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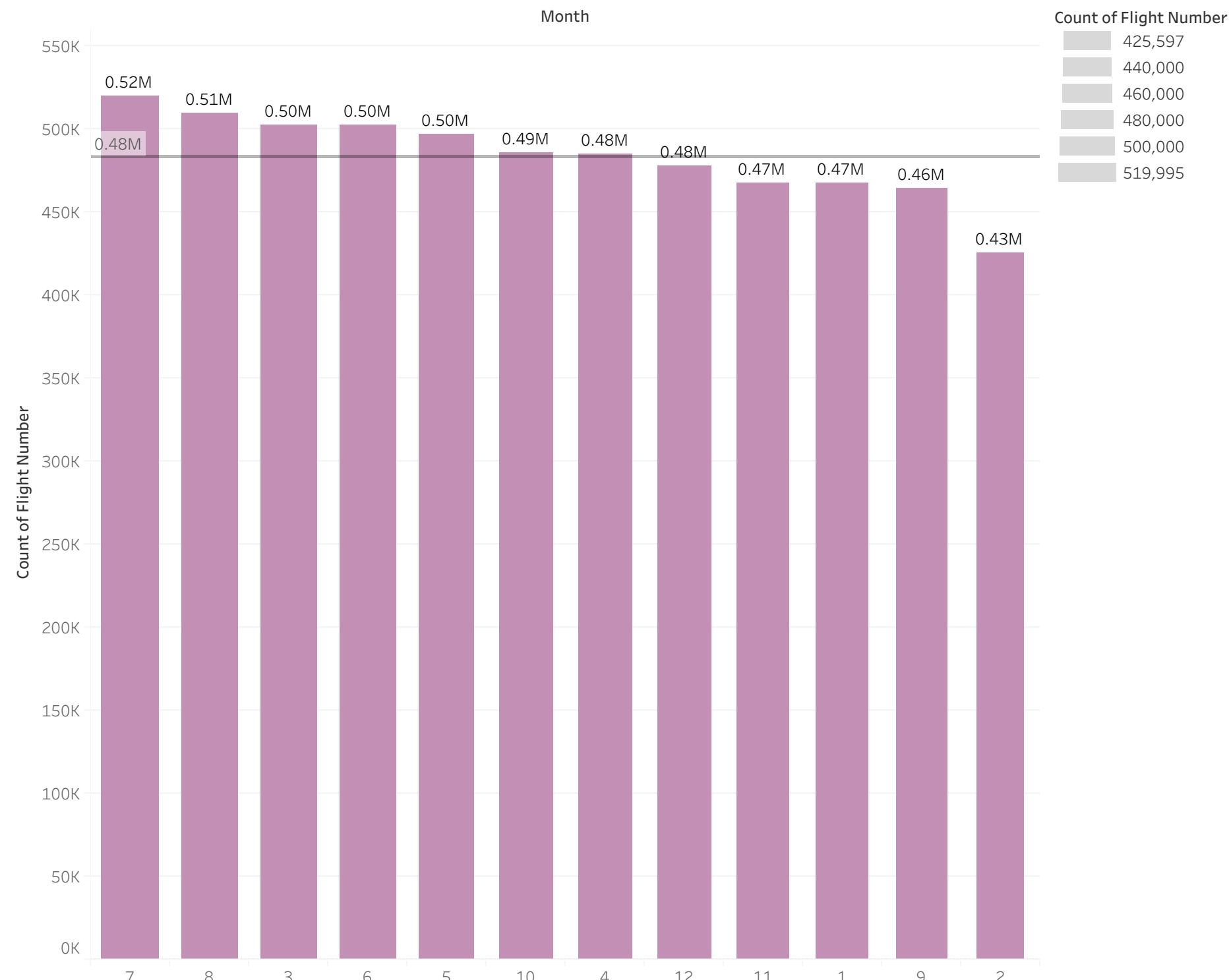
hts

5.8

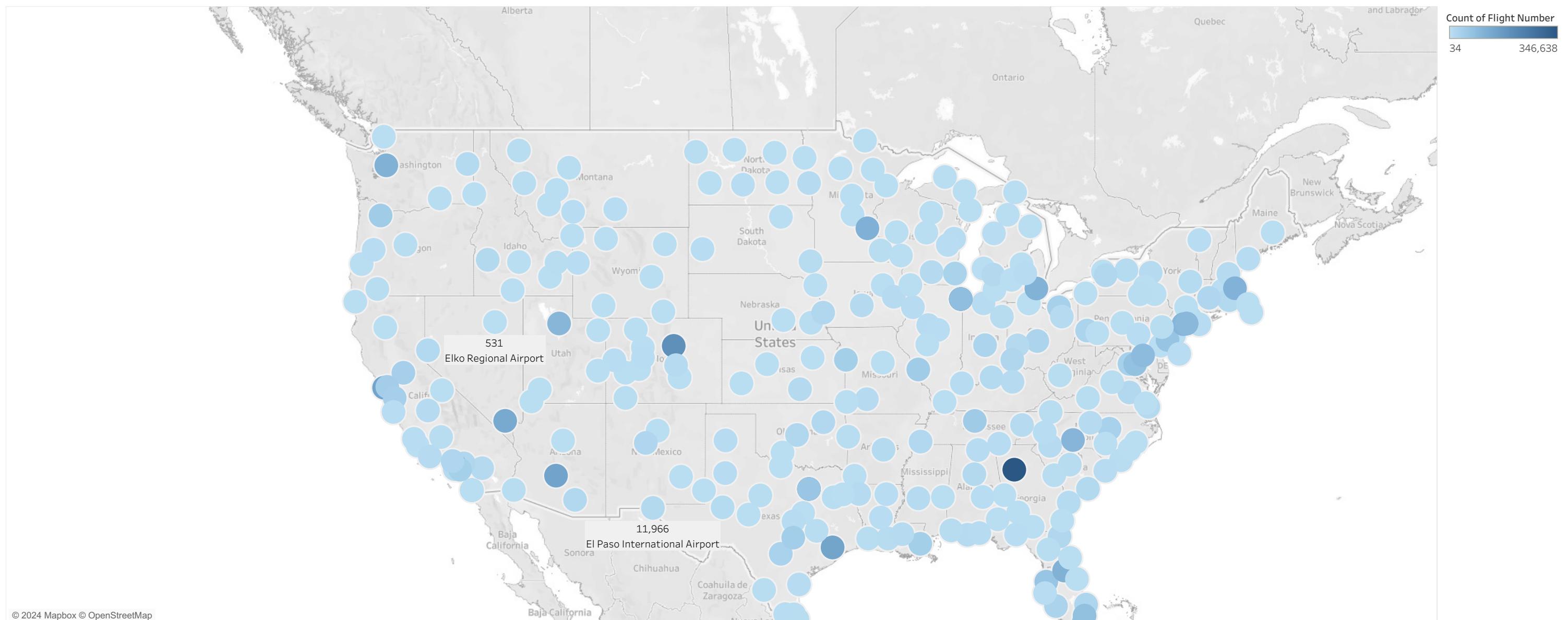
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Abs

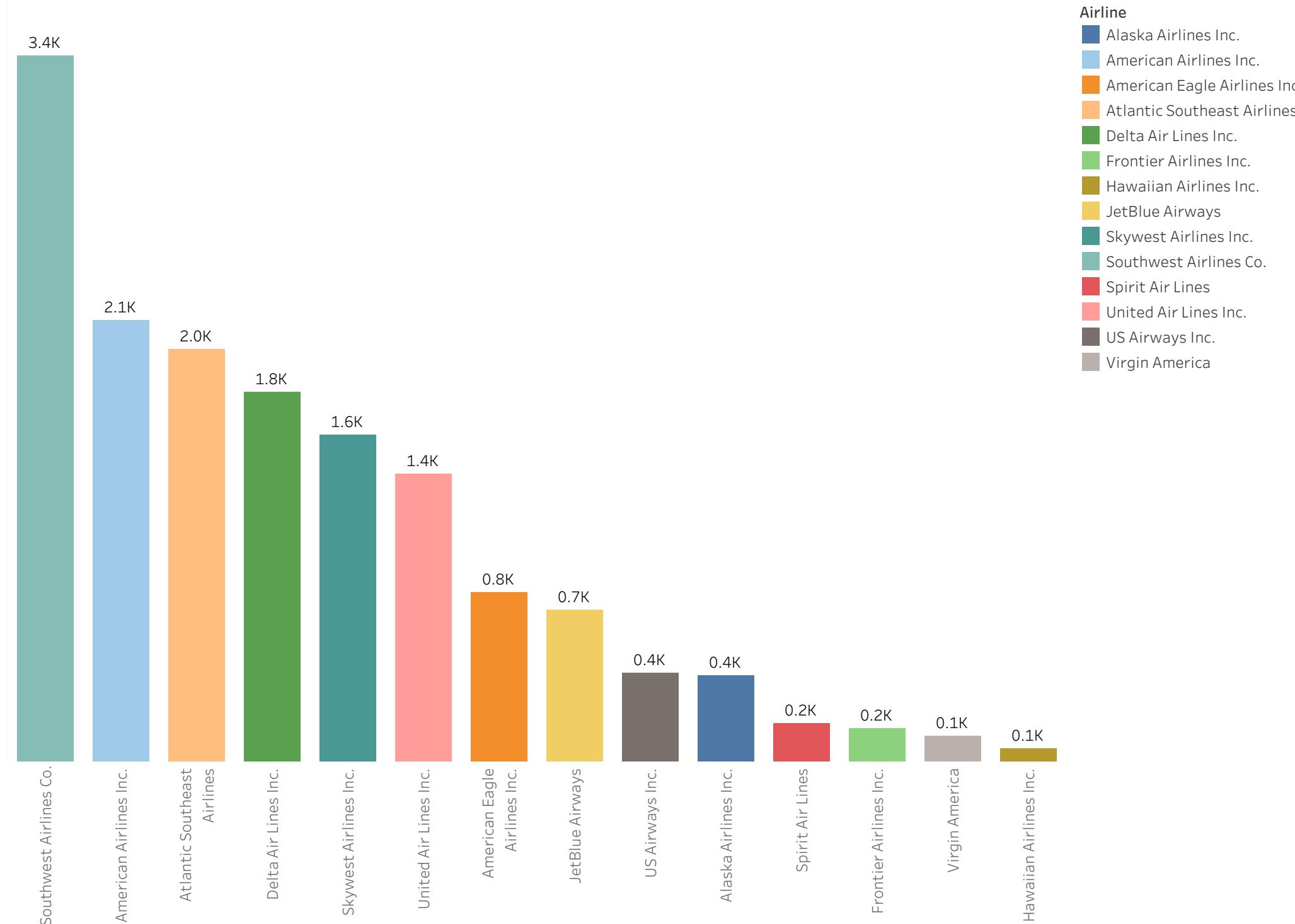
## Monthly Total Flights



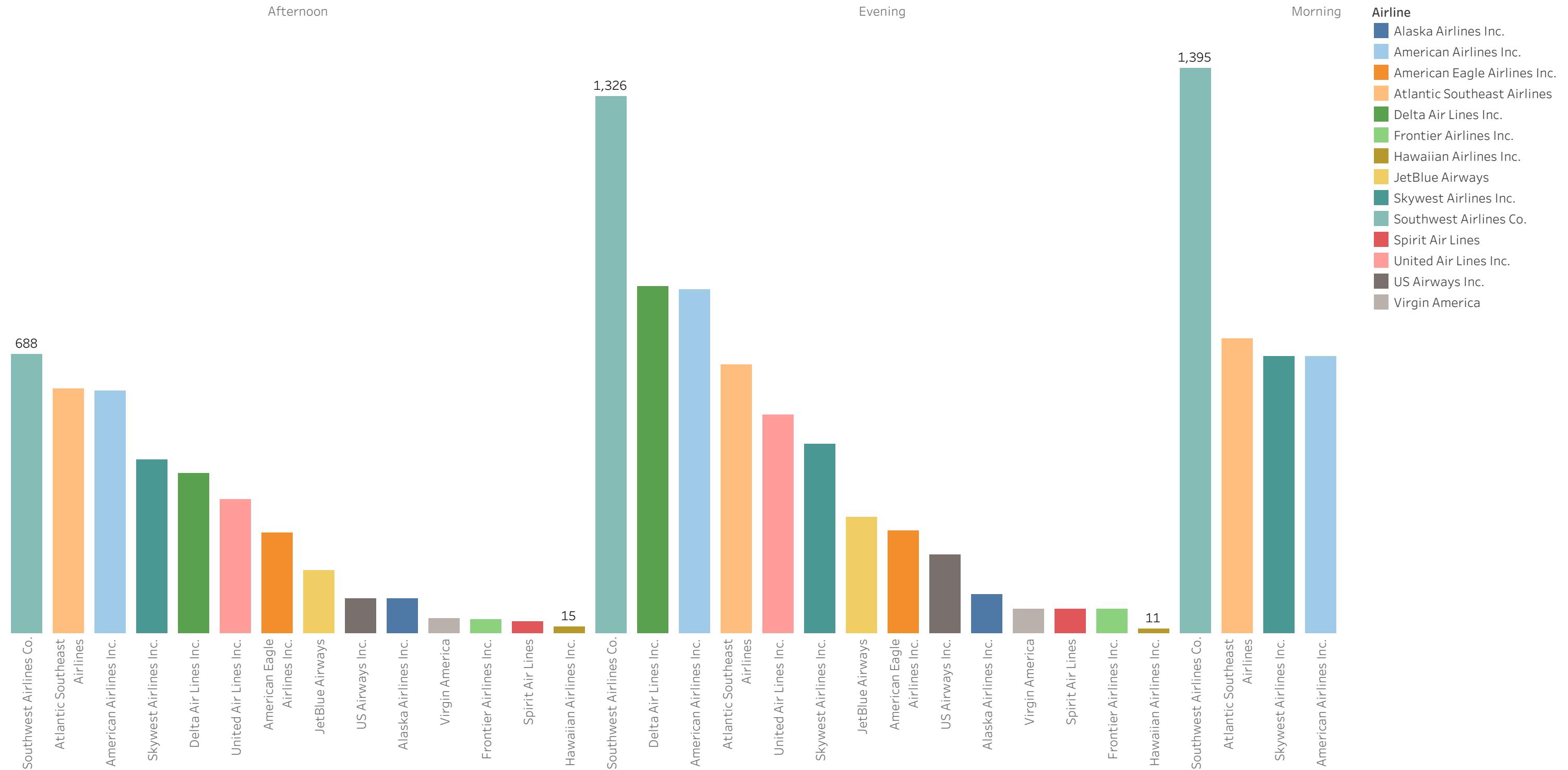
Sheet 3



# Total Diverted Flights/Airlines



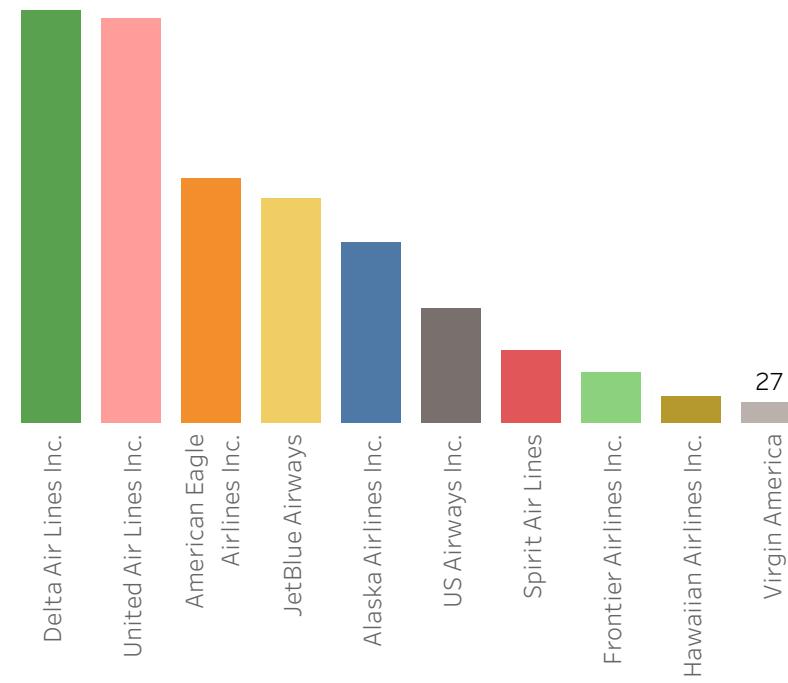
# Arrival Diverted Flights Time



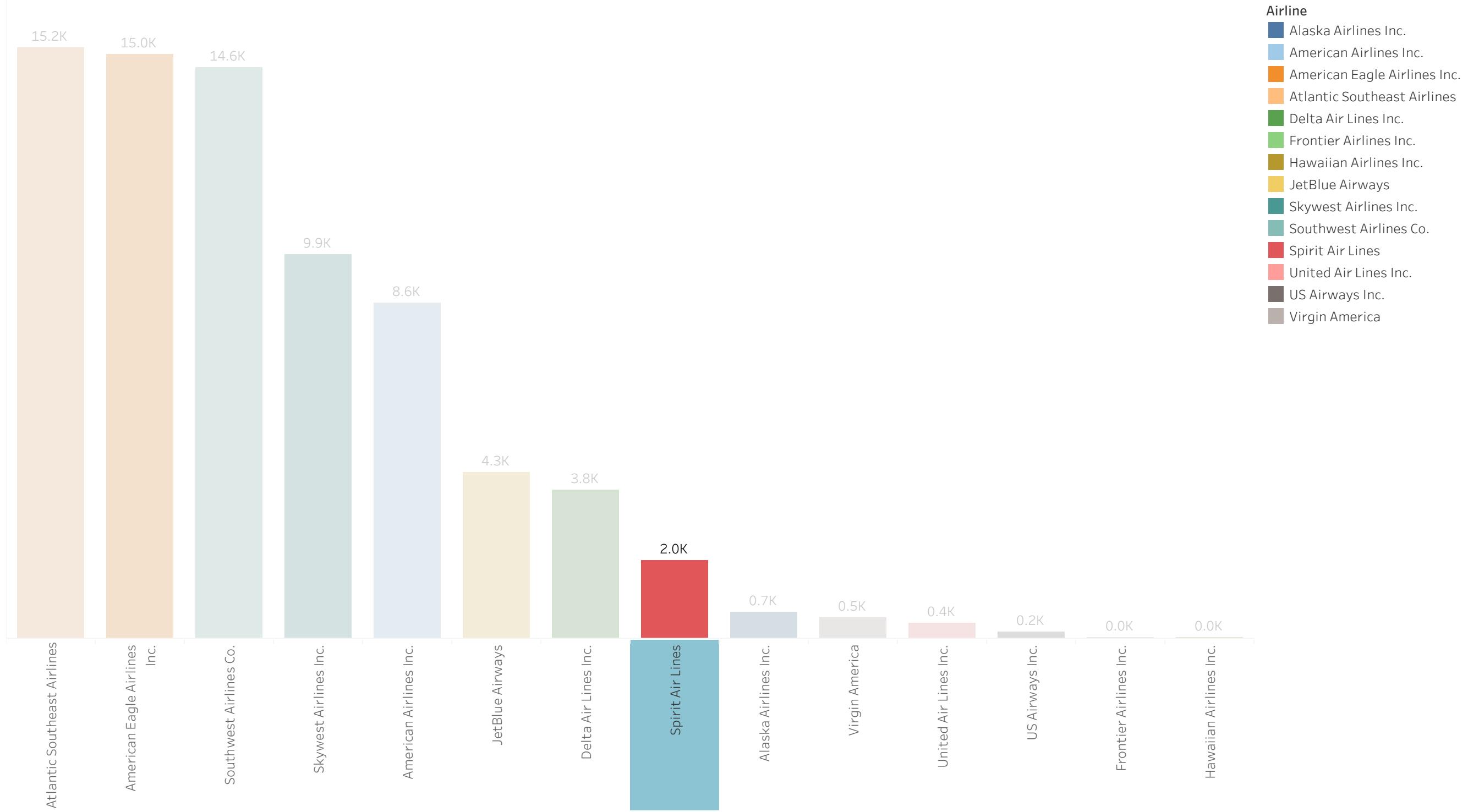
# Arrival Diverted Flights Time

Morning

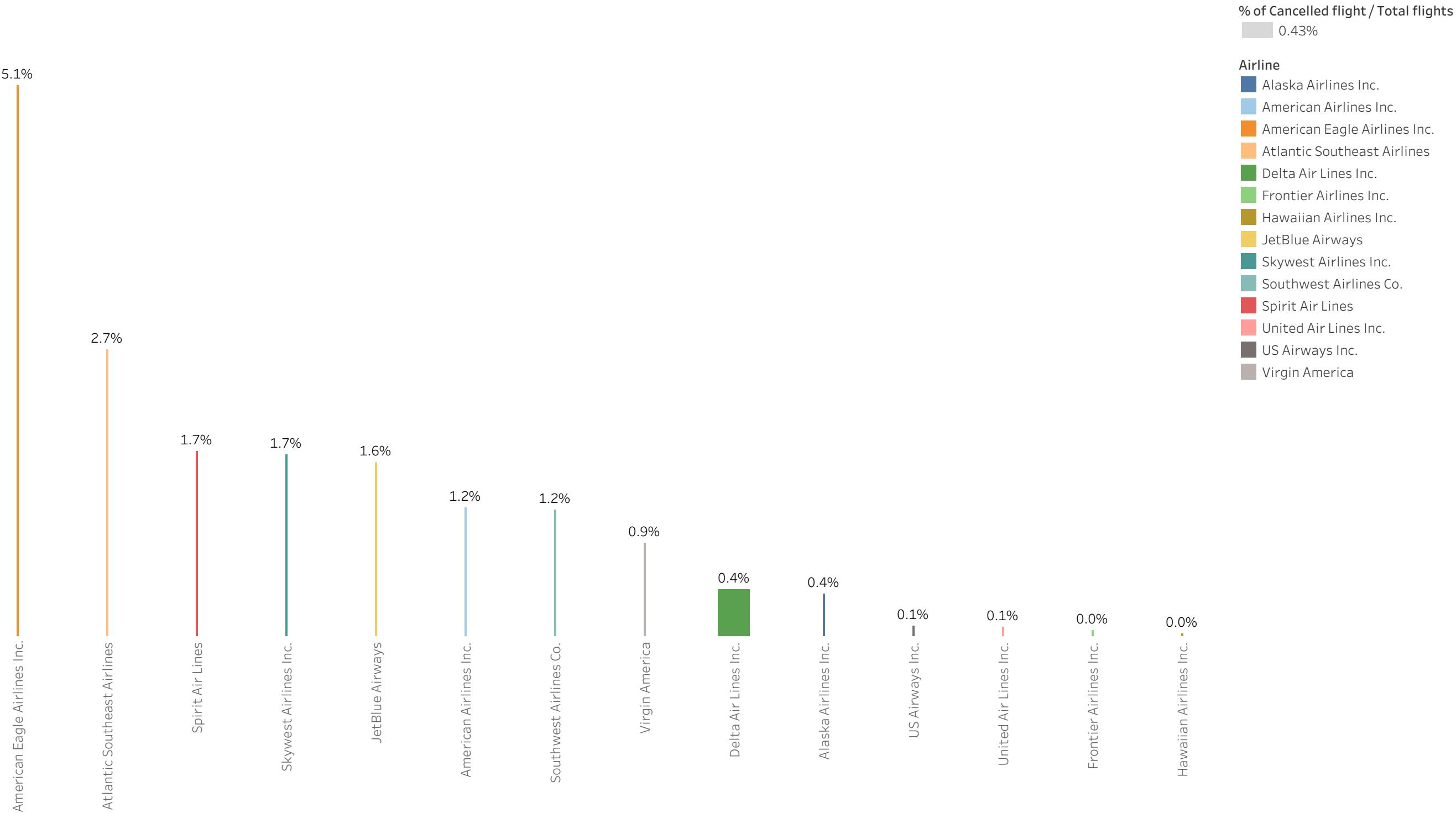
Airline
Alaska Airlines Inc.
American Airlines Inc.
American Eagle Airlines Inc.
Atlantic Southeast Airlines
Delta Air Lines Inc.
Frontier Airlines Inc.
Hawaiian Airlines Inc.
JetBlue Airways
Skywest Airlines Inc.
Southwest Airlines Co.
Spirit Air Lines
United Air Lines Inc.
US Airways Inc.
Virgin America



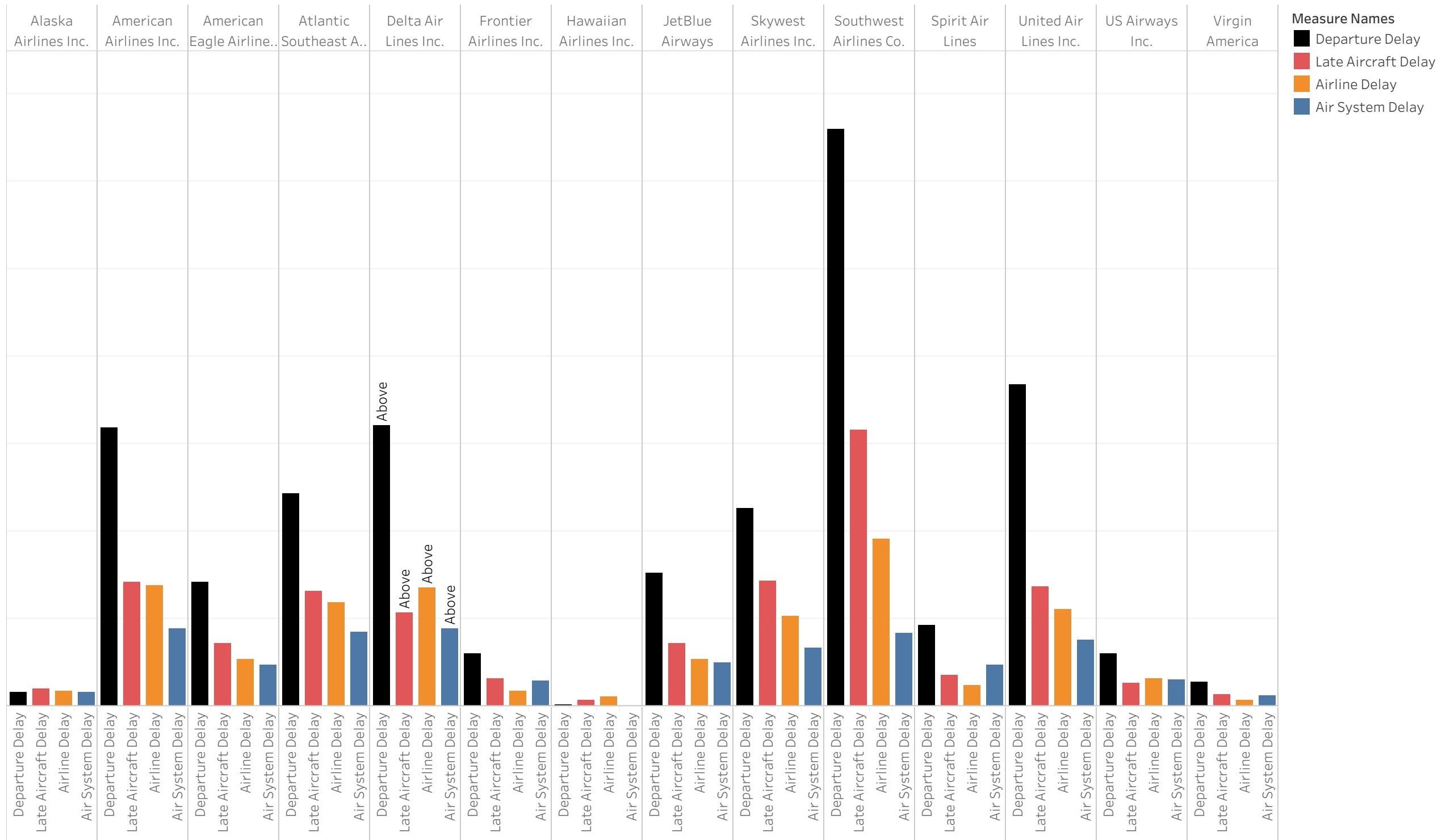
# Total Cancelled Flights by Airlines



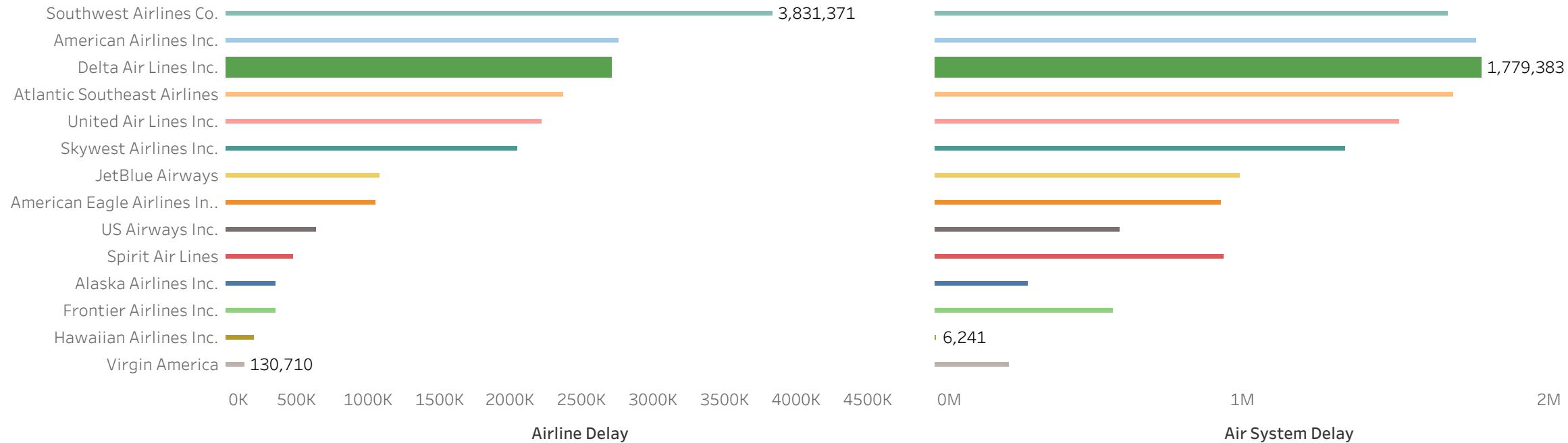
# %Total Cancelled Flights / Airlines



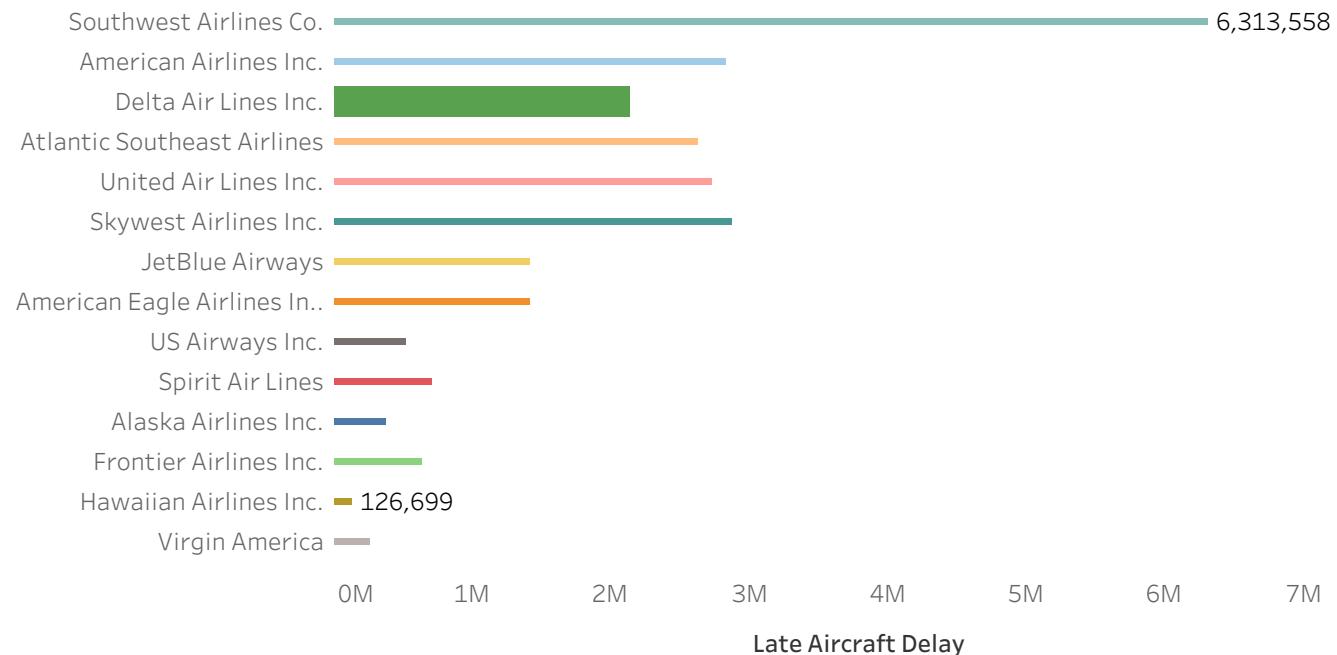
# Total Delays by Airlines



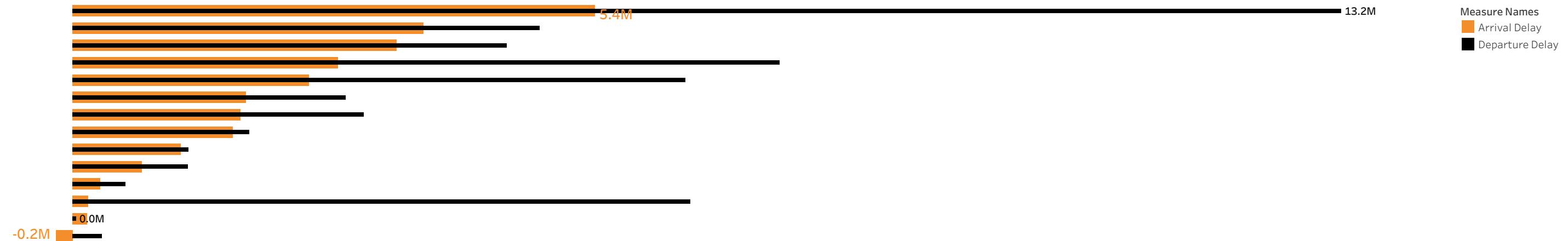
# Airlines Delay Reasons



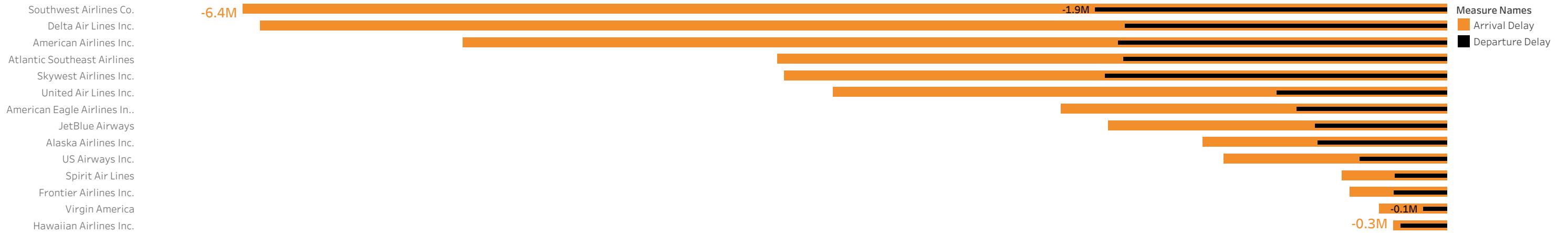
## Airlines Delay Reasons



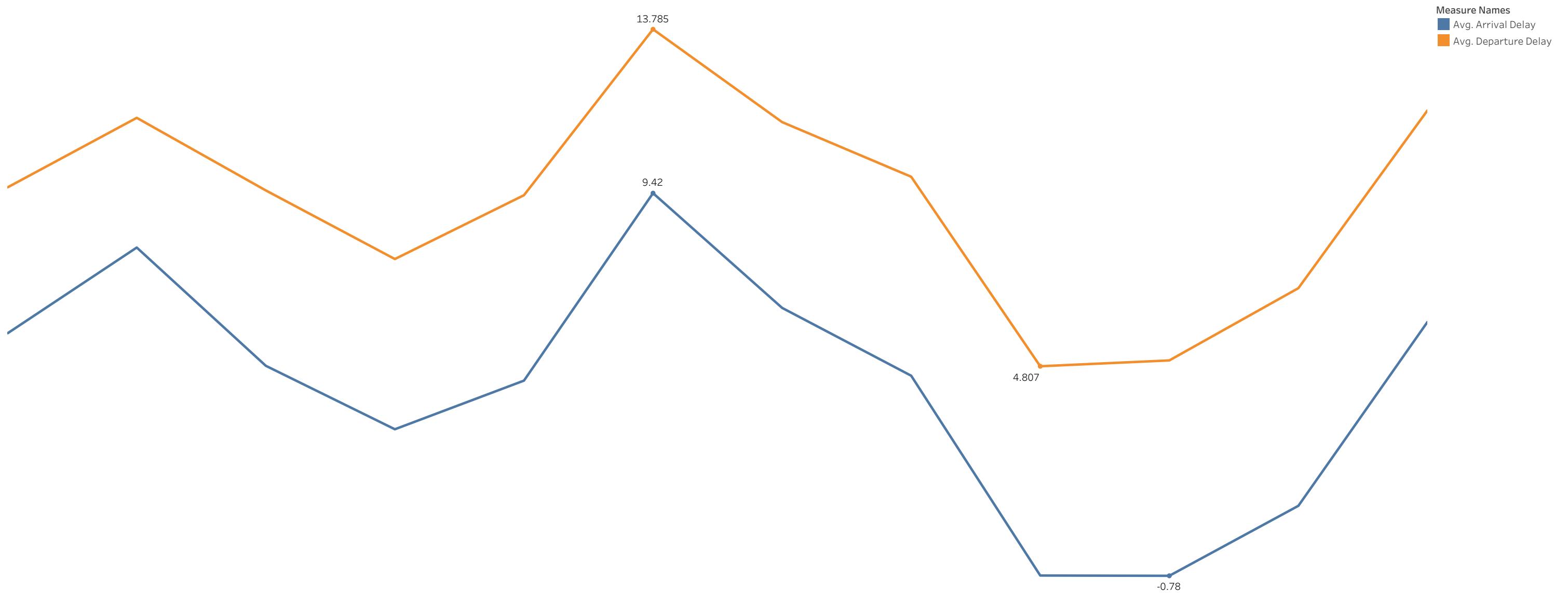
## Arrival Delay Vs Dep Delay



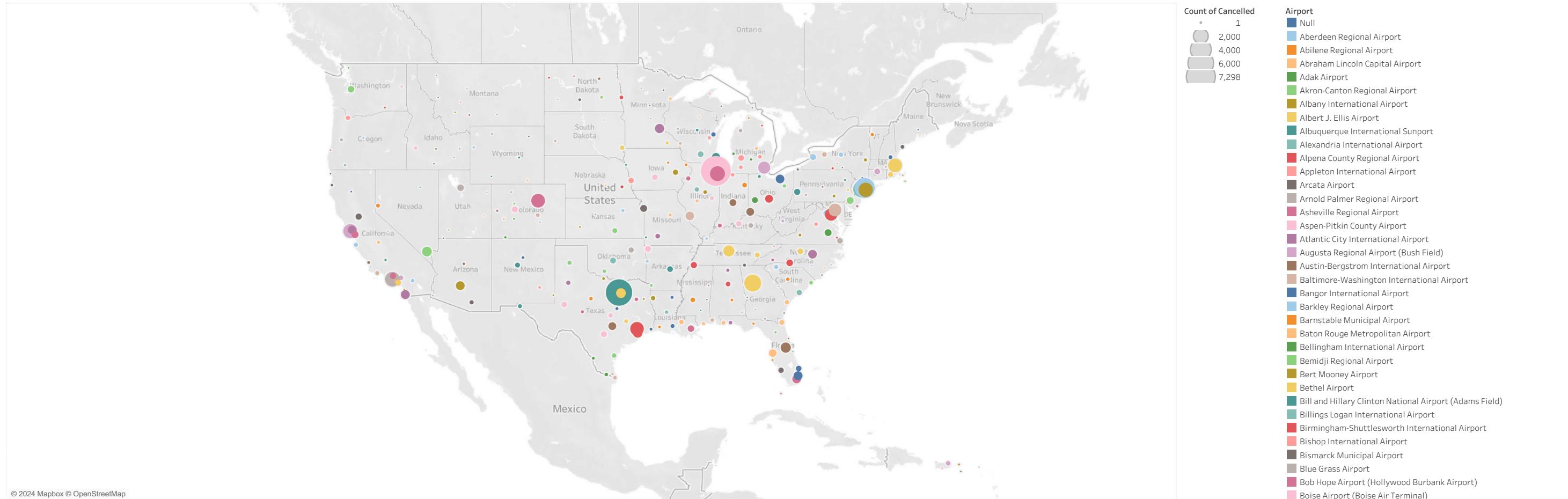
## Early Arrival Vs Early Dep



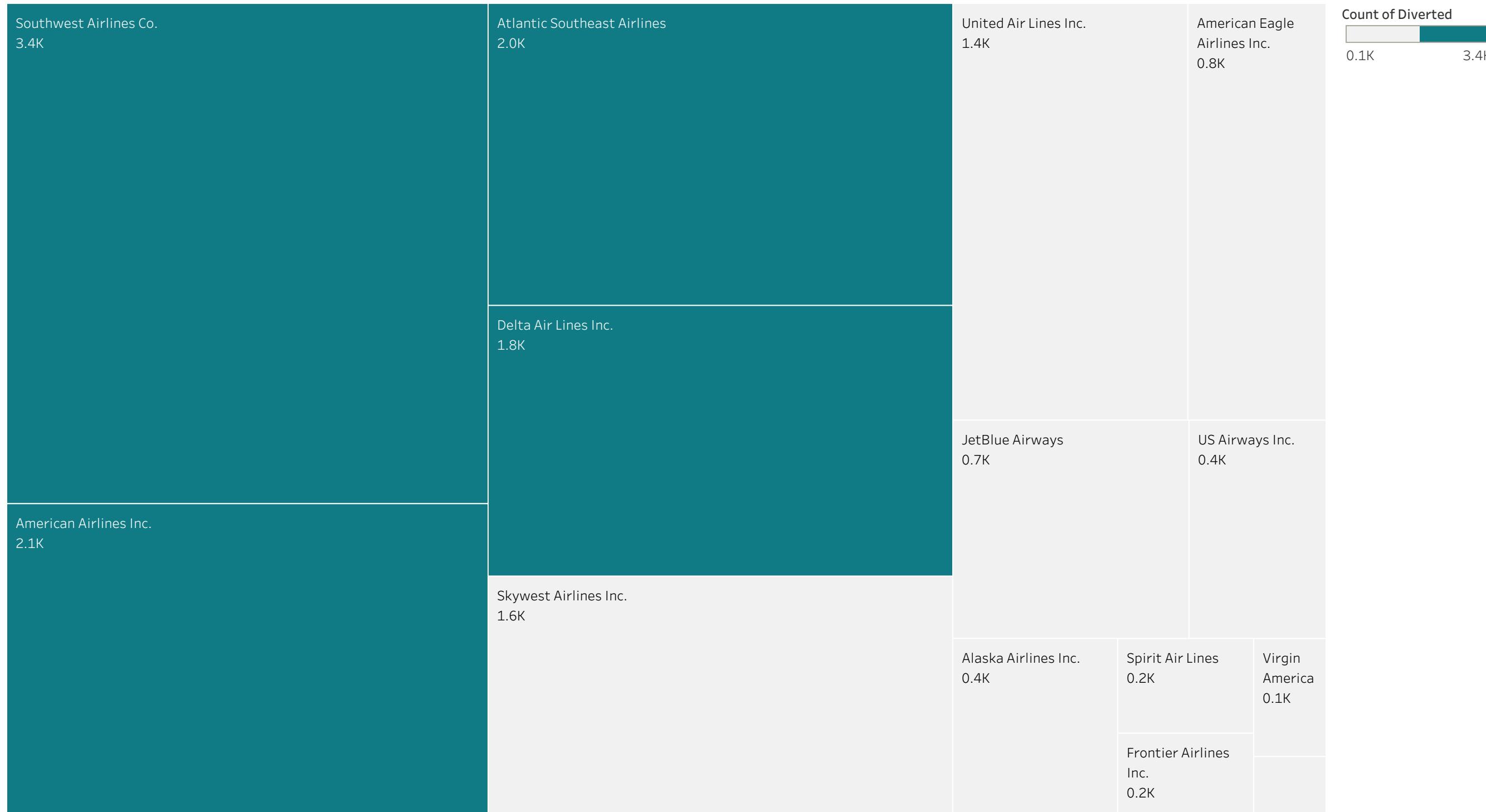
## Avg. Monthly Delay



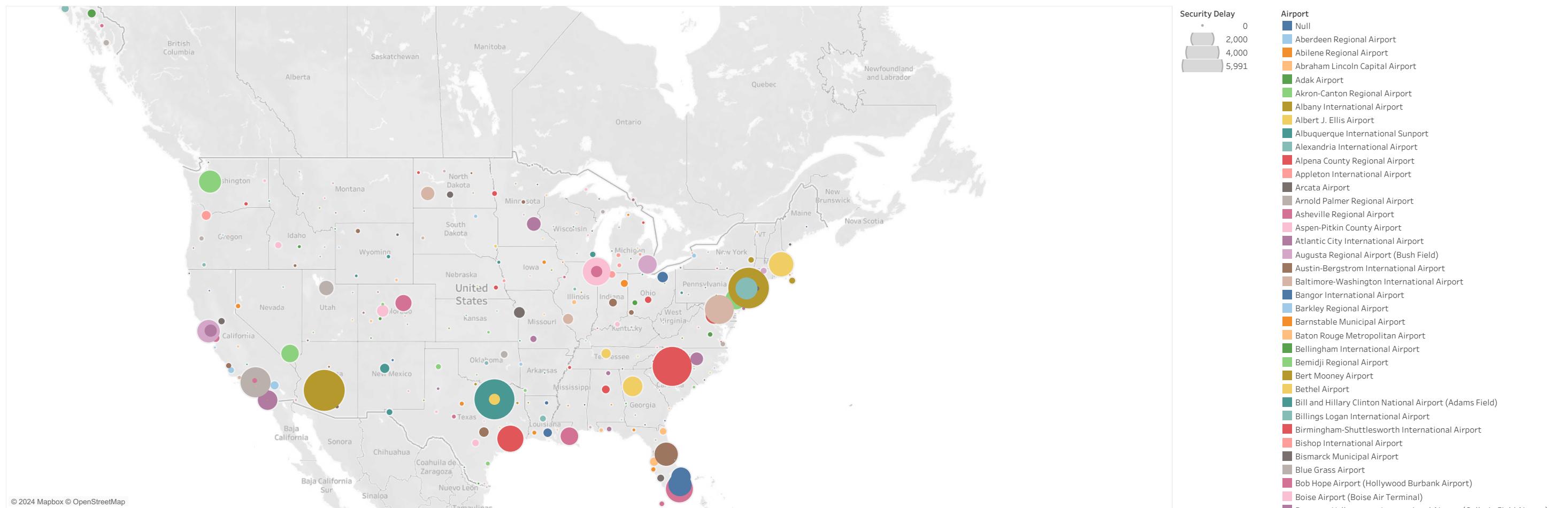
## Cancellation Airport Map



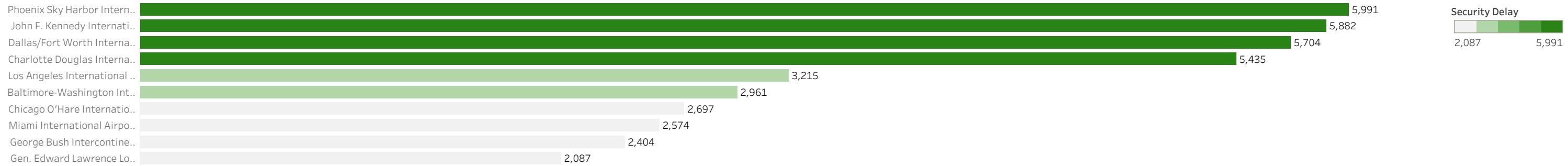
# Total Diverted Flights/Airlines



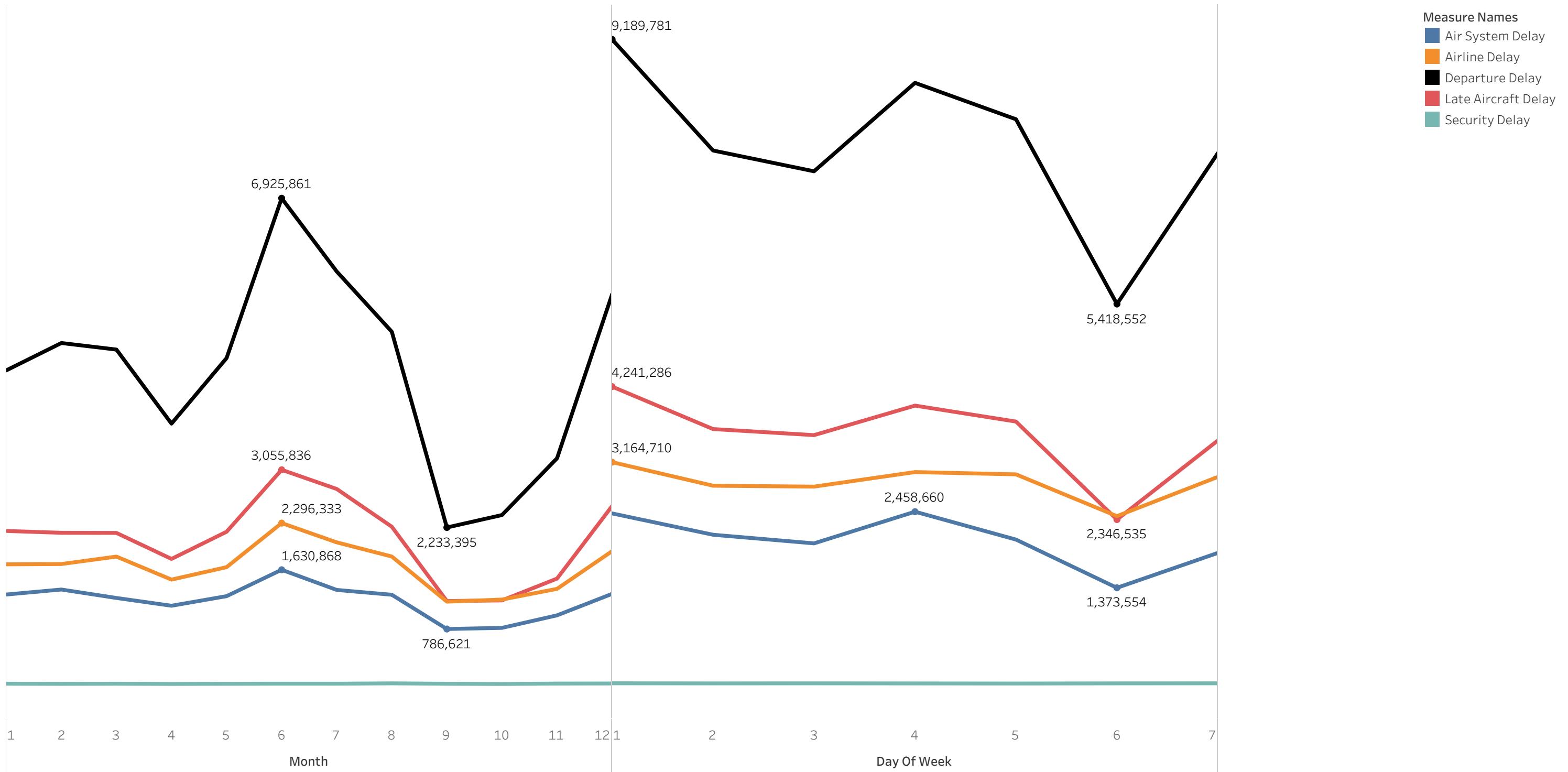
## SD Map



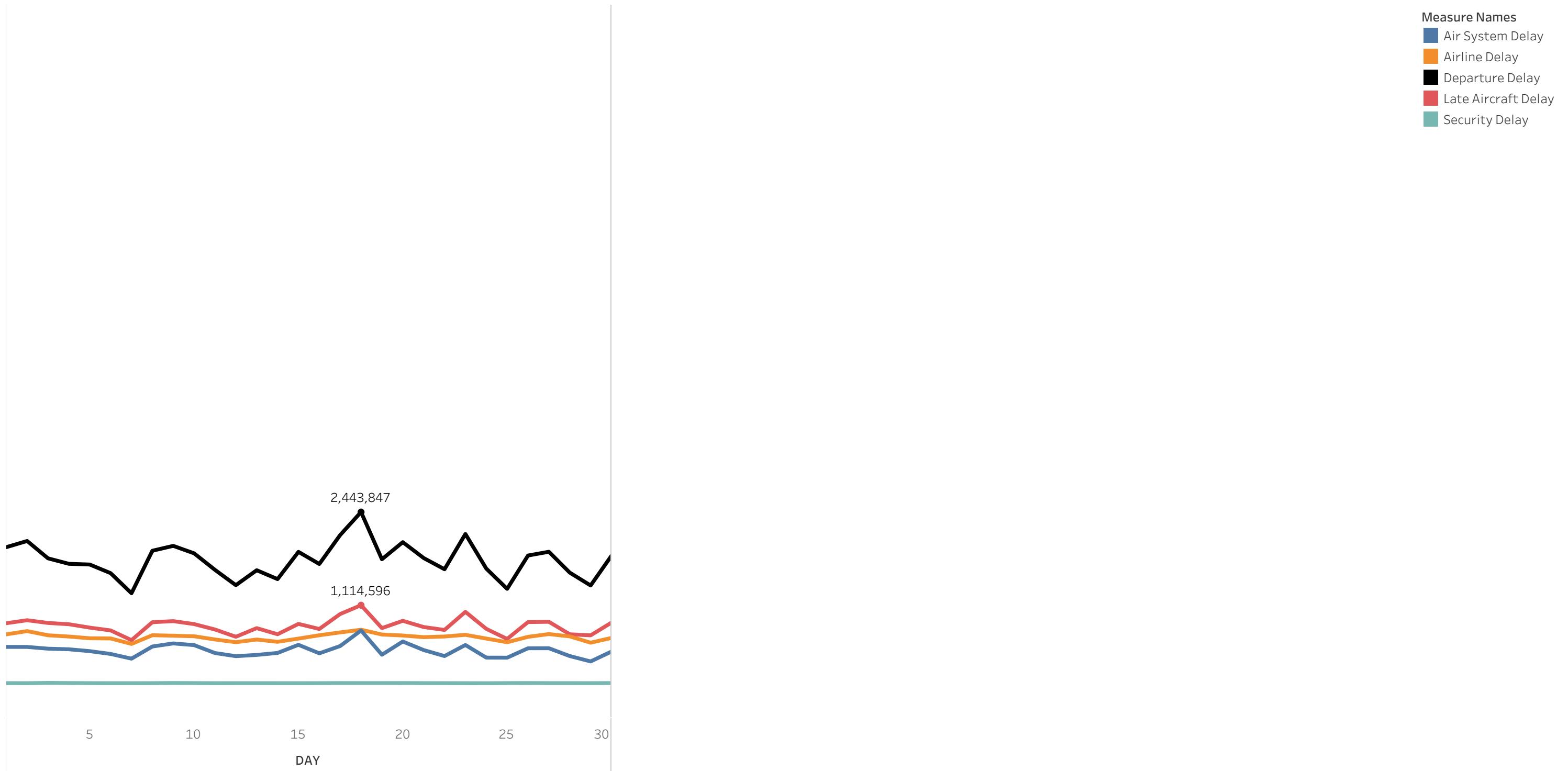
## Security delay by Airport



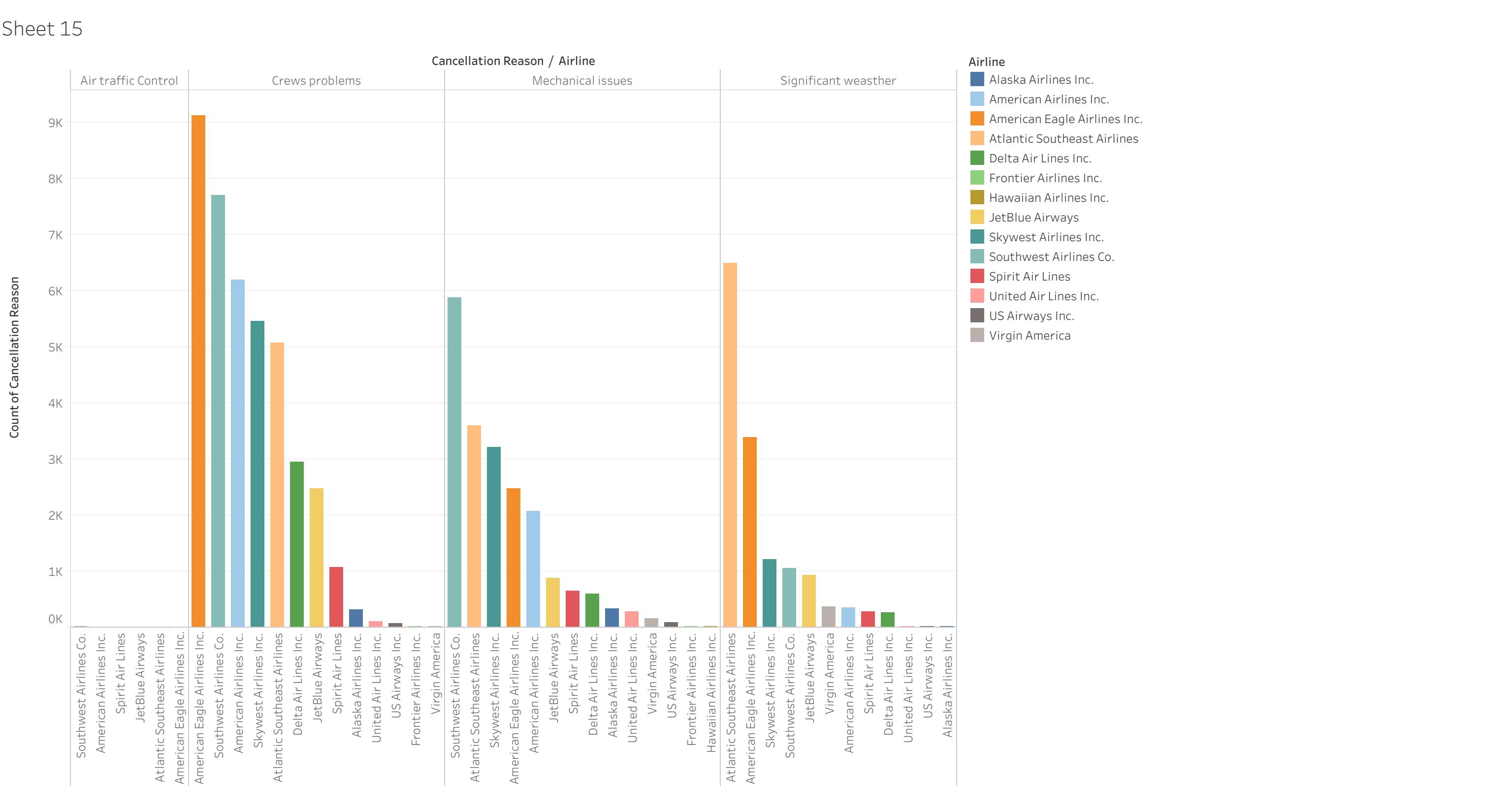
## Delay\_TimeFrame



## Delay\_TimeFrame



Sheet 15



# Cancellation breakdown reasons

Air traffic Control

Southwest Airlines Co. | 12  
American Airlines Inc. | 4  
Spirit Air Lines | 3  
JetBlue Airways | 1  
Atlantic Southeast Airlines | 1  
American Eagle Airlines Inc. | 1  
American Airlines Inc. | 1  
Southwest Airlines Co. | 9116

Crews problems

American Airlines Inc. | 6182  
Skywest Airlines Inc. | 5450  
Atlantic Southeast Airlines | 5074  
Delta Air Lines Inc. | 2947  
JetBlue Airways | 2464  
Spirit Air Lines | 1068  
Alaska Airlines Inc. | 317  
United Air Lines Inc. | 109  
US Airways Inc. | 69  
Frontier Airlines Inc. | 19

Mechanical issues

Virgin America | 12  
Southwest Airlines Co. | 5874  
Atlantic Southeast Airlines | 3597  
Skywest Airlines Inc. | 3202  
American Eagle Airlines Inc. | 2475  
American Airlines Inc. | 2067  
JetBlue Airways | 883  
Spirit Air Lines | 654  
Delta Air Lines Inc. | 594  
Alaska Airlines Inc. | 334  
United Air Lines Inc. | 274  
Virgin America | 157  
US Airways Inc. | 89  
Frontier Airlines Inc. | 23

Significant weather

Hawaiian Airlines Inc. | 6489  
American Eagle Airlines Inc. | 3385  
Southwest Airlines Inc. | 1203  
Southwest Airlines Co. | 1048  
JetBlue Airways | 928  
Virgin America | 365  
American Airlines Inc. | 355  
Spirit Air Lines | 279  
Delta Air Lines Inc. | 257  
United Air Lines Inc. | 23  
US Airways Inc. | 19  
Alaska Airlines Inc. | 18

Airline

Alaska Airlines Inc.  
American Airlines Inc.  
American Eagle Airlines Inc.  
Atlantic Southeast Airlines  
Delta Air Lines Inc.  
Frontier Airlines Inc.  
Hawaiian Airlines Inc.  
JetBlue Airways  
Skywest Airlines Inc.  
Southwest Airlines Co.  
Spirit Air Lines  
United Air Lines Inc.  
US Airways Inc.  
Virgin America

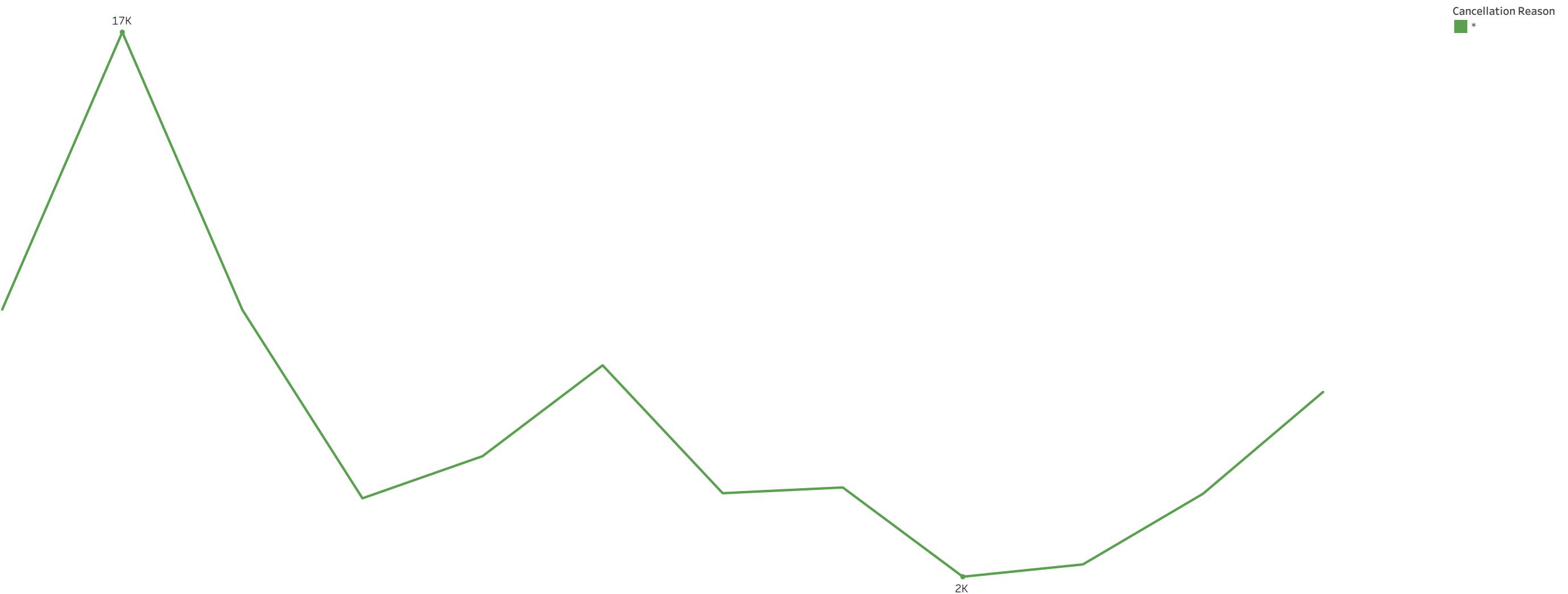
# % Airlines Cancellation / Reasons

	Total Cancellation	Total Crews	Total Mechanical	Total Significant	Total Air traffic
Airline	Flights	problems	issues	weather	Control
<b>Atlantic Southeast Airlines</b>	15,161	20.17%			
<b>American Eagle Airlines In..</b>	14,977	19.93%			
<b>Southwest Airlines Co.</b>	14,638	19.48%			
<b>Skywest Airlines Inc.</b>	9,855	13.11%			
<b>American Airlines Inc.</b>	8,608	11.45%			
<b>JetBlue Airways</b>	4,276	5.69%			
<b>Delta Air Lines Inc.</b>	3,798	5.05%	2,947	77.59%	594
<b>Spirit Air Lines</b>	2,004	2.67%			
<b>Alaska Airlines Inc.</b>	669	0.89%			
<b>Virgin America</b>	534	0.71%			
<b>United Air Lines Inc.</b>	406	0.54%			
<b>US Airways Inc.</b>	177	0.24%			
<b>Frontier Airlines Inc.</b>	42	0.06%			
<b>Hawaiian Airlines Inc.</b>	18	0.02%			

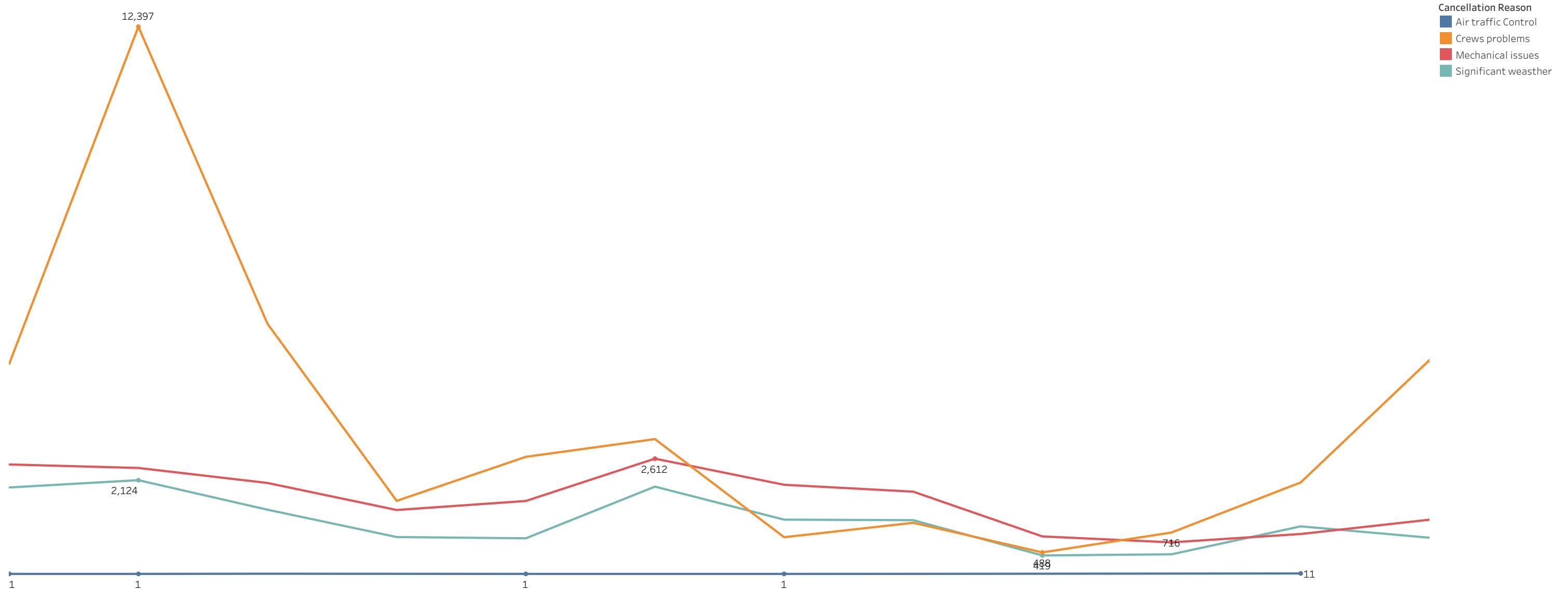
## % Airline Cancellation Time / Reasons

Airline	DepartureT..	Total Cancellatio..	% Total Crews prob..	CP%	Total Mechanical..	MI%	Total Significant ..	SW%	Total Air traffic ..	AT%	
Atlantic	Afternoon	219	0.29%								
Southeast	Evening	219	0.29%								
Airlines	Morning	14,723	19.59%								
American	Afternoon	291	0.39%								
Eagle	Evening	191	0.25%								
Airlines Inc.	Morning	14,495	19.28%								
Southwest	Afternoon	74	0.10%								
Airlines Co.	Evening	148	0.20%								
	Morning	14,416	19.18%								
Skywest	Afternoon	262	0.35%								
Airlines Inc.	Evening	264	0.35%								
	Morning	9,329	12.41%								
American	Afternoon	189	0.25%								
Airlines Inc.	Evening	167	0.22%								
	Morning	8,252	10.98%								
JetBlue	Afternoon	18	0.02%								
Airways	Evening	15	0.02%								
	Morning	4,243	5.65%								
Delta Air	Afternoon	46	0.06%	25	54.35%	16	34.78%	5	10.87%	0	0.00%
Lines Inc.	Evening	30	0.04%	16	53.33%	14	46.67%	0	0.00%	0	0.00%
	Morning	3,722	4.95%	2,906	78.08%	564	15.15%	252	6.77%	0	0.00%
Spirit Air	Afternoon	34	0.05%								
Lines	Evening	22	0.03%								
	Morning	1,948	2.59%								
Alaska	Afternoon	21	0.03%								
Airlines Inc.	Evening	9	0.01%								
	Morning	639	0.85%								
Virgin	Afternoon	6	0.01%								
America	Evening	4	0.01%								
	Morning	524	0.70%								
United Air	Afternoon	121	0.16%								
Lines Inc.	Evening	157	0.21%								
	Morning	128	0.17%								
US Airways	Afternoon	61	0.08%								
Inc.	Evening	56	0.07%								
	Morning	60	0.08%								
Frontier	Afternoon	15	0.02%								
Airlines Inc.	Evening	16	0.02%								
	Morning	11	0.01%								
Hawaiian	Afternoon	8	0.01%								
Airlines Inc.	Evening	5	0.01%								
	Morning	5	0.01%								

## Monthly Cancellation

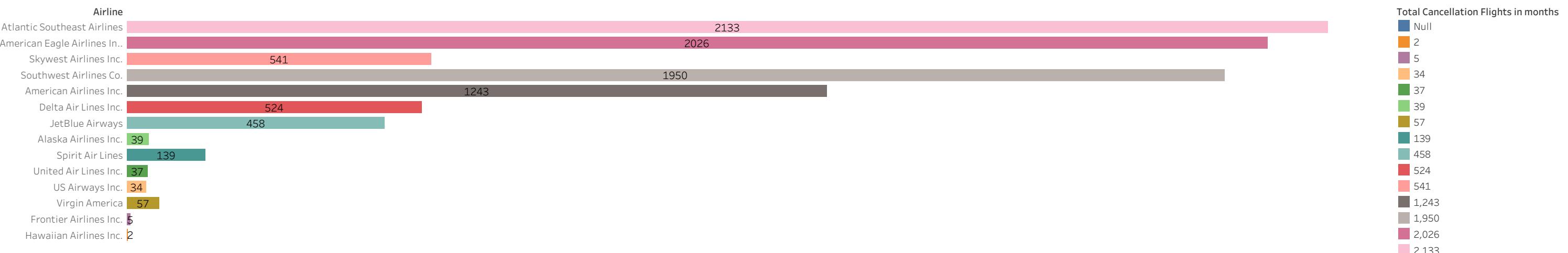


## Cancellation Reasons by Month



## Airlines Cancellation Flights per Month

Month [ 3 ]



Total  
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**75K**

**1.3**

**%**

Abc

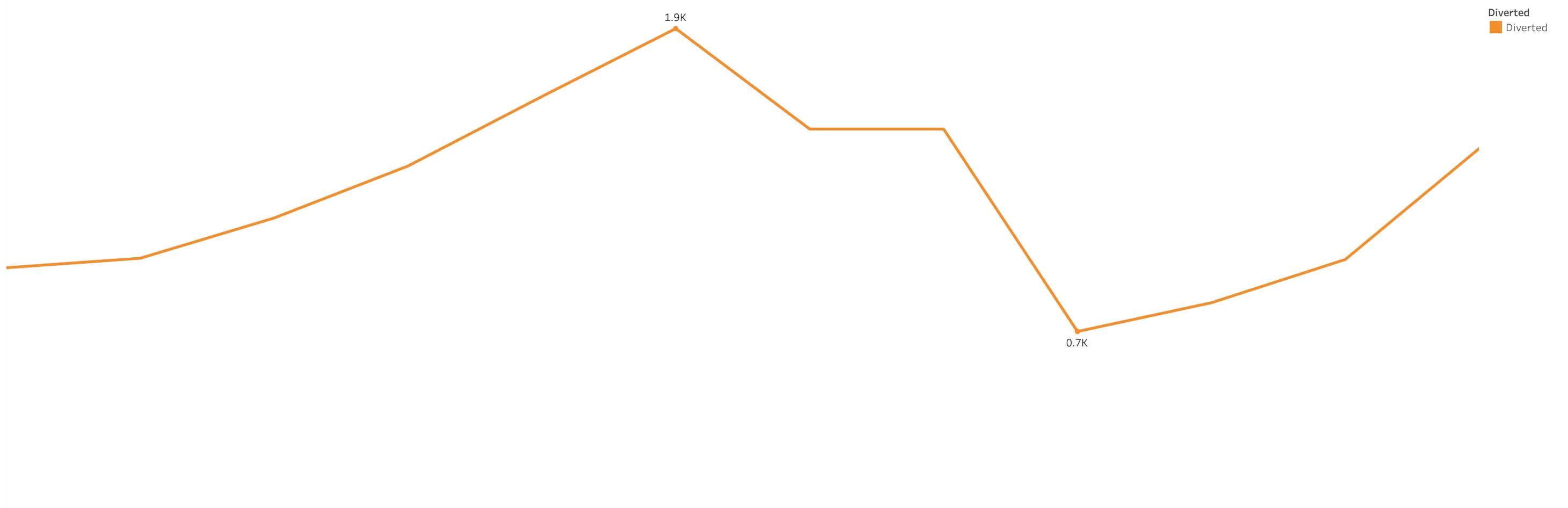
**Total Cancellation In Month [ 3 ]**

**9K**

**▲ 1.83%**

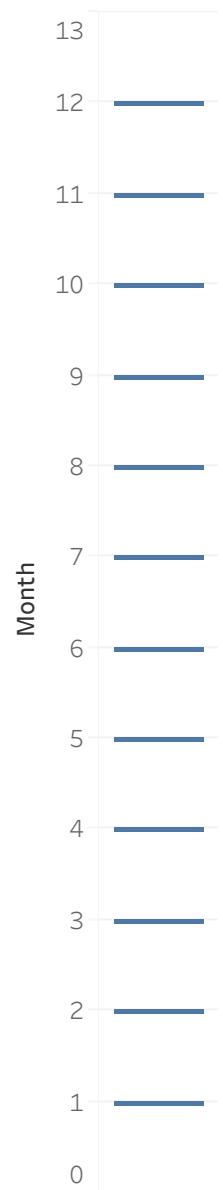


## Diverted Flights per Month

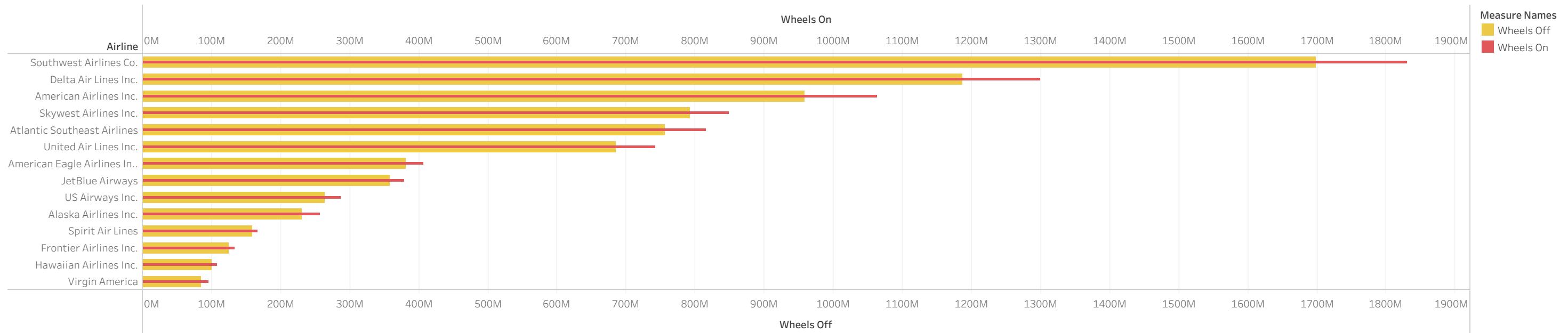


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**15K**  
**0.26**  
%

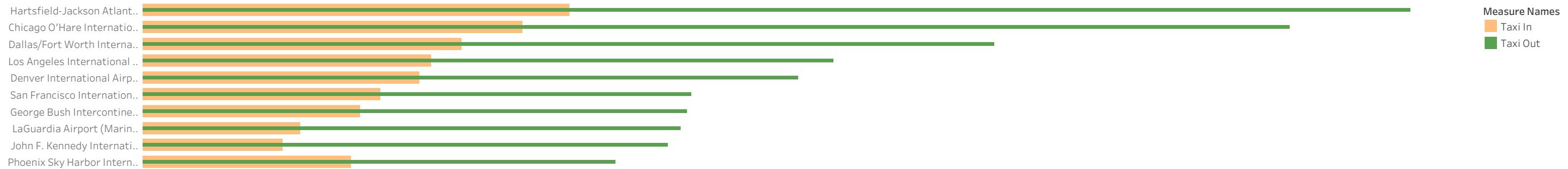
Divert-  
ed % In  
Month [  
3]  
**0.23%**



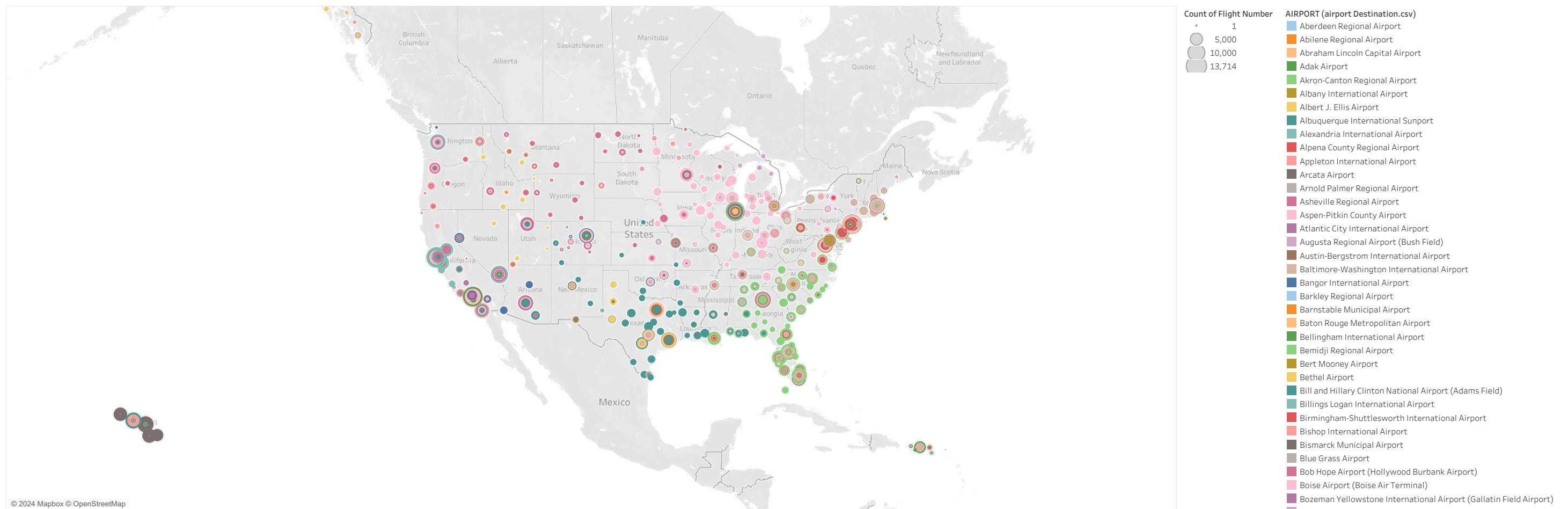
## Airlines Wheels on / off



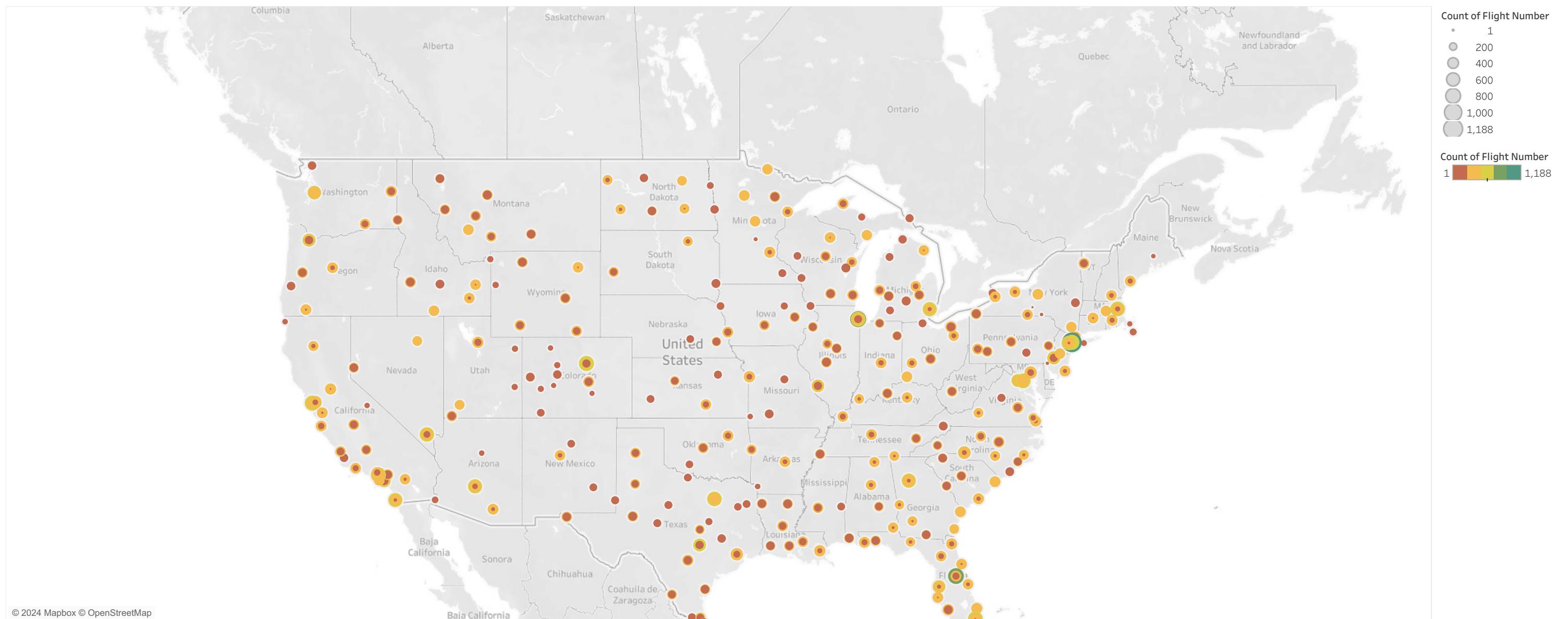
## AirPorts Taxi In/Out



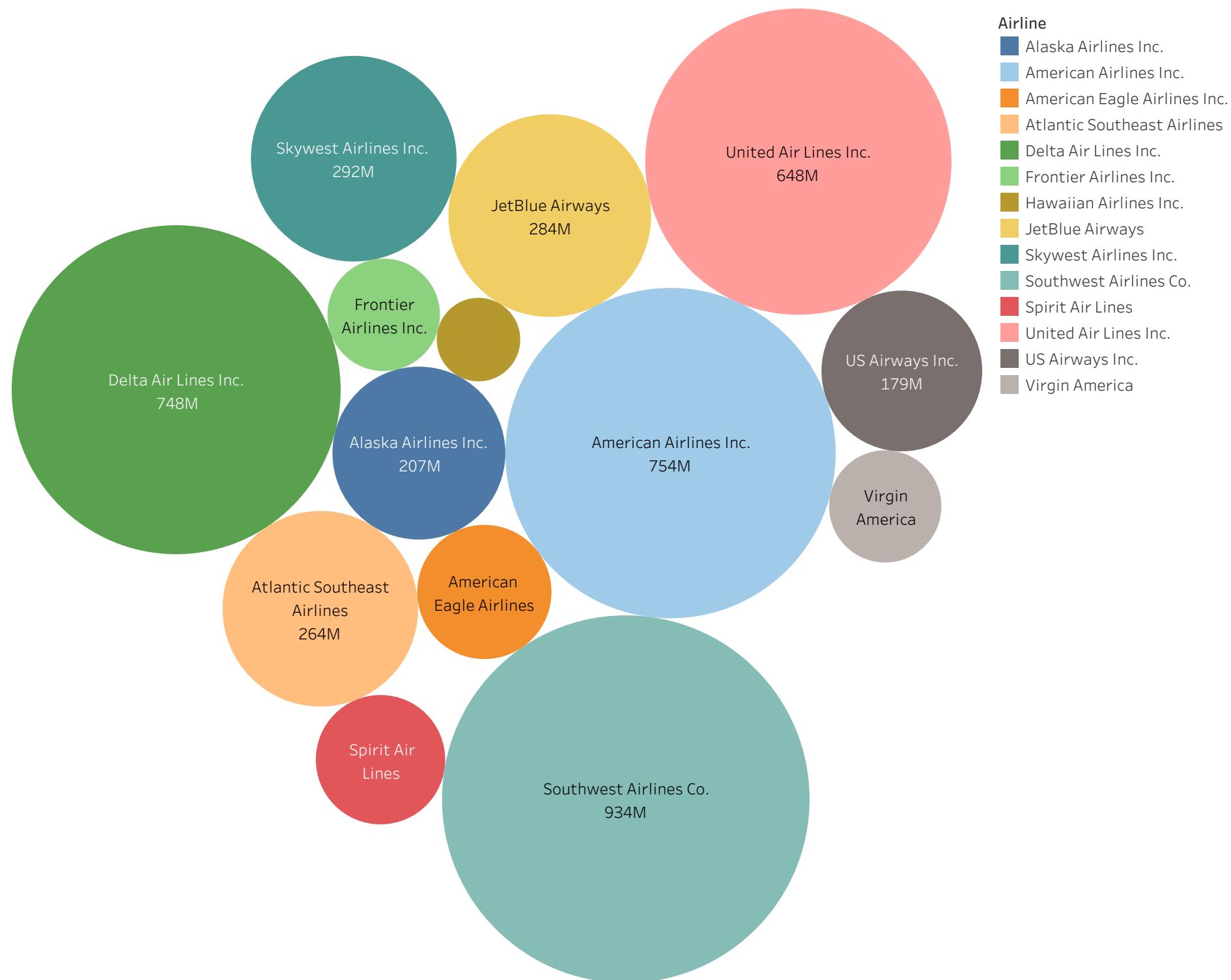
## Destination airport



origin airport



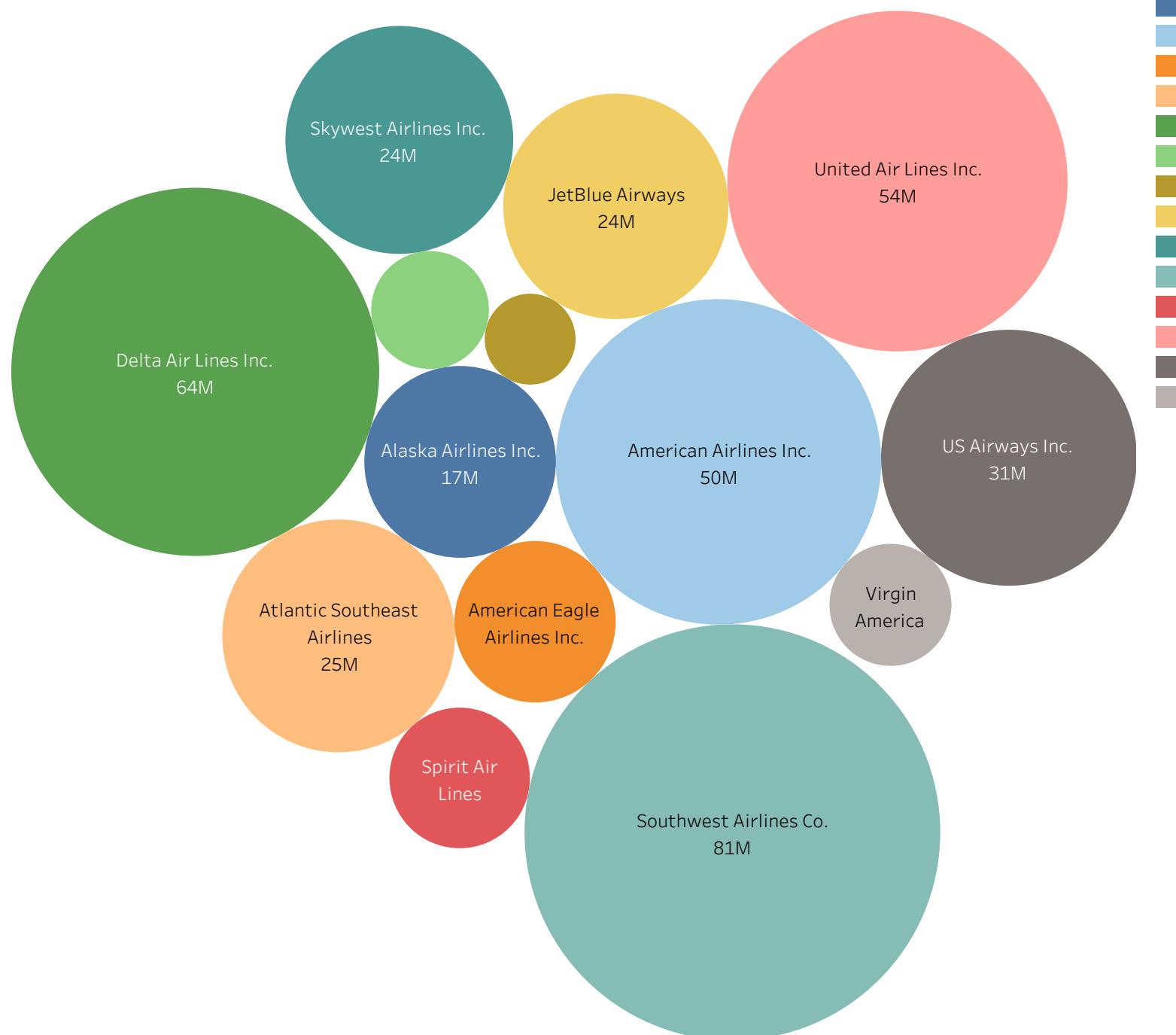
Distance



Airline

- Alaska Airlines Inc.
- American Airlines Inc.
- American Eagle Airlines Inc.
- Atlantic Southeast Airlines
- Delta Air Lines Inc.
- Frontier Airlines Inc.
- Hawaiian Airlines Inc.
- JetBlue Airways
- Skywest Airlines Inc.
- Southwest Airlines Co.
- Spirit Air Lines
- United Air Lines Inc.
- US Airways Inc.
- Virgin America

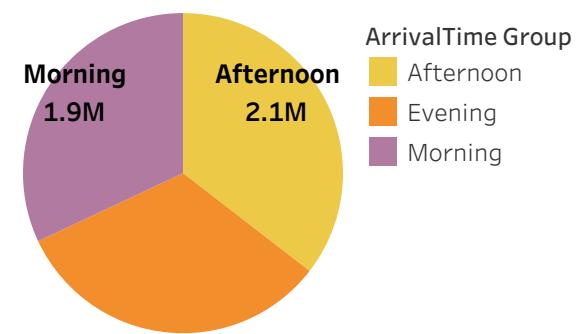
Distance in Months



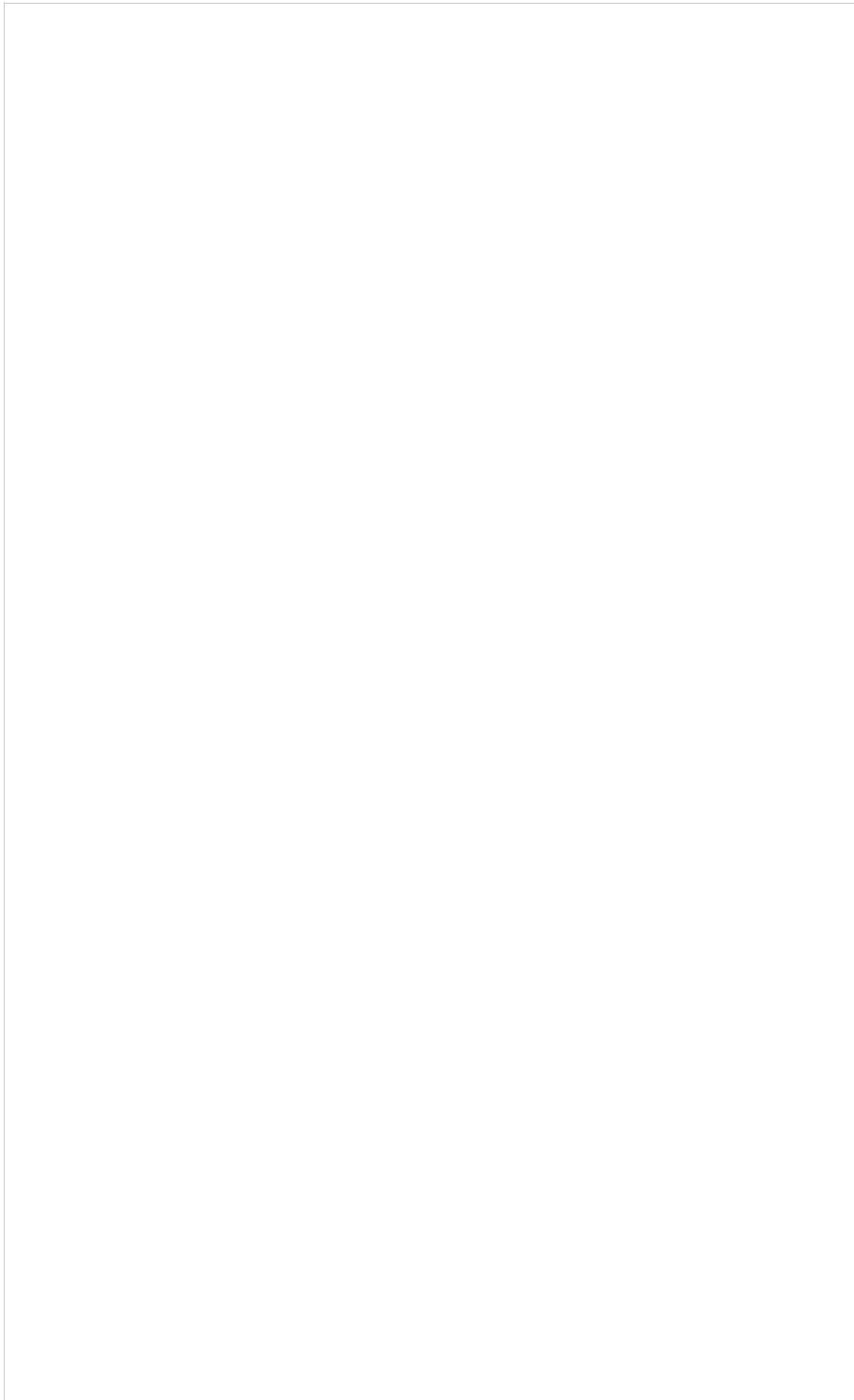
Airline

- Alaska Airlines Inc.
- American Airlines Inc.
- American Eagle Airlines Inc.
- Atlantic Southeast Airlines
- Delta Air Lines Inc.
- Frontier Airlines Inc.
- Hawaiian Airlines Inc.
- JetBlue Airways
- Skywest Airlines Inc.
- Southwest Airlines Co.
- Spirit Air Lines
- United Air Lines Inc.
- US Airways Inc.
- Virgin America

# Flights' Time







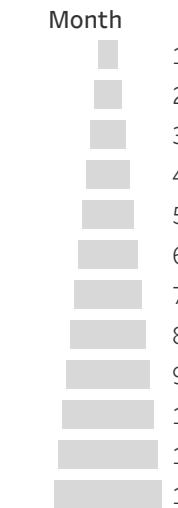
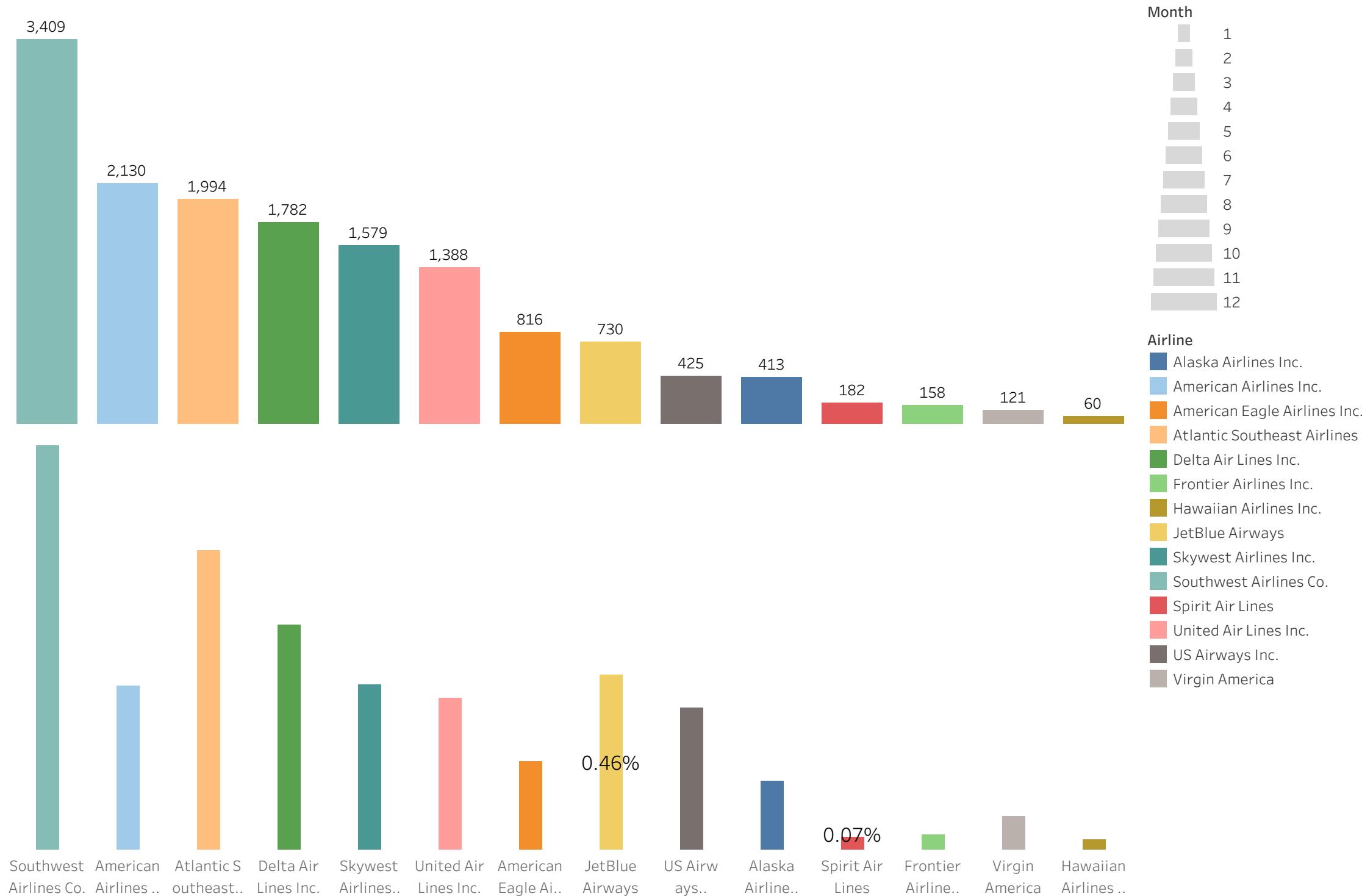
Sheet 26

diverted flights	15,187
Diverted Flights%	0.26%
get count of flights	5,804,358

## Monthly Diverted Flights

Month	Diverted Flights%	Total Flights
1	0.21%	
2	0.24%	
3	0.23%	502,498
4	0.28%	
5	0.33%	
6	0.38%	
7	0.29%	
8	0.30%	
9	0.15%	
10	0.17%	
11	0.22%	
12	0.30%	

# Airlines Diverted Flight/ month



## Top 10 Origin airport

Airport	In / Out of Flight Number Set		Count of Flight Number
	Out	In	
Hartsfield-Jackson Atlant..	345,793	845	386
Chicago O'Hare Internatio..	283,642	992	345,793
Dallas/Fort Worth Interna..	236,956	2,086	
Denver International Airp..	193,540	1,946	
Los Angeles International ..	193,405	887	
San Francisco Internation..	145,832	1,672	
Phoenix Sky Harbor Intern..	145,416	1,134	
George Bush Intercontine..	145,297	720	
McCarran International Ai..	131,622	1,400	
Minneapolis-Saint Paul In..	111,635	386	

## Top 10 Origin airport

(2)

Airport	Count of Flight Number
Hartsfield-Jackson Atlant..	346,638
Chicago O'Hare Internatio..	284,634
Dallas/Fort Worth Interna..	239,042
Denver International Airp..	195,486
Los Angeles International ..	194,292
San Francisco Internation..	147,504
Phoenix Sky Harbor Intern..	146,550
George Bush Intercontine..	146,017
McCarran International Ai..	133,022
Minneapolis-Saint Paul In..	112,021

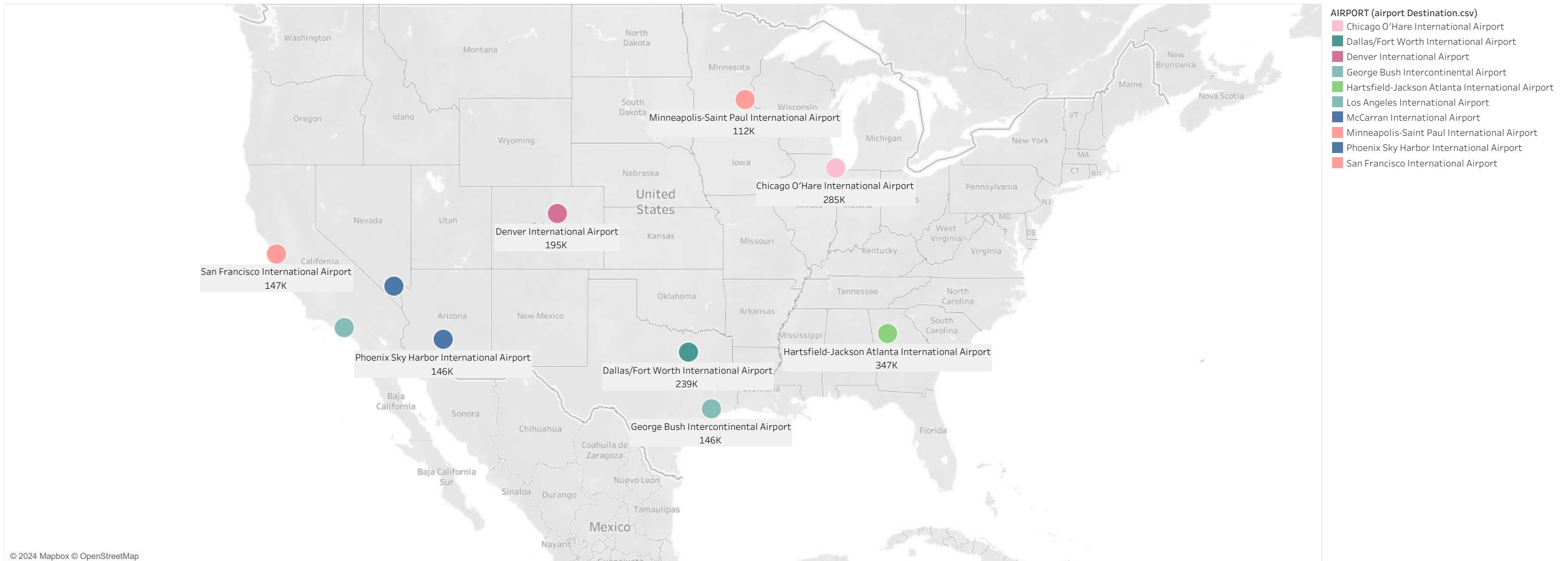
## Top 10 Des airport (3)

AIRPORT (airport Destina..	Count of Flight Number
Hartsfield-Jackson Atlant..	346,664
Chicago O'Hare Internatio..	284,604
Dallas/Fort Worth Interna..	239,214
Denver International Airp..	195,328
Los Angeles International ..	194,331
San Francisco Internation..	147,391
Phoenix Sky Harbor Intern..	146,337
George Bush Intercontine..	145,975
McCarran International Ai..	133,040
Minneapolis-Saint Paul In..	112,043

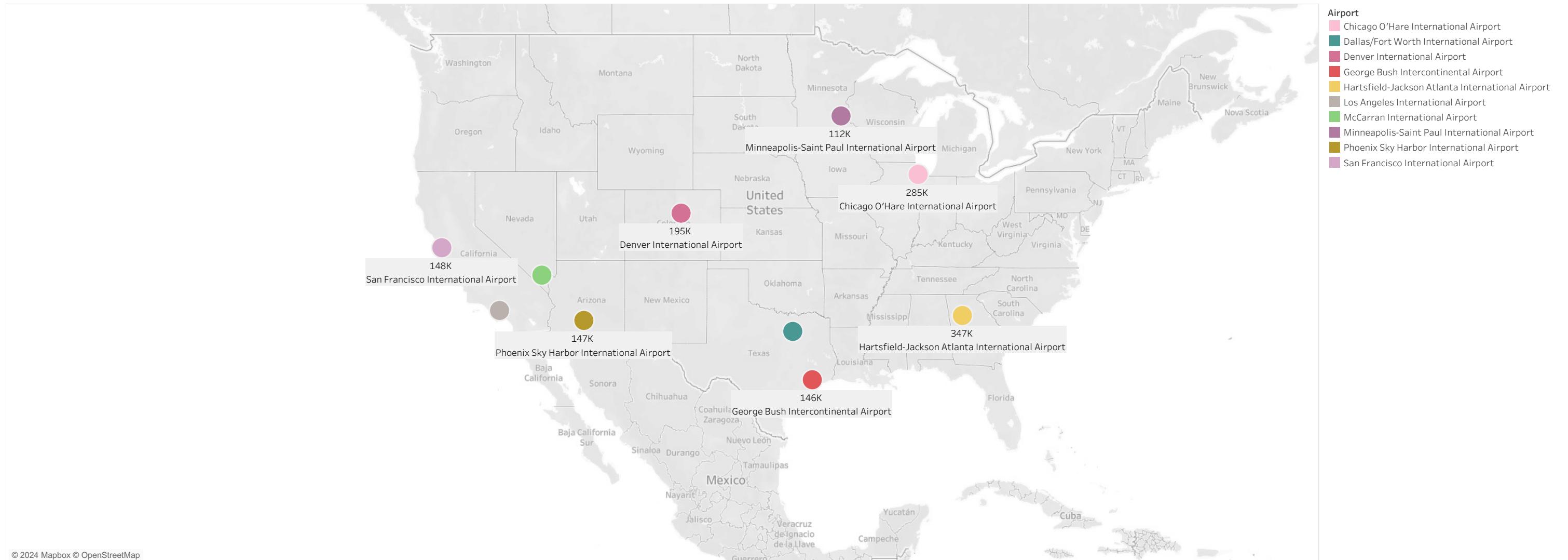
## Sheet 39

AIRPORT (airport Destina..)	In / Out of Flight Number Set		Count of Flight Number
	Out	In	
Hartsfield-Jackson Atlant..	345,051	1,613	302
Chicago O'Hare Internatio..	283,940	664	
Dallas/Fort Worth Interna..	236,931	2,283	
Denver International Airp..	194,127	1,201	
Los Angeles International ..	191,689	2,642	
San Francisco Internation..	146,148	1,243	
Phoenix Sky Harbor Intern..	145,272	1,065	
George Bush Intercontine..	145,046	929	
McCarran International Ai..	131,751	1,289	
Minneapolis-Saint Paul In..	111,741	302	

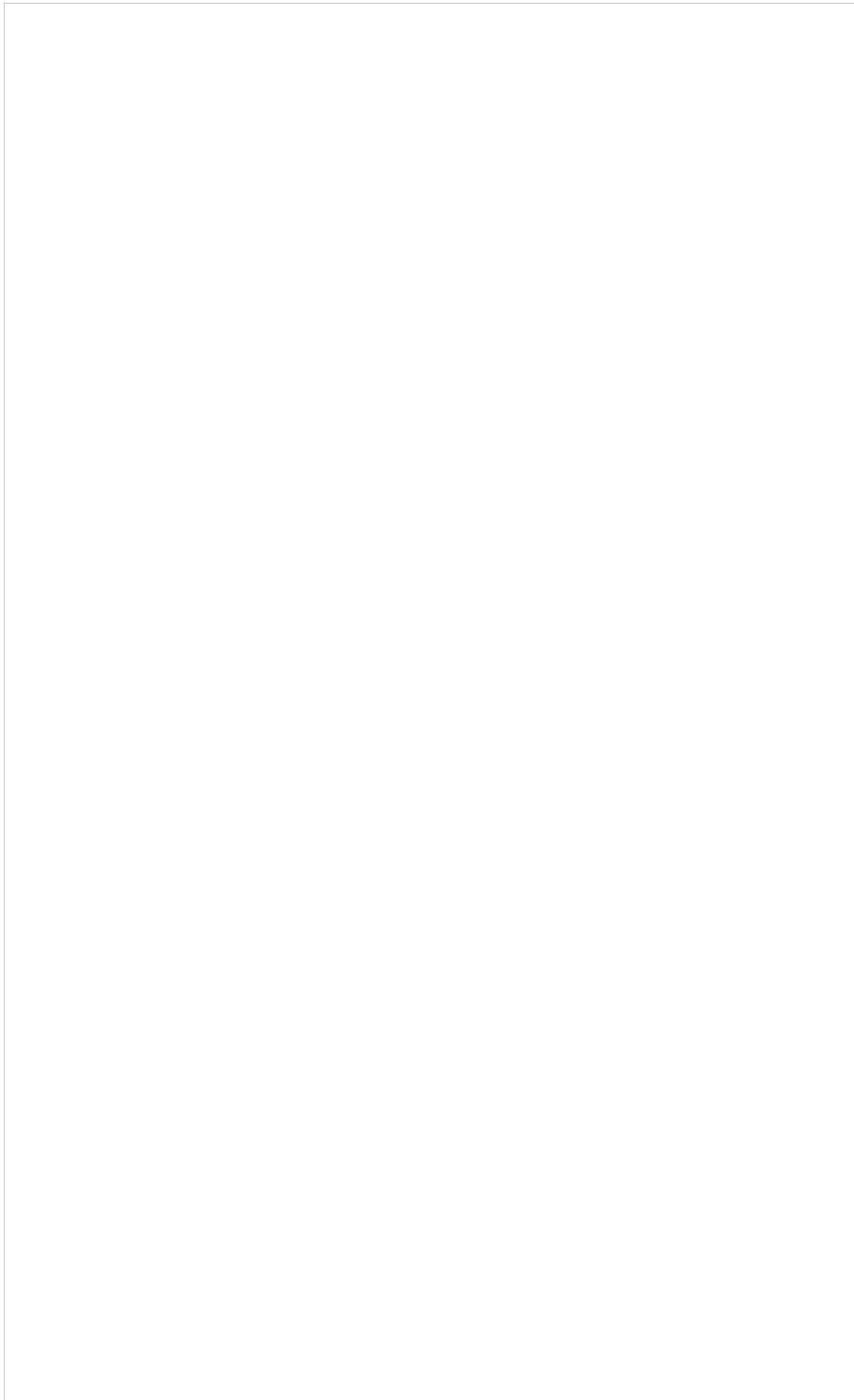
## Top 10 Destination Airports



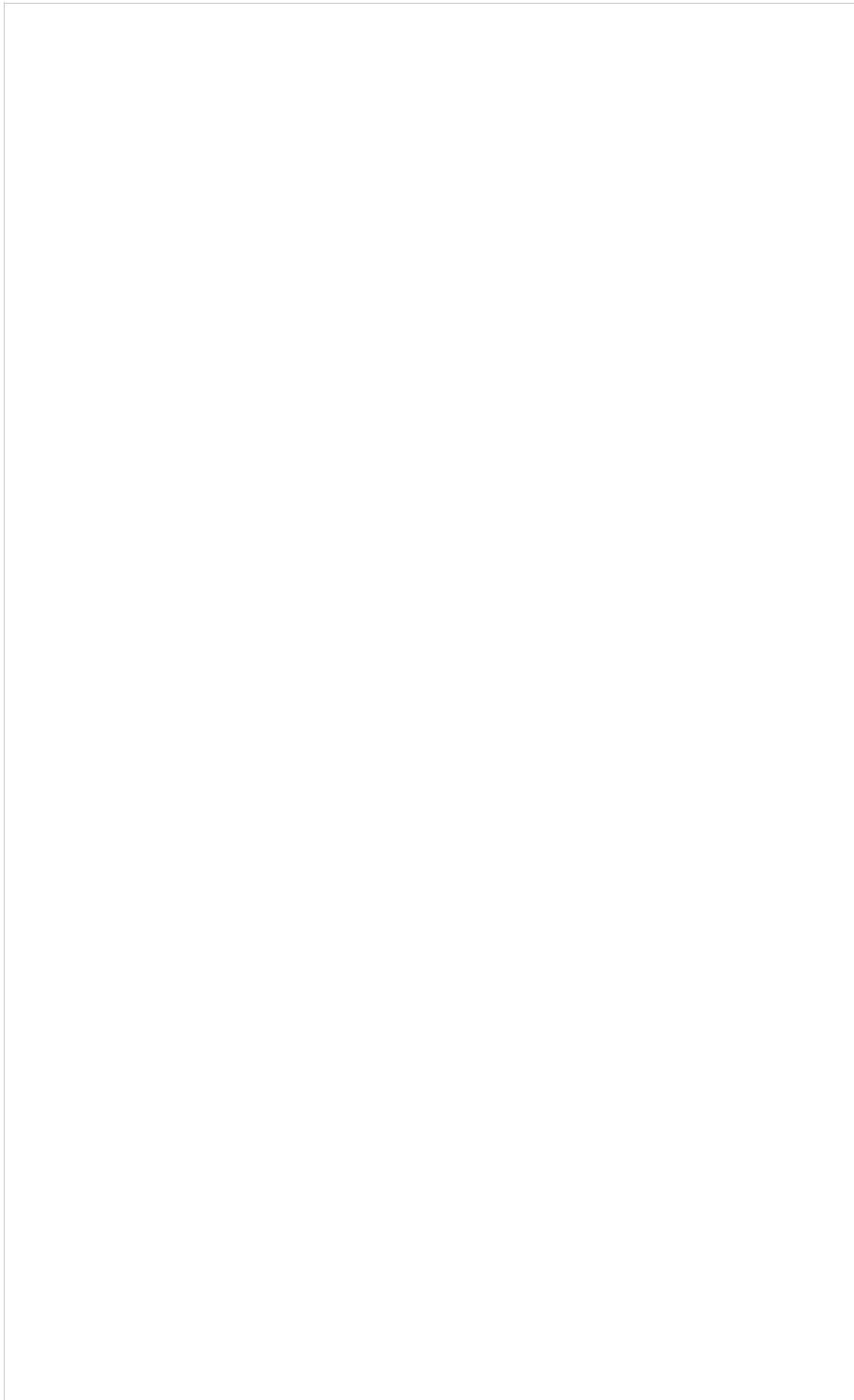
## Top 10 Origin Airports











# Flight Operations Overview : Cancellations, Diversions, and Delays by Airline and Airport

**Total Flights**

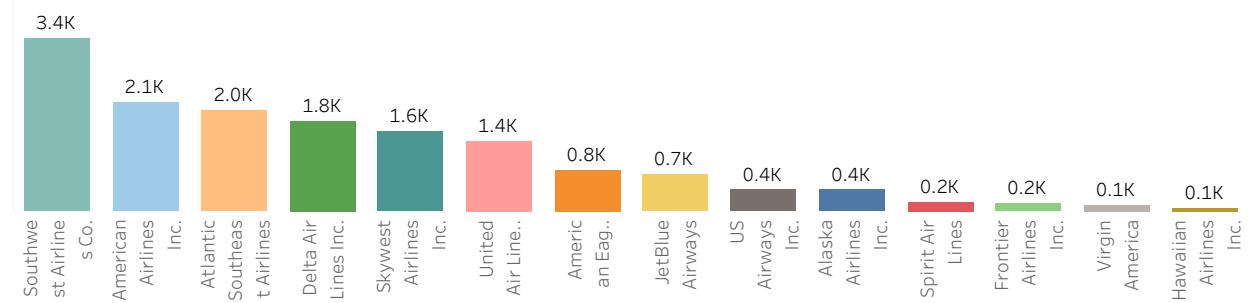
**5.8M**

**Total Diverted :**

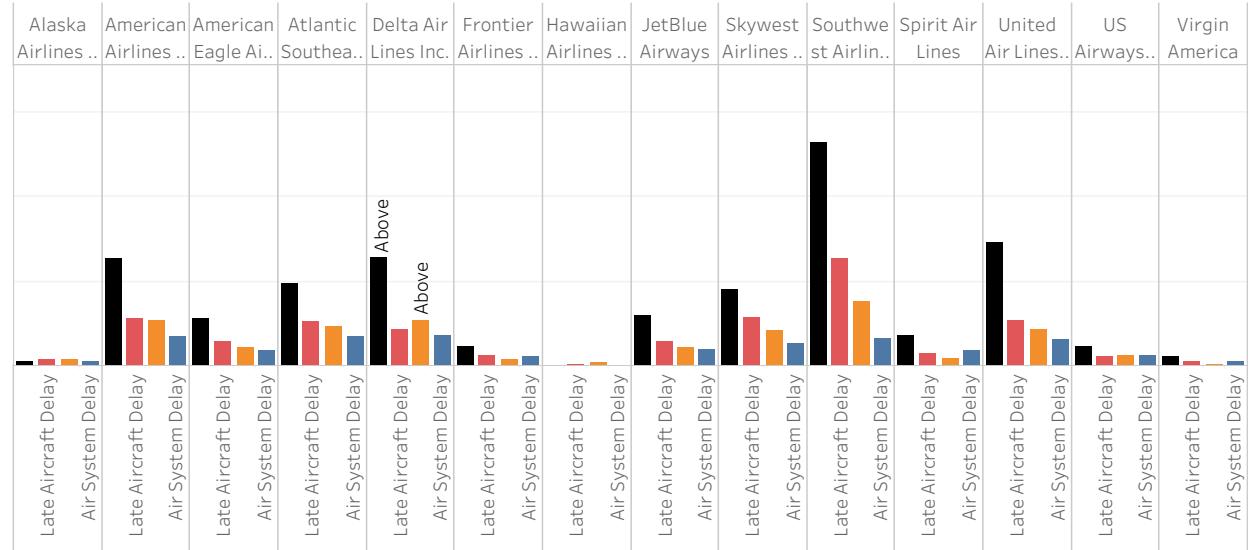
**15K**

**0.26 %**

## Total Diverted Flights/Airlines



## Total Delays by Airlines

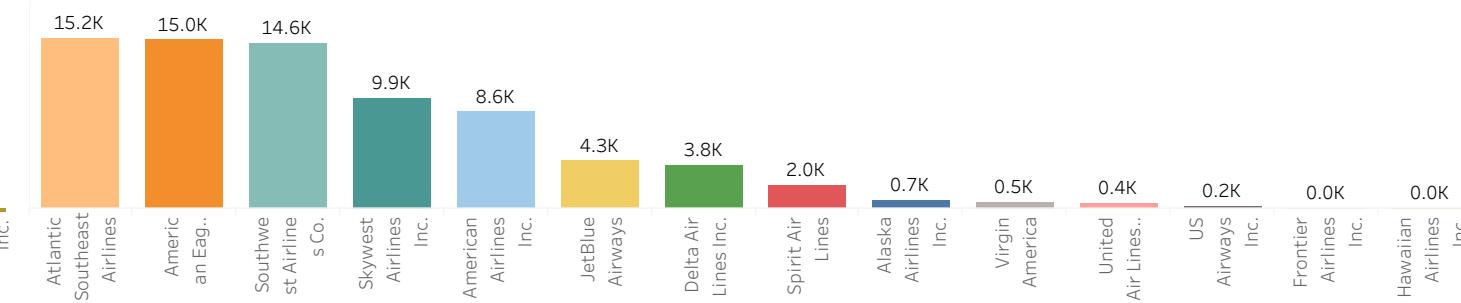


## Total Cancellation Flights

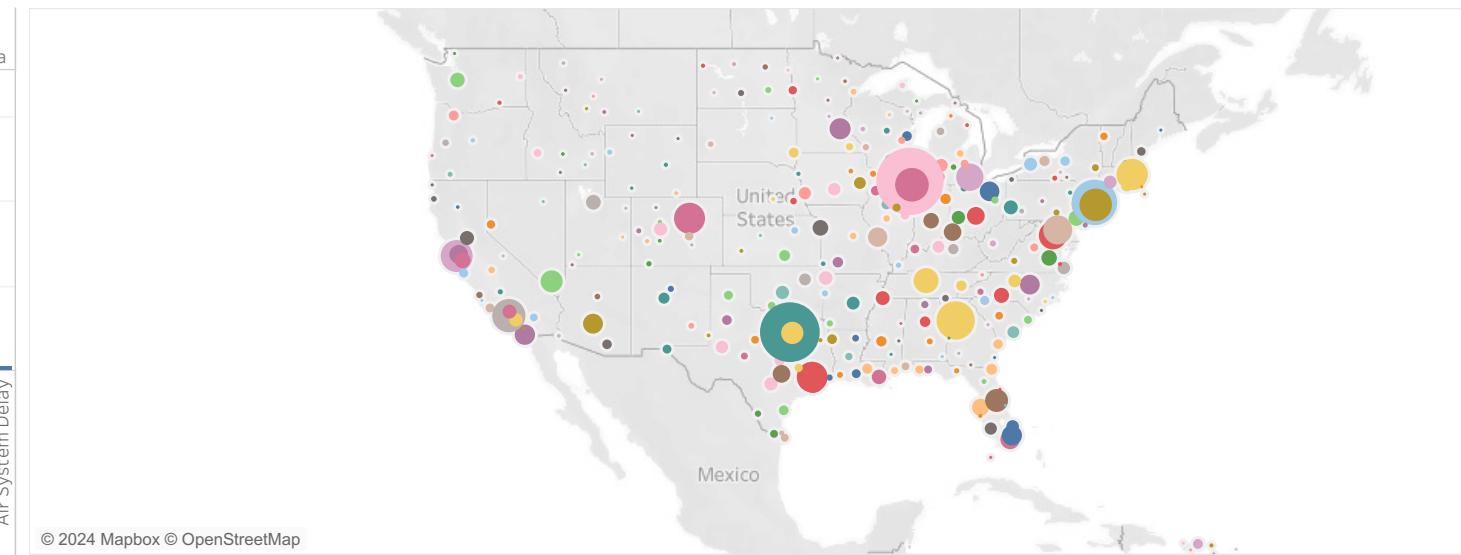
**75K**

**1.3%**

## Total Cancelled Flights by Airlines



## Cancellation Airport Map



Select Airlines  
Delta Air Lines Inc.

Select Months  
3

Measure Names  
Departure Delay  
Late Aircraft Delay  
Airline Delay  
Air System Delay

# Airline Cancellations Overview: Monthly Trends and Key Causes

## Total Cancellation In Month [ 3 ]

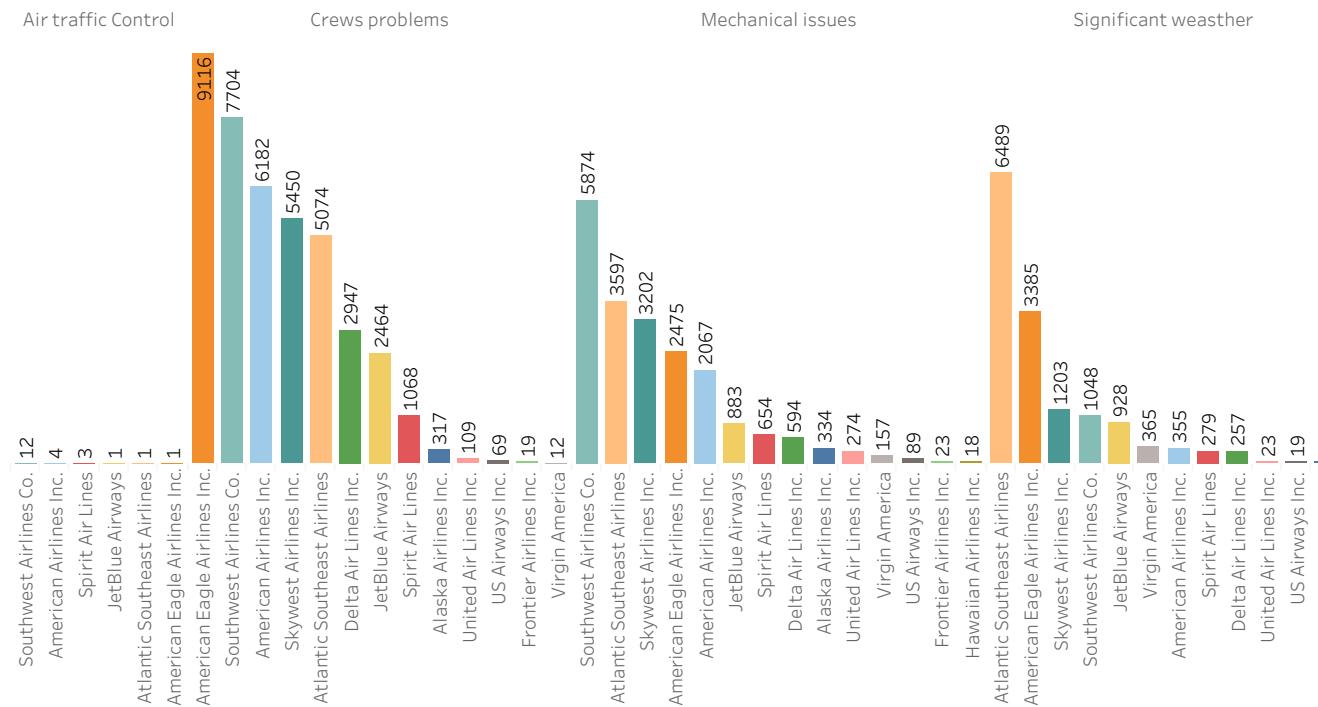
9K

▲ 1.83%

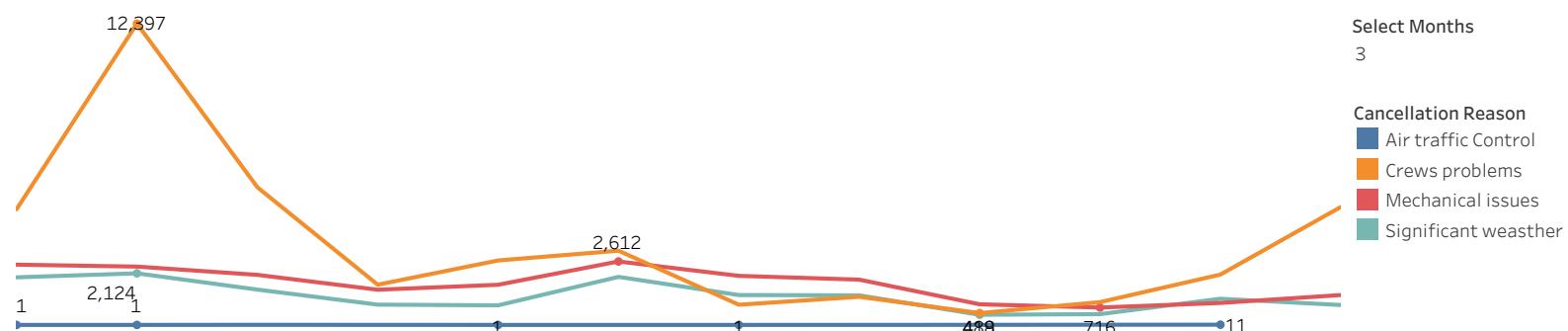
## Monthly Cancellation



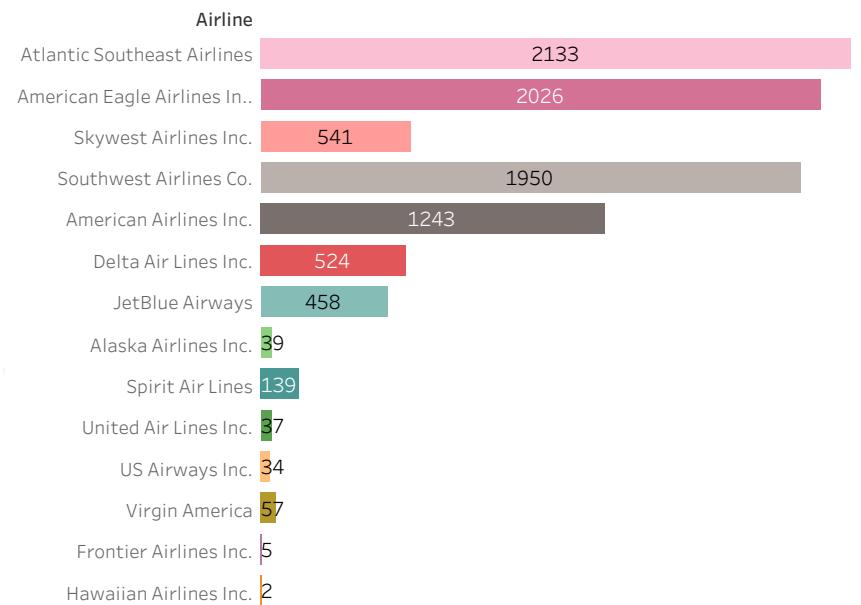
## Cancellation breakdown reasons



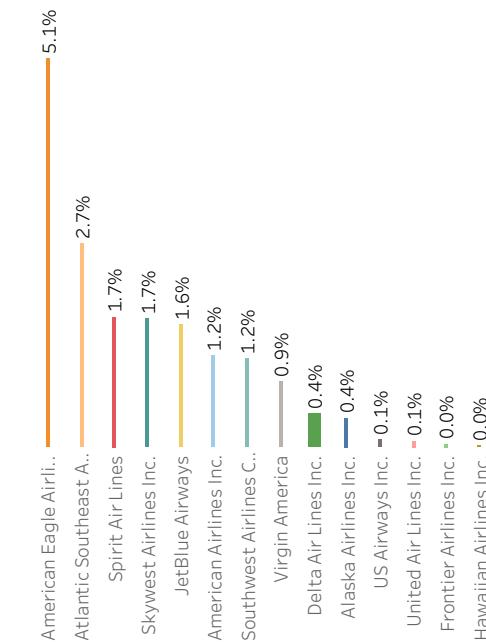
## Cancellation Reasons by Month



## Airlines Cancellation Flights per Month Month [ 3 ]



## %Total Cancelled Flights / Airlines



## Airline Cancellations : Percentage Breakdown by Reason and Time

## % Airlines Cancellation / Reasons

## Select Airlines

Delta Air Lines Inc.

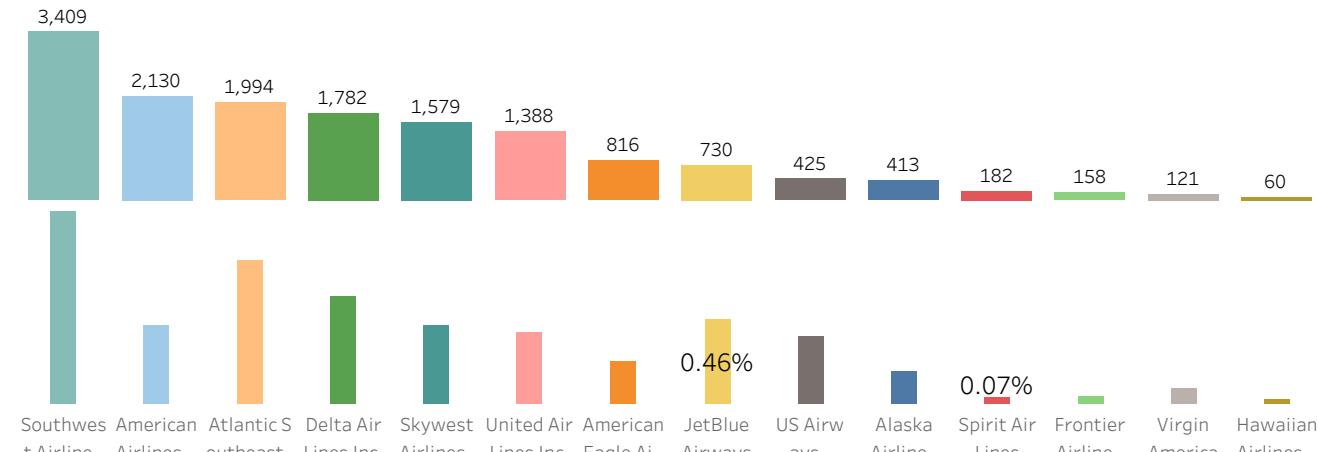
# % Airline Cancellation Time / Reasons

# Flight Diversions Overview : Monthly Trends and Airline Impact

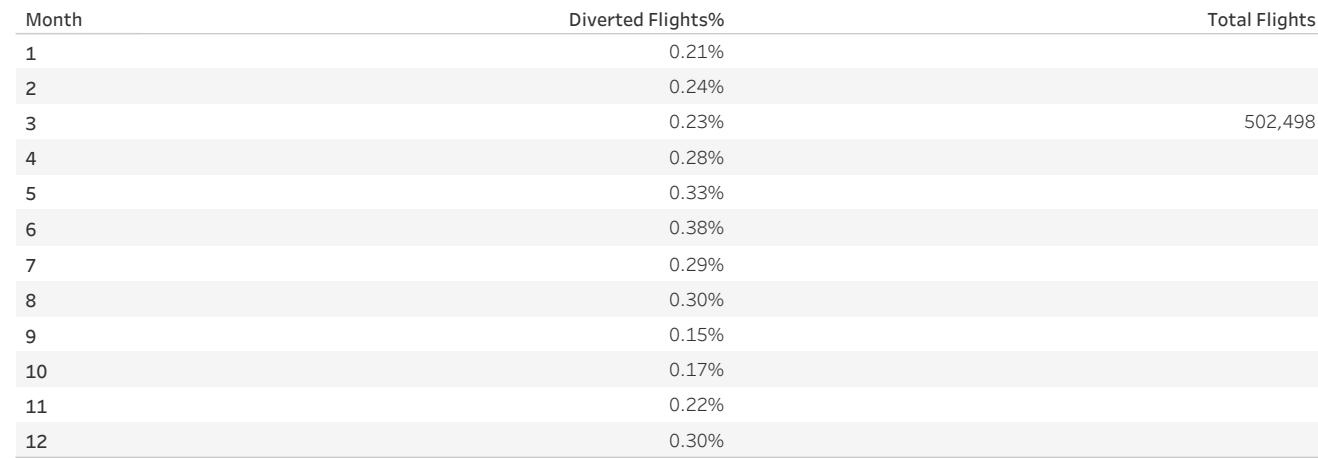
Diverted % In Month [ 3 ]

0.23%

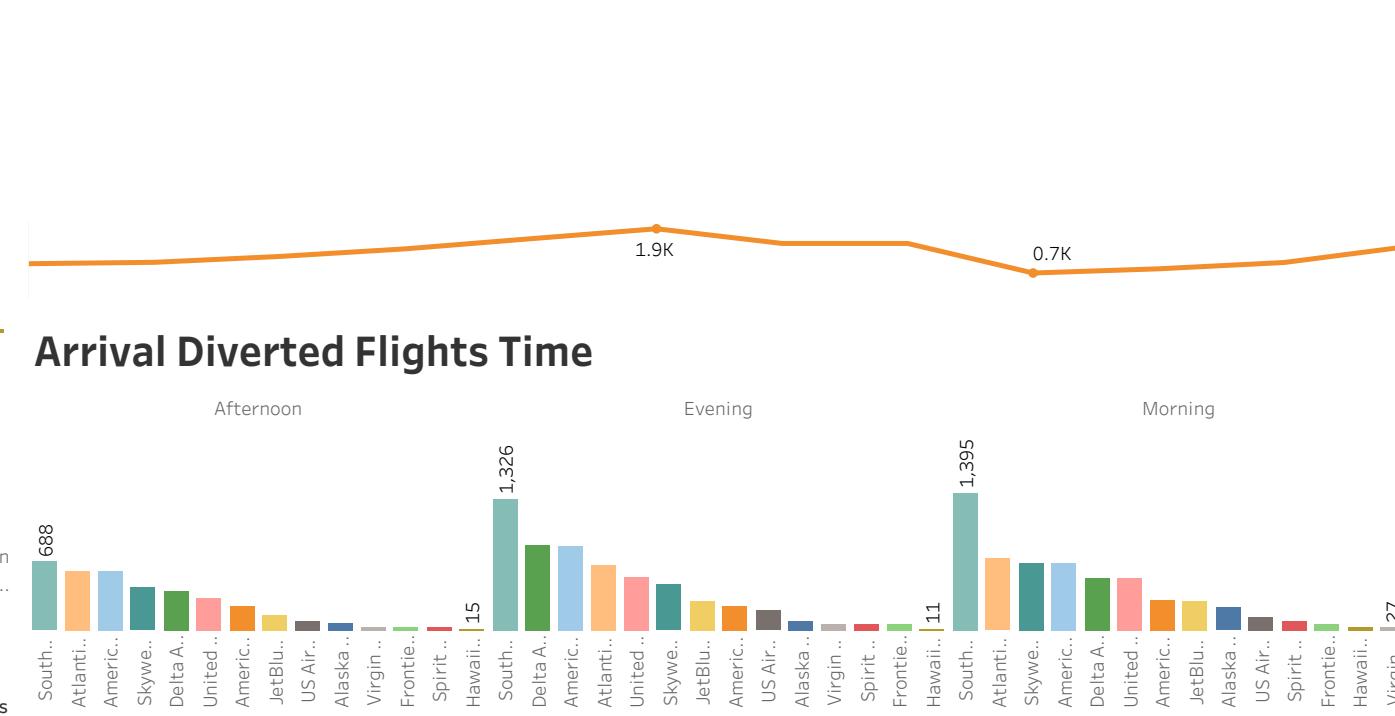
Airlines Diverted Flight/ month



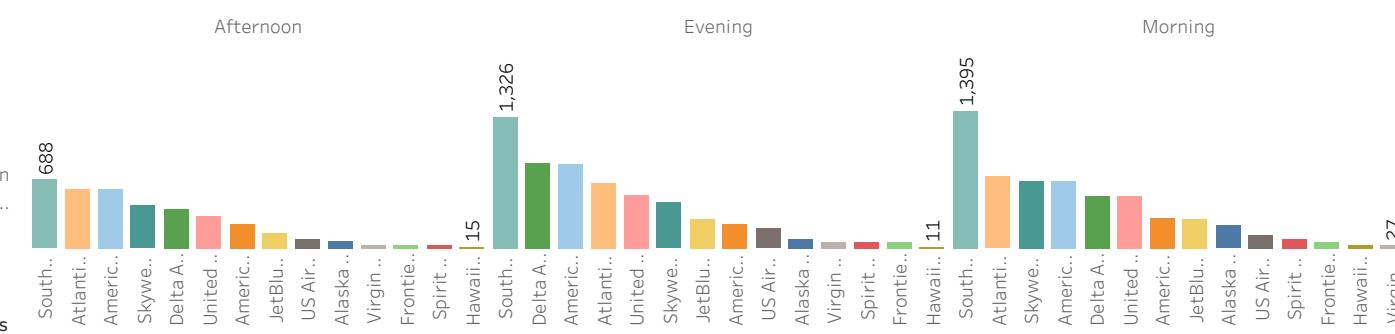
Monthly Diverted Flights



Diverted Flights per Month



Arrival Diverted Flights Time



Total Diverted Flights/Airlines

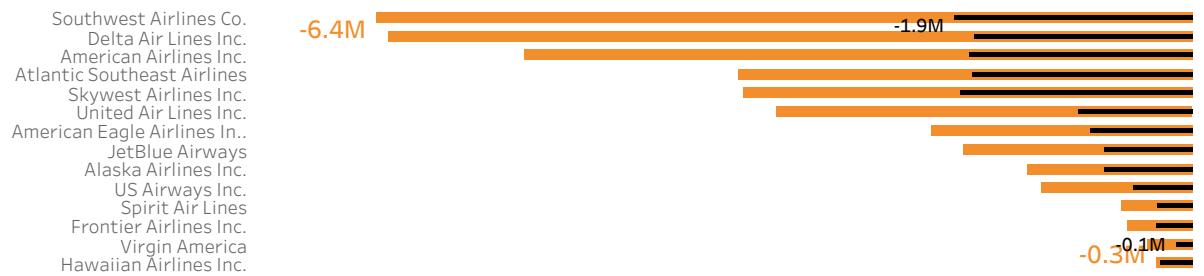


Select Months  
3

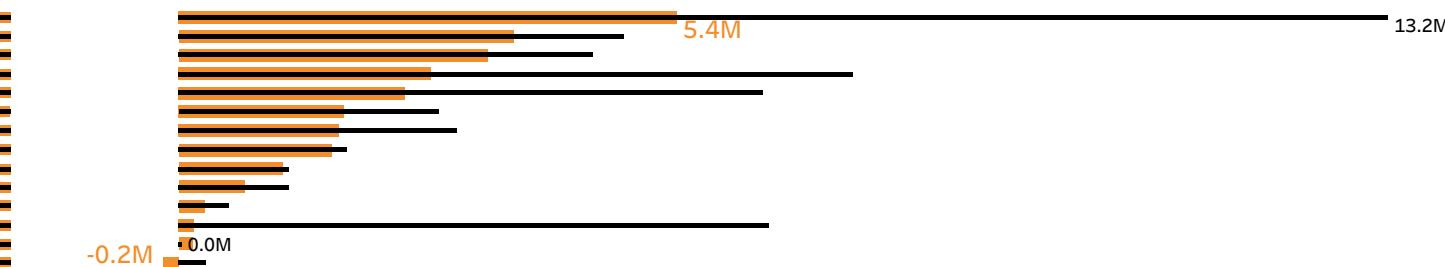
Airline  
Alaska Airlines Inc.  
American Airlines Inc.  
American Eagle Airlines Inc.  
Atlantic Southeast Airlines  
Delta Air Lines Inc.  
Frontier Airlines Inc.  
Hawaiian Airlines Inc.  
JetBlue Airways  
Skywest Airlines Inc.  
Southwest Airlines Co.  
Spirit Air Lines  
United Air Lines Inc.  
US Airways Inc.  
Virgin America

## Flights Delays Analysis : Arrival vs Departure and key Delay Factors

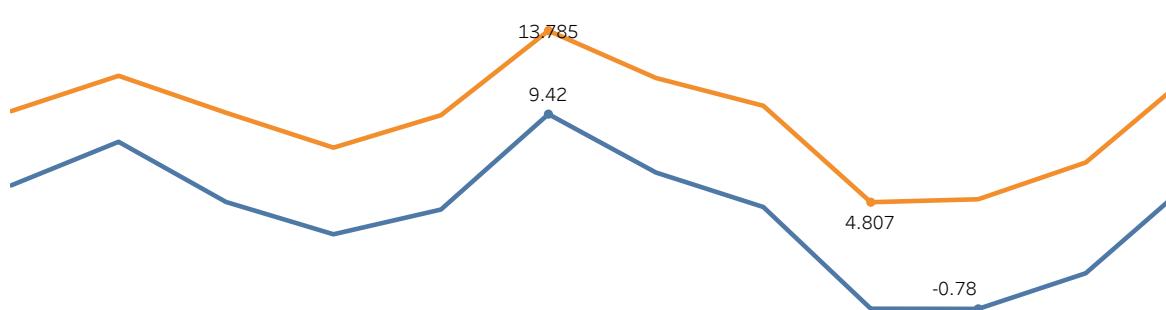
### Early Arrival Vs Early Dep



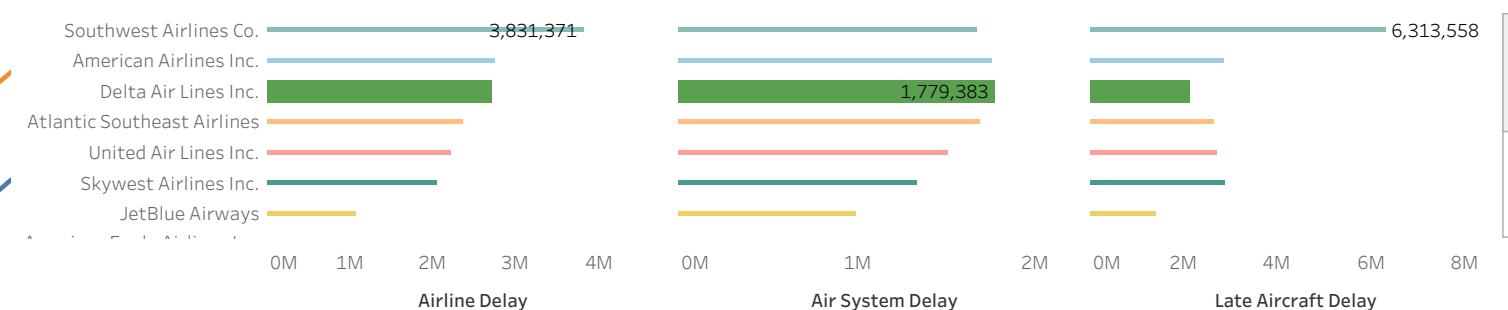
### Arrival Delay Vs Dep Delay



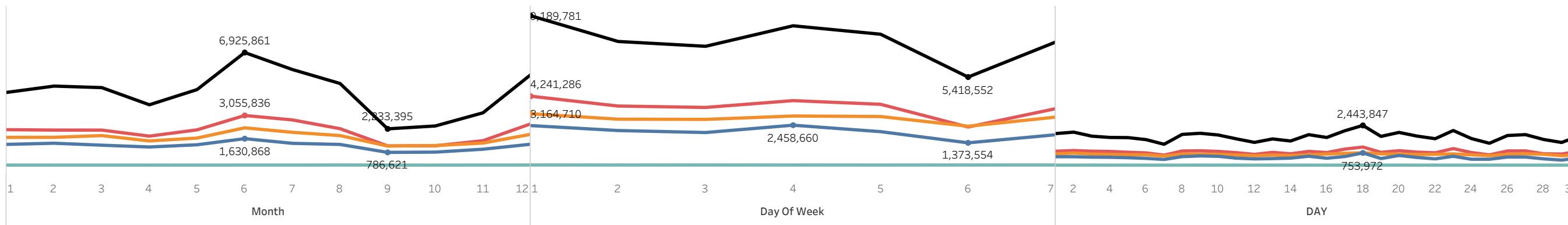
### Avg. Monthly Delay



### Airlines Delay Reasons



### Delay\_TimeFrame



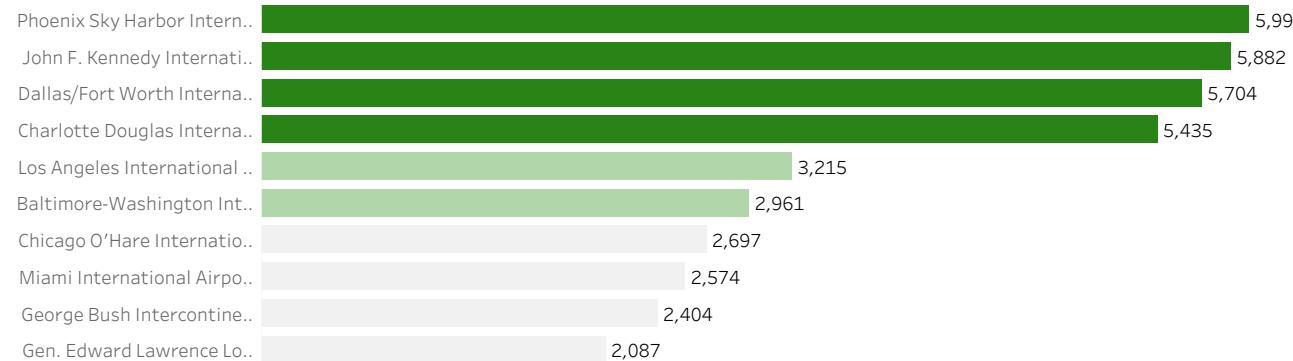
Select Airlines  
Delta Air Lines Inc.

Measure Names  
Arrival Delay  
Departure Delay

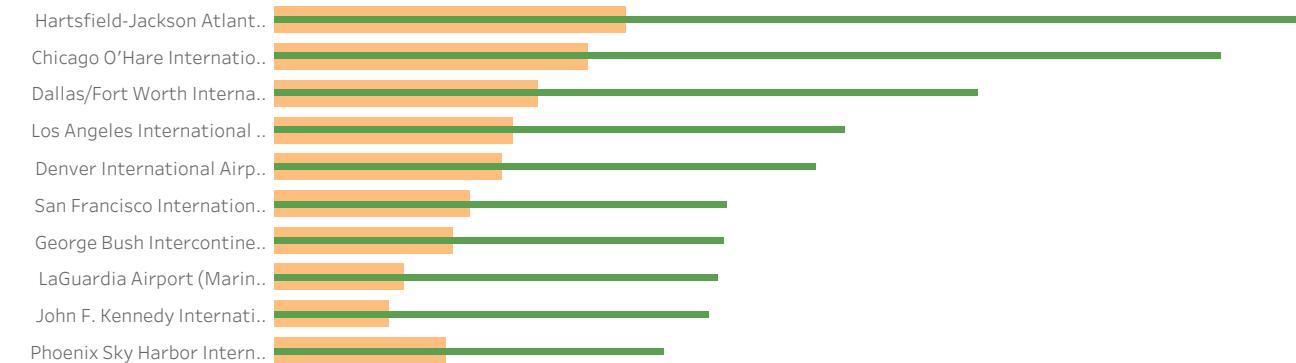
Measure Names  
Air System Delay  
Airline Delay  
Departure Delay  
Late Aircraft Delay  
Security Delay

# Airport Performance Insights : Security Delays , Taxi Times and Top Airports

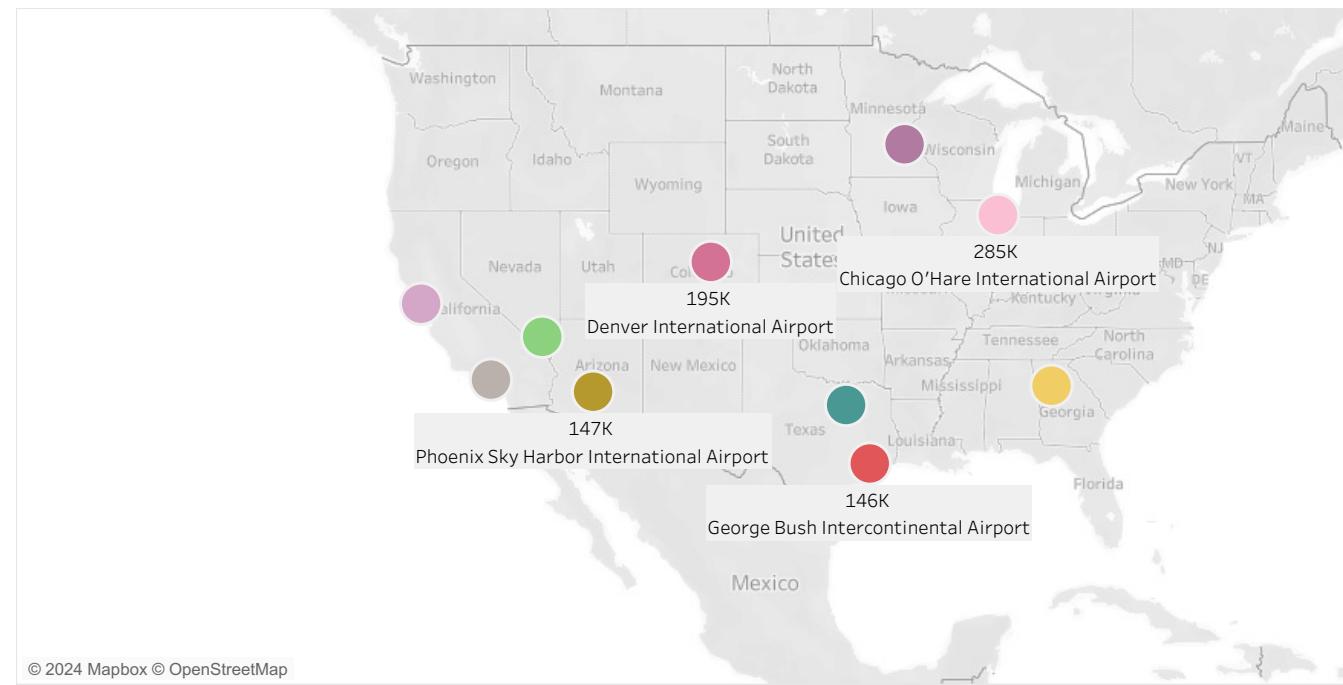
## Security delay by Airport



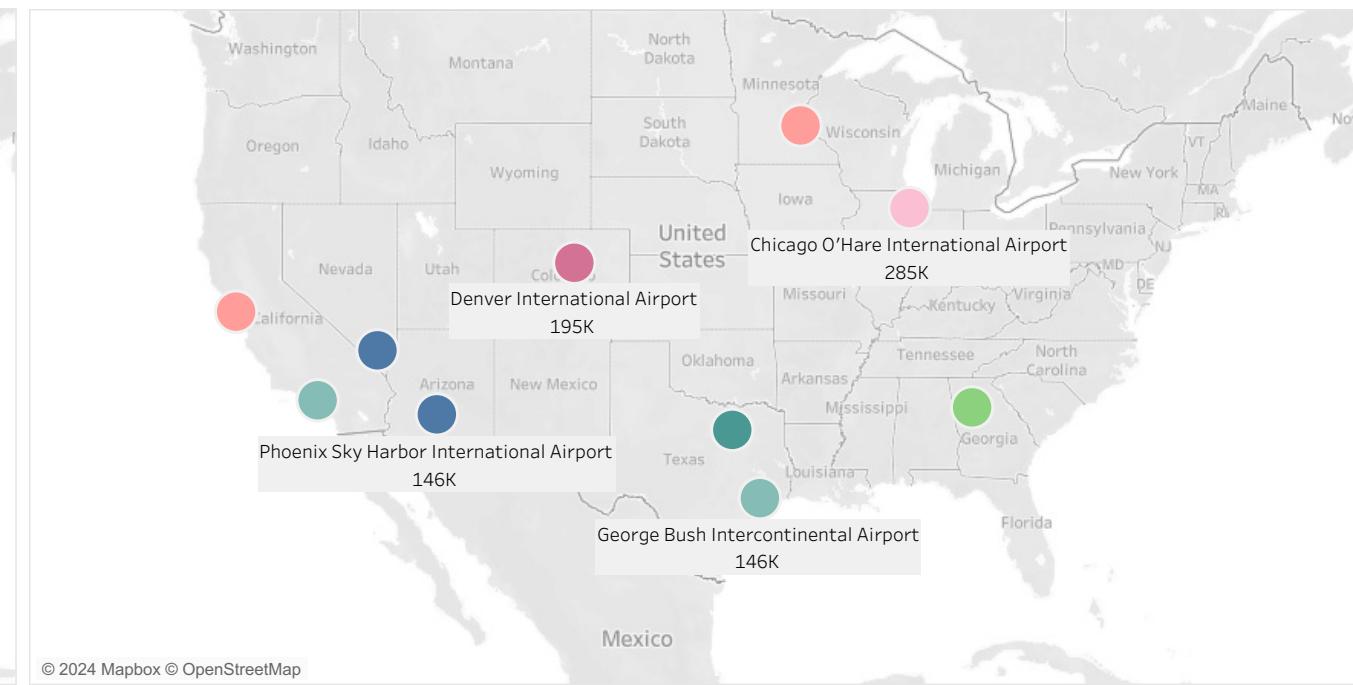
## AirPorts Taxi In/Out



## Top 10 Origin Airports



## Top 10 Destination Airports



Security Delay  
2,087 5,991

Measure Names  
Taxi In  
Taxi Out

AIRPORT (airport Destina..  
Chicago O'Hare Inter..  
Dallas/Fort Worth Int..  
Denver International ..  
George Bush Intercon..  
Hartsfield-Jackson At..  
Los Angeles Internati..  
McCarran Internation..  
Minneapolis-Saint Pa..  
Phoenix Sky Harbor I..  
San Francisco Interna..