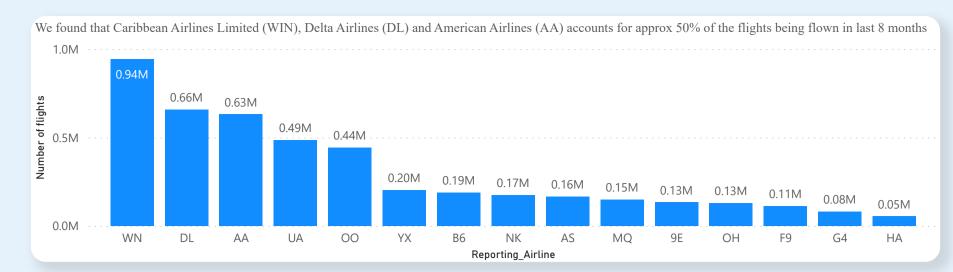
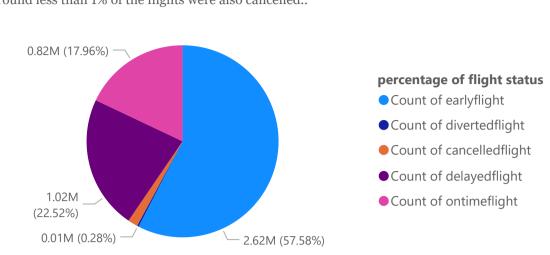
Flight Delay Analytical Tracker

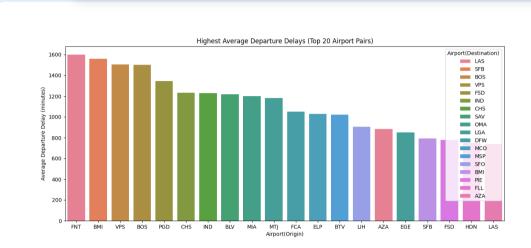


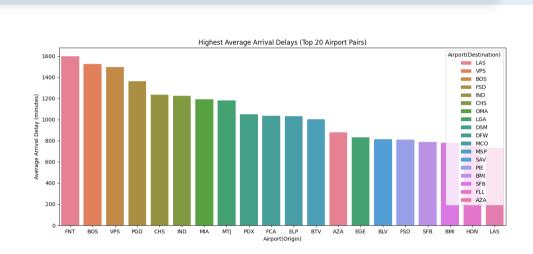
We found that around 60% of the flights were early and 18% of the flights were on time. But we found that around 22% of the flights were late which is a significant loss in airline industry. Around less than 1% of the flights were also cancelled..

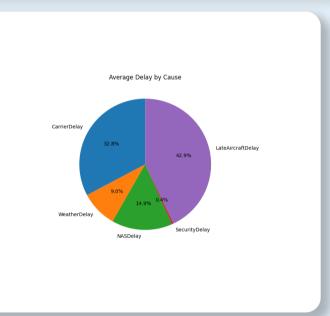


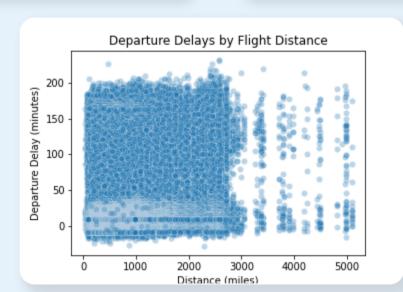


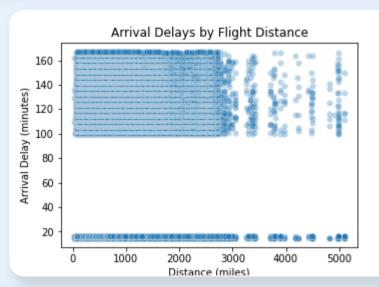
Airports that experience consistently higher delays





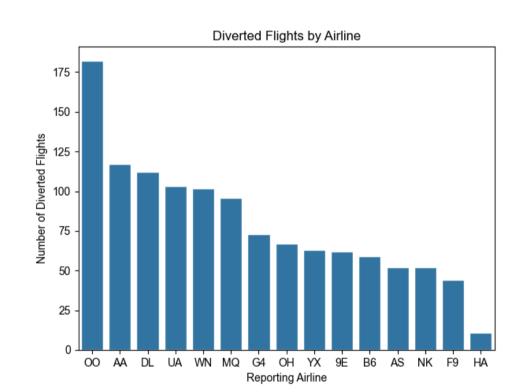


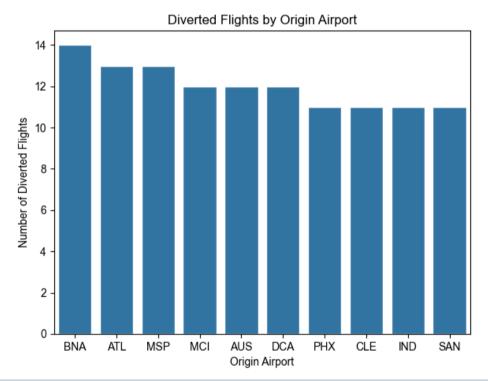




From above scatter plot we observe that Shorter distance flights are having more delays as compared to long haul flights

SkyWest Airlines (OO) and American Airline (AA) had the highest number of flight diversions. Nashville International International Airport (BNA) had the highest number of flight diversions. Denver Airport although is not considered to the be the buisiest airport. But steps needs to be taken to mitigate the diversion issue.





From the below correlation matrix, it is found that Carrier delay and Late aircraft delay as strongly correlated with arrival delay and departure delay. Distance is loosely correlated factor.

Correlation Heatmap of Flight Delay Factors													
DayOfWeek -	1	0.0085	0.0067	0.012	0.011	0.0068	-0.0066	-0.014	0.004	0.018			- 1.0
Month -	0.0085	1	-0.0032	0.08	0.069	0.034	0.0069	-0.025	-0.0089	0.08			- 0.8
Distance -	0.0067	-0.0032	1	0.028	0.028	0.048	-0.028	-0.0067	0.026	-0.0011			
DepDelay -	0.012	0.08	0.028	1	0.99	0.75	0.21	0.067	0.029	0.59			- 0.6
ArrDelay -	0.011	0.069	0.028	0.99	1	0.75	0.22	0.13	0.029	0.58			
CarrierDelay -	0.0068	0.034	0.048		0.75	1	-0.029	-0.072	-0.0063	0.0068		-	- 0.4
WeatherDelay -	-0.0066	0.0069	-0.028	0.21	0.22	-0.029	1	0.021	-0.0041	-0.015			
NASDelay -	-0.014	-0.025	-0.0067	0.067	0.13	-0.072	0.021	1	-0.0062	-0.082		-	- 0.2
SecurityDelay -	0.004	-0.0089	0.026	0.029	0.029	-0.0063	-0.0041	-0.0062	1	-0.0094			
.ateAircraftDelay -	0.018	0.08	-0.0011	0.59	0.58	0.0068	-0.015	-0.082	-0.0094	1			- 0.0
)ayOfWeek -	Month -	Distance -	DepDelay -	ArrDelay -	arrierDelay -	atherDelay -	NASDelay -	:urityDelay -	rcraftDelay -			

