

FLIGHT DELAYS



AIRLINE DELAY ANALYSIS

MICROSOFT
#30DAYSOFLearning
CAPSTONE



MARY
SULEIMAN

DASHBOARD

DELAY
ANALYSIS

INSIGHTS



AIRLINE DELAY DASHBOARD



539K

Total Flights

240K

Delayed Flights

299K

Flights on Time

18

Airlines

4190

Total Flight Routes

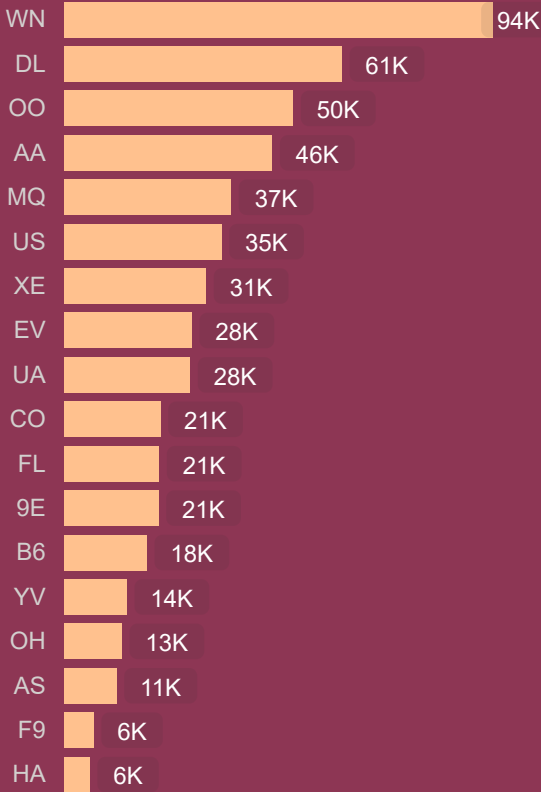
0.45

Delay Index

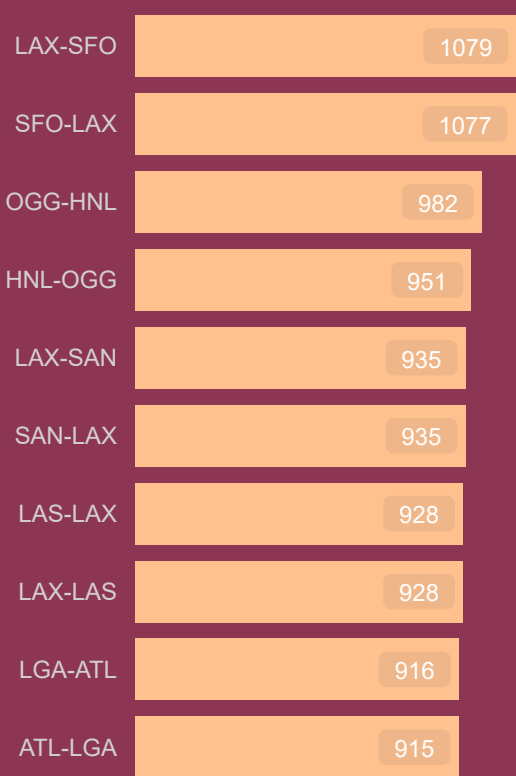
0.55

Flights on time index

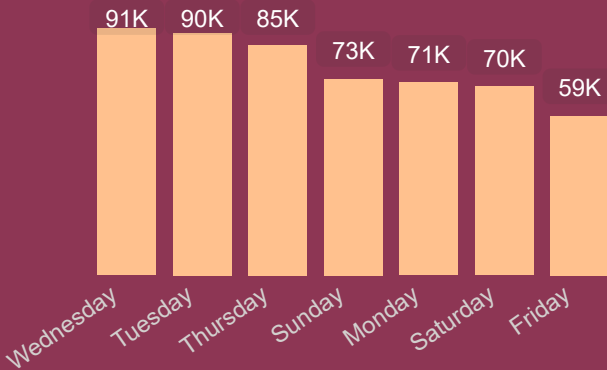
Total Flights by Airline



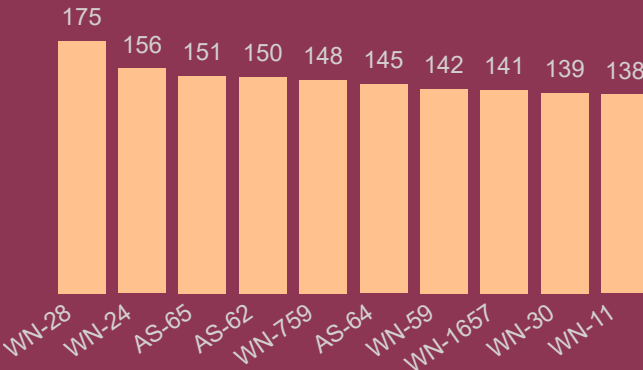
Top 10 Flights by Flight Route



Total Flights by Weekday

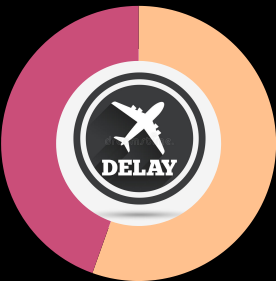


Top 10 Flights by Flight

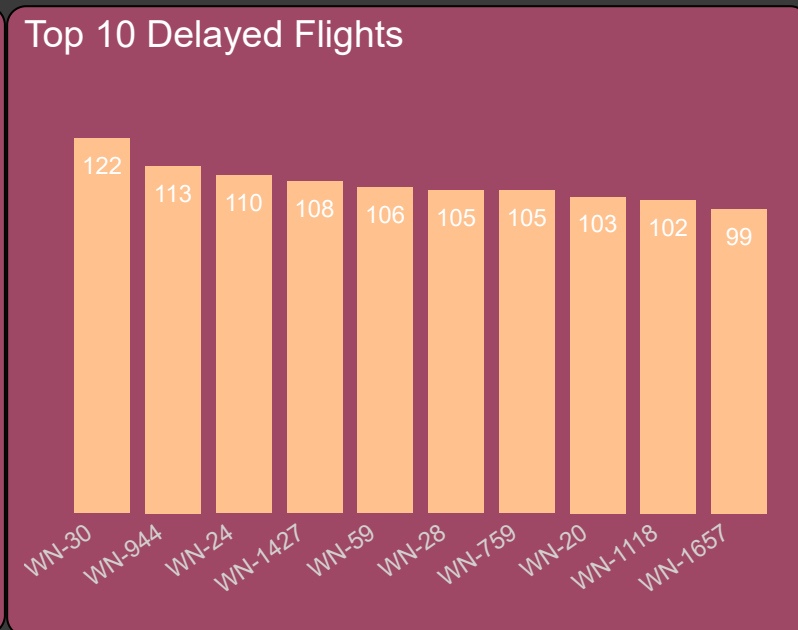
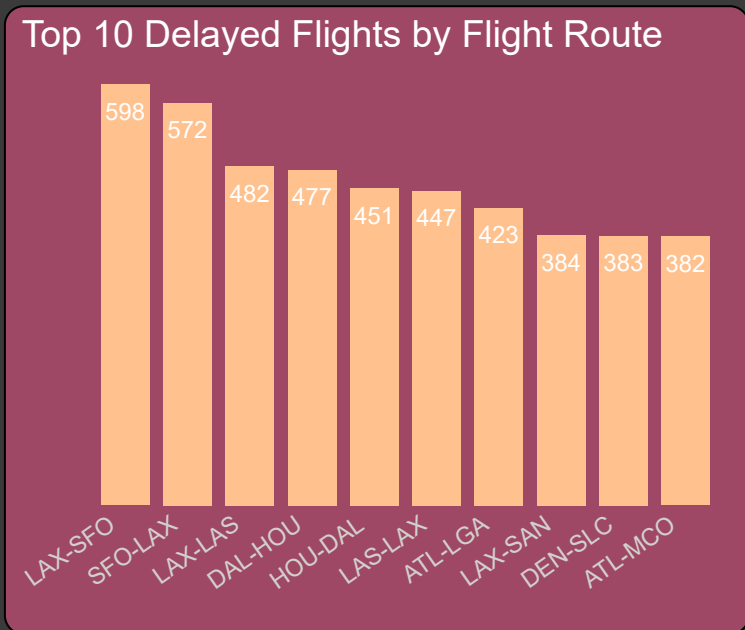


Percentage of Delayed and Flights on Time

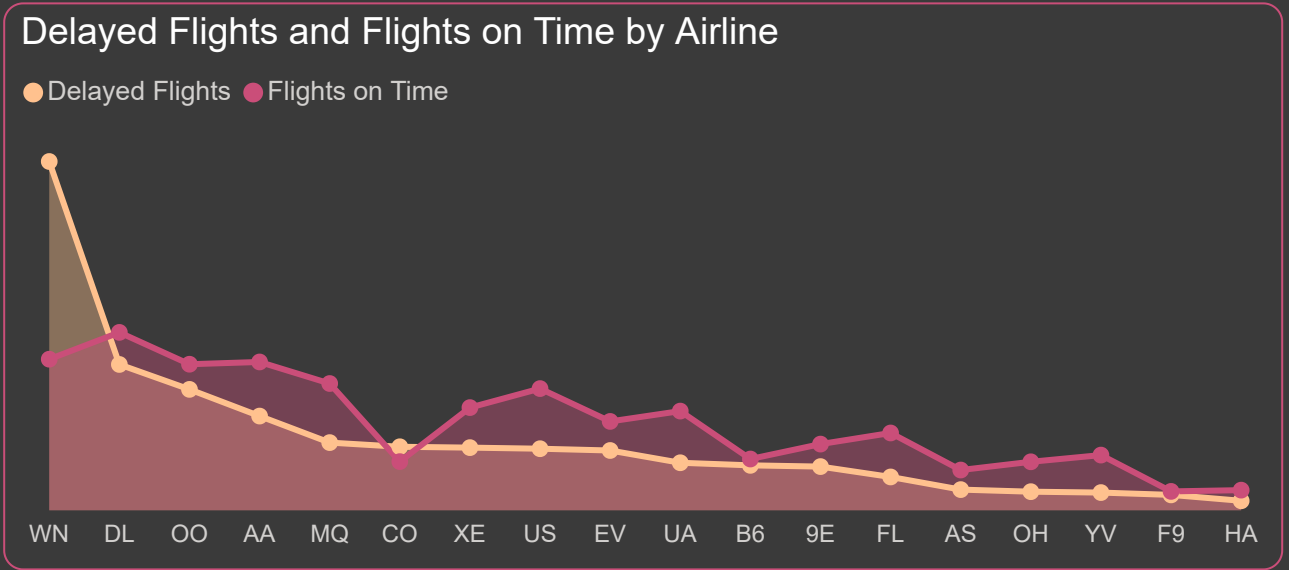
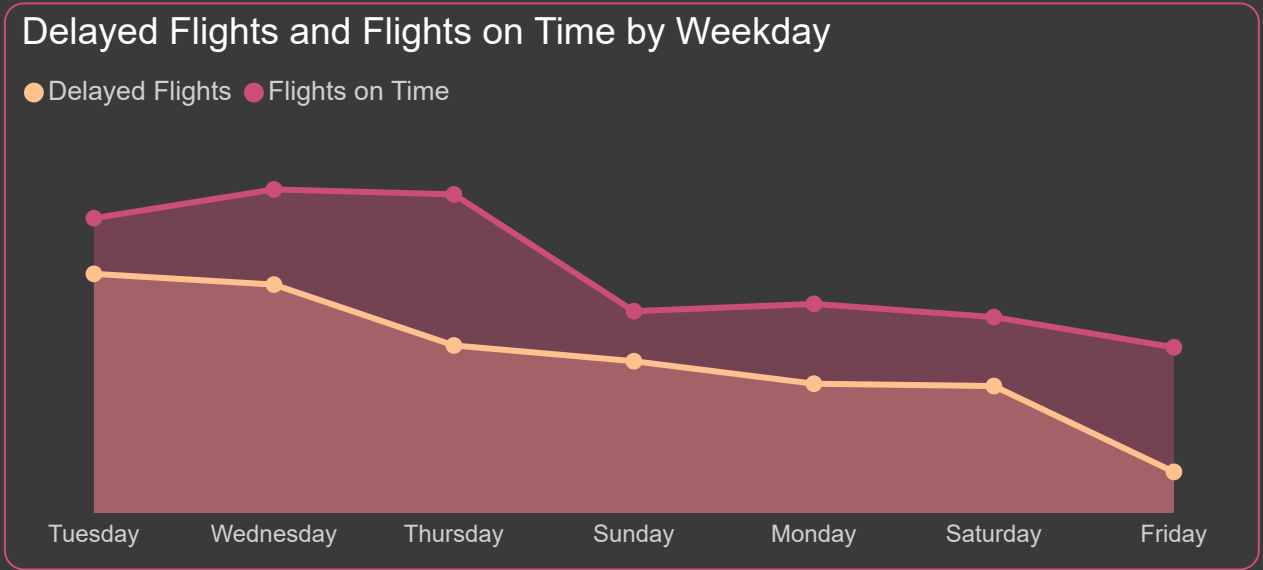
Delayed Flights 44.5%



Flights on Time 55.5%



Airline	Delayed Flights	Flights on Time	Delay Index
9E	8226	12460	0.40
AA	17736	27920	0.39
AS	3892	7579	0.34
B6	8459	9653	0.47
CO	11957	9161	0.57
DL	27452	33488	0.45
EV	11255	16728	0.40
F9	2899	3557	0.45
FL	6275	14552	0.30
HA	1786	3792	0.32
MQ	12742	23863	0.35
Total	240264	299119	0.45



FLIGHT DELAYED



INSIGHTS

General overview

- a total of 539,383 flights were considered.
- 240,264 flights which is about 44.5% of the flights were delayed.
- 299,119 flights which is about 55.5% were not delayed.
- Less flights were delayed.
- 18 Airlines were considered. Airline WN had the highest number flight. HA had the least
- Wednesday had more flights than any other day of the week, Friday had the least.
- More flights were taken from Los Angeles Airport to San Francisco Airport than any other airport.
- WN-28 flight had the highest number of flight.

Delay Analysis

- Even though Wednesday had the highest number of flights, Tuesday had the highest number of delayed flights.
- WN had the highest number of delayed flights, which had about 70% of its flight delays, other airlines had a little below 50% of their flights delayed.
- WN flights were generally more delayed than any other flight, even in instances when they were not the most used flights.

Recommendations

- WN airline should do better with their flights are they are the most used.
- If you are looking to travel without delay, Friday will be the best day to do so, and the HA airline will be the best to use as it has the lowest delay index.

AIRLINES

Alaska Airlines AS / ASA
American Airlines AA/AAL
Air Canada AC/ACA
Aero Mexico AM / AMX
Continental Airlines CO / COA
Delta Airlines DL / DAL
FedEx FX / FDX
Hawaiian Airlines HA / HAL
Northwest Airlines NW / NWA
Polar Air Cargo PO / PAC
Southwest Airlines SW / SWA
United Airlines UA / UAL
United Parcel (UPS) 5X / UPS
Virgin Atlantic VS / VIR
Viva Aerobús VB / VIV
WestJet WS / WJ
Endeavor Airline 9E
Frontier Airline F9

AIRPORTS

ATL - Hartsfield-Jackson Atlanta International Airport - Georgia
AUS - Austin-Bergstrom International Airport - Texas
BNA - Nashville International Airport - Tennessee
BOS - Boston Logan International Airport - Massachusetts
BWI - Baltimore-Washington International Thurgood Marshall Airport - Washington
CLT - Charlotte Douglas International Airport - North Carolina
DAL - Dallas Love Field - Texas
DCA - Ronald Reagan Washington National Airport - Arlington, Virginia
DEN - Denver International Airport - Colorado
DFW - Dallas/Fort Worth International Airport - Texas
DTW - Detroit Metropolitan Airport - Michigan
EWR - Newark Liberty International Airport - New Jersey
FLL - Fort Lauderdale-Hollywood International Airport - Florida
HNL - Daniel K. Inouye International Airport - Honolulu, Hawaii
HOU - William P. Hobby Airport - Houston, Texas
IAD - Dulles International Airport - Virginia
IAH - George Bush Intercontinental Airport - Houston, Texas
JFK - John F. Kennedy International Airport - Queens, New York
LAS - McCarran International Airport - Las Vegas, Nevada
LAX - Los Angeles International Airport - California
LGA - LaGuardia Airport - Queens, New York
MCO - Orlando International Airport - Florida
MDW - Chicago Midway International Airport - Illinois
MIA - Miami International Airport - Florida
MSP - Minneapolis-Saint Paul International Airport - Minnesota
MSY - Louis Armstrong New Orleans International Airport - Louisiana
OAK - Oakland International Airport - California
ORD - O'Hare International Airport - Chicago, Illinois
PDX - Portland International Airport - Oregon
PHL - Philadelphia International Airport - Pennsylvania
PHX - Phoenix Sky Harbor International Airport - Arizona
RDU - Raleigh-Durham International Airport - North Carolina