

Our data covers domestic flights in and out of Seattle for the past 22 years, including four specific time periods: before and after the September 11 Attacks (2000 and 2002), and before and after the COVID-19 Pandemic (2018 and 2022).

We selected specific columns that we felt showcased the most relevant information for all time periods. For 2018, we focused on flight date, airline carrier, flight number, origin airport, and destination airport. For 2000 and 2002, we used origin and destination airport codes, flight numbers, and flight dates. For 2022, we focused on month, origin airport, destination airport, and number of flights. We also removed irrelevant data from each set.

A new column was added to the dataset called "percent monthly flights". This column represents the percentage of monthly flights that a particular route represents, which can be a useful metric for understanding the relative popularity of different routes. For example, if a particular route represents 10% of all flights in a given month, it could suggest that the route is a popular one among travelers. This new column can provide valuable insights into the changing popularity of different flight routes over time, which can be useful for airlines, travel agencies, and researchers alike.

While we made every effort to refine our data, there could be potential pitfalls. For example, flight delays or cancellations may not be properly recorded, leading to incomplete or unreliable data. Also, our data is limited to domestic flights within the United States, so it may not be representative of all flights out of Seattle. The percentage could be skewed if there are missing or incorrect data points for any given route.

The events our data surrounds, 9/11 and the COVID-19 outbreak were both major events. Following both incidents, flights decreased and the aviation industry suffered. A key reason for this can be related to one of the 8 Human Rights Principles, Safety and Security. Following 9/11, people feared for their health and safety during air travel and were concerned about how security measures were able to protect them from an infectious disease or a hijacking.

Overall, our data can provide insights into trends in domestic flights to and from Seattle over the past 22 years, with a specific focus on changes in the airline industry due to significant events such as the September 11 Attacks and the COVID-19 Pandemic. The data can be used to identify patterns and make predictions about future trends in air travel.