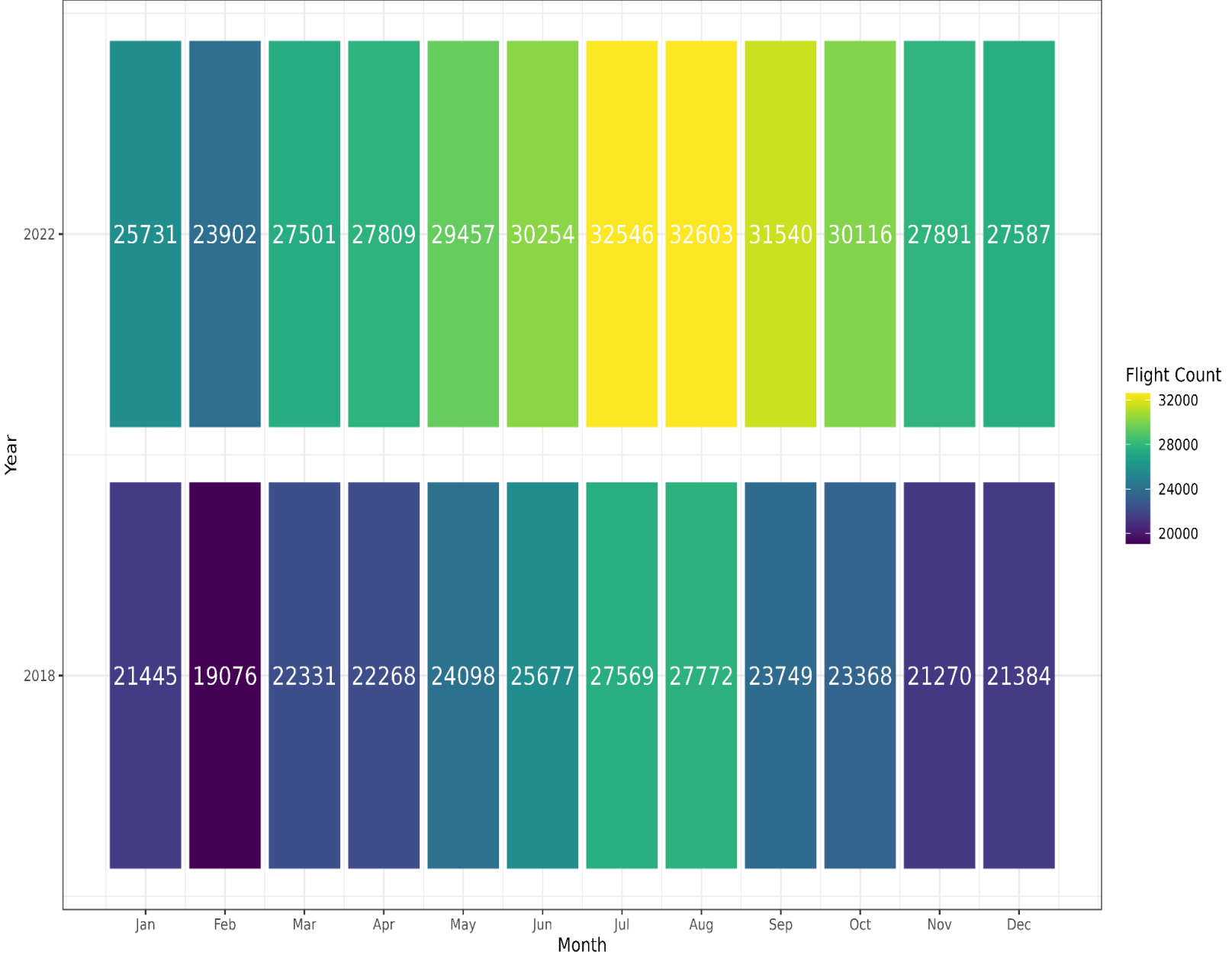
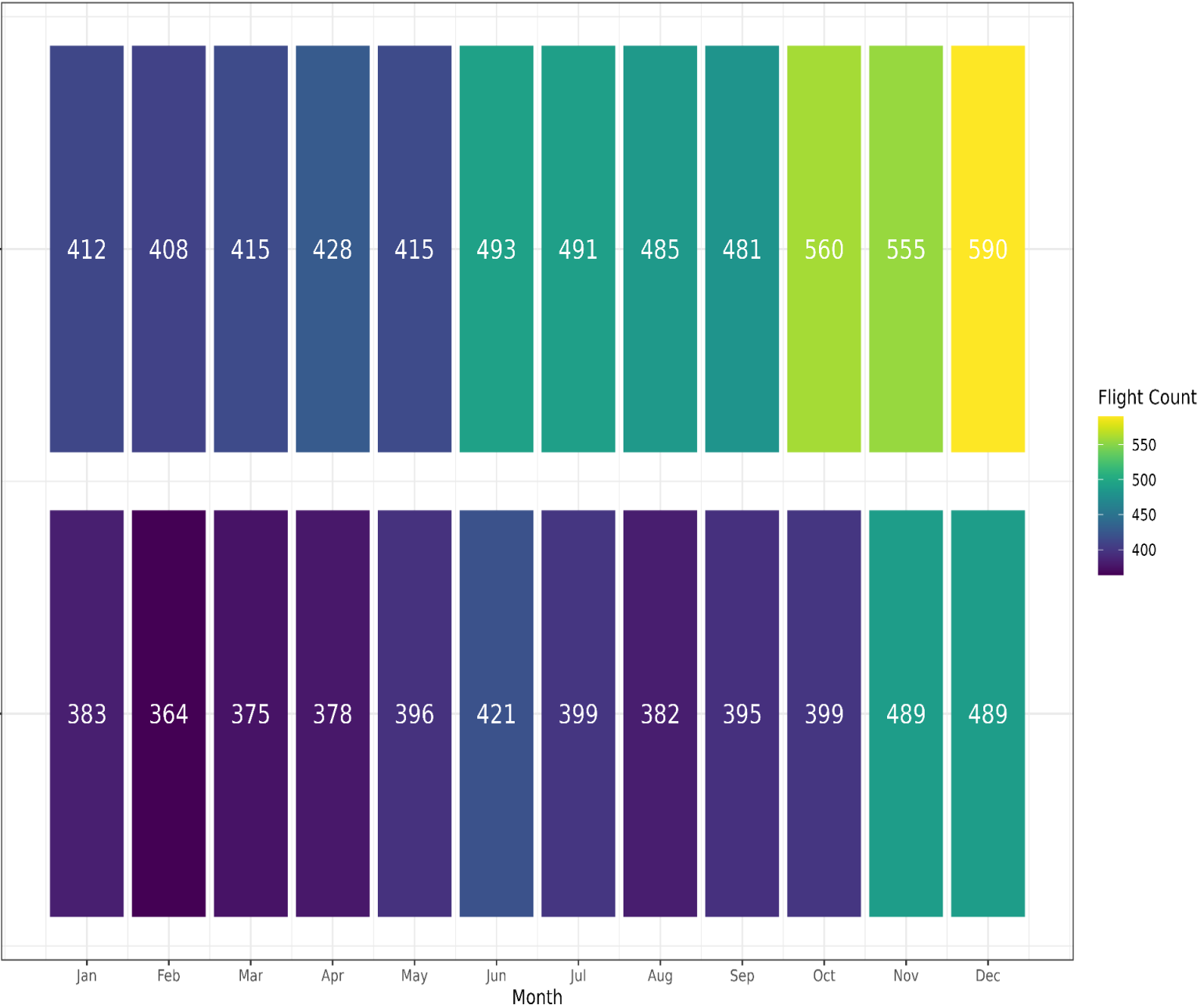


Flight Count before and after outbreak of the SARS-CoV-2 outbreak to and from SEATAC airport



Flight Count before and after September 11th, 2001 Attack to and from SEATAC airport



# Narrative design 1 - Factors

## **Factors :**

the outbreak of the Coronavirus; the attacks of September 11th, 2001;

## **Questions:**

Monthly, what changes occurred to the number of monthly flights (to and from SEATAC airport) between the year 2000 (before the attacks of September 11th, 2001) and the year 2002 (after the attacks of September 11th, 2001)?

Monthly, what changes occurred to the number of monthly flights (to and from SEATAC airport) between the year 2018 (before the outbreak of the Coronavirus) and the year 2022 (the outbreak of the Coronavirus)?

## **Takeaways:**

Question 1: The attack of September 11th, 2001 had a crippling effect on the aviation industry at the time. As seen in the visualization, 2002 January flight (to and from SEATAC airport) numbers were lower than their 2000 December Counterpart, reversing the general trend of increasing traffic.

Question 2: The outbreak of the Coronavirus had a much less profound effect on the aviation industry at the time. As seen in the visualization, the Covid period spanning 2020 and 2021 did not radically damage the industry and the trend of increasing traffic (to and from SEATAC airport) remained steady, maintaining the pre-covid trend of high summer flight numbers.

## **Background information:**

visualizations :

- Color-coded based on monthly flight count.
- The data scopes specifically to flights to and from Seatac airport in Seattle.

Q1 (September 11th, 2001 attacks):

- Awareness of the September 11th, 2001 terrorist attacks on the United States. Understanding of the impact of the attacks on various sectors, including air travel and the aviation industry.
- Airline passenger travel and capacity (measured in terms of available seats) fell drastically after the terrorist attacks of September 11th, when our national air space was temporarily closed. The numbers of airline passengers and seats remained low in subsequent months, but have recovered in the following years. Available seats have increased more slowly than air passenger travel, and have only recently reached the pre-9/11 peaks; in contrast, air passenger travel reached its pre-9/11 peak in July 2004 and has continued to grow. Thus

the aviation industry has accommodated passenger growth with few additional seats, which means fuller planes.

- Shifts in the size of different segments of the industry. In particular, the low-cost carriers grew significantly and air fares decreased through this period.
- Congress had passed a bipartisan financial package to mitigate losses that came as a result of the terrorist attacks. In other words, a bailout bill was passed to save those airlines that were considered “too big to fail.” Overall, bailouts for America’s largest legacy network carriers from 2000-2015 added up to nearly \$71 billion.

Q2(Coronavirus outbreak):

- Familiarity with the outbreak of the Coronavirus disease (COVID-19) that started in late 2019 and had a significant global impact.
- The COVID-19 pandemic disrupted aviation service over many months through a patchwork of travel restrictions among states and foreign destinations.
- In response to industry-specific challenges created by the pandemic, the following programs were created for Treasury to provide assistance to passenger air carriers, cargo air carriers, aviation contractors, and national security businesses, under the CARES Act, the Consolidated Appropriations Act, 2021, and the American Rescue Plan Act of 2021.
  - CARES: \$25B
  - CAA: \$15B
  - ARP: \$14B