### COVID-19 TRAVEL MONITORING SNAPSHOTS 2020-2022

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### **PROJECT SCOPE**

- Snapshots to illustrate how the COVID-19 pandemic was impacting travel in the metropolitan Washington region
  - 2020 through 2022, compared with pre-pandemic data
  - Continuous Count Station (CCS) data collected by the District of Columbia, Maryland, and Virginia
  - Performed analyses for the TPB Modeled Region and each of the jurisdictional groupings of the Core, Inner, and Outer Rings
  - Enplanement data provided by the Metropolitan Washington Airports Authority (MWAA) and BWI Thurgood Marshall Airport



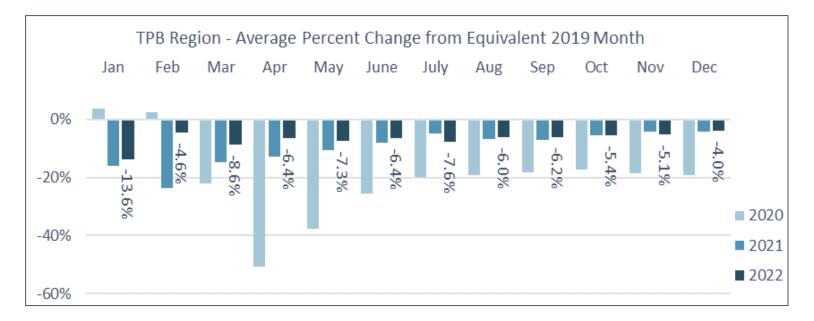
# **CONTINUOUS COUNT DATA**

- Collected data from states by direction and station, or by sensor with direction in the District
- For each station/sensor we compared days with equivalent days
  - Assigned each day an evaluation day
  - Example: Friday, March 25, 2022 = Friday, March 26, 2021 = Friday, March 27, 2020 = Friday, March 29, 2019
  - Compared each hour and day with the same counter in 2019
  - Checked for and eliminated missing or suspect data
  - Analysis limited to the CCS that were operating and producing reliable data in both 2020/2021/2022 and 2019



### **MONTHLY AVERAGE PERCENT CHANGE**

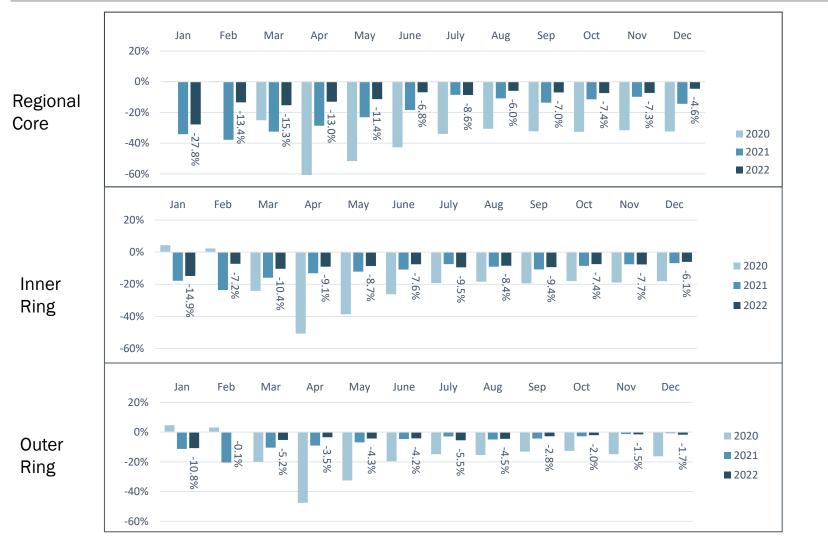
- Average percent change in traffic volumes compared to the equivalent pre-pandemic month beginning in January of 2020
- The percent change was calculated for each station and those were averaged





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### **JURISDICTIONAL GROUPINGS**

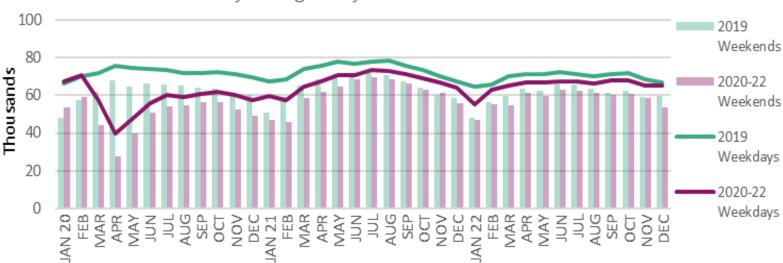




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## **MONTHLY AVERAGE DAILY TRAFFIC**

- Average weekday traffic volumes using lines and average daily weekend traffic using columns.
- Total daily traffic volumes were calculated for each station and the results were averaged by month.



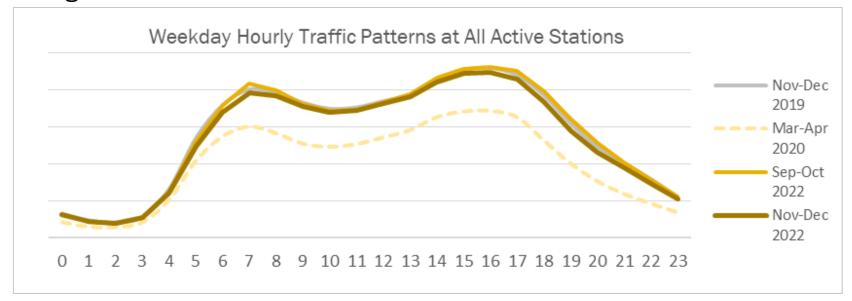
Monthly Average Daily Traffic at All Active Stations



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## **WEEKDAY HOURLY TRAFFIC PATTERN**

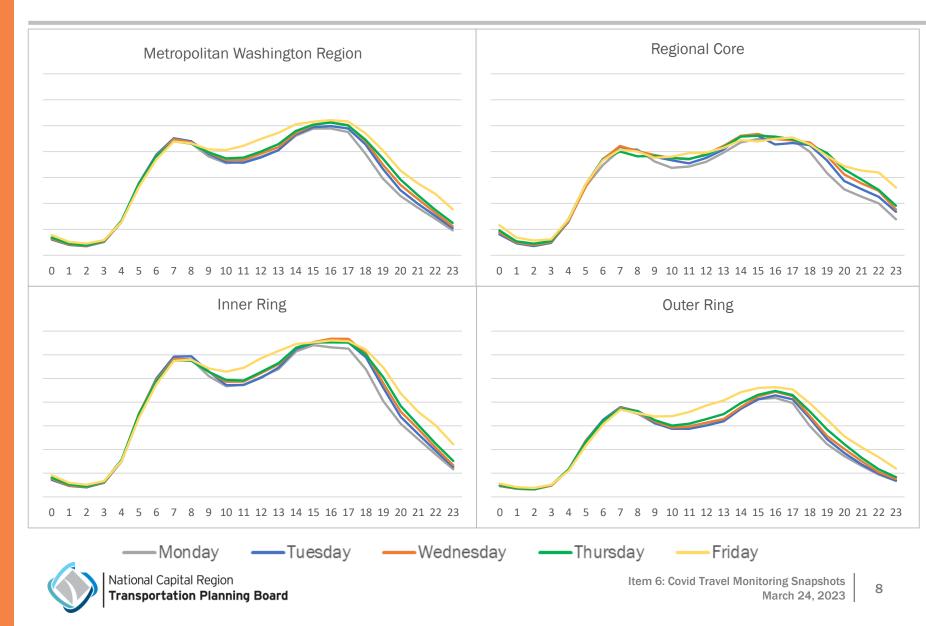
- Average weekday hourly traffic volume trends for the most recent bimonthly period compared with the last bimonthly period and the equivalent 2019 monthly grouping.
- The average weekday hourly volume by two-month group was calculated for each station and these were averaged for the region.



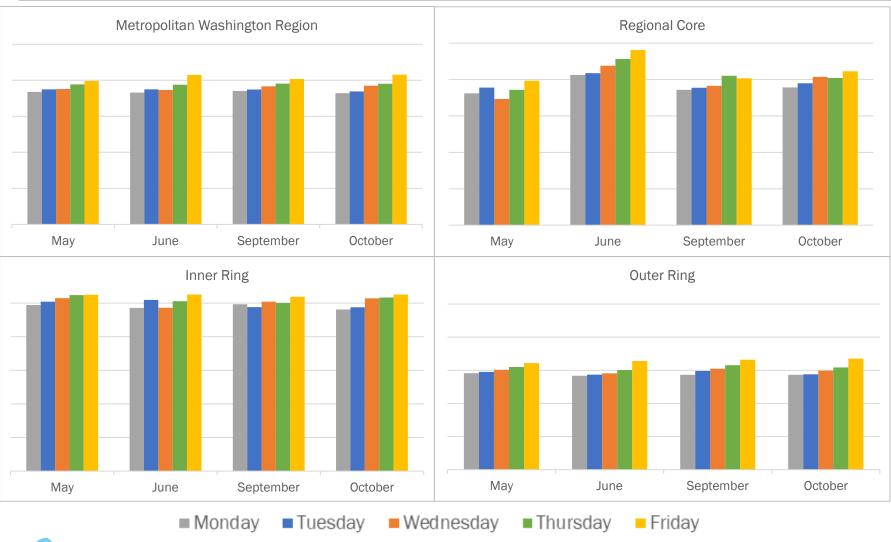


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#### \*NEW\* OCTOBER 2022 WEEKDAY HOURLY TRAFFIC



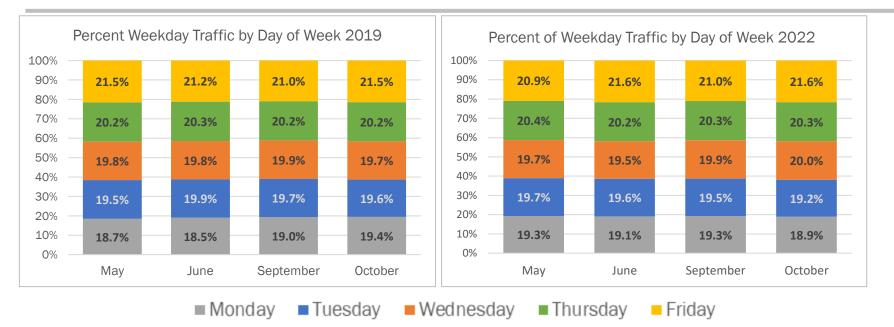
### \*NEW\* 2022 WEEKDAY TRAFFIC by DAY of WEEK





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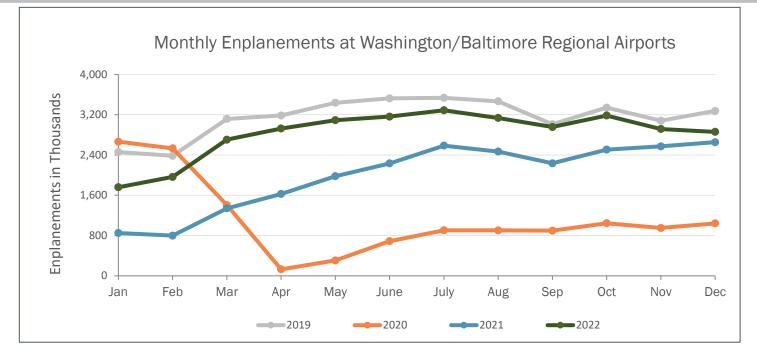
#### \*NEW\* 2019 vs 2022 DAY of WEEK TRAFFIC



- Share of traffic by day of week is very similar between 2019 and 2020
- Monday traffic is consistently lowest of the weekdays
- The core days of Tuesday, Wednesday, and Thursday have similar traffic
- Friday traffic is the highest of the week, but the pattern is different than most weekdays with higher midday and evening traffic



# **MONTHLY ENPLANEMENT DATA**



- Plane travel decreased sharply in April 2020 and remained low
- Began to rise again in 2021 and continues to increase
- Enplanements were 95% or more of 2019 levels in Sep Nov 2022
- Dip to 89% of 2019 levels in December due in part to the SWA issues



### **MAJOR TAKEAWAYS**

- After a swift decline in March and April of 2020, traffic began to rise again on the region's roadways and at the end of 2022 was over 95 percent of 2019 levels.
- Traffic in the Regional Core was the slowest to rebound while traffic in the Outer Ring approached 2019 levels by the spring of 2021.
- The pace of traffic recovery slowed in the Inner and Outer Rings during the spring and summer of 2022 while it increased in the Regional Core. This could have resulted from a return to the office and an increase in recreational travel.
- No large increase in traffic during the core days of Tuesday, Wednesday, Thursday was observed in 2022.
- Plane travel at the region's major airports continues to increase.
   Enplanements at DCA have been higher than 2019 in every month since April 2022.
- Reliable continuous count data is of paramount importance when performing these analyses.



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