

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY**MEMORANDUM**

FOR: Chair Phyllis J. Randall and Members,
Northern Virginia Transportation Authority

FROM: Monica Backmon, CEO, NVTA

DATE: March 3, 2022

SUBJECT: Travel Trends Update

1. Purpose.

To inform the Northern Virginia Transportation Authority (NVTA) on recent travel trends since the onset of the COVID-19 pandemic.

Background.

NVTA staff is monitoring travel trends in Northern Virginia, comparing highway and transit travel metrics from 2020 and 2021 with corresponding weeks and months in 2019. NVTA staff has so far presented four of these snapshot analyses, at the June, July, September, and November 2021 Authority meetings.

This update features findings from a yearly traffic snapshot report from a “Big Data” traffic analytics company (TomTom), in addition to analyses of Northern Virginia highway travels (afternoon peak periods) and WMATA transit ridership (average monthly). In our last update at the November Authority meeting, we presented data analysis through September 2021. This report updates the analysis through December 2021.

The objective of these analyses is to gain a better understanding of such trends, and to identify whether they are temporary or may be more permanent. This knowledge will enhance NVTA’s ongoing long-range transportation planning efforts, and may influence project-funding recommendations in future Six Year Programs.

2. TomTom Traffic Index 2021

TomTom collects hundreds of millions of anonymized GPS signals from cars and smartphones around the world to analyze traffic in more than 400 cities. The resulting metrics were published recently online, available at this location-https://www.tomtom.com/en_gb/traffic-index/. Roadway traffic congestion is expressed as ‘Congestion Level’. A 10% congestion level means that on average, travel times were 10% longer than during the baseline non-congested conditions. This means that a 30-minute trip driven in free-flow condition will take 3 minutes longer when the congestion level is at 10%.

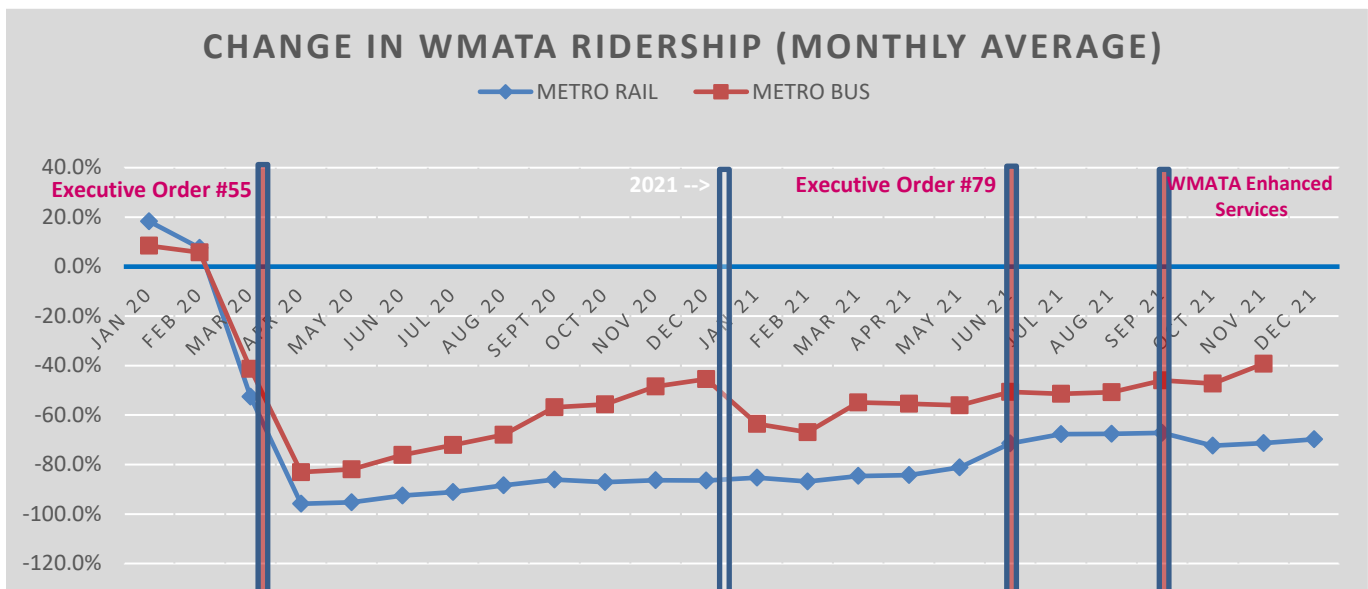
Overall congestion levels in North America were down 14% in 2021 compared with 2019. At traditional peak hours, the drop in traffic was 31%. In the Washington D.C. metro region, corresponding drops in traffic congestion are 8% and 23.5%, respectively. While overall traffic was close to pre-COVID conditions in this region, there was a shift in peak period travel pattern. This is consistent with what NVTA staff has reported in June 2021.

3. Northern Virginia highway travel trends:

In the October – December 2021 period, using VDOT data, traffic volumes on freeways and major arterials in Northern Virginia were close to pre-pandemic levels, on average 4% below pre-pandemic condition. Travel speeds were about 6% faster than pre-pandemic conditions.

4. WMATA ridership in Northern Virginia:

The following chart shows percentage changes in average monthly ridership data from Metrorail and Metrobus services in Northern Virginia, comparing data from 2020 and 2021 to the 2019 baseline. Since February 2021, Metrobus ridership had been on an upward trend. In the October – December 2021 period, bus ridership was within 57% of pre-COVID usage. This may reflect a number of service enhancements starting from September 2021. In the same period, Metrorail ridership on average was within 29% of pre-COVID ridership.



Several local transit providers have recently introduced, or announced free or reduced-fare programs, and enhanced services. In addition, DRPT is planning a transit recovery marketing initiative for a series of promotional events in June 2022. NVTA staff will monitor the impacts of these programs/initiatives on ridership trends, and report back in due course.

5. Next steps. NVTA staff will continue this trend analysis to track emerging travel patterns, as the region continues to opening up.