

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

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

FROM: Harun Rashid, Planning Analytics Manager

DATE: September 7, 2023

SUBJECT: Travel Trends Update

1. **Purpose:** To inform the Northern Virginia Transportation Authority (NVTA) on Northern Virginia transit, highway, and other travel trends.
2. **Background:** NVTA staff are monitoring travel trends in Northern Virginia, comparing highway and transit travel metrics from 2020, 2021, 2022, and 2023 with corresponding weeks and months in 2019. NVTA staff have so far presented ten of these snapshot analyses quarterly to the Authority, the last one was on June 8 of this year.

This update features staff analyses of office space utilization rates, in addition to regular updates on highway traffic volumes and transit ridership. In our last update at the June Authority meeting, we presented data analysis through March 2023. This report updates the analysis through June 2023.

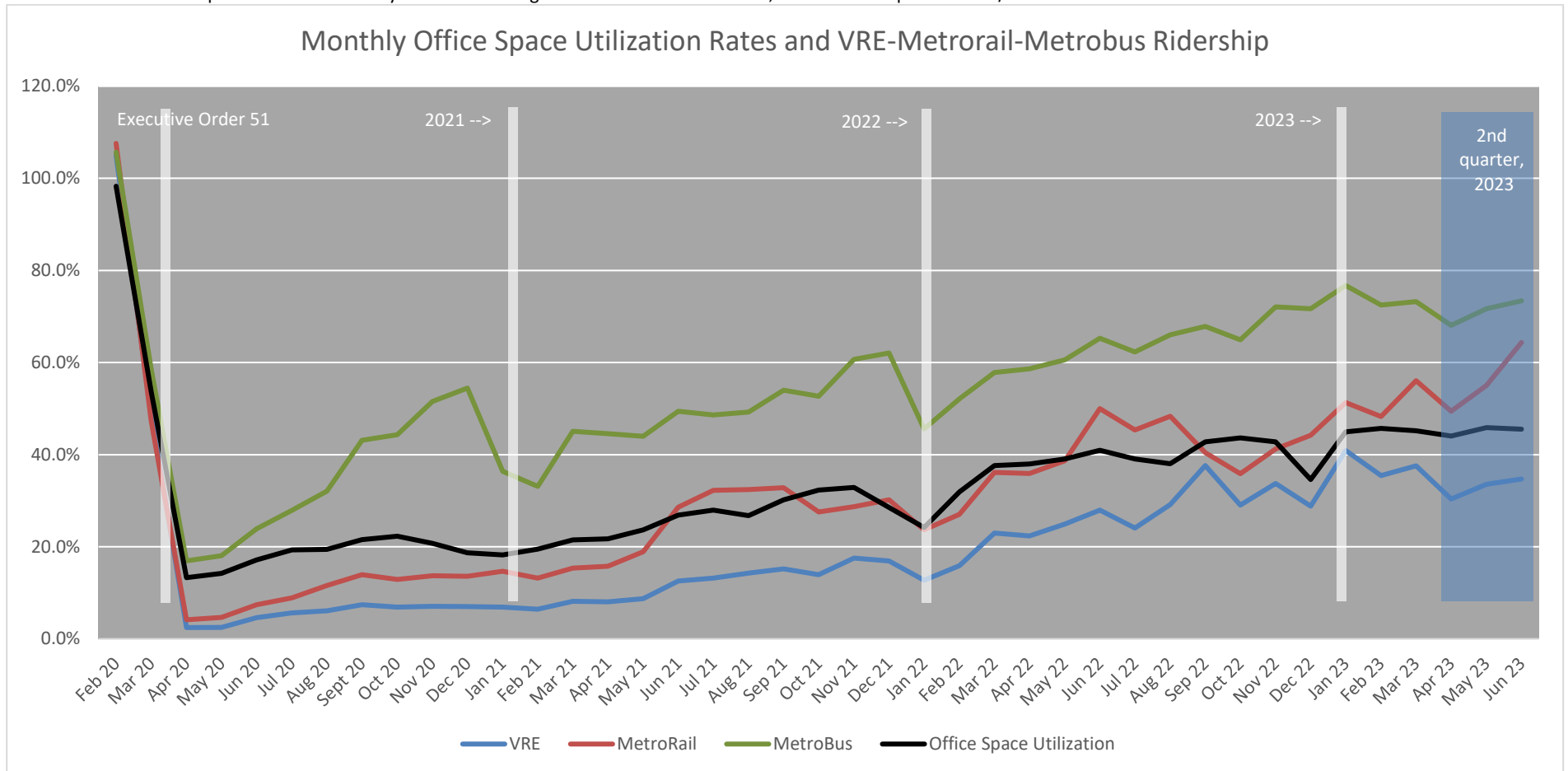
The objective of these analyses is to gain a better understanding of such trends, and to identify whether they are temporary or maybe more permanent. This knowledge will enhance NVTA's transportation planning efforts and may influence project-funding recommendations in Six Year Program update cycles.

3. **Office space utilization rates:** With a number of recent media articles on private and public sector employers' efforts to encourage workers to return to the office, staff have analyzed office utilization trends in the Washington metro region since the pandemic started. The data source is a commercial building access security provider, Kastle System (<https://www.kastle.com/safety-wellness/getting-america-back-to-work/#workplace-barometer>), that analyzes unique keycard, fob and app access data from 2,600 buildings in ten major metro areas in United states (not a national statistical sample). Because of privacy concerns, Kastle System does not provide information on business types of these buildings, e.g., commercial vs. government establishments. While we do not have specific data on federal offices in the Washington metro area, a recent report from Government Accountability Office (GAO) states – *'majority of major federal agencies are seeing their headquarters buildings at 25% of capacity or less, while none are more than half full'* (<https://www.govexec.com/management/2023/07/post-pandemic-most-agency-headquarters-are-only-one-quarter-full/388479/>).

The Kastle analysis is based on tracking individual access events to customer buildings, showing actual utilizations rather than building occupancies which are based on lease contracts. On Chart 1, average monthly ridership from major transit providers in Northern Virginia are plotted in addition to office space utilization to understand their correlation. While Metrorail and Virginia Railway Express (VRE) trendlines are at or below, it appears the upward growth in Metrobus ridership always stayed above the office utilization trendline. This aligns with our observation during the height of the pandemic period where local bus services catered more to essential workers resulting in higher ridership recovery even when offices remain under-utilized.

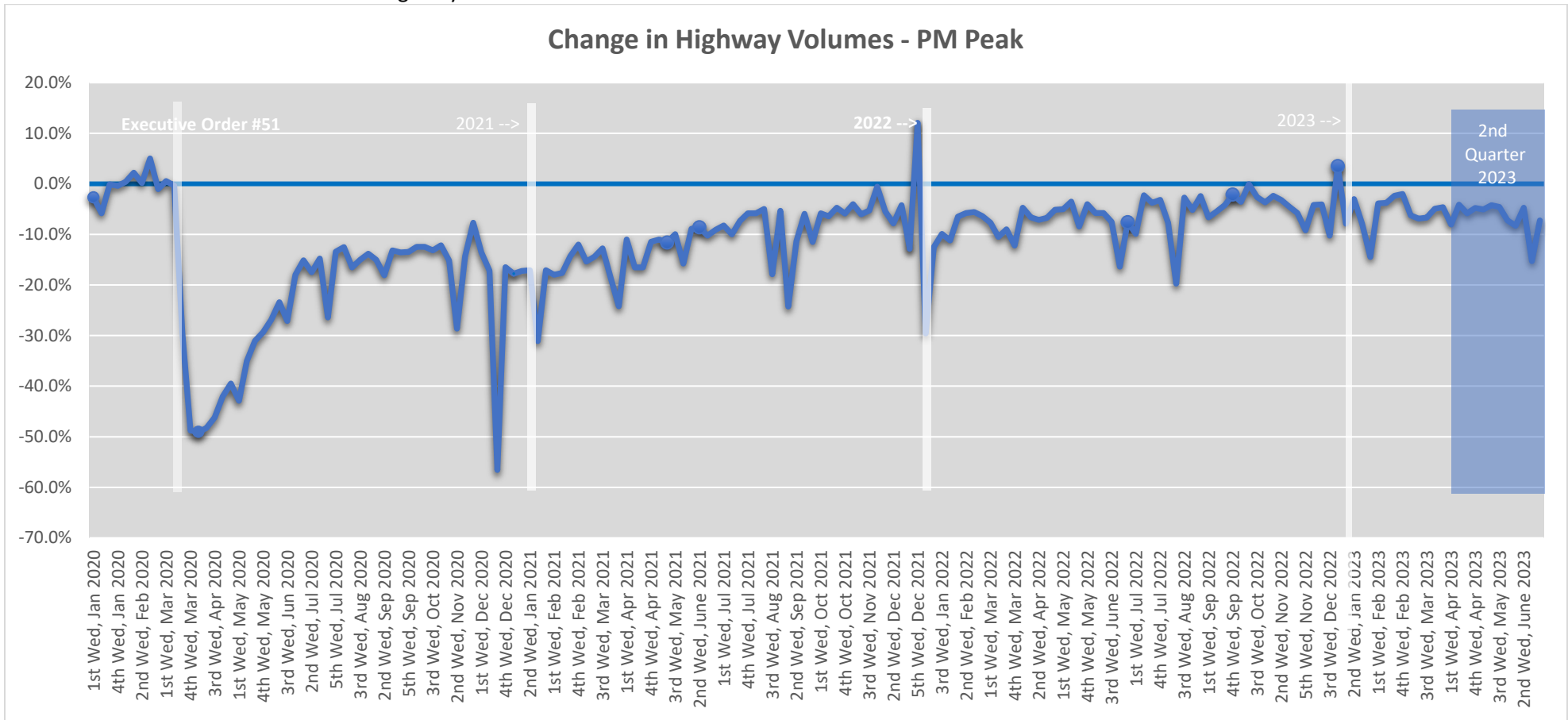
Chart 1: Monthly office utilization rates and transit ridership.

Source: Unique Card Holder Activity in Kastle Buildings within the Greater DC Area; transit ridership from DRPT/NVTC.



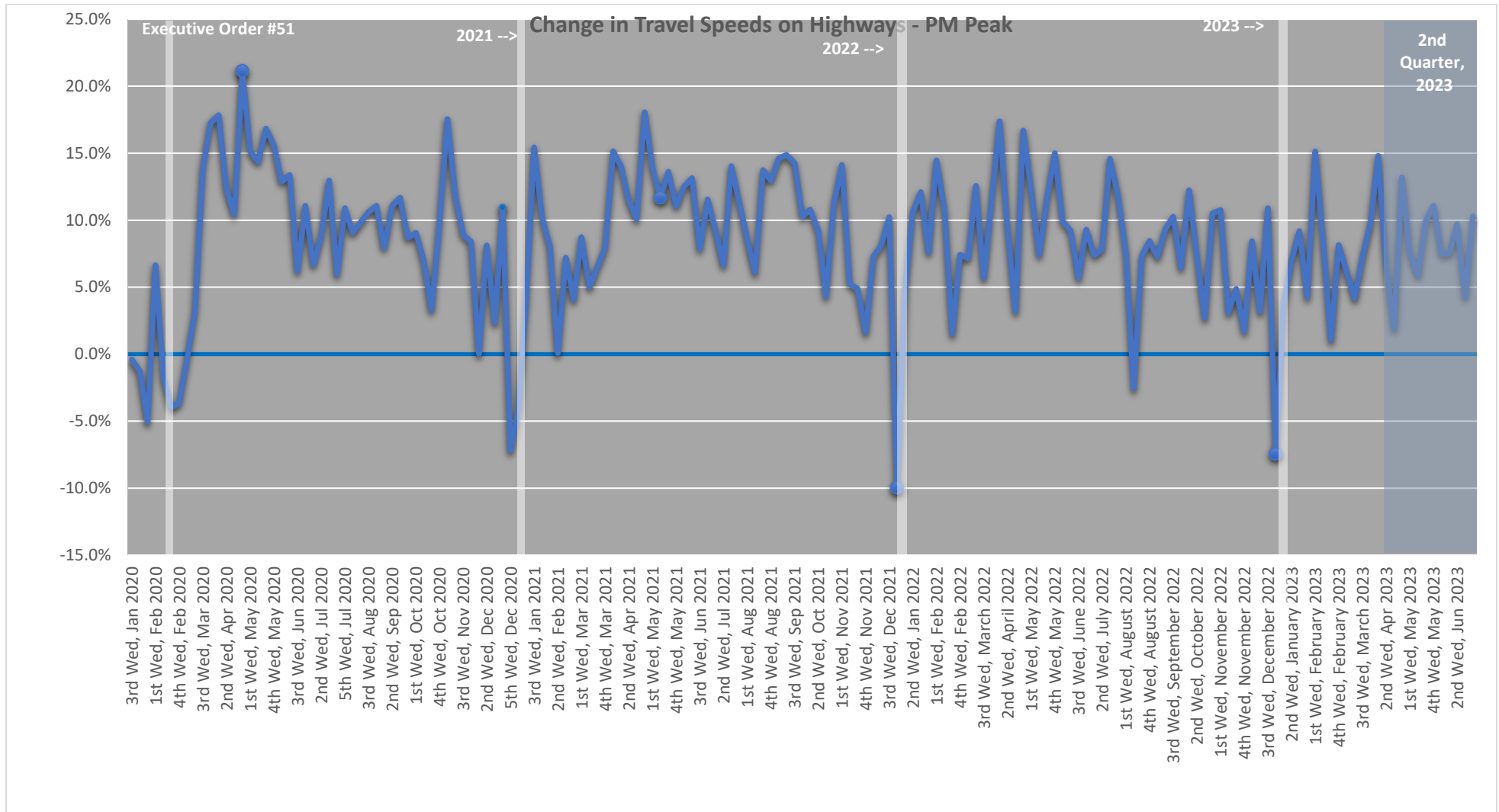
4. Highway travels: In the second quarter of 2023 (April - June), well beyond the third-year anniversary of Governor’s stay-at-home Executive Order #51 (March 12, 2020), traffic volumes (afternoon PM peak period) on Northern Virginia’s highways were on average 7% below pre-pandemic level (Chart 2). Corresponding travel speeds were on average 8% above (Chart 3).

Chart 2: Traffic volumes on highways.



Data source: VDOT database on pandemic impact on major highway locations.

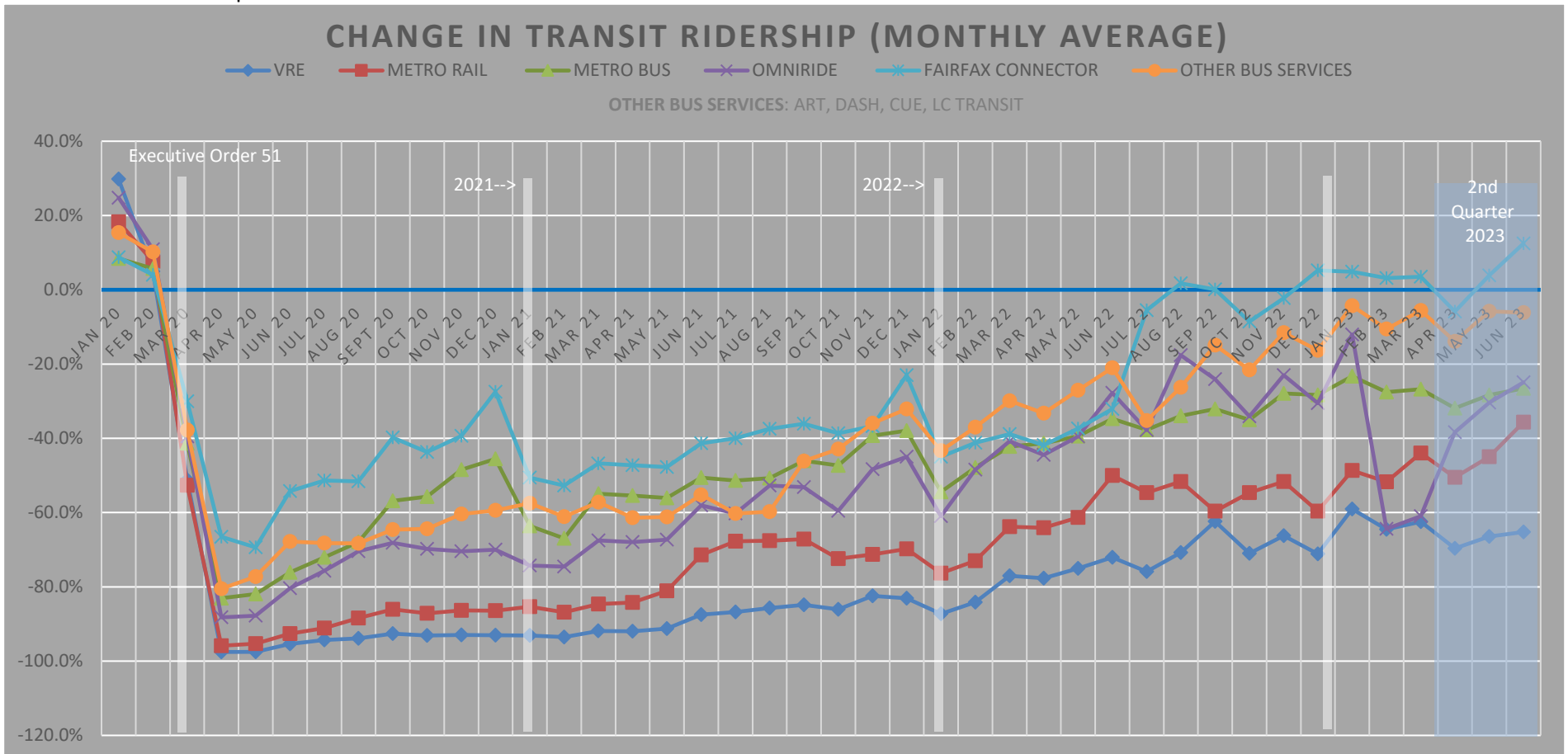
Chart 3: Travel speeds on highways.



Data source: RITIS-INRIX online data analytics at UMD CATT Lab (<https://pda.ritis.org/suite/>).

5. **Transit ridership:** In this same period, OmniRide ridership bounced back from the strike-related decline, while Fairfax Connector and 'OTHER BUS SERVICES' (ART, DASH, CUE, LC TRANSIT) maintained their close-to or above pre-pandemic level ridership. Among rail services, while Metrorail showed a sharp upward trend (4% growth), VRE ridership on average remained flat despite the Friday-free-fare program (Chart 4). The growth in Metrorail ridership in this quarter may be related to increased service levels and the reduced fare program, Metro Lift, that started in June.

Chart 4. Transit ridership.



Source: Average monthly ridership data from DRPT and NVTC.

- 6. Next steps:** NVTa staff will continue this trend analysis to track emerging travel patterns, as the region's travelers continue to adjust their travel choices/behaviors. In the next update, covering the data period of July – September of this year, we anticipate higher travel demands on roadways with back-to-school traffic and impacts of higher rates of workers returning to the office.