

TRANSPORTATION IMPACTS OF THE COVID-19 PANDEMIC IN THE NATIONAL CAPITAL REGION

Andrew Meese
Systems Performance Planning Director

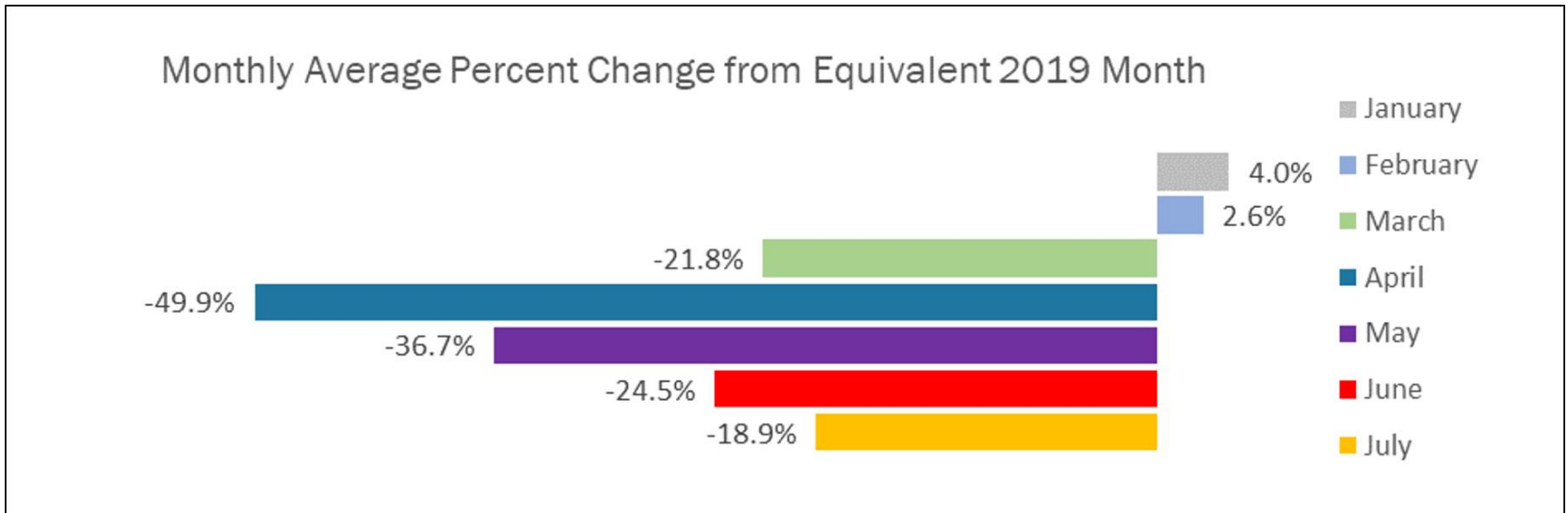
TPB Technical Committee
September 4, 2020

Introduction

- The COVID-19 pandemic has had profound impacts on transportation since March 2020
- Staff reviewed a variety of data sources for “snapshots”
 - Insights, not definitive conclusions
 - Be aware of caveats regarding the variety of data sources and the dynamic situation
- Examined were:
 - Travel and roadway traffic volumes impacts
 - Transit and walking
 - Safety, speeds, and other impacts



Roadway Traffic Volumes

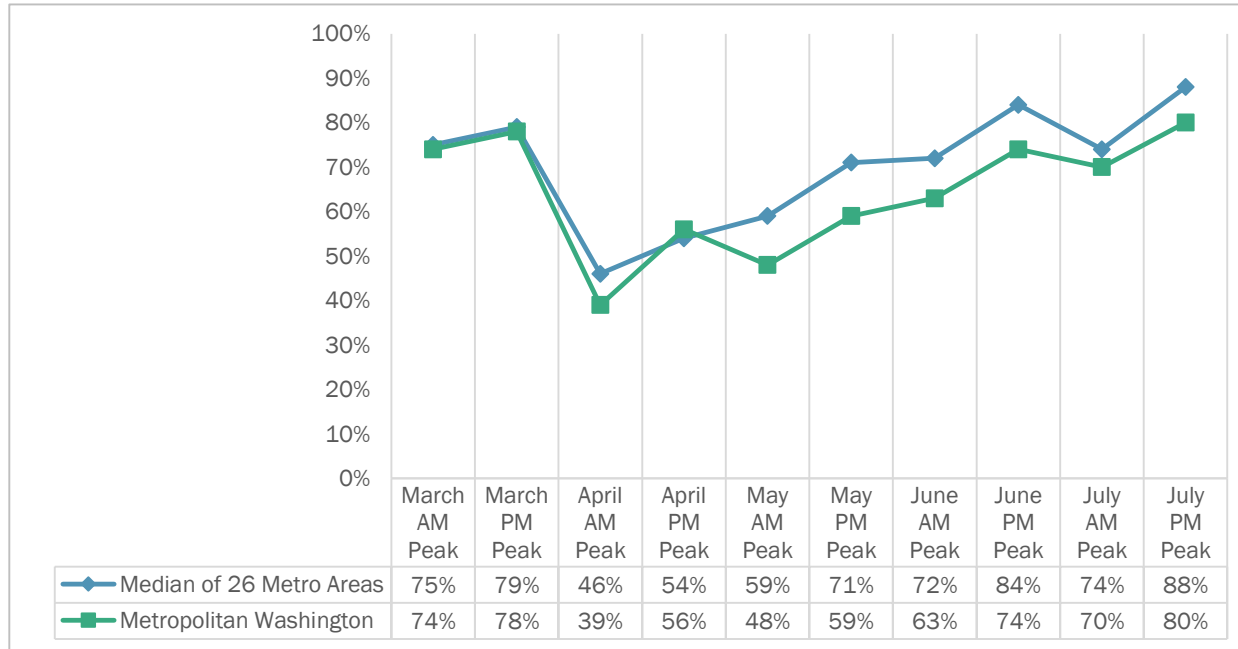


Source: COG/TPB

- Regional traffic volumes, which in April 2020 had dipped below 50% of 2019 volumes, by July had recovered to over 80% of 2019 volumes



Vehicle Miles of Travel

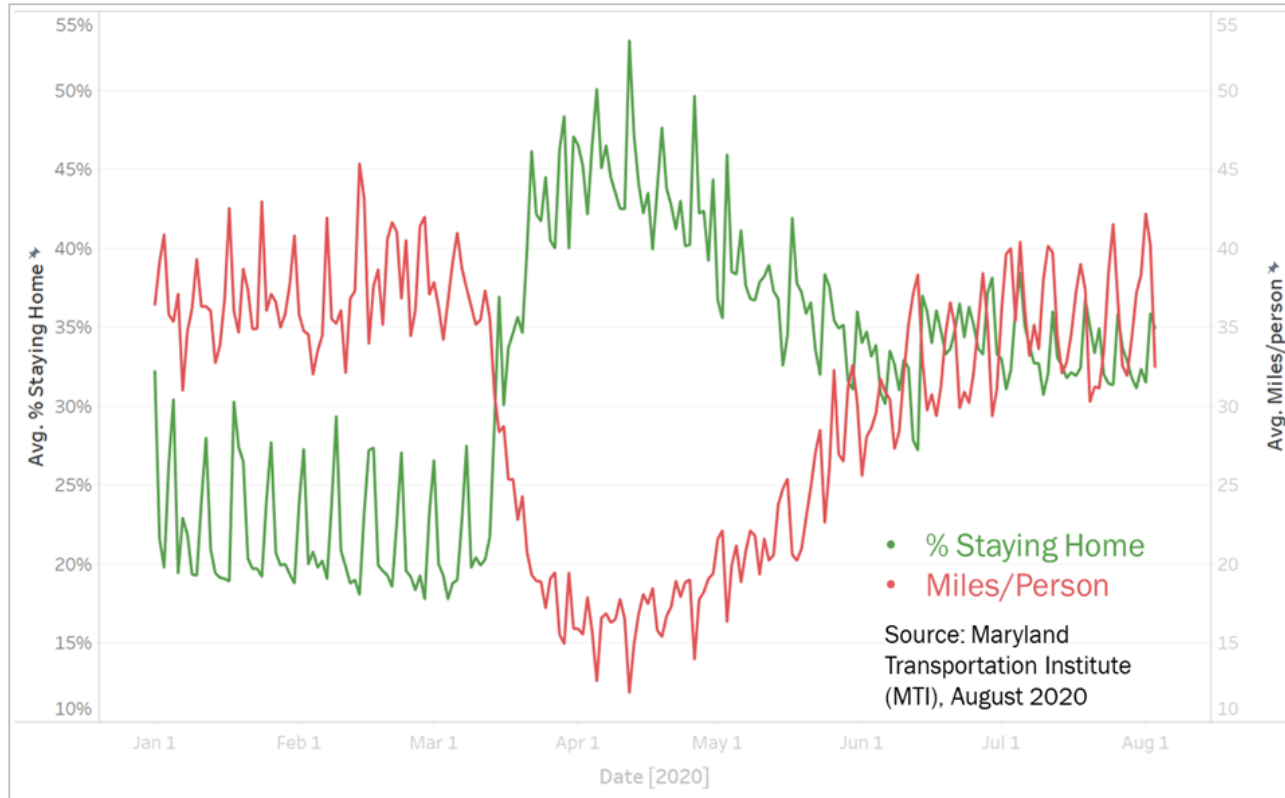


Comparison to pre-pandemic levels. Source: INRIX

- Regional vehicle miles of travel (VMT) dipped most dramatically in April, but by July had recovered significantly
- Lower but similar to the median of 26 major metro areas



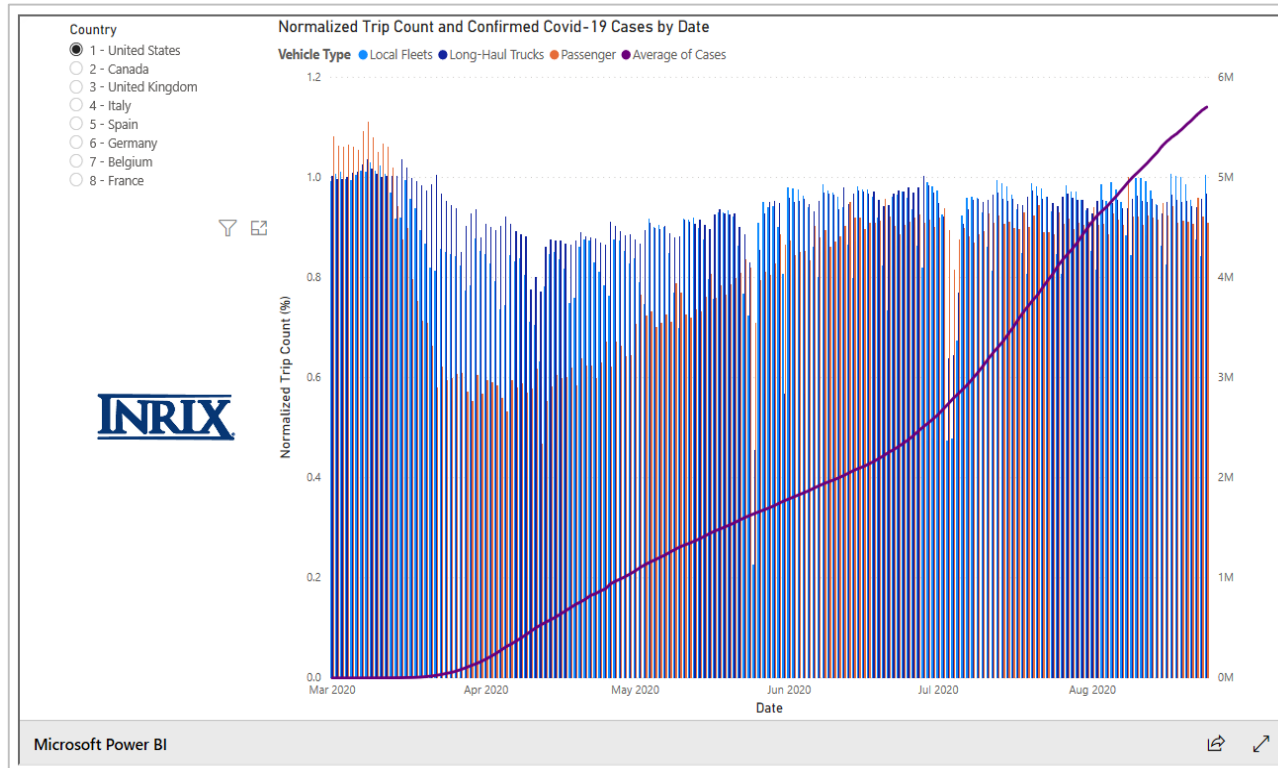
Person Travel



- Miles of travel per person have returned to near pre-pandemic levels, though people are still more likely to be staying at home



Truck Travel

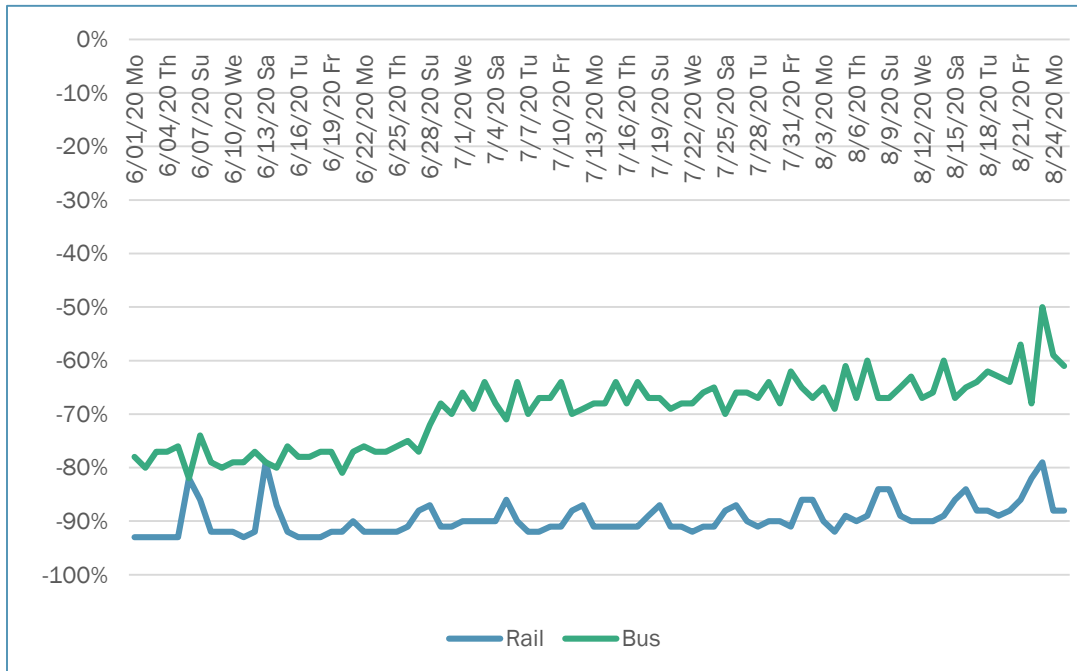


Nationwide data. Source: INRIX.

- Nationally and regionally, truck travel (blue) never declined as much as passenger travel (red/orange) did



Metrorail and Metrobus Ridership

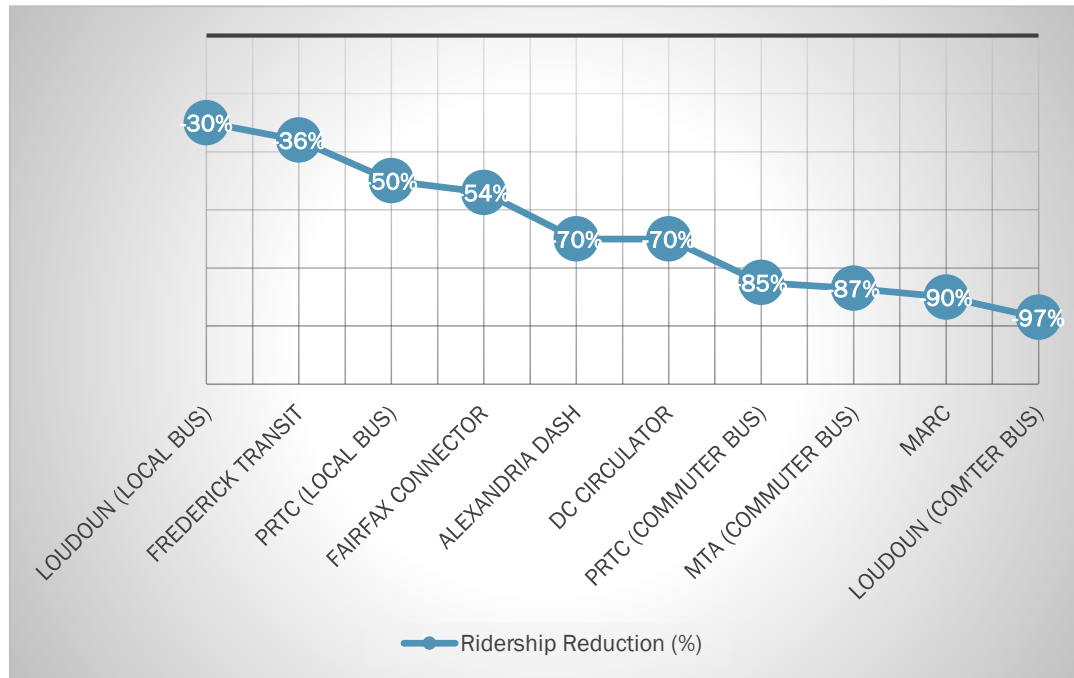


Year-to-year (2020 vs. 2019) percentage decline in ridership. Source: WMATA Data Portal.

- Usage of available capacity has been high, particularly on the bus system, which remains a lifeline for critical workers
- WMATA data will be further addressed in a future analysis



Local and Commuter Transit

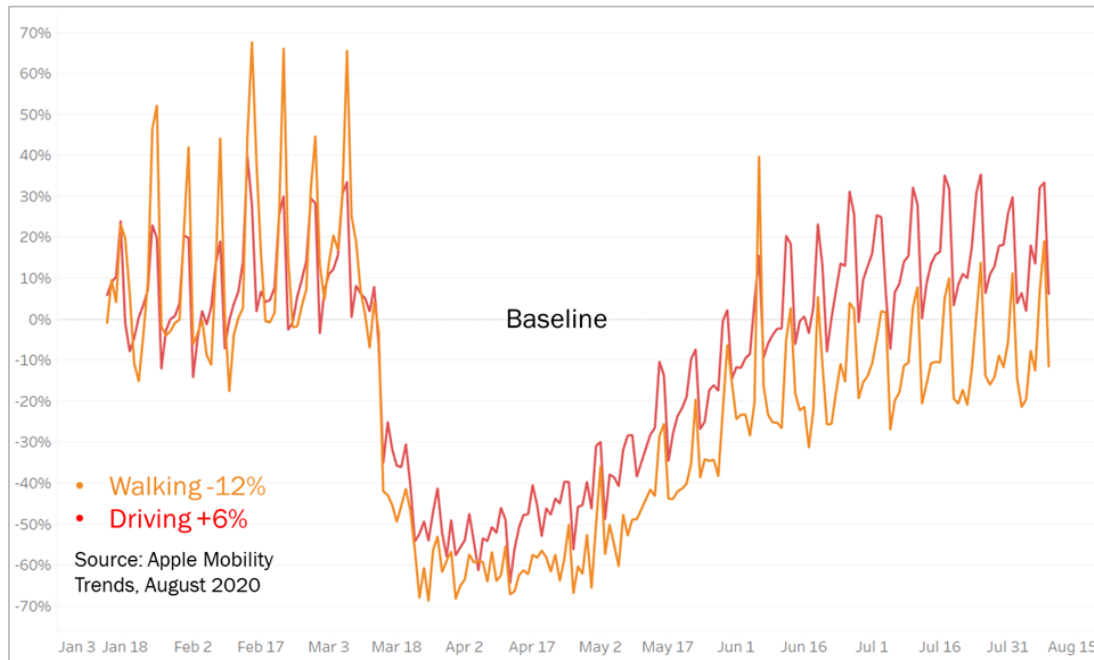


- Impacts varied among long-distance, local, and tourist routes

Reported approximate reductions of ridership vs. typical levels. Source: COG/TPB questionnaire of local transit agencies, August 5, 2020.



Walking

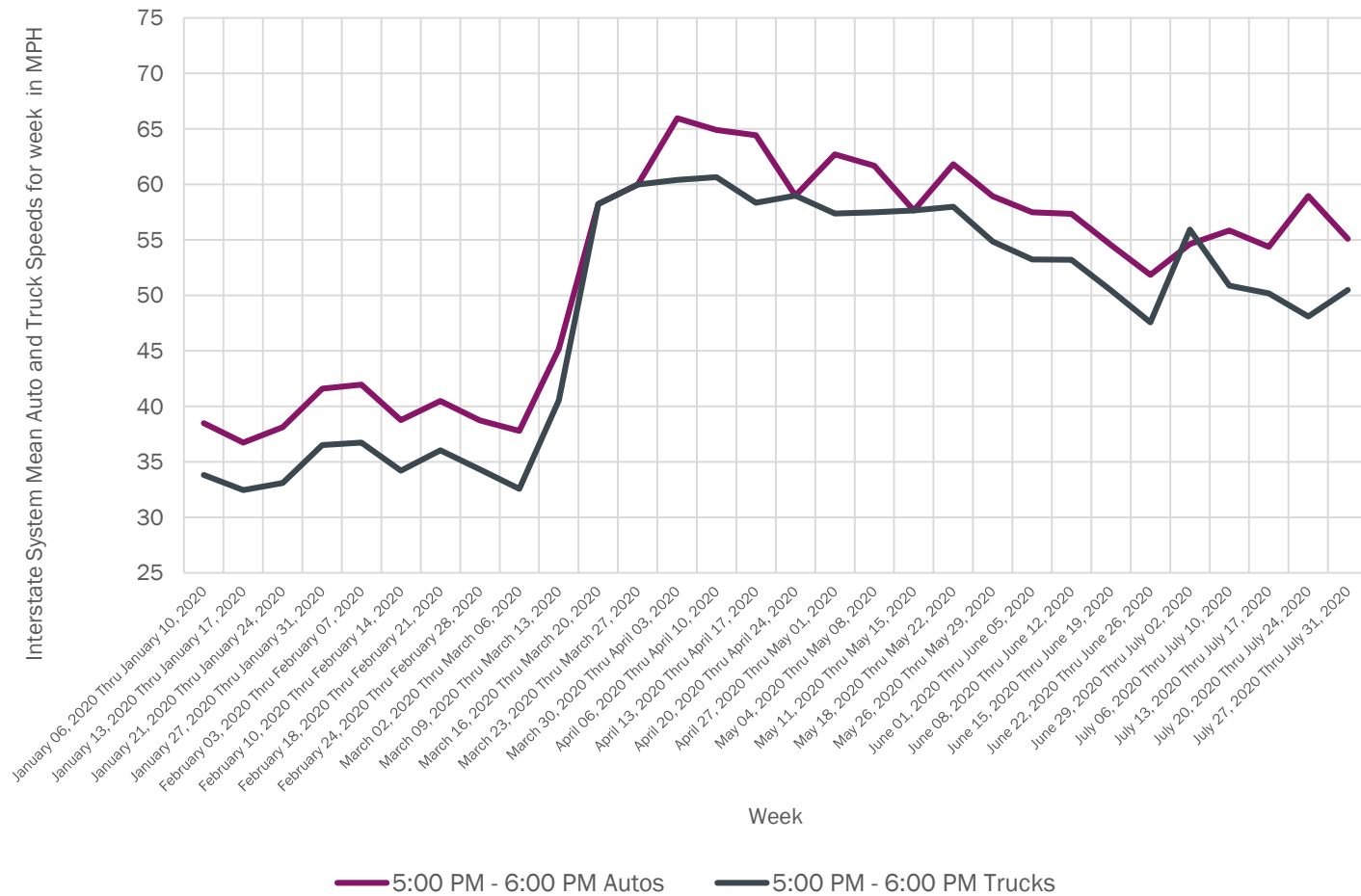


Note: Data are for the District of Columbia only, not the entire National Capital Region.

- App-based data provide an interesting but perhaps unproven insight into trends such as walking during the pandemic
- Walking shows to have recovered, but not quite to pre-pandemic levels



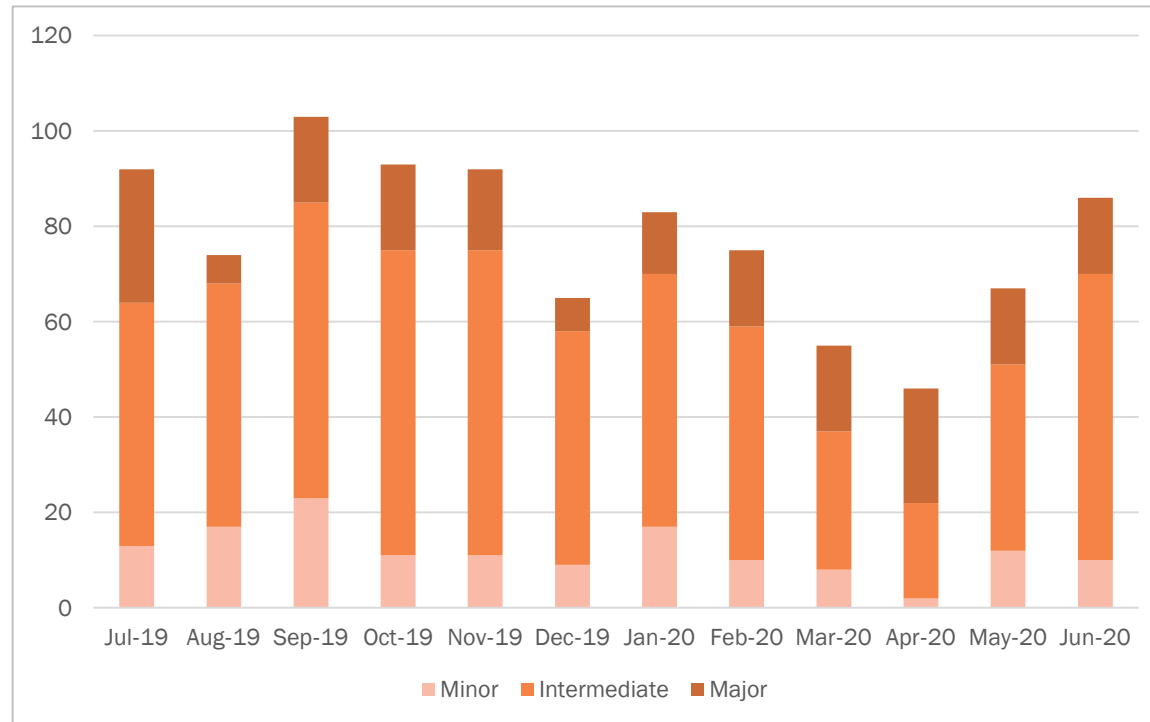
Roadway Speeds



Source: COG/TPB Analysis of Probe Data Analytics Suite Data



Safety: MATOC Incidents

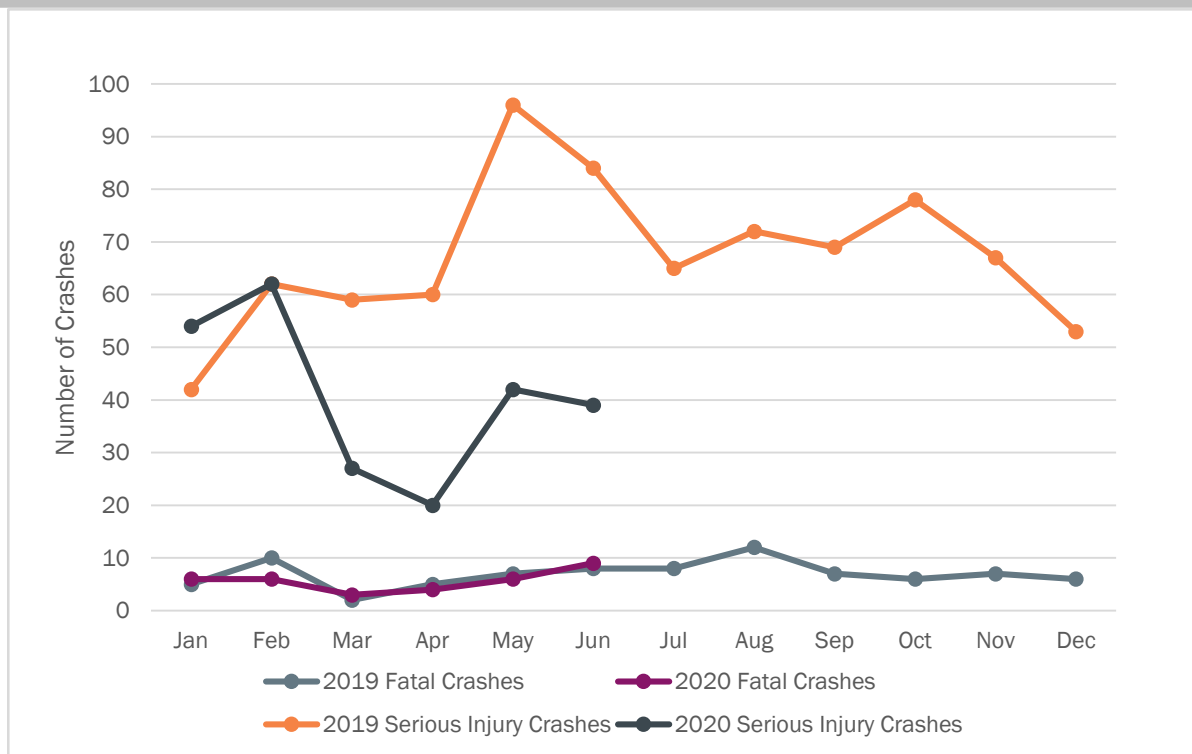


Source: MATOC

- MATOC-tracked major incidents were disproportionately high in April, but have since returned to pre-pandemic levels



Safety: Crashes (Northern Virginia)

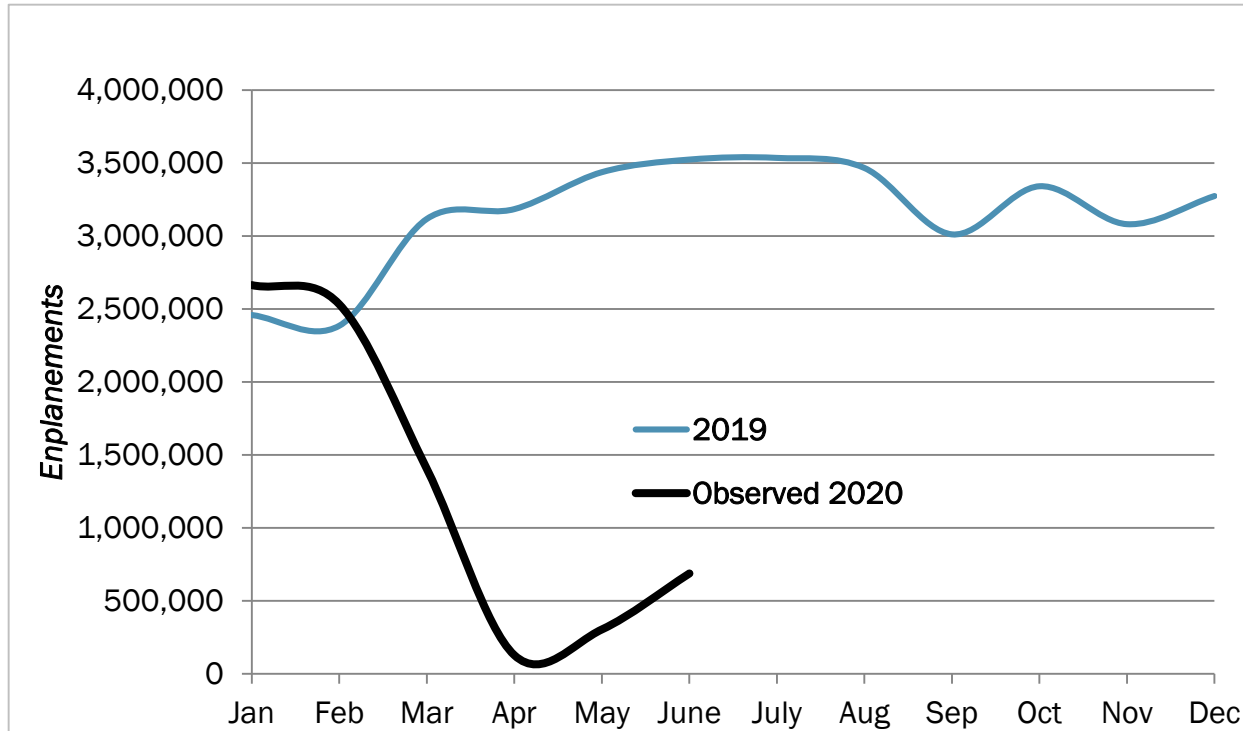


Preliminary data. Source: Virginia Department of Motor Vehicle/VDOT Data Portal.

- Though serious crash numbers have been lower than 2019, fatal crashes have remained at about the same level as 2019, even during months such as April with reduced traffic volumes



Air Travel



Source: COG

- Air travel has recovered somewhat at the region's three major airports since April, but remains much lower than 2019



Summary

- Traffic volumes and vehicle miles of travel dipped most dramatically in April but have significantly recovered
- Though miles of travel per person have returned to near pre-pandemic levels, people are still much more likely to be staying home
- Truck travel never declined as much as passenger travel did
- Though the overall number of crashes and incidents went down during the pandemic, major incidents and fatal crashes remained high even during periods of reduced travel demand
- Transit ridership has varied, with greater declines for longer-distance commuter services, lesser declines for local bus transit services
 - Ridership changes should be viewed in relation to pandemic-reduced service levels; bus usage has been significant, and remains a lifeline for critical workers.



Andrew Meese

Systems Performance Planning Director

(202) 962-3789

ameese@mwkog.org

mwkog.org/tpb

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region
Transportation Planning Board