

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

Andrew Meese, AICP
TPB Systems Performance Planning Director

Timothy Canan, AICP
TPB Planning Data and Research Program Director

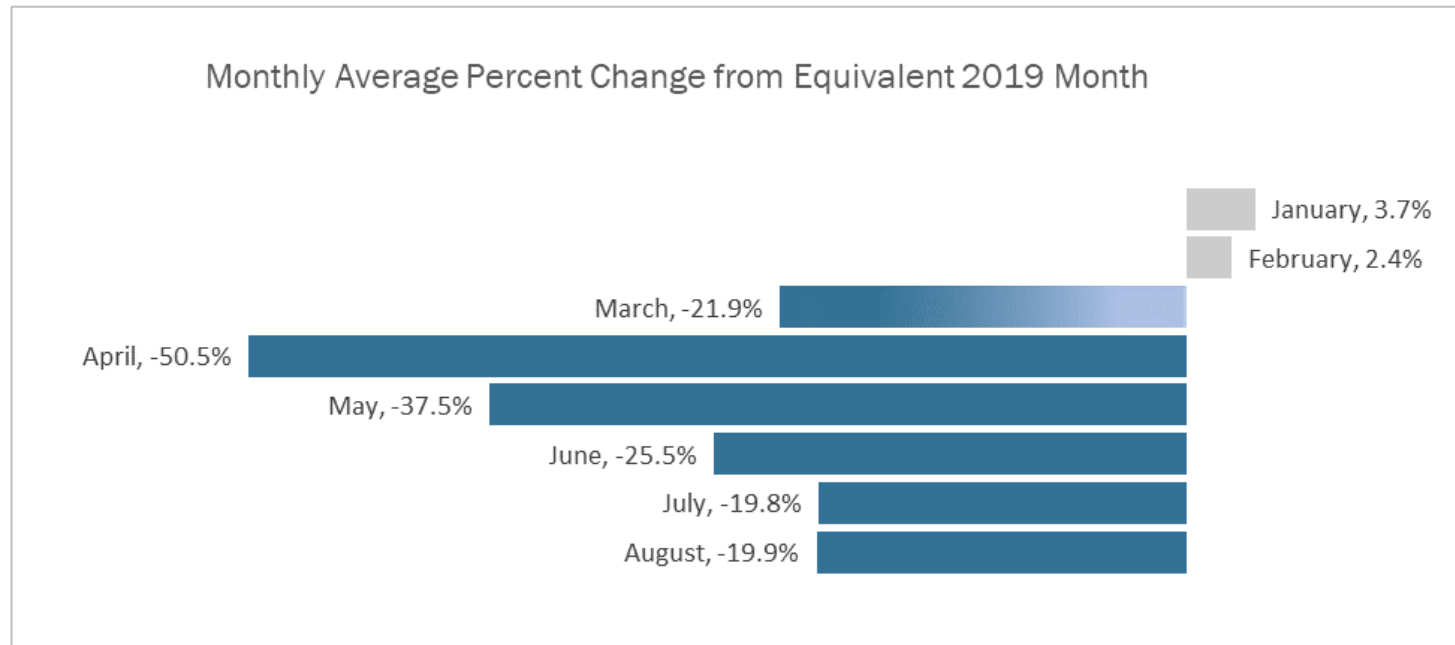
Access for All Advisory Committee
November 10, 2020

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
 - Safety, speeds, and other impacts



Roadway Traffic Volumes

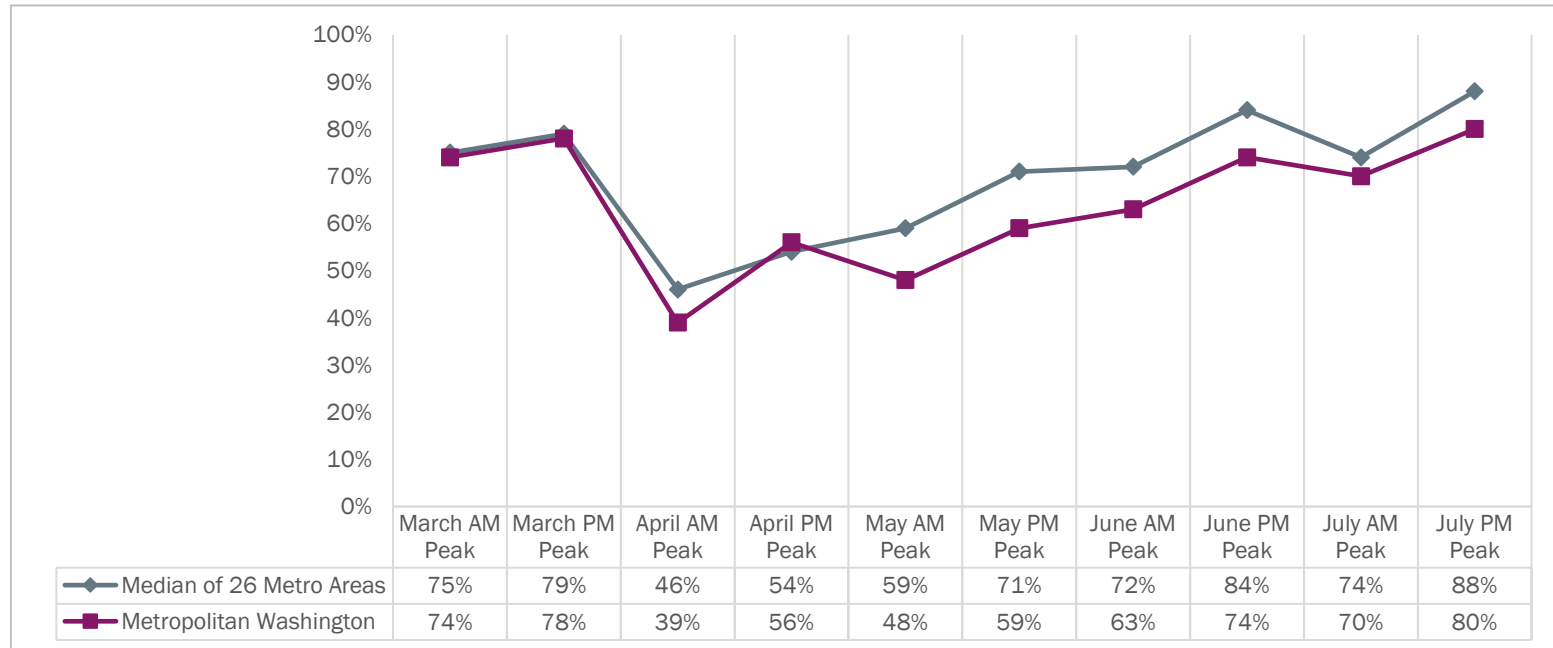


Source: COG/TPB

- Regional traffic volumes, which in April 2020 had dipped below 50% of 2019 volumes, by July had recovered to over 80% of 2019 volumes, and remained at that level in August



Vehicle Miles of Travel

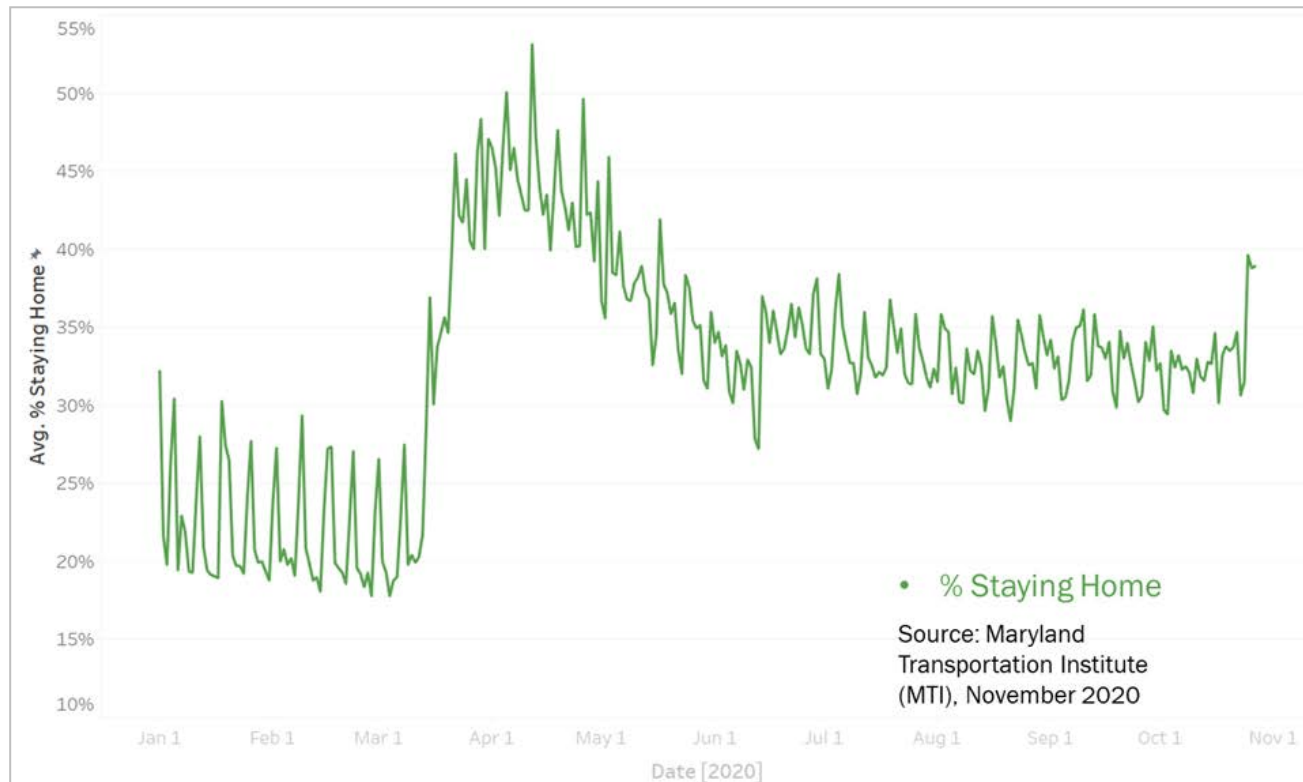


Comparison to pre-pandemic levels. Source: INRIX.

- 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



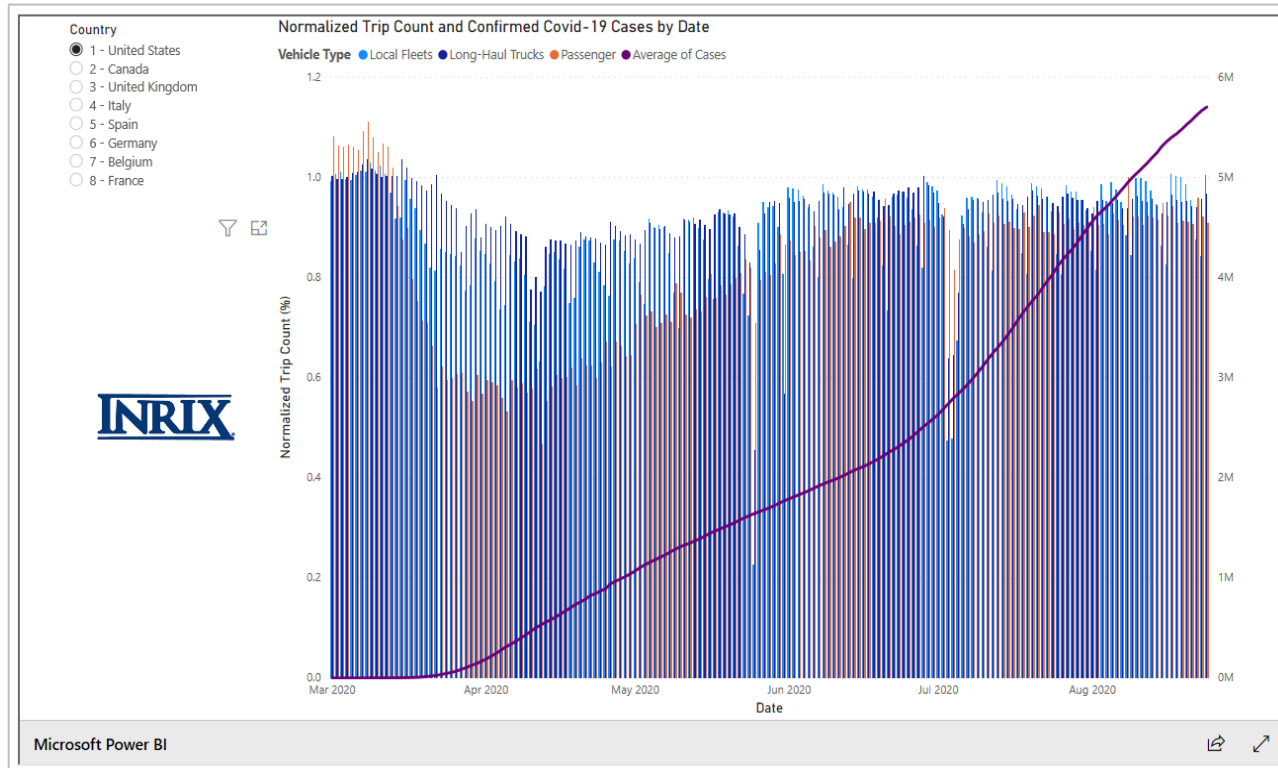
Person Travel



- Persons staying home on a given day regionally went from about 25% pre-pandemic, up to about 45%, and recently back to around 35%



Truck Travel

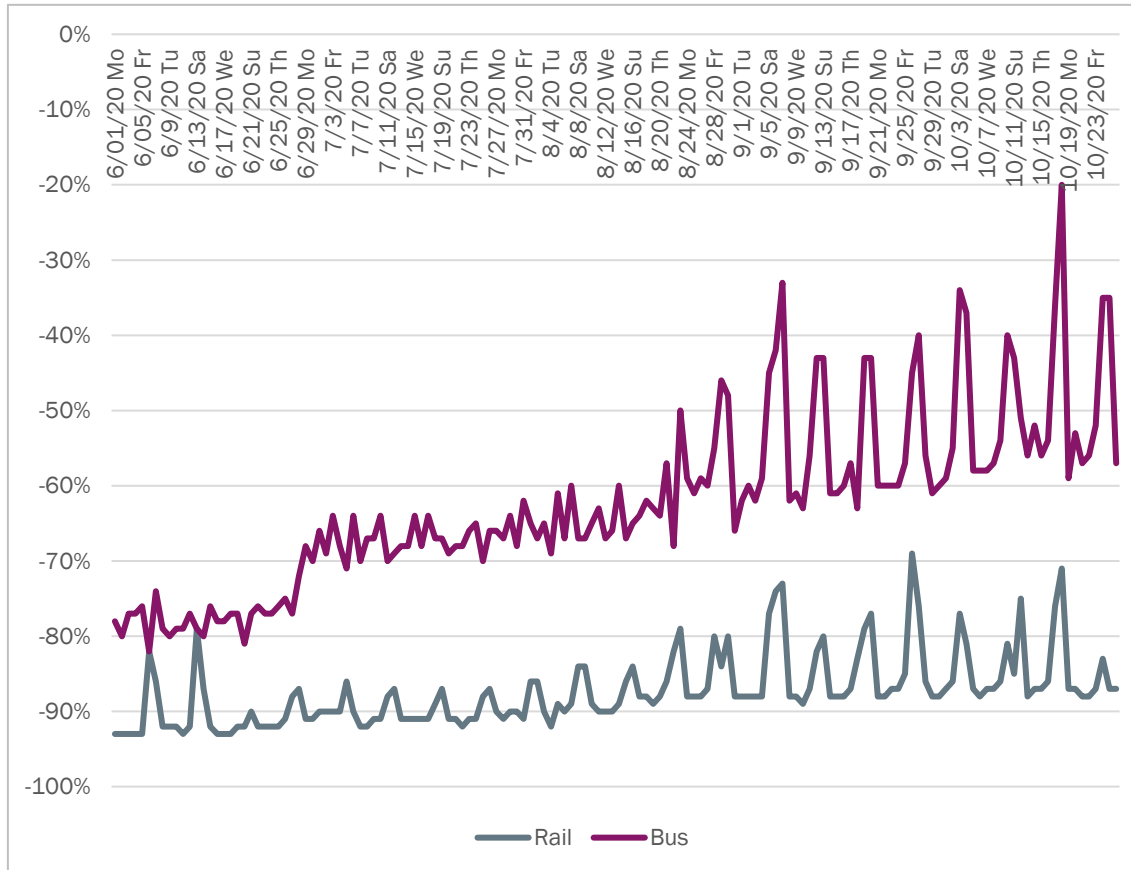


Nationwide data. Source: INRIX.

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



Metrorail and Metrobus Ridership

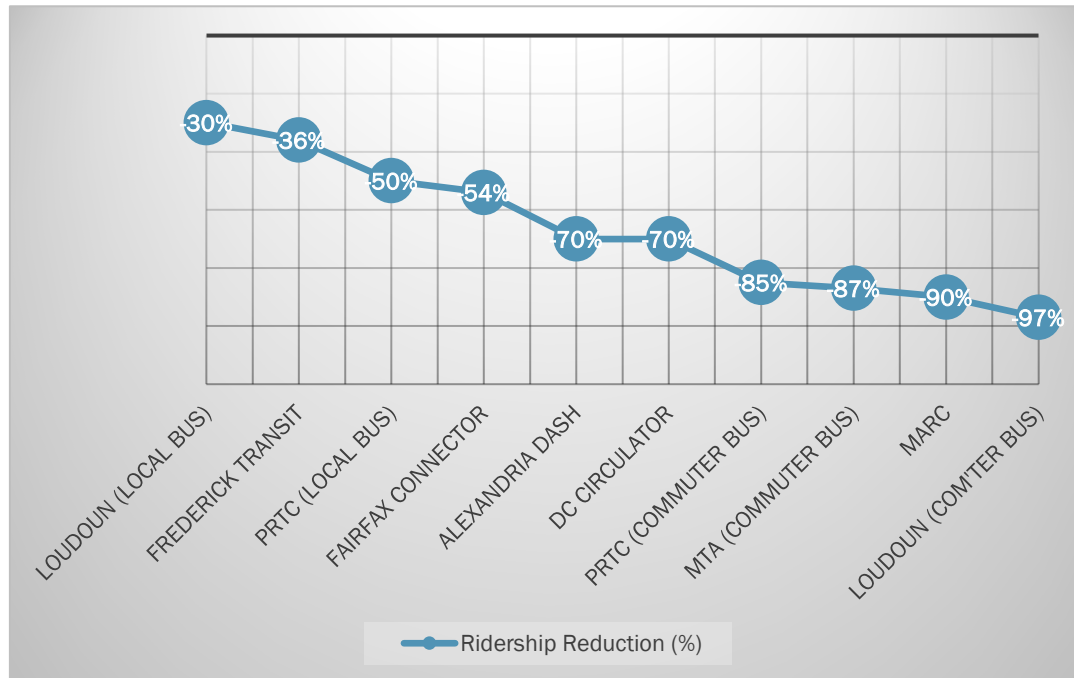


Year-to-year (2020 vs. 2019) percentage decline in ridership. Source: WMATA COVID Public Information Page.

- Usage of available capacity has been significant, particularly on the bus system, which remains a lifeline for critical workers
- Complex interaction of demand and supply (what services were running)



Local and Commuter Transit

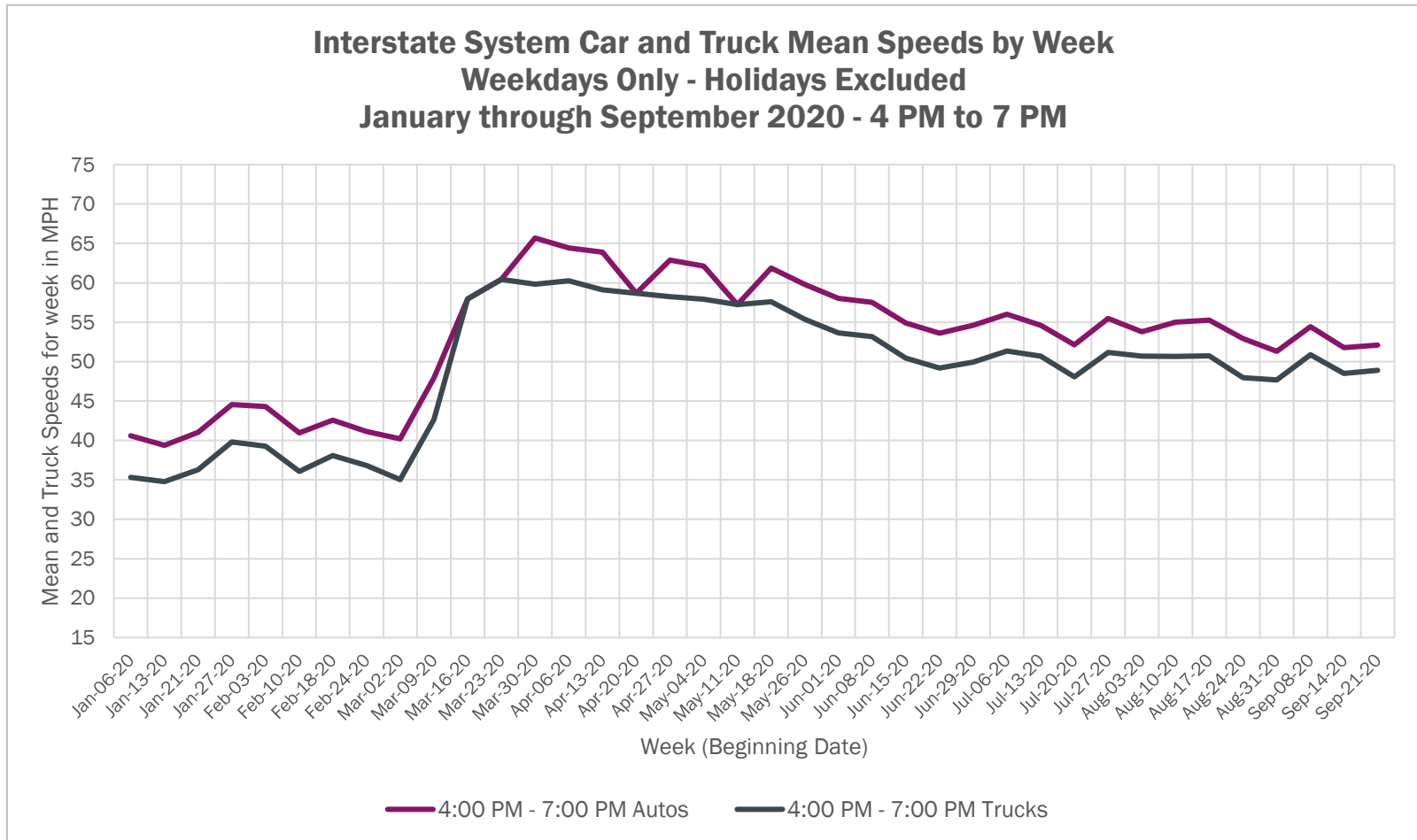


- Impacts varied among long-distance, local, and tourist routes

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



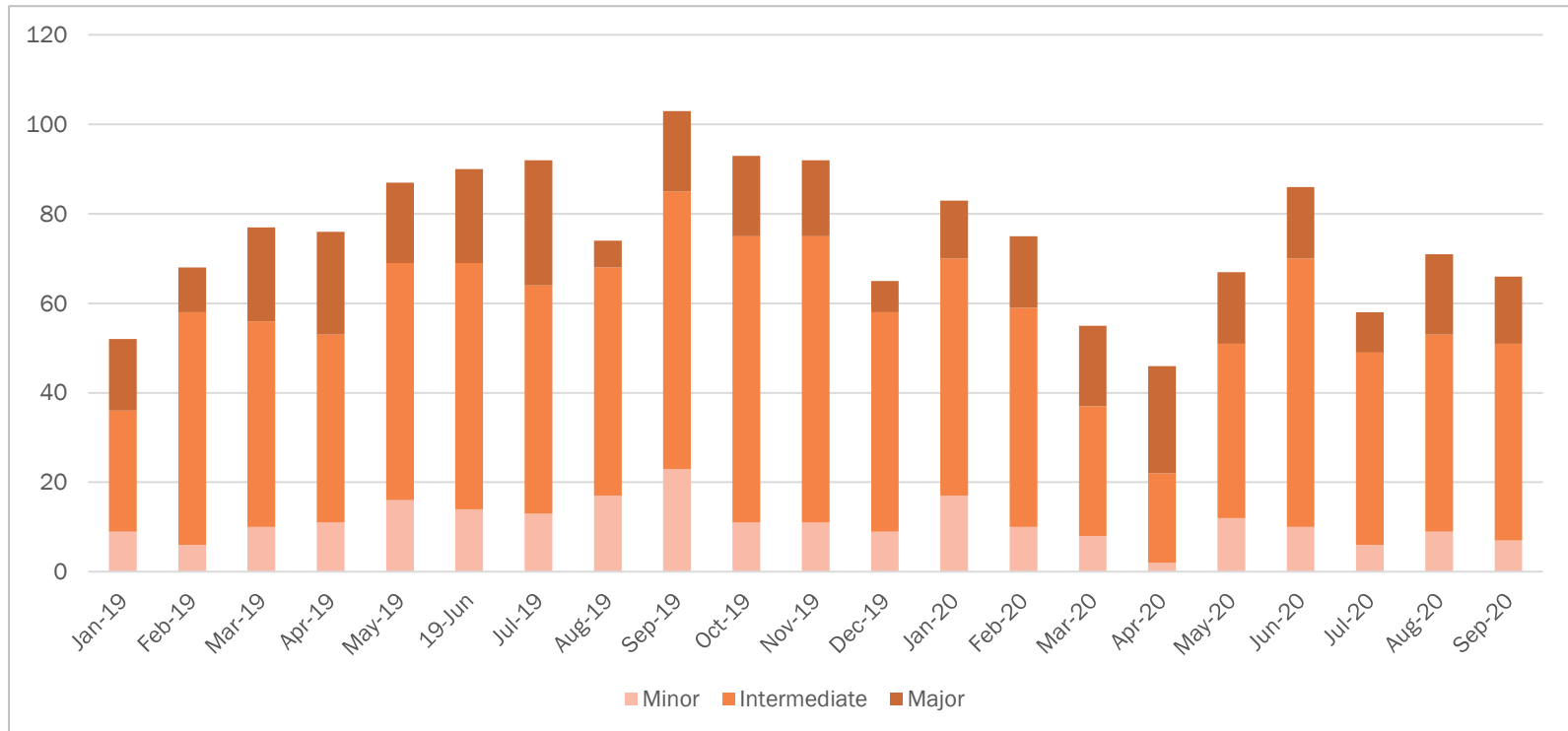
Roadway Speeds (Example)



Source: COG/TPB Analysis of the National Performance Management Research Data Set (NPMRDS).
 Certain regional Interstate highway segments excluded due to data availability.



Safety: MATOC Incidents

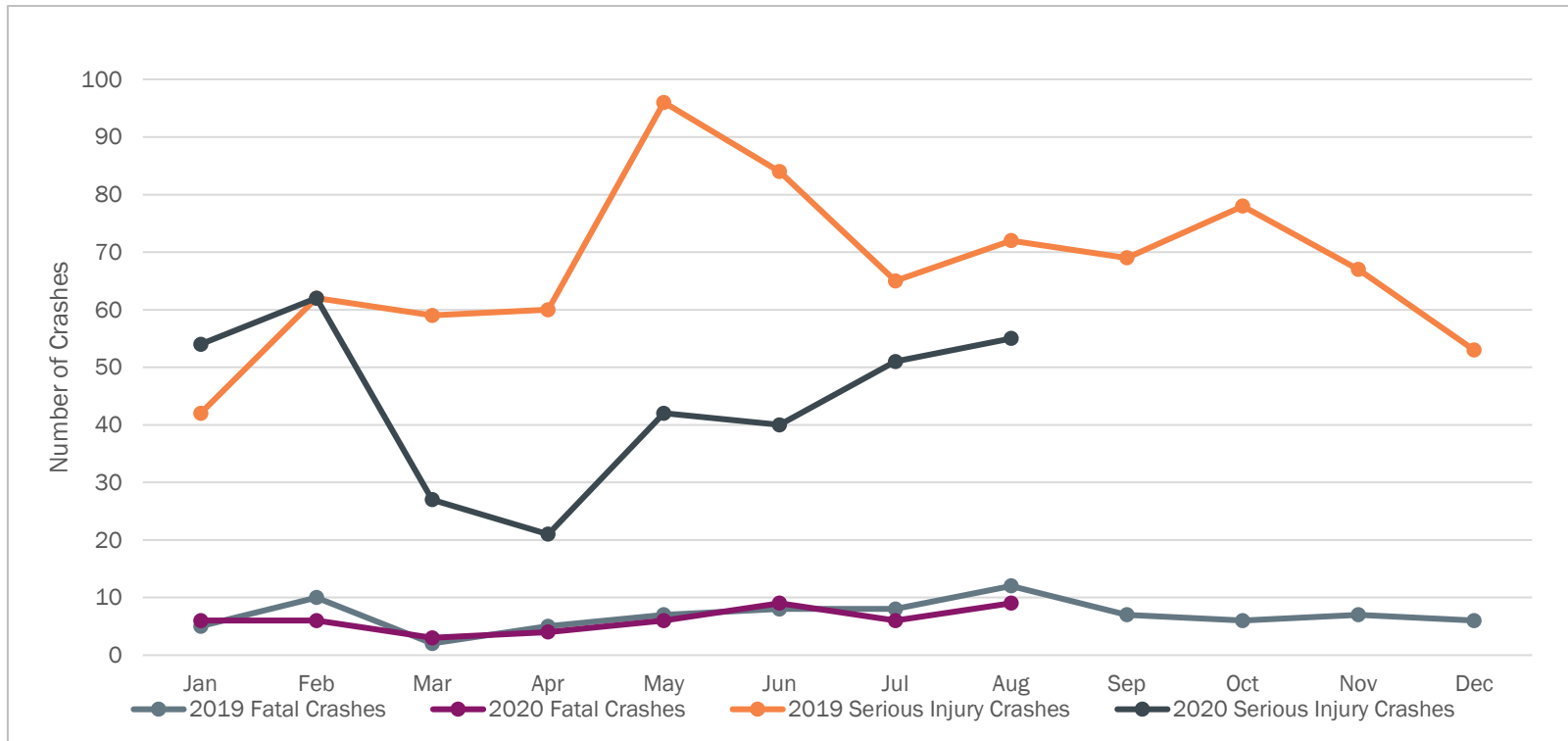


Numbers of documented roadway incidents during Metropolitan Area Transportation Operations Coordination (MATOC) Program operating hours (4:30 A.M. to 8:00 P.M. weekdays only). Source: MATOC.

- MATOC-tracked major incidents were disproportionately high in April, and have remained disproportionately elevated



Safety: Crashes (Northern Virginia)

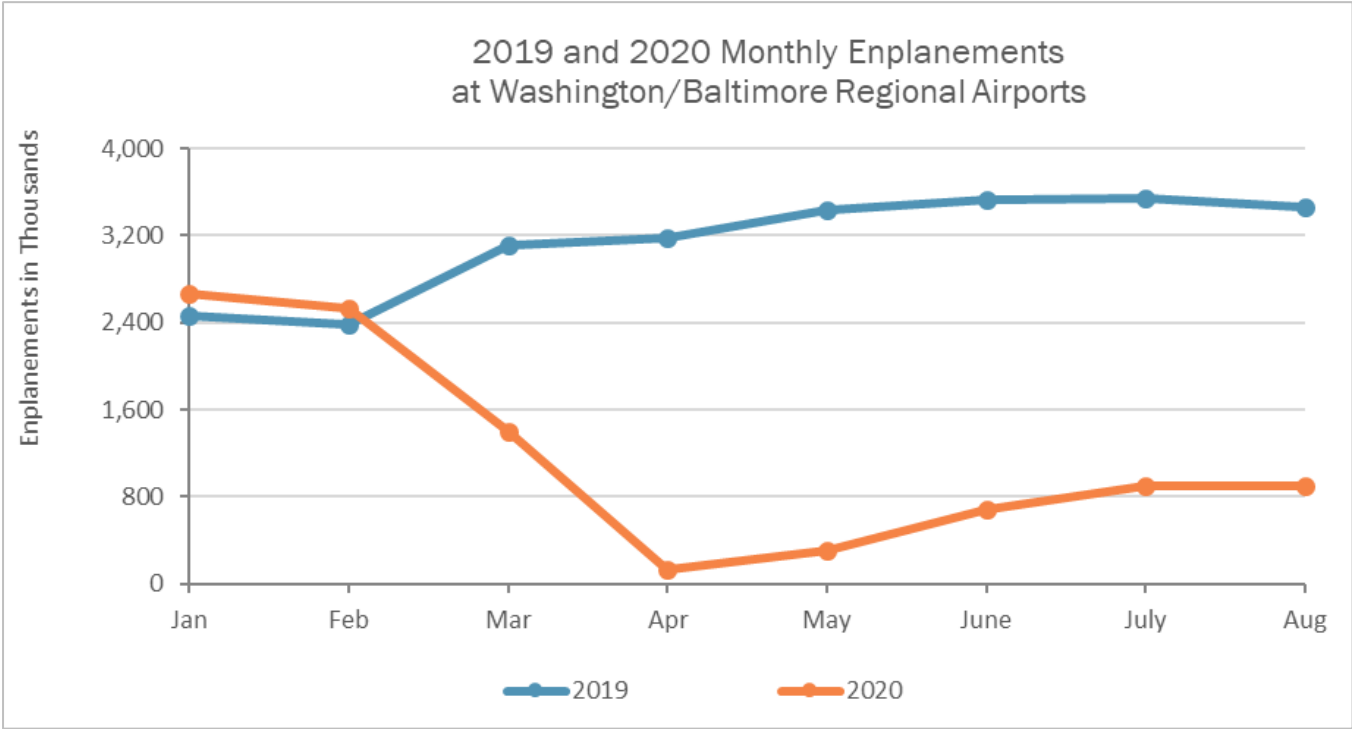


Data for 2020 are preliminary and subject to change. Source: VDOT.

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



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
- 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.



Next Steps

Staff from COG Departments of Transportation Planning, Environmental Programs, and Community Planning & Service to collaborate on a multi-sectoral assessment of COVID-19 impacts on the region.

- Deeper dive into more data
- Examine interrelationships of data from multiple sectors to discern impacts and inform long-range planning and programming.
- Sectors of Analysis
 - Roadway Travel
 - Public Transportation
 - Economy
 - Environment
 - Health



Andrew Meese, AICP

TPB Systems Performance Planning Director

(202) 962-3789

ameese@mwkog.org

Timothy Canan, AICP

TPB Planning Data and Research Program Director

(202) 962-3280

tcanan@mwkog.org

mwkog.org/tpb

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002

