

MONITORING EFFECTS OF COVID-19 ON THE REGION'S TRANSPORTATION SYSTEM

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Commuter Connections Subcommittee
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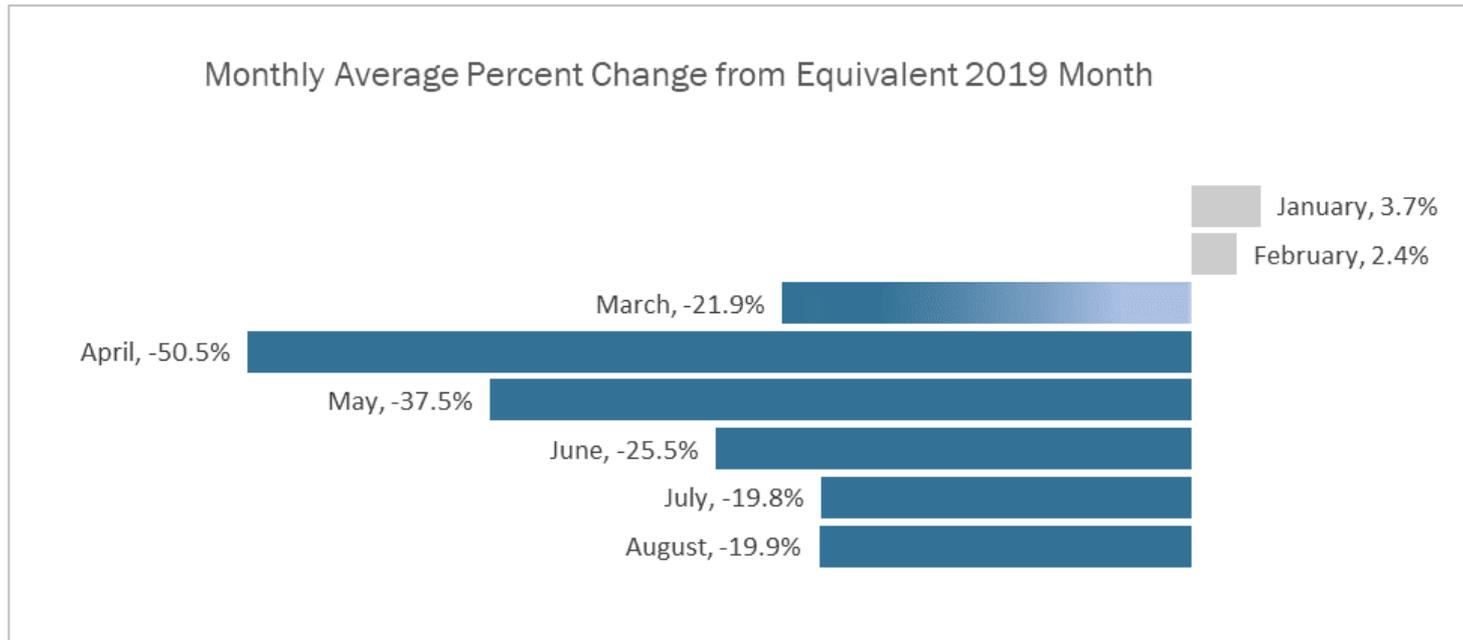


Introduction

- 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

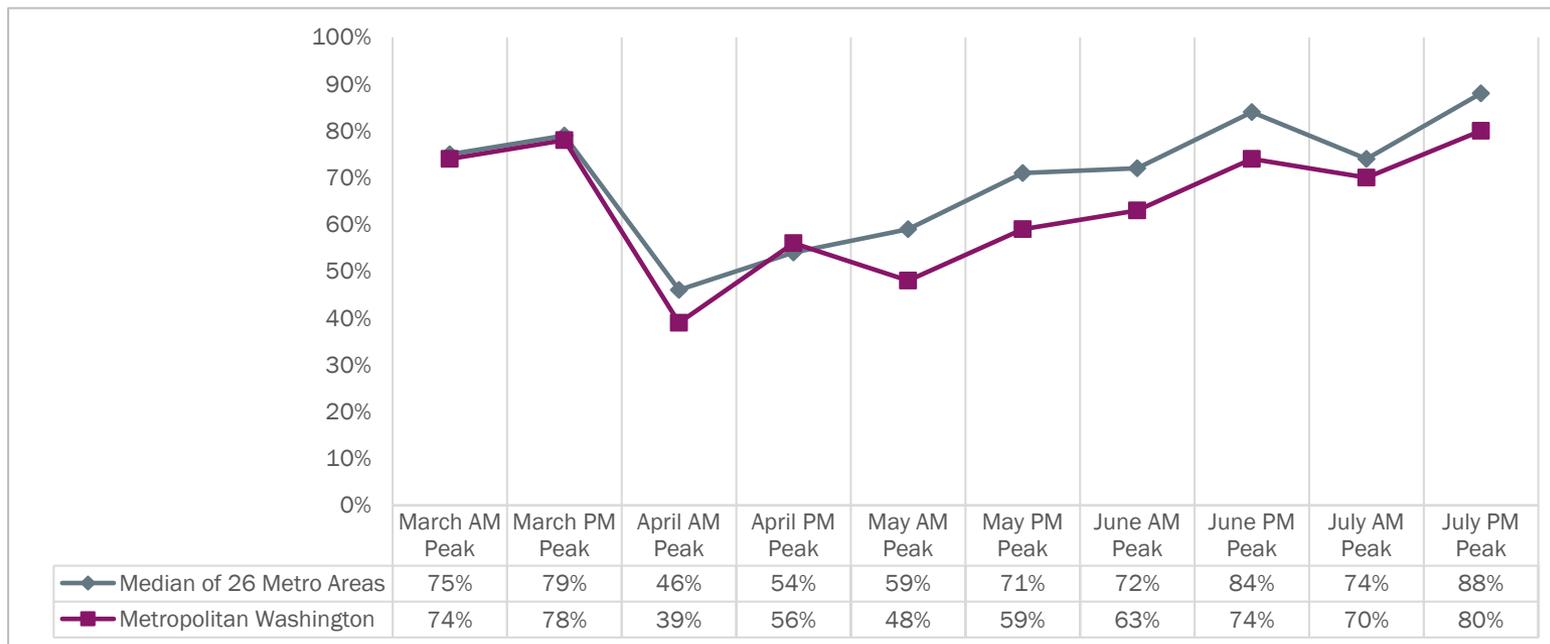


Source: COG/TPB

- 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

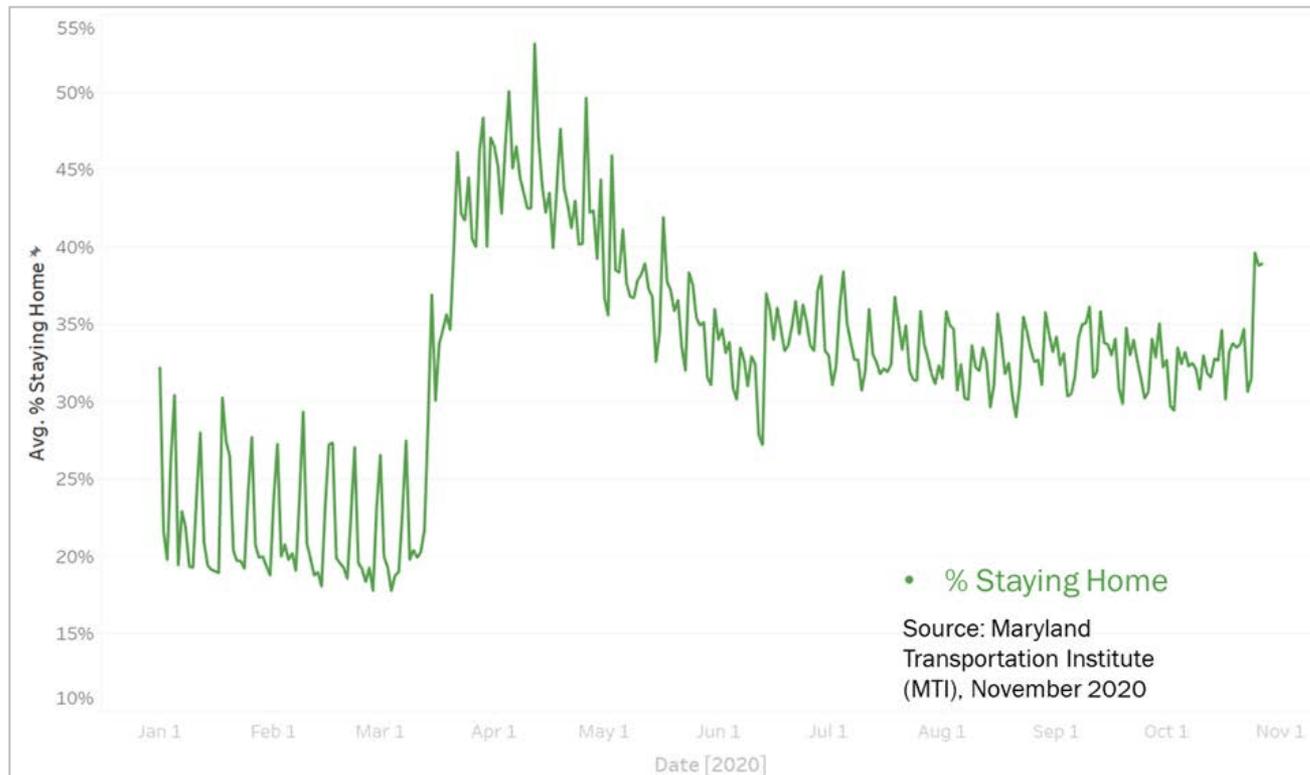


Comparison to pre-pandemic levels. Source: INRIX.

- 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



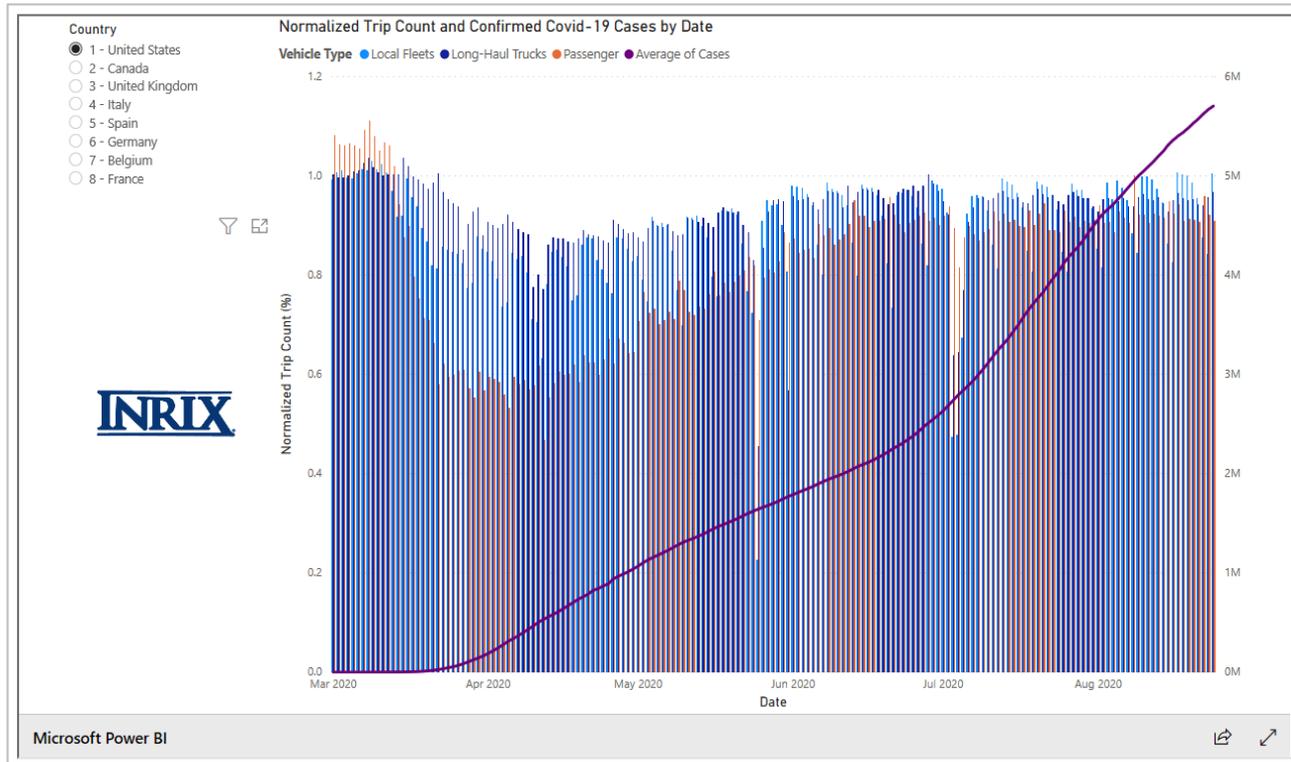
Person Travel



- 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

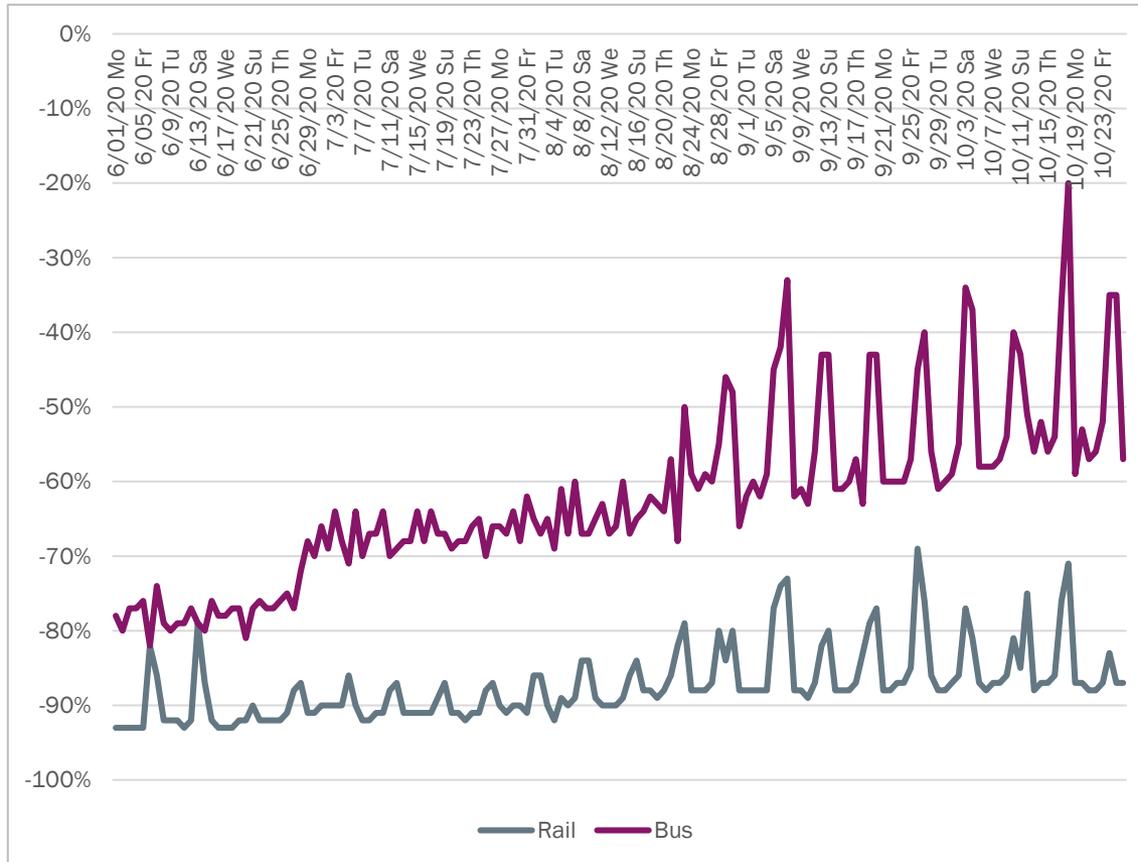


Nationwide data. Source: INRIX.

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



Metrorail and Metrobus Ridership

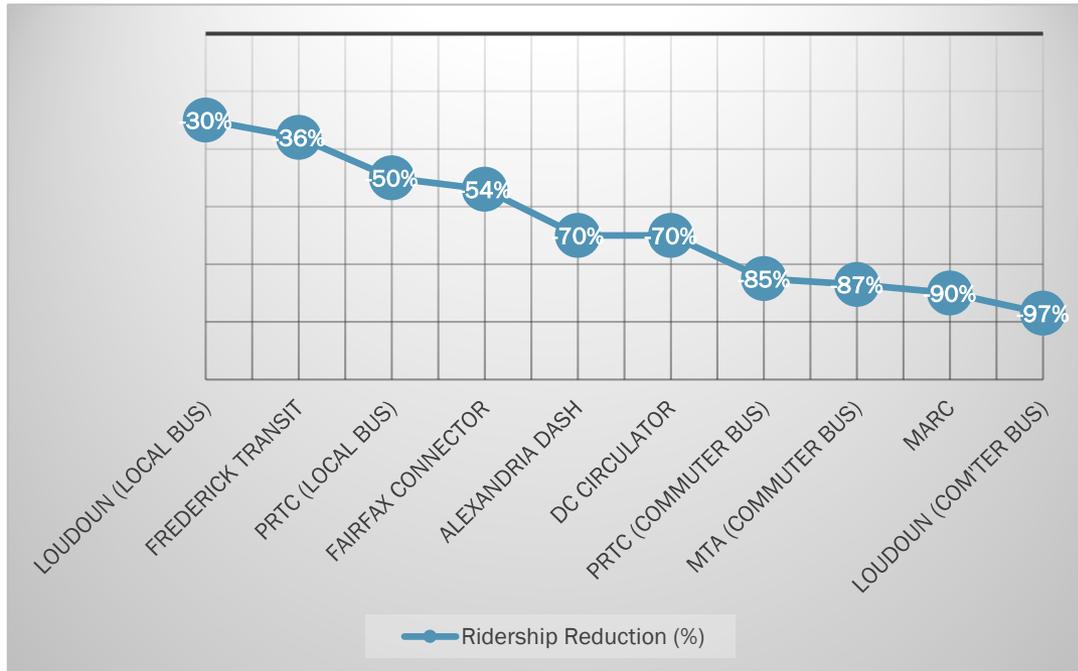


Year-to-year (2020 vs. 2019) percentage decline in ridership. Source: WMATA COVID Public Information Page.

- 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

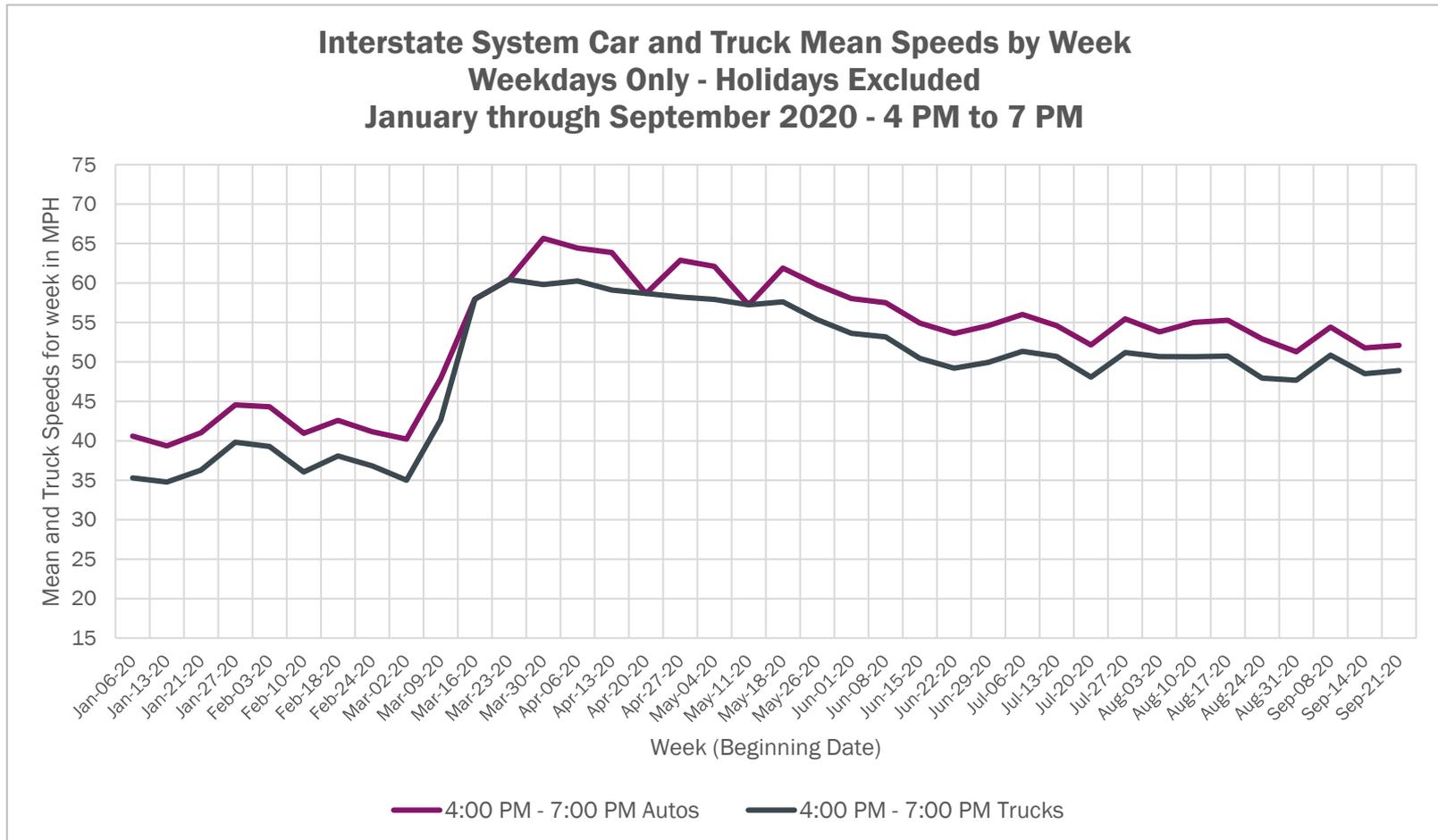


- Impacts varied among long-distance, local, and tourist routes

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



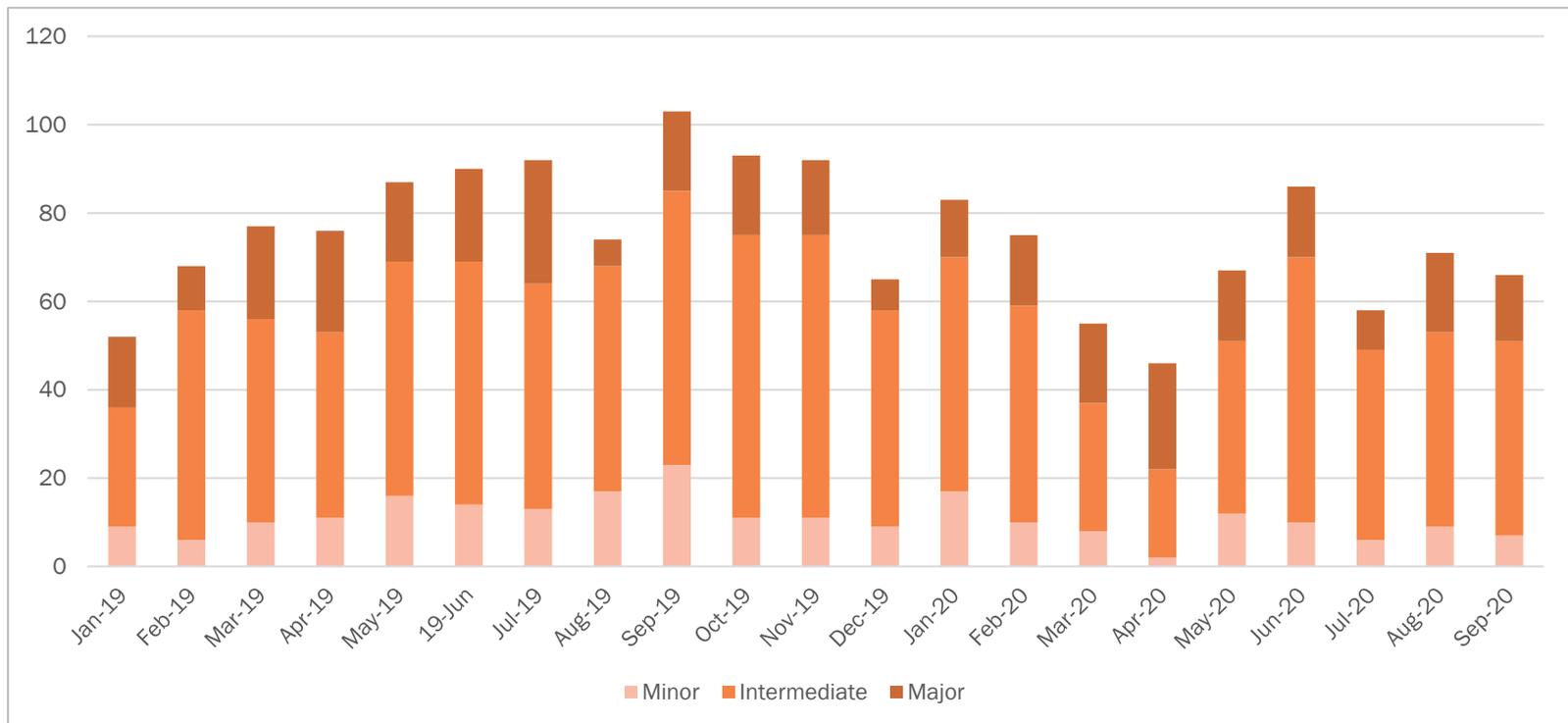
Roadway Speeds (Example)



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

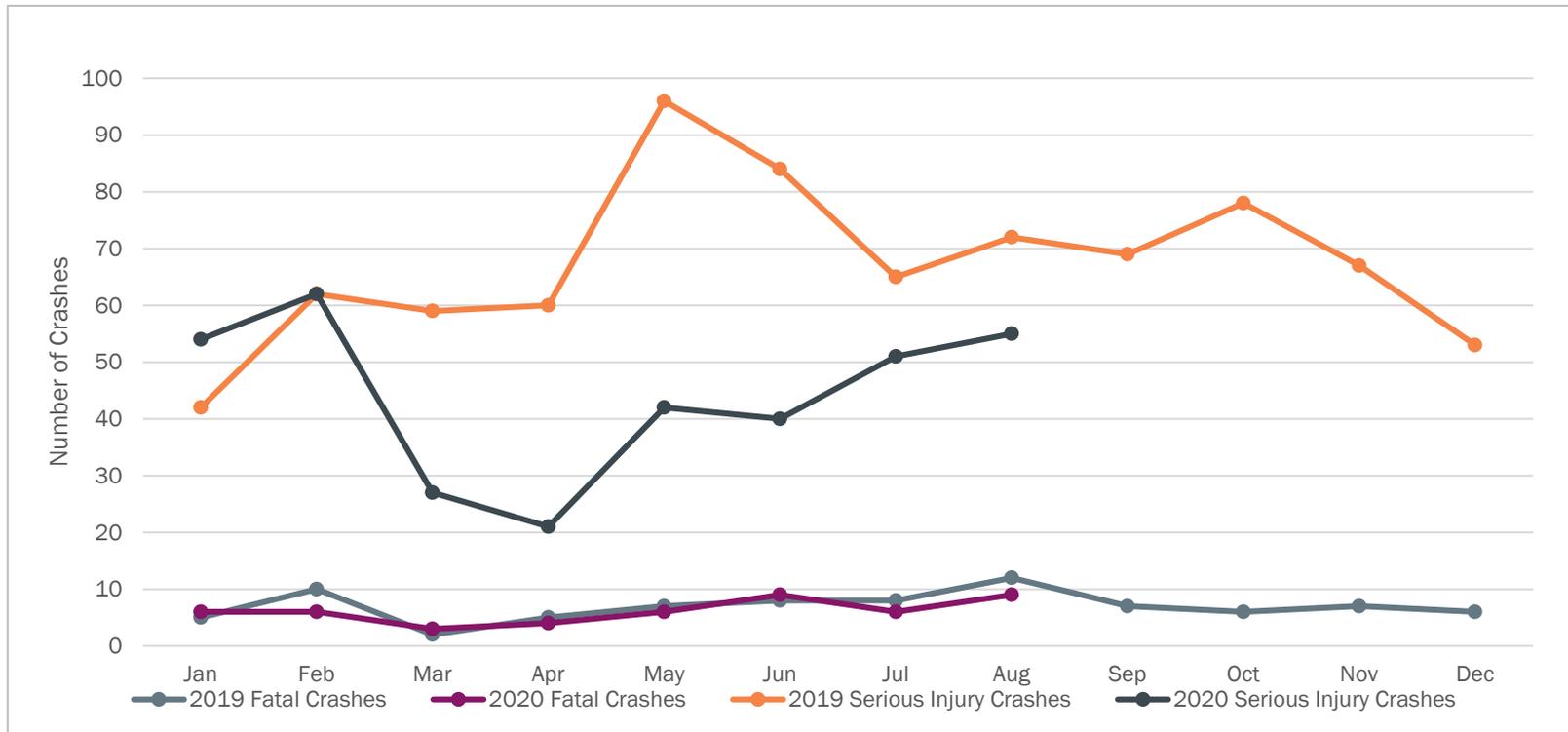


Numbers of documented roadway incidents during Metropolitan Area Transportation Operations Coordination (MATOC) Program operating hours (4:30 A.M. to 8:00 P.M. weekdays only). Source: MATOC.

- MATOC-tracked major incidents were disproportionately high in April



Safety: Crashes (Northern Virginia)

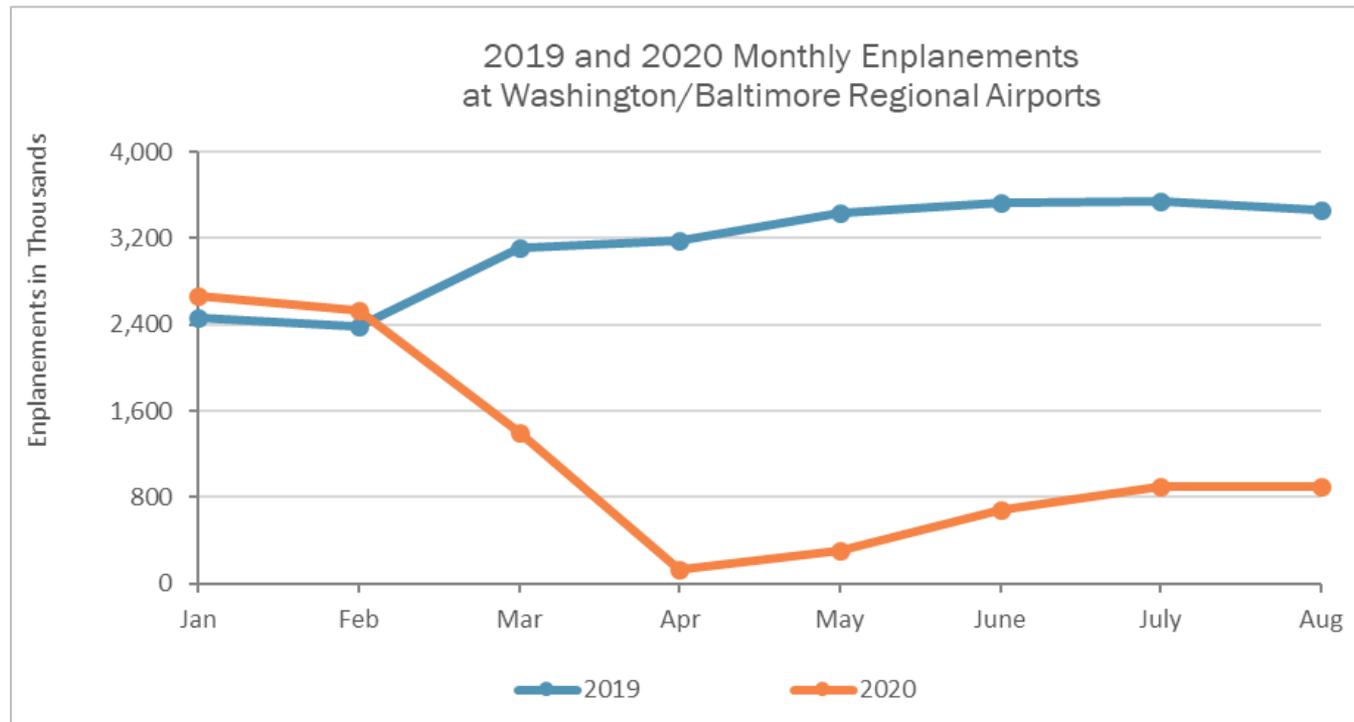


Data for 2020 are preliminary and subject to change. Source: VDOT.

- 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



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