Where We've Been and Where We're Going

Transit Trends and the Year Ahead

Kevin Quinn, Administrator December 10, 2020



MARYLAND TRANSIT ADMINISTRATION

Agenda

• Trends in Transit

• Service and Ridership

• Project Updates

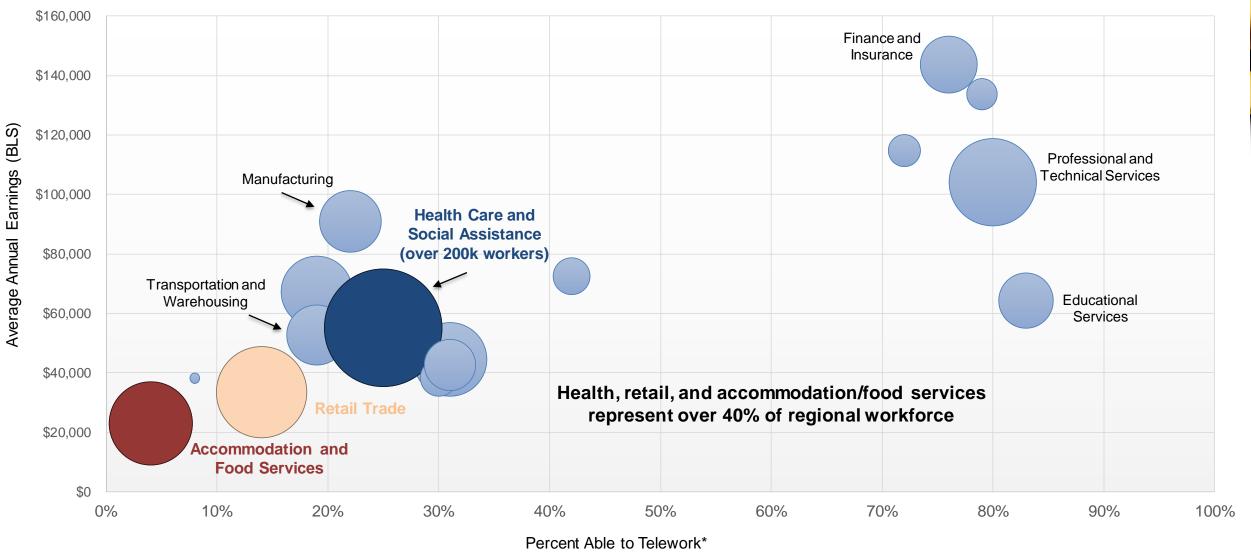


Trends in Transit



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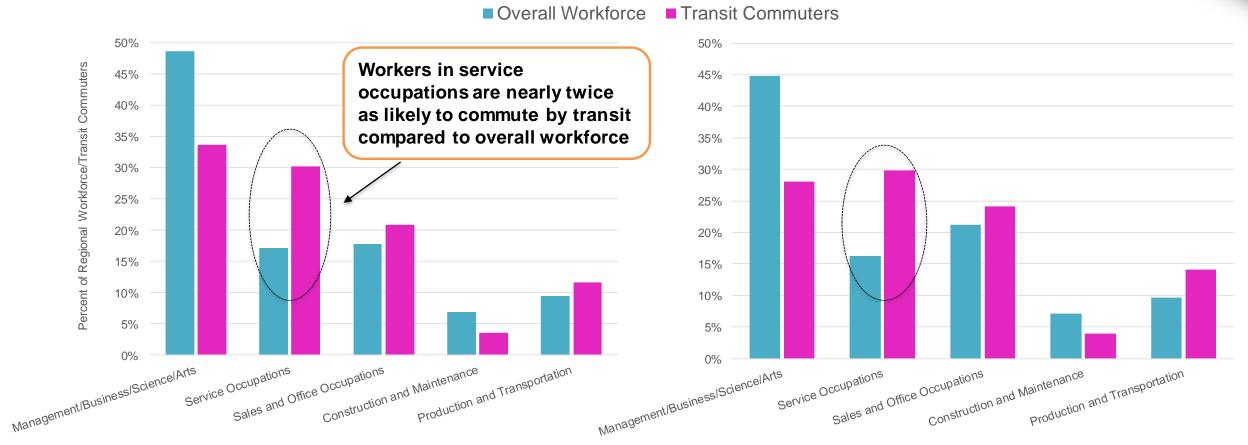
Baltimore Region Employment, Earnings, and Ability to Telework



*Estimates derived from Dingel and Meiman, How Many Jobs Can Be Done at Home?, NBER April 2020

Transit Use by Occupation

- Transit commuters are disproportionately likely to work in service occupations
 - Includes healthcare support (e.g. nurses) and food service workers



Baltimore City

Baltimore Region

Source: American Community Survey 5-Year Estimates, 2018



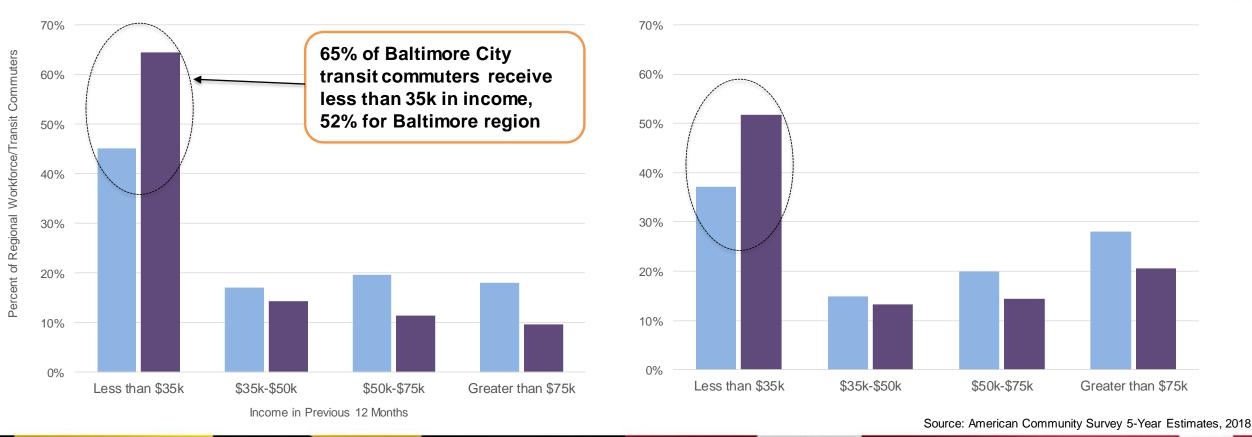
Transit, Income, and Employment

- Transit commuters are disproportionately low-income relative to overall workforce
- Nearly two-thirds of Baltimore City transit commuters receive less than \$35k in income, over half for region

Overall Workforce Transit Commuters

Baltimore City

Baltimore Region



Transit Use by Race/Ethnicity

- Transit commuters are disproportionately Black relative to overall workforce
- Approximately three-quarters of Baltimore City transit commuters are Black, over 60% for region

Overall Workforce Transit Commuters 80% 80% 76% of Baltimore City 70% 70% transit commuters are 60% Black, higher than the 60% 54% share of City 50% 50% workforce 62% of transit 40% 40% commuters in the **Baltimore region are** 30% 30% Black, higher than the 26% share of regional 20% 20% workforce 10% 10% 0% 0% White Black Hispanic Asian Other White Black Hispanic Other Asian

Baltimore City

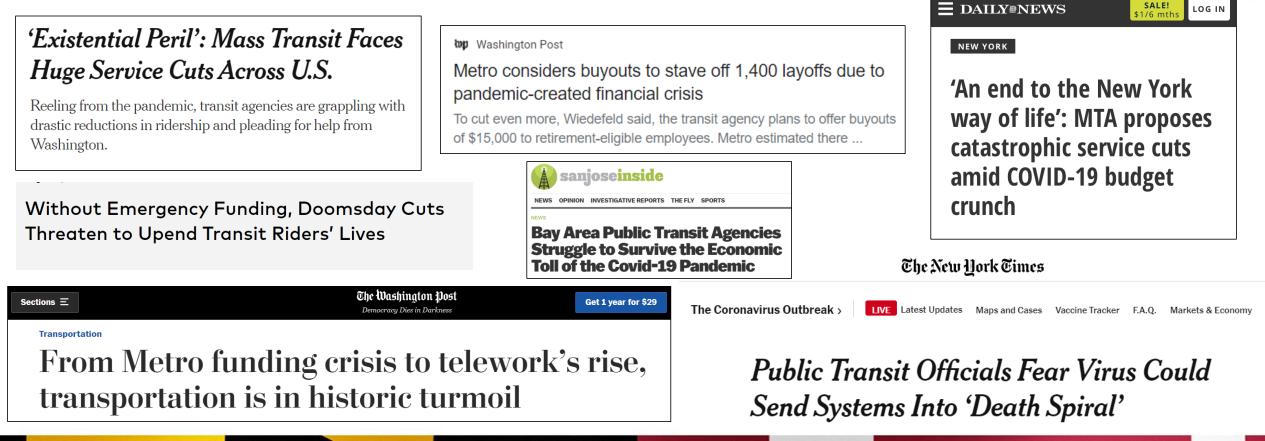
Baltimore Region

Source: American Community Survey 5-Year Estimates, 2018

Percent of Regional Workforce/Transit Commuters

The Funding Crisis is Real

- Transit agencies throughout the US are looking at a budget shortfall nearly 2,000% greater than that experienced during the Great Recession
- According to an APTA survey, 8 in 10 large agencies are considering service cuts and/or delaying, deferring, or cancelling capital projects to close their budget gaps



MDOT MTA Advocacy



- MDOT MTA has been an active advocate for additional federal funding for transit including:
 - A July 6, 2020 joint letter with 26 other transit CEOs to Congressional leadership requesting funding and highlighting the consequences of failing to provide funding for transit
 - An August 6, 2020 joint letter with APTA and 23 other commuter rail CEOs to Congressional leadership requesting additional funding
 - A September 23, 2020 joint letter with more than 70 organizations to the Maryland Congressional Delegation in support of \$32 billion in additional transit funding
 - APTA press conferences with transit executives
- We need your help!

Service and Ridership



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Service Change Decision

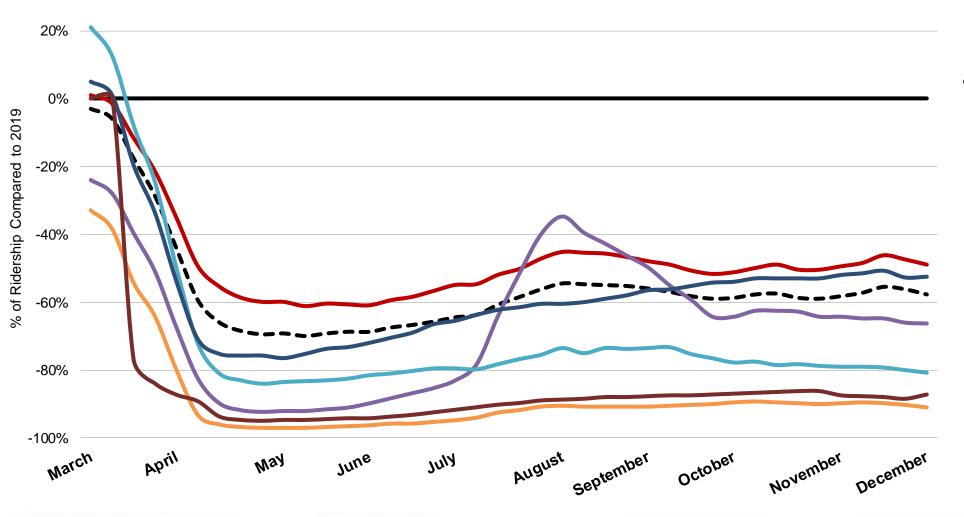
- You spoke, we listened
 - Public comment and feedback from local jurisdictions, elected officials
- We looked at the data
 - Ridership/passengers per trip for commuter services vs core service
 - Vehicle access, essential workplaces
- Initial proposal was withdrawn
 - No reductions in core service
 - No impacts to Mobility service area



Ridership by Transit Mode

Ridership Compared to Previous Year (Rolling 4-Week Averages)

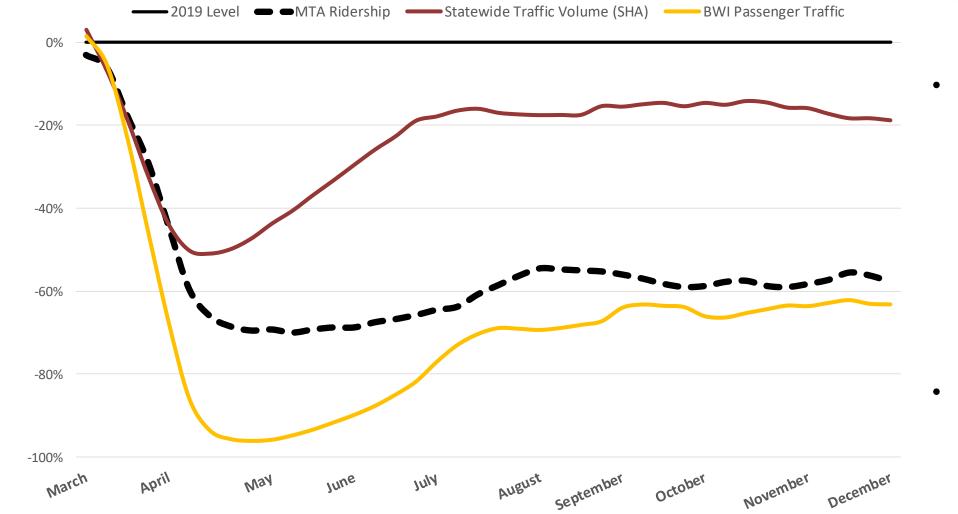




- Overall ridership is down approximately 60% as of early December
 - Core Bus down 50%
 - Mobility down 55%
 - Light Rail down 65%
 - Metro down 80%
 - Commuter Bus down 87%
 - MARC down 90%

Transit vs Other MDOT Modes

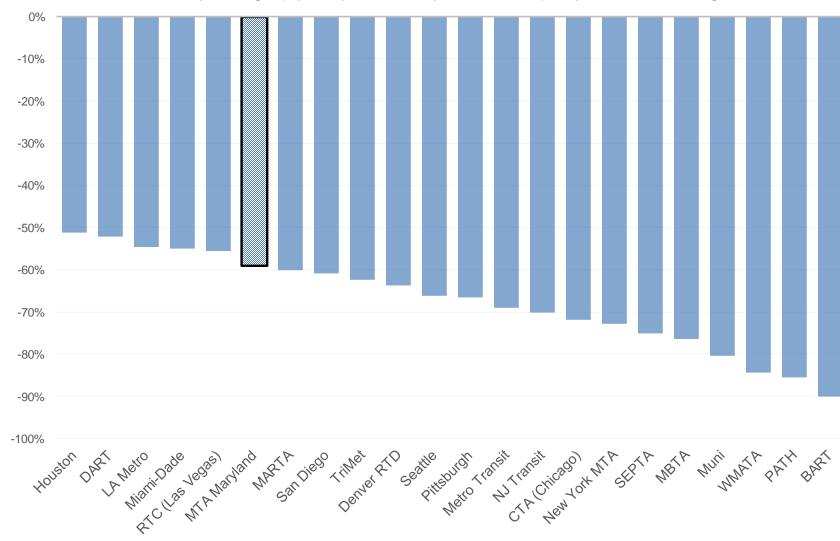
Ridership/Traffic Compared to Previous Year (Rolling 4-Week Averages)

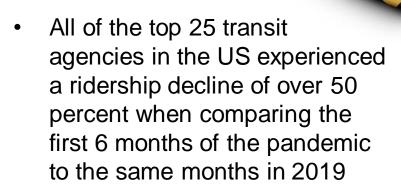


- Statewide traffic volume has recovered faster than transit ridership
 - Stabilizing around 15-20% of prepandemic levels compared to 60% for transit
- Long term implications for mode shift?

COVID-19 Ridership Impacts

Total Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies



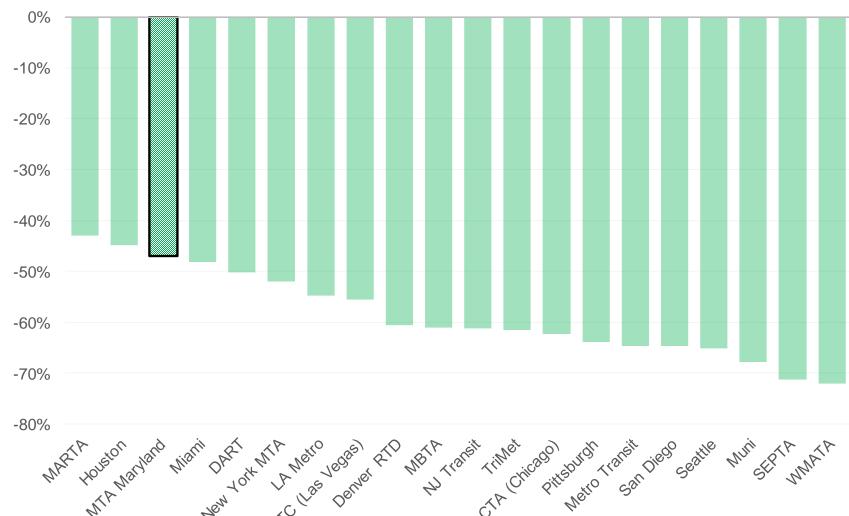


 Total MTA ridership has fallen by less (59%) than most other top transit agencies in the nation, which collectively declined by 72%

Source: NTD

COVID-19 Core Bus Ridership Impacts

Bus Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies

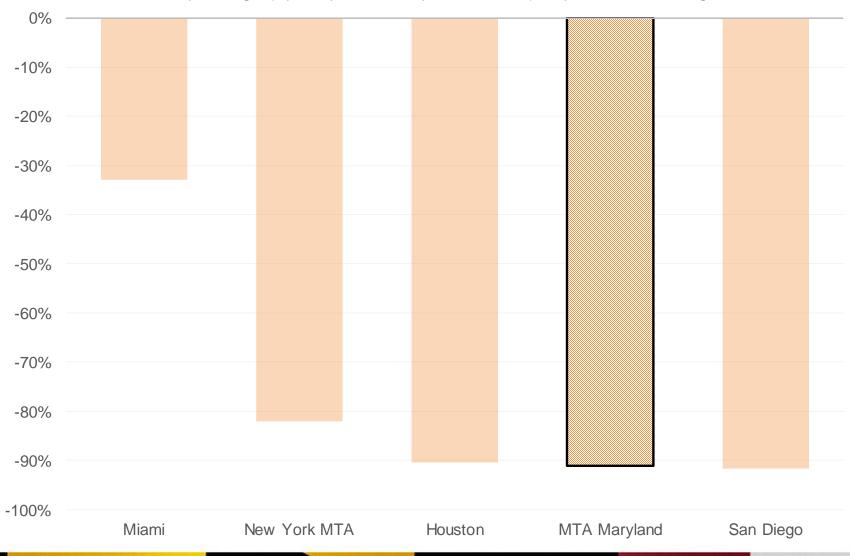


- MTA had one of the lowest drops in core bus ridership (47%) among the top 25 agencies
 - Only MARTA (43%) and Houston Metro (45%) experienced less of a decrease
- Every top transit agency with the exception of San Diego saw bus ridership declines *less* than the overall total
 - Essential workforce and bus ridership
- WMATA and SEPTA led the nation in bus ridership declines, both at over 70%

Source: NTD

COVID-19 Commuter Bus Ridership Impacts

CB Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies

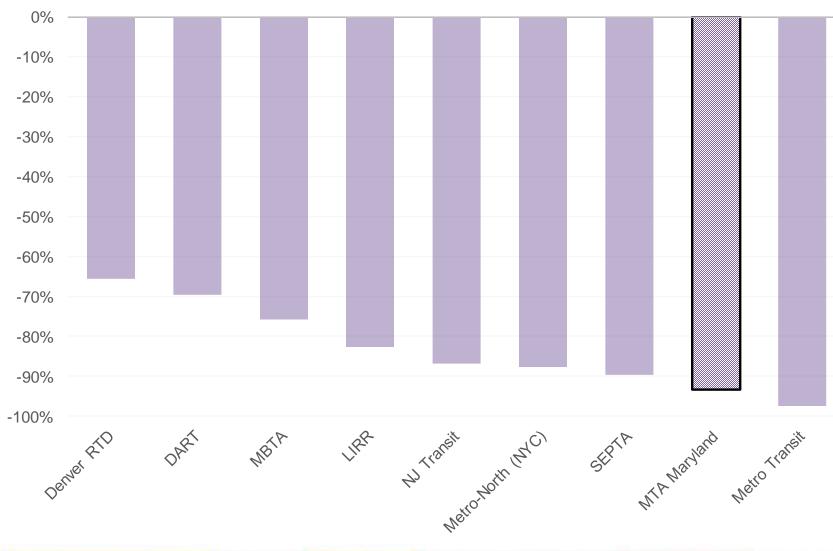


- MTA had one of the highest drops in commuter bus ridership at over 90%
- As of the most recent data month, MTA still has the 5th largest commuter bus program in the country

Source: NTD

COVID-19 Commuter Rail Ridership Impacts

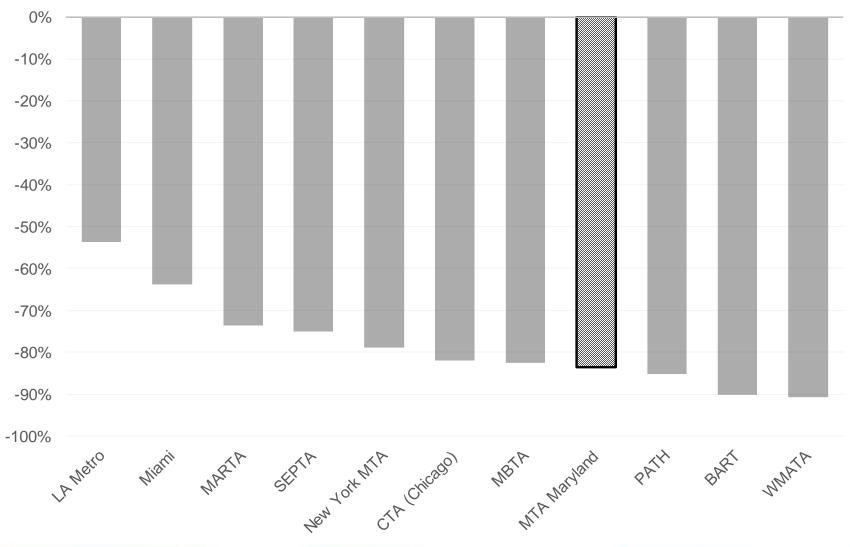
CR Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies



- MTA had the second-highest drop in commuter rail ridership at over 93%
 - Only Metro Transit in Minneapolis had a greater decrease in ridership (97%)
- More than 80% of federal workers expect to telework three days per week or more in the future, which could have implications for MARC

COVID-19 Heavy Rail Ridership Impacts

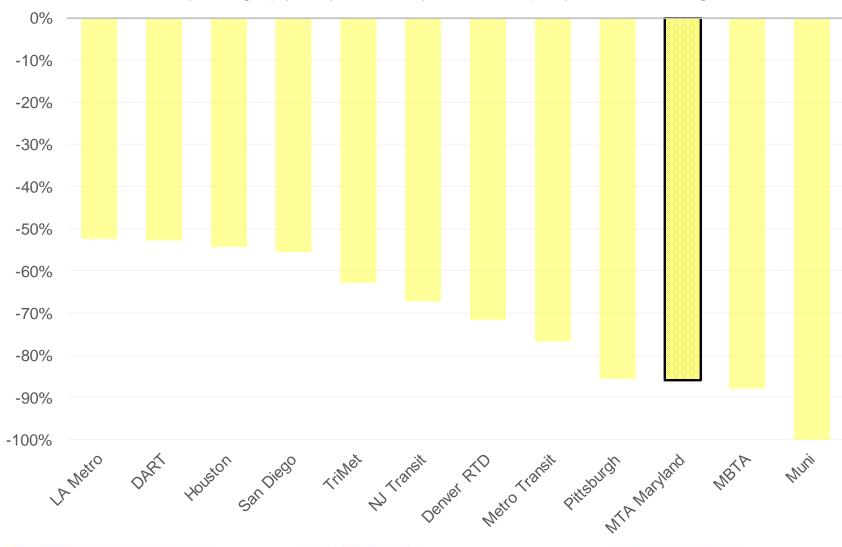
HR Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies



- MTA Metro ridership declined by 84%, similar to heavy rail systems in Boston (83%) and Chicago (82%)
- WMATA experienced greatest decrease
 - Role of federal telework

COVID-19 Light Rail Ridership Impacts

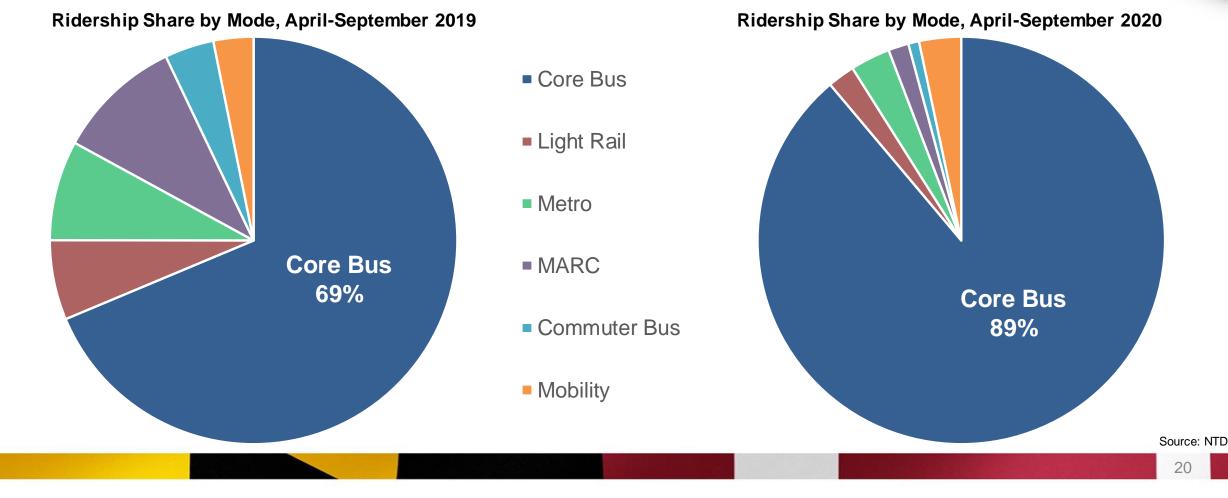
LR Ridership Change (Apr-Sep 2020 Compared to 2019), Top 25 US Transit Agencies



MTA light rail ridership experienced one of the greater drops in ridership (86%), surpassed only by MBTA (88%) and Muni in San Francisco, which replaced its light rail service entirely with buses

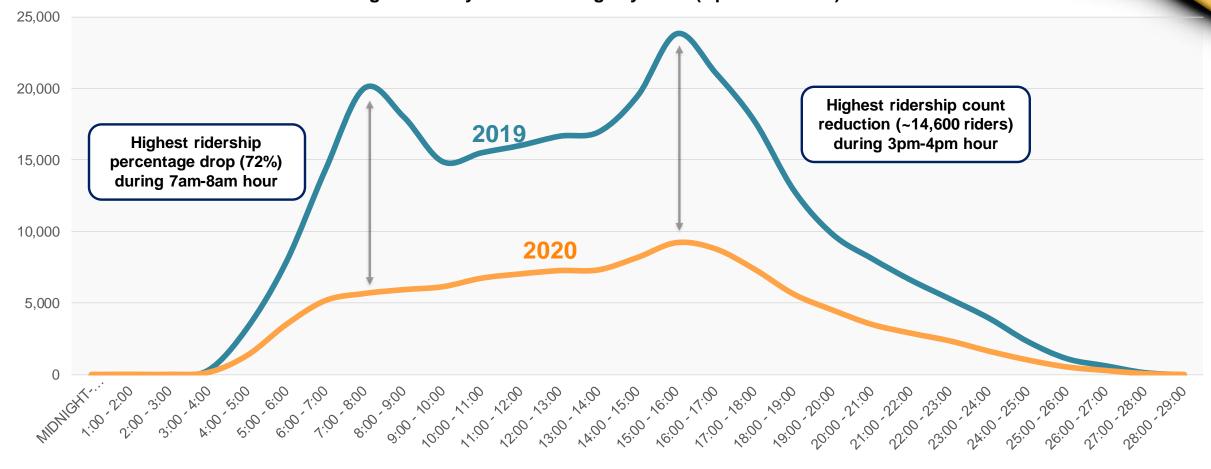
Changes in Transit Modal Share

- Core Bus now represents 89% of total ridership, compared to 69% last year
- MARC declined from 10% of ridership to ~1.5%
- Commuter Bus declined from 4% to less than 1%
- Mobility stayed relatively constant at ~3%



A Decline in Transit's Peaks

• Transit ridership has become more evenly spread throughout the day



Average Weekday Bus Boardings by Hour (April – October)

Hour of Day

Service Updates

- Winter Service Change effective February 14, 2021
 - Recalibrates runtimes on 53 of the 65 core bus routes
 - Responds to ridership and traffic conditions, aiming to reduce early buses
 - Includes minor adjustments in service across routes in response to ridership demand
 - Continues discontinuation of all Express routes and LocalLinks 38 and 92
- Working with BCPSS on supplemental service school trippers as plans become available
- Will monitor ridership and traffic trends and adjust service accordingly for Summer and Fall

Project Updates



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North Avenue Rising



- Partnership with Baltimore City Department of Transportation
- Paving started for 7 miles of dedicated bus lanes
 60% complete
- Sidewalks and pedestrian lights installed on nearly all of North Avenue corridor
- Interior and exterior station lighting upgrades completed
- Installation underway for Transit Signal Priority (TSP) detection hardware
 - 50% complete
- Communicating construction impacts to public



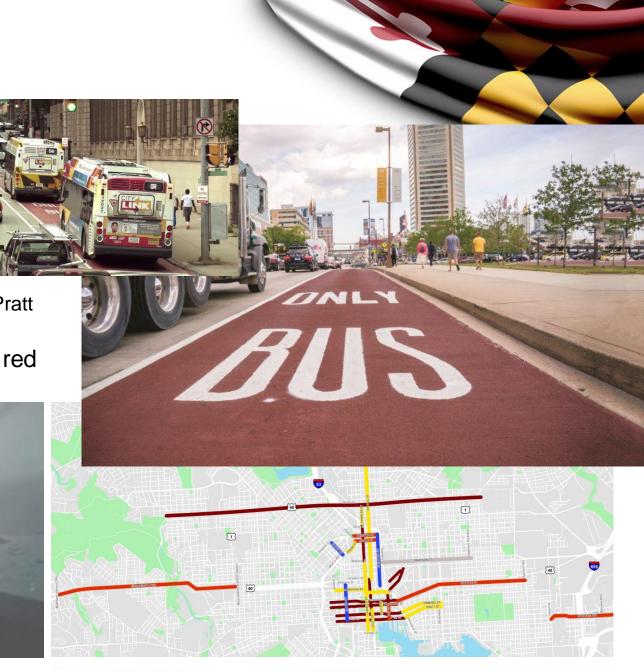


Dedicated Bus Lanes

- Repainting to begin this Spring
- Order of repainting:
 - Baltimore Street from Arch to Gay
 - Fayette Street from President to Arch
 - Gay Street from Baltimore to Forrest
 - Charles Street from Madison to Oliver
 - Saint Paul Place/Light Street from Mount Vernon to Pratt
- Reminder: lanes still enforced when not painted red







Kirk Division Modernization

MASS TRANSIT SUBSCRIBE | MAGAZINE | ADVERTISE | CONTACT US | SUPPLIERS BUS RAIL TECHNOLOGY SAFETY & SECURITY A

BUS | INFRASTRUCTURE | MOOT MTA MARKS CONSTRUCTION MILESTONE IN KIRK AVENUE BUS DIVISION PROJECT

MDOT MTA marks construction milestone in Kirk Avenue Bus Division Project

The milestone was celebrated at a ceremony that included signing, raising and placing the final truss.

Maryland Transit Administration (MTA) OCTOBER 25, 2019











- \$80 million facility will accommodate 175 buses, including articulated and hybrid vehicles
- 180,000 square feet of improved bus storage, fueling, washing, radio dispatching, administrative offices, and operator support facilities
- Entire facility under cover
 - Will address community concerns related to bus visibility, noise, and emissions
- Operations to begin in mid-February

Rail Vehicle Updates

- Light Rail Mid-Life Overhaul
 - \$163 million overhaul program for 53-car fleet
 - Approximately halfway done
 - ~25 vehicles accepted for revenue service
 - Expected to be 75% complete by end of 2021
 - Completion by end of summer 2022
- Metro Fleet and Train Control Replacement
 - \$400+ million project for 78 new Metro vehicles
 - Car shell manufacturer has resumed production after closing due to COVID-19
 - Train Control is continuing construction and testing
 - First carshell will be delivered to Miami manufacturing facility in February for assembly of first married pair
 - Will arrive in Baltimore fall 2021 for final testing
 - All new vehicles to be in revenue service by Spring 2024



Bus Fleet Updates

- \$212 million 5-year bus purchase
- 50 out of 70 Nova buses for this year have been accepted for revenue service
 - All buses due to be in service by end of year
- 30 40' buses and 40 articulated buses







- \$38 million state-of-the-art upgrade and unification of all on-board bus equipment and monitoring systems
- 209 vehicles installed as of early December
 - One-third of fleet
 - On track to complete all installs by late April 2021
- 90% of training is complete for operators, mechanics, and supervisors
- Currently validating GTFS-RT with Swiftly
- Real-time capacity data
 - Late spring/early summer

Central Maryland Regional Transit Plan

- 25-year plan to define public transportation goals for the Central Maryland Region
 - Goals include improved connectivity and integration of transit services
 - Identifies corridors for future improvements
 - Final plan available at rtp.maryland.gov
- Extensive public outreach
 - Over 3,000 surveys completed
 - 45+ outreach events
 - Public comment for draft plan occurred between April and June 2020
- Shifting from plan development to implementation
 - Implementation team includes representatives from regional jurisdictions, business and advocacy groups
- Corridor studies
 - East to West: Ellicott City to Convention Center
 + Convention Center to Bayview (yellow)
 - North to South: Town to UMMC (neon green)
 - \$12.6 million project includes transit priority improvements to support future limited stop service and existing bus routes



Connecting Our Future A Regional Transit Plan for Central Maryland



The Central

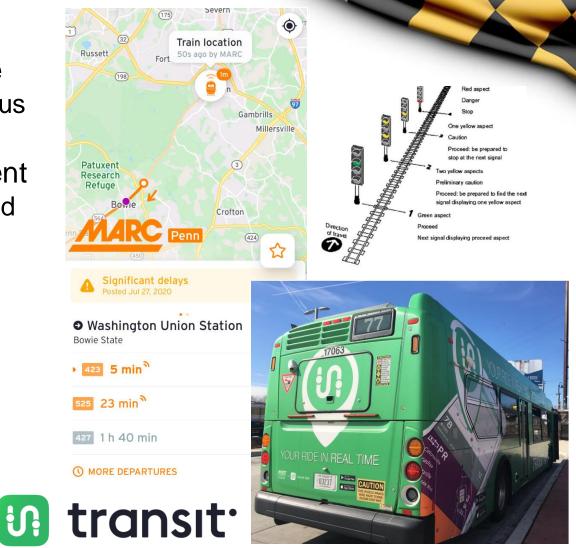
Fare System Replacement



- Working toward next generation fare system
- RFP advertised in November 2020
 - Proposals due in January 2021
 - System launch by mid-2023
- Goals include easier/contactless payment, more options to purchase/reload fares
 - Replacement of fareboxes and ticket vending machines
 - Expanded retail network
 - Improvements to mobile ticketing
 - Integration with LOTS
 - Shorter dwell times
 - Better ridership data
 - Reliability and repair time improvements

Rider-Focused Technological Updates

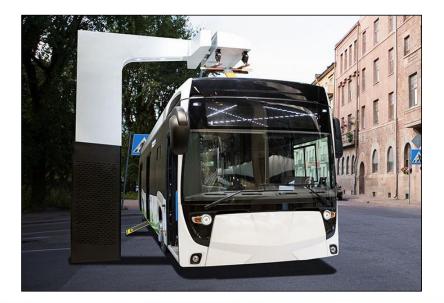
- Real-time launched on MARC Train Service
 - Also available on core bus and Commuter Bus
- Light Rail and Metro currently in development
 - Unique issues of short turns and underground network respectively
 - Installation and testing underway
 - On track for summer 2021 launch
- Mobility on-demand app
 - RFP to be advertised early next year
 - Mobile and app-based booking options
 - Working group of riders, advocates, and MDOD staff is contributing to pilot development



Toward a Zero Emissions Bus Fleet

- Focused on 50% bus fleet transition to ZEV by 2030
 - Technology: Compare electric and hydrogen fuel cell costs and capabilities
 - Service: Can current technology support bus routes that exist today?
 - Charging: How could bus storage and maintenance facilities be retrofitted?
 - Phasing and financing options
- Funding for two pilots, with revenue service expected in 2022
 - \$2.6M FTA Low and No Emissions Grant -3 60' battery electric buses and charging infrastructure
 - \$3M Volkswagen Grant 4 40' battery electric buses and charging infrastructure





What We're Thinking About



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Thinking Strategically About the Future of MTA

- Service Delivery
 - New service models?
 - More dynamic and agile service planning
 - Multimodalism
- Equity & Inclusion
 - Service impacts
 - ADA
 - Community partnerships
- Communications
 - Internal and external
 - Service disruptions
- Fiscal Management
 - Impacts on service
 - Investment prioritization
 - Scenario planning
- Safety & Security
 - COVID-19 safety practices
 - State of good repair
 - Operator safety



Conclusion

- Transit funding faces significant headwinds in the near-term
- Agency is still focused on exciting projects
- Monitoring city and federal outlook
- Transit plays a huge role in the COVID-19 recovery:
 - Ensuring cars don't overwhelm city streets
 - Providing employment access to essential workers and low-income residents
 - Improving environmental outcomes
- We've got to adapt and evolve to meet rider needs