NVTC WMATA Committee Meeting
April 21, 2022

Meeting materials available at www.novatransit.org
Committee Meeting Agenda

1. Review January 20, 2022 Meeting Summary
2. Presentation from WMATA Staff on WMATA’s Bus Priority Program
3. How WMATA is Funded in Virginia
4. Update on WMATA’s FY 2024 Operating Budget Gap
5. Updates from the VA WMATA Board Members
6. NVTC Program Updates
Agenda Item #2:
Presentation From WMATA Staff on WMATA’s Bus Priority Program
NVTC WMATA Committee Meeting

Bus Transformation Project and Bus Priority

April 21, 2022
Purpose and Background

Review Bus Transformation Project (BTP)

Progress:

- Designed to transform the bus system to provide **fast, frequent, reliable, affordable service** that feels **unified** and advances **transit equity**

- More than a year of public and stakeholder input developed four strategies and **26 recommendations** to improve bus

Bus Priority Updates and Partnership Opportunities
Buses Move the Region

- A major part of the Washington area’s transportation system, connecting residents to destinations
  - Provided by **nine operators**, including Metrobus
  - Since start of the pandemic, Metrobus has carried more riders than Metrorail

- Needs improvement to meet needs of region, especially riders who rely on it most
**Metrorail vs. Metrobus Demographics in Virginia**

Persons of Color = Non-white or Hispanic

Low-income = Household income of $30,000 or lower per year

Source: 2016 Metrorail Survey; 2018 Metrobus Survey
Respondents were asked to prioritize improvements to local bus service by apportioning “coins” from a hypothetical budget of 20 coins to eight different categories of improvement types based on their preferences.

**More Frequent Service**
- Run more buses!...ridership here would increase exponentially if buses were frequent and preferably in dedicated lanes

**More Reliable and Faster Service**

**More Direct Buses and Fewer Transfers**

**Longer Hours of Operation**

**Affordable Fares**

**Safer, More Secure Buses and Stops**

**Better App for Information or Payment**

**Less Confusing system**

Metro buses come fairly frequently (every 10-15 minutes) which is very convenient because then I can leave work whenever I want and always know a bus will be there soon.
Buses face on-route challenges

Pre-Covid, buses got slower than 10 years ago…

...as a result of multiple changes to the landscape

- Increased congestion
- On-street parking
- Proliferation of bus stops
- Curbside developments
- Elimination of historical bus lanes
- Lack of enforcement for deliveries, taxis, etc. in bus lanes and at stops

Source: National Transit Database, WMATA FY19 budget. BCG Analysis
## Bus Transformation Project | Strategies

<table>
<thead>
<tr>
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<th>Strategies</th>
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| 1 | **Frequent and Convenient Bus Service**  
Provide frequent and convenient bus service that connects communities and promotes housing affordability, regional equity, and economic growth |
| 2 | **Bus Priority on Roadways**  
Give buses priority on roadways to move people quickly and reliably |
| 3 | **Customer Experience**  
Create an excellent customer experience to retain and increase ridership |
| 4 | **Task Force to Implement the Strategy**  
Empower a publicly appointed Task Force to transform bus and lead the implementation of a truly integrated regional system |
## 2. Bus Priority on Roadways

Progress since the Board’s endorsement in January 2020

<table>
<thead>
<tr>
<th>F</th>
<th>Commitments from state and local agencies to expedite coordinated implementation of bus priority</th>
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<tbody>
<tr>
<td></td>
<td>DDOT - Bus lanes, TSP, Queue Jumps, and Violation Detection; Montgomery and Prince George's Counties - Queue Jumps and Tactical Bus Lanes; Northern Virginia – TSP, All-door Boarding</td>
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<td>G</td>
<td>Enforcement policies that establish bus priority</td>
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<td>Project underway to launch a bus-mounted, fully-automated Bus Priority Violation Detection System (VDS) in coordination with jurisdictions</td>
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<td>Capital program at Metro for bus priority projects</td>
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<td>✔️ Bus Priority team and programmed CIP</td>
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<td>I</td>
<td>Regional congestion mitigation efforts</td>
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<td>WMATA prepared to support regional efforts</td>
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*Note: Board priority recommendations are in **bold***
Bus Transformation Update

Bus Priority Treatments to Improve Speed and Reliability

- All-Door Boarding
- Floating Bus Stops
- Queue Jumps
- Dedicated Bus Lanes
- Automated Violation Detection and Enforcement
- Transit Signal Priority
- Queue Jumps
- Dwell Time
- Stop Delay: Deceleration
- Stop Delay: Acceleration
- Free Flow
- Traffic Congestion
- Signal Delay
Bus Transformation Update

Bus Priority Progress in Region

Metroway in Alexandria and Arlington, VA

Bus Lanes in Silver Spring, MD

A Bus Priority Queue Jump Signal in DC

Bus Lanes in DC

Montgomery County’s Flash BRT Service
Active projects include both managing and coordinating programs

1. **Transit Signal Priority (TSP)**
   - a. **Extended green**
     - TSP called
     - 36s (5s) 19s
     - Typical phase length
   - b. **Truncated red**
     - TSP called
     - 19s (5s) 36s
     - Typical phase length

   Buses request an extended green or truncated red light to reduce wait times

2. **Queue Jumps (QJs)**
   - Give buses a head start with additional travel lane and special signal

3. **Violation Detection System**
   - Sends video of violations to jurisdictions to issue citations and deter future misuse

4. **All-door Boarding Pilot**
   - Reduces dwell time by allowing passengers to board from all doors
New TSP Corridors | Improve Performance and Equity

- Total TSP intersections in the region: **250**
  - DC: 200 intersections
  - Virginia: **50 intersections** and more coming online
- Transition to 4G communications completed in 2022
- Ongoing System Maintenance
- New Corridors in NoVA in 2022: **Duke Street**
- Upcoming: Additional intersections on Route 7, Langston Boulevard, and Columbia Pike
All-Door Boarding Pilot *(Coming in 2023)*

Downtown Boston

Weekday Morning Rush Hour

June 2017
Bus Priority Program

Violation Detection System *(Coming to DC in 2023)*

- **Project Goal:** Improve travel time and reliability for bus riders by keeping bus lanes and bus zones clear from unauthorized use.

- **Benefit to Buses:** Can increase bus speeds up to 20-30%

- **Current Status**
  - Developing technology requirements, scope of work, program implementation plan
  - Vendor RFP to be released this spring
  - Targeting early 2023 for initial rollout
Key Takeaways

- Regular regional coordination is the cornerstone of a successful Bus Priority Program
- Incremental benefits can be realized as bus priority treatments are layered on along bus routes and corridors
- Strong analytics and performance monitoring make the case for continued regional investment in Bus Priority

Next Steps

- Redesign Bus Network
- Expand bus priority initiatives in partnership with local DOTs

DC’s 2020 Bus Lanes improved median speeds by **3-16%** Slowest speeds improved up to **27%**
Agenda Item #3:
How WMATA is Funded in Virginia

- WMATA Capital & Operating Budget Overview
- How WMATA Funding Flows in Virginia
WMATA’s Capital Budget Overview

**Capital Budget**

- Priorities are safety, reliability and state of good repair
- Supported by a mixture of federal and state and local funds
- 2018 legislation established dedicated capital funding
- Dedicated funding debt supports the acceleration of capital expenditures
- Infrastructure Investment and Jobs Act increases federal capital support
- Capital Funding Agreement between WMATA and funding jurisdictions
WMATA’s Capital Funding Sources

Approved FY 2023 Capital Budget Funding Sources (in millions)

- **Debt Funding**
  - Dedicated Funding Debt: $954.3
  - Reimbursables ($50)
    - Jurisdictional Capital Subsidies: $285.4
    - PRIIA Match: $148.5
  - $500

- **State & Local Funding from VA, DC, & MD**
  - PRIIA:
    - $143.5
  - Formula + Other: $342.9

- **Federal Funding**
  - Dedicated Funding:
    - $13.0 Alexandria
    - $23.7 Arlington
    - $0.7 City of Fairfax
    - $42.1 Fairfax County
    - $0.8 Falls Church
    - $5.8 Loudoun County
    - $86.1 VA Subtotal
    - $96.5 MD
    - $102.2 DC
    - $49.5 VA (DRPT)
    - $49.5 MD
    - $49.5 DC
    - $154.5 VA (DRPT)
    - $167.0 MD
    - $178.5 DC

**Grand Total = $2,424.6**

- Dedicated funding debt is supported by future debt service payments from the dedicated funding revenues
- As defined in the Capital Funding Agreement, Jurisdictional Capital subsidies increase by up to 3% for the total jurisdictional subsidy.
- Jurisdictional Capital Subsidies are allocated by applying the weighted Board approved operating historical subsidy formulae for each mode

Note: Figures include PRIIA but no other funding from the Infrastructure Investments and Jobs Act

Source: WMATA Board FY 2023 Budget Approval, March 2022

Northern Virginia Transportation Commission 21
WMATA’s Projected State of Good Repair Backlog

Source: WMATA Board Finance and Capital Committee, November 2021

Note: Figure developed by WMATA staff prior to passage of the Infrastructure Investment and Jobs Act of 2021.
WMATA’s Operating Budget Overview

Operating Budget

- Funds expenses associated with Metrorail, Metrobus and MetroAccess operations
- Approximately 70% of the operating budget is personnel expenses
- Typically, the operating budget is funded by fare and non-fare revenues and jurisdictional subsidies with no federal support
- 2018 transportation funding legislation did not address operating funding but did enact a legislative 3% cap on Virginia’s operating subsidy growth

*Total expenses by mode to not include $14.4 million in reimbursable expenses

Source: WMATA Board FY 2023 Budget Approval, March 2022
WMATA's Operating Funding Sources

• Fare revenues include all modes and depend on ridership, which is well below pre-pandemic levels

• Non-Fare revenues include advertising, parking, and other sources.

• Expenses - Revenues = Jurisdictional Operating Subsidies, which are allocated to each funding jurisdiction

• Federal funds are one-time COVID-19 relief funds which will be exhausted in FY 2024

Source: WMATA Board FY 2023 Budget Approval, March 2022
WMATA’s Jurisdictional Operating Subsidies

• Allocated to each funding jurisdiction via alternative formula approved by the WMATA Board in order to comply with legislative 3% operating caps in VA and MD

• Legislative Caps in MD and VA withhold funding if conditions are not met. VA and MD legislation have similar legislative exclusions

• NVTC 3% Cap Working Group Report from 2020 found that the cap was a useful tool and recommended no immediate legislative changes

• The Working Group did note several unintended consequences with WMATA’s implementation of the legislative caps

Prior Year Base + 3% Growth on Signatories (VA, DC and MD) * + Legislative Exclusions** = Proposed Year Budget Total Subsidy

*The 3% increase to VA is suballocated to each jurisdiction based on their respective share of historical subsidy allocation formula within VA

**Allocated to each jurisdiction by historical subsidy allocation formula
How WMATA is Funded in Virginia

In addition to regional gas tax and local transportation support funds, the fund includes the regional grantor’s tax, regional TOT, recordation tax and statewide motor vehicle rental tax.

VRE C-ROC fund

NVTC

Regional Gas Tax

State Aid (Subsidy Allocation Model)

Virginia Funding Jurisdictions

Alexandria

Arlington

Falls Church

Fairfax County

Fairfax City

Loudoun County

Local Jurisdictions use a variety of revenue sources: General Fund, General Obligation Bonds (only for capital), NVTA 30% and other funds

Jurisdictions instruct NVTC to make payments on their behalf out of their respective NVTC trust fund balance

Virginia DRPT

WMATA Capital Fund (VA share of regional dedicated funding)

NVTC-WMATA Allocation (from Commonwealth Mass Transit Fund)

PRIIA Match

WMATA
How WMATA is Funded in Virginia

NVTC-WMATA Allocation
- Funding is provided to NVTC to assist local funding jurisdictions in meeting their capital and operating subsidy commitments to WMATA

WMATA Capital Fund
- Totals $154 million per year. This is Virginia’s share of the regional $500 million in dedicated capital funding
- DRPT manages the funding and disperses it to WMATA; most of the revenue is collected in NVTC jurisdictions who also provide $27.1 million in local transportation support funds

PRIIA Match
- DPRT provides Virginia’s $50 million match to federal PRIIA funding directly to WMATA
- Funding comes ‘off the top’ of the Commonwealth Mass Transit Fund
How WMATA is Funded in Virginia

**Regional Gas Tax**
- 7.7 cents per gallon (in FY 2022) in NVTC jurisdictions, indexed to inflation
- Commonwealth directs revenue to VRE Commuter Rail Operating Fund (C-ROC), WMATA Capital Fund, with net funds to NVTC to assist the jurisdictions in meeting their capital and operating obligations to WMATA

**State Aid (Subsidy Allocation Model)**

**NVTC-WMATA Allocation/State Aid**
- DRPT contracts operating and capital assistance for WMATA to NVTC
- State Aid is used to assist the local jurisdictions in making their capital and operating subsidy commitments to WMATA
- NVTC allocates the funding to our jurisdictions using the NVTC Subsidy Allocation Model Formula (SAM)
How WMATA is Funded in Virginia

NVTC jurisdictions are the compact Funding Partners in Virginia

- For jurisdictional capital and operating subsidies, NVTC jurisdictions are the funding partners in VA
- These local governments meet these obligations using a mixture of resources: state and regional funding sources managed at NVTC and local revenues including general fund, general obligation bonds, NVTA 30% and other transportation funds.
- In general, funding is annually budgeted for and approved in each jurisdiction’s budget
- Other than general obligation bonds, all sources can be used for capital or operating

Virginia Funding Jurisdictions

Local Jurisdictions use a variety of revenue sources: General Fund, General Obligation Bonds (only for capital), NVTA 30% and other transportation funds
Key Messages

Capital

• Regional dedicated capital funding and additional federal investments from the Infrastructure Investment and Jobs Act (IIJA) have provided WMATA with funding stability for state of good repair needs for this decade. WMATA anticipates that increased federal funding extends the point at which dedicated capital funding is exhausted to approximately FY 2030

• Additional capital needs beyond state of good repair (i.e. Blue/Orange/Silver improvements and zero-emission bus transition) are largely unfunded but the IIJA offers some discretionary funding opportunities

Operating

• In Virginia, state aid and the regional gas tax can be used by local jurisdictions to pay their operating and/or capital obligations to WMATA

• Fare and non-fare revenues and state and local subsidies are traditionally the main revenue sources for WMATA’s operating budget

• The 3% cap on operating constrains the amount WMATA can increase local subsidies
Agenda Item #4:
Update on WMATA’s FY 2024 Operating Budget Gap

- Background
- Assumptions and Considerations
- Operating Budget Gap
WMATA’s Ridership Recovery Projections

- COVID-19 continues to impact WMATA operations. Ridership recovery is expected to be gradual, with a weak outlook for future operating revenue.

Source: WMATA November 4 Finance and Capital Committee Meeting
Assumptions and Considerations

• Ridership recovery is expected to be gradual, and it is unclear what the new normal will look like.

• Expense growth exceeds revenue growth. Expense growth is primarily driven by inflation, collective bargaining agreements and new services.

• VA and MD legislative 3% operating caps constrain subsidy growth.

• With a loss of fare and non-fare revenues due to the pandemic, federal COVID aid has balanced the operating budget since FY 2020. When this funding is exhausted in FY 2024, there will be a major operating funding gap.

• Due to budget savings found in the Approved FY 2023 Operating Budget and additional COVID aid from ARP Additional Assistance Funding, the funding gap has been reduced.
## WMATA’s Expenses for FY 2021-2024 (in millions)

<table>
<thead>
<tr>
<th></th>
<th>FY 2021 Pre-Pandemic</th>
<th>FY 2021 Actual</th>
<th>FY 2022 Budget*</th>
<th>FY 2023 Approved*</th>
<th>FY 2024 Scenario*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Jurisdictional Subsidy</strong></td>
<td>$1,246</td>
<td>$1,880</td>
<td>$2,100</td>
<td>$2,262</td>
<td>$2,363</td>
</tr>
<tr>
<td><strong>Federal Relief</strong></td>
<td>$1,246</td>
<td>$1,880</td>
<td>$2,100</td>
<td>$2,262</td>
<td>$2,363</td>
</tr>
<tr>
<td><strong>Total Fare + Non-Fare Revenue</strong></td>
<td>$824</td>
<td>$1,009</td>
<td>$1,109</td>
<td>$1,192</td>
<td>$1,228</td>
</tr>
<tr>
<td><strong>Funding Gap</strong></td>
<td>$2,070</td>
<td>$1,880</td>
<td>$2,100</td>
<td>$2,262</td>
<td>$2,363</td>
</tr>
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*Information subject to change as WMATA updates its actual budget expenditures and budget assumptions.

Note: Updated to reflect FY 2023 WMATA Approved Budget and ARP Additional Assistance Funding Awarded in March 2022.

Source: WMATA December 9 Board of Directors Meeting
Agenda Item #5:

Updates from the Virginia WMATA Board Members

- 7000-series and Rail Service Update
- WMATA OIG
- Blue/Orange/Silver Capacity & Reliability Study
Agenda Item #6: NVTC Program Updates

- Update on Yellow Line Bridge/Tunnel Rehabilitation and Potomac Yard Track Tie-In and Regional Mitigation and Coordination Effort
Yellow Line Bridge/Tunnel Rehabilitation and Potomac Yard Track Tie-In

**Potomac Yard Station**
- Shutdown of rail service south of Ronald Reagan Washington National Airport Station
- Engineering, testing and commissioning needed to integrate new station into existing Metrorail system

**Yellow Line Bridge/Tunnel Rehabilitation**
Sept. 10, 2022 - Spring 2023
- Shutdown between Pentagon and L’Enfant Plaza Stations
- Work crews will restore the Yellow Line bridge and repair the steel lined tunnel

Photos from WMATA and City of Alexandria
WMATA/NVTC Regional Mitigation and Coordination Effort

NVTC’s Role: Support Regional Coordination

• Metro is leading with the support of NVTC

• The stakeholder group held a kickoff meeting in March 2022 and regular conference calls will continue monthly

• The monthly calls are an opportunity for Metro and stakeholders to coordinate on mitigation efforts and report progress on planning

• In addition, there will be the Public Information Officer group and bus service group meeting separately to inform the larger stakeholder group
Upcoming Committee Meetings and Anticipated Topics

Anticipated June/July Meeting Topics

• Blue/Orange Silver Study Comments
• Updates on WMATA FY2024 Operating Budget Gap
• Annual Report on the Performance and Condition of WMATA

Upcoming Meetings

• June 16 at 6pm
• July 21 at 6pm
Thank You.