WASHINGTON AREA
BUS TRANSFORMATION
PROJECT

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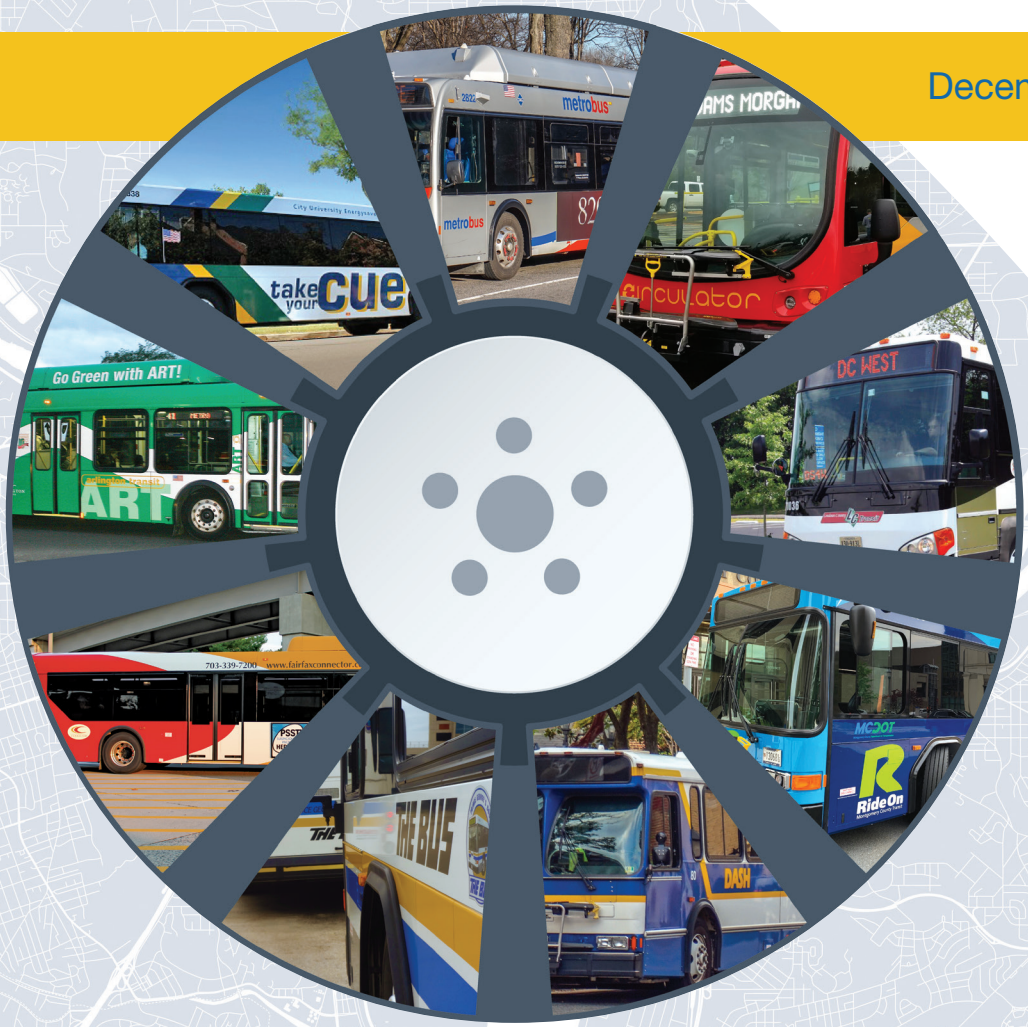
Action Plan Details

December 2019



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Introduction

The Bus Transformation Strategy highlights 26 recommendations within the four key recommendation areas of Frequent and Convenient Service, Bus Priority, Excellent Customer Service, and Empowerment and Coordination. Taken together, these recommendations will improve the region's bus system by providing better regional connectivity, improving the rider experience, increasing efficiency, growing ridership, and focusing on equity.

The Action Plan sets out a clear and organized approach to implementing the Strategy, based on input received from the public and stakeholders. It includes detailed Action Steps for each recommendation and lays out an overall timeline that incorporates estimated timeframes and dependencies, notes progress to date by jurisdictions and agencies, accommodates flexibility for jurisdictions who face varying priorities, and outlines roles for the actors that will need to lead, support, or partner with others to move these recommendations forward.

This document serves as a companion to the Bus Transformation Project *Action Plan Executive Summary* and provides additional implementation and evaluation details that will be helpful to achieve the Strategy's 26 recommendations throughout the region. Each Chapter covers one of the Strategy's four overarching recommendations and includes detailed Action Steps as well as challenges to be addressed in order to achieve the region's goals for the bus system.

Implementation of individual recommendations and actions will vary considerably for different organizations, jurisdictions, and agencies. The detailed steps outlined in this document are meant to serve as a guide for action, and certainly do not represent the only path forward. Each entity will need to customize their work plan to fit their specific needs. As conditions evolve, priorities change, and achievements are realized, updates to the details in this document will be necessary and encouraged so that it can remain useful.

How to Use this Document

Each Chapter covers a single overarching Bus Transformation Strategy recommendation and includes a summary overview of that recommendation, including:

- The **benefits** the recommendation will unlock for the region;
- A **detailed implementation schedule** for each of the recommendations (based on the proposed Action Steps included in the following pages); and
- **Roles and responsibilities** within each recommendation, highlighting where different entities would lead specific actions, and where their support and partnership will be crucial for achieving success.

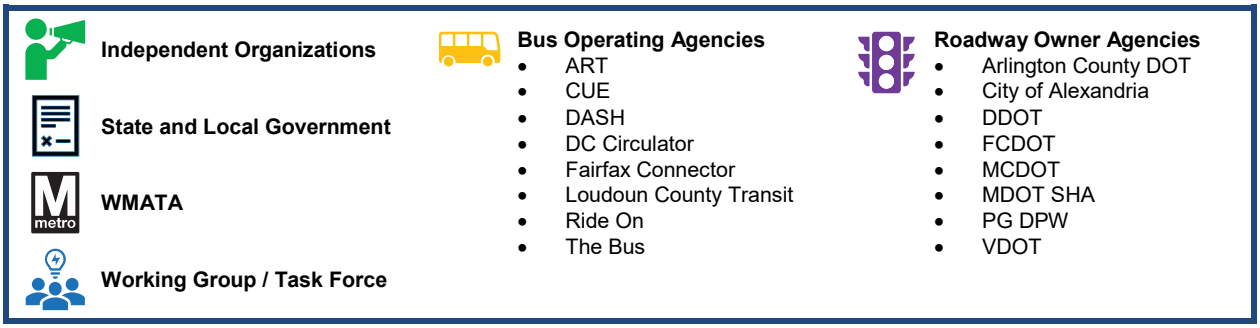
Following each chapter summary, each of the 26 recommendations are presented in the same format for the purpose of consistency. The sections and their contents are outlined here for reference.

Primary and Supporting Actors

Throughout this Action Plan, various government agencies, transit providers, and other stakeholders are noted as having primary responsibility for leading recommendations or parts of recommendations. Supporting actors for each recommendation are also identified, whose input and support will be necessary in order to successfully achieve the recommendation.

Lead and supporting actors are listed for each recommendation and constituent action steps. Icons are used to identify these categories of entities as outlined below. These entities have been a part of the development of the Bus Transformation Strategy and Action Plan and will need to lead the region in implementation.

Agencies and Other Actors Implementing the Bus Transformation Strategy



Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

Benefits and Outcomes

While they sound similar, the sections labeled “Benefits” and “Outcomes” highlight different results of each recommendation:

- **Benefits** highlight the benefits that achieving the recommendation will bring to riders, travelers in the region, transit providers, or the general transportation system. Benefits could include improved customer satisfaction, increased ridership, lower operating costs, and others.
- **Outcomes** highlight the end state of each recommendation, and answer the question: “How will we know when this recommendation has been achieved?”

Recommendation Schedule

This section includes several important items related to the timing of each recommendation. For recommendations with clear start and end dates, those years are listed. Other ongoing recommendations have been noted as ongoing Enhancements to Existing Efforts.

In addition, this section identifies any dependencies or synergies between this recommendation and other recommendations in the Bus Transformation Strategy. Dependencies are defined as actions that must occur either before or after the given recommendation, which are shown as dashed black lines in the schedule graphics throughout the Action Plan. Synergies as defined as areas where there would be added benefit to the region if these recommendations or Action Steps are coordinated.

Goals Supported

Five goals for the region’s bus system were identified as part of the Bus Transformation project:

1. Regional Connectivity: Provide high-quality on-street transit options that efficiently and reliably connect people to places and improve mobility.
2. Rider Experience: Ensure that bus is a convenient, safe, easy-to-use, user-centered mobility option.
3. Financial Stewardship: Maintain a transit mode that is financially responsible in the long-term.
4. Sustainable Economic Health & Access to Opportunity: Encourage vibrant, economically-thriving and sustainable communities through investments in bus.
5. Equity: Create a transit system that is affordable and equitable to users.

This section highlights the Project goals that each recommendation will help achieve. More information on the project’s goals and objectives can be found on the Bus Transformation Project website.

Evaluation

This section includes the results of several evaluations that were conducted for each recommendation; they are provided here for reference only. Each recommendation is categorized based on how it would be implemented: Complete the Work Already Underway, Enhance Existing Efforts, and Implement New

Initiatives. Additional descriptions of these categories can be found in the Action Plan Executive Summary. This section also includes:

- Transformational Potential: determined as a combination of the magnitude of impact the recommendation could have and the level of public support generated.
- Difficulty of Implementation: determined based on the progress made in the region to date, the institutional challenges that would need to be overcome, and the level of investment needed.
- Progress to Date: Progress made by all of the appropriate entities in the region towards achieving the recommendation based on interviews with agency staff and a detailed survey.

The complete methodology for these three evaluations can be found in the Appendix.

Action Steps

The main content of these pages outlines a sample series of Action Steps to achieve the desired Outcomes and Benefits of each recommendation. Each Action Step has been given a lower-case letter (i.e., a, b, c) that corresponds to the schedule graphic at the start of each Chapter. Each Action Step includes the necessary actions, any important description, any associated dependencies or synergies for that Action Step, the associated actors, and the expected duration of the Action Step. Unless otherwise noted, the Action Steps are assumed to be performed sequentially, as shown in the schedule graphic at the start of each Chapter. Milestone Achievements, as shown in the schedule graphic at the start of each Chapter, are highlighted with the appropriate Action Steps.

As noted, some agencies/jurisdictions will have already started some of the listed Action Steps, and this section does not imply that those entities need to start over. Those entities are instead able to focus on other recommendations or move ahead with the next set of actions. It should be noted that these Action Steps may not precisely fit the regulatory, political, or funding situation for every agency/jurisdiction. The Lead and Supporting Actors will need to identify any changes or additions that would be necessary in their jurisdiction in order to achieve the milestones associated with each recommendation.

It should also be noted that as time progresses, the context may change enough that these Action Steps need to be rewritten. This Action Plan was written with precisely those types of updates and changes in mind.

Progress to Date

As part of the Bus Transformation Project, dozens of meetings with stakeholders and project committees were held to discuss the work the region is already doing to improve the bus system. This information, in addition to a detailed survey completed by members of the project's Technical Team was used to develop this summary of the current progress of each recommendation. This information is current as of December 2019, but as progress is being made rapidly, it will likely be out of date quickly. For this reason, each recommendation typically starts with an assessment of where the region and each jurisdiction stand.

This progress summary is not fully comprehensive and represents only a summary of activities.

Case Studies

This section references case study work previously conducted as part of the Bus Transformation Project, all of which is available on the project website (www.bustransformationproject.com). These case studies provide some information about other locations that have implemented similar recommendations, and the resulting benefits and impacts. The main sources of these case studies are:

- The Bus Transformation Project Draft Strategy
- Project Overview: White Paper #1
- Strategic Considerations: White Paper #2

Achieving the Vision

The Action Plan is built around a series of concrete milestones for the region. These milestones are outlined in the Executive Summary and the overall Action Plan schedule and represent major accomplishments that will improve the region's bus system. Each stakeholder, whether transit provider, state, local, or regional government, or roadway owner, should now start working towards meeting these milestone timelines through the necessary Actions Steps and processes. Only when everyone is working together towards these goals will the region be able to achieve its ambitious vision for the future of bus.

Bus will be the mode of choice on the region's roads by 2030, serving as the backbone of a strong and inclusive regional mobility system that will support a growing and sustainable economy.

1. Provide Frequent and Convenient Bus Service

1.1. Recommendation 1: Overview

This set of recommendations comprises a systematic plan to refine the physical network of bus routes, the amount of service provided, and the way these services are evaluated and funded. The proposed actions complement one another to achieve maximum impact over the 10-year implementation period. Recommendation 1 is to:

Provide frequent and convenient bus service that connects communities and promotes housing affordability, regional equity, and economic growth.

Within Recommendation 1 there are five detailed recommendations:

A **Establish regional standards** across bus systems to provide consistent bus service, tailored by location and time of day.

B Collect and **share standardized bus operations and performance data** across agencies to improve transparency and better plan bus service.

C **Collaboratively restructure the region's bus network** to create the most efficient and customer-focused bus system.

D Cooperatively **assess Metrobus' current service definitions and funding allocation formula** using the WMATA Board's Authority.

E Leverage existing efforts by transit providers to **operate flexible on-demand services** to supplement the fixed route network where and when warranted.

These recommendations will unlock the following benefits:

For customers:

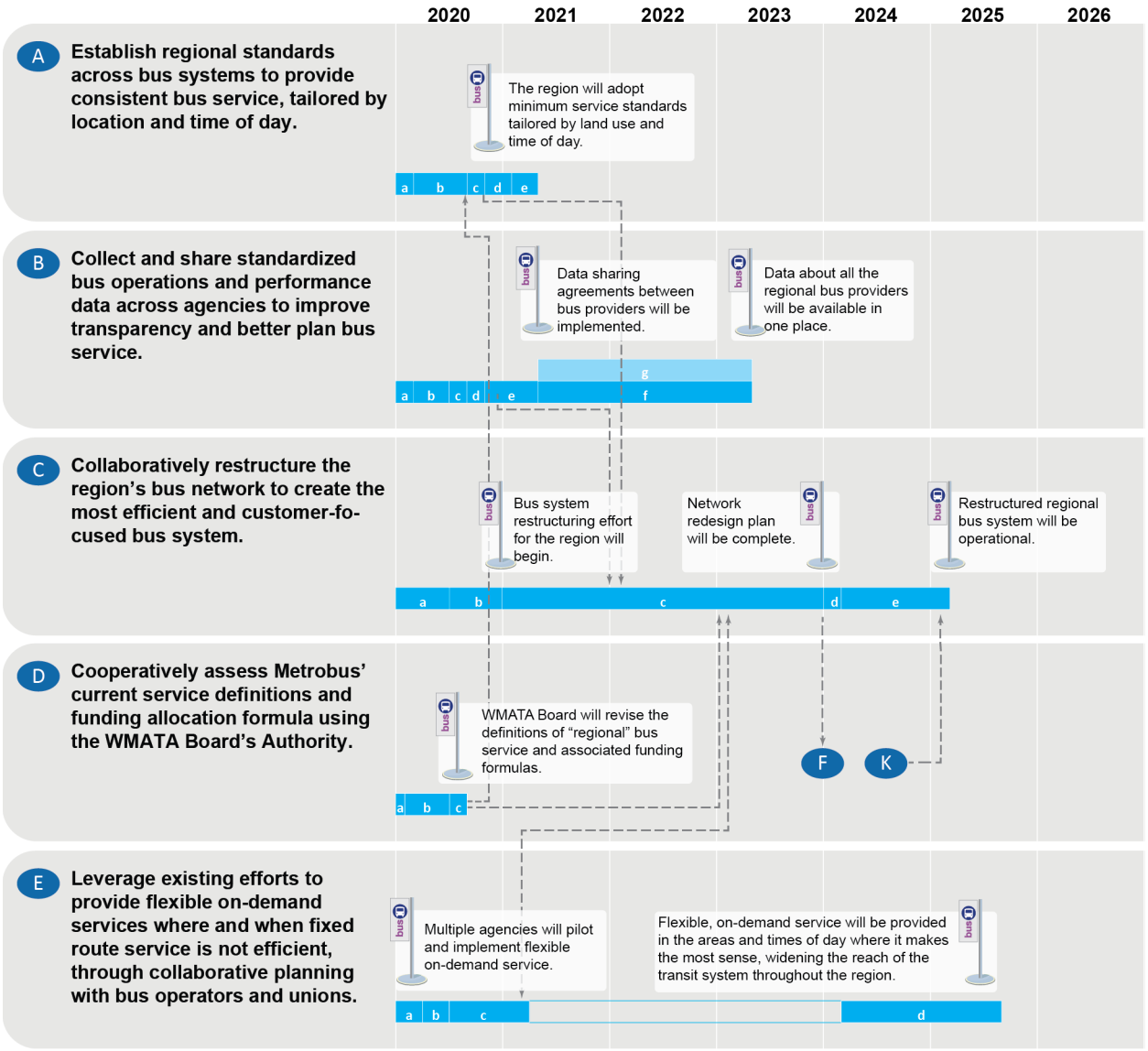
- A more seamless experience using the region's transit system
- Bus service that better matches their needs and demands
- Better access to frequent bus service

For the region's bus system:

- Increased ridership
- Higher operating cost efficiency
- Improved customer satisfaction
- Less congestion on the region's roads
- Reduced environmental impact of transportation

1.2. Recommendation 1: Implementation

Figure 1-1: Detailed Action Plan: Recommendation 1



Lead and Supporting Actors	A	B	C	D	E
State and Local Government	Support		Support	Support	
WMATA	Lead	Lead	Lead	Lead	Support
Working Group / Task Force	Lead	Lead	Lead		Lead
Independent Organizations					
Bus Operating Agencies	Support	Support	Lead	Support	Lead
Roadway Owner Agencies					

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent organizations include advocates, labor, regional transportation agencies, and others.

1.3. Recommendation 1: Detailed Action Steps

A	*Recommendation:* Establish regional standards across bus systems to provide consistent bus service, tailored by location and time of day.	Primary	Support

Benefits	Consistent service levels will ensure that all areas of the region receive the appropriate and equitable service levels. This will also create a more consistent customer experience region-wide and should encourage more bus ridership.
Outcome	Standards for service levels will be established and endorsed by appropriate regional and local bodies. Plans for providing those service levels will be developed, and the region will be working towards providing the desired service levels consistently.
Schedule	Starts: 2020 Complete: 2021
Dependencies/ Synergies	*Dependencies:* The new service definitions and funding formula for WMATA in Recommendation D will inform the formation of regional service standards in Recommendation A; The service standards will inform the restructured regional bus network in Recommendation C.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	High	Low	High

Primary Actor	**Action Steps**
Metro + working group	a. Convene regional service standards working group for bus providers. The jurisdictions and local service providers in the Washington region, including those who participated in BTP efforts as well as other interested bus providers (such as commuter bus services) will be invited to the working group. *Actors:* WMATA convenes the working group of jurisdictions and local service providers.. *Expected Duration:* 2 months
Metro + working group	b. Define regionally acceptable minimum service standards, including identifying when and where standards are not currently met. The working group will review the BTP Technical Assessment on regional service typologies, which details all the existing standards from the local service providers, including WMATA's draft service standards from 2015. The working group will collaboratively synchronize and develop minimum service standards that define desired minimum service levels throughout the region. These standards will need to be context-sensitive and take into consideration the varying conditions and constraints across the region. *Dependencies:* The new service definitions and funding formula for WMATA services from Recommendation D will inform the regionally acceptable minimum service standards. *Actors:* Working group formed in Action Step a. *Expected Duration:* 6 months

A	*Recommendation:* Establish regional standards across bus systems to provide consistent bus service, tailored by location and time of day.	Primary	Support

c. Gain approval/endorsement on regional minimum service standards from all transit providers and the WMATA Board.

Dependencies: Once the regional minimum service standards are approved by the transit providers and the WMATA Board, they will be incorporated into the bus network restructuring planning (Recommendation C) and local transit plans (e.g., TDP, TSP, Transit Vision Plans, etc.).

Actors: Working group participants will need to gain approval from the appropriate local or state entities within their jurisdictions.

Expected Duration: 2 months

Milestone Achievement: In 2020 the region will adopt minimum service standards tailored by land use and time of day.

d. Identify areas where current service does not meet the service standards and where funding/other constraints prevent service standards from being met.

This is an important exercise that will publicize and highlight for elected officials and other decision-makers if current funding levels (or other obstacles) make it difficult to provide the level of bus service the region needs.

Dependencies: During completion of the bus system restructuring (Recommendation C), the service standards working group should incorporate the findings of this Action Step (the locations where current service does not meet the standards and where constraints prevent the service levels defined by the service standards from being met).

Actors: Transit providers

Expected Duration: 3 months

e. Develop plans to overcome these obstacles, including allocation of funding for bus service.

These plans could be developed and implemented as part of regularly occurring budgeting or TDP/TSP processes.

Actors: Transit providers and funding entities at the local and state levels will need to work together to identify paths forward.

Expected Duration: 3 months and ongoing implementation

Progress to date	WMATA developed draft regional service guidelines with jurisdictional partners in 2015, although they were not brought to the Board for consideration.
High	Arlington County, Fairfax County, Montgomery County, and Prince George's County have service standards. City of Alexandria and the City of Fairfax have adopted performance metrics that indicate how well service performs.

B	*Recommendation:* Collect and share standardized bus operations and performance data across agencies to improve transparency and better plan bus service.	Primary	Support

Benefits	Better and more complete data will enable the creation of a better, more efficient regional bus system.
Outcome	Data standards and sharing agreements are reached so that there is consistency in data reporting to make planning and analysis easier and more efficient, which has benefits for other recommendations. Implementation of this recommendation will also include a way to share the operations and performance data easily between agencies and reporting partners.
Schedule	Starts: 2020 Complete: 2023
Dependencies/ Synergies	*Dependencies:* Standardizing and collecting bus operations data in this recommendation is a key component of conducting the analysis for Recommendation C, the bus network restructuring. *Synergy:* Standardized and available data will be used for the bus performance reporting in Recommendation Y.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium/High	Low	Medium

Primary Actor	**Action Steps**
	a. Convene a regional data sharing working group to develop data needs for ongoing planning and reporting, including the types of data, tools to collect data, and level of detail, while considering data that is already being collected (e.g., NTD data). The jurisdictions and local service providers in the Washington region, including those who participated in BTP efforts as well as other interested bus providers (such as commuter bus services) will be invited to the working group. The group would think broadly about what data would be needed for ongoing planning and reporting purposes without the constraints to existing sources. *Actors:* WMATA or TPB's Regional Transportation Data Clearinghouse will convene the working group. All transit providers should be involved in the formation of the working group and determining planning needs and how existing data can be leveraged. *Expected Duration:* 2 months

B	*Recommendation:* Collect and share standardized bus operations and performance data across agencies to improve transparency and better plan bus service.	Primary	Support

b. Identify responsible party to house, own, and maintain the data on an ongoing basis and identify and develop a common tool and formats for collecting and storing the data.

In order to make the data easily usable by planners, a central data warehouse will be defined in terms of who will house and own it on an ongoing basis, what the data formats will be, and what tools will be used to collect the data. The tool for collecting and storing the data would be determined by considering the needs of the agencies providing the data, the need for ease of querying and reporting, and the interface needed depending on the needs of the users defined in Action Step a.

Actors: Participants in the working group will identify the lead party that will house the data and be responsible for ensuring it is updated at prescribed intervals. All transit providers will need to participate in discussions on data formats and collection tool.

Expected Duration: 4 months

c. Identify what data will be made available to other transit providers, the public, and independent organizations and develop a shared data inventory of the types of data, level of detail, uses, and frequency of sharing that would be useful for regional planning purposes, including the priority of different data items.

The types of data and level of detail would be discussed from the perspective of different types of needs for varying kinds of planning activities, including bus service planning and the regional bus system restructuring (Recommendation C), as well as regional long-range planning, facility assessments, and other types of planning that are dependent on transit data. Different types of data may be desired for different purposes and may include stop-level boardings, origin/destination data, on-time performance, customer survey results, etc.

Whether the gathered data will be available only to transit agencies for planning purposes, to independent organizations (such as the one conducting the progress report in Recommendation Y), and/or to the general public needs to be defined and clarified for each data item.

Actors: Led by the working group, supported by all transit providers.

Expected Duration: 2 months

d. Develop and sign a data sharing agreement between all transit agencies and the data repository owner.

Actors: Working group, all transit providers.

Expected Duration: 2 months

e. Collect and consolidate the first phase of data from each agency. Agencies upload data to shared portal as per agreed-upon schedule.

This step provides the working group and data storage owner the opportunity to work through data quality issues as well as missing data, inconsistent formats, and inconsistent detail.

Synergies/Dependency: Once this step is completed the efforts under Recommendations C and Y will utilize the resultant database.

Actors: Transit providers, with support from the working group and the owner of the data repository.

Expected Duration: 6 months

***Milestone Achievement*:** In 2021 data sharing agreements between bus providers will be implemented.

B	*Recommendation:* Collect and share standardized bus operations and performance data across agencies to improve transparency and better plan bus service.	Primary	Support

f. Develop and implement plans for collecting the remaining data needed.

This step develops a plan for moving toward a complete dataset for anything that is not included in Action Step e in terms of general availability, format, and/or detail. Where necessary, funding sources would be identified for additional hardware and/or software needs.

Actors: Each transit provider would need to develop and implement their own plan, with support from the owner of the data repository owner and the working group, as needed.

Expected Duration: 2 years

***Milestone Achievement*:** In 2023 data about all the regional bus providers will be available in one place.

g. Perform ongoing analysis of consolidated data.

A potential mechanism would be to add a work item to the Transportation Planning Board (TPB) Unified Planning Work Program (UPWP) to assist agencies with the maintenance of and access to this data. Alternatively, WMATA could build, staff, update, and maintain this information through its technical assistance funds provided through the UPWP.

Actors: Database owner, working group, and all transit providers.

Expected Duration: Ongoing

B	*Recommendation:* Collect and share standardized bus operations and performance data across agencies to improve transparency and better plan bus service.	Primary	Support

Progress to date

Medium

Progress toward this recommendation depends in large part on what data is collected by the various bus providers as well as the accuracy of the data and whether the operators spend time processing, cleaning, and analyzing the data.

Automated Vehicle Location (AVL) on buses:

- DASH – 100%
- DC Circulator – 100%
- CUE – 100%
- Fairfax Connector – 100%
- Loudoun County Transit – 100%
- The Bus – 100%
- WMATA – 100%

Automatic Passenger Counters (APC) on buses:

- DASH – 66%
- DC Circulator – 81%
- CUE – 0% (has a grant to procure in FY2020)
- Fairfax Connector – 100%
- Loudoun County Transit – 40%
- The Bus – 100%
- WMATA – 100%

While data is collected by many bus providers, not all have the capacity to analyze that data in-house. Agencies with staff currently dedicated to analysis of bus data include:

- DASH – Yes
- DC Circulator – No
- CUE – Yes. Part of the duties of the multimodal transportation planner, in coordination with the transit superintendent.
- Fairfax Connector – Yes
- Loudoun County Transit – Yes
- The Bus – Yes, by the service planners.
- WMATA – Yes. The Office of Performance is designated to this task for all of Metrobus. The Office of Bus Planning and Scheduling analyzes specific bus route performance.
- DRPT also analyzes performance data of transit systems statewide. DRPT provides leadership, advocacy, technical assistance and funding to and for public transportation.

Case Studies

Chicago Regional Transit Authority; Draft Strategy, page 153

Hamburg HVV; Draft Strategy, page 153

C	*Recommendation:* Collaboratively restructure the region's bus network to create the most efficient and customer-focused bus system.	Primary	Support

Benefits	A redesigned bus network would better match service with travel demand, increasing ridership and connectivity while improving operating efficiency.
Outcome	A redesigned bus network is launched, including signage, maps, service, etc. This recommendation follows what many cities and regions across the country have done through a comprehensive evaluation of their bus network structures, as recommended by the 2017 LaHood report. The redesign will be undertaken in a thoughtful, deliberate, and inclusive manner. Redesigning the bus network within WMATA's Transit Zone falls within WMATA's remit as the Mass Transit Plan outlined in the WMATA Compact.
Schedule	Starts: 2020 Complete: 2025
Dependencies/ Synergies	*Dependencies:* Recommendation C is dependent upon progress in Recommendations A, B, D, E, F, and K: • The regional standards established in Recommendation A will inform the restructuring of the bus network, which will follow the standards. • The improved data collection in Recommendation B is necessary input for the data processing in this recommendation. • Reassessing WMATA's role in Recommendation D will influence provision of service in the restructured bus network. • Standards for on-demand service and service area descriptions from Recommendation E will be incorporated into the bus network restructuring effort. • The results of the bus network restructuring will inform the idenfitication of bus priority corridors in Recommendation F. • Implementation of the new bus system should happen simultaneously with completing Recommendation K so that the new restructured system can be organized with consistent route naming and numbering schemes and maps can be consistent across the region.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	High	High	Low

Primary Actor	**Action Steps**
	a. Convene a working group to develop the parameters of a network redesign and confirm the approach (blank slate, incremental, scenario-based, etc.); determine the geography and included agencies; develop scope and schedule; confirm service types to be included (local bus, express bus, BRT); requirements for public engagement; lead entity (WMATA, MWCOG, other); local agency roles; and approach to costs (i.e., cost-neutral or a service increase). The jurisdictions and local service providers will be included in this working group, as were included in the BTP efforts. As the process progresses, the working group may expand to cover a wider geographic area (e.g., the full MWCOG region), and/or include additional types of service providers (e.g., commuter bus). *Actors:* WMATA convenes the working group of jurisdictions and local service providers. *Expected Duration*: 6 months

C	*Recommendation:* Collaboratively restructure the region's bus network to create the most efficient and customer-focused bus system.	Primary	Support

b. Arrange funding and other resources to begin the network redesign. Procure services necessary to complete the effort.

Depending on the scope of the geographic area, the working group may need to collectively determine where the financial resources will come from for the network redesign plan. They will also need to identify the personnel who will be major players, including managing the effort, providing data and information, participating in the plan development, hosting public engagement efforts, etc. In addition to the resources and personnel to complete the plan, the working group would need to identify, at a high level, resources for implementing more service than is currently operated if the plan will include that, as well as resources for implementation and operations.

Actors: Led by WMATA with support of the working group established in Action Step a with support from transit providers.

Expected Duration: 6 months

Milestone Achievement: In 2021 the bus system restructuring effort for the region will begin.

c. Complete the network redesign plan, including extensive public outreach.

The agency or organization leading the effort, with strong support as defined in Action Step b, would engage a consultant for all or part of the work involved in conducting the network redesign plan. The scope developed in Action Step a would be implemented, with extensive collaboration and input from the working group.

Dependencies: The plan would be based on established minimum regional standards developed in Recommendation A and the standards and service areas identified in Recommendation E. The plan will also take into account the new WMATA service definitions in Recommendation D and the analysis would be dependent upon standardiazed and organized data from all providers from Recommendation B. The results of the bus network restructuring will inform the idenfitication of bus priority corridors in Recommendation F.

Actors: Working group and all participating transit providers.

Expected Duration: 3 years

Milestone Achievement: In 2023 the network redesign plan will be complete.

d. Jurisdictions and WMATA Board adopt findings of the study.

At the end of the planning process the WMATA Board and all jurisdictions that operate and fund transit included in the plan would adopt the study findings.

Actors: Working group representatives from each jurisdiction or agency.

Expected Duration: 2 months

C	*Recommendation:* Collaboratively restructure the region's bus network to create the most efficient and customer-focused bus system.	Primary	Support

e. Implement the new bus system.

Dependencies: Should be completed after the completion of Recommendation D. Implementation of the new bus system should happen simultaneously with completing Recommendation K.

Actors: While the working group may still meet to coordinate, the lead actors during implementation would be the operating agencies.

Expected Duration: 18 months

Milestone Achievement: In 2025 the new restructured regional bus system will be operational.

Progress to date

Low

There has been progress on bus network planning at a jurisdictional, not regional, level.

City of Alexandria: Finalizing 10-year Transit Vision Plan in 2020 which redesigns the city's bus network based on community-defined priorities and intensive data collection to create a network that encourages more people to go more places at more times using transit. (https://www.alexandriava.gov/tes/default.aspx?id=104193)

DC Circulator: Redesigned two routes (realigned segments) as part of the 2017 TDP. The next TDP (2020) will examine adding a new route to the system and extending an existing route.

DC: moveDC, completed in 2014, contained a local bus study (Metrobus) and will be updated in the next 12 months. (http://www.wemovedc.org/)

Virginia Department of Rail and Public Transportation (DRPT) requires all jurisdictions to strategically review their bus networks and, depending on their size, develop either a Transit Strategic Plan (TSP) or a Transit Development Plan (TDP). A TSP ensures that transit services are planned in a way that better meets the mobility needs of their communities and provides an opportunity for each agency to look at their system as a blank slate, re-examine the priorities of stakeholders and riders, and make difficult choices concerning where and how to provide services in an efficient and cost-effective manner. A TSP is intended to replace the previously required Transit Development Plan (TDP) for agencies that are required to complete one. The most recent TDPs adopted by the jurisdictions include:

- City of Alexandria: Adopted a 6-year Transit Development Plan in 2016 with recommendations for DASH and Metrobus (https://www.alexandriava.gov/uploadedFiles/tes/info/City%20of%20Alexandria%20Transit%20Development%20Plan%20(TDP).pdf)
- Arlington County: Adopted a 10-year Transit Development Plan in 2016 with recommendations for ART and Metrobus (https://projects.arlingtonva.us/plans-studies/transportation/transit-development-plan/)
- City of Fairfax: Adopted a 6-year Transit Development Plan in 2017 with recommendations for CUE, recommendations for new or alternate routes were not adopted. (https://www.fairfaxva.gov/government/public-works/transportation-division/current-transportation-projects/cue-transit-development-plan)
- Fairfax County: Adopted a 10-year Transit Development Plan in 2016 (included Fairfax Connector and Metrobus); Route optimization studies for two areas of the county ongoing through 2020; Three other areas of the county will be conducted in next three years. (https://www.fairfaxcounty.gov/transportation/tdp)
- Loudoun County: Staff recently recommended shortening many commuter bus routes. Metrorail service may begin in Loudoun County in 2020. Numerous routes will be modified or added to serve these stations.

Montgomery County: Partially restructured four Ride On routes in Clarksburg in 2018.

C	*Recommendation:* Collaboratively restructure the region's bus network to create the most efficient and customer-focused bus system.	Primary	Support

Prince George's County: Completed a Transit Vision Plan recently that includes recommendations for TheBus. (https://princegeorgestransitvision.com/transit-vision-plan-intro). Considering how their bus system can be redesigned but have not begun.

For use in conducting service planning, NVTC has developed an extensive Geographic Information System (GIS) database for bus service in Northern Virginia and incorporated a transit planning tool, the Transit Boarding Estimation and Simulation Tool (TBEST). TBEST was developed by the Florida Department of Transportation and is being used by many jurisdictions in Virginia under a DRPT-funded program. NVTC is coordinating with DRPT on the development of TBEST in Northern Virginia. The TBEST model uses the land-use and the current bus network (all providers) as inputs to develop short-term ridership forecasts, calculate cost estimates, and perform environmental justice analysis. NVTC takes the transit service changes developed as part of jurisdictional transit plans and tests the service changes using TBEST. NVTC provides this service as a value-added activity to their jurisdictions and assists with testing and analysis of different scenarios to help guide jurisdictional staff in developing future service changes.

Case Studies

Columbus, Ohio; Austin, Texas; *Bus Transformation Project Draft Strategy*, page 101:

Houston Texas; Draft Strategy, page 101; *Bus Transformation Project White Paper #2*, page 29

Anchorage, Alaska; *Bus Transformation Project White Paper #2*, page 30

Bus Network Redesigns have been conducted and are underway in many cities and regions across the country. Some of these are documented in Transit Cooperative Research Program (TCRP) Synthesis 140: *Comprehensive Bus Network Redesigns*, 2019.

D	*Recommendation:* Cooperatively assess Metrobus' current service definitions and funding allocation formula using the WMATA Board's Authority.	Primary	Support

Benefits	Revisiting these definitions should result in a more cost-efficient bus system and a clearer role for WMATA in the provision of bus service in the region.
Outcome	WMATA Board adopts definition of what types of service Metrobus provides, how they are funded, and what costs are included in the amount charged to the funding agencies. If necessary, transition plans developed for each jurisdiction, including for assets and facilities.
Schedule	Starts: 2020 Complete: 2020
Dependencies/ Synergies	*Dependencies:* The new service definitions and funding formula for WMATA in this recommendation will inform the formation of regional service standards in Recommendation A; The updated WMATA service definitions in this recommendation will be used to conduct the bus network restructuring in Recommendation C.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	High	Low

Primary Actor	**Action Steps**
Metro	a. WMATA Board appoints a working group comprised of WMATA staff and representatives from jurisdictions and funding entities to review service definitions and funding formulas. *Actors:* WMATA Board or designated working group. *Expected Duration*: 1 month
Metro	b. Review current service provision definitions, funding formulas, information developed by BTP, and jurisdictional comments to assess the suitability of existing service definitions and funding formulas. Service provision definitions and service typologies reviewed and analyzed during the BTP will serve as a starting point for this analysis as a way for the WMATA Board and other participating agencies to understand existing conditions. Comments received on the BTP Draft Strategy from participating jurisdictions and agencies should also be used to fully assess existing definitions and potential modifications to definitions, costs, and funding. If updates are required, WMATA Board works with partner jurisdictions and funding entities (including state, regional, local, and WMATA) to develop updated/new criteria and parameters for defining service provision and funding. Jurisdictions provide information on physical limitations, funding issues, and other planned system growth. The discussions would also identify any potential impacts to the local service providers. *Actors:* WMATA Board, leveraging WMATA staff resources, workings with funding agencies, jurisdictional partners, and local transit providers. *Expected Duration*: 5 months.

D	*Recommendation:* Cooperatively assess Metrobus' current service definitions and funding allocation formula using the WMATA Board's Authority.	Primary	Support

c. WMATA Board adopts any changes to service definitions, service provision plans, and funding formula.

Actors: WMATA Board would vote on the definitions and parameters discussed in Action Step c.

Expected Duration: 2 months.

***Milestone Achievement*:** In 2020 the WMATA Board will revise the definitions of "regional" bus service and associated funding formulas.

Progress to date *Low*	Some progress made through BTP analysis (https://bustransformationproject.com/resources#draft)
Case Studies	Stockholm, Sweden; *Bus Transformation Project White Paper* #2, page 81

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent organizations include advocates, labor, regional transportation agencies, and others.

E	*Recommendation:* Leverage existing efforts to provide flexible on-demand services where and when fixed route service is not efficient, through collaborative planning with bus operators and unions.	Primary	Support

Benefits	On-demand service provides more availability of service to more people in areas where fixed route service isn't cost efficient.
Outcome	Jurisdictions adopt policies and/or implementation plans for on-demand transit in coordination with recommendations of the bus network restructuring plan (Recommendation C).
Schedule	Starts: 2020 Complete: 2025
Dependencies/ Synergies	*Dependency:* Standards for on-demand service and service area descriptions from this recommendation will be incorporated into the bus network restructuring effort (Recommendation C). *Synergies:* Flexible service should be included in the service standards developed in Recommendation A.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Medium	Medium

Primary Actor	**Action Steps**
	a. Collect details about current status of on-demand services in the region, including ongoing, completed, or planned pilots, any performance data for existing pilots, any design standards, etc. Progress during BTP will be used as a strong starting point to this step and information will be updated for every agency. *Actors:* TPB's Regional Public Transportation Subcommittee could help coordinate this effort with input from local bus providers and jurisdictional governments. *Expected Duration*: 3 months ***Milestone Achievement*:** In 2020 multiple agencies will pilot and implement flexible on-demand service.
	b. Compile research on peer efforts from BTP and supplement with new research on how and where these types of services can be most efficient. This research should include identifying potentially successful market types and demonstrating the benefits of flexible, on-demand service. *Actors:* The lead actor identified in Action Step a, above. *Expected Duration*: 3 months

E	*Recommendation:* Leverage existing efforts to provide flexible on-demand services where and when fixed route service is not efficient, through collaborative planning with bus operators and unions.	Primary	Support

c. Identify areas for potential coordination between jurisdictions, such as design standards, service area characteristics, shared procurements, shared marketing, and trip reservation apps.

Regional coordination in some or all of these areas could make the services more cost-efficient to operate, easier to initiate, and/or provide a more seamless customer experience in the region. This Action Step should also identify the agency within the region best suited to lead specific functional areas (e.g., reservation app, procurement).

Dependencies: After the on-demand service standards and service area descriptions are determined, incorporate the new potential on-demand zones (geographic and time of day) into the bus network restructuring effort (Recommendation C). Any service standards or service area descriptions developed should be incorporated and revised as part of the bus restructuring effort.

Actors: The lead actor identified in Action Step a, above. Different functions (e.g., reservation app, procurement) could be led regionally by different agencies.

Expected Duration: 9 months

d. Implement recommended services, assess performance, and share data.

Some of these services are already being operated, but this step will continue until recommendations coming out of the bus system restructuring are implemented.

Actors: Implementation should be led by the local bus providers, in coordination with the implementation of the restructured bus system (Recommendation C-Action Step e.)

Expected Duration: Ongoing with implementation of Recommendation C

***Milestone Achievement*:** By 2025 flexible, on-demand service will be provided in the areas and times of day where it makes the most sense, widening the reach of the transit system throughout the region.

Progress to date

Medium

Mobility on demand was explored as part of the City of Alexandria Transit Vision study, and though not included in the initial recommendations, is an idea that will continue to be explored through the City's update to its transportation master plan, the Alexandria Mobility Plan.

Arlington County completed a feasibility study in 2019 and decided not to pursue flexible services at that time, but continues to study the viability of this service option.

The DC Department of For-Hire Vehicles is piloting two Microtransit programs to provide more transit options for residents in parts of the city. Taxi-to-Rail (T2R) provides rides for people traveling to or from one of the eight metro stations east of the Anacostia. DC Microtransit provides transit services to northeast and northwest parts of DC.

Loudoun County is possibly considering investigating this type of service in the future.

Montgomery County DOT has pilot flexible services, Ride On Flex, in two zones. Service began in 2019 and is operated by Ride On using County-owned vehicles, Ride On drivers, a standard farebox with payment by cash, SmarTrip® cards, passes, and tokens. Trip requests are powered by a vendor-developed app or by phone. The county will be evaluating the Flex pilot and establishing performance criteria in 2020.

Prince George's County offers call-a-bus service during weekdays from 8:30 a.m. to 3:30 p.m. Call-a-bus is a demand-response curb-to-curb service in areas that are not served by fixed-route bus or rail service. Reservations can be made from seven days in advance to same-day (with same-day requests subject to available resources). Many small municipalities within the County also offer call-a-bus service. The County has plans to offer limited microtransit services on a pilot basis.

		Primary	Support
E	*Recommendation:* Leverage existing efforts to provide flexible on-demand services where and when fixed route service is not efficient, through collaborative planning with bus operators and unions.		

In July 2019 WMATA began an After-Hours Commuter Service Pilot, partnering with Lyft. The pilot is tailored to late-night workers in hospitality and healthcare. Participants must apply and be approved to participate, which entitles them to a small discount on using shared ride-hailing trips. Extension of the pilot or formal adoption will depend on future decisions on late night transit service and the evaluation of the pilot.

Case Studies

In addition to the local case studies currently being piloted, other national case studies have been identified:

- Los Angeles, California; Draft Strategy, page 111
- Sacramento, California; Draft Strategy, page 111; White Paper #2, page 105
- Santa Clara County's Valley Transportation Authority (VTA), Santa Clara, California; White Paper #2, page 105
- Alameda-Contra Costa Transit District (AC Transit), Oakland, California; White Paper #2, page 105
- Pinellas Suncoast Transit Authority (PSTA), Tampa, Florida; White Paper #2, page 115
- Altamonte Springs, Florida; White Paper #2, page 116

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

2. Give Buses Priority on Roadways

2.1. Recommendation 2: Overview

This set of recommendations details policy, capital, operating, and enforcement strategies to give bus priority on the roadways. Transit agencies and roadway owners will need to work together to achieve the vision of faster and more reliable buses. Recommendation 2 is to:

Give buses priority on roadways to move people quickly and reliably.

Within Recommendation 2 there are four detailed recommendations:

- F — Obtain commitments from state and local agencies (including roadway owners) to **adopt consistent guidelines**, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.
- G — Implement enforcement policies that **establish bus priority** and result in reliable and fast service.
- H — Establish a capital program at WMATA that **supports accelerated implementation of bus priority projects**, including BRT.
- I — Support regional congestion mitigation efforts that bolster bus priority and **move more people more efficiently**.

These recommendation will unlock the following benefits:

For customers:

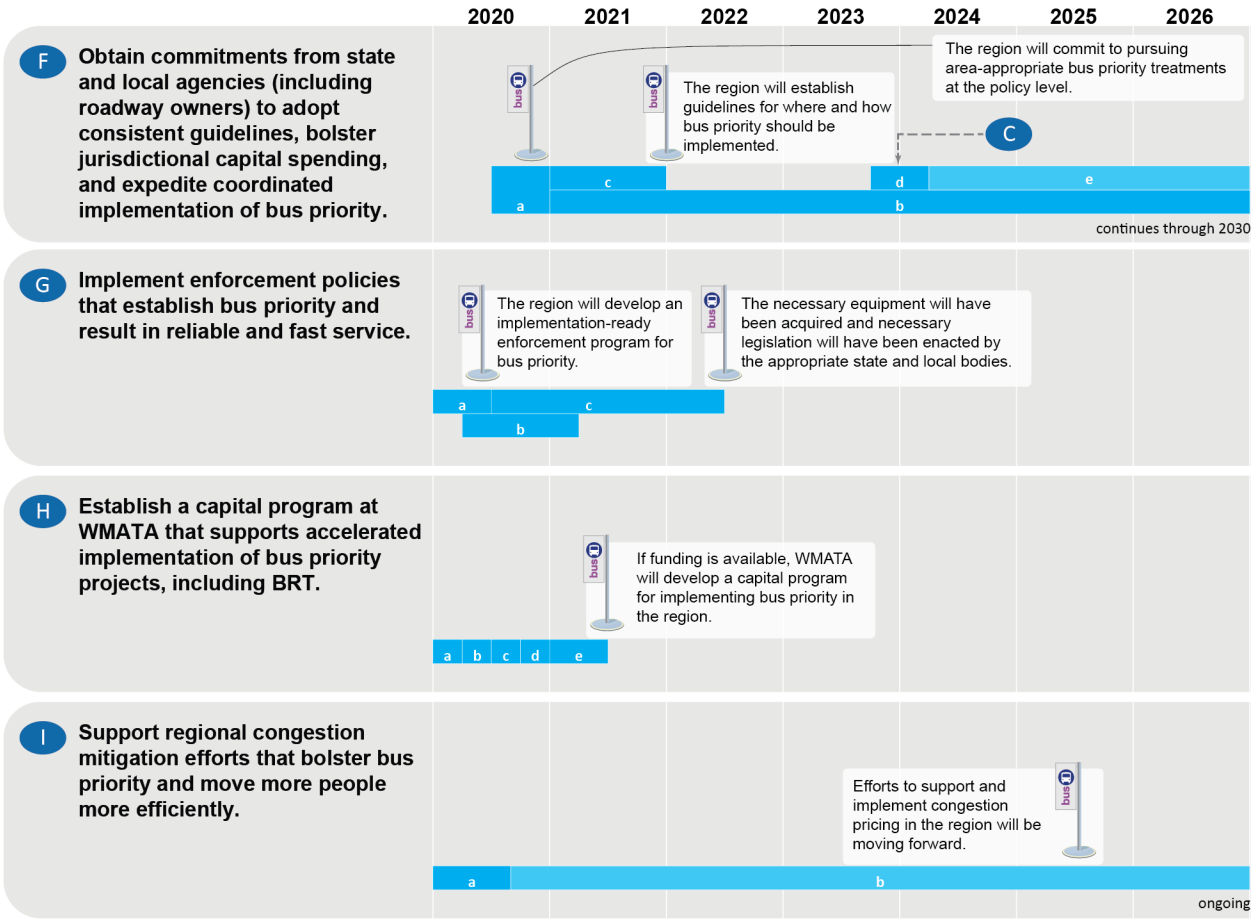
- Faster and more reliable trips

For the region's bus system:

- Increased ridership
- Higher operating cost efficiency
- Improved customer satisfaction
- Less congestion on the region's roads
- Reduced environmental impact of transportation

2.2. Recommendation 2: Implementation

Figure 2-1: Detailed Action Plan: Recommendation 2



Lead and Supporting Actors	F	G	H	I
State and Local Government	Lead	Lead	Support	Lead
WMATA			Lead	
Working Group / Task Force	Lead	Lead		Support
Independent Organizations	Support	Lead		
Bus Operating Agencies	Support		Support	
Roadway Owner Agencies	Lead	Support	Support	Lead

Independent Organizations

State and Local Government

WMATA

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

2.3. Recommendation 2: Detailed Action Steps

F	*Recommendation:* Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.	Primary	Support

Benefits	Buses will be able to move faster and more reliably throughout the region, increasing ridership and lowering operating costs.
Outcome	All regional agencies commit through a formal policy-level agreement to prioritize the bus on corridors where ridership warrants. Best practices for bus priority are identified and used to develop regional bus priority guidelines which establish a context sensitive approach to both where bus priority treatments should be implemented and what treatments should be implemented at those locations. Bus priority, as determined through these policies and guidelines, is implemented quickly throughout the region to move buses faster and more reliably.
Schedule	Ongoing coordination and enhancements to build on existing progress on bus priority treatment, enforcement, and reporting on the benefits of bus priority.
Dependencies/ Synergies	*Dependency:* The bus network restructuring (Recommendation C) will inform the bus priority corridors in Recommendation F.c. *Synergies:* Demonstrating the benefits of bus priority treatments for riders and improved efficiency will be helped by the regional data sharing in Recommendation B, and could be facilitated and disseminated by the entities in Recommendation W (Regional Mobility Innovation Lab) or Recommendation Y (bus performance scorecard). Development of enforcement strategies (Recommendation G, Action Step a) will complement the bus priority guidelines developed in this recommendation.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	High	High	Low

Primary Actor	**Action Steps**
	The planning and policy aspects of this recommendation are given specific timeframes but the actual implementation of bus priority and its continued enforcement and reporting will occur on an ongoing basis and last beyond 2030.

F	*Recommendation:* Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.	Primary	Support

a. Obtain formal policy-level agreement across region to commit to prioritizing the bus on corridors where ridership warrants. Specific actions may include:

   i. Identify relevant bodies/agencies including state agencies: DDOT, MDOT, and VDOT, and other local agencies that control roads and traffic operations in the jurisdictions
   ii. Develop and sign formal policy agreement or memorandum of understanding
   iii. Incorporate into local Complete Streets policies, Capital Improvement Programs, traffic management protocols, etc.

Actors: A regional bus priority working group should be established including representation from all regional jurisdictions and transit providers, including WMATA. Will require strong support from jurisdictional and agency leadership, boards, and councils and their staff.

Expected Duration: 6 months

***Milestone Achievement*:** In 2020 the region will commit to pursuing area-appropriate bus priority treatments at the policy level.

b. Implement bus priority treatments.

Implementation of the priority treatments identified in Action Step c will be completed by the appropriate roadway owners in each jurisdiction. These projects may be funded and implemented through a number of different programs.

Actors: Roadway owners in each jurisdiction, with support from the transit providers (including WMATA) and the regional working group.

Synergies: The Bus Priority Capital Program (see Recommendation H) would help implement bus priority faster.

Expected Duration: Ongoing; full implementation of all recommended bus priority treatments will take at least ten years.

F	*Recommendation:* Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.	Primary	Support

c. Establish context-sensitive regional guidelines for where and how bus priority should be provided, including what needs to be regionally uniform.

Building off existing work, including WMATA's Priority Corridor Network, priority corridors identified by the jurisdictions, recent analysis by MWCOG, TCRP, and work in other cities/regions, this context could be based on:

- Transportation characteristics (e.g., service frequency, stop spacing, ridership, right-of-way characteristics)
- Land use characteristics (e.g., high-density activity and employment centers, transit proximity)
- Travel patterns (e.g., level of total demand in a corridor)
- Demographics and equity
- Service levels

These guidelines will define the types of treatments and when/where they are most appropriate, based on a thorough review of the national state-of-the-practice. Treatments may include:

- Infrastructure (e.g., TSP, queue jumps, dedicated bus lanes/guideways)
- Operations (e.g., all-door boarding, off-board fare payment, parking limitations, pick-up/drop-off zones, interactions with bike lanes)

The guidelines will also establish how to prioritize the implementation of priority treatments, e.g., based on the return on investment in terms of person hours of delay saved, bus speed increase, bus reliability increase, etc.

Actors: Led by the working group comprised of all transit providers, jurisdictions, and agencies.

Expected Duration: 12 months

***Milestone Achievement*:** In 2022 the region will establish guidelines for where and how bus priority should be implemented

d. Identify and prioritize the treatments to be implemented on specific corridors, in specific locations, or across specific subareas in the region.

The working group will disseminate the guidelines from Action Step b and the local jurisdictions will identify the treatments most appropriate to each location in the regional transit network based on the guidelines. The application will be context-sensitive and take into consideration the varying conditions and constraints across the region. Priorities for investment and implementation include connections among different corridors that result in "network effects" – benefits far greater than unconnected individual segments.

Actors: Working group should coordinate the effort regionally, but the individual jurisdictions should lead on identifying appropriate treatments on their roadways.

Dependencies: As service levels will help identify appropriate priority treatments in specific location, this Action Step should be completed following the bus system restructuring (Recommendation C).

Expected Duration: 6 months

F	*Recommendation:* Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.	Primary	Support

e. Demonstrate the benefits of bus priority treatments for riders and improved efficiency.

As implementation of bus priority continues in the region, the benefits should be quantified and highlighted to ensure continued support of the public and decision-makers. Evaluating the impacts of pilot projects and sharing lessons learned could be conducted by the Regional Mobility Innovation Lab (Recommendation W).

On a more regular basis, the impacts of individual project implementation and the combined "network effects" of implementing multiple projects around the region should be quantified. This type of ongoing evaluation will be made easier through the sharing of regional performance data (Recommendation B) and may be facilitated through the bus performance scorecard (Recommendation Y).

Synergies: Action Step d does not need to be complete for this Action Step to begin, but some implementation in the region must occur. Recommendations B, W, and Y are not required for demonstration of benefits of bus priority treatments but will improve the effectiveness of this recommendation.

Actors: The Regional Mobility Innovation Lab (Recommendation W) or the entity developing the bus performance scorecard (Recommendation Y) would be the ideal entities to lead this work. Support from each transit provider would be necessary.

Expected Duration: Ongoing annually

Progress to date

Low

Historically, decisions regarding bus priority treatments have been made on a case by case basis in each jurisdiction. While the 2015 Metrobus service guidelines include some discussion of priority there is no recent regional document that tackles this issue. Details on specific efforts include:

- WMATA developed the Priority Corridor Network in 2008.
- WMATA and DDOT are currently evaluating effectiveness of TSP and queue jumps.
- DDOT and WMATA have signed a Memorandum of Agreement to work closely together to advance bus priority policies and measures in the District.
- DDOT piloted bus lanes on H & I Streets during the summer of 2019 and based on results made them permanent with expanded hours. The 16th Street bus lanes are expected to be implemented in 2020. DDOT is launching a Bus Priority Program Fall 2019/Winter 2020.
- Arlington and the City of Alexandria implemented Metroway, which includes dedicated runningway.
- Arlington County and the City of Alexandria have plans for several additional BRT corridors with transit priority.
- Montgomery County developed a Countywide Bus Rapid Transit Study in 2011 which includes plans for bus priority.
- Montgomery County is launching US 29 BRT in 2020 which includes limited bus priority treatments.
- Montgomery County is continuing BRT planning and design on several corridors including MD 355 (Rockville Pike) and MD 586 (Veirs Mill Road) which include various bus priority treatments.
- Fairfax County is continuing BRT Planning and design on VA-7 and US Route 1, which include bus priority treatments.

		Primary	Support
F	*Recommendation:* Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.		

Case Studies

Bus Transformation Project White Paper # 2 provided extensive references related to bus priority treatments. Numerous national studies cover this topic, too numerous to list here, but a few key sources include:

- Bus Priority Treatment Guidelines, TPB/MWCOG, 2011
- TCRP Synthesis 83: Bus and Rail Transit Preferential Treatment in Mixed Traffic, 2010
- TCRP Report 118: Bus Rapid Transit Practitioner's Guide, 2007
- When Are Bus Lanes Warranted? Considering Economic Efficiency, Social Equity, and Strategic Planning Goals, Victoria Transport Policy Institute, 2016
- Transit-Only Lane Repurposing, Florida DOT, 2014

Key for Primary and Support Actors

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- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

G	*Recommendation:* Implement enforcement policies that establish bus priority and result in reliable and fast service.	Primary	Support

Benefits	Bus will be able to move faster and more reliably throughout the region.
Outcome	Working with a broad array of agencies, the region will identify a toolbox of bus priority enforcement strategies and enact enabling legislation for those strategies. The enforcement strategies will identify the appropriate use and enforcement of bus lanes, how enforcement will be funded, and who will be authorized to enforce bus lanes. The results of this effort will also identify where in the region various strategies will be deployed and programs for education, monitoring and reporting.
Schedule	Starts: 2020 Complete: 2021
Dependencies/ Synergies	*Synergies:* Monitoring and sharing of lessons learned could benefit from the Regional Mobility Innovation Lab (Recommendation W). As bus priority is implemented in Recommendation F, enforcement strategies should also be deployed.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium-High	Medium	Medium

Primary Actor	**Action Steps**

G	*Recommendation:* Implement enforcement policies that establish bus priority and result in reliable and fast service.	Primary	Support

a. Develop a comprehensive bus priority enforcement program.

Building off the 2017 MWCOG report "Bus Lane Education and Enforcement" that identifies enforcement strategies, identifies legislative barriers in the DC region, and describes necessary and effective education and outreach efforts, the working group will:

- Confirm the enforcement strategies identified as best practices in the report for effective bus lane management and identify a preferred regional toolbox of potential enforcement mechanisms and programs (e.g., compliance through design, lane restriction enforcement, cameras on buses, stationary cameras mounted on traffic signals, police enforcement)
- Working with local and state departments of transportation, assess existing enforcement enabling legislation with regards to bus priority treatments, identify any deficits in existing legislation, and provide recommended enabling legislation. This will be an update of the information on this topic included in Bus Lane Education and Enforcement report.
- Identify funding needs and responsibilities for enforcement and beneficiaries of any revenues.

The working group could be modeled off of (or be a continuation of) the Traffic Incident Management Enhancement task force at TPB/COG, and should include representatives of jurisdiction government, roadway owners, enforcement agencies (local, state, and other police enforce laws on the region's roadways), and bus providers.

Actors: Working group, including local jurisdictions (cities/counties), roadway owners (city/county/state), state transportation agencies (VDOT, MDOT, DDOT, DRPT), law enforcement, and transit agencies.

Expected Duration: 6 months

***Milestone Achievement*:** In 2020 the region will develop an implementation-ready enforcement program for bus priority

b. Advance new regulations or correct any legislative deficits by getting State and local legislation and administrative processes implemented.

Legislation should cover the full range of issues, including determining what types of vehicles are permitted to use bus lanes at what times and under what conditions. Legislation and administrative process should also address agents of enforcement, violation reporting and ticketing process, warning periods, and privacy.

Actors: Led by local and/or state governments, as appropriate, with support from the working group.

Dependencies: Legislation can take a long time to implement, and the process can be started before the full enforcement plan is developed in Action Step a.

Expected Duration: 9-12 months, depending on legislative cycle

G	*Recommendation:* Implement enforcement policies that establish bus priority and result in reliable and fast service.	Primary	Support

c. Implement enforcement program and monitor performance.

Enforcement strategies should be implemented alongside priority deployments in Recommendation F. In addition to the enforcement strategies themselves, it will be necessary to develop a public outreach program to educate the public, businesses, and stakeholders about bus lane enforcement based on guidelines developed in Bus Lane Education and Enforcement report.

A program to monitor the effectiveness of different enforcement strategies should also be deployed, so that necessary adjustments can be identified and made on an ongoing basis.

Actors: Jurisdictions; roadway owners in coordination with law enforcement and transit operating agencies. Public outreach campaign should be led by the working group. Ongoing monitoring should be led by roadway owners and enforcement agencies, with lessons learned shared through the working group and the Regional Mobility Innovation Lab (Recommendation W).

Expected Duration: 18-24 months for jurisdiction enforcement programs, public education program development and initial campaign; ongoing monitoring

***Milestone Achievement*:** In 2022, to appropriately enforce bus priority, the necessary equipment will have been acquired and necessary legislation will have been enacted by the appropriate state and local bodies.

Progress to date

Medium

The application of enforcement mechanisms varies greatly by jurisdiction. Both states and the District of Columbia have passed legislation enabling the use of camera-based enforcement of certain activities; none of them, however, have enabled camera-based enforcement of bus lanes. Currently enforcement of bus lanes is handled by various law enforcement agencies. Specific efforts that directly support this Recommendation include:

- The TPB/COG Traffic Incident Management Enhancement Taskforce (TIME) was a convening of all the entities that would be involved in bus priorty enforcement.
- MD House Bill 130 of 2019 Session: Establishing the Workgroup to Study Dedicated Bus Lanes in Baltimore City to study and analyze dedicated bus lane enforcement mechanisms in use by peer transit agencies and develop an enforcement plan; requiring the study to include an examination of best practices and technologies, a review of potential costs, and an evaluation of the most effective methods for ensuring compliance with and enforcement of existing law; requiring the Workgroup to report by December 31, 2019, to the Governor and General Assembly; etc.
- DDOT is developing pilots for automated bus lane enforcement
- MWCOG published the Bus Lane Education and Enforcement Guidelines in 2017.

Case Studies

The 2017 MWCOG report *Bus Lane Education and Enforcement* report includes a comprehensive international review of peers and literature on this topic. Most relevant are efforts by New York, Seattle, and San Francisco who have piloted various enforcement strategies and measured and reported on their effectiveness.

H	*Recommendation:* Establish a capital program at WMATA that supports accelerated implementation of bus priority projects, including BRT.	Primary	Support

Benefits	Bus priority treatments are implemented sooner than otherwise, ensuring faster more reliable bus service that attracts more riders and is more cost efficient to operate.
Outcome	A capital grant program is established that leverages current funding sources to help seed faster implementation of bus priority efforts by offsetting upfront costs for state and local governments and roadway owners.
Schedule	Starts: 2020 Complete: 2021 (and ongoing)
Dependencies/ Synergies	*Synergies:* The implementation of this recommendation will help to implement the bus priority treatments in Recommendation F.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	High	High	Low

Primary Actor	**Action Steps**
	a. Develop the approach for implementing a bus priority capital program at WMATA. A Technical Assessment on the below is being conducted for WMATA as part of the BTP and will complete by January 2020. It includes a literature and peer review that identifies best practices, including regional examples (e.g., WMATA's Project Development Program, NVTC's Commuter Choice, TPB's grant programs, DRPT's MERIT grant program, NVTA's TransAction, and/or the Commonwealth of Virginia's SmartScale, etc) and other similar programs at agencies around the country. Based on this review, a recommended approach will be developed that addresses the following issues: • Identify potential funding sources and any associated restrictions • Quantify recommended funding levels and required local match percentages • Identify the types of projects that would be eligible to receive funding • Define selection criteria and develop a template application process • Specify how selection decisions will be made • Identify methods to ensure that program funds are distributed around the region • Define methods for evaluating the success of the capital program • Outline recommended management and operational needs, including a recommended location for the program within WMATA Additional review and coordination with regional partners will be necessary. *Actors:* WMATA leads this effort, with coordination with regional stakeholders. *Expected Duration:* 3 months
	b. WMATA Board approves the funding allocation as part of the annual capital budget. This and following steps would apply if and when funds are allocated in WMATA's Capital Budget. *Actors:* WMATA Board *Expected Duration*: 3 months

H	*Recommendation:* Establish a capital program at WMATA that supports accelerated implementation of bus priority projects, including BRT.	Primary	Support

c. Issue the first call for projects.

A final application and procedure will need to be finalized from the materials produced in Action Step a. For the first call for projects, it would be helpful to conduct meetings with jurisdictions providing an overview of the application process and selection criteria.

Actors: WMATA issues the call for projects. Roadway owners/jurisdictions will be responsible for completing applications by the stated deadline.

Expected Duration: 3 months

d. Select projects to be funded to create Year 1 funding program.

Actors: WMATA in collaboration with jurisdictional partners.

Synergies: Implementation of bus priority treatments (Recommendation F) will be able to occur more quickly with completion of this Action Step.

Expected Duration: 3 months

e. Refine process and program based on Year 1; develop next 3-year funding program.

After reviewing lessons learned on the first year—in terms of process, selection criteria, and funding decisions—modifications will be made and implemented to develop a three-year funding program, providing agencies with more time for advanced planning with a longer-term funding outlook. At the start of FY2022, a new call for projects will be issued and the process will continue.

Actors: WMATA in collaboration with jurisdictional partners.

Expected Duration: 6 months

***Milestone Achievement*:** In 2021 if funding is available, WMATA will develop a capital program for implementing bus priority in the region.

Progress to Date

Low

A technical assessment of the issues outlined in Action Step a has been begun by WMATA and will be complete by January 2020.

I	*Recommendation:* Support regional congestion mitigation efforts that bolster bus priority and move more people more efficiently.	Primary	Support

Benefits	Ridership increases as a result of improved service, particularly related to reliability, frequency, and speed. Climate benefits as a result of reduced vehicle miles traveled through increased transit use, e.g. decrease in fuel consumption and emissions.
Outcome	Congestion mitigation proposals and measures are endorsed by state and local government throughout the region and strengthened in their positive impact on bus performance.
Schedule	Ongoing effort to elevate the bus in congestion mitigation efforts.
Dependencies/ Synergies	*Synergies:* Implementation is linked to Recommendation C (restructure the regional bus network), whereby disincentivizing single-occupancy vehicle travel will shift mode share to transit and increase demand; effects of this recommendation to be tracked via Recommendation Y (progress report and performance report).

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	High	Medium

Primary Actor	**Action Steps**
	This recommendation represents an ongoing effort to elevate the impact of bus in congestion mitigation efforts.
	a. Develop decision framework to evaluate congestion mitigation efforts and facilitate coordination so that bus agencies can: • Work with entities leading congestion reduction efforts to encourage polices that disincentivize usage of low-occupancy vehicles • Support the planning process to ensure that these initiatives are aligned with and enabled by upcoming bus system improvements • Increase bus service hours and frequency to accommodate increase in riders resulting from reduced personal vehicle usage The decision framework will be applied to congestion mitigation efforts to assist agencies in planning for bus and helping to shift mode choice from single-occupancy vehicles to transit options. This will help identify challenges and opportunities to emphasizing bus as an option within congestion mitigation efforts. *Actors:* Conveners would include each agency with authority over congestion mitigation policy and funding. A working group may be needed to draft the decision framework, distribute for comment, revise and finalize. *Expected Duration:* 6-9 months

I	*Recommendation:* Support regional congestion mitigation efforts that bolster bus priority and move more people more efficiently.	Primary	Support

b. Bus performance is highlighted and tracked in congestion mitigation efforts (e.g., curbside management pilots, decongestion pricing, pick-up/drop-off zones, etc.).

Agencies develop performance measures and guidance on how best to incorporate these measures into congestion mitigation plans and programs. This may include both qualitative and quantitative measures.

Actors: State and local jurisdictions and agencies.

Expected Duration: Ongoing

***Milestone Achievement*:** By 2025 efforts to support and implement congestion pricing in the region will be moving forward.

Progress to date *Medium*	Across the region, counties, cities, and some developments have transportation management plans (TMPs) which require implementation of programs to mitigate congestion. Additionally, there are many local, state, and regional transportation demand management (TDM) programs to encourage alternatives to single-occupancy vehicle travel. Other operational and pricing mechanisms are used in the region to mitigate congestion including ongoing work by DCST in the District with the Decongestion Pricing Study, DDOT Curbside Management program, VDOT and MDOT managed lane and "corridor management" projects.
Case Studies	Stockholm, Sweden Trafikverket (*Bus Transformation Project Draft Strategy*, page 89) Resource Pricing Transport for London (*Bus Transformation Project White Paper #2*, page 54) Swedish Transport Administration and Singapore Land Transport Authority (*Bus Transformation Project White Paper #2*, pages 55-56)

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

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3. Create an Excellent Customer Experience

3.1. Recommendation 3: Overview

This set of recommendations focuses on efforts that will make it easier for customers to plan and pay for trips, have a safe and pleasant experience while on the bus, and continually improve the customer experience. Recommendation 3 is to:

Create an excellent customer experience to retain and increase ridership.

Within Recommendation 3 there are four groups of recommendations that pertain to how customers interact with the bus:

Equip riders with high-quality, accurate, and easily accessible information to plan a trip.

- J — Ensure that **accurate, real-time service information** for all providers is available in one place
- K — Make bus service easy to understand with legible maps and **customer-friendly route names** across providers
- L — **Expand marketing efforts** to enhance visibility of bus options and benefits

Make paying bus fares easier.

- M — Provide **full transfer discount** between local bus and Metrorail
- N — Provide **reduced fare options** for low-income riders
- O — Create a **mobile solution** to plan and pay for trips in one place
- P — Develop **regional passes** that work across all providers, and make bus fares clear and understandable
- Q — **Incentivize more employers** to offer transit benefits

Make it safer and more pleasant to ride the bus.

- R — Make **bus stops and shelters** safe, comfortable, accessible, and technology-enabled
- S — Advance technology and programs that **improve the safety** of everyone on board by partnering with riders, bus operators, and unions
- T — Empower front-line staff to provide **exceptional customer service**
- U — Ensure that all buses meet the highest standards of comfort and cleanliness

Pursue innovation and bus improvement.

V Advance new vehicle technologies to improve bus' **environmental footprint and efficiency**, such as electric buses and automation

W Establish a Regional Mobility Innovation Lab to systematically **share knowledge and accelerate improvements** such as service provision, customer experience, and bus operator and passenger safety

These recommendations will unlock the following benefits:

For customers:

- A more seamless experience using the region's transit system
- More affordable travel, especially for low-income passengers
- Accurate, easy-to-use, accessible information that makes it easy to use the region's transit system
- Reduced perceived and actual wait time for customers at bus stops
- Safer and more comfortable experience when riding and waiting for the bus

For the region's bus system:

- Increased ridership
- Improved customer satisfaction
- Less congestion on the region's roads
- Reduced environmental impact of transportation
- Higher operating cost efficiency

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

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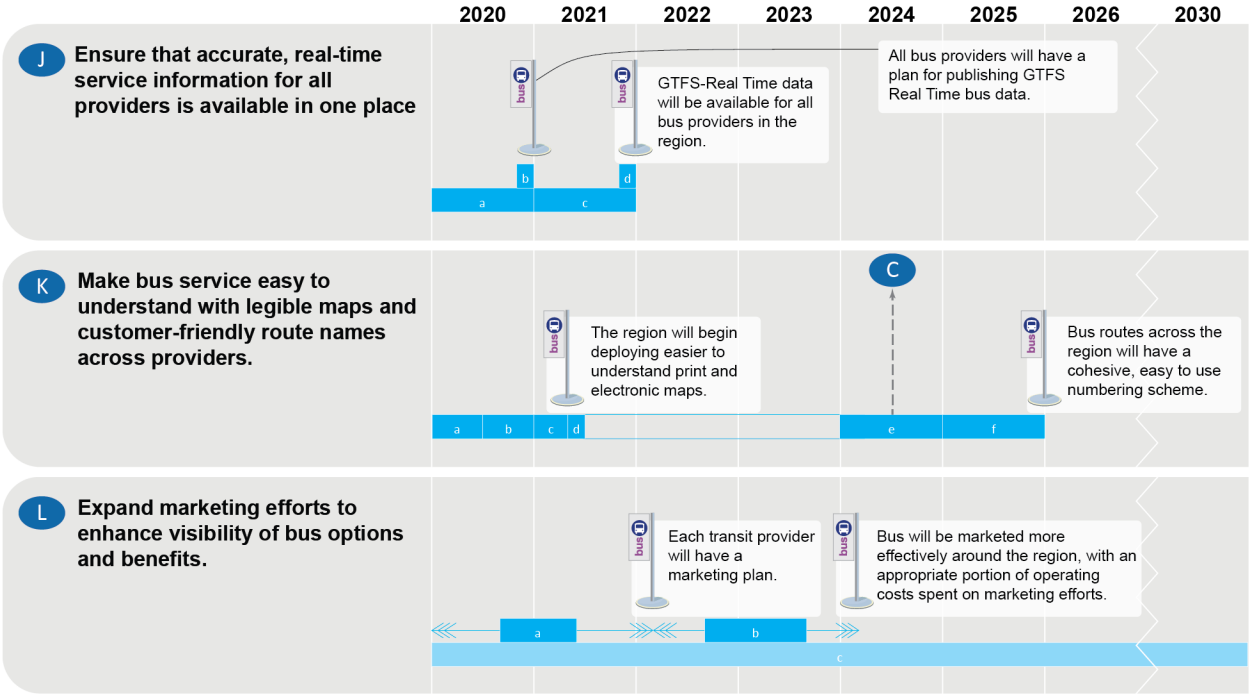
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

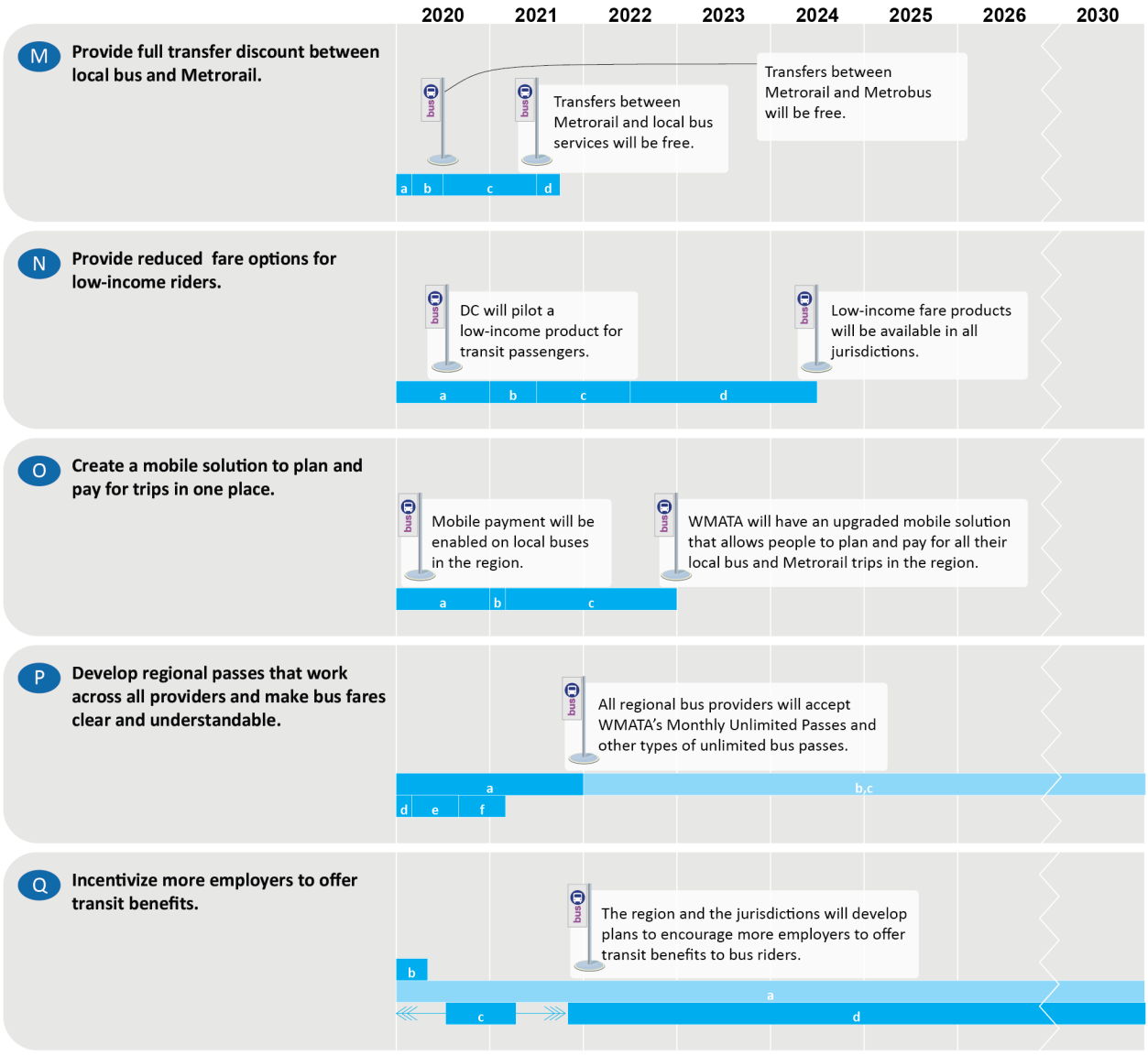
3.2. Recommendation 3: Implementation

Figure 3-1: Detailed Action Plan: Equip riders with high-quality, accurate, and easily accessible information to plan a trip



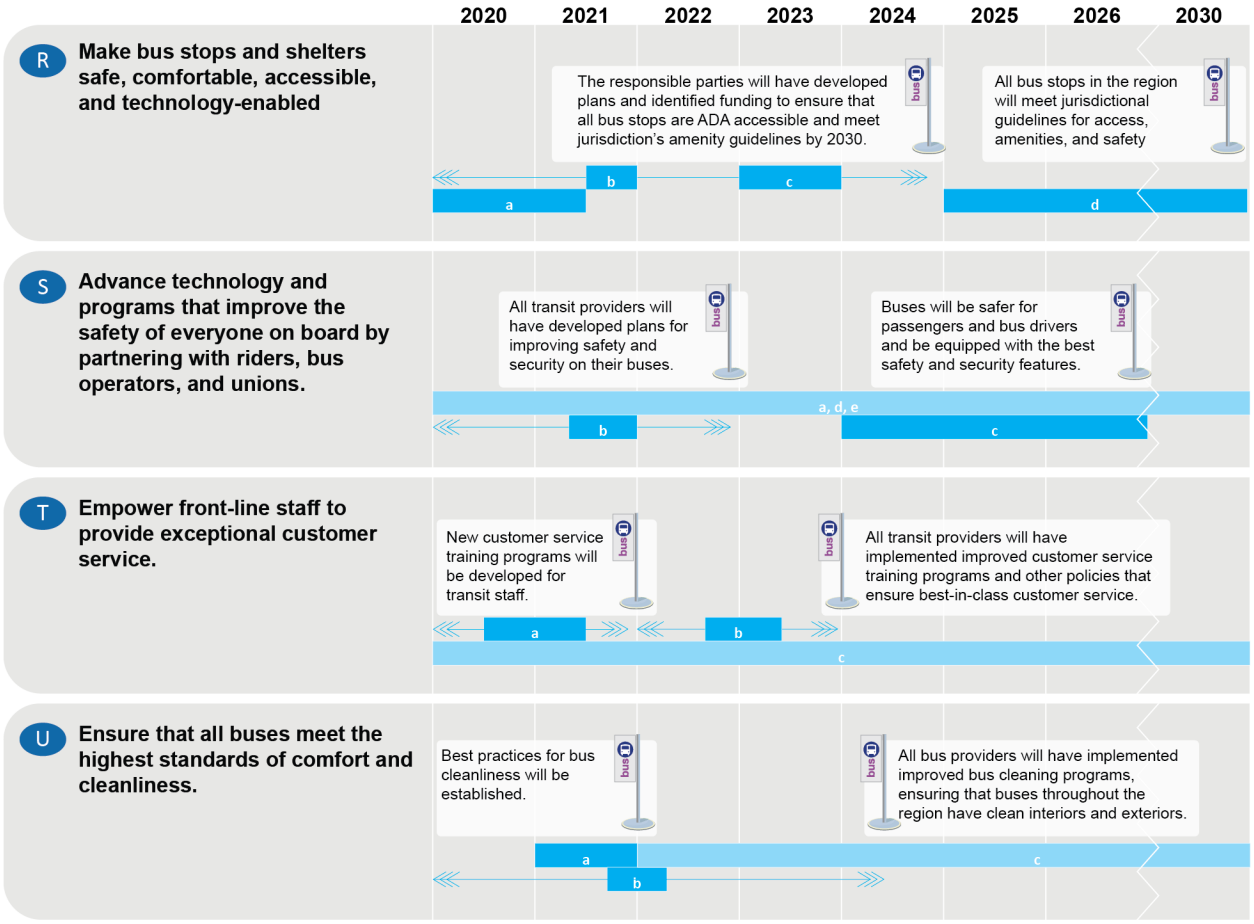
Lead and Supporting Actors	J	K	L
State and Local Government			
WMATA	Lead	Lead	Lead
Working Group / Task Force	Support	Support	
Independent Organizations			Support
Bus Operating Agencies	Lead	Lead	Lead
Roadway Owner Agencies			

Figure 3-2: Detailed Action Plan: Make paying bus fares easier



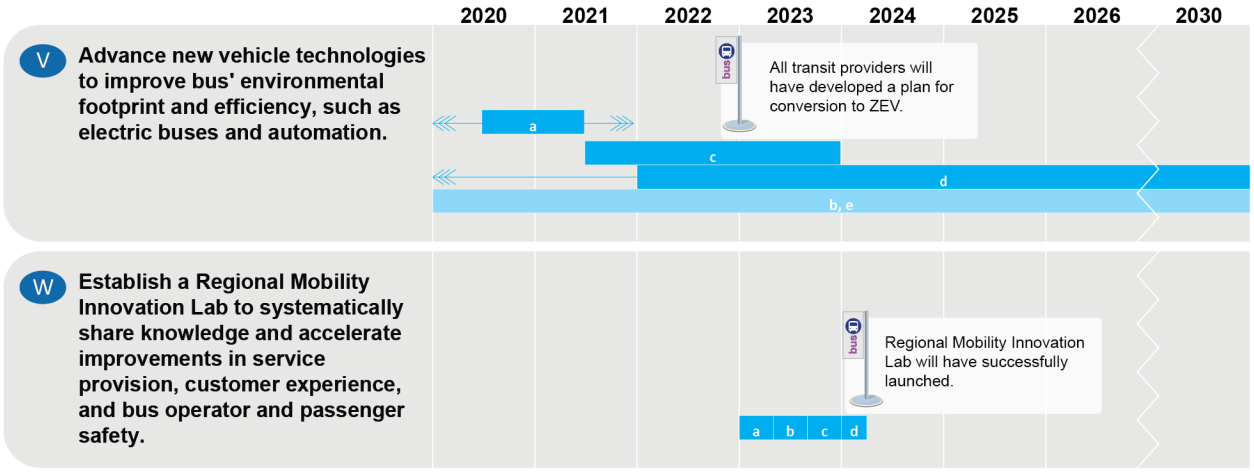
Lead and Supporting Actors	M	N	O	P	Q
State and Local Government	Support	Lead			Lead
WMATA	Lead	Lead	Lead	Lead	Support
Working Group / Task Force				Support	
Independent Organizations					Lead
Bus Operating Agencies	Support	Support	Support	Support	Support
Roadway Owner Agencies					

Figure 3-3: Detailed Action Plan: Make it safer and more pleasant to ride the bus



Lead and Supporting Actors	R	S	T	U
State and Local Government	Support			
WMATA	Support	Lead	Lead	Lead
Working Group / Task Force				
Independent Organizations		Support	Support	Support
Bus Operating Agencies	Lead	Lead	Lead	Lead
Roadway Owner Agencies	Lead			

Figure 3-4: Detailed Action Plan: Pursue innovation and bus improvement



Lead and Supporting Actors	V	W
State and Local Government		Support
WMATA	Lead	Support
Working Group / Task Force		Lead
Independent Organizations	Support	Lead
Bus Operating Agencies	Lead	Support
Roadway Owner Agencies	Support	Support

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

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- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

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- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

3.3. Recommendation 3: Detailed Action Steps

J	*Recommendation:* Ensure that accurate, real-time service information for all providers is available in one place	Primary	Support

Benefits	Accurate real-time data eliminates a major customer frustration while encouraging bus usage and making bus more competitive with other modes, such as ride-hailing.
Outcome	Outcome: Every transit agency achieves very high accuracy of real-time data and connectivity with app providers. All transit agencies provide a General Transit Feed Specification Realtime (GTFS-RT) feed. (GTFS-RT format is preferred as a universal format with no proprietary restrictions and is the preferred format for integrating with app providers.) A regional data validation program is deployed to ensure reliability of real-time service information.
Schedule	Starts: Already begun — Complete: 2022
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Complete the Work Already Underway**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium-High	Medium	Medium

Primary Actor — **Action Steps**

a. WMATA and bus operating agencies develop plan to implement and publish GTFS-RT feeds.

Building on current or emerging efforts, each bus operating agency develops a plan for publishing and integrating GTFS-RT data. Although many of the regional service providers have begun implementation of real-time bus data, not all are working with GTFS-RT formats. To achieve full GTFS-RT data coverage in the region, each agency should address topics such as:

- How GTFS-RT feeds could be developed from existing real-time service information (as GTFS-RT is needed to get the real-time information out to customers in one place.)
- How accuracy and reliability will be developed, managed, and maintained through the necessary hardware, software, vendor/staff capabilities, back-end data warehousing/integration, data management/flow, processes for updates, etc. Where needed, funding for additional hardware and/or software will need to be obtained.
- How and when the GTFS-RT data feeds will be open and available to app developers for use on different platforms.

Actors: Each service provider.

Expected Duration: Completion dates will vary for each provider but should target completion within 12 months.

***Milestone Achievement*:** In 2020 all bus providers will have a plan for publishing GTFS Real Time bus data.

J	*Recommendation:* Ensure that accurate, real-time service information for all providers is available in one place	Primary	Support

b. Plan for ongoing improvements to accuracy and reliability of GTFS-RT data.

As part of the plan developed in Step A, each provider should have a preliminary plan for how GTFS-RT data will be maintained to ensure the highest level of accuracy and reliability. Building on this, service providers could develop more detailed standards to ensure accuracy and reliability, along with a validation program to ensure that standards are met. This data validation program will need to be repeated at regular intervals and should be reported on to demonstrate accuracy and reliability of data. Plans to improve data, such as hardware and software upgrades and/or fixes to the underlying schedule data should also be tracked and reported on.

It may be more cost efficient to deploy a single regional data validation program, instead of individual programs through each operator. To achieve this, these elements should be discussed regionally, either through the WMATA JCC, TPB's Regional Public Transportation Subcommittee or some other venue in lieu of a regional task force.

Actors: Led by service providers, with facilitated regional coordination.

Synergies: This step can begin while Action Step a is still ongoing.

Expected Duration: 2 months to develop data validation standards and programs. Ongoing data validation.

c. Implement GTFS-RT plans across the region

GTFS-RT plans are rolled out. Implementation is monitored, and accuracy and reliability are managed and updated in line with Step B.

Actors: Each service provider.

Expected Duration: Completion dates will vary for each provider but should target completion within 12 months.

***Milestone Achievement*:** In 2021 GTFS-Real Time data will be available for all bus providers in the region.

d. Market the availability of real-time information.

Letting customers and potential riders know about the existence of this information will make riders feel more comfortable waiting for the bus and allow them to make better travel decisions. Informing the public about this information should be a part of continued marketing campaigns (See Recommendation L).

Synergies: This step can begin while Action Step C is still ongoing.

Actors: WMATA and local transit providers

Expected Duration: 2 months and ongoing

Progress to date

Medium

Most of the service providers are at various states of providing real-time bus data, although not all are using GTFS-RT technology

- ART already publishes GTFS Realtime
- Loudoun County publishes real-time data and is currently deploying a software upgrade that will support GTFS Realtime
- upgrade that will support GTFS Realtime
- WMATA launched GTFS-RT in Apple Maps in 2019 and will publish other services in 2020.
- Fairfax Connector shares real-time data through BusTracker API (not GTFS Realtime)
- CUE shares real-time data through NextBus API (not GTFS Realtime)
- RideOn is in the process of developing publicly available GTFS Realtime

		Primary	Support
J	*Recommendation:* Ensure that accurate, real-time service information for all providers is available in one place		

- TheBus is in the process of developing publicly available GTFS Realtime
- DASH is in the process of developing publicly available GTFS Realtime
- DC Circulator is in the process of developing publicly available GTFS Realtime

K	*Recommendation:* Make bus service easy to understand with legible maps and customer-friendly route names across providers.	Primary	Support

Benefits	Customers will navigate the regional bus system with ease thanks to consistent route naming patterns, map design, and signage.
Outcome	Regionally consistent route numbering system; standardized easy-to-read system and route level maps; one-stop-shop for online and print route and system information.
Schedule	Starts: 2020 Complete: 2025 and ongoing
Dependencies/ Synergies	Route renaming occurs simultaneously with Recommendation C – Collaboratively restructure the regional bus network. Action Steps a-d related to mapping could be done independently of Action Steps e-g related to system renumbering.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low-Medium	Low	Low

Primary Actor	**Action Steps**
Metro, Bus	a. WMATA collaborates with interested representatives from transit providers across the region to receive input on new design standards for system and route-level maps (printed and electronic). WMATA will develop updated templates for printed and digital maps, including bus/rail maps at rail stations and on trains, bus system maps, high-frequency bus system maps, transfer center / Metrorail station bus maps, and route-level maps. WMATA will plan the schedule and level of effort needed to roll out the new maps and provide new route-level templates for WMATA routes, which will be designed so that any operator could use them. *Actors:* WMATA and transit providers *Expected Duration:* 6 months
Metro, Bus	b. Determine an implementation plan for design and printing of maps across interested transit providers and coordinate funding source(s). *Actors:* WMATA and transit providers *Expected Duration*: 6 months (could partially overlap with Action Step a)

K	*Recommendation:* Make bus service easy to understand with legible maps and customer-friendly route names across providers.	Primary	Support

c. Publish and disseminate revised print and electronic maps.

Publication may be phased, with different locations and providers implementing over time. Transit providers who did not opt to participate in the first round will be given the option to participate in the future.

Dependencies: WMATA may begin disseminating and printing new maps before Action Step b is complete.

Actors: WMATA and transit providers

Expected Duration: 4 months for the first round of maps (could partially overlap with Action Step b)

***Milestone Achievement*:** In 2021 the region will begin deploying easier to understand print and electronic maps.

d. Develop implementation plan for ongoing map updates. Transit providers may opt in or opt out as they wish.

The implementation plan will establish a regular schedule for updating the templates, upgrading digital capabilities, reviewing funding sources, and allowing providers to opt in or out.

Actors: WMATA and transit providers

Expected Duration: 2 months

e. Develop implementation plan for route and numbering changes, including changes to signage and maps.

This action step should be coordinated with the system restructuring effort in Recommendation C so that naming conventions can be consistent across the region, be tied to service type, and be integrated with the regional planning effort.

Dependencies: Occurs during the implementation of Recommendation C as the route system is restructured. This step is an update of the mapping activities in Action Steps a-d.

Actors: Working group leading the system restructuring in Recommendation C, with support from WMATA and transit providers

Expected Duration: 6-12 months, concurrent with Recommendation C, Actions Step e

f. Implement route and numbering changes

Actors: WMATA and transit providers

Expected Duration: 12 months and ongoing

***Milestone Achievement*:** By the end of 2025 bus routes across the region will have a cohesive, easy to use numbering scheme.

Progress to Date

Low

Current bus maps that incorporate the routes from all local-bus operators are available on the WMATA website and in select locations in hard copy. Rail system maps currently do not show bus connections, station area and transit center bus maps are not consistent, and there is not a WMATA or regional high-frequency bus map.

K	*Recommendation:* Make bus service easy to understand with legible maps and customer-friendly route names across providers.	Primary	Support

Case Studies

- Seoul, Korea; Bus Transformation Project Draft Strategy, page 33
- Paris RATP; Bus Transformation Project Draft Strategy, page 34
- Transport for London; Bus Transformation Project Draft Strategy, page 34
- New York MTA; Bus Transformation Project Draft Strategy, page 34
- Transport for London (TfL); Bus Transformation Project Draft Strategy, page 35

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
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- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
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- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

L	*Recommendation:* Expand marketing efforts to enhance visibility of bus options and benefits.	Primary	Support

Benefits	More people will be informed about bus options and benefits, which will make them more likely to use it.
Outcome	Increased marketing of the bus system across the region.
Schedule	Beginning in 2020, develop and implement ongoing marketing efforts across the region.
Dependencies/ Synergies	Marketing strategies should be informed by improvements made to the bus system in all other Recommendations.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Low	Low

Primary Actor	**Action Steps**
Metro, Bus	a. Each transit provider develops detailed, multi-year marketing plan and identifies funding. Each transit provider will develop a marketing plan for bus in the region and their service area. Each strategy will formalize the forms of outreach and communication, feedback systems and an enhanced digital presence (with the potential to overlap with Recommendation O) and will facilitate enhanced customer relationships and connections to brand identity. Each strategy will identify sources of funding and implementation timeframe. Where appropriate, the some or all of transit providers may decide to collaborate on a more regional campaign that includes multiple operators and creates a more cohesive identity for bus marketing efforts. *Actors:* Individual transit providers will each develop their own marketing plans. *Expected Duration*: 9 months for each provider ***Milestone Achievement*:** By 2022 each transit provider will have developed a marketing plan.
Bus, Metro	b. Implement the marketing plans. Marketing strategy is rolled out. Strategy is monitored and updated cyclically, in particular when new improvements to the bus system are realized through the implementation of other Recommendations. *Actors:* WMATA and transit providers, with potential coordination with Commuter Connections *Expected Duration*: 12 months for each provider and ongoing ***Milestone Achievement*:** By 2024 Bus will be marketed more effectively around the region, with an appropriate portion of operating costs spent on marketing efforts.

L	*Recommendation:* Expand marketing efforts to enhance visibility of bus options and benefits.	Primary	Support

c. Convene a regular meeting for marketing staff at from each bus provider to discuss ongoing efforts, opportunities for collaboration, and potential metrics for success.

Actors: Marketing staff from all bus providers.

Expected Duration: Ongoing

Progress to date	MWCOG Commuter Connections Regional TDM Marketing Group produces a strategic marketing plan (version 22 released in 2018) for planning and marketing communication programs for commuters of multiple modes, including bus. Marketing of bus exists but is piecemeal and based on individual services, e.g., MD 355 Ride On and DC Circulator.

Key for Primary and Support Actors

Independent Organizations

State and Local Government

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- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

M	*Recommendation:* Provide full transfer discount between local bus and Metrorail.	Primary	Support

Benefits	Makes it more affordable for low income riders to use the full regional transit network, allowing them to save money and have shorter, more efficient trips. Creates a more cohesive transit system.
Outcome	Jurisdictions and WMATA Board fund and implement full transfer discount between local bus and Metrorail.
Schedule	Already begun — Complete: 2021
Dependencies/ Synergies	none

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Complete the Work Already Underway**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium-High	Medium	Medium

Primary Actor	**Action Steps**
Metro	a. WMATA proposes implementing full transfer discounts between Metrobus and Metrorail as part of the annual budget process for FY2021. *Actors:* WMATA *Expected Duration:* 2 months
Metro	b. WMATA Board adopts the proposed budget that includes full transfer discounts between Metrorail and Metrobus. In order to get approval, WMATA will likely need to provide justification to Board members, including analysis on the potential impacts to budget, ridership, and service. Documentation of the support for this action from the BTP public survey and other sources should be identified, along with the equity benefits the Recommendation would provide. *Actors:* WMATA Board with support from jurisdictions. *Expected Duration:* 4 months ***Milestone Achievement*:** In 2020 transfers between Metrorail and Metrobus will be free.

M	*Recommendation:* Provide full transfer discount between local bus and Metrorail.	Primary	Support

c. Implement full transfer discounts between Metrorail and all local bus providers.

WMATA will work with each local transit provider to expand the program. This will include identifying allocation of fare revenue for these transfer discounts, which could range from splitting the cost of the transfer discount equally with local providers, to the entire transfer discount being provided on the rail fare. Both would have budgetary impacts, either on local jurisdictional provider's farebox revenues and/or on the Metrorail operating subsidies.

All transit agencies would ideally participate in the full transfer discount program to make the regional transit system function seamlessly for riders. Funding constraints at some providers may prevent simultaneous adoption of the full program at all transit agencies. In order to move forward with the program, a phased approach may be more appropriate and could also build public support across the region.

In order to implement, the following actions would be necessary:

- Local providers request approval from funding Boards/Councils to enable jurisdiction's participation
- WMATA updates internal business and Automated Fare Collection rules and functions
- WMATA updates tariff

Actors: WMATA will lead this effort, with action needed from local transit providers and local and/or state governments.

Expected Duration: 12 months

***Milestone Achievement*:** In 2021 transfers between Metrorail and local bus services will be free.

d. Evaluate the impacts.

Once the program has been implemented, the effects on revenue and ridership should be measured for each agency. Impacts on transit riders, including lower travel costs and shorter travel times (for riders who, as a result of this change now take rail which had been too costly) should be measured as well. If the program is implemented using a phased approach, evaluation should occur after each phase.

Actors: Each transit provider, including WMATA, should participate in this evaluation, which could be done collaboratively or separately.

Expected Duration: 3 months and ongoing

Progress to date	WMATA has included full transfer discounts between Metrobus and Metrorail as part of the proposed FY2021 budget.
Medium	Some initial analysis on the potential for implementation were previously undertaken by WMATA.
Case Studies	New York, NY MTA - Bus Transformation Project Draft Strategy, page 54; Bus Transformation Project White Paper #2, page 111

N	*Recommendation:* Provide reduced fare options for low-income riders.	Primary	Support

Benefits	Increased ridership for bus and improved mobility for low-income riders (who comprise more than 50% of total Metrobus riders).
Outcome	A reduced-fare product for low-income riders is implemented on all bus systems regionwide.
Schedule	Starts: Year 2020 — Complete: 2024 and ongoing
Dependencies/ Synergies	None

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium	High	Low

Primary Actor	**Action Steps**
	a. Implement DDOT's low-income pilot in DC. DDOT has a current project underway to pilot a low-income fare product in partnership with the D.C. Department of Human Services (DHS) for residents of DC. The project is in the final stages of development. The pilot product, supported in part by WMATA, will be administered by DC DHS. *Actors:* DDOT, WMATA and DHS *Expected Duration:* 12 months ***Milestone Achievement*:** In 2020 DC will pilot a low-income product for transit passengers.
	b. Measure program effectiveness and define scalable solution. Working with DHS, DDOT will review results from pilot project to determine whether project goals have been met (based on performance metrics established by DDOT and WMATA) and make recommendations for whether to implement district-wide. Considerations likely include impacts on revenue, ridership, and dedicated funding sources. Based on recommendations, DDOT and WMATA will develop implementation plan to rollout out low-income fare product across district and coordinate with DHS for administration. *Actors:* DDOT, WMATA and DHS *Expected Duration:* 6 months

N	*Recommendation:* Provide reduced fare options for low-income riders.	Primary	Support

c. DDOT, WMATA and DHS implement low-income fare product across District.

With partnership from DHS to administer the low-income fare product, DDOT rolls out low-income fares to District residents. Together, WMATA and DHS monitor and evaluate program on annual basis to track progress on performance metrics established in Step B.

Actors: DDOT, WMATA and DHS

Expected Duration: 12 months

d. WMATA works with jurisdictions to implement low-income fare products across region.

WMATA coordinates with local jurisdictions and bus service providers to implement program more broadly across region. WMATA shares templates for administration of product and best practices on securing funding sources, implementation, and ongoing monitoring and evaluation. Jurisdictions and service providers implement low-income fare products.

Actors: WMATA, jurisdictions and service providers.

Expected Duration: 12-24 months

***Milestone Achievement*:** In 2024 low-income fare products will be available in all jurisdictions.

Progress to date

- DDOT is finalizing a pilot with the District to implement a pilot of low-income fare products, to be administered by DC DHS.
- CUE offers free fares to low-income residents who qualify for tax relief
- NVTC has discussed this strategy but no policy decisions have been made.
- MCDOT has a program to provide subsidized taxi trips for low-income older adults and individuals with disabilities.

Case Studies

LA Metro (Los Angeles, CA); King County Metro (Kings County, Washington), and New York - Bus Transformation Project Draft Strategy, page 50

Free Fares Estonia Bus Transformation Project White Paper #2, page 101

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

O	*Recommendation:* Create a mobile solution to plan and pay for trips in one place	Primary	Support

Benefits	Mobile payment will make it easier to use the bus, especially for infrequent riders and visitors. Could also help speed up the boarding process, allowing buses to travel faster.
Outcome	Building upon the ongoing regional efforts being led by WMATA, deploy a mobile payment solution for all modes that works on all systems and includes a trip planning feature.
Schedule	Already begun — Complete: 2024
Dependencies/ Synergies	Would integrate with Recommendation J, real-time information, when available

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Complete the Work Already Underway**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium	Low	High

Primary Actor	**Action Steps**
Metro, Bus	a. Develop and implement the mobile payment solution, including the procurement of any necessary hardware. The mobile payment solution is already being developed by WMATA and is anticipated to be released in 2020. The implementation includes time for a soft launch in order to identify issues prior to wide-scale deployment. This will include completion of design and development in addition to the necessary upgrades to software and firmware. Actors: WMATA *Expected Duration:* 12 months ***Milestone Achievement*:** By 2020 mobile payment will be enabled on local buses in the region.
Metro, Bus	b. Market the mobile payment solution. At the initial launch, the tool should be strongly marketed by all transit providers to raise awareness and educate customers on how to use it. The mobile payment solution should be a part of continued marketing campaigns (See Recommendation P). *Actors*: WMATA and local transit providers *Expected Duration*: 2 months and ongoing

O	*Recommendation:* Create a mobile solution to plan and pay for trips in one place	Primary	Support

c. Identify additional capabilities and features and upgrade the mobile solution.

Upgrades may include trip planning, integration of GTFS-Realtime, and/or integration with additional modes. Upgrades should be considered on a regular basis to keep the mobile solution current and as useful as possible.

Actors: WMATA and local transit providers.

Dependencies: After development of the mobile solution, ongoing upgrades should be identified no later than one year after deployment of new features.

Expected Duration: 22 months, with regular updates.

***Milestone Achievement*:** By 2022 WMATA will have an upgraded mobile solution that allows people to plan and pay for all their local bus and Metrorail trips in the region.

Progress to date *High*	WMATA is working on a mobile payment solution that is currently planned for release in 2020.
Case Studies	• DART (Dallas, TX) GoPass - Bus Transformation Project Draft Strategy, page 40 • Portland, Oregon - Bus Transformation Project Draft Strategy, page 41 • WMATA - Bus Transformation Project Draft Strategy, page 42

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

P	*Recommendation:* Develop regional passes that work across all providers and make bus fares clear and understandable.	Primary	Support

Benefits	Passes will encourage more bus ridership and will make the regional system more seamless to use for customers.
Outcome	The region's bus providers will have implemented clear and consistent fares; Bus passes that can be used on all bus service providers in the region have been implemented.
Schedule	Starts: 2020 Complete: 2022
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Complete the Work Already Underway**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Medium	Medium

Primary Actor	**Action Steps**
Metro, Bus	a. Expand WMATA's pass products (e.g., Monthly Unlimited Pass, etc.). to include local bus providers. WMATA will work with the jurisdictions, through the regional SmarTrip® Consortium, to review existing pass products and agree on arrangements for inclusion in any existing and future pass products. This would incorporate any discussion about revenue sharing. The types of pass products that could be collectively provided includes unlimited rail, fare capping, school passes, etc., including improvements to existing offerings. It would be best if the expansion could incorporate all jurisdictions simultaneously, but providers should be added to the passes as soon as possible instead of waiting for uniformity. *Actors:* WMATA leads, with coordination with the local transit providers. *Expected Duration*: 24 months for all providers ***Milestone Achievement*:** In 2022 all regional bus providers will accept WMATA's Monthly Unlimited Passes and other types of unlimited bus passes.
Metro, Bus	b. Market regional pass products that include bus to raise awareness. The passes should be a part of continued marketing campaigns (See Recommendation L). *Actors:* Transit Providers *Expected Duration:* Ongoing
Metro, Bus	c. Evaluate impacts of the regional bus pass products on ridership, revenue, and service. *Actors:* WMATA and the jurisdictional service providers. *Expected Duration:* Ongoing

P	*Recommendation:* Develop regional passes that work across all providers and make bus fares clear and understandable.	Primary	Support

d. Collect fare policy and special fares for each service provider and identify differences between regional providers.

Actors: SmarTrip Consortium convenes members for discussion, with data provided by service providers.

Dependencies: This Action Step (and those that follow) can be started before Action Steps a-c and is independent from them.

Expected Duration: 2 months

e. Develop recommendations and implement changes to the region's fare policy, including how special fares are defined for seniors, children, students, etc. across the region.

Actors: SmarTrip Consortium and each responsible agency and jurisdiction.

Expected Duration: 3 to 6 months

f. Develop clear, easy-to-use materials outlining regional fare policy on all service providers. Include in marketing efforts.

Actors: SmarTrip Consortium.

Expected Duration: 3 months, with on-going updates as needed

Progress to date	WMATA has added Metrobus to its Monthly Unlimited Passes, which now includes Metrorail and Metrobus.
Medium	A 7-Day Regional Bus Pass that works on Metrobus and most local bus operators in the region is also available.

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

Q	*Recommendation:* Incentivize more employers to offer transit benefits.	Primary	Support

Benefits	Increased access to transit benefits for bus-dependent riders. Increased ridership; increased equity of transit benefits and lower out-of-pocket transportation costs.
Outcome	More bus riders receive transit benefits.
Schedule	Ongoing enhancements to existing Travel Demand Management (TDM) efforts.
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Medium	Medium

Primary Actor	**Action Steps**
	This recommendation represents an enhancement of the region's ongoing TDM efforts organized by many entities, including jurisdictional governments and Commuter Connections. To achieve this recommendation, each of these agencies will need to enhance their ongoing efforts, adding a particular focus on employers of bus riders.
	a. Convene regional TDM representatives on an annual basis with the specific focus of developing best practices to reach bus customers. This will encourage sharing of data and best practices in the region, and coordinate efforts where trips cross jurisdictional boundaries. *Actors:* This group could be convened by Commuter Connections' Employer Outreach Subcommittee or another entity. Each of the jurisdictional TDM offices would need to participate. *Expected Duration:* Ongoing Annually
	b. Ensure that all transit benefits materials are available in Spanish. *Actors:* WMATA and jurisdictional TDM offices *Expected Duration:* 4 months

Q	*Recommendation:* Incentivize more employers to offer transit benefits.	Primary	Support

c. Develop plans to encourage more employers to offer transit benefits to bus customers.

Each jurisdictional and regional TDM agency will develop a tailored plan for increasing the use of SmartBenefits by bus riders. The plan for each agency will be different depending on the specific conditions, but may include some or all of the following elements:

- Identify markets for bus customers and develop targeted on-board marketing.

  This analysis would identify bus routes with a large number of commute trips, but where the usage of SmartBenefits is low. Once these routes have been identified, an on-board marketing (preferably in English and Spanish) campaign would be developed and deployed on the identified routes to encourage riders to participate if eligible.

- Encourage marketing of SmartBenefits to employers through Business Improvement Districts, Real Estate Investment Trusts, and Community Based Organizations.
- Development and implementation of regulation to require employers of 20 or more employees to offer qualified transportation benefits.

Actors: Jurisdictional TDM agencies, with support from transit providers, legislative bodies, and Commuter Connections.

Expected Duration: 9 months for each agency

***Milestone Achievement*:** In 2021 the region and the jurisdictions will develop plans to encourage more employers to offer transit benefits to bus riders.

d. Implement plans to increase the use of SmartBenefits among bus riders.

Actors: Jurisdictional TDM agencies, with support from transit providers, legislative bodies, and Commuter Connections.

Expected Duration: Ongoing

Progress to date

Washington DC's Transit Benefits Requirement Act took effect January 1, 2016.

Maryland provides tax credits to employers to who provide transit benefits.

The IRS provides a tax credit for employer transit benefits.

Many of the local governments already work closely with employers to offer transit benefits including Alexandria, Arlington, DC, Fairfax County, Loudoun County, and Montgomery County.

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

R	*Recommendation:* Make bus stops and shelters safe, comfortable, accessible, and technology-enabled	Primary	Support

Benefits	All regional bus stops in the region will have the amenities appropriate for their context and levels of use and include ADA accessibility needs. Bus stops and shelters will be safe and accessible for all users. These improvements should make it easier for more people to ride the bus.
Outcome	Consistent context-sensitive design, accessibility, and amenity standards are established and an increased rate of bus stop improvements are undertaken such that within ten years all bus stops identified as being in need would be upgraded.
Schedule	Ongoing enhancements to bus stop improvement programs.
Dependencies/ Synergies	Synergies: Sharing of bus performance data in Recommendation B will provide data input to determining where to focus improvements. Recommendation J will provide input related to the criteria for provision of real-time information at certain bus stops.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium/High	Medium	Medium

Primary Actor	**Action Steps**
	This recommendation represents an enhancement of the efforts to improve bus stops that are already in place throughout the region. With more than 14,000 bus stops in the region, these efforts are being led by different agencies in different jurisdictions depending on the bus stop owners and organization of responsibilities including roadway owners at the local and state levels, transit providers, and WMATA. This recommendation seeks to increase the speed at which bus stops in the region are improved to achieve the important milestone of having a regional bus system with full accessible, comfortable, updated bus stops by 2030.
	a. Each transit provider works with local jurisdictions to review their existing bus stops and associated amenities, and develops/updates their inventory of each stop, with exact location data (lat/long), and information and pictures about the existence and condition of accessibility, shelters, lighting, signage (static and real time), and other amenities. The daily level of passenger activity at each stop should also be included. *Dependencies*: This data should be incorporated into the shared data repository (Recommendation B) for use in regional planning, including the bus system restructuring (Recommendation C). *Actors:* All transit providers and roadway owners. *Expected Duration:* 18 months

R	*Recommendation:* Make bus stops and shelters safe, comfortable, accessible, and technology-enabled	Primary	Support

b. Each jurisdiction develops context-sensitive "gold standard" and minimum bus stop guidelines.

The standards should include bus stop design, spacing, accessibility, and amenities, including the provision of real-time information (as it becomes available under Recommendation J) and updated maps (as they are developed in Recommendation K). These standards will need to be context-sensitive and take into consideration the varying conditions and constraints of each jurisdiction.

During the development of these standards, it would be helpful to convene a meeting of the bus providers in the region to share ideas, share data, and support one another in establishing, funding, and maintaining a bus stop improvement program.

Actors: Each bus provider with potential coordination through the TPB Regional Public Transportation Subcommittee.

Expected Duration: 6 months for each agency

c. Each agency or jurisdiction develops a detailed plan which amends their existing bus stop improvement program to include schedule and funding levels in order to upgrade all its bus stops to meet standards by 2030 and maintain them into the future.

Actors: Each service provider and/or jurisdictional government. Specific actors will vary across the region.

Expected Duration: 12 months for each agency

***Milestone Achievement*:** By 2024 the responsible parties will have developed plans and identified funding to ensure that all bus stops are ADA accessible and meet jurisdiction's amenity guidelines by 2030.

d. Improve all bus stops to jurisdictional standards by 2030 according to the jurisdictional plans.

Actors: Each service provider and/or jurisdictional government. Specific actors will vary across the region.

Expected Duration: Ongoing

***Milestone Achievement*:** By 2030, all bus stops in the region will meet jurisdictional guidelines for access, amenities, and safety.

Progress to date

Medium

Bus Stop Guidelines or Standards:

Alexandria: Typically uses WMATA bus stop standards.

DC: Bus stop design guidelines and standards are in the DDOT Design and Engineering Manual.

City of Fairfax: In progress of developing standards: https://www.fairfaxva.gov/government/public-works/transportation-division/current-transportation-projects/cue-access-and-technology-improvements

Fairfax County: Have bus stop guidelines as of 2004 as well as guidelines in Title VI. The FCDOT project division oversees the implementation of bus stops.

Loudoun: Only a requirement that the stops be ADA compliant. The county will be researching this in FY 2021/2022 and creating the guidelines based on the study data.

R	*Recommendation:* Make bus stops and shelters safe, comfortable, accessible, and technology-enabled	Primary	Support

MDOT SHA: MTA has a Bus Stop Design Guide - https://www.mta.maryland.gov/bus-stop-design-guide. MDOT SHA is currently developing urban mobility design guidelines, but transit stop design would not be explicitly outlined.

Prince George's: Use WMATA bus stop design standards.

VDOT:

For shelters, see VDOT Road Design Manual Chapter 2B (see page 2B-4). http://www.virginiadot.org/business/resources/LocDes/RDM/chap2b.pdf For transit-related design, see VDOT Road Design Manual Appendix 1A Complete Streets Guide - (see pages 105 onward). http://www.virginiadot.org/business/resources/LocDes/RDM/Appenda1.pdf Document.

DRPT multimodal design guide - created with VDOT (an adopted part of VDOT RDM) http://www.drpt.virginia.gov/transit/planning/multimodal-guidelines/ See chapter 5 and page 104 (Ch. 6) in particular. Other design guides/best practices exist as well, including ADA standards.

WMATA: Bus Stop standards adopted by the Metro Board in March 2010: http://cms-www.wmata.com/BoardResolutions/2010/2010-15.pdf

Capital Programs for Bus Stop Improvements:

Arlington County has two major Bus Stop programs. The Bus Stop & Shelter program is an ongoing capital maintenance, improvement, and enhancement program in which stop improvements are prioritized based on safety, accessibility, age, shelter condition, and ridership. The Bus Stop Accessibility program is a 1—year program to design and construct accessibility improvements at ~570 bus stops to bring them into ADA compliance. This program expects to complete 20-30 stops in FY20 as port of coordinated effort with WMATA.

DC: DDOT is responsible for this and improved 66 stops in FY19.

City of Fairfax: Currently has a grant to construct improvements but does not currently have other funds programmed in the City's capital budget for bus stop improvements.

Fairfax County: FCDOT project division and public works department improves about 75 bus per year.

Loudoun: The county currently has a $4M ADA transition plan in effect to bring 300 stops into ADA compliance.

Prince George's: Has a limited bus stop improvement program and improves approximately 100 bus stops each year.

VDOT: VDOT has no bus stop/shelter Improvement Program. Bus stops/shelters maintained by VDOT are predominantly in their commuter lots and VDOT Maintenance sections maintain/improve them on an as-needed basis. Localities/transit agencies install shelters or bus stops in VDOT right-of-way through a permit process and are locality/transit agency maintained.

WMATA:

- Over the past several years WMATA completed a construction program to bring over 200 selected stops in the public right-of-way into ADA compliance funded by an FTA grant. In past years, the rate of improvement on public ROW stops was in the 20-50 stops per year range. Future selection and prioritization of stop improvements in public ROW will stem from a new WMATA effort to resurvey the region's bus stops related to ADA compliant construction.

R	*Recommendation:* Make bus stops and shelters safe, comfortable, accessible, and technology-enabled	Primary	Support

- Recently WMATA kicked off an effort to install Bluetooth beacons on signs which will help individuals who are blind locate the front of the bus stop. WMATA has also installed hundreds of LED and e-paper signs around the region to provide customers with real time arrival information, schedules, and maps.
- The deteriorating state of WMATA's oldest bus shelters is being addressed through several means, lately including them in the project scope for existing and future station rehabilitation projects. As priorities and capital funding line up for other stations those shelters will be replaced.
- WMATA works with all other public transit agencies in the region (as well as private operators and shuttles) with whom they either share a stop or that serves one or more Metrorail stations.

Case Studies Utah Transit Authority (UTA); Draft Strategy, page 61

S	*Recommendation:* Advance technology and programs that improve the safety of everyone on board by partnering with riders, bus operators, and unions.	Primary	Support

Benefits	Safety and security aboard buses for both operators and riders improve.
Outcome	Jurisdictions adopt best practices on safety and security features and programs on-board all buses.
Schedule	Ongoing enhancements to on-board safety features and programs.
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium	Medium	Medium

Primary Actor	**Action Steps**
	This recommendation represents an enhancement of the efforts to improve safety and security for passengers and drivers that are already in place throughout the region. To achieve this recommendation, each transit provider will need to enhance their ongoing efforts to equip their vehicles with the appropriate technology. Additionally, enhancing and expanding educational and outreach campaigns regarding driver safety is also indicated.
	a. Organize a recurring meeting or meetings among bus providers, unions, and police departments to share issues, challenges, existing safety and security features and programs, and best practices for bus operator and customer safety and security. It is important to consult Metro's Transit Police Department (MTPD) and jurisdictional police forces as they are an important component to ensuring safety. Union involvement is also essential as bus operators have the most direct contact with the riding public. *Actors:* WMATA or TPB's Regional Public Transit Subcommittee will convene subject matter experts from transit providers, police departments, and the unions. *Expected Duration:* Ongoing

S	*Recommendation:* Advance technology and programs that improve the safety of everyone on board by partnering with riders, bus operators, and unions.	Primary	Support

b. Through peer research and consultation with the above parties, each bus provider develops a plan for improving onboard safety/security to utilize during bus procurement and employee training processes.

These plans should cover safety for passengers and bus operators, which has been a growing concern in recent years both locally and nationally. Each plan may include physical safety features for buses (e.g. camera systems), changes to policing procedures, changes to staff training, and/or informational programs to discourage unsafe behaviors.

Many buses are already equipped with security cameras, silent alert buttons, pedestrian detections systems and other features. This information will be used to identify differences between buses and provide opportunities to expand safety components and programs.

Actors: Each bus provider, with strong support from police forces and unions.

Expected Duration: 8 months for each agency

***Milestone Achievement*:** By 2022 all transit providers will have developed plans for improving safety and security on their buses.

c. Each bus provider implements training program and/or utilizes plans on all future bus procurements, as defined by their plan developed in Action Step b.

Agencies and local governments may need to approve changes to bus equipment specifications and training procedures. Other programs will need to be adopted by other entities in each jurisdiction.

Actors: Each bus provider will lead adoption in their own jurisdiction, with coordination through a regional working group where needed.

Expected Duration: 3 years

***Milestone Achievement*:** By 2027, buses will be safer for passengers and bus drivers and be equipped with the best safety and security features.

d. Work directly with operators, supervisors, unions, and riders to develop a public education program focused on encouraging positive rider behavior towards other riders and drivers.

This task is focused specifically on public outreach and education for riders to address issues of driver safety. A regional campaign, similar to StreetSmart for pedestrian safety may be appropriate.

Actors: A regional campaign would be supported by WMATA and the jurisdictions. Each operating agency could also establish their own campaign.

Expected Duration: 4 months and annually

e. Encourage cross-participation in safety meetings across agencies to ensure that regional best practices are adopted where appropriate.

Actors: All bus providers, including WMATA.

Expected Duration: Ongoing

Progress to date

Medium

All transit providers include safety features for drivers and passengers. A summary of these features includes:

- ART (Arlington): Safety & Security Plan is based on federal safety regulations with six core areas of focus: Employee Selection, Employee Training, Substance Abuse Testing and Education, Safety Maintenance, Security Awareness, Accident and Safety Data Acquisition. ART partners with organizations that drive industry-wide instructional

S	*Recommendation:* Advance technology and programs that improve the safety of everyone on board by partnering with riders, bus operators, and unions.	Primary	Support

standards and programs to develop their safety plan and stay on the leading edge of employee training.

- DASH (Alexandria): Passenger safety features include security cameras installed on all buses and pedestrian detection sensors on about 20% of the fleet. Operator safety includes silent alert button and security cameras.
- City of Fairfax: Passenger safety features include on-board cameras.
- Fairfax County: Passenger safety features include drive cameras and Computer Aided Dispatch (CAD) / Automated Vehicle Location (AVL) with alarm systems. Operator safety features include security cameras and panic buttons. Fairfax County has plans for a new camera system to be installed on future buses.
- Loudoun County: Passenger safety features include accident cameras installed on all buses and pedestrian warning cameras on part of the fleet. Operator safety features include panic buttons. New bus purchases will have pedestrian safety cameras; surveillance cameras are being considered for the local fixed route fleet.
- Prince George's County: Passenger safety features include drive cameras on fixed route buses. Operator safety features include silent alarms. New paratransit vehicles will be equipped with cameras.
- WMATA: Passenger safety features include CCTV surveillance systems on all buses and approximately 19% of the fleet is equipped with rear TV monitors behind the SDS equipment box facing passengers. There are also rotating full screen live image displays to alert passengers they are under video surveillance. There is a bike rack deployment indicator on the dashboard in about 13% of the fleet. Operator safety features include driver protection shields on almost 95% of the fleet; front TV monitors with live image of the front door and fare box area on 19% of the fleet; EA Panic Buttons, CCTV and DriveCam recording on 100% of the fleet; and Secure Bus Access on almost 82% of the fleet. Future investments will make the rear and front TV monitor standard on future buses. There are also plans for a Wheelchair Safety Initiative that will increase visibility for wheelchair patrons through flashing lights, voice annunciator, audible alarm, and reflective tape, which is currently prototyped on 2 buses. Currently testing a Mobile Eye Pedestrian Avoidance system on 5 buses. These features are included in new bus procurements.

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Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

T	*Recommendation:* Empower front-line staff to provide exceptional customer service.	Primary	Support

Benefits	Riders have a more pleasant experience, resulting in high customer satisfaction.
Outcome	All front-line staff have participated in new training programs that promote continuous improvement in customer service.
Schedule	Ongoing enhancements to customer service efforts.
Dependencies/ Synergies	Will incorporate feedback from the Customer Relationship Management platform in Recommendation Z.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Medium	Low

Primary Actor	**Action Steps**
	a. Each agency evaluates their customer service practices and training procedures and compares them to best practices regionally and nationally. As determined by their evaluation of needs, each bus provider develops a training program based on their particular needs. *Actors:* Bus providers including WMATA in coordination with staff, unions, private contractors, and other key stakeholders as needed. *Synergies:* Public input from Recommendation Z should be used to feed the customer service training program and to track its impacts. *Expected Duration:* 1 year for each agency ***Milestone Achievement*:** In 2021 new customer service training programs will be developed for transit staff.
	b. Each provider works with customer-facing staff to review policies and processes that negatively or positively impact customer experience. Transit agencies will review existing policies and/or work rules and implement changes to policies and/or work rules to improve the customer experience. Where necessary, these changes may need to be incorporated into Collective Bargaining Agreements or other contracts. *Actors:* The participants in Action Step a will need to identify the necessary changes, while transit providers will need to work with their local staffs, government agencies, and unions. *Expected Duration:* 9 months for each agency ***Milestone Achievement*:** By 2024, all transit providers will have implemented improved customer service training programs and other policies that ensure best-in-class customer service.

T	*Recommendation:* Empower front-line staff to provide exceptional customer service.	Primary	Support

c. Evaluate impact and monitor performance.

The training programs and staff performance will be evaluated on an on-going basis and improved or adjusted as necessary. This will focus on measurable improvements to customer satisfaction with the bus system and overall performance.

Actors: Each transit provider should assess their own impacts using a common set of performance metrics.

Expected Duration: Ongoing

Progress to date

DASH (Alexandria): Customer service is a critical component of the training program for new drivers and part of the refresher training for veteran drivers. The new driver training program lasts 6-8 weeks and classes typically spend a total of one week or more on customer service. Incentive programs for front-line staff include an Annual Customer Service award with a cash prize.

City of Fairfax: Bus operators currently receive Transit and Paratransit Company (TAPTCO) training.

DDOT: Customer service training is offered through a contractor.

Fairfax County: Customer service training is offered through a contractor. The Transit Service Division currently offers a customer service incentive program for front-line employees.

Loudoun County: Customer service training is offered through a contractor.

Prince George's County: Customer service training is offered through a contractor.

Washington Metro: Customer service training is currently offered as a component in the 10-week bus operator training program. Module 4 and 5 (of 11 modules) present the customer service discussion. A separate Metro Transit Police Department practicum is offered in week six, which is designed to help reduce assaults on operators and negative customer experiences. There is a customer service component in our remedial and refresher class.

U	*Recommendation:* Ensure that all buses meet the highest standards of comfort and cleanliness.	Primary	Support

Benefits	Buses will be perceived as a clean and comfortable option, encouraging more people to ride the bus.
Outcome	Best practices for cleanliness and comfort have been established. Each bus provider has developed and implemented improved cleaning guidelines.
Schedule	Ongoing enhancements to existing cleaning efforts by bus providers.
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Low	Medium

Primary Actor	**Action Steps**
	a. Conduct a literature and peer review regionally and nationally to develop best practices. Best practices will include both interior and exterior cleaning practices and associated equipment as well as innovative methods and technologies. This document should be made available to all bus providers in the region. *Actors:* Could be coordinated through the TPB Regional Public Transportation Subcommittee, the WMATA JCC or other entity. *Expected Duration:* 6 - 12 months ***Milestone Achievement*:** In 2021 best practices for bus cleanliness will be established.
	b. Bus providers work directly with agency maintenance staff and riders to develop and/or improve cleaning standards and procedures. Bus providers will evaluate how they can improve their cleaning plans and procedures based on the review of best practices. The standards should include cleaning for the interior and exterior of the bus as well as rider comfort standards. A definition for what constitutes a “clean and properly serviced bus” should also be included. *Actors:* Transit providers, in coordination with staff and unions, as necessary. *Expected Duration:* 7 months for each agency ***Milestone Achievement*:** By 2024, all bus providers will have implemented improved bus cleaning programs, ensuring that buses throughout the region have clean interiors and exteriors.

U	*Recommendation:* Ensure that all buses meet the highest standards of comfort and cleanliness.	Primary	Support

c. Convene a regular meeting for bus providers to share processes, information, and challenges in improving, funding, and maintaining bus cleanliness programs in the region.

Actors: Convener from Action Step a and transit providers.

Expected Duration: Ongoing

Progress to date *Medium*	All agencies have their own cleaning procedures.

V	*Recommendation:* Advance new vehicle technologies to improve bus' environmental footprint and efficiency, such as electric buses and automation.	Primary	Support

Benefits	Reduced emissions and reduced dependency on fossil fuels. Improved environmental quality through emitting less vibration, less noise, and zero exhaust. Reduced operating and maintenance costs.
Outcome	Zero Emissions Vehicles (ZEV): Each agency explores the cost/benefit of implementing ZEV buses, including electric buses, and if they decide to move forward, develops and implements a plan for charging (infrastructure and operations), new maintenance, training, and vehicle acquisition. Automated Vehicles (AV): State and local governments and bus operating agencies will monitor results of AV pilot programs and continue the regional conversation.
Schedule	Ongoing consideration and implementation of new technologies.
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Enhance Existing Efforts**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Medium	Medium

Primary Actor	**Action Steps**
	a. Investigate zero emissions bus technology, power availability, operational specifics (routes, garages, etc.) Service providers investigate ZEV to establish full understanding and implications of battery-electric buses (BEBs) and other zero-emission bus (ZEB) technologies (costs, vehicles, infrastructure, benefits, transition period, impacts to staffing, etc.). Providers have opportunity for knowledge sharing based on early adopters of ZEV in the region. Some providers have already begun this process. *Actors:* Bus providers *Expected Duration:* 12 months for each agency
	b. Convene staff to share investigation results Staff from WMATA and service providers convene to share results of investigation and best practices from early adopters (agencies with existing ZEV or those that deploy ZEV before 2025) of ZEV in region. Provide updates on each provider's ZEV strategy and discuss and partner where regional consistency is desirable. *Actors:* Bus providers *Expected Duration:* Ongoing annually (or more often, as appropriate)

V	*Recommendation:* Advance new vehicle technologies to improve bus' environmental footprint and efficiency, such as electric buses and automation.	Primary	Support

c. Investigate testing and evaluation of ZEV

Bus providers investigate ZEV procurement and acceptance testing (18 months).

WMATA and bus providers test and evaluate ZEV (12 months).

Actors: Each provider

Expected Duration: 2.5 years

d. Develop and implement plans for conversion to ZEV

Each provider will develop a plan for implementing ZEV, including:

- Update to fleet and facilities plans
- Convert facilities
- Procure and retire fleet
- Install in-route charging

Actors: Bus providers, working with road owners and utility companies as needed

Expected Duration: 5-15 years (depending on fleet and facility needs)

***Milestone Achievement*: By 2022 all transit providers will have developed a plan for conversion to ZEV.**

e. Monitor the development of automated vehicle (AV) technologies and their application to buses and transit vehicles. Consider appropriate next steps.

As AV technologies advance, bus providers should monitor applicability to bus transit vehicles and consider how/if these technologies could best be integrated into bus fleets. This may include pilot testing of different AV functions, consideration of how bus procurement may need to change, and/or plans for staffing AV buses.

Additionally, bus providers will need to consider any changes needed to driving rules or procedures in order to interact better with AVs of all sizes on the roads.

Actors: Transit providers and road owners

Expected Duration: Ongoing

Progress to date

DDOT: DDOT has one of the largest BEB fleets on the east coast with 14 Proterra E2 Catalyst 440kwh having been in operation across all DC Circulator routes since the Spring of 2018. DDOT is currently evaluating options to expand the charging capacity of its existing facilities and is actively pursuing the purchase and development of a new purpose-built bus storage and maintenance facility that would accommodate the existing fleet and future fleet expansions. Through a combination of local and federal FTA LoNo funding DDOT intends to purchase 18 more BEBs in the short-term to replace their oldest buses and allow for route expansion. The District also intends that all future bus purchases will be battery electric.

DASH (Alexandria): Actively studying electric buses for the past two years. Six electric replacement buses are expected in Summer 2020. Future State and regional funds have been secured for additional zero-emission buses and a facility expansion with space dedicated to storage. Overall goal is to be 100% of replacement bus purchases to be electric by 2027.

City of Fairfax: Currently has 6 hybrid buses with plans to replace these in 2021 with diesel buses due to maintenance challenges with the hybrids. Expressed interest in autonomous buses.

Fairfax County: In partnership with DRPT, developing an autonomous shuttle bus pilot project. The Level 4 shuttle is planned to travel from the Dunn Loring Metrorail Station to an activity center in the Merrifield area.

V	*Recommendation:* Advance new vehicle technologies to improve bus' environmental footprint and efficiency, such as electric buses and automation.	Primary	Support

Montgomery County: Received two FTA grants for purchase of electric buses and charging infrastructure. Anticipates 4 electric buses in Fall 2019, and an additional 10 buses in the next 2 years.

Prince George's County: Applied for FTA funding for 4 electric buses with anticipated implementation in 2021.

VDOT: Works with agencies to implement AV pilots, particularly shuttle projects.

Virginia Department of Rail and Public Transportation: Initiated an electric bus State procurement where agencies can purchase electric buses via the State contract. DPRT is also partnering with the Department of Environmental Quality (DEQ) to utilize the Volkswagen Mitigation Trust Fund to assist agencies in adding electric buses to the fleet and charging infrastructure to facilities. The first electric buses are scheduled to be in service in Summer 2021. For the FY21 grant cycle, DRPT will also consider requests from State transit agencies for alternative propulsion vehicles (electric, hybrid, and natural gas).

DRPT and Hampton Roads Transit are participating in a nationwide Automated Bus Consortium designed to investigate the feasibility of implementing automated bus projects across the United States. The goal of the consortium is to deploy full size, full speed automated buses in a variety of geographies and applications to advance the industry understanding of the technology. DRPT is partnering with Fairfax County to deploy an automated Level 4 Shuttle pilot project.

WMATA: In February 2019, WMATA began a study of electric bus technologies which will be complete by the start of 2020. This effort involved a study to investigate what kind of vehicles, batteries, and charging infrastructure are typically used in the public transit industry; how WMATA could obtain the energy to charge the vehicles; which divisions, and routes, would be suitable for an electric bus test and evaluation; and other issues essential to the operation of an electric bus program (such as workforce training, maintenance, etc.). Future work would include procurement of electric buses (expected on property in summer 2021) and monitoring of performance, testing infrastructure, and assessing the best way to convert fleet to zero-emission vehicles over the next 25 years. In discussion regarding AV opportunities, but have not committed to a particular application or project.

Case Study	Transit Chicago, CTA; Draft Strategy, page 67

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

W	*Recommendation:* Establish a Regional Mobility Innovation Lab to systematically share knowledge and accelerate improvements in service provision, customer experience, and bus operator and passenger safety.	Primary	Support

Benefits	Innovative solutions to improving the bus will continually be explored and implemented, making the bus system more attractive to riders and more cost efficient to operate.
Outcome	Regional Mobility Innovation Lab (RMIL) is established with a clear role and measures of success.
Schedule	Starts: 2023 Complete: 2024
Dependencies/ Synergies	N/A

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Evaluation	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Low/Medium	Low	Medium

Primary Actor	**Action Steps**
	a. Perform literature and peer review to identify examples of different approaches and develop memo that investigates several options for RMIL in the region that may build on existing entities in the region. The research and review will identify potential approaches to establishing a RMIL and make a recommendation for how to implement one in the region. A particular focus will be the appropriate location to house the RMIL, such as at WMATA, within one of the local or state governments, at a University, at an independent organization, or as a stand-alone entity. This literature review will also include information on existing programs in the region (e.g. Arlington County's Mobility Lab and the CATT Lab) and nationally such as New York MTA's Transit Tech Lab. *Actors:* WMATA or TPB could convene a working group in lieu of a task force to direct this Action Step. WMATA, the local transit providers, and other outside entities would be involved. *Expected Duration:* 4 months
	b. Working with universities and innovation officers from around the region, establish RMIL charter that defines purpose, scope, staffing needs, and potential funding sources. The working group in Action Step a will work with regional stakeholders to determine the purview of the RMIL, including which mode of travel, the types of service, and kinds of innovations it will focus on. *Actors:* Directed by the regional working group and the entity identified in Action Step a to host the RMIL. Partners will include all transit providers in the region, research institutions, and others. *Expected Duration:* 4 months

W	*Recommendation:* Establish a Regional Mobility Innovation Lab to systematically share knowledge and accelerate improvements in service provision, customer experience, and bus operator and passenger safety.	Primary	Support

c. Establish regional funding source and agreements for resource sharing.

Identify and establish a regional funding source, which will be needed to facilitate RMIL staffing and outcomes/deliverables. Agreements will also be developed, based on best practices, to guide resource sharing with stakeholders and interested parties.

Actors: Directed by the lead entity identified in Action Step a with strong support from local and regional governments to identify and allocate funding.

Expected Duration: 4 months

d. Launch the RMIL.

Launch of the RMIL would include hiring any staff that is needed and beginning initial project work.

Expected Duration: 3 months and ongoing work

***Milestone Achievement*:** In 2024, the Regional Mobility Innovation Lab will have successfully launched.

Progress to date	Arlington County's Mobility Lab focuses on transportation issues and travel demand management.
Medium	The University of Maryland's CATT Lab focuses on transportation data analysis and visualization.
Case Studies	Transport for London's RoadLab; Draft Strategy page 162 New York MTA's Transit Tech Lab; Draft Strategy, page 162

Key for Primary and Support Actors

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
- City of Alexandria
- DDOT
- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

4. Empower a Publicly Appointed Task Force to Transform Bus

4.1. Recommendation 4: Overview

This set of recommendations will help ensure that the rest of the Bus Transformation Strategy is implemented and that all responsible parties are held accountable. Recommendation 4 is to:

Empower a publicly appointed Task Force to transform bus and lead the implementation of a truly integrated regional system.

Within Recommendation 4 there are three detailed recommendations:

X Convene a Task Force to **ensure implementation** of the Strategy **and provide long-term leadership** for the region's bus system.

Y Facilitate an independently published **annual progress report** on Bus Transformation Strategy implementation and a **bus performance scorecard** to track the level of service delivered to customers.

Z **Develop a platform for rider feedback**, administered by the task force, and an ongoing mechanism for incorporating feedback into regular revisions of the Strategy recommendations.

These recommendations will unlock the following benefits:

For customers:

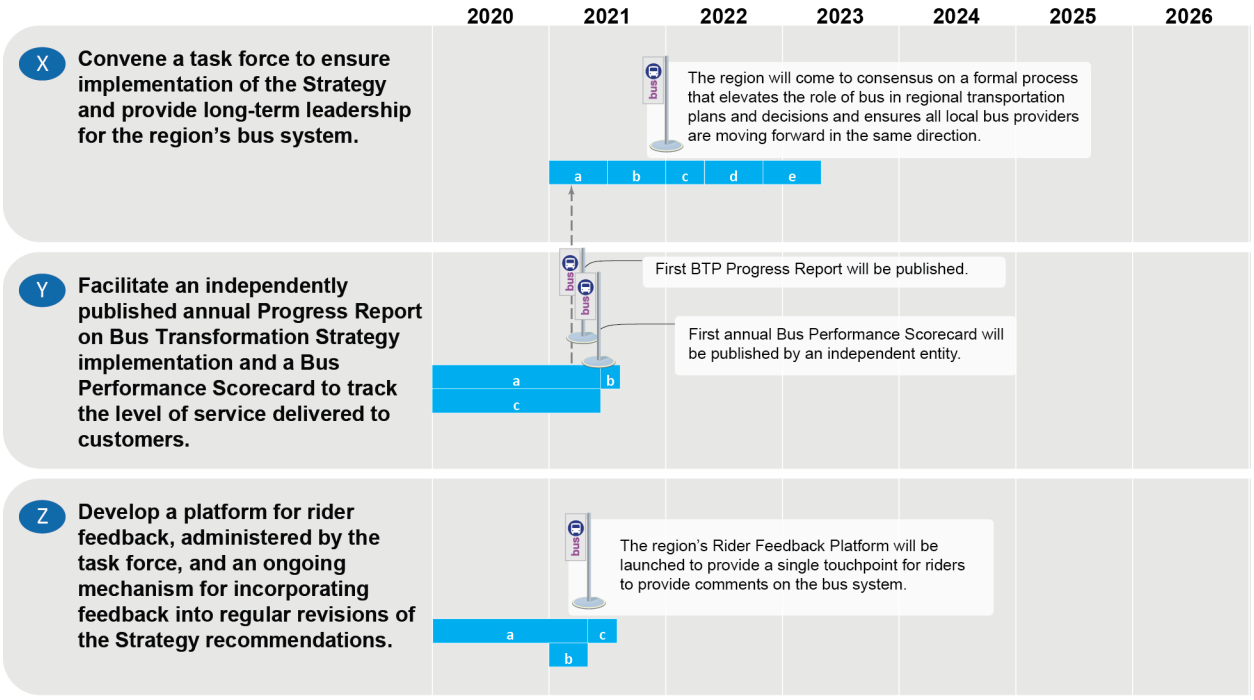
- A more seamless experience using the region's transit system
- A voice in shaping the Bus Transformation Strategy as it evolves

For the region's bus system:

- Improved customer satisfaction
- Less congestion on the region's roads
- Better coordination in regional decision making

4.2. Recommendation 4: Implementation

Figure 4-1: Detailed Action Plan: Recommendation 4



Lead and Supporting Actors	X	Y	Z
State and Local Government	Support	Support	
WMATA	Support	Support	Support
Working Group / Task Force	Lead	Support	
Independent Organizations	Support	Lead	Lead
Bus Operating Agencies	Support	Support	Support
Roadway Owner Agencies	Support		

Independent Organizations

State and Local Government

WMATA

Working Group / Task Force

Bus Operating Agencies

- ART
- CUE
- DASH
- DC Circulator
- Fairfax Connector
- Loudoun County Transit
- Ride On
- The Bus

Roadway Owner Agencies

- Arlington County DOT
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- FCDOT
- MCDOT
- MDOT SHA
- PG DPW
- VDOT

Note: Independent Organizations include advocates, labor, regional transportation agencies, and others.

4.3. Recommendation 4: Detailed Action Steps

X	*Recommendation:* Convene a task force to ensure implementation of the Strategy and provide long-term leadership for the region's bus system.	Primary	Support

Benefits	Bus will be seen as a valuable tool to solve the region's transportation issues. The bus system will feel more unified to customers and be prioritized by the region, resulting in a bus system that provides quicker, more reliable service and generates increases in ridership.
Outcome	Since the inception of this project, advocates, the business community, and community organizations have noted the need to improve coordination and collaboration among bus providers and road operators so that the bus system is **unified and customer-responsive** and is not beholden to geographic or funding boundaries. The current approach of nine providers acting independently creates a weak link in the region's transportation system. Bus is not meeting the needs of: a) the region's residents, especially the most vulnerable; b) the business community which requires consistent access for employees; and c) cities, counties, and states that are facing increasing budget pressure. These limitations suggest the need for **integrated decision making** to ensure that the multiple bus providers are moving in the same direction, where and when necessary, while still enabling creativity and individuality in service provided. With **better coordination** of operations, facilities, services and guidelines, the outcome will be more **efficient use of public resources**. The project's Executive Steering Committee proposed a **"task force"** that would elevate bus in the region's transportation discourse, shifting bus from the mode of last resort to the mode of choice on the region's roads. Local bus providers, jurisdictions, and regional transportation entities have expressed concerns that the task force, as proposed, would add to an already crowded governance system, potentially resulting in a loss of autonomy, and that the task force would not represent all who operate and pay for bus service. An effective organization would remove barriers, not create new ones. It would champion the bus at local, regional, and state levels, where bus as a viable solution is not appreciated.
Schedule	Starts: 2022 (other pre-task force activities begin in 2020) Complete: 2023 and ongoing
Dependencies/ Synergies	*Dependency:* The creation of the first Bus Transformation Scorecard (Recommendation Y) will help identify the appropriate scope of activities for a task force. *Synergies:* Many other recommendations would likely happen in a more coordinated fashion with a task force to support and promote them.

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Ratings	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium/High	High	Low

Primary Actor	Action Steps
	a. Discuss options to advance a more unified bus system through existing or other organizations. As part of the Bus Transformation Project, a white paper is being developed to investigate potential organizational forms to advance the Strategy and bus as a whole. The white paper includes: i. Assessment of the need for improved governance, oversight, and coordination of bus across the region. ii. Opportunities and challenges of existing entities to achieve regional coordination. iii. Summary of BTP Strategy recommendations that suggest increased regional coordination and oversight. iv. Case studies and lessons learned for bus-focused coordination and governance. v. Review and examination of different models or forms of the task force. vi. Overview and detailed structure for different models/forms. vii. Recommendations and next steps. This step will include stakeholder input and feedback from focus groups. Focus groups could be comprised of select members of the BTP Executive Steering Committee, Strategy Advisory Panel, and Technical Team. Responses to this white paper will guide subsequent action steps of this recommendation. The goal is broad agreement among stakeholders on the purpose and roles of an organization and greater definition of its proposed scope and authority. *Actors:* WMATA can convene, with participation from state, regional, and local agencies and jurisdictions, bus providers, roadway owner agencies, and independent organizations. *Expected Duration:* 6 months
	b. Define organization roles, responsibilities, and structure of the task force – strengthening existing organizations or developing new structure/collaborations. Key tasks include: i. Development of a brief on the role, responsibilities, technical and professional guidelines for members; challenges; expectations/outcomes; accountability; transparency; and duration of task force involvement. ii. Identification of individuals who meet the qualifications and acquisition of commitments from nominees to actively participate in the task force. *Actors:* Organizations identified in Action Step a. *Expected Duration:* 6 months ***Milestone Achievement*:** In 2021 the region will come to consensus on a formal process that elevates the role of bus in regional transportation plans and decisions and ensures all local bus providers are moving forward in the same direction.
	c. Identify functional location, funding, and staff support for task force, if necessary. Key tasks include: i. Entity identified in Step a identifies the appropriate location for the task force and support staff, if necessary, and takes necessary action to achieve its remit. ii. Determine what type of staff is needed to support task force and the experience necessary (e.g., technical or administrative, level of experience, unique skills or qualifications). iii. Determine/obtain agreement on provision of staff, expertise support, and funding, if needed. *Actors*: Organization established in Action Step a. *Expected Duration:* 6 months

d. Launch task force (or alternative) and develop short-term (1-3 years) and long-term workplans.

Key tasks include:

i. Task force develops work plan that establishes clear goals, actions, responsibilities and expected outcomes for 6, 12, 24, and 36-month horizons based on BTP Action Plan. Sample tasks in first six months include setting task force vision, mission, and goals; acquiring dedicated funding; and identifying ongoing staffing requirements
ii. Determine long-term future of task force
    i. Task force decides its role going forward
    ii. Task force determines regional and/or state agreement required
    iii. Task force identifies sources for permanent funding

Actors: Task force.

Expected Duration: 8 months

e. Implement work plans and oversee Bus Transformation Project Recommendations and progress.

Key tasks include:

i. Task force initiates implementation of recommendations for which it is responsible by convening the relevant organizations and decision makers.
ii. Task force tracks/monitors implementation of recommendations by others.

Actors: Task force.

Expected Duration: Ongoing

Progress to date *Low*	WMATA has initiated development of the White Paper referenced above in Step a. as part of the Bus Transformation Project.
Case Studies	• Chicago Regional Transit Authority; *Bus Transformation Project White Paper #2*, page 71 • Bay Area MTC (San Francisco, CA); *Bus Transformation Project White Paper #2*, page 72 • Hamburg HVV; *Bus Transformation Project White Paper #2*, page 73

Y	*Recommendation:* Facilitate an independently published annual Progress Report on Bus Transformation Strategy implementation and a Bus Performance Scorecard to track the level of service delivered to customers.	Primary	Support

Benefits	Transparency and accountability will encourage regional participation and faster implementation of the Bus Transformation Strategy.
Outcome	The first annual progress report on implementation is completed. A Bus Performance Scorecard is developed and published, with plans for additional measures and/or additional bus systems to be integrated over time.
Schedule	Starts: 2020 — Complete: Ongoing, with annual updates throughout implementation
Dependencies/ Synergies	*Dependency:* The creation of the first Bus Transformation Scorecard will help identify the appropriate scope of activities for a task force (Recommendation X). *Synergy:* Preceded by Recommendation B: Shared Bus Data

Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Ratings	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium/High	Low	Medium

Primary Actor — **Action Steps**

a. Identify entity that will create the annual BTP Progress Report.

In lieu of a task force, another entity will have to be identified and step forward to lead this recommendation. This Progress Report is conceptually designed to track progress towards achieving the Bus Transformation Strategy (as shown in an example below). Reporting on the operational performance of the bus system is to be separate activity (see Action Step b).

Example Bus Transformation Progress Report:

Strategy point	Recommendation	Completion	Key leads	Status	Notes
Provide frequent & convenient bus service	Establish regional service guidelines	[Date]	[Name]	Complete	
Give buses priority on roadways	Obtain commitment from elected officials to prioritize bus			On-track	
	Adopt bus priority guidelines			Progressing but facing obstacles	
Create an excellent customer experience	Provide accurate real-time information			Behind schedule	

		Primary	Support
Y	*Recommendation:* Facilitate an independently published annual Progress Report on Bus Transformation Strategy implementation and a Bus Performance Scorecard to track the level of service delivered to customers.		

This Action Step comprises several supporting actions, including:

i. Seeking approval from each bus operator and jurisdiction to access and publish data about the progress of Bus Transformation recommendations. This may require data sharing agreements with individual agencies, or the owner of the shared data repository (see Recommendation B).
ii. Creating measures to track the progress of Strategy implementation. The intent is to be able to demonstrate the progress of the multiple initiatives occurring simultaneously across the region, highlighting the efforts of agencies and jurisdictions to improve bus.
Tracking would be developed to include each Strategy recommendation. It may be effective to begin with a selection of specific achievements that have been identified as high priority
iii. Conducting a milestone status check and publishing the annual Progress Report.
iv. Sharing the analysis with regional partners, providing a systematic opportunity for review and comment. Then publishing the Progress Report.

Actors: Independent entity, along with a working group of regional partners.

Expected Duration: 12 months to complete first Progress Report and ongoing for annual updates

***Milestone Achievement*:** The first Bus Transformation Progress Report will be published.

b. Jurisdictions and agencies review Progress Report and respond through modifications to Strategy

i. Red flag review: Jurisdictions and agencies review Progress Report to identify areas for intervention and designate responsible entities to resolve any roadblocks.
ii. Resolution: Key leads for each milestone implement recovery plans, engaging relevant stakeholders as needed.

Actors: Agencies and jurisdictions responsible for Bus Transformation implementation.

Expected Duration: 2 months (and ongoing)

		Primary	Support
Y	*Recommendation:* Facilitate an independently published annual Progress Report on Bus Transformation Strategy implementation and a Bus Performance Scorecard to track the level of service delivered to customers.		

c. Create and publish annual Bus Performance Scorecard.

The Bus Performance Scorecard is designed to track and quantify the performance of the bus system operations against a set of designated performance metrics. This makes it different from the BTP Progress Report outlined in Action Step a.

In lieu of a regional task force, an entity will need to develop and public the Bus Performance Scorecard. This may be the same entity identified to develop the BTP Progress Report, the owner of the shared data repository (see Recommendation B) or some other group (e.g., Coalition for Smarter Growth who has recently published the Metrobus Report Card).

This Action Step comprises several supporting actions, including:

i. Seeking approval from each bus operator and jurisdiction to access and publish data about the progress of Bus Transformation recommendations. This may require data sharing agreements with individual agencies, or the owner of the shared data repository (see Recommendation B).
ii. Creating metrics associated with performance of bus (e.g., financial efficiency, ridership, on-time performance, customer experience, etc.).
iii. Analyzing bus data annually to develop and update the Scorecard.

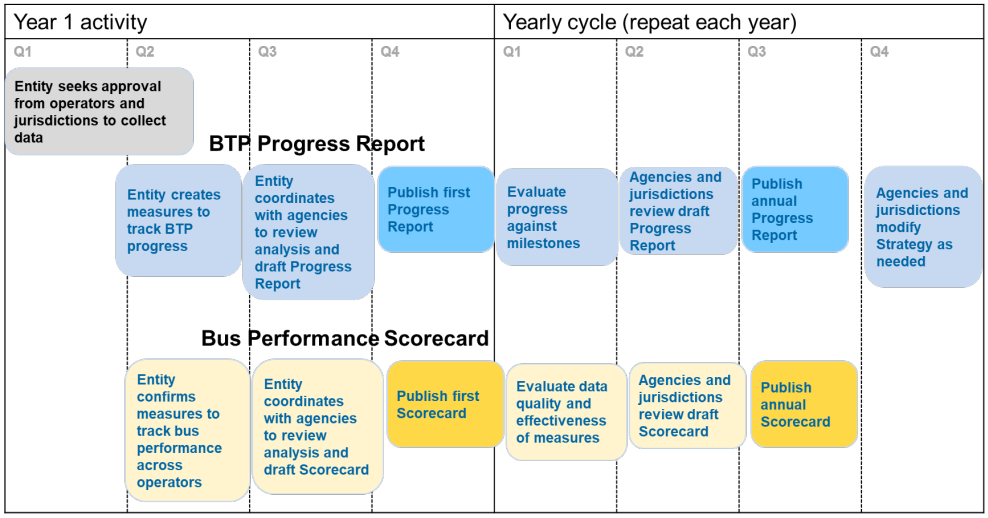
Actors: Independent entity, along with a working group of regional partners.

Connections: The first Bus Performance Scorecard can be published before or after the BTP Progress Report, and Action Step c is not dependent on Action Steps a and b.

Expected Duration: 12 months (and ongoing)

***Milestone Achievement*:** The first annual Bus Performance Scorecard will be published by an independent entity.

Overall, the actions for this recommendation would follow the following conceptual schedule. It may be desirable to publish the Progress Report during a different quarter of each year than the Performance Scorecard.



		Primary	Support
Y	*Recommendation:* Facilitate an independently published annual Progress Report on Bus Transformation Strategy implementation and a Bus Performance Scorecard to track the level of service delivered to customers.		

Progress to date

Medium

CSG piloted the Metrobus Report Card in 2019, focusing on the WMATA Priority Corridor Network routes. The Report Card focuses on:

- Headway Adherence
- Schedule Adherence
- Average Speed

At varying levels of detail and frequency of updates, the following agencies publish performance metrics:

- DASH
- Metrobus,
- City of Fairfax
- Fairfax County
- MCDOT

DRPT and NVTC collect and publish performance metrics for all of their member/grantee agencies.

The following agencies have plans to publish performance data within the next two years:

- Loudoun County
- DDOT

Case Studies

MBTA; Draft Strategy, page 177.

Z	*Recommendation:* Develop a platform for rider feedback, administered by the task force, and an ongoing mechanism for incorporating feedback into regular revisions of the Strategy recommendations.	Primary	Support

Benefits	Regular revisions and updates to the Strategy will make sure that it remains relevant and able to address new issues as they arise. Incorporating more rider feedback illustrates the region's commitment to providing the best bus system possible.				
Outcome	Public engagement and feedback plan have been adopted. Mechanisms for incorporating rider feedback into the Strategy have been piloted.				
Schedule	Starts: 2020		Complete: Ongoing, with annual updates throughout implementation		
Dependencies/ Synergies	*Synergies:* Relates to Recommendation B (Shared Bus Data); Will feed into Recommendation L (Marketing) and Recommendation T (Customer Service)				
Goals Supported	Regional Connectivity	Rider Experience	Financial Stewardship	Sustainable Economic Health & Access to Opportunity	Equity

Ratings	**Implement New Initiative**		
	Transformation Potential	Difficulty of Implementation	Progress to Date
	Medium/High	Low	Medium

Primary Actor	**Action Steps**
	a. Create a regional platform for rider feedback. In lieu of a regional task force, another entity such as WMATA or TPB will need to lead this recommendation. This entity will convene rider representatives and rider advocacy groups from each bus provider to confirm this outlined approach. The new platform will not replace or downgrade the existing structures for providing feedback, but rather will provide a forum to strengthen ongoing work by agencies. The rider feedback platform will consist of: • Website for riders to provide feedback/input, and for agencies to consolidate information. • An "audit" function for how well agencies are responding to rider feedback. • Schedule of regular meetings that bring together riders and standing Rider Advisory groups. The platform will adapt to current needs and concerns but will not focus on detailed customer service that is done by local bus providers day-to-day. The platform will provide an ongoing opportunity for co-education between bus providers and rider representatives, including: • Conduct best practices research to refine structure for platform and functions. • Building from Recommendation T (Customer Service), train staff with customer service skills and empowered with local jurisdictional knowledge and experience. • Related to Recommendation L (Marketing), deploy platform to support project-level public engagement. For example, the proposed system redesign (Recommendation C) will include significant public engagement. This platform can complement that engagement by convening stakeholders and enhancing the flow of information. *Actors:* Independent entity, along with a working group comprised of transit operators and bus advocacy groups. *Expected Duration:* 16 months ***Milestone Achievement*:** The region's Rider Feedback Platform will be launched to provide a single touchpoint for riders to provide comments on the bus system.

Z	*Recommendation:* Develop a platform for rider feedback, administered by the task force, and an ongoing mechanism for incorporating feedback into regular revisions of the Strategy recommendations.	Primary	Support

b. Create an ongoing mechanism for incorporating feedback into regular revisions of the Strategy recommendations.

   i. Via the platform, information is shared among the network of regional stakeholder organizations whose decisions affect bus.
   ii. Incorporate feedback and trends in future revisions of the Bus Transformation Strategy.
   iii. Track trends in feedback and consider in future iterations and revisions of the Bus Transformation Strategy and Action Plan.
   iv. Every 2-3 years re-evaluate the prioritization of Bus Transformation Strategy recommendations based on this input.

Actors: Independent entity, along with a working group comprised of transit operators and bus advocacy groups.

Expected Duration: 4 months (and ongoing)

c. Encourage more elected officials and decision-makers to participate in bus ride-along programs.

   i. Brief elected officials and senior agency staff on the structure of the platform and input from riders and rider groups.
   ii. Through standing meetings of rider groups and through meetings/events organized via the new platform, provide opportunities for elected officials and senior agency staff to interact with riders and rider groups.

Actors: Independent entity, along with a working group comprised of transit operators and existing bus advocacy groups.

Expected Duration: 3 months (and ongoing)

Progress to date

Medium

Most of the region's transit providers provide opportunity for customer feedback.

- DASH receives customer feedback via phone, email, and social media. DASH also offers public forums and is forming several advisory committees comprised of DASH riders and senior/disabled riders.
- City of Fairfax CUE riders provide feedback via phone or email. There is no rider council.
- Fairfax Connector customers can contact customer service by telephone, email, social media. The County has conducted several customer surveys in the past year.
- WMATA has a Riders Advisory Council that reports to the WMATA Board. Survey bus riders as part of individual corridor studies, as part of annual State of Good Operations, and as part of the annual budget process.
- Prince George's County has a quarterly Rider Advisory Council meeting to enable customers to provide feedback on services. The bulk of comments/suggestions come through the 311 system or directly through the customer service line.

A. Evaluation and Progress

A1: Evaluation Methodology

Overview

As part of the development of this Action Plan, each recommendation was evaluated based on two categories:

- **Transformational Potential** was determined as a combination of the magnitude of impact that the recommendation could have with the level of public support that it generated.
- **Difficulty of Implementation** was determined based on three factors:
    - Progress-to-date as determined for all of the bus service providers and jurisdictions in the region based on interviews and a detailed survey;
    - Institutional challenges that would need to be overcome, such as Board adoption and/or legislation; and
    - The level of investment needed.

The results of this evaluation can be found in the detailed summary of each Recommendation in Chapters 1-4 of this document.

Evaluation Criteria

Table A- 1 shows the rubric that was used to evaluate each recommendation for Transformational Potential, while **Table A-2** shows the rubric used to evaluate the Implementation Challenge associated with each recommendation.

Table A- 1: Recommendation Evaluation Methodology – Transformational Potential

Evaluation	Description	Scoring Methodology
Level of public support	Public and stakeholder feedback from public workshops and 3,000 survey responses. Sources: Public Survey Summary and Results; Public Feedback Report	High = If the recommendation is about a topic that was rated highly by the public. • From Survey: choice of recommendation preferences and comment compilation summary. • From open houses: dot exercises and rating questions • Also consider what recommendations are appealing to the public based on professional judgment that were not addressed directly in the surveys or questions. Medium = If the recommendation was not highly rated nor received no comments or comments indicating a lack of support. Low = If the recommendation is about a topic that did not get mentioned / come through the public feedback report, OR if it's something that the public probably doesn't care a lot about, either because people stated they did not care at the public meetings or through professional judgment. *The top three scoring recommendations from the SAP voting exercise were also bumped up one level in the scoring to reflect that preference.*
Magnitude of impact	Based on how much the recommendation moves us towards the Vision (by meeting objectives and reaching goals as defined earlier in the study).	High = Would help achieve 4 or more of the project goals. Medium = Would help achieve 2-3 of the project goals. Low =Would help achieve 1 of the project goals.
Transformational Potential	Overall transformational potential	Average of Public Support rating and Magnitude of Impact rating, resulting in five gradations: High, M/H, Medium, L/M, Low

Table A- 2: Recommendation Evaluation Methodology – Difficulty of Implementation

Evaluation	Description	Scoring Methodology
Investment	Capital cost estimate based on work-to-date/industry standards/similar projects *plus* increased operating costs (include 5 years of operating costs)	High = ≥$8,000,000 Medium = ≥$1,000,000 and <$8,000,000 Low = <$1,000,000
Institutional challenge	Level of effort required to achieve agency/jurisdiction adoptions.	High = WMATA Board, Local Jurisdiction Boards/Councils, and State/DC legislation Medium = WMATA Board and Local Jurisdiction Boards/Councils and Unions Low = Staff/Director Level decisions or WMATA Board only *The level of challenge for the region as a whole is based on the most difficult situation. In other words, if one jurisdiction has already approved something but the others need board/council approval, the recommendation would be rated for needing board/council approval*.
Progress to-date	Captures existing level of progress in region (commitment, pilot, implementation). Level of progress to-date was determined through a detailed survey of all bus operators and other agencies involved in overseeing and running the bus system in the region.	High = Six or more operating agencies have piloted, implemented, or committed Medium = Four or more operating agencies have piloted, implemented, or committed Low = Three or fewer operating agencies have piloted, implemented, or committed

<table>
<tr><th>Evaluation</th><th>Description</th><th>Scoring Methodology</th></tr>
<tr><td>Difficulty of Implementation</td><td>Based on the results of institutional challenge (takes time to obtain approvals/legislation); progress to date (less progress means more time); and investment (takes time to obtain funding).

Results in High, Medium, and Low Ratings</td><td>First evaluate Difficulty of Implementation based on progress to-date and institutional challenges:
<table>
<tr><td></td><td></td><td colspan="3">Institutional Challenge</td></tr>
<tr><td></td><td></td><td>Low</td><td>Med</td><td>High</td></tr>
<tr><td rowspan="3">Progress</td><td>High</td><td>L</td><td>L</td><td>M</td></tr>
<tr><td>Med</td><td>L</td><td>M</td><td>M</td></tr>
<tr><td>Low</td><td>L</td><td>H</td><td>H</td></tr>
</table>
After applying the table above, adjust ratings to reflect time to obtain funding (if needed) using the following lookup table for “Cost-Modified Difficulty of Implementation:”
<table>
<tr><td></td><td></td><td colspan="3">Cost</td></tr>
<tr><td></td><td></td><td>Low</td><td>Med</td><td>High</td></tr>
<tr><td rowspan="3">Initial Difficulty</td><td>High</td><td>H</td><td>H</td><td>H</td></tr>
<tr><td>Med</td><td>M</td><td>M</td><td>M</td></tr>
<tr><td>Low</td><td>L</td><td>L</td><td>M</td></tr>
</table>
These resulting cost-modified Difficulty of Implementation ratings were then reviewed vis-à-vis the number and intensity of Action Steps and any appropriate changes were made.</td></tr>
</table>

In addition to developing the Transformational Potential and the Difficulty of Implementation, another metric evaluated for each recommendation was the "return on investment" in a loose sense based on high, medium, or low costs and the magnitude of impact (as defined in the previous table). The calculation for the return on investment rating is shown in **Table A- 2**.

Table A- 2: Return on Investment Calculation

		Investment		
		Low	Med	High
Magnitude of Impact	High	H	M/H	M
	Med	M/H	M	L/M
	Low	M	L/M	L

Evaluation Results

The results of each of these evaluations can be found in **Table A-3**.

Table A- 3: Recommendation Ratings

Recommendations	***Evaluation Categories***							
	Transformational Potential	Public Support	Magnitude of Impact	**Difficulty of Implementation**	Investment	Progress to-date	Institutional Challenge	**Return on Investment**
Recommendation 1: Provide frequent and convenient bus service that connects communities and promotes housing affordability, regional equity, and economic growth.								
A: Establish regional standards across bus systems to provide consistent bus service, tailored by location and time of day.	**H**	H	H	**L**	L	H	M	H
B: Collect and share standardized bus operations and performance data across agencies to improve transparency and better plan bus service.	**M/H**	H	M	**L**	L	H	L	M/H
C: Collaboratively restructure the bus network to create the most efficient and customer-focused bus system. [*Mass Transit Plan as defined in the WMATA Compact]	**H**	H	H	**H**	H	L	H	M
D: Cooperatively assess Metrobus' current service definitions and funding allocation formula using the WMATA Board's authority.	**L/M**	L	M	**H**	M	L	H	M
E: Leverage existing efforts to provide flexible, on-demand services where and when fixed route service is not efficient, through collaborative planning with bus operators and unions.	**L/M**	L	M	**M**	L	M	M	M/H
Recommendation 2: Give buses priority on roadways to move people quickly and reliably.								
F: Obtain commitments from state and local agencies (including roadway owners) to adopt consistent guidelines, bolster jurisdictional capital spending, and expedite coordinated implementation of bus priority.	**H**	H	H	**H**	H	L	H	M

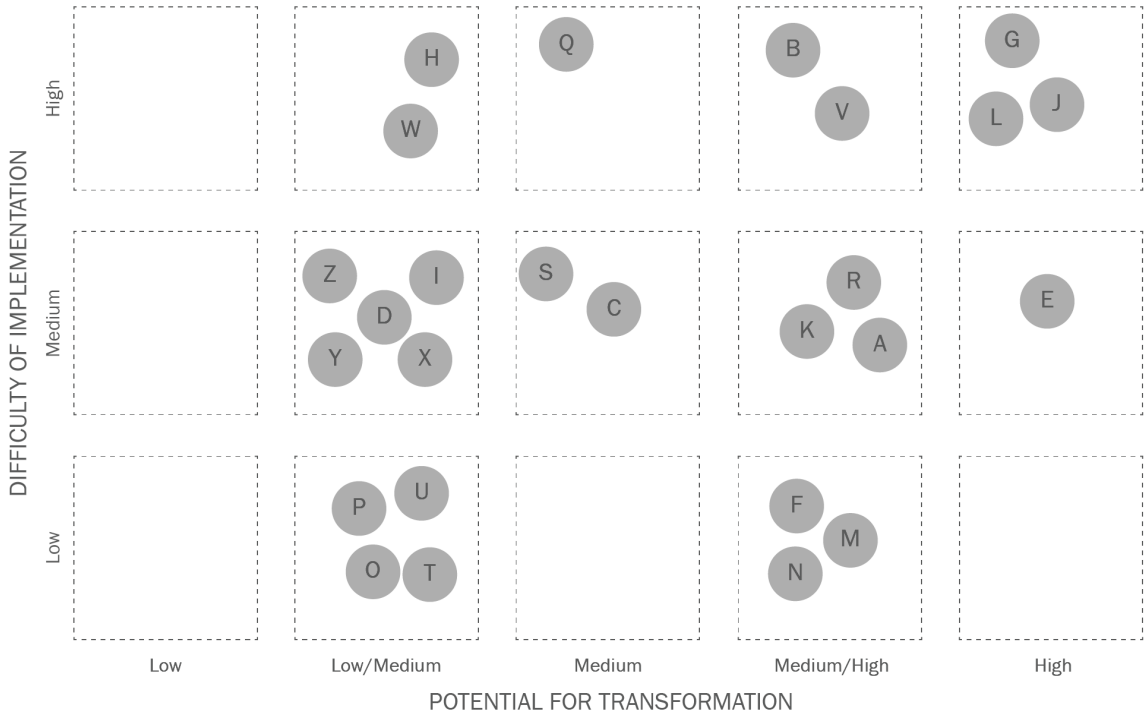
Recommendations	***Evaluation Categories***							
	Transformational Potential	Public Support	Magnitude of Impact	**Difficulty of Implementation**	Investment	Progress to-date	Institutional Challenge	**Return on Investment**
G: Implement enforcement policies that establish bus priority and result in reliable and fast service.	**M/H**	H	M	**M**	M	M	H	M
H: Establish a capital program at WMATA that supports implementation of priority projects, including BRT.	**H**	H	H	**H**	H	L	H	M
I: Support regional congestion mitigation efforts that bolster bus priority and move more people more efficiently.	**L/M**	L	M	**H**	H	L	H	L/M
Recommendation 3: Create an excellent customer experience to retain and increase ridership.								
Equip riders with high-quality, accurate, and easily accessible information to plan a trip.								
J: Ensure that accurate, real-time service information for all providers is available in one place	**M/H**	H	M	**M**	M	M	M	M
K: Make bus service easy to understand with legible maps and customer-friendly route names across providers	**L/M**	M	L	**L**	L	L	L	M
L: Expand marketing efforts to enhance visibility of bus options and benefits	**L/M**	L	M	**L**	M	L	L	M
Make paying bus fares easier.								
M: Provide free transfers between bus and rail	**M/H**	H	M	**H**	H	L	M	L/M
N: Provide reduced fare options for low-income riders	**M**	M	M	**H**	H	L	M	L/M
O: Create a mobile solution to plan and pay for trips in one place	**M**	M	M	**L**	H	H	L	L/M
P: Develop new regional passes that work across all providers, and make bus fares clear and understandable	**L/M**	L	M	**M**	M	M	M	M
Q: Incentivize more employers to offer transit benefits	**L/M**	L	M	**M**	L	M	M	M/H

Recommendations	***Evaluation Categories***							
	Transformational Potential	Public Support	Magnitude of Impact	**Difficulty of Implementation**	Investment	Progress to-date	Institutional Challenge	**Return on Investment**
Make it safer and more pleasant to ride the bus.								
R: Make bus stops and shelters safe, comfortable, accessible, and technology-enabled	**M/H**	H	M	**M**	H	H	M	L/M
S: Advance technology and programs that improve the safety of everyone on board by partnering with riders, bus operators and unions	**M**	M	M	**M**	M	M	M	M
T: Empower front-line staff to provide exceptional customer service	**L/M**	M	L	**M**	L	M	M	M
U: Ensure that all buses meet the highest standards of comfort and cleanliness	**L/M**	M	L	**L**	M	L	L	L/M
Pursue innovation and bus improvement.								
V: Investigate new vehicle technologies to make bus service better, such as electric buses and automation	**L/M**	L	M	**M**	L	M	M	M/H
W: Establish a Regional Mobility Innovation Lab to systematically share knowledge and accelerate improvements in service provision, customer experience, and bus operator and passenger safety	**L/M**	L	M	**L**	M	M	L	M
Recommendation 4: Empower a publicly appointed task force to transform bus and lead the implementation of a truly integrated regional system.								
X: Convene a task force to oversee implementation of the Strategy and provide long-term leadership for the regional bus system	**M/H**	M	H	**H**	M	L	H	M/H

Recommendations	***Evaluation Categories***							
	Transformational Potential	Public Support	Magnitude of Impact	**Difficulty of Implementation**	Investment	Progress to-date	Institutional Challenge	**Return on Investment**
Y: Facilitate an independently published annual progress report on Bus Transformation Strategy implementation and a bus performance scorecard to track the level of service delivered to customers.	**M/H**	H	M	**L**	L	M	L	M/H
Z: Develop a platform for rider feedback, administered by the task force, and an ongoing mechanism for incorporating feedback into regular revisions of the Strategy recommendations.	**M/H**	H	M	**L**	M	M	L	M

Figure A-1 shows the resulting Difficulty of Implementation and Potential for Transformation evaluations visually. Recommendations shown towards the top of this diagram will likely be more difficult to implement in the whole region. Recommendations shown further to the right are more likely to result in a larger transformation to the regional bus system.

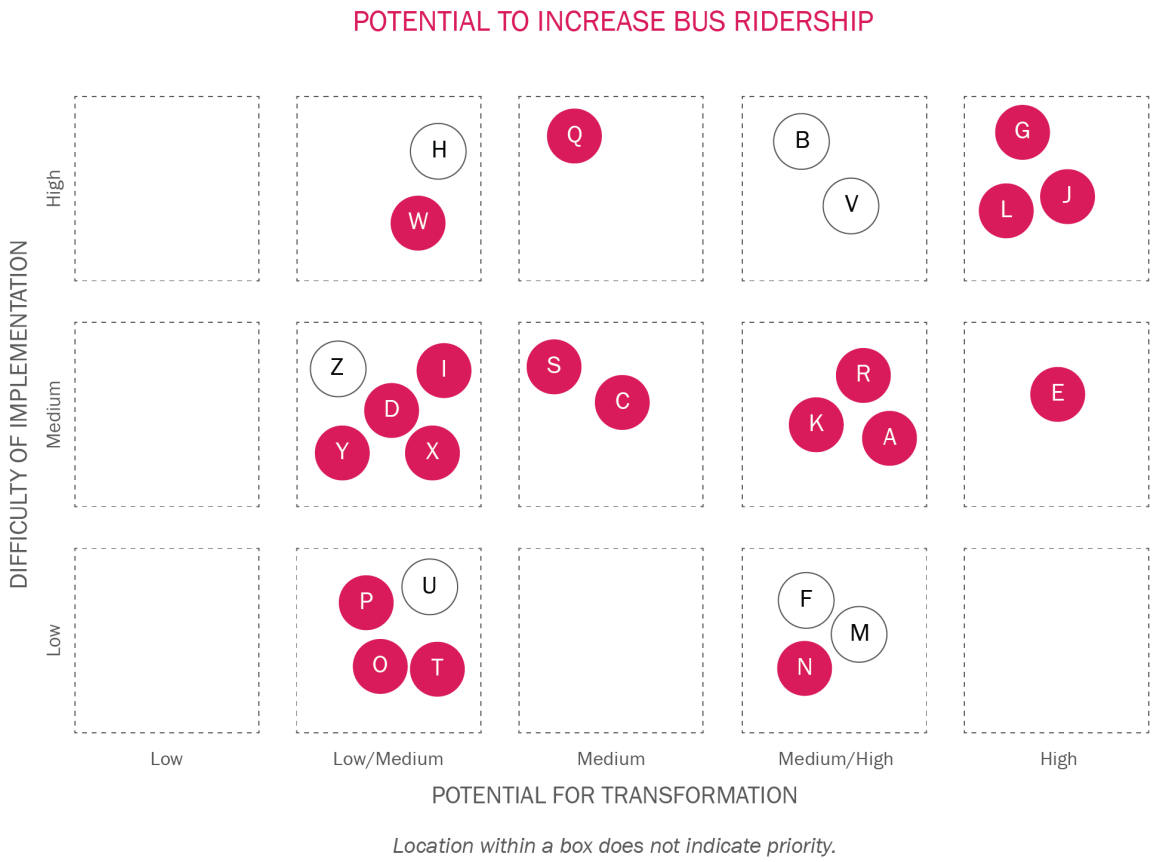
Figure A- 1: Recommendation Transformative Potential and Difficulty of Implementation



Location within a box does not indicate priority.

The recommendations highlighted in pink in Figure A-2 are those with the potential to increase bus ridership. The vast majority of recommendations have the potential to increase bus ridership in the region.

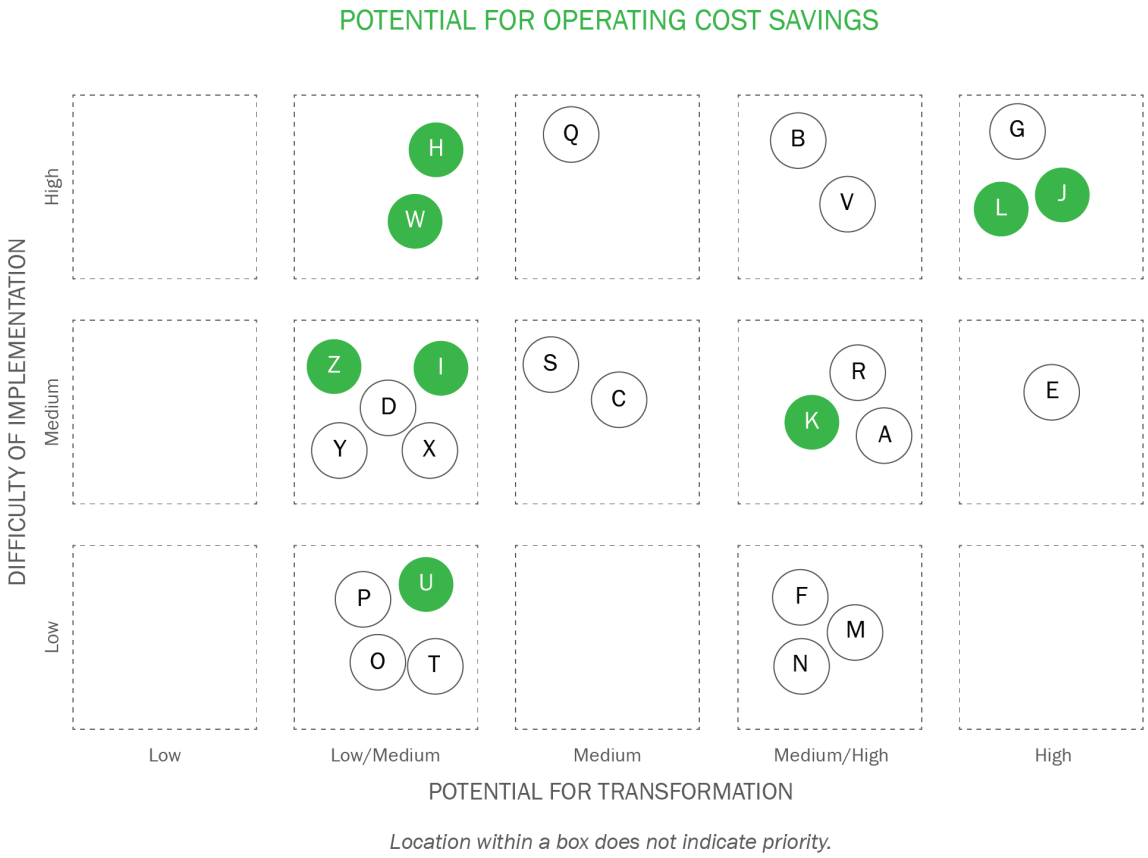
Figure A- 2: Recommendations and the potential to increase bus ridership



Location within a box does not indicate priority.

The recommendations highlighted in green in Figure A-3 are those with the potential to realize operating cost savings.

Figure A- 3: Recommendations and the potential for operating cost savings



Location within a box does not indicate priority.

The recommendations highlighted in purple in Figure A-4 are those which for or more agencies have made significant progress in realizing.

Figure A- 41: Recommendations and operator progress

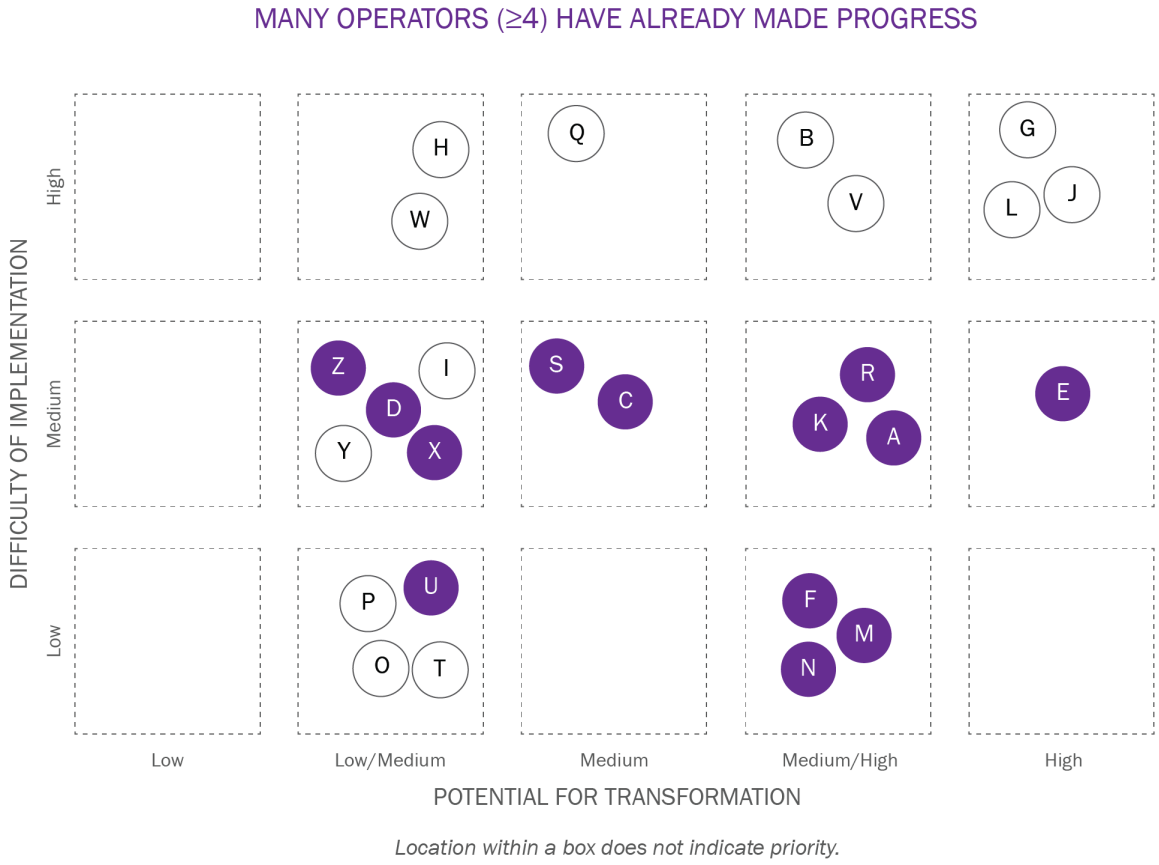
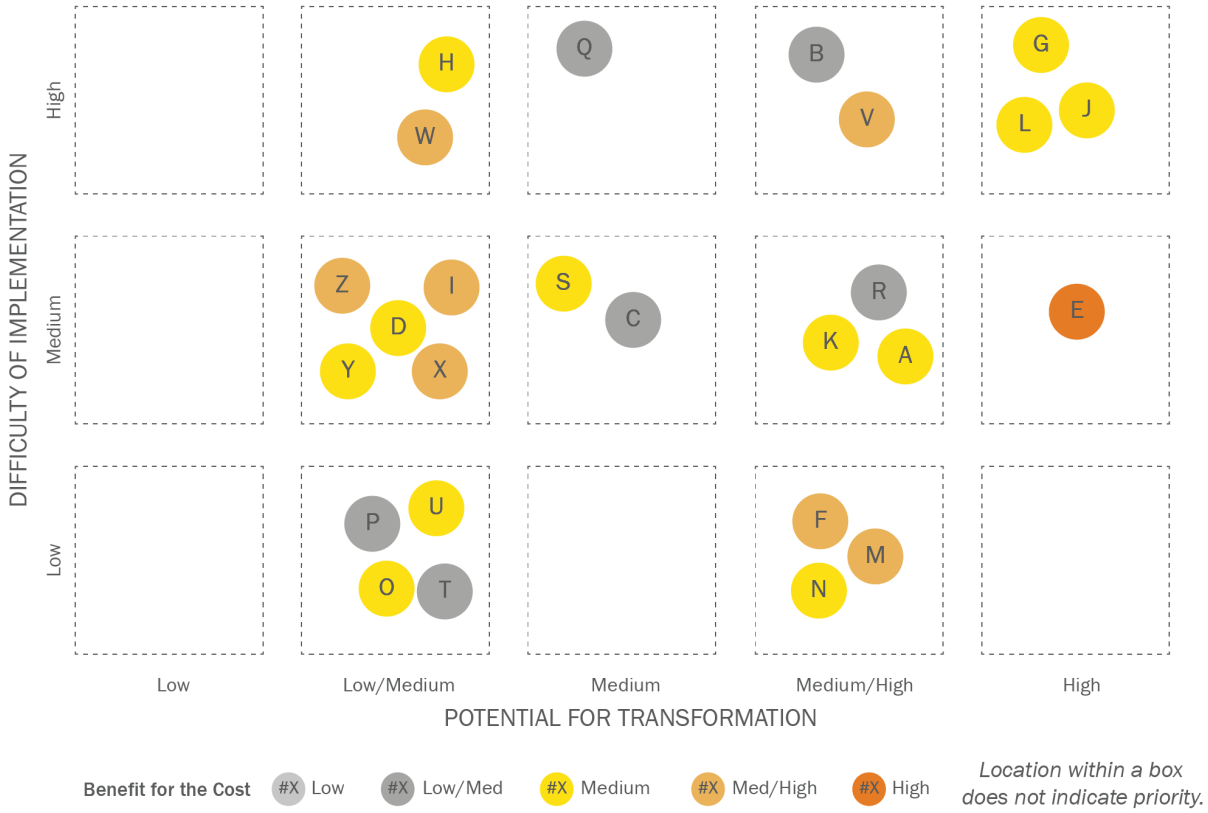


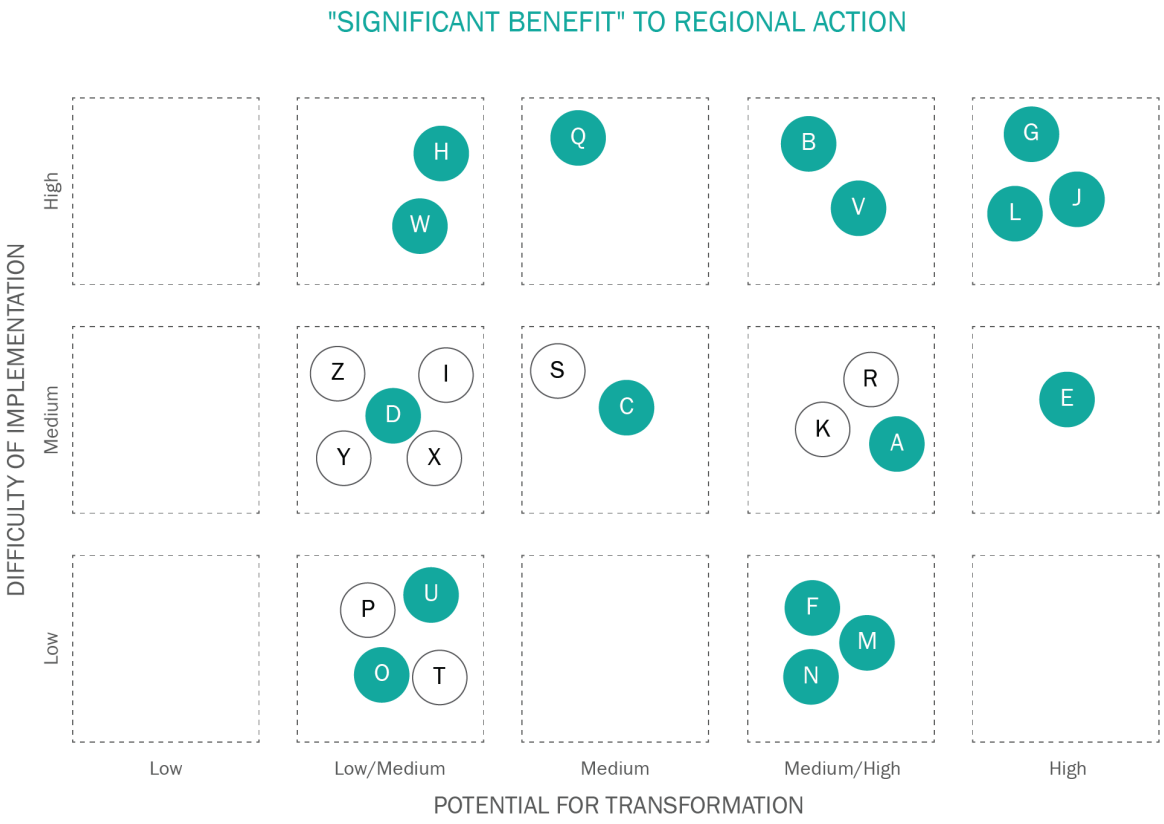
Figure A-5 highlights the expected Return on Investment for each Recommendation.

Figure A- 5: Recommendations and potential return on investment



The recommendations highlighted in teal in Figure A-6 are those where a regionally coordinated effort would result in a significant benefit beyond that which would be achieved by each agency/provider/jurisdiction pursuing the recommendation independently

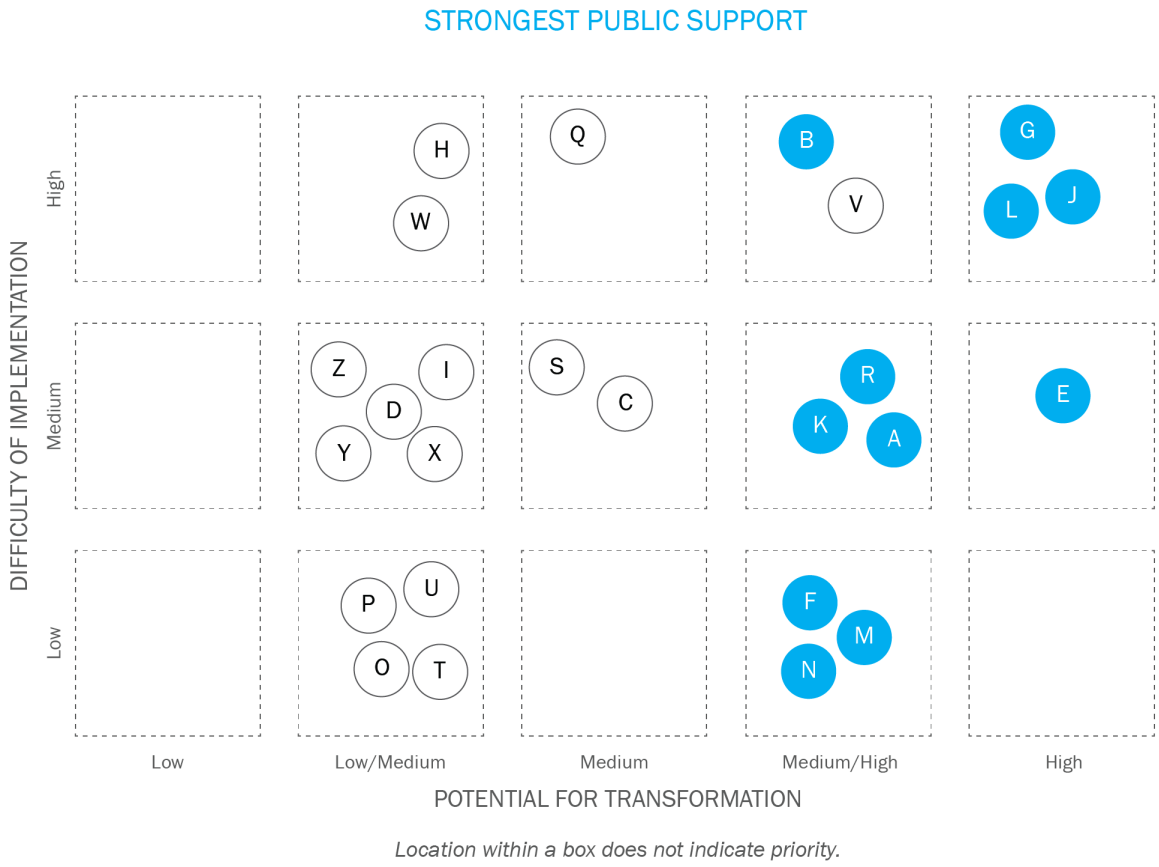
Figure A-6: Recommendations with potential to have a "significant benefit" with regional action



Location within a box does not indicate priority.

The recommendations highlighted in blue in Figure A-7 are those with the strongest support from the public.

Figure A-7: Recommendations and relationship to public support



Location within a box does not indicate priority.

A2: Charting Progress

This Action Plan is intended to be a living document that will adapt to progress and change throughout the 10-year process.

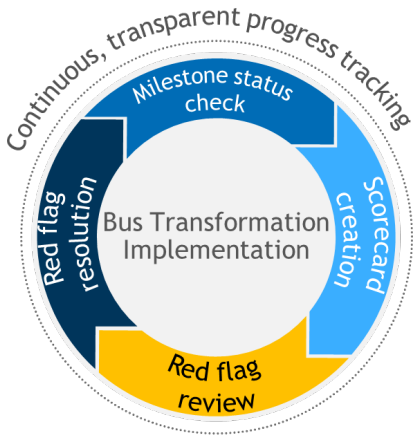
Many regional strategic plans develop broad recommendations that may or may not be referenced, or acted on, by participating agencies in the proceeding years. The intent for this Strategy is that the implementation of the recommendations through this Action Plan, and the results of that implementation, will be tracked and reported on regularly – at a minimum to the WMATA Board and the National Capital Region Transportation Planning Board. That tracking and reporting process will become a feedback loop that informs adjustments to the Strategy, its recommendations, and implementation efforts.

Mechanisms

The progress will be systematically recorded and reported on through several avenues, including through:

- The results of Recommendation Y, that will include an independently published annual progress report on Bus Transformation Strategy implementation and a bus performance scorecard to track the level of service delivered to customers. This process will ensure accountability, provide insight into lagging milestones, enable prioritization of key actions, and enhance visibility into regional bus performance and actions the region is taking (or not) to improve it.
- The results of Recommendation Z that will develop a platform for rider feedback and an ongoing mechanism for incorporating feedback into regular revisions of the Strategy and the Action Plan.
- Individual agencies reporting progress on their efforts (launching pilots, improving service, new initiatives, etc.).
- Regional agencies reporting on cross jurisdictional coordination and improvement efforts.
- Work performed and reported on by the Regional Mobility Innovation Lab (recommendation W).

Figure A- 8: Progress Tracking Cycle



The Action Plan: A Living Document

This document has been developed in collaboration with the project Technical Team, and the prioritization process is documented in a transparent manner—all with the intent that the contents can be updated to reflect progress and change from year to year. As necessary, this Action Plan document will be revisited and revised to suit changing circumstances such as funding availability, technology changes, and jurisdiction/agency roles.

Together these elements will ensure that the Strategy and Action are not merely another aspirational regional document; but a movement that residents, riders, public servants, bus operators, and decision makers can become part of, and be proud of the transformation to bus transit that results.