Large-Scale and Emerging Priority Transit Corridors Assessment

One of the top priorities of MPOT 2035 is to identify and update strategies to make transit more frequent, convenient, accessible, and affordable for people who live, work, or visit Prince George's County. One way to improve transit throughout the County is to focus transit investment along high-demand corridors—to impact service capacity, reliability, and speed. For best results, these strategic transit corridors should be selected using credible evaluation criteria: high-capacity, high-frequency, high-speed transit is more efficient in corridors with a strong mix of population and employment densities, a vibrant mix of land uses that attracts diverse trips, and when connecting fast-growing areas or addressing severe service gaps.

With a robust transit network serving the County, including 28 fixed-routes provided by TheBus; WMATA's Metrorail and Metrobus service with 15 Metrorail Stations and 68 bus lines, MARC's two commuter rail lines with 8 stations, the Regional Transit Agency of Central Maryland (RTA) fixed routes, and the 16-mile light rail Purple Line under construction by MDOT MTA, priority transit corridors are not a new concept and have been the subject of multiple studies and plans.

The recent storyline begins in 2018, when the Prince George's County Department of Public Works and Transportation (DPW&T) developed a five-year plan for improving and expanding transit, the *Prince George's County Transit Vision Plan*. The *Transit Vision Plan* provides a roadmap for short-term, mid-term, and long-term improvements to transit in the County.

With the intent to enable faster, more frequent, and reliable transit, the *Transit Vision Plan* recommended the development of a master plan for a countywide fixed-guideway system that would evaluate candidate corridors and assess feasible guideway improvements. Consequently, DPW&T has released a draft *BRT Feasibility Study* that builds upon past work including *WMATA's Priority Corridors Network study*, the 2012 *Prince George's County Transitway Systems Planning Study*, and subsequent efforts to develop a network of potential BRT corridors.

To build on those efforts, we reviewed and screened a range of identified and potential high- and medium-capacity transit corridors to help guide the prioritization of future transit enhancements in the County. We performed a high-level evaluation of the key corridors identified in previous plans and studies to reaffirm or modify them for inclusion in MPOT 2035. This evaluation was based on County approved plans and project alignments as of Spring 2022. MPOT 2035 will include a program of high-priority corridors to meaningfully enhance transit service across the County.

Corridor Definitions

The review of the already identified transit corridors in adopted local and regional plans, including review of transit ridership, socio-demographics, and land use analysis, resulted in a large database containing nearly 100 candidate corridors or corridor segments. Significant differences between the corridors are due to ridership demand responsive to varying land uses and population and jobs densities; function (regional vs. local); and readiness for high-capacity transit modes (heavy rail, light rail, or BRT).

The transit corridors have been organized in two tiers:

1. **High-Capacity Transit** or **Large-Scale Transit Corridors**
2. **Medium-Capacity Transit** or **Emerging Priority Corridors**

Large-Scale/High-Capacity Transit Corridors

High-capacity transit has distinctive characteristics: high passenger capacity, frequent service (preferably 5- to15-minute headways), possibly distinctive branding and stations or, at the least enhanced stops with many serving mobility transit hubs for transfers between transit routes and to other transportation modes. High-capacity transit corridors make transit trips more reliable, faster, and convenient, providing high mobility, access, and connectivity between key origins and destinations and local bus network. These types of corridors show attributes today that are highly transit-supportive and are good candidates for traditional high-capacity transit modes such as heavy rail, commuter rail, light rail, streetcar, or BRT. High-capacity transit tends to operate in exclusive lanes or dedicated guideways.

WMATA's five Metrorail lines serve the 15 Prince George's County stations that form the backbone of the current high-capacity transit network. They are augmented with two MARC commuter rail lines serving 8 stations: the Camden Line, with stations in Riverdale, College Park, Greenbelt, Muirkirk, Laurel; and the Penn Line with stations in New Carrollton, Seabrook, and Bowie State. The Purple Line, under construction, is the next high-capacity transit corridor in the County. Future high-capacity transit corridors in the County may be rail-based or BRT. They will certainly include all WMATA heavy rail Metrorail line extensions serving the County or the already studied further extension(s) of the Purple Line.

Ultimately, when completed, the high-capacity transit network will provide robust transit service to/from key strategic locations identified in the Growth Policy Map in Plan Prince George's 2035 Approved General Plan (Plan 2035):

- **8 Regional Transit Districts (RTDs)**: the focus of the County's planned growth and mixed-use development with capacity to become major economic generators.
- **6 Employment Centers**: areas with the highest concentrations of economic activity in four targeted industry clusters—healthcare and life sciences; business services; information, communication, and electronics; and the federal government.
- **Local Centers**: Plan 2035 designated 26 Local Centers, which include the new Purple Line stations, as focal points for concentrated residential development and limited commercial activity based on access to transit or major highways.

Emerging Priority/Medium-Capacity Transit Corridors

Medium-capacity transit corridors are bus routes that offer convenient, efficient, and more reliable and faster service than typical local fixed routes. They have elements that help move buses through traffic in key locations, as well as improve stops and pedestrian and bicycle connections. They operate mostly in mixed traffic with some transit priority treatments such as dedicated bus lanes, queue jumps, traffic signal priority, enhanced stops, and upgraded connections. They may receive additional capital and service investments to make them more attractive to riders and more competitive with other modes in terms of travel time, comfort, and convenience.

The medium-capacity transit network, for the purpose of our initial evaluation, initially consists of the busiest Metrobus and TheBus fixed routes. They largely reflect the already identified as Metrobus' Priority Corridor Network (PCN) and TheBus' Major Routes, with some modifications and additions. These bus routes provide robust and solid connections to key locations in the County, including all Regional Transit Districts and multiple Local Centers identified in Plan 2035. With implemented enhancements, they will offer frequent service, reliable express and limited-stop service, real-time traveler information, and larger fleet vehicles to accommodate peak and off-peak demand. Any express/limited stop service in these corridors would be on top of local service with more frequent stops to provide more useful, accessible, and reliable bus service coverage.

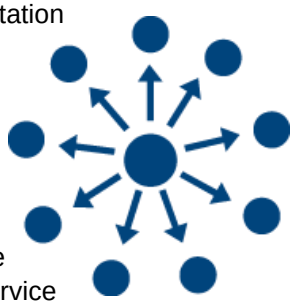
Local Routes

Although we focus on high-demand transit corridors, a connected and complete network will require supportive transit and multimodal transportation options, including regular fixed route bus service, paratransit, emerging mobility strategies, and trip planning, TOD, sensible parking provision, sound curbside management, and safe access for pedestrians, bicyclists, as well as freight delivery vehicles. The County's regular transit routes might be good candidates for other meaningful enhancements such as increasing service span and frequency, speed and reliability improvements including bus stop consolidation, roadway segments with bus-only lanes, and other bus priority treatments. Additional preparation, such as enhanced transit service, starter service, and/or land use policy changes will better position these corridors for future transit investment.

Corridor Planning Process

Our corridor analysis process will confirm and update transit corridors by using these four steps:

1. **Identify**: Identify candidate transit corridors based on implementation potential.

   Nearly 100 candidate corridors or segments were initially identified for consideration based on past and ongoing County plans and studies, stakeholder input, and public input. We developed a matrix to track and organize the corridors.

2. **Screen**: Conduct initial screening evaluation of candidate corridors through review of related plans and studies, planned service expansion and enhancements, already established priority transit corridors, and input from MPOT 2035 stakeholders and public outreach. If needed, refine, and modify most promising corridors to prepare for evaluation.

3. **Evaluate**: Evaluate screened corridors using focused criteria:

   a. **Transit Criteria**: Density of population and employment, ridership, land uses, and feasibility
   b. **Growth Strategies**: Connections to Regional Transit Districts, Local Transit Centers, and Employment Centers
   c. **Regional Priority**: Regional significance and inclusion in multiple plans leading to planning consistency.

4. **Prioritize**: Score and rank corridors using a prioritization matrix that scales numerical value to each criterion by assigned weight. The objective is for MPOT 2035 to identify and recommend one next large-scale corridor with the most potential and a complete emerging bus priority network. Corridors selected to advance will be sorted into tiers representing near-, medium-, and long-term priorities for implementation. A brief discussion of potential scenarios, implementation options, and a design toolkit will be included.

MPOT 2035 goals, countywide priorities, funding availability, and support from the key stakeholders and the public will determine how investments are implemented along the corridors. Corridors should be regularly updated to reflect successful corridor implementation, integrate changing land uses and density and type of development patterns, and remain consistent with the County's objectives. Through this process, corridors will be reevaluated, and new candidate corridors may be considered.

We recognize that to advance and implement the network of transit corridors in the County, long-term strategic transit planning will need to be highly coordinated and supported by the public and key stakeholders and transit service providers, including DPW&T, M-NCPPC, MDOT MTA, WMATA, Montgomery County, and others. The discussion of the corridor identification and evaluation process and the corridor recommendations will not offer detailed answers, solutions, service plans, cost estimates, or recommended transit mode for the corridors. That analysis will be part of the future corridor-focused planning and alternatives analysis specific to each corridor at the transit agency, county, or regional, state, and federal governance level.

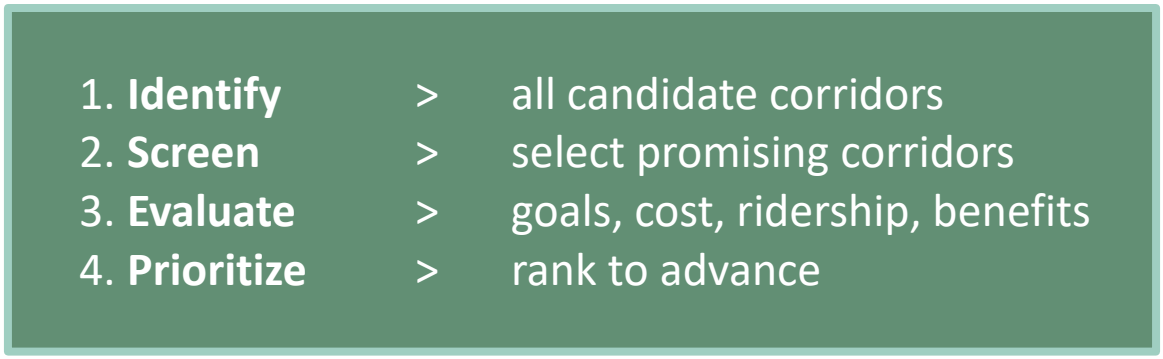
This report describes the first two steps of the corridor evaluation process (Identify > Screen) for both the Large-Scale/High-Capacity Transit and Emerging Priority/Medium-Capacity Transit corridors.

Step 1: Candidate Corridor Identification

For the first step, a comprehensive set of corridor candidates in the County was compiled into a master database matrix spreadsheet. There was some overlap between corridors with a few of the same or similar ones listed in different plans. We did a high-level check of which corridors are no longer applicable, removed duplicates and streamlined the list to account for feedback from multiple transit workshop sessions with DPW&T, the study team, and public outreach sessions.

Primary data sources used to compile relevant data for the initial corridor set are listed in Table 1. The most prominent and influential sources for identifying candidate corridors were the draft *BRT Feasibility Study* and the *Transit Vision Plan*, both prepared by DPW&T. We listed every single corridor, or segment, as proposed or identified in any relevant plan or study to begin the evaluation, but we excluded corridors in the region that are not within the County's limits. Figure 1 shows a sample entry from our matrix.

The plans and studies previously completed or in progress informed the development of the initial list of candidate corridors and made the draft candidate corridor matrix voluminous. It was timely



that multiple relevant plans were released in December 2021. A review of those fresh-off-the-press plans, including the MDOT MTA's *50-year Statewide Transit Plan* and DDOT's *Bus Transformation*

affirmed several candidate corridors considered by this planning effort and provided more context and depth to advance a comprehensive transit strategy for the region. Of note, the ongoing WMATA/Prince George's County bus network redesign will also propose a set of high-frequency corridors, which will be incorporated once they are available.

Table 1: Candidate Corridors Working Matrix Snapshot Sample

MASTER PLAN of TRANSPORTATION #MPOT2035 — potential transit corridors

#	Corridor	Routes	Corridor & <Segments>	Include as Large-Scale Corridor? Yes / No	Source	Ranking	Recommendation	Next Steps	Notes
1	C1	original	Bladensburg - Takoma Park	Yes	BRT Study	7			C1.1 & C1.2 – Takoma Park to Riverdale
	C1.1	BRT1	Takoma/Langley Transit Center <> Riggs & East West Highway	Yes	BRT Study	38	Advance	Conceptual Layout	Large Scale = Combine as 1 BRT line
	C1.2	BRT1	East West Highway <> Riverdale Park	Yes	BRT Study	33	Advance	Conceptual Layout	Large Scale = Combine as 1 BRT line
	C1.3	?	Kenilworth Avenue <> Bladensburg Road	No	BRT Study	66	Revise - Study with DC		Instead, Emerging Corridor?
	C1.4	?	38th Avenue <> Rhode Island Avenue	No	BRT Study	105	Revise - Study with DC		Instead, Priority Bus Corridor?
	C1.5	?	Rhode Island Avenue <> Washington, DC	No	BRT Study	109	Revise - Study with DC		Instead, Priority Bus Corridor?
2	C2	original	National Harbor – South Capitol Street	No	BRT Study	6			
	C2.1	?	S. Capitol Street <> Southern Avenue	No	BRT Study	in DC	Revise - Study with DC		Instead, Priority Bus Corridor?
	C2.2	?	Arapahoe Road <> Oxon Hill Road	No	BRT Study	79	Revise - Study with DC		Instead, Priority Bus Corridor?
	C2.3	?	Port America Grande Blouelevard <> National Harbor	No	BRT Study	100	Revise - Study with DC		Instead, Priority Bus Corridor?
3	C3	original	Branch Avenue [MD 5/US 301]	No	BRT Study	3			inclined to include - recurring idea
	C3.1	?	Naylor Road <> Branch Avenue Metrorail	No	BRT Study	53	BOS Study		Priority Bus Corridor? BOS
	C3.2	?	Branch Avenue Metrorail <> Woodyard Road/Brandywine	No	BRT Study	72	BOS Study		Priority Bus Corridor? BOS
4	C4	original	Outer Purple Line Extension	Yes	BRT Study	2			C4.1-C4.2 - New Carrollton to PGCC
	C4.1	LR1	New Carrollton <> Central Avenue	Yes	BRT Study	63	Advance	Conceptual Layout	LR vs BRT
	C4.2	LR1	Central Avenue <> Suitland Parkway [PGCC]	Yes	BRT Study	70	Advance	Conceptual Layout	LR vs BRT
	C4.3	LR1 or 2	Suitland Parkway <> Branch Avenue	No	BRT Study	56		2nd phase?	LR vs BRT + phasing
	C4.4 = C7	LR1 or 2 or 3	Branch Avenue <> National Harbor/Virginia	Yes	BRT Study	22	Advance	2nd or 3rd phase?	LR vs BRT + phasing; same as C7.4 = merge
5	C5	original	Greenbelt - Konterra	No	BRT Study	4			*Look @ service on US 1 instead*
6	C6	original	Penn - Westphalia	No	BRT Study	5			
	C6.1	?	Washington, DC line Pennsylvania Ave <> Forestville Road/Pitchie Road	No	BRT Study	40			Priority Bus Corridor? BOS
	C6.2	?	Pennsylvania Avenue <> Woodyard Road	No	BRT Study	102	BOS Study		Priority Bus Corridor? BOS
	C6.3	?	Woodyard Road <> Westphalia	No	BRT Study	108	BOS Study		Priority Bus Corridor? BOS
7	C7	original	Inner Purple Line Extension	Yes	BRT Study	1			
	C7.1	LR1	New Carrollton <> Central Ave	Yes	BRT Study	41	Future - Largo Mall & FedEx Field		LR vs BRT
	C7.2	LR2	Central Ave <> Silver Hill Rd	Yes	BRT Study	117	Future - Largo Mall & FedEx Field		LR vs BRT + phasing
	C7.3	LR2	Silver Hill Rd <> Suitland Parkway	Yes	BRT Study	24	Addison Road to Suitland	Conceptual Layout	LR vs BRT + phasing. Top segment
	C7.4 = C4.4	LR3	Suitland Parkway <> National Harbor/Virginia	No	BRT Study	19		Conceptual Layout	LR vs BRT + phasing; same as C4.4 = merge
			New Metrorail Line: Blue to Greenbelt	No	C		Not an LPA		
	C2		New Metrorail Line: Blue to National Harbor		WMATA BOS Study		TBD - study in progress		Similar to C2 BRT Study corridor
			New Metrorail Line: Silver to Greenbelt *['Ust Vicinity']*		WMATA BOS Study		TBD - study in progress		Nerr C1 BRT Study corridor
			New Metrorail Line: Silver to New Carrollton		WMATA BOS Study		TBD - study in progress		
	C1	C2, C4	Greenbelt - Twinbrook	Yes	Momentum		Concept Plan		Priority Corridor Network
		B	Baltimore-Washington Superconducting Magnetic Levitation (SCMAGLEV) Projec	No	50-year Statewide Transit Plan				No stops in Price George's County - nearest DC + BWI
	C7	24	Purple Line extension - inner [same as C7]	Yes	50-year Statewide Transit Plan				extend PL to densely populated suburbs in inner PG'sC
	C3	6	SMRT - Southern Maryland Rapid Transit Corridor - connect Charles Co. to Prince	Yes	Southern Maryland Rapid Transit Study + STP				BRT vs LR
		24	BWI Airport to Greenbelt via Laurel		Regional Transit Corridors		Mid-term		
		28	Annapolis to Union Station DC via Bowie & New Carrollton	No	Regional Transit Corridors		Long-term		
		4	Glen Burnie to Bowie	No	Regional Transit Corridors		Long-term		
		21	Laurel to Halethorpe	No	Regional Transit Corridors		Long-term		
		11	US 1 - Rhode Island Avenue Metro to College Park		ConnectGreaterWashington LRTP		by 2040		Prioruity Corridor Network trunk line
		28	MD 212/410 - Blandensburg to Takoma-Langley Park		ConnectGreaterWashington LRTP		by 2040		Prioruity Corridor Network trunk line
		29	US 50 - New Carrollton to Bowie		ConnectGreaterWashington LRTP		by 2040		Metrorail Orange line feeder extension
		10	Southern Avenue, MD 210 - Southern Avenue Metro to National Harbor		Momentum; ; ConnectGreaterWashington LRTP		by 2040		New high-capacity corridor
		22	I-495 - Alexandria to Prince George's County - Eisenhower Metro to Branch Avenue Metro via Woodrow Wilson Bridge		ConnectGreaterWashington LRTP		by 2040		New high-capacity corridor
		G12, G14	Greenbelt - New Carrollton						
	C1	83, 86	College Park	Yes	Bus Transformation				
		A12	Martin Luther King Highway	Yes	Bus Transformation				
	C1	C2, C4	Greenbelt - Twinbrook	Yes	Bus Transformation				
	C7	C21, C22, C26	Central Avenue	Yes	Bus Transformation				
	C2, C7	D12, D13, D14	Oxon-Hill - Suitland	Yes	Bus Transformation				
	C1	F4	New Carrollton - Silver Spring	Yes	Bus Transformation				

Table 2: Candidate Corridors Identification: Key Sources

Plan / Study	Agency	High-Capacity	Medium-Capacity
BRT Feasibility Study	Prince George's County	◎	◎
Transit Vision Plan	Prince George's County		◎
MPOT 2009	Prince George's County	◎	◎
2035 Approved General Plan	Prince George's County	◎	◎
Prince George's Transitways Study	MWCOG	◎	◎
ConnectGreaterWashington 2040	WMATA	◎	
Blue/Orange/Silver Capacity & Reliability Study	WMATA	◎	
Momentum Strategic Plan	WMATA	◎	
MARC Cornerstone Plan	MDOT MTA	◎	
Priority Corridor Network	WMATA		◎
Bus Priority Plan	DDOT		◎
Bus Transformation	DDOT		◎
moveDC	DDOT	◎	◎
Regional Transit Corridors	MDOT MTA	◎	◎
50-year Statewide Transit Plan	MDOT MTA	◎	
Southern Maryland Rapid Transit Study	MDOT MTA	◎	
Countywide Transit Corridors Functional Master Plan	Montgomery County Planning Department	◎	◎

Step 2: Screen Candidate Corridors

The identified candidate corridors were then screened to identify a smaller group of the most promising corridors to advance for further evaluation. It should be noted that our overall scoping charge was to confirm and prioritize previously identified corridors, rather than identify a set of new corridors. This is understandable since so much useful transit planning work has already been completed, with great analysis and details. To conduct the screening, we used extensive background analysis and recommendations found in the *Transit Vision Plan*, *BRT Feasibility Study*, Plan 2035 recommendations, along with multiple WMATA studies impacting Metrorail and Metrobus service expansion and prioritization.

We paid attention to transit policies in Plan 2035 and how well corridor candidates could support them—along with the MPOT 2035 vision, goals, and objectives. This is especially true for these policies:

- Relevant to all transit corridors:
  - Support Policy 2: Expand and improve transit service, particularly on routes connecting Downtowns, the Innovation Corridor, and Regional Transit Districts to maximize the economic development potential and synergies between these areas.
  - TM2.1: Invest in existing bus service and new bus and light-rail transit service to connect Downtowns, the Innovation Corridor, and Regional Transit Districts. Coordinate transit planning initiatives with local municipalities, the County, WMATA, and the State of Maryland.
- Relevant to high-capacity transit corridors
  - TM2.2 Identify new transitway corridors that will support the Plan 2035 development priorities and amend the Master Plan of Transportation Transit Element to include the updated corridors. Concentrate medium- to high-density residential development along priority transitway corridors to provide the density necessary to sustain higher levels of rail and bus service.
- Relevant to medium-capacity transit corridors:
  - TM2.3 Implement the recommendations for *Metrobus Priority Corridor Networks* recommended in Momentum—The Next Generation of Metro (Strategic Plan 2013-2025) through continued coordination with WMATA, the State of Maryland, and the County. Amend the Master Plan of Transportation as necessary.

These policies influenced our consideration for the already identified corridors. Our overall approach to this Phase 1 screening process was straightforward: If a given corridor is already identified as an existing or potential transit corridor in the County by one of the transit providers or other key stakeholders, we were highly motivated to include it—modified or refined if needed, based on cursory review of current conditions and ongoing studies and projects. Our team combined the information from the technical work, coordination with DPW&T and M-NCPPC staff, feedback from the stakeholders and the public and identified approximately 24 corridors showing promise for enhanced, higher-capacity, high-frequency transit in the County, keeping in mind the mid- to long-term 2035 horizon year of MPOT 2035.

Results

Our team combined the information from the technical work, coordination with DPW&T and M-NCPPC staff, feedback from the stakeholders and the public and identified 24 corridors countywide:

- **7 Large-Scale Transit Corridors** ready for high-capacity transit investments.
- **17 Emerging Priority Corridors** suited for smaller-scale transit enhancements. These corridors may be good candidates for high-capacity transit in the future.

These corridors were identified based on cursory review and analysis of:

- Relevant plans and prior studies
- MPOT 2035 vison, goals, and objectives
- Existing and projected transit provision and demand
- Density: population and employment
- Land use: mix, growth and expected changes
- Station/stop area development potential
- Planning consistency: inclusion in multiple plans and studies
- Stakeholder input from DPW&T, transit agencies, and municipalities
- Public workshops

Figure 1 maps the screened high-capacity transit corridors, which are listed in Table 3. The Purple Line, currently under construction, is shown for illustrative purposes only. Figure 2 and Table 4 show the potential medium-capacity corridors.

An interactive online GIS working map of these corridors was created for internal feedback: Transit Corridors - MPOT 2035 (arcgis.com). A separate tab was added in the matrix to organize the screening process and facilitate corridor evaluation and prioritization.

Corridors 'Ingredients'

High-Capacity Transit Corridors

- BRT Study corridors
- Purple Line Extension
- National Harbor
- Bladensburg to Takoma Park
- Branch Avenue
- Metrorail: Blue Line extension to National Harbor

Medium-Capacity Transit Corridors

- Metrobus Priority Corridor Network – proposed additions
- Metrobus Frequent Service routes + 'Major' TheBus routes – based on service frequency, ridership, span, coverage, and connections
- 'Advance' segments from BRT Study that do not meet High-Capacity Transit criteria yet.

Figure 1: Screened High-Capacity Transit Corridors

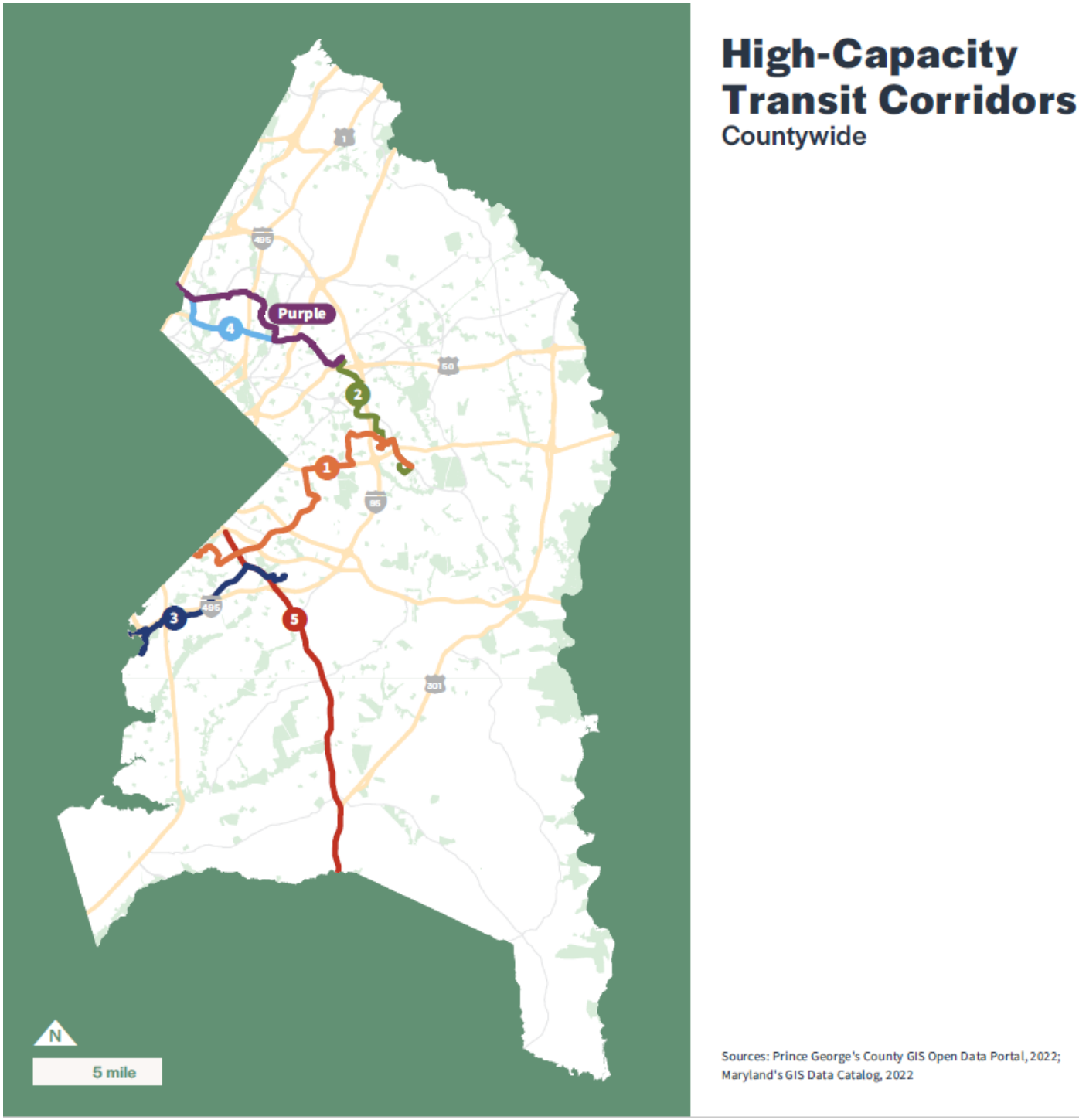


Table 3: Screened High-Capacity Transit Corridors

Corridor #	ID	Corridor Description	Transit Type	Agency	Length (m)
1	C7M	Inner Purple Line Extension: Southern Avenue to Prince George's Community College	LRT/BRT	DPW&T	15.3
2	C4A	Outer Purple Line Extension: New Carrollton to Prince George's Community College via Largo	LRT/BRT	DPW&T	8.2
3	C4C	Outer Purple Line Extension: Branch Ave to National Harbor/Virginia	LRT/BRT	DPW&T	11.1
4	C1A	Takoma Park - Riverdale Park	BRT	DPW&T	4.9
5	Branch Ave	Branch Avenue (MD 5/US 301): Naylor Road to White Plains	LRT/BRT	DPW&T	21.0
6A*	Blue X / C2	New Metrorail Line: Blue - DC via Southern Avenue to National Harbor and Virginia	Heavy Rail /or BRT	WMATA or DPW&T	
6B*	Silver GB	New Metrorail Line: Silver to Greenbelt	Heavy Rail	WMATA	
6C*	Silver NC	New Metrorail Line: Silver to New Carrollton	Heavy Rail	WMATA	

* Pending WMATA's LPA selection. One of the three corridors will be included (most likely Blue X / C2).

Figure 2: Screened Medium-Capacity Transit Corridors

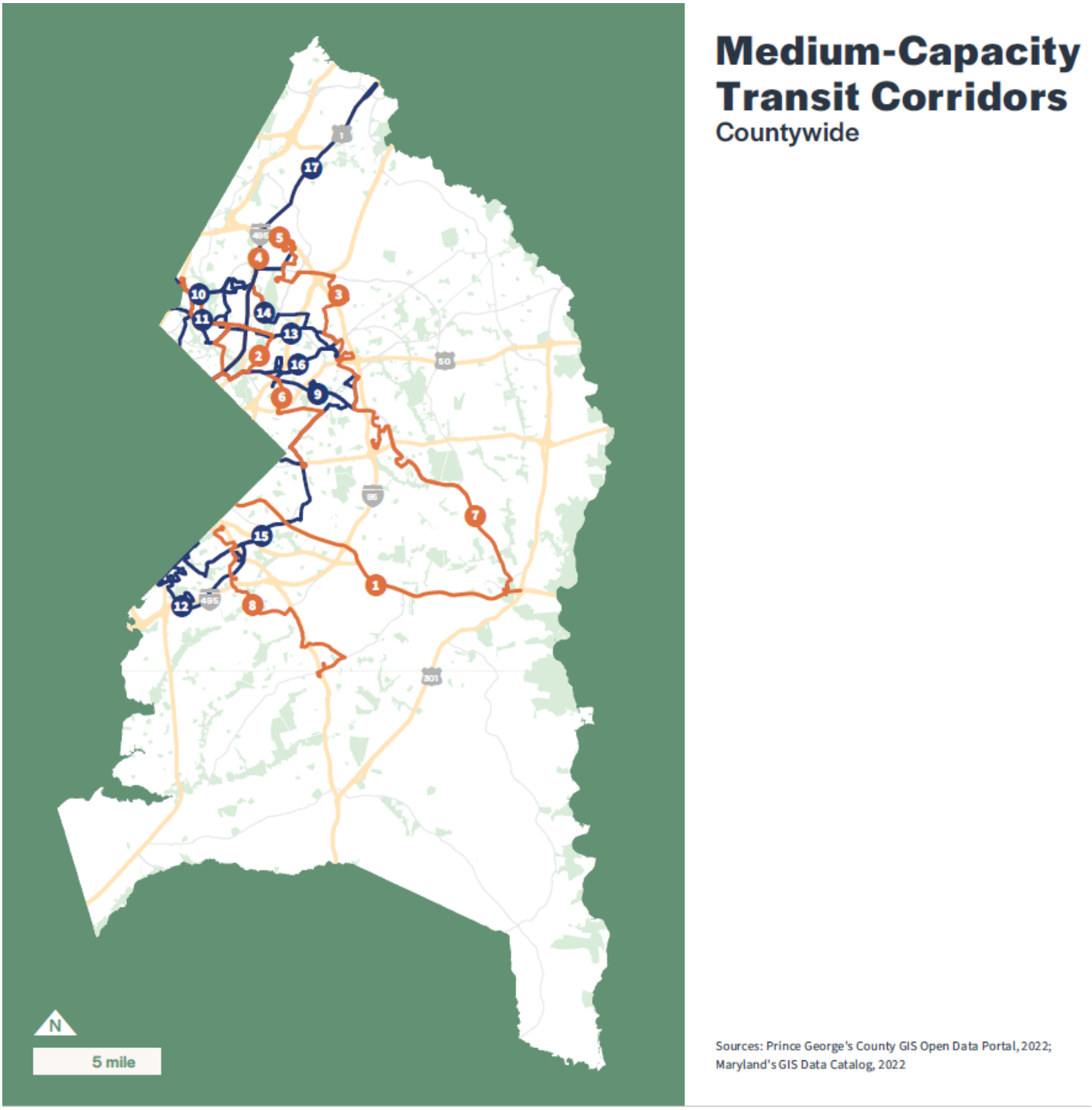


Table 4: Screened Medium-Capacity Transit Corridors

#	Corridor ID	Corridor Description	Transit Type	Agency	Length (m)
1	C6 Penn-Westphalia / Route 20	Washington DC - Pennsylvania Avenue - Westphalia	BOS / BRT-lite / TBD	DPW&T	12.8
2	C1.3-1.5 Bladensburg	Riverdale Park - Kenilworth - Rhode Island Ave - DC	BRT-lite / TBD	DPW&T	8.2
3	Route 16	Greenbelt – New Carrollton	The Bus Major Route	DPW&T	13.8
4	Route 17	College Park IKEA – Mount Rainier	The Bus Major Route	DPW&T	15.6
5	Route 17 Extension	Route 17 extension to Greenbelt Metro	The Bus Major Route	DPW&T	3.6
6	Route 18	Langley Park – Addison Road	The Bus Major Route	DPW&T	24.1
7	Route 21	New Carrollton – Upper Marlboro	The Bus Major Route	DPW&T	23.8
8	Route 32	Naylor Road – Clinton Fringe P&R	The Bus Major Route	DPW&T	12.9
9	A12	Addison Road - Capital Plaza	MetroBus	WMATA	22.1
10	C2	Takoma Langley Transit Ctr - Greenbelt	MetroBus	WMATA	25.8
11	C4	Takoma Langley Transit Ctr - Prince George's Plaza	MetroBus	WMATA	23.8
12	D12	Southern Avenue - Suitland	MetroBus	WMATA	14.6
13	F4	Silver Spring - New Carrollton	MetroBus	WMATA	15.2
14	F6	New Carrollton- Fort Totten Line	MetroBus	WMATA	22.3
15	P12	Addison Road - Eastover Shopping Center	MetroBus	WMATA	17.3
16	T18	Rhode Island Avenue - New Carrollton	MetroBus	WMATA	15.1
17	US 1	Rhode Island Avenue - College Park - Laurel via Konterra	MetroBus	WMATA or DPW&T	16.7

High-Capacity Corridors - Descriptions

BRT Feasibility Study Corridors (DPW&T)

Our initial screening work included review of underlying assumptions and data used in the draft *BRT Feasibility Study*, including ridership, socio-demographics, employment, and land use information. In addition to identifying where individuals who need transit were located, the technical team revisited assumptions about destinations including current employment and activity centers. The update effort confirmed that many corridors from the BRT Study should be retained. Our screened list of High-Capacity Corridors includes several corridors studied and identified by DPW&T; these include corridors in the *BRT Feasibility Study* that updated the corridors identified in the 2012 *MWCOG TLC Prince George's County Transitways Study*.

The Transitway Study provided an initial framework for the development of a fixed-guideway transit system beyond Metrorail and the Purple Line in Prince George's County. It recommended several corridors for concept-level studies, shown in Figure 3:

1. Bladensburg-Takoma-Langley Park (via Kenilworth Avenue, East West Highway, and Riggs Road)
2. National Harbor (connection to South Capitol Street in Washington, DC)
3. Branch Avenue (MD 5/US 301)
4. Inner or Outer Purple Line Extensions (from New Carrollton to the Woodrow Wilson Bridge, two slightly different alignments)
5. Greenbelt/Konterra (via CSX corridor, US 1, and Virginia Manor Road)
6. Pennsylvania Avenue – Westphalia (Upper Marlboro to the Washington, DC line)

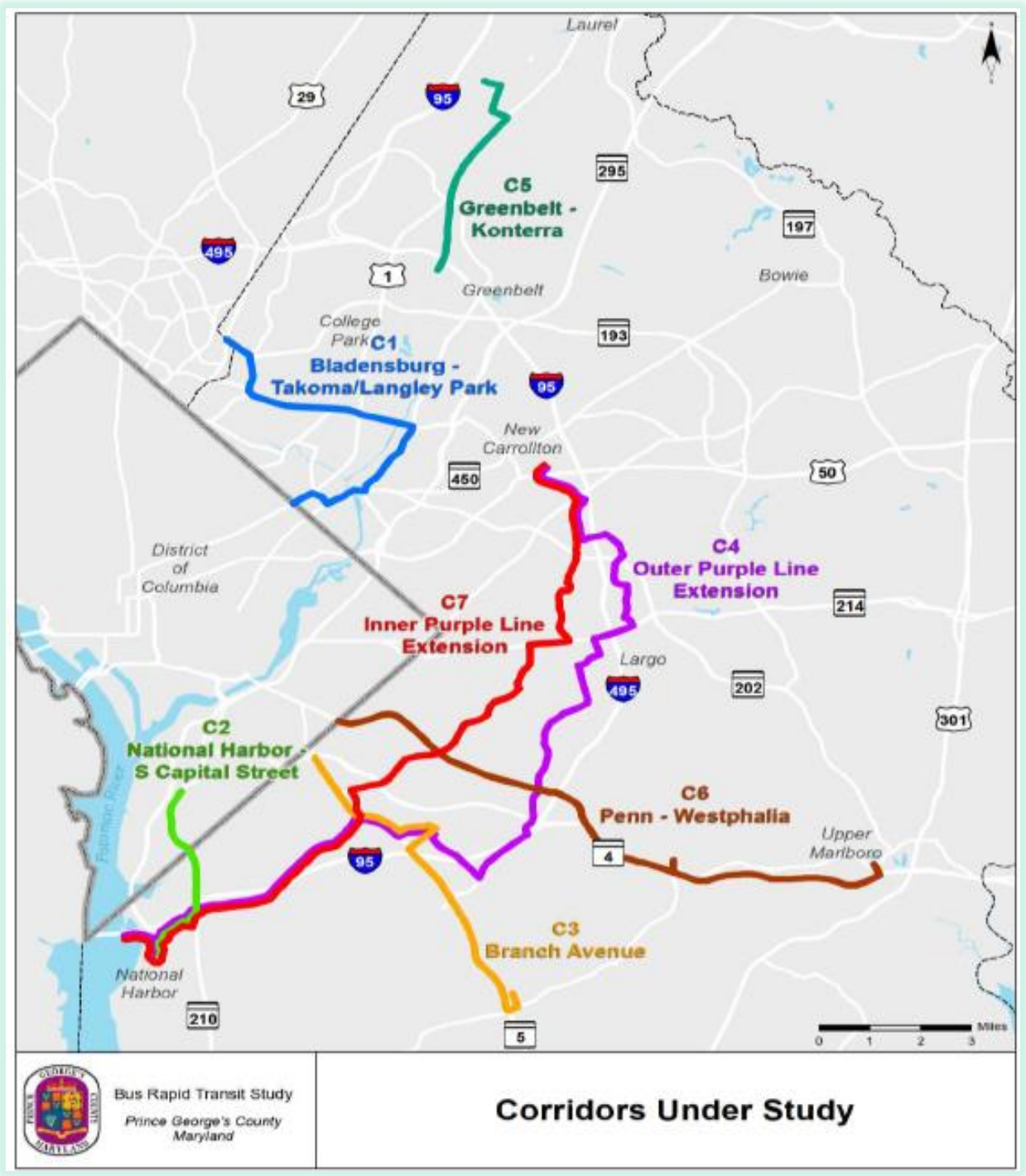
The *BRT Feasibility Study* reconsidered and updated the proposed 2012 High-Capacity Transit corridors, retaining some, splitting some into segments, and deferring the viability of some corridors until future studies are completed. The study advanced corridors/corridor segments highlighted in green in Table 5. Corridor C7, the Inner Purple Line Extension, ranked the highest.

Table 5: BRT Feasibility Study: Evaluated Corridors

Route		Initial Recommendations
C1	Bladensburg – Takoma Park	✓ C1.1 & C1.2 – Takoma Park to Riverdale – Conceptual Plan ➢ C1.3 – C1.4 – Future Study with Washington, DC-Rhode Island Avenue to Konterra
C2	National Harbor to South Capitol Street	➢ Future study with Washington, DC
C3	Branch Avenue	➢ Future Bus on Shoulder Study with MDOT SHA and MDOT MTA
C4	Outer Purple Line Extension	✓ C4.1 & C4.2 – New Carrollton to Prince George's Community College – Conceptual Plan ✓ C4.4 – Branch Avenue to National Harbor/Virginia – Conceptual Plan
C5	Greenbelt - Konterra	➢ Future Study with Washington, DC – Rhode Island to Konterra
C6	Penn - Westphalia	➢ Future Bus on Shoulder Study with MDOT SHA and MDOT MTA
C7	Inner Purple Line Extension	✓ C7.3 – Southern Avenue Metrorail to Prince George's Community College – Conceptual Plan

Source: DPW&T

Figure 3. BRT Feasibility Study: Evaluated Corridors



Source: DPW&T

Our team reviewed and is in concurrence with the *BRT Feasibility Study's* recommendations, including the updated list of corridors. Our analysis suggests retaining all identified corridors/corridor segments shaded in green in Table 2. An example illustrating this approach, consider that Corridor C1, Bladensburg - Takoma Park, was split into five distinct segments for the purpose of the analysis and to develop successful routing concepts. Segments 1 and 2 have strong potential with excellent transit connections, unlike segments 3, 4, and 5. The study recommends developing this corridor as two separate BRT lines, with the Takoma/Riverdale (C1A) line ready for high-capacity transit investment based on its relatively high segment ranking. That became corridor 4, C1A - Takoma Park - Riverdale Park, as shown in Table 2 listing all screened high-capacity corridors.

We did not exclude the three segments not mature enough for high-capacity transit. Instead, we propose to include them as a combined medium-capacity corridor. That became Corridor 2, C1.3-1.5 Bladensburg - Riverdale Park - Kenilworth - Rhode Island Ave – DC, as shown in Table 4 listing all screened Medium-Capacity Corridors.

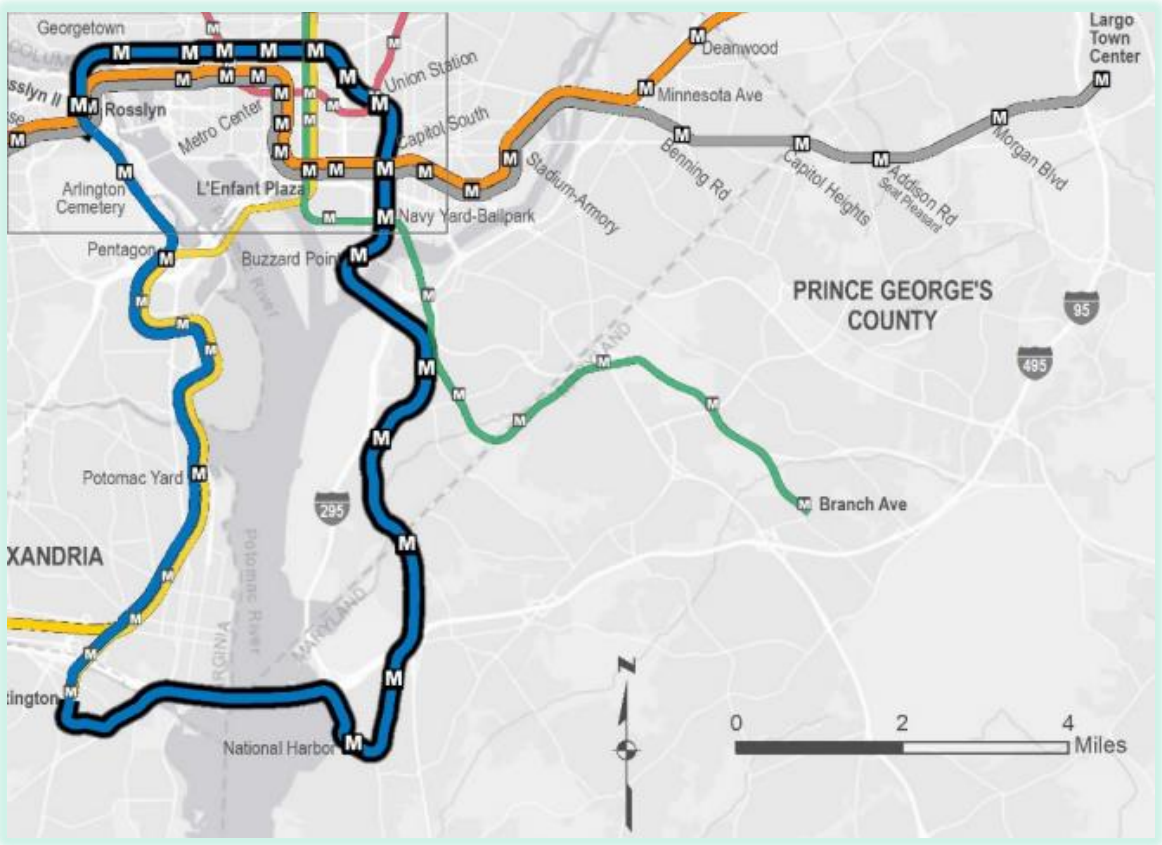
We used the same approach for all the other green-lighted corridor segments, including Inner and Outer Purple Line extension options, but with some exceptions. We agree to omit C5 from further consideration since the proposed alignment is not viable due to conflicts with CSX Transportation railroad tracks. We also concur with the preliminary recommendation in the BRT Study that a potential Konterra BRT could serve the US 1 corridor from College Park to Laurel well. That is an entirely new corridor we are proposing to evaluate - US 1: Rhode Island Avenue - College Park - Laurel via Konterra. However, we recommend classifying it as a medium-capacity corridor because of limited fixed-route bus service along US 1. The US 1 corridor is listed as 17 in Table 4 and needs further analysis.

BOS Capacity & Reliability Study Corridors (WMATA)

We take a slightly different approach to corridor C3 – Branch Avenue, since the general ideas are in sync with the concepts WMATA is proposing for its Blue Line extension to Prince George's County in terms of corridor alignment, coverage, function, and connections, transit mode aside. We merge the two scenarios into one potential National Harbor high-capacity transit corridor. If we gain more clarity about WMATA's plans regarding the Blue Line extension, we will adjust our observations.

Note that we have considered screening and potentially including more than one of the three WMATA Metrorail extensions into Prince George's County. But WMATA's Blue/Orange/Silver Capacity & Reliability Study is still in progress, so there is no Locally Preferred Alternative identified yet. Interim reports released to date indicate the Blue Line's extension - Southern Ave to National Harbor – (Figure 4) has the most potential of the three remaining heavy-rail alternatives, but since there is no recommendation to date, all three are included in the matrix for illustrative purposes.

Figure 4: Bus-On-Shoulder Capacity & Reliability Study: Potential Blue Line Metrorail Extension



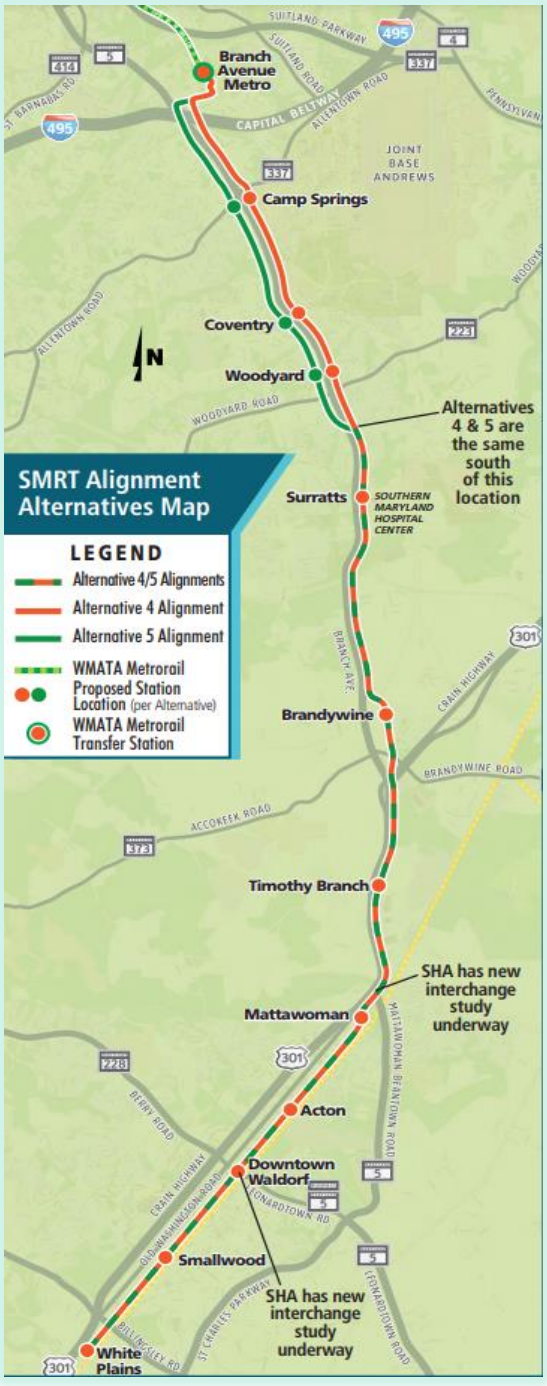
Source: WMATA

Branch Avenue Corridor (MDOT MTA)

We include corridor C3 in the BRT Feasibility Study as part of the potential high-capacity transit network, subject to further evaluation. It is one of the most recurring and requested corridors identified as ready and in need of enhanced transit improvements in other regional and statewide plans and we have heard repeated requests from the stakeholders and the public to include it based on that argument alone. Given the rapid growth in southern Prince George's County and the resulting congestion along US 301 and MD 5, transit alternatives along MD 5 have been studied for over a decade. In 2010, the MDOT MTA completed the *Southern Maryland Transit Corridor Preservation Study* to evaluate several potential alignments along the corridor.

In 2013, and updated in 2015, the *Southern Maryland Rapid Transit Study* (SMRT) by MDOT MTA was conducted to determine a Locally Preferred Alternative and feasibility of the corridor including examination of environmental features, costs, and ridership estimates. This study was a collaborative effort between MDOT MTA, Prince George's County, Charles County, and other stakeholders interested in potential for high-capacity transit in dedicated lanes along the corridor. MDOT MTA considered two transit modes for the corridor, BRT, and light-rail transit. SMRT also evaluated a range of alignment alternatives for the future transit line, see **Error! Reference source not found.**.

The corridor is also listed as one of the regionally significant transit corridors in the MDOT MTA's *50-year Statewide Transit Plan*, DPW&T, in its draft *BRT Feasibility Study,* also recommends a bus-on-shoulder transit service along this corridor—a concept similar to the one in SMRT. The BRT Study notes this potential transit service should be studied in partnership with MDOT SHA and Charles County since MD 5 is a heavy commuter corridor from Prince George's and Charles counties, and enhanced transit will benefit commuters across county lines.



High-Capacity Corridors—Growth Strategies Screening

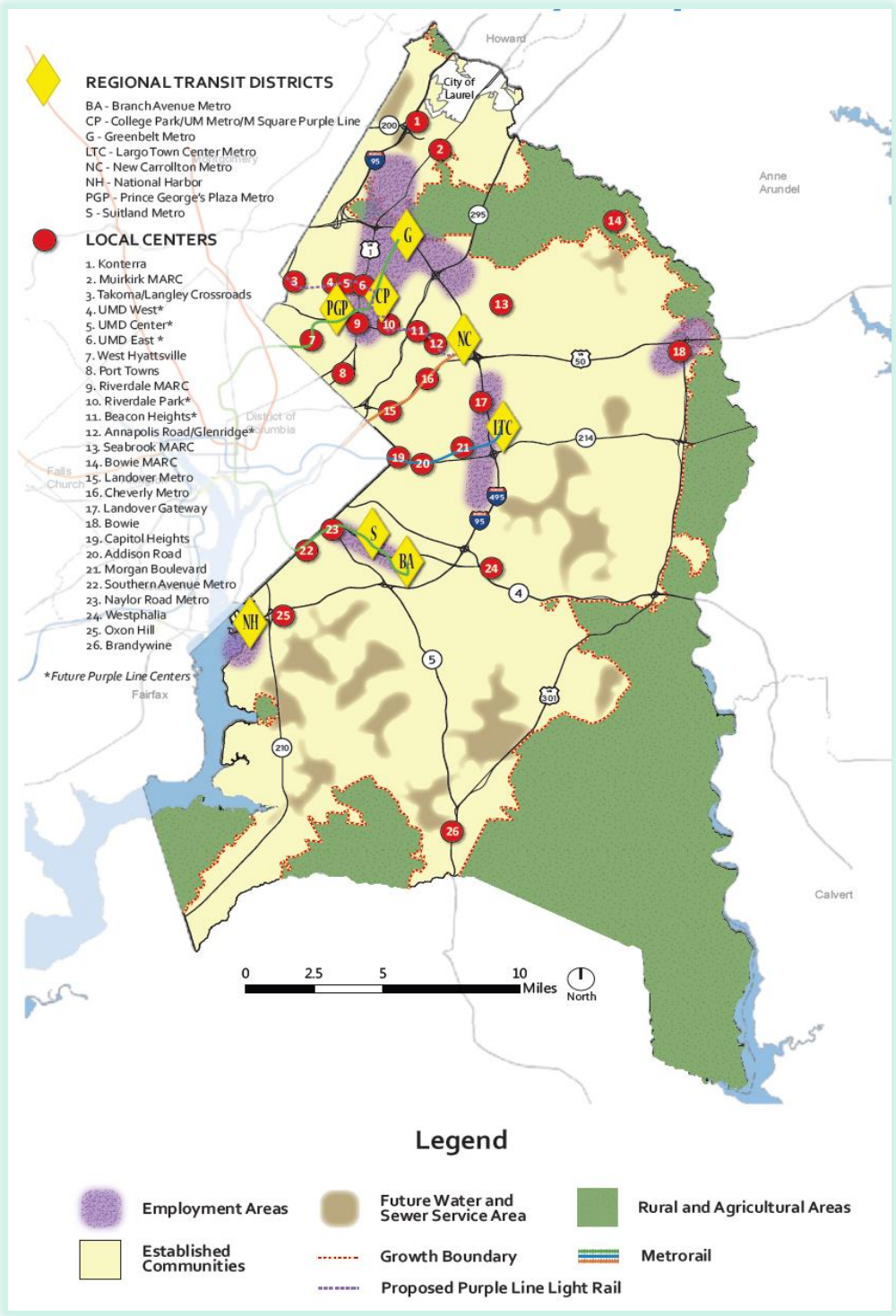
Corridors in the regional concept were screened at a cursory level for alignment with MPOT 2035 vision, goals, and objectives, key activity and employment clusters, concentrations of transit-dependent populations, land use mixes, both existing and expected, and areas with planning initiatives in place that support dense coverage and linear, faster transit operations. We screened the identified High-Capacity Transit corridors for how well they would be responsive to the County's Growth Policy Strategies (Figure 6) and provide access to eight Regional Transit Districts (RTDs), six Employment Centers, and Local Transit Centers, as designated in the County's Plan 2035. The results, in Table 6, indicate a clear edge the Inner and Outer Purple Line extensions hold over the other High-Capacity Transit corridors in terms of their potential to satisfy the County's adopted Growth Policy Strategies.

Table 6: High-Capacity Transit Corridors: 2035 Growth Strategies Screening

#	Corridor ID	Corridor Description	Regional Transit Districts	Local Center	Employment Areas	Growth Score Total
1	C7M	Inner Purple Line Extension: Southern Ave to Prince George's Comm. College	3: S, BA, LTC	6: 17, 19, 20, 21, 22, 23	2	**11**
2	C4A	Outer Purple Line Extension: New Carrollton to Prince George's Comm. College	2: NC, LTC	4: 12, 16, 17, 21	1	**7**
3	C4C	Outer Purple Line Extension: Branch Ave to National Harbor/Virginia	3: S, BA, NH	1: 25	2	**6**
4	C1A	Takoma Park - Riverdale Park	1: PGP	3: 3, 7, 8	1	**5**
5	Branch Ave	Branch Avenue (MD 5/US 301): Naylor Road to White Plains	2: S, BA	2: 22, 23	1	**5**
*6A**	*Blue X / C2*	*New Metrorail Line: Blue - Southern Ave to National Harbor*	*1: NH*	*1: 25*	*1*	*3*
*6B**	*Silver GB*	*New Metrorail Line: Silver to Greenbelt*				
*6C**	*Silver NC*	*New Metrorail Line: Silver to New Carrollton*				

* Pending WMATA's LPA selection. One of the three corridors will be included (most likely Blue X / C2).

Figure 4. Prince George's County Growth Policy Map



Source: PLAN 2035, Prince George's County

Medium-Capacity Corridors

The overarching goal of the screening was to identify and map medium capacity corridors that meet service performance goals, have high ridership potential, and can improve bus service with modest improvements, but are not ready for higher level capital investment. The medium-capacity network for the purpose of our screening initially was determined to host the busiest and most frequent Metrobus and TheBus fixed routes filtered through any longer-term recommendations in the WMATA's reports and the *Transit Vision Plan*.

Our key sources to identify and screen medium-capacity corridors ultimately come from:

Prince George's County Transit Vision Plan ('Major Routes').

We considered service standards for a high-level evaluation of the operations of each TheBus route as proposed in the *Transit Vision Plan*, especially as they apply to Major Routes, which for the purpose of MPOT 2035, at least initially, would equal medium-capacity transit service. The current conditions evaluation by DPW&T shows substantial service improvements required to meet these minimum standards for both service frequency and hours of service for a given route to reach a Major route category designation.

Route Category	Service Component	Minimum Standard
Major	Weekday Service Frequency	Peak – 20 minute wait time between bus arrival Off-Peak – 30 minute wait time between bus arrival
	Weekday Hours of Service	First trip of day leaves no later than 5:30 AM Last trip of day leaves no earlier than 10:00 PM
	Saturday Service	Highest priority for expansion of service to Saturday
	Saturday Service Frequency	30 minutes all day
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 9:00 PM
	Route Directness	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.

Within the next five years and beyond, a certain number of routes could be upgraded to the Major category if certain service improvements are made: 15 of 28 routes will require improved service frequencies in the peak period to meet minimum service standards and eight will require improved off-peak frequencies to meet minimum standards. To become Major, some identified routes will need to increase span of service and introduce or extend weekend service hours.

Ultimately, we follow DPW&T's recommendations and include all the existing and potential Major TheBus routes, a function of reviewing all the North, Central, and South County Transit Improvement Recommendations by implementation phase/timeframe: short, mid, and long term. Notably, in addition to the above enhancements, based on our cursory service evaluation of all existing and high performing Local TheBus routes, we introduce one additional route that could be modified to be upgraded to a Major route: TheBus 17, with service extended to Greenbelt Metro. Our screening analysis of TheBus routes is in Table 7. The first six routes should become part of the Medium- Capacity Transit network, based on the recommended enhancements alone. We also considered how these TheBus routes would interact with our proposed high-capacity transit

network and the ease of transfers to high-capacity corridors—shown in the rightmost column in Table 7.

Table 7: Medium-Capacity Corridors: Screening of TheBus Routes

Route	Type	Description	"Beyond 5 Years" Recommendations	BRT Study Corridor Connections
16	Major	Greenbelt – New Carrollton	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	C4A at New Carrollton Metro
17 + 17X	Major	College Park IKEA – Mount Rainier	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend to Greenbelt Metro	C1A at US1 & East-West Hwy
18	Major	Langley Park – Addison Road	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	C7M at Addison Road Metro
			Split Route in Two with Overlap between Prince George's Plaza and Cheverly	C1A at Prince George's Plaza Metro
20	Major	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	C7M at Addison Road Metro
				C7M at Silver Hill Road & Marlboro Pike
21	Major	New Carrollton – Upper Marlboro	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	C4A at New Carrollton Metro
				C4A at Prince George's County Community College
32	Major	Naylor Road – Clinton Fringe P&R		
12	Local	West Hyattsville Metro – Gwinn Britt Senior Center	Extend Service to Saturday	Not Selected
			Split in Two to Make More Direct	
			Extend Weekday Operating Hours to 9:00 PM	
15X	Local	Greenbelt Metro – New Carrollton Metro		
22	Local	Morgan Boulevard	Improve Peak Frequency to 30 minutes from current 40 minutes	
			Extend Weekday Operating Hours to 8:00 PM	
23	Local	Addison Road Metro – Sheriff Road	Extend Service to Saturday	
			Extend Weekday Operating Hours to 9:00 PM	
24	Local	Capitol Heights – Morgan Boulevard Metrorail Station		
26	Local	Morgan Boulevard Metro – Largo Town Center Metro		
28	Local	Largo Town Center Metro – Woodmore Town Center		
30	Local	Branch Avenue Metro – Southern Maryland Hospital		
33	Local	Padgett's Corner Shopping Center – Southern Avenue Metro	Extend Route to Naylor Road Metro	
35	Local	Southern Avenue Metro – Camp Springs		

Route	Type	Description	"Beyond 5 Years" Recommendations	BRT Study Corridor Connections
36	Local	Clinton Fringe P&R – Mattawoman Beantown Road P&R	Extend Service to Saturday	

Source: DPW&T

WMATA's Momentum (Metrobus Priority Corridor Network)

WMATA's 2013-2025 strategic plan, *Momentum, The Next Generation of Metro*, establishes priorities for near- and long-term actions and identifies seven pivotal capital improvements. One improvement of importance to Prince George's County is the Metrobus Priority Corridor Network Plan. The Priority Corridor Network was developed to improve bus service, travel speeds, and reliability on 24 regional corridors that serve half of Metrobus ridership. Seven corridors in the Priority Corridor Network are within, or partially within, Prince George's County. We incorporated those corridors into our proposed medium-capacity corridors network.

We also reviewed and used WMATA's Metrobus Frequent Service maps, including the ones focusing primarily on highlighting frequent Metrobus service in Prince George's County to identify Metrobus routes that could be added to the future medium-capacity transit network (https://www.wmata.com/initiatives/upload/Sept5MetrobusFrequencyMap_Regional.pdf).

Our screening approach was straightforward: Metrobus routes with daily service frequencies of 12 minutes or better between 7:00 am to 9:00 pm are included in our list of potential Medium-Capacity Transit corridors. Metrobus routes with service frequency between 12 and 20 minutes from 7:00 am to 9:00 pm are also included if their ridership levels are on par with the most frequent routes—those with 12 minutes or better headways.

WMATA's Bus Transformation and DDOT's Bus Priority Plan

These two plans are recent studies that also conducted a robust corridor analysis using transit performance, equity, safety, and land use criteria to prioritize bus service to focus on addressing slow and unreliable bus service in historically under-resourced communities. Nearly all identified priority bus corridors in these two plans are in Washington, D.C., but a few future corridors would extend service into Prince George's County. We reviewed both the existing and future Bus Priority Corridors and identified a few corridors most relevant to Prince George's County, with minimal implications due to overlap of these corridors with the corridors we have already identified in other plans:

- Existing relevant Bus Priority Corridors
  - Rhode Island Ave,
  - H St/Benning Rd/Minnesota Ave
  - Benning Rd/Southern Ave
  - Southern Ave
  - S. Capitol St/MLK Jr Ave/11th St
- Future corridors:
  - New York Avenue
  - Bladensburg

  (interactive map: DDOT Bus Priority Program - Website App (arcgis.com)

Figure 5. WMATA's Metrobus Frequent Service Map for Prince George's County

Source: WMATA

DPW&T's draft BRT Feasibility Study

DPW&T's *BRT Feasibility Study* identified "unused segments supported for gradual advancement," as discussed in the high-capacity transit corridors section. In addition, we reviewed its analysis of TheBus and Metrobus boarding and maximum loads along the key bus routes that would intersect with the proposed high-capacity transit corridors.