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Committee Review: Completed
Staff: Glenn Orlin, Senior Analyst
Purpose: Final action – vote expected
Keywords: #I-270, transit

AGENDA ITEM #6
April 5, 2022
Action

SUBJECT

Corridor Forward: The I-270 Transit Plan

EXPECTED ATTENDEES

Casey Anderson, Chair, Planning Board
Gwen Wright, Director, Planning Department
Carrie Sanders, Chief, Midcounty Planning, Planning Department
Jason Sartori, Chief, Countywide Planning, Planning Department
Jessica McVary, Master Planner/Supervisor, Midcounty Planning
Jesse Cohn McGowan, Project Manager, Countywide Planning

COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

The attached adoption resolution reflects the revisions to the Planning Board's Draft of the Plan recommended by the Transportation and Environment Committee on March 9, 2022, with which the Council concurred on March 22, 2022.

This report contains:

Adoption resolution

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Resolution No.: _____
Introduced: _____
Adopted: _____

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY, MARYLAND**

Lead Sponsor: County Council

SUBJECT: Approval of Corridor Forward: The I-270 Transit Plan

1. On January 7, 2022, the Montgomery County Planning Board transmitted to the County Executive and the County Council the Planning Board Draft of Corridor Forward: The I-270 Transit Plan.
2. The Planning Board Draft of Corridor Forward: The I-270 Transit Plan contains the text and supporting maps for an amendment to the 2013 Countywide Transit Corridors Functional Master Plan and the 2018 Master Plan of Highways and Transitways. It also amends The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George’s Counties, as amended; the 1989 Germantown Master Plan; 1994 Clarksburg Master Plan and Hyattstown Special Study Area, as amended; 2009 Germantown Employment Area Sector Plan; 2010 Great Seneca Science Corridor Master Plan, as amended; 2014 10 Mile Creek Area Limited Amendment Clarksburg Master Plan and Hyattstown Special Study Area; 2016 Montgomery Village Master Plan; 2019 MARC Rail Communities Sector Plan; and 2021 Shady Grove Sector Plan Minor Master Plan Amendment.
3. On February 15, 2022, the County Council held a virtual public hearing on the Planning Board Draft of Corridor Forward: The I-270 Transit Plan. The Functional Master Plan was referred to the Council’s Transportation and Environment Committee for review and recommendations.
4. On February 28 and March 9, 2022, the Transportation and Environment Committee held worksessions to review the issues raised in connection with the Planning Board Draft of Corridor Forward: The I-270 Transit Plan.
5. On March 22, 2022, the County Council reviewed the Planning Board Draft of Corridor Forward: The I-270 Transit Plan and the recommendations of the Transportation and Environment Committee.

1. On March 24, 2022, the Office of Management and Budget transmitted to the County Council the Executive's Fiscal Impact Statement for the Planning Board Draft of Corridor Forward: The I-270 Transit Plan.

Action

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following resolution:

The Planning Board Draft of Corridor Forward: The I-270 Transit Plan, dated January 2022, is approved with revisions. County Council revisions to the Planning Board Draft of Corridor Forward: The I-270 Transit Plan are identified below. Deletions to the text of the Plan are indicated by [brackets], additions by underscoring. All page references are to the January 2022 Planning Board Draft of Corridor Forward: The I-270 Transit Plan.

Page 5 Revise the Abstract as follows:

Corridor Forward: The I-270 Transit Plan contains an examination of and recommendations for a transit network, which includes both a near-term network of dedicated bus lanes and a long-term [recommendation for] vision of an extension of Metrorail's Red Line and enhanced MARC service along the Brunswick Line. The near-term network of dedicated bus lanes builds on existing master planned projects, including the MD 355 and Veirs Mill Road Bus Rapid Transit (BRT) projects to create a transit network that serves communities and employment centers along the I-270 corridor. Corridor Forward re-envision the master planned Corridor Cities Transitway as a network of dedicated bus lanes, which connect the I-270 corridor communities to the county's existing and planned rapid transit network.

Corridor Forward is a functional master plan that looks ahead 25 years from the date of adoption. [The Plan's first priority is the immediate implementation of the MD 355 BRT and Veirs Mill Road BRT. The Plan's second priority is the Corridor Connectors, and the third priority is the Red Line Extension.] This Plan recommends the MD 355 BRT and Veirs Mill Road BRT as the most crucial first steps in improving transit accessibility along the I-270 corridor. Incremental implementation of the Corridor Connectors and pursuit of actions to advance the Red Line [E]extension and MARC commuter rail enhancements are envisioned over the Plan's horizon.

Page 7 Revise the first sentence of the third paragraph in Chapter 1 – Executive Summary as follows:

In response, Corridor Forward: The I-270 Transit Plan offers a refocused vision for the corridor. It proposes a transit network, which includes [a] near-term recommendations for dedicated bus lanes and [a] long-term recommendations for

an extension of Metrorail's Red Line and enhancements to MARC commuter rail along the Brunswick Line.

Page 7 Revise the fourth paragraph in Chapter 1 – Executive Summary as follows:

The [proposed] transit network was determined through an iterative planning process, which began with the identification of general stakeholder values and priorities pertaining to transit, as well as an inventory and initial evaluation of potential transit options. Next, metrics were developed to consider the cumulative benefits, costs, and risks of six compelling transit options retained for detailed analysis. Based on performance, implementation, and policy considerations, components of three of the six transit options were combined and subsequently evaluated to develop the [proposed] transit network.

Page 7 Revise the subsection of The Proposed Network as follows:

[THE PROPOSED NETWORK] PLAN RECOMMENDATIONS

The Plan recommendations are organized into four groups: Near-Term Transit Network, Long-Term Transit Vision, Supporting Recommendations, and Regional Opportunities.

Page 7 Revise the subsection title for Near-Term Dedicated Bus Lanes:

Near-Term [Dedicated Bus Lanes] Transit Network

Page 8 Revise the second paragraph the subsection Near-Term Dedicated Bus Lanes as follows:

The [complete proposed] transit network, with additional dedicated bus lanes beyond the MD 355 and Veirs Mill Road BRT services, is shown in Figure 1. This network augments the planned BRT routes in midcounty and upcounty to maximize connectivity, reduce implementation obstacles, and unlock multiple community-serving service patterns. The [proposed] transit network's dedicated bus lanes can serve as individual dedicated bus lanes (if implemented in a piecemeal fashion following the MD 355 and Veirs Mill Road BRTs) and as a network, providing significantly improved transit connectivity for communities in the midcounty and upcounty once they are fully constructed. Corridor Forward shifts the focus from single branded services, like the CCT, to a flexible network of Corridor Connectors - dedicated bus lanes that can support multiple routing patterns. Dedicated bus lanes do not need to be restricted to a single purpose or route, and the county does not need to wait to fund the full system to advance components of the [proposed] Corridor Connectors. The recommended Corridor Connectors are listed below:

Page 8 Replace the remainder of the subsection Near-Term Dedicated Bus Lanes as follows:

[The Plan’s ultimate success is demonstrated through implementation of the proposed transit network. As the network may be implemented incrementally, Corridor Forward suggests priorities for the order of implementation, as well as strategies to advance implementation. The Plan’s highest priorities for implementation are the MD 355 and Veirs Mill Road BRT services, followed by the Corridor Connectors in the following order:

- The Germantown and Life Sciences Connectors
- The Lakeforest/Montgomery Village Connector
- The Great Seneca Connector
- The Manekin West Connector
- The Milestone/COMSAT East Clarksburg Connector]

- The Rockville Connector
- The Life Sciences Connector
- The Crown Connector
- The Great Seneca Connector
- The Lakeforest/Montgomery Village Connector
- The Germantown Connector
- The Manekin West Connector
- The Milestone/COMSAT East Clarksburg Connector

The Plan supports the implementation of the Great Seneca Transit Network, prioritizing investments that increase frequencies and provide meaningful travel time benefits for transit users. This network, proposed by the Montgomery County Department of Transportation (MCDOT), envisions a series of new local bus routes serving the Great Seneca vicinity. These routes are enhanced with operational improvements such as transit signal priority, queue jumps, and express bus lanes. In addition, the Corridor Connectors can be used by commuter bus services to support off-highway diversions to key points of demand. In this regard, the infrastructure becomes multifunctional. Also, while not studied extensively in this Plan, the recommendations include continued support for the North Bethesda Transitway.

Page 8

Revise the subsection Long-Term Extension of the Red Line as follows

Long-Term [Extension of the Red Line] Transit Vision

In addition to the [Corridor Connectors] Near-Term Transit Network, the [proposed] Plan [transit network] also includes [a] recommendations for a long-term extension of the Washington Metropolitan Area Transit Authority’s (WMATA) Metrorail Red Line to Germantown Town Center and enhancements to the Maryland Area Regional Commuter (MARC) Brunswick Line. [This long-term extension is] These long-term transit investments are ambitious due to the additional detailed [analysis] analyses required, the magnitude of coordination, and

existing WMATA and MARC priority projects. For example, the work that must be done within the core of the existing Metrorail system, [all of which] must be addressed prior to advancing [the recommendation] an extension of the Red Line. [This Plan identifies several specific factors that require coordination for the long-term extension to advance.]

Page 8

Add two new subsections under The Proposed Network as follows:

Supporting Recommendations

Beyond the proposed transit network itself, Corridor Forward offers additional recommendations that support the proposed transit network and strengthen the potential to advance local and regional transit connectivity.

Regional Opportunities

The Plan includes recommendations that focus on connections to adjacent jurisdictions, such as Frederick County and Fairfax County, Virginia. Recommendations include studying an extension of the Purple Line west of Bethesda, designing the American Legion Bridge to support rail transit, and exploring a direct transitway connection to Frederick City.

Page 10




Revise the section Additional Recommendations as follows:



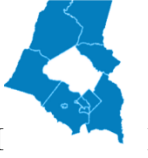
[ADDITIONAL RECOMMENDATIONS] RECOMMENDATIONS SUMMARY

[Beyond the proposed network, Corridor Forward offers additional recommendations that support the proposed transit network and strengthen the potential to advance local and regional transit connectivity.] County actions accompany each of these recommendations, which are organized by [priority] category and champion—meaning which jurisdiction(s) would likely take the lead on advancing a recommendation given the anticipated benefits. As shown in Table 1, champions to advance recommendations include both Montgomery County as well as multiple stakeholders within the region. [explains how recommendations are organized.] Table 2 provides the complete set of recommendations that strengthen the proposed network and support regional connectivity.














Page 10






Revise Table 1 as follows:

| | [Priority] | |
|--|--|--|
| [Primary Recommendation] | [Supporting Recommendation] | [Future Need or Consideration] |
|  [] |  [] |  [] |

| | | |
|--|---|---|
| <p>[Primary recommendations are the Plan’s foundational recommendations. These recommendations represent the Plan’s ultimate vision for Corridor accessibility.]</p> | <p>[Supporting recommendations strengthen the advancement and quality of the Plan’s primary recommendations.]</p> | <p>[Future needs or considerations are recommendations that, while lower in priority, support long-term regional connectivity.]</p> |
| Champion | | |
| Montgomery County | Shared by County and Others | [Primarily Others] |
|  |  |  |
| <p>Montgomery County government is the lead agency responsible for advancing a recommendation, and the county’s constituents stand the most to gain from a recommendation’s advancement.</p> | <p>Multiple parties within the region, including Montgomery County government, are necessary to advance a recommendation. Benefits are relatively distributed across various regional stakeholders.</p> | <p>[Montgomery County government can cooperate and support the advancement of a recommendation, but the lead stakeholder is not Montgomery County government. Montgomery County’s constituents stand to gain from the recommendation, but benefits may be greater for other parties.]</p> |

Remove Table 2 – Summary of Recommendations and replace with the following table:

| Recommended Near-Term Transit Network | Champion |
|---|---|
| A. Implement the MD 355 BRT and Veirs Mill Road BRT. |  |
| B. Implement the Corridor Connectors, a network of dedicated bus lanes in the midcounty and upcounty, which include refinements to the Corridor Cities Transitway. |  |
| C. Support the Great Seneca Transit Network. |  |
| D. Support the North Bethesda Transitway alignment as master-planned. |  |
| E. Continue state-provided commuter bus service on I-270, making use of the Corridor Connectors when diverting to bus stations in Montgomery County’s population and employment centers via the Corridor Connectors. |  |
| Recommended Long-Term Transit Vision | Champion |
| F. Work with local, state, and regional partners to advance the recommendation for a Red Line Extension to Germantown Town Center. |  |
| G. Support the long-term potential of the Maryland Transit Administration MARC Rail Brunswick Line. |  |
| H. Promote strategic and equitable MARC Rail access by supporting new stations. |  |
| Supporting Recommendations | Champion |
| I. Convert existing general-purpose travel lanes to dedicated transit lanes on targeted streets to maximize person throughput and improve the relative travel time competitiveness and convenience of transit, including—but not limited to—the streets detailed in the right-of-way table. |  |
| J. Prioritize the provision of dedicated transit lanes and spaces for walking, bicycling and other micromobility modes over auto capacity to maximize person throughput and improve the relative travel time competitiveness and convenience of transit. |  |
| K. Develop a multimodal transit hub within the vicinity of Metropolitan Grove as part of implementation of the Red Line Extension to serve local bus, BRT, Metrorail and MARC services. |  |
| L. Ensure safe and efficient access to planned transit stops for pedestrians, bicyclists, and other micromobility modes. |  |
| M. Update relevant land use plans and guidelines to support master-planned transit facilities. |  |

| | |
|---|---|
| N. Where beneficial and/or necessary, support the incremental implementation of dedicated bus lanes. |  |
| O. Maximize the travel potential of dedicated bus lanes. |  |
| Regional Opportunities | Champion |
| P. Study extensions of the Purple Line to understand if and where extension(s) of the county's light rail service may be warranted. |  |
| Q. Design and construct the American Legion Bridge to support rail transit. |  |
| R. Explore a direct transitway connection between the recommended WMATA Metrorail Red Line terminus and Frederick City. |  |

Page 13

Remove the two paragraphs on page 13:

[While this Plan focuses on infrastructure and not operational improvements, it also supports two additional key services as noted in recommendations G and H. First, the Plan supports the implementation of the Great Seneca Transit Network, prioritizing investments that increase frequencies and provide meaningful travel time benefits for transit users. This network, proposed by the Montgomery County Department of Transportation (MCDOT), envisions a series of new local bus routes serving the Great Seneca vicinity. These routes are enhanced with operational improvements such as transit signal priority, queue jumps, and express bus lanes. Second, the Corridor Connectors can be used by commuter bus services to support off-highway diversions to key points of demand. In this regard, the proposed infrastructure becomes multifunctional. Also, while not studied extensively in this Plan, recommendation K discusses continued support for the North Bethesda Transitway.

Corridor Forward extensively studied MARC Rail Enhancements as contemplated in the Maryland Transit Administration's (MTA) MARC Cornerstone Plan (2018). Recommendations M and N call for continued support of the long-term potential of MARC Rail. This plan maintains the recommendation to obtain right-of-way for additional mainline track during the development process and advocates for already master-planned stations at Shady Grove and White Flint.]

Page 15

Revise the second bullet:

- Planned concepts are often advanced without strategic or flexible implementation strategies, inviting opportunities for perpetual tweaks and re-envisioning. This topic is addressed in the narrative of Chapter 5 [and recommendations of Chapter 6].

- Page 15 Remove the third bullet:
- [Historically, the county’s policies supported convenient automobile travel without a comparable emphasis on implementing high-quality transit. Commitment is required to not only implement transit but ensure that it is successful and competitive with driving. This topic is addressed throughout the Plan’s recommendations, but significant focus is provided on this issue in the recommendations in Chapter 6.]
- Page 19 Revise the sixth bullet:
- [Span of service spectrum] Geographic Coverage: Some modes typically provide [greater spans of service] longer distance services, traversing regions rather than localities. Other modes provide more locally-focused service.
- Page 19 Revise the fourth sentence in the last paragraph of the subsection When Everything is a Priority...:
- Metrorail and BRT modes fall somewhere in the middle of the access-efficiency and [span of service] geographic coverage spectrums.
- Page 22 Revise the first sentence of the page as follows:
- [Per Planning Board direction, t]The top performing options advanced for further analysis were:
- Page 23 Retitle Chapter 4 - Initial Evaluation:
- [INITIAL] OPTIONS EVALUATION
- Page 23 Revise the first paragraph of Chapter 4 – Initial Evaluation:
- This chapter provides information and insight regarding the performance of the six options that advanced for further technical analysis. [Three of the six options—the Corridor Cities Transitway, the Managed Lanes Enhanced Commuter Bus, and the Red Line Extension—demonstrated merit, warranting inclusion in further Plan analyses. Montgomery Planning further examined components of these three options as larger networks. This chapter includes recommendations related to the three services that were not included in the Plan’s network studies, which include Enhanced MARC Rail, a New Frederick Rail Connection, and the Purple Line Extension. Each of these options offers long-term benefits and may warrant implementation following the build-out of the prioritized network.]
- Page 23 Remove the third paragraph in the subsection The Approach:

[The initial evaluation of the retained options suggests that the Purple Line Extension, Enhanced MARC Rail, and Frederick Rail Connection options have merit, but offer benefits that are comparably less attractive when viewed through the lens of this Plan’s goal. The descriptive summaries that follow offer recommendations intended to strengthen regional connectivity that are relevant to the long-term merits of these options. The relative performance of the CCT, Managed Lanes Enhanced Commuter Bus, and Red Line Extension options resulted in the inclusion of components of these options within the Plan’s proposed transit network, discussed in Chapter 5.]

Page 24 Revise the title of Table 5 – Initial Evaluation (2045):

Table 5 – [Initial] Options Evaluation (2045)

Page 24 Revise the last paragraph in the subsection Purple Line Extension as follows:

Other alignments—for example, one that travels along Old Georgetown Road to Rock Spring via the National Institutes of Health, Suburban Hospital, and Montgomery Mall—might yield greater benefits. [While this Plan does not prioritize the studied alignment, it recommends that the county consider and maintain options for a future Purple Line Extension, including potential alignments that extend into Northern Virginia. The Plan makes the following recommendations to support this consideration:]

Page 25 Remove Table 6 – Purple Line Extension Recommendations.

Page 26 Remove the last four paragraphs in the subsection Enhanced MARC Rail as follows:

[Compared with other options, Enhanced MARC Rail increases access to the smallest number of corridor jobs, both generally and for Equity Focus Area communities and is less successful than the direct Frederick Rail Connection option at reducing VMT and carbon emissions.

Necessary infrastructure improvements to enhance MARC Rail are both costly and challenging. Even before accounting for the line’s anticipated 78 grade crossings (which includes overpasses, underpasses, and pedestrian facilities), the Plan estimates substantial capital and renewal costs for the option. Given that the railroad has been operational for over a century, several sites and districts along the corridor have been designated as historic, and the additional main line track could potentially impact over 40 locations with some form of existing or planned historic designation.

Most importantly, CSX Transportation owns the majority of the rail tracks used by the MARC Rail Brunswick Line (including the Old Main Line Subdivision between Point of Rocks and Frederick Junction; excluding the Frederick Branch between

Frederick Junction and downtown Frederick) adding complexity into the implementation outlook for proposed enhancements. Infrastructure improvements would require discussions and negotiations with CSX, which would certainly require limitations to—and mitigations for—any freight service disruption.

At the time of this writing, the potential of the state’s commuter rail services has been a topic of significant state and local policymaking interest. Within the county, forecasted gains are modest for communities that are not well-connected to the county’s high-quality transit network. While enhancements to the MARC Rail Brunswick Line are not a priority within the Plan’s recommended transit network, Corridor Forward recommends maintaining the existing service and supports the long-term potential of the MARC Rail Brunswick Line. The Plan cautions the need to maintain realistic expectations for future enhancements based on constraints.]

Page 27 Remove Table 7 – Enhanced MARC Rail Recommendations.

Page 28 Remove Table 8 – Frederick Rail Connection Recommendation.

Page 31 Remove Table 10 – Managed Lanes Enhanced Commuter Bus Recommendation.

Page 32 Remove the subsection Performance Outcomes

[PERFORMANCE OUTCOMES

The Plan’s transit options evaluation demonstrates the comparative benefits and costs of studied options. The Managed Lanes Enhanced Commuter Bus and Red Line Extension options offer benefits to both the county and region, while the CCT improves local access. Based on benefits derived for the county, the Plan retained these options for further evaluation, which informed the development of the proposed transit network.]

Page 33 Replace Chapter 5 – Proposed Transit Network and Chapter 6 – Implementation Strategies as follows:

Corridor Forward establishes a near-term transit network for the I-270 corridor, complemented by a long-term transit vision. The near-term and long-term networks are supplemented by additional recommendations focused on supporting and enhancing the transit network and strengthening connections to adjacent jurisdictions. The Corridor Connectors, in combination with local and commuter bus, bus rapid transit, and rail create a complete transit network for the midcounty and upcounty that serves existing and planned land use as well as provides a viable alternative to travel by car for trips among neighborhoods, centers of activity, and destinations within the region.

Table 7 and Tables 10 to 12 outline the Plan’s recommendations. The Plan’s ultimate success is demonstrated through implementation of its recommendations.

As a result, each recommendation includes action steps towards advancing implementation.

NEAR-TERM TRANSIT NETWORK


The near-term network builds on existing master-planned projects, such as the MD 355 and Veirs Mill Road BRT projects, through new dedicated bus lanes—referred to as the Corridor Connectors. The Corridor Connectors re-envision the previously master-planned CCT as a network of more buildable dedicated bus lanes, which connect I-270 corridor communities to the county’s existing and planned rapid transit network.





Master-Planned BRT Services

This Plan recommends the MD 355 and Veirs Mill Road BRT services as the most crucial first step in improving corridor accessibility. MD 355 functions as the county’s primary north-south rapid transit corridor, and Viers Mill Road provides a crucial link between Wheaton and Rockville. These routes offer connections to high-quality services like Metrorail and the MARC Rail Brunswick Line, as well as other planned BRT services. The dedicated bus lanes included in the Corridor Connectors connect to these services, creating a network with numerous service pattern opportunities. While current planning and design work for these two services does not envision bidirectional dedicated bus lanes on all planned segments, this Plan supports the implementation of interim conditions (peak hour dedicated bus lanes, queue jumps, some mixed-traffic segments, etc.) where necessary, but maintains and recommends bidirectional dedicated bus lanes for these services as the ultimate vision.

In addition to the MD 355 and Veirs Mill Road BRTs, the Plan recommends implementation of the North Bethesda Transitway, specifically maintaining the recommendation from the 2013 *Countywide Transit Corridors Functional Master Plan*, prioritizing service to White Flint based on the county’s land use goals.

Table 7 – Near-Term Transit Network Recommendations

| <u>Near-Term Transit Network</u> | <u>County Actions</u> | <u>Champion</u> |
|--|--|---|
| <u>Implement the MD 355 BRT and Veirs Mill Road BRT.</u> | A. <u>Secure financial support for the MD 355 BRT and Veirs Mill Road BRT; advance and construct these two key services.</u> |  |

| <u>Near-Term Transit Network</u> | <u>County Actions</u> | <u>Champion</u> |
|---|--|---|
| <p><u>Implement the Corridor Connectors, a network of dedicated bus lanes in the midcounty and upcounty, which include refinements to the Corridor Cities Transitway.</u></p> | <ul style="list-style-type: none"> A. <u>Create a new capital project for the Corridor Connectors so individual Corridor Connectors may be prioritized, and funds may be allocated.</u> B. <u>Work with MDOT to shift funding commitments in the Consolidated Transportation Program from the CCT to the Corridor Connectors, specifically the Corridor Connectors that most align with the original CCT alignment: the Life Sciences Connector, the Great Seneca Connector, and the Milestone/COMSAT East Clarksburg Connector.</u> C. <u>Study and demonstrate the local and regional value of the remaining Corridor Connectors: the Rockville Connector, the Crown Connector, the Lakeforest/Montgomery Village Connector, the Germantown Connector, and the Manekin West Connector.</u> D. <u>If and when the state advances the Managed Lanes project north of I-370, advocate for access points that support connections to the Life Sciences Center, Montgomery Village/Lakeforest, and Germantown Town Center via the proposed Corridor Connectors.</u> |  |
| <p><u>Support the Great Seneca Transit Network.</u></p> | <ul style="list-style-type: none"> A. <u>Support infrastructure improvements associated with the Great Seneca Transit Network (Pink, Cobalt, Lime, and Gray Lines), prioritizing routes that either make use of or complement the Corridor Connectors.</u> B. <u>Align the “extended network” to make use of the Corridor Connectors, including the Germantown Connector, the Montgomery Village Connector, and the Life Sciences Connector.</u> C. |  |
| <p><u>Support the North Bethesda Transitway alignment as master-planned.</u></p> | <ul style="list-style-type: none"> A. <u>Maintain the recommendation from the 2013 <i>Countywide Transit Corridors Functional Master Plan</i> for the North Bethesda Transitway, prioritizing service to White Flint based on the county’s land use goals.</u> |  |
| <p><u>Continue state-provided commuter bus service on I-270, making use of the Corridor Connectors when diverting to bus stations in Montgomery County’s population and employment centers via the Corridor Connectors.</u></p> | <ul style="list-style-type: none"> A. <u>Recommend the state explore opportunities to fund the Corridor Connectors as a mechanism to enhance commuter bus service, prioritizing the Germantown and Life Sciences connectors.</u> |  |

Corridor Connectors

The Corridor Connectors build upon the work of previous plans and studies associated with the county's planned BRT network and envision a system of dedicated bus lanes that, once implemented in full, can support a series of different service patterns, to be determined by operating partners at county, state, or other inter-jurisdictional levels. The transit network maximizes the potential of the MD 355 BRT and Veirs Mill Road BRT by providing branches of additional dedicated bus lanes that feed into the two services.

This Plan re-envision the previously master-planned CCT as a network of dedicated bus lanes, which connect I-270 corridor communities to the county's existing and planned rapid transit network. The proposed Corridor Connectors provide dedicated bus lanes within and among the Corridor Cities of Rockville, Gaithersburg, Germantown, and Clarksburg, and provide the opportunity for transit that is accessible, convenient, and efficient among these centers of activity. The proposed Corridor Connectors introduce an additional transit choice and a viable alternative to driving for trips within the midcounty and upcounty – fulfilling the missing link in the hierarchy of mobility needs discussed in Chapter 3.

The Corridor Connectors address both the purposes and barriers of the master planned CCT by integrating communities previously planned for service into the currently planned MD 355 and Veirs Mill Road BRT network.

In addition, these dedicated bus lanes may be used to support BRT and commuter bus service. With dedicated lanes available and proximate to the highway, commuter buses can divert into these dedicated bus lanes to access communities and activity centers more quickly and efficiently.

The Corridor Connectors represent the network of dedicated bus lanes in Great Seneca, Lakeforest, Montgomery Village, Germantown, and Clarksburg, and they include the following components:

- The Rockville Connector
- The Life Sciences Connector
- The Crown Connector
- The Great Seneca Connector
- The Lakeforest/Montgomery Village Connector
- The Germantown Connector
- The Manekin West Connector
- The Milestone/COMSAT East Clarksburg Connector

Rockville Connector

The Rockville Connector links Rockville with the Life Sciences Center, and it can be considered an extension of the dedicated bus lanes associated with the Veirs Mill Road BRT. This Plan anticipates that links between the Life Sciences Center,

the county seat in Rockville, and the significant labor pools residing in the Twinbrook and Wheaton areas may support access to and growth of the Life Sciences Center. In addition, this connector creates the opportunity for a one-seat ride to the Life Sciences Center from points southeast like Rockville Town Center, Twinbrook, and Wheaton. Analysis demonstrates that a connection to the Life Sciences Center could add as many as 5,300 new daily riders to the Veirs Mill Road BRT, many of whom reside in Equity Focus Areas along Veirs Mill Road.

The Rockville Connector includes two alternative alignments between MD 355 and the Life Sciences Connector. The first alignment runs along Gude Drive between MD 355 and Piccard Drive, while the second alignment travels along MD 28 from MD 355 to Gude Drive. The constructed alignment will be determined during the facility planning process.

Life Sciences Connector

The Life Sciences Connector links the Shady Grove Metro station with the Life Sciences Center, and it connects to the MD 355 BRT as well as the Great Seneca and Crown Connectors. If the state advances an interchange at Gude Drive as a component of the Managed Lanes project (or some other future interstate project), commuter buses running on I-270 will be able to quickly and efficiently divert from the interstate to access the Life Sciences Center via the dedicated bus lanes.

Crown Connector

The Crown Connector provides dedicated bus lanes between I-370 and the Life Sciences Connector. The dedicated bus lanes largely align with the previously master-planned CCT alignment along Decoverly Drive, Diamondback Drive, and Broschart Road. This connector provides premium transit infrastructure to Crown Farm, as well as efficient access to the Universities at Shady Grove and Adventist Health Care Shady Grove Medical Center.

Great Seneca Connector

The Great Seneca Connector extends between the terminus of the Life Sciences Connector and MD 355 at Watkins Mill Road, largely following the path of the previously master-planned CCT with slight deviations. This alignment of dedicated bus lanes connects communities and employment centers such as the National Institute of Standards and Technology (NIST) and the Kentlands into the county's larger BRT network. When joined with the Life Sciences Connector, these communities receive direct access to the Life Sciences Center employment hub, as well as the Metrorail Red Line in Rockville. Depending on the ultimate service patterns programmed by operational partners, completing the Link offers the potential to provide one-seat rides between Wheaton and NIST or Montgomery Village and the Life Sciences Center.

Two alternative alignments are provided: one alternative includes dedicated bus lanes through the Public Safety Training Academy (PSTA) and Belward Farm

properties and then along Muddy Branch Road, while another option includes dedicated bus lanes along Great Seneca Highway. The alignment for the Great Seneca Connector in this location should be determined through subsequent planning processes.

Lakeforest/Montgomery Village Connector

The Lakeforest/Montgomery Village Connector runs along MD 124 from the Great Seneca Connector (which diverts from MD 124 at Clopper Road) past Lakeforest Mall to Montgomery Village. Gaithersburg's Lakeforest Mall is planned for redevelopment and the municipality has recently completed its Lakeforest Mall Master Plan. The site is currently planned to be served by the MD 355 BRT but could be further enhanced with an east-west link that connects to points of demand along MD 124. Further northeast, Montgomery Village, a relatively dense, established community, and a designated Equity Focus Area, is not well connected to premium transit. Providing service along MD 124 to integrate Montgomery Village in a direct and efficient manner to the MD 355 BRT, as well as points west and south, such as the National Institute of Standards and Technology, Kentlands, and the Life Sciences Center, will generally improve access for this underserved community.

The alignment proposes two stops: Montgomery Village Center and Lakeforest Mall. However, additional stops could be explored during the facility planning process as numerous dense subdivisions have access adjacent to Montgomery Village Avenue/MD 124. The Lakeforest Mall Master Plan discusses potentially relocating the site's transit center closer to MD 355. Corridor Forward reiterates this suggestion. As I-270 highway access is provided at Montgomery Village Avenue/MD 124, commuter bus service operated by others could potentially use the recommended dedicated bus lanes to improve regional access for Lakeforest and Montgomery Village.

Germantown Connector

The Germantown Connector links points of demand along MD 118, including Montgomery College (Germantown), Germantown Town Center, and the Germantown MARC Station. The dedicated bus lanes on MD 118 allow the MD 355 BRT service to travel to and from Germantown Town Center in dedicated lanes. The Germantown Connector supports local connectivity for rapid and local service alike; Ride On buses 61, 75, and 83 all use segments of MD 118 and could be supported by the dedicated lanes. In addition, the Germantown Connector can serve potential commuter bus diversions from the interstate to points of demand in Germantown.

Manekin West Connector

The Manekin West Connector connects the Germantown Connector and Milestone/COMSAT East Clarksburg Connector. Dedicated bus lanes on Aircraft Drive, Century Boulevard, and Dorsey Mill Road comprise the Manekin West Connector, which unlocks the potential to route some MD 355 BRT buses to

communities originally envisioned for CCT service. In other words, following a diversion to Germantown Town Center, some MD 355 BRT buses could run and terminate at Manekin or continue to Clarksburg via the Milestone/COMSAT East Clarksburg Connector east of I-270. While the Corridor Connector extends over the planned Dorsey Mill Bridge, the bridge itself is not considered part of the transit project. This Corridor Connector serves the developing Black Hill communities, as well as apartment complexes and office parks in the Cloverleaf vicinity.

Milestone/COMSAT East Clarksburg Connector

A third branch of dedicated bus lanes between Germantown and Clarksburg—the Milestone/COMSAT East Clarksburg Connector—will allow the MD 355 BRT to connect to other CCT communities and employment centers, including stops at Dorsey Mill, COMSAT, and Gateway Center via Observation Drive—or alternatively, Gateway Center Drive—before traveling to the Clarksburg Outlet terminus.

Today, an extension of Observation Drive (or alternatively Gateway Center Drive) remains yet to be constructed between its existing termini. Montgomery Planning anticipates initiating master planning work for the existing unoccupied COMSAT site, where a roadway connection is planned.

The dedicated bus lanes in Germantown and Clarksburg integrate six previously master-planned northern CCT stops into the MD 355 BRTs network. Because MD 355 provides connectivity to both the Shady Grove and Rockville Metrorail stations (as well as other points on the Red Line), one of the original intents of the CCT—connecting Germantown and Clarksburg to the WMATA Metrorail System—is satisfied in a more efficient and less costly manner.

Relationship to the CCT

This Plan re-envisioned the master planned CCT as a network of dedicated bus lanes that connect I-270 corridor communities to the county's existing and planned rapid transit network and support MCDOT's Great Seneca Transit Network. The Corridor Connectors provide a more implementable alternative to the CCT, consistent with the position of MDOT SHA that supports options that reduce and/ or eliminate the need for additional infrastructure. Three cost-saving elements of the Corridor Connectors include:

- The planned CCT overpass connecting King Farm Boulevard and Fields Road is no longer necessary, reducing implementation costs.
- By connecting to the MD 355 BRT, the Corridor Connectors eliminate the need for the dedicated bus lanes paralleling the western side of I-270 that do not serve any planned communities. Removing three miles of new right-of-way reduces the project's costs.
- While the Corridor Connectors maintain the crossing of the Dorsey Mill Bridge, bridge design and construction is not considered part of the

Corridor Connector project. There is merit to the Manekin West Connector and Milestone/COMSAT East Clarksburg Branch even if the two are not linked across I-270. Exclusion of the bridge from the transit project further reduces the Corridor Connectors' implementation cost.

Corridor Forward recommends the Maryland Department of Transportation shift funding commitments in the Consolidated Transportation Program from the Corridor Cities Transitway to the Corridor Connectors, specifically the Corridor Connectors that most align with the original CCT alignment: the Life Sciences Connector, the Great Seneca Connector, and the Milestone/COMSAT East Clarksburg Connector.

While Corridor Forward proposes a re-envisioning of the CCT with Corridor Connectors, this Plan does not recommend vacating existing transit easements or previous dedications as these may still be beneficial in the long-term for various purposes, including but not limited to, transit, pedestrian, bicycle, and other micromobility improvements.

Roadway and Transitway Recommendations

Error! Reference source not found. details the right-of-way needs for the Corridor Connectors. The minimum right of way widths provided in the table reference the county's Complete Streets Design Guide to determine spacing needs. These guidelines inform ultimate design with the aim of creating safe, sustainable, and dynamic street environments. In most cases, roadways are not expanded beyond current master planned widths. Where ranges are presented, the lower end of the range is highly preferable to support sound urban design and the development of pedestrian-friendly environments. Research suggests that pedestrians tend to prefer environments that create a sense of enclosure, which is easier to accomplish in tighter street environments. In some cases, the higher end of a range may be necessary, particularly if repurposing automobile capacity is not possible.

Beyond the table, this Plan removes the "T" (transit) designation from all CCT roadways not explicitly included in Table 14. Subsequent county master plans will address the right-of-way widths for roadways previously master planned for CCT service. In locations where roadways planned for CCT service fall within municipalities, Gaithersburg and Rockville, as relevant, maintain the authority to consider and address transit and right-of-way widths at their discretion. These communities will be served by the Corridor Connectors, as well as the Great Seneca Transit Network—a series of enhanced, locally serving bus routes. As some of the transit network falls within municipalities, this Plan recommends municipal consideration of the right-of-way needs, as shown in Table 2.

Table 1 – Roadway and Transitway Recommendations

| <u>Connector</u> | <u>Roadway</u> | <u>To</u> | <u>From</u> | <u>Designation</u> | <u>Minimum ROW¹</u> | <u>Preferred Number of Dedicated Bus Lanes</u> |
|--|---|--|---|--|--------------------------------|--|
| <u>Life Sciences Connector</u> | <u>Medical Center Drive</u> | <u>Fallsgrove Boulevard</u> | <u>Broschart Road</u> | <u>Arterial, A-261d</u> | <u>100-150</u> | <u>2</u> |
| | <u>Medical Center Drive</u> | <u>Broschart Road</u> | <u>Great Seneca Highway</u> | <u>Arterial, A-261d</u> | <u>100-150</u> | <u>2</u> |
| | <u>Medical Center Drive</u> | <u>Great Seneca Highway</u> | <u>Key West Avenue</u> | <u>Arterial, A-261d</u> | <u>100-150</u> | <u>2</u> |
| <u>Crown Connector</u> | <u>Decoverly Drive</u> | <u>Gaithersburg City Limit</u> | <u>Diamondback Drive</u> | <u>Arterial, A-284</u> | <u>100-150</u> | <u>2</u> |
| | <u>Diamondback Drive</u> | <u>Decoverly Drive</u> | <u>Key West Avenue</u> | <u>Arterial, A-261b</u> | <u>100-150</u> | <u>2</u> |
| | <u>Broschart Road</u> | <u>Key West Avenue (MD 28)</u> | <u>Medical Center Drive</u> | <u>Arterial, A-261b</u> | <u>100-150</u> | <u>2</u> |
| <u>Great Seneca Connector</u> | <u>Great Seneca Highway (MD 119)</u> | <u>Medical Center Drive</u> | <u>Key West Avenue (MD 28)</u> | <u>Controlled Major Highway, CM-90</u> | <u>150'</u> | <u>2</u> |
| | <u>Great Seneca Highway (MD 119)</u> | <u>Key West Avenue (MD 28)</u> | <u>Sam Eig Highway</u> | <u>Controlled Major Highway, CM-90</u> | <u>150'-200'</u> | <u>2</u> |
| | <u>Johns Hopkins Drive²</u> | <u>Key West Avenue (MD 28)</u> | <u>Belward Campus Drive</u> | <u>Arterial, A-261d</u> | <u>100-150</u> | <u>2</u> |
| | <u>Decoverly Drive²</u> | <u>Muddy Branch Road</u> | <u>Johns Hopkins Drive</u> | <u>Arterial, A-284</u> | <u>100-150</u> | <u>2</u> |
| | <u>Muddy Branch Road²</u> | <u>Decoverly Drive</u> | <u>Great Seneca Highway</u> | <u>Major Highway, M-15</u> | <u>170</u> | <u>2</u> |
| <u>Lakeforest/Montgomery Village Connector</u> | <u>Montgomery Village Avenue (MD 124)</u> | <u>Gaithersburg City Limits</u> | <u>Mid-County Highway</u> | <u>Major Highway, M-24</u> | <u>120'-140'</u> | <u>2</u> |
| | <u>Montgomery Village Avenue (MD 124)</u> | <u>Mid-County Highway</u> | <u>Club House Road</u> | <u>Arterial, A-295</u> | <u>120'³</u> | <u>2</u> |
| <u>Germantown Connector</u> | <u>Germantown Road (MD 118)</u> | <u>Bowman Mill Drive (MARC access)</u> | <u>Frederick Road (MD 355)</u> | <u>Major Highway, M-61</u> | <u>150'</u> | <u>2</u> |
| <u>Manekin West Connector</u> | <u>Aircraft Drive</u> | <u>Germantown Road (MD 118)</u> | <u>Century Boulevard</u> | <u>Business District Street, B-7</u> | <u>100'</u> | <u>2</u> |
| | <u>Crystal Rock Drive</u> | <u>Century Boulevard</u> | <u>Germantown Road (MD 118)</u> | <u>Business District Street, B-24</u> | <u>120'</u> | <u>2</u> |
| | <u>Century Boulevard</u> | <u>Crystal Rock Drive</u> | <u>Aircraft Drive</u> | <u>Business District Street, B-10</u> | <u>136'</u> | <u>2</u> |
| | <u>Century Boulevard</u> | <u>Aircraft Drive</u> | <u>Crystal Rock Drive Northern Circle</u> | <u>Business District Street, B-10</u> | <u>136'</u> | <u>2</u> |
| | <u>Dorsey Mill Road</u> | <u>Century Boulevard</u> | <u>Observation Drive</u> | <u>Business Street, B-14</u> | <u>150</u> | <u>2</u> |

| | | | | | | |
|---|--|---|-----------------------------------|----------------------------|------------------|----------|
| <u>Milestone/COMSAT East Clarksburg Connector</u> | <u>Observation Drive</u> | <u>Germantown Road</u> | <u>Stringtown Road</u> | <u>Arterial, A-19</u> | <u>150'</u> | <u>2</u> |
| | <u>Gateway Center Drive Extended²</u> | <u>Current Observation Drive Terminus</u> | <u>West Baltimore Road</u> | <u>Arterial, A-300</u> | <u>125'</u> | <u>2</u> |
| | <u>Gateway Center Drive Extended²</u> | <u>West Baltimore Road</u> | <u>Shawnee Lane</u> | <u>Arterial, A-300</u> | <u>125'</u> | <u>2</u> |
| | <u>Gateway Center Drive²</u> | <u>Shawnee Lane</u> | <u>Proposed Clarksburg Bypass</u> | <u>Arterial, A-300</u> | <u>125'</u> | <u>2</u> |
| | <u>Gateway Center Drive²</u> | <u>Proposed Clarksburg Bypass</u> | <u>Stringtown Road</u> | <u>Arterial, A-300</u> | <u>125'</u> | <u>2</u> |
| <u>MD 355 BRT – Ultimate Segment 7 Alignment</u> | <u>Ridge Road</u> | <u>Brink Road</u> | <u>MD 355</u> | <u>Major Highway, M-27</u> | <u>150'</u> | <u>2</u> |
| | <u>Ridge Road</u> | <u>Snowden Farm Parkway</u> | <u>Brink Road</u> | <u>Major Highway, M-27</u> | <u>150'</u> | <u>2</u> |
| | <u>Snowden Farm Parkway</u> | <u>Stringtown Road</u> | <u>Ridge Road</u> | <u>Arterial, A-305</u> | <u>120'-140'</u> | <u>2</u> |
| | <u>Stringtown Road</u> | <u>I-270</u> | <u>Snowden Farm Parkway</u> | <u>Arterial, A-260</u> | <u>120'-140'</u> | <u>2</u> |
| | <u>Clarksburg Road</u> | <u>Clarksburg Premium Outlets Entry</u> | <u>I-270</u> | <u>Arterial, A-27</u> | <u>150'</u> | <u>2</u> |

¹ Prioritize lower number of automobile lanes to allow transit, pedestrian, and bicycle capacity.

² Represents an alternate alignment option to be considered during facility planning.

³ Montgomery Village Avenue minimum right-of-way is master-planned to be 120 feet, unless a portion of the right-of-way can be repurposed.

Table 2 – Advisory Only - Roadway and Transitway Recommendations within Municipal Bounds

| <u>Connector</u> | <u>Roadway</u> | <u>From</u> | <u>To</u> | <u>Jurisdiction</u> | <u>Preferred Number of Dedicated Bus Lanes¹</u> |
|-------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------------|--|
| <u>Rockville Connector</u> | <u>West Montgomery Avenue(MD 28)</u> | <u>Shady Grove Road</u> | <u>Gude Drive / Fallsgrove Drive</u> | <u>City of Rockville</u> | <u>2</u> |
| | <u>Gude Drive²</u> | <u>Frederick Road (MD 355)</u> | <u>Piccard Drive</u> | <u>City of Rockville</u> | <u>2</u> |
| <u>Life Science Connector</u> | <u>Redland Boulevard</u> | <u>Piccard Drive</u> | <u>MD 355</u> | <u>City of Rockville</u> | <u>2</u> |
| | <u>Piccard Drive</u> | <u>Redland Boulevard</u> | <u>Gude Drive</u> | <u>City of Rockville</u> | <u>2</u> |
| | <u>Gude Drive</u> | <u>Piccard Drive</u> | <u>Fallsgrove Drive</u> | <u>City of Rockville</u> | <u>2</u> |
| | <u>Fallsgrove Drive³</u> | <u>Gude Drive</u> | <u>Fallsgrove Boulevard</u> | <u>City of Rockville</u> | <u>2</u> |
| | <u>Fallsgrove Boulevard</u> | <u>Fallsgrove Drive</u> | <u>Shady Grove Road</u> | <u>City of Rockville</u> | <u>2</u> |
| <u>Crown Connector</u> | <u>Fields Road</u> | <u>I-370</u> | <u>Decoverly Drive</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| | <u>Decoverly Drive</u> | <u>Fields Road</u> | <u>Gaithersburg City Limit</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| <u>Great Seneca Connector</u> | <u>Great Seneca Highway (MD 119)</u> | <u>Sam Eig Highway</u> | <u>Quince Orchard Road</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| | <u>Quince Orchard Road (MD 124)</u> | <u>Great Seneca Highway (MD 119)</u> | <u>Twin Lakes Drive</u> | <u>City of Gaithersburg</u> | <u>2</u> |

| | | | | | |
|--|---|--------------------------------|---|-----------------------------|----------|
| | <u>Quince Orchard Road (MD 124)</u> | <u>Twin Lakes Drive</u> | <u>Clopper Road (MD 117)</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| | <u>Clopper Road (MD 117)</u> | <u>Quince Orchard Road</u> | <u>Watkins Mill Road</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| | <u>Watkins Mill Road</u> | <u>Clopper Road (MD 117)</u> | <u>Frederick Road (MD 355)</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| <u>Lakeforest/Montgomery Village Connector</u> | <u>Montgomery Village Avenue/Quince Orchard Road (MD 124)</u> | <u>Clopper Road (MD 117)</u> | <u>Frederick Road (MD 355)</u> | <u>City of Gaithersburg</u> | <u>2</u> |
| | <u>Montgomery Village Avenue (MD 124)</u> | <u>Frederick Road (MD 355)</u> | <u>Gaithersburg City Limits (Lakeforest Entrance)</u> | <u>City of Gaithersburg</u> | <u>2</u> |

¹ Provision of transit lanes is strongly suggested for municipal consideration, which has planning authority independent of the county. Prioritization of dedicated bus lanes over automobile travel lanes is strongly recommended.

² Represents an alternate alignment option to be considered during facility planning.

³ While express or dedicated bus lanes are strongly preferred, section could allow off-peak parking or mixed-traffic transit operations, dependent on further facility planning studies.

While median-running transit offers the best opportunity to operate a bus without impact from traffic, in some locations curb-running transit may be preferable. Section needs vary significantly based on context, as utilities, mature trees, and adjacent connecting active zone facilities can impact the most desirable and/or practical design. Engineered sections will be designed during the facility-planning process or determined through the development review process for new development adjacent to the relevant roadway(s).

While Complete Streets classifications have not yet been officially applied to all county roadways by an amendment to the 2018 *Master Plan of Highways and Transitways*, illustrative sections are included in the Plan's Appendix that reference the county's Complete Streets Design Guide to inform development. Dedicated bus lanes are assumed to be 13 feet or 12 feet in constrained sections. Dedicated bus lane buffer widths may vary. Along wider roadways, buffers with six-foot wide medians are preferred to provide pedestrians ADA-compliant crossing refuges; however, in locations where it is preferable to maintain a tight cross-section to reduce crossing distances, two-foot-wide buffers may be appropriate. In locations where left turn lanes are necessary, 16-to-18-foot-wide center medians have the potential to support turning needs and pedestrian refuges, while smaller 12-foot-wide medians do not support pedestrian safety. Consistent with the county's Vision Zero policy and the intent of the Complete Streets Design Guide, prioritizing safety for a roadway's most vulnerable users is paramount. For this reason, ultimate section designs should account for adequate pedestrian refuges across wider roadway sections, as well as appropriate buffers from traffic that protect non-motorists, many of whom are walking, biking, or rolling to transit.

The Great Seneca Transit Network

MCDOT has a network of targeted bus infrastructure within the vicinity of the Life Sciences Center, including newly constructed dedicated lanes, painted express bus-only lanes, queue jumps, and transit signal priority. The network includes five lines connecting various points of demand in the Great Seneca and Gaithersburg vicinities with the Universities at Shady Grove. While Montgomery Planning does not master-plan operational improvements and was not involved in the network's analysis, this Plan supports the implementation of the network, including repurposing travel lanes, as consistent with this Plan's recommendations.

This Plan proposes a near-term network that, when complemented by MCDOT's Great Seneca Transit Network, serves most of the communities originally envisioned for CCT service, as well as additional communities. By itself, the Great Seneca Transit Network does not serve the entire geographic span of the CCT; however, the near-term Corridor Connectors and the Great Seneca Transit Network together support the original vision of the CCT.

Commuter Bus Service on I-270

The Plan recommends continued state-provided commuter bus service on I-270, making use of the Corridor Connectors when diverting to bus stations in Montgomery County's population and employment centers via the Corridor Connectors. The Plan's analysis suggests that there is demand between Frederick and the Life Sciences Center and points spanning between Montgomery Village and Tysons.


The joint MTA and Virginia Department of Rail and Public Transportation's 2021 *American Legion Bridge – Transit/TDM Study* illustrates various investment packages including commuter bus service. The report assumes highway access is available at Gude Drive, implying that the Life Sciences Connector would have a regional benefit. Additionally, the report shows access to Germantown Town Center via a portion of the Germantown Connector. Finally, the report shows a terminal alignment at the Lakeforest Mall, with an alignment that could be slightly re-envisioned to connect these communities with highway infrastructure via MD 124 rather than MD 355. Locations included for service in Gaithersburg could be served by the MTA/DRPT study's MD 355-Gude Drive service pattern. Regardless, the three connectors and their connecting service legs have regional value and may be stronger candidates for funding support as compared to the original CCT.



LONG-TERM TRANSIT VISION

The long-term transit vision complements the near-term transit network, identifying large-scale transit investments likely to be implemented beyond the plan's horizon. The recommendations included in the long-term transit vision focus on improvements to existing transit services: an extension of Metrorail's

Red Line to Germantown and enhanced services and new stations for the MARC Brunswick Line.

Table 3 – Long-Term Transit Vision Recommendations

| <u>Long-Term Transit Vision</u> | <u>County Actions</u> | <u>Champion</u> |
|---|--|--|
| <p><u>Work with local, state, and regional partners to advance the recommendation for a Red Line Extension to Germantown Town Center.</u></p> | <p>A. <u>Reserve and/or acquire through dedication 62 feet of space as measured from the outer southbound track of the existing CSX Brunswick Line along the Metropolitan Branch Subdivision.</u></p> <p>B. <u>In consultation with agency partners, evaluate the steps necessary to address:</u></p> <ul style="list-style-type: none"> • <u>state of good repair and existing capacity issues within the Metrorail system’s core;</u> • <u>potential upstream and downstream capacity impacts resulting from an extension along the line;</u> • <u>regional resource commitments to advance the recommendation, particularly relating to operations based on WMATA’s three percent cap on annual operating subsidy increases from jurisdictions.</u> <p>C. <u>Determine what land use density and ridership targets would need to be met for WMATA to consider heavy rail service extensions to Germantown, factoring in regional draw for locations beyond the immediate vicinity of the station, including points in other jurisdictions. Update county master plans as warranted to support these targets.</u></p> <p>D. <u>Coordinate with CSX to confirm right-of-way needs, understand the magnitude of costs for anticipated rail operation and property impacts, and determine any operational agreements that would need to be made or adjusted to support the parallel-running service.</u></p> <p>E. <u>Conduct a detailed analysis of operational and maintenance facility needs and potential facility locations, to include parking needs as warranted, accounting for contextual challenges associated with what would likely be a locally unwanted land use. Coordinate with the Federal Government regarding the future of the Department of Energy site, which may be a viable location for combined government offices and operation and maintenance facilities.</u></p> <p>F. <u>Determine a refined estimate of total project costs, operating expenses, and projected benefits.</u></p> |  |

| <u>Long-Term Transit Vision</u> | <u>County Actions</u> | <u>Champion</u> |
|---|--|---|
| <u>Support the long-term potential of the Maryland Transit Administration MARC Rail Brunswick Line.</u> | <p>A. <u>Obtain 25-foot-wide land dedications adjacent to the northbound tracks of the Brunswick Line right-of-way along the segments identified in the 2018 MARC Cornerstone Plan.</u></p> <p>B. <u>Support the state’s Brunswick Line Master Plan, which will identify short-term, mid-term, and long-term service enhancements and the infrastructure improvements required to achieve them. Ensure M-NCPPC participation in development of the plan.</u></p> |  |
| <u>Promote strategic and equitable MARC Rail access by supporting new stations.</u> | <p>A. <u>Support the 2010 White Flint Sector Plan recommendation to construct an additional MARC station within the vicinity of White Flint and the 2021 Shady Grove Sector Plan recommendation for an additional MARC station at Shady Grove. Prioritize the White Flint station.</u></p> <p>B. <u>If CSX maintains its current policy that no new station can be added without the removal of an existing station or provision of additional main line track, develop a plan or strategy to support the elimination of service at underutilized stations in order to advance new stations projected to have greater network value.</u></p> |  |

Red Line Extension

The long-term transit vision includes an extension of WMATA’s Metrorail Red Line to Germantown Town Center, potentially including stops at Olde Towne Gaithersburg, MD 124/Fairgrounds, and Germantown Town Center (Error! Reference source not found.Error! Reference source not found.)¹. An extension of the Red Line to Germantown Town Center provides an opportunity to deliver the region’s highest-quality transit service to areas of the county with significant, and growing, population densities. According to *Montgomery County Trends: A Look at People, Housing, and Jobs Since 1990*, the largest increases in population and population density over the last three decades have occurred in communities along the I-270 corridor, including the vicinities of Gaithersburg, Germantown and Clarksburg, consistent with the 1964 General Plan’s vision for focused growth within corridor cities along I-270. In addition to serving existing and growing population, an extension of the Red Line also performed the best among the studied options at increasing regional transit trips, decreasing vehicle miles traveled, connecting all populations, including Equity Focus Areas, to jobs, and potentially influencing growth patterns.

As discussed in Chapter 4, extending the Red Line is not an immediately realistic proposition for numerous reasons. WMATA has indicated that it will not support extensions until the safety and state-of-good-repair needs of the Metrorail core are addressed. WMATA also has planning-level criteria that assess the viability of

¹ Stops listed were studied in the Plan’s technical analyses. Stop locations will be determined through future analyses and would require municipal support and coordination.

Metrorail extensions and today the extension does not satisfy these criteria.² In addition, as the Red Line Extension advances through subsequent environmental reviews, alternative alignments and stop locations may be studied, but service to Germantown Town Center should remain a priority.

An extension of the Red Line has been studied, generally in a cursory fashion, in various planning and NEPA efforts dating back to the 1970s. The rationale for not pursuing the option has varied across stakeholder groups and periods of study. Today, skeptics point to the magnitude of upfront capital costs, coordination with CSX, right-of-way impacts, and the core service resource hurdles that WMATA must address as significant constraints. This Plan agrees that these are real constraints. It acknowledges that the county should not turn a blind eye to costs, but it should also not turn a blind eye to opportunity costs. The Plan's evaluation demonstrates the equity benefits, job access benefits, and climate benefits associated with an extension justify more serious consideration. Furthermore, the historical performance of land around WMATA's heavy rail stations suggests that rail offers a highly reliable means of stimulating compact mixed-use growth.

The county has successfully worked with regional stakeholders to advance important transit facilities, like the existing Red Line and advancing Purple Line. While realizing these facilities was no simple task and took decades, the county is more livable today because of the work of previous regional transit champions. This Plan lays the groundwork for new champions to emerge.

Enhanced MARC Rail

The long-term transit vision includes improvements to MARC Rail along the Brunswick Line, including reducing headways to 15 minutes, implementing reverse commute service, adding midday service, and constructing new stations. Improving MARC service is expected to require an additional mainline track for 45 miles of the rail corridor.

To advance service improvements, the Plan recommends obtaining 25-foot-wide land dedications adjacent to the northbound tracks of the Brunswick Line right-of-way along the segments identified in the 2018 MARC Cornerstone Plan and supporting the state's Brunswick Line Master Plan, which will identify short-term, mid-term, and long-term service enhancements and the infrastructure improvements required to achieve them.

² In 2015 WMATA developed low, medium, and high threshold targets for various services. For suburban Metrorail expansions, these include:

- Households per Acre: Low <12; Medium 12-18; High >18
- Employment per Acre: Low <19; Medium 19-26; High >26
- Ridership per Mile: Low <3,500; Medium 3,500-7,00; High >7,000
- WMATA Built Environment Walkshed Rating (similar to the Montgomery Planning's Pedestrian Level of Comfort Analysis): Low; 50% connected; Medium 50%-65% connected; High >65% connected

The Plan recommends new MARC stations in Shady Grove and White Flint, consistent with the existing recommendations in the 2021 *Shady Grove Sector Plan* and 2010 *White Flint Sector Plan*. Of these two stations, a new MARC station at White Flint should be prioritized. If CSX maintains its current policy that no new station can be added without the removal of an existing station or provision of additional main line track, it will be necessary to develop a plan or strategy to support the elimination of service at underutilized stations in order to advance new stations projected to have greater network value.

Necessary infrastructure improvements to enhance MARC Rail are both costly and challenging. Even before accounting for the line's anticipated 78 grade crossings (which includes overpasses, underpasses, and pedestrian facilities), the Plan estimates substantial capital and renewal costs for the option. Given that the railroad has been operational for over a century, several sites and districts along the corridor have been designated as historic, and the additional main line track could potentially impact over 40 locations with some form of existing or planned historic designation.

Most importantly, CSX Transportation owns the majority of the rail tracks used by the MARC Rail Brunswick Line (including the Old Main Line Subdivision between Point of Rocks and Frederick Junction; excluding the Frederick Branch between Frederick Junction and downtown Frederick) adding complexity into the implementation outlook for proposed enhancements. Infrastructure improvements would require discussions and negotiations with CSX, which would certainly require limitations to—and mitigations for—any freight service disruption.

SUPPORTING RECOMMENDATIONS

Supporting recommendations enhance the benefits of the near-term transit network and long-term transit vision. These recommendations focus on prioritizing investments in transit over those that increase auto capacity, safe and convenient access to transit, land use that supports premium transit, and strategies to expedite implementation and maximize the utility of the planned dedicated bus lanes.




It may be challenging in some locations to acquire right-of-way for the county's master-planned dedicated bus lanes network due to the development potential of proximate land use. For example, it can be challenging to acquire new right-of-way in locations where existing townhouse communities or single-family homes are located. In some cases, it may be more feasible and cost-effective to reallocate right-of-way capacity to support the implementation of transit. Reallocating right-of-way often improves the competitiveness of transit, which can travel more rapidly and reliably when provided with its own infrastructure.




The Plan recommends that safe and comfortable bicycle and pedestrian access to transit facilities be implemented concurrent with the transit facilities themselves. In addition, Corridor Forward supports intermodal connectivity. During the


subsequent planning for the Red Line’s extension, this Plan recommends the development of a multimodal station that integrates MARC Rail, Metrorail, and bus modes. From a land use perspective, the Plan recommends updating relevant plans and guidelines to support compact, transit-oriented development patterns within the station areas. Acknowledging that transportation investments can be associated with rising rents, the Plan recommends creating affordable housing and preserving small businesses along the corridor.




To support implementation of the transit network, the Plan recommends a key shift in the approach to move projects forward. Segments of the transit network have independent utility and can support various service patterns and targeted local bus services. Rather than waiting to compete for large funding opportunities when they become available, segments of the ultimate network can and should be implemented incrementally as funds allow.

Table 11 – Supporting Recommendations

| <u>Supporting Recommendations</u> | <u>County Actions</u> | <u>Champion</u> |
|---|--|---|
| <u>Convert existing general-purpose travel lanes to dedicated transit lanes on targeted streets to maximize person throughput and improve the relative travel time competitiveness and convenience of transit, including—but not limited to—the streets detailed in the right-of-way table.</u> | <ul style="list-style-type: none"> A. <u>Convert existing auto travel lanes to dedicated transit lanes to advance the transit network.</u> B. <u>Modify congestion standards to include a BRT station designation between that of Metrorail station areas (120 seconds) and local bus (80 seconds).</u> C. <u>Continue to explore and prioritize other locations in the corridor where local bus service can be enhanced through the provision of express bus lanes, queue-jumps, and other facilities.</u> |  |
| <u>Prioritize the provision of dedicated transit lanes and spaces for walking, bicycling and other micromobility modes over auto capacity to maximize person throughput and improve the relative travel time competitiveness and convenience of transit.</u> | A. <u>Limit the addition of non-transit travel lanes in areas defined by the Complete Streets Design Guide as Downtowns and Town Centers, to be confirmed through future master plans. Address fee-in-lieu and alternate development mitigation when projects demonstrate impacts to the convenience of automobile travel in an update to the Growth and Infrastructure Policy or Local Area Transportation Review.</u> |  |
| <u>Develop a multimodal transit hub within the vicinity of Metropolitan Grove as part of implementation of the Red Line Extension to serve local bus, BRT, Metrorail and MARC services.</u> | A. <u>If the Red Line Extension advances into construction, coordinate with MCDOT, MARC Rail, and WMATA, to ensure convenient transfers between the different transit services at the station.</u> |  |

| <u>Supporting Recommendations</u> | <u>County Actions</u> | <u>Champion</u> |
|--|---|---|
| <p><u>Convert existing general-purpose travel lanes to dedicated transit lanes on targeted streets to maximize person throughput and improve the relative travel time competitiveness and convenience of transit, including—but not limited to—the streets detailed in the right-of-way table.</u></p> | <p>D. <u>Convert existing auto travel lanes to dedicated transit lanes to advance the transit network.</u></p> <p>E. <u>Modify congestion standards to include a BRT station designation between that of Metrorail station areas (120 seconds) and local bus (80 seconds).</u></p> <p>F. <u>Continue to explore and prioritize other locations in the corridor where local bus service can be enhanced through the provision of express bus lanes, queue-jumps, and other facilities.</u></p> |  |
| <p><u>Prioritize the provision of dedicated transit lanes and spaces for walking, bicycling and other micromobility modes over auto capacity to maximize person throughput and improve the relative travel time competitiveness and convenience of transit.</u></p> | <p>B. <u>Limit the addition of non-transit travel lanes in areas defined by the Complete Streets Design Guide as Downtowns and Town Centers, to be confirmed through future master plans. Address fee-in-lieu and alternate development mitigation when projects demonstrate impacts to the convenience of automobile travel in an update to the Growth and Infrastructure Policy or Local Area Transportation Review.</u></p> |  |
| <p><u>Develop a multimodal transit hub within the vicinity of Metropolitan Grove as part of implementation of the Red Line Extension to serve local bus, BRT, Metrorail and MARC services.</u></p> | <p>B. <u>If the Red Line Extension advances into construction, coordinate with MCDOT, MARC Rail, and WMATA, to ensure convenient transfers between the different transit services at the station.</u></p> |  |

| <u>Supporting Recommendations</u> | <u>County Actions</u> | <u>Champion</u> |
|---|---|---|
| <p><u>Ensure safe and efficient access to planned transit stops for pedestrians, bicyclists, and other micromobility modes.</u></p> | <ul style="list-style-type: none"> A. <u>As long-range planning and implementation planning (NEPA and facility planning) progress, explore opportunities to create new Bicycle and Pedestrian Priority Areas (BiPPAs) and red Metro Station Policy Areas (MSPAs) to support new premium services.</u> B. <u>Provide buffered sidewalks, protected crossings, bicycle facilities, and lighting to serve new master-planned facilities' stops and stations.</u> C. <u>Include bicycle and scooter parking facilities in the ultimate design of all new master-planned stops and stations at the rate and size specified in the <i>Bicycle Master Plan</i> (Appendix G).</u> D. <u>Ensure access to all master planned transit stops is ADA accessible within a half-mile.</u> E. <u>Develop countywide pedestrian and bicycle delay standards to limit crossing delay for pedestrians, bicycles, and other micromobility users, to be applied within a half-mile of a master-planned facility's transit stop or station.</u> F. <u>During station design, consider how to safely provide and accommodate transfers from on-demand services like ridesharing to transit stations and stops, as appropriate based on context.</u> |  |

| <u>Supporting Recommendations</u> | <u>County Actions</u> | <u>Champion</u> |
|---|--|---|
| <p><u>Update relevant land use plans and guidelines to support master-planned transit facilities.</u></p> | <p>A. <u>Update master plans and sector plans, including, but not limited to, the Great Seneca Science Corridor Master Plan, the Germantown Sector Plan, and the MARC Rail Communities Sector Plan, in support of incentivizing compact, transit-oriented development patterns.</u></p> <p>B. <u>Identify and zone the locations of transit operations and maintenance facilities for the recommended transit network and integrate recommended locations for these needs into applicable plan’s land use vision.</u></p> <p>C. <u>Prioritize use of land at existing and master planned stations for transit-oriented development, minimizing space dedicated to bus storage and layover.</u></p> <p>D. <u>Create affordable housing and preserve small businesses in areas where new transit may increase rents. Increase affordable and diversity of housing types in areas already served by transit along the corridor.</u></p> <p>E. <u>Update the Complete Streets Design Guide, adding a “transit” overlay or “transit street” typology addressing transit-specific design elements.</u></p> |  |
| <p><u>Where beneficial and/or necessary, support the incremental implementation of dedicated bus lanes.</u></p> | <p>A. <u>When and where necessary, break larger transit projects into more easily implemented components—when such components offer independent utility—to support the ultimate build-out of the network.</u></p> <p>B. <u>Facilitate all funding and implementation opportunities—large and small—that support the ultimate build-out of the infrastructure network.</u></p> |  |
| <p><u>Maximize the travel potential of dedicated bus lanes.</u></p> | <p>A. <u>Develop policy guidelines on the use of dedicated bus lanes to allow local bus, shuttles, etc. in appropriate contexts and manners that do not degrade rapid services.</u></p> |  |

REGIONAL OPPORTUNITIES




While many trips within Montgomery County both start and end with the county, many residents and employees commute across county lines, to the District of Columbia, Prince George’s County, and other regional jurisdictions. The recommendations in this section strengthen connections to neighboring jurisdictions where premium transit is not currently provided, specifically Fairfax County, VA, and Frederick County, MD.

First, the Plan recommends that the county consider and evaluate options for a future Purple Line extension west of Bethesda, including potential alignments that extend into Northern Virginia. Metrorail travel times between Bethesda and Tysons are 70-minutes with the current network, but a Purple Line extension could reduce this connection to a 22-minute ride.

Second, redesign and replacement of the American Legion Bridge across the Potomac River is planned as part of Managed Lanes highway expansion project. The existing bridge, which carries I-495 traffic, does not currently provide rail transit. The Plan recommends that the redesigned bridge accommodate rail transit, in order to provide flexibility for future transit investments. While this Plan does not explicitly recommend a rail transit service over the American Legion Bridge, the lifespan of a bridge far exceeds the lifetime of this Plan.

Lastly, a portion of Montgomery County employees commute from Frederick County. The Plan recommends supporting efforts led by Frederick County to provide a transitway between the two counties.

Table 12 – Regional Opportunities Recommendations

| <u>Regional Opportunities</u> | <u>County Actions</u> | <u>Champion</u> |
|---|---|---|
| <u>Study extensions of the Purple Line to understand if and where extension(s) of the county’s light rail service may be warranted.</u> | <ul style="list-style-type: none"> A. <u>Add an initial study to Montgomery Planning’s work program to assess travel demand between locations along the under-construction Purple Line and potential points of demand, including, but not limited to, the National Institutes of Health, Rock Spring, Tysons, Georgetown/Rosslyn, and Arlington.</u> B. <u>Coordinate with jurisdictions, as relevant and if warranted following the initial study, to scope further technical feasibility analyses that explore potential extension alignments, their costs, and their benefits.</u> |  |
| <u>Design and construct the American Legion Bridge to support rail transit.</u> | <ul style="list-style-type: none"> A. <u>Advocate for an American Legion Bridge design that can structurally accommodate the rail transit needs of the future.</u> |  |
| <u>Explore a direct transitway connection between the recommended WMATA Metrorail Red Line terminus and Frederick City.</u> | <ul style="list-style-type: none"> A. <u>If Frederick County includes this new, direct transit connection in an update to their Transit Development Plan, support others’ efforts by recommending alignments and stations for any portion of a direct service that falls within Montgomery County.</u> B. <u>Participate as a cooperative stakeholder in others’ study and design efforts.</u> |  |

Page 59 Revise the title of Chapter 7 – Conclusion as follows:

CHAPTER [7] 6 - CONCLUSION

Page 59 Revise the second paragraph in Chapter 7 – Conclusion as follows:

This Plan maintains and recommits to a vision for rapid transit in midcounty and upcounty. The Plan supports regional connectivity—particularly by demonstrating the regional benefits of a Red Line Extension and enhancements to MARC Rail—but also acknowledges the importance of a near-term locally-oriented network of dedicated bus lanes. Once implemented, the [recommended] transit network will serve existing corridor communities and connect them with areas planned for compact growth and further the county’s equity, environment, and economic goals [set by Thrive Montgomery 2050].

Page 59 Revise the last paragraph in Chapter 7 – Conclusion as follows:

An extension of WMATA’s Metrorail Red Line to Germantown Town Center and improvements to MARC Rail service may take time to be realized, as the county will need to lift its vision over several hurdles [(as detailed in Chapter 6)], but the ultimate benefits should encourage the county to face these challenges and further advance its transit commitment. Both near and long-term elements of Corridor Forward can be achieved with support, advocacy, commitment, and focus.

General

All illustrations and tables included in the Plan will be revised to reflect the District Council changes to the Planning Board Draft of Corridor Forward: The I-270 Transit Plan (January 2022). The text and graphics will be revised as necessary to achieve and improve clarity and consistency, to update factual information, and to convey the actions of the District Council. Graphics and tables will be revised and re-numbered, where necessary, to be consistent with the text and titles.

This is a correct copy of Council action.

Selena Mendy Singleton, Esq.
Clerk of the Council