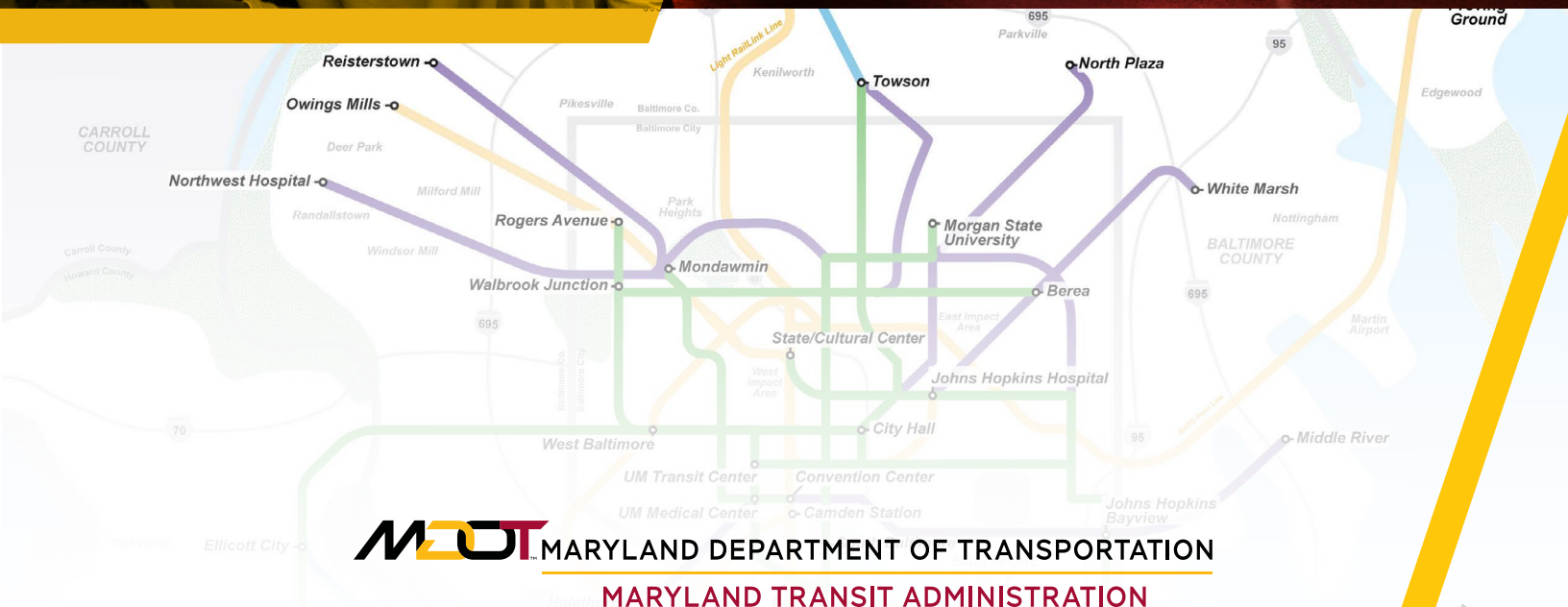
Connecting Our Future

A Regional Transit Plan for Central Maryland

Transit Network Improvements and Regional Transit Corridors Technical Report



MDOT MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

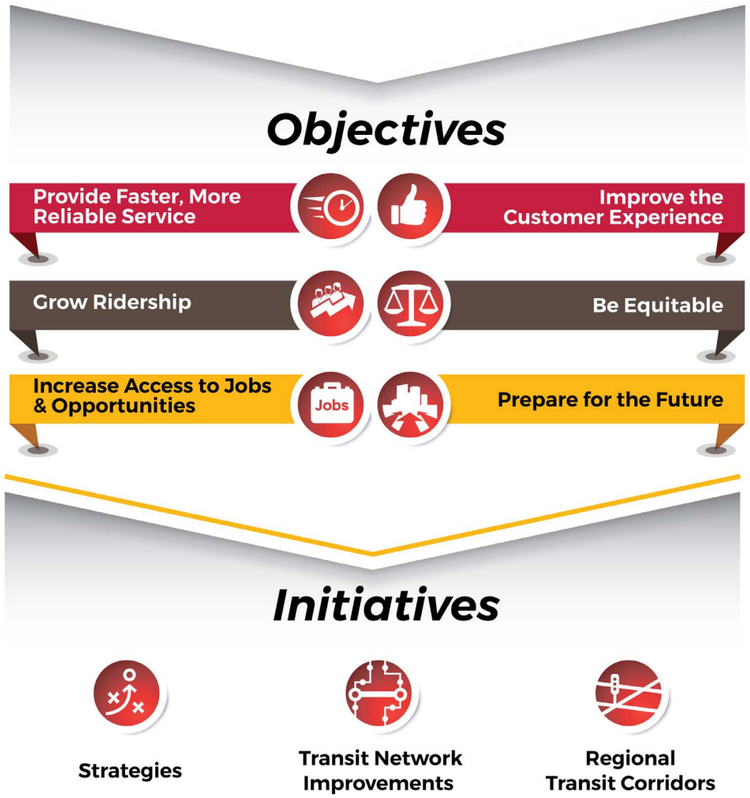
Table of Contents

1 Introduction

The Regional Transit Plan ("the Plan") describes three initiatives by which the region will achieve the six plan objectives. These initiatives are Strategies, Transit Network Improvements, and Regional Transit Corridors. The Strategies are detailed in the Plan and are referenced throughout this technical report in gray boxes.

This technical report describes:

- The identification of Transit Network Improvements
- The selection and prioritization of Regional Transit Corridors



Identification of Gaps, Needs, and Opportunities

The recommended Transit Network Improvements and Regional Transit Corridors contained in this technical report were based on transit gaps, needs, and opportunities identified through a study of existing conditions, an analysis of the market demand for transit, a review of best practices related to the customer journey, and through public and stakeholder outreach.

Transit Network Improvements

Transit Network Improvements are smaller improvements to local or express transit service already operating in the region. These improvements were identified by analyzing the existing transit network, market demand for transit, and existing and future travel flows. The improvements fall into four categories:

- Expanded Transit Service
- Small Area Plans and Shared Mobility Applications
- Improvements to Existing Rail Corridors
- Transit Hubs

More information on this analysis can be found in the Existing and Future Conditions Technical Report.

Regional Transit Corridors

Regional Transit Corridors are key areas for the planning of new transit assets over the next 25 years. Areas identified as Regional Transit Corridors demonstrate transit demand that justifies infrastructure, services, and/or technology improvements. All the selected corridors are regionally significant, providing crucial connectivity within and between jurisdictions.

The Plan does not define specific routes, service patterns, alignments, or levels of service, nor does it identify specific stations or modes to serve those corridors. Relevant stakeholders will conduct future studies in coordination with MDOT MTA to identify the appropriate levels of service, mode, and stations to serve these corridors as the Plan is implemented over the next 25 years. The 30 corridors defined in this plan are meant to remain flexible to accommodate the results of future feasibility studies. The details included in Chapter 3, and in the Appendices of this technical report, should provide local decision-makers the tools to plan and implement recommended corridor service and assets.

2 Transit Network Improvements

There are specific areas in the Central Maryland region that have a demonstrated need for small, localized, or express transit network improvements. These improvements are needed to fill in gaps in service, feed into the corridors, and improve the customer journey (as detailed in the *Customer Journey Technical Report*). The Transit Network Improvements are one of three initiatives developed for the Plan, with the Strategies and the Regional Transit Corridors. Each of these components will provide the greatest benefit when they work together. This chapter will discuss various types of transit network improvements recommended for the region, including:

- Expansion of the existing transit service, including
  - Additional service on existing routes
  - New local or express transit routes
- Small area plans in locations that need further analysis and/or could benefit from Shared Mobility solutions
- Existing rail corridor improvements
- Creation of transit hubs

These improvements are identified based on analysis of the existing transit network, the transit market demand, and existing and future travel flows (which are further documented in the *Existing and Future Conditions Technical Report*). Input from stakeholders and the public were also critical in developing and refining this slate of improvements.

Network Improvement Areas

Subject to future feasibility analysis and local jurisdiction support

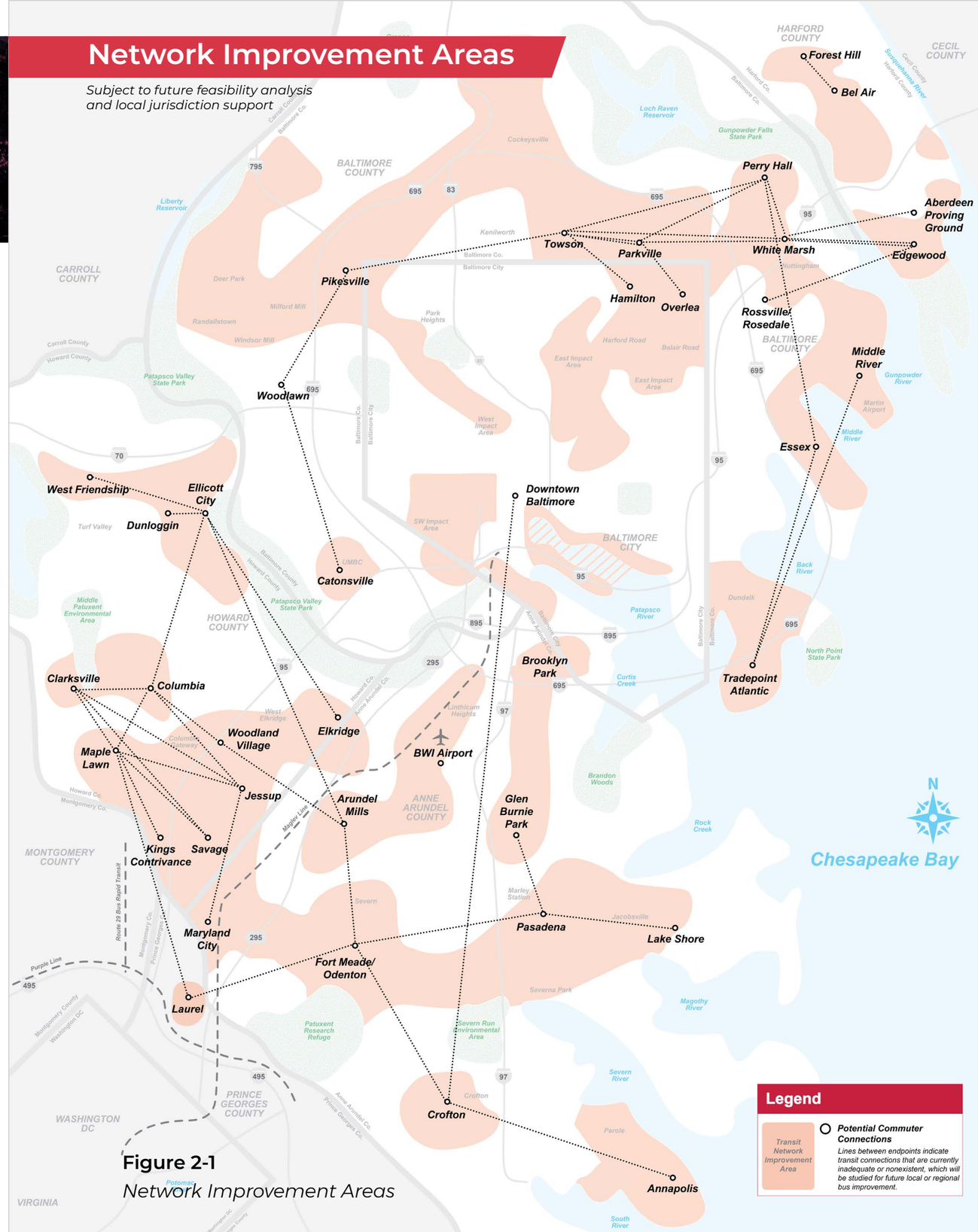


Figure 2-1
Network Improvement Areas

Expansion of Existing Fixed-Route Services

One major element of the network improvements is the expansion of existing fixed-route services. This expansion falls into two categories: the addition of service on existing routes, and the creation of new local and express transit routes.

Additional Service on Existing Routes
The need for additional service was identified in areas that demonstrate a market demand for transit greater than the current provision of transit services in the peak, off-peak, and/or weekend time periods. In some cases, there is no existing transit service in the given time period. For instance, Harford County has no fixed-route transit service on the weekend.

Recommendations are detailed below in Table 2-1 along with a rationale for improving service, often in reference to current limited or nonexistence service.

Table 2-1

Proposed Expansion of Existing Fixed-Route Service and Rationale

County	Area Name	Peak	Off Peak	Weekend	Rationale
Anne Arundel	Arundel Mills	x	x	x	Existing service has low frequency and limited span in all periods.
	Brooklyn Park	x	x	x	Existing service has low frequency and limited span in all periods. *(Note: Brooklyn extends into Baltimore City.)*
	Crofton	x	x	x	Existing service has limited span (during peak hours only) and no off-peak or weekend service currently exists.
	Fort Meade/Odenton	x	x		In need of improved transfers to internal shuttles, new park and ride service, and local service to/from Crofton, Odenton, and Laurel.
	Glen Burnie	x	x	x	Existing service has low frequency in all periods.
	Maryland City	x	x	x	Existing service has low frequency and limited span in all periods.
	Parole (Annapolis Mall)	x	x	x	Existing service has low frequency and limited span in all periods.
	Severn	x	x	x	Existing service has low frequency in all periods.
Baltimore City	Brooklyn	x	x	x	Existing service has low frequency and limited span in all periods. *(Note: Brooklyn extends into Anne Arundel County.)*
	Cherry Hill	x	x	x	High need area identified by market analysis.
	East Impact Area	x	x	x	High need area identified by market analysis.
	Inner Harbor		x	x	Existing free Harbor Connector operates only during weekday peak hours. Other service exists in other periods but at a much higher fare.
	Park Heights Impact Area	x	x	x	High need area identified by market analysis.
	Southwest Impact Area	x	x	x	High need area identified by market analysis.
	West Impact Area	x	x	x	High need area identified by market analysis.
Baltimore County	Cockeysville			x	Growing retail and employment corridor.
	Dundalk (Wise Avenue)			x	Existing service has limited span on weekends but demonstrates high all-day demand.
	Essex		x	x	Existing service has low frequency and limited span in off-peak and on weekends but demonstrates high all-day demand.
	MD 43 (Crossroads)	x	x		Growing employment center.
	Middle River		x	x	Existing service has low frequency and limited span in off-peak and on weekends but demonstrates high all-day demand.
	Perry Hall		x	x	Existing service has low frequency and limited span in off-peak and on weekends but demonstrates high all-day demand.
	Randallstown			x	Existing service has low frequency and limited span on weekends but demonstrates high all-day demand.
	Reisterstown/Glyndon			x	Existing service has low frequency and limited span on weekends but demonstrates high all-day demand.
	Towson	x	x	x	West Towson has unmet demand in the peak, limited span and frequency in the off-peak, and no service on the weekend.
	Tradepoint Atlantic	x	x	x	Growing employment center.
	White Marsh		x	x	Existing service has low frequency and limited span in off-peak and on weekends but demonstrates high all-day demand.

Table 2-1

Proposed Expansion of Existing Fixed-Route Service and Rationale (continued)

County	Area Name	Peak	Off Peak	Weekend	Rationale
Harford	Aberdeen & Aberdeen Proving Ground	x	x	x	Existing service has low frequency and limited span in all periods.
	Bel Air	x	x	x	Existing service has low frequency and limited span in all periods.
	Edgewood	x	x	x	Existing service has low frequency and limited span in all periods.
	Havre de Grace	x	x	x	Existing service has low frequency and limited span in all periods.
Howard	Columbia		x	x	Existing service has low frequency and limited span in off-peak and on weekends but demonstrates high all-day demand.
	Columbia Gateway	x			Existing service has low frequency in peak periods.
	Elkridge			x	Existing service has limited span on weekends.
	Ellicott City	x		x	Existing service has low frequency in peak periods and limited span on weekends but demonstrates high all-day demand.
	Hickory Ridge			x	Existing service has limited span on weekends.
	Jessup	x		x	Existing service has low frequency in peak periods and limited span on weekends but demonstrates high all-day demand.
	Laurel	x	x	x	Existing service has low frequency and limited span in all periods but demonstrates high all-day demand.
	Montgomery Woods	x			Existing service has low frequency in peak periods.
	North Laurel	x			Existing service has low frequency in peak periods.
	Route 1 Corridor	x	x	x	Peak demand is very high in many areas that have only 60-minute frequency. Weekend span is shorter than 12 hours.
	West Elkridge (Waterloo, Woodland Village)	x			Existing service has low frequency in peak periods.

New Local and Express Transit Routes

New local and express bus routes (or, in the case of the Inner Harbor, ferry routes) were identified after examining existing travel flows and gathering feedback from the public and stakeholders. These recommended additions are also shown in Figure 2-1 with dotted lines.

Current travel flow analysis reveals significant movement between Harford County to Baltimore City and County (mainly White Marsh, Towson, and Downtown Baltimore), especially in off-peak hours, that is underserved by existing transit. The timing and frequency of these trips suggest that these are shift workers who may not be adequately served by the Perryville-to-Penn Station segment of the MARC train. Many suburb-to-suburb connections are identified as well, such as express service from Columbia to Arundel Mills, or local service from Maple Lawn to several other suburbs in Howard County. The Plan also identified transit routes connecting major activity centers along the Baltimore Beltway (I-695). These could be local or express bus routes or a combination of both.

Some new transit connections are related to the Regional Transit Corridors, which are detailed in Section 3 of this report. For instance, there is currently no fixed-route service between Crofton and Glen Burnie or Baltimore and points north, which aligns with Corridor #4. The same is true of Ellicott City to Elkridge/ Arundel Mills (Corridor #30). The Plan recommends establishing these new services early to prepare the corridor for the transit assets and investments that its corridor status will bring.

New routes and their possible type of service are summarized below in Table 2-2.

Table 2-2

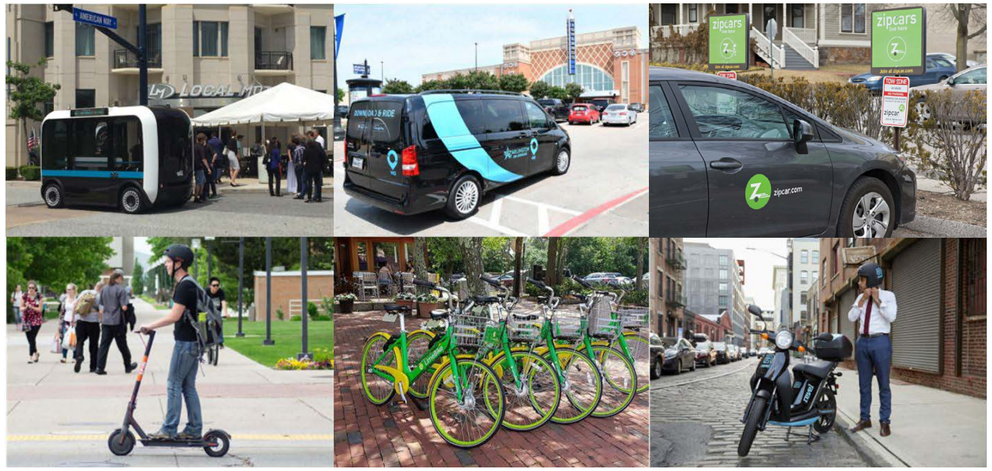
New Local and Express Transit Routes

County	Area Name	Type of Service	Link Destination / Need
Anne Arundel	Arundel Mills	Local or Express Bus	Fort Meade, Ellicott City
	Crofton	Local or Express Bus	Points north to Glen Burnie and Baltimore; Annapolis
	Fort Meade/ Odenton	Local Bus	Laurel, Crofton, Arundel Mills; Internal campus circulation needs
	Glen Burnie/ Cromwell	Local Bus	Community circulation needs
Baltimore City	Inner Harbor	Ferry	Possible additional ferry connections from South Baltimore to Inner Harbor, Harbor East, Fells Point, and Canton

Table 2-2

New Local and Express Transit Routes (continued)

County	Area Name	Type of Service	Link Destination / Need
Baltimore City & County	Belair Road (Overlea, Putty Hill, Perry Hall)	Local Bus	Crosstown service to connect east and west neighborhoods (Hamilton, Parkville, Towson, Rosedale) and arterial transit routes
	Harford Road (Hamilton, Parkville)	Local Bus	Crosstown service to connect east and west neighborhoods (Perry Hall, Putty Hill, Towson, Rosedale) and arterial transit routes
Baltimore County	MD 43 (Crossroads)	Local or Express Bus	Future or growing job center needing new local or express transit routes
	Essex	Local Bus	Tradepoint Atlantic
	Middle River	Local Bus	Tradepoint Atlantic
	Owings Mills	Local Bus	Owings Mills local circulator
	Perry Hall	Local or Express Bus	White Marsh, Towson, Essex
	Pikesville	Local or Express Bus	Towson
	Towson	Local or Express Bus	White Marsh, Perry Hall, Parkville, Pikesville; Community circulation needs
	Tradepoint Atlantic	Local or Express Bus	White Marsh, Middle River; Future or growing job center
	White Marsh	Local or Express Bus	Perry Hall
Harford	Aberdeen & Aberdeen Proving Ground	Local or Express Bus	Belair, White Marsh, Perry Hall, Edgewood; Internal campus circulation needs
	Edgewood	Local or Express Bus	Towson, White Marsh/Rossville
Howard	Clarksville	Express Bus	Laurel, Savage, Jessup, Kings Contrivance
	Columbia	Local or Express Bus	Ellicott City, MD 175 Corridor
	Elkridge	Express Bus	Ellicott City
	Ellicott City	Local or Express Bus	Elkridge, West Friendship, Columbia, Arundel Mills
	Jessup	Local or Express Bus	Clarksville, Maple Lawn
	Kings Contrivance	Local or Express Bus	Clarksville, Maple Lawn
	Laurel	Local or Express Bus	Clarksville, Maple Lawn
	Maple Lawn	Local or Express Bus	Laurel, Savage, Jessup, Kings Contrivance
	Route 1 Corridor	Local or Express Bus	Future or growing job center needing new local or express transit routes; Community circulation needs
	Savage	Local or Express Bus	Clarksville, Maple Lawn
	West Elkridge (Waterloo, Woodland Village)	Local or Express Bus	Ellicott City



Shared Mobility Services clockwise from top left: Olli (autonomous shuttle), Via (microtransit), Zipcar (carshare), Revel (moped-share), Lime (bikeshare), Spin (scootershare). (Photo credits: Local Motors; City of Arlington, TX; Brown Daily Herald/David Deckey; Revel; Flickr/Lorianne DiSabato; Spin.)

Small Area Plans and Shared Mobility Applications

Several job centers in Central Maryland are expected to experience significant growth in the next 25 years or have other needs or challenges in providing transit to and from job sites. Providing specific recommendations to improve access to and mobility within these job centers depends on several factors beyond the scope of this plan. The Plan recommends these locations for "small area plans" to be examined in greater detail (see Table 2-3). These studies should engage stakeholders, employers, and the public to evaluate factors including:

- Existing transit route alignments and levels of service
- Need for new transit services
- Campus/community circulation needs
- Pedestrian/bike connectivity
- Transportation demand management (TDM) applications
- Shared Mobility applications such as e-scooters
- Microtransit service models

Small area plans should address both transit service needs and transit readiness. They should be conducted early within the Plan's 25-year period so that the results of the studies can be fully incorporated into the Plan.

Other sites were identified as not being supportive of fixed-route transit but possible candidates for Shared Mobility or microtransit applications. These solutions include bikeshare, scooter-share, moped-share, carsharing, Transportation Network Companies (TNCs), ridesplitting, microtransit (e.g., Via), or automated shuttles.

Shared Mobility is discussed in further detail in the Customer Journey Technical Report. A list of areas designated for small area plan studies or Shared Mobility applications, as well as the rationale for their selection, is provided below in Table 2-3.

Table 2-3
Areas Designated for Small Area Plans or Shared Mobility Applications

County	Area Name	Small Area Plans	Shared Mobility Application	Rationale
Anne Arundel	Fort Meade/ Odenton	x	x	Identify internal campus circulation needs and needs for new local or express routes
	Glen Burnie/ Cromwell		x	Evaluate area, as it has some significant travel flows but may not be suitable for fixed-transit based on road network
	Parole (Annapolis Mall)		x	Evaluate area, as it has some significant need due to socioeconomic characteristics and high job density but is isolated on a peninsula
	Pasadena		x	Evaluate area, as it has some significant travel flows but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
Baltimore City	Inner Harbor	x	x	Evaluate additional ferry connections from South Baltimore (Cherry Hill and Middle Branch waterfront) to Inner Harbor, Harbor East, Fells Point, and Canton. Evaluate turning all Water Taxi routes into public ferry routes under the Harbor Connector brand and fee structure. Examine feasibility of water ferry routes to Tradepoint Atlantic.
Baltimore County	Dundalk	x	x	Evaluate area, as it has some significant need due to socioeconomic characteristics and high job density but is isolated on a peninsula
	Hunt Valley		x	Evaluate area, as it has some significant travel flows but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
	Owings Mills		x	Evaluate area, as it has some significant travel flows but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
	Towson	x		Study internal community circulation needs and demonstrated need for several new suburb-to-suburb local or express routes
	Tradepoint Atlantic	x		Examine this future or growing job center based on workforce origins
Harford	Aberdeen & Aberdeen Proving Ground	x	x	Study internal campus circulation needs and needs for new local or express routes
	Northwest Bel Air/ Forest Hill	x	x	Evaluate area, as it has some significant travel flows but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
Howard	Dunloggin		x	Study area as it demonstrates transit demand but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
	Hickory Ridge		x	Study area as it demonstrates transit demand but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density
	Maple Lawn		x	Evaluate area as it has some significant travel flows but may not be suitable for fixed transit based on road network, and the worker population's socioeconomic characteristics
	Route 1 Corridor	x		Examine the internal community circulation needs of this future or growing job center
	Savage	x		Evaluate area, as it is slated for population and job growth
	Turf Valley (West Friendship)		x	Study area, as it demonstrates transit demand but may not be suitable for fixed transit based on road network, population socioeconomic characteristics, and density

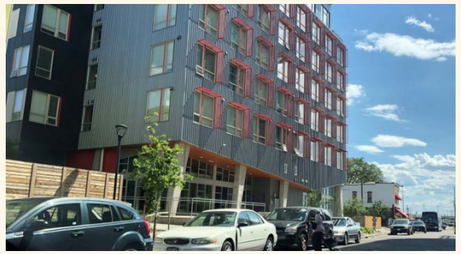
Transit Readiness Case Study
Leveraging Partnerships to Increase Existing Rail-based Transit Value

The area around the 10th and Osage Station (shown in blue) before and after redevelopment.

The City of Denver's *Transit Oriented Denver* (2014) and Regional Transit Denver (RTD)'s *First and Last Mile Strategic Plan and Mobility Hub Guidelines* (2019) have different but closely related goals. Taken together, they focus attention on the details of access and local mobility in each RTD station's potential influence areas. These plans ensure that development is transit-supportive, creates connections that allow transit-oriented development to expand to parcels beyond station areas, and establishes a program for Mobility Hubs for given station contexts.

Denver Housing Authority (DHA)'s redevelopment of the 15-acre, 270-unit South Lincoln Homes demonstrates how a major landowner in the vicinity of an existing rail station can be a strategic partner with the region's major transit provider. DHA's South Lincoln Redevelopment Master Plan (2010) recognized the value of RTD's 10th and Osage Station as significant among the area's assets.

When DHA redeveloped the former South Lincoln Homes into nearly 900 new units, it also built new streets and alleys, inviting and comfortable public spaces and plazas, community gardens, a community center, an elementary school, and retail space on the ground floor of new multi-family buildings. DHA partnered with businesses and non-profits to establish training and employment opportunities that would also offer convenient access to formerly unavailable jobs, goods and services for residents. The community, now known as Maricopa, attained DHA's highest rate of resident retention, more than 45 percent.



The redevelopment led to new public spaces and buffered and structured parking. Public-private partnerships brought about jobs for residents, workforce training, and formerly unavailable services like healthy food outlets. (Photo credit: Kittelson and Associates.)

The 10th and Osage Station served 2,100 daily boardings in 2018, a 30 percent increase from 2011. DHA's initial investment continues to attract new private investment with major mixed-use projects in various stages of permitting and construction. This notable and growing increase in the use of an existing transit asset has been achieved primarily through investments by other public and private partners facilitated by RTD's station design support and proactive coordination with developers and local jurisdictions.

RTD leveraged private partnerships, public funding, and local businesses to enhance existing rail investment. Increasing the density of activities and people around the station in turn created a market for transit services. Addressing the connectivity and pedestrian comfort to and from the station increased accessibility to transit for the entire area.

West Baltimore MARC Station Transit Hub

Transit Hubs

Transit hubs (also called transfer centers) are important for both transit passengers and transit operators. Well-situated and well-designed transit hubs can significantly improve one of the most inconvenient parts of a transit trip for passengers: the transfer experience. Transit hubs enable more connected transit route design and can more easily accommodate amenities for transit drivers and operations staff.

Transit Hub Design

Several different types of hub concepts or improvements could be deployed to implement the recommendations of the Plan. Factors in choosing the appropriate hub design or improvements include:

- Estimating how many vehicles would serve the hub each day
- Predicting how many passengers would use the hub each day
- Ensuring there is enough capacity for many vehicles to serve the hub simultaneously
- Gauging the potential for intermodal connections
- Increasing the ease of access for park and ride commuters, pedestrians, and cyclists

Charles Center Transit Hub Rendering

A hub may feature components of several design and/or improvement types depending upon the location and expected use. Transit hubs may be on-street or off-street and may support different modes of travel. The West Baltimore MARC Station is an example of an off-street transit hub. Ensuring adequate wayfinding improves the functionality and seamlessness for customers.

Transit Hubs

On the next page, Table 2-4 lists major transit hubs and their respective jurisdictions. The hub locations, as well as existing transit corridors, are shown in Figure 2-2. More detailed study of each transit hub is required to determine the best and most appropriate transit hub improvement applicable to the site. These hubs have been identified because they warrant additional infrastructure and amenities such as bus bays or an off-street bus loop, seating, canopies or protection from the weather, wayfinding signage, realtime passenger information signs, and other investments.

Throughout these Technical Reports, gray boxes with the red ! will present strategies from the Plan that are related to the previous section.

Next Steps for Transit Network Improvements

The Plan recommends Transit Network Improvements to be implemented throughout the Plan's 25-year horizon. In the short term, local jurisdictions and transit agencies should initiate high-level and detailed planning by setting goals, engaging the public, identifying funding, and conducting studies for each of the recommended improvements. As the Plan is updated every five years, the appropriate next steps may change for various improvements as the transit network and its needs are reevaluated.

STRATEGIES
Grow Bus Ridership

- Partner with employers and large-scale development to connect residents to job centers
- Plan and construct transit hubs and inter-modal transfer facilities
- Expand the Frequent Transit Network

STRATEGIES
Grow Commuter Bus Ridership

- Develop a park-and-ride lot plan to grow the capacity and access to Commuter Bus service
- Partner with employers and large-scale development to connect residents to job centers

Table 2-4
Transit Hubs

Number	Name	Jurisdiction
1	Arundel Mills	Anne Arundel County
2	BWI Airport	Anne Arundel County
3	Glen Burnie/Cromwell	Anne Arundel County
4	Parole/Annapolis	Anne Arundel County
5	Baltimore Arena	Baltimore City
6	Bayview Medical Center	Baltimore City
7	Camden Station	Baltimore City
8	Charles Center	Baltimore City
9	Johns Hopkins Hospital	Baltimore City
10	Lexington Market	Baltimore City
11	Mondawmin	Baltimore City
12	Morgan State University	Baltimore City
13	Penn North Metro	Baltimore City
14	Penn Station	Baltimore City
15	Rogers Avenue	Baltimore City
16	State Center/Cultural Center	Baltimore City
17	UM Medical Center	Baltimore City
18	Walbrook Junction	Baltimore City
19	West Baltimore	Baltimore City
20	Essex	Baltimore County
21	Owings Mills	Baltimore County
22	Patapsco	Baltimore County
23	Towson	Baltimore County
24	White Marsh	Baltimore County
25	Aberdeen	Harford County
26	Bel Air	Harford County
27	Columbia Town Center	Howard County

Regional Transit Hubs

Subject to future feasibility analysis and local jurisdiction support

Figure 2-2
Transit Hubs

3 Regional Transit Corridors

The Plan identifies and prioritizes 30 Regional Transit Corridors. These corridors are key areas of anticipated transit need for the next 25 years. All the corridors are of regional significance, providing important connectivity within and between jurisdictions in Central Maryland.

The corridors share several common features that distinguish them from other proposals in the Plan. Each has or is projected to have sufficient ridership demand to support all-day, frequent transit. The corridors also require additional infrastructure investment (described in this chapter's *Transit Priority Improvements* section) to fully support successful transit.

Corridor identification is the first step in creating a more connected and robust regional transit network. While the corridors represent major areas of transit infrastructure need, the Plan does not identify specific transit routes and/or stations and does not prescribe modes, alignments, or service levels. Careful study beyond the scope of this Plan is required to assess demand and local context before investing in specific transit assets.

Each corridor was categorized as an early-, mid-, or long-term opportunity. Corridor prioritization was based on quantitative analysis, public input, and stakeholder feedback to compare the demand, needs, potential impacts, and transit readiness of each corridor. Upon publication of the Plan, local jurisdictions and local transit providers will be able to follow these priorities and study the feasibility and needs on the corridors in detail. The process of conducting an alternatives analysis, selecting modes and alignments, producing the final design, and implementing new assets will be completed with input from the public and stakeholders.

Overview of Regional Transit Corridors

The Plan identified the Regional Transit Corridors in Central Maryland based on existing and future travel patterns, land use, and demographics, as well as stakeholder input. These corridors, shown in the schematic map in Figure 3-1, traverse the region with connections to major population and activity centers, in addition to external destinations at Silver Spring in Montgomery County, Laurel in Prince George's County, and Washington, D.C. Each corridor represents major origins and destinations and serves areas with high existing or future transit demand. Corridors are named after their endpoints but also connect many activity centers and transit nodes.

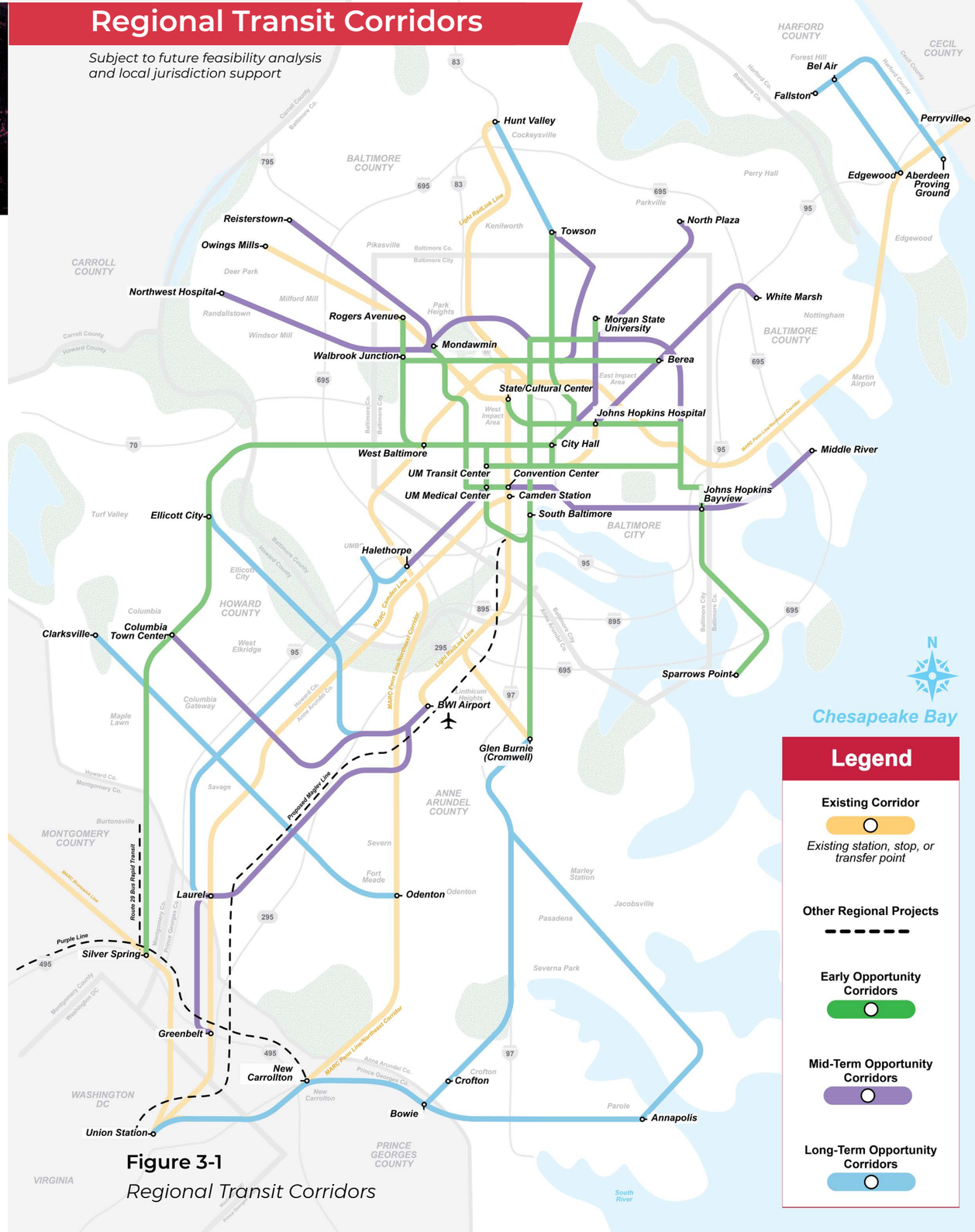


Figure 3-1
Regional Transit Corridors

Table 3-1 lists each corridor's name, jurisdictions served, and length, ranging from 5 to 17 miles. The number associated with each corridor is an identification number; it does not represent priority order. Baltimore City is served by 19 corridors, the most of any jurisdiction. For a detailed map and evaluation of each corridor, see Appendix I: Corridor Profiles.

Table 3-1 | *Regional Transit Corridors*

NO.	Name	Jurisdictions Served	Miles within Region
1	Morgan State Univ. to South Baltimore	Baltimore City	7
2	Glen Burnie to South Baltimore	Anne Arundel County, Baltimore City	7
3	Glen Burnie to Annapolis	Anne Arundel County	17
4	Glen Burnie to Bowie	Anne Arundel County	15
5	Convention Center to Middle River	Baltimore City, Baltimore County	11
6	Towson to UM Transit Center	Baltimore City, Baltimore County	9
7	Towson to Hunt Valley	Baltimore County	7
8	Towson to South Baltimore	Baltimore City, Baltimore County	13
9	North Plaza to UM Transit Center	Baltimore City, Baltimore County	11
10	White Marsh to Johns Hopkins Hospital	Baltimore City, Baltimore County	10
11	Fallston to Aberdeen Proving Ground	Harford County	16
12	Mondawmin to South Baltimore	Baltimore City	7
13	Rogers Avenue to City Hall	Baltimore City	8
14	Mondawmin to Reisterstown	Baltimore City, Baltimore County	10
15	Mondawmin to Northwest Hospital	Baltimore City, Baltimore County	8
16	Ellicott City to Convention Center	Baltimore City and County, Howard County	12
17	West Baltimore to Hopkins Bayview	Baltimore City	6
18	Sparrows Point to Hopkins Bayview	Baltimore City, Baltimore County	6
19	State Center to Hopkins Bayview	Baltimore City	5
20	Walbrook Junction to Berea	Baltimore City	5
21	Laurel to Halethorpe	Baltimore County, Howard County	13
22	Mondawmin to Hopkins Bayview	Baltimore City	11
23	Halethorpe to UM Transit Center	Baltimore City, Baltimore County	6
24	BWI Airport to Greenbelt Metro Station	Anne Arundel County	13
25	BWI Airport to Columbia Town Center	Anne Arundel County, Howard County	15
26	Odenton to Clarksville	Anne Arundel County, Howard County	17
27	Ellicott City to Silver Spring	Howard County	12
28	Annapolis to Union Station	Anne Arundel County	12
29	Bel Air to Edgewood	Harford County	9
30	Ellicott City to BWI Airport	Anne Arundel County, Howard County	14

Prioritization of Regional Transit Corridors

All the corridors identified in this chapter were selected for their potential to meet the region's transit needs within the Plan's horizon; however, the current level of readiness for investment of individual corridors varies across the region. The Plan prioritizes the corridors in a 25-year timeframe. To provide a timeline for the region to identify existing assets and prepare corridors for investment when funding becomes available, the Plan categorizes each corridor as an early-, mid-, or long-term opportunity.

Prioritization Process

The Plan prioritizes corridors according to a data-driven methodology considering factors identified as important to the region by the Plan Commission. The 16 measures address factors such as access to transit and jobs for vulnerable populations, existing transit resources, and alignment with projected future job and population growth. An initial prioritization grouped corridors into early-, mid-, or long-term opportunities based on an equal weighting of all 16 measures. These results were then modified based on feedback from Commissioners, stakeholders, and public outreach efforts. Figure 3-2 shows the prioritization process applied to the corridors.

Figure 3-2

Corridor Prioritization Process

Prioritization Methodology
The prioritization analysis considers measures addressing 16 key questions selected to gauge a corridor's readiness for transit improvements and its potential to improve access to jobs and other opportunities for vulnerable populations (Table 3-2). More detailed descriptions of individual measure methodologies are available in *Appendix II: Prioritization Methodologies* and results for individual corridors are included in *Appendix I: Corridor Profiles*.

Table 3-2

Evaluation Measures Used in Corridor Prioritization Process

Evaluation Measure	Issue Addressed	How Results Are Reported
Gap	Does this corridor address a current or future transit gap?	Yes/no*
Existing Plans	Is the corridor in existing plans?	Yes/no*
Improve Service	Does the corridor improve existing service?	Count of routes which could be improved
Transfer Potential	How many transit routes can you transfer to?	Count of intersecting transit routes
Supportive Land Use	Is the surrounding land use transit supportive?	% of corridor with transit supportive land use
Existing Jobs	How many existing jobs are accessible to the corridor?	Total jobs per mile within ½ mile of corridor
Population Access	Number of residents accessible to the corridor?	Total population per mile within ½ mile of corridor
Long Work Commutes	Does corridor serve workers with long commutes?	% of workers with access to the corridor that have commutes longer than 45 minutes
Minority Access	Percentage of minority population within the corridor?	% of population with access to corridor that is non-white and/or Hispanic
Low-Income Access	Percentage of low-income population within the corridor?	% of households with access to the corridor with incomes less than twice the Federal poverty line
Zero-Car Household Access	Percentage of zero-car ownership within the corridor?	% of households with access to corridor that have no cars
Senior Access	Percentage of seniors within the corridor?	% of population with access to corridor that are seniors
Disabled Access	Percentage of people with disabilities within the corridor?	% of population with access to corridor that has a disability
Future Jobs	How many future jobs are accessible to the corridor?	Total projected jobs per mile within ½ mile of corridor
Supportive Zoning	Is the surrounding zoning transit supportive?	% of corridor with transit supportive zoning
Growth Area	Is the corridor within a growth area?	% of corridor in State Incentive Program Area

*Corridor must receive a "yes" to proceed in prioritization process.

Prioritization Groups
Some of the corridors in the Plan are ready for early investment, while others have lower existing demand for transit but are anticipated to have increased transit demand in the future. The Regional Transit Corridors are categorized as Early Opportunity Corridors, Mid-Term Opportunity Corridors, and Long-Term Opportunity Corridors based on the total route score produced by the prioritization methodology. The proposed prioritization was then presented to stakeholders for consideration and modified based on their feedback. The final corridor prioritization groups are shown in Table 3-3.

Table 3-3

Final Prioritization Groups

Early Opportunity	
1	Morgan State Univ. to South Baltimore
2	Glen Burnie to South Baltimore
6	Towson to UM Transit Center
12	Mondawmin to South Baltimore
13	Rogers Avenue to City Hall
16	Ellicott City to Convention Center
17	West Baltimore to Hopkins Bayview
18	Sparrows Point to Hopkins Bayview
19	State Center to Hopkins Bayview
20	Walbrook Junction to Berea
27	Ellicott City to Silver Spring

Mid-Term Opportunity	
5	Convention Center to Middle River
8	Towson to South Baltimore
9	North Plaza to UM Transit Center
10	White Marsh to Johns Hopkins Hospital
14	Mondawmin to Reisterstown
15	Mondawmin to Northwest Hospital
22	Mondawmin to Hopkins Bayview
23	Halethorpe to UM Transit Center
24	BWI Airport to Greenbelt
25	BWI Airport to Columbia Town Center

Long-Term Opportunity	
3	Glen Burnie to Annapolis
4	Glen Burnie to Bowie
7	Towson to Hunt Valley
11	Fallston to Aberdeen Proving Ground
21	Laurel to Halethorpe
26	Odenton to Clarksville
28	Annapolis to Union Station
29	Bel Air to Edgewood
30	Ellicott City to BWI Airport

Early Opportunity Corridors

Early Opportunity Corridors (Figure 3-3) have been selected for their potential to benefit the highest number of people, jobs, and households in the region in the short term. They include major travel corridors within Baltimore City, and commuter bus links from the suburbs to the region's job centers. All these corridors currently exhibit strong market demand and represent critical links in the regional transit system. Most serve areas with a high density of jobs and population as well as high concentrations of vulnerable populations. The results of the evaluation measures for all the corridors are shown in *Appendix I: Corridor Profiles*.

Early Opportunity	
1	Morgan State Univ. to South Baltimore
2	Glen Burnie to South Baltimore
6	Towson to UM Transit Center
12	Mondawmin to South Baltimore
13	Rogers Avenue to City Hall
16	Ellicott City to Convention Center
17	West Baltimore to Hopkins Bayview
18	Sparrows Point to Hopkins Bayview
19	State Center to Hopkins Bayview
20	Walbrook Junction to Berea
27	Ellicott City to Silver Spring

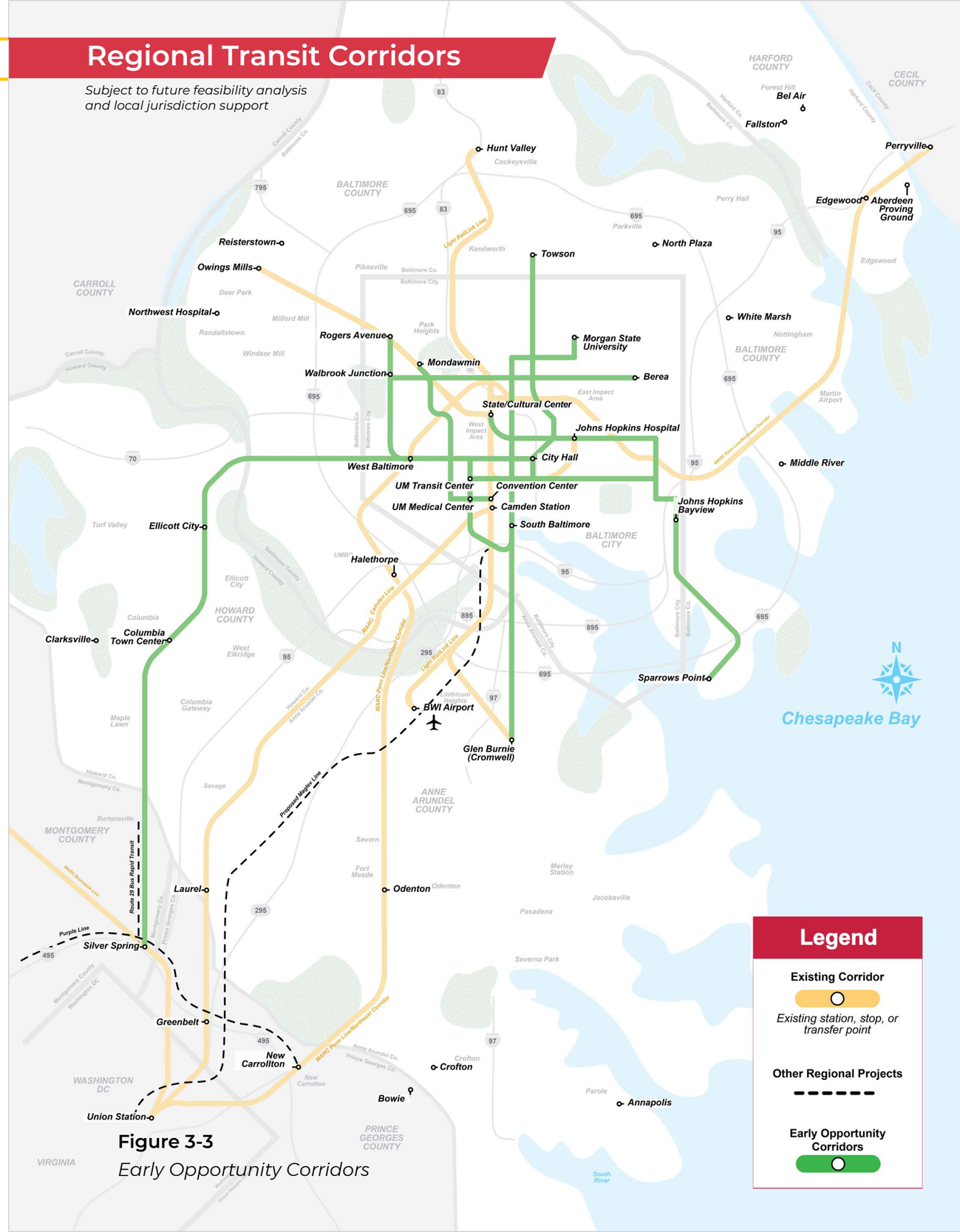


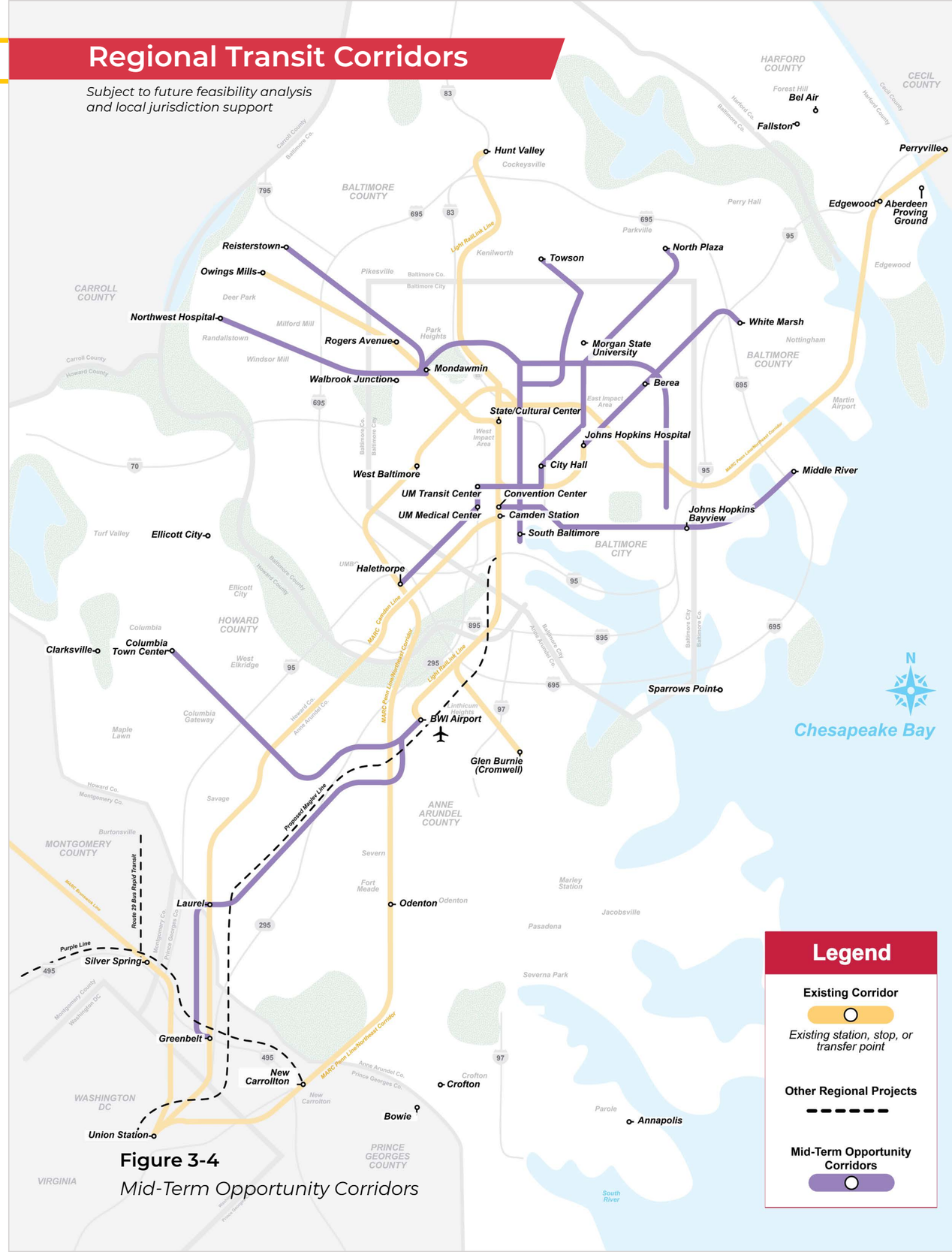
Figure 3-3
Early Opportunity Corridors

Mid-Term Opportunity Corridors
Mid-Term Opportunity Corridors (Figure 3-4) are also selected for their potential to benefit a high number of people, jobs, and households in the region, however these tend to score lower in certain evaluation measures than Early Opportunity Corridors. Mid-Term Opportunity Corridors are concentrated in Baltimore City and County, except for two that connect BWI Airport with important population and job centers in Howard and Anne Arundel counties. Mid-Term Opportunity Corridors tend to have lower concentrations of vulnerable populations than Early Opportunity Corridors despite similar population and job densities.

Mid-Term Opportunity	
5	Convention Center to Middle River
8	Towson to South Baltimore
9	North Plaza to UM Transit Center
10	White Marsh to Johns Hopkins Hospital
14	Mondawmin to Reisterstown
15	Mondawmin to Northwest Hospital
22	Mondawmin to Hopkins Bayview
23	Halethorpe to UM Transit Center
24	BWI Airport to Greenbelt
25	BWI Airport to Columbia Town Center

Regional Transit Corridors

Subject to future feasibility analysis and local jurisdiction support



Legend

Existing Corridor

Existing station, stop, or transfer point

Other Regional Projects

Mid-Term Opportunity Corridors

Figure 3-4
Mid-Term Opportunity Corridors

Long-Term Opportunity Corridors
Long-Term Opportunity Corridors (Figure 3-5) are selected for their potential to benefit areas where transit demand is expected to increase over the next 25 years. These corridors are concentrated on the region's peripheries and tend to connect areas with low existing densities of residents, jobs, and vulnerable populations relative to the region's urban core. However, much of the region's long-term growth is projected to occur in these peripheral areas, and transit markets along these corridors are expected to grow accordingly.

Long-Term Opportunity	
3	Glen Burnie to Annapolis
4	Glen Burnie to Bowie
7	Towson to Hunt Valley
11	Fallston to Aberdeen Proving Ground
21	Laurel to Halethorpe
26	Odenton to Clarksville
28	Annapolis to Union Station
29	Bel Air to Edgewood
30	Ellicott City to BWI Airport

Regional Transit Corridors

Subject to future feasibility analysis and local jurisdiction support

Legend

Existing Corridor

Existing station, stop, or transfer point

Other Regional Projects

Long-Term Opportunity Corridors

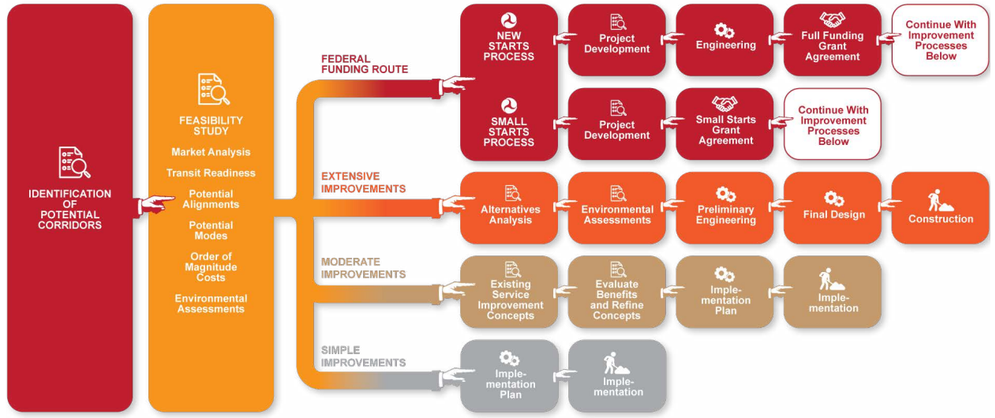
Figure 3-5
Long-Term Opportunity Corridors

Next Steps for All Prioritization Groups

Now that the corridors have been identified, a feasibility study must be conducted to determine the degree of improvements needed to implement the corridors. This process is described in Figure 3-6.

Figure 3-6

Next Steps for Regional Corridors



Jurisdictions, in coordination with MDOT MTA and the LOTS, can take steps in the short-term to direct transit investment to Early Opportunity Corridors, as described below.

Next Steps for Early Opportunity Corridors

- Start corridor studies to assess alternatives that best match the corridor's needs
- Enhance existing service
- Evaluate and install/construct transit priority infrastructure
- Enhance multimodal access to stops and stations

Next Steps for Mid-/Long-Term Opportunity Corridors

- Build transit ridership by implementing new service or improving existing service
- Implement incremental transit priority infrastructure so that existing transit is faster and more reliable
- Review and change land use and zoning ordinances to be more transit supportive
- Facilitate better pedestrian, bicycle, and microtransit access for first mile/last mile travel to the existing and potential future transit corridors

Transit Readiness

Transit Readiness describes the degree to which a place has the land uses, transit-access infrastructure, and concentrations of people that generate transit demand and allow people to comfortably and directly access transit service. In the Central Maryland region, the degree to which places are transit-ready often has to do with what was the most common kind of transportation when the area was developed.

For example, Baltimore City's intricate network of connected streets in its pre-industrial neighborhoods around the Inner Harbor were built when most people walked to and from home, work, daily shopping, and services. When the first commercially operated electric streetcars were introduced to the city in 1885, radial arterials were extended to create the suburban neighborhoods west and north from jobs near the harbor. Most of the city is built and organized at transit-compatible scales, with densities above 15 residents or jobs per acre, connected blocks, sidewalks, and neighborhood commercial centers.

The parts of the region that developed when the automobile was more prevalent are mostly built to a scale that is easier to travel by car. Residences and businesses are more spread out; moderate detours are less significant to people driving than people walking, so the street network tends to be more disconnected and less direct; and large areas in commercial centers are devoted to parking.

Knowing which factors are particularly relevant to a place type or corridor is helpful to identify strategies to make them more transit-ready over time. Local jurisdictions should evaluate an area's transit readiness by considering the five topics below.

1. Destinations along the Path of Travel. This factor describes the degree to which a transit service offers direct connections to high-demand places. This factor describes the degree to which a transit service offers direct connections to high-demand places. Places which naturally generate transit trips act as anchors for a transit route, and their proximity to transit stops is one factor that determines how direct and convenient a transit service will be.

2. Density and Mix of Land Uses. This factor describes the degree to which a place has the density of people and destinations to generate transit demand. Also worth considering is whether a place's mix of land uses will generate transit demand at many hours of the day, or only during concentrated travel peaks. For instance, an office park might house many jobs, but only generate trips during typical commute hours, while a dense street of shops and apartments will generate transit demand all day and into the evening.

3. Connected Street and Path Network. In many settings, most transit riders will access the service by walking to it. In order to do so, they need a dense and connected network of streets and paths that they can safely walk on to reach their ultimate destination.

4. Comfortable Environment. In some locations, a street or path might exist for people to walk on to access transit, but aspects of the environment make it difficult to use, uninviting, or unsafe. The factors making it uncomfortable can be loud, high-volume or high-speed traffic; a high frequency of heavily used driveways crossing the path; a lack of lighting; a lack of safe and convenient crosswalks; or building frontages that lack pedestrian-level design.

5. Programs and Incentives. The physical characteristics and concentrations of people and destinations that make a place transit-ready typically do not happen by chance, especially in places that were developed when automobiles were more prevalent. The adoption of zoning that aligns with the provision of transit and the creation of programs and incentives that encourage dense land uses with inviting and connected pedestrian amenities are crucial to enabling the changes that increase transit readiness.

Table 3-4

Overall Transit Readiness by Corridor

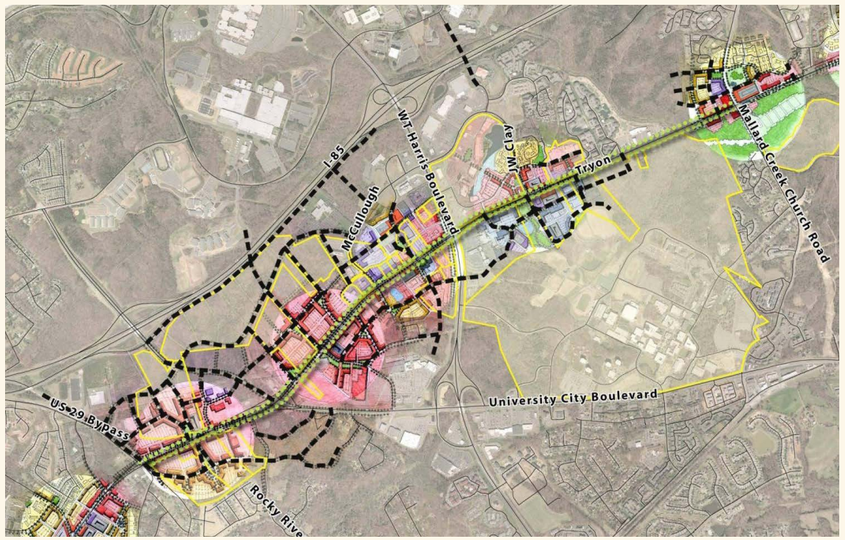
	Corridor	Destinations Along Path	Density of Uses	Connected Network	Comfort	Programs and incentives
1	Morgan State Univ. to South Baltimore	●	●	●	●	●
2	Glen Burnie to South Baltimore	●	●	●	●	●
3	Glen Burnie to Annapolis	●	●	●	●	●
4	Glen Burnie to Bowie	●	●	●	●	●
5	Convention Center to Middle River	●	●	●	●	●
6	Towson to UM Transit Center	●	●	●	●	●
7	Towson to Hunt Valley	●	●	●	●	●
8	Towson to South Baltimore	●	●	●	●	●
9	North Plaza to UM Transit Center	●	●	●	●	●
10	White Marsh to Johns Hopkins Hospital	●	●	●	●	●
11	Fallston to Aberdeen Proving Ground	●	●	●	●	●
12	Mondawmin to South Baltimore	●	●	●	●	●
13	Rogers Avenue to City Hall	●	●	●	●	●
14	Mondawmin to Reisterstown	●	●	●	●	●
15	Mondawmin to Northwest Hospital	●	●	●	●	●
16	Ellicott City to Convention Center	●	●	●	●	●
17	West Baltimore to Hopkins Bayview	●	●	●	●	●
18	Sparrows Point to Hopkins Bayview	●	●	●	●	●
19	State Center to Hopkins Bayview	●	●	●	●	●
20	Walbrook Junction to Berea	●	●	●	●	●
21	Laurel to Halethorpe	●	●	●	●	●
22	Mondawmin to Hopkins Bayview	●	●	●	●	●
23	Halethorpe to UM Transit Center	●	●	●	●	●
24	BWI Airport to Greenbelt	●	●	●	●	●
25	BWI Airport to Columbia Town Ccenter	●	●	●	●	●
26	Odenton to Clarksville	●	●	●	●	●
27	Ellicott City to Silver Spring	●	●	●	●	●
28	Annapolis to Union Station	●	●	●	●	●
29	Bel Air to Edgewood	●	●	●	●	●
30	Ellicott City to BWI Airport	●	●	●	●	●

● Meets Conditions ● Meets Conditions but Needs Improvements ● Does Not Meet Conditions

Transit Readiness Case Study
Integrated Planning of a Transit Corridor in Charlotte, NC

The LYNX Blue Line in Charlotte, North Carolina, opened in 2007, is the first light rail service in the state. In planning a northern extension to UNC Charlotte (which ultimately opened in 2018), the city knew that it would take a major shift in land use and circulation patterns to deliver on its envisioned economic development and mobility goals. Transitioning suburban patterns to walkable transit-ready places would require full cooperation with actors outside of the local transit agency.

Charlotte's transit-ready vision has its genesis in the city's 1994 Centers and Corridors plan, which was updated in 1998 as the 2025 Integrated Transit/Land-Use Plan. From these plans, the city adopted transit-oriented zoning and urban design guidelines to channel private investment toward the desired environment in transit station influence areas. The city also created a Development Response Team and established processes to support collaboration with developers, landowners, and state highway officials, thereby assuring that new investment would be transit-compatible in land use, urban form, and site design.



The proposed network of local streets around Charlotte's Blue Line extension.

New construction at the Blue Line's J.W. Clay Boulevard station.
(Photo credit: Kittelson and Associates.)

Getting out in front of investment decisions with an area plan and an urban design team capable of negotiating solutions was particularly important for the stations near UNC Charlotte. The Development Response Team offered NCDOT an alternative to a proposed $50 million interchange project to eliminate a problematic weave of North Tryon Street and University City Boulevard (Routes 29 and 49). The design was incompatible with the emerging transit-oriented context, area connectivity, and TOD. Facilitating a dialogue between NCDOT and area developers during a single work session led to the developers agreeing to build the team's proposed network of local streets, thereby reducing point-based congestion at the interchange site.

The now-built street network, coupled with changes in allowable land use, is producing transit-compatible employment, shopping, and residential neighborhoods in the area. The at-grade intersection saved the state of North Carolina about $25 million. National retail chains upgraded local street infrastructure to be comfortable for walking, bicycling, and short trips, reducing arterial road impact.

The Development Response concept recognized the need for the city to have technical resources in place to be opportunistic and nimble, able to quickly and effectively inform and leverage investments from partner agencies and the private sector. Beyond this, the city also deploys targeted infrastructure improvements in transit station areas, which is particularly important in less robust markets. This combination of clear city goals, guidance of private investment, and alignment of public infrastructure investment has proven successful in creating transit-ready origins and destinations and serving them with high-quality transit.

Regional Transit Corridor Characteristics

Possible modes, service frequency and span, and methods of prioritizing transit are provided in this section for illustrative purposes. All of these characteristics would be investigated during the corridor feasibility study phase, and final interventions would be selected based on final mode and alignment selection, levels of service, cost-benefit analysis, and local jurisdiction support.

Modes

The Regional Transit Corridors do not assume modes or service levels and do not define specific alignments or routes. Rather, the identified corridors highlight areas with transit need and potential for investment without rigidly defining the future of Central Maryland's transit network. The Regional Transit Corridors prioritized through this plan could use any of the following modes of transit in Table 3-5. The appropriate mode will depend on the prioritization and context of each corridor, the findings of the corridor feasibility study, and participation from stakeholders.

Minimum Service Levels

Table 3-6, on the next spread, describes potential service characteristics by corridor, including minimum span and frequency. The table applies one of three potential service levels to each corridor based on transit market demand, transit readiness, and other local context factors. Corridors traveling through urban areas with high densities of residents and jobs may have transit service 24 hours per day and frequencies of 10 minutes or better during weekday peak periods, whereas corridors traveling along highways or freeways surrounded by lower densities of residents and jobs may have transit service for 14 to 18 hours per day and frequencies of 20 to 30 minutes during weekday peak periods. These service levels are only planning estimates that would be subject to further analysis and review during the corridor feasibility study phase, with implemented service levels subject to local jurisdiction support.

Table 3-5

Potential Regional Transit Corridor Modes

Mode	Description	Example	Cost per mile (2019 dollars)
Heavy Rail	Rail-based transit system operating exclusively in dedicated right-of-way separated from all other traffic using multi-car trains powered by an electric third rail, making stops at high-level boarding platforms.	 MDOT MTA Metro Subway	$150 million to $3 billion
Light Rail	Rail-based transit system operating in dedicated right-of-way using short one- to three-car trains.	 MDOT MTA Light Rail	$30 million to $650 million
Streetcar	Rail-based transit system operating in streets in mixed traffic, typically using single-car trains making frequent stops in urban areas.	 DC Streetcar	$25 million to $100 million
Regional Rail	Rail-based transit system with dedicated right-of-way and all-day, relatively frequent service in both directions but typically with stations spaced at least a few miles apart.	 Denver RTD A Line	$4 million to $200 million
Commuter Rail	Rail-based transit system designed primarily for peak-hour one-way service from suburban areas, with distances of several miles or more between stations, to a city center or central business district.	 MDOT MTA MARC Train	$3 million to $40 million
Bus Rapid Transit	Bus-based transit system with dedicated lanes or right-of-way, traffic signal priority, off-board fare payment, level boarding platforms and enhanced stations.	 WMATA Metroway	$2 million to $170 million
Arterial Rapid Transit	Bus-based transit system operating on major arterial streets and roads in mixed traffic with transit signal priority and off-board fare payment, making stops at enhanced stations.	 Minneapolis Metro Transit A Line	$1 million to $20 million

Photos are courtesy of each transit agency.

Table 3-6

Minimum Levels of Service by Corridor

	Corridor Name	Minimum Span			Minimum Frequency	
		Weekday (hours per day)	Saturday (hours per day)	Sunday (hours per day)	Peak Minimum Frequency (minutes)	Off-Peak Minimum Frequency (minutes)
1	Morgan State University to South Baltimore	24	14-18	14-18	20-30	30-60
2	Glen Burnie to South Baltimore	14-18	14-18	14-18	20-30	30-60
3	Glen Burnie to Annapolis	24	24	24	10	15-20
4	Glen Burnie to Bowie	24	24	24	10	15-20
5	Convention Center to Middle River	14-18	14-18	14-18	15-20	30-60
6	Towson to UM Transit Center	24	24	24	10	15-20
7	Towson to Hunt Valley	24	24	24	10	15-20
8	Towson to South Baltimore	24	24	24	10	15-20
9	North Plaza to UM Transit Center	14-18	14-18	14-18	20-30	30-60
10	White Marsh to Johns Hopkins Hosp.	24	24	24	10	15-20
11	Fallston to Aberdeen Proving Ground	24	24	24	10	15-20
12	Mondawmin to South Baltimore	24	14-18	14-18	15-20	30-60
13	Rogers Avenue to City Hall	24	14-18	14-18	15-20	30-60
14	Mondawmin to Reisterstown	24	14-18	14-18	15-20	30-60
15	Mondawmin to Northwest Hospital	24	24	24	10	15-20
16	Ellicott City to Convention Center	24	14-18	14-18	15-20	30-60
17	West Baltimore to Hopkins Bayview	24	24	24	10	15-20
18	Sparrows Point to Hopkins Bayview	24	24	24	10	15-20
19	State Center to Hopkins Bayview	24	14-18	14-18	15-20	30-60
20	Walbrook Junction to Berea	24	24	24	10	15-20
21	Laurel to Halethorpe	24	24	24	10	15-20
22	Mondawmin to Hopkins Bayview	24	14-18	14-18	20-30	30-60
23	Halethorpe to UM Transit Center	24	14-18	14-18	15-20	30-60
24	BWI Airport to Greenbelt	14-18	14-18	14-18	20-30	30-60
25	BWI Airport to Columbia Town Center	14-18	14-18	14-18	20-30	30-60
26	Odenton to Clarksville	14-18	14-18	14-18	20-30	30-60
27	Ellicott City to Silver Spring	14-18	14-18	14-18	20-30	30-60
28	Annapolis to Union Station	14-18	14-18	14-18	20-30	30-60
29	Bel Air to Edgewood	24	14-18	14-18	20-30	30-60
30	Ellicott City to BWI Airport	14-18	14-18	14-18	20-30	30-60

Transit Priority Improvements

In June 2019, MDOT MTA published the Transit Priority Toolkit, which identifies physical and technology treatments throughout the Core Bus system that would address bus travel delays and reliability, as well as pedestrian and bicycle safety. The Plan expands upon the Transit Priority Toolkit by identifying infrastructure improvements to improve transit travel speeds and service reliability in corridors across Central Maryland.

This section first defines transit priority improvements in four categories: right-of-way, priority infrastructure and technology, stop improvement, and facilities (Table 3-7). Then, it estimates these improvements' potential time savings and costs (Table 3-8). Finally, it identifies which treatments would benefit each corridor (Table 3-9). These investments will be required to fully support successful all-day, high-frequency transit service proposed for the Regional Transit Corridors.

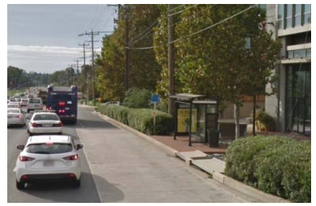
Table 3-7

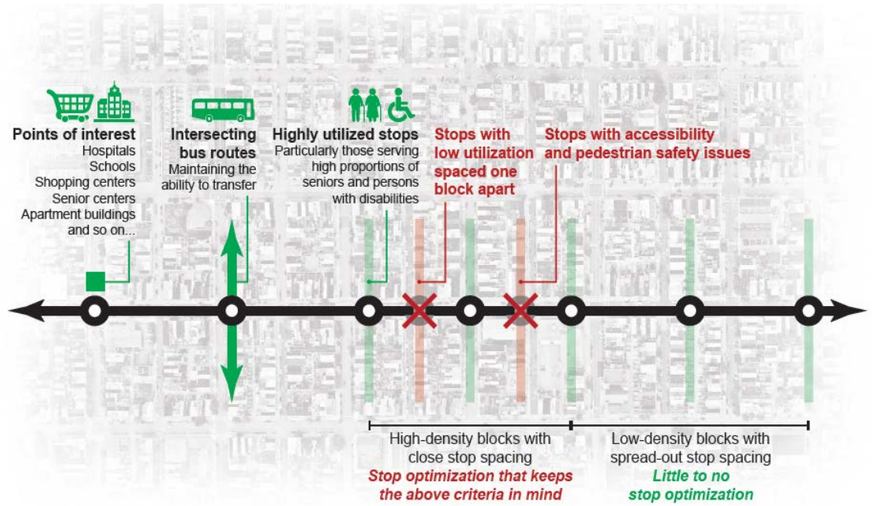
Transit Priority Improvements

Transit Priority Improvement		Description	Example Image
Right-of-way	Dedicated lanes or Right-of-way	*Dedicated lanes* are signed or marked for exclusive transit use. They may be on a separate right-of-way, concurrent with adjacent traffic, or contraflow with adjacent traffic. Dedicated bus lanes may also be shared with bicyclists and emergency vehicles. Busways are dedicated right-of-way physically separated from other traffic by curbs, medians, or other barriers.	
	Peak-only bus lanes	*Peak-only bus lanes* are used exclusively by buses and turning vehicles during specified times of the day. During off-peak periods the lane is used as a general travel lane or a parking lane. Existing travel lanes may be repurposed during peak hours with signage and pavement markings.	
	Bus on shoulder lanes	On highways, freeways, and higher-speed roads, the shoulder can be used as a *bus on shoulder lane*. The shoulder is designated as transit-only, allowing buses to move through congested corridors without delay. Projects may include repurposing existing shoulders during peak hours with signage and pavement markings.	

Table 3-7

Right-of-Way Transit Priority Improvements (continued)

Transit Priority Improvement		Description	Example Image
Right-of-way	Driveway access management	*Driveway access management* is a process by which two or more driveways and access roads are consolidated into one location, or left turns onto major roads are prohibited through medians or other barriers. At the location pictured above, a driveway curb cut was closed and replaced with a bus stop. Access management can improve safety for buses and pedestrians by reducing the number of potential conflict points with other traffic.	 *Photo credit: Google Street View*
Priority infrastructure and technology	Intersection queue jump	An *intersection queue jump* consists of a short transit-only lane prior to an intersection. General traffic may not turn right on red, and buses have a bus-only traffic signal. As a bus approaches the intersection, it receives a dedicated signal to proceed (pictured at right as the white line beneath the "Van Mall Transit Center" sign), while general traffic waits at the red light. The bus can then jump the queue, proceed through the intersection ahead of the adjacent vehicles, and seamlessly merge into the subsequent traffic lanes.	 *Photo credit: Amanda Cowan/ The Columbian*
	Transit signal priority	*Transit signal priority* uses technology for communication between a traffic signal and an approaching bus to give priority to the approaching transit vehicle. This is typically the addition of a few seconds to a green light, or the reduction of a few seconds to a red light.	
	Ramp queue jump	Ramp meters are traffic signals installed on freeway and highway on-ramps that limit merging to one vehicle at a time. *Ramp queue jumps* are sections of a transit-only lane or high-occupancy vehicle lane prior to a ramp meter. Lane markings and signage allow buses to bypass other vehicles waiting to merge onto the highway, continuing without delay.	 *Photo credit: Google Street View*
Stop improvements	Stop optimization	*Stop optimization* is a process for bus routes with closely spaced or underutilized stops (as shown below). Targeted stops are relocated or eliminated in order to optimize passenger boarding patterns with transit travel times.	*See diagram below*
	Curb extension	*Curb extensions* at bus stops or stations are also known as bus bulbs or boarding bulbs. The bus stop boarding area "bulbs out" to the travel lane allowing the bus to stop in the travel lane. This may also shorten the crossing distance for pedestrians at intersections	
	Level boarding	With *level or near-level boarding* at stops or stations, the height of the bus platform is raised above typical curb height to minimize the vertical gap between the pavement and the bus floor. This allows patrons to get on and off the bus without a step up or down, speeding boarding and facilitating boarding for those with disabilities or with strollers.	



Stop Optimization

Table 3-7

Right-of-Way Transit Priority Improvements (continued)

Transit Priority Improvement		Description	Example Image
Stop improvements	Off-board fare payment	*Off-board fare payment* is a system for pre-paying for transit before boarding a bus or train. Using a ticket vending machine at a transit stop, customers may validate their electronic fare card or purchase a ticket using cash or a credit/debit card. Removing fare payment, especially cash payments, from the boarding process reduces time spent at stops.	 *Photo Credit: NYC DOT M86 Select Bus Service Progress Report*
	All-door boarding	*All-door boarding* is a system that allows customers to board at every set of doors of a bus or train rather than at only the front door. Off-board fare payment is usually employed to facilitate all-door boarding. If fares are not paid off-board, customers may validate their electronic farecard when boarding or purchase a ticket on-board using cash or a credit/debit card. All-door boarding speeds the boarding process, reducing time spent at stops.	 *Photo Credit: Institute for Transportation and Development Policy*
Facilities	Transit hub	A *transit hub* is the co-location of two or more transit stops to enable passengers to quickly and efficiently transfer between transit routes and modes. They are typically located at town centers, rail stations, or other high-activity locations. Transit hubs may be equipped with bicycle and vehicle parking, shelters, ticket vending machines, or other customer amenities. Transit hubs often provide space for transit vehicles to lay over between trips and for operators to take breaks.	
Facilities	Terminal	A *terminal* is a facility designed for transit vehicles to lay over between trips. For buses, a terminal is typically an off-street loop that enables operators to turn around at the end of a route. For trains, a terminal may be a siding, a short track at the side of a rail line, where trains reverse direction at the end of a trip. Terminals may be equipped with shelters, ticket vending machines, or other customer amenities.	

Table 3-8 on the next spread summarizes these transit priority improvements, their potential time savings, and their estimated costs.

On the subsequent spread, Table 3-9 identifies potential improvements for each corridor based on existing conditions and local context, including factors such as roadway design, land use, traffic congestion, transit stop spacing, and availability of transit facilities. For example, bus on shoulder would be most appropriate for corridors that include highways or freeways with existing shoulders that could be used or modified for use by transit vehicles.

Further refinement of these Transit Priority Improvements would be investigated during the corridor feasibility study phase, and final interventions would be selected based on final mode and alignment selection, levels of service, cost-benefit analysis, and local jurisdiction support.

STRATEGIES
Improve Bus Speed and Reliability

- Implement targeted investments, such as: dedicated bus lanes, transit signal prioritization, traffic signal replacement and retiming, curb management, all-door boarding, and off-board fare collection
- Introduce limited-stop service where appropriate
- Ensure consistent enforcement of bus lane and bus stop violations
- Coordinate with local jurisdictions to minimize the impact of construction projects on bus services
- When existing buses are retired, replace with low-floor vehicles

Table 3-8
Potential Time Savings and Approximate Costs for Transit Priority Improvements

Transit Priority Improvement		Potential Time Savings	Estimated Costs
Right-of-way	Dedicated lanes or Right-of-way	Between 4 percent and 32 percent reduction in travel time during peak periods	For right-of-way acquisition, physical barrier construction, and roadway widening: $4 to $11 million per lane-mile For repurposed existing travel lanes with signage, pavement markings, and red paint or tinted asphalt overlay: $350,000 to $750,000 per lane-mile
	Peak-only bus lane	Between 4 percent and 32 percent reduction in travel time during peak periods	Projects may include repurposing existing travel lanes during peak hours with signage and pavement markings: $50,000 to $75,000 per lane-mile
	Bus on shoulder	Varies based on the degree of congestion in the general-purpose lane and how many miles congestion extends	Projects may include repurposing existing shoulders with signage and pavement markings: $50,000 to $75,000 per lane-mile
	Driveway access management	Varies based on the frequency of driveways and the amount of activity controlled or reduced due to closures	Varies based on length of driveway and adjacent roadway conditions (open/closed section, sidewalks, buffers, etc.)
Priority infrastructure and technology	Intersection queue jump	Between 5 percent and 15 percent reduction in travel time for buses through intersections	For projects that include right-of-way acquisition and roadway widening: $80,000 to $200,000 per 100 feet of turn lane For queue jump traffic signals: $5,000 to $15,000 based on the type of detection (e.g., loop or video) Lower-cost projects may include repurposing of existing travel lanes with signage and pavement markings: $50,000 to $75,000 per lane-mile
	Transit signal priority	Up to 10 percent reduction in travel time and up to 50 percent reduction in delay at the targeted intersections	Ranges from $15,000 to $25,000 per intersection
	Ramp queue jump	Varies based on the degree of congestion to enter limited access roadway and how many feet congestion extends	For right-of-way acquisition, physical barrier construction, and roadway widening: $4 to $11 million per lane-mile Projects may include repurposing existing travel lanes/shoulder with signage and pavement markings: $50,000 to $75,000 per lane-mile
Stop improvements	Stop optimization	Approximately 1 percent reduction in travel time for a 10 percent reduction in the number of stops Relocating stops to the far side of an intersection can save 4 to 5 seconds per stop	Costs of eliminating bus stops are minimal. When relocating a bus stop, constructing a new concrete bus pad is the most expensive infrastructure element at approximately $15,000
	Level boarding	Not yet well known for raised-curb level boarding, but boarding times on low-floor buses are 0.11 to 0.7 seconds faster per ambulatory passenger and 5 seconds faster for each passenger who would require a lift	Approximately $50,000 to construct raised platforms at each stop and $20,000 per bus to install guidance equipment
	Curb extension	On a typical city street with volumes of 300 to 500 vehicles per lane per hour, a curb extension may save 5 seconds per stop	Ranges from approximately $20,000 for a temporary boarding platform made of durable plastic to approximately $100,000 for a curb extension constructed with concrete
	Off-board fare payment and All-door boarding	Between 1.1 and 2.5 fewer seconds of boarding time per passenger (a reduction of 40 percent to 56 percent in boarding time)	Off-board fare payment machines cost approximately $20,000 each; there are typically additional costs associated with connecting to electric and internet utilities that vary by location Transit agencies employ an average of one full-time equivalent fare inspector per 2,000 daily riders; otherwise, electronic farecard validators must be installed at rear doors at a cost of approximately $5,000 per unit
Facilities	Transit hub and Terminal facilities	Varies based on mode(s) and number of converging routes. Sometimes, diverting routes to a single transit hub may increase the travel time for passengers but offer better transfers. Transit customers perceive a minute waiting to be longer than a minute riding; increasing the comfort and decreasing the length of transfers can benefit passengers even if overall in-vehicle travel time increases slightly.	Varies widely based on design and whether right-way-way acquisition is required

Table 3-9

Potential Transit Priority Improvements by Corridor

	Corridor Name	Right-of-Way				Priority Infrastructure and Technology		
		Dedicated Lanes or Right-of-Way	Peak-Only Bus Lane	Bus on Shoulder	Driveway Access Management	Intersection Queue Jump	Transit SIgnal Priority	Ramp Queue Jump
1	Morgan State University to South Baltimore	x				x	x	
2	Glen Burnie to South Baltimore		x		x	x	x	
3	Glen Burnie to Annapolis			x	x	x	x	
4	Glen Burnie to Bowie			x	x	x	x	
5	Convention Center to Middle River				x	x	x	x
6	Towson to UM Transit Center	x				x	x	
7	Towson to Hunt Valley	x			x	x	x	
8	Towson to South Baltimore	x				x	x	
9	North Plaza to UM Transit Center	x			x	x	x	
10	White Marsh to Johns Hopkins Hosp.	x		x	x	x	x	
11	Fallston to Aberdeen Proving Ground		x	x		x	x	
12	Mondawmin to South Baltimore	x				x	x	
13	Rogers Avenue to City Hall	x				x	x	
14	Mondawmin to Reisterstown	x	x		x	x	x	
15	Mondawmin to Northwest Hospital	x	x		x	x	x	
16	Ellicott City to Convention Center	x		x		x	x	
17	West Baltimore to Hopkins Bayview	x				x	x	
18	Sparrows Point to Hopkins Bayview	x		x		x	x	
19	State Center to Hopkins Bayview	x				x	x	
20	Walbrook Junction to Berea	x				x	x	
21	Laurel to Halethorpe	x	x	x	x	x	x	
22	Mondawmin to Hopkins Bayview	x				x	x	
23	Halethorpe to UM Transit Center	x				x	x	
24	BWI Airport to Greenbelt		x	x		x	x	x
25	BWI Airport to Columbia Town Center		x	x		x	x	x
26	Odenton to Clarksville			x				x
27	Ellicott City to Silver Spring			x				x
28	Annapolis to Union Station			x				x
29	Bel Air to Edgewood		x			x	x	
30	Ellicott City to BWI Airport			x				x

Next Steps for Regional Transit Corridors

Before transit improvements can be implemented in a corridor, the specific alignment, mode, service levels, technologies, and design of facilities and infrastructure must be determined. These details are not dictated by the Plan; the Regional Transit Corridors do not assume modes or service levels and do not define specific alignments or routes. Rather, the identified corridors highlight areas with transit need and potential for investment without rigidly defining the future of Central Maryland's transit network. Although this Plan outlines potential transit priority improvement tools and treatments, the detailed study of all alternatives will be initiated, conducted, and finalized by the relevant regional and local leaders and transit agencies separately for each corridor. It is the responsibility of these regional and local stakeholders, with public support, to create solutions and plan specific transit services.

The appropriate course of action will vary based on the prioritization and context of each corridor, as well as the stakeholders involved. Initially, coalitions must be formed representing the jurisdictional authorities and transit agencies that are relevant to a corridor. Then, the corridors will require feasibility studies to determine the appropriate alternatives for transit improvements given the level of need, local support, potential funding sources, and time frame for implementation. Feasibility studies should evaluate market demand, transit readiness, potential alignments, potential modes, order of magnitude costs, and environmental impact of each alternative.

An important element of a feasibility study is the identification of funding sources. Federal funding sources often have specific requirements for the planning process; project sponsors should be aware of those requirements to ensure eligibility.

Extensive improvements may require an alternatives analysis and environmental assessment, followed by preliminary engineering, final design, and construction. Moderate improvements may require analysis of existing service improvement concepts to evaluate benefits and refine concepts, followed by an implementation plan. For simple improvements, jurisdictions may only need an implementation plan to implement changes on the corridor.

The next steps for study, design, and implementation of improvements and assets for the Regional Transit Corridors may change over time. The corridors, their extent, and prioritization will be updated with the Plan every five years. In the case of changes to a corridor, the course of action following publication of the updated Plan should be revisited.


Appendix
1
Corridor Profiles

LIST OF CORRIDORS

This table lists each corridor's name, jurisdictions served, and length, ranging from 5 to 17 miles. The number associated with each corridor is an identification number; it does not represent priority order. Baltimore City is served by 19 corridors, the most of any jurisdiction. This appendix contains a detailed map and evaluation of each corridor.

NO.	Name	Jurisdictions Served	Miles within Region
1	Morgan State Univ. to South Baltimore	Baltimore City	7
2	Glen Burnie to South Baltimore	Anne Arundel County, Baltimore City	7
3	Glen Burnie to Annapolis	Anne Arundel County	17
4	Glen Burnie to Bowie	Anne Arundel County	15
5	Convention Center to Middle River	Baltimore City, Baltimore County	11
6	Towson to UM Transit Center	Baltimore City, Baltimore County	9
7	Towson to Hunt Valley	Baltimore County	7
8	Towson to South Baltimore	Baltimore City, Baltimore County	13
9	North Plaza to UM Transit Center	Baltimore City, Baltimore County	11
10	White Marsh to Johns Hopkins Hospital	Baltimore City, Baltimore County	10
11	Fallston to Aberdeen Proving Ground	Harford County	16
12	Mondawmin to South Baltimore	Baltimore City	7
13	Rogers Avenue to City Hall	Baltimore City	8
14	Mondawmin to Reisterstown	Baltimore City, Baltimore County	10
15	Mondawmin to Northwest Hospital	Baltimore City, Baltimore County	8
16	Ellicott City to Convention Center	Baltimore City and County, Howard County	12
17	West Baltimore to Hopkins Bayview	Baltimore City	6
18	Sparrows Point to Hopkins Bayview	Baltimore City, Baltimore County	6
19	State Center to Hopkins Bayview	Baltimore City	5
20	Walbrook Junction to Berea	Baltimore City	5
21	Laurel to Halethorpe	Baltimore County, Howard County	13
22	Mondawmin to Hopkins Bayview	Baltimore City	11
23	Halethorpe to UM Transit Center	Baltimore City, Baltimore County	6
24	BWI Airport to Greenbelt Metro Station	Anne Arundel County	13
25	BWI Airport to Columbia Town Center	Anne Arundel County, Howard County	15
26	Odenton to Clarksville	Anne Arundel County, Howard County	17
27	Ellicott City to Silver Spring	Howard County	12
28	Annapolis to Union Station	Anne Arundel County	12
29	Bel Air to Edgewood	Harford County	9
30	Ellicott City to BWI Airport	Anne Arundel County, Howard County	14

CORRIDOR 1

Morgan State Univ. to South Baltimore

Subject to future feasibility analysis and local jurisdiction support

Length: 7 miles

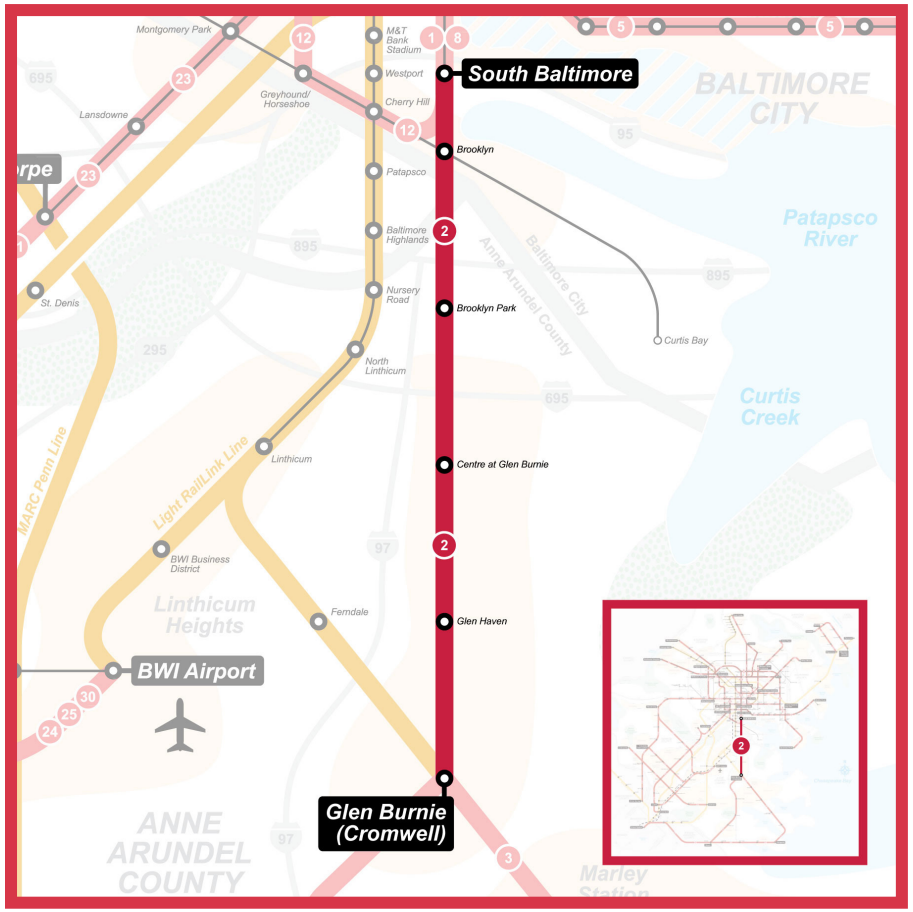
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	5
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	46
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	50%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	16,612 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	11,257 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	18%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	60%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	35%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	32%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	11%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	28,963 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	85%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	93%

CORRIDOR 2

Glen Burnie to South Baltimore

Subject to future feasibility analysis and local jurisdiction support



Length: 7 miles

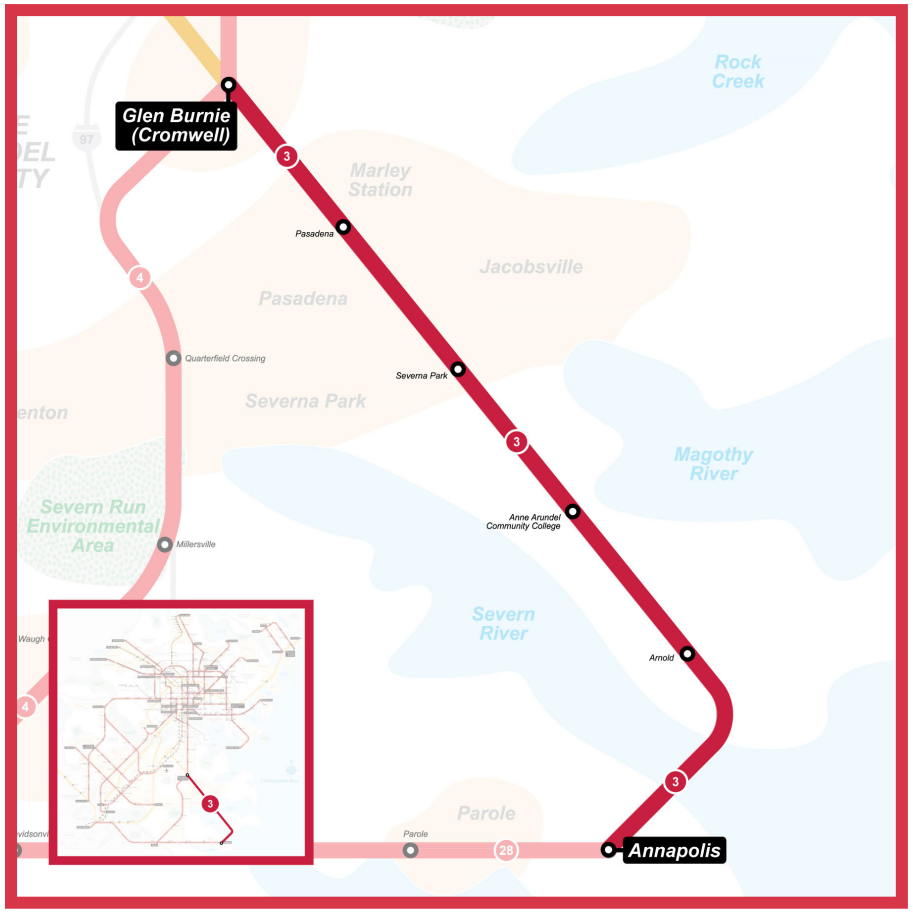
Jurisdictions served: Anne Arundel County, Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	7
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	8%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,741 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	3,789 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	17%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	45%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	35%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	17%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	14%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	4,166 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	79%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	66%

CORRIDOR 3

Glen Burnie to Annapolis

Subject to future feasibility analysis and local jurisdiction support



Length: 17 miles

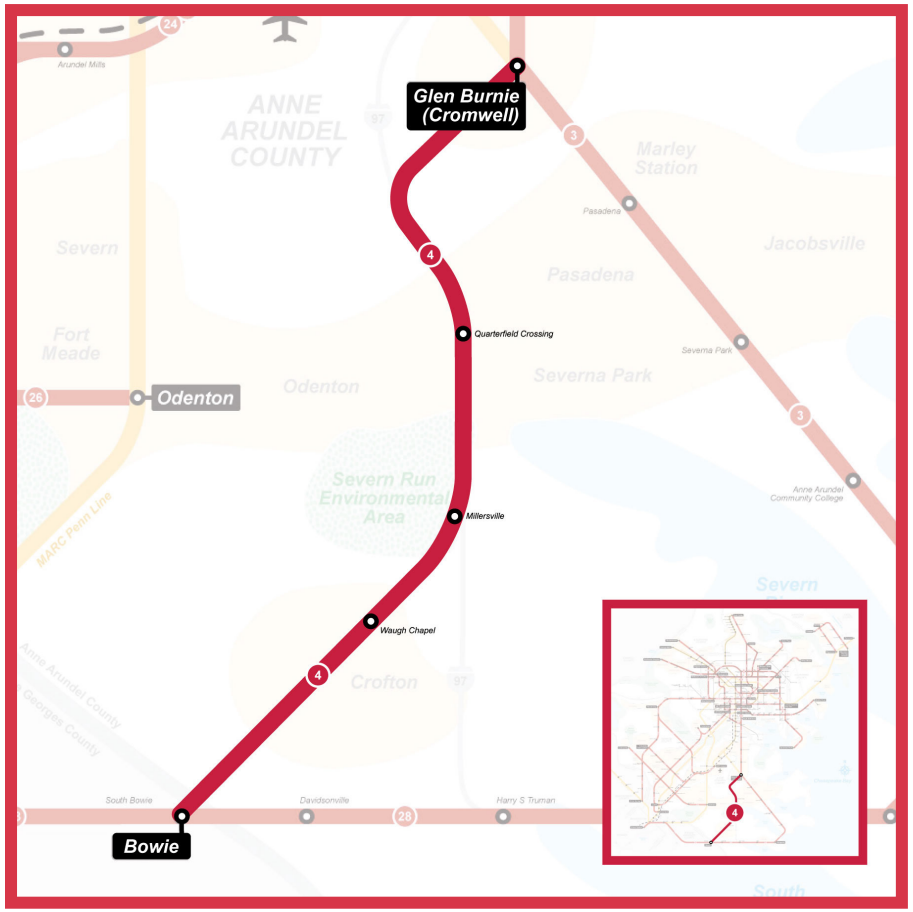
Jurisdictions served: Anne Arundel County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	3
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	15
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	6%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,637 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	2,513 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	19%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	23%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	17%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	8%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	14%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	10%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	2,585 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	46%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	23%

CORRIDOR 4

Glen Burnie to Bowie

Subject to future feasibility analysis and local jurisdiction support



Length: 15 miles

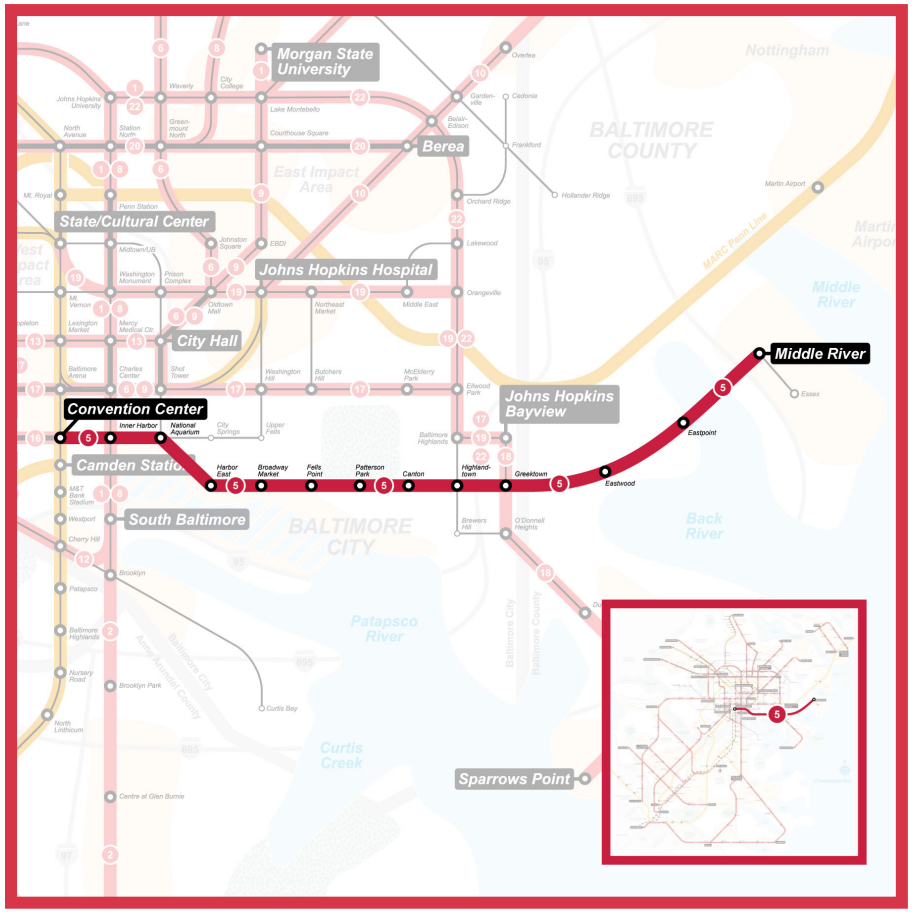
Jurisdictions served: Anne Arundel County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	5
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	12%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,114 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	3,038 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	22%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	42%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	19%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	5%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	8%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	1,838 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	55%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	24%

CORRIDOR 5

Convention Center to Middle River

Subject to future feasibility analysis and local jurisdiction support



Length: 11 miles

Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	5
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	39
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	34%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	10,407 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	7,663 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	18%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	37%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	32%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	20%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	11%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	12%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	18,069 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	76%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	81%

CORRIDOR 6

Towson to UM Transit Center

Subject to future feasibility analysis and local jurisdiction support

Length: 9 miles

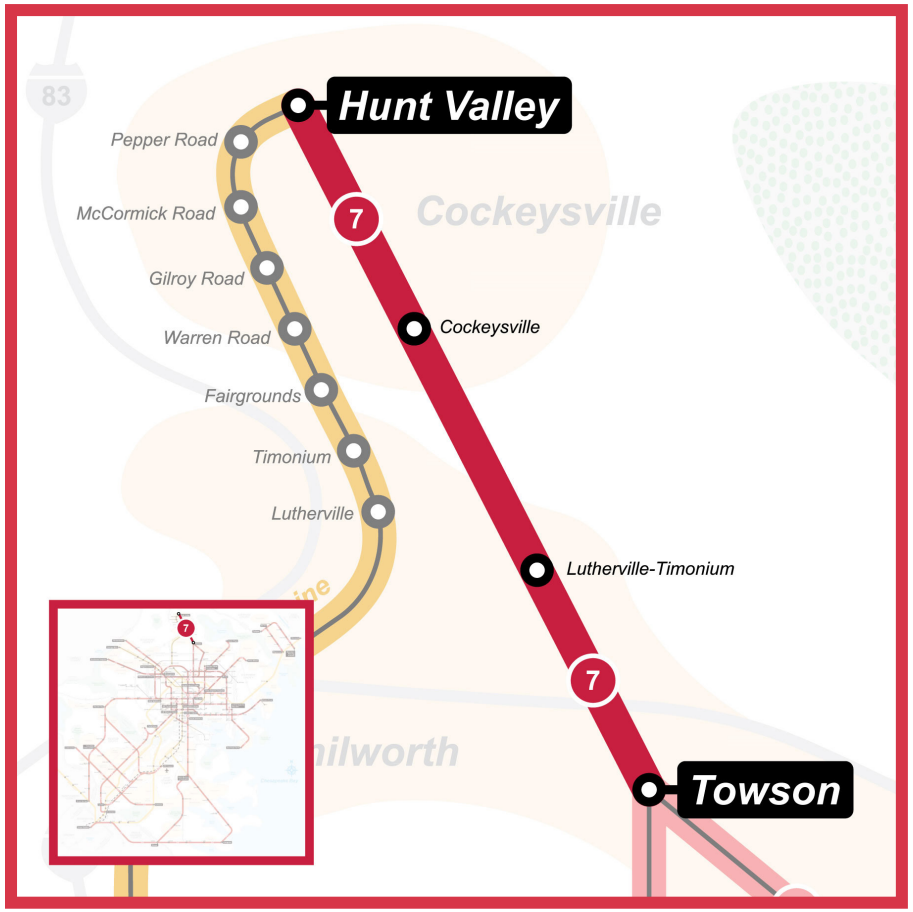
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	55
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	63%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	14,803 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	11,921 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	20%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	61%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	39%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	34%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	12%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	25,852 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	84%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	66%

CORRIDOR 7

Towson to Hunt Valley

Subject to future feasibility analysis and local jurisdiction support



Length: 7 miles

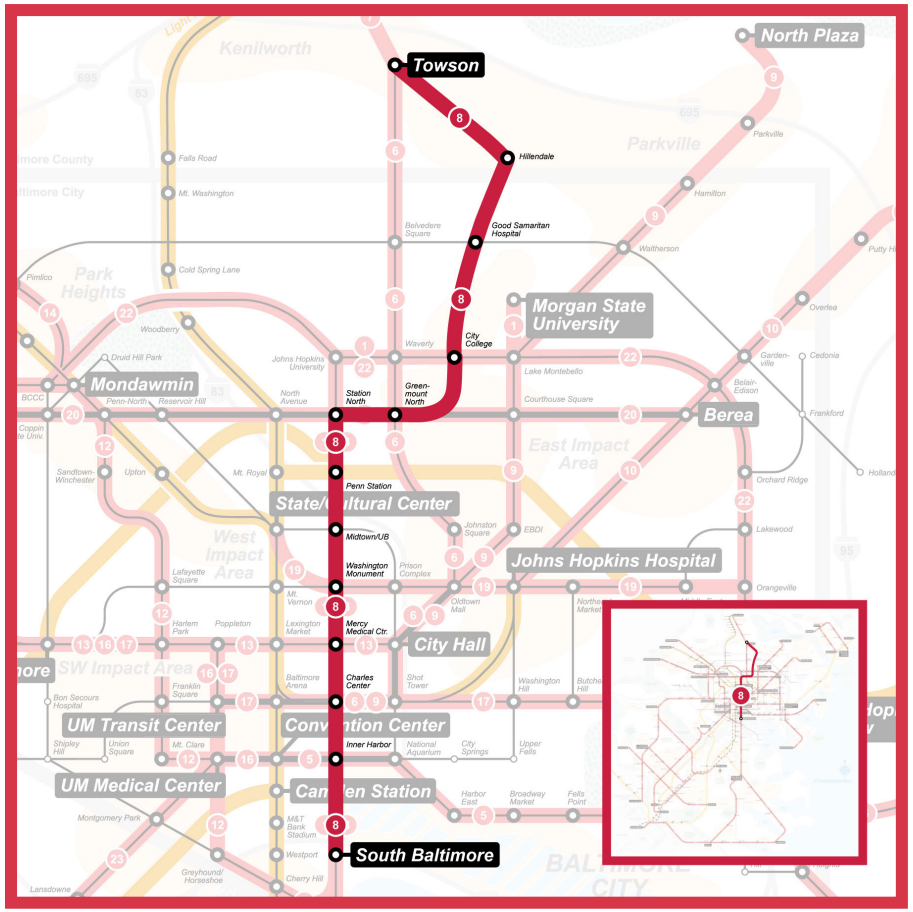
Jurisdictions served: Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	6
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	21%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	7,102 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	3,426 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	17%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	30%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	19%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	10%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	16%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	9%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	9,827 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	50%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	9%

CORRIDOR 8

Towson to South Baltimore

Subject to future feasibility analysis and local jurisdiction support



Length: 13 miles

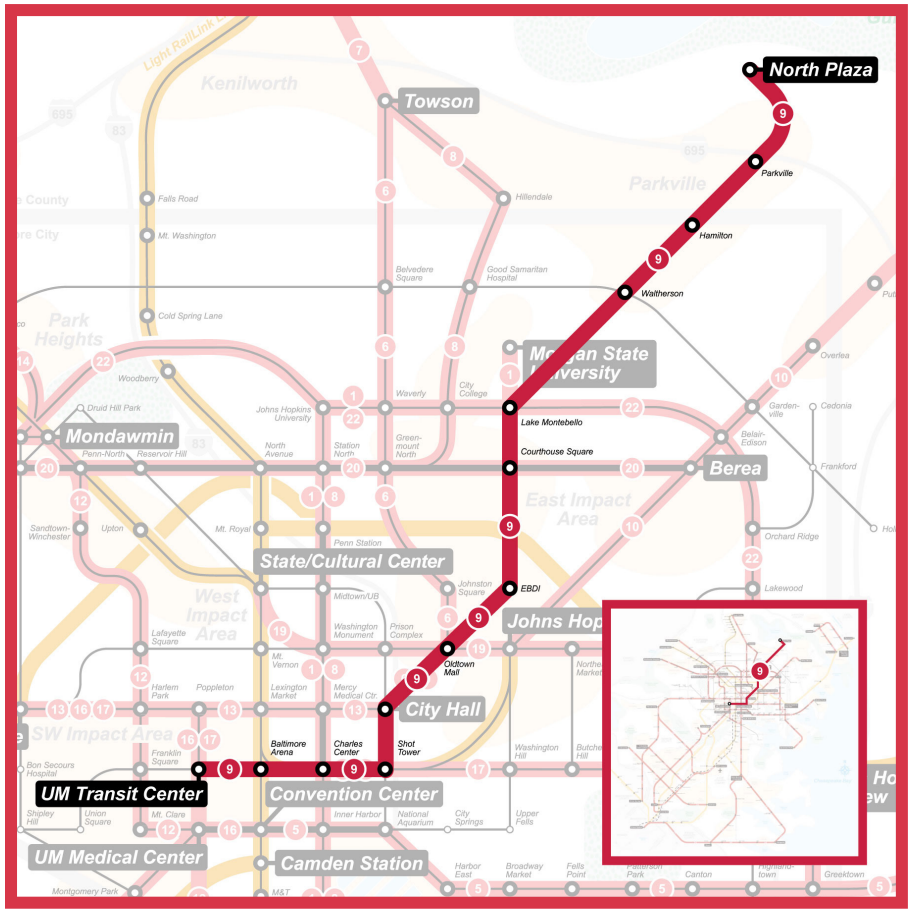
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	3
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	51
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	51%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	10,177 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	9,332 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	19%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	67%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	34%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	27%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	12%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	17,977 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	81%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	73%

CORRIDOR 9

North Plaza to UM Transit Center

Subject to future feasibility analysis and local jurisdiction support



Length: 11 miles

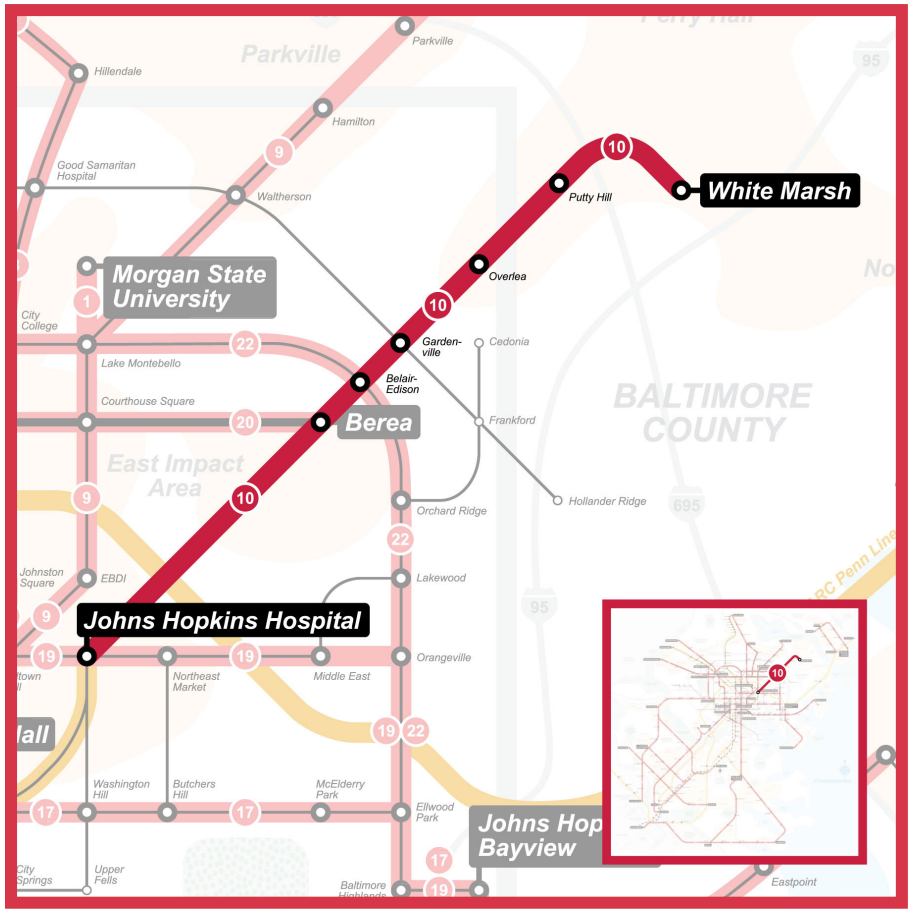
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	52
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	35%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	9,640 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	8,421 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	19%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	64%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	38%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	29%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	13%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	17,136 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	85%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	78%

CORRIDOR 10

White Marsh to Johns Hopkins Hospital

Subject to future feasibility analysis and local jurisdiction support



Length: 10 miles

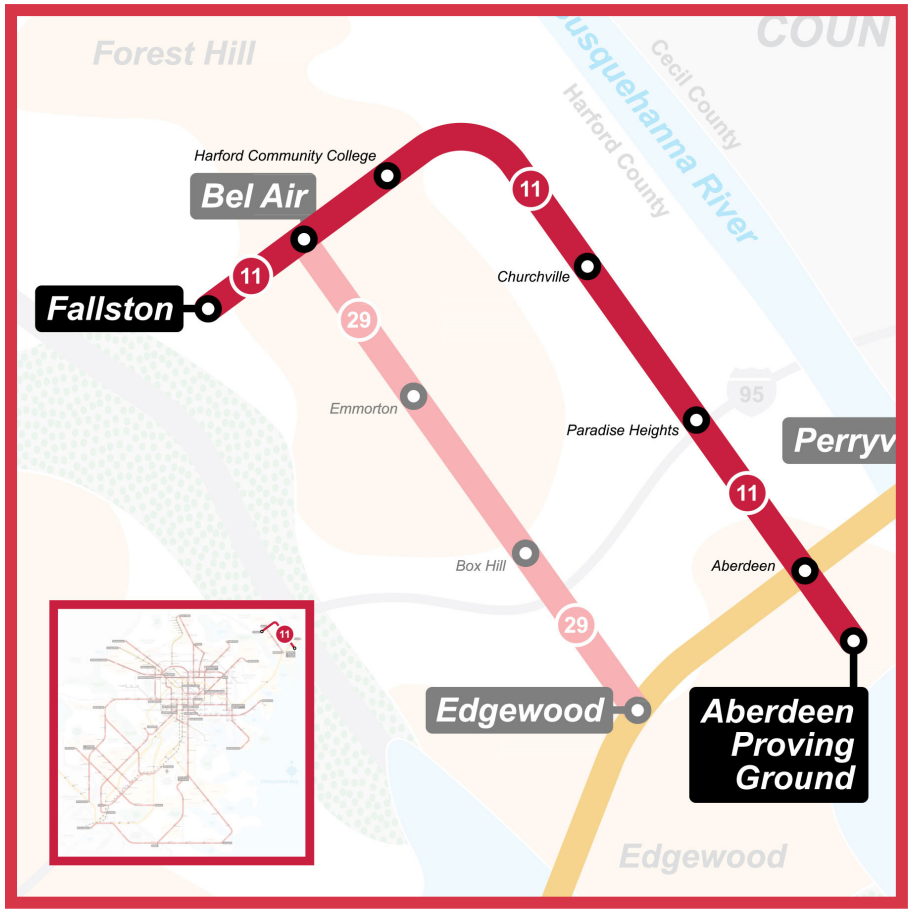
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	22
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	25%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	3,788 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	7,259 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	23%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	71%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	39%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	26%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	11%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	12%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	5,171 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	80%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	58%

CORRIDOR 11

Fallston to Aberdeen Proving Ground

Subject to future feasibility analysis and local jurisdiction support



Length: 16 miles

Jurisdictions served: Harford County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	7
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	2%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,210 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	1,397 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	25%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	23%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	20%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	7%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	15%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	10%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	1,553 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	46%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	21%

CORRIDOR 12

Mondawmin to South Baltimore

Subject to future feasibility analysis and local jurisdiction support

Length: 7 miles

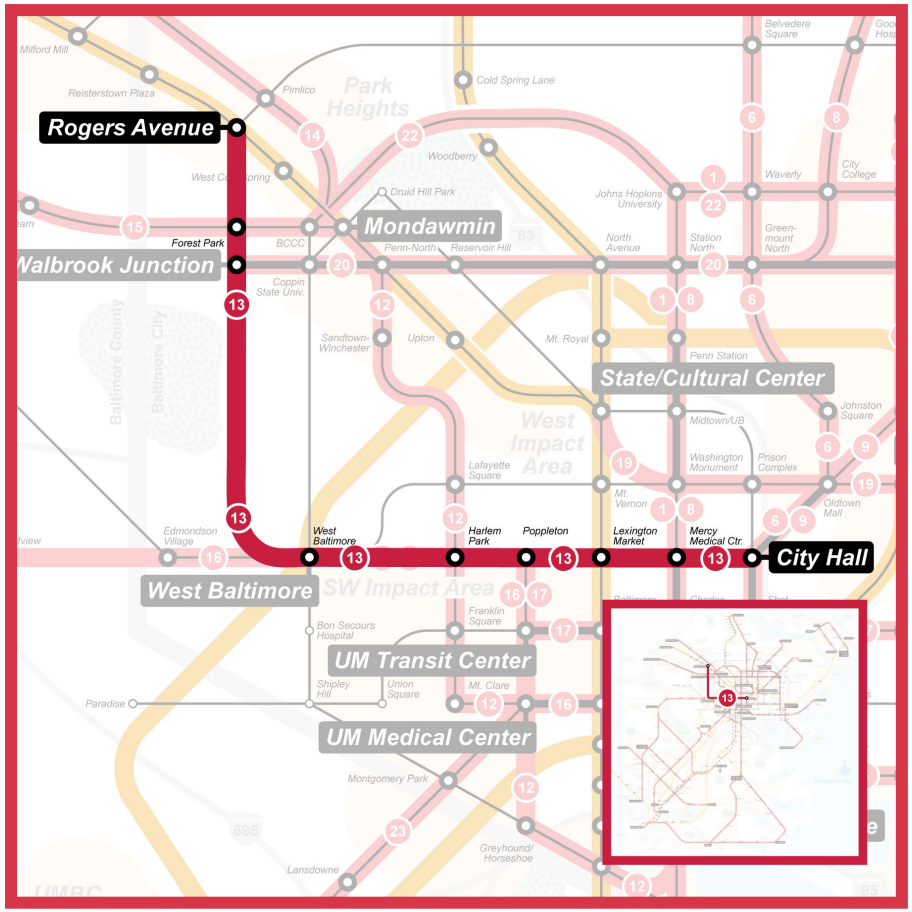
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	35
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	35%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	2,303 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	7,299 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	23%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	91%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	60%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	45%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	11%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	17%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	4,485 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	82%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	100%

CORRIDOR 13

Rogers Avenue to City Hall

Subject to future feasibility analysis and local jurisdiction support



Length: 8 miles

Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	4
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	56
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	55%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	12,791 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	10,433 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	22%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	89%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	54%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	40%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	14%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	17%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	21,832 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	88%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	95%

CORRIDOR 14

Mondawmin to Reisterstown

Subject to future feasibility analysis and local jurisdiction support

Length: 10 miles

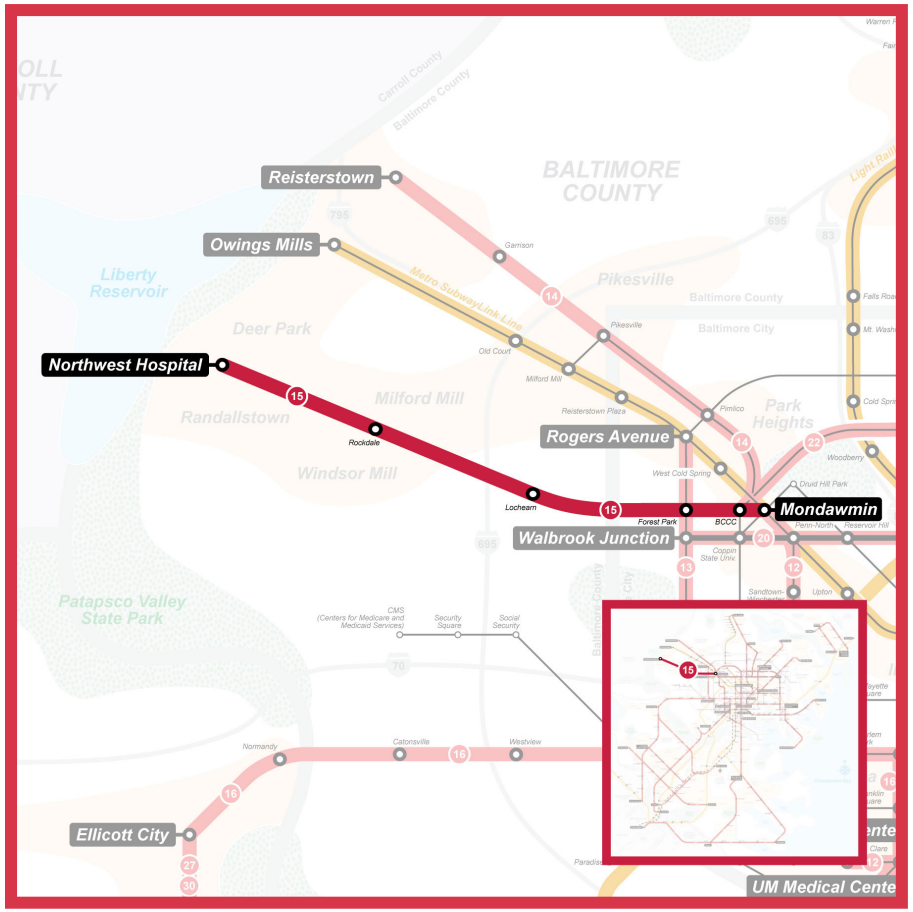
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	22
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	35%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	3,346 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	6,980 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	24%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	79%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	46%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	29%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	16%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	15%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	4,107 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	61%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	68%

CORRIDOR 15

Mondawmin to Northwest Hospital

Subject to future feasibility analysis and local jurisdiction support



Length: 8 miles

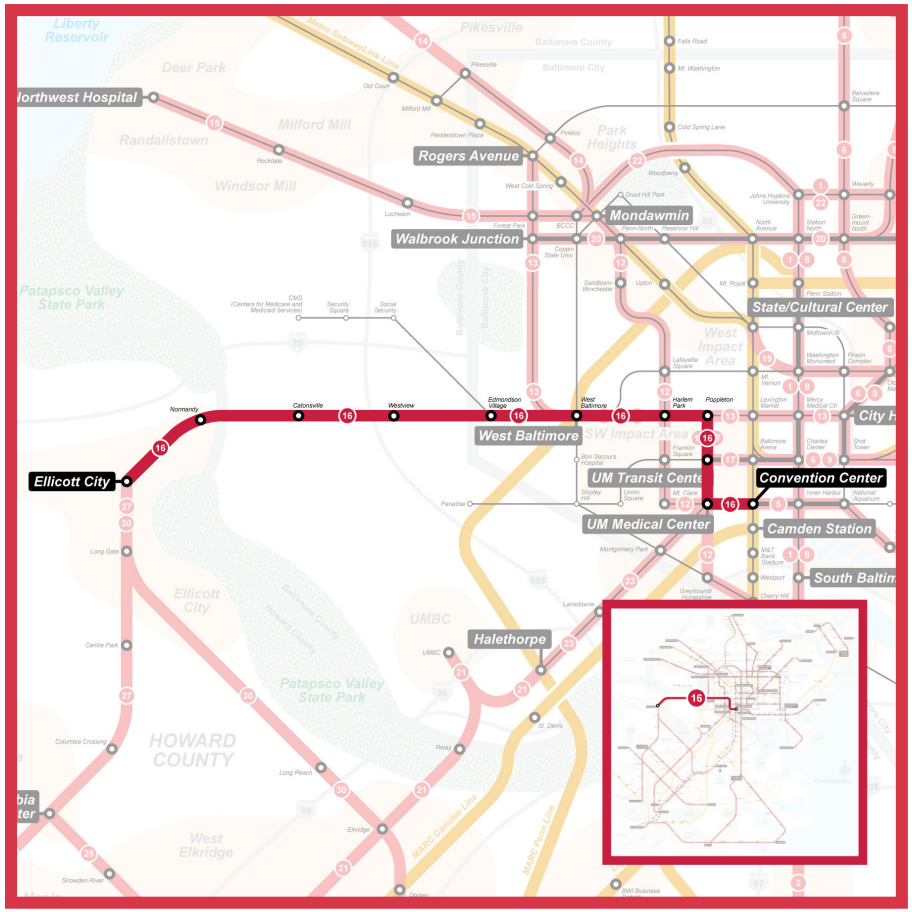
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	18
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	19%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,476 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	6,543 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	22%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	95%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	34%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	19%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	17%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	15%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	1,935 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	81%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	81%

CORRIDOR 16

Ellicott City to Convention Center

Subject to future feasibility analysis and local jurisdiction support



Length: 12 miles

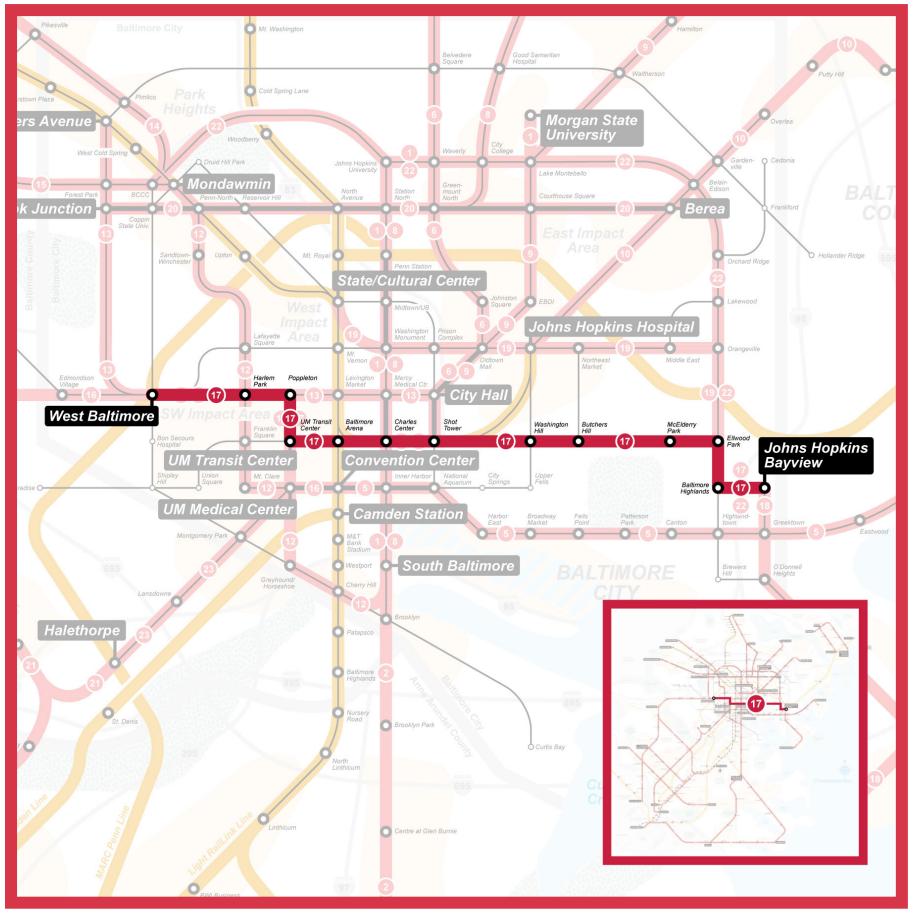
Jurisdictions served: Baltimore City, Baltimore County, Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	6
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	36
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	32%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	6,060 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	7,468 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	20%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	77%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	43%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	31%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	13%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	15%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	10,436 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	77%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	48%

CORRIDOR 17

West Baltimore to Hopkins Bayview

Subject to future feasibility analysis and local jurisdiction support



Length: 6 miles

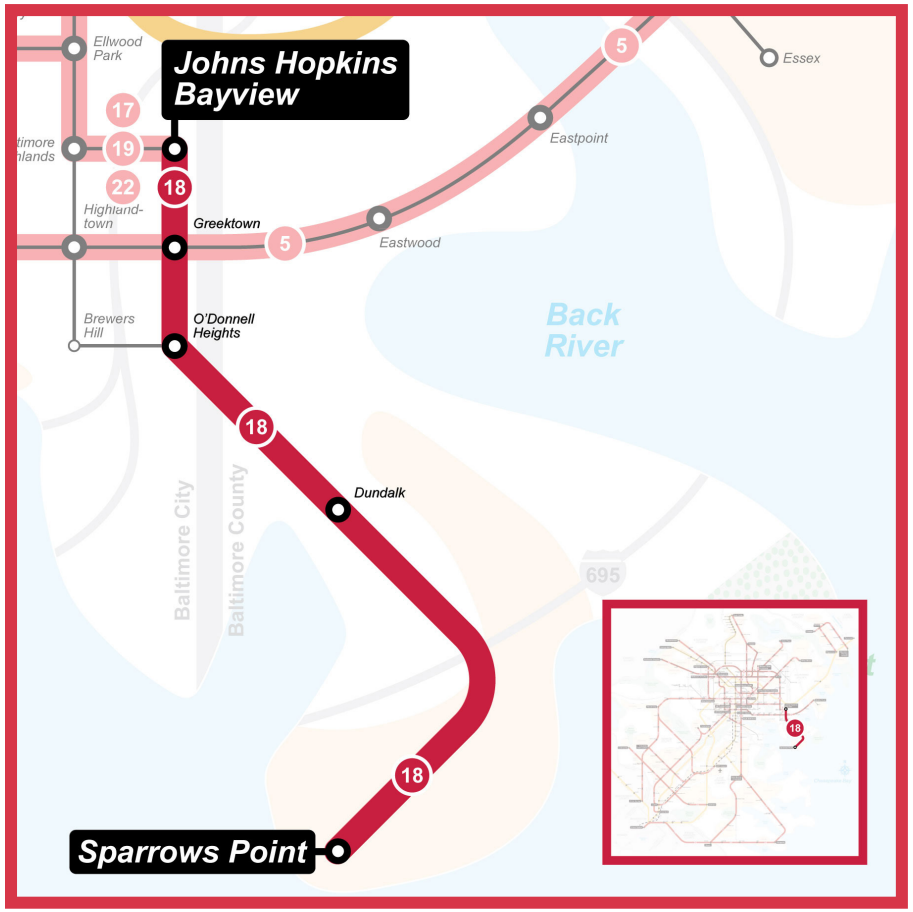
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	4
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	51
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	67%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	20,123 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	13,366 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	21%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	72%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	51%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	42%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	15%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	33,511 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	93%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	98%

CORRIDOR 18

Sparrows Point to Hopkins Bayview

Subject to future feasibility analysis and local jurisdiction support



Length: 6 miles

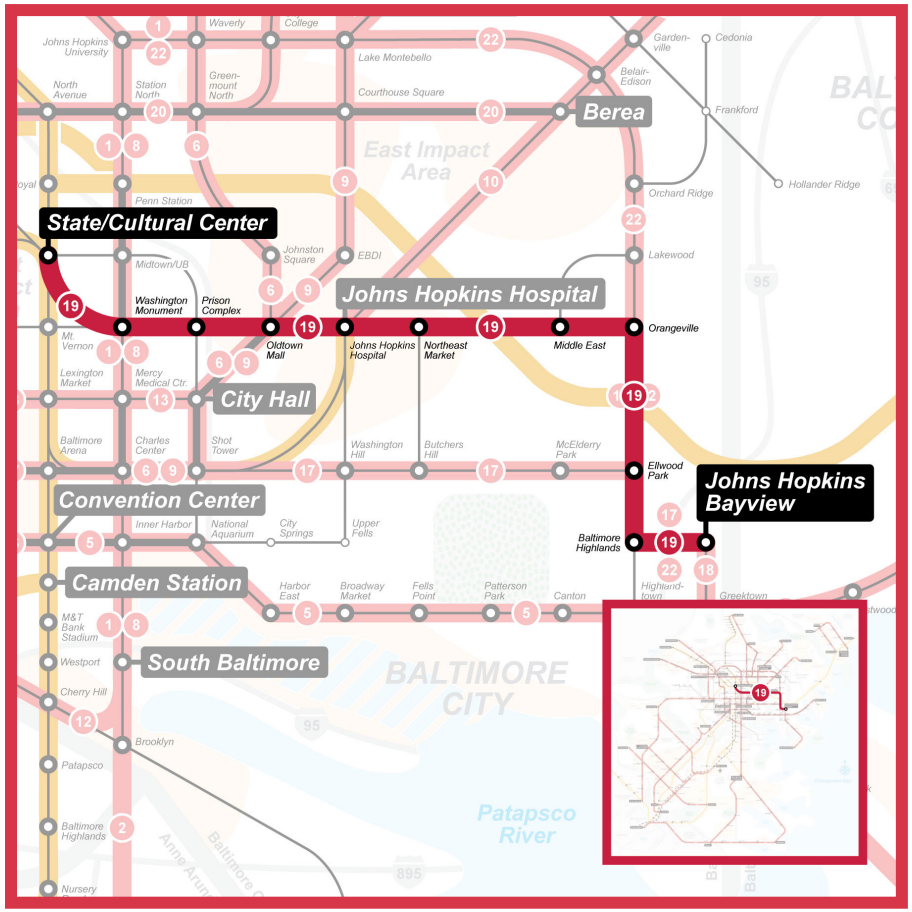
Jurisdictions served: Baltimore City, Baltimore County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	11
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	21%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,719 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	4,424 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	18%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	31%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	43%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	20%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	16%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	18%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,450 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	73%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	91%

CORRIDOR 19

State Center to Hopkins Bayview

Subject to future feasibility analysis and local jurisdiction support



Length: 5 miles

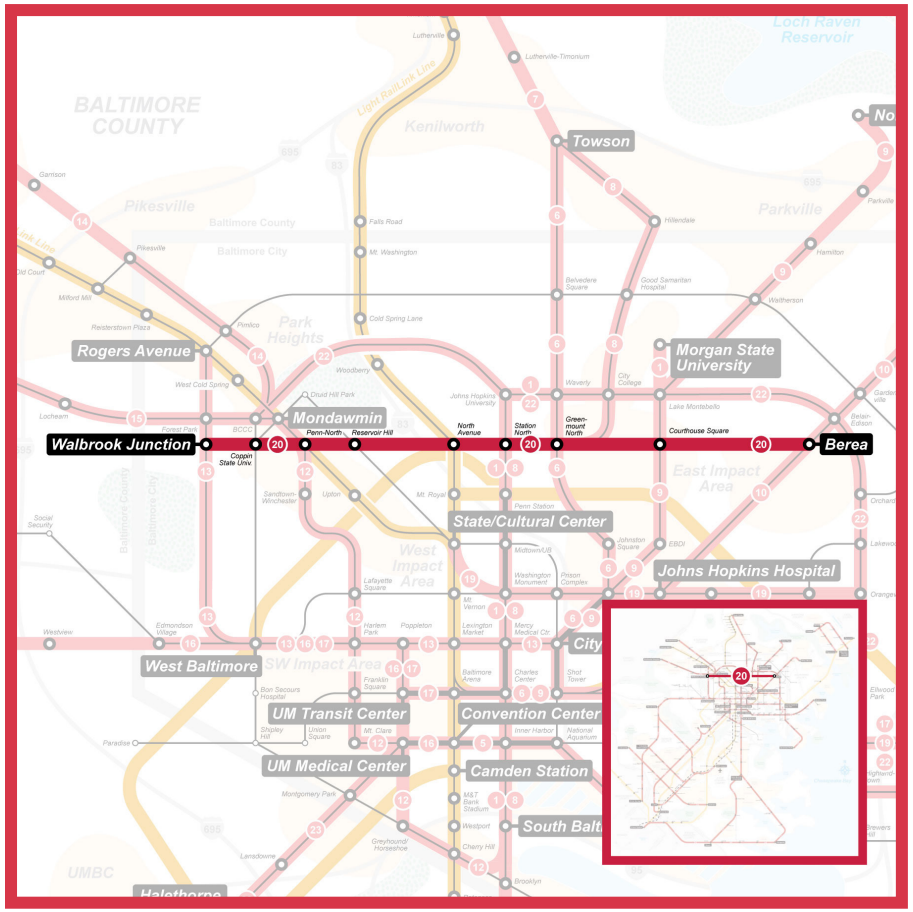
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	3
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	37
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	67%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	17,373 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	15,753 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	21%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	67%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	45%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	41%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	14%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	26,015 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	95%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	99%

CORRIDOR 20

Walbrook Junction to Berea

Subject to future feasibility analysis and local jurisdiction support



Length: 5 miles

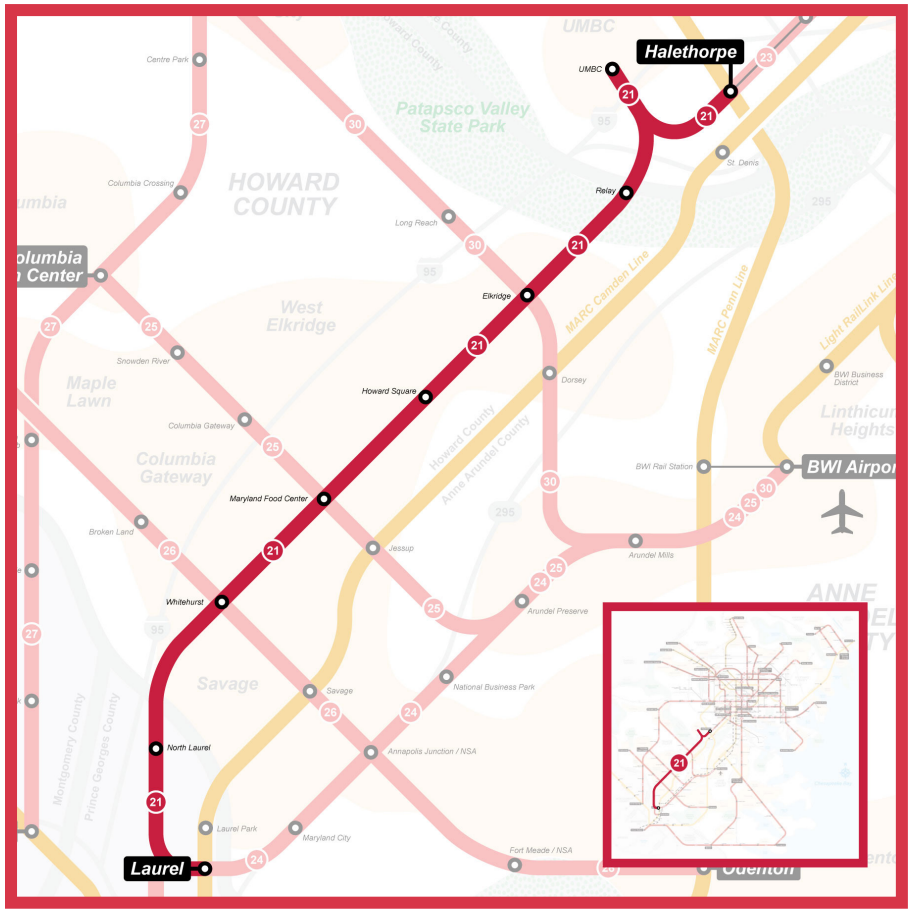
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	29
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	58%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	3,262 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	14,099 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	23%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	89%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	54%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	46%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	17%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	5,130 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	85%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	100%

CORRIDOR 21

Laurel to Halethorpe

Subject to future feasibility analysis and local jurisdiction support



Length: 13 miles

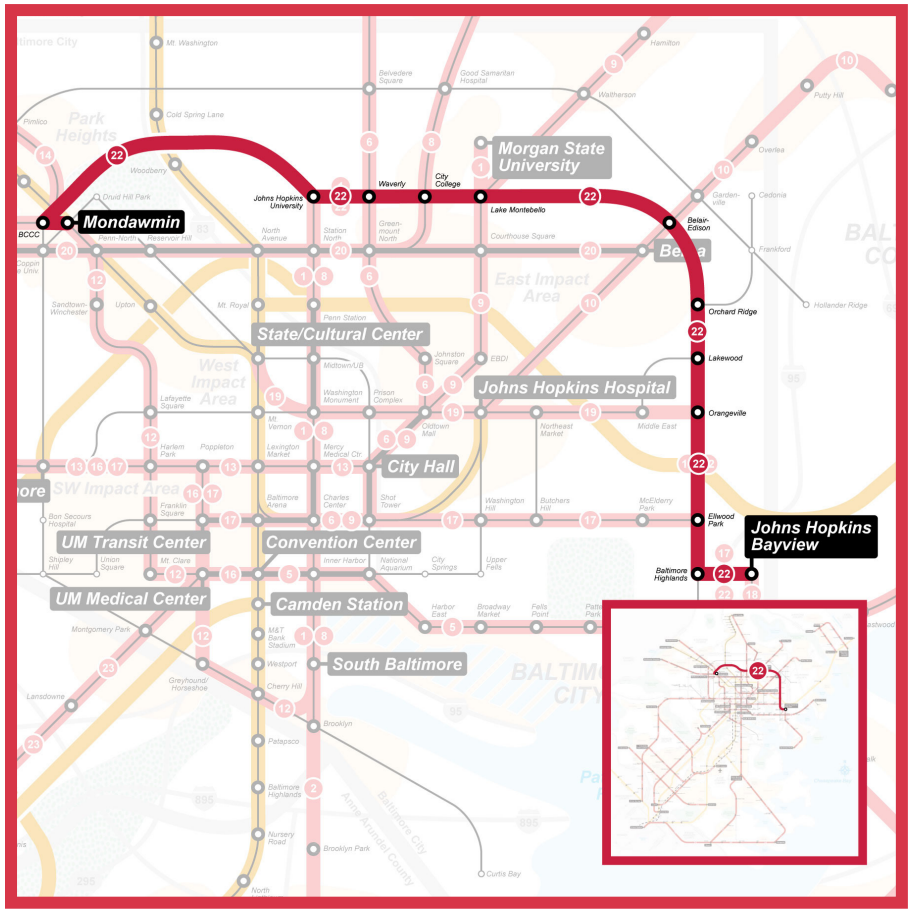
Jurisdictions served: Baltimore County, Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	9
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	1%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,803 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	2,223 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	20%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	50%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	20%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	4%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	7%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	6%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,174 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	58%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	28%

CORRIDOR 22

Mondawmin to Hopkins Bayview

Subject to future feasibility analysis and local jurisdiction support



Length: 11 miles

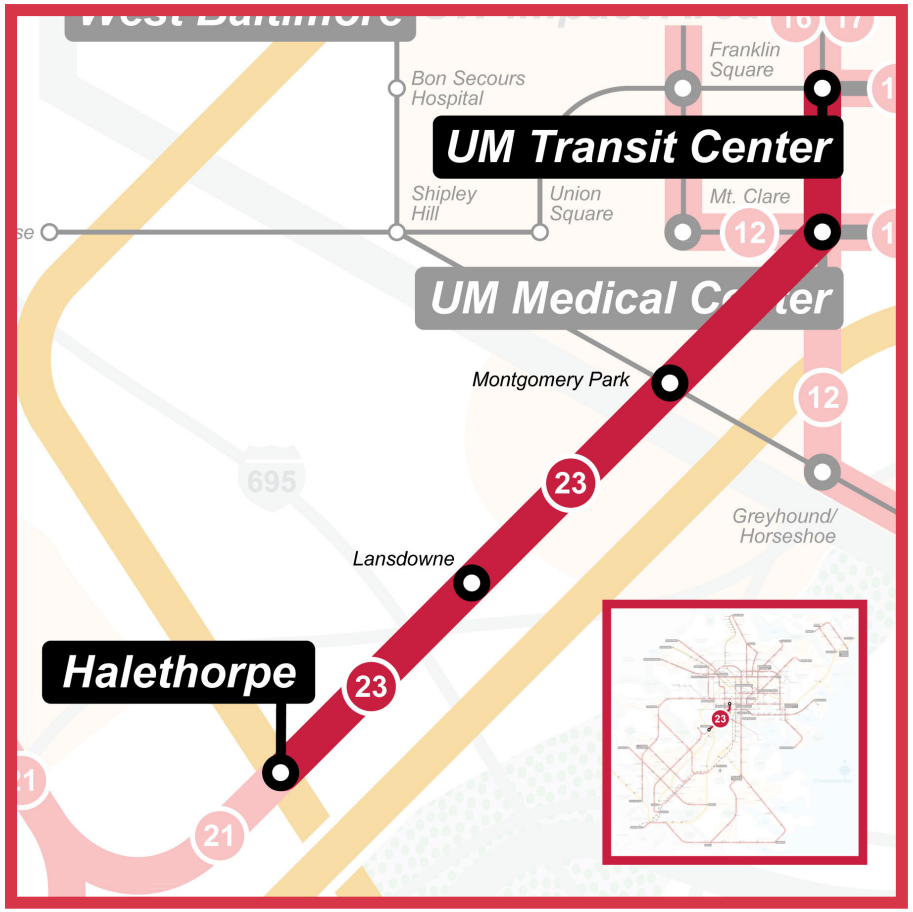
Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	37
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	49%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	3,630 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	10,210 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	21%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	66%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	42%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	30%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	12%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	5,269 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	77%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	87%

CORRIDOR 23

Halethorpe to UM Transit Center

Subject to future feasibility analysis and local jurisdiction support



Length: 6 miles

Jurisdictions served: Baltimore City

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	21
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	20%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	9,849 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	5,204 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	16%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	52%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	46%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	32%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	10%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	15%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	14,538 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	73%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	75%

CORRIDOR 24

BWI Airport to Greenbelt

Subject to future feasibility analysis and local jurisdiction support

Length: 13 miles

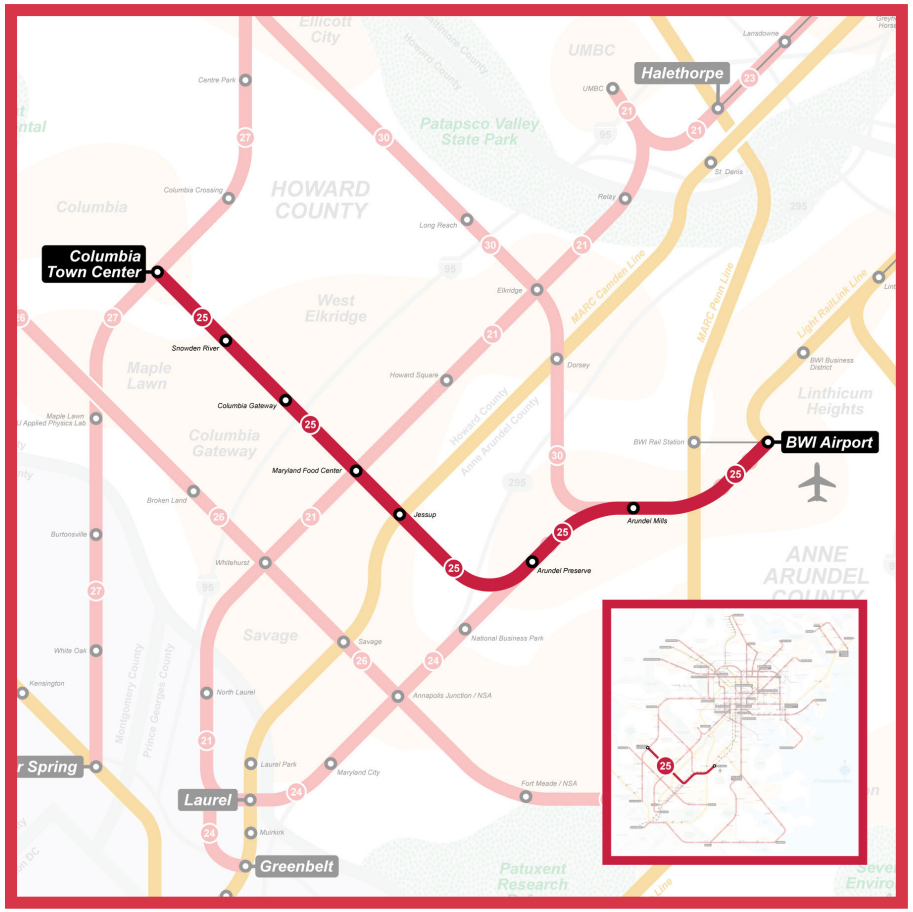
Jurisdictions served: Anne Arundel County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	3
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	7
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	4%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,952 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	1,423 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	26%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	60%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	13%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	1%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	7%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	6%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,795 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	60%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	1%

CORRIDOR 25

BWI Airport to Columbia Town Ccenter

Subject to future feasibility analysis and local jurisdiction support



Length: 15 miles

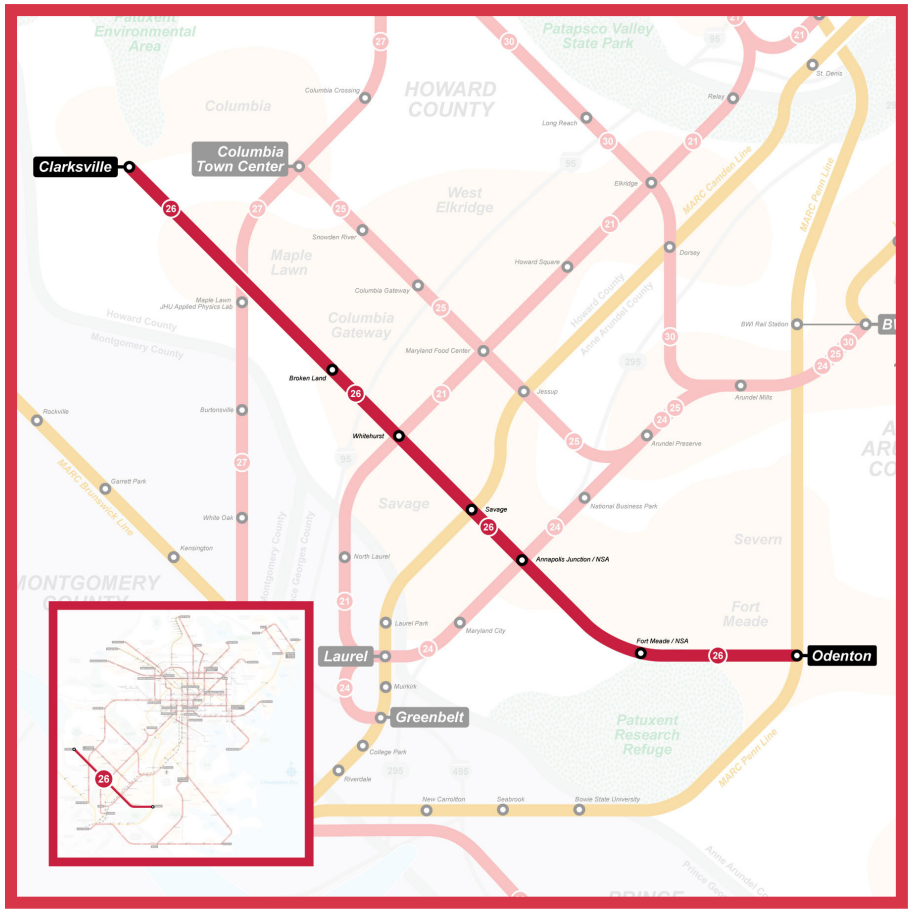
Jurisdictions served: Anne Arundel County, Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	6
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	17
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	4%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	2,636 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	1,944 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	24%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	58%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	14%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	5%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	11%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	7%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	4,710 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	62%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	6%

CORRIDOR 26

Odenton to Clarksville

Subject to future feasibility analysis and local jurisdiction support



Length: 17 miles

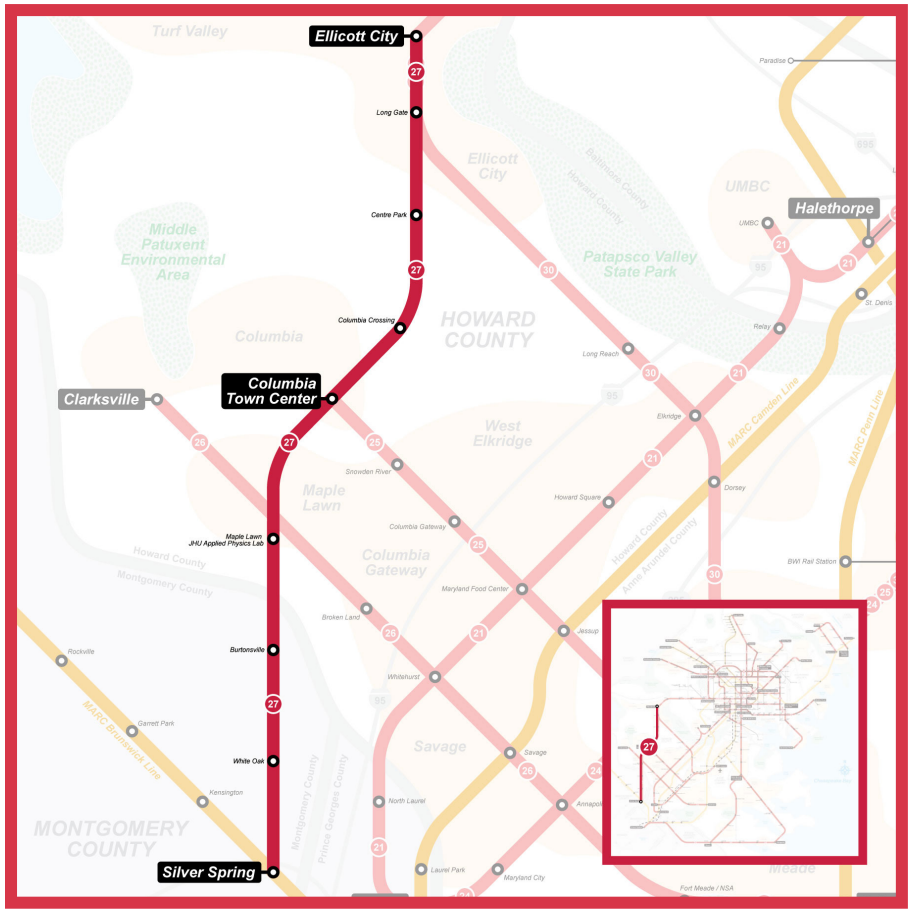
Jurisdictions served: Anne Arundel County, Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	16
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	1%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	2,851 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	1,789 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	24%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	45%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	12%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	3%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	8%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	6%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,066 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	48%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	45%

CORRIDOR 27

Ellicott City to Silver Spring

Subject to future feasibility analysis and local jurisdiction support



Length: 12 miles

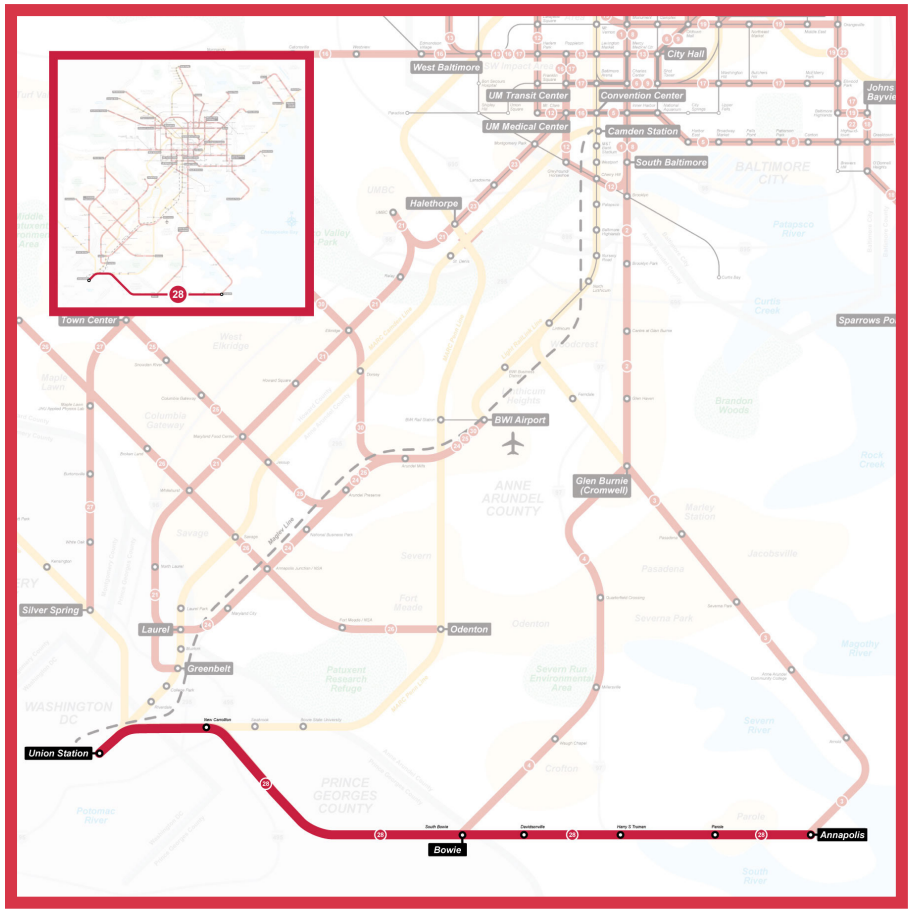
Jurisdictions served: Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	6
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	12
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	7%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,619 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	2,615 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	25%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	47%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	16%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	6%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	12%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	8%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,681 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	85%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	0%

CORRIDOR 28

Annapolis to Union Station

Subject to future feasibility analysis and local jurisdiction support



Length: 12 miles

Jurisdictions served: Anne Arundel County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	5
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	14
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	12%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	2,575 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	1,719 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	19%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	27%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	19%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	8%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	16%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	8%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,831 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	34%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	8%

CORRIDOR 29

Bel Air to Edgewood

Subject to future feasibility analysis and local jurisdiction support

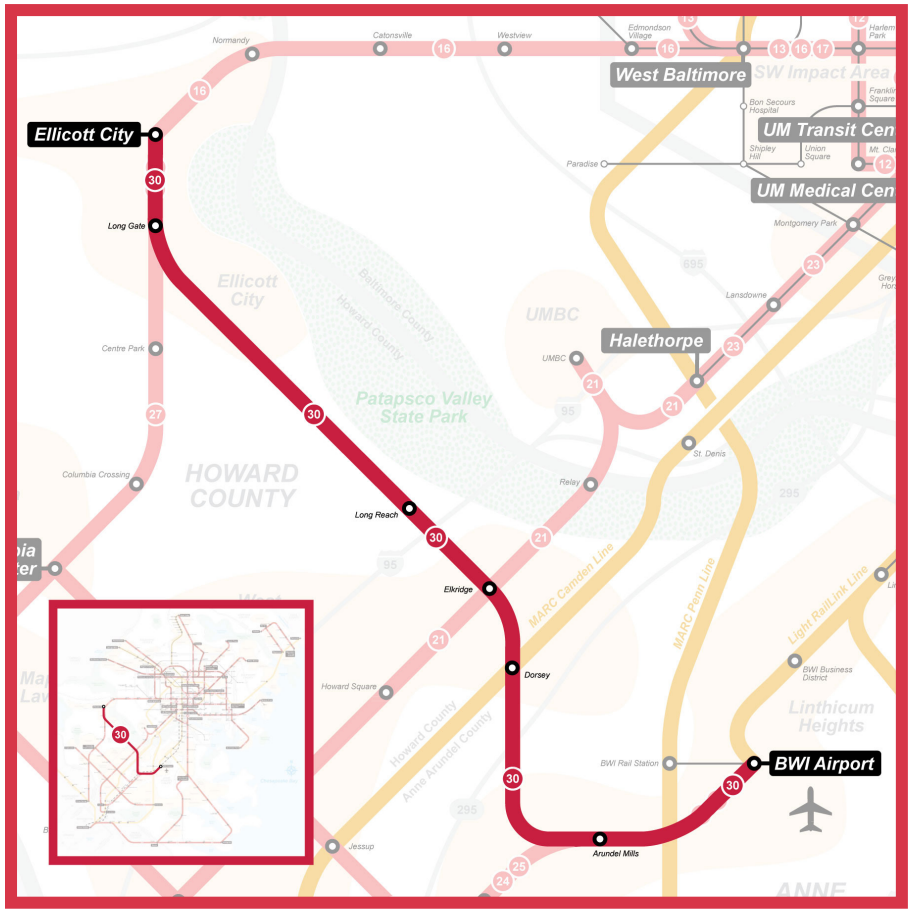
Length: 9 miles
Jurisdictions served: Harford County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	2
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	3
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	0%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	1,459 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	3,129 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	29%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	25%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	21%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	6%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	13%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	10%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,181 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	75%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	28%

CORRIDOR 30

Ellicott City to BWI Airport

Subject to future feasibility analysis and local jurisdiction support



Length: 14 miles

Jurisdictions served: Anne Arundel County, Howard County

EVALUATION MEASURE	RESULT
Gap **Does this corridor address a current or future transit gap?** *(yes/no)*	YES
Existing Plans **Is the corridor in existing plans?** *(yes/no)*	YES
Improve Service **Does the corridor improve existing service?** *(count of routes which could be improved)*	1
Transfer Potential **How many transit routes can you transfer to?** *(count of intersecting transit routes)*	14
Supportive Land Use **Is land use transit supportive?** *(% of corridor with transit supportive land use)*	3%
Existing Jobs **How many existing jobs are accessible to the corridor?** *(total jobs per mile within ½ mile of corridor)*	2,163 jobs/mi
Population Access **Number of residents accessible to the corridor?** *(total population per mile within ½ mile of corridor)*	2,247 residents/ mi
Long Work Commutes **Does corridor serve workers with long commutes?** *(% of workers with access to the corridor that have commutes longer than 45 minutes)*	21%
Minority Access **Percentage of minority population within the corridor?** *(% of population with access to corridor that is non-white or Hispanic)*	50%
Low-Income Access **Percentage of low-income population within the corridor?** *(% of households with access to the corridor with incomes less than twice the Federal poverty line)*	14%
Zero Car Access **Percentage of zero car ownership within the corridor?** *(% of households with access to corridor that have no cars)*	3%
Senior Access **Percentage of seniors within the corridor?** *(% of population with access to corridor that are seniors)*	9%
Disabled Access **Percentage of people with disabilities within the corridor?** *(% of population with access to corridor that has a disability)*	6%
Future Jobs **How many future jobs are accessible to the corridor?** *(total projected jobs (2045) per mile within ½ mile of corridor)*	3,674 jobs/mi
Supportive Zoning **Is zoning transit supportive?** *(% of corridor with transit supportive zoning)*	80%
Growth Area **Is the corridor within a growth area?** *(% of corridor in State Incentive Program Area)*	2%


Appendix
2
Prioritization
Metholodogies

Table of Contents

Introduction

In order to evaluate the suitability of the corridors, the project team developed measures that reflected the goals below. These measures aim to assess existing transit readiness and quantify the magnitude of a potential corridor's impact on existing and future conditions.

This document lists each measure and explains the methodology and source behind each one. The measures are not weighted—rather, they are meant to be a guide for decision-makers to understand the potential impacts that improvements to each transit corridor would have on different demographics of people, access to jobs, and access to other existing transit.

The results of these measures will help the RTP project team, the commissioners, the public, and other stakeholders prioritize the corridors and the implementation timeline of improvements.

Goal 1

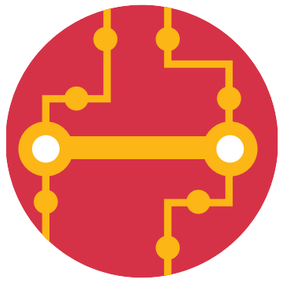
Improve Connectivity & Seamlessness of Transit Services

Goal 2

Optimize Existing Transit Services

Does this corridor address a current or future transit gap?

Each corridor was evaluated against three criteria, listed below. If the corridor met at least one criterion, it was determined to address a transit gap.



The corridor creates a direct link that doesn't exist but is justified now or in the future.

The corridor has existing service but demand for additional or a higher quality or level of service is justified.

The corridor justifies additional infrastructure investment to improve travel times or reliability of existing transit service.

The market, transit network, and travel flow analyses were evaluated together by the RTP Project Team in order to determine which gap(s) a corridor filled. A "yes" was required for the corridor to move forward.

How many existing jobs are accessible to the corridor?

First, each corridor was buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and jobs within all block groups that intersected the buffer were summed. If a block group intersected only part of the buffer, only a proportion of the jobs assigned to that block group (proportional to the percentage of the block group's total area that intersected the buffer) were added to the job sum.

Then, the total number of jobs accessible to the corridor was divided by the total length in miles of the corridor to control for length of the corridor. The resulting measure was Number of Jobs per Mile.
Source: LEHD 2015 Jobs Data

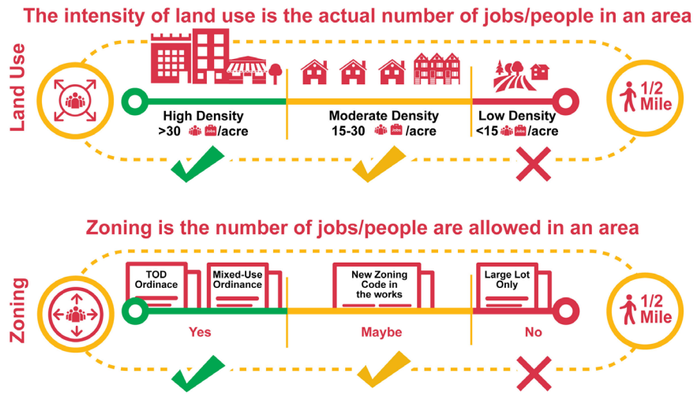
How many future jobs are accessible to the corridor?

Similar to the existing jobs accessible measure, first, each corridor was buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and future jobs within a transportation analysis zone (TAZ) that intersected the buffer were summed. If a TAZ intersected only part of the buffer, only a proportion of the jobs assigned to that TAZ (proportional to the percentage of the TAZ's total area that intersected the buffer) were added to the job sum.

Then, the total number of projected jobs accessible to the corridor was divided by the total length in miles of the corridor to control for length of the corridor. The resulting measure was Number of Future Jobs per Mile.
Source: BRTB-CFC Round 9 Cooperative Forecasted Jobs Data for 2045

Is land use/zoning transit-supportive?

One important indicator of whether a place is compatible with transit service is the level of intensity of the land use within an easy walk of the corridor. To identify where land use was transit-supportive, three separate measures answer were recorded.



continued on next page...

Is land use/zoning transit-supportive?

continued from previous page...

First, locations were identified where there are greater than 30 job/residents per acre, according to ACS and LEHD data, on the census block level. These locations were designated as High Density. Using the same data, locations were identified where there were 15 to 30 jobs/residents per acre; these locations were labeled Moderate.

In the same manner as the other geographic measures, each corridor was first buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and the area of each block group that intersected the buffer and which was categorized as either high or moderate density was summed. If a block group intersected only part of the buffer, only a portion of the area that was assigned to that block group (proportional to the amount of the area that intersected the buffer) was added to the transit-supportive area sum. The transit-supportive land use area was then divided by the total area accessible to the corridor buffer to find the percentage of area that is transit-supportive. High Density and Moderate Density percentages have been reported separately.
Source: ACS 2015 5-year Estimates and LEHD 2015 Jobs Data

To find zoning that is transit-supportive, each jurisdiction's local zoning ordinances were examined, and each zoning category was qualitatively sorted into a "Yes/No/Maybe" category in terms of being transit-supportive based on provided densities and descriptions in the zoning ordinances.

Then each corridor was buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and intersected with the jurisdictional zones that were categorized as either yes or maybe transit-supportive, and the areas were summed. If a zone intersected only part of the buffer, only a portion of the area that was assigned to that zone (proportional to the amount of the area that intersected the buffer) was added to the transit-supportive area sum. The transit-supportive zoning area was then divided by the total area accessible to the corridor buffer to find the percentage of area which is transit-supportive.

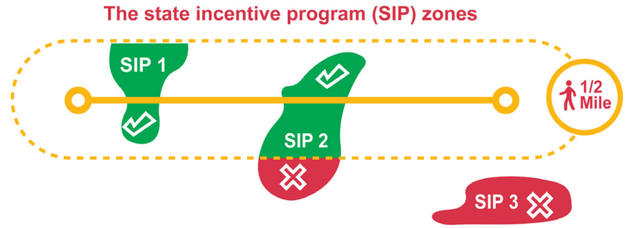
Many of the zoning categories are purely descriptive and provide no numeric density limits, but some zoning categories were clear as to whether or not they could generate significant transit demand; Howard County's R-A-15-TNC zoning category, which allows "Residential: Apartments, Traditional Neighborhood Center" was a clear "yes" while Harford County's Agricultural

Is land use/zoning transit-supportive? (continued)

zoning category was a clear "no." Some designations were less clear, and were sorted into the "maybe" category, such as Baltimore County's Service Employment zone, which was described as "permits and encourages the development of offices, related business service uses and small, low impact, light industrial uses; stresses compatibility with residential uses."
Source: Jurisdiction Zoning Ordinances *(Anne Arundel County, 2019; Baltimore City, 2016; Baltimore County, 2019; Harford County 2019; Howard County, 2018)*

Is the corridor within a growth area?

Similar to the land use and zoning measures, the state incentive program (SIP) zones were examined for their overlap with the walkable buffers around the proposed corridors.

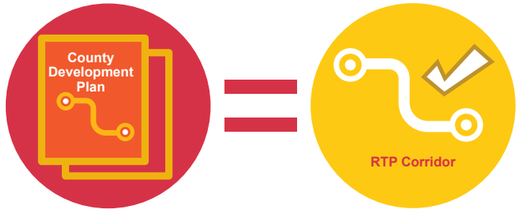


State Incentive Programs examined included: Enterprise zones, BRAC zones, TOD Areas, Opportunity Zones, and Sustainable Communities.

If a SIP zone intersected the corridor's ½-mile buffer (representing the corridor's walkable service area), that SIP zone's area was summed. If a SIP zone intersected only part of the buffer, only a portion of the area that was assigned to that zone (proportional to the percentage of the area that intersected the buffer) was added to the growth area sum. The growth area was then divided by the total area accessible to the corridor buffer to find the percentage of area which is within a growth boundary. While there were many ways to define "growth area," the State Incentive Programs, taken together, include specific ways in which development is incentivized, and are created with input from the jurisdictions.
Source: Maryland Departments of Commerce, Housing and Community Development, and Transportation

Is the corridor in existing plans?

A corridor's inclusion in officially adopted planning documents indicates that it is representative of the vision, strategic decisions, and expectations of the community. Each corridor received one point for each of the types of plan that was specific to the corridor or to one of the places that the corridor would serve. The types of plans are:

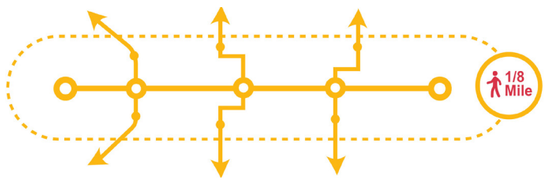


- Corridor plans
- TOD plans, or other transit-specific plans
- Place-based plans such as small area plans
- The jurisdiction comprehensive plan, bike/ped master plan or priority letter

Source: A survey of publicly available planning documents that mention the corridors and the places they serve; County/Jurisdiction Comprehensive Plans

How many transit routes can you transfer to?

Each corridor was buffered 1/8 mile (as the crow flies) and intersected with the 1/8-mile buffer of the alignments for existing transit routes. Corridors were only buffered 1/8 mile for the transfer analysis (compared to ½ mile for other metrics evaluated in this analysis) because passengers are typically unwilling to walk long distances to make a transfer from one transit route to another. Routes identified as intersecting with the proposed corridors were then divided into routes which would be replaced with the new or improved corridor service, and routes which would intersect with the corridor service. The number of routes that intersected with the corridor service were summed to find the total number of potential transit routes that would have a transfer opportunity with the new corridor.



Source: GTFS Feeds from 2019 for MTA and LOTS

Does corridor improve on existing service?

Each corridor was buffered 1/8 mile and intersected with the 1/8 mile buffer of the alignments for existing transit routes. Those routes were then divided into routes which would be replaced with the new corridor service, and routes which would intersect with the corridor service. If a route that would likely be replaced by a corridor service was found, then the corridor was determined to be likely to improve on an existing service.

Source: GTFS Feeds from 2019 for MTA and LOTS. A "yes" was required for the corridor to move forward.

Number of residents accessible to the corridor

First, each corridor was buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and the population within a block group that intersected the buffer was summed. If a block group intersected only part of the buffer, only a proportion of the population was assigned to that block group (proportional to the percentage of the area that intersected the buffer) were added to the population sum. Then, the total number of people accessible to the corridor was divided by the total length in miles of the corridor. The resulting measure was Number of People per Mile. This was done to control for length of the corridor.

Source: ACS 2015 5-year Estimates

Percentage of minority population within the corridor?

For this equity measure, each corridor was buffered ½ mile (as the crow flies) to represent the corridor's walkable service area, and the population within a block group that intersected the buffer were summed. If a block group intersected only part of the buffer, only a proportion of the population was assigned to that block group (proportional to the percentage of the area that intersected the buffer) were added to the population sum. This process was then repeated to find the minority populations. Minority was defined as non-white only persons.

Then, the percent of minority was found by dividing the minority population accessible to the corridor by the total population accessible to the corridor.
Source: ACS 2015 5-year Estimates

Percentage of low-income population within the corridor?

Same process as minority population, except found for households with incomes under 200% of the federal poverty line. Households were controlled for size in determining the poverty line limit to use.

Source: ACS 2015 5-year Estimates

Percentage of zero car ownership within the corridor?

Same process as minority population, except found for households reporting no car available.
Source: ACS 2015 5-year Estimates

Percentage of seniors within the corridor?

Same process as minority population, except found for populations over 65 years old.
Source: ACS 2015 5-year Estimates

Percentage of people with disabilities within the corridor?

Same process as minority population, except found for populations with a disability.
Source: ACS 2015 5-year Estimates

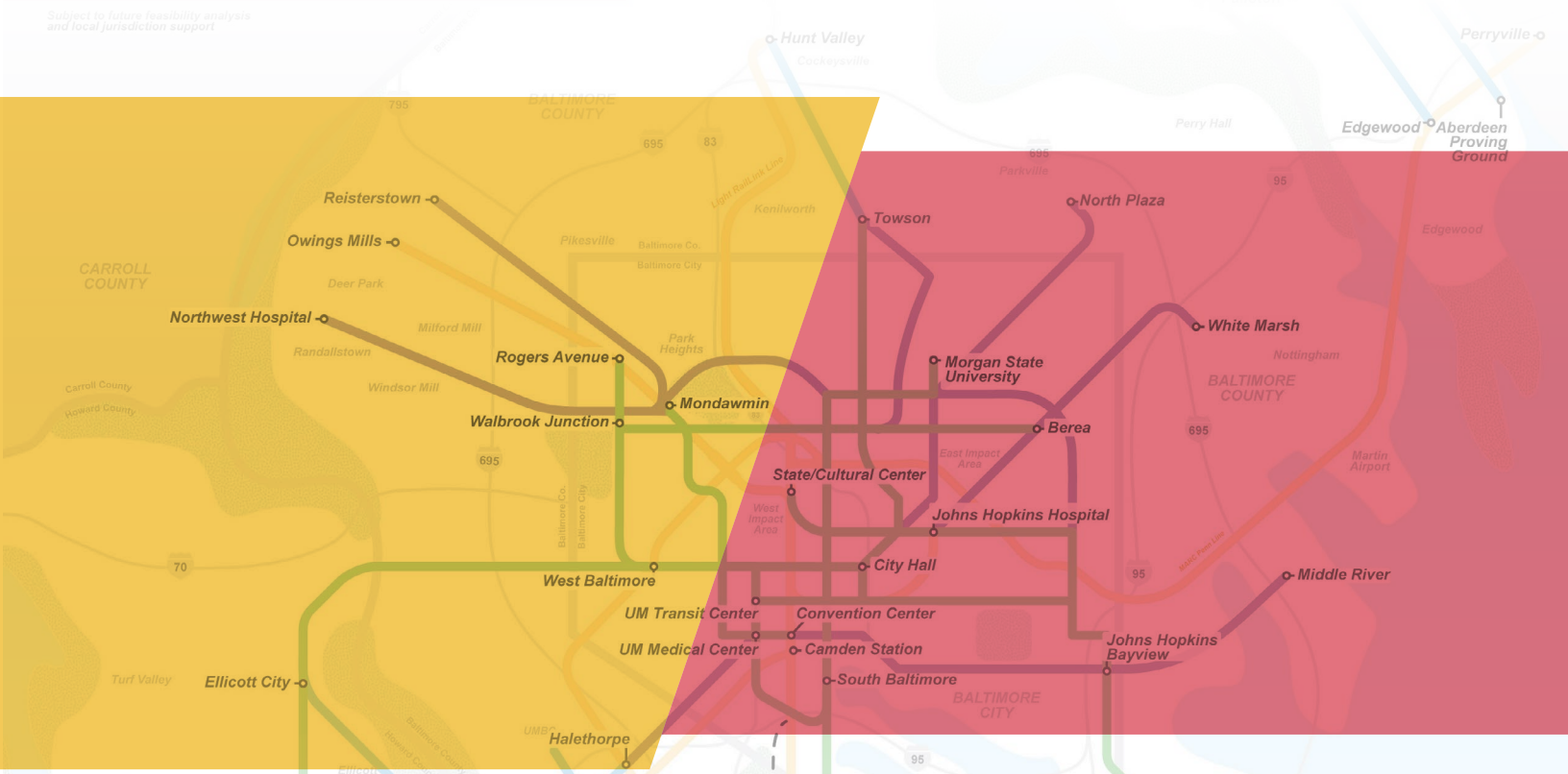
Does corridor serve areas with long commuting times?

Travel time for each block group in the study area was imputed from ACS data. In the ACS dataset, travel time is reported as the number of residents whose typical commute length falls within specified intervals (e.g. five minutes to nine minutes, 10 minutes to 14 minutes).

Each corridor was then buffered ½ mile (as the crow flies), and the number of workers (who do not report working at home) with commutes (on any mode) longer than 45 minutes were summed. If a block group intersected only part of the buffer, only a proportion of the workers was assigned to that block group (proportional to the percentage of the area that intersected the buffer) were added to the worker sum. The final measure used was the percent of workers within the corridor with commutes greater than 45 minutes.
Source: ACS 2015 5-year Estimates

Connecting Our Future

A Regional Transit Plan for Central Maryland



For more information, or to request this document in an alternate format or translated into another language, please contact rtp@maryland.gov// 443-475-0687 // TTY 410-539-3497 // Maryland Relay users dial 7-1-1

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION