

MARC Brunswick Line Commuter Rail Study

May 6, 2022

TPB Technical Committee
Agenda Item 8

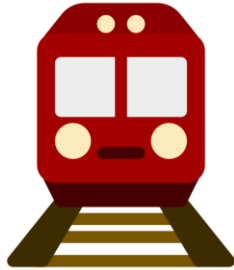


MARYLAND TRANSIT
ADMINISTRATION

MARC Brunswick Line



**Weekday
peak hour
service**



**18
Daily
trains**



**19
Stations**

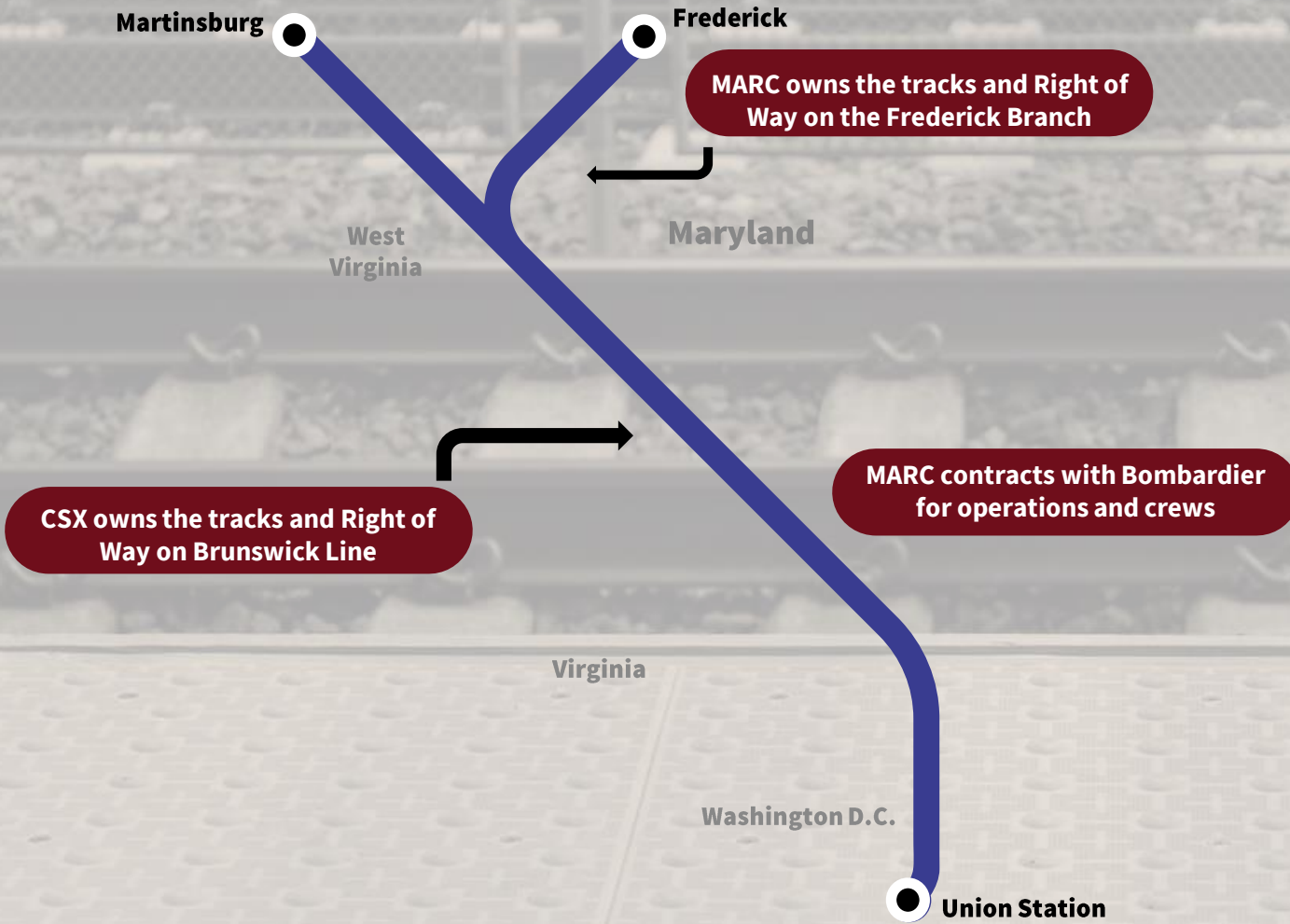


**7,300
Weekday
boardings
(Oct 2019)**



**CSX rail
access
agreement**

Ownership and Operations



Challenges

- CSX controls scheduling, track conditions, and maintenance
- Service changes must be coordinated with and approved by CSX

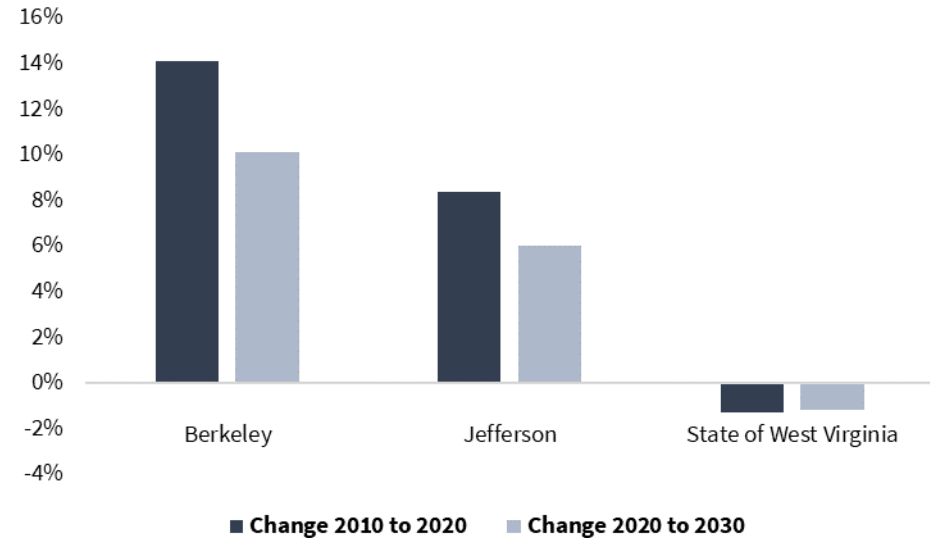
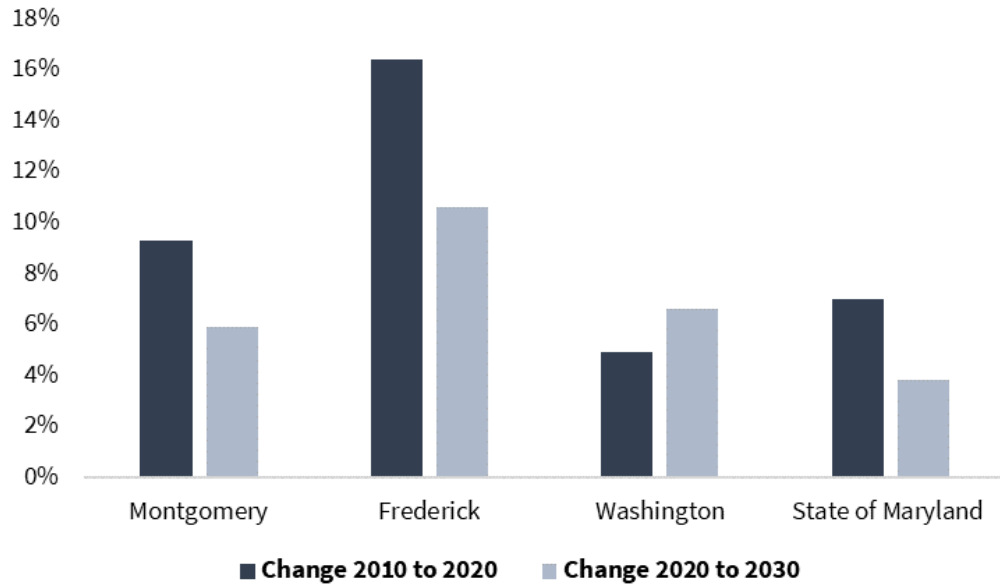
Historic Transportation Corridor

- Since the early 1900's the B&O Railroad's Brunswick Line has played a vital role in Maryland's economic development
- Developed for freight and passengers, the line with its historic stations and bridges is vital to the region's continued mobility



Corridor Population Growth

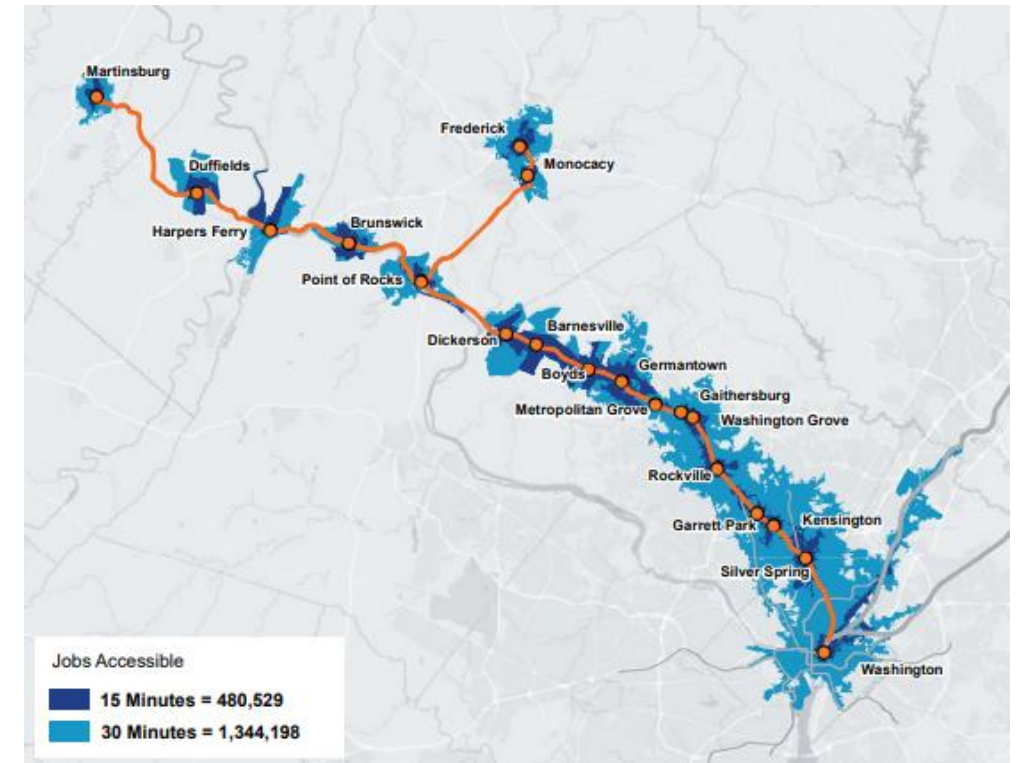
- Maryland and West Virginia counties served by the Brunswick line are growing faster than Maryland and West Virginia.
- Population growth increases the need for commuter rail services.



Corridor Trip Patterns

Home-to-Work trip analysis conducted using US Census' Longitudinal Employer-Household Dynamics (LEHD) program data

Origin Zone		To Silver Spring (Zone 2)		To Washington, DC (Zone 8)	
Zone #	Name	# Workers	% of Workers	# Workers	% of Workers
7	Cumberland	104	0.46%	118	0.52%
6	Hancock	53	1.17%	84	1.85%
5	Hagerstown	1,141	1.86%	1,896	3.09%
4	Brunswick	467	3.38%	714	5.17%
3	Frederick	3,579	3.66%	5,575	5.70%
1	Montgomery County	44,966	12.09%	102,888	27.67%



Regional Mobility

- The Brunswick Line ensures essential regional mobility and access to activity centers
- The commuter rail line provides the equivalent peak hour mobility of an interstate highway lane
- An interstate highway lane carries 750 to 1,500 cars per hour depending on congestion
- During October 2019, the Brunswick Line averaged
 - 3,500 average morning commuters on 9 trains
 - 3,319 average afternoon commuters on 10 trains



Potential Service Enhancements

- **Reverse peak** direction trains during rush hours each weekday
- **Weekend service** in both directions, morning, mid-day, and evening
- Additional off-peak service throughout the **midday**, up to hourly service
- **Additional service during rush hours** in both directions, up to 20-minute headways
- **Late night** trains from Washington
- Brunswick Line service to **Western Maryland** (potential destinations could include Hancock, MD and/or Cumberland, MD)



As CSX owns the railroad right-of-way and may require infrastructure enhancements as a condition of increased MARC service, MDOT MTA is engaging with CSX to evaluate the feasibility of potential service enhancements and to identify their anticipated infrastructure requirements for these enhancements.

Service Enhancement Challenges



Additional track limitation due to Metrorail Red Line and Purple Line



Freight rail traffic

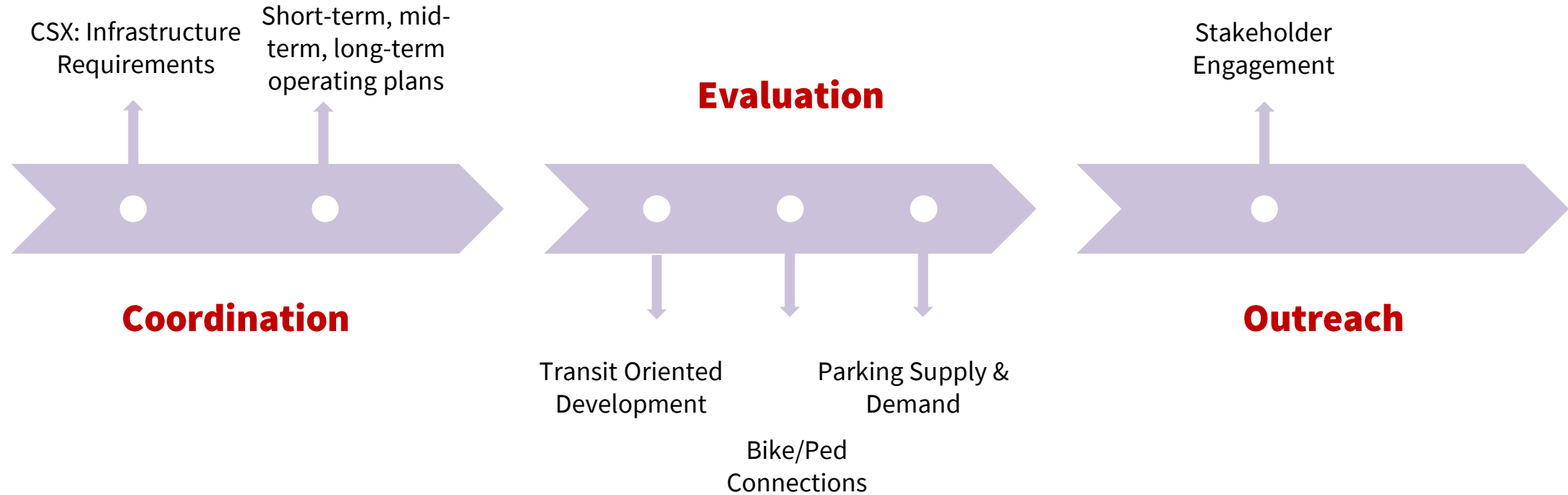


Potomac River flood plain



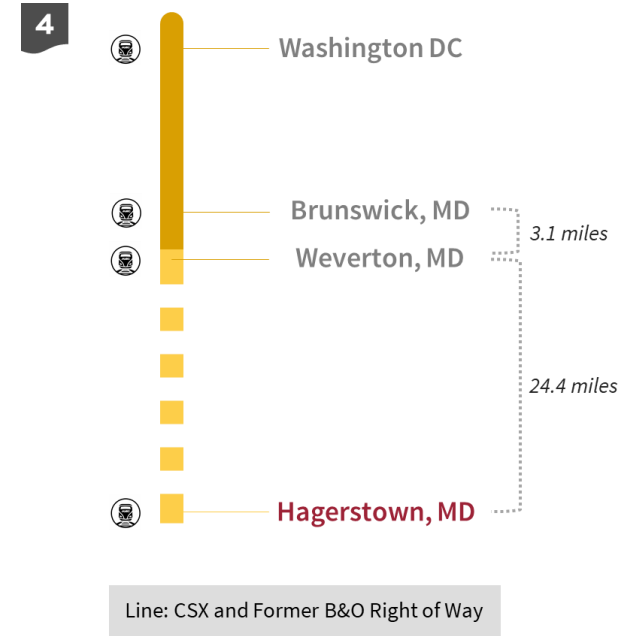
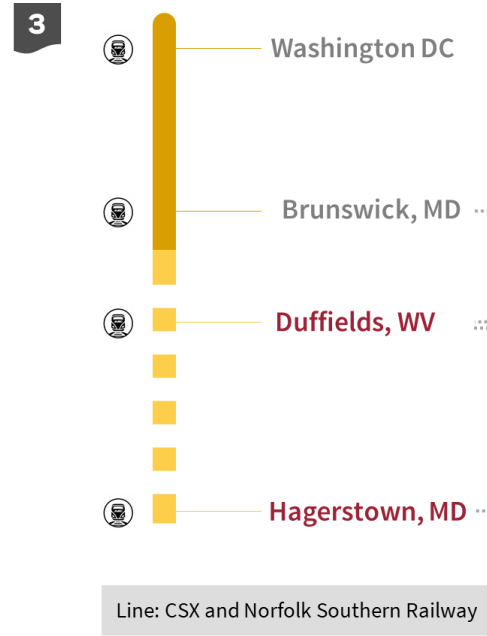
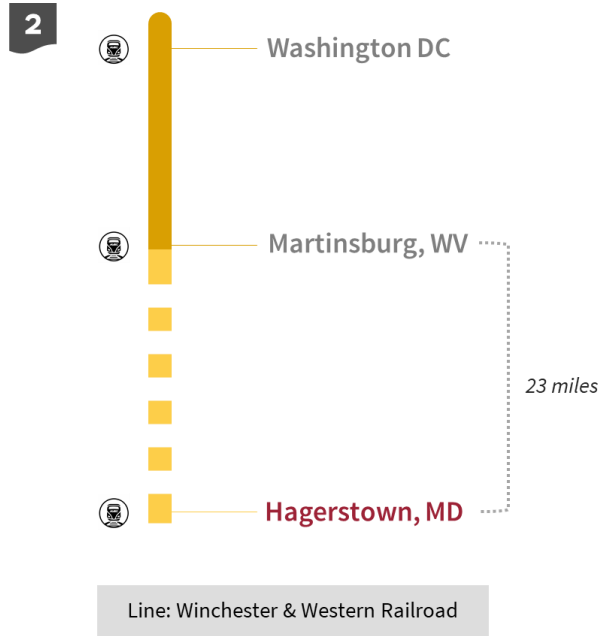
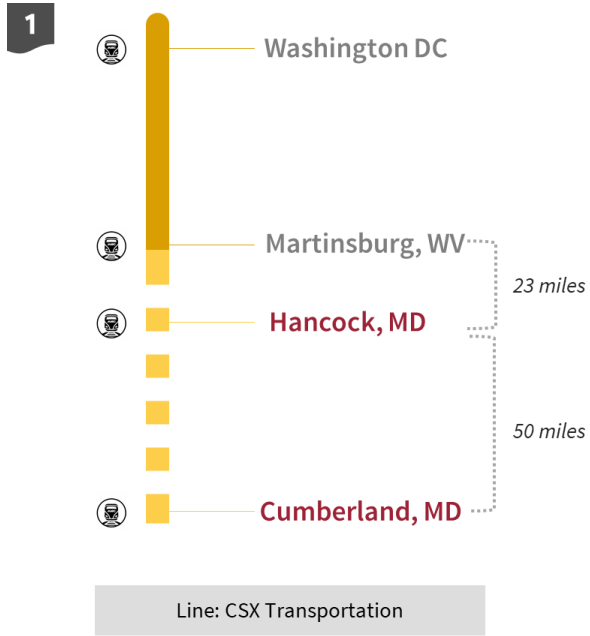
Historic bridges and environmental impacts

Next Steps



Past Alternatives Studied

The Study evaluated constraints and challenges associated with four Western Maryland service extension alternatives, identified in previous rail plans.



Service Expansion Challenges

Alternative	Constraints and Requirements Identified
Martinsburg, WV to Hancock and Cumberland – CSX Corridor	<ol style="list-style-type: none"> 1. Operating agreements with CSX and West Virginia 2. Except for overnight train storage, little construction required
Martinsburg, WV to Hagerstown – Winchester & Western Short Line	<ol style="list-style-type: none"> 1. Operating agreements with Winchester & Western Railroad, Norfolk Southern, West Virginia 2. Station Right of Way in Hagerstown 3. Construction of rail connections between host railroads 4. Tracks upgrades, Positive Train Control (PTC), grade crossing, layover facility
Duffields to Hagerstown – Norfolk Southern Mainline	<ol style="list-style-type: none"> 1. Operating agreement with Norfolk Southern for 23 miles of the corridor 2. Congested freight route 3. Separate bridges and tracks 4. Operating agreement with West Virginia, station Right of Way in Hagerstown 5. Construction of new rail connection tracks, PTC, signals, layover facility
Weverton to Hagerstown – former B&O right-of-way	<ol style="list-style-type: none"> 1. Challenging Right of Way acquisition 2. National Park Service property 3. 18.2 acres of Maryland Correctional Institution 4. Construction of 19 miles of tracks 5. Upgrade of existing tracks, construction of bridges, PTC, signals, layover facility

Discussion