COMPARING THE ALTERNATIVES

BL OR SV CAPACITY & RELIABILITY STUDY

Five alternatives were identified and compared using 14 measures relative to the No-Build Alternative. The measures were grouped under the four project goals shown in the graphic below.

	ALTERNATIVE 1	*ALTERNATIVE 2*	*ALTERNATIVE 3*	*ALTERNATIVE 4*	*ALTERNATIVE 5*	*ALTERNATIVE 6*
	No-Build	Rail Optimization & Bus Service	BL to Greenbelt	BL to National Harbor	SV Express in VA	SV to New Carrollton
Capacity: Provide sufficient rail capacity to serve ridership demand		○	○	★	★	○
Reliability: Improve reliability and on-time performance		○	★	★	○	★
Flexibility: Improve operational flexibility and cost-efficiency		○	★	★	★	○
Sustainability & Equity: Provide transportation options to support sustainable development & expand access to opportunity		○	○	★	★	○

○ alternative meets goal

★ alternative performs better than some alternatives

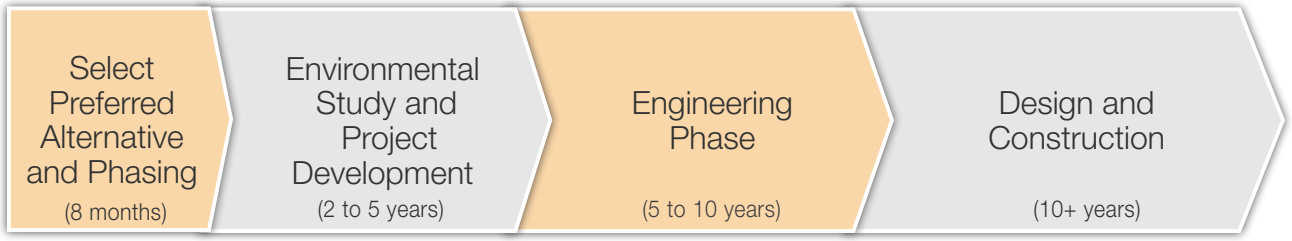
★ the best-performing alternative for this goal

About the Study

Metro identified long-standing issues and opportunities on the Blue, Orange, and Silver lines including crowding, capacity, reliability, equity, and long-term sustainability. To address these needs, the Blue/Orange/Silver Corridor Capacity & Reliability Study used deep data analysis and intensive engagement with community partners to identify alternatives to address the issues. The study concludes when Metro's Board of Directors selects a locally-preferred alternative.

What Happens After the Study?

Selecting the preferred alternative is the first step in a process that could take 10-20 years. The goal is to have the project operational by 2040, but no funding is committed yet.



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The No-Build Alternative assumes that the transportation network would be as it is planned and funded today with no new investments. It is used as a baseline to compare benefits and costs of the New Metrorail Alternatives and the Lower Capital Cost (LCC) Alternative.

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative does not meet the four goals established for this study.

Capacity	Reliability	Flexibility	Sustainability & Equity

○ alternative meets goal

★ performs better than some alternatives

★ the best-performing alternative for this goal

The No-Build Alternative includes the existing regional transportation system plus the projects the region has already committed to fund and deliver by 2045, such as:

- Metro's Capital Improvement Program Projects, including:
  - Station systems and modernizations
  - Rail systems state of good repair
  - Rail car and bus fleet acquisition
  - Track and structures rehabilitation
- Transportation Planning Board (TPB)'s fiscally-constrained long-range transportation projects from Visualize 2045, including:
  - Purple Line; DC Circulator Expansion; DC Streetcar
  - US-1 Bus Rapid Transit; West End Transitway
  - Montgomery County BRT Corridors

ALTERNATIVE 2: RAIL OPTIMIZATION & BUS SERVICE (LOWER CAPITAL COST) BL OR SV CAPACITY & RELIABILITY STUDY

This alternative includes a variety of changes that do not require building a new Metrorail line, some of which are already underway:

- Improvements to Bus Rapid Rransit (BRT) and commuter bus service (see next page)
- Adjusting railcar seating to increase capacity
- Introduction of dynamic rail scheduling to improve reliability
- Expanding core Metro stations to reduce crowding
- Updating rail infrastructure to provide operational flexibility using “turnbacks”

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative offers lower benefits than rail options but would cost less and could be implemented sooner.

**Only meets capacity goals if many customers switch from rail to bus.*

Capacity	Reliability	Flexibility	Sustainability & Equity

○ alternative meets goal ★ performs better than some alternatives ★ the best-performing alternative for this goal

16,000 New weekday transit trips

0 New stations

$3-5 B Construction cost

+3% Trips by transit vs. other travel options

+27% Residents in equity areas with new access to high capacity transit

$75-100 M New annual operating cost

-7% Customers affected by service delays

$34 M New annual fare revenue

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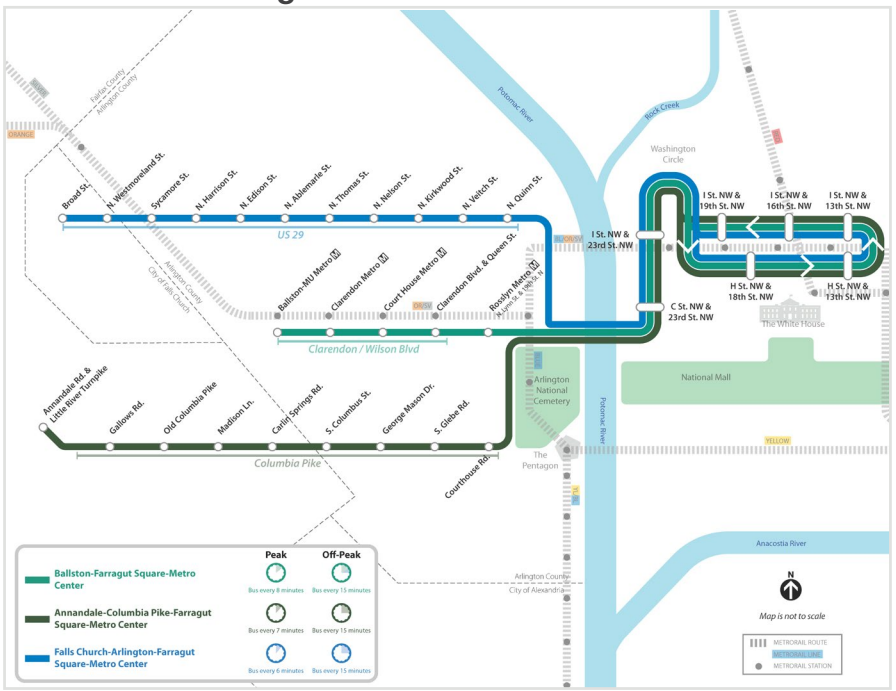
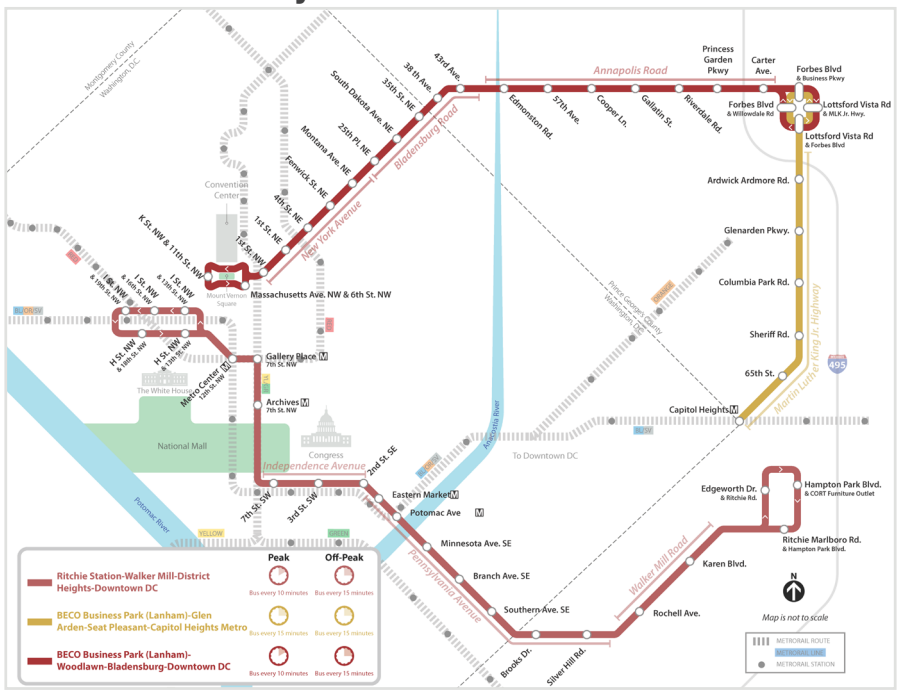
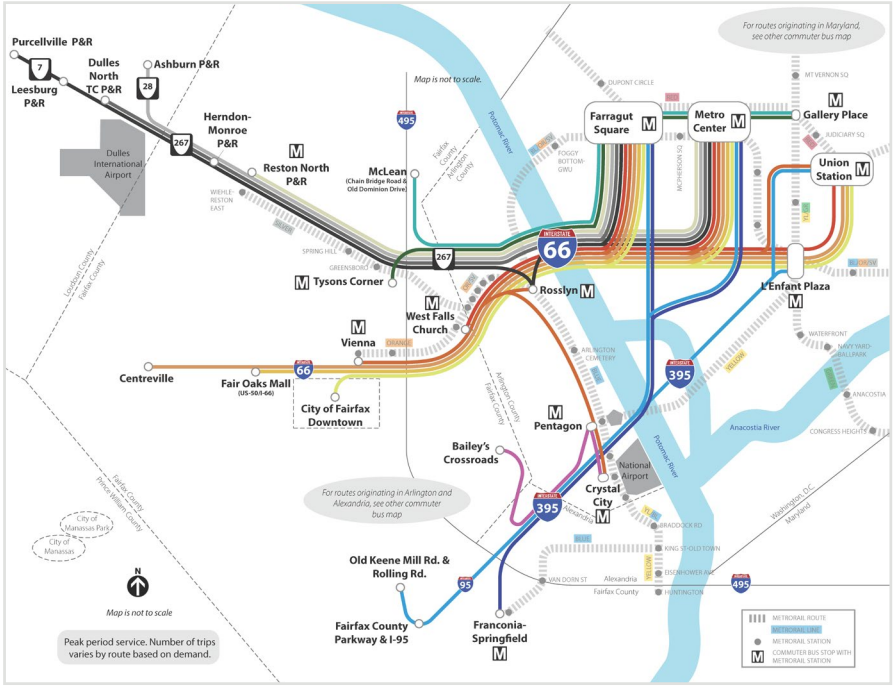
BRT Routes – Virginia



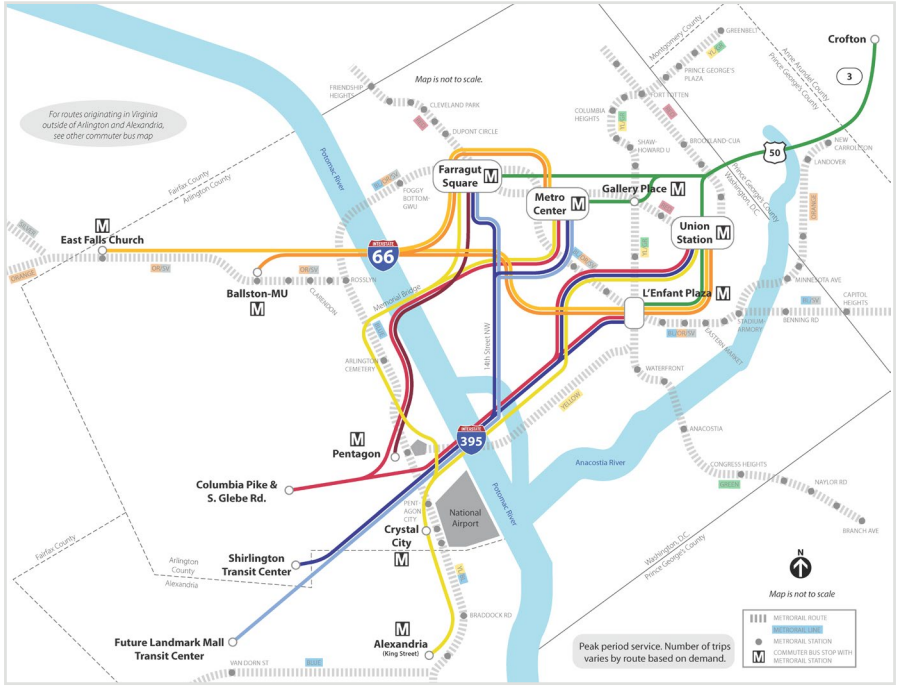
BRT Routes – Maryland



Commuter Bus Routes – Originating in Fairfax and Loudoun



Commuter Bus Routes – Originating in Arlington, Alexandria, and Maryland



This alternative would serve the following areas:

- Rosslyn
- Georgetown
- Downtown DC
- Union Station
- Union Market
- Ivy City
- Fort Lincoln
- Port Towns
- Hyattsville
- College Park
- Greenbelt

Transfers would be available at the following stations:

- GR Greenbelt
- GR College Park-U of Md
- YL GR Mt Vernon Sq
- OR SV Rosslyn II
- RD OR SV Farragut Station
- RD Union Station

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative would reduce potential trip delays at a lower construction cost than the other rail options.

Capacity	Reliability	Flexibility	Sustainability & Equity
○	★	★	○

○ alternative meets goal

★ performs better than some alternatives

★ the best-performing alternative for this goal

92,000 New weekday transit trips

14 New stations

$25-30 B Construction cost

+3% Trips by transit vs. other travel options

+20% Residents in equity areas with new access to high capacity transit

$125-150 M New annual operating cost

-13% Customers affected by service delays

$79 M New annual fare revenue

NOTE: The names of proposed new stations are preliminary placeholders. Actual station names will be determined at a later date.

N

Map is not to scale

This alternative would serve the following areas:

- Rosslyn
- Georgetown
- Downtown DC
- Union Station
- Navy Yard
- Buzzard Point
- St. Elizabeths
- Forest Heights
- Oxon Hill
- National Harbor
- Alexandria

Transfers would be available at the following stations:

- GR Navy Yard-Ballpark
- YL GR Mt Vernon Sq
- OR SV Rosslyn II
- OR SV Capitol South
- RD OR SV Farragut Station
- RD Union Station

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative would perform best at reducing crowding, growing ridership, and providing access to transit and jobs in equity areas.

Capacity | Reliability | Flexibility | Sustainability & Equity

- alternative meets goal
- performs better than some alternatives
- the best-performing alternative for this goal

180,000 New weekday transit trips

16 New stations

$30-35 B Construction cost

+11% Trips by transit vs. other travel options

+35% Residents in equity areas with new access to high capacity transit

$175-200 M New annual operating cost

-15% Customers affected by service delays

$154 M New annual fare revenue

This alternative would serve the following areas:

- West Falls Church
- Ballston
- Rosslyn
- Georgetown
- Downtown DC
- Union Station
- Capitol Hill
- Ivy City
- Port Towns
- Hyattsville
- College Park
- Greenbelt

Transfers would be available at the following stations:

- GR Greenbelt
- GR College Park-U of Md
- YL GR Mt Vernon Sq
- OR West Falls Church
- BL OR Rosslyn
- RD BL OR Farragut Station
- RD Union Station

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative would maximize train throughput, increase operational flexibility, and provide customers with multiple route options.

Capacity	Reliability	Flexibility	Sustainability & Equity

○ alternative meets goal ★ performs better than some alternatives ★ the best-performing alternative for this goal

139,000 New weekday transit trips

18 New stations

$35-40 B Construction cost

+3% Trips by transit vs. other travel options

+27% Residents in equity areas with new access to high capacity transit

$175-200 M New annual operating cost

-32% Customers affected by service delays

$119 M New annual fare revenue

This alternative would serve the following areas:

- Rosslyn
- Georgetown
- Downtown DC
- Union Station
- Union Market
- Ivy City
- Fort Lincoln
- Port Towns
- Landover Hills
- New Carrollton

Transfers would be available at the following stations:

- YL GR Mt Vernon Sq
- OR New Carrollton
- BL OR Rosslyn
- RD BL OR Farragut Station
- RD Union Station

How would this alternative perform?

(Performance estimates are relative to the No-Build Alternative.)

This alternative would perform best at reducing travel times between Downtown DC and areas near the eastern Orange Line.

Capacity	Reliability	Flexibility	Sustainability & Equity

- alternative meets goal
- performs better than some alternatives
- the best-performing alternative for this goal

94,000 New weekday transit trips

12 New stations

$25-30 B Construction cost

+3% Trips by transit vs. other travel options

+17% Residents in equity areas with new access to high capacity transit

$125-150 M New annual operating cost

-34% Customers affected by service delays

$80 M New annual fare revenue