

# Corridor Capacity & Reliability Study

Round 3
Public Meetings

Summer 2023



# Meeting Agenda

- Study purpose and overview
- How alternatives were developed
- Descriptions of six current alternatives
- Next steps



**BOS Corridor** 









# **BOS Study Overview**

- Purpose: To address multiple challenges and opportunities on the Blue, Orange, and Silver lines
- Outcome: Concludes with the Metro Board's selection of a locally-preferred alternative (LPA)

# **BOS Needs and Opportunities** Reliability, Connectivity, Flexibility Sustainability Development Equity





**BOS Study and LPA** 

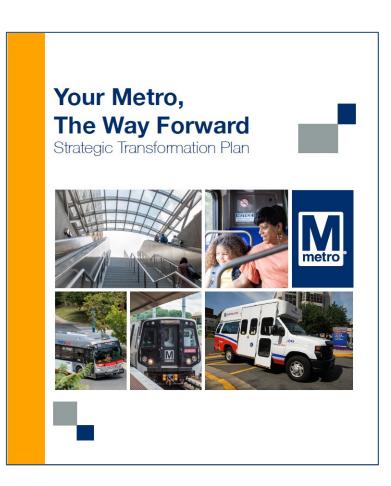








# Study Advances the Your Metro Strategic Transformation Plan



**Metro's Mission**: Your Metro – connecting you to possibilities

Metro's Vision: The region's trusted way to move more people safely and sustainably

#### **BOS Study Aligns with Your Metro Goals:**



Deliver safe, reliable, convenient, equitable, accessible, and enjoyable service for customers



Design transit service to move more people and equitably connect a growing region



Manage resources responsibly to achieve a sustainable operating, capital, and environmental model



Attract, develop, and retain top talent where individuals feel valued, supported, and proud of their contribution

#### Selecting a BOS LPA is a Your Metro Plan initiative:



Develop and select a plan for the Blue, Orange, and Silver Line Corridor

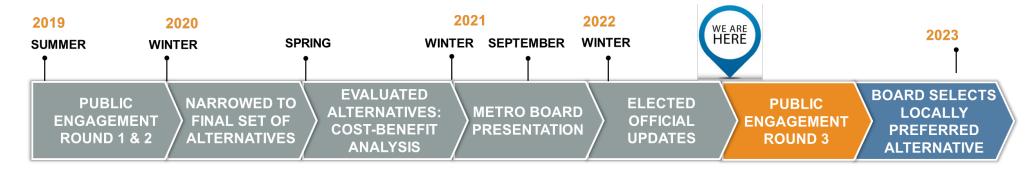






# **BOS Study Status**

- Completed two rounds of public engagement
- Engaged community partners and elected officials
- Identified six alternatives and delivered cost-benefit analysis
- Ready for third round of public engagement



# A Locally-Preferred Alternative

- Follows analysis and public feedback on a range of alternatives
- The LPA is the alternative decision-makers select for further development









# Purpose of Today's Meeting

- Present the six alternatives and cost-benefit analysis
- Gather your feedback on:
  - preferred alternative & potential names
  - priority outcomes/benefits
- Not revisiting goals, alternatives, or cost-benefit analysis
- Your input will inform the Board's selection of locally-preferred alternative (LPA)

#### No-Build **Alternative**

- Today's system
- State of Good Repair
- **System modernization**
- **Funded jurisdictional** projects such as:
  - **Purple Line**
  - **BRT lines**

#### **Rail Optimization & Bus** Service

- · Enhanced bus service
- Dynamic rail scheduling
- Railcar capacity
- Rail turnbacks
- Core station expansions















# How the Alternatives Were Developed







wmata.com/BOSstudy

### Factors that Shaped the Alternatives

#### **BOS Needs and Opportunities**





Development



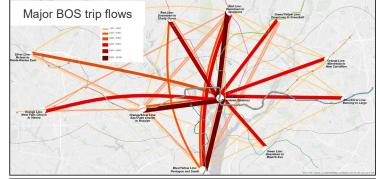
Reliability, Connectivity, Flexibility

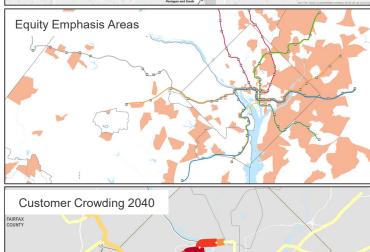




OR SV wmata.com/BOSstudy

#### **Analysis**

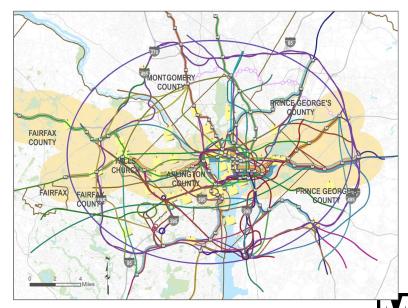




#### **Public and Stakeholder Input**



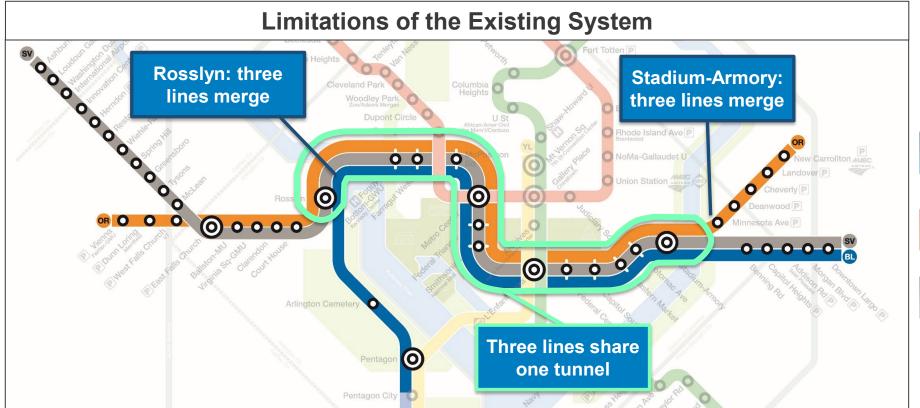


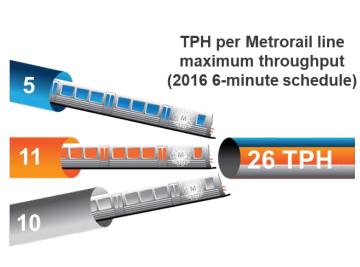




# **Capacity**

- Three lines operate on one set of tracks between Rosslyn and Stadium-Armory
- Capacity of 26 trains per hour (TPH) with existing systems / technology
- Region forecasts 37% more people and 30% more jobs around BOS lines by 2040



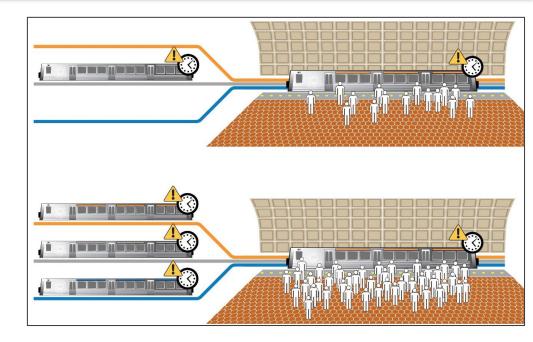


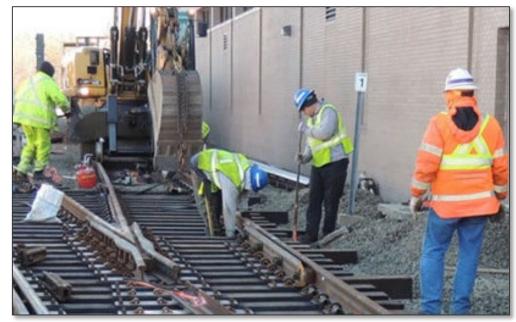




### Reliability, Connectivity, and Flexibility

- Running three lines through one tunnel creates and multiplies delays and crowding
- New infrastructure would help Metro better manage and move around disruptions
- Would reduce the impacts of work zones and disruptions





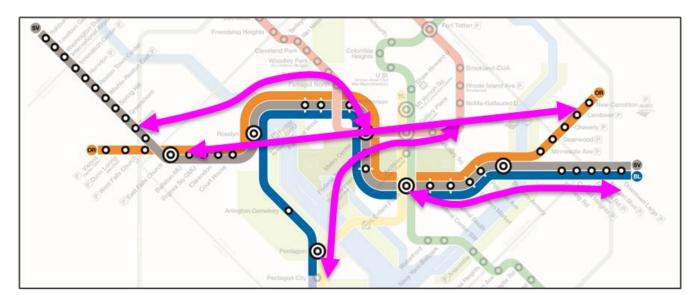




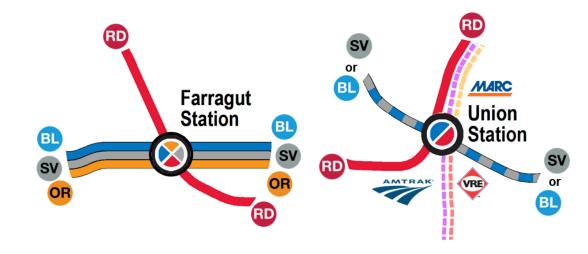


# Reliability, Connectivity, and Flexibility

- Opportunity to fix limitations of existing system (interlining and difficult transfers)
- New connections and customer path-choices would avoid similar problems in future



Opportunity to un-interline Blue/Orange/Silver and to provide customers more ways to get where they're going



Opportunity for more and better connections, within Metro system and to regional services



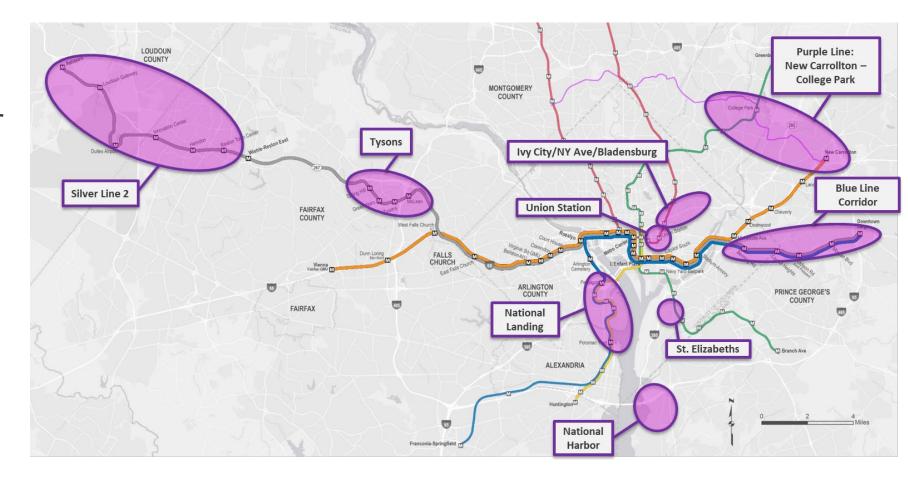








- Increase transit-oriented development
- Support areas prioritized for growth
- Increase use and value of existing infrastructure





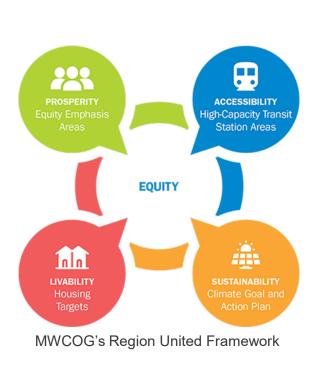


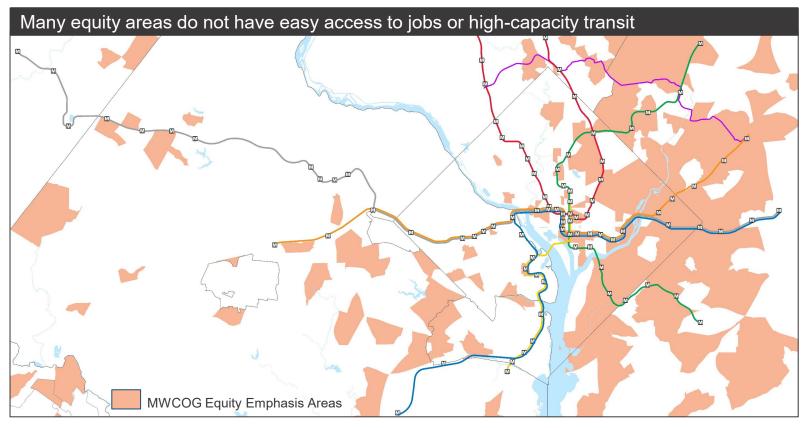




# **Equity**

- Expand access to high-frequency transit and economic opportunities
- Particularly in equity-focus communities that lack fast transit to jobs, other activities









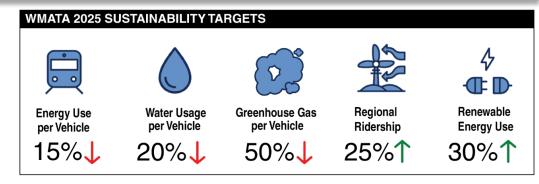






# Sustainability

- Advance the region's sustainability goals and targets
  - Be primary mode of choice for most people
  - Encourage shifts from driving to transit, biking, and walking
  - Help reduce emissions and greenhouse gases











# Community Input Helped Shape the Alternatives







- Summer 2019
- Complete
- Website
- Pop-ups
- Handouts
- Stakeholder meetings



- Winter 2019
- Complete
- Public open houses
- Online survey
- Updated website
- Stakeholder meetings





#### **Round 3: Solution**

- Summer 2023
- Public meetings
- In-person outreach at stations
- Online survey
- Stakeholder meetings
- Input on preferred alternative











### The LPA Should Meet Four Goals:



#### Goal 1:

**Provide Sufficient Capacity to Serve Ridership Demand** 



#### Goal 2:

Improve Reliability & On-Time Performance



#### Goal 3:

Improve Operational Flexibility & Cost-Efficiency



#### Goal 4:

**Support Sustainable Development & Expand Access to Opportunity** 











# The Alternatives







# Six Alternatives Range in Benefits, Impacts, Costs

#### No Build

- Today's system
- State of Good Repair
- System modernization
- Funded jurisdictional projects such as:
  - Purple Line
  - BRT lines

costs/ Higher cost benefits

#### **Rail Optimization & Bus** Service (Lower Capital Cost)

- Enhanced bus service
- Dynamic rail scheduling
- Railcar capacity
- Rail turnbacks
- Core station expansions

# **New Metrorail Lines**

- Four potential corridors
- New rail lines

Highest benet

- New rail stations
- Expanded capacity
- Expanded rail access





#### Alternative 1: No-Build



The transportation system as it is planned (and funded) to be in 2040, including:

- Existing roads and transit
- State of good repair projects
- Modernization and optimization programs
- Planned/funded new transit services, such as:
  - Purple Line
  - US-1/Richmond Highway BRT
  - Flash BRT

This alternative will improve reliability and sustainability, but would not meet all four goals

<sup>\*</sup> Based on currently funded projects

### Alternative 2: Rail Optimization & Bus Service (Lower Capital Cost)



Attempts to meet goals without a new rail line, using:

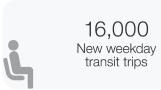
- New bus rapid transit (BRT) and commuter bus service (approximately 60 routes)\*\*
- Dynamic rail scheduling
- New rail infrastructure to optimize service
- More space in stations
- More room in railcars

#### Benefits summary:

- Costs far less than rail options
- Could be implemented sooner
- Fewer/lower benefits than rail options
- Only achieves capacity goals if thousands of peak riders switch from rail to bus

<sup>\*</sup> Based on currently funded projects plus this alternative

### Alternative 2: Rail Optimization & Bus Service Illustrative BRT and Commuter Routes





New stations



\$3-5 B Construction



Trips by transit vs. other travel options

+3%

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



\$75-100 M

New annual operating cost

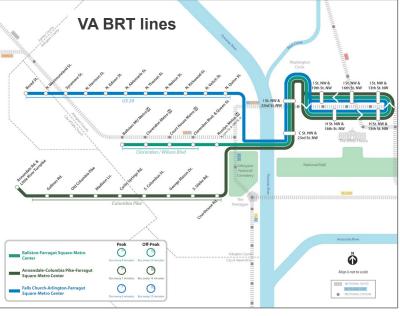


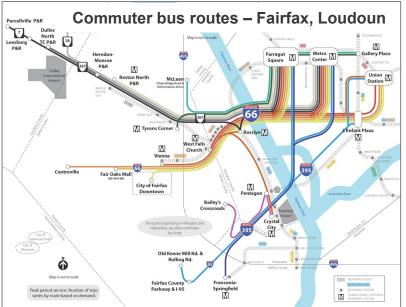
-7% Customers affected by service delavs

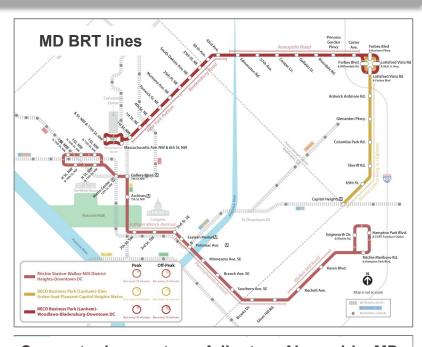


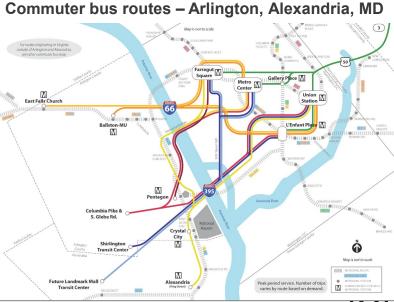
New annual fare revenue







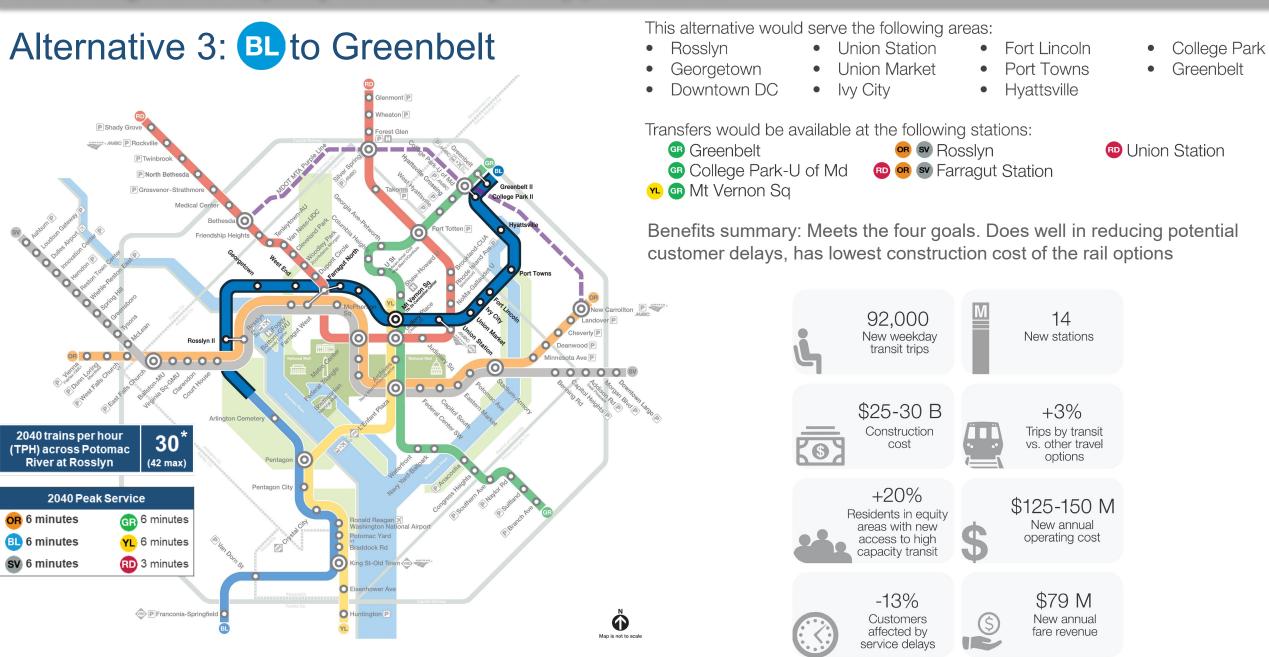




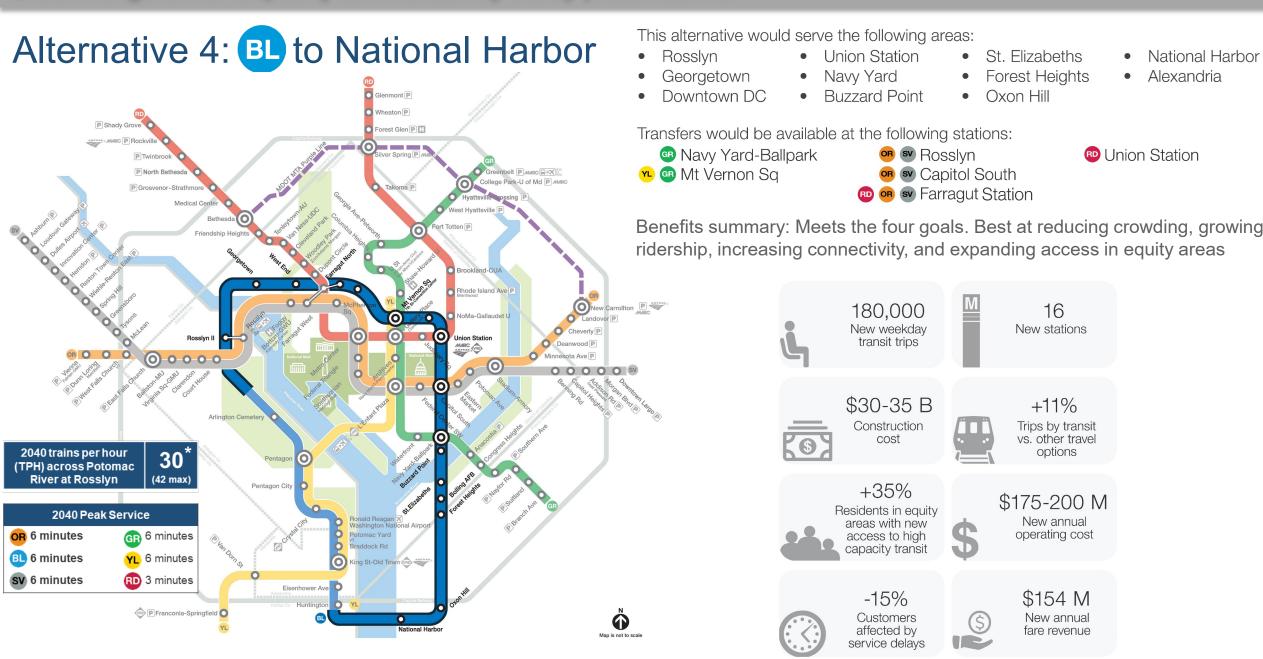




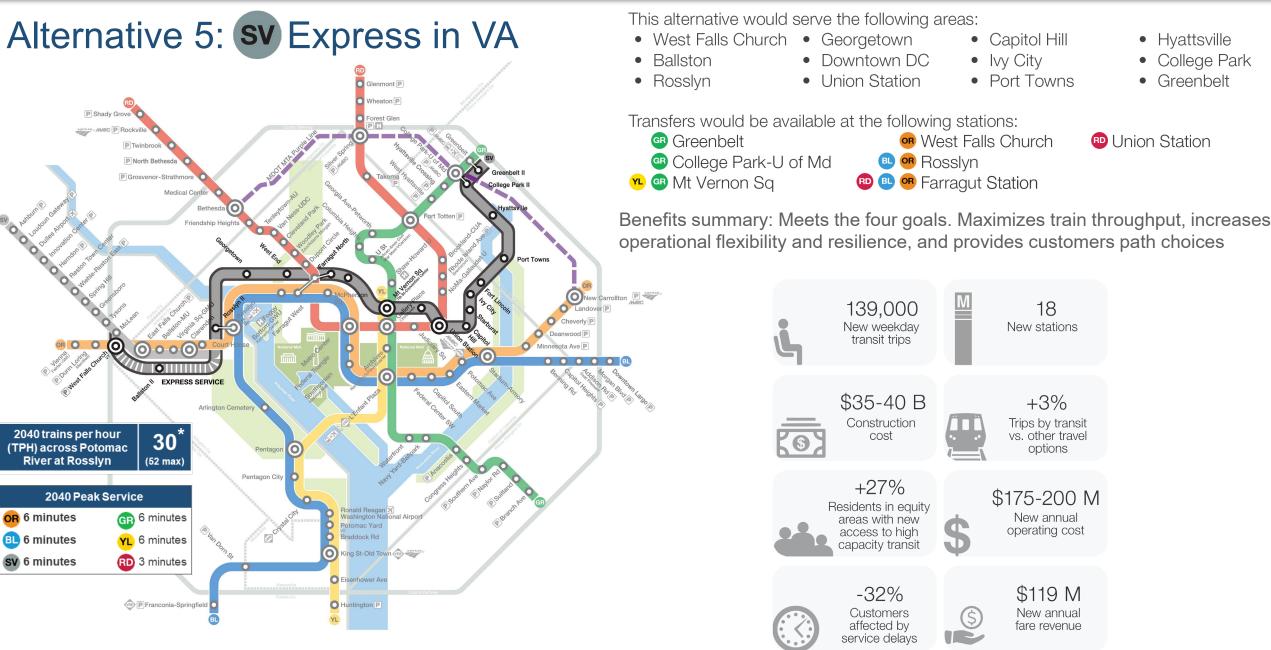




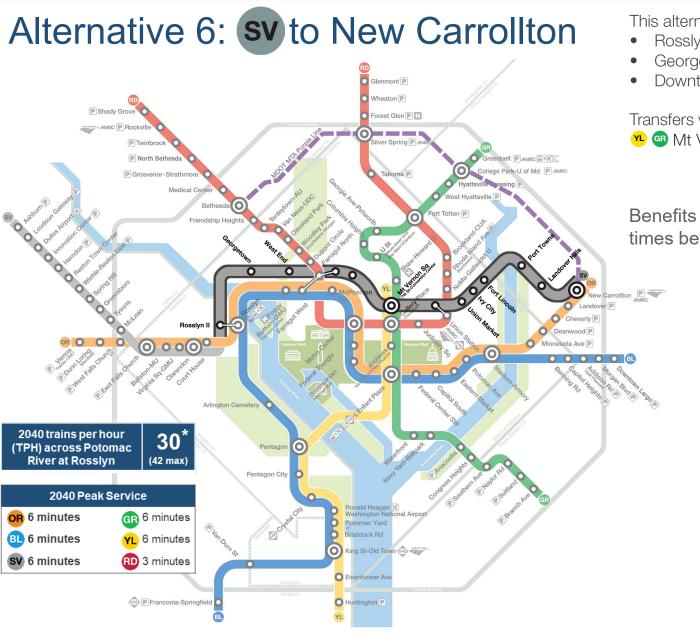
<sup>\*</sup> Based on currently funded projects plus this alternative



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This alternative would serve the following areas:

- Rosslyn
- Georgetown
- Downtown DC
- Union Station
  - Fort Lincoln Union Market
    - Landover Hills

Port Towns

Transfers would be available at the following stations:

Ivy City

Mt Vernon Sa

New Carrollton

Union Station

New Carrollton

B Rosslyn RD BD OR Farragut Station

Benefits summary: Meets the four goals. Does best at reducing travel times between Downtown DC and areas near the eastern Orange Line.



94.000 New weekday transit trips

New stations



\$25-30 B

Construction cost



Trips by transit vs. other travel options

+3%



capacity transit

\$125-150 M New annual operating cost



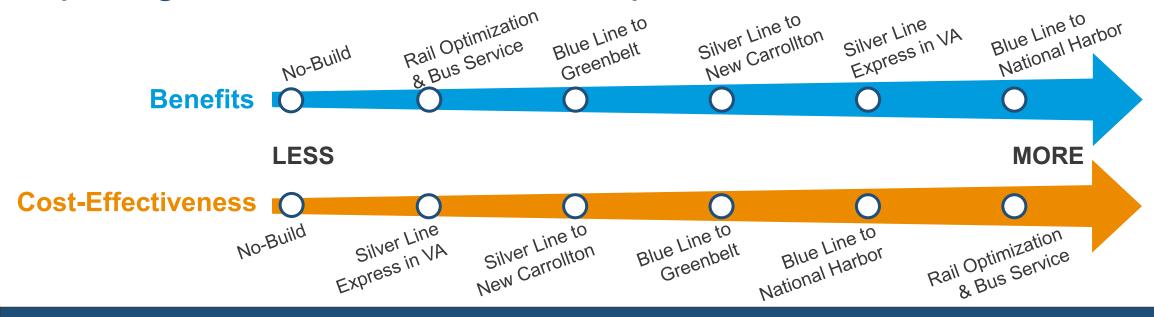
-34% Customers affected by service delays



\$80 M New annual fare revenue

Based on currently funded projects plus this alternative

# Comparing Costs, Benefits, and Impacts



#### Estimated New Ridership, Fare Revenue, and Costs, 2023 Dollars (in addition to the No-Build Alternative)

Alternative	How well it meets goals	New weekday rail trips	New annual fare revenue (\$M)	Construction costs (\$B)	Annual operating/ maintenance costs (\$M)
Alt 4: Blue Line to National Harbor		180K	\$154.2	\$30-35	\$175-200
Alt 5: Silver Line Express in VA		139K	\$119.4	\$35-40	\$175-200
Alt 6: Silver Line to New Carrollton		94K	\$80.4	\$25-30	\$125-150
Alt 3: Blue Line to Greenbelt		92K	\$79.1	\$25-30	\$125-150
Alt 2: Rail Optimization & Bus Service		16K	\$33.9	\$3-5	\$75-100
Alt 1: No-Build	_	0	\$0	\$0	\$0

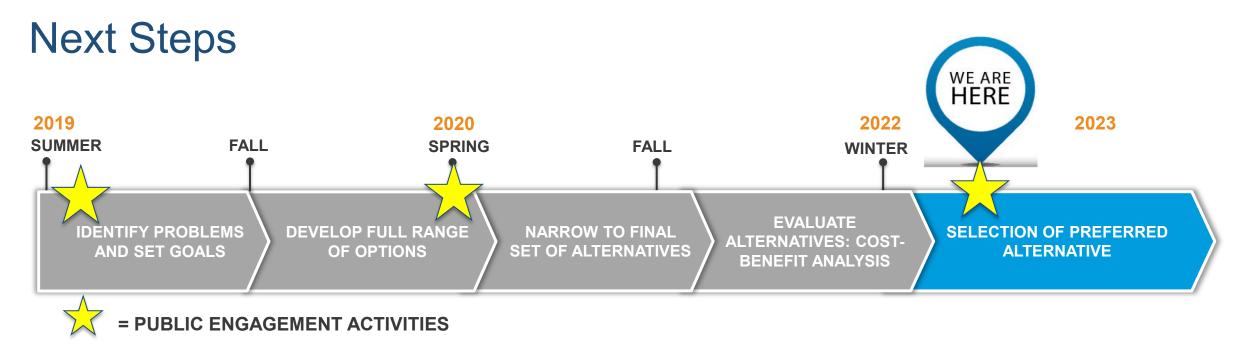
How Well Alternative Meets Goals Does not meet goals Meets goals Performs better Performs best

# Next Steps









- Finish public engagement
- Discuss results with stakeholder committees and elected officials
- Support Board of Directors in selecting an LPA





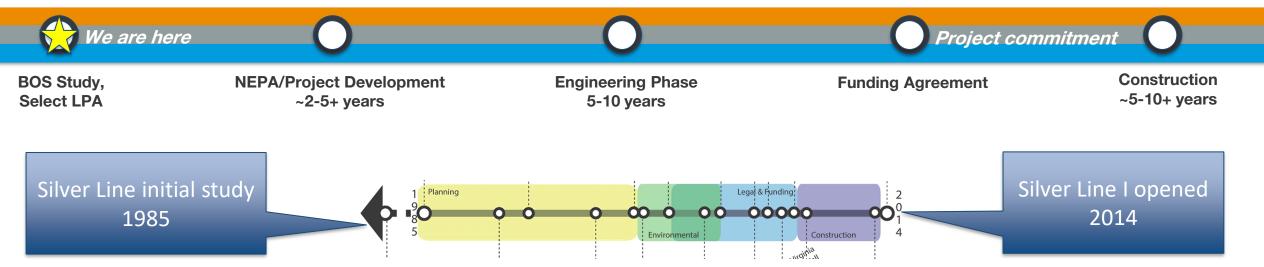




# Why Now?

- Metro's process follows federal requirements to be eligible for federal funding
- This study is only the first step in a long process
- Major capital projects can take 20+ years to deliver (like the Silver Line)
- No commitment to build unless/until there's a funding agreement

#### **Illustrative Major Project Delivery Timeline**









# THANK YOU!

# Don't forget to take the online survey at wmata.com/BOSstudy

For questions or additional information, email BOSstudy@wmata.com







