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BUS RAPID TRANSIT IN MONTGOMERY COUNTY

Flash BRT Update

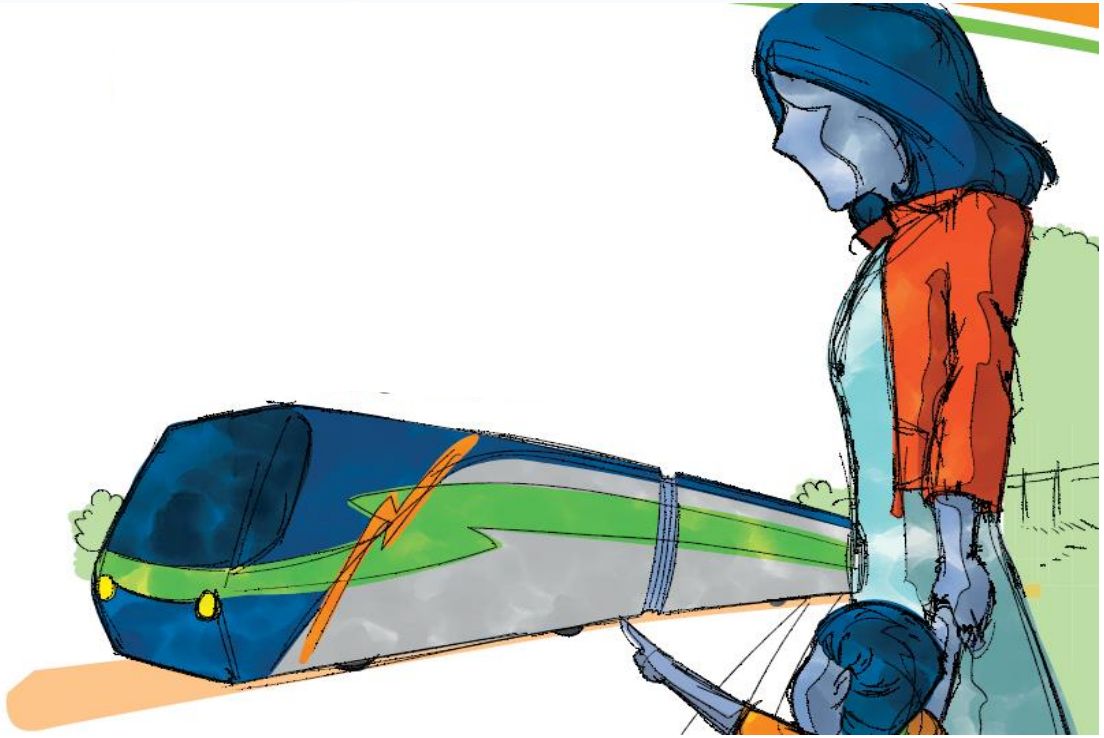
TPB Regional Public Transportation Subcommittee

January 29, 2019

MCDOT
Montgomery County
Department of Transportation

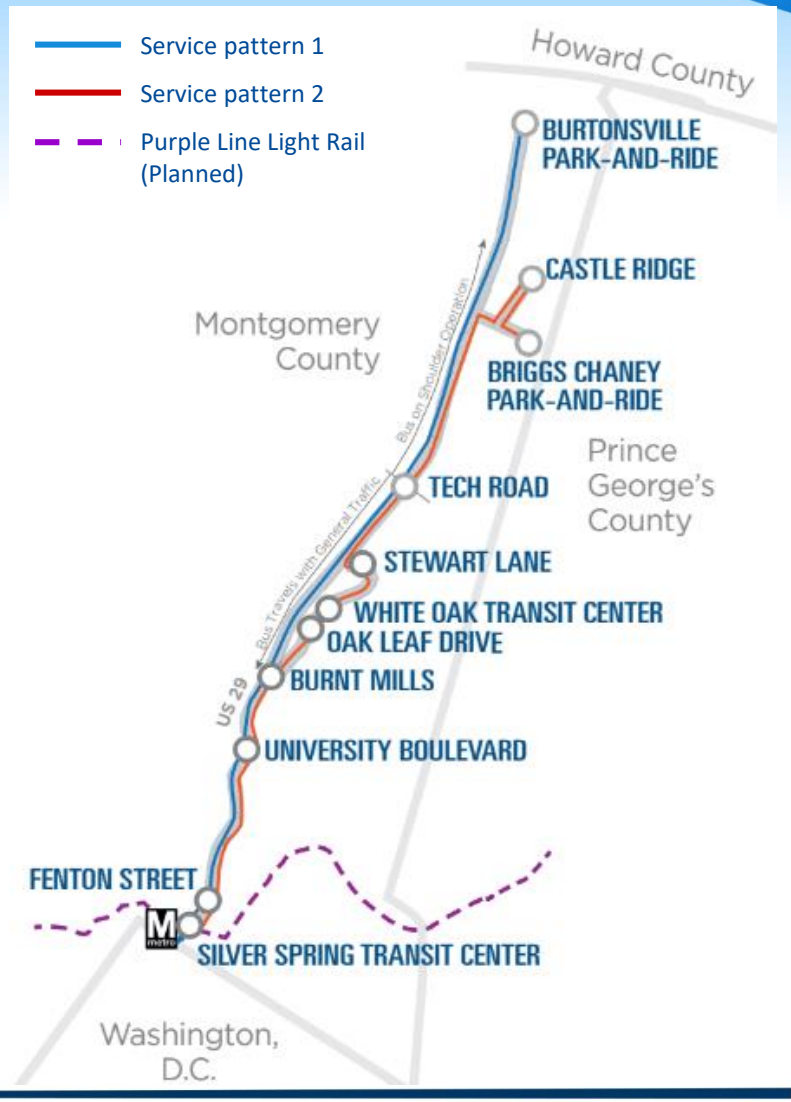
Agenda

- US 29
- MD 355
- Other corridors
- Vehicles
- Q&A



US 29

- 14 miles from the Silver Spring Transit Center to Burtonsville
- Two service patterns:
  - Burtonsville to Silver Spring
  - Briggs Chaney to Silver Spring
- Frequent all-day service
  - 7 days/week
  - Similar hours to Metrorail
  - 7.5 minutes peak; 15 minutes off-peak
- 11 Stations (18 platforms)
- Bus on shoulder north of Tech Road (~40%)



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US 29 Features

New, enhanced vehicles that accommodate bicycles onboard and are equipped with Wi-Fi and USB ports

Community-friendly design with enhanced pedestrian and bicycle facilities

New, comfortable stations that provide weather protection

Near-level boarding through all doors

Pre-payment kiosks, and real-time transit information (via message boards)

Transit Signal Priority (TSP)

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US 29 Status

- Completed design October 2018
- Negotiated guaranteed maximum price (GMP) with our Construction Manager at Risk (CMAR) in November 2018
- Arts on the Block has been creating mosaic tile art for each station
- Construction began December 2018
- Expected completion date – December 2019
- Start of service – Spring 2020

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MD 355 Background

- State Study led by MDOT from 2014 to 2017
- Developed Preliminary Purpose and Need Statement and Conceptual Alternatives Report (April 2017)
- Resulted in No Build and Three Build Alternatives:
  - Transportation System Management (TSM)
  - Curb
  - Median
- Project Transitioned to MCDOT in May 2017 for Alternative Selection (Next Phase)

MD 355 Study Purpose

- Evaluate alternatives using criteria related to travel time savings, reliability, ridership, connections to jobs and other activity centers, economic development, costs, and property and environmental impacts.
- Through evaluation, **identify a single Recommended Alternative**, which will include an alignment, station locations, a service plan, and proposed improvements to MD 355.
- Once a Recommended Alternative has been identified, it can be advanced toward design and implementation.

MD 355 BRT Alternatives

Alternative
No-Build Alternative
Transportation Systems Management (TSM) Alternative
Alternative A **Mixed Traffic** with BRT Features
Alternative B Mostly **Median-Running**
Alternative C Mostly **Curb-Running**

Build Alternatives (A, B, and C) all include: Queue jumps, additional TSP, off-board fare collection, level boarding, new BRT vehicles, upgraded stations, and Flash branding.

Developed measures for comprehensive evaluation

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GOALS

PROVIDE AN APPEALING, FUNCTIONAL, AND HIGH QUALITY TRANSIT SERVICE

- Reduce travel times
- Increase service reliability
- Increase ridership
- Be a user-friendly route
- Complement Metrorail and local bus service

IMPROVE MOBILITY OPPORTUNITIES, ACCESSIBILITY, AND TRANSPORTATION CHOICES FOR ALL

- Improve access to jobs and other destinations
- Minimize traffic impacts and use roadway space efficiently
- Improve bicycle and pedestrian facilities
- Improve service and increase transit options for everyone

SUPPORT MASTER PLAN DEVELOPMENT

- Improve transit service to existing and planned developments
- Locate stations to support walkability

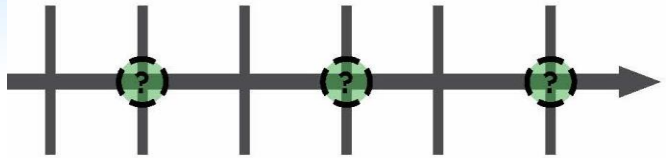
SUPPORT SUSTAINABLE AND COST-EFFECTIVE TRANSPORTATION SOLUTIONS

- Minimize environmental, cultural, and property impacts
- Use practical design to minimize capital and operating costs

STATION SCREENING PROCESS

Potential Stations

Multiple studies have identified potential locations.



STUDIES

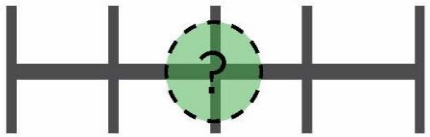
- Countywide Transit Corridor Functional Master Plan
- City of Gaithersburg MD 355 BRT Study
- Rockville BRT Town Center Integration Study
- MD 355 BRT Phase I Study

STAKEHOLDER SUGGESTIONS

- Corridor Advisory Committees
- Open Houses
- Agency Comments

Level 1 Screening

Does this location have the elements of a successful station?



RIDERSHIP

- Existing bus ridership and forecasted BRT ridership

LAND USE

- Existing land use and master planned development

PEDESTRIAN AND BICYCLE CONNECTIONS

- Proximity to infrastructure, existing and planned

TRANSIT CONNECTIONS

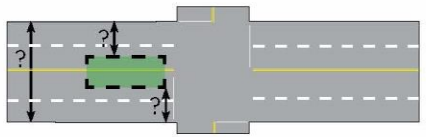
- Proximity to other services, existing and planned

STREET NETWORK

- Signalization, volumes, crash data, stop spacing

Level 2 Screening

Would a station fit in this location and where should it be be sited?



GEOMETRY

- Adequate street design, horizontal curvature, vertical grades

SPACE CONSTRAINTS

- Sufficient roadway width and length for station (right of way)

TYPE OF STATION AND PLACEMENT

- Median or curbside, stop spacing

TRANSIT CONNECTIONS

- Ability to accommodate transfers or layovers

PEDESTRIAN AND BICYCLE CONNECTIONS

- Quality of infrastructure, existing and planned

STATION SELECTION

Station Screening – Phase 1

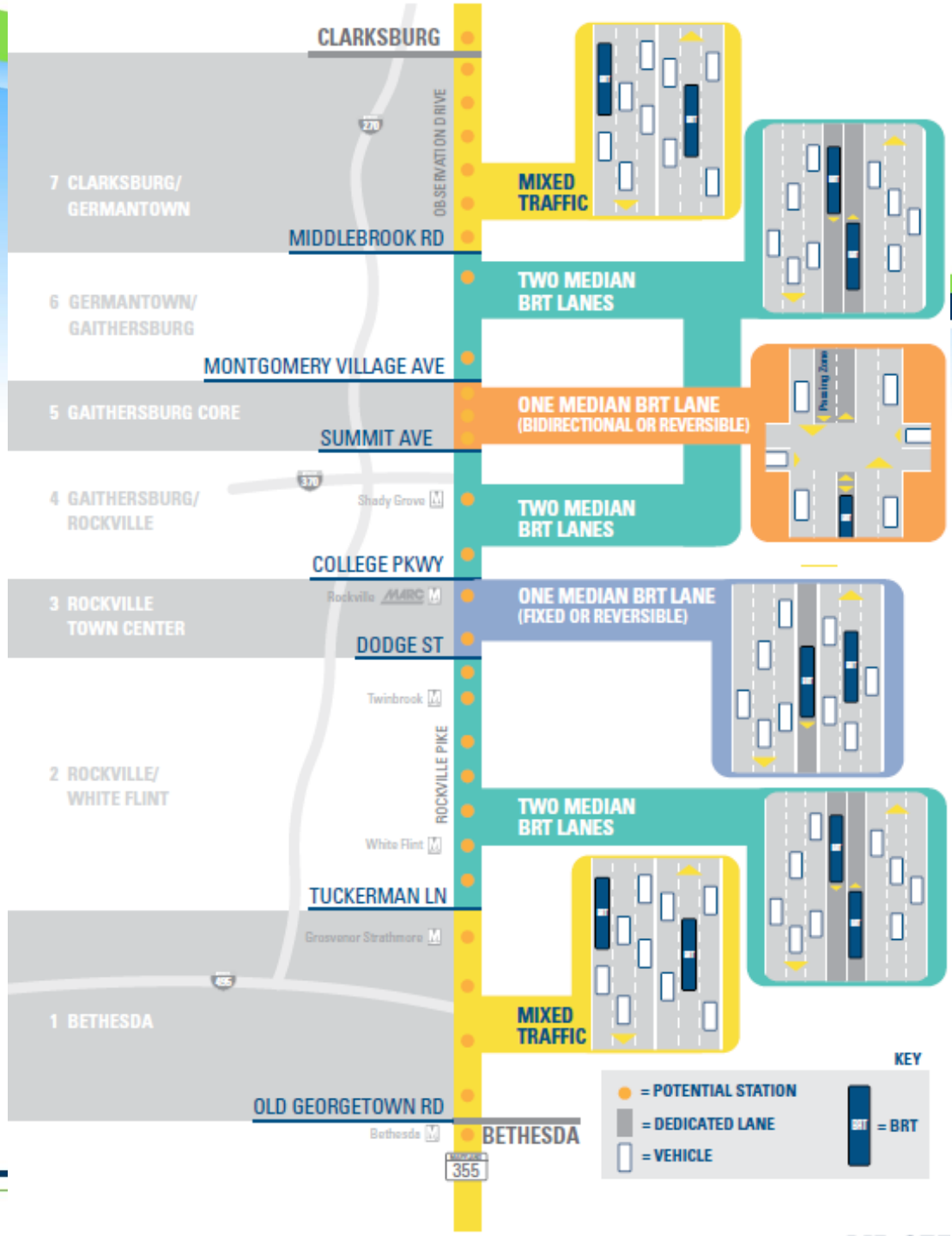
✓ Station to Proceed
✗ Station not to Proceed
○ Infill: Long-Term Station Option

			Ridership	Land Use	Pedestrian & Bicycle Connections	Transit Connections	Street Network
SEGMENT 1 - Bethesda Metro to Tuckerman Lane							
✓	Bethesda Metro Station	South Entrance	High	High	High	High	Medium
		Bus Bays	High	High	High	High	High
✓	MD 355 and Cordell Avenue		High	High	High	High	High
✓	Medical Center Metro Station		High	High	High	High	Medium
○	MD 355 and Cedar Lane		Medium	Medium	Medium	High	Medium
✓	MD 355 and Pooks Hill Rd		Medium	High	Medium	Medium	Medium

- Refined traffic and travel demand models
- Refined service plans
- Documented environmental, cultural, and historic resources
- Added economic impact analysis
- Refined the build alternatives
  - "Guiding principle": Get as close to master plan vision as possible, while reducing cross sections to minimize impacts and costs.
- Continued the public participation process

Engineering Challenges

- Diverse and widely different corridor
- Multiple stakeholders
- Right-of-way
- Stormwater
- Utilities



MD 355 Status

- Traffic and Travel Demand modeling is complete and results are being reviewed
- Engineering for Build Alternatives is complete*
  - Modified alternative is being developed
- Property and environmental impacts are being finalized for the build alternatives
- Expected study completion – Spring 2019

Other corridors

- State-led
  - Corridor Cities Transitway preliminary design complete
  - MD 586 (Veirs Mill Road) Recommended Alternative selected

- Funding has been identified for the following:
  - Design for Veirs Mill Road (FY22)
  - Planning for New Hampshire Avenue (FY22)
  - Planning for North Bethesda Transitway (FY24)

Vehicles

- Vendor selected Fall 2018 (NovaBus)
- Finalizing details currently
- First bus will arrive September 2019
- Final delivery early 2020

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Questions?

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