Project Overview

- Provide faster, more direct and more reliable transit service connecting the major activity centers in Northern Virginia
- Provide transit linkages to two Metrorail Stations and future transitways in Alexandria
- Increase connectivity and accessibility to major job centers
- Accommodate future growth and support economic and community development

Project Phases

1. Phase I performed a planning-level assessment to evaluate and narrow transit options
2. Phase II selected BRT as the mode to best serve the corridor and where BRT should deviate from Route 7
3. Phase III developed a conceptual engineering study for the alignment
4. Phase IV will assess mobility benefits of BRT within the City of Falls Church

We are here!
Phase IV Mobility Study

Study Corridor

- 3.5 mile long corridor in the City of Falls Church
- BRT would provide high speed and reliable transit services on the second busiest bus corridor in Northern Virginia
- Travels through downtown Falls Church and serves the East Falls Church Metrorail Station

Study Objectives

- Explain how BRT could function in the corridor
- Determine the mobility benefits of BRT in the City of Falls Church
- Evaluate the benefits of various BRT concepts

For more information about the project, please scan the QR Code
Existing Conditions

Bus Ridership

- Bus ridership is calculated using weekday morning peak period (6-9 am) data
- East Falls Church Metrorail Station has the highest bus ridership with more than 100 passengers in the morning peak in both directions

### Morning Peak Period (6-9 AM) Boarding + Alighting

**Westbound - Towards Tysons Corner**

**Source**
WMATA, October 2019 (Pre-pandemic)

**Eastbound - Towards Seven Corners**

**Source**
WMATA, October 2019 (Pre-pandemic)
Existing Conditions

Bus Speeds

- Buses on the corridor are slow with speeds generally at or below 10 mph
- Buses experience slower speeds in the evening peak, in the eastbound direction

Morning Peak Hour (7:30 - 8:30 am)

- 14 mph
- 12 mph
- 10 mph
- 7 mph

Evening Peak Hour (4:30 - 5:30 pm)

- 14 mph
- 10 mph
- 8 mph
- 6 mph

Source: WMATA, October 2019 (Pre-pandemic)
Existing Conditions

Bus Frequency

- Route 28A provides the most frequent bus service on the corridor (5 buses per hour)
- Washington Boulevard between Broad Street and I-66 has the highest combined service (9 buses per hour)
- The East Falls Church Metrorail Station is a key transfer location for bus and rail service
Existing Conditions
Vehicle Delay & Level of Service (LOS)

- Vehicles experience low delay (<35 seconds) at most intersections
- Study intersections have excess capacity except for a few locations

<table>
<thead>
<tr>
<th>LOS</th>
<th>Control Delay for Signalized (sec/veh.)</th>
<th>Control Delay for Unsignalized (sec/veh.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤10</td>
<td>≤10</td>
</tr>
<tr>
<td>B</td>
<td>10-20</td>
<td>10-15</td>
</tr>
<tr>
<td>C</td>
<td>20-35</td>
<td>15-25</td>
</tr>
<tr>
<td>D</td>
<td>35-55</td>
<td>25-35</td>
</tr>
<tr>
<td>E</td>
<td>55-80</td>
<td>35-50</td>
</tr>
<tr>
<td>F</td>
<td>≥80</td>
<td>≥50</td>
</tr>
</tbody>
</table>

Source: 2019 (pre-pandemic) intersection volumes and signal timing plans

Morning Peak Hour (7:30 - 8:30 am)

Evening Peak Hour (4:30 - 5:30 pm)

LEGEND
- Level of Service (LOS)
- Delay (sec)
- Signalized Intersection
- Unsignalized Intersection

Source: 2019 (pre-pandemic) intersection volumes and signal timing plans
Bus Rapid Transit (BRT) Overview

- BRT is **high-capacity** and **high-quality** transit
- Provides **fast** and **reliable** service

**Source**
Madison Corridor Bus Rapid Transit, SDOT 2015
Please Mark Locations Where You See Buses Experiencing Delay and Congestion
Potential BRT Infrastructure Elements for Falls Church Segment

**Business Access and Transit (BAT) Lanes**

**Transit Signal Priority (TSP)**

**Bus Queue Jump Lane and Queue Jump Signal**
Existing Conditions
Bicycle and Pedestrian Conditions

For bicycles, study area is generally served well with both on-street and off-street facilities (e.g., W&OD Trail).

For pedestrians, average pedestrian crossing times at intersections are generally short with a few exceptions.