Community Outreach Presentation

Public Meeting
October 20, 2022

alexandriava.gov/DukeInMotion

This project is funded with Northern Virginia Transportation Authority (NVTA) regional revenues.
Welcome!

Duke Street *in Motion* overview

Why Bus Rapid Transit (BRT)

Current Conditions in Segment 1

Busway Design Concepts: Focus on Segment 1

Next Steps

Questions followed by open house
Project Overview
What is “Duke Street *In Motion*”?

Duke Street *IN MOTION* is a project focused on ensuring that transit improvements in the Duke Street corridor, from Landmark Mall to the King Street Metro Station, provide efficient transportation options that align with all users’ needs, wants, and expectations.
Duke Street in Motion Process

**Vision and Guiding Principles**
- Completed Summer 2021

**Concept Development**
- March 2022: *Advisory Group created*
- October 2022: public engagement to *introduce range of concepts*
- Late 2022: AG to consider concepts for further refinement

**Preferred Alternative**
- Public engagement planned for Spring 2023

**Advisory Group Recommendation to Council**
- Summer 2023
Project Purpose & Background

• Pursue high-capacity transit to achieve City sustainability and equity goals
• Reconsider concept plans in context of 2021 community visioning
What is Bus Rapid Transit (BRT)?

Buses that run more like trains

Boarding improvements
Frequent service
Transit Signal Priority
Queue jump lanes
Station amenities
Bus lanes
Fully separated bus lanes
Phase 1 Community Engagement
(June 21-July 31, 2021)

- 1,785 feedback form responses
- 3,587 project handouts
- 6,393 received eNews blast
- 95,889 reached on social media
- 22 community pop-up events (2,552 people reached)
- 92 webinar attendees

What do you see in Duke Street’s future?
How do you want to get around?
Community Input in Phase 1

88% Want to see reduced traffic

47% Would ride or would consider riding the bus more often with improvements

55% Want to see improved safety

A full summary is available at alexandriava.gov/DukeInMotion
Project Vision

This project will provide an efficient and desirable bus rapid transit (BRT) option along Duke Street by improving the transit experience for current and potential riders.

With multimodal enhancements to the corridor, Duke Street will become a safe, efficient, and desirable community connector for people riding the bus, walking, biking, and driving.
## Project Guiding Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Convenient</strong></td>
<td>Make bus travel more predictable, frequent, and comfortable</td>
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<tr>
<td><strong>Efficient</strong></td>
<td>Improve mobility for all Duke Street travelers</td>
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<td><strong>Equitable</strong></td>
<td>Use enhanced bus transit to support equitable access for a diversity of people and places</td>
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<td><strong>Safe</strong></td>
<td>Ensure safety and accessibility for those connecting to and riding the bus, as well as other travelers</td>
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<td><strong>Vibrant</strong></td>
<td>Create and enhance thriving and future corridor destinations that improve resident quality of life and boost the local economy</td>
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<td><strong>Sustainable</strong></td>
<td>Contribute positively to the environment, now and in the future</td>
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To learn more about all the ways the City is working to make Duke Street work better, please visit alexandriava.gov/transportation-planning/duke-street-projects.
Why Bus Rapid Transit on Duke Street?
Why BRT on Duke Street?

- Greenhouse gas emissions
- Air quality
- Equity
- Choices
- Congestion management
Factors for Success

- High frequency transit connections to major activity centers
- Core base ridership: ~3000/day
- Competitiveness with driving
Placemaking and Livability

Route 1 Before

Route 1 After
Segment 1 Overview & Existing Conditions
Corridor Segments
Segment 1: West End Alexandria to Jordan Street
Segment 1:
West End Alexandria to Jordan Street

Sidewalk  Travel Lanes  Median  Travel Lanes  Service Road  Sidewalk
Segment 1 Concepts
Street Design Concepts

Busway and Curb Features

Step 1: Busway

Step 2: Curb features
- Sidewalks Wideened
- Shared-use path
- Cycle track
- Service Roads
- Streetscaping
A BRT can mix different treatments to make bus service faster and more reliable.
Concept Summary

**Segment 1**
- Center running
- Curb running
- Mixed traffic

**Segment 2A**
- Center running
- Hybrid
- Mixed traffic

**Segment 2B**
- Center running
- Bidirectional
- Mixed traffic

**Segment 3**
- Center running
- Curb running
- Mixed traffic
Segment 1: Center Running

Benefits

• Best bus reliability, speed, and rider experience
• Separates bus and general traffic
• Shorter crossings to bus stations
• Increased area for trees, streetscaping, stormwater management

Trade Offs

• Potential increase in vehicle travel time

*Curb features to be determined at a later stage in the project.
Segment 1: Center Running

*Curb features to be determined at a later stage in the project.
Segment 1: Curb Running

Benefits
- Improved bus reliability, speed, and rider experience
- Maintains median and tree canopy
- Separates bus from most vehicle traffic

Trade Offs
- Potential increase in vehicle travel time
- Right-turning vehicles use bus lanes, which reduces bus reliability

*Curb features to be determined at a later stage in the project.
Segment 1: Curb Running

LEGEND
- BRT Station
- Bus and Turn Lanes
- Landscaping/Buffer
- Curb Features*

*Curb features to be determined at a later stage in the project.
Segment 1: Mixed Traffic

*Curb Features

Benefits
• Some improved bus reliability and bus rider experience due to transit signal priority
• Center median and tree canopy remain

Trade Offs
• Limited/reduced improvement to bus operation and reliability
• No changes to vehicle safety in the corridor

*Curb features to be determined at a later stage in the project.
Segment 1: Mixed Traffic

*Curb features to be determined at a later stage in the project.
Concept Summary

SEGMENT 1 - West End Alexandria to Jordan
- Center running
- Curb running
- Mixed traffic

SEGMENT 2A - Jordan to Wheeler
- Center running
- Hybrid
- Mixed traffic

SEGMENT 2B - Wheeler to Roth
- Center running
- Bidirectional
- Mixed traffic

SEGMENT 3 - Roth to King St Metro Station
- Center running
- Curb running
- Mixed traffic
Next Steps
Upcoming Events

**Webinar**
- Oct 1
- Project website

**Pop-up Events**
- Throughout October
- 7-10 events

**Focus Groups**
- 4+ events to target underrepresented groups
  - Renters
  - Transit riders
  - Youth
  - Spanish speakers
  - Businesses

**In-Person Meetings**
- Throughout October
- 4 in-person events
- Segment focused
- Open house for entire corridor
- Build your own Duke Street

<table>
<thead>
<tr>
<th>In-Person Meeting Dates/Locations</th>
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<tr>
<td><strong>October 12</strong></td>
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<tr>
<td>Segment 3 Meeting @ Bishop Ireton School</td>
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<td><strong>October 17</strong></td>
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<tr>
<td>Segment 2 Meeting @ Bishop Ireton School</td>
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<td><strong>October 20</strong></td>
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<tr>
<td>Segment 1 Meeting @ Patrick Henry Rec Center</td>
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<tr>
<td><strong>October 26</strong></td>
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<td>Open House @ Patrick Henry Rec Center</td>
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Advisory Group Recommendation to Council
Thank you!

➔ Visit boards
➔ Speak with Project Team
➔ Complete feedback form

alexandriava.gov/DukeInMotion
Q&A

• One question per attendee
• The project team will be available afterwards for additional questions
• FAQs will be posted on the website
• Please provide comments using the feedback form