

# DUKE STREET IN MOTION

## Advisory Group Meeting #5 Agenda

Thursday, September 15, 2022 6:30 PM

- **Welcome/Introductions** (5 min)
- **Public Comment - 2 min/person** (10 min)
- **Background** (5 min)
- **Engagement Plan** (10 min)
- **BRT 301** (15 min)
- **Segment 2A (Jordan to Wheeler) and 2B (Wheeler to Roth)** (65 min)
  - Existing Conditions
  - Design Concepts
  - Discussion on segments and presentation of material
- **Next Steps** (5 min)
- **Virtual Meeting Policy** (5 min)
- **Approval of Meeting Minutes #3** (5 min)
- **Adjourn**

### MEETING GOALS

- Understand features of design concepts for Duke Street
- Provide feedback on whether the proposed design concepts are the right range of options to bring to the community
- Understand the engagement approach and share any additional thoughts on the presentation of materials to the public

### MATERIALS

- Fact Sheets
- Comparison Matrices
- Data plan for October engagement
- Virtual Meeting Policy
- Bus Station status update

## BUS STATION ITEMS

Topic	Timing/How addressed
Distribution list for the project	Created a Duke Street Projects eNews.
2012 Council language on the website	Council materials on the 2012 alignment are available under the Resources section of the website.
Inform the community about the pilot project at West Taylor Run and potential impacts on this area; link to public information and how information will be used in the Duke St study -	Created a Duke Street Projects eNews; will have info about all projects at the meetings.
Expectations for screening data	Enclosing data plan in 9/15 packet for October engagement.
Provide additional visuals	Overhead schematics will be included in the 9/15 meeting presentation.
Send out Doodle Poll to schedule Duke St/Metroway Tour	Done.
Address how access would change if frontage roads are impacted; provide renderings that show circulation and access	<ul style="list-style-type: none"> <li>- Presenting concepts for Segment 2 on 9/15</li> <li>- October engagement will include examples or potential ways that we would consider</li> </ul>
Consideration of frontage roads (Prior bus station item)	Ongoing discussion; addressing roles of frontage roads along with discussion of each segment.
Address costs	Will have more information after concepts are narrowed down.
Address how segments connect (for transit, biking, walking)	Can get into this after concepts are narrowed down.

## Segment 2A: Center Running BRT

Jordan Street to Wheeler Avenue



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### EXISTING CORRIDOR

- » Two travel lanes in each direction
- » Residential and commercial frontage roads
- » No center median
- » Sidewalk on both sides of the street
- » Some curbside bus pull off areas

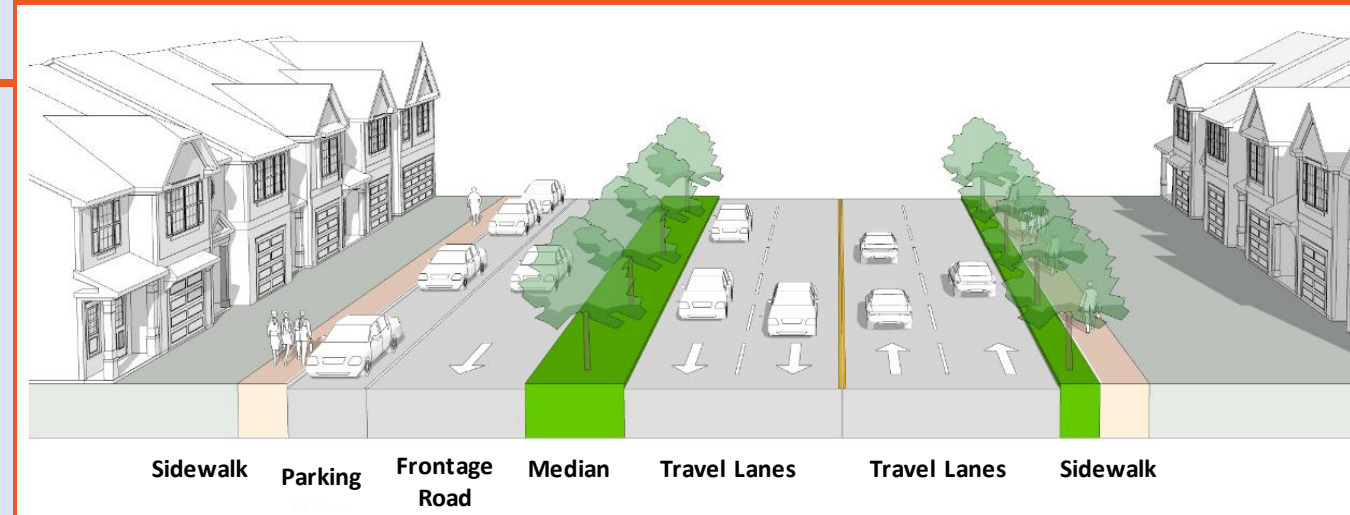
### CONCEPT

- » Two travel lanes in each direction
- » One dedicated transit lane in each direction
- » Median bus stations
- » Some median space for landscaping/stormwater features
- » Two-way shared-use path on north side
- » Sidewalk with buffer on south side
- » Opportunity to bury utilities

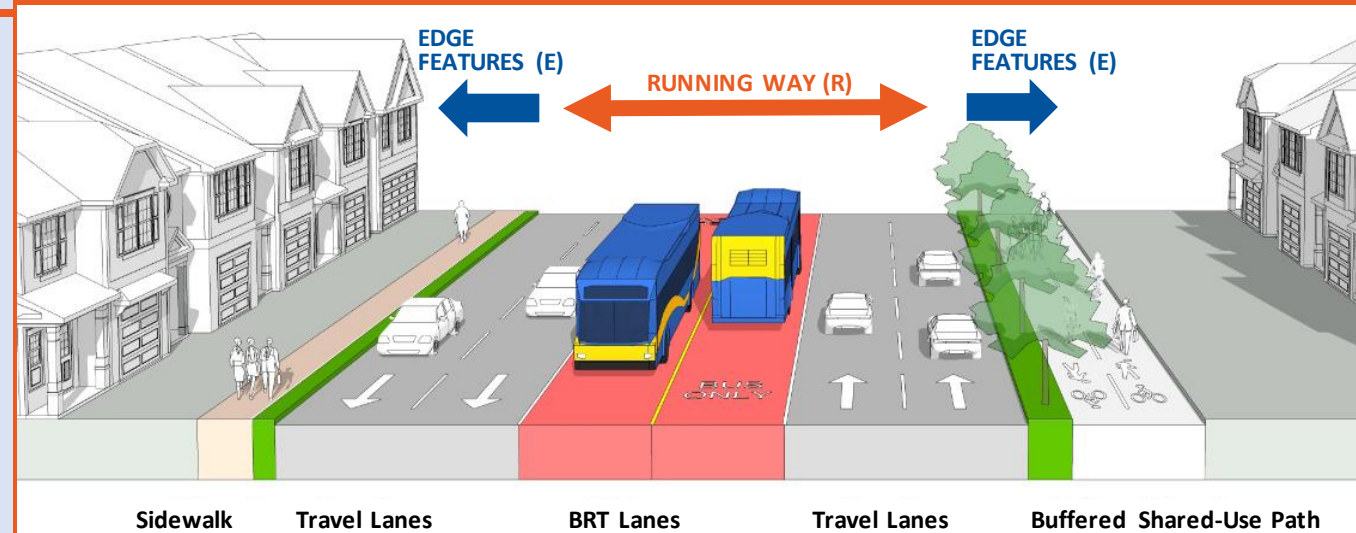
### KEY TRADE OFFS

- » Center bus lanes require widening (R)
- » Widening impacts frontage roads and related access/parking (R)
- » Property impacts (R/E)
- » Left turn access changes (R)

### EXISTING TYPICAL SECTION



### CENTER RUNNING BRT



### BENEFITS



#### Convenient

- » Transit lanes improves **transit reliability** and user experience (R)



#### Efficient

- » Transit lanes provide maximum **travel time savings** for users (R)



#### Safe

- » Improved **pedestrian access and safety** (R/E)
- » Increased **bicyclist safety**, comfort, and convenience (E)
- » Improved **vehicle safety** from separating car and transit traffic (R)



#### Vibrant and Sustainable

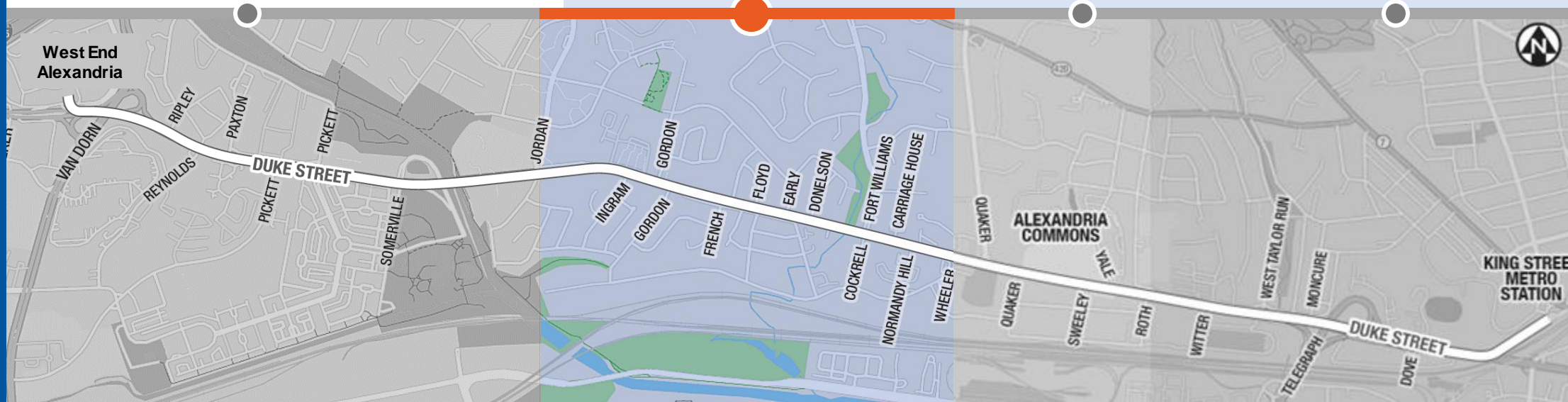
- » Areas for **trees, streetscaping, stormwater management** (R/E)



#### Equitable

- » Enhanced stations located near **high ridership/high need communities** (R)

### NOTES





## Segment 2A: Hybrid BRT

Jordan Street to Wheeler Avenue



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### EXISTING CORRIDOR

- » Two travel lanes in each direction
- » Residential and commercial frontage roads
- » No center median
- » Sidewalk on both sides of the street
- » Some curbside bus pull off areas

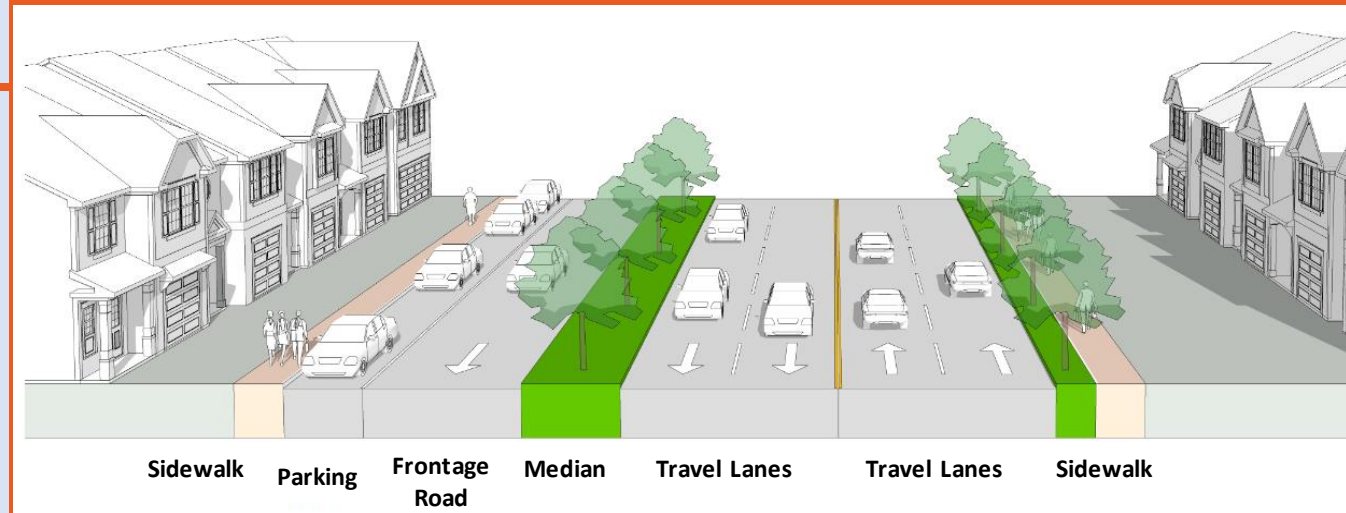
### CONCEPT

- » Two travel lanes in each direction
- » Transitions from two-way transit lanes to mixed traffic to bi-directional lane (see map below)
- » Running way adapts to reduce impacts on frontage roads
- » Mix of median and curbside bus stations
- » Buffered sidewalks
- » Opportunity to bury utilities

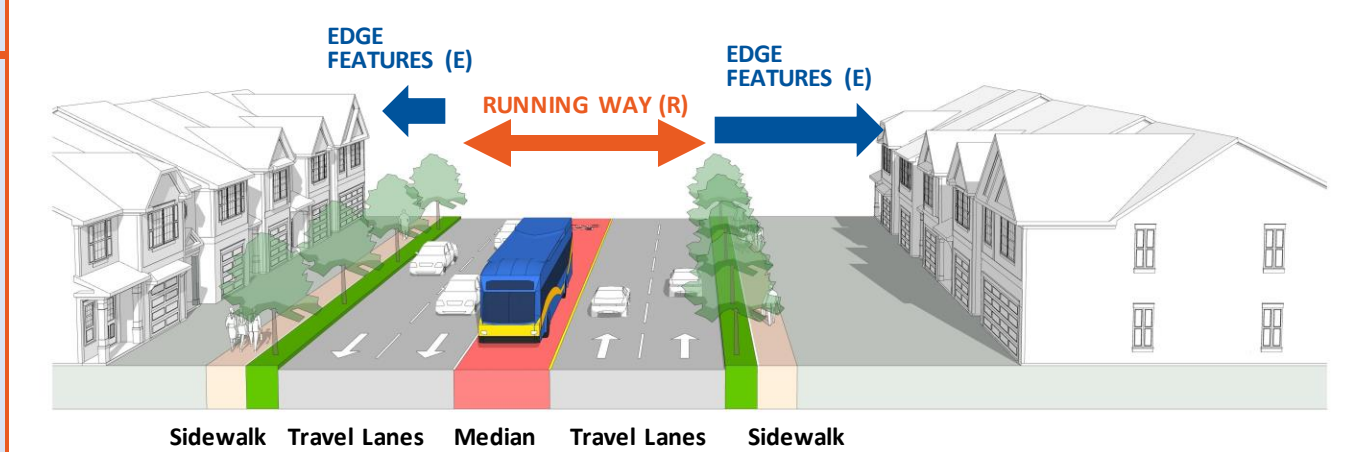
### KEY TRADE OFFS

- » Widening required in transit lane locations (R)
- » Widening impacts commercial frontage road (R)
- » No impacts to residential frontage roads (R)
- » Reduced transit efficiency (R)

### EXISTING TYPICAL SECTION



### HYBRID BRT (SHOWING BI-DIRECTIONAL LOCATION)



### BENEFITS



#### Convenient

- » Transit lane(s) improve **transit reliability** and user experience (R)



#### Efficient

- » Transit lane(s) provide **travel time savings** for users (R)



#### Safe

- » Improved **pedestrian access and safety** (R/E)



#### Vibrant and Sustainable

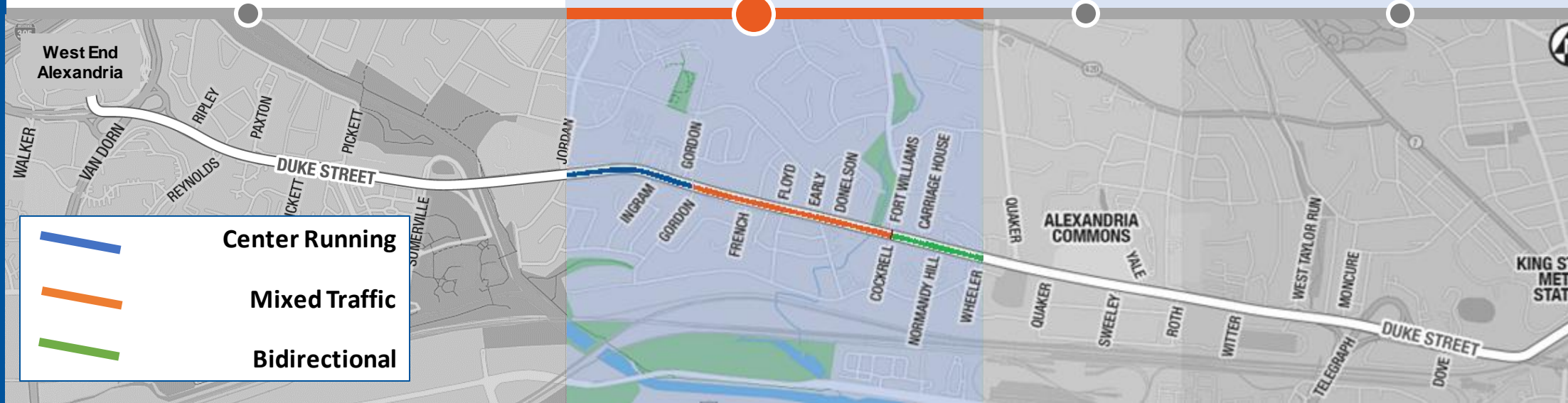
- » Areas for **trees, streetscaping, stormwater management** (R/E)



#### Equitable

- » Enhanced stations located near **high ridership/high need communities** (R)

### NOTES





## Segment 2A: Mixed Traffic BRT

Jordan Street to Wheeler Avenue



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### EXISTING CORRIDOR

- » Two travel lanes in each direction
- » Some areas with residential frontage roads
- » No center median
- » Sidewalk on both sides of the street and on one side of the frontage road
- » Some curbside bus pull off areas

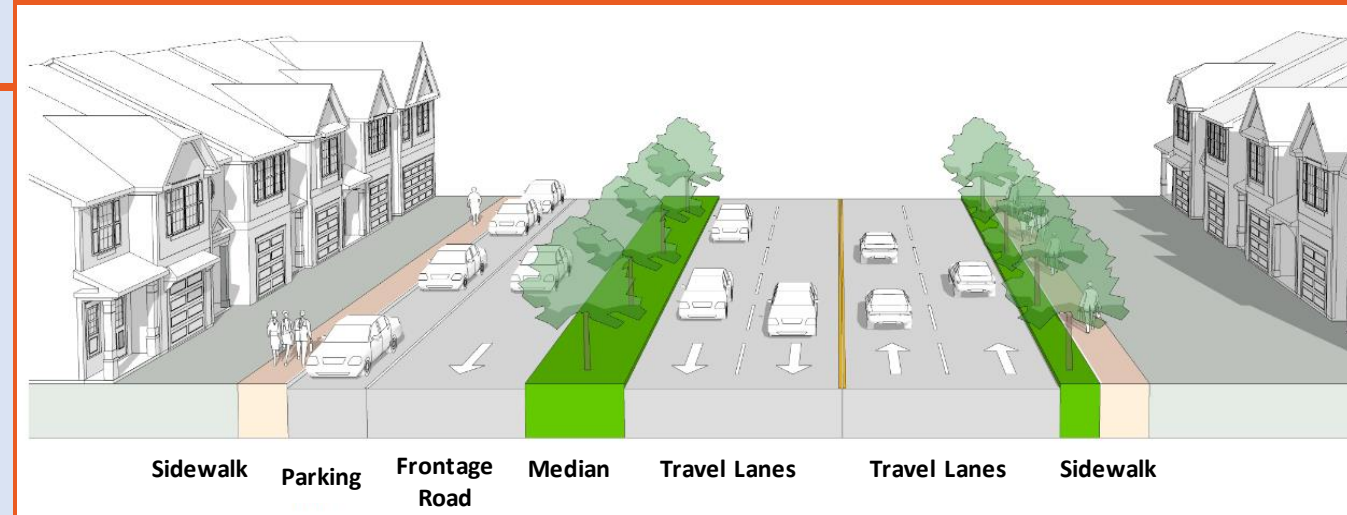
### CONCEPT

- » Two travel lanes in each direction
- » Curbside bus stations
- » Buffered sidewalk on the south side
- » Two-way shared-use-path on the north side
- » Opportunity for streetscaping along shared-use path
- » Opportunity to bury utilities

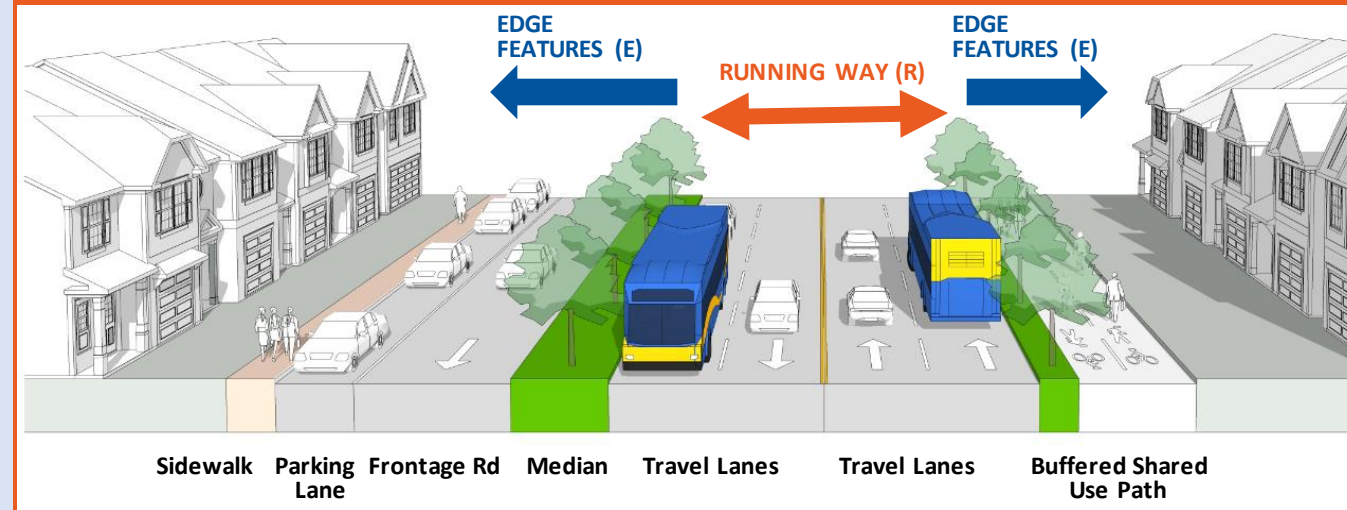
### KEY TRADE OFFS

- » Limited improvement to bus operation and reliability (R)
- » Corridor safety not significantly changed (R)
- » Frontage roads maintained (R)
- » Property impacts for shared-use path (E)

### EXISTING TYPICAL SECTION



### MIXED TRAFFIC BRT



### BENEFITS



#### Convenient

- » Transit signal priority and queue jump at intersections improve **transit reliability** and user experience (R)



#### Safe

- » Improved **pedestrian access and safety** (E)
- » Increased **bicyclist safety**, comfort, and convenience (E)



#### Vibrant and Sustainable

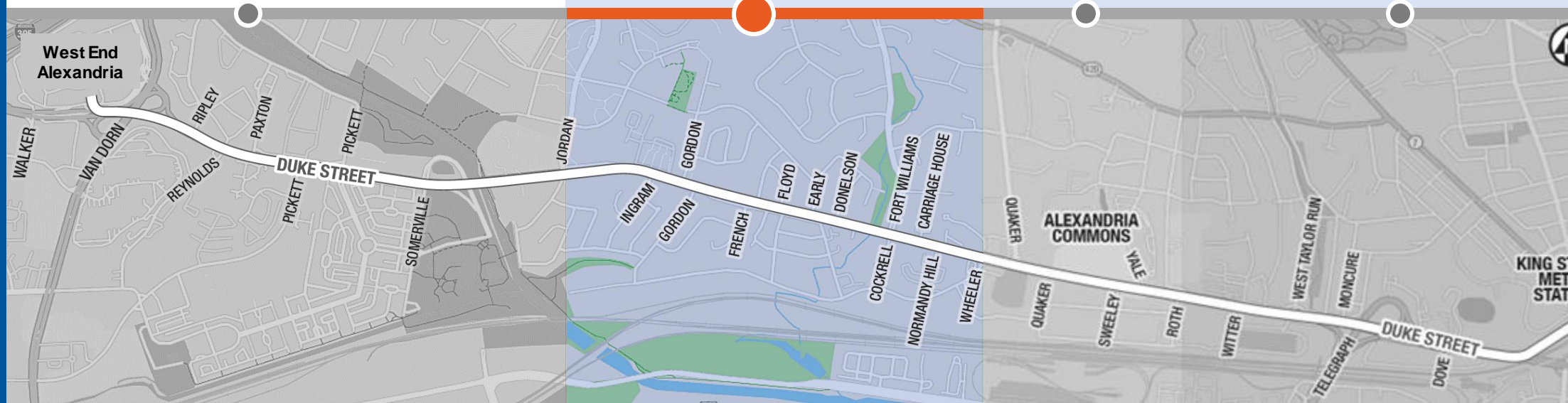
- » Improved **corridor access** to retail, parks, and recreations and preservation of **greenspace**. (E)



#### Equitable

- » Enhanced stations located near **high ridership/high need communities** (R)

### NOTES





## Segment 2B: Center Running BRT

Wheeler Avenue to Roth Street



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### EXISTING CORRIDOR

- » Two travel lanes in each direction with turn lanes
- » Primarily commercial land use
- » Sidewalks on both sides of the street

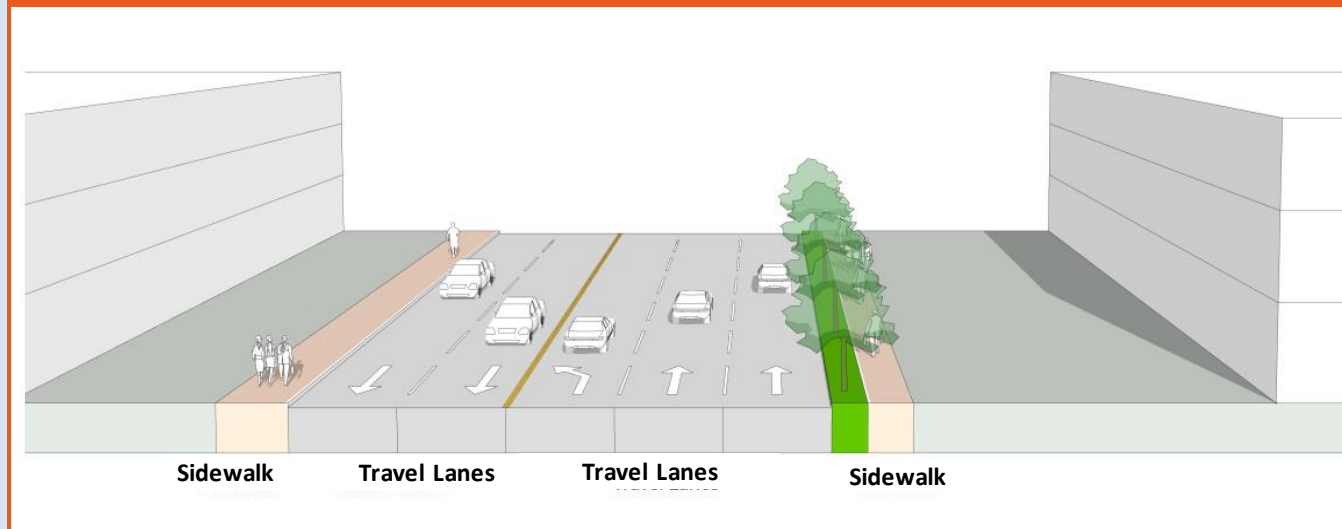
### CONCEPT

- » Two travel lanes in each direction
- » Some left-turn access restrictions
- » One dedicated transit lane in each direction
- » Median bus stations
- » Median buffer with space for landscaping and stormwater features
- » Shared-use path on the north side
- » Sidewalk with buffer on the south side

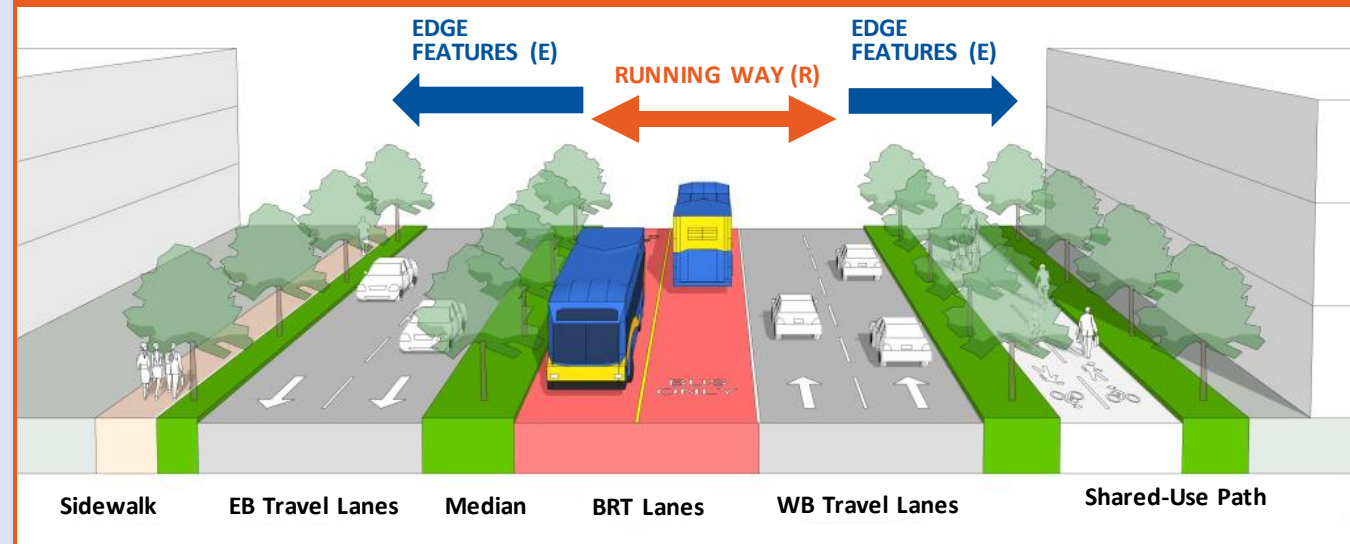
### KEY TRADE OFFS

- » Widening required with property impacts (R/E)
- » Left-turn access restrictions (R)

### EXISTING TYPICAL SECTION



### CENTER RUNNING BRT



### BENEFITS



#### Convenient

- » Transit lanes improve **transit reliability** and user experience (R)



#### Efficient

- » Transit lanes provide **travel time savings** for users (R)



#### Safe

- » Improved **pedestrian access and safety** with shorter crossings (R)
- » Increased **bicyclist safety**, comfort, and convenience (E)
- » Improved **vehicle safety** from separating car and transit traffic (R)



#### Vibrant and Sustainable

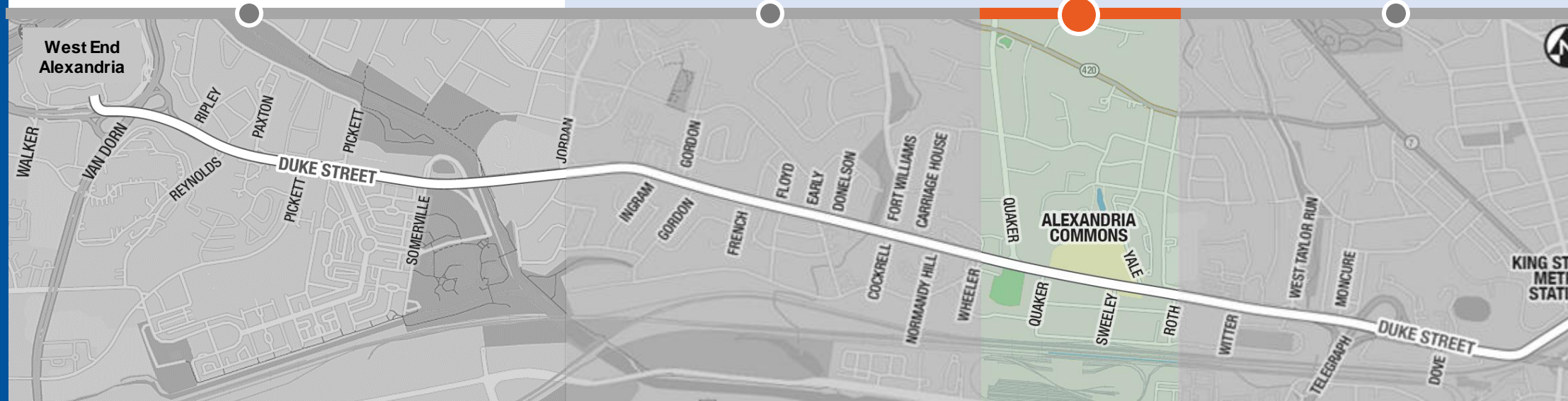
- » Increased area for **trees, street-scaping, stormwater management** (R)



#### Equitable

- » **Enhanced stations** located near **high ridership/high need communities** (R)

### NOTES





# Segment 2B: Bi-Directional BRT

Wheeler Avenue to Roth Street



## EXISTING CORRIDOR

- » Two travel lanes in each direction with turn lanes
- » Primarily commercial land use
- » Sidewalks on both sides of the street

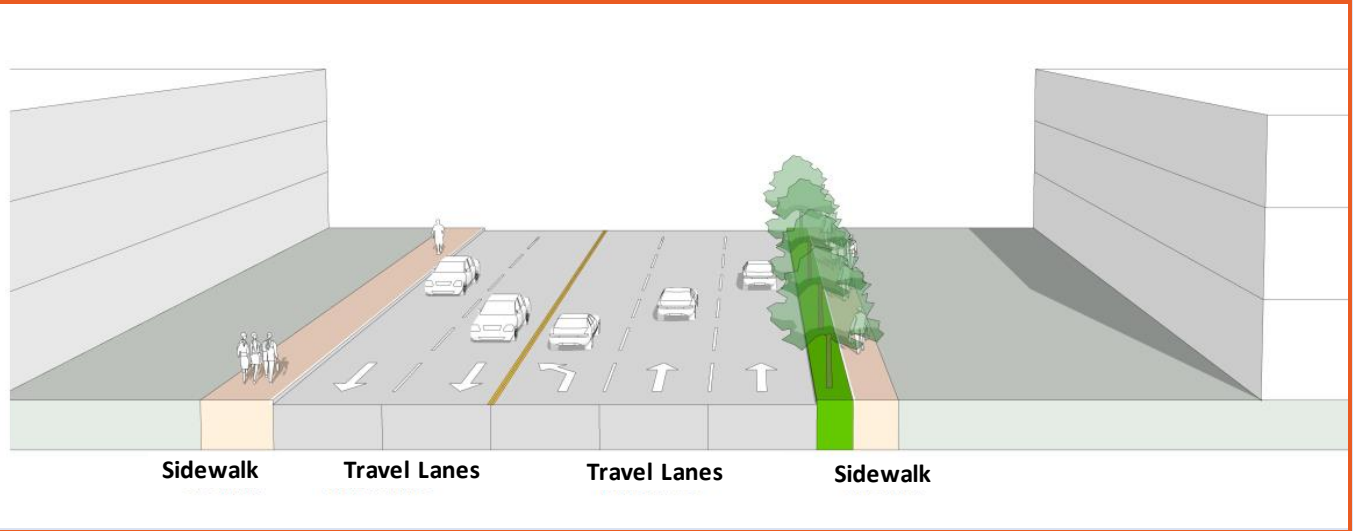
## CONCEPT

- » Two travel lanes in each direction
- » Some left turn access restrictions
- » One bi-directional transit lane
- » Median bus stations
- » Median with space for landscaping and stormwater features
- » Sidewalk on both sides of the street

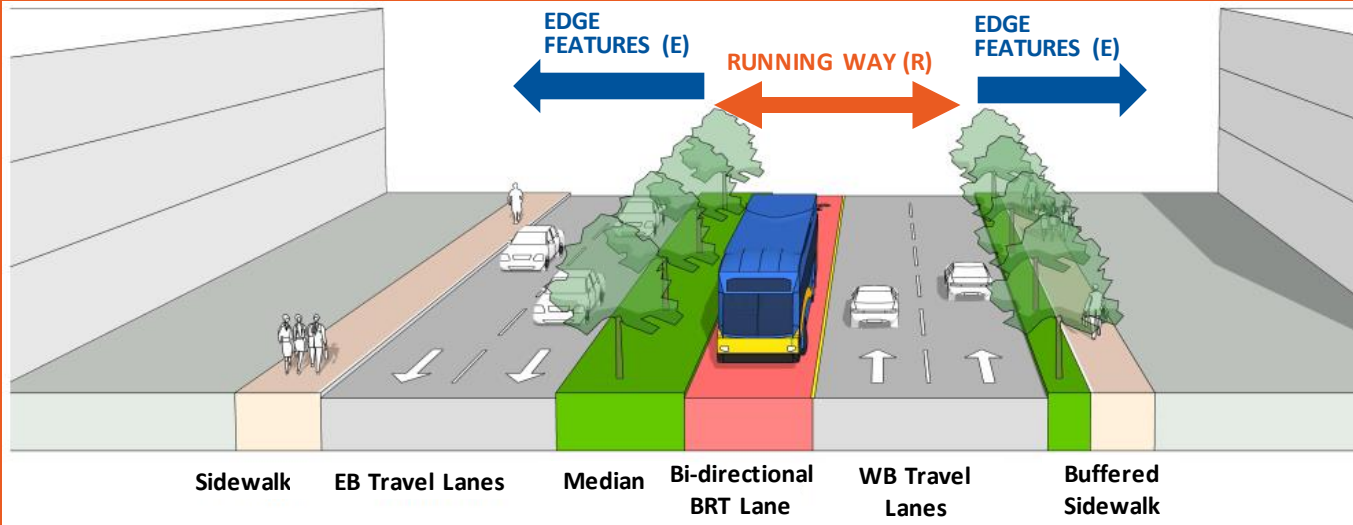
## KEY TRADE OFFS

- » Widening required to the north side (R)
- » Property impacts (R)
- » Left-turn access restrictions (R)
- » Reduced transit efficiency from two lanes (R)
- » Limited pedestrian and bicyclist safety (E)

## EXISTING TYPICAL SECTION



## CENTER RUNNING BI-DIRECTIONAL BRT



## BENEFITS



### Convenient

- » Transit lane improves **transit reliability** and user experience (R)



### Efficient

- » Transit lane provides **travel time savings** for users (R)



### Safe

- » Improved **pedestrian access and safety** with shorter crossings to stations (R)
- » Improved **vehicle safety** from separating car and transit traffic (R)



### Vibrant and Sustainable

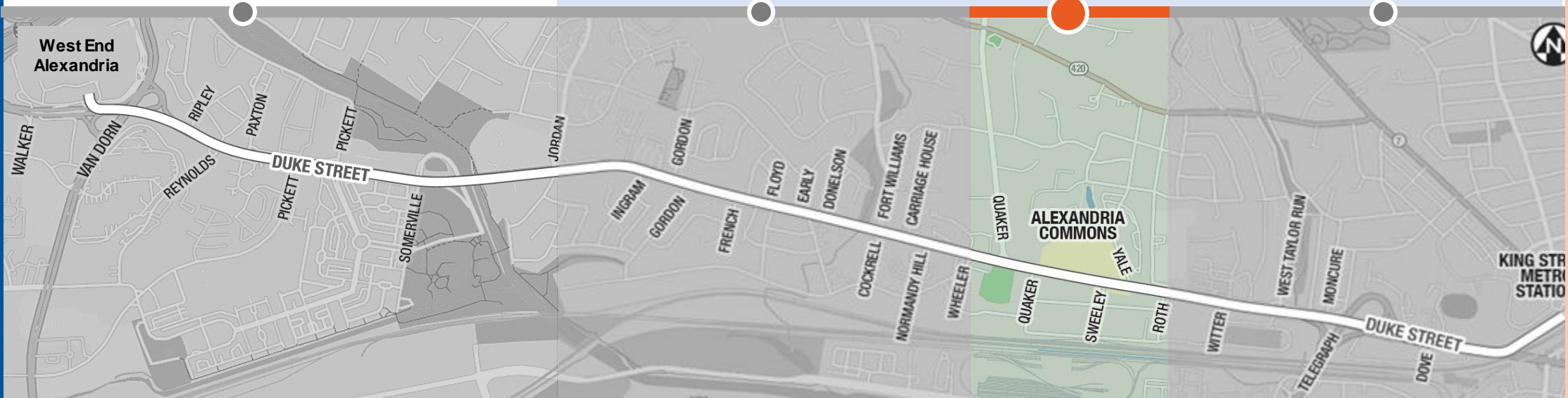
- » Increased area for **trees, street-scaping, stormwater management** (R)



### Equitable

- » **Enhanced stations** located near **high ridership/high need communities** (R)

## NOTES



## Segment 2B: Mixed Traffic BRT

Wheeler Avenue to Roth Street



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### EXISTING CORRIDOR

- » Two travel lanes in each direction with turn lanes
- » Primarily commercial land use
- » Sidewalks on both sides of the street

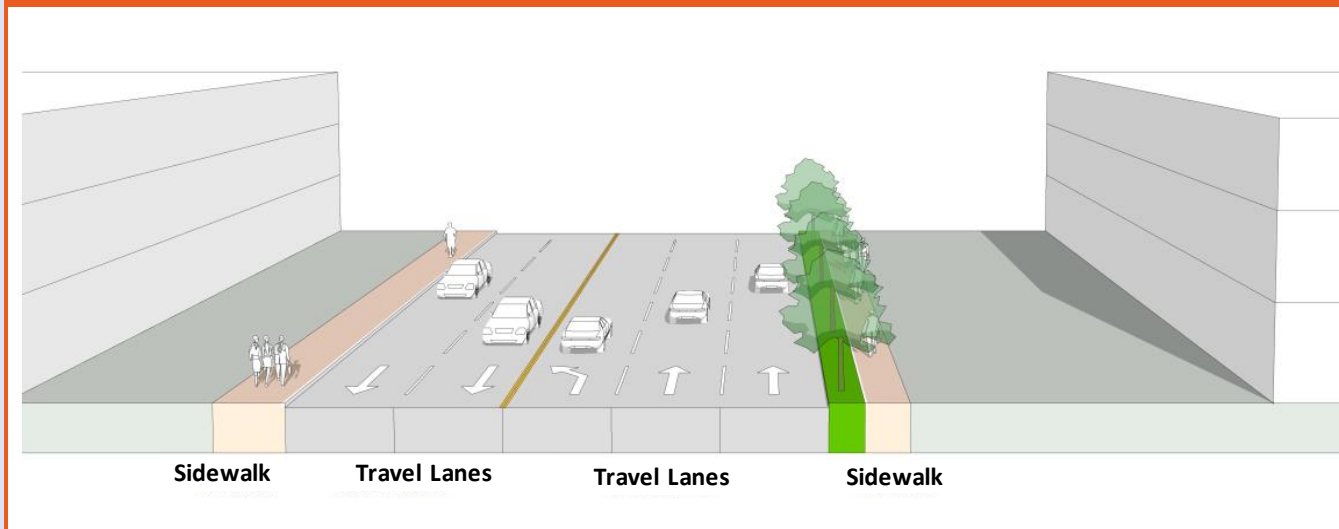
### CONCEPT

- » Two travel lanes in each direction
- » Queue jump transit lane
- » Curbside bus stations
- » Shared-use path on the north side
- » Sidewalk on the south side

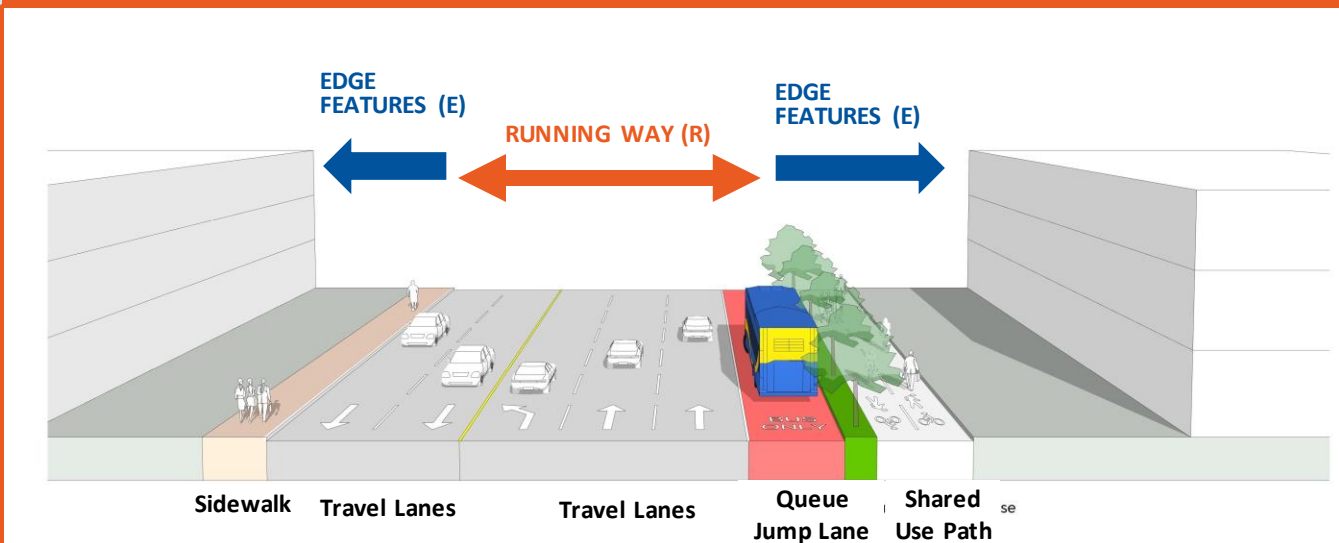
### KEY TRADE OFFS

- » Limited improvement to transit operation and reliability (R)
- » Widening required for queue jump (R)
- » Property impacts (R/E)

### EXISTING TYPICAL SECTION



### MIXED TRAFFIC BRT



### BENEFITS



#### Convenient

- » Transit signal priority and queue jump at intersections improve **transit reliability** and user experience (R)



#### Safe

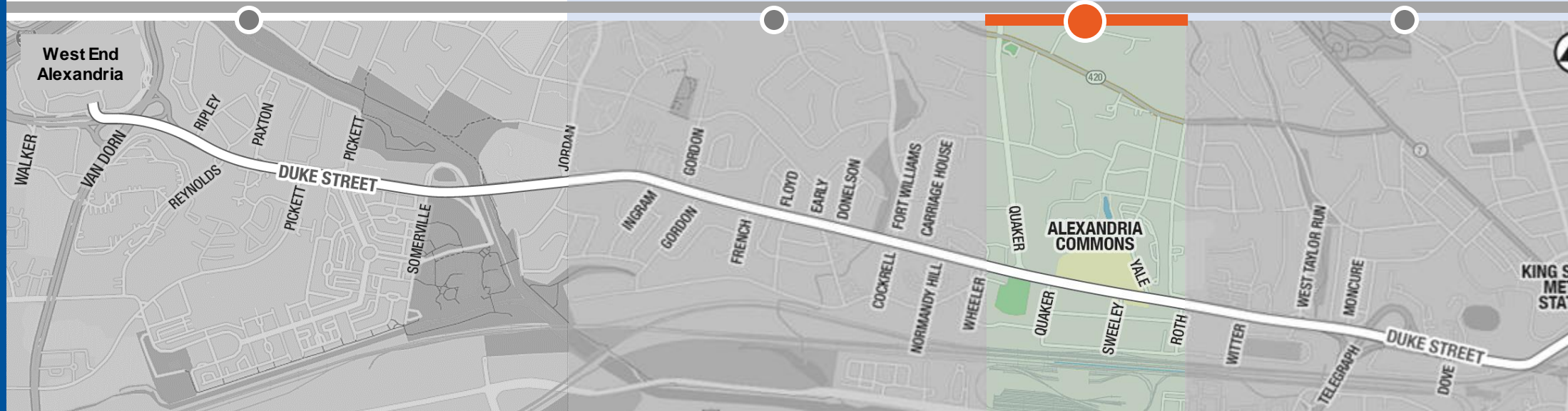
- » Improved **pedestrian access and safety** with shared-use path (E)
- » Increased **bicyclist safety**, comfort, and convenience (E)
- » Spot improvement to **vehicle safety** by separating car and transit traffic (R)



#### Equitable

- » **Enhanced stations** located near **high ridership/high need communities** (R)

### NOTES





Key		Benefits				Center Running BRT Concept		Hybrid BRT Concept		Mixed Traffic BRT Concept	
		No Benefit	Minor Benefit	Moderate Benefit	Large Benefit						
		No Impact	Minor Impact	Moderate Impact	Large Impact						
Benefits	Convenient	Bus schedule reliability and user experience				Large Benefit		Moderate Benefit		Minor Benefit	
	Safe	Corridor and intersection safety features				Large Benefit		Minor Benefit		No Benefit	
	Efficient	Bus travel time*				Large Benefit		Moderate Benefit		Minor Benefit	
Impacts	Vibrant	Non-transit vehicle travel time*				Minor Impact		Minor Impact		No Impact	
		Property impacts				Minor Impact		Minor Impact		No Impact	
		Business and residential access				Large Impact		Minor Impact		No Impact	
		Parking				Moderate Impact		Minor Impact		No Impact	

\*High level estimate based on bus running way configuration, signal delay. More detailed corridor end-to-end travel time will be provided once the corridor alternative(s) are determined.

Key		Benefits			Impacts		
No Benefit		Minor Benefit			No Impact		
Moderate Benefit		Large Benefit			Minor Impact		
					Moderate Impact		
					Large Impact		
		Center Running BRT Concept			Bi-Directional BRT Concept		
Benefits	Convenient	Bus schedule reliability and user experience			Bus schedule reliability and user experience		
	Safe	Corridor and intersection safety features			Corridor and intersection safety features		
	Efficient	Bus travel time*			Bus travel time*		
Impacts	Vibrant	Non-transit vehicle travel time*			Non-transit vehicle travel time*		
		Property impacts			Property impacts		
		Business and residential access			Business and residential access		
		Parking			Parking		

\*High level estimate based on bus running way configuration, signal delay. More detailed corridor end-to-end travel time will be provided once the corridor alternative(s) are determined.



# SCREENING LEVEL DATA – WHAT TO EXPECT

**Information:** High level analyses comparing the running way concepts

**Timeline:** October public engagement meetings and the November AG meeting

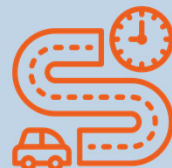
**Goal:** Help inform feedback and discussions as we narrow down running way concepts for further analysis



## Transit Reliability

Estimate of on time performance and degree of adherence to planned schedule.

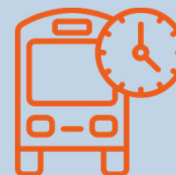
Convenient



## Traffic Travel Time

Estimate of point to point traffic travel time compared to existing.

Efficient



## Transit Travel Time

Estimate of point to point transit travel time savings compared to existing.



## Crashes Mitigated

Estimate of number of crashes that could be reduced.

Safe

Source: Flaticons.com

## Slide 11

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### HO6

Is this about narrowing down alternatives or helping people have information that will help them prioritize tradeoffs?

Hillary Orr, 9/7/2022



## **ELECTRONIC PARTICIPATION POLICY FOR REMOTE PARTICIPATION AND ALL- VIRTUAL PUBLIC MEETINGS TEMPLATE**

City of Alexandria

Duke Street in Motion Advisory Group

Electronic Participation Policy for Remote Participation and All-Virtual Public Meetings

It is the policy of Duke Street in Motion Advisory Group that members may participate in meetings of the Commission by electronic communication means as permitted by § 2.2-3708.3 of the Code of Virginia.

### **Remote Participation by Individual Members**

Remote participation by individual members is allowed under the following circumstances:

1. A personal matter
  - a. On or before the day of a meeting, the member shall notify the Chair that the member is unable to attend the meeting due to a personal matter. The member must identify with specificity the nature of the personal matter.
  - b. A quorum of the Commission must be physically assembled at the primary or central meeting location.
  - c. The Chair may approve or disapprove the request for electronic participation. If the absent member's remote participation is disapproved because such participation would violate this policy, the basis for the disapproval shall be recorded in the Advisory Group's minutes. The decision shall be based solely on the criteria in this policy, without regard to the identity of the member or matters that will be considered or voted on during the meeting.
  - d. The Commission shall record the specific nature of the personal matter and the remote location from which the absent member participated in the Commission's minutes.
  - e. Participation by the absent member due to a personal matter shall be limited in each calendar year to: (1) two (2) meetings or (2) 25% of the meetings held rounded up to the next whole number, whichever is greater, of the Commission.
2. A member's temporary or permanent disability or other medical condition or a family member's medical condition that requires the member to provide care for such family members, thereby preventing the member's physical attendance
  - a. On or before the day of a meeting, the member shall notify the Chair that the member is unable to attend the meeting due to the member's temporary or permanent disability or other medical condition that prevents his or her physical

attendance or a family member's medical condition that requires the member to provide care for such family members, thereby preventing the member's physical attendance.

- b. A quorum of the Board must be physically assembled at the primary or central meeting location.
  - c. The Commission shall record the fact of the member's disability or other medical condition or a family member's medical condition that requires the member to provide care for such family members, thereby preventing the member's physical attendance, and the remote location from which the absent member participated in the Commission's minutes.
3. The member's principal residence is more than 60 miles from the meeting location identified in the meeting notice.
  4. For any remote electronic participation, the Commission shall make arrangements for the voice of the absent member or members to be heard by all persons in attendance at the meeting location.

#### All Virtual Meetings

All-virtual meetings are permitted, other than for groups prohibited by Code of Virginia § 2.2-3708.3, when conducted in conformance with the following requirements:

1. The meeting notice shall indicate that the meeting will be all-virtual and a statement that the method by which the Commission meets shall not be changed unless a new notice is advertised;
2. Public access to all-virtual public meetings is provided via electronic communication means;
3. The electronic communication means used allows the public to hear all members of the Commission participating in the all-virtual public meeting and, when audio-visual technology is available, to see the members of the group as well;
4. A phone number or other live contact information is provided to alert the group if the audio or video transmission of the meeting fails. The Commission shall monitor the means of communication during the meeting and recess until public access is restored if the transmission fails for the public;
5. A copy of the proposed agenda and all agenda packets and, unless exempt, all materials furnished to members of the Commission for a meeting is made available to the public in electronic format at the same time that such materials are provided to members of the group;
6. The public is afforded the opportunity to comment through electronic means, including by way of written comments, at those public meeting when public comment is customarily received;



7. No more than two members of the Commission are together in any one remote location unless that remote location is open to the public to physically access it;
8. If a closed session is held during an all-virtual public meeting, transmission of the meeting to the public resumes before the Commission votes to certify the closed meeting as required by § 2.2-3712(D);
9. The Commission shall not convene an all-virtual meeting more than (i) two (2) meetings or (ii) 25% of the meetings held per calendar year rounded up to the next whole number, whichever is greater. The Commission shall not hold consecutive all-virtual meetings; and
10. Minutes of all-virtual public meetings held by electronic communication means are taken as required by Code of Virginia § 2.2-3707 and include the fact that the meeting was held by electronic communication means and the type of electronic communication means by which the meeting was held. If a member's participation from a remote location is disapproved because such participation would violate this policy, such disapproval shall be recorded in the minutes with specificity.

This policy shall not govern an electronic meeting conducted to address a state of emergency declared by the Governor or the City Council. Any meeting conducted by electronic communication means under such circumstances shall be governed by the provisions of Code of Virginia § 2.2-3708.2.