DUKE STREET IN MOTION

Segment 3: Center Running

Roth Street to King Street Metro Station

AlexandriaVA.gov/DukeInMotion

EXISTING CORRIDOR

- Three travel lanes in each direction
- Median with trees
- Sidewalk on both sides of the street (northern sidewalk along elevated service road)
- Some areas with service roads
- Bicycle sharrows on service road

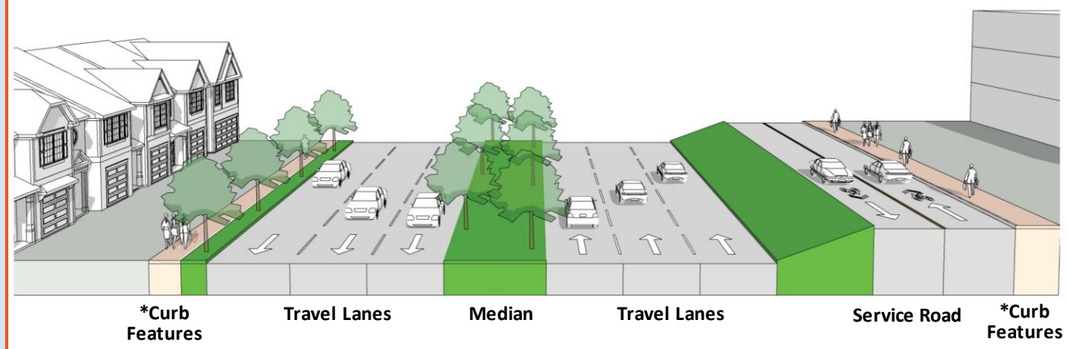
CONCEPT

- Two travel lanes in westbound (WB) direction
- Three travel lanes in eastbound (EB) direction
- A dedicated bus lane in each direction
- Median buffer with space for landscaping and stormwater features

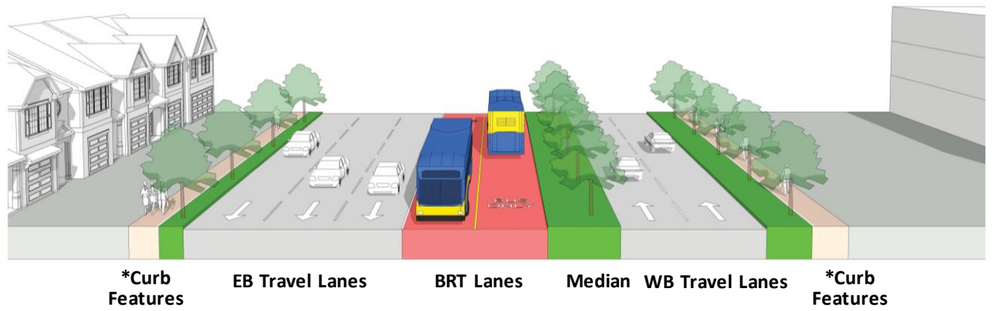
KEY TRADE OFFS

- Number of general travel lanes (WB) reduced
- Potential increase in vehicle travel time

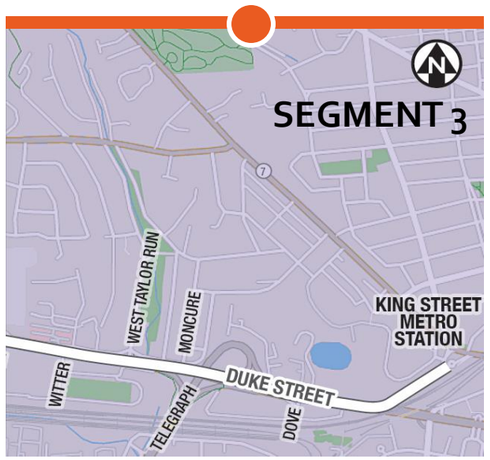
EXISTING TYPICAL SECTION

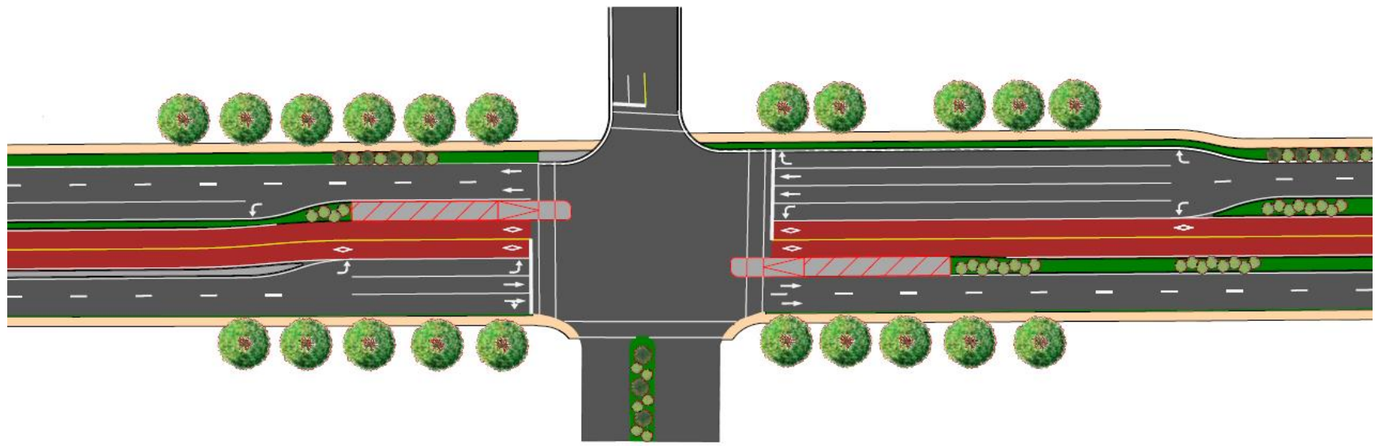


CENTER RUNNING CONCEPT



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





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

BENEFITS

Convenient
- Provides maximum **transit reliability** and bus rider experience improvements

Efficient
- Provides maximum **travel time savings** for bus riders

Safe
- Improved **pedestrian access and safety** with shorter crossings
- Improved **vehicle safety** from separating car and bus traffic and reducing conflict areas

Vibrant and Sustainable
- Increased area for **trees, street-scaping, stormwater management**

Equitable
- **Enhanced stations** located near **high ridership/high need communities**

DUKE STREET IN MOTION

Segment 3: Curb Running

Roth Street to King Street Metro Station

AlexandriaVA.gov/DukeInMotion

EXISTING CORRIDOR

- Three travel lanes in each direction
- Median with trees
- Sidewalk on both sides of the street (northern sidewalk along elevated service road)
- Some areas with service roads
- Bicycle sharrows on service road

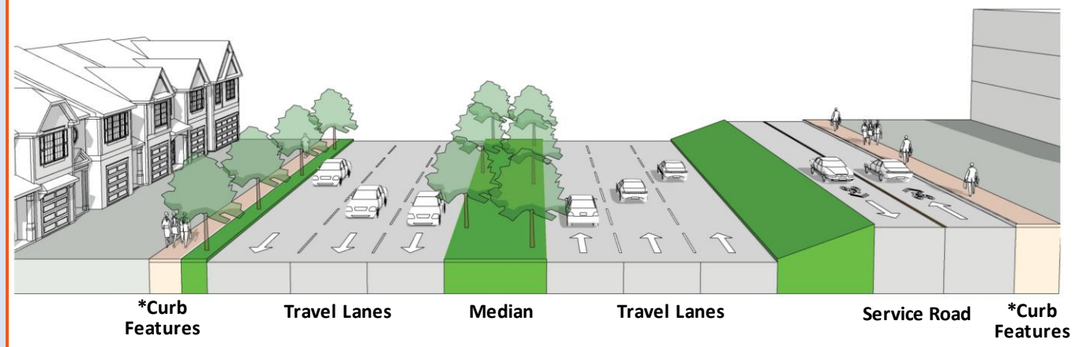
CONCEPT

- Two travel lanes in westbound (WB) direction
- Three travel lanes in eastbound (EB) direction
- Dedicated bus lane in WB direction
- No change to median

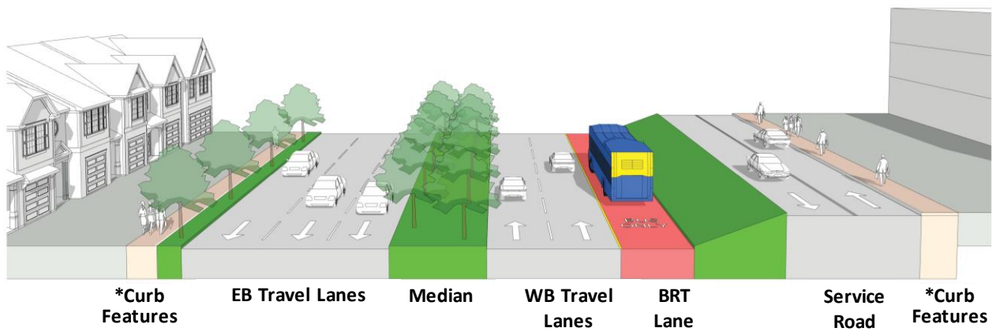
KEY TRADE OFFS

- Number of general travel lanes (WB) reduced
- Number of travel lanes (EB) maintained
- Potential increase in vehicle travel time (WB)

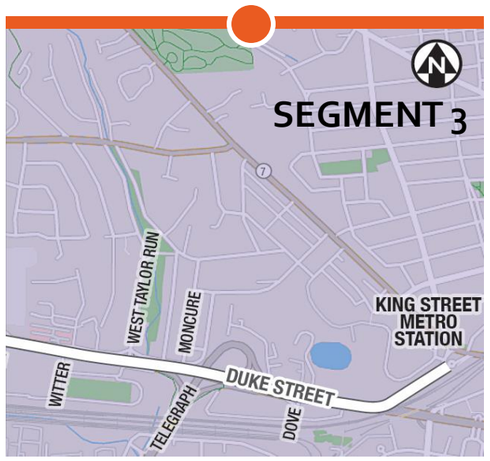
EXISTING TYPICAL SECTION

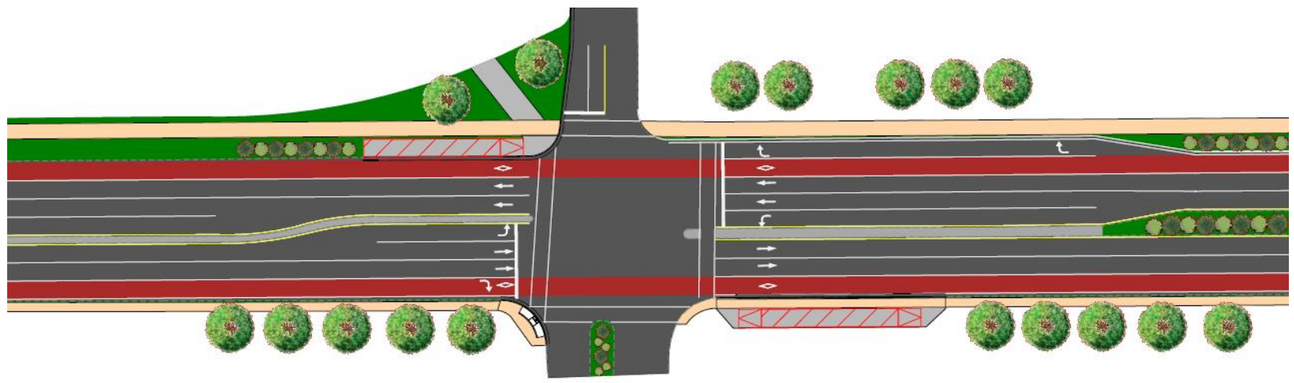


CURB RUNNING CONCEPT



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





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

BENEFITS

Convenient

- Dedicated bus lane improves **transit reliability** and bus rider experience

Efficient

- Dedicated curbside transit lane provides **travel time savings** for bus riders in the westbound direction

Safe

- Improved **vehicle safety** from separating car and transit traffic and reducing conflict areas

Equitable

- **Enhanced stations** located near **high ridership/high need communities**

DUKE STREET IN MOTION

Segment 3: Mixed Traffic

Roth Street to King Street Metro Station

AlexandriaVA.gov/DukeInMotion

EXISTING CORRIDOR

- Three travel lanes in each direction
- Median with trees
- Sidewalk on both sides of the street (northern sidewalk along elevated service road)
- Some areas with service roads
- Existing bicycle sharrows on frontage road

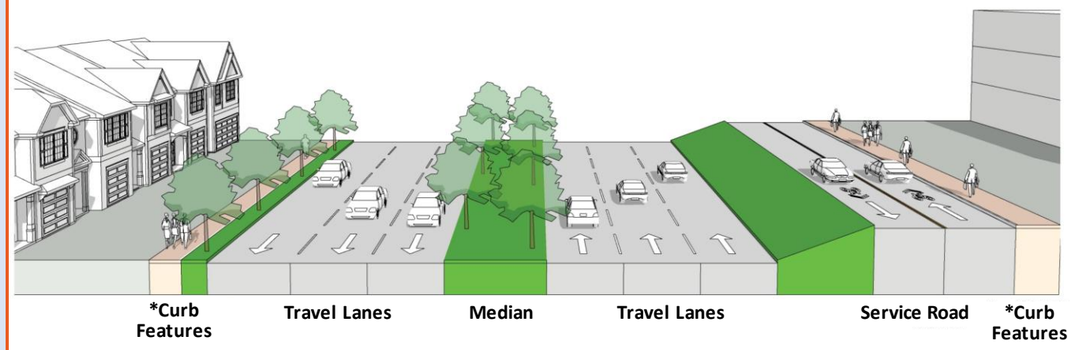
CONCEPT

- Three travel lanes in each direction
- No dedicated bus lane in either direction
- No change to median
- Queue jump areas at spot locations along the corridor

KEY TRADE OFFS

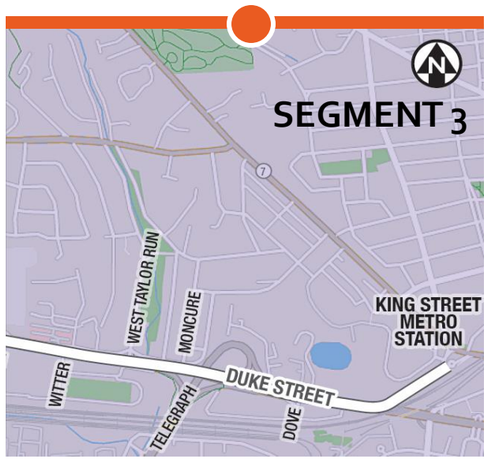
- Limited/reduced improvement to bus operation and reliability
- Limited improvements to vehicle safety in the corridor

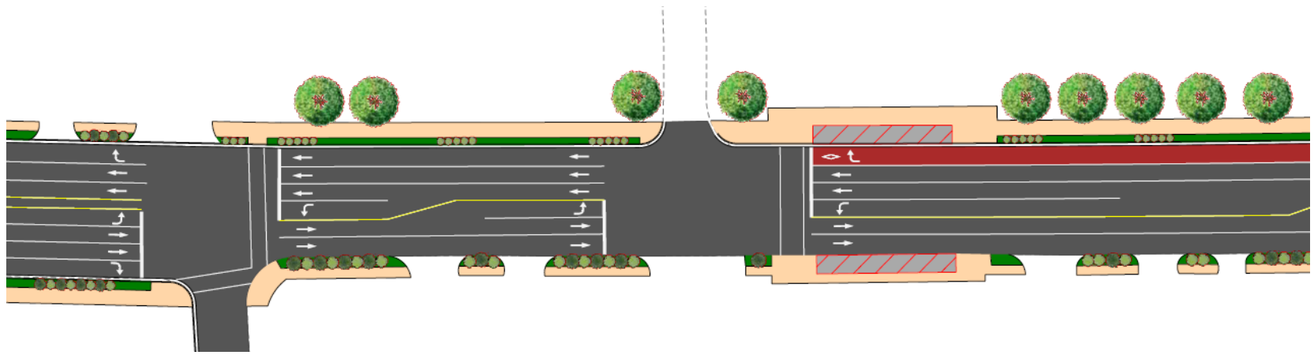
EXISTING TYPICAL SECTION



MIXED TRAFFIC CONCEPT

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





LEGEND

- BRT Station
- Bus-only Lanes (Queue Jump)
- Landscaping/Buffer
- Curb Features*

BENEFITS

Convenient

- Transit signal priority and queue jump at intersections improve **transit reliability** and bus rider experience

Safe

- Spot improvement to **vehicle safety** by separating car and bus traffic at queue jumps

Vibrant and Sustainable

- Center median and **tree canopy** remain

Equitable

- **Enhanced stations** located near **high ridership/high need communities**