

South George Mason Drive Multimodal Corridor Study

Virtual Public Meeting – July 2022

Leah Gerber – Principal Planner, DES
Nate Graham – Public Engagement Specialist, DES

Christina Fink – Senior Traffic Engineer, Toole Design
Wendy Phelps – Senior Planner, Toole Design



ARLINGTON
VIRGINIA

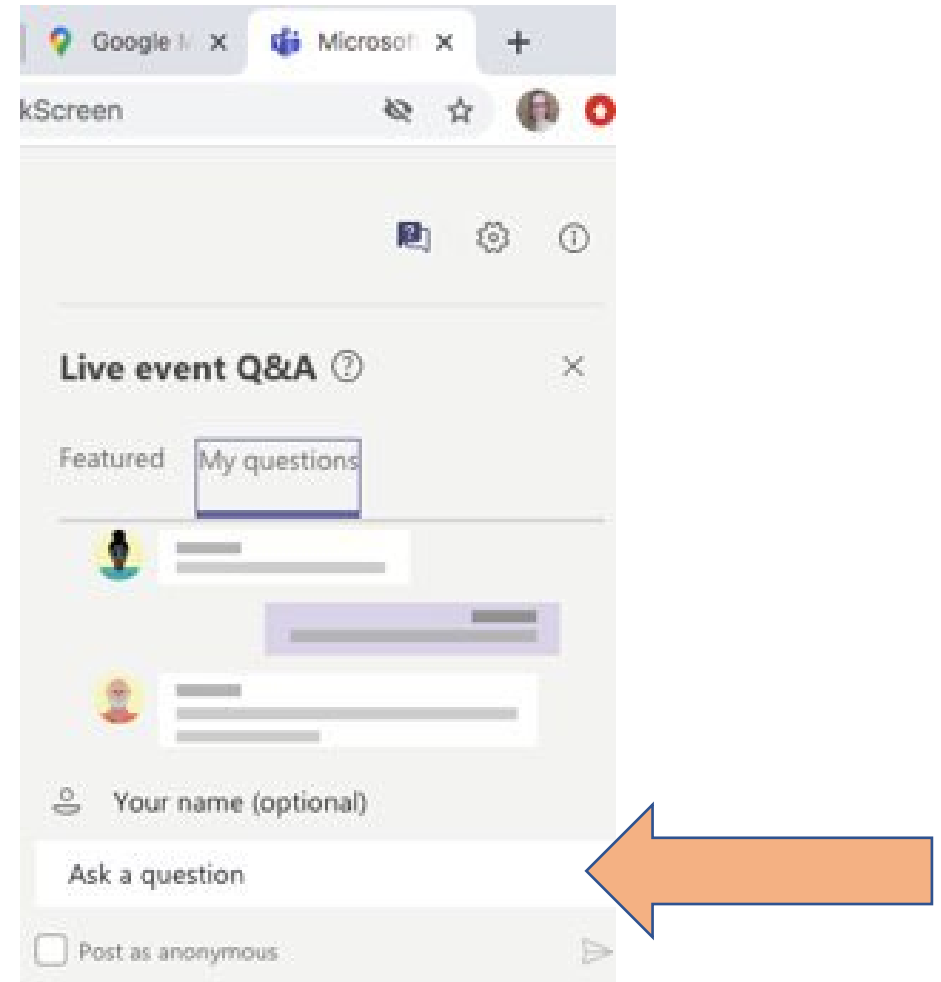
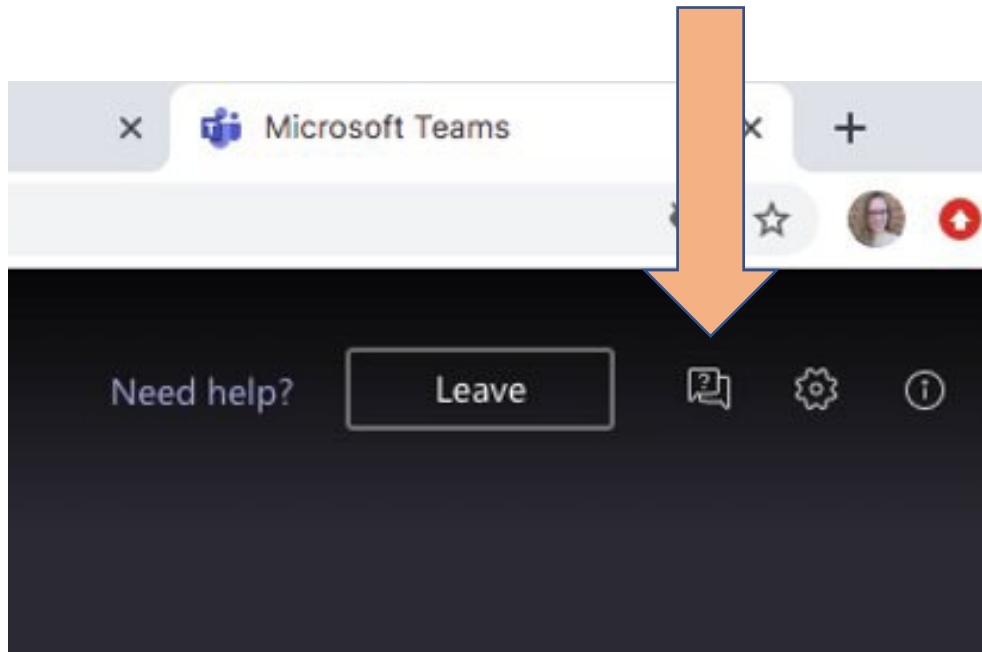
Environmental Services



Meeting Agenda

- Study Overview
- Existing Conditions Engagement – What We Heard
- Data Collection & Analysis
- Corridor-Wide Concepts
- Public Engagement & Next Steps

How to Ask Questions



Study Overview



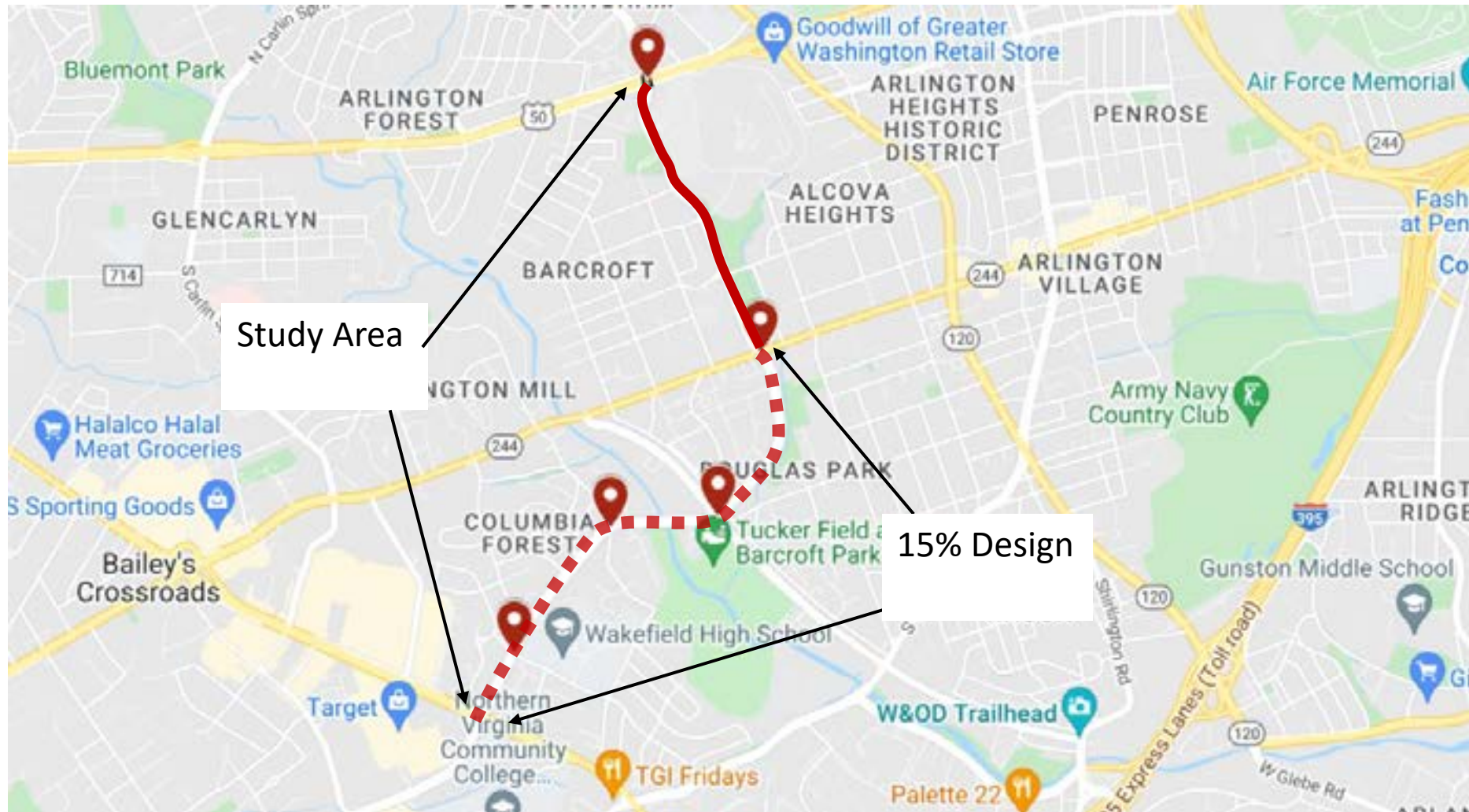
Study Goals

The purpose of this study is to develop a preliminary plan to improve safety and access along S. George Mason Drive for people walking/rolling, riding transit, cycling, and driving. This study will be informed by:

- County Planning Guidance
- Data Analysis and Research
- Inter-departmental Coordination
- Public Engagement



Study Area



Corridor Segments

- Segment 1: Arlington Boulevard – Columbia Pike
- Segment 2: Columbia Pike – S. Four Mile Run Drive
- Segment 3: S. Four Mile Run Drive – Arlington/Fairfax County Line



Existing Conditions – What We Heard



Existing Conditions Engagement Methods

Engagement Opportunity	Method	Date/Time	Attendees/Respondents
Community Kickoff Meeting	Online	April 6, 7:00 PM	16
Online Feedback Questionnaire & Map	Online	April 6 to May 1	Survey: 404 Unique Respondents Map: 625 Total Comments
Barcroft Walking Tour	In Person	April 23, 12:00 PM	8
Alcova Heights Walking Tour	In Person	April 28, 2:00 PM	4

Demographic Data

- Online questionnaire open for nearly a month
- 76% live in Arlington
- 42% work in Arlington
- 9% commuter through Arlington
- 5% of respondents said they had a disability that impacted their mobility

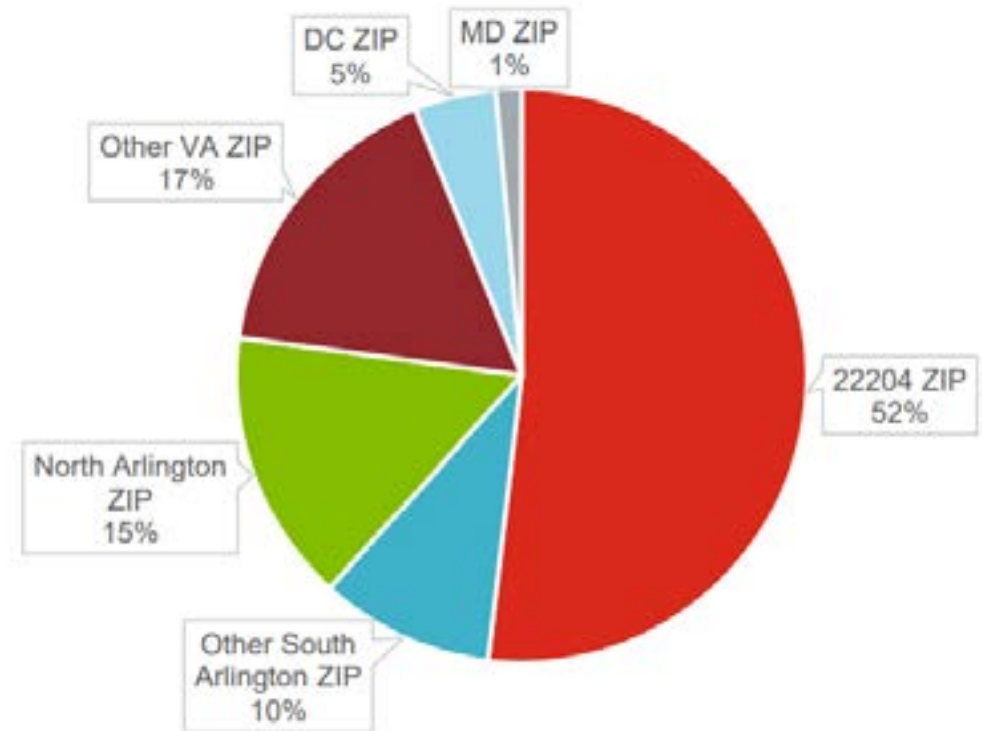


Figure 4-1: Home ZIP Codes

Travel Habits

- 35% traveling 6-7 days
- 28% traveling 4-5 days a week
- 70% use the corridor primarily to reach destinations on or near S. George Mason Drive
- 30% use the corridor to get to other places

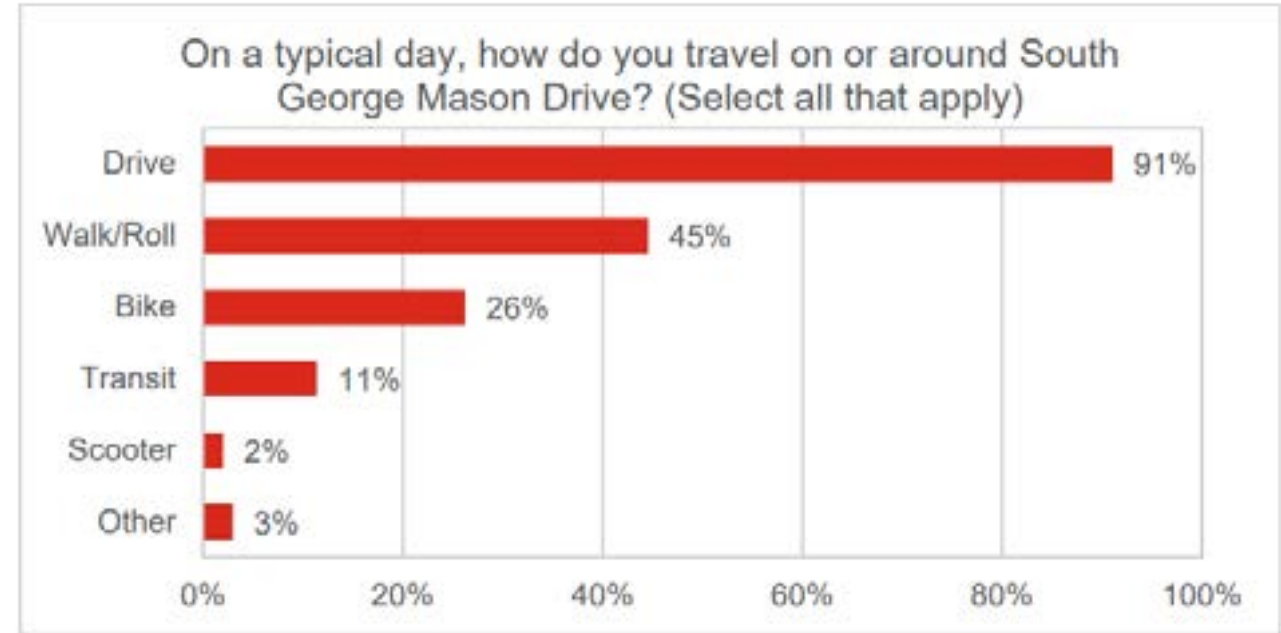
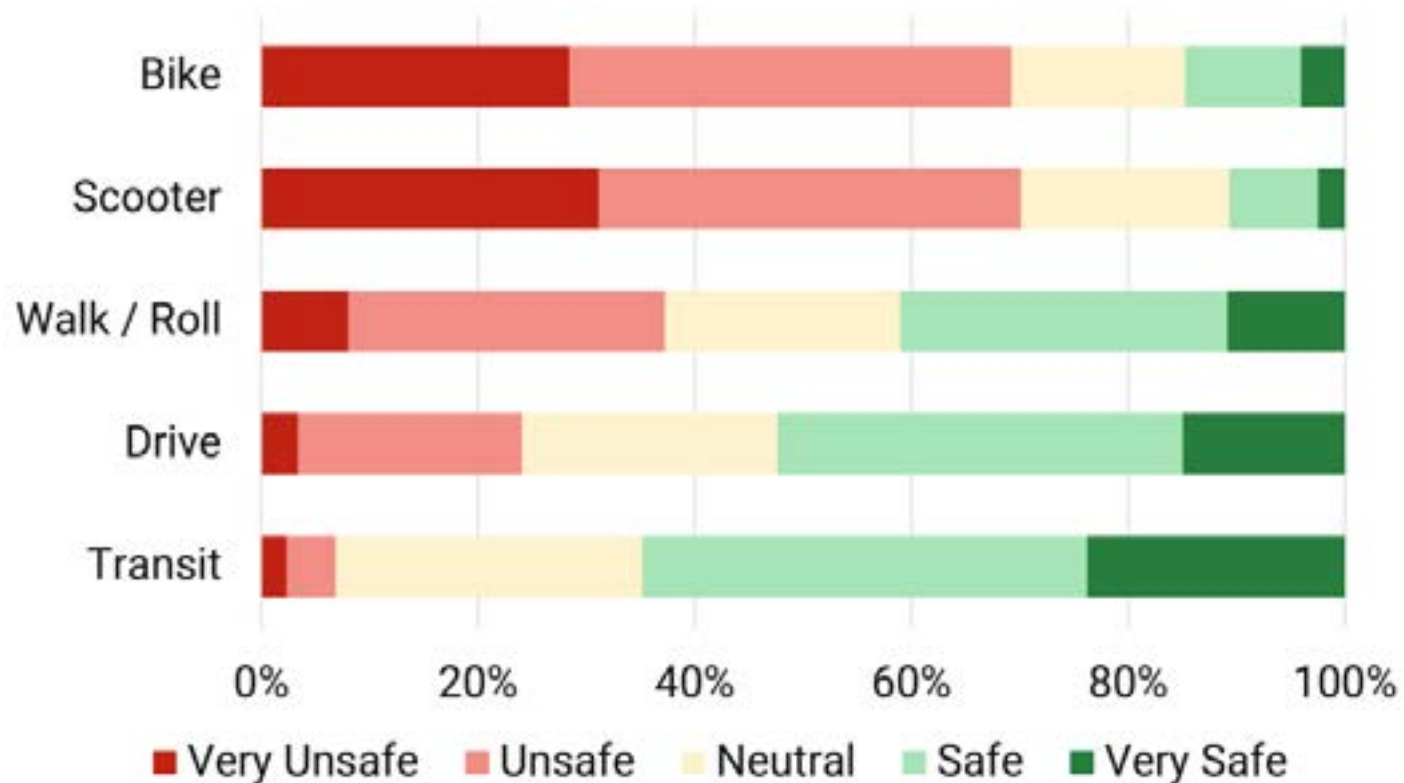


Figure 4-2: Typical Mode of Transportation on South George Mason Drive

Perception of Safety by Mode

Overall, how safe do you feel while traveling along South George Mason Drive using the following types of transportation?



Potential Changes

Most common responses people selected were:

- Safer intersections (50%)
- Protected bike lanes (45%)
- Slower traffic (32%)
- Crosswalks were also high on the list at 23%

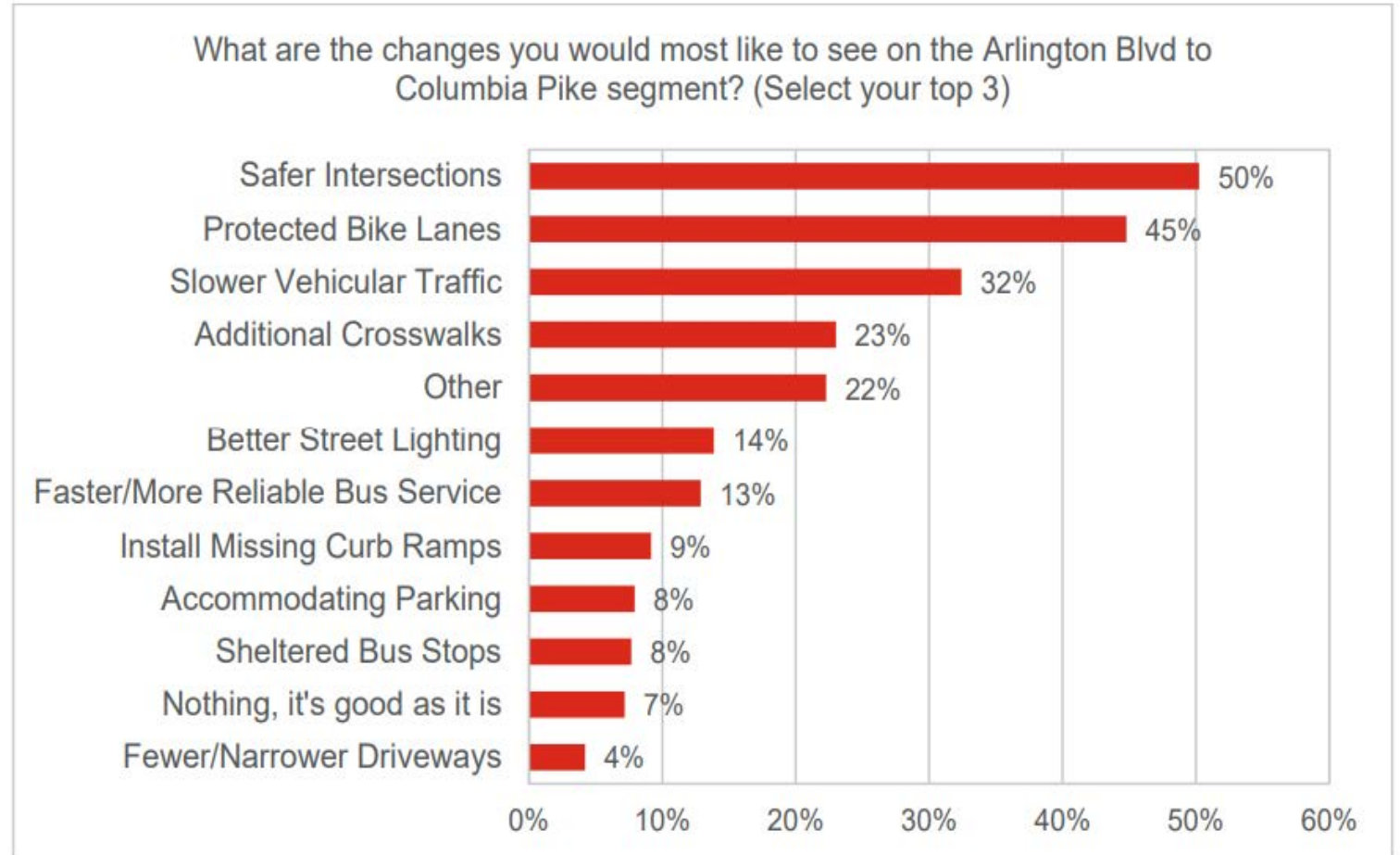
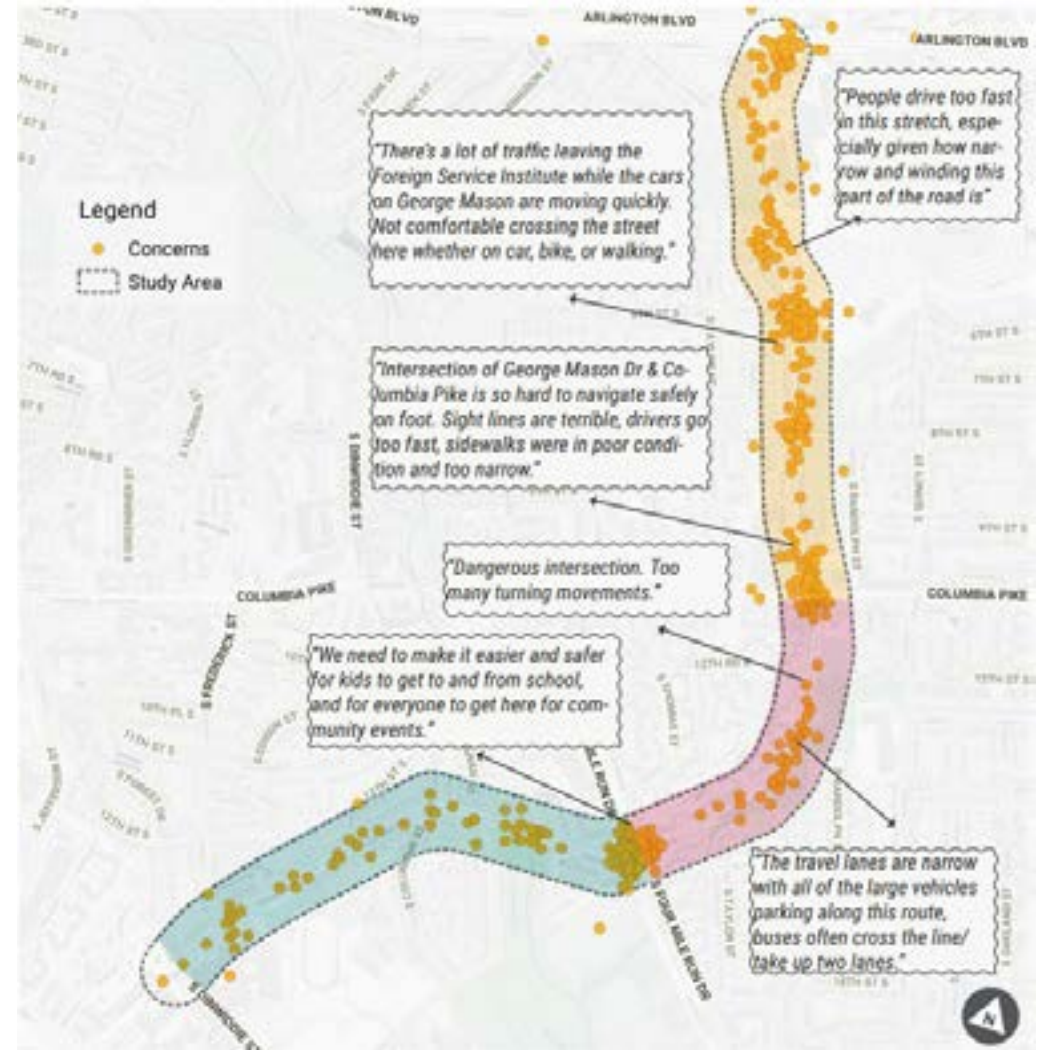


Figure 4-4: Potential Changes in Order of Preference

Concerns Pins and Comments

- "There's a lot of traffic leaving the Foreign Service Institute while the cars on George Mason are moving quickly. Not comfortable crossing the street here whether on car, bike, or walking."
- "Intersection of George Mason Dr & Columbia Pike is so hard to navigate safely on foot. Sight lines are terrible, drivers go too fast, sidewalks were in poor condition and too narrow."
- "The travel lanes are narrow with all of the large vehicles parking along this route, buses often cross the line/take up two lanes."
- "We need to make it easier and safer for kids to get to and from school, and for everyone to get here for community events."



Comment Themes

- Regardless of how they traveled, many road users focused comments on the complex intersections at Arlington Blvd and Four Mile Run Drive
- Entering South George Mason Drive from driveways and side streets was another top concern, most prevalent amongst people who drive to the Foreign Service Institute/National Foreign Affairs Training Center (FSI/NFATC)
- People bicycling were particularly challenged by the Columbia Pike and 8th Street intersections

Data Collection and Analysis



What's Here Today – Walking/Rolling



Table 3-2: Pedestrian Crossing Locations

Crossing Location	Type of Crossings	Distance to nearest marked crossing to the south
Arlington Blvd north (WB)	Signalized	225'
Arlington Blvd south (EB)	Signalized	650'
National Guard Bureau	PHB	850'
4 th Street	Marked – unsignalized	500'
6 th Street	Marked – unsignalized	775'
8 th Street	Signalized	1,100'
Columbia Pike	Signalized	975'
13 th Street	PHB	950'
North of Four Mile Run Drive	Marked – unsignalized	525'
Four Mile Run Drive Service Road	Signalized	150'
Four Mile Run Drive Main	Signalized	1,400'
Columbus Street	Signalized	1,650'
Frederick Street	PHB (to be converted to full signal)	425'
Hamilton Drive/Dinwiddie Street	Signalized	900'

MTP: "Along arterial streets, where intersections with marked crosswalks are more than **800'** apart, and pedestrian crossing volumes are significant, consideration is to be given to providing mid-block crossings."

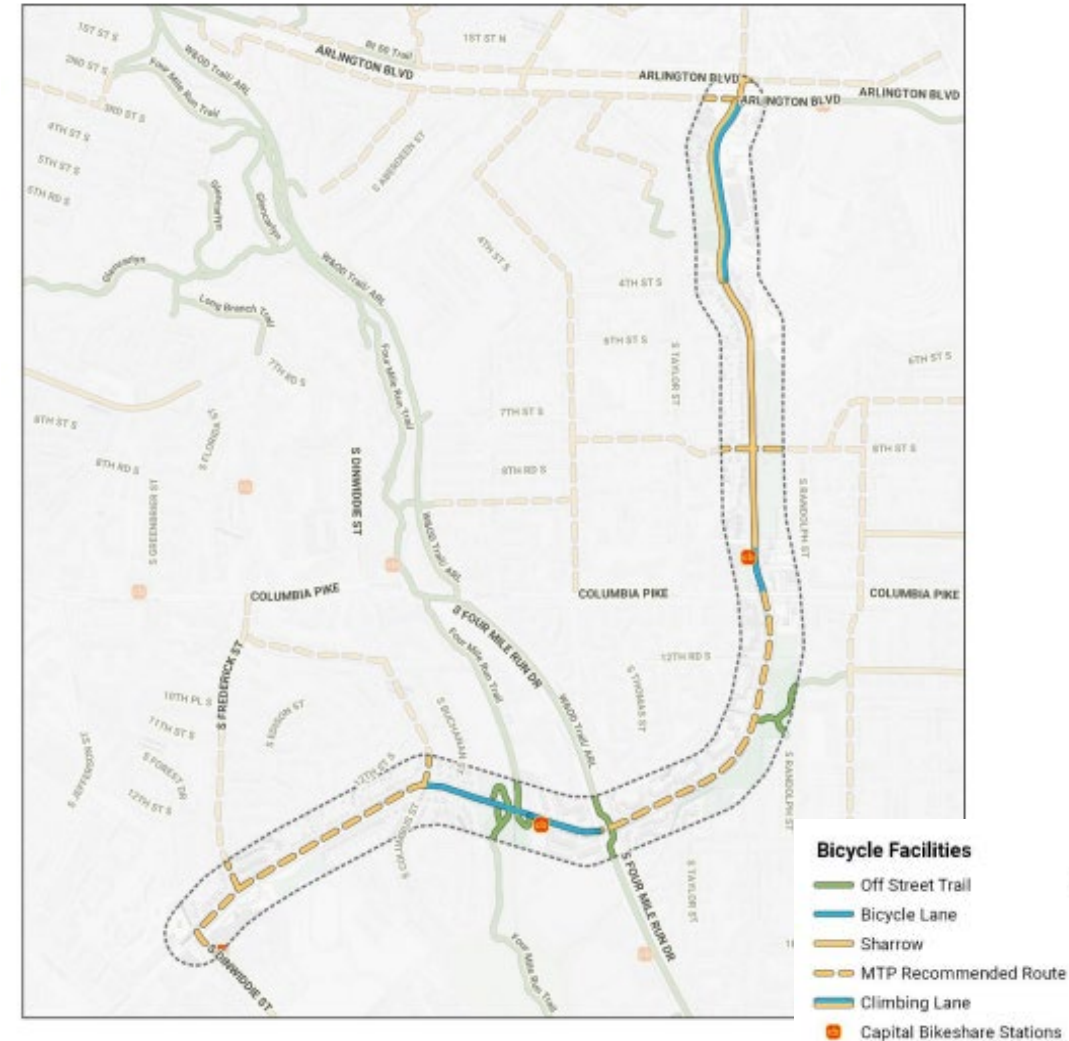
What's Here Today – Riding Transit



Table 3-3: Transit Routes and Headways

Route	Route on George Mason Drive	Route Destinations off of George Mason Drive	Schedule
Metrobus 22A	Henderson Road (north of Arlington Blvd) to Columbia Pike	Ballston Metro Station to Pentagon Metro Station	7-Day Hourly
ART 45	Four Mile Run Dr to Columbia Pike	S Dinwiddie & Columbia Pike to Rosslyn Metro Station	7-Day Half-hourly
ART 72	Henderson Road (north of Arlington Blvd) to Four Mile Run Dr Service	Rock Spring – Williamsburg Blvd & N Glebe Road to Shirlington Bus Station	5-Day Half-hourly
ART 75	Frederick Street to Dinwiddie Street	Shirlington Bus Station to Virginia Square Metro Station	5-Day Half-hourly
Metrobus 16	Crosses George Mason Drive at Columbia Pike	Patriot & Americana Drs. (Annadale) to Pentagon Metro Station	7-Day Frequent
ART 41	Crosses George Mason Drive at Columbia Pike	S Dinwiddie & Columbia Pike to Court House Metro Station	7-Day Frequent

What's Here Today – Biking



What's Here Today - Driving



Table 3-1: Parking Lanes and Regulations

Segment	Southbound Parking	Northbound Parking
Arlington Blvd to north of 4 th St	Unrestricted on-street	Prohibited (bike lane)
North of 4 th St to 6 th St	Residential permit parking	Residential permit parking
6 th Street to 8 th Street	Residential permit parking	Unrestricted on-street
8 th Street to S Four Mile Run Dr	Unrestricted on-street	Unrestricted on-street
S Four Mile Run Dr to George Mason Village Driveway	Prohibited (bike lane)	Unrestricted on-street
George Mason Village Driveway to S Columbus St	Prohibited (bike lane)	Prohibited (bike lane)
S Columbus St to S Hamilton Dr/S Dinwiddie St	Residential permit parking	Unrestricted on-street

Data Collection

The study team collected:

- 24-hour speed and volume data at 3 locations
- Peak period multimodal turning movement counts (TMCs) at 6 signalized study intersections
- 12-hour Turning Movement Counts (TMCs) at two additional intersections in April 2022 for future signal analysis



Data Analysis - Volumes and Peak Hours

- Peak hours are when the most users are on the roadway, when traffic volumes are highest
- Network peak hours were determined to be 7:30AM – 8:30AM and 5:00PM – 6:00PM

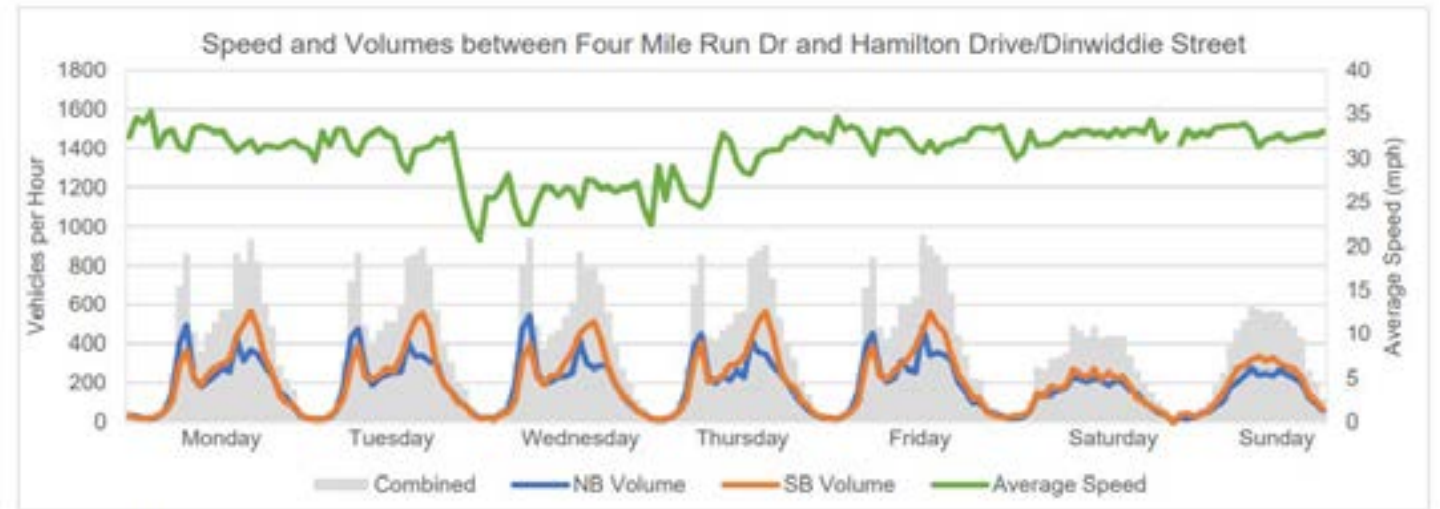


Figure 3-12: 7-day Speed and Volume Data on South George Mason Drive

Data Analysis – Speed and Volume

- Speed limit on S. George Mason Drive is 30mph
 - School Slow Zone speed limit at Wakefield High School is 20 mph during school hours

- When a vehicle is traveling at...
 - **20 mph** there is a **13%** chance of pedestrian fatality or injury
 - **30 mph** there is a **40%** chance of pedestrian fatality or injury
 - **40 mph** there is a **73%** chance of pedestrian fatality or injury

Table 3-6: Speed and Volume Data Summary on South George Mason Drive

Count Location	Direction	Weekday ADT (vpd)	Average Speed	85 th Percentile Speed
Between Arlington Blvd and Columbia Pike	Northbound	9,302	33 mph	40 mph
	Southbound	9,586	30 mph	36 mph
	Combined	18,888	32 mph	38 mph
Between Columbia Pike and Four Mile Run Dr	Northbound	7,239	32 mph	39 mph
	Southbound	6,475	32 mph	39 mph
	Combined	13,713	32 mph	39 mph
Between Four Mile Run Dr and Hamilton Drive / Dinwiddie Street	Northbound	4,902	32 mph	39 mph
	Southbound	5,408	30 mph	35 mph
	Combined	10,310	31 mph	38 mph

Data Analysis – Driving Speeds

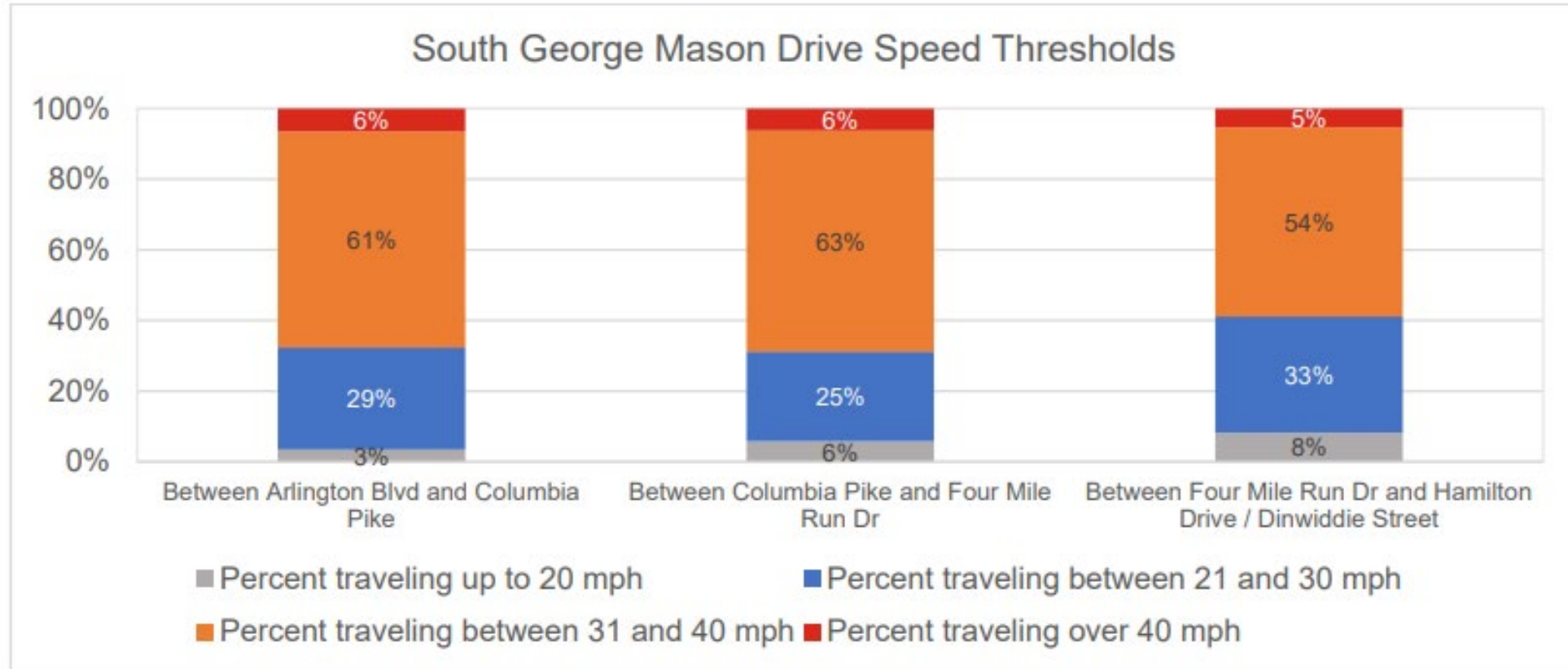


Figure 3-14: Speed Thresholds

Crash Data

Table 3-7: Crashes by Severity and Mode

Crash Severity	Motorist-Only Crashes	Pedestrian Crashes	Bike Crashes	All Crashes (2016-20)
K – Killed	0	0	0	0
A – Serious Injury	2	0	0	2
B – Minor Injury	46	11	8	65
C – Suspected Injury	4	0	0	4
O – Property Damage Only	183	0	2	185
Total Crashes	235	11	10	256

Measures of Effectiveness

“Measures of Effectiveness (MoEs) will be used to evaluate the safety and operations for biking, walking, transit, and driving conditions on George Mason Drive under the existing conditions and future build conditions.”

- Motor Vehicle Operations
- Travel Time by Mode
- Person Capacity
- Trip Conversion Potential
- Bicycle Level of Stress
- Pedestrian Crossings

Corridor-Wide Concepts

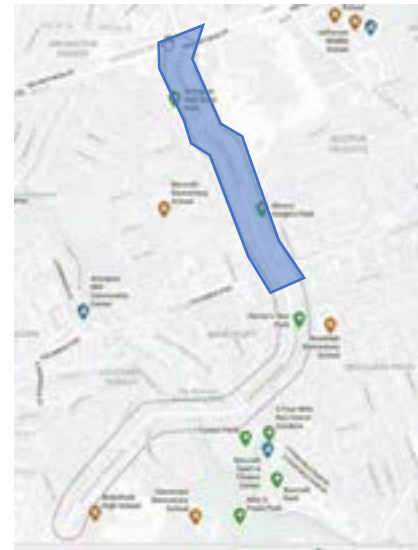
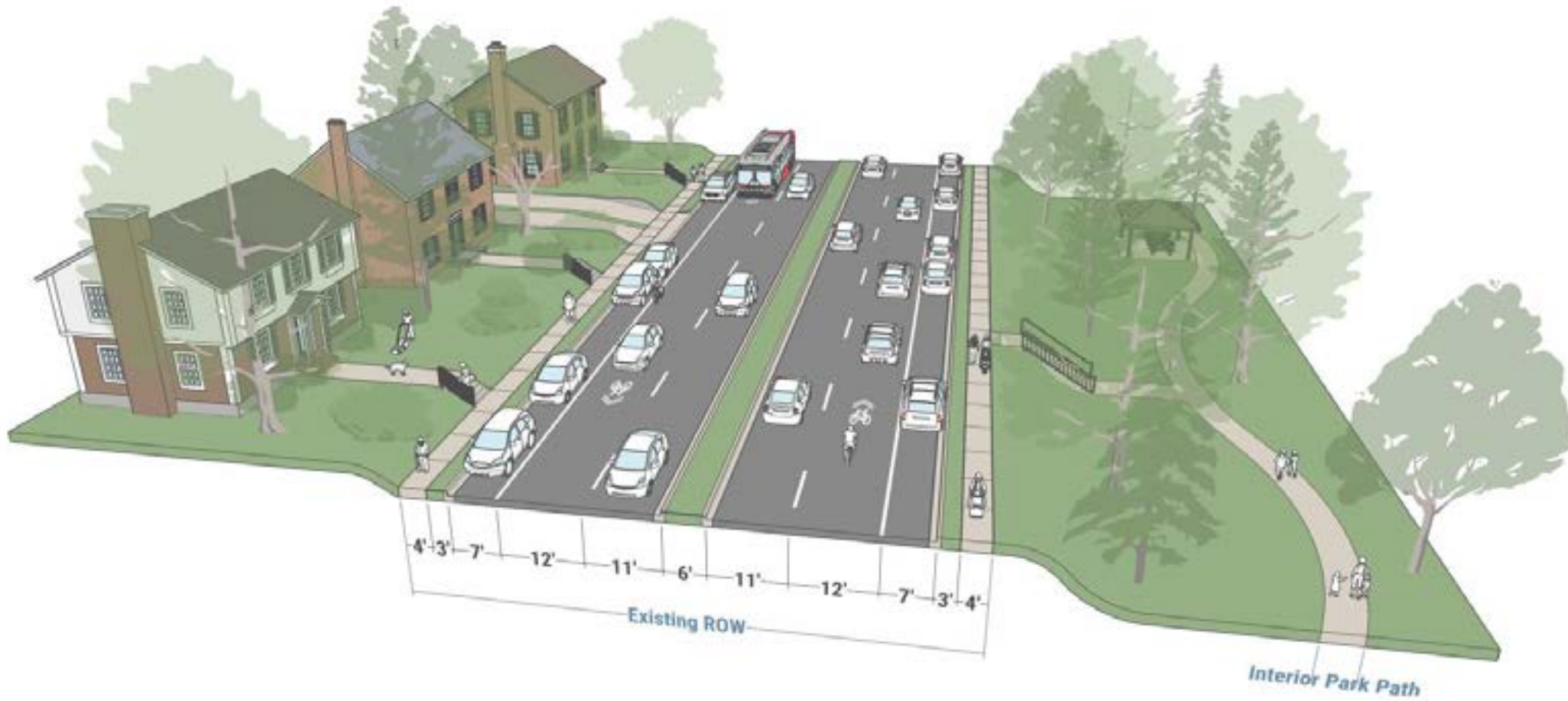


Corridor Segments

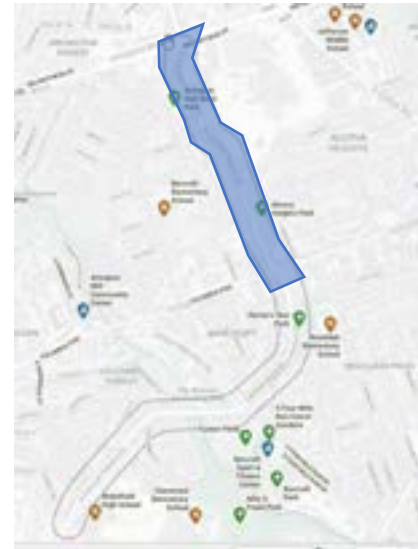
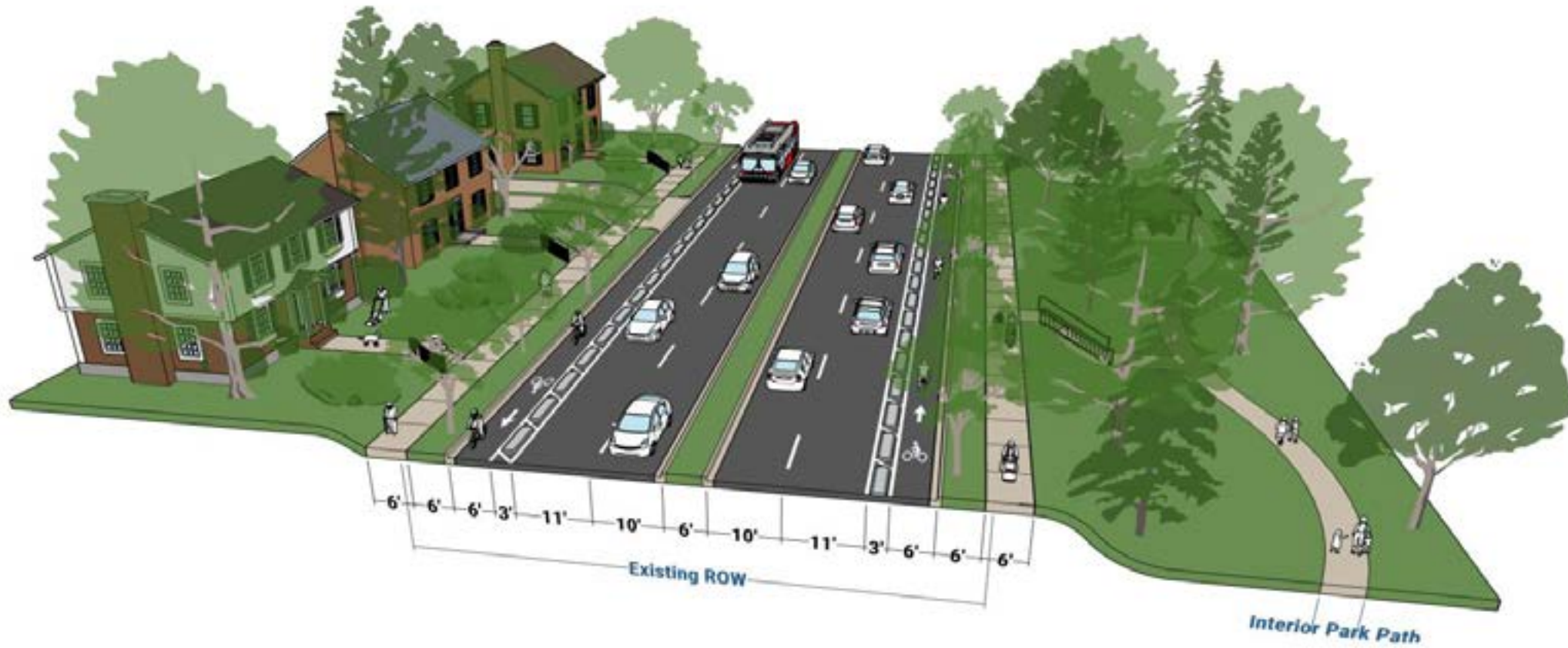
- Segment 1: Arlington Boulevard – Columbia Pike
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- Segment 3: S. Four Mile Run Drive – Arlington/Fairfax County Line



Segment 1 – What's Here Today



Segment 1 – Concept A



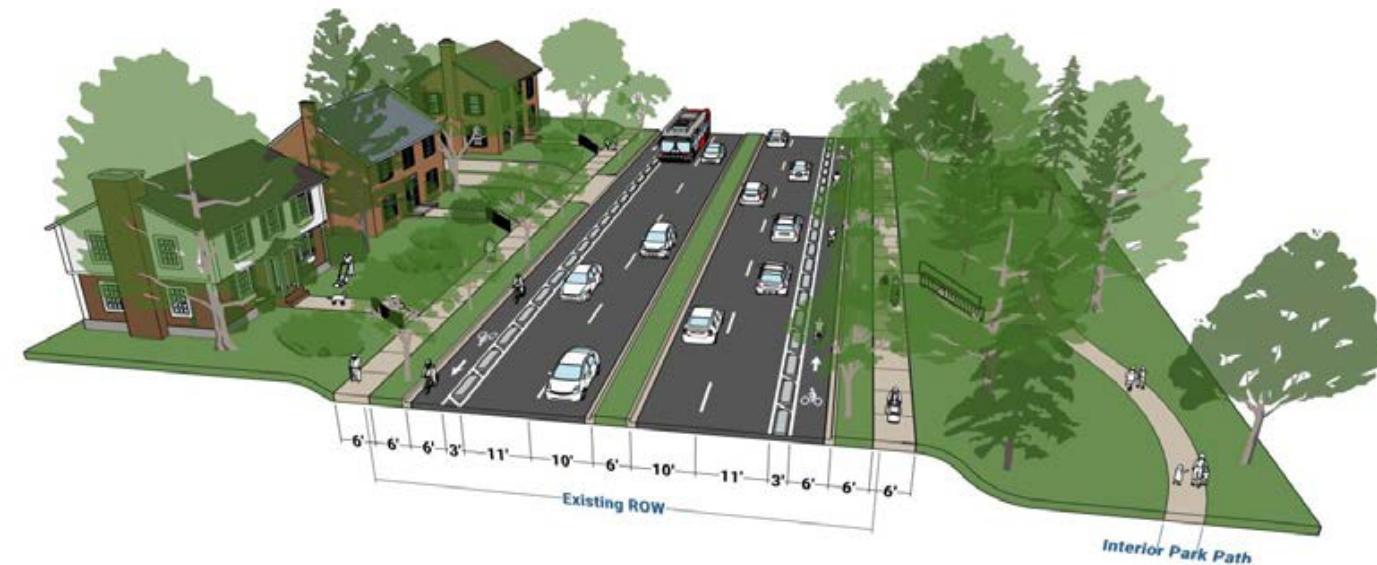
Segment 1 – Concept A

CONCEPT A: BENEFITS

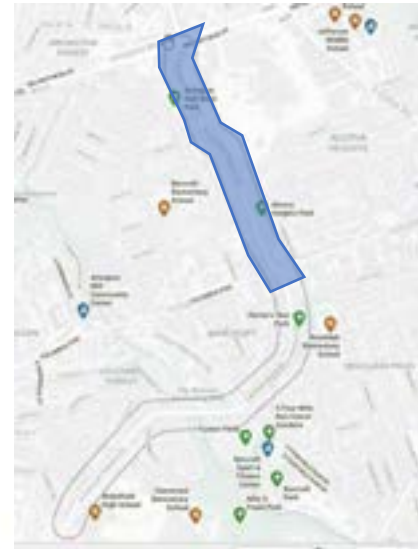
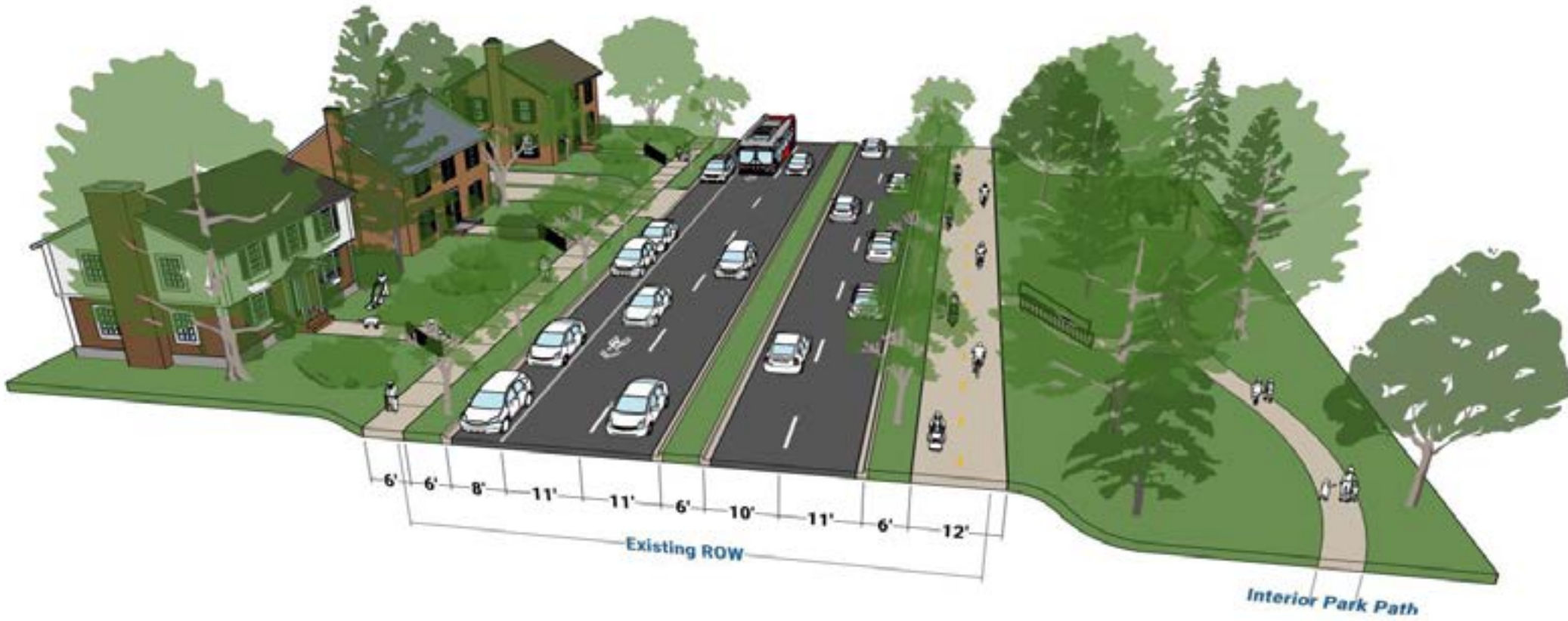
- Separates bicycles, motor vehicles, and pedestrians
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Provides a continuous low-stress bike facility
- Curb stays in existing location, reducing construction costs

CONCEPT A: CHALLENGES

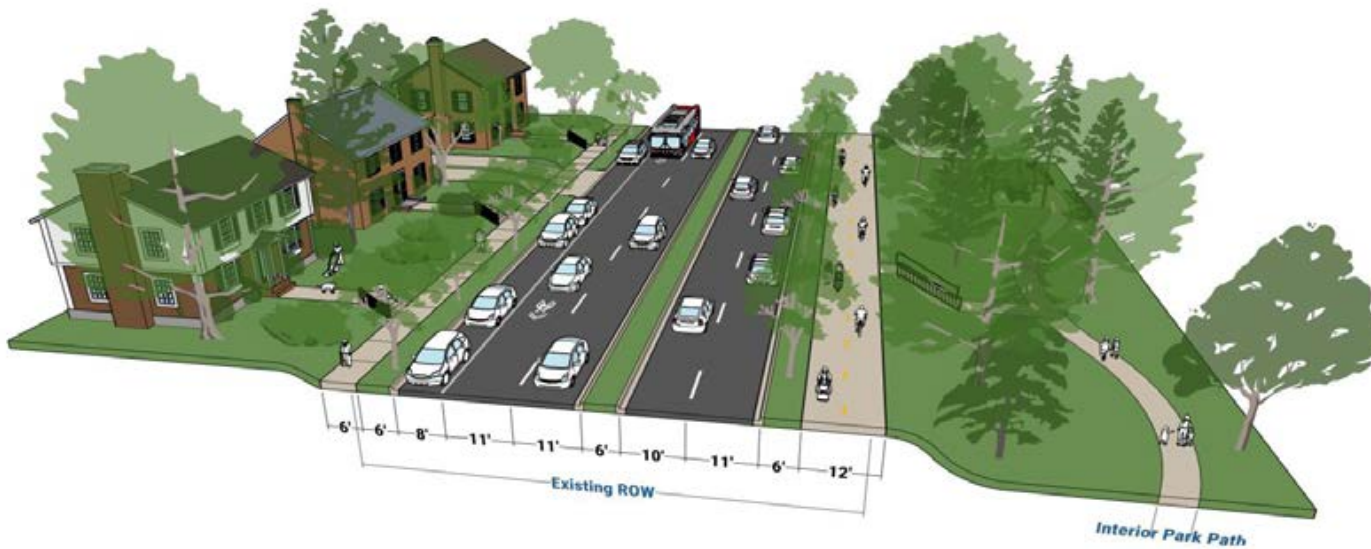
- Increases the number of lanes pedestrians must cross (1 bike lane, plus 2 travel lanes on each side of the median)
- Removes on-street parking (all segments)
- Requires additional right-of-way width behind the curb for wider sidewalks (all segments)
- Requires additional design consideration for transit stops
- May require signal phasing changes to reduce conflicts between people driving and those walking and biking at intersections with high volumes of turning vehicles
- Possible tree removal



Segment 1 – Concept B



Segment 1 – Concept B



CONCEPT B: BENEFITS

- Separates people biking and those driving vehicles
- Provides continuous low-stress bike facility
- Widens sidewalks on west side
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Adds new multi-use trail connecting multiple County parks
- Connects three significant regional trails (Arlington Blvd Trail, W&OD, Four Mile Run Trail) with a direct, continuous multi-use trail
- Reduces conflicts between people biking and transit vehicles when compared to Concept A

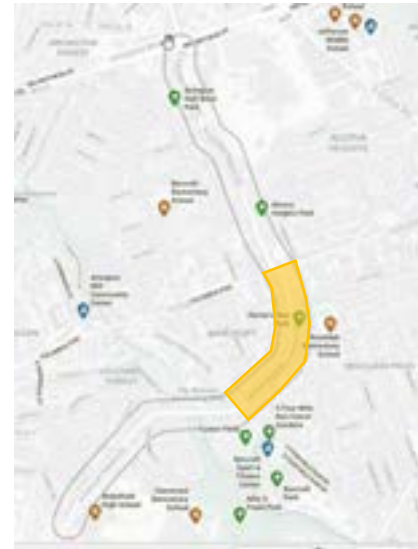
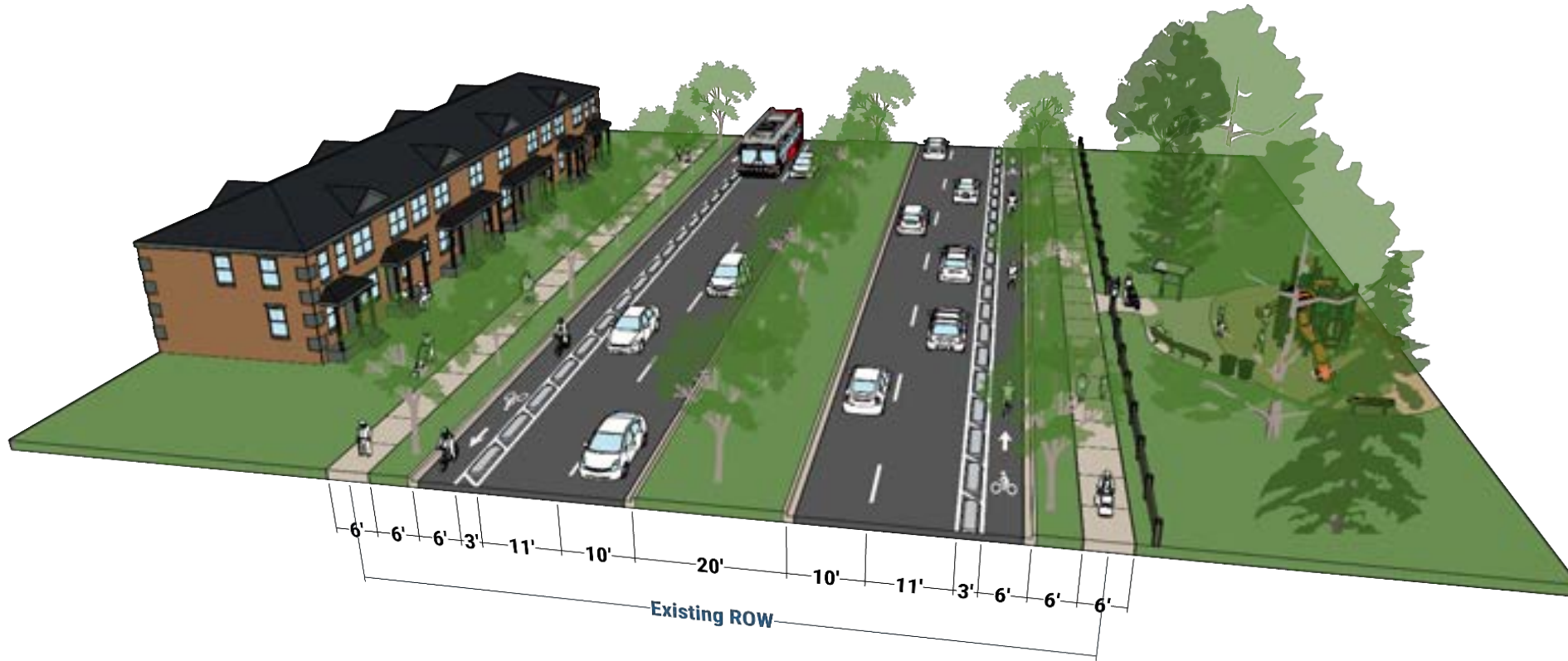
CONCEPT B: CHALLENGES

- Requires additional right-of-way width for wider sidewalk and trail (Segment 1 and 2)
- Removes on-street parking on one side (Segment 1)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- Design will need to balance construction costs with aesthetic requirements in residential areas
- Possible tree removal

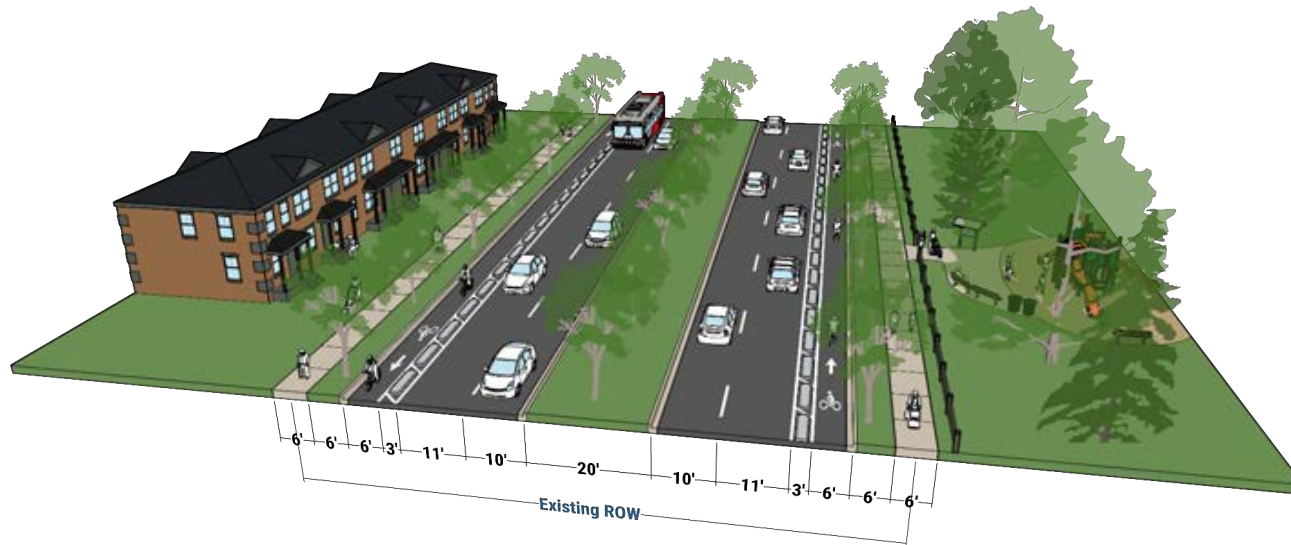
Segment 2 – What's Here Today



Segment 2 – Concept A



Segment 2 – Concept A



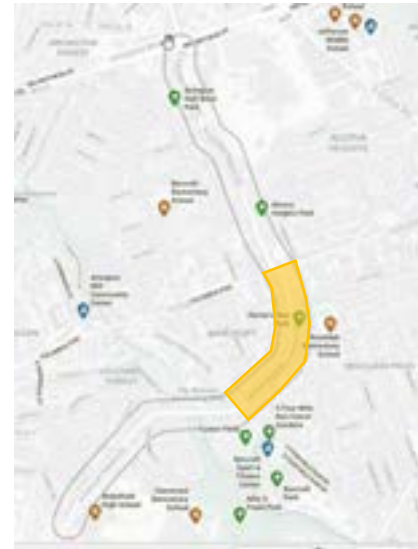
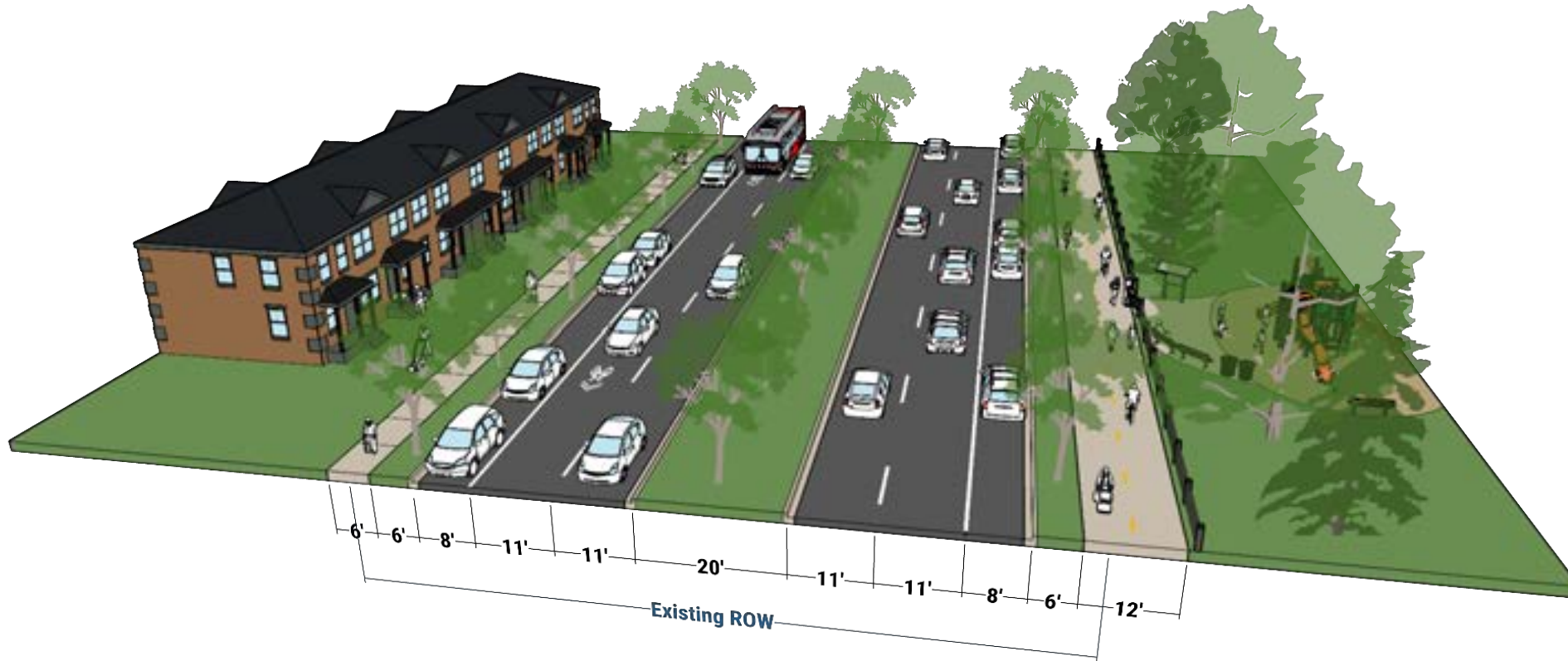
CONCEPT A: BENEFITS

- Separates bicycles, motor vehicles, and pedestrians
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffers, increasing possibilities for vegetation and tree coverage
- Provides continuous low-stress bike facility
- Curb stays in existing location, reducing construction costs

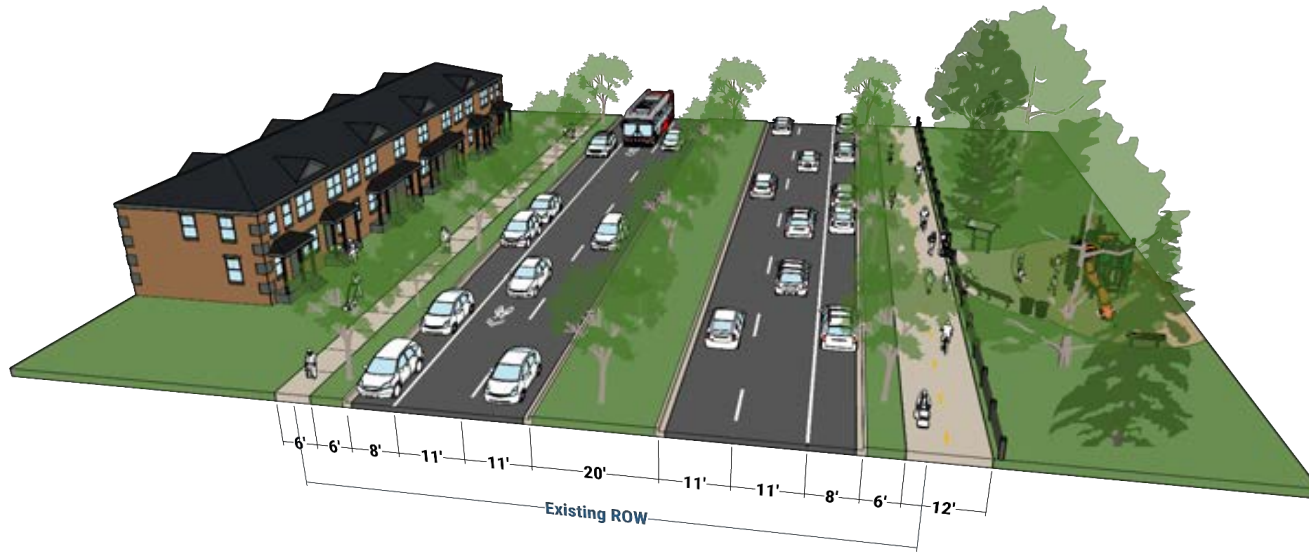
CONCEPT A: CHALLENGES

- Requires additional right-of-way width behind the curb for wider sidewalks (all segments)
- Increases number of lanes pedestrians must cross (1 bike lane, plus 2 travel lanes on each side of the median)
- Removes on-street parking (all segments)
- Requires additional width behind the curb for wider sidewalks (all segments)
- Requires additional design consideration for transit stops
- May require signal phasing changes to reduce conflicts between people driving and those walking and biking at intersections with high volumes of turning vehicles
- Possible tree removal

Segment 2 – Concept B



Segment 2 – Concept B



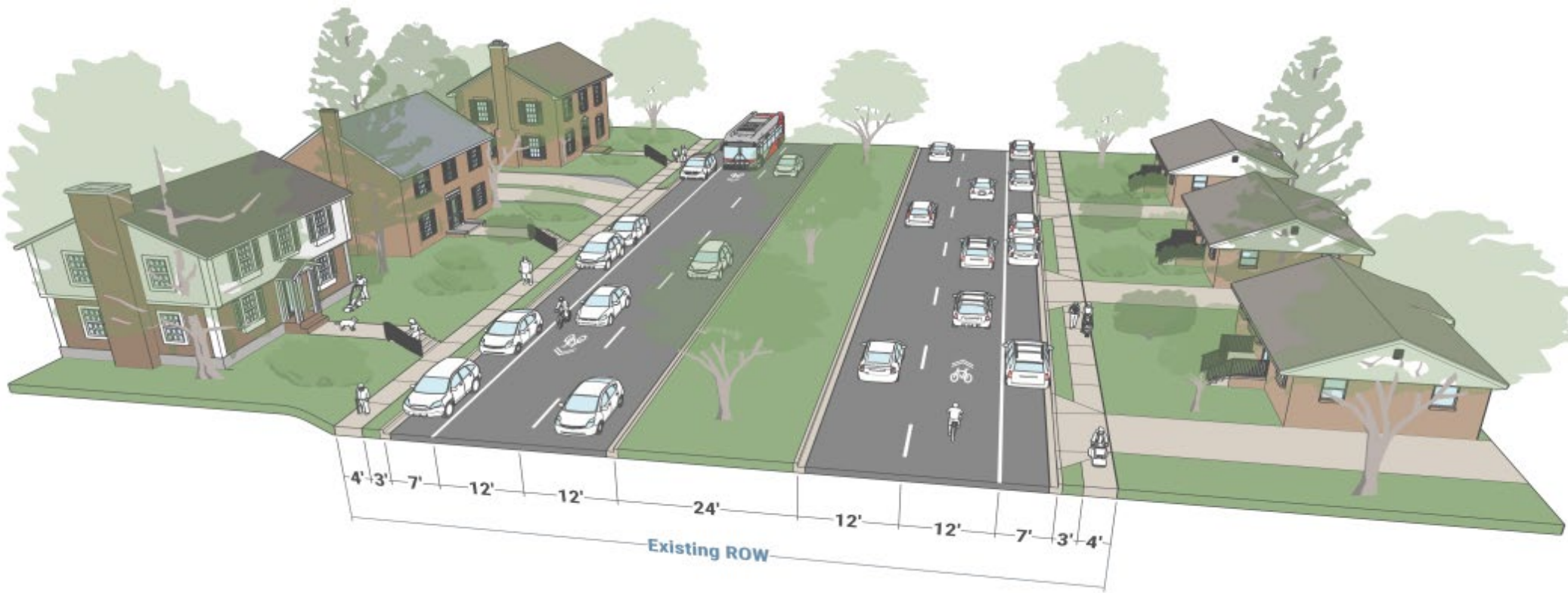
CONCEPT B: BENEFITS

- Separates bicycles and motor vehicles
- Provides continuous low-stress bike facility
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Adds new multi-use trail connecting multiple County parks
- Connects three significant regional trails (Arlington Blvd Trail, W&OD, Four Mile Run Trail) with a direct, continuous multi-use trail
- Reduces conflicts between people biking and transit vehicles when compared to Concept A

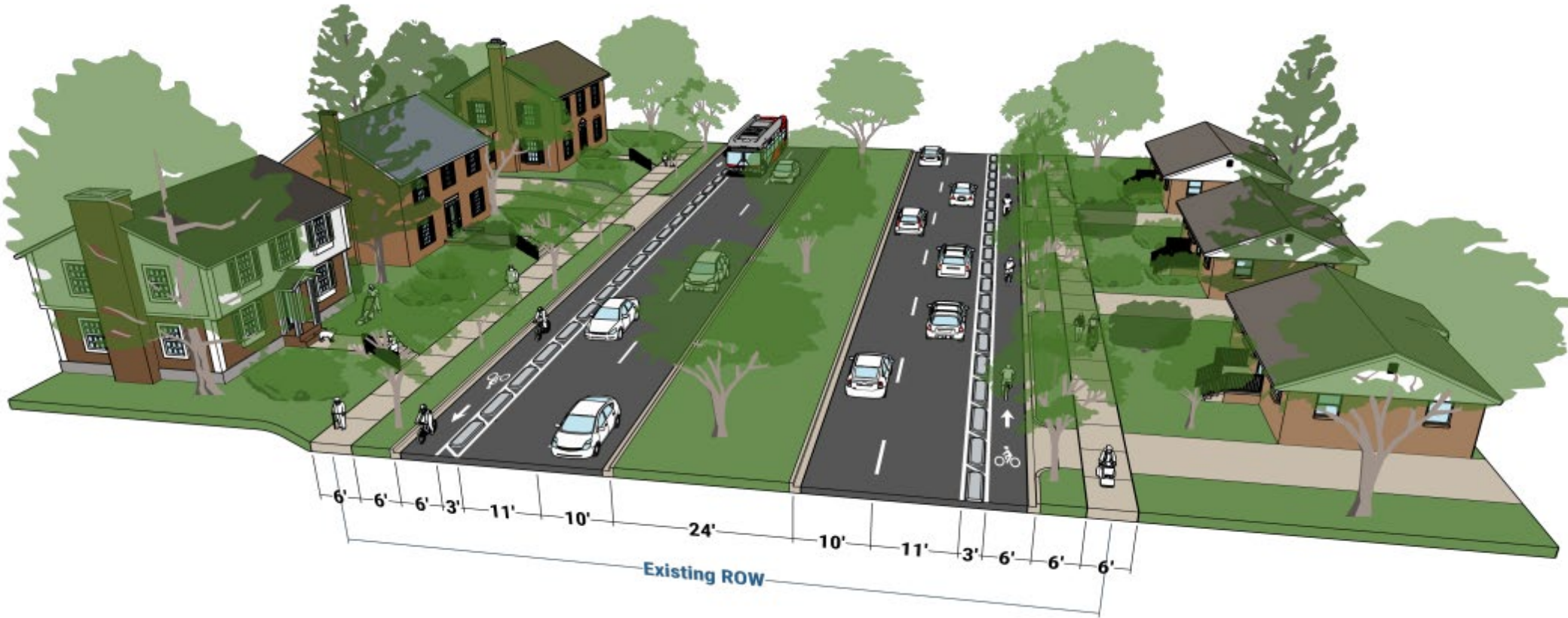
CONCEPT B: CHALLENGES

- Requires additional right-of-way width for wider sidewalks and trail (Segment 1 and 2)
- Requires some parking removal to maintain sight distance at intersections and driveways (Segments 2 and 3)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- Design will need to balance construction costs with aesthetic requirements in residential areas
- Possible tree removal

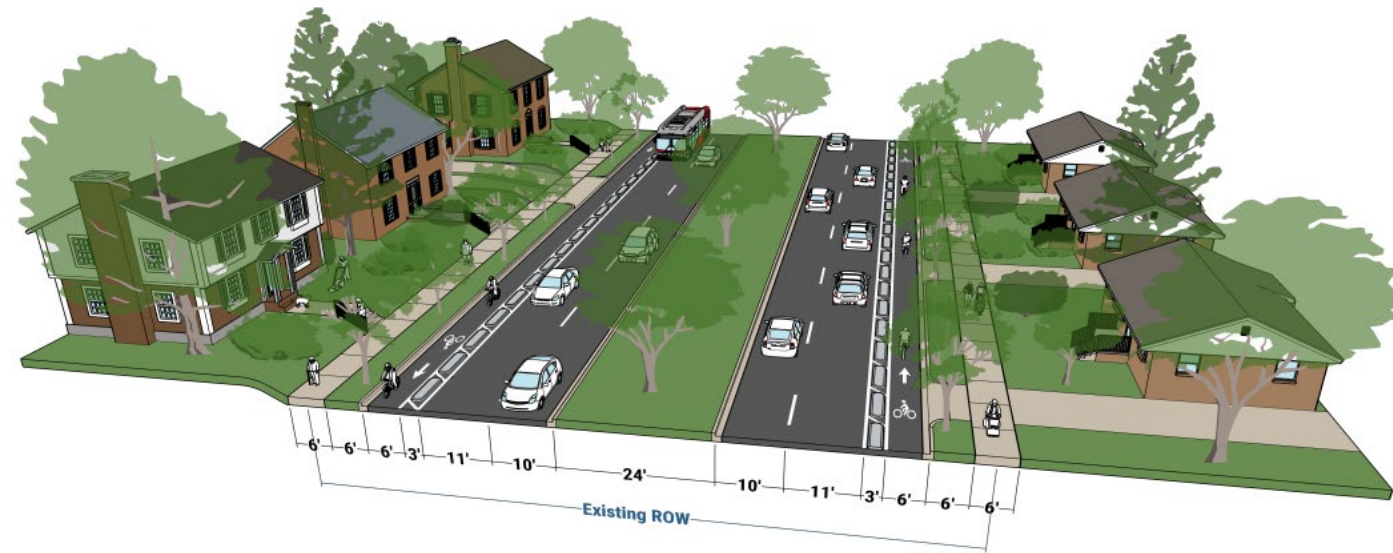
Segment 3 – What's Here Today



Segment 3 – Concept A



Segment 3 – Concept A



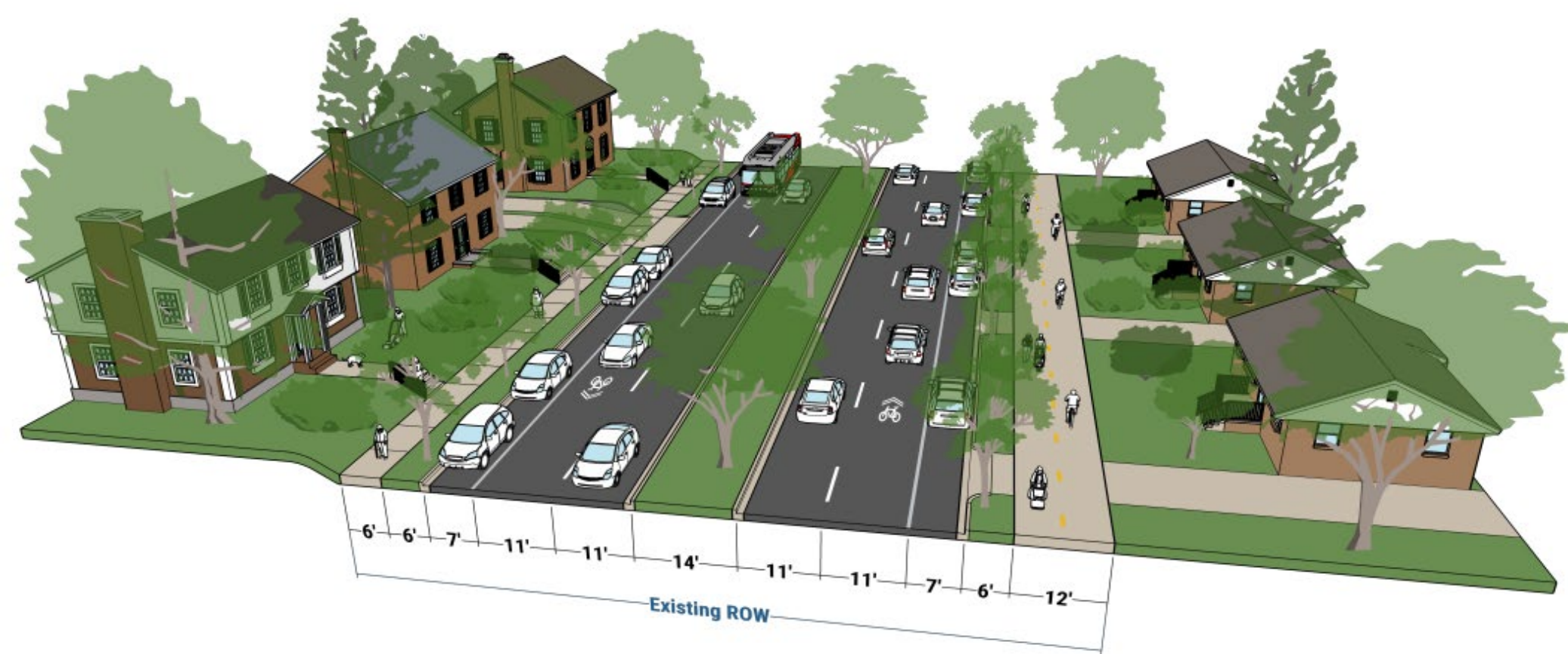
CONCEPT A: BENEFITS

- Separates bicycles, motor vehicles, and pedestrians
- Widens sidewalks to meet ADA and County guidance
- Increases width of planting strip, increasing possibilities for vegetation and tree coverage
- Provides continuous low-stress bike facility
- Curb stays in existing location, reducing construction costs

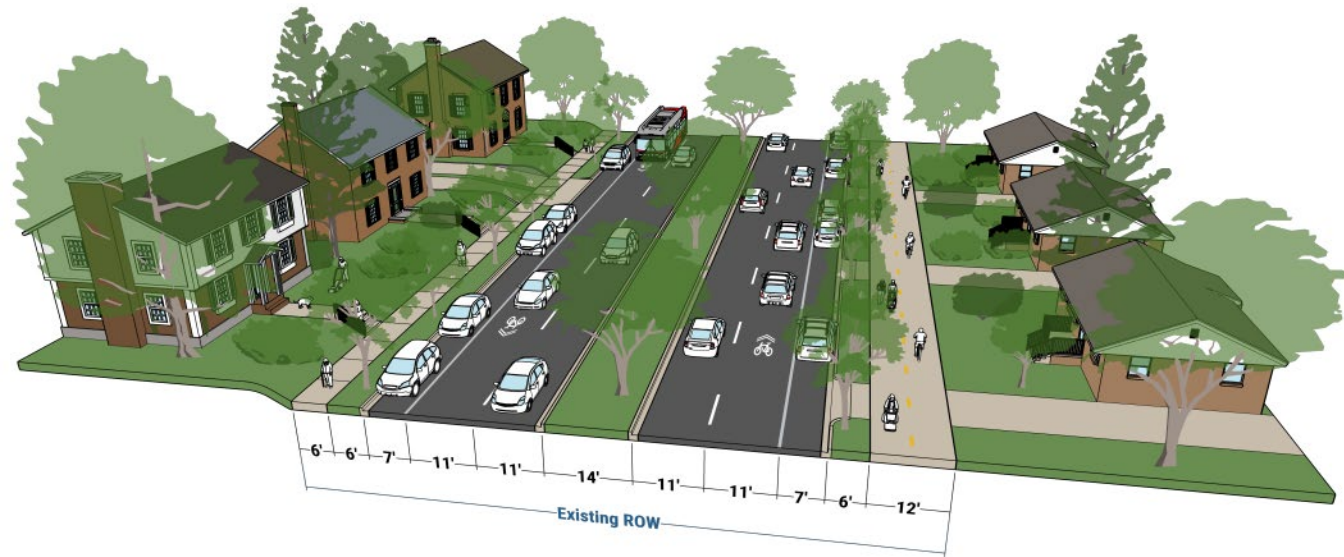
CONCEPT A: CHALLENGES

- Increases number of lanes pedestrians must cross (1 bike lane, plus 1 travel lanes on each side of the median)
- Removes on-street parking
- Requires additional right-of-way width behind the curb for wider sidewalks
- Requires additional design consideration for transit stops
- May require signal phasing changes to reduce conflicts between people driving and those walking and biking at intersections with high volumes of turning vehicles
- Possible tree removal

Segment 3 – Concept B



Segment 3 – Concept B



CONCEPT B: BENEFITS

- Separates people biking and those driving vehicles
- Provides continuous low-stress bike facility
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Adds new multi-use trail connecting multiple County parks
- Connects three significant regional trails (W&OD and Four Mile Run Trail) with a direct, continuous multi-use trail
- Reduces conflicts between people biking and transit vehicles when compared to Concept A

CONCEPT B: CHALLENGES

- Narrows the median to provide space for wider sidewalks which could result in tree removal
- Requires some parking removal to maintain sight distance at intersections and driveways (Segments 2 and 3)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- May require additional design consideration for context sensitivity in residential areas
- Possible tree removal

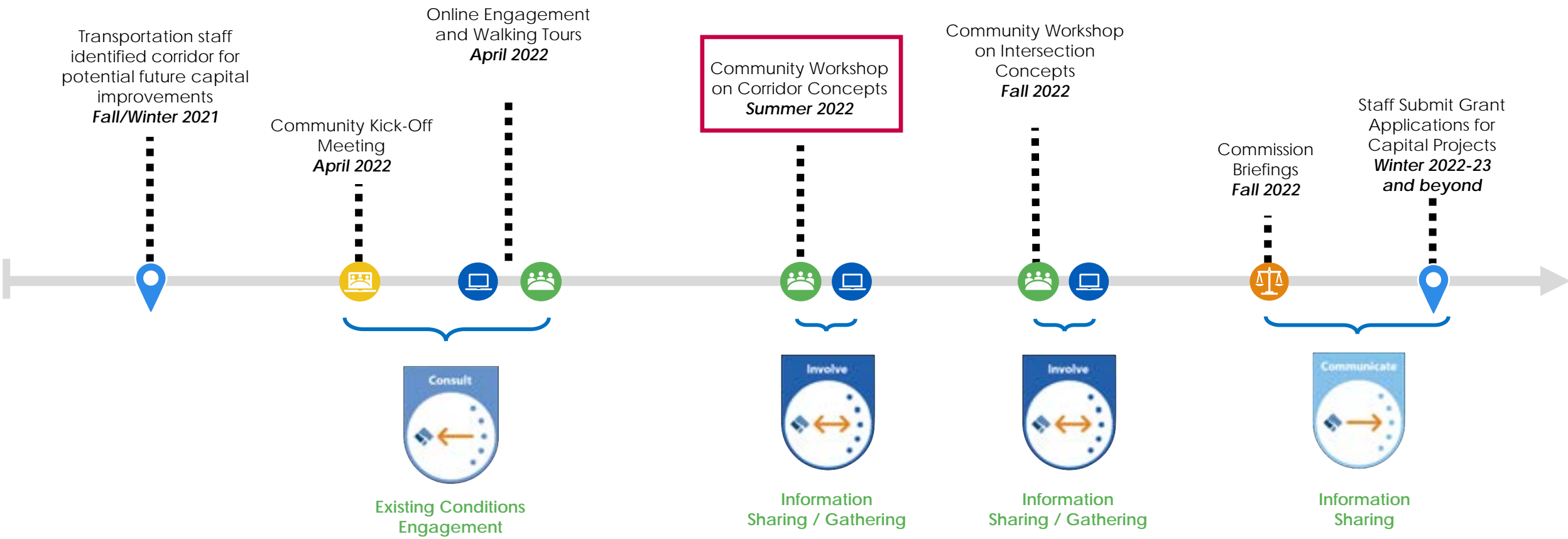
Public Engagement & Next Steps



S. George Mason Drive – Engagement Timeline

Project Contact:
Leah Gerber
lgerber@arlingtonva.us

Project Funding:
NVTA Local, Commercial & Industrial
Tax



Online Feedback
(e.g. questionnaire, feedback form, etc.)



In-Person Engagement and Pop-Ups
(e.g. community meeting, roundtable, tabling, walking/bus tour, deliberative dialogue, etc.)



Virtual Meeting
(e.g., TEAMS, TEAMS live, Zoom, etc.)



County Board Engagement
(e.g. public hearing, Board work session, open door Monday, commission meeting etc.)



Key Milestone

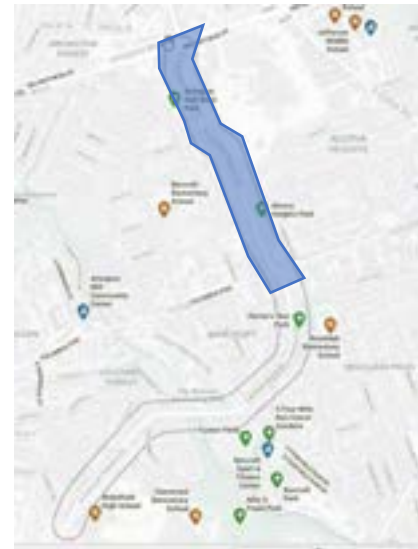
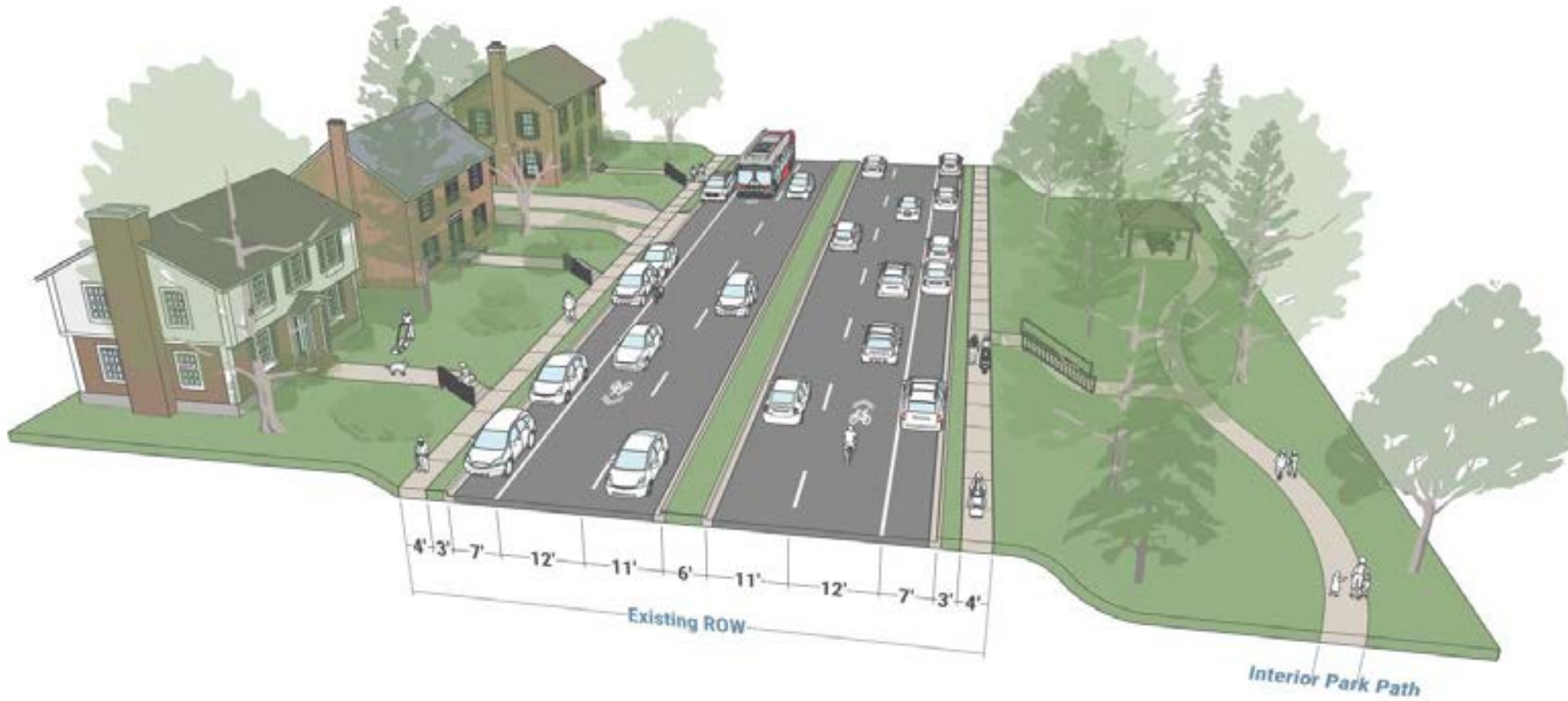
Upcoming Public Engagement

- **Monday, July 18, 2022 – Virtual Public Meeting 7:00pm – 8:30pm**
 - A recording and slides for tonight’s presentation will be posted on the website in Amharic, Arabic, Chinese, Mongolian, Spanish, and Vietnamese after July 18.
- **Monday, July 18, 2022 – Sunday, August 7, 2022 – Online Feedback Form open for comment**
 - Translation available via QR codes via mailers sent to all addresses along S. George Mason Drive in Amharic, Arabic, Chinese, Mongolian, Spanish, and Vietnamese.
- **Wednesday, July 20, 2022 – In-Person Community Workshop – 5:00pm – 7:00pm**
 - Workshop materials will be available in Amharic, Arabic, Chinese, English, Mongolian, Spanish, and Vietnamese.
 - Location to be announced via Project Page

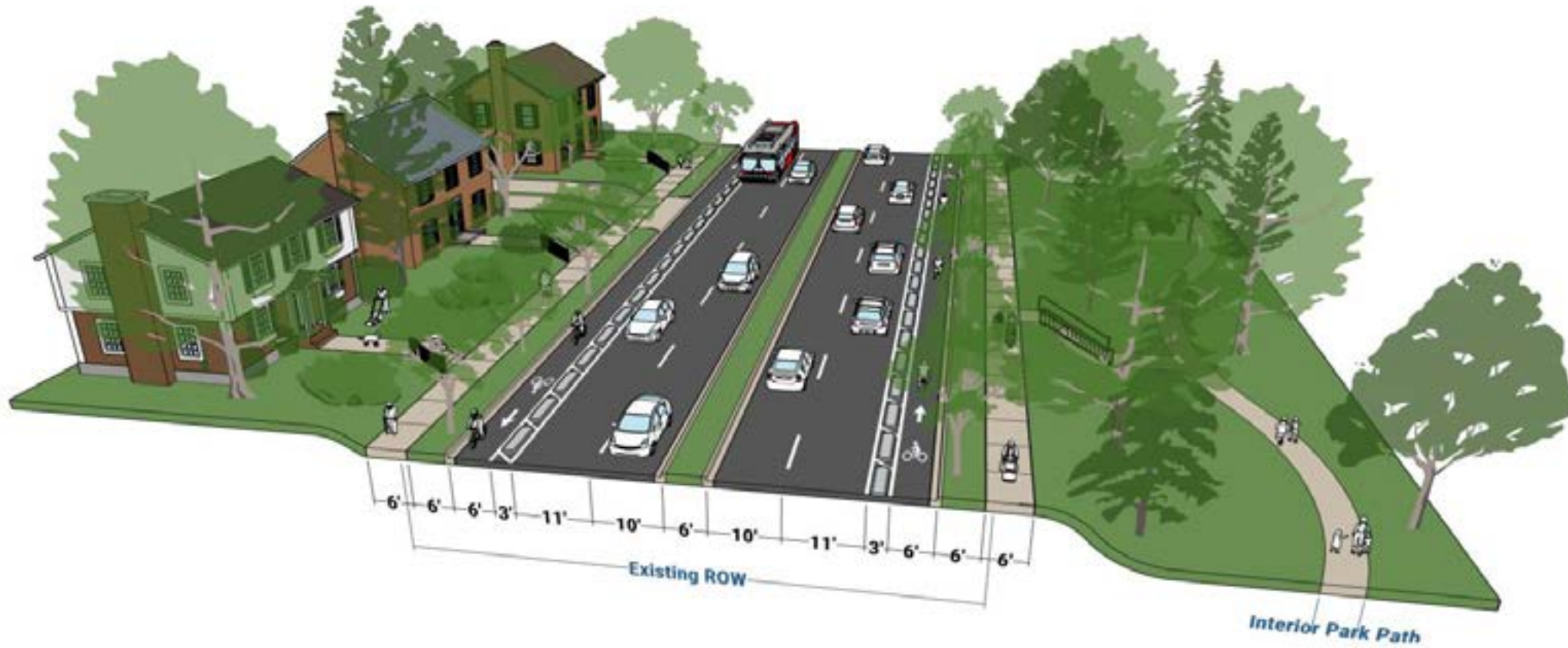
Thank You

- Project page:
 - Visit arlingtonva.us and search “South George Mason Drive”
- Leah Gerber – Project Manager
 - Email: lgerber@arlingtonva.us
- Nate Graham – Public Engagement
 - Email: nsgraham@arlingtonva.us

Segment 1 – What's Here Today



Segment 1 – Concept A



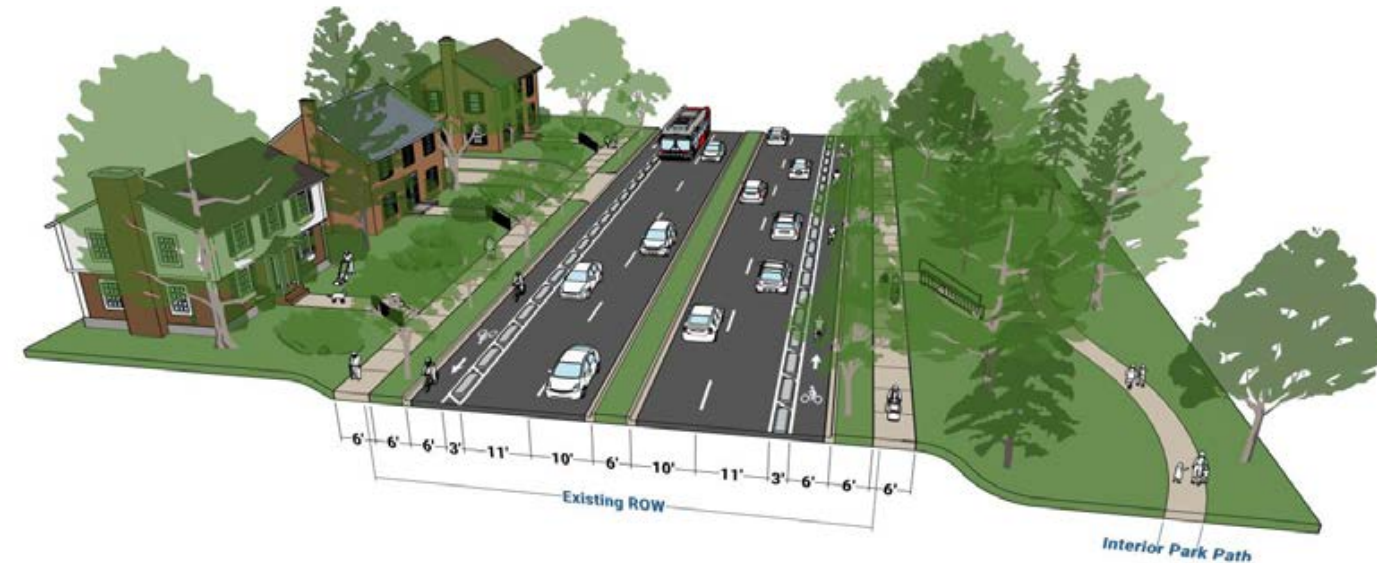
Segment 1 – Concept A, Benefits & Challenges

CONCEPT A: BENEFITS

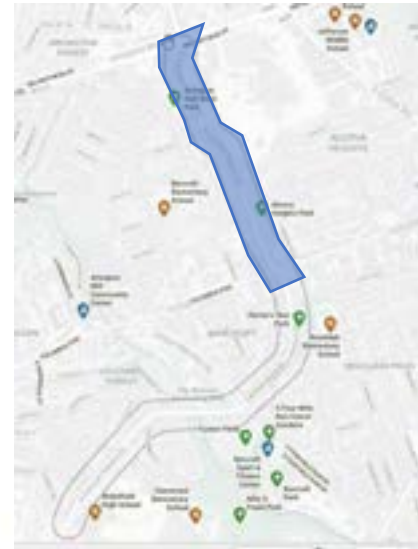
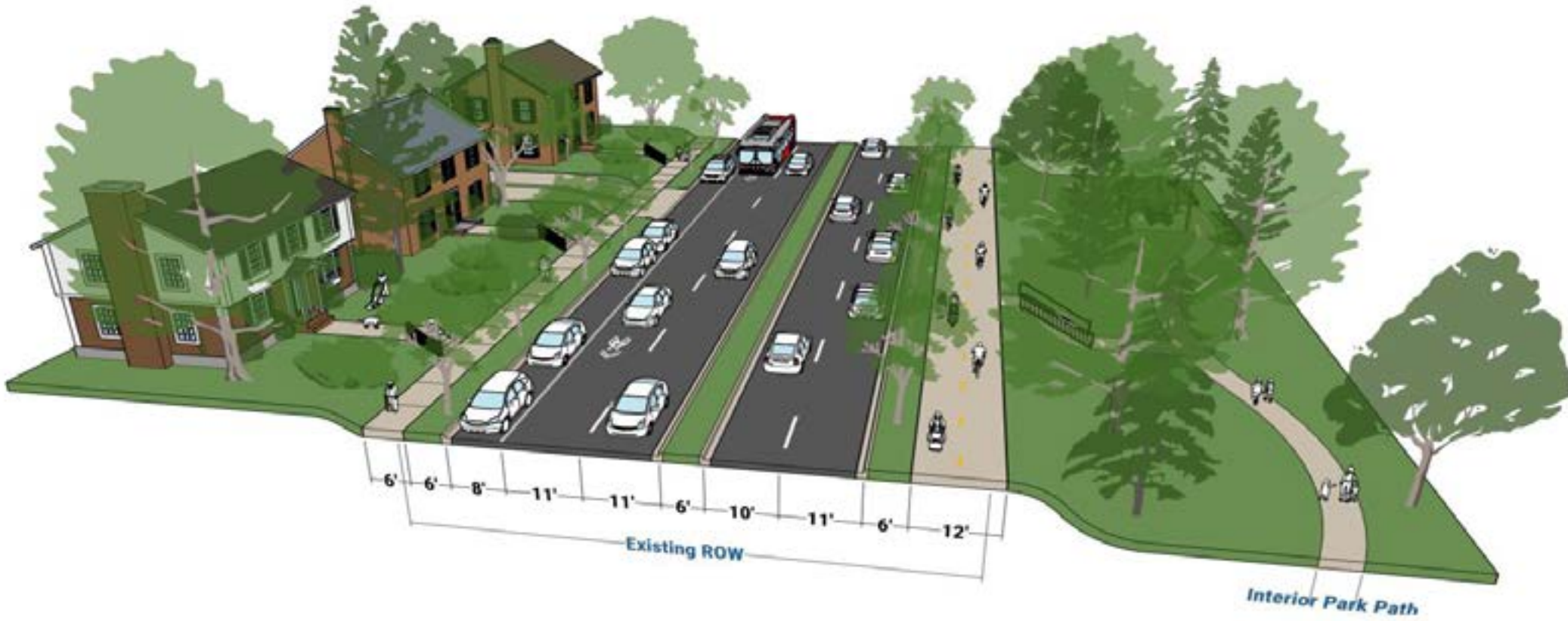
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CONCEPT A: CHALLENGES

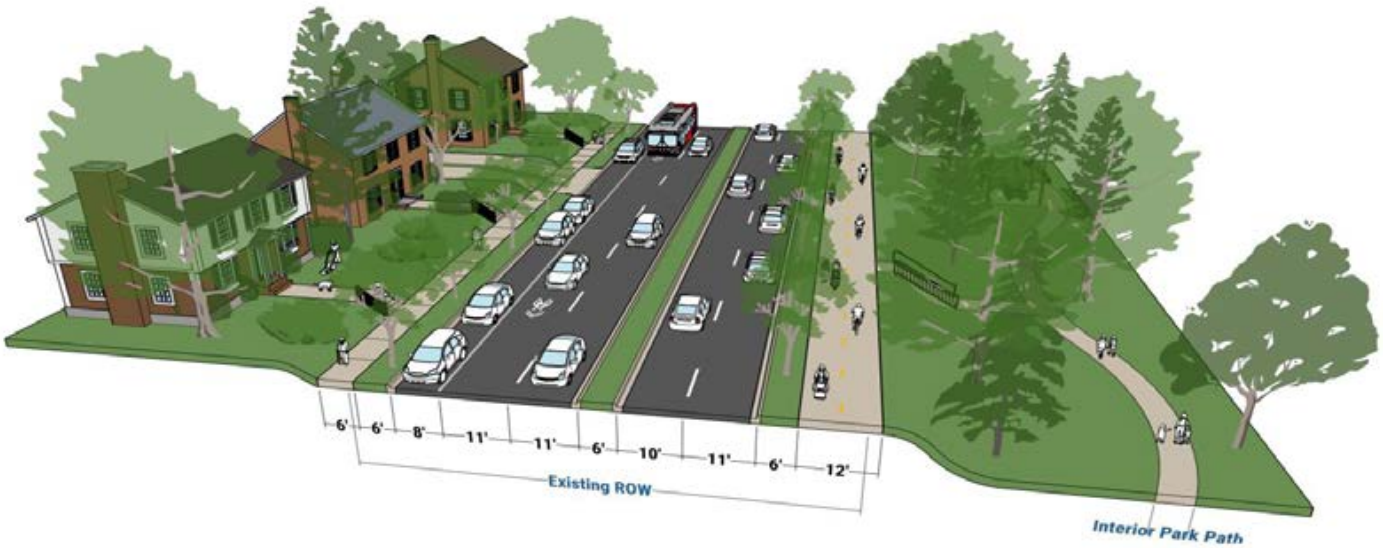
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- Possible tree removal



Segment 1 – Concept B



Segment 1 – Concept B, Benefits & Challenges



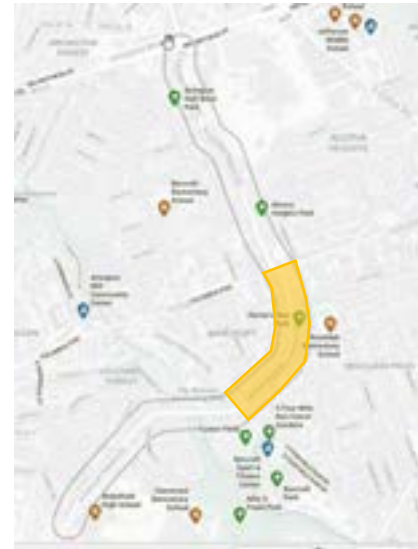
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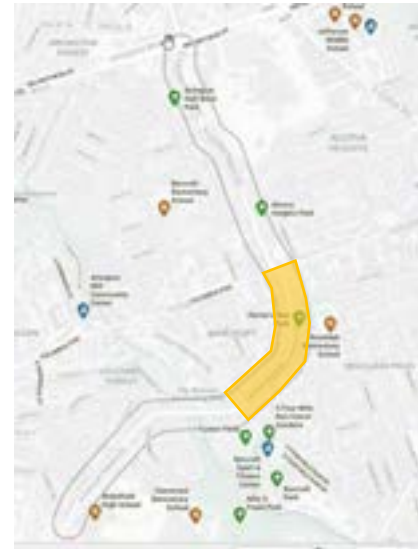
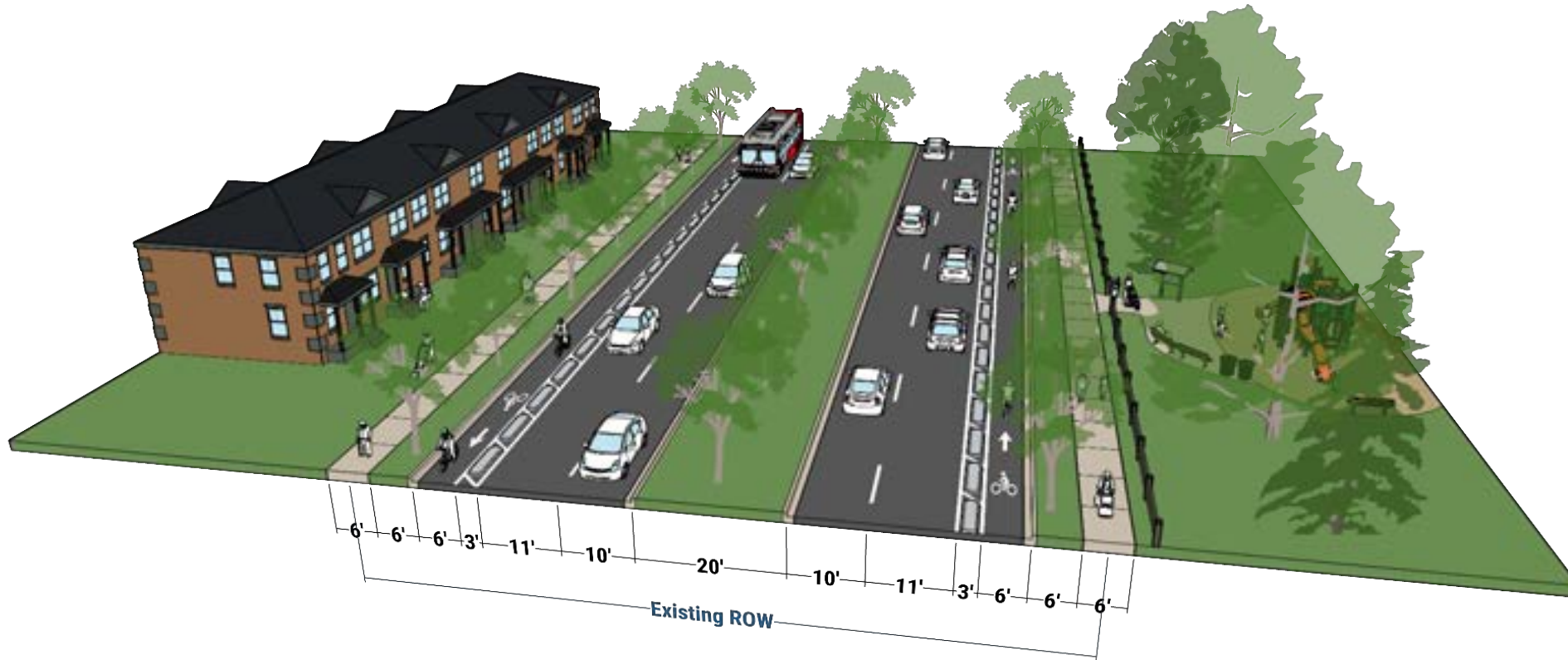
CONCEPT B: CHALLENGES

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- Removes on-street parking on one side (Segment 1)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- Design will need to balance construction costs with aesthetic requirements in residential areas
- Possible tree removal

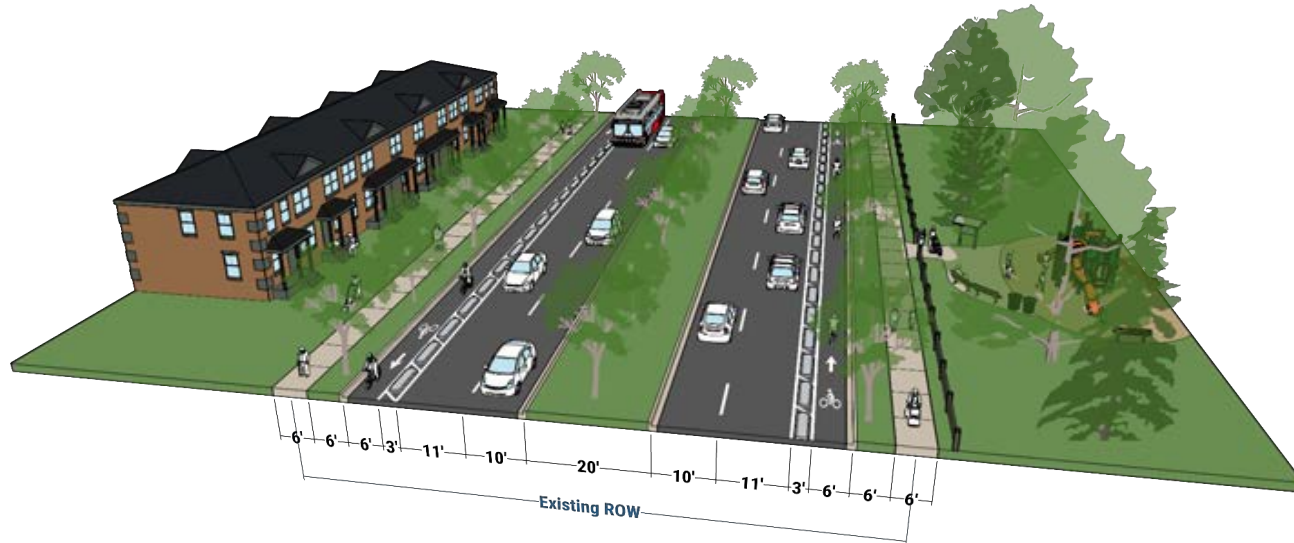
Segment 2 – What's Here Today



Segment 2 – Concept A



Segment 2 – Concept A, Benefits and Challenges



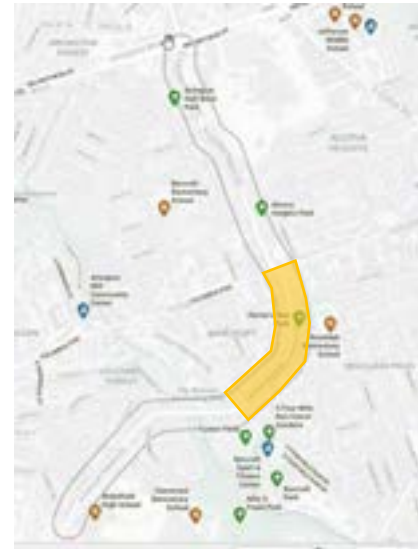
CONCEPT A: BENEFITS

- Separates bicycles, motor vehicles, and pedestrians
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffers, increasing possibilities for vegetation and tree coverage
- Provides continuous low-stress bike facility
- Curb stays in existing location, reducing construction costs

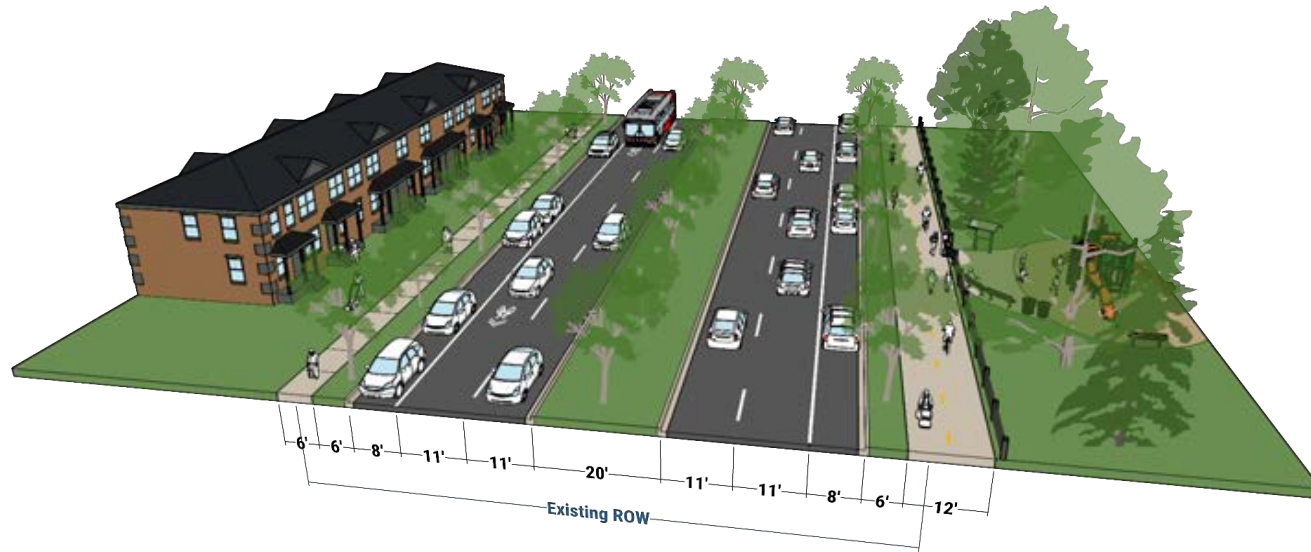
CONCEPT A: CHALLENGES

- Requires additional right-of-way width behind the curb for wider sidewalks (all segments)
- Increases number of lanes pedestrians must cross (1 bike lane, plus 2 travel lanes on each side of the median)
- Removes on-street parking (all segments)
- Requires additional width behind the curb for wider sidewalks (all segments)
- Requires additional design consideration for transit stops
- May require signal phasing changes to reduce conflicts between people driving and those walking and biking at intersections with high volumes of turning vehicles
- Possible tree removal

Segment 2 – Concept B



Segment 2 – Concept B, Benefits & Challenges



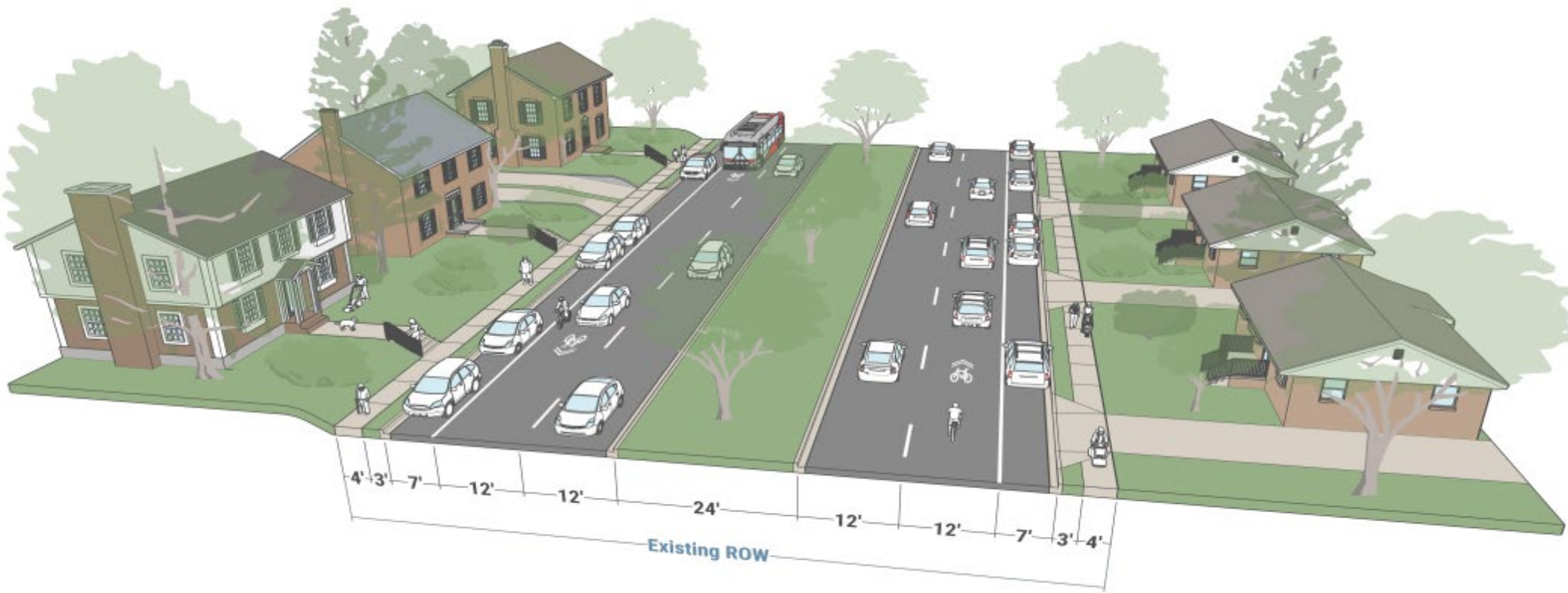
CONCEPT B: BENEFITS

- Separates bicycles and motor vehicles
- Provides continuous low-stress bike facility
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Adds new multi-use trail connecting multiple County parks
- Connects three significant regional trails (Arlington Blvd Trail, W&OD, Four Mile Run Trail) with a direct, continuous multi-use trail
- Reduces conflicts between people biking and transit vehicles when compared to Concept A

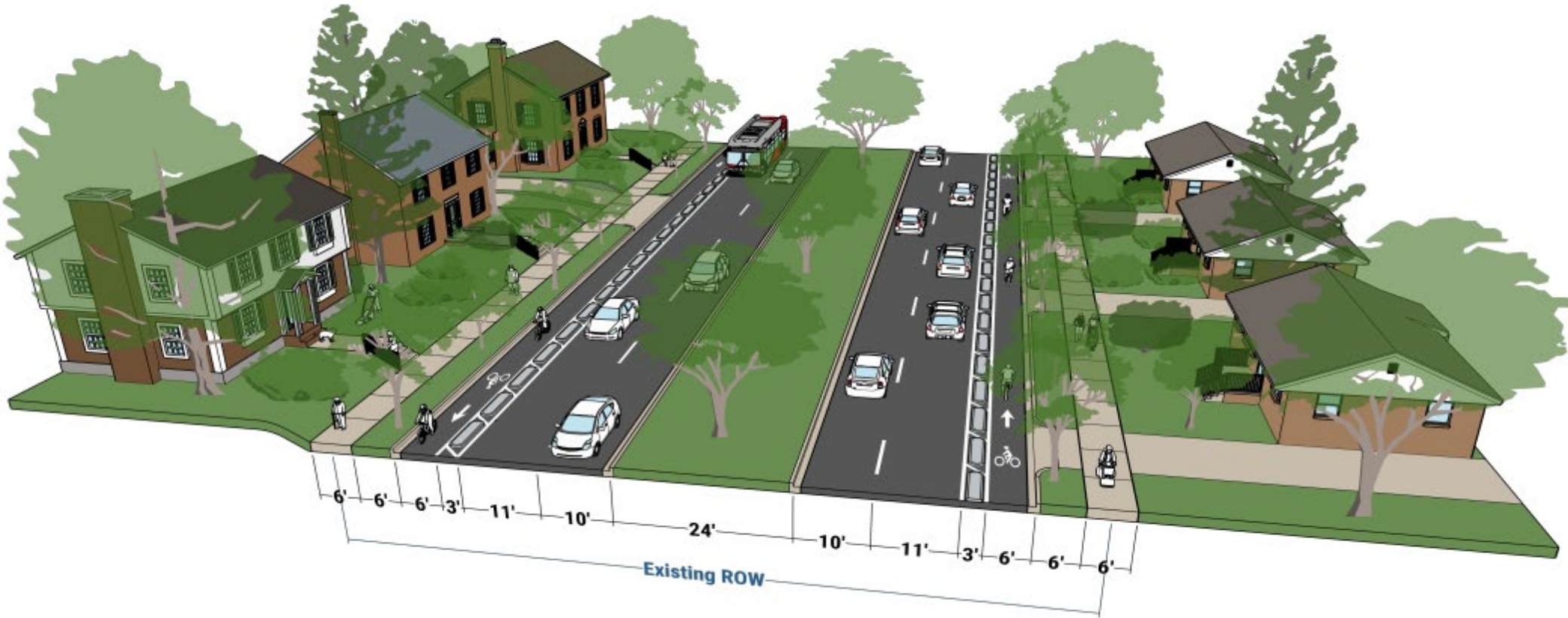
CONCEPT B: CHALLENGES

- Requires additional right-of-way width for wider sidewalks and trail (Segment 1 and 2)
- Requires some parking removal to maintain sight distance at intersections and driveways (Segments 2 and 3)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- Design will need to balance construction costs with aesthetic requirements in residential areas
- Possible tree removal

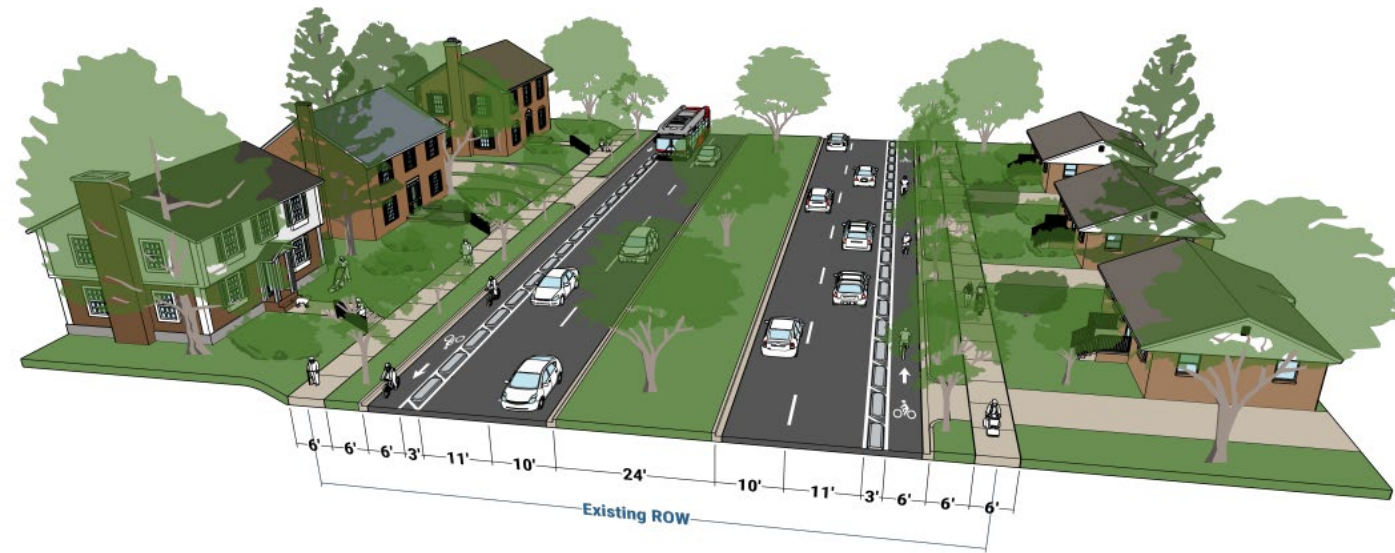
Segment 3 – What's Here Today



Segment 3 – Concept A



Segment 3 – Concept A, Benefits & Challenges



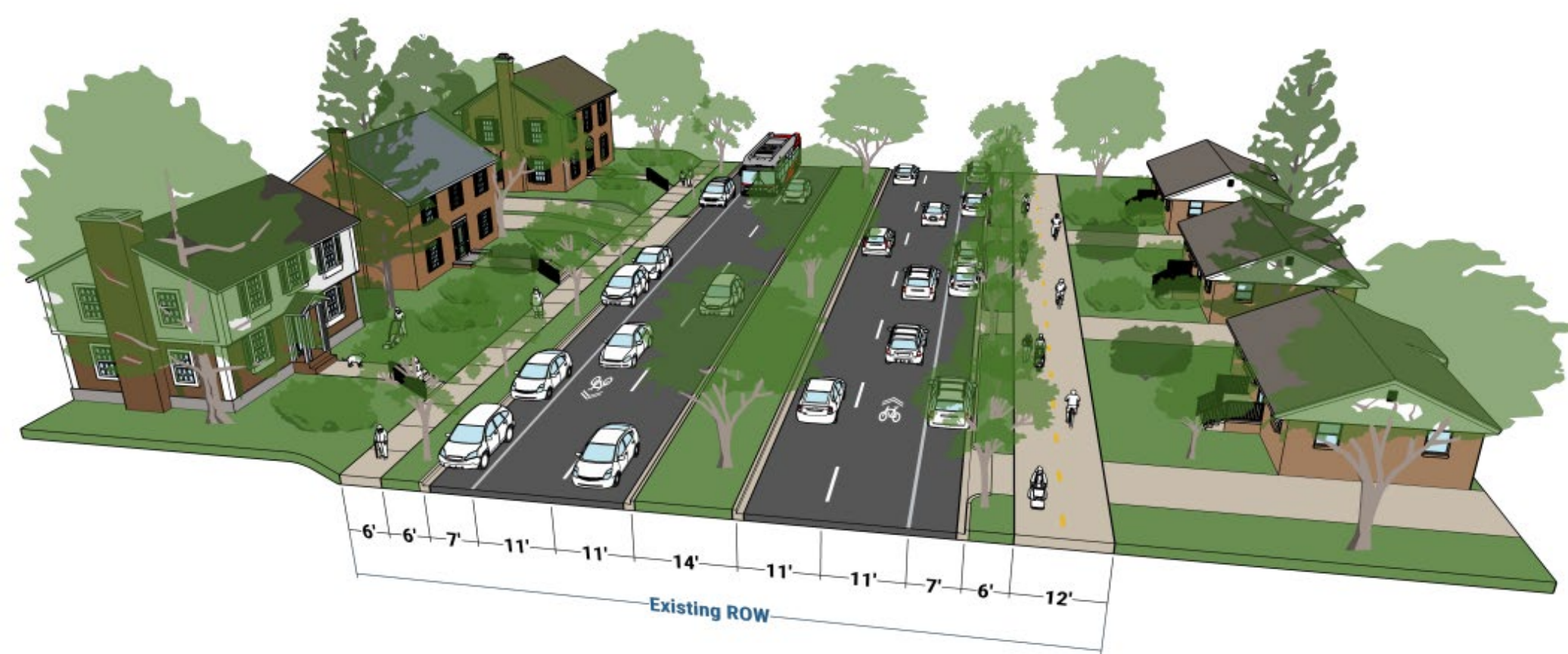
CONCEPT A: BENEFITS

- Separates bicycles, motor vehicles, and pedestrians
- Widens sidewalks to meet ADA and County guidance
- Increases width of planting strip, increasing possibilities for vegetation and tree coverage
- Provides continuous low-stress bike facility
- Curb stays in existing location, reducing construction costs

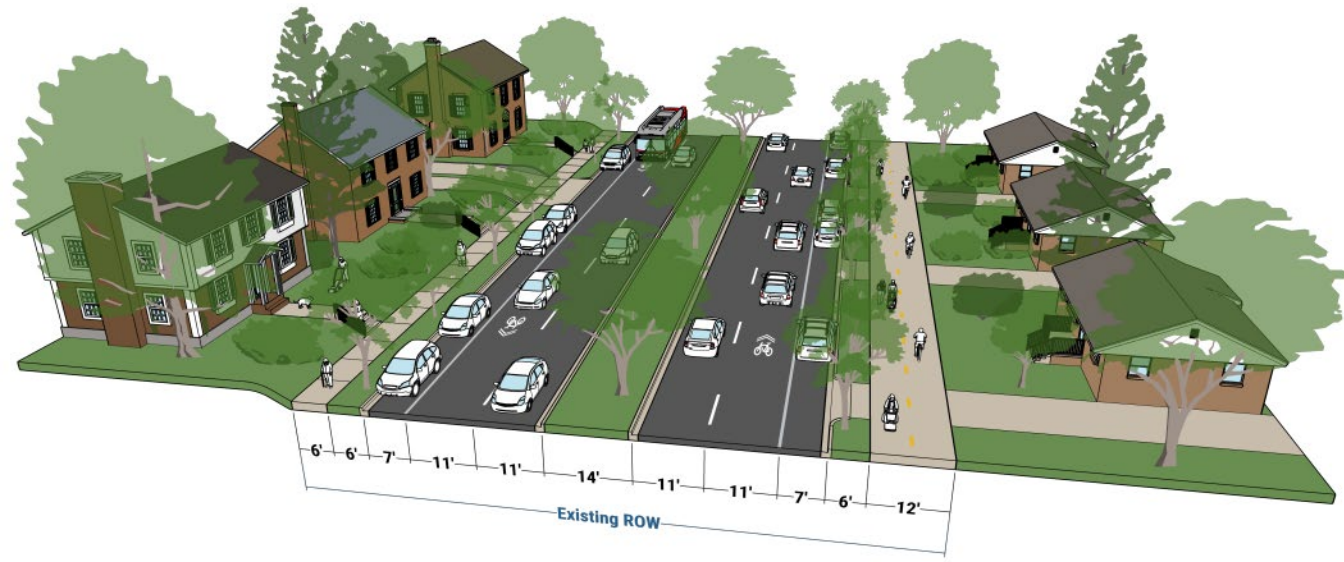
CONCEPT A: CHALLENGES

- Increases number of lanes pedestrians must cross (1 bike lane, plus 1 travel lanes on each side of the median)
- Removes on-street parking
- Requires additional right-of-way width behind the curb for wider sidewalks
- Requires additional design consideration for transit stops
- May require signal phasing changes to reduce conflicts between people driving and those walking and biking at intersections with high volumes of turning vehicles
- Possible tree removal

Segment 3 – Concept B



Segment 3 – Concept B, Benefits & Challenges



CONCEPT B: BENEFITS

- Separates people biking and those driving vehicles
- Provides continuous low-stress bike facility
- Widens sidewalks to meet ADA and County guidance
- Increases width of planted buffer, increasing possibilities for vegetation and tree coverage
- Adds new multi-use trail connecting multiple County parks
- Connects three significant regional trails (W&OD and Four Mile Run Trail) with a direct, continuous multi-use trail
- Reduces conflicts between people biking and transit vehicles when compared to Concept A

CONCEPT B: CHALLENGES

- Narrows the median to provide space for wider sidewalks which could result in tree removal
- Requires some parking removal to maintain sight distance at intersections and driveways (Segments 2 and 3)
- Requires signal phasing changes to minimize left-turn conflicts with multi-use trail at intersections with high volumes of turning vehicles
- May require additional design consideration for context sensitivity in residential areas
- Possible tree removal