

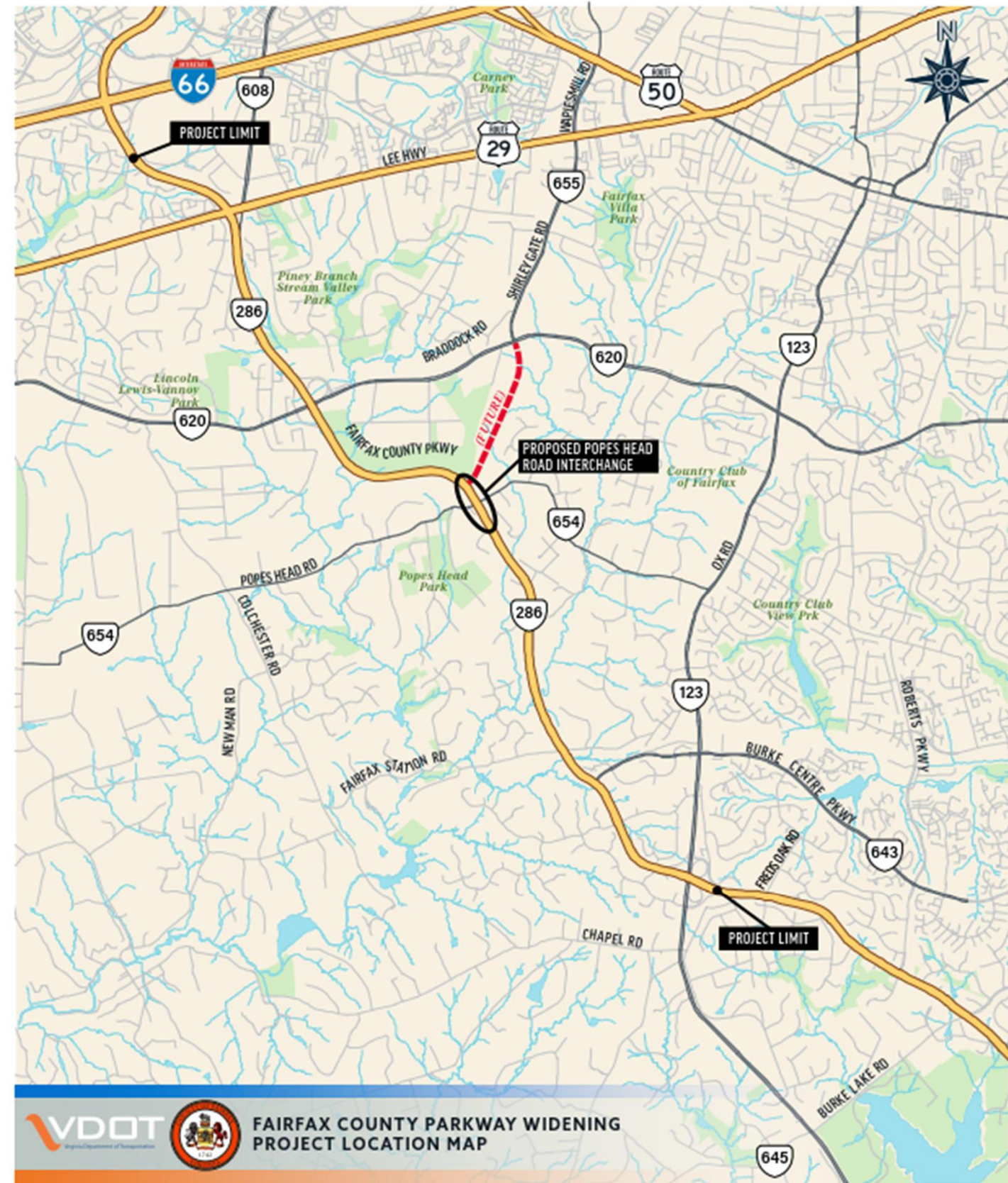


Fairfax County Parkway (Route 286) Widening Project

Route 29 (Lee Highway) to Route 123 (Ox Road)
State Project No. 0286-029-259, P101; UPC 107937

December 13, 2018

Burke Centre Conservancy



Presentation Agenda

- **Introduction**
 - **Nick Roper, VDOT District Engineer for Project Development**
- **Project Overview**
 - **Andy Beacher, VDOT Preliminary Engineering**
- **Conceptual Design Options/Alternatives**
 - **John Maddox and Dana Trone, WRA (Design Consultant)**
- **Project Schedule and Funding**
 - **Andy Beacher, VDOT Preliminary Engineering**

Project Overview

Reduce recurring congestion along the corridor and improve safety at crash “hot-spots” by:

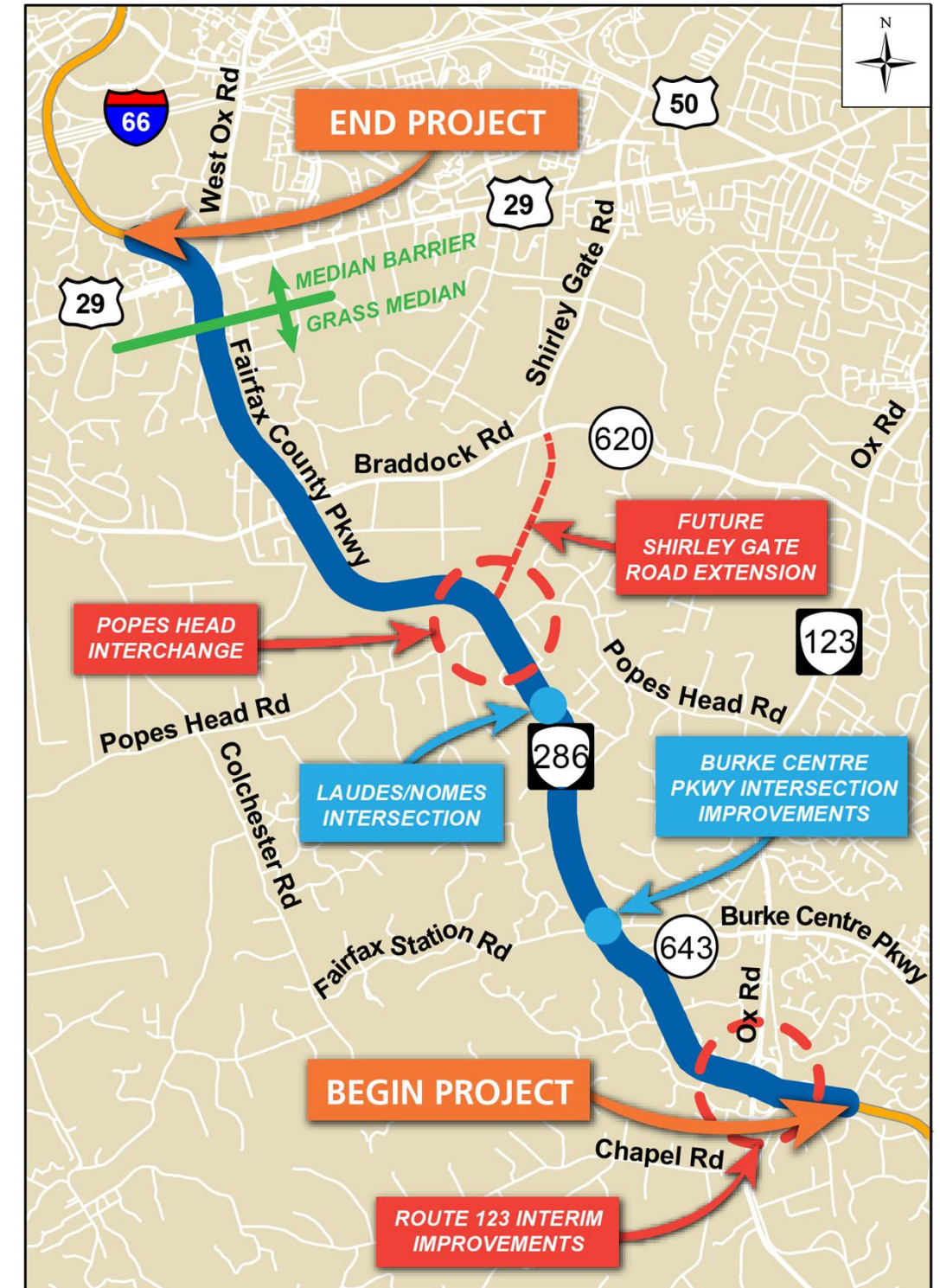
- Widening Fairfax County Parkway (FCP) to provide third lane in each direction
- Improvements to intersections within project limits
- Interchange at Popes Head Road
 - Includes access to future development of Patriot Park and future extension of Shirley Gate Road

Provide multimodal accommodations for pedestrian and bicyclists:

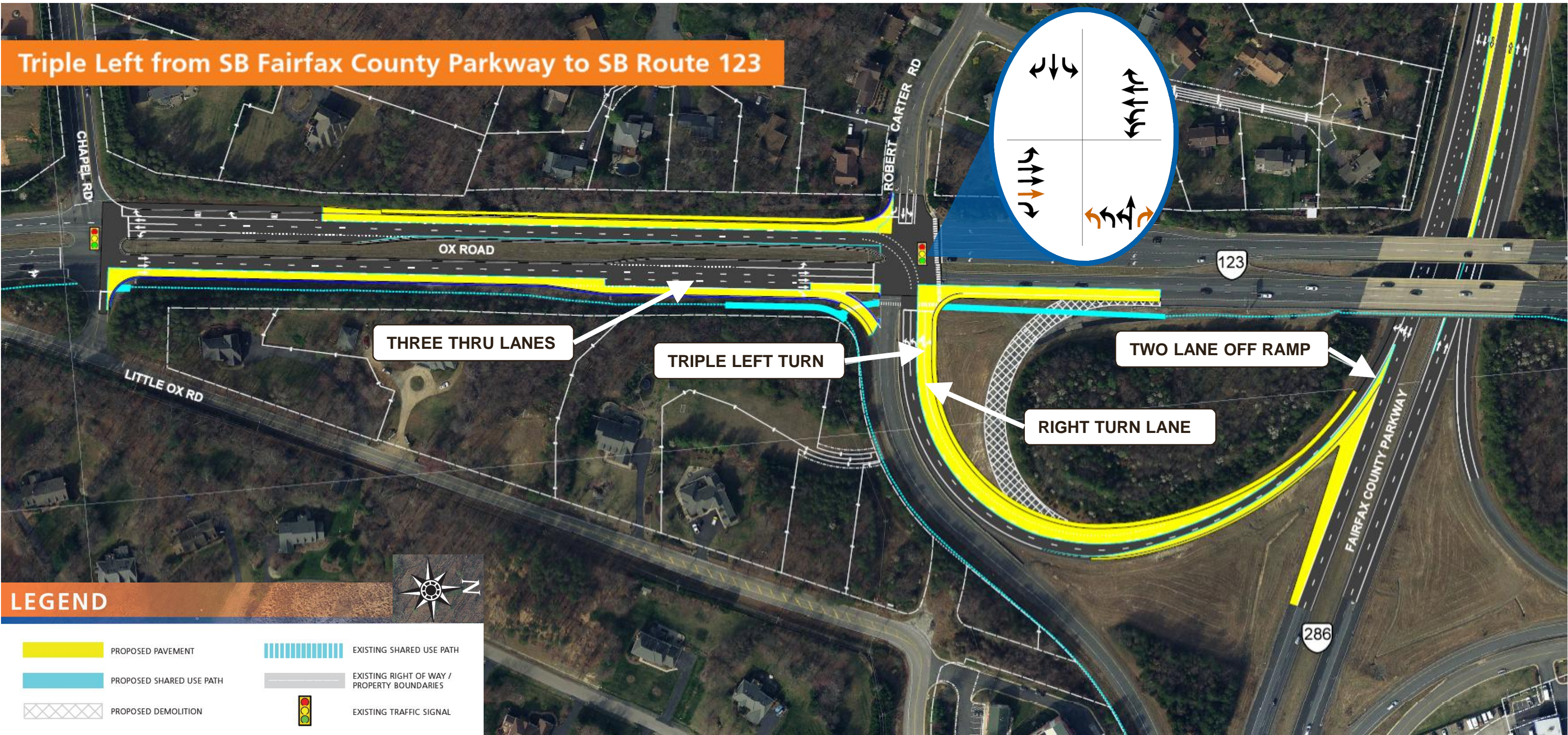
- Upgrades to shared use path

Other design considerations:

- Noise analysis, stormwater management
- Right-of-way impacts

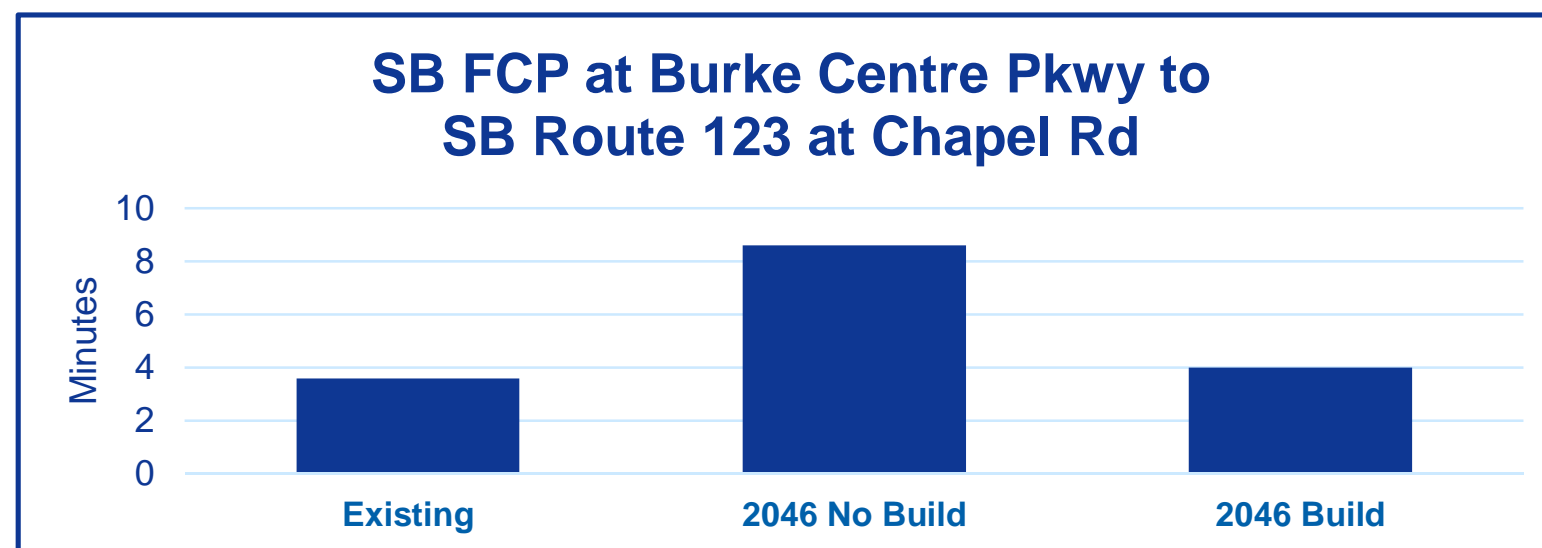


Route 123 (Ox Road) Interchange



Route 123 Interchange Traffic Operations

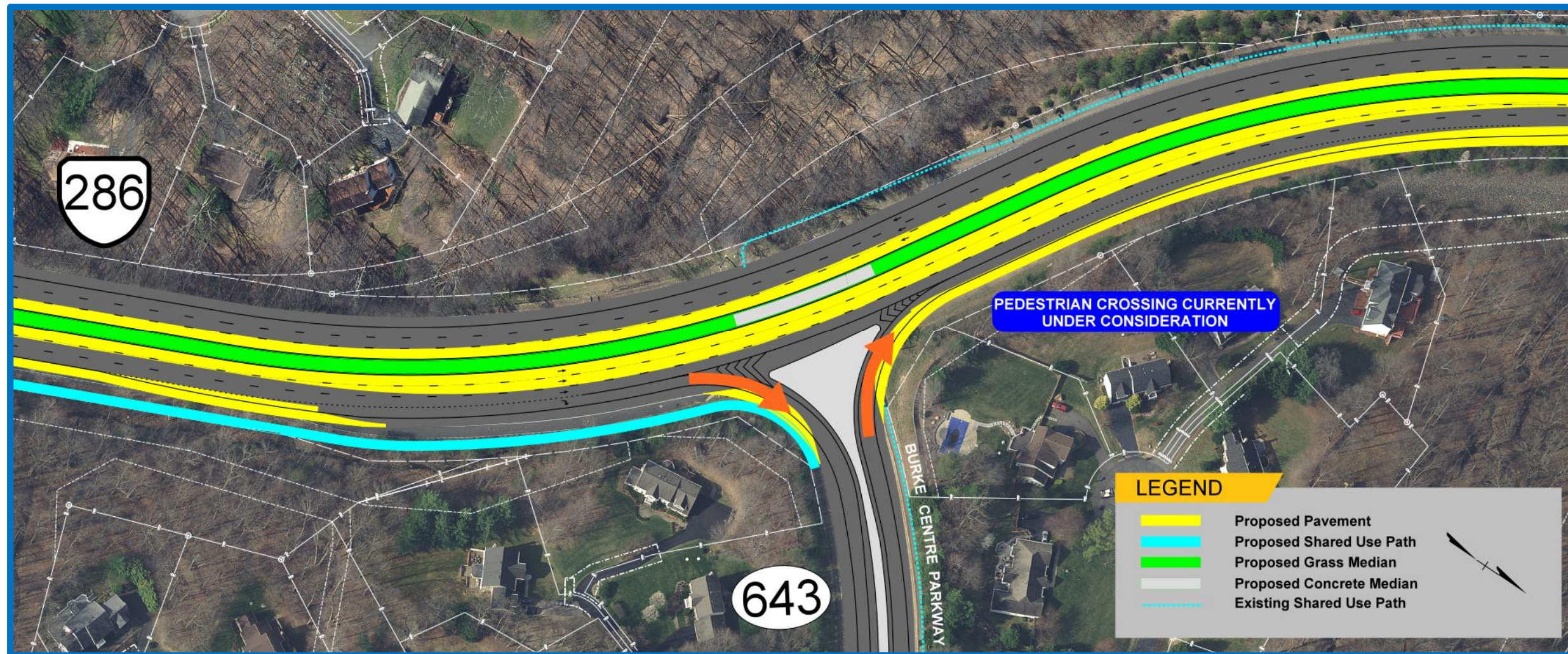
- Travel times compared along southbound Fairfax County Parkway from Burke Centre Parkway to southbound Route 123 at Chapel Road
- Key Findings
 - 2046 Build condition travel times are similar to existing conditions
 - Significant benefits with added turn/thru lanes



Burke Centre Parkway Intersection

Right-In/Right-Out

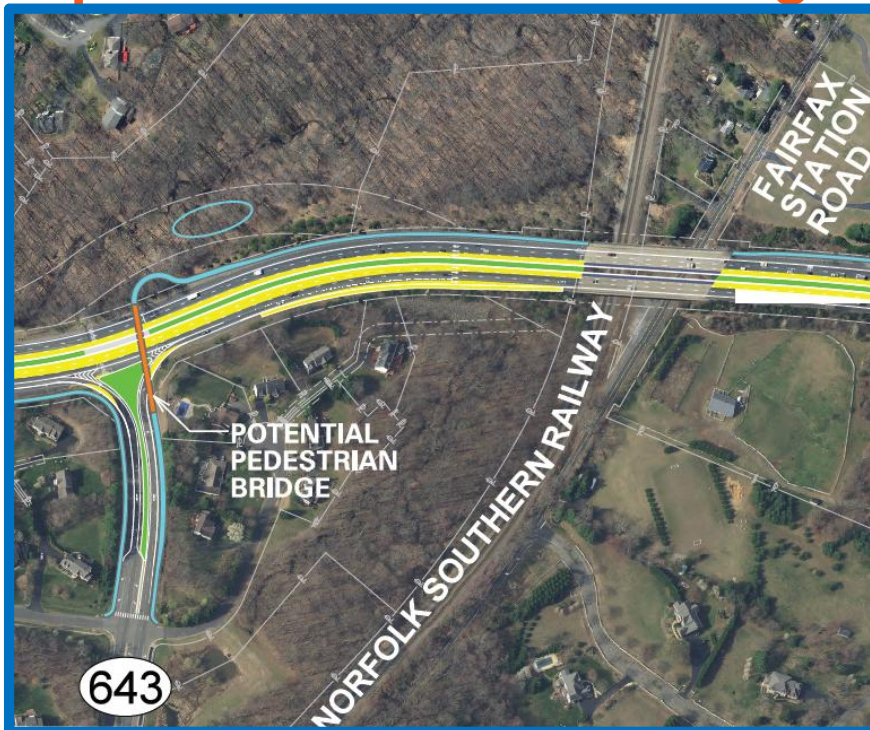
- Eliminates existing traffic signal
- Acceleration lane for WB Burke Centre Parkway right turn
- Prohibits all left turn and U-turn movements at Burke Centre Parkway
- Requires grade separation of pedestrian crossing of Fairfax County Parkway



Shared Use Path Crossing

Project Team is currently evaluating 3 options:

Option A: Pedestrian Bridge



- Construct new pedestrian bridge spanning Fairfax County Parkway (FCP) at Burke Centre Parkway
- At grade crossing required at Fairview Woods Drive

Option B: Railroad Underpass



- Shared use path adjacent to Norfolk Southern Railroad (NSRR) track crossing underneath FCP
- New shared use path along east side of FCP and crosses Burke Centre Parkway at grade
- Preliminary approval from NSRR

Option C: Fairfax Station Underpass



- Shared use path adjacent to Fairfax Station Road crossing underneath FCP
- New shared use path along east side of FCP and crosses Burke Centre Parkway at grade
- Requires widening of Fairfax Station/NSRR bridge

Ladues End Lane and Nomes Court Intersection



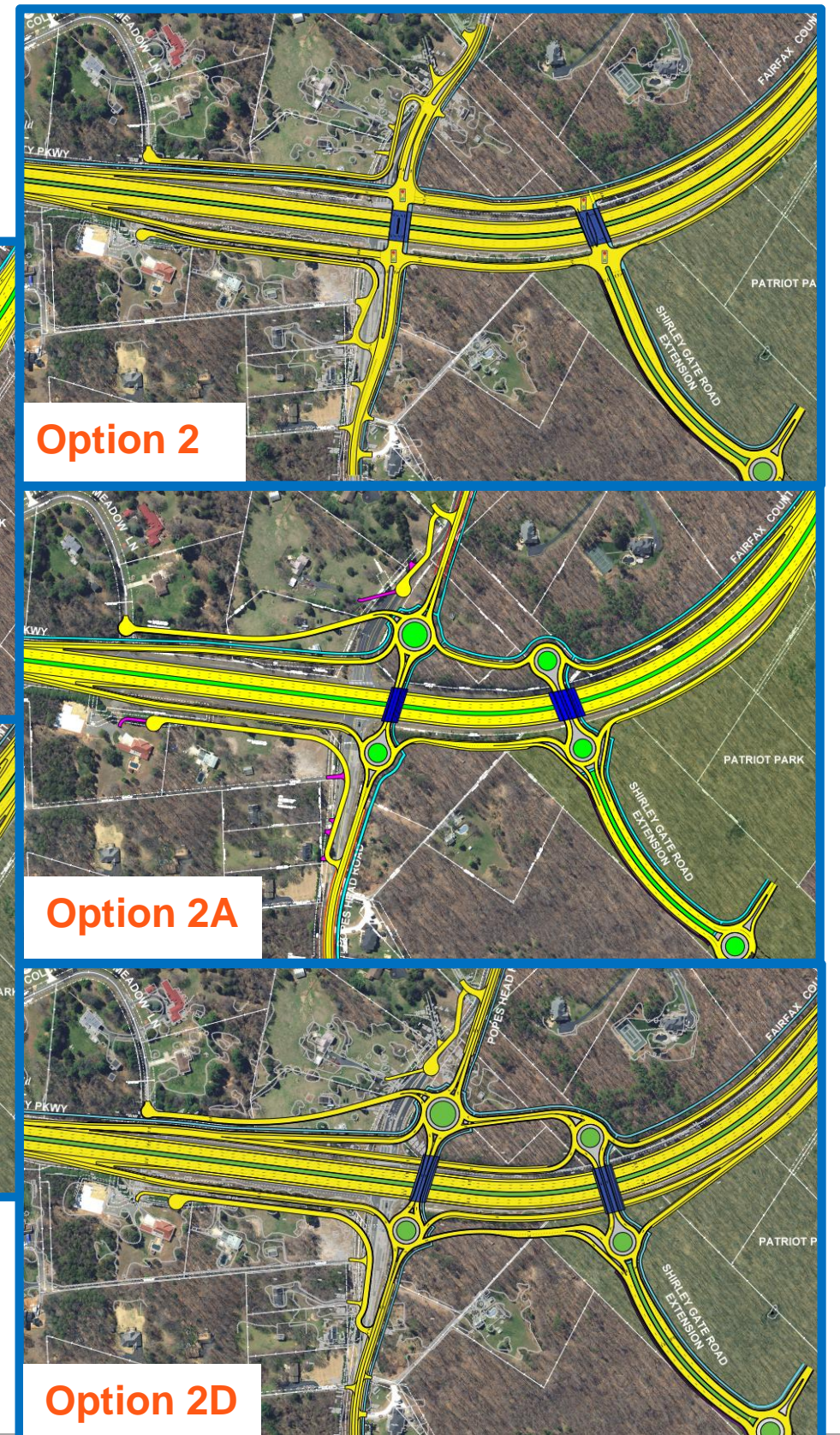
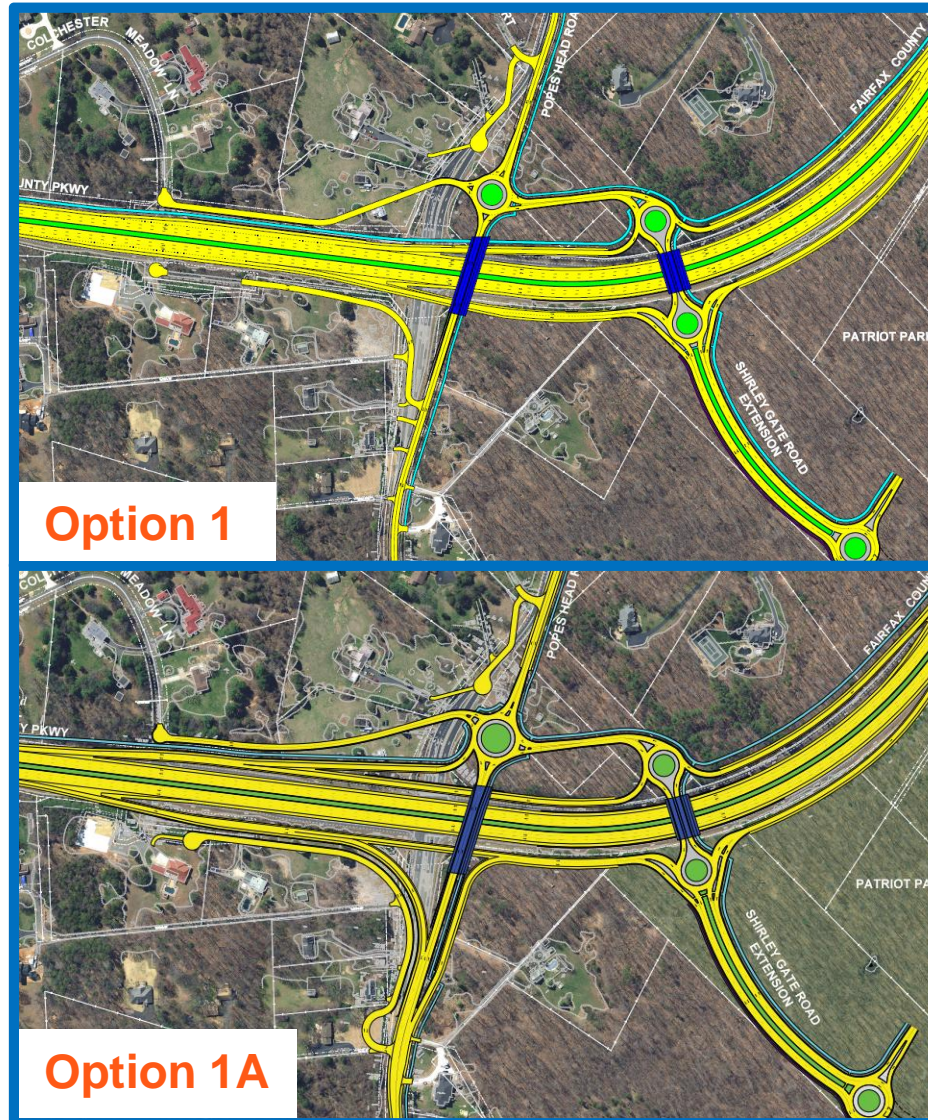
Left-In with Restricted Crossing U-Turn (RCUT)

- Removes left turning movement exiting from Ladues End Lane and Nomes Court
 - Current Ladues End Lane left out movement must turn right and use RCUT or Route 123 interchange to travel north
 - Current Nomes Court left out movement must turn right and use the Popes Head Road interchange to travel south

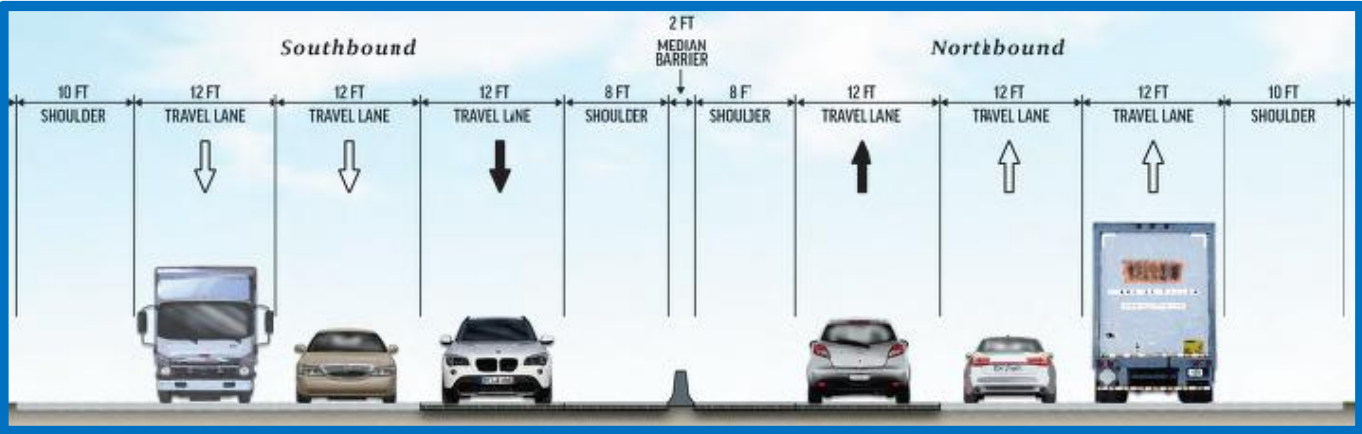
Popes Head Road Interchange

Summary

- Provide access to future development of Patriot Park and accommodate the future extension of Shirley Gate Road
- Studied over 10 interchange concepts
- Narrowed down to three different interchange concepts (with two options including ramp configuration variations)
- Option 1 only option within project budget
- Design Team reviewing opportunities for cost savings
- All 5 options have acceptable traffic operations



Improvements to Northern Section



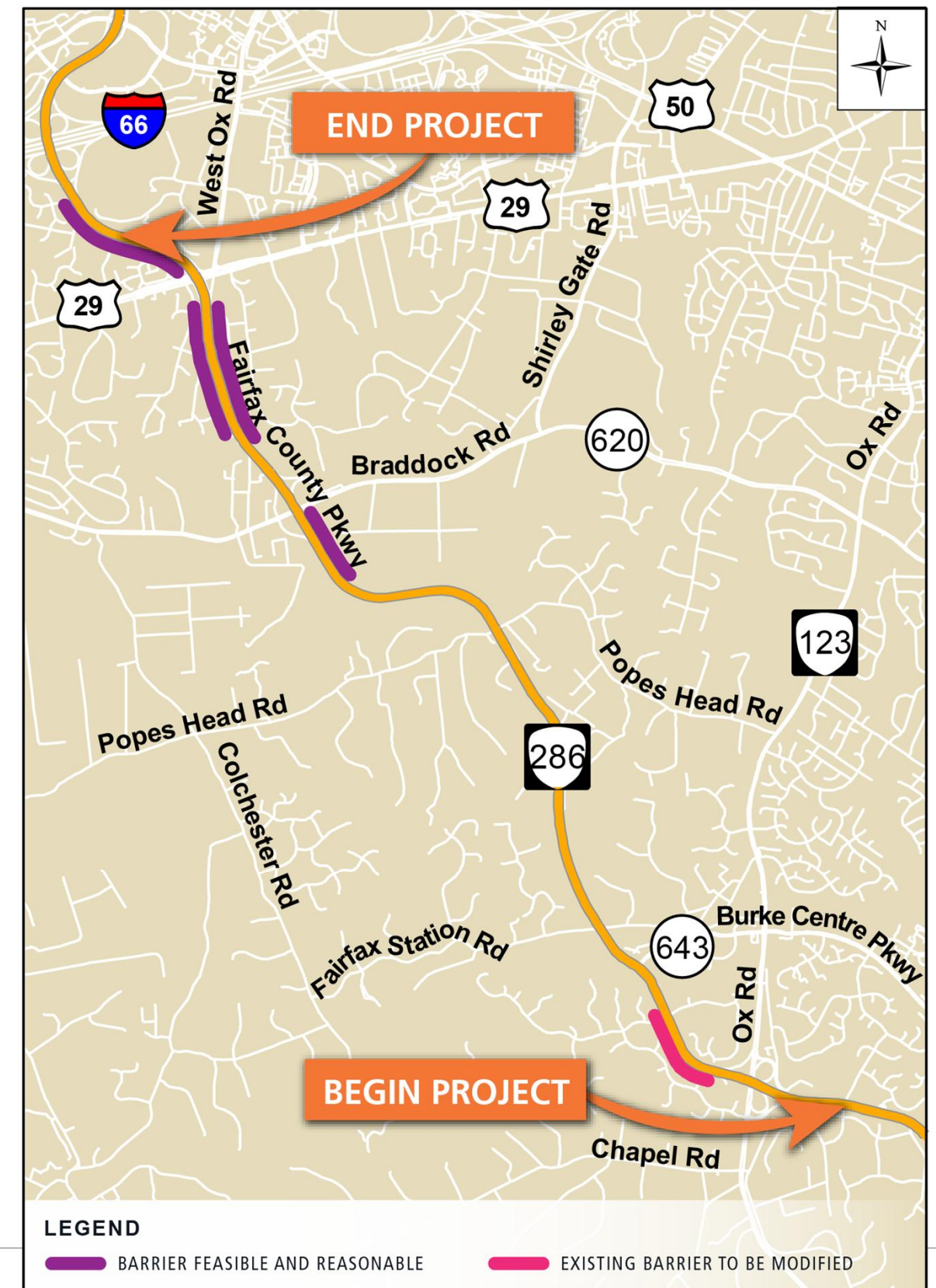
- Widening ties into existing 6-lane roadway section north of Route 29 Interchange
- Shared Use Path upgrades on east side of Fairfax County Parkway



Preliminary Noise Analysis

Summary Slide

- Total of 4 new noise barriers considered feasible and reasonable
- One existing barrier replacement on the west side of Fairfax County Parkway between Route 123 and Clara Barton Drive considered feasible and reasonable



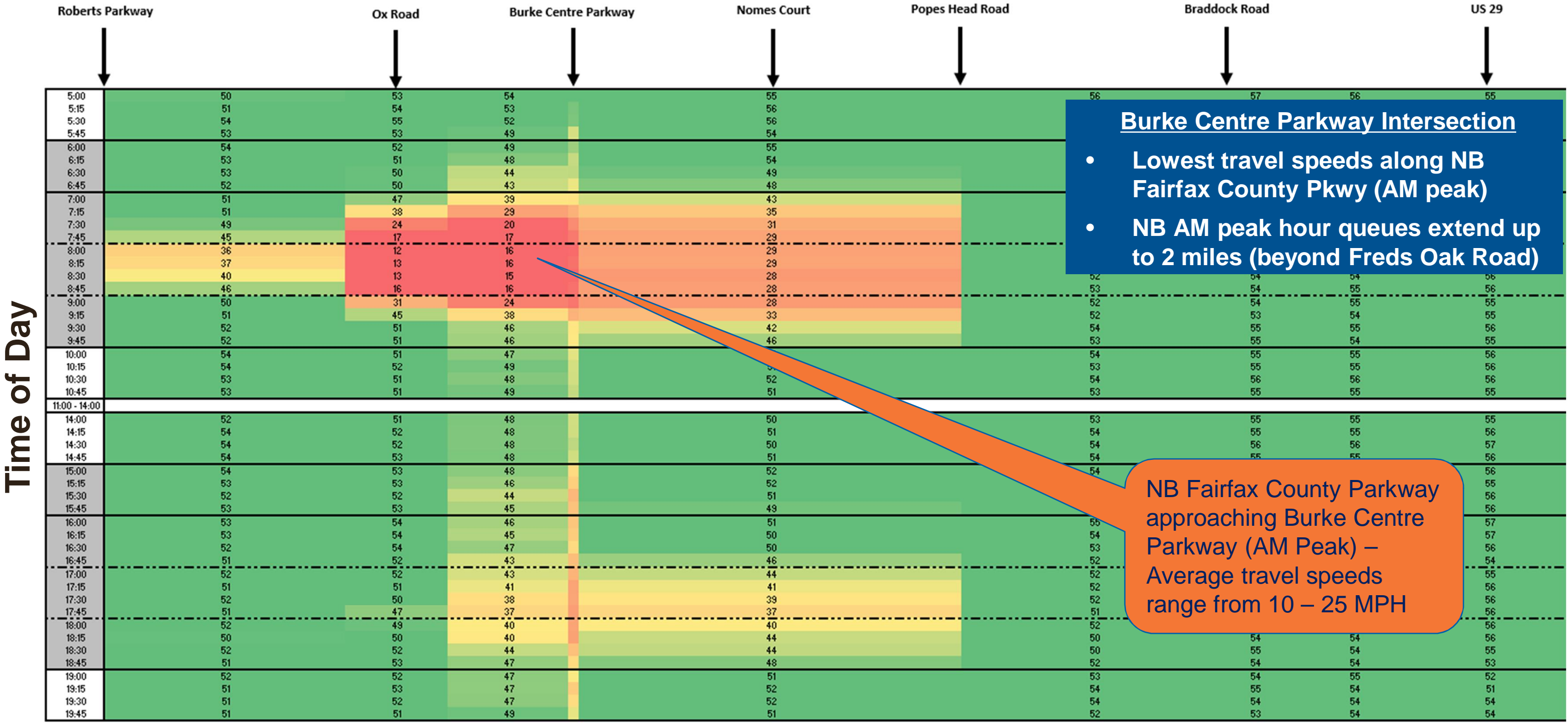
Burke Centre Parkway Intersection – Existing Conditions

- Congestion on NB Fairfax County Parkway approaching Burke Centre Parkway during AM peak hour
- Crash “hot spot” along the Fairfax County Parkway corridor
- Existing shared use path crossing of Fairfax County Parkway
- Burke Centre Parkway serves Burke Centre residents and commuters avoiding Fairfax County Parkway congestion

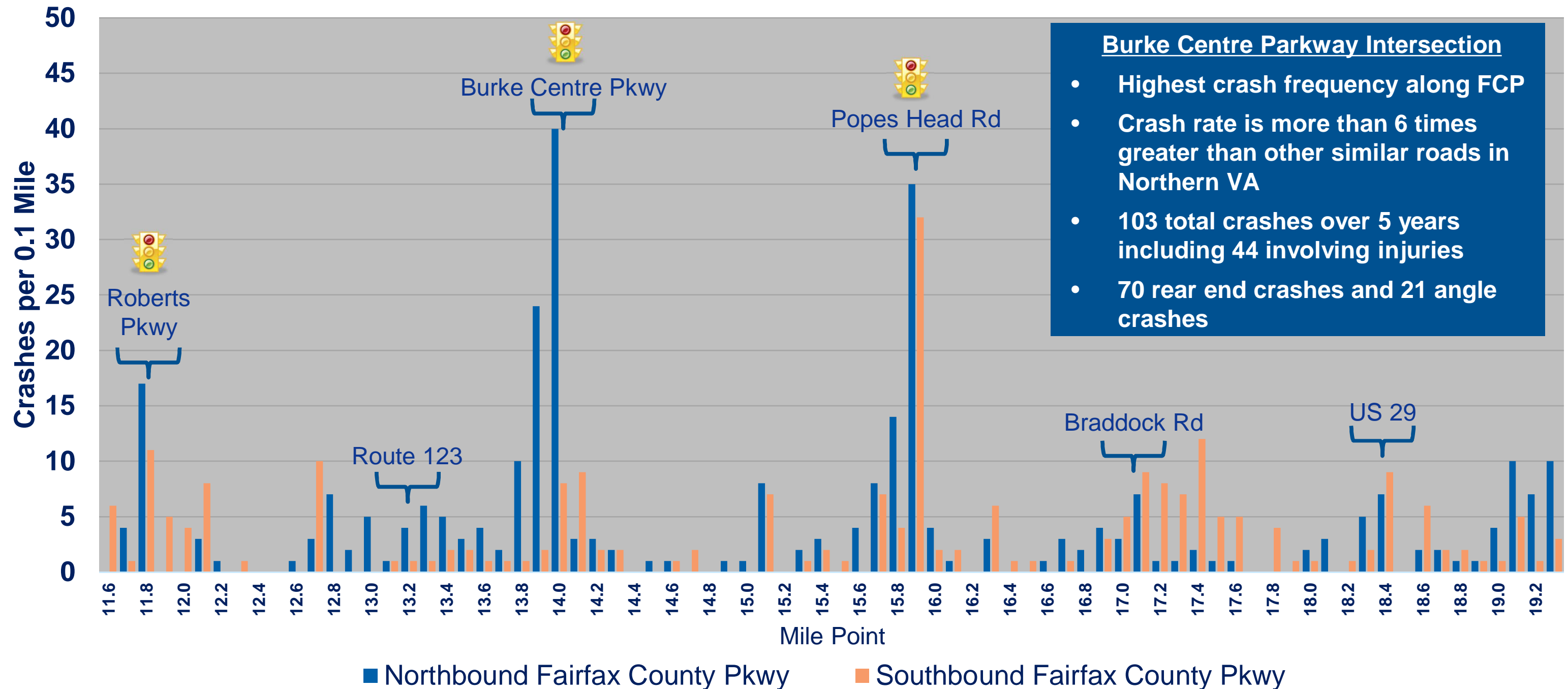


NB Fairfax County Parkway - View from Route 123 Bridge

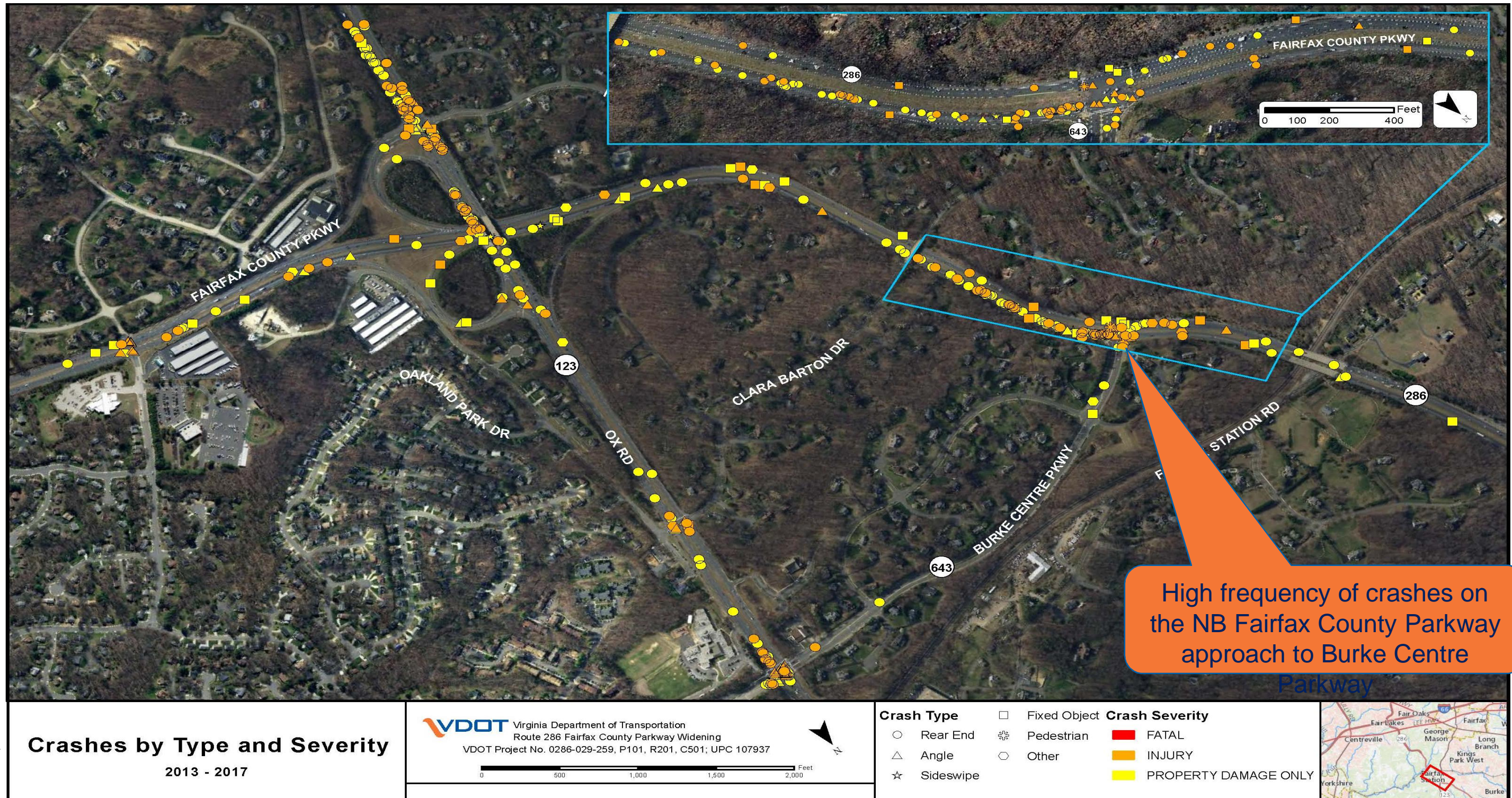
Existing Northbound Fairfax County Parkway Speeds



Fairfax County Parkway Safety Analysis (2013 – 2017)



Fairfax County Parkway Safety Analysis (2013 – 2017)



Burke Centre Parkway Intersection

- **Options Considered**
 - **Continuous Green-T (CGT)**
 - **Prohibit Left Turns from Burke Centre Parkway**
 - **Right In / Right Out (preferred option presented at Sept/Oct 2018 Public Information Meetings)**

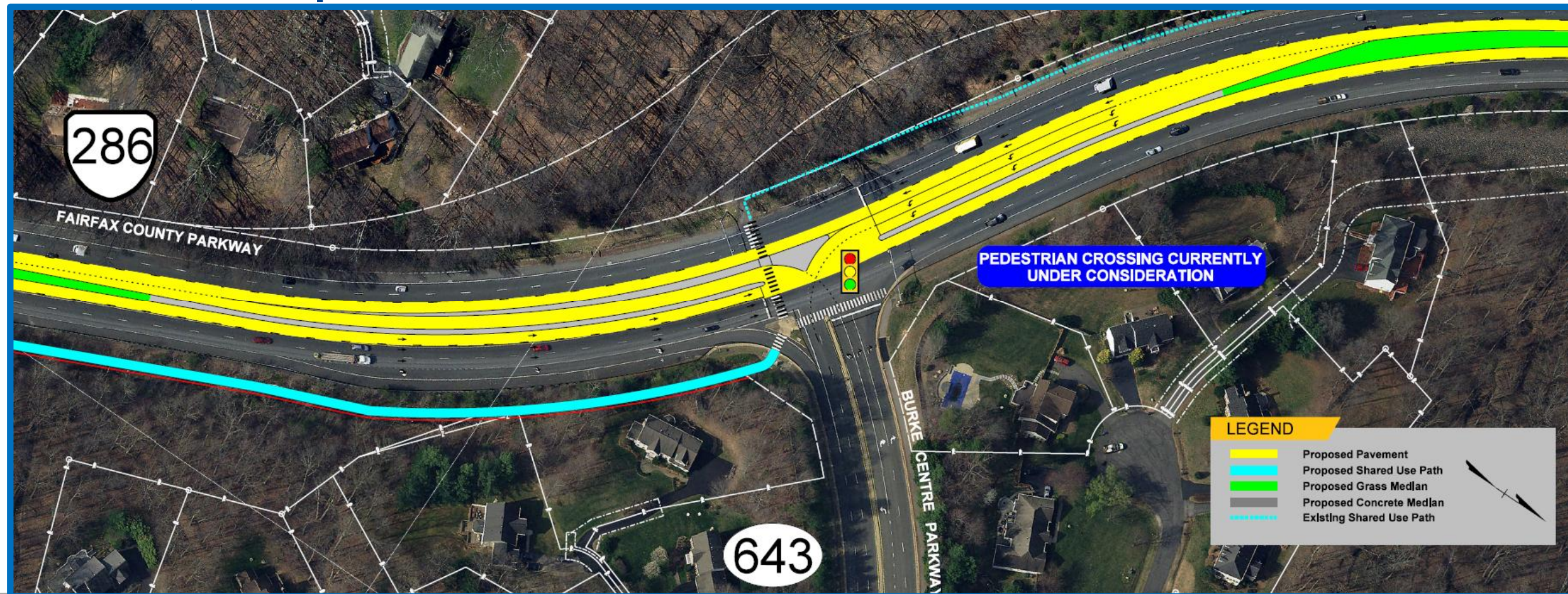


NB Fairfax County Parkway –
View from Clara Barton Drive bridge

Burke Centre Parkway Intersection

Continuous Green-T (CGT)

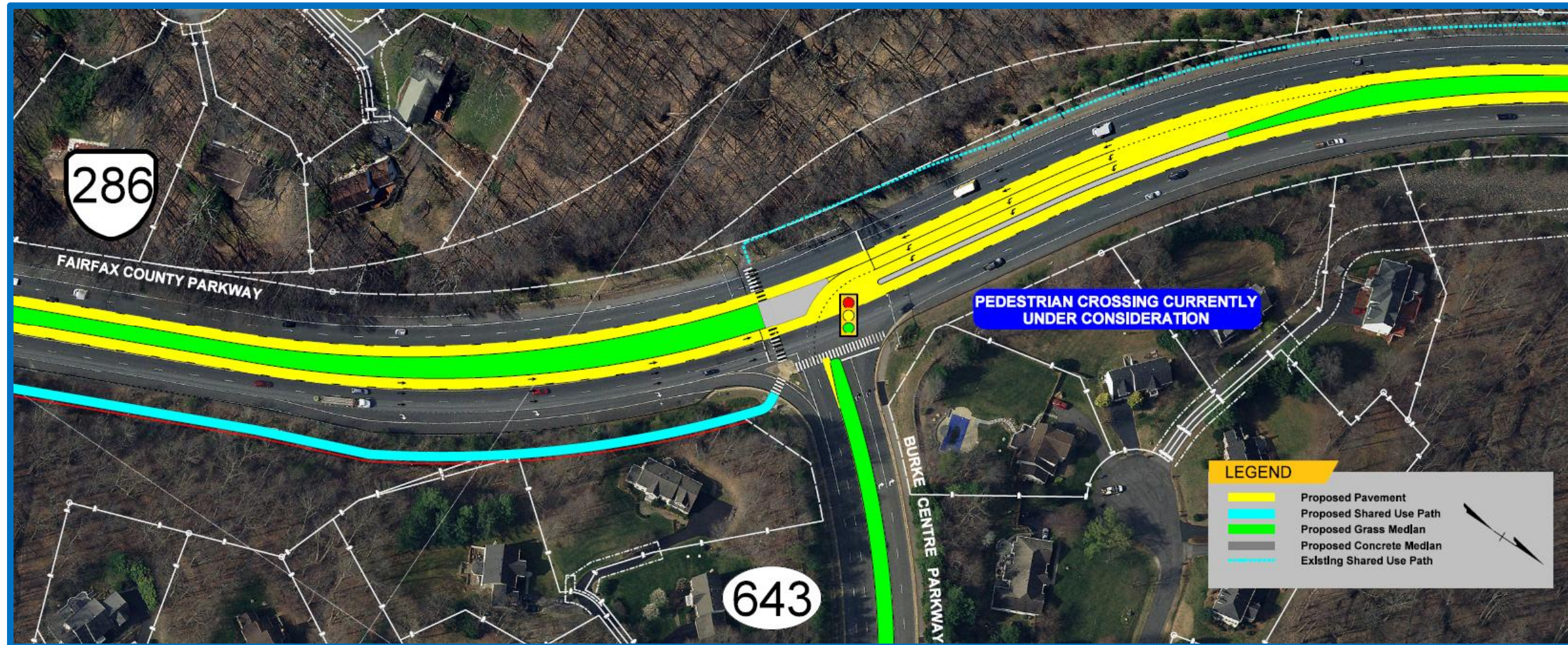
- Minimizes stopping for SB Fairfax County Parkway
- Low left turn volumes from WB Burke Centre Parkway (less than 15 per hour)
- Left hand merge on SB Fairfax County Parkway
- Crosswalk across Fairfax County Parkway requires stopping SB traffic when activated; unexpected condition for motorists



Burke Centre Parkway Intersection

Prohibit Left Turns from Burke Centre Parkway

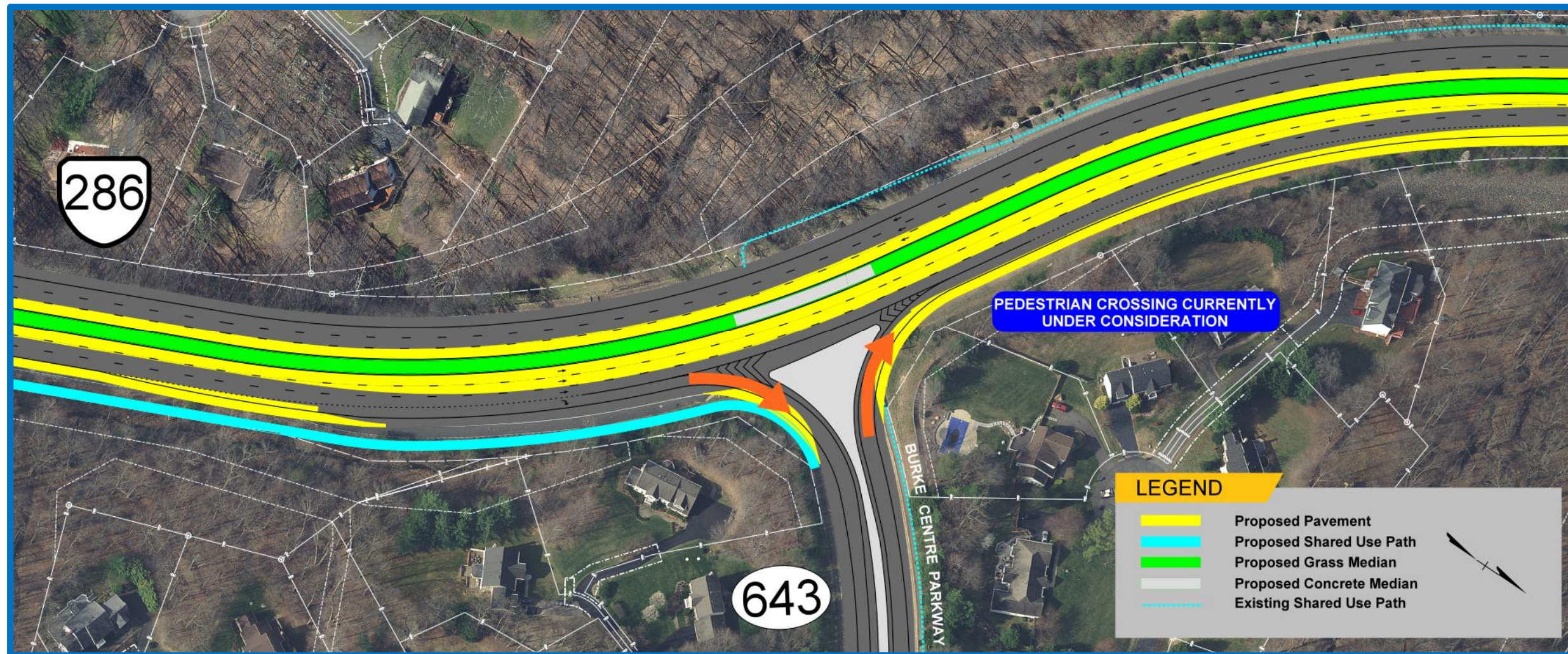
- Removal of WB Burke Centre Parkway left turn increases green time for NB Fairfax County Parkway and improves operations (compared to CGT)
- An at-grade pedestrian crossing of Fairfax County Parkway requires stopping SB traffic when activated; unexpected condition for motorists



Burke Centre Parkway Intersection

Right-In/Right-Out

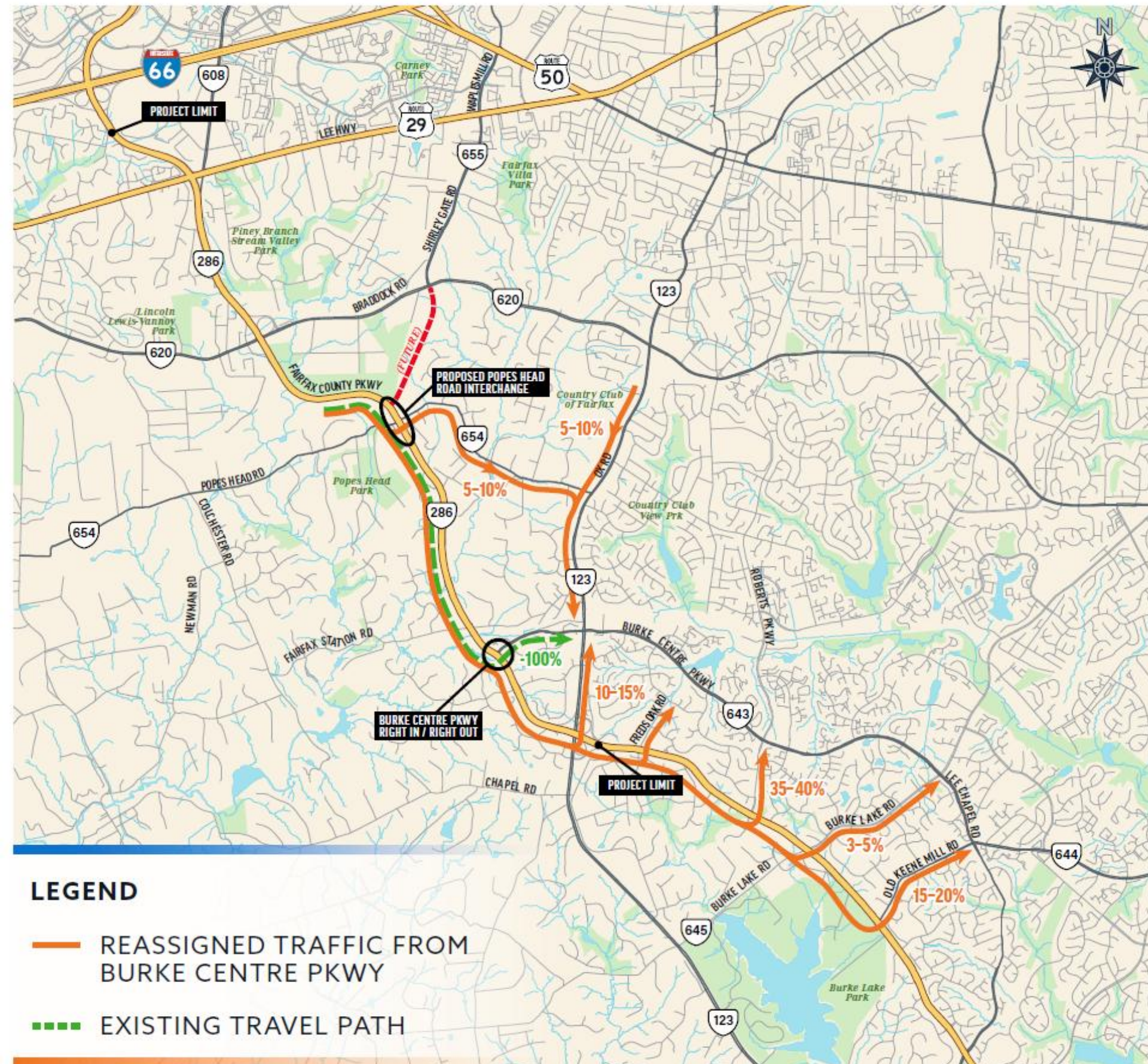
- Eliminates existing traffic signal
- Acceleration lane for WB Burke Centre Parkway right turn
- Prohibits all left turn and U-turn movements at Burke Centre Parkway
- Requires grade separation of pedestrian crossing of Fairfax County Parkway



Burke Centre Parkway Intersection

Right-In/Right-Out

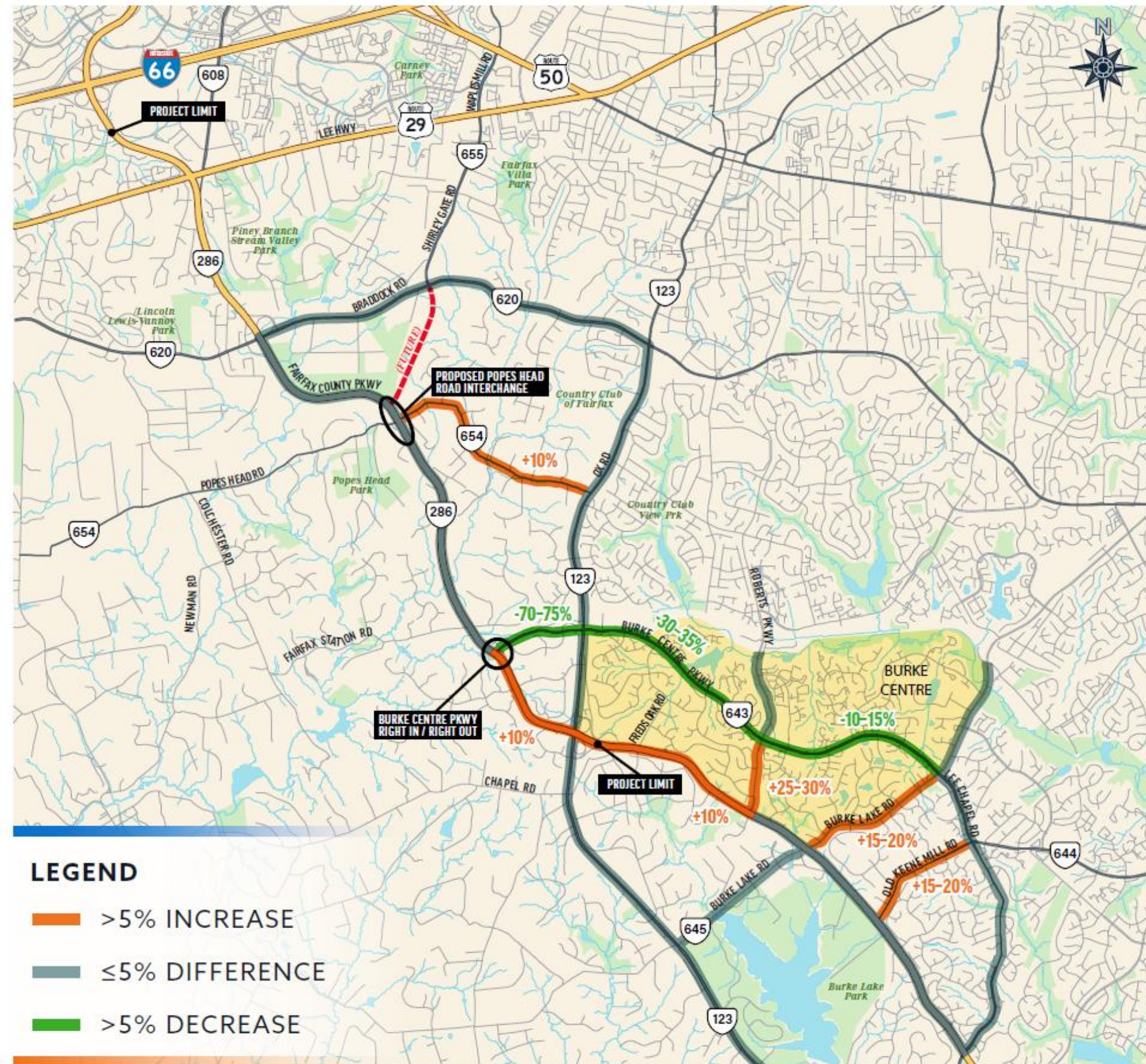
- Daily Traffic Volumes-
Reassignment of Southbound
Fairfax County Parkway Left
Turns to Burke Centre Parkway to
Alternate Routes



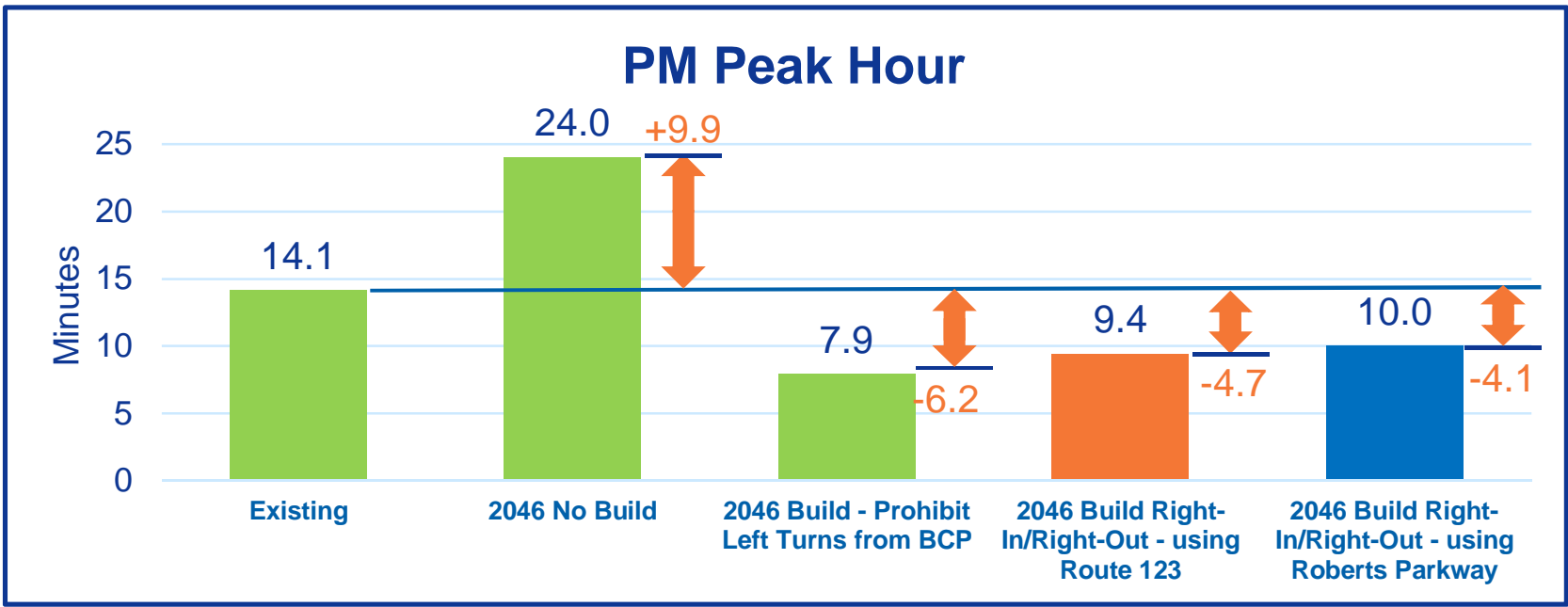
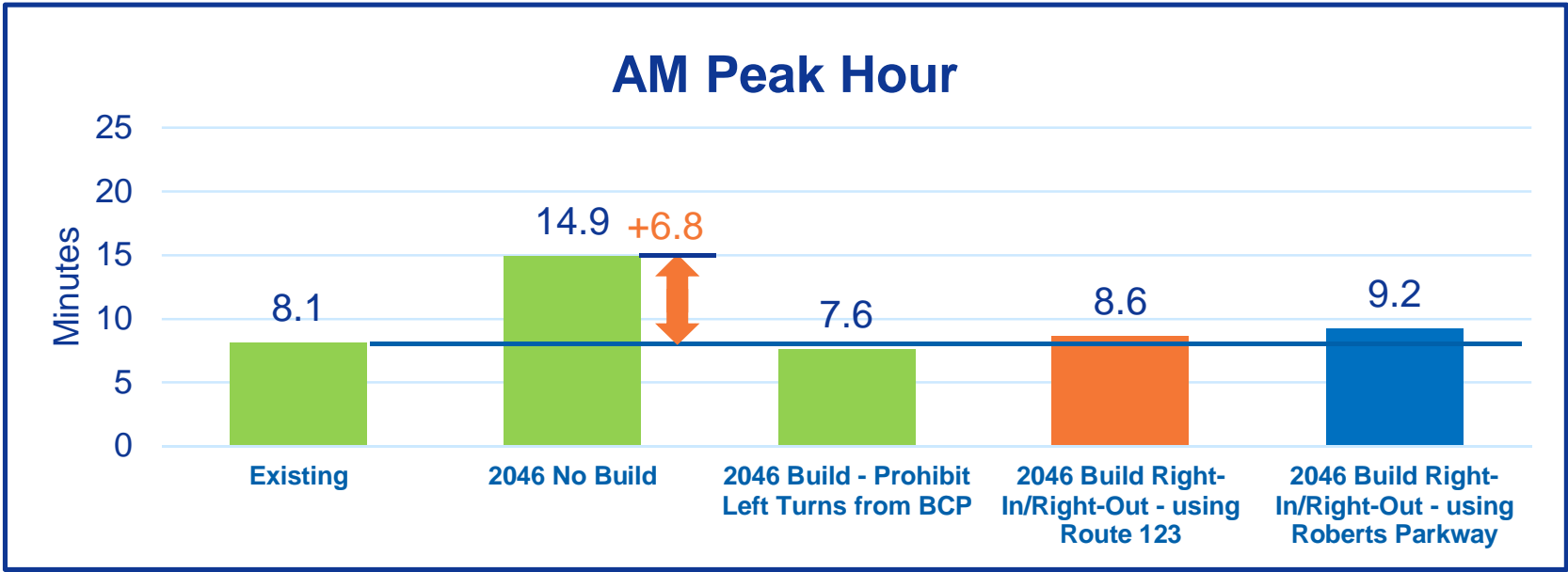
Burke Centre Parkway Intersection

Right-In/Right-Out

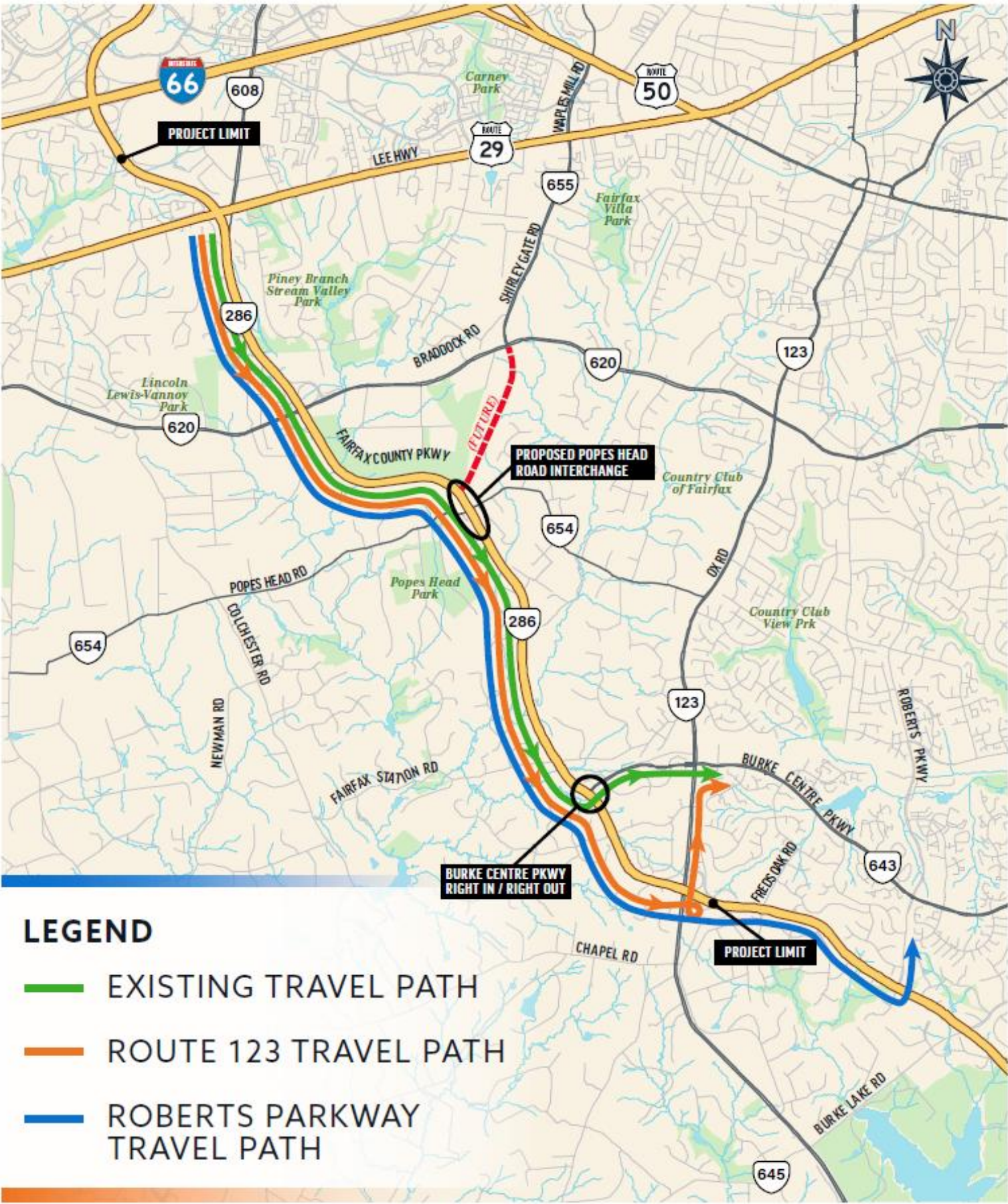
- Daily traffic volume changes resulting from removal of left turns to and from Burke Centre Parkway



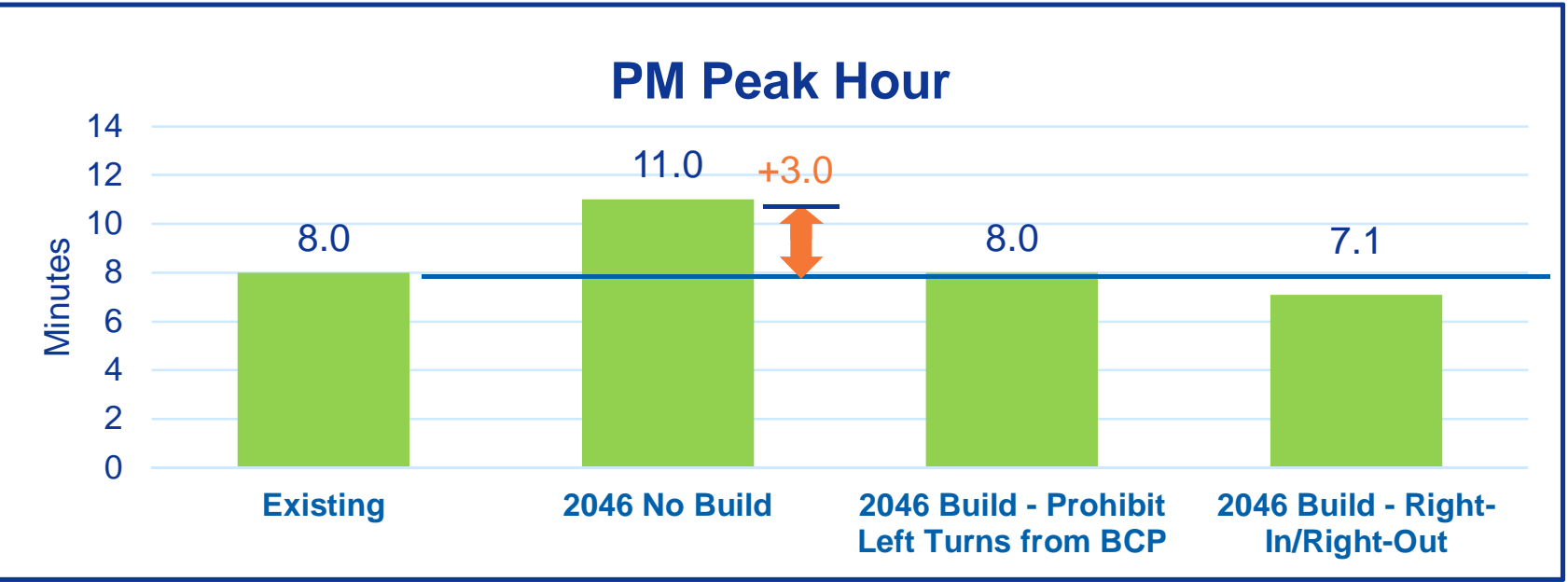
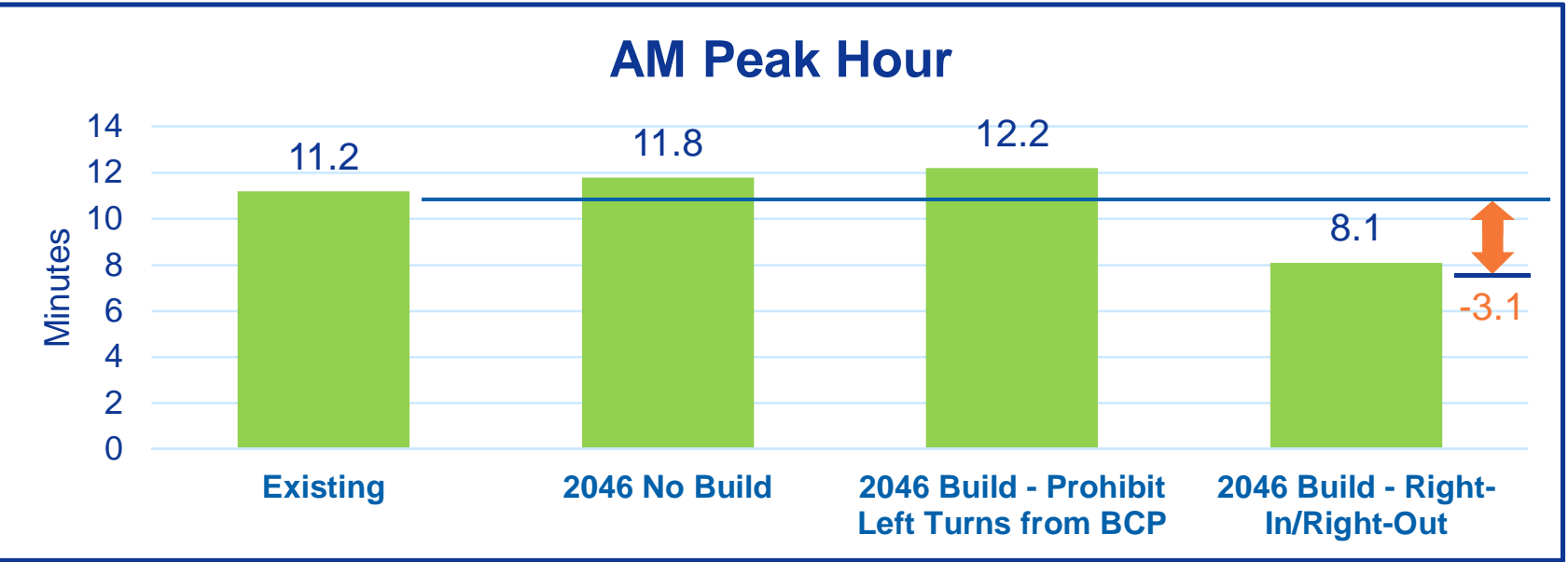
Southbound Fairfax County Parkway Travel Times – Left Turn to Burke Centre Parkway and Alternate Routes



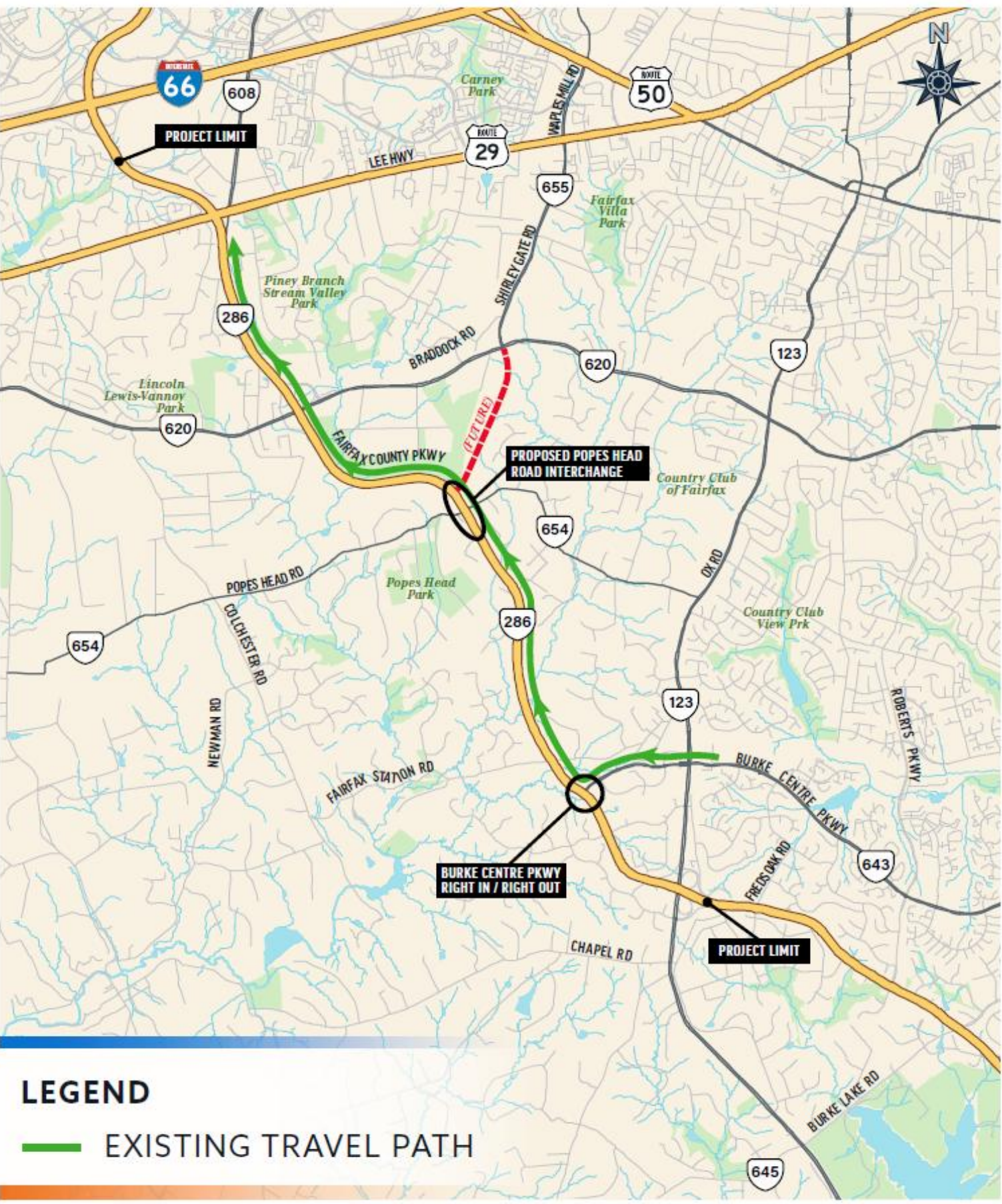
+XX - Difference compared to existing conditions



Northbound Fairfax County Parkway Travel Times – WB Right Turn from Burke Centre Parkway



+XX - Difference compared to existing conditions



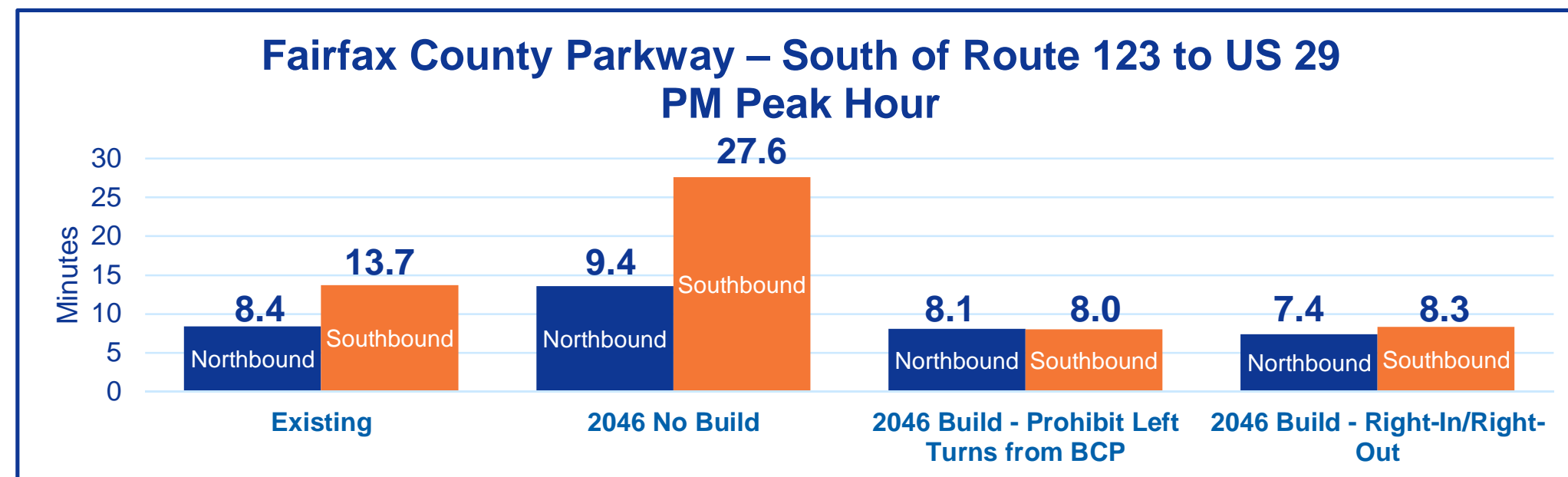
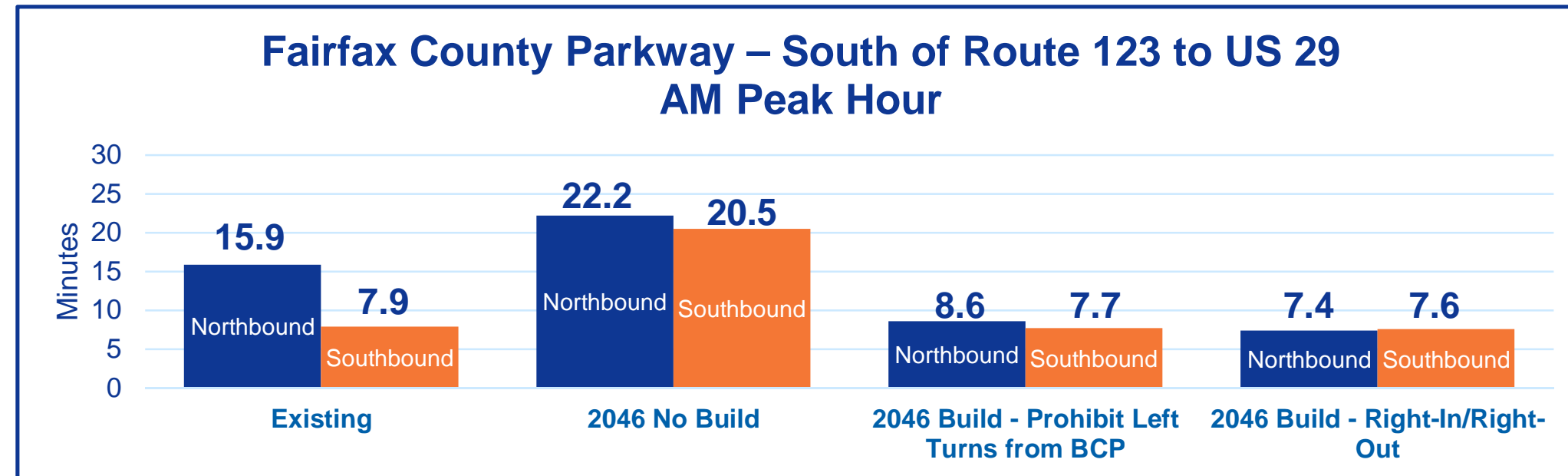
Fairfax County Parkway Travel Times

2046 No Build Conditions

- No improvements along Fairfax County Parkway
- Southbound travel times are 13 - 14 minutes greater than existing conditions

2046 Build Conditions

- Includes:
 - Fairfax County Parkway widening
 - Popes Head Road interchange
 - Burke Centre Parkway improvements
- Northbound AM Peak
 - 14-15 minute travel time savings
- Southbound PM Peak
 - 19-20 minute travel time savings



Burke Centre Parkway Intersection Recommended Alternative

Right-In/Right-Out

- Improves safety at a crash “hot-spot” by removing the existing signal at Burke Centre Parkway
- Reduces recurring congestion along the Fairfax County Parkway corridor within project limits
- Overall reduction in traffic in residential areas including Burke Centre Parkway
- Reduces the overall daily travel time to and from Burke Centre Parkway communities and points north during peak hours

Project Schedule:

Milestones	Dates
Public Information Meeting	December 7, 2017
Begin Noise Study	January 2018
Public Outreach Meetings	January – April 2018
Draft Preliminary Noise Study Completion	Mid 2018
Public Information Meetings	September 2018 – January 2019
Public Hearing	Early 2019
Design Approval	Mid 2019
Phase 1 Construction – Popes Head Road/Shirley Gate Road Interchange <ul style="list-style-type: none"> ○ Award Design Build Contract/Begin Construction ○ Completion of Construction 	<div>Late 2019</div> <div>Late 2022</div>
Phase 2 Construction – Fairfax County Parkway Widening	To be determined as additional funding becomes available

Estimated Project Cost and Funding

Project Estimate and Budget					
<u>Project</u>	<u>Preliminary Engineering</u>	<u>Right of Way/ Utility Relocation</u>	<u>Construction</u>	<u>Subtotal</u>	<u>Total</u>
Popes Head Interchange and FCP Widening		Phase 1: \$9.7M	Phase 1: \$54.6M	\$64.3M Smart Scale Budget	\$194.6M
	Phase 2: \$14M	Phase 2: \$22.3M	Phase 2: \$94M	\$130.3M	

These project costs are estimates and subject to change as the project design is further developed

Current Funding Awarded				
<u>Project</u>	<u>Amount</u>	<u>Source</u>	<u>Date Awarded</u>	<u>Phase</u>
Phase 1: Popes Head Interchange	\$4M	Fairfax County	FY2016	Construction
Phase 1: Popes Head Interchange	\$50.6M	Smart Scale	FY2018	Construction
Phase 2: FCP Widening	\$25.5M	NVTA & RSTP	7/14/2016	Right of Way & Design
Popes Head Interchange and FCP Widening	\$67M	NVTA	6/14/2018	Construction
Total:	\$147.1M			

Northern Virginia Transportation Authority (NVTA) is the regional transportation planning and funding body

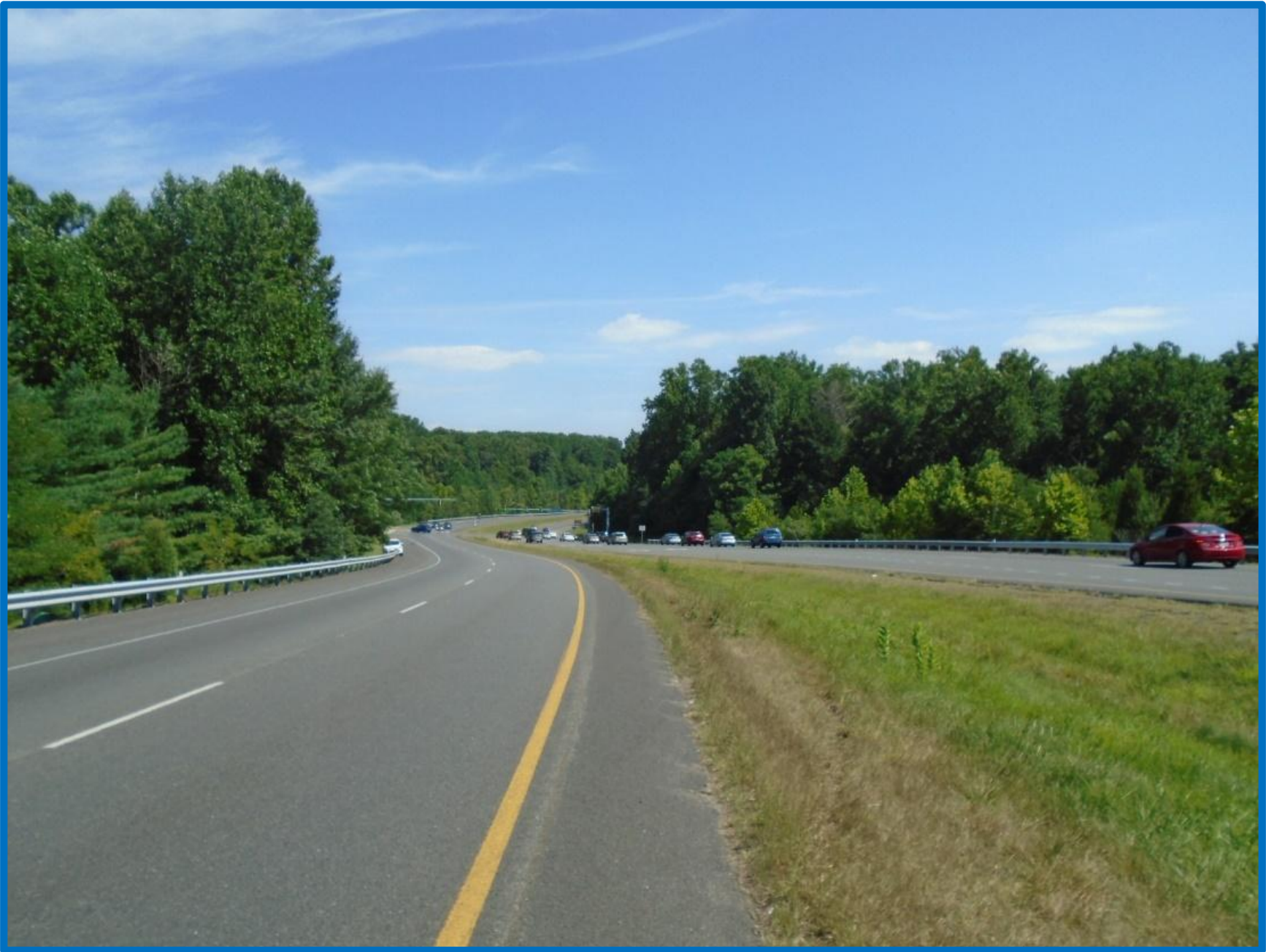
Questions?

- **Contact Information**

Sitaram Kodali, P.E.	Andy Beacher, P.E.
Project Manager, VDOT Location and Design	Project Sponsor, VDOT Preliminary Engineering
4975 Alliance Drive, Fairfax, VA 22030	4975 Alliance Drive, Fairfax, VA 22030
Sitaram.Kodali@vdot.virginia.gov	Andrew.Beacher@vdot.virginia.gov
703-691-6710	703-259-2239

- **Email Comments to:**
 - **meetingcomments@vdot.virginia.gov**
 - **Please include “Fairfax County Parkway Widening” in the subject line**
- **Project information for this meeting is available online at:**
 - **www.virginiadot.org/projects**
 - **VDOT’s Northern Virginia Office**

Comments and Questions?



VDOT Virginia Department of Transportation
www.VirginiaDOT.org

Public Information Meeting
Fairfax County Parkway Widening
Fairfax County

All meeting times are from 6:30 p.m. to 8:30 p.m. with a presentation at 7 p.m.

Tuesday, Sept. 25, 2018	Thursday, Sept. 27, 2018	Wednesday, Oct. 3, 2018
Willow Springs Elementary School 5400 Willow Springs School Road Fairfax, VA 22030	Fairview Elementary School 5815 Ox Road Fairfax Station, VA 22039	Oak View Elementary School 5004 Sideburn Road Fairfax, VA 22032

Federal Project: STP-5A01 (775)
State Project Number: 0286-029-259, P101
UPC: 107937

COMMENT SHEET

All comments are subject to public disclosure.

Name (optional): _____
Address (optional): _____
Email (optional): _____

1. Which of the following best applies to you?
____ I live on a street that intersects with Fairfax County Parkway. If so, where? _____
____ I live in a neighborhood adjacent to Fairfax County Parkway. If so, where? _____
____ I commute on Fairfax County Parkway.
____ Other _____

2. Which interchange option do you prefer?
____ Diamond Interchange with Triple Roundabouts
____ Split Diamond Interchange
____ Diamond Interchange with Quadruple Roundabouts
____ Other _____

Why do you prefer the option selected above? _____

3. Please provide us with any additional information or suggestions, which you feel would assist in the completion of the project.
____ Newspaper _____ Social Media _____ Website _____ Other: _____

4. How did you hear about this meeting?
____ Newspaper _____ Social Media _____ Website _____ Other: _____

Please leave this comment sheet at the designated location, mail your comments within 10 days (postmarked October 15, 2018) to the addressee on the reverse side, or email to meetingcomments@vdot.virginia.gov.