



# **RICHMOND HIGHWAY** CORRIDOR IMPROVEMENTS

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# PUBLIC INFORMATION MEETING

MONDAY, NOVEMBER 6, 2017  
MOUNT VERNON HIGH SCHOOL  
8515 OLD MT. VERNON ROAD, ALEXANDRIA, VA 22309

Amanda Baxter, VDOT, Special Projects Development Manager

William Dunn, PE, VDOT, Design Project Manager

John McDowell, PE, RK&K, Director - Transportation

UPC 107187 Richmond Highway Corridor Improvements



# Today's Meeting

- **Coordination with EMBARK**
- **Project Overview**
- **Project Schedule**
- **Intersection Improvement Options**
- **Preliminary Noise Analysis**
- **Right of Way Process**
- **Public Outreach**

# Project Coordination



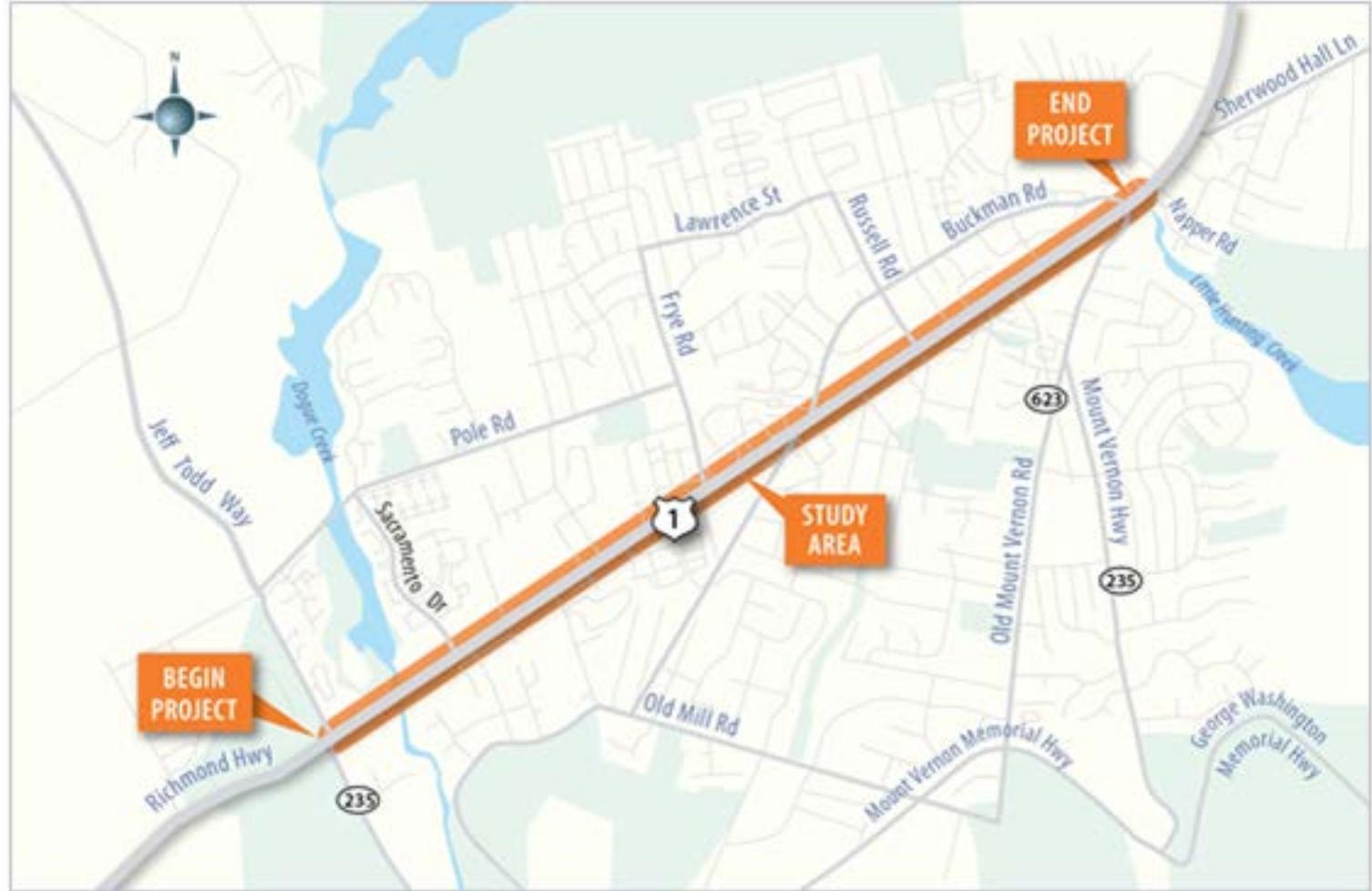
Embark Richmond Highway is an initiative focused on creating a multimodal future for Richmond Highway Corridor where residents, workers, and visitors can walk, bike, or drive to the places they want to go. The components of the Embark Richmond Highway project include:



- ⇒ Fairfax County-led components of EMBARK are providing the vision for the design of the widening of Richmond Highway from Jeff Todd Way to Napper Road
- ⇒ Coordination between state and local agencies occurs at project progress meetings and during informal discussions and mini-workshops.
- ⇒ VDOT maintains Richmond Highway and makes final decisions considering the positions of its partners and the public
- ⇒ Fairfax County Board of Supervisors will be asked to provide endorsement of this project.

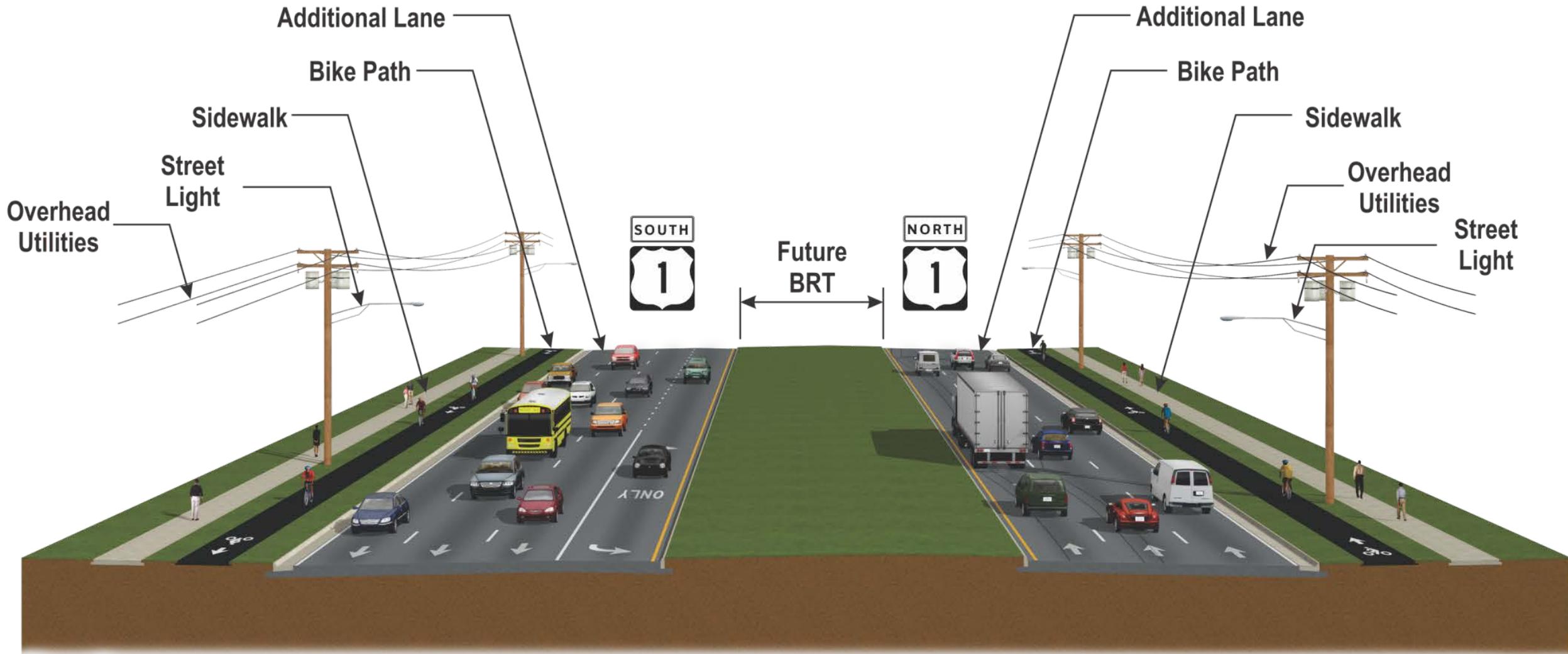
# Project Overview

- **Widening of Richmond Highway (US Route 1) from four lanes to six lanes**
  - Jeff Todd Way to Napper Road
  - Approximately 3 miles
- **Safety Improvements**
- **Congestion relief**
- **Intersection Improvements**
- **Median reservation for future Bus Rapid Transit (BRT)**
- **Sidewalks and separate bicycle path on both sides of road**
- **Three Bridge Replacements**
- **Potential noise walls**
- **Utility relocations**





# Typical Section

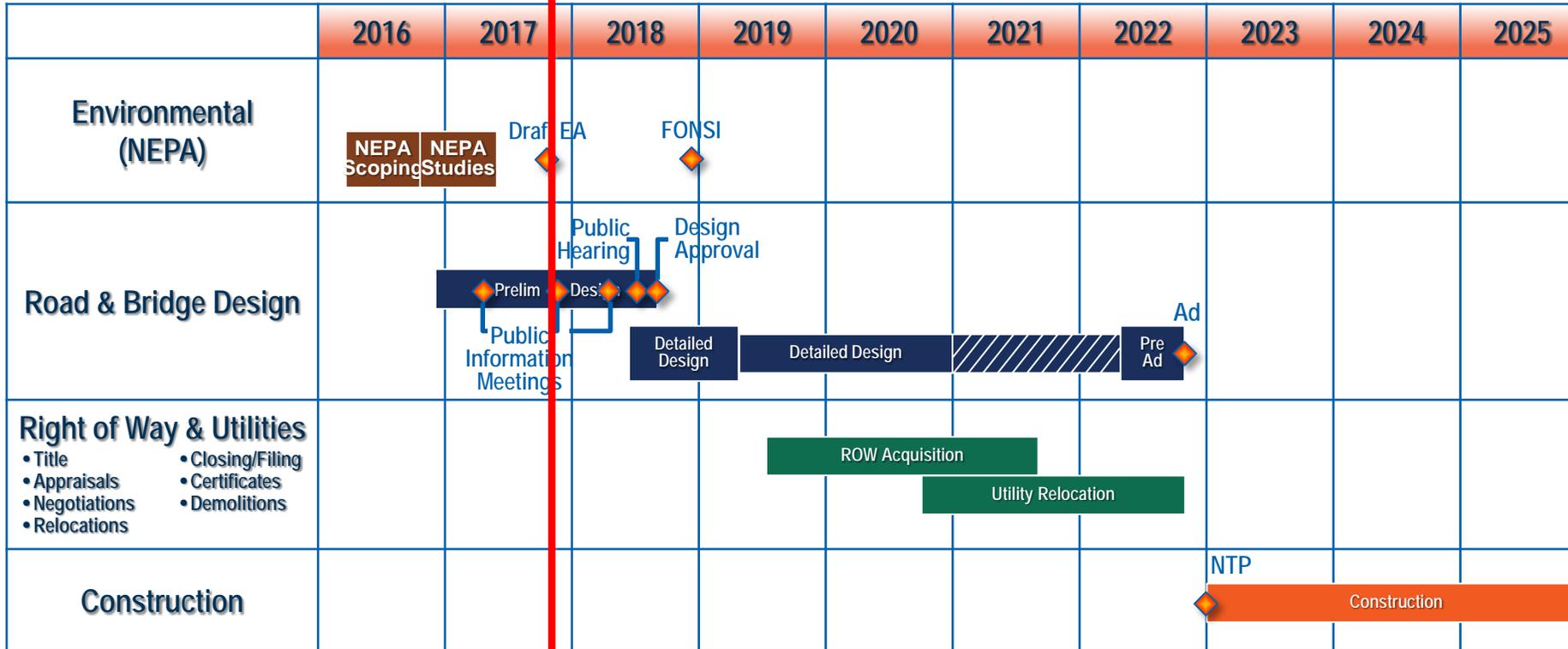


**The intent of this exhibit is to depict the configuration of elements within the Proposed right-of-way. For clarity, potential landscaping is not depicted.**

# Schedule

**We are here -  
November 6, 2017**

## Calendar Schedule



= Milestones

## List of Milestone Events

Activities	Dates
Public Information Meeting #1	April 2017
Release Environmental Assessment	Late 2017
Public Information Meeting #2	Late 2017
Public Hearing	Mid 2018
FHWA Record of Decision and Design Approval	Late 2018
Final Design	Late 2018
Right of Way Acquisition and Utility Relocations	Mid 2019
Begin Construction	Early 2023
Project Open to Traffic	2026

# Richmond Highway Widening

## Mount Vernon Memorial Highway to Napper Road

Route 1 Widening (\$ in Millions)	Need	Available Funding	Request
Project Estimate	215.0		Current project estimate
RSTP		27.1	Allocated by NVTA
Revenue Sharing		15.9	Sourced from State Revenue Sharing funds
Regional NVTA		1.0	Sourced from Regional NVTA funds
Funding Gap			171.0
<b>Total</b>	<b>215.0</b>	<b>44.0</b>	<b>171.0</b>

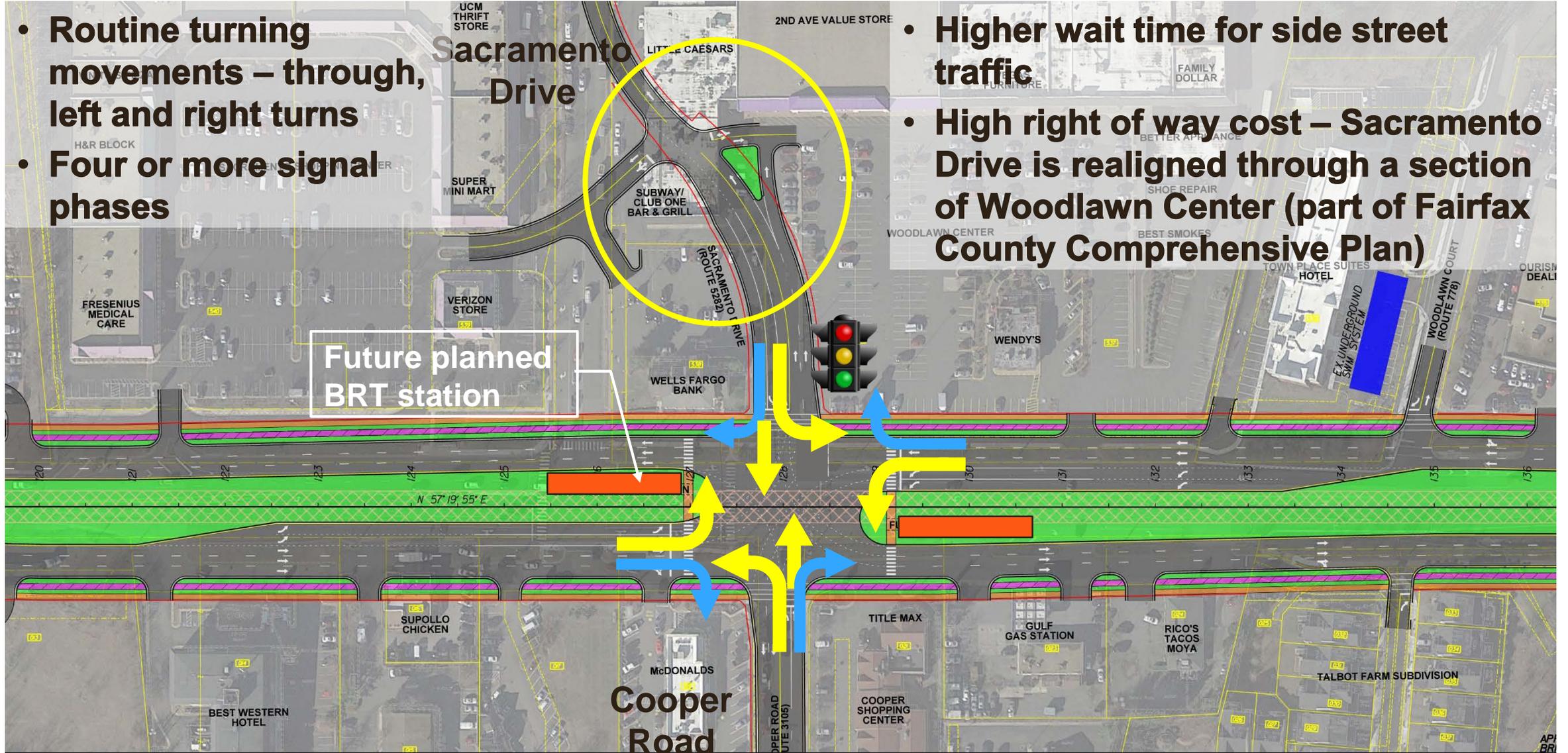
### Possible ways to address \$171M funding gap:

- NVTA regional, additional federal RSTP funds or state programs, local revenues, and developer contributions

# Sacramento Drive / Cooper Road - Traditional

- Routine turning movements – through, left and right turns
- Four or more signal phases

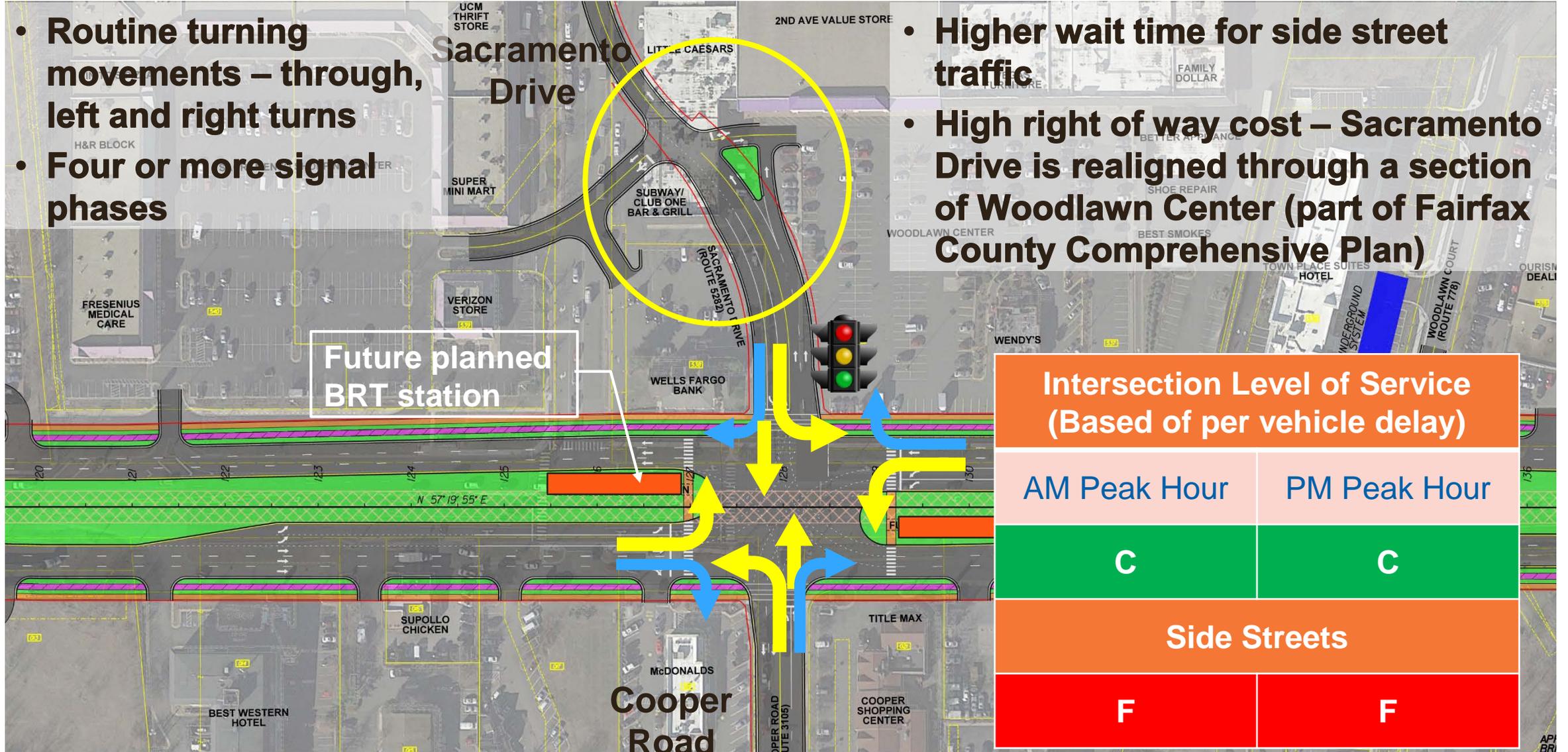
- Higher wait time for side street traffic
- High right of way cost – Sacramento Drive is realigned through a section of Woodlawn Center (part of Fairfax County Comprehensive Plan)



# Sacramento Drive / Cooper Road - Traditional

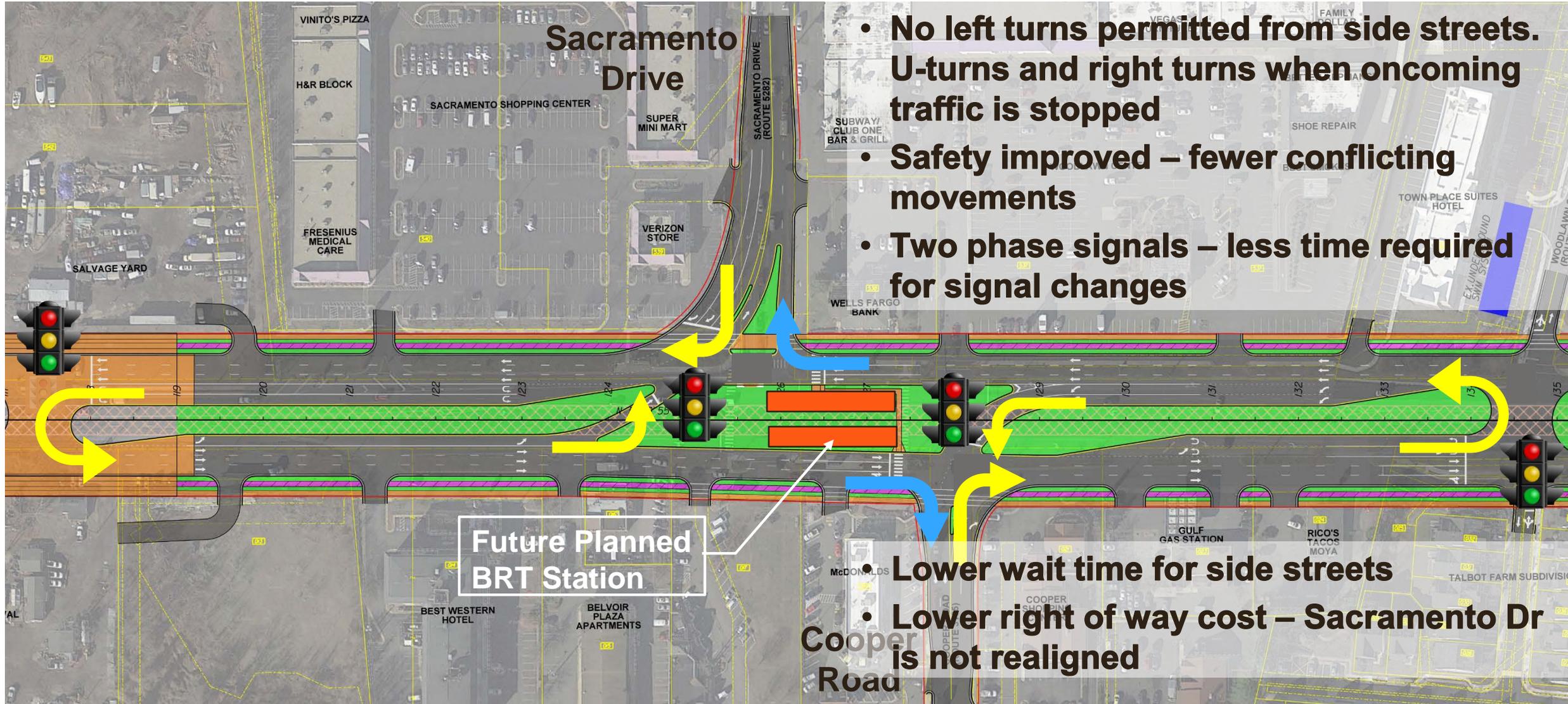
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# Sacramento Drive / Cooper Road - Superstreet



- No left turns permitted from side streets. U-turns and right turns when oncoming traffic is stopped
- Safety improved – fewer conflicting movements
- Two phase signals – less time required for signal changes

- Lower wait time for side streets
- Lower right of way cost – Sacramento Dr is not realigned



# Sacramento Drive / Cooper Road - Superstreet

**Intersection Level of Service  
(Based of per vehicle delay)**

AM Peak Hour

PM Peak Hour

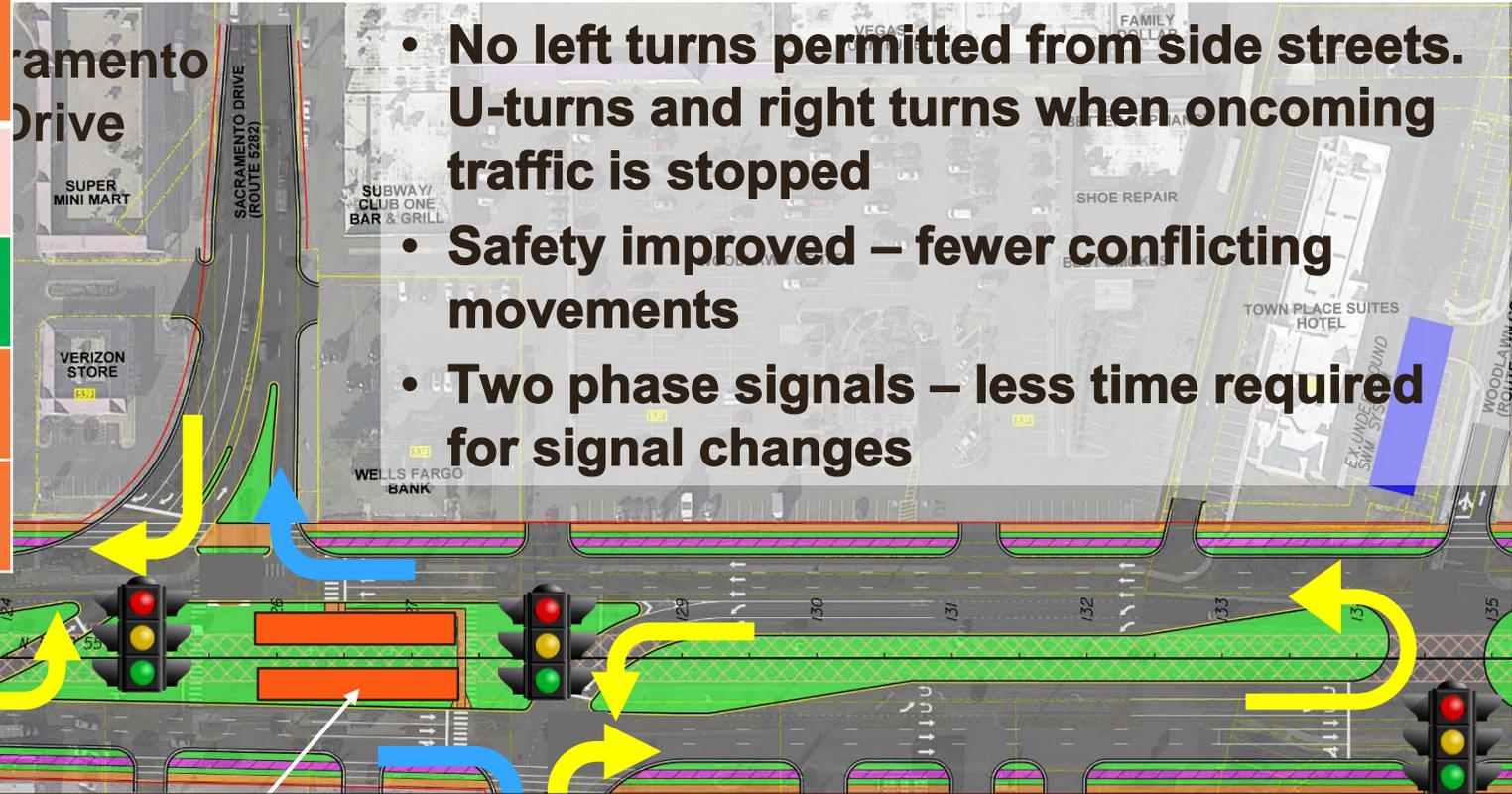
B

B

Side Streets

E

E



- **No left turns permitted from side streets. U-turns and right turns when oncoming traffic is stopped**
- **Safety improved – fewer conflicting movements**
- **Two phase signals – less time required for signal changes**

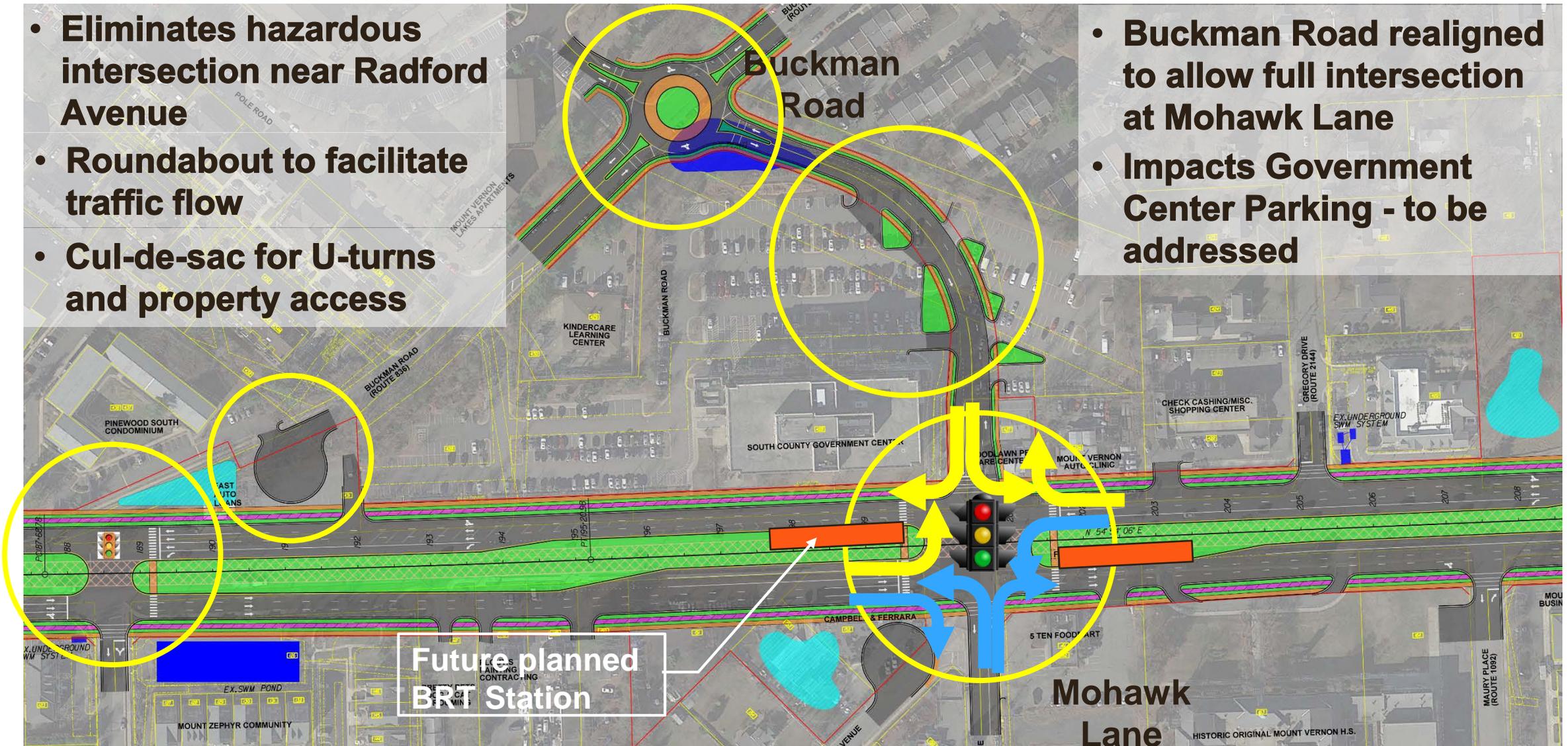
## Comment form question:

**1. What design concept do you prefer at Sacramento Drive and Cooper Road, traditional or superstreet? Why?**

# Buckman Road / Government Center

- Eliminates hazardous intersection near Radford Avenue
- Roundabout to facilitate traffic flow
- Cul-de-sac for U-turns and property access

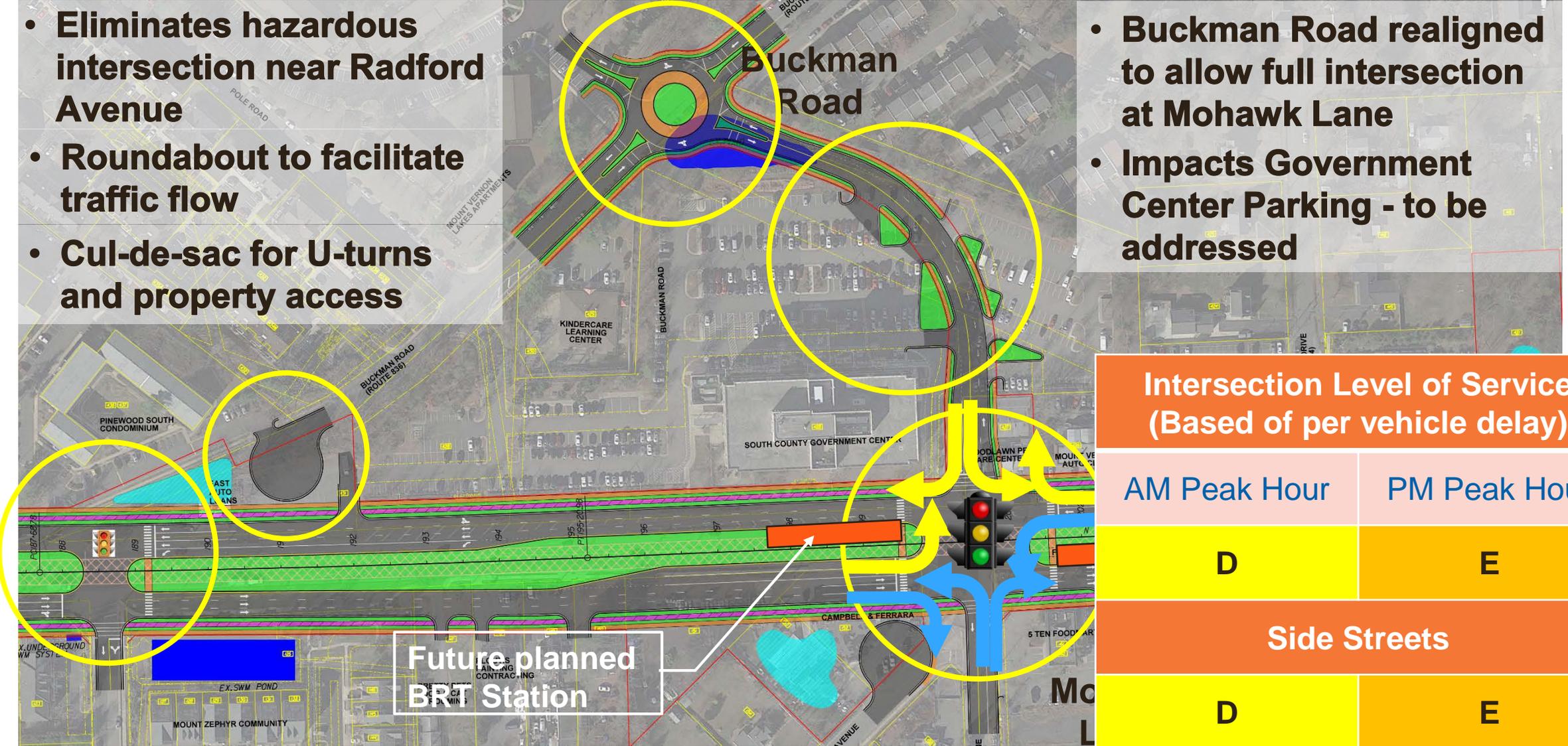
- Buckman Road realigned to allow full intersection at Mohawk Lane
- Impacts Government Center Parking - to be addressed



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- Roundabout to facilitate traffic flow
- Cul-de-sac for U-turns and property access

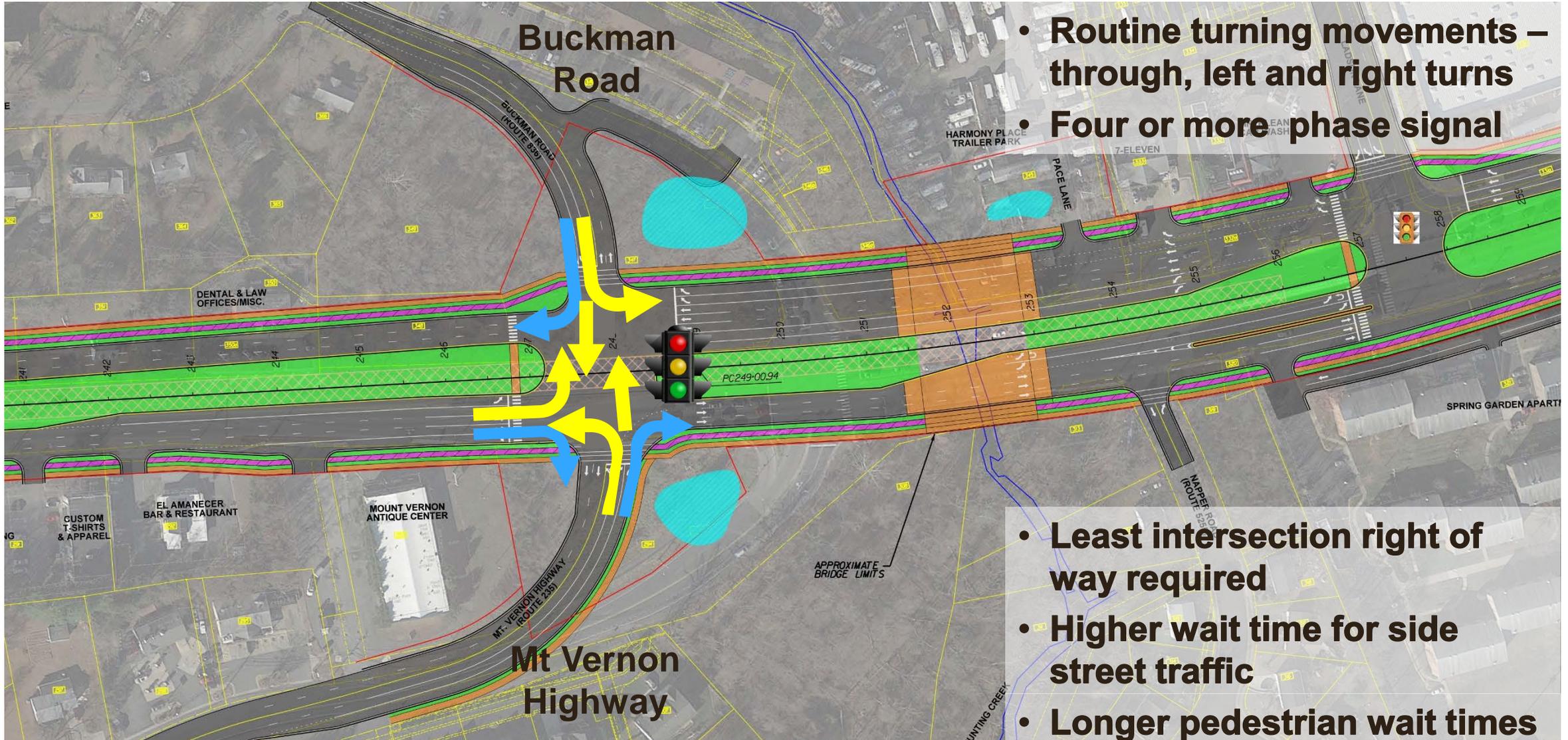
- Buckman Road realigned to allow full intersection at Mohawk Lane
- Impacts Government Center Parking - to be addressed



Intersection Level of Service (Based of per vehicle delay)	
AM Peak Hour	PM Peak Hour
D	E
Side Streets	
D	E



# Buckman Road/Mt. Vernon Highway - Traditional

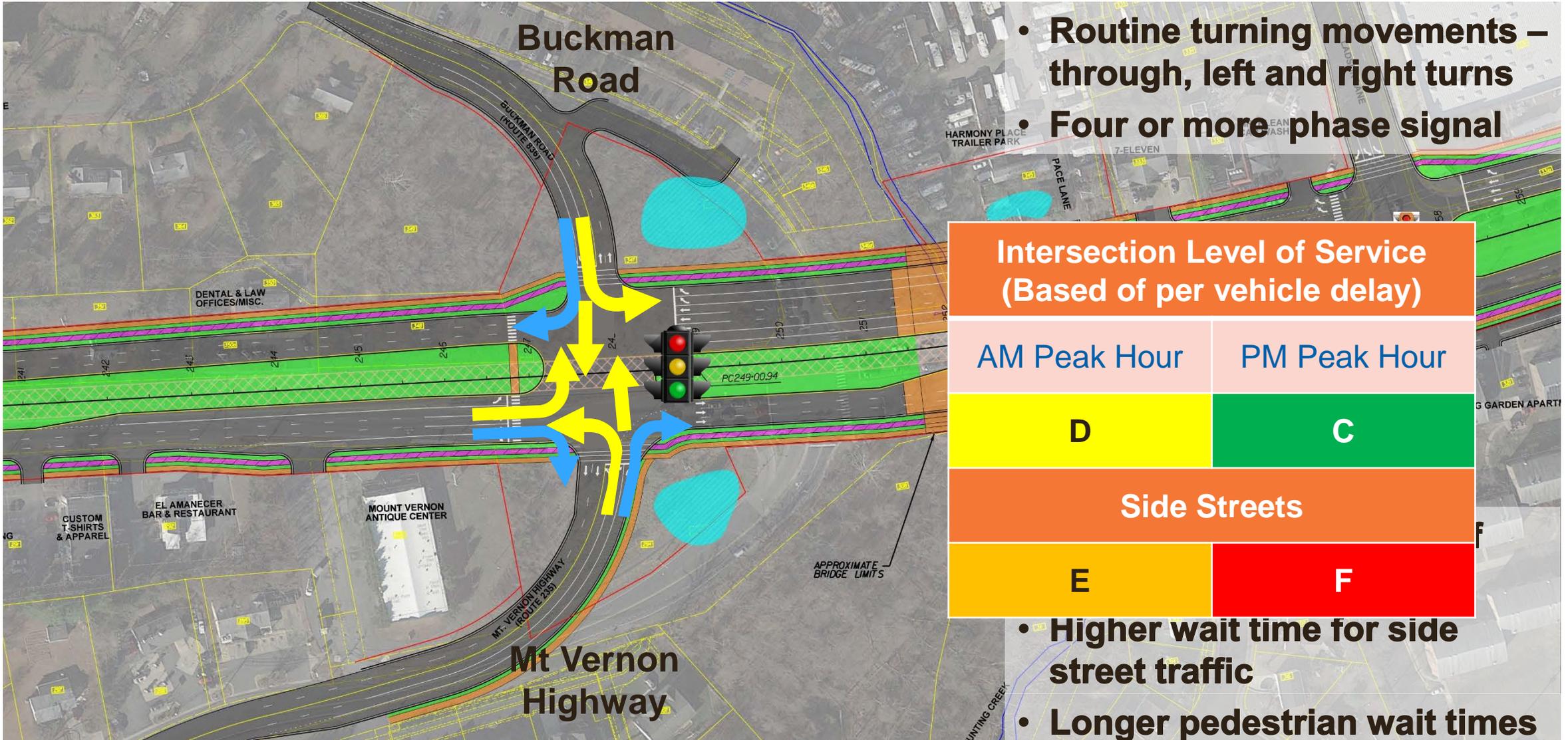


- Routine turning movements – through, left and right turns
- Four or more phase signal

- Least intersection right of way required
- Higher wait time for side street traffic
- Longer pedestrian wait times



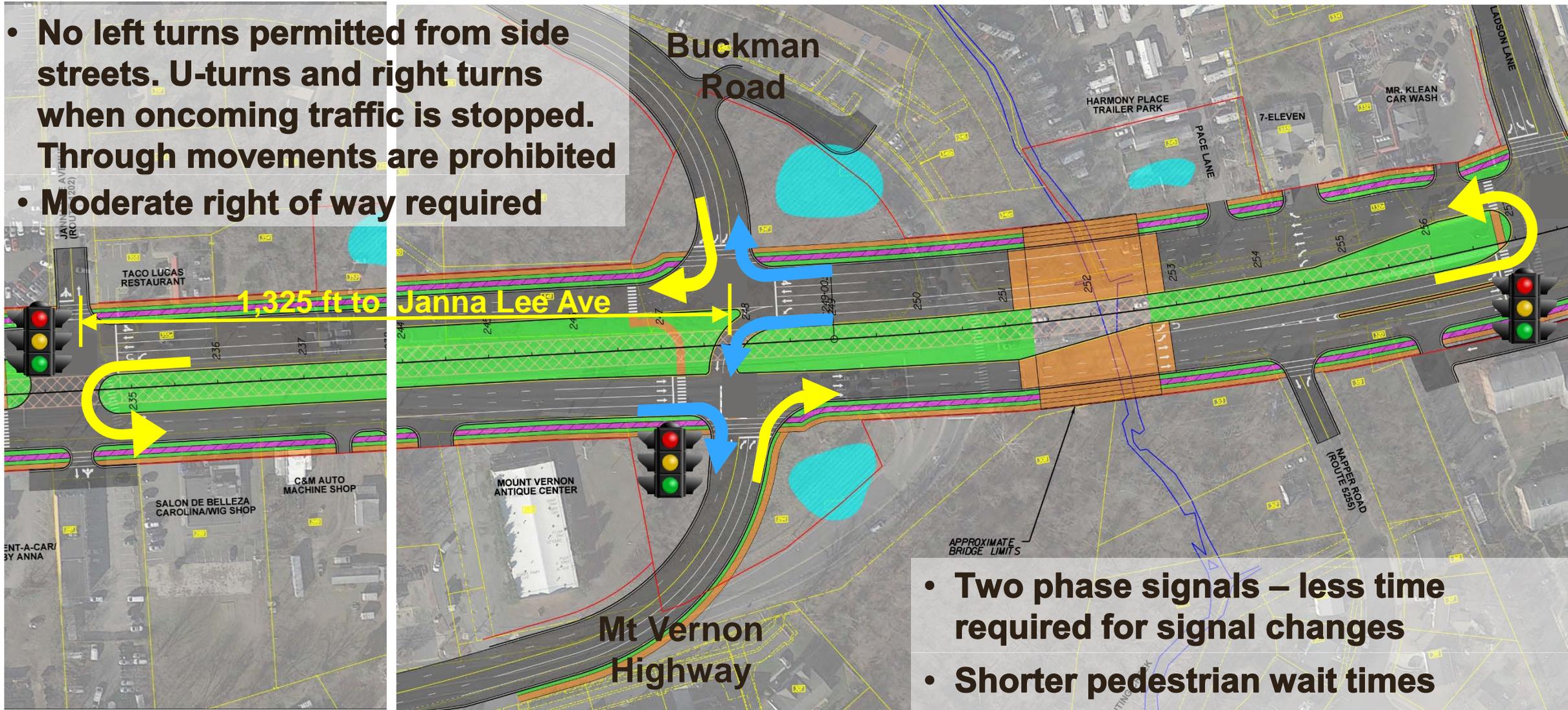
# Buckman Road/Mt. Vernon Highway - Traditional





# Buckman Road/Mt. Vernon Highway – Superstreet

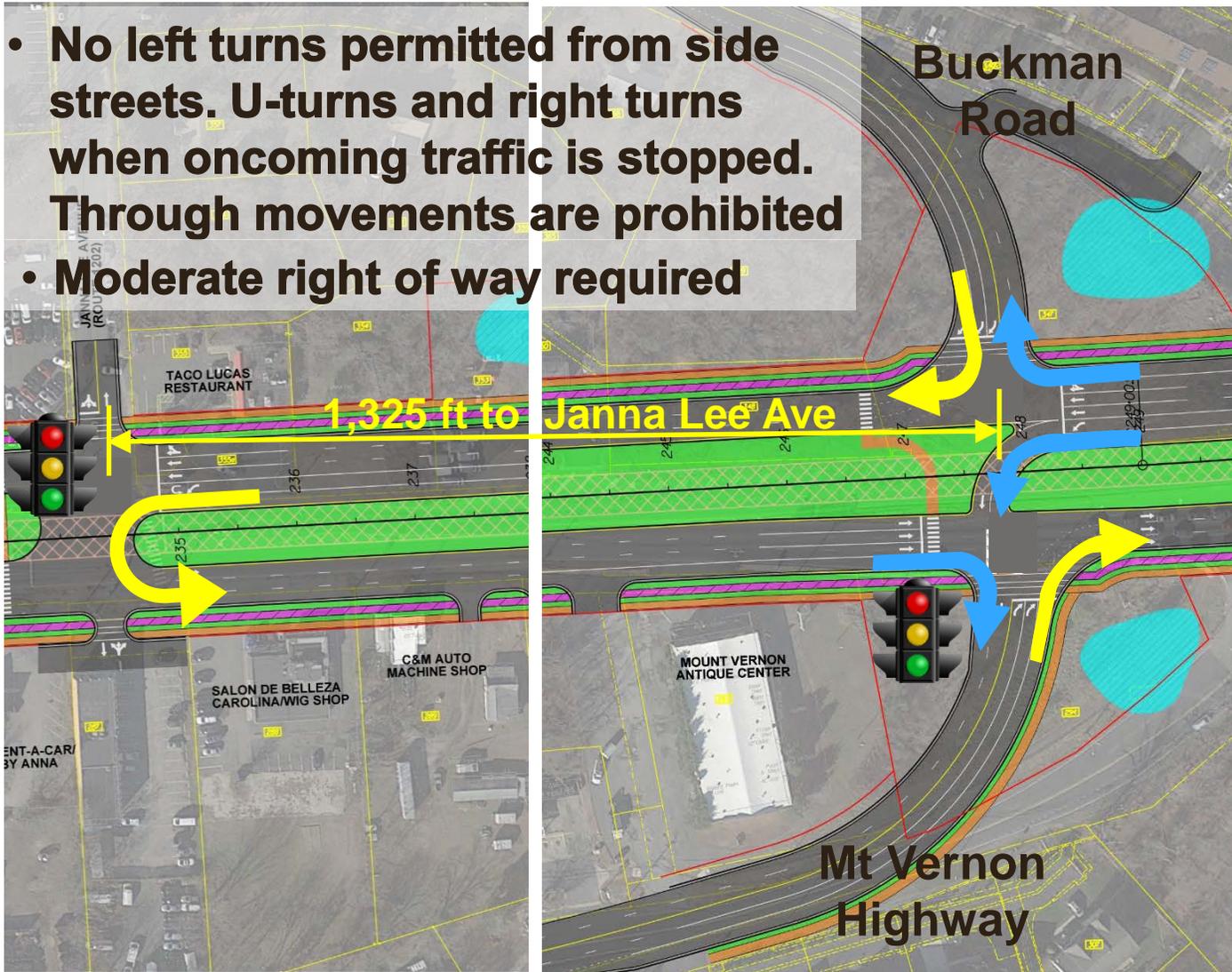
- No left turns permitted from side streets. U-turns and right turns when oncoming traffic is stopped. Through movements are prohibited
- Moderate right of way required





# Buckman Road/Mt. Vernon Highway – Superstreet

- No left turns permitted from side streets. U-turns and right turns when oncoming traffic is stopped. Through movements are prohibited
- Moderate right of way required

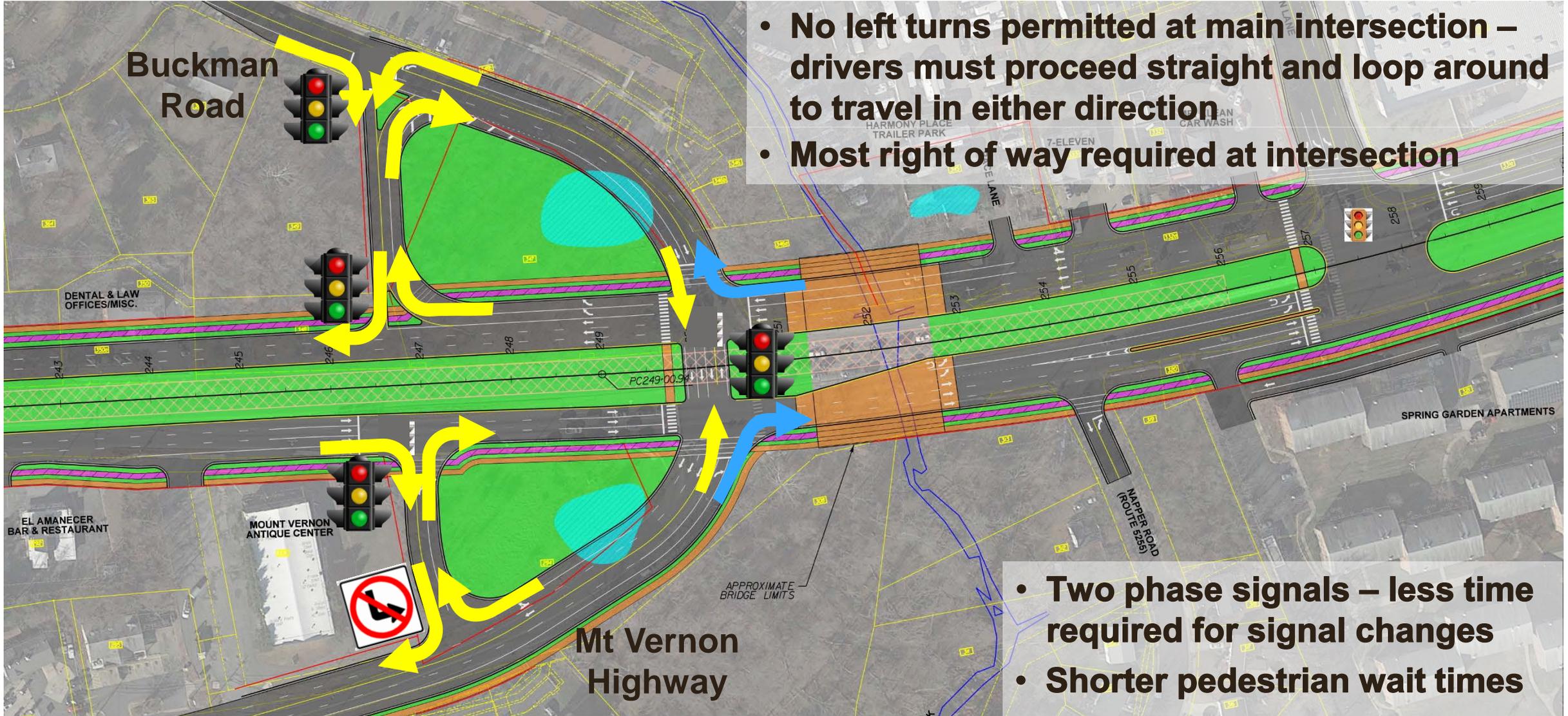


Intersection Level of Service (Based of per vehicle delay)	
AM Peak Hour	PM Peak Hour
B	B
Side Streets	
D	D

- Two phase signals – less time required for signal changes
- Shorter pedestrian wait times

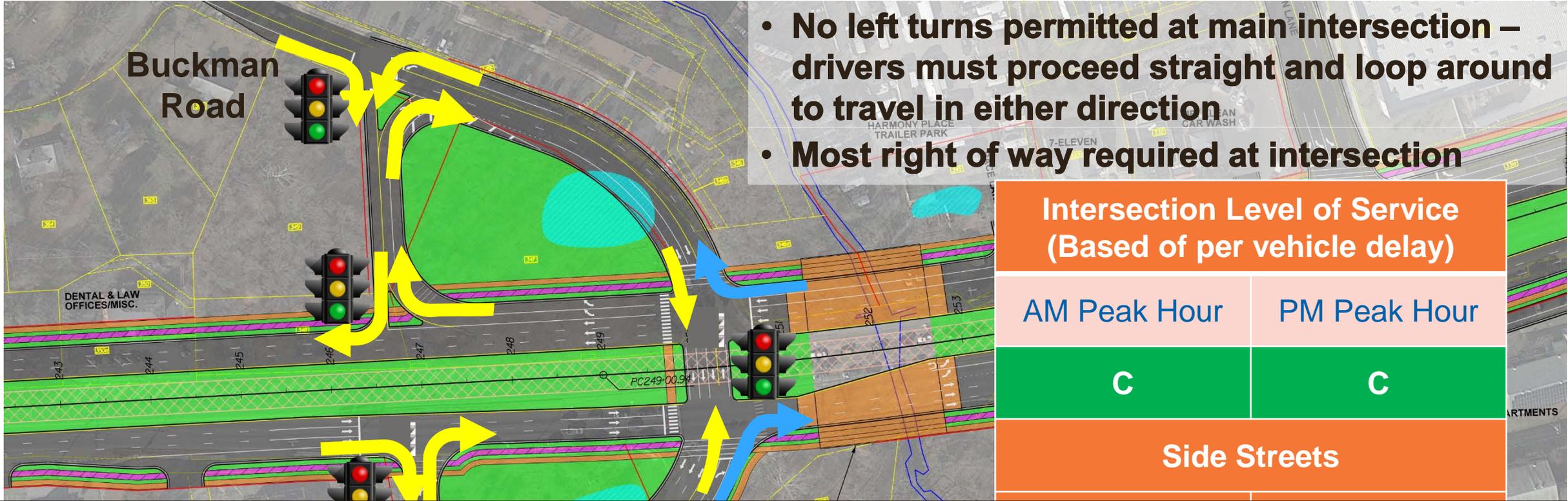


# Buckman Road/Mt. Vernon Highway – Jughandle





# Buckman Road/Mt. Vernon Highway – Jughandle



- No left turns permitted at main intersection – drivers must proceed straight and loop around to travel in either direction
- Most right of way required at intersection

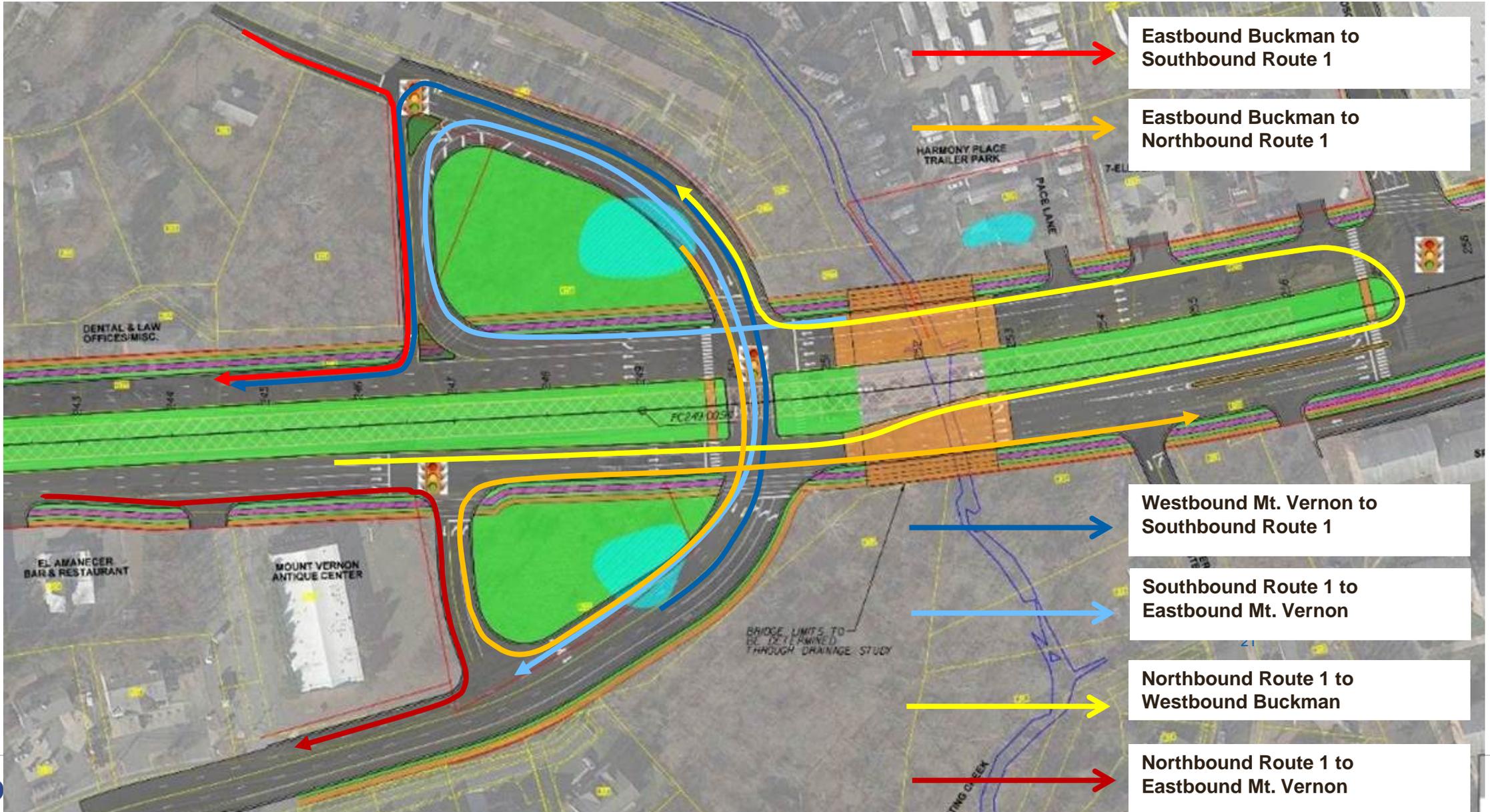
## Comment form question:

**2. What design concept do you prefer at Buckman Road and Mount Vernon Highway – traditional, superstreet or jughandle? Why?**



# Buckman / Mt. Vernon

## *NEW - Jughandle Intersection Operations*



# Noise Analysis

- ⇒ **Required to evaluate noise levels on federally funded projects to comply with federal law under the National Environmental Policy Act**
- ⇒ **Where project noise levels are projected to exceed established criteria, VDOT is required to propose noise mitigation**
- ⇒ **Sound Barriers will be constructed only if the people who are directly benefited vote for them**
- ⇒ **Noise Analysis**
  - **Preliminary and Final**
  - **Computer model calibrated to existing conditions**
  - **Based on design year traffic volumes (2045)**
  - **Loudest hour – 3 PM for Richmond Highway**

**Voting for Barrier G12**

Color	# of Benefited Receptors
Yellow	8
Blue	1

⇒ **Only benefited receptors vote**

- Yellow - Impacted and Benefited is weighted as a 5
- Blue - Benefited but not impacted is weighted as a 3
- Green – Not Benefited and not impacted – Do not vote
- Rentals – Owner and renter votes
- Voting occurs during Final Design 2019 - 2022

**Example – Sound Barrier Voting**

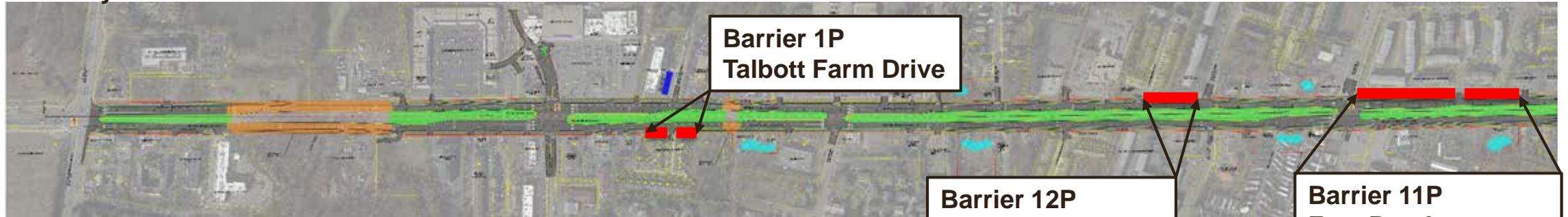


# Preliminary Noise Analysis

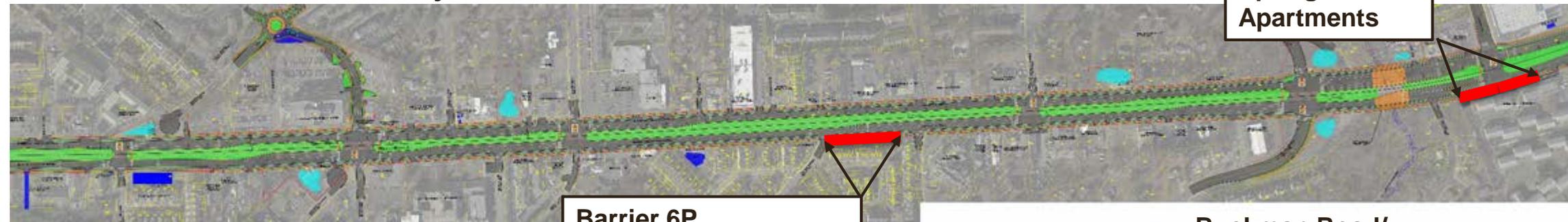
Jeff Todd Way

Sacramento Drive

Frye Road



- NB Rte. 1 – Barriers 1P, 6P, 7P – 1,009'
- SB Rte. 1 – Barriers 11P, 12P – 1,004'
- Approximately 6.5% of total project length
- Aesthetic treatments may be considered



Buckman Road/  
Mohawk Lane

Barrier 6P  
Central Avenue to  
Shannons Green Way

Buckman Road/  
Mt. Vernon Hwy

# Right-of-Way Acquisition

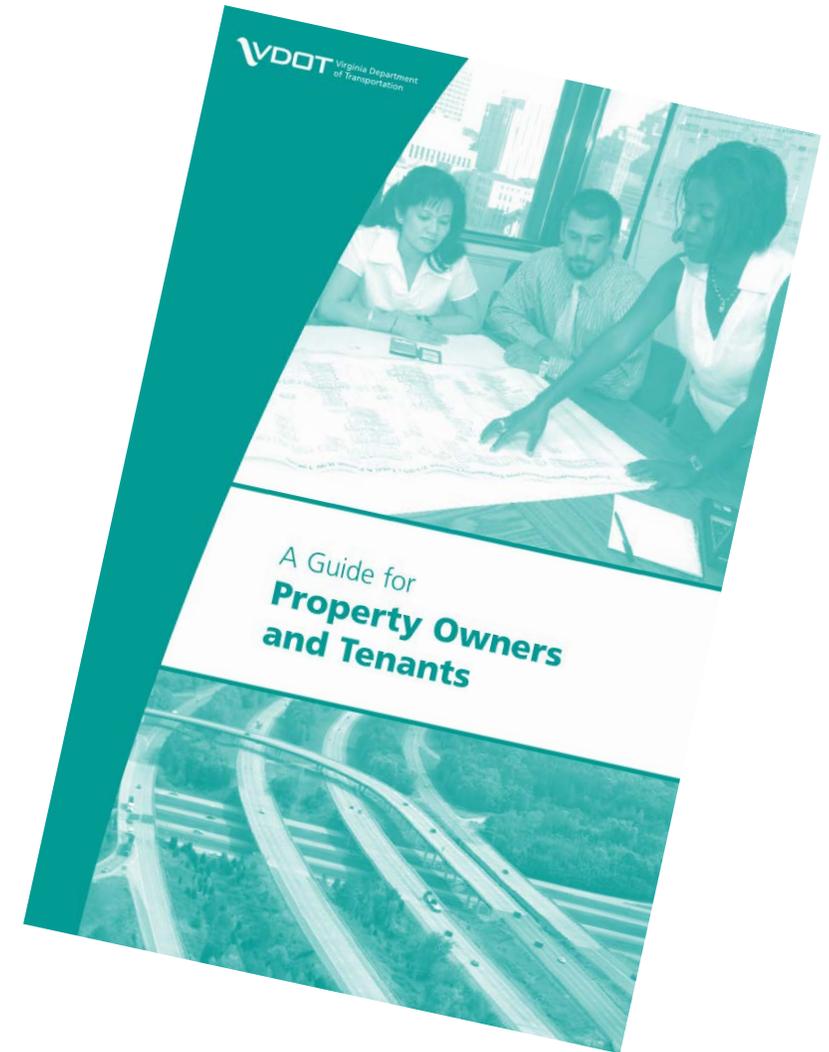
*Each property impact is unique*

Further design details are needed to determine full right of way impacts

Right of way acquisition process to begin after detailed design – anticipated in mid-2019

Meetings with individual property owners

Right of Way representatives will be at each public meeting



# How to Provide Comments

- **At Tonight’s Public Information Meeting:**
  - Submit written comments on the comment sheet
  - Provide oral comments during the question and answer session following the formal presentation
- **Mail:**
  - Mail written comments to VDOT, attention William Dunn, VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030
- **Email:**
  - Email your comments or questions to [RichmondHighway@vdot.virginia.gov](mailto:RichmondHighway@vdot.virginia.gov)
- **Online:**
  - Submit your comments via the online comment form, available at [www.virginia.gov/richmondhighway](http://www.virginia.gov/richmondhighway)

**Please reference “Richmond Highway Corridor Improvements” in subject line of all correspondence – Response Deadline December 6, 2017**



# Questions?