



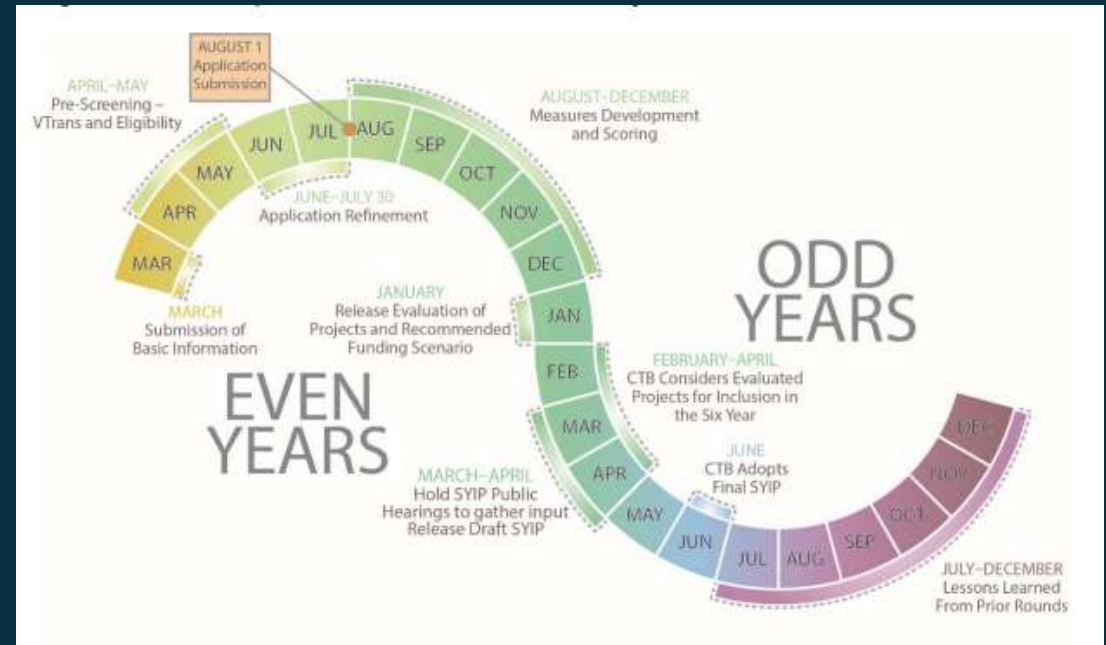
**Town Council**  
**VDOT Smart Scale Pre – Applications Round 6**  
**February 13, 2024**

# Background

- Since 2020, the Town and VDOT have been actively reviewing potential safety improvements at intersections along the Broadview/Lee Hwy corridor.
- 2020 Town applied for Round 4 Smart Scale grants for the intersections of Broadview/Winchester/Lee Hwy and Broadview (then Roebling)/US 17. These applications were not successful.
- 2021 – 2022 VDOT initiated a “Pipeline Project” of Lee Highway to study intersection improvements and solicit public input.
- March 2022 Town Council directed staff to submit pre-applications for Round 5 Smart Scale for the two intersections above and added Lee Hwy/Blackwell Road.
- October, 2022 VDOT publishes final Lee Highway Pipeline Study
- June, 2023 CTB awarded the Town almost \$30 million to construct the two roundabout applications on Lee Highway.

# Smart Scale Process

- Federal Funding through VDOT High Priority Projects Program and Construction District Grant Program
- Applications Open Every Two Years
- Project VDOT Administered
- Must Be Pre-screened In and Meet VDOT Criteria
- CTB Decision June, 2025



# FUNDED ROUND 5- Broadview/Winchester/Lee Roundabout

- Previous Round 4 Application – Town Council Resolution
- CoSS and UDA
- Included in Plan Warrenton 2040
- Included in FY23-28 CIP
- Pipeline Study
  - This alternative reconfigures the intersection to a multi-lane hybrid roundabout.
  - The roundabout can improve operations by 60%, reduce crashes up to 60%, and improve the safety of pedestrian crossings.



# FUNDED ROUND 5 - Lee Hwy/Blackwell Road Roundabout

- Included in Plan Warrenton 2040
- Included in FY23-28 CIP
- CoSS and UDA
- Pipeline Study
  - This alternative reconfigures the intersection to a multi-lane hybrid roundabout.
  - The roundabout can improve operations by 70%, reduce crashes up to 60%, and improve the safety of pedestrian crossings.



# NOT FUNDED - US17/Broadview/Shopping Center Roundabout

- Previous Round 4 & 5 – Town Council Resolution
- CoSS and UDA
- Included in Plan Warrenton 2040
- Included in FY23-28 CIP



# Example



Boise, Idaho

# Lee Highway Pipeline Study - Preferred Alternatives



## PROJECT NEEDS

These proposed improvements help address VTrans needs associated with safety, capacity preservation, and congestion mitigation. The preferred alternatives reduce delay, improve safety for both vehicle and other modes such as bikes and pedestrians.

Need	Priority
Congestion Mitigation	Very High
Transit Access	Very High
Transportation Demand Management	Very High
Safety Improvement	High
Bicycle and Pedestrian Access	High

## Survey Summary

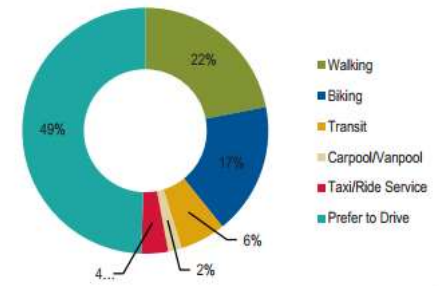
- The MetroQuest survey ran between February 1 and February 18, 2022
- Survey included 457 participants
- 79% of respondents were residents, 13% visitors, and 8% employees of the study area

## PROJECT DESCRIPTION

The following alternatives were advanced that can be submitted for future funding applications. These improvements will incorporate measures such as improved pedestrian crossing distances, crosswalks, and updated parallel facilities, such as shared use paths:

- Multi-lane Hybrid Roundabouts:** A multi-lane roundabout will help improve operations and reduce crashes by up to 60%. Roundabouts are also particularly beneficial for other roadway users like pedestrians and cyclists because of the slower speeds through a roundabout.
- Thru-cuts:** An alternative that reduces traffic signal phases on the minor approaches by relocating the through movement within the network. This improvement enhances timings and reduces delay.
- Access Management and Intersection Improvement:** A safety improvement that reduces the number of movements permitted at an intersection.
  - Branch Drive: Movements onto and into Branch Drive northbound approach would be reduced so that those turns would use a future roundabout at Broadview Avenue.
  - Village Center Driveway: Movements across and out of the driveway are reduced to enhance safety. The driveway would also be reconstructed to allow quicker ingress/egress.

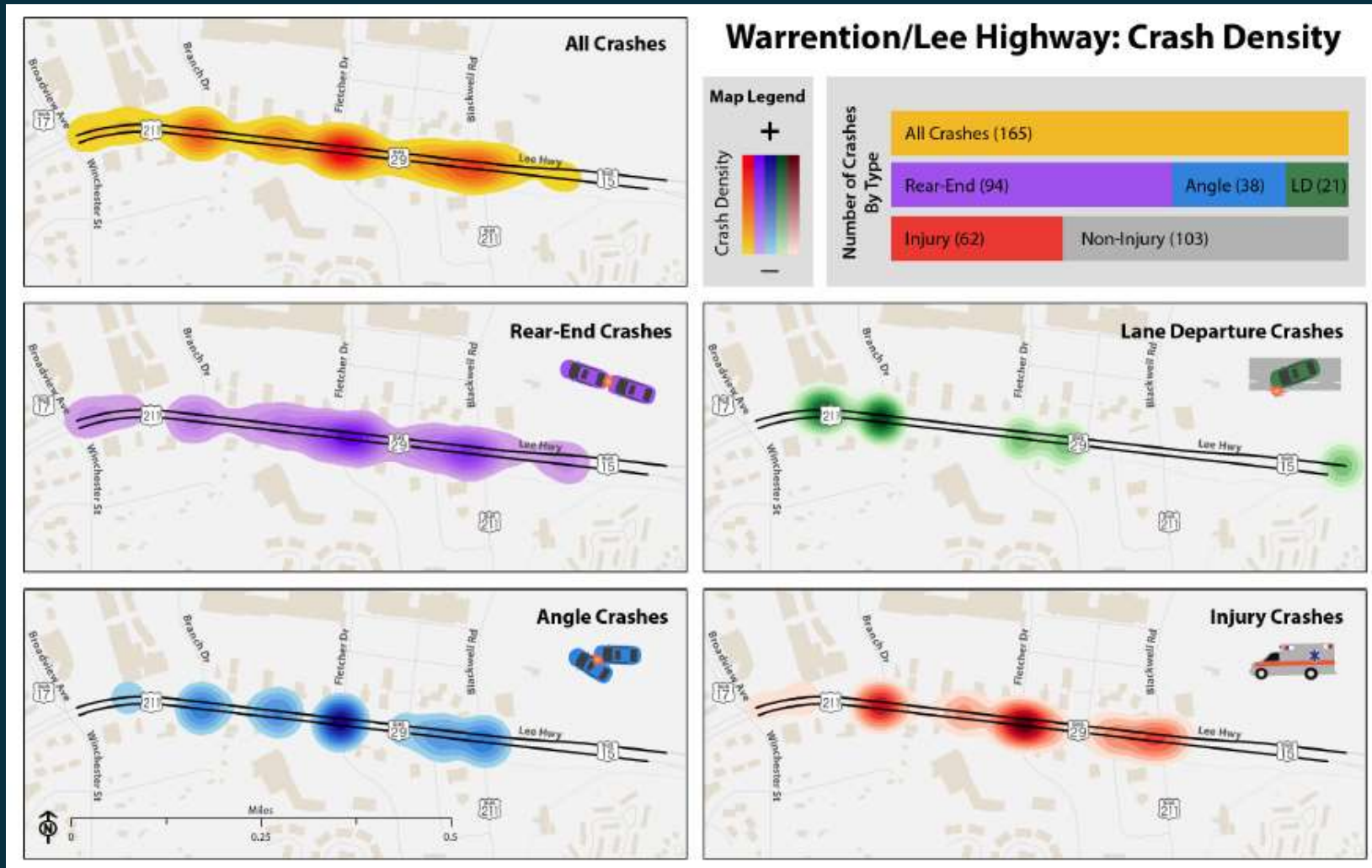
## What other modes of travel would you prefer?



Improvement	Description	Planning-Level Cost Estimate
Blackwell Road Hybrid Roundabout and Pedestrian Improvements	Convert the intersection of Lee Highway and Blackwell Road to a hybrid roundabout, construct pedestrian facilities on each leg, and provide pedestrian crossings with median refuges and HAWK signals	\$11,200,000
Branch Avenue Thru-Cut	Relocate the Branch Drive through movements through other intersections	\$6,700,000
Branch Avenue Access Management Improvements	Convert northbound approach of Branch Ave to right-in/right-out only	\$3,000,000
Fletcher Drive Roundabout	Multi-lane hybrid roundabout	\$7,200,000



# Data Collection/Analysis



# Branch Avenue Access Management Concept



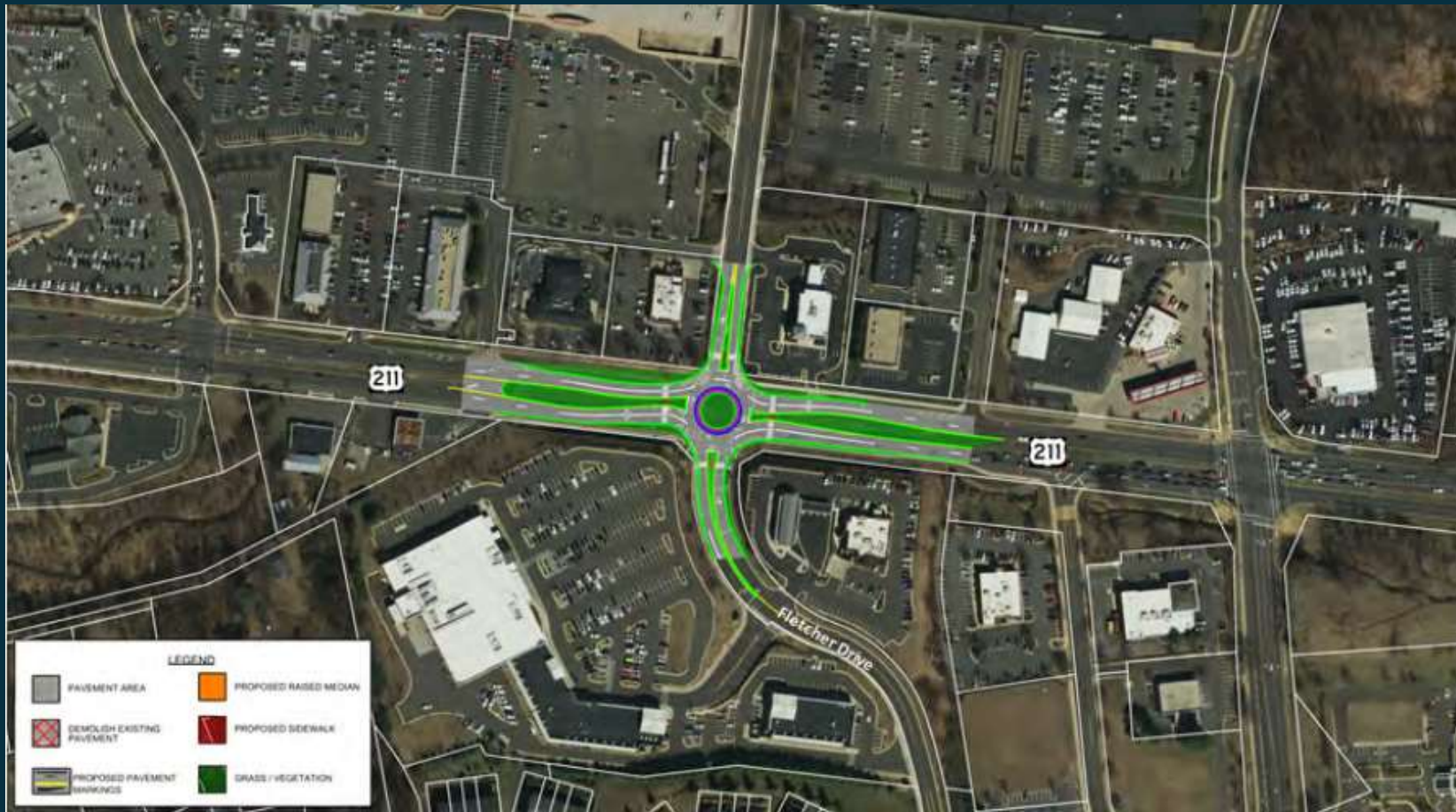
General Concept is to restrict left turn movements on to side streets. Final Design to be determined.

# Village Center Access Management Concept



General Concept is to restrict left turn movements on to side streets. Final Design to be determined.

# Fletcher Drive Roundabout Concept



General Concept is to install a roundabout to keep circulation moving with the other roundabouts and improve safety. Final Design to be determined.

# Next Steps

- Provide Staff Direction to Proceed with Pre-Application
- Pre-Application Submittal/VDOT Pre-Screen
- Public Hearing June/July, 2024
- Town Council Support Resolution
- PD9 Resolution of Support
- Application Due August 1, 2024
- Final CTB Action June, 2025



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