

# CHALLENGER CORRIDOR

U.S. ROUTE 460 LAND USE &  
CONNECTIVITY STUDY

COMMUNITY MEETING #3

Presented by



**TIMMONS GROUP**  
ENGINEERING | DESIGN | TECHNOLOGY

Traffic & Planning  
Consultants

September 29, 2022

A 30 MINUTE  
PROJECT UPDATE  
PRESENTATION  
WILL BEGIN AT  
5:30PM



## WHAT WE WILL DISCUSS

- Previous Corridor Planning and Funded Projects – Megan Cronise, Asst. Director of Planning
- Goals of this Study – Dave Anderson, Timmons Group
- Process of this Study to Date
- Changes Resulting from Public Feedback
- Recommended Improvements
- Next Steps – Philip Thompson, Director of Planning

# VDOT Route 460 STARS Study

- **2019 and 2020:** VDOT, the City of Roanoke and Roanoke County studied potential safety and operational improvements along Route 460 from Williamson Road to Alt. Route 220
- **November 2019:** Public Information Meeting and Survey (over 1,000 responses)
- **June 2020:** Virtual Meeting and Survey
- **August 2020:** Seven projects chosen and submitted for SMART SCALE funding



PUBLIC INFORMATION MEETING, NOVEMBER 2019  
Route 460 (Orange/Challenger Avenue)  
Operational Improvements Study



## WELCOME

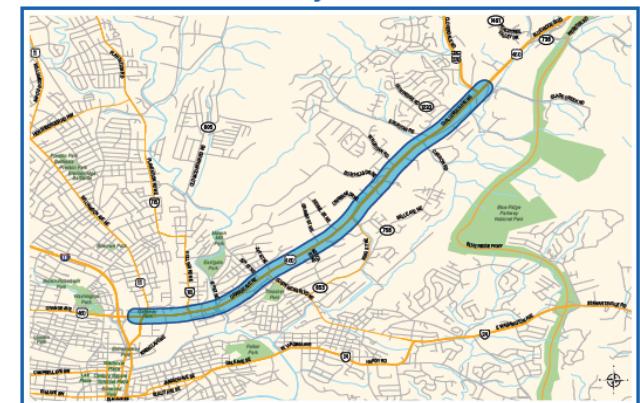
### Purpose of the Route 460 (Orange/Challenger Avenue) Operational Improvements Study

- Evaluate operational and safety conditions along Route 460 (Orange/Challenger Avenue) between Williamson Road (Route 11) and Route 220 Alternate (Cloverdale Road)
- Consider and assess potential safety and operational improvements in the study area
- Develop cost estimates for the potential improvements

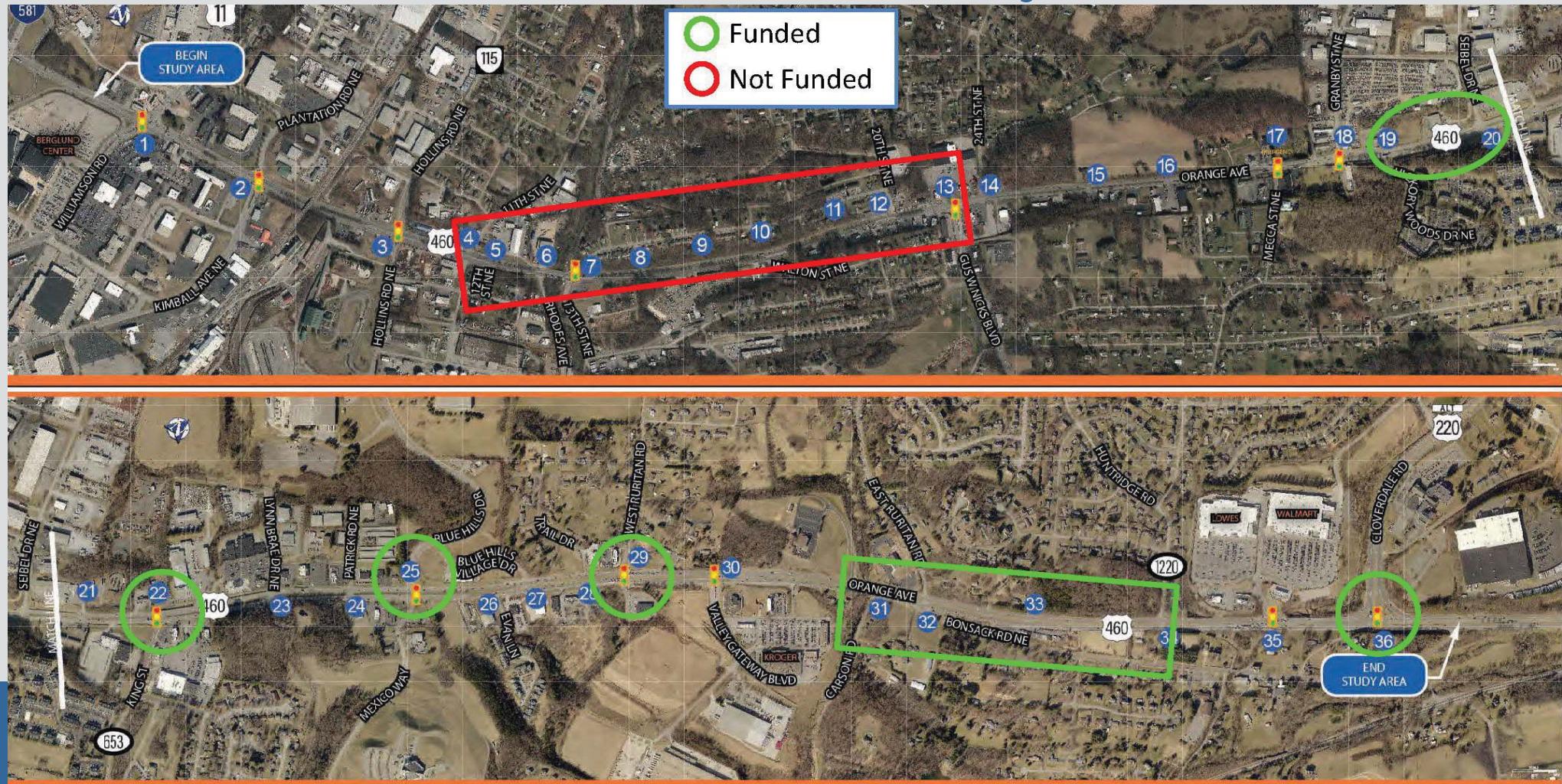
### Objectives of the Public Information Meeting

- Inform the public about the study
- Present preliminary information on safety and traffic conditions within the study area
- Provide the public an opportunity to give comments and suggestions on existing safety and traffic operations and gather ideas to enhance safety and reduce congestion in the corridor

#### Study Area



# Route 460 Funded SMART SCALE Projects



## Route 460 Funded SMART SCALE Projects

Funded Transportation Projects	Construction Start	Funding	
		Federal/State	Local
Route 460 and Alternate Route 220 Intersection Improvements	2027	\$21,800,000	\$0
Route 460 Intersections from Carson Rd. to Huntridge Rd.	2026	\$2,800,000	\$0
Route 460 at West Ruritan Intersection Improvements	2026	\$7,500,000	\$0
Route 460 (Orange Avenue) Improvements near Blue Hills Drive	2026	\$5,600,000	\$0
Route 460 (Orange Avenue) Improvements Seibel Dr/Hickory Woods	2026	\$450,000	\$0
Route 460 (Orange Avenue) Improvements at King Street	2026	\$5,000,000	\$0
<b>Total Funding</b>		<b>\$43,150,000</b>	<b>\$0</b>

*There are no local funds on these projects, though the Roanoke Valley Transportation Planning Organization provided leverage funding for five out of six projects.*

# Route 460 at Alternate Route 220 Intersection Improvements

Proposed Displaced Left Turn will improve traffic flow and safety



# Route 460 Intersections from Carson Rd. to Huntridge Rd.

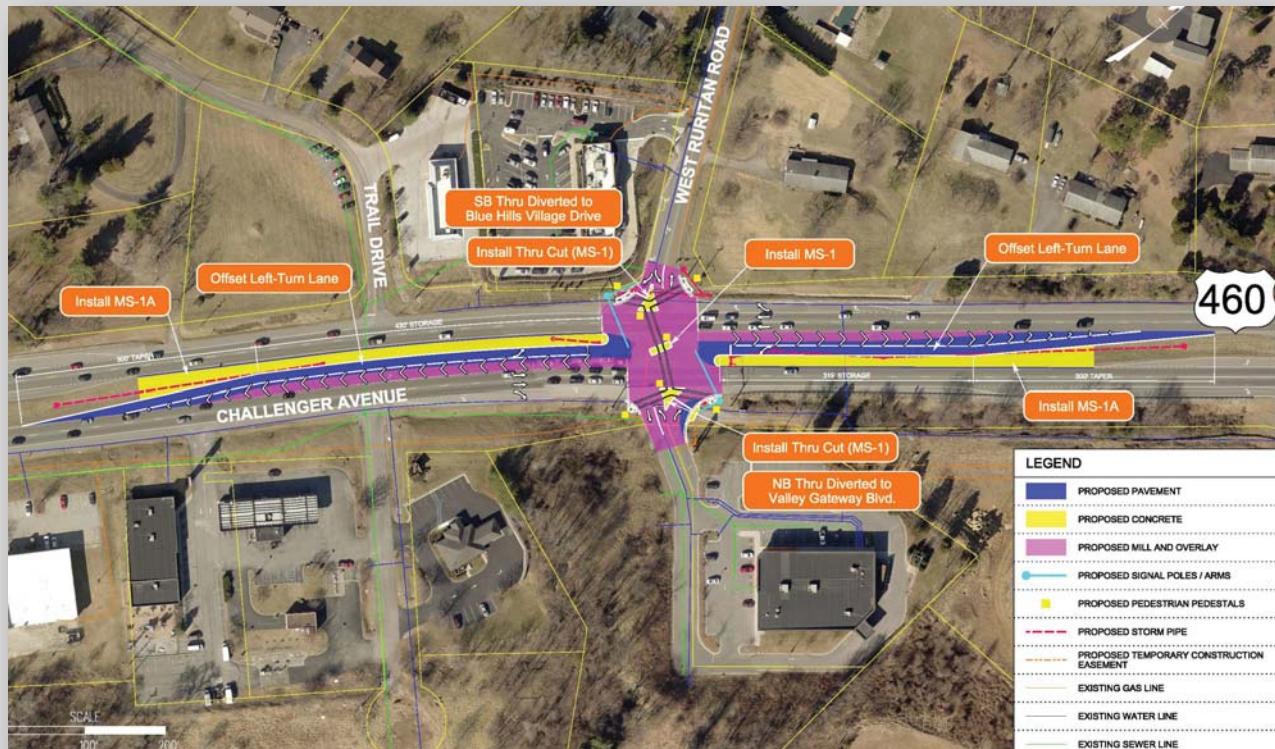
Proposed changes will improve traffic flow and safety along Route 460 with intersection changes proposed for:

- Carson Road
- East Ruritan Road/Bonsack Road
- Country Corner crossover
- Huntridge Road



# Route 460 at West Ruritan Road Intersection Improvements

- Proposed Through-Cut will improve traffic flow and safety
- Includes pedestrian accommodations



## Route 460 Land Use and Connectivity Study

While the VDOT STARS Study provided recommendations for improving intersections and traffic flow ***on*** Route 460, Roanoke County wants to focus on improving traffic flow ***around*** Route 460.

Particularly with demand for redevelopment of parcels fronting Route 460, adding new commercial entrances onto Route 460 will only make congestion worse.

This study proposes new and improved ways for motorists, pedestrians and bicyclists to move around the Bonsack area without having to use Route 460. It will also establish recommended access routes for future development and redevelopment activities.

# WHO WE ARE – TIMMONS GROUP



800+ STAFF



VIRGINIA BASED FIRM  
8 offices in Virginia



FULL-SERVICE ENGINEERING  
DESIGN & TECHNOLOGY FIRM



ENR TOP 500  
28+ years



INC. 5000  
A FASTEST GROWING  
PRIVATE FIRM IN US  
2016 • 2017 • 2018



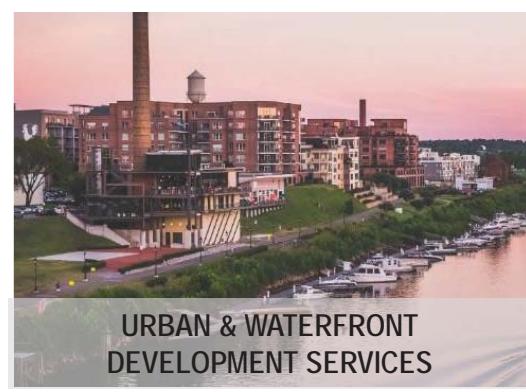
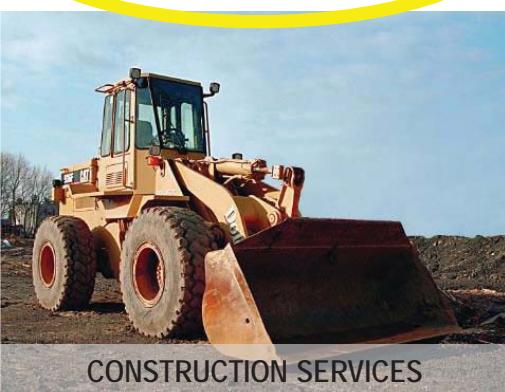
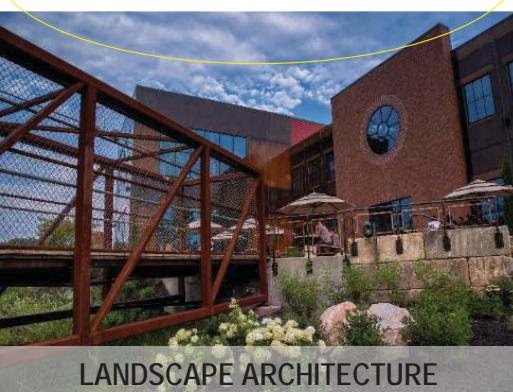
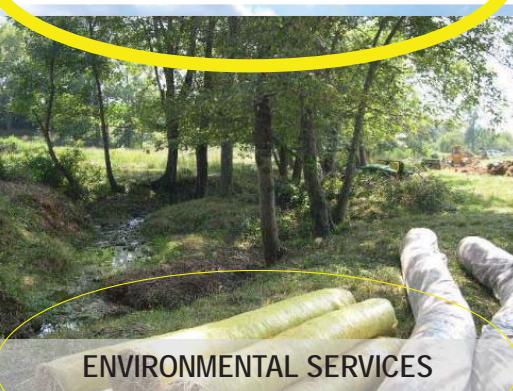
**HOT  
FIRM**  
ZWEIG GROUP



**ENR  
TOP  
500**



**TIMMONS GROUP**  
ENGINEERING | DESIGN | TECHNOLOGY



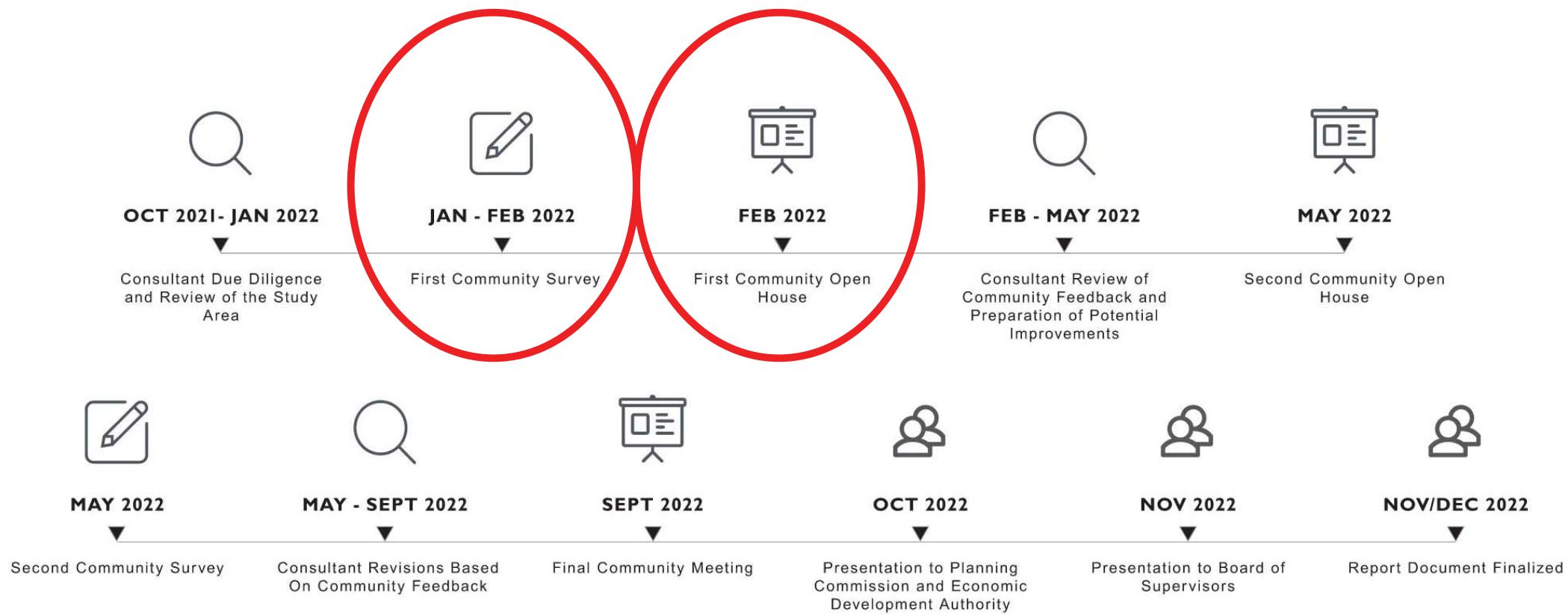
**TIMMONS GROUP**  
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# GOALS

- Reduced Route 460 Reliance
- Safety Improvements
- Potential Expansion East of Rail Line
- Potential Greenway Opportunities





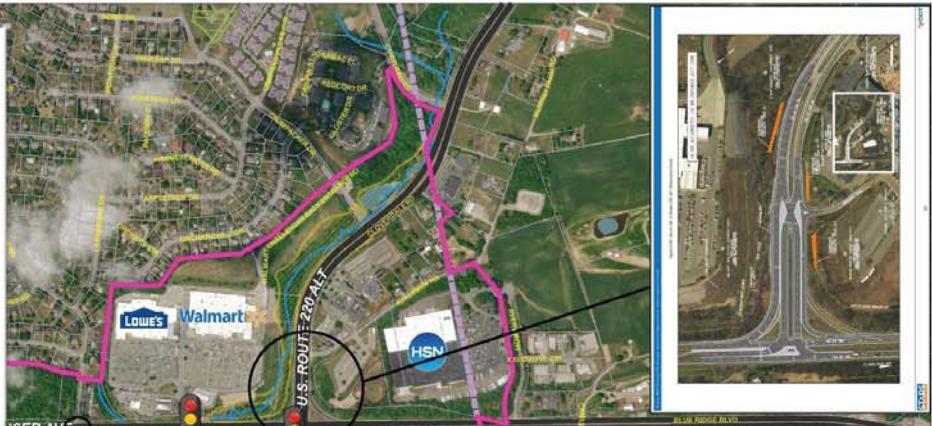
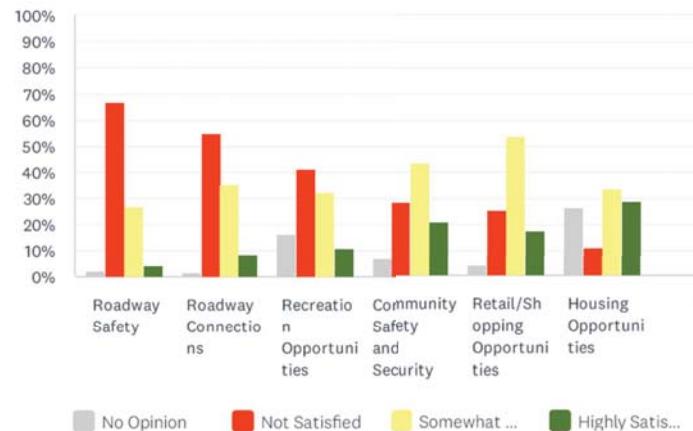


**U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY**  
ROANOKE COUNTY, VA - JANUARY 2022



Q2 What is your current level of satisfaction of the following in the Study Area?

Answered: 220 Skipped: 0



**U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY**  
ROANOKE COUNTY, VA - JANUARY 2022







Virginia  
Legend

- Archi
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## DRAINAGE ANALYSIS

## TOPOGRAPHIC ANALYSIS

**U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY  
POTENTIAL TRANSPORTATION IMPROVEMENTS**  
ROANOKE COUNTY, VA - FEBRUARY 2022

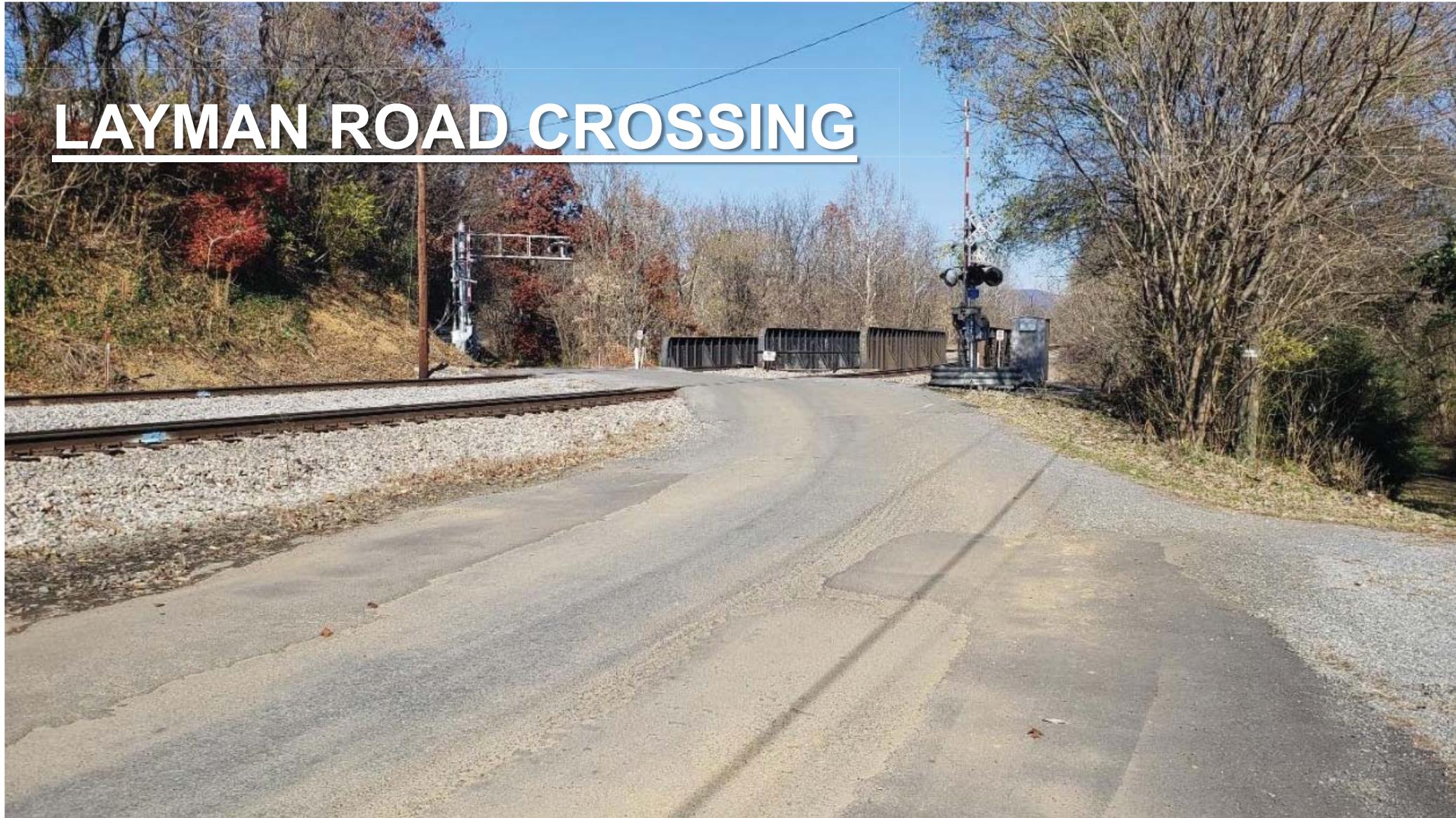
Notice of AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.



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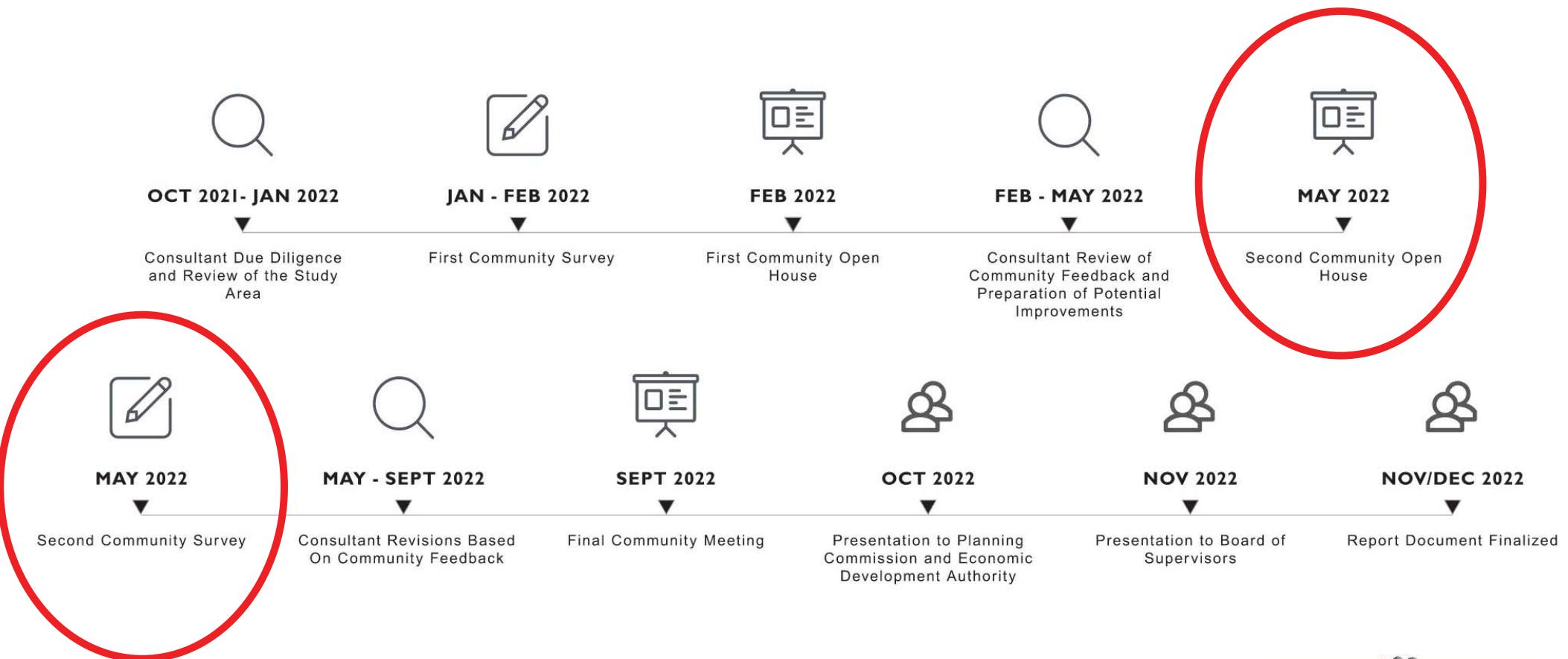


# LAYMAN ROAD CROSSING



# GLADE CREEK CROSSING





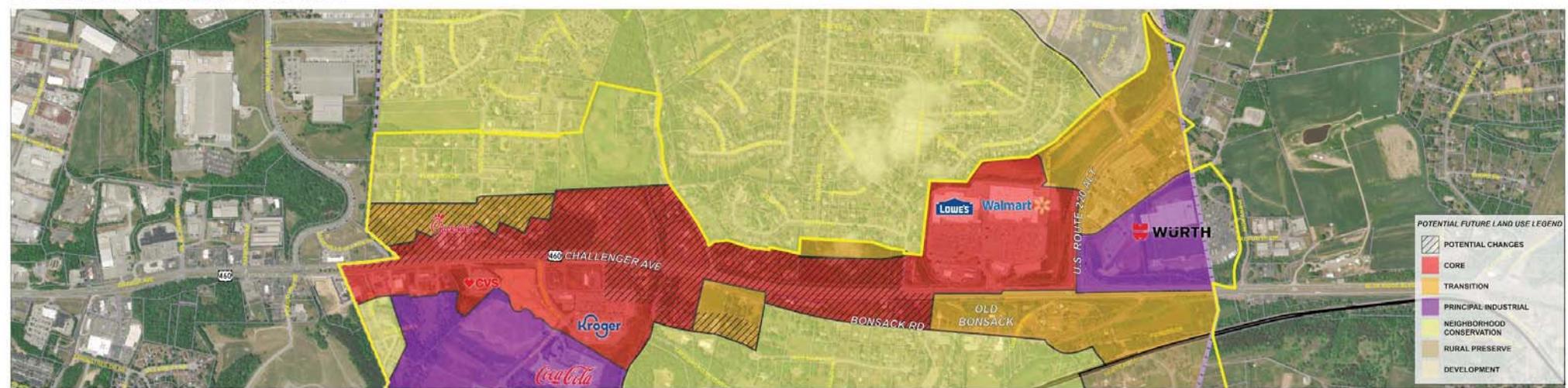
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## CURRENT FUTURE LAND USE

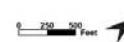
CURRENT FUTURE LAND USE GUIDE	
<b>CORE:</b>	
A future land use area where high intensity urban development is encouraged. Land uses within core areas may parallel the central business district and surrounding urban areas. Core areas may also be appropriate for larger-scale highway-oriented retail uses and regionally-based shopping facilities. Due to limited availability, areas designated as Core are not appropriate for tax-exempt facilities.	
<b>TRANSITION:</b>	
A future land use area that encourages the orderly development of highway frontage parcels. Transition areas generally serve as developed areas along highway frontage and are used to support development. Industrial, retail and highway oriented commercial uses are encouraged in transition areas, which are more suitable for office, institutional and small-scale, coordinated retail uses.	
<b>PRINCIPAL INDUSTRIAL:</b>	
A future land use area where a variety of industry types are encouraged to locate. Principal Industrial areas are existing and planned regional employment centers and are distributed throughout the county. They are located near major rail lines and substate highway access. Due to limited availability, areas designated as Principal Industrial are not appropriate for tax-exempt facilities.	
<b>NEIGHBORHOOD CONSERVATION:</b>	
A future land use area where established single-family neighborhoods are protected and the conservation of the existing development pattern is encouraged.	
<b>RURAL PRESERVE:</b>	
A future land use area of mostly undeveloped, outlying lands. These rural regions are generally stable and require a high degree of protection to preserve agricultural, forest, recreational, and natural areas.	
<b>DEVELOPMENT:</b>	
A future land use area where most new neighborhood development will occur, including large-scale planned developments which mix residential with retail and office uses. Increasing connectivity and walkability in-situ development is a key objective. Clustered developments are encouraged as is the use of greenways and bike and pedestrian trails.	



## POTENTIAL FUTURE LAND USE



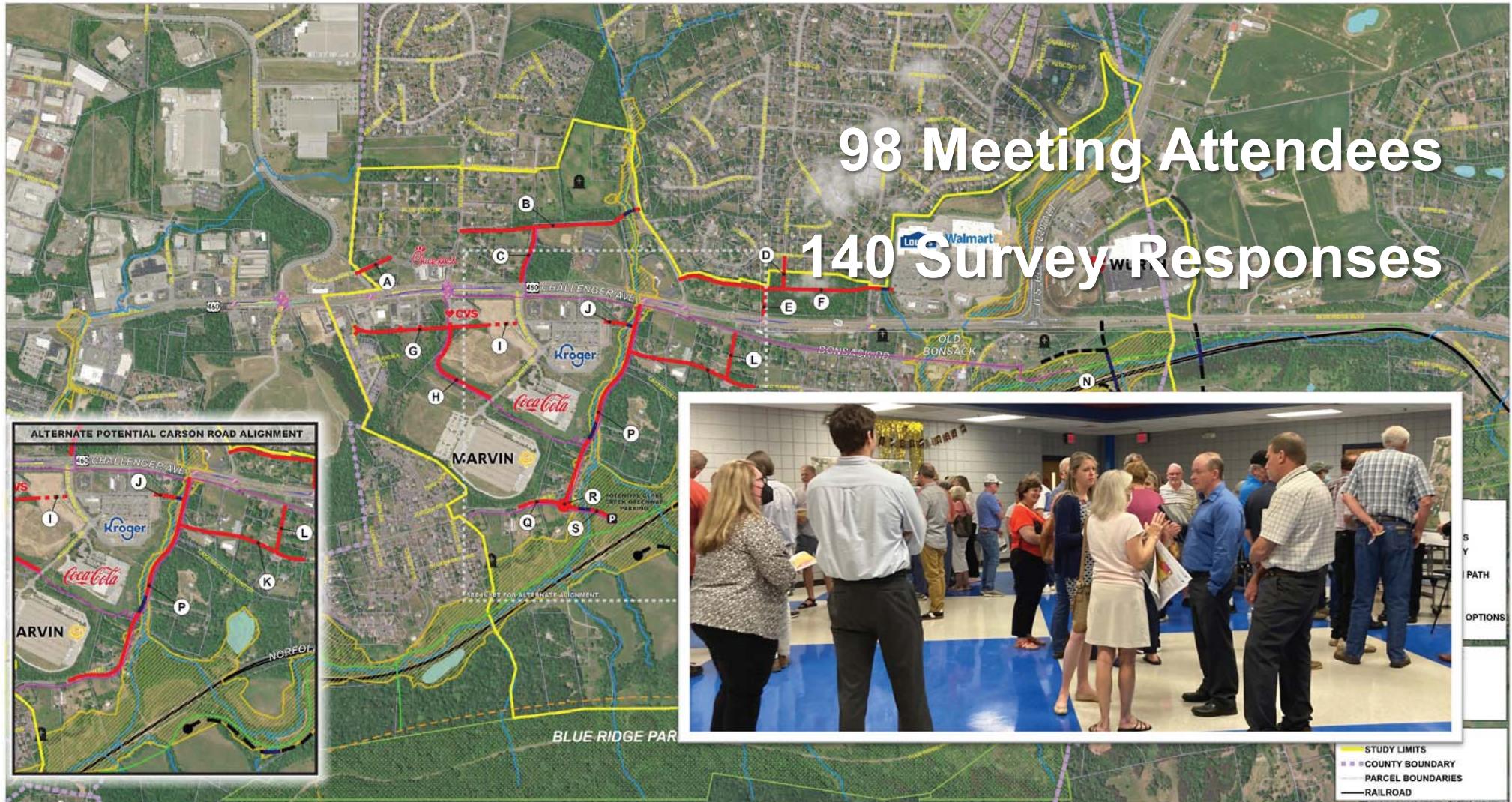
**U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY**  
**POTENTIAL FUTURE LAND USE**  
 ROANOKE COUNTY, VA - MAY 2022





# 98 Meeting Attendees

# 140 Survey Responses



**U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY  
POTENTIAL TRANSPORTATION IMPROVEMENTS**  
ROANOKE COUNTY, VA - MAY 2022



 **TIMMONS GROUP**  
YOUR VISION ACHIEVED THROUGH OURS.



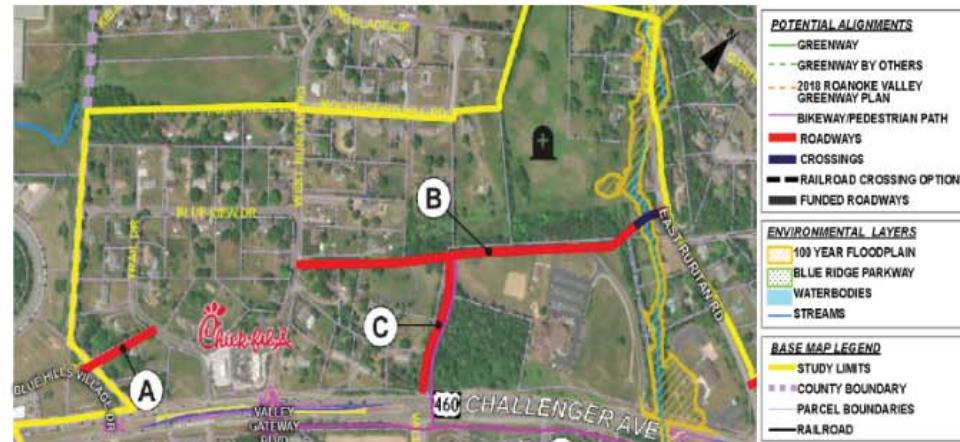
## Route 460 Land Use and Connectivity Study

[Transportation Opportunities](#)[Future Land Use Opportunities](#)

### Blue Hills to East Ruritan

The East and West Ruritan Road improvement opportunities are shown in the area map to the right. It consists of the area between Blue Hills Drive and East Ruritan Road, west of Challenger Avenue. It includes existing roads and proposes new roads intended to help alleviate congestion problems while allowing for future growth and its impacts.

Significant challenges are associated with Chick-fil-A traffic and additional traffic is expected from the new LewisGale Freestanding Emergency Room across the street. The road improvements here generally allow for new traffic patterns to emerge.



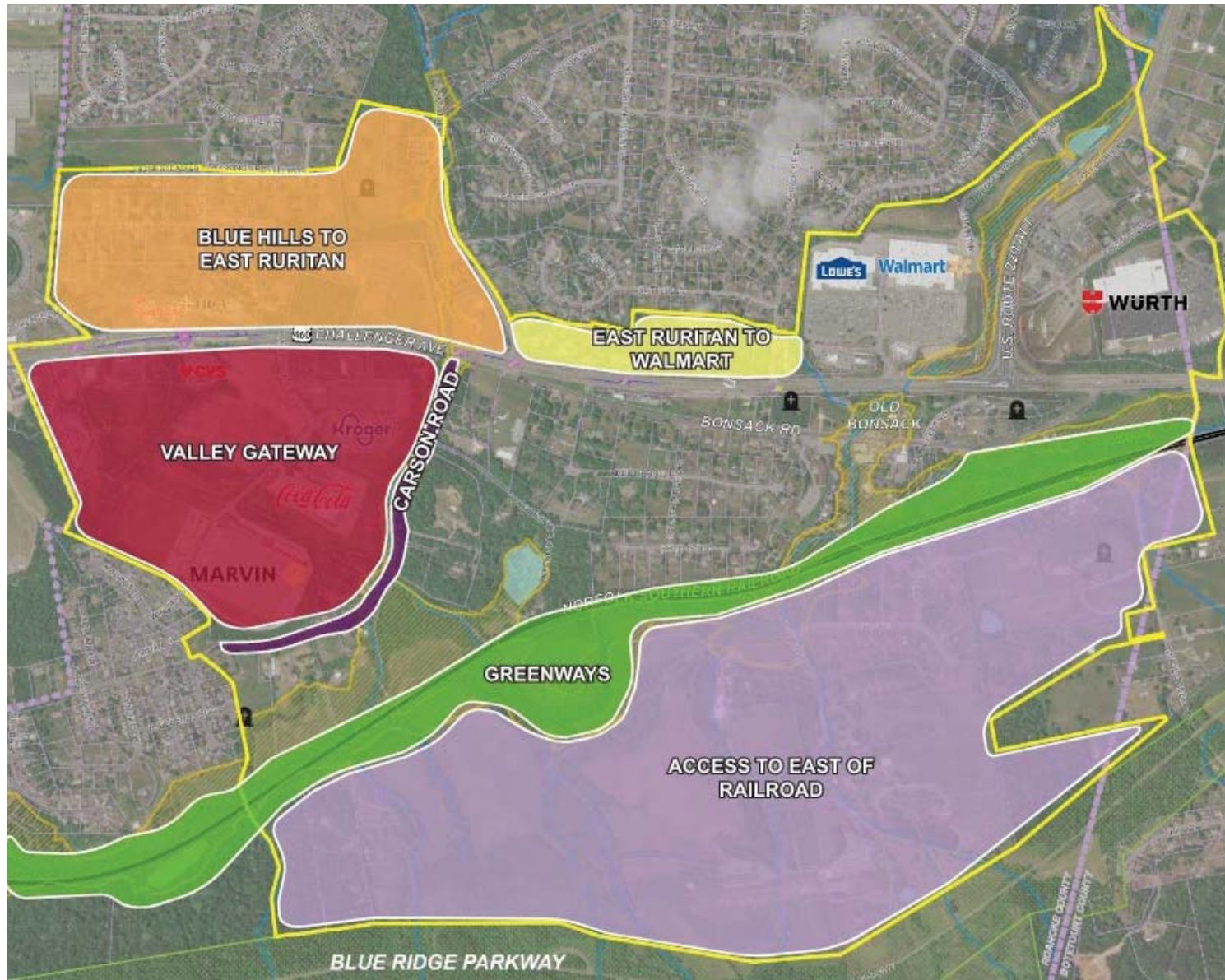
**Road A** is a potential improvement that if constructed would allow existing traffic that comes in and out of the Chick-fil-A and cleaners parking lots at Trail Drive to have direct access to Blue Hills Drive and its traffic signal at Challenger Avenue. Construction of this road would likely be tied to new development of these properties that front Challenger Avenue.

**Road B** as envisioned, provides a new road from which to connect between East and West Ruritan roads. This road not only allows for more connection points to and from the neighborhoods to the West, but also allows for better access to new developments without having to access Challenger Avenue.

**Road C** connects from Valley Gateway Blvd directly to Road B, allowing for future development of the nearby properties to have a better and more efficient access, lessening the impact on the existing road network.

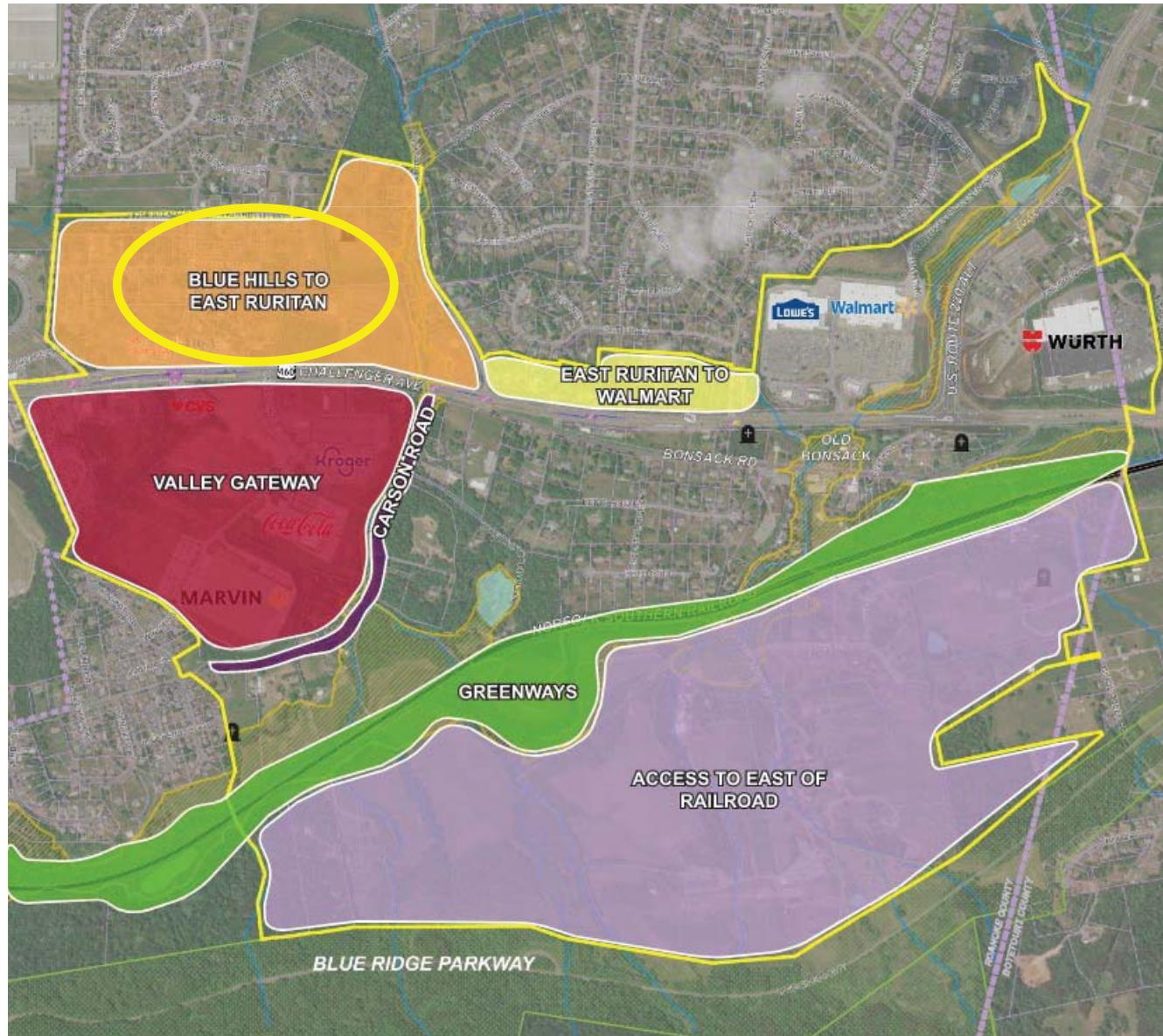
[Provide Feedback](#)

Survey ID #	Transportation Area Name	Comment	The information presented on the website was clear and easy to understand.	Please indicate your level of support for the transportation improvement area.
1	Access to East of Railroad	Why not consider replacing the NS crossing with a bridge? Would greatly improve safety and aid in future housing development! May receive funding from Smart Scale or Economic Development EDA grants?		Agree Agree
2	Access to East of Railroad	I think M, N, and O would be great if that were something that could actually happen		Agree Agree
3	Access to East of Railroad	Agree on the option N to build bridge between North end of Bonsack Rd and existing Glade Creek Road. This will eliminate the railroad crossing.		Agree Strongly agree
4	Access to East of Railroad	Good		Agree Strongly agree
5	Blue Hills to East Ruritan	Has potential. May have citizen opposition.		Strongly agree Agree
6	Blue Hills to East Ruritan	Road A - Trail Drive is already very narrow and the left turn from Blue View Drive onto West Ruritan is difficult to see oncoming traffic due to grade and vegetation. Increasing traffic on these roads should include improvements to these roads. Road B - I support this plan. Road C - The Valley Gateway Blvd traffic signal is already very busy and often backs up into the West Ruritan light during evening commutes. Increasing traffic through this signal needs to be carefully studied. These two intersections are very close together and I do not support increasing the complexity of that intersection as it is designed now.		Strongly agree Neutral
7	Blue Hills to East Ruritan	Roads A, B, and C seem helpful.		Agree Agree
8	Blue Hills to East Ruritan	I think all three options would be realistic improvements for the corridor. I believe that B and C options could have more direct impact of the neighborhood off of 460 but could be very beneficial for better connectivity in that area to avoid congestion.		Agree Agree
9	Blue Hills to East Ruritan	Good		Agree Strongly agree
10	Blue Hills to East Ruritan	If Option A takes place, please keep in mind that Trail Dr should be widened. It is a 1.5 lane road at best, and adding more traffic to Trail could be dangerous. Additionally, visibility from Blue View turning onto W Ruritan is poor due to the hill AND the overgrown property at Blue View and W Ruritan. Care would have to be taken here when also increasing the traffic at this intersection. Otherwise as a resident living off of W Ruritan I highly support option A. This would allow us easy access to the businesses on and around Blue Hills Dr without having to go through the lights on Challenger.		Agree Agree
11	Blue Hills to East Ruritan	Their should not be any more traffic on this road. This road is way too small for this kind of traffic!! Who ever wants to put this plan into place has not been here to walk the area. Just have the traffic turn left coming out of the cleaner's parking lot onto 460 West. Their is a right hand turn lane there all ready . Just bring it down to Trail Drive. Then you have your road into the Industrial Park.		Strongly disagree Strongly disagree
12	Blue Hills to East Ruritan	Strongly agree		Strongly agree Strongly agree
13	Blue Hills to East Ruritan	460 needs more lanes, off topic but true.		Agree Agree
14	Carson Road	Has potential but could be citizen concerns. Carson does need safety improvements.		Strongly agree Agree
15	Carson Road	I prefer the option 1 that includes access to Glade Creek greenway and potential park.		Strongly agree Agree
16	Carson Road	I am 100% on board with Option 1, to include the roundabout and greenway system. I am a runner and have to drive at a minimum over to Tinker Creek to pick up the greenway system and have no option to run in and around my neighborhood due to Carson Road not being pedestrian friendly. This would be a welcome change, and I guarantee you that the number of people that would use this would make it completely worth the expense.		Agree Strongly agree
17	Carson Road	I do not support any walking trail access through Carson Road area. Residents of this area chose to live here because of the privacy. The last thing we want is the bums that now spend all day on every corner at the intersections at King Street and Walmart having easier access to walk to and around our neighborhoods. We already had a string of robberies over last summer by people who do not live in this neighborhood. The increase in crime in this area is going to drive out good, hardworking, productive citizens. Many neighbors are already talking about moving to Botetourt. We do not want to live in the city, and this plan...along with the new Sheets on King St is going to impact our quiet neighborhood in a negative way. It is already dangerous making a right hand turn onto Carson Rd when leaving Kroger. Although the new road to connect Carson directly to Kroger would be great...having turning vehicles from Carson onto the new road would be dangerous to those making the sharp right turn onto Carson and then having to abruptly stop for turning vehicles heading to Kroger on Carson.		Agree Disagree
18	Carson Road	We as residents in this area do not want a greenway, roundabout or more traffic in our neighborhood due to increased theft, suspicious persons in and around our neighborhood! No Thank You!		Disagree Strongly disagree
19	Carson Road	Would love to see a park on carson with no greenery or any parks near by this is an amazing idea as a neighbor right off carson i strongly agree with this plan and the road improvements i think many could benefit from this		Strongly agree Strongly agree
20	Carson Road	I live off of Carson road and a park and greenway would be fantastic to have access too.		Agree Strongly agree
21	Carson Road	The proposed park and greenway would essentially be in my backyard. We enjoy the seclusion, privacy, and safety that comes along with it. There is been an increase in panhandling and homeless activity on Orange Avenue in recent years. Myself and our neighbors strongly feel that bringing this park and greenway would provide an area for these activities to spread, therefore jeopardizing the safety that many people in our neighborhood enjoy. While a park would theoretically be enjoyable for our children, I do not feel that it would be worth it, at the expense of jeopardizing the security and safety that we currently have.		Strongly agree Strongly disagree
22	Carson Road	All of these options provide access and reasons for MORE traffic on Carson road. I have lived here for over 20 years and while traffic has increased it is never congested nor have there been numerous wrecks or tragedies due to the cars cutting through. This is a HUGE waste of taxpayer money that will only cause more safety concerns for the homeowners in this area. Please think of the homeowners FIRST.		Strongly disagree Strongly disagree
23	Carson Road	Bike paths and pedestrian paths seem to add to the chaos of Carson. I like the roundabouts to slow traffic down and access from Carson to the Kroger center. I like the idea of a park too that is nearby but the bike path and pedestrian paths concern me for how hectic traffic can be as well as safety of the surrounding neighborhoods when it comes to unwanted traffic.		Agree Neutral
24	Carson Road	Carson Rd should not be used as a through way, King St already provides that access and should be considered for improvement before Carson Rd. Carson Rd is more of a neighborhood.		Disagree Strongly disagree
25	Carson Road	Improvements to Carson road would be welcomed with open arms. Seems like there's way too much traffic on this road for its size. Easy access to Kroger would be greatly appreciated, as well.		Agree Strongly agree
26	Carson Road	Please leave Carson Road as a neighborhood. The below "improvements" only build Carson Road as a thoroughfare to Vinton.		Strongly disagree Strongly disagree



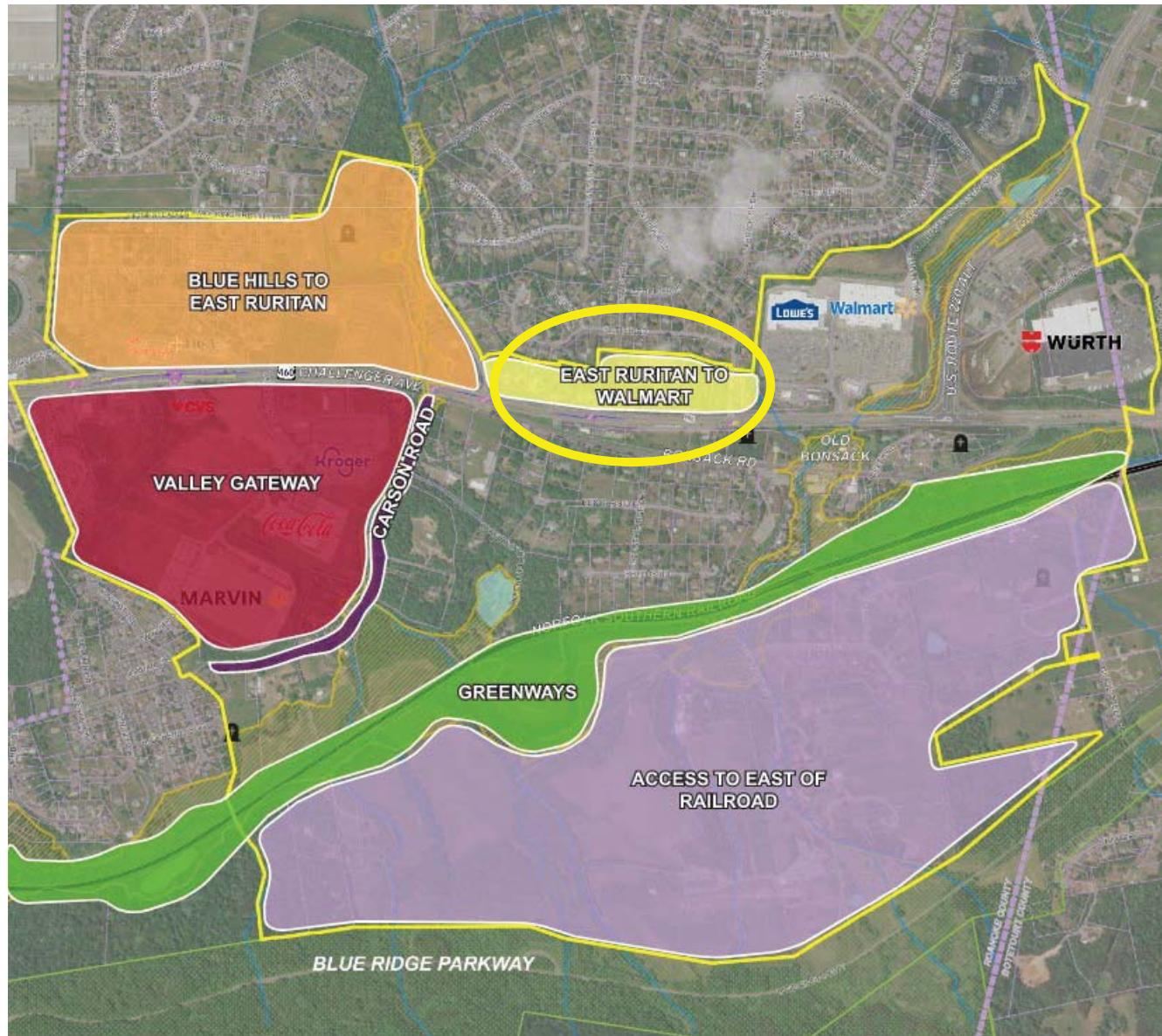
## BLUE HILLS TO EAST RURITAN

- Convenience
- Reduced 460 Congestion
- Additional Business



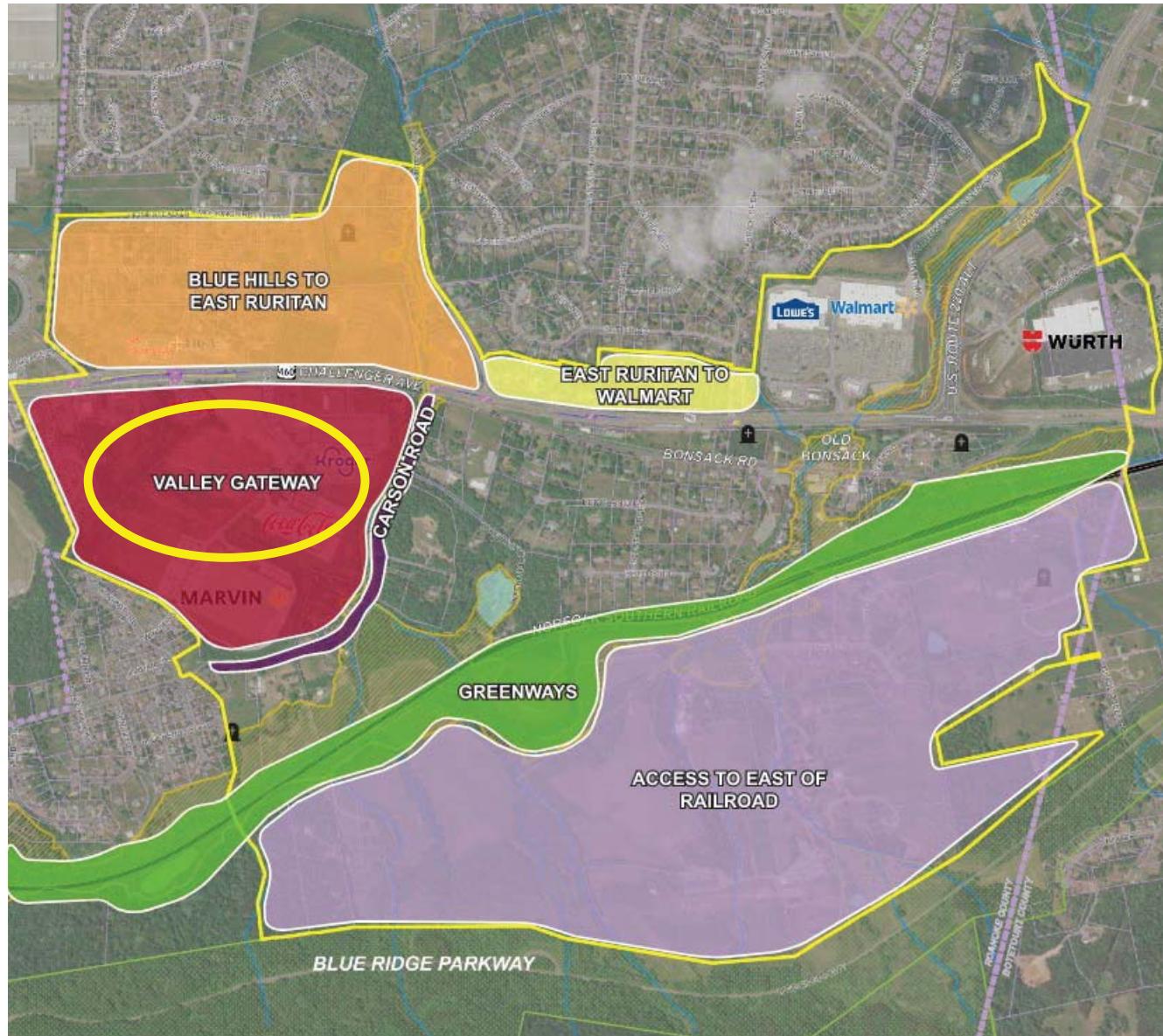
## EAST RURITAN TO WALMART

- Convenience
- Reduced 460 Congestion
- Safety



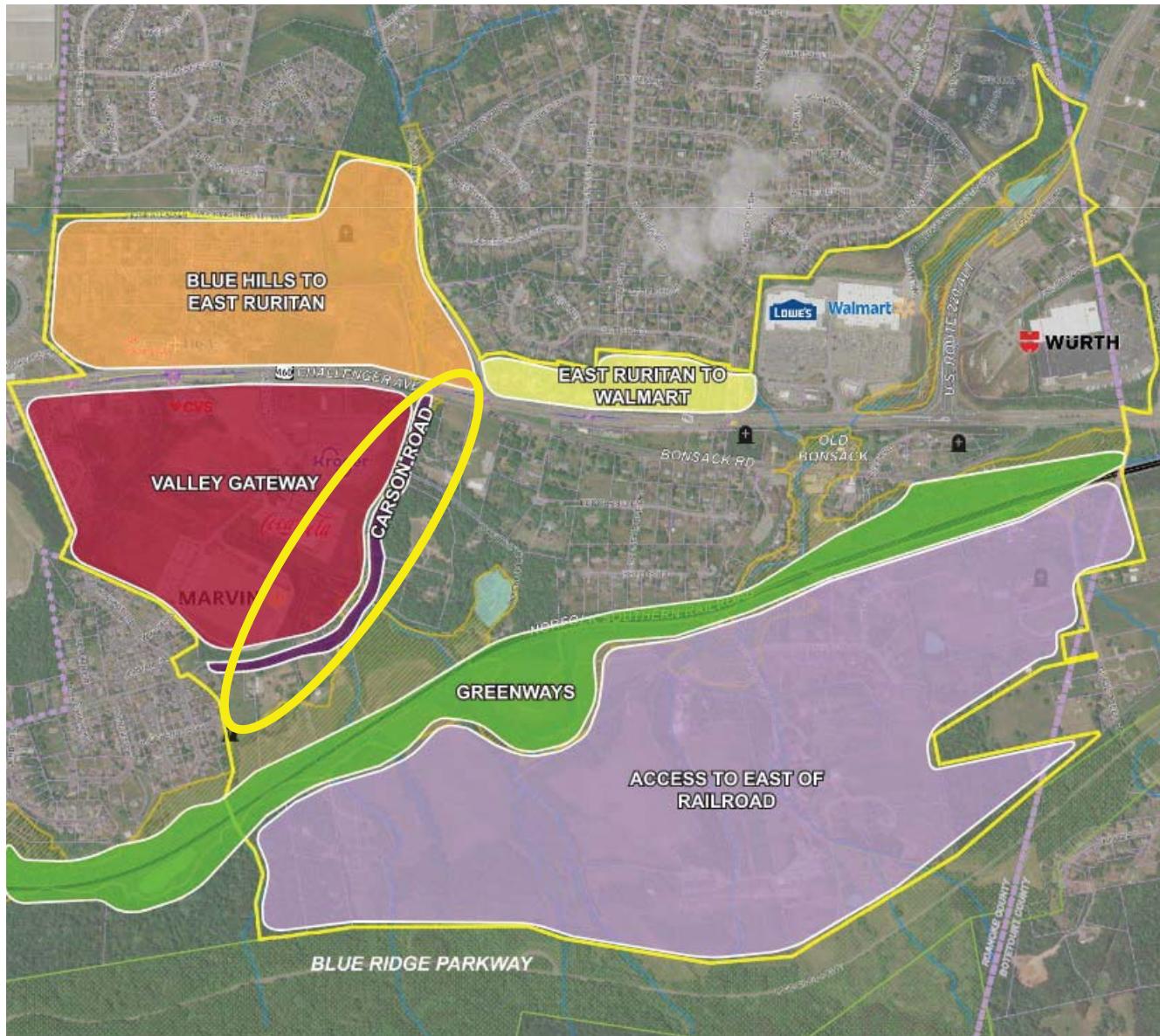
## VALLEY GATEWAY

- Shift Change Improvements
- Business Growth
- Interconnections
- Reduced Gateway Dependency



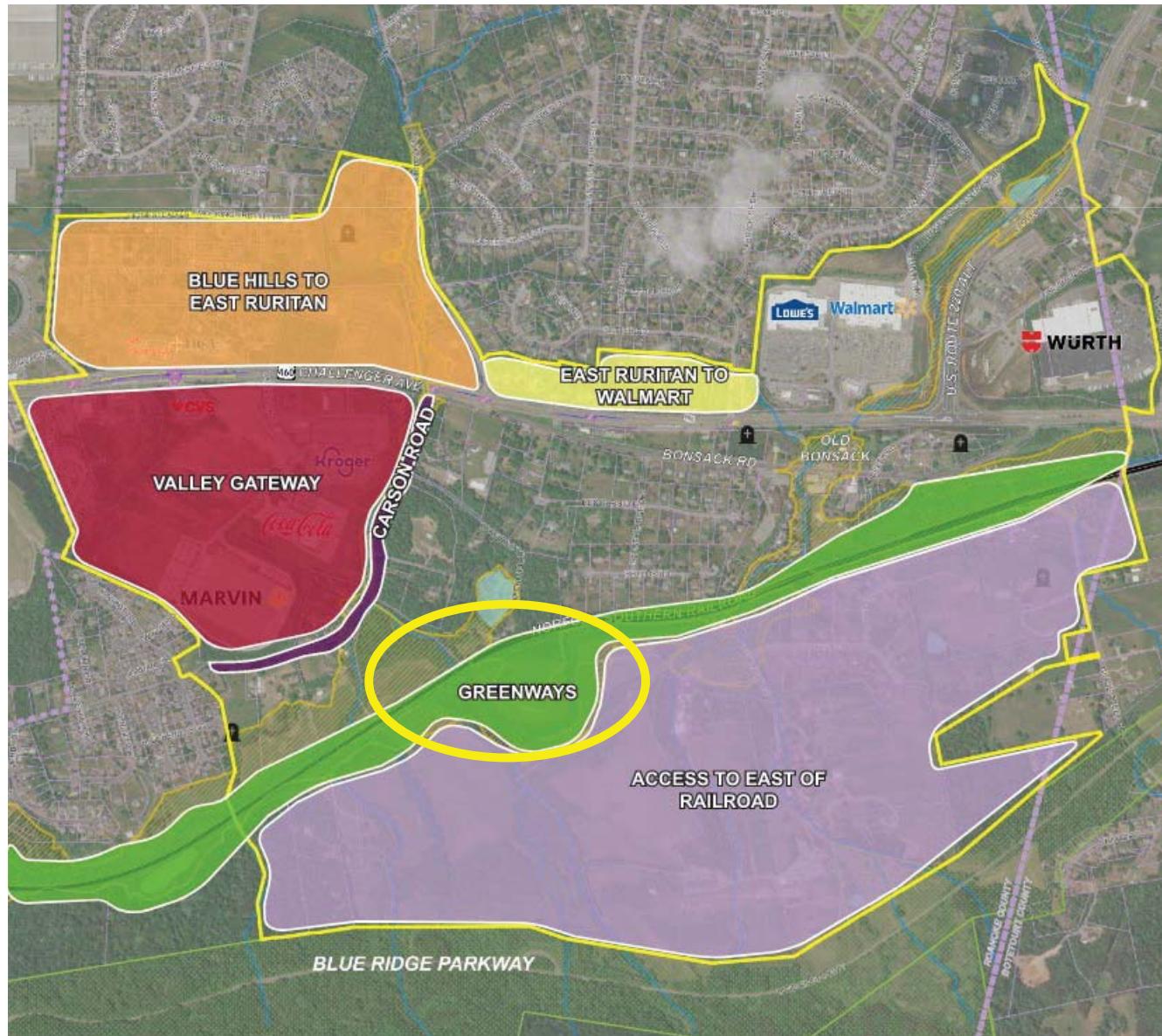
## CARSON ROAD

- Safety
- Preservation
- Convenience



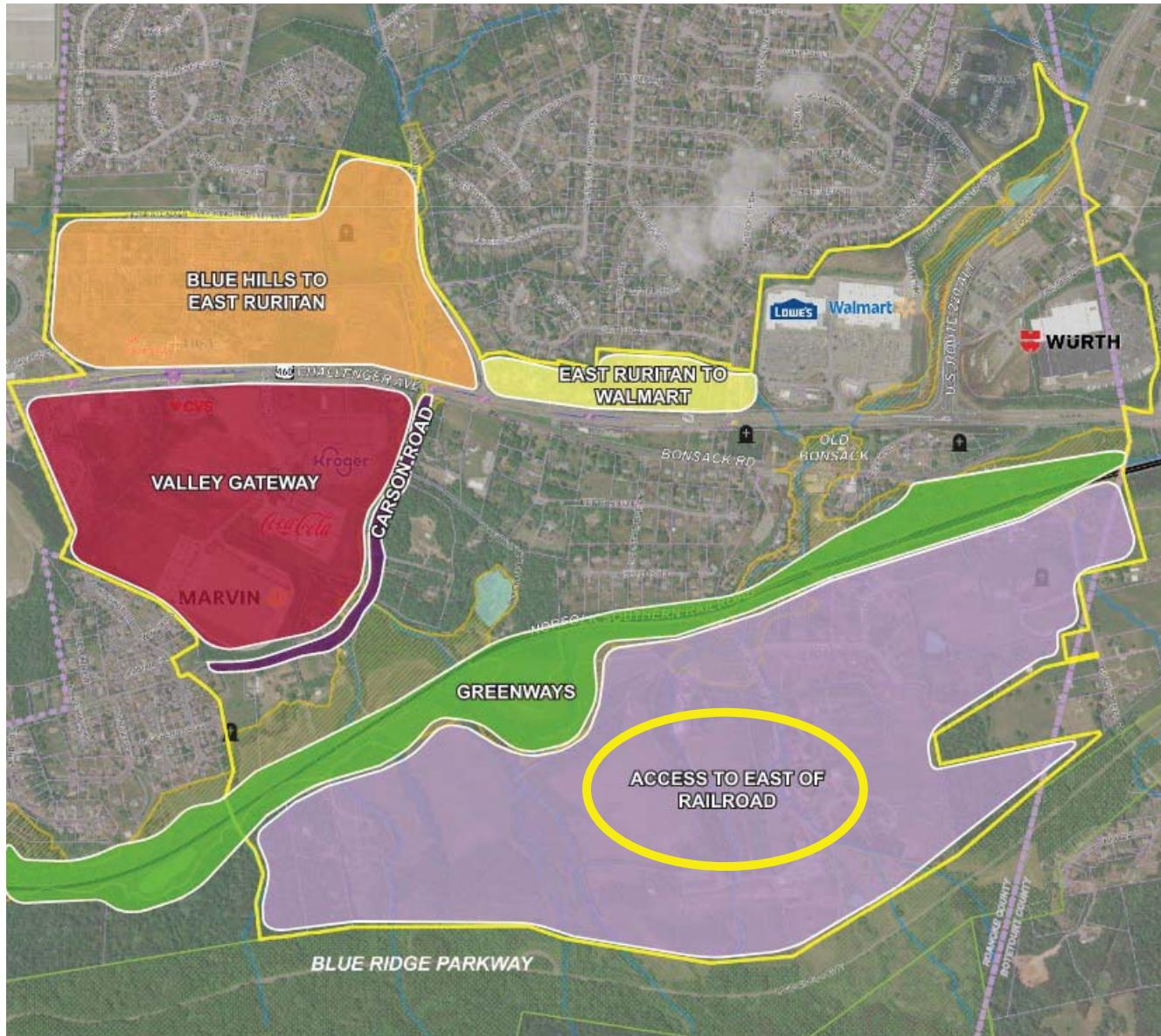
## GREENWAYS

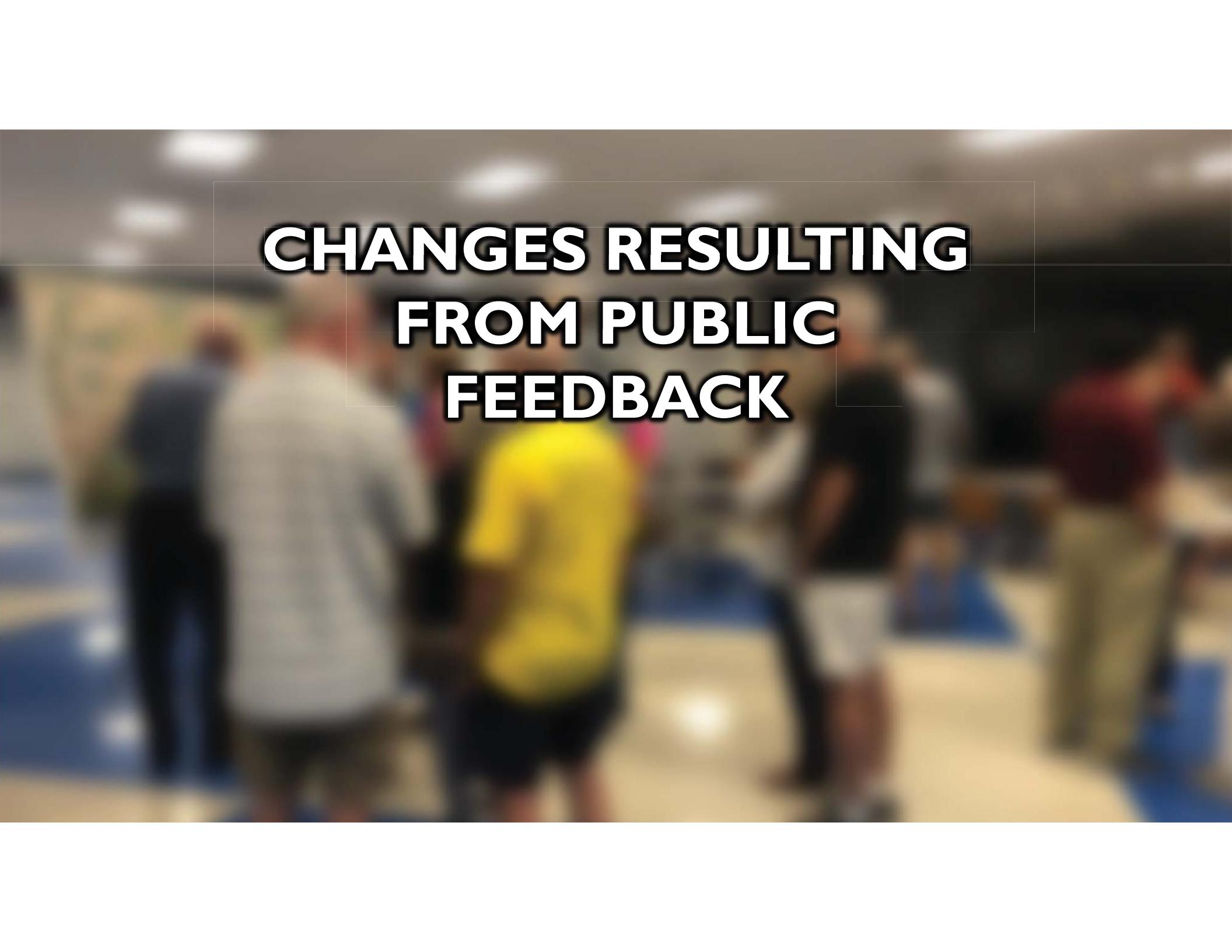
- Recreation Opportunity
- Quality of Life
- Response of Public
- Regional Connections



## ACCESS TO EAST OF RAILROAD

- Studied Viability
- Continue Agricultural Use
- Improve Access
- Railroad Safety





# **CHANGES RESULTING FROM PUBLIC FEEDBACK**

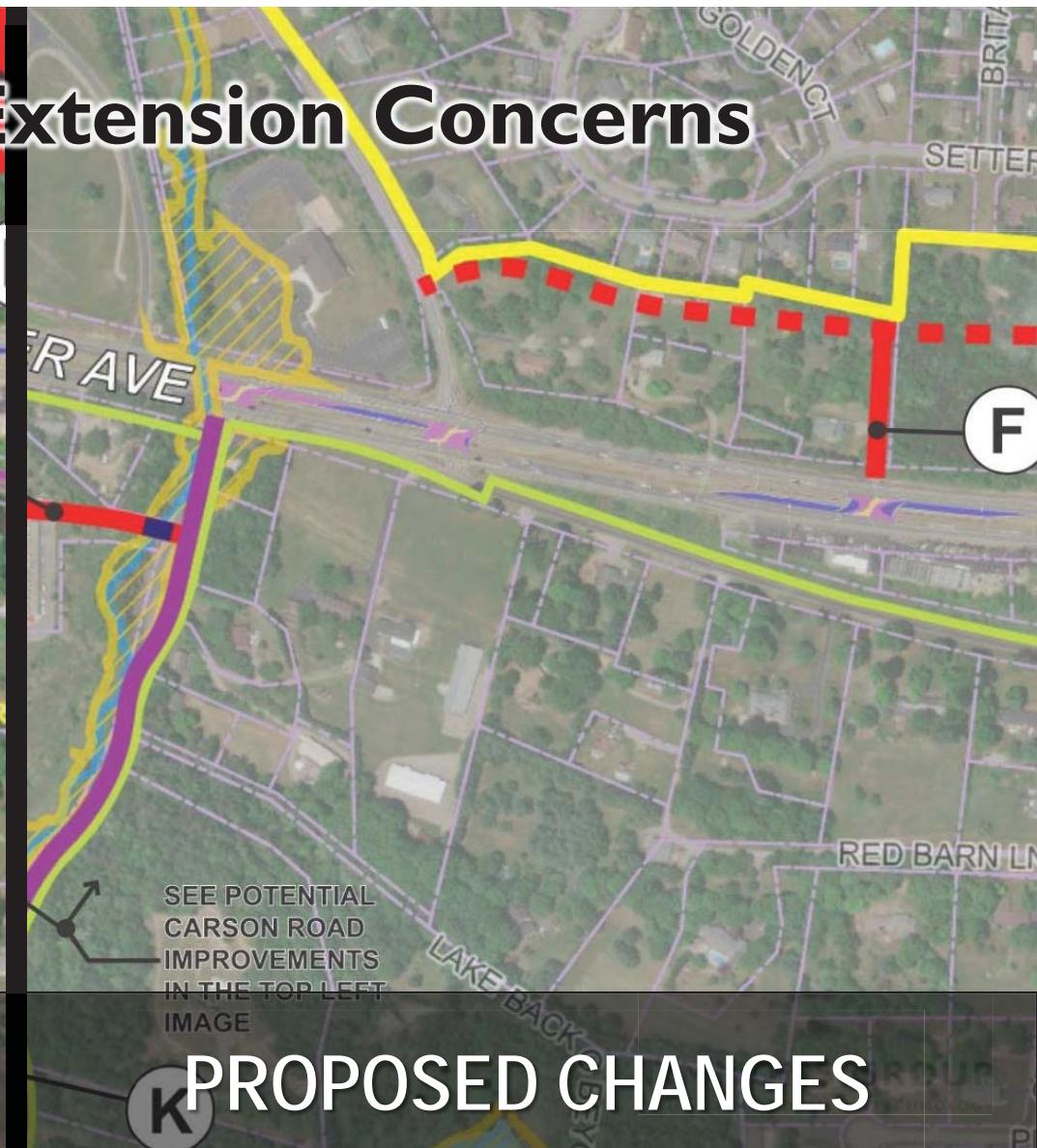
## COMMUNITY MEETING FEEDBACK

- Little Tree Acres Extension Concerns
- Carson Road Alignment Concerns
- Greenway Feedback
- Britaney Road Cut-through Concerns

# Little Tree Acres Extension Concerns



# MAY COMMUNITY MEETING



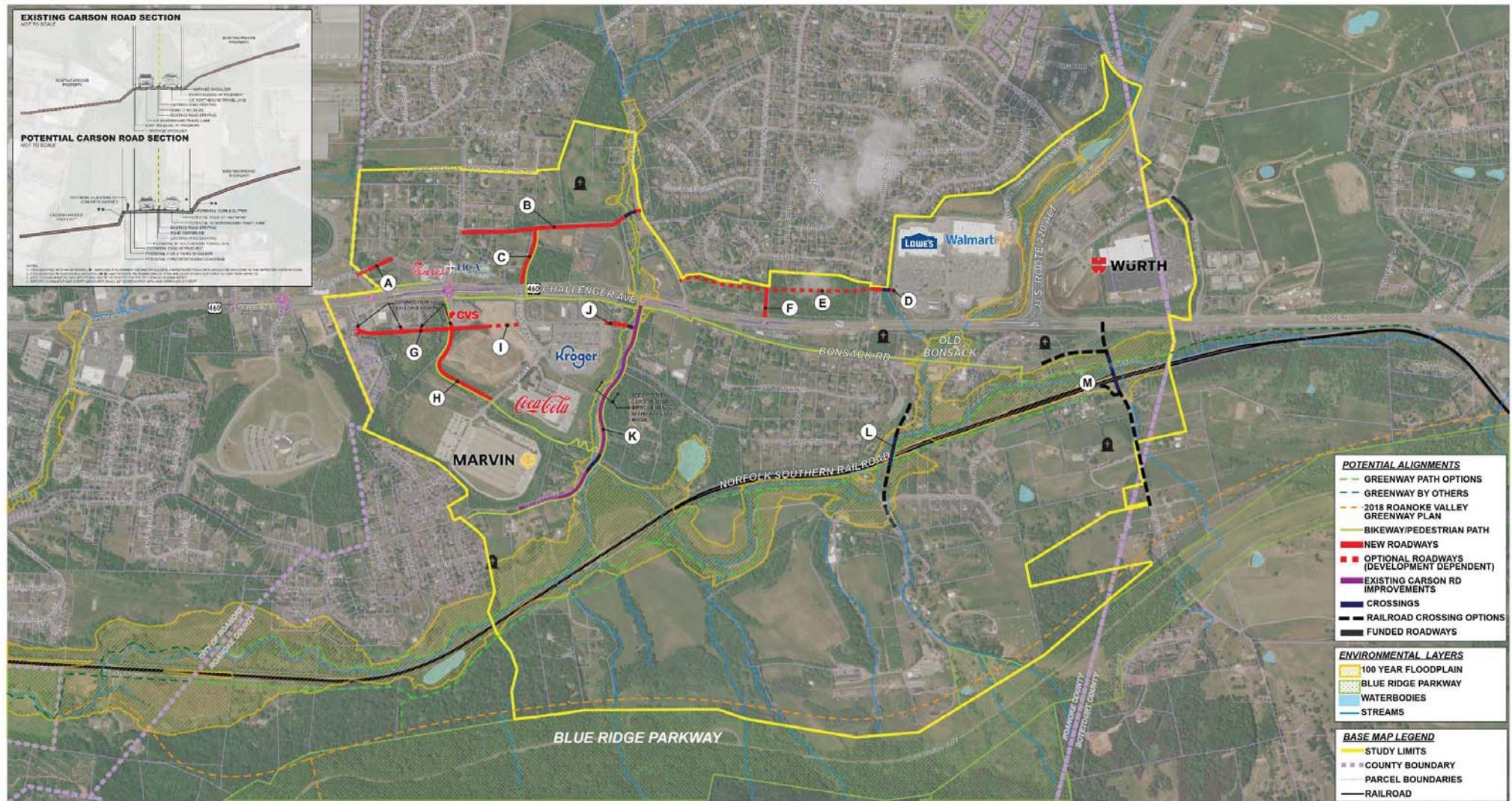
# PROPOSED CHANGES





# Britaney Road Cut-Through Concerns





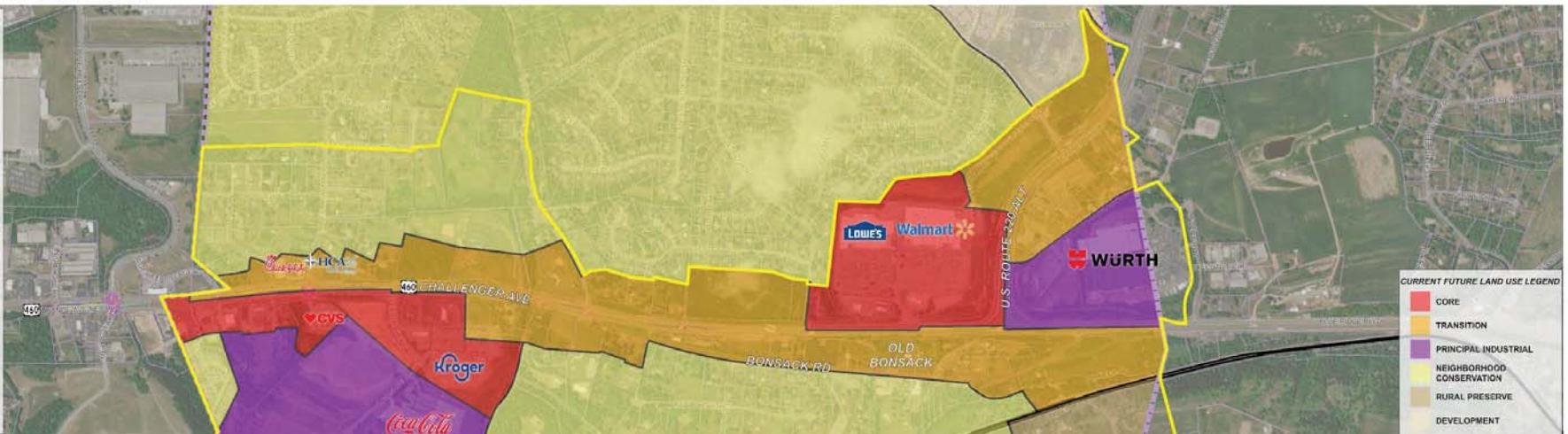
## U.S. ROUTE 460 LAND USE AND CONNECTIVITY STUDY POTENTIAL TRANSPORTATION IMPROVEMENTS

ROANOKE COUNTY, VA - SEPTEMBER 2022

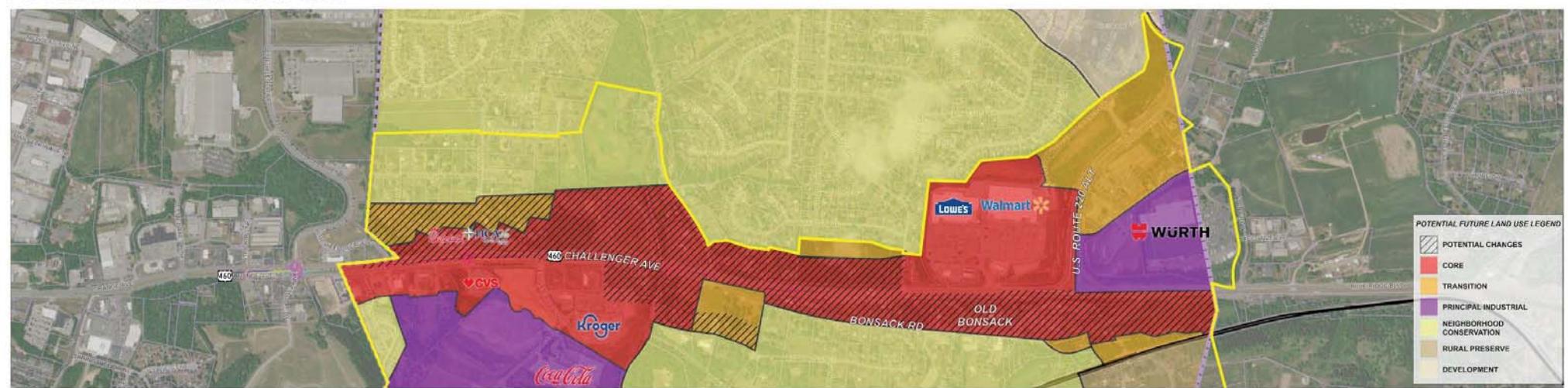


## CURRENT FUTURE LAND USE

CURRENT FUTURE LAND USE GUIDE	
<b>CORE:</b>	
A future land use area where high intensity urban development is encouraged. Land uses within core areas may parallel the central business district and surrounding urban areas. Core areas may also be appropriate for larger-scale highway-oriented retail uses and regionally-based shopping facilities. Due to limited availability, areas designated as Core are not appropriate for tax-exempt facilities.	
<b>TRANSITION:</b>	
A future land use area that encourages the orderly development of highway frontage parcels. Transition areas generally serve as developed areas along highway frontage and are located between core development, including retail and highway-oriented commercial uses discouraged in transition areas, which are more suitable for office, institutional and small-scale, coordinated retail uses.	
<b>PRINCIPAL INDUSTRIAL:</b>	
A future land use area where a variety of industry types are encouraged to locate. Principal Industrial areas are existing and planned regional employment centers and are distributed throughout the county. These areas are characterized by major and substate highway access. Due to limited availability, areas designated as Principal Industrial are not appropriate for tax-exempt facilities.	
<b>NEIGHBORHOOD CONSERVATION:</b>	
A future land use area where unpopulated single-family neighborhoods are located and the conservation of the existing development pattern is encouraged.	
<b>RURAL PRESERVE:</b>	
A future land use area of mostly undeveloped, outlying lands. These rural regions are generally stable and require a high degree of protection to preserve agricultural, forest, recreational, and natural resources.	
<b>DEVELOPMENT:</b>	
A future land use area where most new neighborhood development will occur, including large-scale planned developments which mix residential with retail and office uses. Intensification of existing urban areas and community in-situ development is a key objective. Clustered developments are encouraged as is the use of greenways and bike and pedestrian trails.	



## POTENTIAL FUTURE LAND USE



## DRAFT REPORT

WILL BE  
PRESENTED TO  
BOARD OF  
SUPERVISORS  
AND AVAILABLE  
FOR PUBLIC  
REVIEW ON

NOVEMBER 9,  
2022

# NEXT STEPS

**U.S. ROUTE 460 LAND USE & CONNECTIVITY STUDY**  
ROANOKE COUNTY, VA



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September 29, 2022

## FAQ

When will projects start?



There are NO projects in  
the pipeline. This is a  
roadmap for potential  
future improvements.

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# FAQ

What is next?  
This Study will be  
presented to the County  
Planning Commission,  
Economic Development  
Authority & Board of  
Supervisors.



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# THANK YOU!

## CONVERSATION WILL CONTINUE AT THE MAPS



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