

## QRI Website and Videos

[www.QRIVirginia.org](http://www.QRIVirginia.org)

The webpage includes several videos showing traffic patterns and navigation through the QRI intersection.

A link to the entire South Fork Bridge project page can be found on QRIVirginia.org.

## Civil Rights

VDOT ensures nondiscrimination and equal employment in all programs and activities in accordance with Title VI and Title VII of the Civil Rights Act of 1964.

If you need more information in regards to your civil rights on this project or special assistance for persons with disabilities or limited English proficiency, contact the project manager listed below.

## Contact Information

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Citizen Information Meeting

### Route 340/522 and Route 55 Quadrant Roadway Intersection (QRI) Warren County

Thursday, September 28, 2017, 4 - 7 p.m.  
Warren County Government Center  
220 North Commerce Avenue  
Front Royal, VA 22630

Friday, September 29, 2017, 3:15 - 6:30 p.m.  
A. S. Rhodes Elementary  
224 West Strasburg Road  
Front Royal, Virginia 22630

## Public Meeting

Welcome to the Virginia Department of Transportation's (VDOT) citizen information meeting concerning the Quadrant Roadway Intersection (QRI) at Route 340/522 (North Shenandoah Avenue) and Route 55 (Strasburg Road) in Warren County. The work at this intersection is part of the South Fork Bridge construction project on Route 340/522.

This meeting is being held to provide an opportunity for any person, acting on his/her own behalf or representing a group or governing agency, to receive information regarding the function and traffic pattern of this Innovative Intersection.

VDOT strives to ensure that all members of the community have the opportunity to participate in public decisions on transportation projects and programs affecting them.

Please visit [www.QRIVirginia.org](http://www.QRIVirginia.org) for complete traffic pattern information, graphics and videos to navigate the Quadrant Roadway Intersection.

## QRI Location



Quadrant Roadway Intersection (QRI)  
Route 340/522 (North Shenandoah Avenue) and Route 55 (Strasburg Road)

The QRI project in Warren County is located at the Route 55 (Strasburg Road) and Route 340/522 (North Shenandoah Avenue) intersection. The quarter loop is named Quadrant Road.

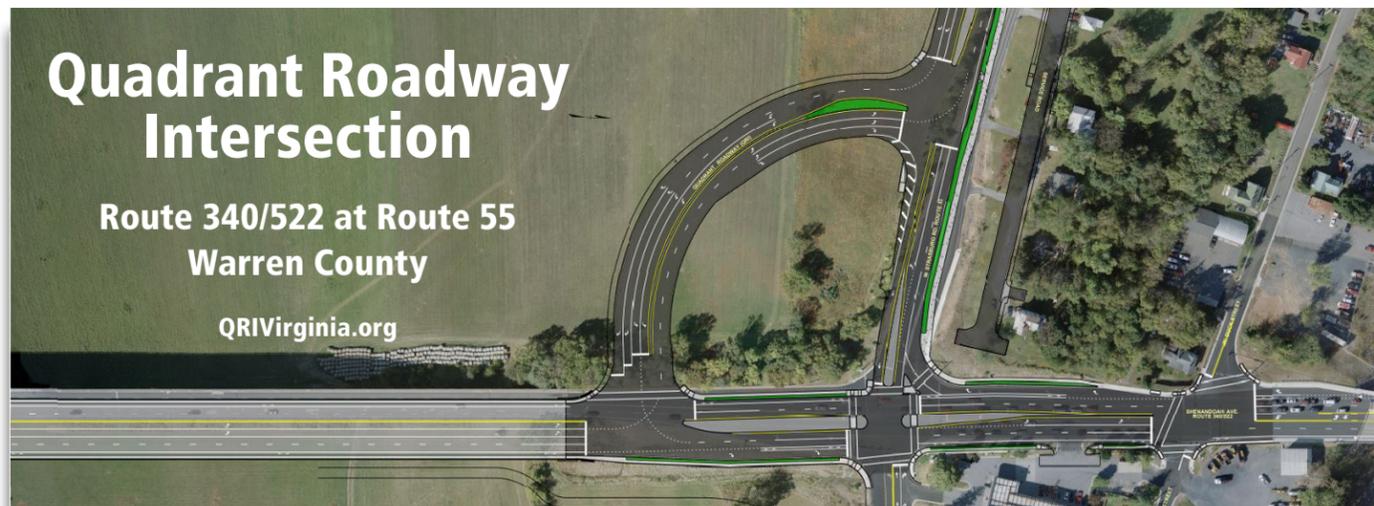
**East/West**  
Route 55 is an east-west highway. Familiar landmarks are A.S. Rhodes Elementary School on the western side of this intersection and Riverton United Methodist and Greater Joy Baptist churches on the eastern side.

**North/South**  
Route 340/522 is a north-south roadway with Interstate 66 located north and the Town of Front Royal located south of this intersection.

# Quadrant Roadway Intersection

Route 340/522 at Route 55  
Warren County

QRIVirginia.org



The Warren County QRI is part of the South Fork Bridge construction project. The QRI is an innovative and cost-effective solution for a congested traffic area. It handles more vehicles and offers fewer delays than a conventional four-way signalized intersection. This is achieved by moving left-turns away from the intersection of Route 340/522 and Route 55, and relocating them to the intersections with Quadrant Road. The QRI provides substantially more green-light time for north-south traffic on Route 340/522, which is the dominant traffic pattern at this intersection.

## Driving Through the Quadrant Roadway Intersection (QRI)

	<p><b>Eastbound to Northbound (School to I-66)</b></p> <p>Route 55 eastbound traffic from area of A.S. Rhodes Elementary School takes right turn at Quadrant Road (quarter-loop), stays in two left-most lanes and turns left onto Route 340/522 toward Interstate 66.</p>
	<p><b>Eastbound to Southbound (School to Front Royal)</b></p> <p>Route 55 eastbound traffic from area of A. S. Rhodes Elementary School takes right turn at Quadrant Road (quarter loop), stays in two right-most lanes and turns right onto Route 340/522 toward the Town of Front Royal.</p>
	<p><b>Northbound to Westbound (Front Royal to School)</b></p> <p>Route 340/522 northbound traffic from Town of Front Royal area stays in two left-most lanes and turns left onto Quadrant Road (quarter loop) and then turns left onto Route 55 westbound toward A. S. Rhodes Elementary School.</p>
	<p><b>Southbound to Eastbound (I-66 to Churches)</b></p> <p>Route 340/522 southbound traffic from area of I-66 stay in two right-most lanes. Go past intersection of Route 55 (Strasburg Road). Get in the right lane and turn right onto Quadrant Road (quarter loop) and then turn right onto Route 55 (Strasburg Road) eastbound. Cross Route 340/522 toward the area of Riverton United Methodist Church and Greater Joy Baptist Church.</p>
	<p><b>Westbound to Southbound (Churches to Front Royal)</b></p> <p>Route 55 westbound traffic from area of Riverton United Methodist Church and Greater Joy Baptist Church stays in the left lane, crosses Route 340/522 and stays in the far left-lane, turning left onto Quadrant Road (quarter loop), then traveling in the two far right-lanes on the loop. Turn right onto Route 340/522 southbound and head towards the Town of Front Royal.</p>

Traffic-simulation videos, maps and other helpful information are at [QRIVirginia.org](http://QRIVirginia.org).



## Innovative Intersections

Innovative intersections enable more efficient traffic flow. The Federal Highway Administration has sanctioned several design standards including the Quadrant Roadway Intersection (QRI).

Today's road designs are emerging from standards set in the mid-20th Century. In the last 60 to 70 years communities have grown and traffic patterns have changed. Innovative intersection designs are experiencing increased popularity in the 21st century as solutions to intersections with extensive traffic backups.

More information about VDOT's Innovative Intersection program is available at: [www.QRIVirginia.org](http://www.QRIVirginia.org)

## Project Description

The Warren County QRI is part of the South Fork Bridge construction project, which brings sustainable bridge construction that potentially will last a century before replacement is needed.

The QRI is an innovative cost-effective solution for a congested traffic area, where it offers the following benefits over a conventional four-way signalized intersection:

- Keeps more vehicles moving.
- Provides fewer delays and more "green light" time for north-south traffic, which is the dominant traffic pattern at this intersection.
- Handles 5-15% more traffic volume, and reduces travel time by 5-20%. (Source: Federal Highway Administration)

The QRI protects the nearby historic district by increasing the intersection's service life, thus delaying further construction that could impact designated historic sites. Current and future transportation conditions require continued thoughtful and efficient planning.

All traffic signals on the bridge, at the QRI and at Duck Street will be coordinated to minimize travel times through the intersection area of Route 340/522 and Route 55.

The speed limit through the QRI area is 35 miles per hour. The speed limit on Quadrant Road is 25 miles per hour.

## Anticipated Schedule

**Fall construction schedule. All work is weather permitting:**

**October 2017**  
Paving work on Route 55, Route 340/522 and Quadrant Road

**November 2017**  
Bridge and QRI become fully operational

## Paving Mid to Late October

A portion of Route 55 (West Strasburg Road) in Warren County is scheduled to be closed for several days in October. This closure is just west of Route 340/522 (North Shenandoah Avenue) near the town of Front Royal. It allows contractors to construct the portion of Route 55 within the new Quadrant Roadway Intersection (QRI), as shown in the map. At the intersection there will be two northbound lanes with an additional left-turn lane and two southbound lanes. This traffic pattern will be achieved using part of the newly constructed South Fork Bridge and existing pavement. Detours are as follows:

Drivers heading east on Route 55 from Strasburg or A.S. Rhodes Elementary School will turn right onto Quadrant Road, which leads to a new traffic signal at Route 340/522. Drivers then turn right to reach Front Royal, or left to reach East Strasburg Road or Interstate 66.

Drivers who use Route 55 to reach Strasburg or A.S. Rhodes Elementary School from Route 340/522 will turn onto Quadrant Road at the new traffic signal, and then turn left onto Route 55.

Property owners along Route 55 will have access to their homes throughout the October 2-13 roadway construction.

Throughout October 2017, motorists can expect lane closures for final paving on Route 55 and Route 340/522 just north of Front Royal. This is part of the construction on the QRI and the new South Fork Shenandoah River bridge. Both of these facilities are scheduled to fully open to traffic in November 2017. All work is weather permitting.

