

When will construction take place?

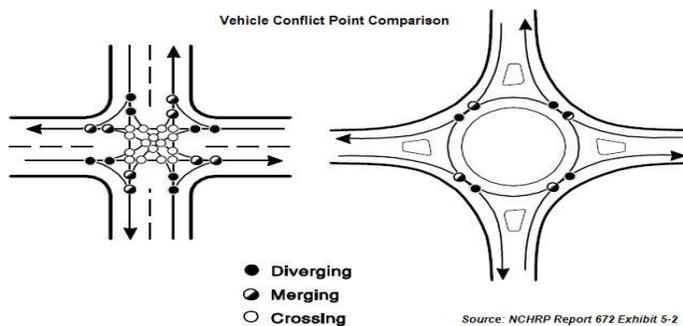
Construction is expected to start in early 2016 and be complete by November 2017.

What does the project include?

The project construction will replace the current signalized intersection with a roundabout, build two bypass lanes at the intersection, realign the ramps to and from I-95 and remove the yield condition on the I-95 NB off ramp for improved safety and traffic flow.

What is a roundabout?

A roundabout is a circular intersection that allows traffic to move continuously counterclockwise without the use of a traffic signal. Traffic approaches the intersection by yielding to traffic already within the roundabout, but does not require stopping, which improves traffic flow. The roundabout also allows for far fewer conflict points than today's intersection, which will drastically reduce the severity of crashes.



Left: The illustration shows potential points of conflict between vehicles as they move through a traditional signalized intersection versus a roundabout. Roundabouts have 8 conflict points compared to 32 conflict points in a traditional signalized intersection. Additionally, the points of conflict in a roundabout are less severe, often fender benders or simple side swipes, compared to head-on collisions and T-bone crashes experienced in a signalized intersection.

Why was a roundabout design chosen?

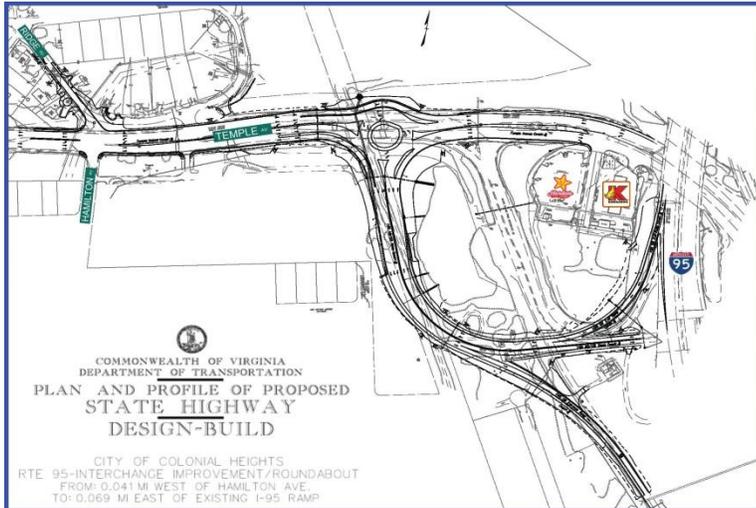
As a congested intersection with growing traffic volumes and prone to vehicular crashes, the intersection no longer provides an acceptable level of service to drivers. To address the traffic flow issues and crash rates, VDOT studied nine alternatives for possible improvements. Several improvements involved the reconfiguration and/or elimination of existing ramps, but no other designs offered the comprehensive solutions needed at the intersection that the roundabout provides.

How will people learn how to navigate the new roundabout?

Drivers will be guided through the new traffic configuration by pavement markings and signage. During the first few months after construction is complete, additional transitional signage will be installed to help guide drivers through. Before construction is complete, VDOT and the design-build team will hold educational sessions with key stakeholders and other groups to familiarize the community with the new design. Online resources are also being made available.

Are there any similar roundabout designs in Virginia?

Several similarly sized roundabouts are in place along busy corridors in Virginia, such as Route 50 in Loudoun and Fauquier counties as well as the I-81 interchange with Route 220 in Botetourt County. Smaller roundabouts are in place on Courthouse Rd. in Prince George County and near Rt. 60 in Chesterfield County.



Project Milestones

- ✓ 2009-2011 – Project partners studied nine potential interchange improvement options, which focused on how each best solved existing issues of high crash rates and congestion.
- ✓ 2011 – VDOT worked with City of Colonial Heights to identify best solution. Colonial Heights City Council voted to move forward with a roundabout configuration in Dec. 2011
- ✓ 2013 – Public hearing for input
- ✓ 2014 – Prepared project for advertisement
- ✓ Feb. 2015 – Signed on design-build team to design and construct new configuration
- ✓ January-spring 2016 – Utility relocations
- ✓ Spring 2016 – Construction begins
- ✓ November 2017 – Construction complete

How is a roundabout different from a traffic circle?

Modern roundabouts offer the opportunity for drivers to choose their lanes as they approach the intersection, which reduces points of conflict. Roundabout traffic yields to oncoming traffic, instead of stopping, which offers a smoother traffic flow at reduced speeds. Roundabout traffic moves at reduced speeds, which also facilitates fewer and less severe crashes.

Would a diverging diamond interchange have worked in this location?

A diverging diamond interchange requires an entire interchange modification on all four interchange quadrants, which does not fit the current interchange configuration. It would require exorbitant property acquisition and environmental invasion and would not offer the same reduction in conflict points, as traffic signals would remain in place.

How will traffic move through this area during construction?

At least one through lane of travel in each direction will remain available to traffic on Temple Avenue during construction. There will be minimal impact to travel on I-95. Traffic will be heavy, especially during peak travel times. Drivers may want to budget extra time into commutes or use an alternate route.

How can I learn more?

Please contact the project manager, Harold Dyson, P.E. at Harold.Dyson@vdot.virginia.gov or the VDOT Communications office at richmondinfo@vdot.virginia.gov. Submit written inquiries or comments to VDOT Richmond District, Harold Dyson, 2430 Pine Forest Drive, Colonial Heights, VA 23834. The project team plans a robust outreach and communications plan to inform the public about the project construction plans and educate those interested about roundabout traffic configurations. Contact the VDOT Communications office at richmondinfo@vdot.virginia.gov or (804) 524-6179 to request informational presentations for your group.