



Interstate 95 and Route 630 (Courthouse Road) Reconstruction, Stafford County Diverging Diamond Interchange

Frequently Asked Questions

March 3, 2015

Why is a project needed at the I-95 interchange at Route 630 (Courthouse Road) in Stafford?

The amount of traffic expected to travel on Courthouse Road will grow substantially in the next 20 years. The existing interchange is not designed to accommodate this level of traffic. To address the coming traffic volume, the Virginia Department of Transportation has proposed adding more capacity on Courthouse Road, relocating the intersection of Courthouse Road and Route 1, and reconfiguring the interchange design to move traffic on and off the interstate with greater efficiency.

At the March 3, 2015 meeting of the Stafford County Infrastructure Committee, VDOT presented a design concept for reconstructing the interchange and Courthouse Road. VDOT is proposing to build a diverging diamond interchange.

What is a diverging diamond interchange?

A diverging diamond interchange (DDI) is an innovative design that is increasingly being built or considered by other U.S. transportation departments. The ramp configuration is similar to a traditional diamond interchange. However, traffic on the cross street (Courthouse Road), switches sides. Traffic is shifted to the left side of the road, which allows vehicles turning left to enter an interstate on-ramp without stopping at a traffic signal.

What are the benefits of this design?

This design significantly lowers the number of conflict points, where crashes are more likely to occur. Shifting traffic to the left can decrease congestion, since traffic turning left onto the interstate on-ramp does not have to stop at a signal. It is a sleeker design that requires less property to build, which lowers the project cost and minimizes impacts to nearby homes and businesses.

If this is a promising design, why wasn't it proposed sooner?

An interchange project at Courthouse Road has been in discussion since the 1990s, when the Exit 136/Centreport Parkway interchange on I-95 was in the planning stages. At the time an interchange reconstruction at Courthouse Road was being initially developed in 2008-2012, DDIs were not prevalent in the United States. Since the first U.S. DDI opened in Springfield, Missouri in 2009, the advantages have caused them to quickly be considered by numerous states.

I'm worried about traffic going the wrong way. How will drivers adapt to this pattern?

Motorists who drive through the interchange find them easy to navigate by following clear pavement markings and signs. In addition, eastbound and westbound Route 630 (Courthouse Road) traffic will be traveling over the interstate on separate bridges. Raised pavement features will separate traffic and guide traffic in the proper direction. An extensive

driver education campaign will be part of the project before it opens. However, even for a driver unfamiliar with this pattern, the on-road features provide clear direction for traffic.

I operate a commercial business. Can tractor-trailers navigate a diverging diamond interchange?

Tractor-trailers will be able to navigate a diverging diamond interchange. The project will be designed to accommodate the turning movements of these vehicles. A DDI built in Louisa County, Virginia is near a large commercial distribution facility, and tractor-trailers are currently navigating that interchange. Other states have found that vehicles that can navigate a traditional diamond interchange can navigate a diverging diamond interchange.

What will happen to the Park & Ride commuter lot on Courthouse Road?

Commuter parking will be shifted from its current location west of I-95 to east of I-95. At minimum, we will replace the commuter parking that exists today, 545 spaces.

Construction will be scheduled so the new lot is built before the existing lot closes.

How does this project accommodate pedestrian and bicyclist traffic?

Construction of a shared-use path in the Courthouse Road area could be a future, separately funded initiative.

Where else have diverging diamond interchanges been built?

In Virginia, a diverging diamond interchange opened on Interstate 64 at Zion Crossroads in Louisa County in 2014. Another diverging diamond interchange is under construction at Interstate 581 and Valley View Boulevard in Roanoke. A second diverging diamond interchange will begin construction this year at Route 460 and Southgate Drive near Virginia Tech. A diverging diamond interchange is under design for Interstate 66 and Route 15 in Haymarket.

Nationwide, 45 states have a diverging diamond interchange in operation, under construction, or in the planning stages.

What are the next steps for this project?

Designers and engineers will continue to develop this diverging diamond interchange concept this year. The project's environmental document will be re-evaluated. Revisions will be made to the approved Interchange Modification Report (IMR) for the project, which must then be re-submitted to the Federal Highway Administration for their review. Once federal approval is granted for the Interchange Modification Report and environmental document, a public hearing will be held on the project.

I would like to comment on this design. How can I share my comments?

The Virginia Department of Transportation anticipates holding a public hearing on the diverging diamond interchange design in late 2015. A minimum of 30 days before the hearing, VDOT will advertise the hearing date, time and location on its website, www.VirginiaDOT.org, and in area newspapers. Comments are accepted at the public hearing, and during a 10-day period following the hearing.

While our staff continues to work on this project, we will be happy to answer as many questions as we can. Please call VDOT Communications Manager Kelly Hannon at (540) 656-0321 or email her at Kelly.Hannon@VDOT.Virginia.Gov.

When will the project be built?

We anticipate construction work in the field may begin in late 2017.

More information on the project schedule will be available in late 2015, at the project's public hearing.

How does this project affect the widening of Courthouse Road west of I-95, from Austin Ridge Drive to Ramoth Church Road/Winding Creek Drive?

This project is active, and is in the Right-of-Way acquisition phase now. Additional details will be available in spring 2015 on the project's new construction start and completion date. Previous dates had construction starting in June 2016, and completion in November 2018.

This project's limits changed recently to widen Route 630 (Courthouse Road) from 2 to 4 lanes from Austin Ridge Drive to Ramoth Church Road/Winding Creek Road. A traffic signal would be installed at the intersection of Ramoth Church/Winding Creek, and at the entrance to Colonial Forge High School. The project's estimate has increased from \$29.9 million to \$38.9 million.