

# Intersection introspection

Planners say 'diverging diamond' will ease Arundel Mills woes

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Traffic planners have prescribed a novel decongestant for one clogged intersection near the **Arundel Mills** shopping mall, which is certain to grow even busier with the addition of a casino next year.

Motorists may call it driving on the wrong side of the road. But in industry parlance, it's a diverging diamond intersection. And it's all the rage.

"One of the biggest capacity constraints at an intersection is left turns [across traffic]. We've eliminated those conflicts," said Wes Guckert, president of **The Traffic Group Inc.**

The White Marsh firm created the new look for the intersection where Arundel Mills Boulevard passes over the Baltimore-Washington Parkway, Maryland 295. Its plan abandons the dumbbell-shaped configuration in which drivers navigate a pair of roundabouts to move from one road to the other.

Instead, the boulevard's lanes would be flip-flopped on the overpass, with drivers traveling in the lanes on their left, rather than their right. The crossover on the east side of the 295 would be controlled with a traffic light.

The result, Guckert said, will be drivers heading west on the boulevard able to swing north or south on 295 without dodging oncoming traffic to make left turns or snaking through traffic circles. And drivers coming south on 295 will be able to head east on Arundel Mills Boulevard by traveling through a single traffic light instead of two traffic circles.

A light at the top of the ramp taking northbound 295 traffic east on the boulevard would eliminate the need for drivers to cut across three lanes of traffic to take a left at a nearby intersection.

A **State Highway Administration** spokesman confirmed last week that state planners had received the proposal, but could not determine if it had been approved. State offices were closed Friday and Monday.

Guckert said the diverging diamond system can increase capacity by 30 or 40 percent and would be faster than conventional intersections, where traffic lights with phases for left turns increase wait times.

A **Federal Highway Administration** analysis of the diverging diamond concept found it leads to "less delays, fewer stops, reduced stop times, and shorter



RICH DENNISON

Traffic Group President Wes Guckert says driving on a 'diverging diamond' intersection is easier than negotiating a roundabout.

queue lengths compared to the conventional design." The administration wrote the interchanges work especially well in areas where space is tight and the work needs to be done quickly.

Guckert said the new traffic pattern, the first of its kind in Maryland, could be ready by the time the casino is scheduled to open in 2012. Asked about the driving public's reaction to driving on the wrong side of the road, Guckert answered "that's what they said about roundabouts."

"You follow the lines. Really there are no decisions to make, other than following the road," he said. "The roundabout takes a whole lot more decision making on the part of the driver — when to enter, when to exit, who has right of way."

Like roundabouts, the diverging diamond is a European import. The Missouri Department of Transportation opened the country's first such interchange in 2009 in Springfield. MoDOT has since opened two more and has plans for others.

Guckert said he knows of five in operation around the country, and 14 more in the works.

"They're definitely alleviating traffic jams and reducing the risk for drivers as well," said Jorma Duran, a spokesman for the Missouri Department of Transportation. "It removes where you're trying to turn



THE TRAFFIC GROUP

The 'diverging diamond intersection,' developed by **The Traffic Group Inc.** of White Marsh, has motorists driving on the wrong side of the road for a short distance.

across traffic and dart between cars."

The department credits the diverging diamond pattern with reducing accidents at the Springfield interchange by 53 percent and eliminating traffic backups that stretched for two to three miles beyond drivers trying to make left turns.

The intersections are cheaper, too. The state's third, in suburban St. Louis, cost \$10 million, whereas a more traditional single point intersection would have set them back \$13 million more. The Missouri department, the source of diverging diamond gospel in this country, has

fielded calls on the topic from 36 states and one in Australia.

The St. Louis interchange's project director, Lee Hillner, said it took motorists a little while to get used to the idea, but now traffic flows smoothly, with 83 percent of drivers reporting fewer delays than before.

"It's really easy to drive," he said. "When you look at it on a piece of paper, from above, it looks like a pretzel. But when you're driving it, you just follow the road."

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