

What is a **Diverging Diamond Interchange?**

The Wisconsin Department of Transportation (WisDOT) is considering a Diverging Diamond Interchange (DDI) at the I-39/90 and WIS 26 (Milton Ave.) interchange.

A DDI is a type of interchange that connects a freeway with a major highway. The DDI is based on a standard diamond interchange with a shift in the highway traffic within the interchange to safely and efficiently accommodate high volume left turn movements. Within the interchange, traffic on the highway briefly drives on the left side of the road to allow left turn movements to occur without crossing oncoming traffic or stopping. A DDI has fewer conflict points, reducing the opportunities for crashes, and there is greater capacity for vehicles at the interchange.

DDIs typically perform best at locations with heavy left turn volumes, like the WIS 26 (Milton Ave.) interchange. In addition, the potential for increased safety due to a reduction in the number of conflict points at the interchange is the primary benefit of the DDI design at this location.

Questions, comments or concerns?

Connect with us!

www.i39-90.wi.gov

I39-90Project@dot.wi.gov

f <u>Facebook.com/WisconsinI3990Project</u>



U.S. Department of Transportation Federal Highway Administration

October 2014



How to drive the WIS 26 (Milton Ave.) DIVERGING DIAMOND INTERCHANGE

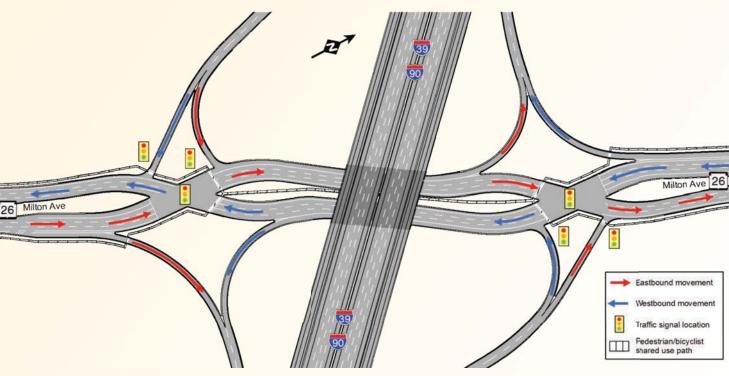


ADVANTAGES of the DDI

DDIs are an alternative to roundabouts, traffic signals and stop signs to control traffic, have many operational and safety benefits and are designed to meet the needs of all road users:

- Safety Reduces the number of ways vehicles can collide by almost half (14 compared to 26 for a conventional diamond interchange).
- Greater capacity and efficiency Accommodates more traffic than conventional designs. Drivers make free-flow, left turns onto the Interstate.
- Reduces backup congestion At intersections where there is a high volume of left turns onto the Interstate, DDIs reduce traffic backups because the free-flow left turns mean vehicles do not have to stop to access the ramp.
- Easy navigation Guides drivers with overhead signs, pavement marking and traffic signals.
- Meets the needs of all road users Accommodates large trucks, vehicles, pedestrians and bicyclists.





DRIVING the DDI

- Following the signage, signals and pavement markings, motorists cross over to the left side of the roadway after the first set of traffic lights.
- All left turns onto the freeway are free flow, meaning vehicles do not have to stop to access the ramp.
- Vehicles going straight simply proceed through a second set of traffic lights and cross back to the right side of the road.



www.i39-90.wi.gov