What is a **Diverging Diamond Interchange?**

Wisconsin's first **Diverging Diamond Interchange (DDI)** will be completed in November 2016 at the I-39/90 and WIS 11 (Avalon Road) interchange (Exit 177), south of Janesville.

A Diverging Diamond Interchange (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 crosses over and travels 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.

WIS 11 (Avalon Road) has a significant amount of traffic, particularly large trucks, making left turns onto the Interstate. During the morning peak hours, an average of 350 vehicles merge onto I-39/90 northbound from WIS 11 eastbound compared to only 71 vehicles continuing to Avalon Road. Due to the high volume of left turns onto the Interstate, the diamond interchange design was not efficient at reducing traffic congestion.

Questions, comments or concerns?

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WISCONSIN DEPARTMENT OF TRANSPORTATION

U.S. Department of Transportation
Federal Highway Administration

39/90
IMPROVING
a gateway to Wisconsin

Navigating the WIS 11 (Avalon Road)

DIVERGING DIAMOND INTERCHANGE

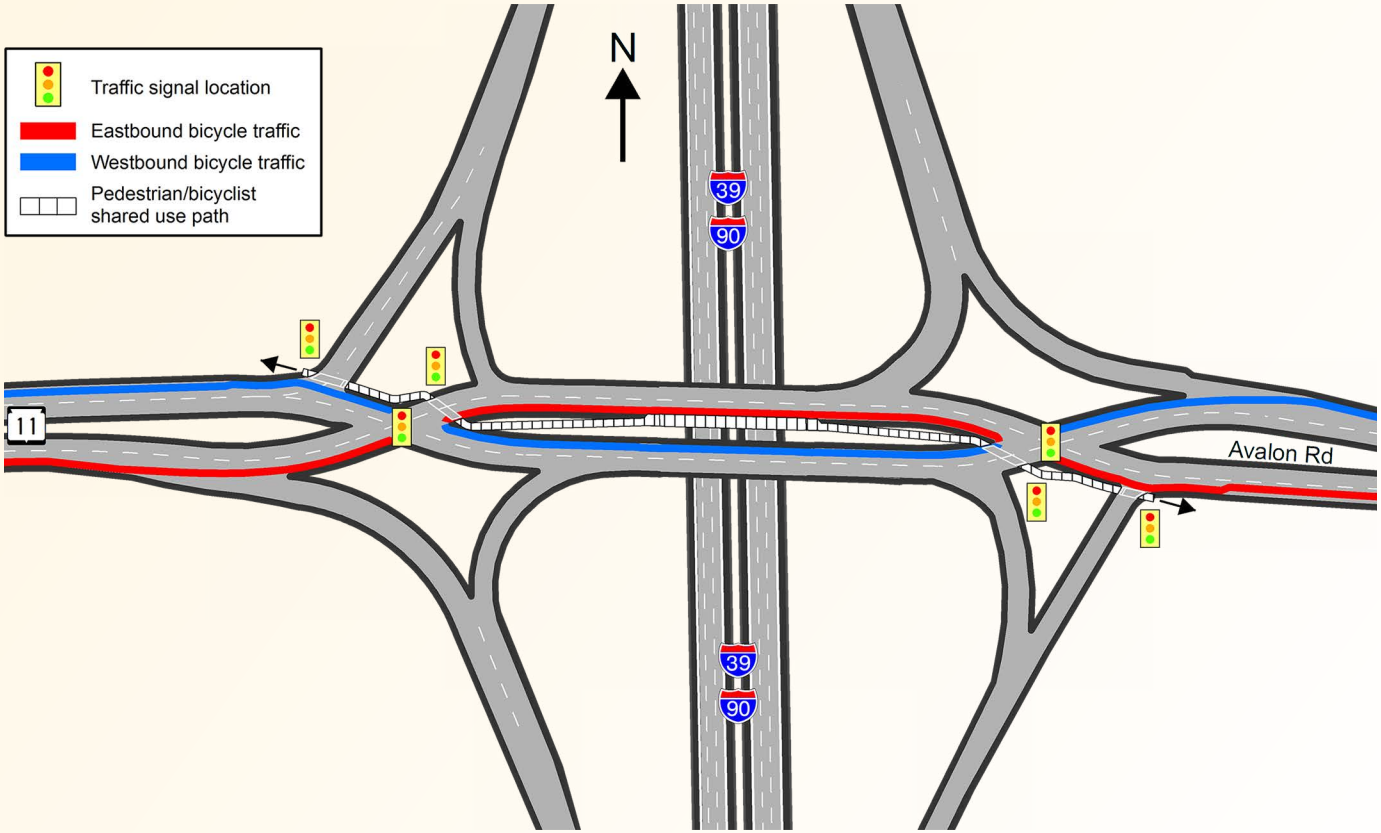
Pedestrians and Bicyclists

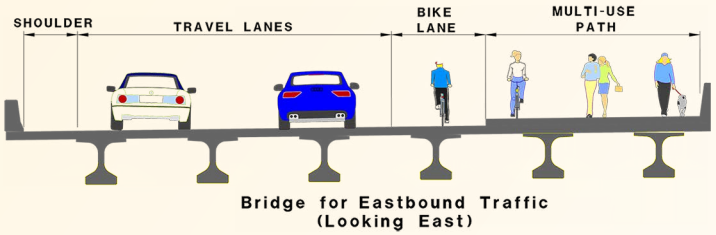
www.i39-90.wi.gov

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.





Bridge for Eastbound Traffic (Looking East)

NAVIGATING the DDI

BICYCLISTS on the road

- Use the designated bicycle lane to navigate through the DDI.
- If you're not comfortable riding in the designated bicycle lane, utilize the shared use path and crosswalks.

Crossing as a PEDESTRIAN

- Always stay on the designated shared use path and cross only at the crosswalks.
- Share the multi-use path and crosswalks with bicyclists.