Diverging Diamond Interchange

The Wisconsin Department of Transportation (WisDOT) is considering the use of a Diverging Diamond Interchange (DDI) at key highway interchanges across the state. This innovative interchange, sometimes called a “double crossover diamond,” is designed to intuitively guide motorists through the pathways.

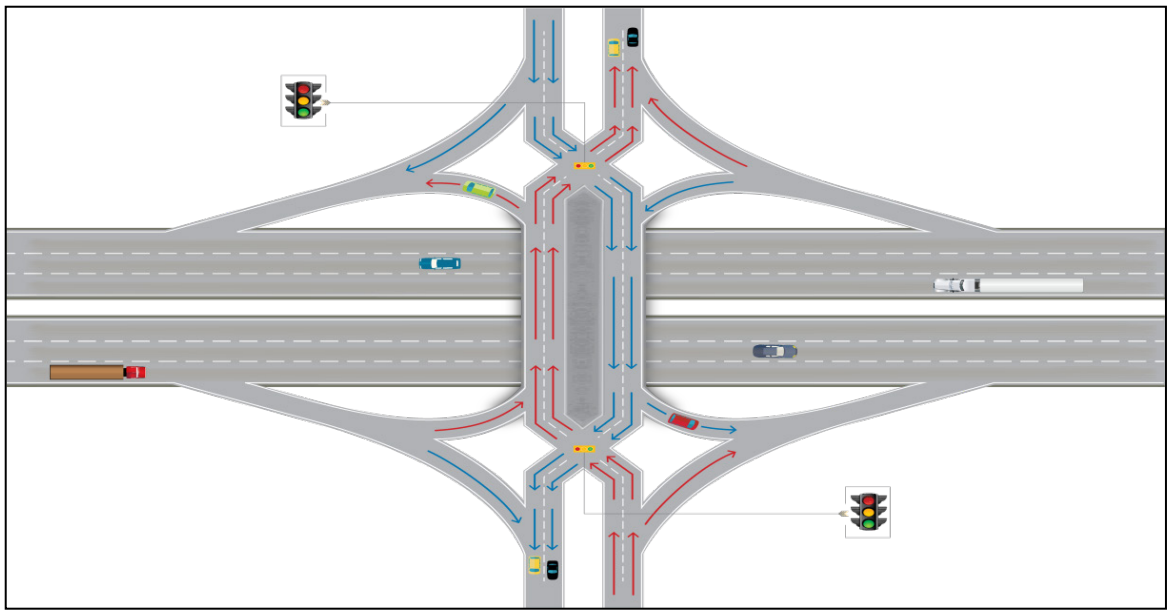
These interchanges have been shown to increase capacity and safety, decrease congestion and minimize the cost of new infrastructure.

Advantages of this type of interchange include:

- 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 right and left turns on to the major freeway.
- Easy Navigation – Guides drivers with overhead signs, pavement marking, and traffic signals.
- Meets the needs of all road users – Accommodates large trucks, pedestrians and bicyclists.

Navigating the DDI:

- Drivers follow the signs, signals and pavement markings to cross through the intersection at the first set of traffic lights. Traffic appears as if on a one-way street.
- 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.
- Pedestrians travel on designated walkways and cross only at the crosswalks.
- Bicyclists may choose to use the bike lane or pedestrian walkways and crosswalks.



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WisDOT is committed to exploring all available options for safely and efficiently moving traffic. Using the latest engineering technology and techniques gives us more options than simply adding lanes. The economic benefits combined with improved safety and mobility will contribute to enhanced competitiveness and quality of life for businesses and communities. Where appropriate, we will incorporate these innovative designs into future interchanges.