Diverging Diamond Interchange
FACT SHEET

Diverging Diamond Interchanges

A diverging diamond interchange, or DDI, is a new, innovative design that addresses congestion by allowing vehicles to travel more quickly through an intersection. DDIs are particularly effective at locations that have a high volume of left-turn traffic. A DDI increases traffic flow by temporarily shifting traffic to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the intersection simultaneously. This eliminates the need for left-turn arrows. The intersection design increases safety by reducing the number of potential conflict points between cross-traffic and left-turn movements.

Driving in a Diverging Diamond Interchange

While driving through a DDI is different, it is not difficult to understand and navigate once you get used to it. Also, it’s proven to have reduced crashes by 50 percent in some areas. A DDI creates a diamond-shaped pattern in the intersection and temporarily shifts traffic to the left side of the roadway prior to entering the intersection.

How it works:

- Traffic signals are installed at the roadway crossover points. These signals will then direct traffic safely to the left side of the road.
- Once traffic is on the left side of the road, drivers can freely turn left, rather than waiting for oncoming traffic to clear or for a left-turn signal. Or, drivers can continue straight and then switch back to the right side of the roadway once they’ve cleared the DDI intersection.

Advantages of a Diverging Diamond Interchange

A DDI enhances safety and mobility by reducing potential crash points at intersections and by allowing more cars to move through an intersection. This means a reduction in delays and travel time. Other benefits include:

- Improved travel time because additional “green time” at traffic signals allow more vehicles to pass through the intersection;
- Additional sidewalks will increase safety and better accommodate pedestrians and bicyclists; and
- Relatively low cost improvement.

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