# Navigating a Diverging Diamond Interchange

- » Learn more about the benefits of DDIs at fdot.tips/DDI
- » See planned FDOT DDI projects in Central Florida at cflroads.com

## What Is a Diverging Diamond Interchange (DDI)?

Unlike a conventional interchange, the lanes in a DDI cross over to the left side of the roadway. That limits the number of traffic signal phases and allows drivers to make a left turn without crossing in front of oncoming traffic. The lanes then change back to the right side of the road.

Central Florida's first diverging diamond interchange opened at Interstate 95 (I-95) and Viera Boulevard in July 2019. A new DDI configuration opened to motorists July 2022 at the interchange of Interstate 4 (I-4) and County Road



(C.R.) 532 near ChampionsGate, and additional DDIs are planned for the I-4 corridor. Those will be located at the I-4 interchanges of Daryl Carter Parkway and Sand Lake Road (State Road (S.R.) 482). Construction of the DDI at Daryl Carter Parkway began in November 2022 and is expected to be complete by early 2026. The Sand Lake Road interchange will be reconfigured as a DDI starting in 2023.

These innovative interchange configurations have been shown to improve safety, increase traffic efficiency, and be cost effective.

#### The Benefits of DDIs

- **Safety**: In certain cases, DDIs could reduce conflict points by 50 percent compared to a conventional interchange.
- **Cost**: Because DDIs require less right of way to build, they are less expensive. Likewise, they take less time to build.
- Efficiency: By design, DDIs help to reduce congestion and move higher volumes of traffic.

#### **DDI Facts**

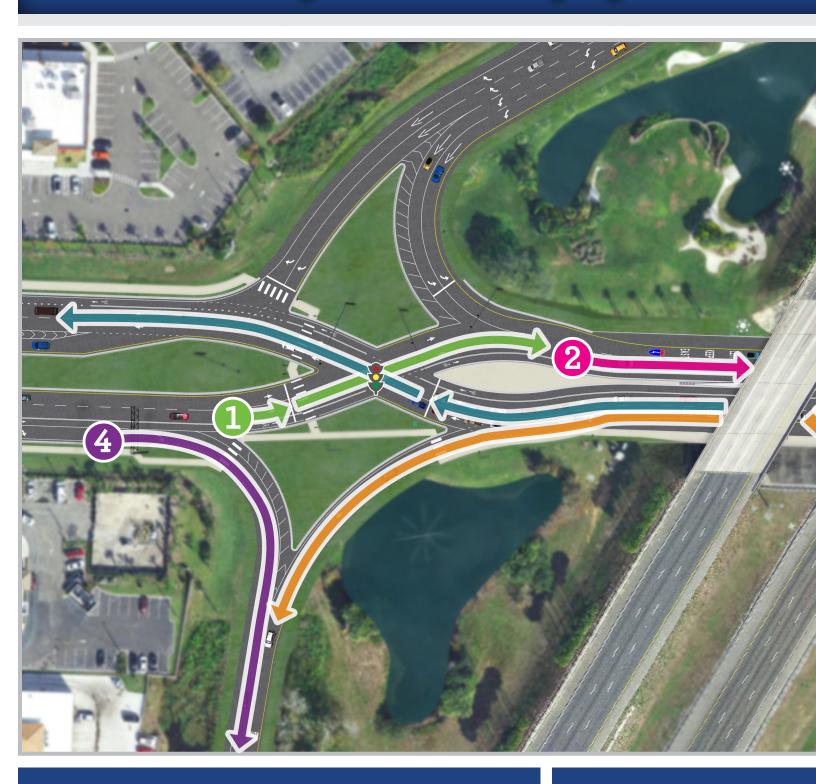
- The first DDI in the nation was built in Springfield, Missouri. It opened in 2009.
- A DDI is sometimes referred to as a double crossover diamond.
- Florida opened its first DDI in 2017. It is located in Sarasota at Interstate 75 (I-75) and University Parkway.



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# How to Navigate the Diverging Diamond I



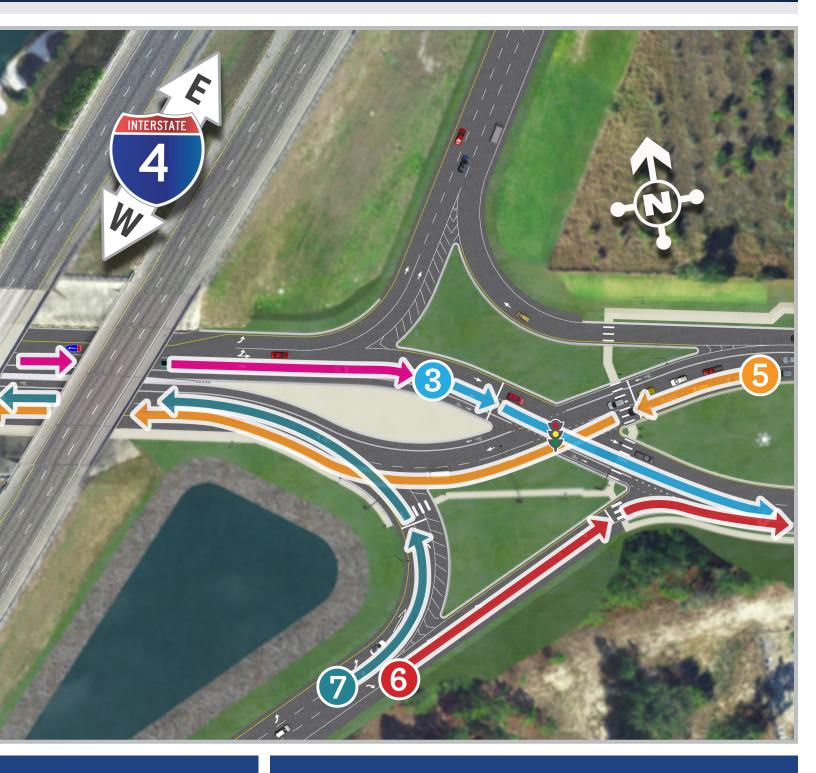
## Going Straight Through a Diverging Diamond

- The driver should proceed through the first traffic light, staying in the lane in which he or she is driving.
- The lane will guide the driver to the opposite side of the road.
- Before the lane crosses back to the right side of the road, the driver will encounter one more traffic signal.

## Turning Onto a Freeway Ram

- If the driver wants to turn right onto from the arterial road, the driver sho turn lane, just like in a conventional
- When turning left onto a freeway ra the left lane and follow the lane thro the other side of the road. Then, bet traffic light, the driver will turn left of

# nterchange at I-4/County Road (C.R.) 532



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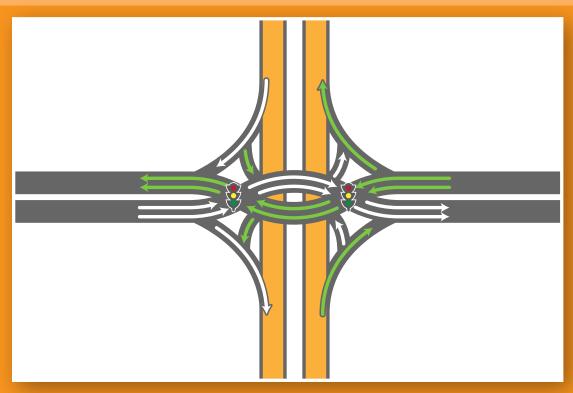
## Getting Onto the Arterial Road From the Freeway

- Turning right onto the arterial road from a freeway ramp is as easy as taking a right turn at a conventional interchange. When turning right onto an arterial road, remember to yield to oncoming traffic and watch for pedestrians and bicyclists using marked walkways.
- To turn left onto the arterial road, follow the left lane and, when traffic allows, take a left turn. The lanes will guide the driver from the left side of the road to the right side of the road, similar to going straight through the interchange.

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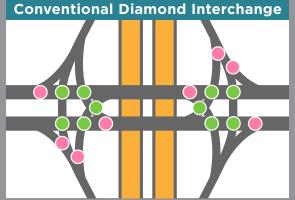
### **Diverging Diamond Interchange Moves Traffic Efficiently**



The diverging diamond interchange (DDI) eliminates left turn phases at traffic signals. It also reduces the number of traffic signal phases. The DDI will move almost double the traffic through the intersection in the same time.

### **DDI Reduces Conflicts**

The DDI reduces conflict points and allows left turns that do not cross oncoming traffic. When compared to a conventional diamond interchange, the DDI reduces the number of conflicts of crossing and merging traffic by more than half.





Crossing	10	2
Merging	8	6
Total	18	8



**Florida Department of Transportation** 



