## 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. As part of I-4 Beyond the Ultimate projects, six additional DDIs are currently in



design for the Interstate 4 (I-4) corridor in Osceola, Orange, Seminole and Volusia counties. Those will be located at the I-4 interchanges of County Road (C.R.) 532, Daryl Carter Parkway, Sand Lake Road (S.R. 482), Lake Mary Boulevard, C.R. 46A, and State Road (S.R.) 472. Construction of the DDI at C.R. 532 is anticipated to begin in 2021 while the DDIs at Daryl Carter Parkway and Sand Lake Road are scheduled for 2022.

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**

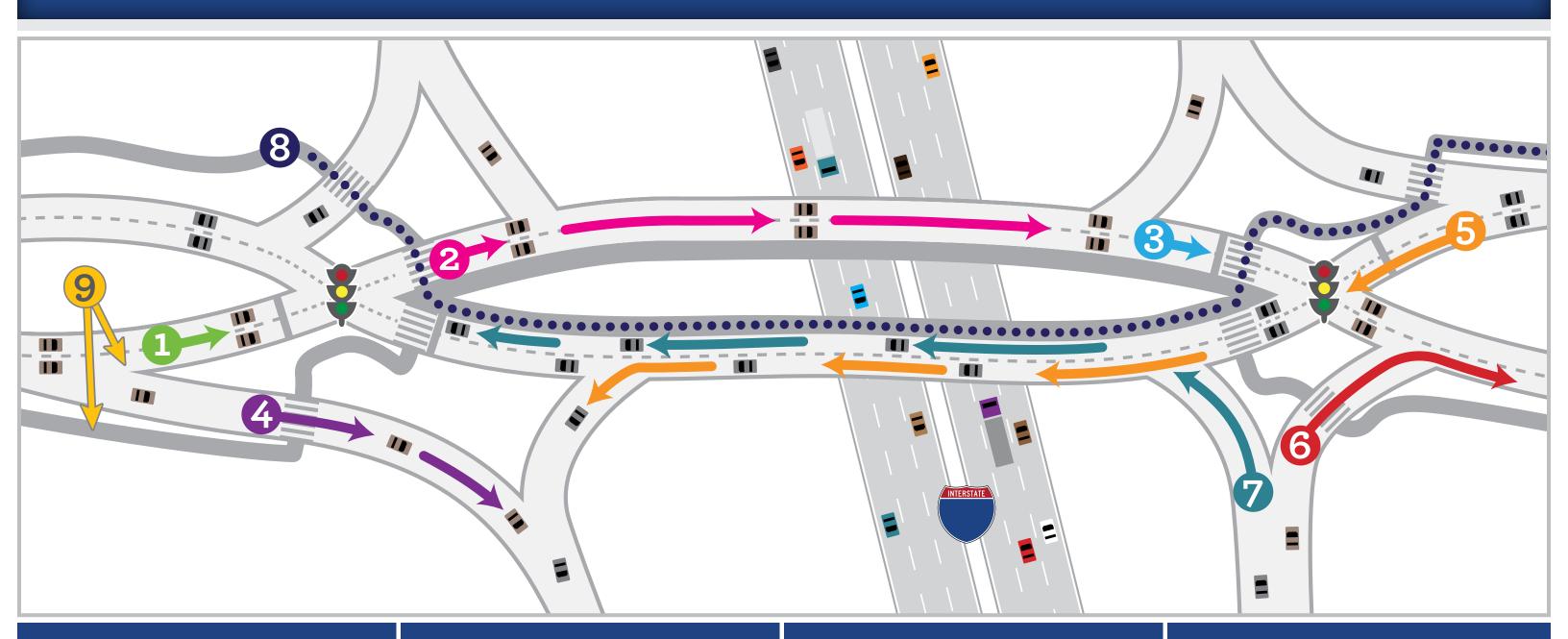
- The first DDI in the nation was built in Springfield, Missouri. It opened in 2009.
- A DDI is sometimes referred to as a double crossover diamond.
- Florida opened its first DDI in 2017. It is located in Sarasota at Interstate 75 (I-75) and University Parkway.

FDOT

Florida Department of Transportation Innovative, Efficient and Exceptional CFLRoads.com
@MyFDOT\_CFL

MyFDOTCFLMYFDOT\_CFL

# How to Navigate a Diverging Diamond Interchange



## Going Straight Through a Diverging Diamond

- 1 The driver should proceed through the first traffic light, staying in the lane in which he or she is driving.
- 2 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 Ramp**

4 If the driver wants to turn right onto a freeway ramp from the arterial road, the driver should use the rightturn lane, just like in a conventional interchange.

When turning left onto a freeway ramp, the driver should stay in the left lane and follow the lane through the first traffic light on to the other side of the road. Then, before going through the second traffic light, the driver will turn left onto the freeway ramp.

## 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.



Florida Department of Transportation Innovative, Efficient and Exceptional

## Navigating a DDI as a Pedestrian or Cyclist

8

Compared to walkways in conventional interchanges, pedestrian walkways are shorter in DDIs. When walking through a DDI, pedestrians should cross traffic on designated crosswalks to reach a median. They cross traffic again to reach the other side of the interchange.

9

Bicyclists have the option of either using a bike lane to get through a DDI or they can use pedestrian walkways. Depending on the specific configuration of the interchange, pedestrians may be routed on the outside of the DDI.

① CFLRoads.com② @MyFDOT\_CFL

MyFDOTCFLMYFDOT\_CFL

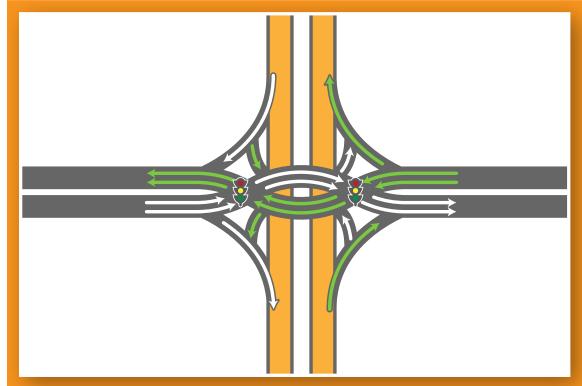
Last Updated 5/11/2020

## Navigating a Diverging Diamond Interchange

 » Learn more about the benefits of DDIs at fdot.tips/DDI
» See planned FDOT DDI projects in

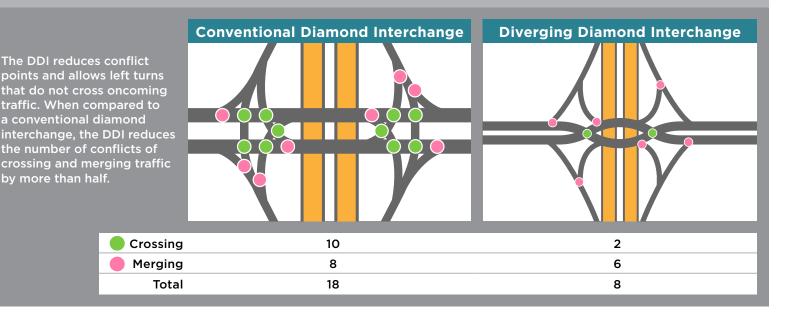
 See planned FDOT DDI projects in Central Florida at cflroads.com

#### **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**





Florida Department of Transportation Innovative, Efficient and Exceptional  MyFDOTCFLMYFDOT\_CFL