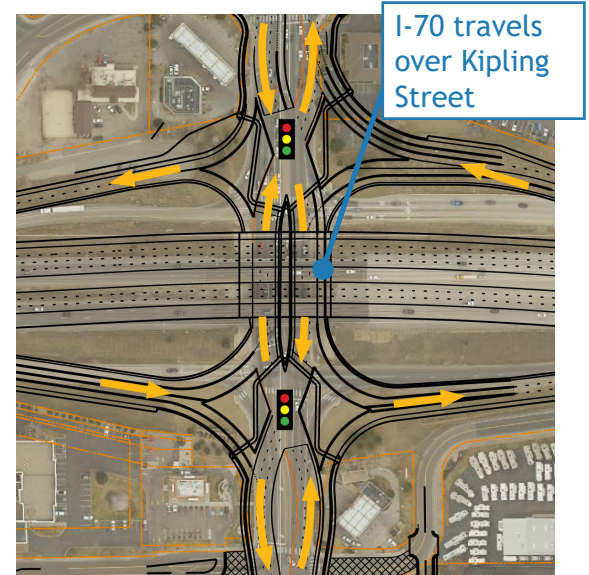


DIVERGING DIAMOND INTERCHANGE (DDI)

Following additional screening and analysis of interchange configuration alternatives in late 2016, and public review in early 2017, the Colorado Department of Transportation (CDOT) identified a Diverging Diamond Interchange as the Preferred Alternative for reconstruction of the interchange at I-70 and Kipling Street.

WHAT IS A DDI?

A DDI crosses traffic to the left side of the road across a grade-separated interchange (in this case, under I-70) and allows vehicles to have direct access to freeway ramps without having to wait at a traffic signal. Vehicles cross to the opposite side of the road at a traffic signal. Left turns at the interchange do not cross oncoming traffic, which results in fewer crashes because there are fewer potential conflict points. Crashes that do occur are likely to not be as damaging as the T-bone crash that can occur with left turns at typical intersections. A DDI configuration is able to move high volumes of traffic through an interchange without increasing the number of lanes and traffic signals.



WHERE HAVE DDIs BEEN IMPLEMENTED?

There are over 100 DDIs currently operating throughout the country, with three present in Colorado:

- US 36 and McCaslin Boulevard in Louisville
- I-25 and Fillmore Street in Colorado Springs
- I-70 and US 6/50 in Grand Junction

HOW WOULD I USE A DDI AT I-70/KIPLING?

Although DDIs can seem unclear and unusual in an aerial view, traveling through them is usually a pleasant surprise. Motorists simply follow the pavement markings, signage and traffic signals just like at any other intersection.

Kipling Street traffic will remain underneath the I-70 bridge. Drivers proceed through a traffic signal at the entrance to the interchange and then follow their lane to the left side of the roadway. To turn left onto the I-70 on ramp, there is no need to wait for oncoming traffic and no additional traffic signal to wait through.

To continue on Kipling Street, drivers proceed to a second traffic signal and follow the lane back to the right side of the road.

Anticipated Benefits of a DDI at I-70/Kipling

- Improved peak hour levels of service at ramp intersections
- Reduced traffic delay at ramps
- Substantially shorter traffic queues
- Substantial decrease in crashes due to reduction in congestion and less conflict points
- Improved multimodal traveler comfort and safety with controlled bicycle/pedestrian crossings

