It’s All About Safety

Road designers continually strive to make our streets and highways as safe as possible. By studying crash data, they have discovered that intersections and construction zones are hot spots for crashes. These crashes range from fender benders to serious injuries and fatalities. Road designers have developed options to help reduce the number of crashes and to make your journey safer.

These options include the roundabout, diverging diamond and zipper merge. All are easy to navigate and most have pavement markings and/or signs posted to serve as guides.

Follow the guidelines in this brochure for tips on how to navigate these roadway maneuvers.

It’s All About Safety: Roundabout, Diverging Diamond and Zipper Merge is supported by Kansas Department of Transportation’s Drive to Zero initiative.

For more information and to view videos, visit ktsro.org.

NOTE: This information is available in alternative accessible formats. To obtain an alternative format, contact KDOT Public Affairs, Eisenhower Building, 700 SW Harrison Street, 2nd Floor West, Topeka, KS, 66603-3754, or 785-296-3585 (Voice)/Hearing Impaired—711.
Forty percent of all crashes occur at intersections. Right angle (T-bone) collisions are the most severe intersection crashes. Roundabouts make intersections safer by reducing speeds, the number of potential conflict points and the angle of impact. Some are one-lane and others are multi-lane. Signs and/or pavement markings identify the movement made from each lane.

- As you approach the roundabout, reduce speed and review the posted signs and pavement markings.
- The sign at the beginning explains which lane to choose based on where you will exit the roundabout.
- Before you enter the roundabout, look to the left and yield to drivers already in the roundabout. Once you are inside the roundabout, drivers outside are required to yield to you.
- Follow your lane’s pavement markings until it’s your time to exit the roundabout.

The diverging diamond creates safer left turns. This interchange allows traffic to move to and from the freeway ramp to the intersecting roadway without having to yield to oncoming vehicles. The number of potential conflict points is reduced, which reduces the number of crashes.

- As you approach the interchange, review the posted signs and follow the pavement markings.
- Traffic lights control all activity as you briefly cross to the left side of the road at carefully designed crossover sections.
- You travel for a limited distance, then cross back to the traditional right side of the road.

The zipper merge is activated for lane closures in heavily traveled highway construction zones. In traditional construction zones, a “lane closed ahead” sign is posted, and all drivers immediately move into one lane. With the zipper merge, both lanes are open to traffic as long as possible. This reduces congestion and driver frustration and increases safety and traffic flow.

- As you approach the construction zone, review the posted signs. If the zipper merge is in use, a sign will instruct you to use both lanes when congested.
- All drivers continue to use both lanes until a sign indicates a definite merge point.
- At the merge point, a sign instructs drivers to take turns moving into the open lane, just like a zipper!