

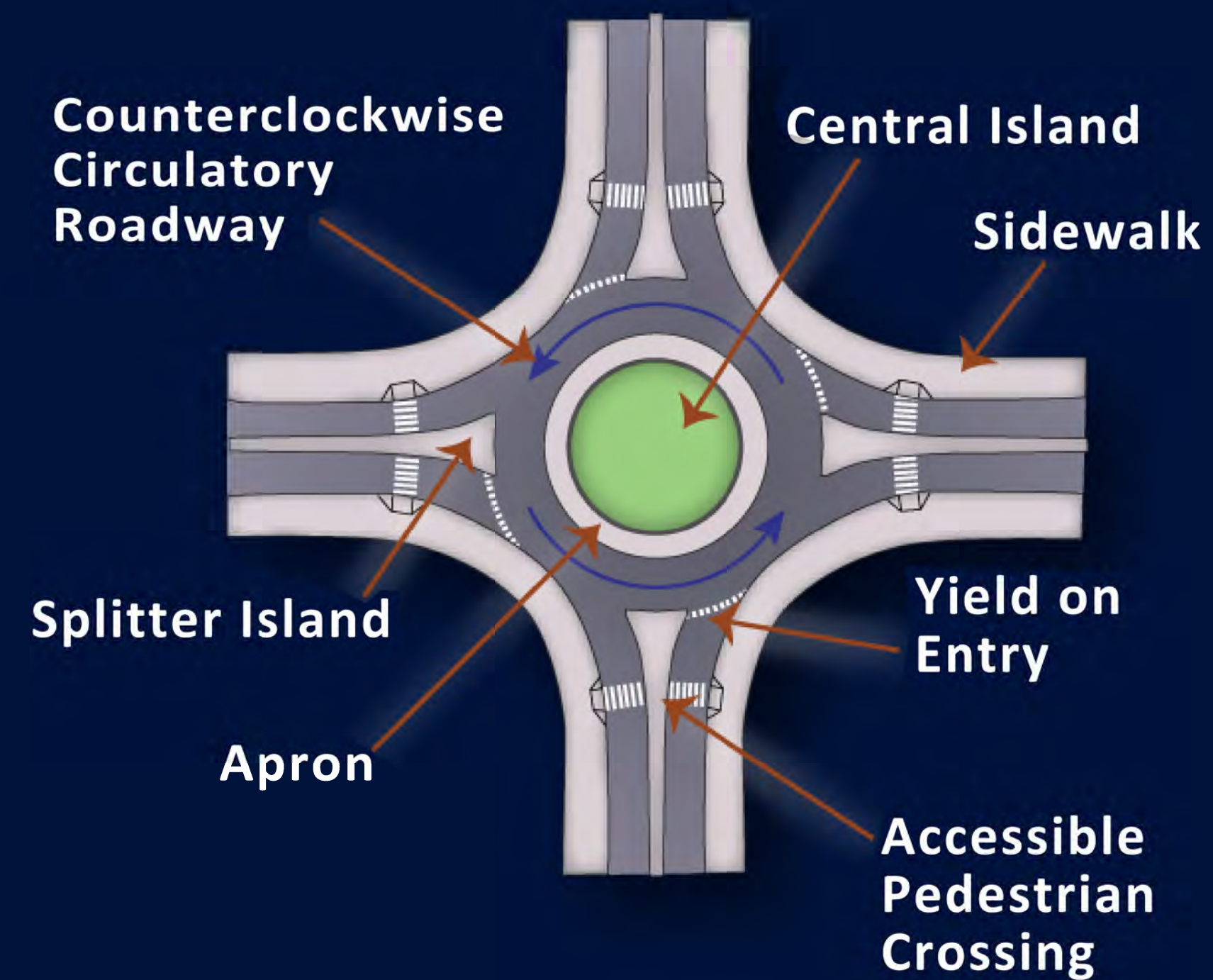
WHAT IS A ROUNDABOUT?

THE MODERN ROUNDABOUT

DEFINITION

The Federal Highway Administration (FHWA) defines a roundabout as a type of circular intersection with yield control of entering traffic, islands on the approaches, and appropriate roadway curvature to reduce vehicle speeds.

Modern roundabouts are different from rotaries and other traffic circles. For example, roundabouts are typically smaller than the large, high-speed rotaries still in use in some parts of the country, but larger than neighborhood traffic circles that are used to calm traffic. Also, a modern roundabout will have traffic yield rather than stop. This allows more efficient traffic flow through the intersection.



FEATURES

Roundabouts have certain essential distinguishing features:

- **Counterclockwise Flow.** Traffic travels counterclockwise around a center island.
- **Entry Yield Control.** Vehicles entering the roundabout yield to traffic already circulating.
- **Low Speed.** Curvature that results in lower vehicle speeds (15-25 mph) throughout the roundabout.

SAFETY ELEMENTS

The design of the modern roundabout incorporates these additional safety elements:

- **Geometric Design.** Proper geometric design ensures that traffic will flow safely and efficiently. For example, pedestrian crosswalks are located away from traffic in the roundabout to increase safety for both the pedestrian and the driver.
- **Pavement Markings & Signage.** Adequate markings and signage are vital for safely guiding each motorist through the roundabout. The signage and pavement markings inform the driver how to navigate the roundabout, as well as provide destination information without confusion.
- **Landscaping.** Landscaping in the center island of the roundabout encourages lower speeds by limiting sight distance to the immediate left instead of all the way around the roundabout. Also, landscaping makes the central island more visible to approaching traffic.



WHY A ROUNDABOUT?

ROUNDBABOUTS VS. SIGNALIZED INTERSECTIONS

SAVE TIME. SAVE MONEY.

56% Reduction in Vehicle Stops

89% Reduction in Vehicle Delays

30% Reduction in Fuel Consumption

30-50% Increase in Traffic Capacity

\$5,000/year Saved in Maintenance Costs



IMPROVED SAFETY

In multiple studies across the United States, it has been shown that all crash types have decreased with roundabouts, compared to signalized intersections. Roundabouts move traffic safely through intersections with slower speeds, fewer conflict points, and easy decision making.

When crashes do occur, the consequences rarely result in injuries. At traffic signals, where speeds are higher, the severity of crashes can be fatal. Studies from the Insurance Institute for Highway Safety show roundabouts provide a 90% reduction in fatal crashes, a 75% reduction in injury crashes, a 40% reduction in pedestrian crashes, and a 10% reduction in bicycle crashes. Overall, roundabouts can reduce vehicle crashes by up to 35%.

