

# All About Modern Roundabouts

## What is a Modern Roundabout?

- A modern roundabout is a compact circular intersection in which traffic flows counter-clockwise around a center island.
- A roundabout can be single lane, or multi-lane with two or more lanes of entering and circulating traffic.
- At a roundabout, entering traffic yields to circulating traffic.
- The relatively small diameter of a roundabout and the curved entry paths promote speeds of 20 mph or less.



## What a Roundabout is Not...

Rotary

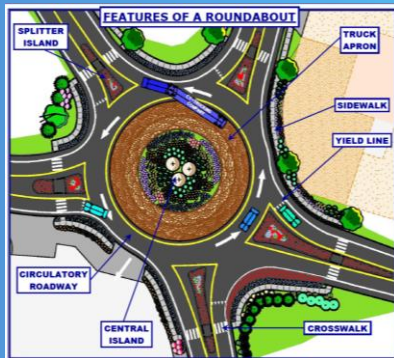


Traffic Circle



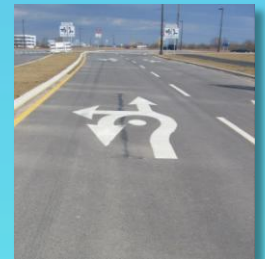
- Modern roundabouts differ from rotaries and traffic circles in several key respects:
- Roundabouts are substantially smaller in diameter than typical traffic circles. The diameter of a typical roundabout can be 3 to 5 times smaller than that of a traffic circle or rotary.
- Because of their small size, roundabouts are designed for low speeds of entering and circulating traffic. Traffic circles and rotaries are much larger and promote high-speed merging and weaving of traffic.
- Roundabouts require yield-at-entry such that entering traffic must yield to circulating traffic. Many old traffic circles require circulating vehicles to grant the right of way to entering vehicles.

## The Main Features of a Roundabout:



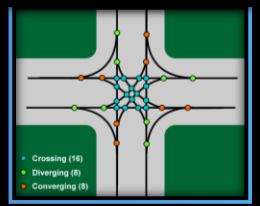
## Signing & Pavement Markings are Key...

Clear and effective signing and pavement markings are key to helping motorists navigate a roundabout, particularly multi-lane roundabouts.

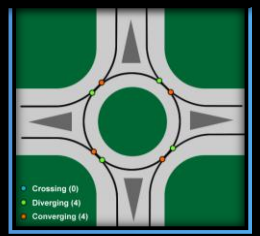


## Safety Benefits of a Roundabout...

Vehicle Conflict Points at Traditional Intersections



Vehicle Conflict Points at Roundabouts



Studies have shown that modern roundabouts, when replacing traditional intersections, can reduce all accidents by 48% and fatal accidents by 78%. Also consider:

- At traditional intersections, common collision types often include right-angle, left-turn, and head-on collisions. These types of collisions can be severe as they can occur at high speeds.
- With roundabouts, these types of collisions are essentially eliminated. Installing roundabouts in place of traffic signals can also reduce the likelihood of rear-end crashes and their severity by removing the incentive for drivers to speed up as they approach green lights and by reducing abrupt stops at red lights.
- As shown in the graphic at left, the vehicle-to-vehicle conflicts that occur at roundabouts generally involve a vehicle merging into the circular roadway, with both vehicles traveling at low speeds — generally less than 20 mph.

Sources:  
CTDOT, "What is a Roundabout?"  
CTDOT, "Benefits and Operational Information, Five Corners, Ellington."  
FHWA, "Safety Aspects of Roundabouts"