

What is a roundabout?

A roundabout is a one-way, circular intersection without traffic signal equipment in which traffic flows around a center island.

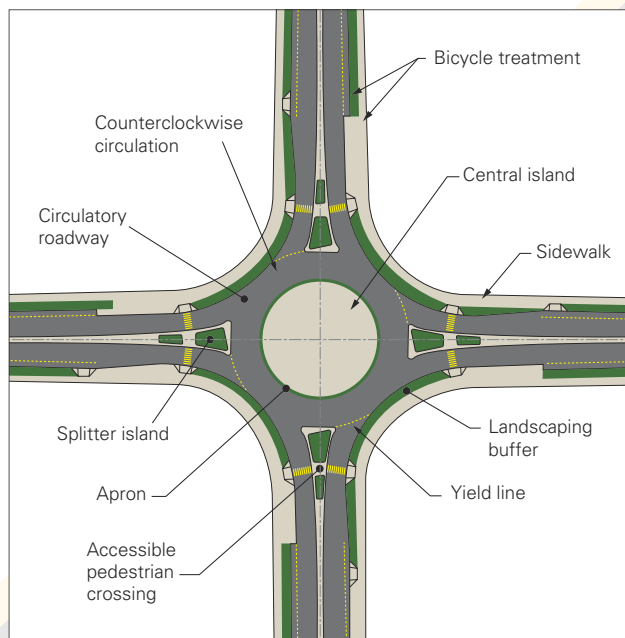
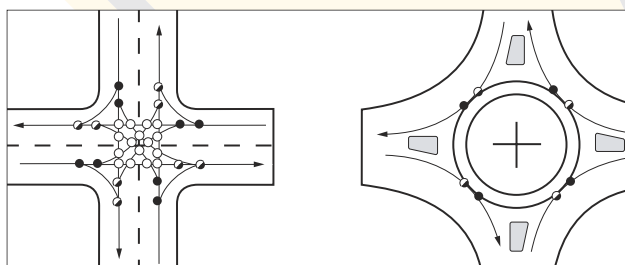


Illustration of potential conflict points in traffic intersections.

Through proper design, roundabouts can easily accommodate emergency and large sized vehicles. Drivers should behave in the same manner as they would on any other road if an emergency vehicle approaches: carefully move your vehicle as far right as possible and, if necessary, stop until the emergency vehicle passes.



Signaled intersection:
32 conflict points

Roundabout:
8 conflict points

All roundabouts have these features:

Yield-at-entry

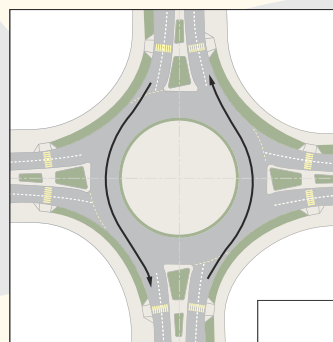
- Traffic entering the circle yields to traffic already in the circle.

Traffic deflection

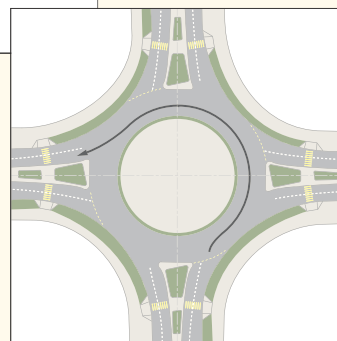
- Pavement markings and raised islands direct traffic into a one-way counterclockwise flow.

Geometric curvature

- The radius of the circular road and the angles of entry can be designed to slow the speed of vehicles.



Driving straight through a roundabout



Left-hand turn

Because the only movement allowed upon entry or exit from a roundabout is a right turn, the occurrence of crashes that result in injury is substantially reduced. Small-angle collisions, the type of collisions that can occur as a result of a right-hand turn, are typically less severe than other types of collisions.

Benefits of a roundabout:

Lives saved

- Up to a 90% reduction in fatalities
- 76% reduction in injury crashes
- 30-40% reduction in pedestrian crashes
- 75% fewer conflict points than four way intersections

Slower vehicle speeds (under 30 mph)

- Drivers have more time to judge and react to other cars or pedestrians
- Advantageous to older and novice drivers
- Reduces the severity of crashes
- Keeps pedestrians safer

Efficient traffic flow

- 30-50% increase in traffic capacity

Reduction in pollution and fuel use

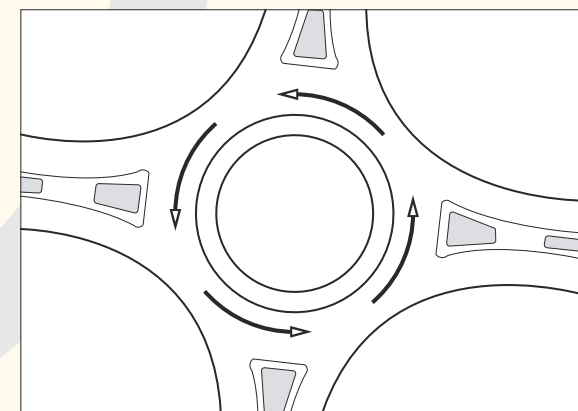
- Improved traffic flow for intersections that handle a high number of left turns
- Reduced need for storage lanes

Money saved

- No signal equipment to install and repair
- Savings estimated at an average of \$5,000 per year in electricity and maintenance costs
- Service life of a roundabout is 25 years (vs. the 10-year service life of signal equipment)

Community benefits

- Traffic calming
- Aesthetic landscaping



Continuous counterclockwise traffic flow

Roundabouts save lives...

...less congestion,
less frustration,
less pollution,
less expense,
fewer and less severe traffic
collisions,
fewer pedestrian and driver
injuries...

Roundabouts: The more
you build, the less you get.

Education is vital to the acceptance and success of a roundabout. Navigating a roundabout is easy. But because people can be apprehensive about new things, it's important to educate your community about roundabout use. There are just a few simple guidelines to remember:

- 1) Slow down.
- 2) Yield to traffic already in the circle.
- 3) Obey one-way signs at all times.
- 4) Watch for pedestrians and bicycles throughout.

Left turns are completed by circling around the center island and then making a right turn to exit from the roundabout.

Roundabouts have been used successfully all over the world, including in Australia, Western Europe, The Czech Republic, Israel, and Canada. In the U.S., communities in Kansas, Colorado, California, Florida, Maryland, Vermont and other states are currently using roundabouts successfully. Roundabouts are not suitable for every intersection. Please consult *Roundabouts: An Informational Guide* for more information.

Learn more!

Roundabouts: An Informational Guide, FHWA Publication No. FHWA-RD-00-067, available at <http://www.tfhrc.gov>

**Your community
deserves a lot less. ...**



U.S. Department of Transportation
Federal Highway Administration