What is a roundabout?

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

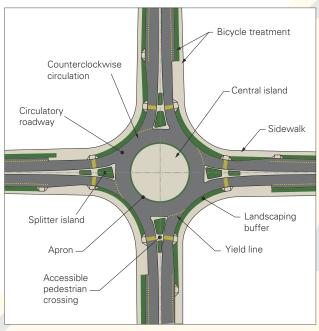
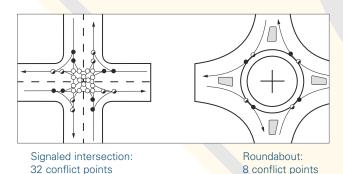


Illustration of potential conflict points in traffic intersections.

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.



All roundabouts have these features:

Yield-at-entry

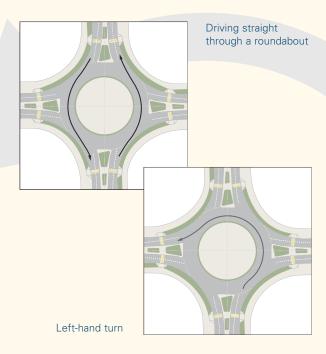
 Traffic entering the circle yields to traffic already in the circle.

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.



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.

Roundabouts save lives...

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

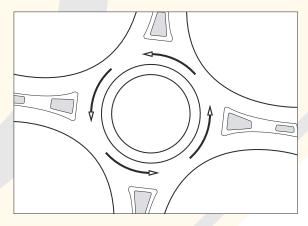
- Improved traffic flow for intersections that handle a high number of left turns
- Reduced need for storage lanes

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)

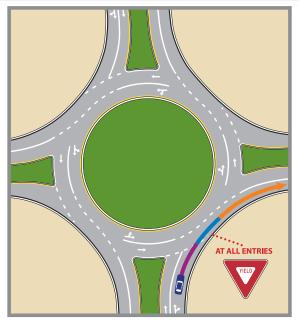
Community benefits

- Traffic calming
- Aesthetic landscaping



Continuous counterclockwise traffic flow

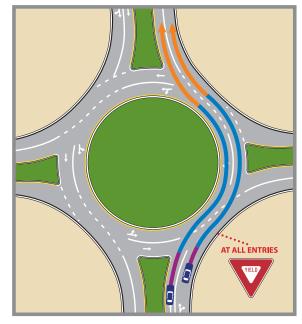
Driving Roundabouts



Turning Right



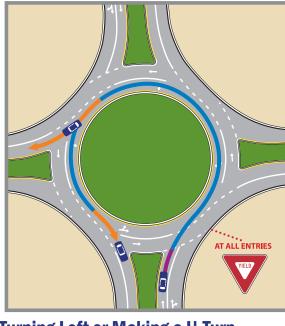
- 1. APPROACHING: Be in the right-hand lane unless otherwise marked on the roadway, and use a right-turn signal.
- 2. CIRCULATING: Keep to the right-hand (outside) lane of the roundabout and continue to use your right-turn signal through your exit. Do not change lanes.
- 3. EXITING: Stay in the right-hand lane as you exit the roundabout.



Going Straight Ahead



- 1. APPROACHING: You can be in either lane, unless otherwise marked on roadway or posted.
- 2. CIRCULATING: Stay to the inside of the circulatory roadway if you entered from the left-hand approach lane, or stay to the outside if you entered from the right-hand approach lane. Do not change lanes.
- 3. When you have passed the last exit before the one you want, use your right-turn signal and continue to use it through your exit.
- 4. EXITING: As you exit the roundabout, be aware of vehicles traveling on the outside of the circulatory roadway that may continue to circulate around the roundabout.



Turning Left or Making a U-Turn



1. APPROACHING: Be in the left-hand lane unless otherwise marked on the roadway, and use a left-turn signal.



- 2. CIRCULATING: Stay in the left-hand lane of the circulatory roadway until you are ready to exit.
- 3. When you have passed the last exit before the one you want, use your right-turn signal and continue to use it through your exit. Do not change lanes.
- 4. EXITING: As you exit the roundabout, be aware of vehicles traveling on the outside of the circulatory roadway that may continue to circulate around the roundabout.

Roundabout Signs:



Provides orientation of approaching streets



LIMIT

20

down when approaching a roundabout

Slow



AHEAD

Watch pedestrians and golf carts



YIELD to traffic already in the roundabout



Stay to the right of the splitter island



Travel in a counterclockwise direction only.



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

