

Roundabouts offer:

- less congestion,
- less frustration,
- less pollution,
- less cost to build,
- fewer and less severe traffic collisions,
- fewer pedestrian and driver injuries

Roundabouts save lives!

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

1. **Slow** down.
2. **Choose** your lane, according to your destination, before entering the roundabout
3. **Yield** to traffic already in the circle.
4. **Obey** one-way signs at all times.
5. **Watch** for pedestrians and bicycles throughout.

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

Modern 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, New York and other states are currently using modern roundabouts successfully.



Rhode Island Department
of Transportation

For more information, visit our website:

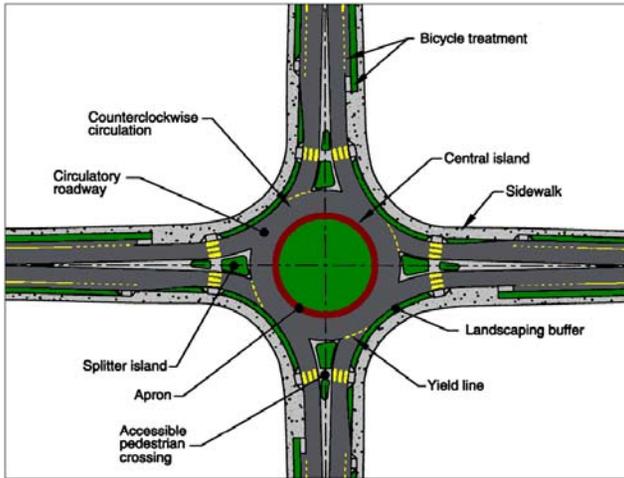
www.dot.ri.gov/engineering/trafficdesign/roundabouts.asp

The Roundabout Navigating Rhode Island's newest traffic circles



What is a roundabout?

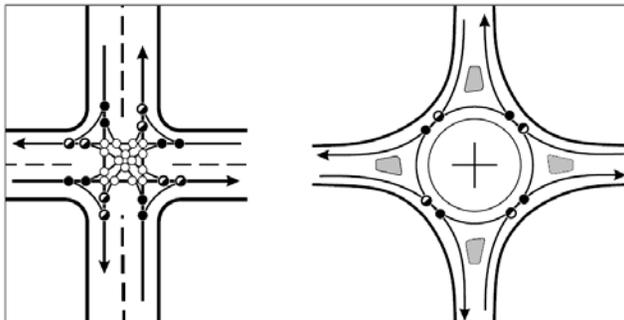
A roundabout is a one-way, circular intersection without traffic signal equipment in which traffic flows around a center island.



Basic elements of a modern roundabout

Through proper design, roundabouts can easily accommodate trucks, emergency vehicles and other large 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.

Illustration of potential conflict points in traffic intersections



Traditional intersection:

32 points of conflict

Roundabout:

8 points of conflict

Unlike rotaries, modern roundabouts have these features:

Yield at entry

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

Traffic deflection

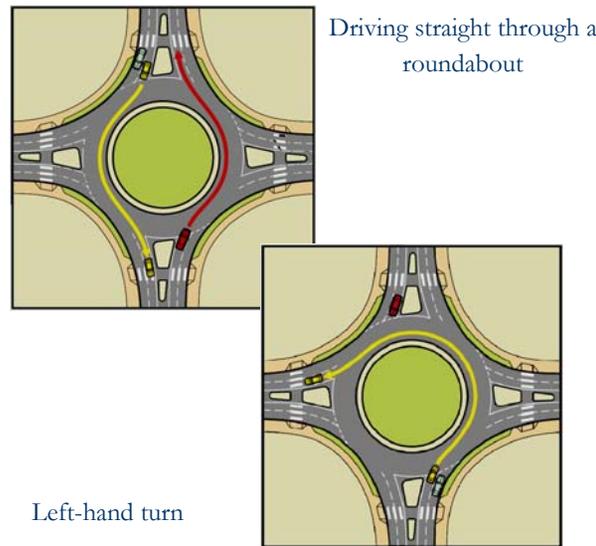
- Pavement markings and raised islands direct traffic into a one-way counterclockwise flow.

Geometric curvature

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

Size

- Modern roundabouts are smaller than old rotaries. A modern two lane roundabout may be up to 230 feet of diameter, unlike rotaries which were up to 660 feet.



Because the only movement allowed upon entry or exit from a roundabout is a right turn, the occurrence of crashes that result in injuries 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 and 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

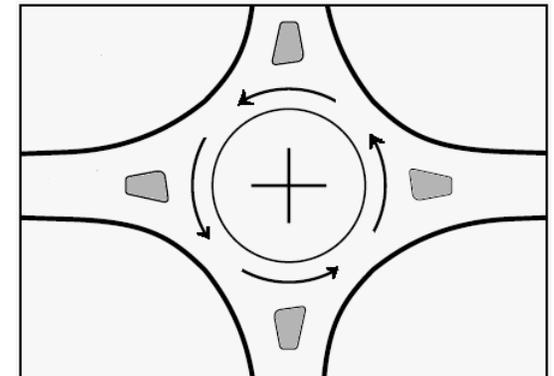
- Improved traffic flow for intersections that handle a high number of left turns
- Reduced need for storage lanes

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