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What are roundabouts?

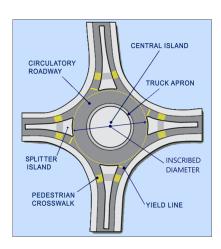
How do roundabouts work for motorists, pedestrians and bicyclists? What are the benefits and advantages of roundabouts?



What are Roundabouts?

Roundabouts are one-way circular intersections in which traffic flows counterclockwise around a center island without stop signs or signals. Vehicles entering a roundabout yield the right-of-way to traffic already circulating in the roundabout. The "yield at entry" and smaller size distinguish modern roundabouts from older traffic circles and rotary intersections seen in Europe and the eastern United States, and facilitate safer and more efficient operations by eliminating weaving and reducing speeds.

Mini-roundabouts are a special subset of roundabouts with an inscribed diameter of less than 90 feet that are designed to fit in a constrained site. The smaller diameter is facilitated by a fully traversable central island to accommodate large vehicles.



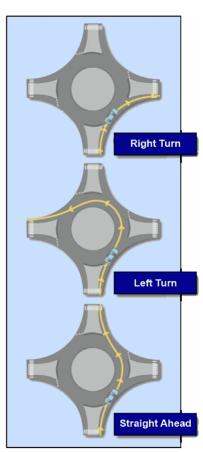
How do roundabouts work for motorists, pedestrians and bicyclists?

Motorists: Driving through a roundabout may be unfamiliar to some motorists, but it is a relatively easy task that uses many of the same skills as making a right-turn out of a driveway, as described below.

- 1. Upon approaching a roundabout, slow down and yield to pedestrians and bicyclists.
- 2. Motorists circulating in the roundabout have the right-of-way. Yield to vehicles on your left and enter the roundabout when there is an adequate gap in circulating traffic
- 3. Do not enter the roundabout when an emergency vehicle is approaching from any direction.
- 4. Proceed through the roundabout counterclockwise to the right of the center island. Do not stop for vehicles waiting to enter the roundabout, as motorists within the roundabout have the right-of-way.
- 5. Use your turn signal to indicate your exit.
- 6. When approaching a multi-lane roundabout, select the appropriate lane for your intended turn or through movement based on lane use signing and markings on the approach.
- 7. Do not overtake other vehicles or bicyclists within a roundabout.
- 8. Never travel next to large commercial trucks or other large vehicles within a multilane roundabout as large vehicles may need extra lanes to maneuver through the roundabout.

Pedestrians:

- 1. Walk the perimeter of the roundabout never cross to the central island.
- 2. Use designated crosswalks while watching and listening for vehicles. Even though pedestrians have the right-of-way, be sure that motorists have recognized your presence and right to cross.
- 3. Use the splitter island between vehicular entries and exits for refuge.





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Bicyclists: Bicyclists have two options while traveling through a roundabout:

- 1. Ride like a car through the roundabout by claiming the entire travel lane on the approach to the roundabout and through the circulatory roadway. Do this by riding near the center of the lane as a car would. Obey the same driving rules as a car.
- 2. Walk like a pedestrian around the roundabout. Dismount and exit the approach lane at a bicycle ramp if one exists, or at the pedestrian crosswalk ramp. Enter the sidewalk and walk your bicycle like a pedestrian.



Improved Safety: Roundabouts have been found to be significantly safer than signalized intersections. They greatly reduce the potential for severe high-speed crashes involving right-angle, rear-end, left-turn and head-on collisions. Studies have found that roundabouts produce:

- up to a 90 percent reduction in fatalities.1
- a 76 percent reduction in injury crashes.²
- a 30-40 percent reduction in pedestrian crashes.²
- 75 percent fewer conflict points than conventional intersections.

Reduced Delay and Queuing: Traditional traffic signals usually stop two or more directions of traffic at one time. At roundabouts, all directions of traffic are often kept open and safely flowing. A study of three intersection conversions in Nevada, Kansas, and Maryland found roundabouts reduced delays by 13-23 percent.³

Reduced Operational Costs: Roundabouts have been estimated to reduce electrical and maintenance costs by an average of \$5,000 annually.

More environmentally-friendly: Because roundabouts reduce vehicle stops and delays, they also reduce vehicle emissions, noise, and fuel consumption.

Aesthetics: The center island of roundabouts provides an opportunity for unique community gateways and landscape/aesthetic improvements that can enhance and define a corridor or area in a positive way.

- ¹ Persaud, B.N., R.A. Retting, P.E. Gardner and D. Lord. "Safety Effect of Roundabout Conversions in the United States: Empirical Bayes Observational Before-After Study." Transportation Research Record 1751 (2001):1-8.
- ² NCHRP Report 572: Roundabouts in the United States. National Cooperative Highway Research Program, TRB, NAS, Washington D.C., 2007.
- ³ Retting, R.A., G. Luttrell, E.R. Russell. "Public Opinion and Traffic Flow Impacts of Newly Installed Modern Roundabouts in the United States." ITE Journal, September 2002:30-37.

Want More Information?

This flyer is for general purposes only. For more information, please contact the city of Las Vegas Department of Public Works, Transportation Engineering Division at (702) 229-6331 or https://seeclickfix.com/las-vegas

NOTE: The **Manual on Uniform Traffic Control Devices (MUTCD)** is used throughout the country as the standard by which traffic control decisions are made. Nevada Revised Statute 484A.430 requires its use for placement of all traffic control devices. Find the **complete MUTCD** at https://mutcd.fhwa.dot.gov/ or scan the QR code.



