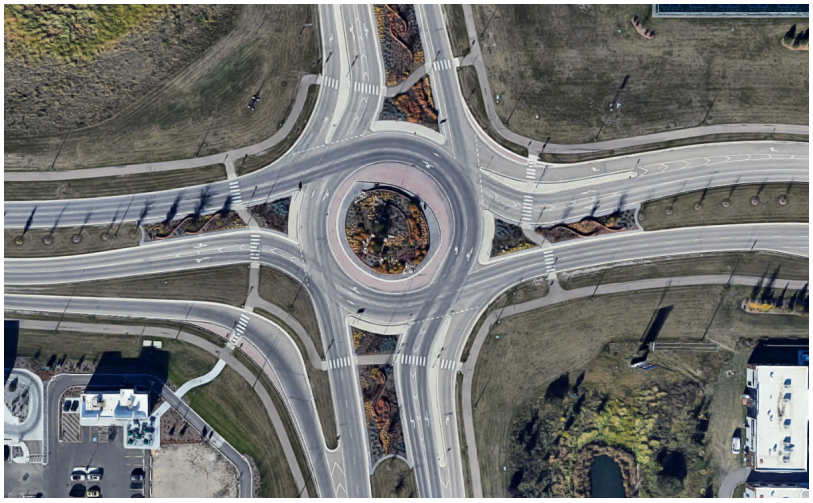
BUILDING
EDMONTON

Roundabout Information Sheet

Did you know? Edmonton has over 25 roundabouts and five traffic circles!

What is a roundabout?

A roundabout is a circular intersection that enhances traffic flow and safety while minimizing delays. Vehicles and cyclists move around the central island counterclockwise using curved approaches.



How is a roundabout different from a traffic circle?

While the terms “traffic circle” and “roundabout” are used interchangeably there are some key differences. A roundabout typically has a tighter entry and exit curvature as well as a smaller centre island which encourages vehicles to move through it more slowly, compared to traffic circles. Roundabouts may also have a sloped curb, also known as a truck apron, to allow for larger commercial vehicles to pass through. Traffic circles tend to be larger in size and can have stop signs or traffic lights. Roundabouts can be a safer alternative to traffic circles or traditional signalized intersections in high-traffic areas.

What makes a roundabout safe?

Roundabouts prioritize circulating traffic using design features that place a high priority on speed control. Drivers usually enter a roundabout at a lower speed compared to a signal intersection, which results in lower collision severity if drivers fail to yield and collide. This reduced speed also reduces the severity of collisions with people walking and wheeling.

Roundabouts significantly decrease the risk of serious accidents by greatly reducing the number of conflict points as motor vehicles travel around in the same direction, eliminating right-angle and left-turn conflicts.

What are the benefits of a roundabout?

Roundabouts provide a range of advantages over traditional intersections, including:

Improved Safety: A common misconception is that roundabouts cause more crashes than stop-controlled or signalized intersections. Roundabouts reduce overall crashes, by eliminating head-on and high-speed right-angle collisions.

Time Savings: Roundabouts eliminate unnecessary stopping, allow vehicles to move efficiently, and reduce congestion, queuing and delay, particularly during off-peak hours.

Environmental Benefits: Continuous traffic flow reduces fuel consumption (no need for engine stop/start), reduces noise and pollution and contributes to cleaner air and a lower carbon footprint. Roundabout islands can be landscaped with native plants and trees.

Cost Effectiveness: Roundabouts require less maintenance than traffic control signals, offer time and fuel savings to users, provide societal cost savings through less severe and fewer collisions, alleviate the need for auxiliary turn lanes, and create the possibility for narrower roadways and shorter or narrower bridge structures. They operate in power outages, eliminating the need for police to direct traffic.

Aesthetics: Roundabouts can provide an opportunity to create an aesthetically pleasing focal point within or adjacent to a community by providing space for landscaping to enhance the streetscape.

How do you use a roundabout?

Navigating a roundabout is simple when you understand the rules. Follow the steps below to ensure a safe and efficient experience:

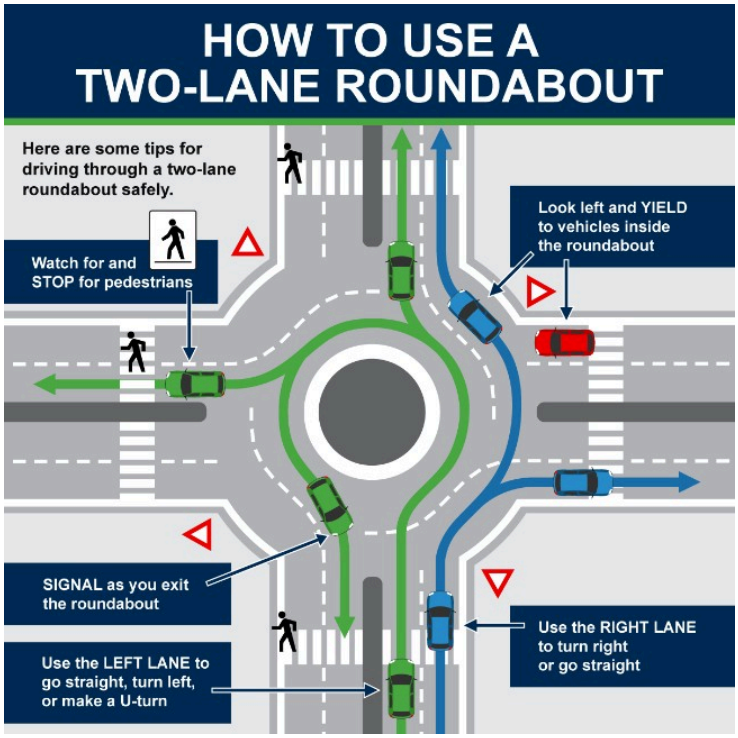


Image sourced from City of St. Albert

Slow Down and Prepare: Slow down as you approach the roundabout and be aware of crossing pedestrians. Look for signs and road markings to determine the correct lane that corresponds to your intended exit.

Yield to Circulating Traffic: Check for traffic from the left and yield to vehicles inside the circular lane(s). Enter the roundabout when there is a safe gap in traffic, travelling in a counterclockwise direction.

Stay in Your Lane: Once inside, continue moving. In multi-lane roundabouts, choose the correct lane before entering and stay in the same lane until you exit. Maintain a safe speed, as indicated by the posted speed limit signs.

Signal Your Exit: Use your right turn signal to indicate your intention to exit as you approach the desired exit. Maintain a safe speed and be aware of pedestrian crossings.

So why a roundabout?

Roundabouts and signalized intersections both regulate traffic flow. Roundabouts are preferred due to their design which promotes lower speeds, has fewer conflict points and overall improves safety for all users resulting in reduced accidents and congestion.