

# **ROUNDABOUTS**

A total of five roundabouts have been constructed in the City of Champlin. They are located at 109<sup>th</sup> Avenue/Goose Lake Road, 109<sup>th</sup> Avenue/Elm Creek Parkway, 117<sup>th</sup> Avenue/Business Park Boulevard, 117<sup>th</sup> Avenue/Douglas Drive and Business Park Boulevard/Emery Parkway. The following information can help you navigate these new roundabouts and learn more about the safety benefits of roundabouts.

**Q: What is a roundabout?**

A: A modern roundabout is an unsignalized circular intersection engineered to maximize safety and minimize traffic delay. Over the last few decades, thousands of roundabouts have been installed in Europe, Australia and other parts of the world. Recently, they have gained support in the United States with many states getting experience with their use and design. In the cities and towns where roundabouts have been built, and even where the public has been hesitant about accepting them initially, roundabouts ultimately have been accepted enthusiastically because of the increased safety they provide, along with traffic calming, and aesthetic benefits.

**Q: Why are roundabouts used instead of a signal light or 4-way stop?**

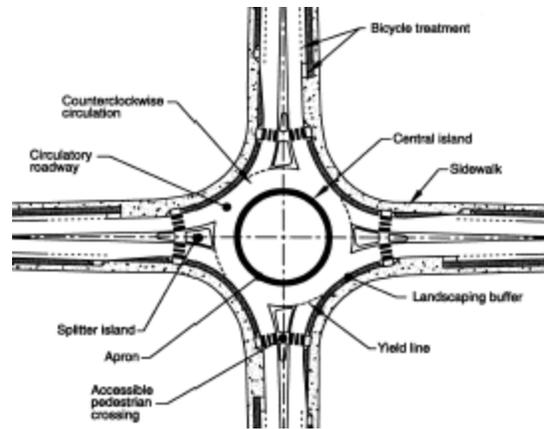
A. In a recent Insurance Institute for Highway Safety study of 24 intersections in the USA where stop control and traffic signals were replaced with modern roundabouts, there was a large drop in crashes.

- 39% overall crash reduction
- 76% overall injury reduction
- 90% fatal crash reduction

Roundabouts reduce vehicle speeds, minimize vehicle weaving, automatically establish right-of-way, and reduce points of conflict.

**Q: How can such impressive crash reductions be explained?**

A: One reason is that there is a reduction in the number of conflict points within the facility. The circulatory vehicle movements at roundabouts eliminate or drastically reduce the critical conflicts resulting from red light running, left-turns against opposing traffic, right-angle conflicts at corners, and rear-end collisions. A standard intersection has 32 potential vehicle-to-vehicle conflicts versus 8 for a roundabout, according to the FHWA Roundabout Guide. In addition, modern roundabouts are designed such that traffic enters at nearly right angles to circulating traffic. This allows more opportunities to enter circulating traffic and fewer accidents result.



### Drivers in a roundabout

- When approaching the roundabout, slow down to 15 mph and yield to pedestrians.
- Look to the left, as traffic in the circulatory road has the right-of-way.
- Enter when it is safe and there is an adequate gap in the circulating traffic flow.
- Keep your speed low within the roundabout.
- As you approach your exit, turn on your right turn signal.
- Exit carefully to your destination, yielding to pedestrians.
- If you miss your exit, go around again.
- Do not drive on the truck apron (inner concrete apron.) Stay in the blacktop circulatory roadway.



### Bicyclists in a roundabout

- If you are riding on the shoulder or bike lane, merge into the traffic lane before the shoulder ends.
- Signal your intent to move into traffic
- Once inside the roundabout, don't hug the curb. Ride close to the middle of the lane to prevent cars from passing and cutting you off.
- Watch for cars waiting to enter the roundabout, as they may not see you.
- If you do not want to ride your bike in the roundabout, use the sidewalk to walk your bicycle and proceed as a pedestrian.



### Pedestrians in a roundabout

- Stay on designated walkways at all times.

- Watch for cars; you have the right-of-way, but your best protection is your own attention.
- Cross one lane at a time, using the splitter island as a refuge area before crossing the next lane.
- Never cross to the large round central island.



#### Trucks in a roundabout

- Drive on the circulatory roadway, except large trucks and trailers may use the truck apron provided to negotiate the tight turning radius.
- Drive on the raised pavement of the truck apron to navigate more easily.
- Cars should not use the truck apron.

**Q: Where can I go for more information, including information on how to navigate a roundabout?**

A: The Federal Highway Administration (FHWA) has an Informational Guide on roundabouts,  
[http://safety.fhwa.dot.gov/intersections/col\\_roundabouts.htm](http://safety.fhwa.dot.gov/intersections/col_roundabouts.htm)

Insurance Institute for Highway Safety  
 The benefits of roundabouts and navigating them  
<http://www.ihs.org/research/quanda/roundabouts.html>

Alaska Department of Transportation  
[www.alaskaroundabouts.com](http://www.alaskaroundabouts.com)

Arizona Department of Transportation  
[www.dot.state.az.us/CCPartnerships/Roundabouts/faq.asp](http://www.dot.state.az.us/CCPartnerships/Roundabouts/faq.asp)

New York Department of Transportation  
[www.dot.state.ny.us/roundabouts/round.html](http://www.dot.state.ny.us/roundabouts/round.html)

Kansas Department of Transportation  
[www.ksdot.org/burTrafficEng/Roundabouts/roundabout.asp](http://www.ksdot.org/burTrafficEng/Roundabouts/roundabout.asp)

Wisconsin Department of Transportation  
[www.dot.wisconsin.gov/safety/motorist/roaddesign/roundabout.htm](http://www.dot.wisconsin.gov/safety/motorist/roaddesign/roundabout.htm)

Roundabout Presentations  
[http://www.teachamerica.com/roundabouts/ra\\_conference.htm](http://www.teachamerica.com/roundabouts/ra_conference.htm)

### **Animated Demonstrations**

Here's some recommended links to check out from mostly other state and federal agencies . . .

Car

<http://www.alaskaroundabouts.com/Dowling/chooseLaneFlashN.htm>

Truck

<http://www.alaskaroundabouts.com/Dowling/largeTrucksFlashN.htm>

Pedestrian

<http://www.scottsdaleaz.gov/Traffic/Roundabouts/DemoFlashPlayer.asp?v=ped.swf>

Bicycle

<http://www.scottsdaleaz.gov/Traffic/Roundabouts/DemoFlashPlayer.asp?v=cycle.swf>

Emergency Vehicle

<http://www.alaskaroundabouts.com/Dowling/emergVehiclesFlashN.htm>