

INTERIM MODIFIED CONNECTOR

Frequently Asked Questions

(FUNCTIONING AS A ROUNDABOUT)

Roundabouts are becoming more common across the U.S. as a way to improve traffic flow and reduce serious accidents. But for drivers who have never used a roundabout, it can seem confusing. With no stop signs or signals, who has the right of way? Is it safe for pedestrians? What's the speed limit in a roundabout? In this brochure, drivers, pedestrians and cyclists can find answers to common roundabout questions.

What is a roundabout?

A modern roundabout is a circular intersection where drivers travel counterclockwise around a center island. Drivers yield to traffic in the circle, then enter the roundabout and exit at their desired street. There are no traffic lights or stop signs in a modern roundabout.



Driving the
Roundabout
Way



Arkansas State Highway &
Transportation Department



Find out more information on roundabouts

<http://safety.fhwa.dot.gov/intersection/innovative/roundabouts/>

Video - Driving a roundabout

<https://www.youtube.com/watch?v=AMV02ReN0Ic>

As you near the roundabout, make sure you are in the left lane. Yield to traffic already in the circle. Enter the roundabout, staying in the left lane, and make a sweeping left turn three-quarters of the way around the center of the roundabout, staying to the right of the roadway median as you exit. Check to make sure there is no traffic in the outside lane before you exit.

No. Once you enter a roundabout, you must stay in your lane. Make sure you choose the correct lane before you enter the roundabout.

No. If you are in a roundabout, vehicles entering the roundabout must yield to you. However, you must yield to pedestrians or bicycles in crosswalks when entering or exiting the roundabout.

In a roundabout, you treat emergency vehicles the same way you would in a traditional intersection. Do not stop if you are in the roundabout. Continue to your exit. Once you exit the roundabout, pull to the right and allow the emergency vehicle to pass. If you see an emergency vehicle as you are approaching a roundabout, pull to the right to allow it to pass, then continue into the roundabout.

Roundabouts are designed for speeds 25 mph or slower. You should drive between 15 and 25 mph through the roundabout.

Diagram illustrating a roundabout configuration with a central green island. The roundabout is a circular structure with a central green area. Four roads enter the roundabout from different directions, each with a yield sign indicating 'Yield to Traffic in Roundabout':

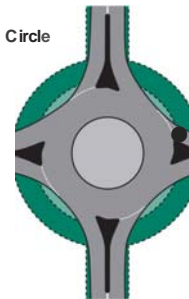
- Highway 549 (Bella Vista Bypass)** enters from the left.
- Highway 728** enters from the bottom left.
- Highway 23** enters from the top right.
- Interstate 4 Southbound On Ramp** enters from the right.

Yellow arrows indicate the clockwise flow of traffic around the central island. The roundabout is labeled 'Making a U-Turn'.

As you near the roundabout, make sure you are in the left lane. Yield to traffic already in the circle. Enter the roundabout, staying in the left lane, and make a sweeping left turn completely around the center of the roundabout. Exit the roundabout, staying to the right of the roadway median. Check to make sure there is no traffic in the outside lane before you exit.

We don't plan to build roundabouts at every intersection, only those where they will be most beneficial. Roundabouts are appropriate for intersections with significant traffic delays or frequent collisions. Roundabouts can reduce delays and serious collisions. Studies by the Insurance Institute for Highway Safety (IIHS) have shown a 75 percent reduction in crashes at intersections where a roundabout replaced a traffic signal. The likelihood of high-speed crashes is reduced because drivers must slow to 15 or 20 mph before entering a roundabout. Roundabouts also encourage better traffic flow because drivers only have to yield, not stop, before entering a roundabout, which can reduce backups. Also, traffic isn't required to stop at a roundabout, limiting vehicle emissions and fuel consumption. Studies have shown that roundabouts can reduce fuel consumption by up to 30 percent. They are also cheaper to maintain than traffic signals.

Traffic Circle



No. Traffic circles, often seen in Europe or on the East Coast, are larger than modern roundabouts and often use signals or stop signs. Drivers enter a traffic circle in a straight line. Modern roundabouts are smaller than traffic circles.

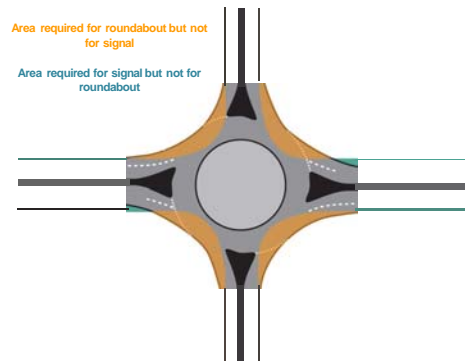
roundabouts by navigating a curve. These two changes force drivers to travel more slowly through a roundabout. Traffic in a roundabout also has the right-of-way. Drivers entering a roundabout must yield to traffic already circling. In many traffic circles, entering traffic has the right-of-way, which can lead to backups and delays.

Treat it like you would a collision in a traditional intersection. If possible, drivers involved in the collision should drive out of the roundabout to the shoulder of the road. Drivers within the roundabout should, if possible, drive around the collision and exit. If a collision is completely blocking the roundabout, call 911 and use an alternate route, if possible.

No. It may speed up your commute. At a traditional intersection, you would have to wait for a green light before proceeding. Roundabouts can also handle more cars per hour than a signalized intersection, which means you will be able to get through an intersection more quickly. An IIHS study showed an 89 percent average reduction in delays and a 56 percent average reduction in stops at intersections where roundabouts replaced traffic signals or stop signs.

Area required for roundabout but not for signal

Area required for signal but not for roundabout



Roundabouts often use less space than intersections. Because roundabouts can process higher volumes of traffic more efficiently than traffic signals, they typically require fewer traffic lanes approaching the intersection. The center of the roundabout can take up more space than a traditional intersection, but the approaches to the roundabout typically take up less room.

Roundabouts promote a continuous flow of traffic, which means vehicles spend less time idling, or stopping and starting. This reduces fuel consumption and vehicle emissions and is better for the environment. Studies by the IIHS have shown that roundabouts can reduce fuel consumption by 30 percent compared to traditional traffic signals. Roundabouts can also be constructed with trees and shrubs at the center, which provides another porous surface for water to filter into the ground.

How do I go straight?



In a two-lane roundabout, you can use either the left or right lane to go straight. As you approach the roundabout, yield to traffic already in the circle. Enter the roundabout and curve gently to the right, then continue ahead in your lane, staying to the right of the roadway median as you exit the roundabout.

How do I make a right turn?



As you approach the roundabout, make sure you are in the correct lane. Yield to traffic already in the circle. Enter the roundabout and make a sweeping right turn one-quarter of the way around the roundabout, staying to the right of the roadway median as you exit the roundabout.

How safe is a roundabout?

Studies have shown that roundabouts are safer than traditional signalized intersections. Speeds are slower through a roundabout because cars enter the circular intersection at a desirable angle and all travel the same direction. The chance of T-bone and head-on collisions is virtually eliminated. Studies by the IIHS have shown a 40 percent reduction in all crashes, a 70 percent reduction in injury crashes and a projected 90 percent reduction in fatality crashes. And because speeds in a roundabout are 25 mph or slower, the braking distance is significantly reduced in the event of a collision. At 50 mph, braking distance is approximately 475 feet. At 25 mph, braking distance is reduced to 125 feet.

How expensive is a roundabout?

Costs for modern roundabouts can vary, and can be dependent on the costs of property acquisition or sensitive environmental areas. Where long-term costs are considered, roundabouts are cheaper to maintain and operate than traffic signals. Maintenance and operation of a traffic signal can cost \$5,000 per year or more. Roundabouts have virtually no cost for maintenance or operation.

I have a business near a roundabout - will traffic have a harder time reaching me?

Not necessarily. During construction, access may be more difficult. But once the roundabout is complete, drivers and pedestrians should be able to easily access businesses. In fact, roundabouts can be good for business. A study of businesses along a highly traveled road in Golden, Colorado where roundabouts were installed found that businesses near the roundabouts saw an increase in sales tax revenues despite an areawide economic slowdown. Fewer collisions and delays, as well as an aesthetic and pedestrian-friendly roadway, contributed to a healthy business environment.



Arkansas State Highway & Transportation Department

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Frequently Asked Questions

What impacts do roundabouts have on surrounding property?

Roundabouts typically take more room than traffic signals at low-volume intersections. As volume increases, the size of a roundabout and traffic signal become comparable. However, because roundabouts do not require the construction of turn lanes to store vehicles waiting for a green light, they allow the roadways entering the roundabout to be narrower, this reducing property impacts.

I drive a big truck, and that roundabout looks awfully tight. Will I fit?

Yes. The roundabout has been designed specifically to accommodate large vehicles such as yours. As you approach the roundabout, stay close to the left side of the entry. As you pass through the roundabout, your trailer may drag over the special apron around the central island – it was designed specifically for this purpose. As you exit, again stay close to the left side of the exit. At a multilane roundabout, you may need to occupy the entire circulatory roadway to make the turn. Signal your intention in advance and claim both lanes on approach to the roundabout

I'm driving in a multilane roundabout. How do I choose which lane to enter and exit?

In general, approach a multilane roundabout the same way you would approach any other intersection. If you want to turn left, use the left–most lane and signal that you intend to turn left. If you want to turn right, use the right–most lane and signal that you intend to turn right. In all cases, pass counterclockwise around the central island. When preparing to exit, turn on your right turn signal as you pass the exit before the one you want to use.

How can I prevent fender bender crashes at/in roundabouts?

Despite the growing number of roundabouts across the nation, for some drivers, roundabouts are new. Safely maneuvering a roundabout requires drivers to be alert and follow three key rules:

- Slow down
- Choose the correct lane
- Yield to all lanes

Failing to follow these basic rules can increase non-injury crashes.

The AHTD has provided outreach materials to help motorists adjust to driving roundabouts. A video tutorial and other materials are available on AHTD's website.

www.arkansashighways.com



Arkansas State Highway &
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What to do when an...

EMERGENCY VEHICLE

APPROACHES A ROUNDABOUT

After you exit the roundabout, move to the right and stop so the emergency vehicle can safely pass.

KEY

-  Stopped
-  Yielding
-  In Motion
-  Ambulance

If you are already in the roundabout, **do not stop** because the emergency vehicle may not be able to safely pass.

Do not enter a roundabout when an emergency vehicle is approaching from another direction.

Prior to entering the roundabout, move to the right so the emergency vehicle can safely pass.

EMERGENCY VEHICLES

Drivers are trained to pull over when an emergency vehicle is coming because it's the law. In the case of roundabouts, motorists must clear a roundabout if they hear (or see) an emergency vehicle coming.

Motorists should immediately exit the roundabout at the next right.



U.S. Department of Transportation
Federal Highway Administration