NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

Why Install a Roundabout?

Roundabouts help address safety and congestion concerns at intersections. They are designed to enhance traffic efficiency, safety and aesthetics, and minimize delay and cost for all users including motorists, pedestrians and bicyclists.

How do roundabouts affect safety?

At traditional intersections with stop signs or traffic signals, the most serious types of crashes are t-bone, left-turn, and head-on collisions. With roundabouts, these types of crashes are reduced because vehicles travel in the same direction at a lower speed.

In North Carolina, crashes of all types have been reduced by almost half where roundabouts have been installed at existing intersection locations. For more information, please see the full technical report available at www.ncdot.org/doh/preconstruct/traffic/safety/Reports/completed.html.

Pat McCrory
Governor

Nicholas J. Tennyson
Secretary of Transportation

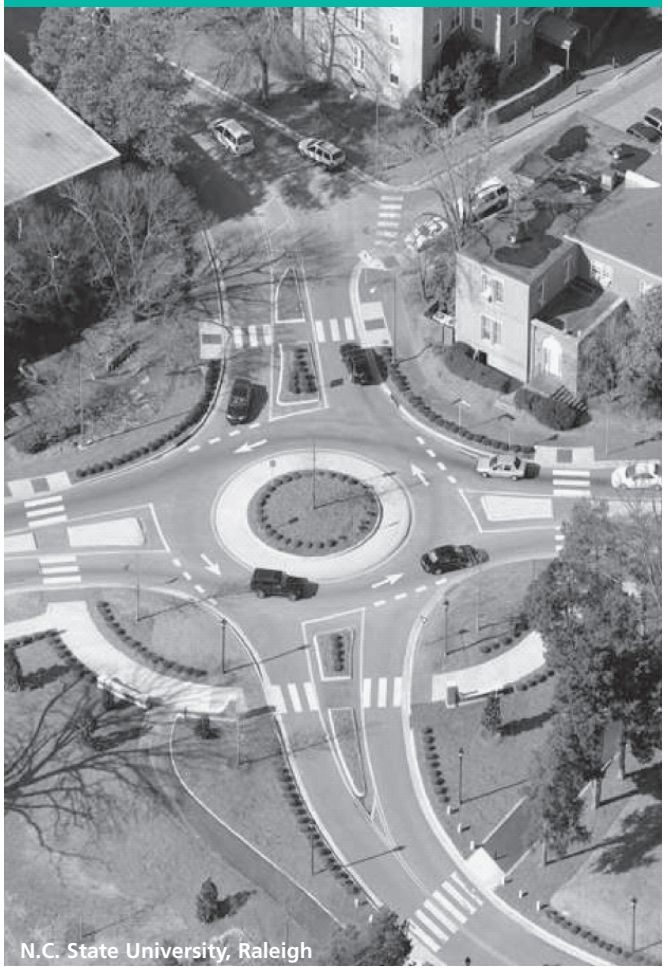
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

Transportation Mobility and Safety
750 N. Greenfield Parkway
Garner, NC 27529
(919) 773-2800

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

YOUR GUIDE
TO UNDERSTANDING

ROUNDABOUTS



N.C. State University, Raleigh

FREQUENTLY ASKED QUESTIONS

Ocean Isle

What is a roundabout?

A roundabout is an intersection requiring entering traffic to yield the right of way to traffic already in the roundabout. This keeps the traffic in the roundabout flowing and prevents traffic backups and delays.

How is a roundabout different from a traffic circle?

Modern roundabouts are generally much smaller than older traffic circles, and require vehicles to travel at a lower speed. Because of the higher speeds in traffic circles, generally they operate less efficiently and have higher crash rates than roundabouts.

What is the size of a roundabout?

The size of a roundabout is determined by the amount of vehicles, the size of the largest vehicle using the roundabout, the need to achieve appropriate speeds throughout the roundabout, and the layout of the existing intersection. A roundabout is usually constructed to accommodate a tractor trailer. The size of a single-lane roundabout is typically 120 feet across. This is about one third the length of a football field.

Who makes the decision to install a roundabout?

If the road under consideration is a state road, then NCDOT will make the decision after consulting with local governments. If the road is a local road, then the local government makes the decision.

Does a roundabout cost more to install than a traffic signal?

The initial construction cost of a roundabout is more expensive than a traffic signal; however, maintenance and utility costs of a roundabout are less than a traffic signal over time.

Will a roundabout inconvenience me and add travel time to my drive?

When operating within their capacity, roundabout intersections typically operate with shorter vehicle delays than other intersections, especially during non-peak traffic times.

Are roundabouts appropriate everywhere?

No. The choice of using a roundabout is made on a case-by-case basis. NCDOT evaluates traffic volumes and crashes at each candidate intersection individually to determine if a roundabout would be the most effective solution.

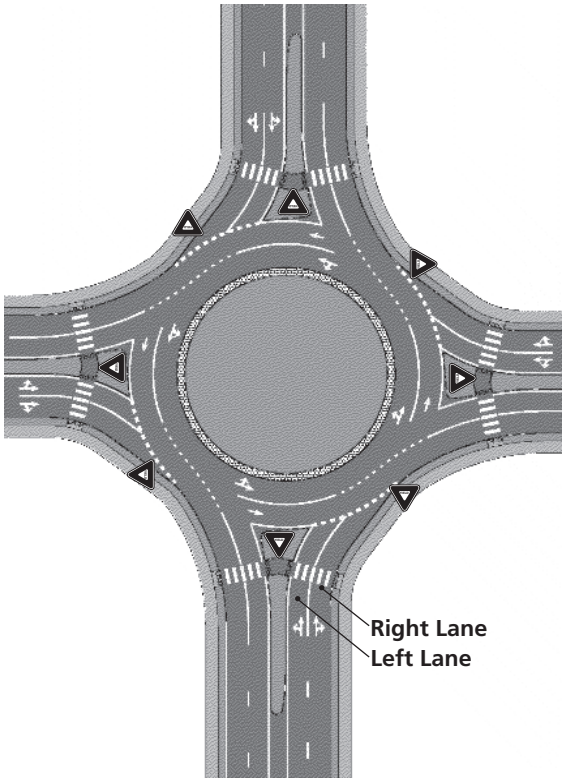
How does a pedestrian navigate a roundabout?

A pedestrian should walk around the outside, not through the middle of a roundabout. Roundabouts usually have marked sidewalks or striped crossings to help pedestrians navigate.

How does a bicyclist navigate a roundabout?

A bicyclist should follow the same rules as a vehicle or walk along the outside of a roundabout like a pedestrian.

TWO LANE ROUNDABOUT



How to drive a roundabout:

- Yield to vehicles already in the roundabout;
- Once in the roundabout, you have the right of way;
- Use your turn signal when exiting the roundabout; and
- Always be cautious and look for unexpected vehicles, pedestrians or bicycles.

How to drive a two-lane roundabout:

Prior to entering the roundabout, move into the appropriate lane as you would when approaching a traffic signal. The left lane circles the roundabout and the right lane turns right. Advance signing will provide guidance. Do not cross from the left lane in the roundabout to the right lane as you exit the roundabout.