



Reduced Conflict Intersections

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Why an RCI?

- Safety is a top priority at NCDOT.
- Raised medians and reduced conflict intersections better manage access on the main road.
- The design improves safety—lowers crash rates—and improves traffic flow.
- An RCI is an innovative solution to traffic congestion. It often reduces the need to add extra lanes, which increase costs and environmental impacts.
- You can reach your destination more quickly.

Types of RCI designs

- There are variations, but they all function the same way by reducing the number of potential locations, or conflict points, where drivers can collide.
- In the most common design, drivers from minor movements from side streets are redirected to turn right.

Safety Benefits

- NCDOT study in 2010 and Federal Highway Administration study in 2017 found:
 - At unsignalized locations, total crashes reduced by 46%; and, injury crashes reduced by 63%
 - At signalized intersections, total crashes reduced by 15%; and, injury crashes reduced by 22%

Travel Time Savings

- There is an average 20% time savings on a signalized corridor with RCI designs vs. conventional intersections, per an N.C. State University study in 2010.

- At traditional intersection, several phases of a traffic signal are needed to cycle everyone through it, increasing travel time. At a signalized RCI, only two phases are needed.

Other Benefits

- Compared to widening roadways, the RCI design may require less new right of way, reducing impacts to businesses and the community.
- U-turns are designed to be performed safely at designated locations with clear visibility.
- It's often faster to turn right from the minor street and make a safe U-turn a short distance away, than to wait for a safe gap in both directions of traffic.
- An RCI design simplifies how traffic moves. It's the right way to go left!

A 2022 Study of the Economic Impacts by UNC-Wilmington Found:

- While some locations showed a positive increase in economic activity, many others had neither a negative nor positive effect, suggesting that the RCI benefits to the traveling public do not generally harm a business.
- The RCI design has the potential to support home values.
- Safe access is good for business.
 - Customers will less likely travel on a corridor with a high crash rate.
 - Customers avoid using a corridor with heavy backups and long travel times.
- NCDOT's [Reduced Conflict Intersection website](#)