

Improving Safety for All Road Users

Roundabouts



In Connecticut, approximately one out of every five motor vehicle-related fatalities occurs at a conventional intersection.¹ At an intersection, all roadway users cross paths as they travel through or turn from one road to another, so it is not surprising that a major part of addressing road safety involves intersections.

One of the most effective safety countermeasures to reduce intersection crashes and fatalities is the roundabout. A roundabout is a one-way, circular intersection in which traffic flows counterclockwise around a center island. Roundabouts differ from rotaries and traffic circles, because they operate at lower speeds making them safer and simpler to use.

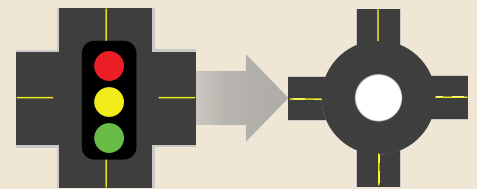
WHY ARE ROUNDABOUTS SO BENEFICIAL?

Some of the ways roundabouts benefit communities include:

- Roundabouts virtually eliminate broadside (“T-bone”) and head-on collisions, which tend to be the most serious crashes.
- The design of the roundabout calms traffic, making it easier for motorists to make driving decisions such as avoiding potential crashes and finding gaps to enter the roundabout.
- Raised “splitter” islands allow pedestrians to cross one direction of traffic at a time. These islands, combined with lower speeds, offer pedestrians more crossing opportunities and improve safety.
- With traffic signals, drivers may try to speed up to “beat the light.” This is not an issue with roundabouts, which reduces the potential for high-speed crashes.
- Since there are no stop signs or traffic signals to halt traffic, roundabouts promote a continuous flow for vehicles and, in turn, reduces delay and congestion.
- Fewer stops and reduced idling time leads to less pollution, noise, and fuel use.
- Without the hardware, maintenance, and electrical costs associated with traffic signals, roundabouts can save thousands of dollars per year per location.

➔ *Converting to a roundabout results in less crashes.*

SIGNALIZED INTERSECTION TO A ROUNDABOUT



Reductions up to:

78%
SEVERE
CRASHES

48%
OVERALL
CRASHES

Source: AASHTO *Highway Safety Manual*.



CONNECTICUT DOT CONVERTED 5 INTERSECTIONS TO ROUNDABOUTS

Reductions:

81%
SEVERE
CRASHES

49%
OVERALL
CRASHES

➔ *As of 2017, 150 crashes and 100 injuries have been prevented.*

¹ National Highway Traffic Safety Administration, Fatality Analysis Reporting System, “State Traffic Safety Information For Year 2015 – Connecticut.” Available at: <https://cdan.nhtsa.gov/STSI.htm>



"Five Corners" Roundabout at Route 74 and Route 286 in Ellington, Connecticut.

"The new roundabout at the Five Corners is 'the greatest thing since sliced bread,' as they would say. I've been traveling through there daily since 1968 and traffic has never flowed more smoothly than it does now... I have never seen a back-up since the day they put the barrels up during construction."

Ellington resident



HOW DO I DRIVE THROUGH A ROUNDABOUT?

1. Slow down as you approach the roundabout, yield to pedestrians in the crosswalk.
2. When you arrive at the yield sign, look to your left and wait for a sufficient gap in traffic before entering the roundabout.
3. Once in the roundabout, you have the right of way. Do **not** stop to let in traffic from entering legs.
4. When exiting the roundabout, use your right turn signal to notify other drivers, pedestrians, and bicyclists. Yield to pedestrians in the crosswalk.

Other Driving Tips:

- If you are driving within a roundabout and an emergency vehicle approaches, continue through the roundabout to your exit and pull to the right at a location allowing room for the emergency vehicle to pass.
- Trucks and vehicles with trailers can use the raised truck apron around the central island. The truck or vehicle pulling the trailer should stay on the paved portion of the roundabout while the trailer may ride up onto the truck apron.

