

ROUNDABOUTS

MAKING INTERSECTIONS SAFER AND MORE EFFICIENT



Roundabouts are growing in popularity as more and more transportation agencies recognize the increased safety and traffic-moving efficiency they bring to intersections.

Safety

The most common justification for a roundabout is safety. This is because roundabouts only have 8 potential conflict points vs. 32 at a traditional intersection. Studies by the Federal Highway Administration (FHWA) show that roundabouts achieve a 44% reduction in crashes and reduce serious injury and deadly crashes by nearly 90% at two-way stop intersections. When roundabouts replace a traffic signal, FHWA found a 48% reduction in crashes and nearly 80% drop in serious injury and deadly crashes.

Efficiency

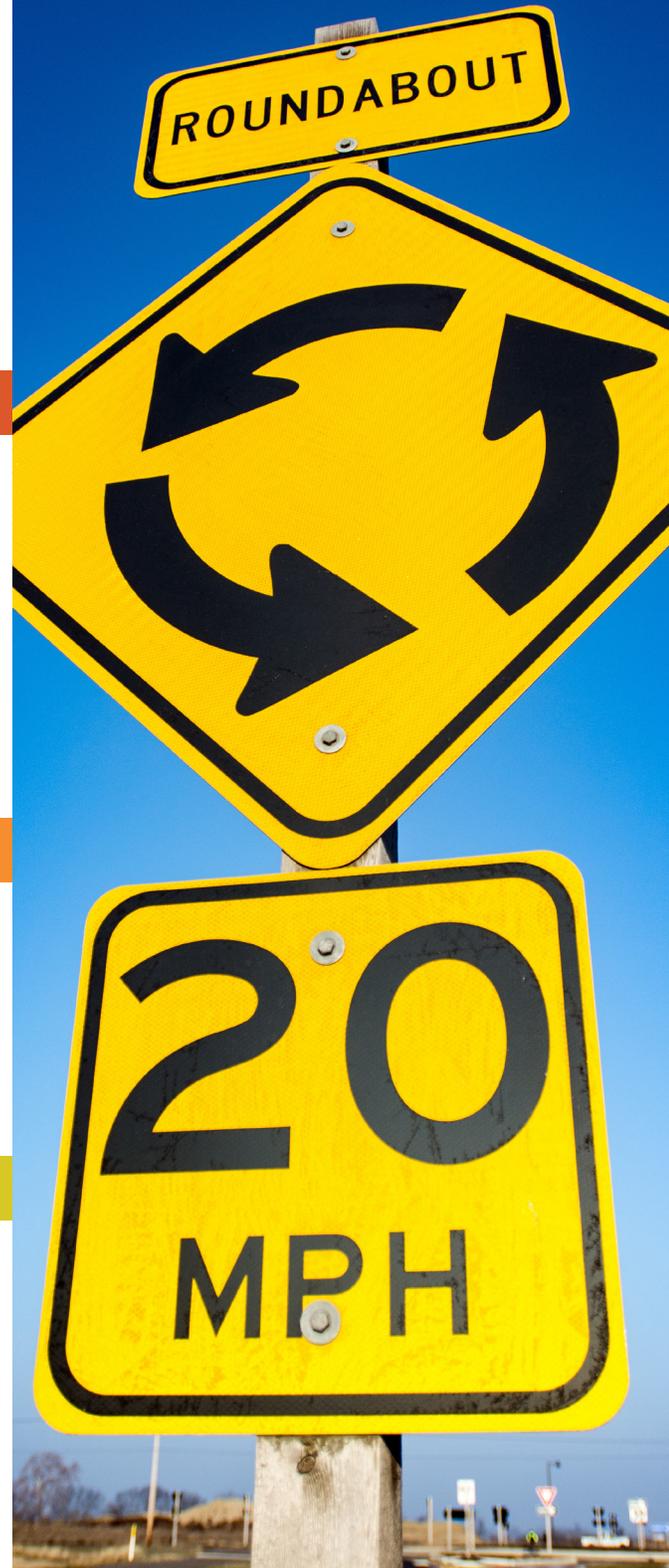
Roundabouts can move traffic more efficiently which reduces delays and fuel consumption. This is because traffic generally doesn't need to come to a full stop at the intersection. A study by the Insurance Institute for Highway Safety (IIHS) estimated that the conversion of 10 percent of the signalized intersections in the United States to roundabouts would have reduced vehicle delays by more than 981 million hours and fuel consumption by more than 654 million gallons in 2018.

Larger Vehicles

Ohio is a state that grows things and moves things. There are often concerns about how large farm machinery or semi-trucks will navigate roundabouts. One way this is accomplished is with truck aprons - an area between the central island and the traveled way that is mountable by larger vehicles but not used by passenger vehicles.

Public Opinion

Roundabouts typically aren't the most popular solution with the public. Much of that is due to a lack of education about their benefits and them being a relatively new traffic pattern for many areas of Ohio. Public reaction usually flips to positive within a year or two of them being installed and open to traffic. An IIHS study of three communities where single-lane roundabouts replaced stop sign-controlled intersections found that only 31% of drivers supported the change before construction. However, after more than a year support soared to 70%.



Learn more at transportation.ohio.gov/roundabouts