

Modern Roundabouts in the U.S.

Due to numerous benefits, states' use of roundabouts has grown dramatically. For instance:

1992: 3 states have roundabouts

1993: 14 states have roundabouts

2007: 44 states have roundabouts

Currently, there are more than 1,400 roundabouts operating in the U.S., with more than 100 planned or proposed.

Resources

- Roundabouts: An Informational Guide, FHWA Publication No. FHWA-RD-00-067, available at http://www.tfhrc.gov
- safety.fhwa.dot.gov
- www.dot.state.nd.us
- www.dot.state.mn.us/roundabouts
- www.ksdot.org/burTrafficEng/ Roundabouts/Roundabout_Guide/ RoundaboutGuide.asp
- www.wsdot.wa.gov/Projects/roundabouts/

VIDEO INSTRUCTION ON HOW TO DRIVE A ROUNDABOUT

- www.mnltap.umn.edu/Publications/ Videos/ModernRoundabouts/
- www.wsdot.wa.gov/eesc/CAE/ designvisualization/video/Portfolio/ Modern Roundabouts/mpg index.htm



Rural Transportation Safety and Security Center is a program of the Upper Great Plains Transportation Institute at North Dakota State University

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Modern Roundabouts

Helping Communities Reduce Injuries, Crashes, Emissions, and Congestion





What is a Modern Roundabout?

A modern roundabout is a circular intersection with yield control of entering traffic, islands on the approaches, and appropriate roadway curvature to reduce vehicle speeds. Modern roundabouts are different from rotaries and other traffic circles.

Vehicles yield to circulating traffic, slow to speeds of 15-20 mph, and follow traffic signs to travel in the desired direction.

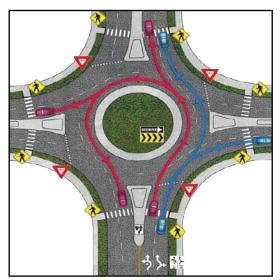


Diagram of a modern roundabout courtesy of the Minnesota Department of Transportation

Why Consider Roundabouts?

IMPROVED SAFETY

- 75% less potential vehicle conflict points (places where vehicles may collide)
- Head-on and high-speed right angle collisions are virtually eliminated
- 90% less fatalities*
- 76% less injuries**
- 34% less crashes**
- Slower vehicle speeds are safer for pedestrians

- *"Safety Effect of Roundabout Conversions in the United States: Empirical Bayes Observational Before-After Study." Trasportation Research Record 1751, Transportation Research Board (TRB), National Academy of Sciences (NAS), Washington, D.C. 2001.
- **NCHRP Report 572: Roundabouts in the United States, National Cooperative Highway Research Program, TRB, NAS, Washington, D.C. 2007.

REDUCED CONGESTION

- Up to 65% less vehicle delays
- Up to 52% less vehicle stops
- Efficient during both heavy and light traffic times

REDUCED EMISSIONS AND FUEL CONSUMPTION

 Fewer stops and hard accelerations and less time spent idling

SAVED MONEY

- Often no signal equipment to power and maintain
- Often less pavement needed