

# How do I navigate a mini-roundabout?

## DRIVING TIPS

for mini-roundabouts



1. **Yield to traffic circulating inside** the mini-roundabout – they have the right of way.
2. **Drive counter-clockwise** around the center island.
3. **Keep moving** while you are in the mini-roundabout, and don't block emergency vehicles.
4. When exiting the mini-roundabout, **signal a right-turn just before you exit**. This way, drivers waiting to enter the mini-roundabout know that you're exiting.
5. **Be aware that:**
  - a. Larger vehicles, such as tractor-trailers, vehicles pulling boats/trailers, and farm equipment may be required to drive over the central island and splitter islands to complete their maneuver.
  - b. Bicyclists may travel through the mini-roundabout in the same way as a motor vehicle.

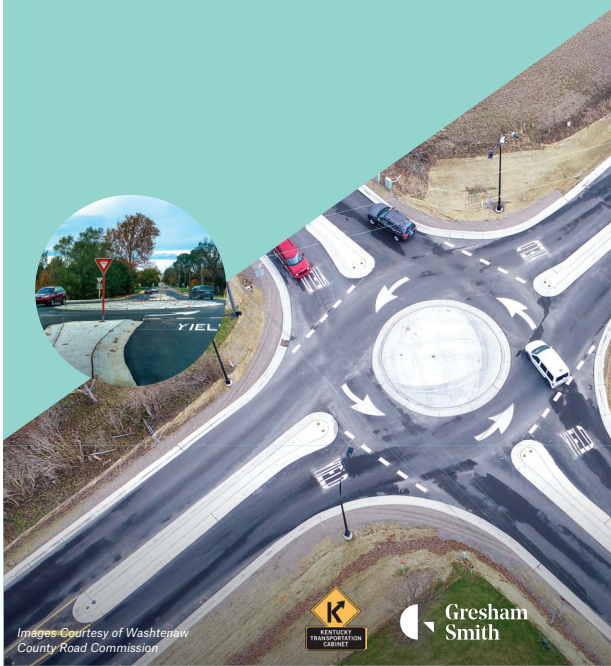


Images Courtesy of Fishbeck, Inc.

## FOR MORE Information

on mini-roundabouts

1. Federal Highway Administration. Mini-Roundabouts Technical Summary. Office of Safety Programs, Federal Highway Administration Report FHWA-SA-10-007, Washington, DC, 2010.
2. Department for Transport and the County Surveyors Society. *Mini Roundabouts, Good Practice Guidance*. Department for Transport, United Kingdom, November 27, 2006.
3. Bodé, Christian, and Faber Maunsell. *Mini-Roundabouts: Enabling Good Practice*. Proceedings, European Transport Conference, Strasbourg, France, September 18-20, 2006.
4. Department for Transport. TD 54/07, *Design of Mini-Roundabouts*. Design Manual for Roads and Bridges, Volume 6, Road Geometry; Section 2, Junctions, Part 2. Department for Transport, United Kingdom, August 2007.

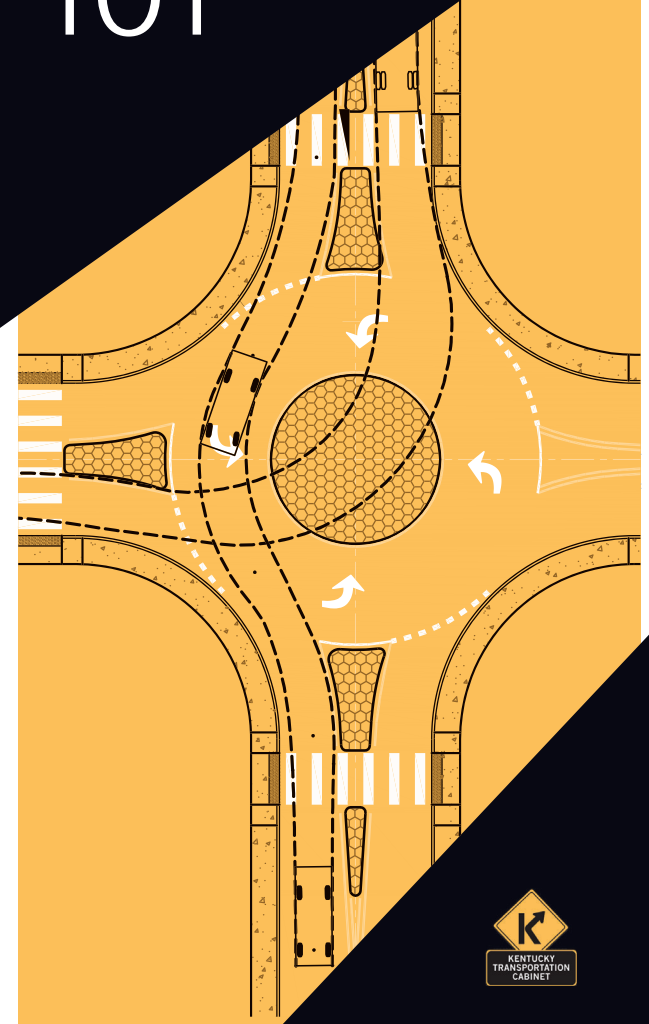


Images Courtesy of Washtenaw County Road Commission



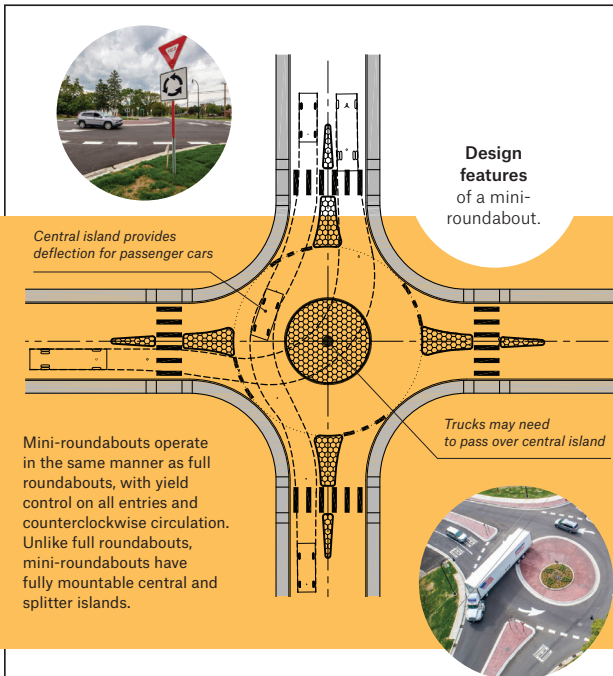
Gresham Smith

# Mini-Roundabouts 101



# WHAT IS A Mini-Roundabout?

A mini-roundabout is a type of intersection that can be constructed at physically-constrained locations in place of stop-controlled or signalized intersections to improve safety and reduce delays. Mini-roundabouts offer most of the benefits of full roundabouts with the added benefit of a smaller footprint. With its smaller size, a mini-roundabout rarely requires right-of-way acquisition and often can be constructed within the existing intersection pavement footprint, keeping costs to a minimum.



## How have mini-roundabouts worked in other states?

Mini-roundabouts are common in the United Kingdom and France and are emerging in the United States. Mini-roundabouts have been constructed in multiple U.S. states, including Michigan, Texas, Minnesota, Maryland and Georgia. Many more are currently planned. Not only have these U.S. mini-roundabouts shown to improve the safety and operations of intersections, they have been very well-received by the public.

Some examples include:

### King County, Washington

A 4-legged, stop-controlled intersection experienced 9 crashes between 1998 and 2006. After receiving a mini-roundabout treatment, there were zero crashes between 2006 and 2017.

### Harford County, Maryland

A 4-legged, stop-controlled intersection experienced crashes resulting in 3 injuries (1 serious) between 2008 and 2011. After receiving a mini-roundabout treatment, the intersection experienced crashes with only 1 minor injury between 2012 and 2016. In addition to the reduction in crash severity, public opinion of this mini-roundabout has been positive.

### Washtenaw County, Michigan

Two 4-legged, stop-controlled intersections along Textile Road were experiencing significant delays. After receiving mini-roundabout treatments, operations at these intersections improved significantly. Despite public skepticism of the mini-roundabouts prior to their construction, post-construction surveys revealed a significant shift in public acceptance.

## Benefits

of mini-roundabouts

Mini-roundabouts provide many benefits over traditional stop-controlled and signalized intersections without some of the undesirable impacts of a full roundabout.

### Compact Size

Can often be developed to fit within the existing right-of-way

### Safety

Reduces the potential for fatal and serious injury crashes compared to stop-controlled and signalized intersections

### Traffic Calming

Reduce speeds within and approaching the mini-roundabout with channelized islands, advisory speed signs, and narrower lanes

### Operational Efficiency

Can reduce delays for a critical movement or for an overall intersection

### Access Management

Can be used to provide efficient access to new or existing developments

### Aesthetics

Provide opportunities for colored and textured pavements, periphery landscaping, and lighting

### Environmental Benefits

Can offer environmental benefits through reduced delays, fuel consumption, vehicle emissions, noise, and maintenance requirements

## When is a mini-roundabout a good option to consider?

Mini-roundabouts may be an optimal solution for a safety or operational issue at an existing intersection where there is insufficient right-of-way for a full roundabout.

Mini-roundabouts have been shown to improve the operation of stop-controlled intersections, signalized intersections, and conventional roundabouts. Normally, they are installed at 3- or 4-legged intersections.

There are four main reasons for introducing a mini-roundabout:

- To serve as a crash remedial measure
- To serve as part of an overall traffic-calming plan
- To improve the operation of an existing intersection
- To provide access to a new development



## What is the cost of a mini-roundabout?

Construction costs for mini-roundabouts vary widely, depending upon the extent of sidewalk modifications or other geometric improvements, and the types of materials used. In most cases, mini-roundabouts have been installed with little-or-no pavement widening and with only minor changes to curbs and sidewalks.

Construction costs have ranged from \$50,000 for an installation consisting entirely of pavement markings and signage, to \$250,000 or more for mini-roundabouts that include raised islands and pedestrian improvements.

