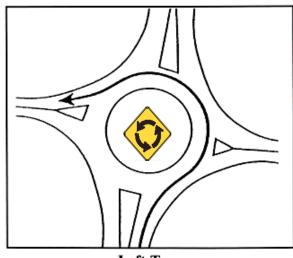
# HOW TO DRIVE A ROUNDABOUT

As you approach a roundabout there will be a YIELD sign and dashed yield bar (see Figure 1). Slow down, watch for pedestrians and bicyclists, and be prepared to stop if necessary. When you enter, yield to circulating traffic on the left, but do not stop if it is clear.

A conventional roundabout will have ONE-WAY signs mounted in the center island. These help guide traffic and indicate that you must drive to the right of the center island.

Upon approaching the street you wish to exit, turn on your right turn signal and watch for pedestrians and bicyclists as you exit.

Left turns are completed by traveling around the central island (see Figure 3).



Left Turn Figure 3

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Palm Beach County
Board of County
Commissioners

Dave Kerner, Mayor
Robert S. Weinroth, Vice Mayor
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## **County Administrator**

Verdenia C. Baker

For more Engineering and Public Works
Information, visit the County's website at:

discover.pbcgov.org/engineering

# ROUNDABOUTS





TRAFFIC DIVISION

### ROUNDABOUTS

Each year the County receives numerous requests to reduce the traffic congestion on streets throughout the County. Citizens also express concerns about the safety of the streets on which they live. In an effort to find appropriate ways to deal with these concerns, reduce traffic congestion and improve safety, the County has recently considered the use of roundabouts.

Roundabouts are used throughout Europe and in many countries around the world to reduce injury accidents, traffic delays, fuel consumption, air pollution, and construction costs, while increasing capacity and enhancing intersection beauty. They have also successfully been used to control traffic speeds in residential neighborhoods and are accepted as one of the safest types of intersection design.

A roundabout is a circular intersection similar to the traffic circle used previously in this country. The common characteristics that define a roundabout are:

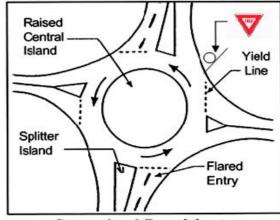
Yield at Entry – At roundabouts the entering traffic yields the right-of-way to the circulating traffic. This is different from traffic circles, which sometimes employ stop or signal control, or give priority to entering vehicles. The yield at entry rule for roundabouts keeps traffic from locking-up and allows free flow movement.

**Deflection** – The entry and center island of a roundabout deflects entering traffic to slow traffic and reinforce the yielding process.

#### **CONVENTIONAL ROUNDABOUTS**

The conventional roundabout is currently the most common configuration used in Palm Beach County. Eligibility for new roundabout installation is based on thoroughfare road status and a minimum of 80' right-of-way. This type of roundabout is a one-way circular roadway around a curbed central island for

circulating traffic (see Figure 1). Sometimes, conventional roundabouts will also have flared approaches to allow multiple vehicle entry.

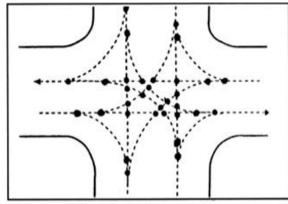


Conventional Roundabout Figure 1

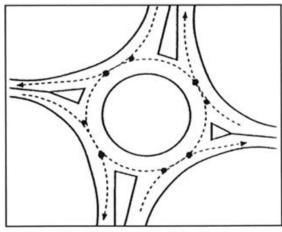
#### WHY USE A ROUNDABOUT?

- 1. **Safety** Roundabouts have been shown to reduce fatality and injury accidents. Driving at a lower speed gives the driver more opportunity to react, which decreases the severity of an accident. For example, roundabouts in Australia and Great Britain have reduced fatality and injury accidents by as much as 75% to 86%. Reduction in accidents is attributed to slower speeds and a reduced number of conflict points. ("Conflict points are locations along a roadway where two vehicle's paths can legally cross. A basic principle in access management is to limit the number of conflict points along a roadway..." see Figure 2).
- 2. **Low Maintenance** Roundabouts eliminate maintenance costs associated with traffic signals which amount to approximately \$2,000\* per year per intersection. In addition, electricity costs are reduced with a savings of approximately \$1,000\* per year per intersection. (\*These Costs are representative of Palm Beach County only.)

- 3. **Reduced Delay** By yielding at the entry rather than stopping and waiting for a green light at a standard signalized intersection, delay can be significantly reduced.
- 4. **Capacity** Intersections in residential areas that are not likely to meet signal warrants may still experience high left turn volumes. In such instances, these intersections are better handled by a roundabout rather than a stop sign, yield sign, or other traffic control devices.
- 5. **Aesthetics** The central island provides an opportunity for landscaping, which is also an integral part of the roundabout. In addition, reduction in delay corresponds to a decrease in fuel consumption and air pollution.



Standard Intersection



Roundabout Intersection

• = Conflict Point

Figure 2