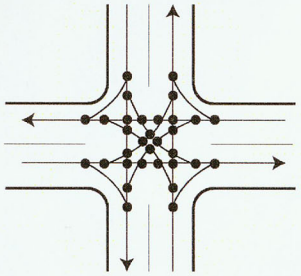
- At 11 roundabouts in Maryland, the average accident rate reduced by 60 percent and injury related accidents reduced by 86 percent. (Source: Maryland State Highway Administration)

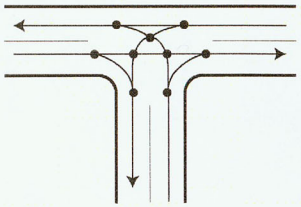
- A similar national study of 24 roundabouts found the average accident rate reduced by 39 percent, and injury related accidents reduced by 76 percent. (Source: Insurance Institute for Highway Safety Status Report)

- The decrease in accident rates is often attributed to the reduction of conflict points at a roundabout:

Typical Intersection

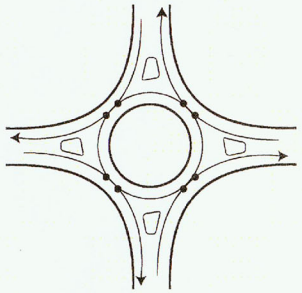


32 Conflict Points

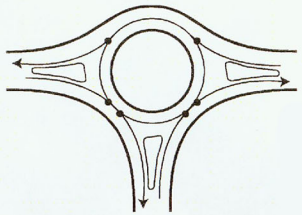


9 Conflict Points

Roundabout



8 Conflict Points



6 Conflict Points

1. "Splitter islands" are raised or painted areas used to separate entering and exiting traffic, to guide and slow entering traffic, and provide refuge for pedestrians and bicyclists.
2. All vehicles are "deflected" or guided by the roundabout's central island, resulting in lower speeds overall.
3. Vehicles entering the roundabout must yield to circulating traffic.
4. A mountable "apron" may be necessary to accommodate large vehicles.
5. The "central island" is the raised center of a roundabout and can be landscaped for improved aesthetics.
6. All vehicles circulate counter-clockwise around and pass to the right of the central island.

Driving a Roundabout

SLOW DOWN
Upon entry. Speeds of 15 mph or less are adequate.

YIELD to any vehicle in the roundabout. Remember to be prepared to stop.

ENTER the roundabout. Once inside, do not stop. You have the right-of-way.

LOOK for your destination sign. Exit the roundabout toward your destination. Remember to use your turn signals.

ON A BICYCLE?
use the same vehicular movements.

For clarity, not all appropriate signing & marking are shown or labeled

COMPARING ROUNDABOUTS AND TRAFFIC CIRCLES

People often confuse roundabouts and traffic circles. Roundabouts are generally smaller, and operate more simply.

	ROUNDABOUTS	OLD STYLE TRAFFIC CIRCLES
Traffic Control	*Yield control is used on all entries. The circulatory roadway has no control.*	*Stop control (signs or signals) might be used on some approaches or within the circulatory roadway.*
Right-of-Way	*Circulating vehicles in a roundabout have the right-of-way.*	*Circulating vehicles are sometimes required to yield to vehicles entering the circle.*
Deflection	*Deflection is used to maintain lower-speed operation throughout a roundabout.*	*Some larger traffic circles provide a straight path, at higher speed, for major movements.*
Channelization	*Splitter islands are used to provide pedestrian refuge areas and help to deflect entering traffic.*	*Splitter islands are generally not used.*
Circulation	*All vehicles circulate counter-clockwise around and pass to the right of the central island.*	*Some circles allow left-turning vehicles to pass to the left of the central island.*
Parking	*No parking is allowed within the circulating roadway or at the entries.*	*Some larger traffic circles permit parking within the circulating roadway.*
Pedestrian Access	*No pedestrian activity takes place on the central island.*	*Some larger traffic circles provide for pedestrian crossing to, and activities on, the central island.*
	Nationally Accepted Design Standard (FHWA)	*Design standards vary by area*

WHY A ROUNDABOUT?

SAFETY

* Roundabouts are safer than traditional intersection treatments.
* The number of intersection conflict points is reduced
* When accidents do occur, the lower speeds in the roundabouts tend to result in less severe accidents, and fewer injuries.

TRAFFIC OPERATIONS

* Simplified movements- one way flow
* Lower overall operating speeds and speed consistency
* Greater capacity than four way stop controlled and some signalized intersection
* Decreased overall delay

OTHER CONSIDERATIONS

* Serves as traffic calming measure
* Provides aesthetic opportunity for landscaped island
* Can serve as a gateway to the community
* May have a higher construction cost than a signalized intersection but maintenance cost are generally lower for roundabouts
* Can be designed to accomodate larger vehicals

ROUNDABOUTS

Delaware Department of Transportation