

Traffic Calming Fact Sheets

May 2018 Update

Roundabout

Description:

- Raised islands placed in unsignalized intersections around which traffic circulates
- Approaching motorists yield to motorists already in the intersection
- Requires drivers to slow to a speed that allows them to comfortably maneuver around them
- Different from traffic circles or mini-roundabouts; possible substitute for traffic signal control

Applications:

- Intersections of arterial and/or collector streets
- One or more entering lanes
- Can be used at intersections with high volumes of large trucks and buses, depending on design



(Source: Grant Kaye)



(Source: PennDOT Local Technical Assistance Program)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- See ITE *Roundabout Primer* for design details
- Default design vehicle WB – 50
- Typically circular in shape but may be an oval shape
- Usually have landscaped center islands
- Typically controlled by YIELD signs on all approaches
- Key design features include: offset distance (distance between projection of street curb and center island), lane width for circulatory roadway, circle diameter, and height of mountable apron for large vehicles
- Large vehicles circulating around the center island for all movements may traverse the apron
- Landscaping needs to be designed to allow adequate sight distance per AASHTO
- Preferable to have a closed-section road (i.e. curb and gutter)
- Cross-section possible with or without a dedicated bicycle facility – not striped within circulatory roadway

Potential Impacts:

- Limited impact on access, except for access points immediately adjacent to intersection
- Limited impact on roadways with on-street parking
- Minimal diversion of traffic

Emergency Response Issues:

- Appropriate for emergency vehicle routes or streets that provide access to hospitals
- Emergency vehicles maneuvering without using the center island may traverse the apron

Typical Cost (2017 dollars):

- Cost ranges between \$150,000 and \$2,000,000