



INNOVATIVE INTERCHANGES

Single Roundabout



US 9 at Troy Schenectady Road, Latham, NY

What is a single roundabout?

- A grade-separated interchange in which all ramps begin or end at a single roundabout on the arterial
- A single roundabout serves as the overpass or underpass of the freeway
- The roundabout is a circular unsignalized intersection in which traffic flows in one direction around a central island
- Traffic entering the roundabout must yield to traffic already inside the roundabout
- Can accommodate more than four intersecting roadways

When should a single roundabout be considered?

- At interchanges with heavy turning volumes onto and off of the freeway ramps
- In urban areas with moderate traffic volumes
- At locations where right-of-way is limited
- At heavily-used freeway off-ramp intersections where vehicles tend to back up onto the freeway

What are the benefits of a single roundabout?

- **Improved safety:** Reduces the number of points where vehicles cross paths and eliminates the potential for right-angle and head-on crashes
- **Increased efficiency:** Decreases the delay for ramp traffic and eliminates the need for traffic signals
- **Continuous flow:** Yield-controlled design minimizes backups on the freeway, reducing the potential for high-speed rear-end crashes

What are innovative interchanges?

Interchange designs where traffic movements are modified to improve safety, reduce delay, and increase efficiency.

Visit www.virginiadot.org/innovativeintersections to learn more.





Navigating a Single Roundabout

🚲 Depending on their level of comfort, cyclists may navigate the interchange using vehicle or pedestrian paths

↶ To turn left from the freeway ramp, enter the roundabout and exit onto the third leg

↶ To turn left onto the freeway from the arterial, enter the roundabout and take the third leg onto the freeway entrance ramp

↑ To continue straight on the arterial, enter the roundabout and take the second leg to pass through the interchange

🚶 Pedestrians use marked crosswalks to safely navigate the interchange

↷ To turn right onto the freeway from the arterial, enter the roundabout and take the first leg onto the freeway entrance ramp

↷ To turn right from the freeway ramp, enter the roundabout and exit onto the first leg

NOT TO SCALE

Note: For simplicity, only two directions of traffic are shown. Opposing traffic follows similar routes.