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.

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
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 from the freeway ramp, enter the roundabout and exit onto the first leg.

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

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