INNOVATIVE INTERSECTIONS

Restricted Crossing U-Turn (RCUT)

What is an RCUT?
- Intersection design where all side street movements begin with a right turn
- Side street left-turn and through vehicles turn right and make a u-turn at a dedicated downstream median opening to complete the desired movement
- Main intersection and median u-turns can be designed as signalized, stop controlled, or yield controlled

When should an RCUT be considered?
- On median-divided highways
- At intersections with heavy through and/or left-turn traffic volumes on the major street
- At intersections with low through and left-turn traffic volumes on the side street
- At intersections with three or four legs

What are the benefits of an RCUT?
- Improved safety: Reduces the number of points where vehicles cross paths and eliminates the potential for head-on crashes
- Increased efficiency: Each direction of the major street can operate independently creating two one-way streets and increasing the overall intersection capacity
- Shorter wait times: Fewer traffic signal phases means less stopping for mainline vehicles and right turns only from the side street vehicles means less time waiting
- Cost-effective: A RCUT can be more cost-effective than adding lanes to improve capacity

What are innovative intersections?
Intersection designs where traffic movements are modified to improve safety, reduce delay, and increase efficiency.

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

AN RCUT IS ALSO KNOWN AS:
- Superstreet Intersection
- J-turn Intersection
- Reduced Conflict Intersection (RCI)
- Synchronized Street Intersection
**Navigating a Restricted Crossing U-Turn (RCUT)**

- **Pedestrians use marked crosswalks to safely cross the intersection**
- **To make a left turn from the side street to the major street, turn right onto the major street, make a u-turn, and continue straight**
- **From the major street, navigate the intersection like at a conventional intersection**
- **To turn right from the side street, turn right like at a conventional intersection**
- **To continue straight on the side street, turn right onto the major street, make a u-turn, and turn right onto the side street**

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

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

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