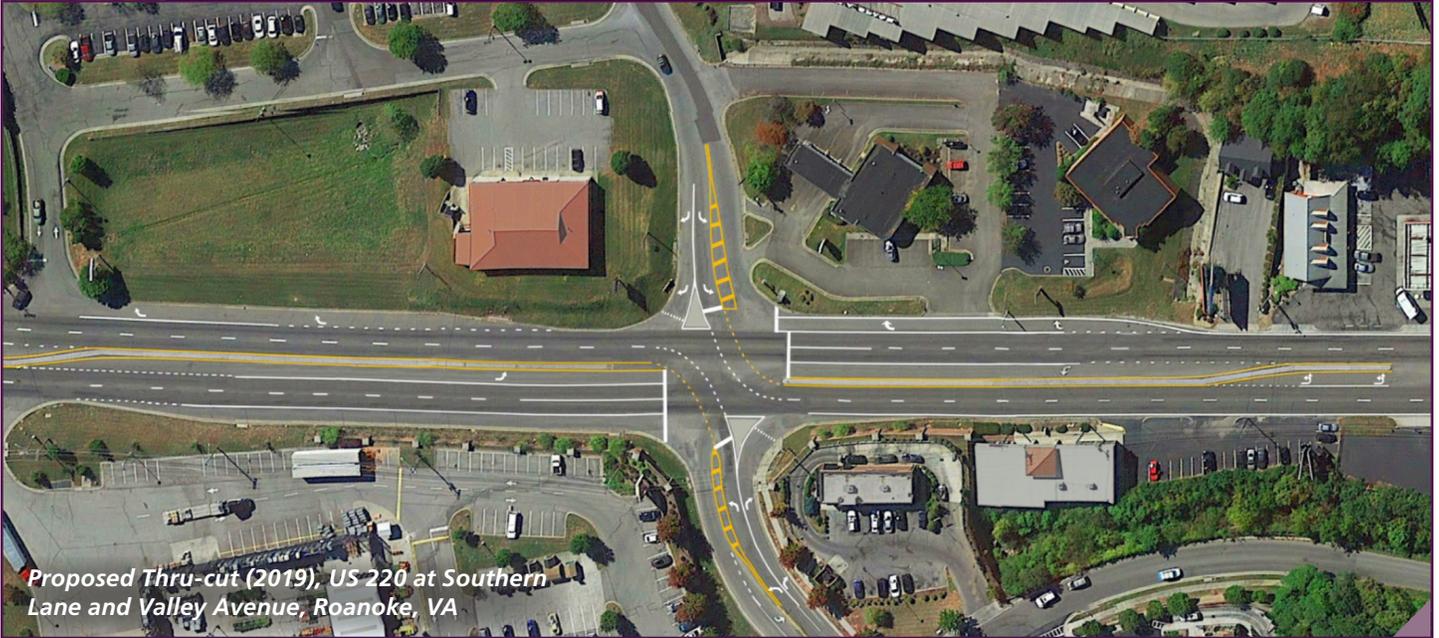




Thru-cut



Proposed Thru-cut (2019), US 220 at Southern Lane and Valley Avenue, Roanoke, VA

What is a thru-cut?

- Intersection design where side street through movements are prohibited
- Side street motorists turn left or right and make another turn at an existing opening to cross the major street
- Side street left and right turn lanes may be channelized using physical barriers or pavement markings
- Main intersection may be controlled with a traffic signal, stop signs or yield signs

When should a thru-cut be considered?

- On median-divided highways
- At intersections with low side street through traffic volumes
- At intersections with heavy major street through and/or left-turn traffic volumes
- At intersections where side street through movements can be accommodated by rerouting to existing intersections or median openings
- At intersections with four legs

What are the benefits of a thru-cut?

- **Improved safety:** Reduces the number of points where vehicles cross paths
- **Increased efficiency:** Eliminates the side street through movements, allowing for fewer or shorter traffic signal phases, which reduces delay and increases capacity
- **Shorter wait times:** Fewer traffic signal phases means less time stopped at the intersection
- **Cost-effective:** A thru-cut may 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.virginia-dot.org/innovativeintersections to learn more.





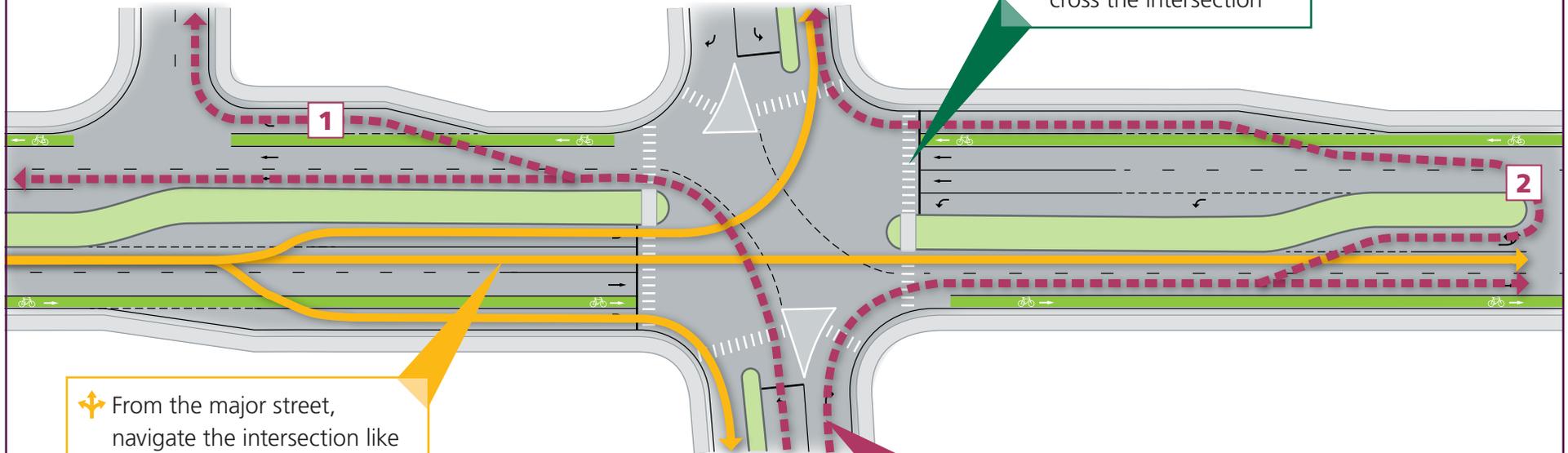
Navigating a Thru-cut

↑ Motorists on the side street may not go straight through the intersection. Depending on the location of the thru-cut, motorists will either:

- 1 turn right or left onto the major street and make a second turn at an adjacent side street OR
- 2 turn right onto the major street, make a u-turn at a median opening, and turn right onto the side street

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

🚶 Pedestrians use marked crosswalks to safely cross the intersection



➦ From the major street, navigate the intersection like at a conventional intersection

➦ From the side street, turn right and left like at a conventional intersection

NOT TO SCALE

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