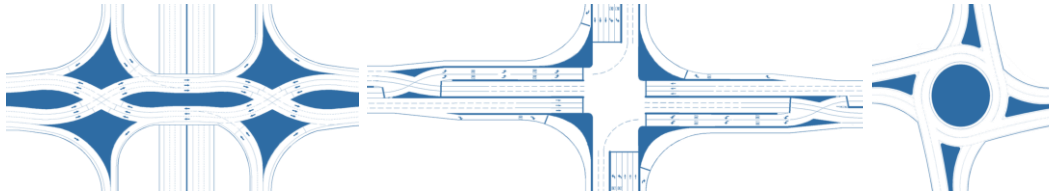


VJuST

VDOT Junction Screening Tool



New Configuration – Thru-cut

With the addition of the thru-cut, VJuST now includes **30** possible intersection and interchange configurations.

Signalized Intersection Configurations

- Conventional
- Bowtie
- Center Turn Overpass
- Continuous Green-T
- Echelon
- Full Displaced Left Turn
- Median U-Turn
- Partial Displaced Left Turn
- Partial Median U-Turn
- Quadrant Roadway N-E
- Quadrant Roadway N-W
- Quadrant Roadway S-E
- Quadrant Roadway S-W
- Restricted Crossing U-Turn
- Single Loop
- Split Intersection
- **Thru-cut**

Unsignalized Intersection Configurations

- 50 Mini Roundabout
- 75 Mini Roundabout
- Roundabout
- Two-Way Stop Control

Interchange Configurations

- Traditional Diamond
- Contraflow Left
- Displaced Left Turn
- Diverging Diamond
- Double Roundabout
- Michigan Urban Diamond
- Partial Cloverleaf
- Single Point
- Single Roundabout



What is a thru-cut?

- A thru-cut is an intersection design where minor street through movements are prohibited

When should I consider a thru-cut?

- A thru-cut is a signalized intersection best suited for locations at which:
 - Minor street through volumes are relatively low (less than 100 vph), but overall minor street volumes are high enough to warrant a traffic signal
 - The surrounding roadway network already supports alternative routes for minor street through-movement trips

How does VJuST reroute minor street through movements?

- Existing minor street through movements in VJuST are split evenly between left- and right-turn movements and do not re-enter the intersection. VJuST does not include U-turn crossovers on the major street or downstream turns at other roads or driveways.

Can VJuST screen an unsignalized thru-cut?

- No, the benefits of unsignalized thru-cuts are limited. The design would encourage concurrent two-stage left turns from the minor street, which are not desirable. Additionally, unsignalized thru-cuts do not reduce conflict points between minor street left-turn movements and major street traffic.

For more information on the thru-cut, visit www.virginiadot.org/innovativeintersections/

