Displaced Left Turn (DLT)

What is a DLT?
- Interchange design where left-turn vehicles cross to the other side of the opposing through traffic in advance of the freeway ramps
- Protected left turns and opposing through movements occur simultaneously at the two ramp intersections
- Ramp intersections and crossovers are signalized and timed to work together to minimize stops
- Interchange can be designed as an overpass or an underpass

When should a DLT be considered?
- At interchanges with heavy through traffic volumes in both directions of the arterial roadway
- At interchanges with moderate to heavy left-turn traffic volumes onto the freeway ramps
- At interchanges with low to moderate left-turn traffic volumes onto the arterial from the freeway
- At interchanges with limited bridge width, but with right-of-way available approaching the bridge

What are the benefits of a DLT?
- Improved safety: Spreads out the number of potential conflict points where vehicles may cross paths
- Increased efficiency: Simultaneous movement of protected left turns and opposing through movements allows for only two traffic signal phases rather than the typical four phases, which reduces delay
- Better synchronization: Corridor travel times are improved through elimination of left-turn traffic signal phases and synchronization of the ramp intersections and crossover traffic signals, allowing through traffic to spend less time stopped

INNOVATIVE INTERCHANGES

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.
Pedestrians use marked crosswalks to safely cross the interchange.

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

To turn left onto a freeway ramp from the arterial, cross to the opposite side of the street at a signalized crossover before reaching the interchange.

From the arterial, continue straight and turn right like at a conventional interchange.

From the freeway ramps, turn left and right like at a conventional interchange.

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

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