Replace Left-Turn and Through Movements with a Right-Turn/U-Turn Combination

Conversion of minor road left turns and through movements to right turns and U-turns. There are several variations of this design, with some permitting direct left turns from the major road and others prohibiting left turns entirely.

### Targeted Crash Types
- Right-angle
- Opposing left turn
- Rear-end (major road)
- Pedestrian

### Problems Addressed
- Excessive intersection conflicts
- Poor operational performance
- Misjudgment of gaps
- Vehicle conflicts with non-motorists

### Conditions Addressed
- Crash history or observed conflicts involving left-turning vehicles or vehicles attempting to continue on the minor road by crossing the major road.
- Insufficient gaps in major road traffic for left-turn or through movements from minor road.
- Crash history or observed conflicts involving vehicles in median.
- Can eliminate a turning movement across a crosswalk and provide pedestrian refuge.

### Considerations
- This treatment is typically applied along major roads whose geometric conditions are conducive to U-turn maneuvers (i.e., those characterized by a median and multiple lanes in each direction).
- A bulb-out (also known as a loon) may be needed to accommodate U-turn maneuvers for buses and other longer vehicles.
- Stakeholders should be involved during planning stages, especially adjacent businesses or residents that may be affected by the access restriction.
- Consult with elected representatives and emergency responders before initiating design work.
- Sufficient distance should be provided from the intersection to the U-turn.
- Appropriate signing should be incorporated to prevent motorist confusion.

### Industry Standard
**MUTCD**
Section 2B.18: Movement Prohibition Signs
**AASHTO Green Book**
Section 9.9: Indirect Left Turns and U-turns

### Other Resources
- Restricted Crossing U-Turn Intersections Video, FHWA
- Median U-Turn Intersections Video, FHWA
- Alternative Intersections/Interchanges: Informational Report (AIIR), FHWA
- Low-Cost Safety Enhancements for Stop-Controlled and Signalized Intersections, FHWA
- Innovative Operational Safety Improvements at Unsignalized Intersections, FDOT

### Select Examples
- US 15 & S. Seton Ave., Emmitsburg, MD
- Tanbridge Rd. & Eastwood Rd., Wilmington, NC
- US 1 & Cranes Creek Rd., Vass, NC
- Linden Dr. NW & Lake Michigan Dr., Allendale, MI

### Source:
- North Carolina DOT
- VHB
- Tennessee DOT Aerial

Drivers must turn right and then complete a U-turn maneuver to turn left.

This intersection incorporates delineators instead of concrete islands to force all drivers to turn right.

This aerial photograph shows the channelization at the intersection and the downstream U-turn bulb-out.

Check for Crash Modification Factor: [CMF](#)