



# Increase an Intersection Curb Radius

*Reconstruction of the edge of traveled way at the intersection to provide a larger corner radius, which will better accommodate turning trucks and other large vehicles.*

## Targeted Crash Types

- Rear-end (major road)
- Rear-end (minor road)
- Sideswipe, opposite direction

## Problems Addressed

- Excessive intersection conflicts
- Poor operational performance

## Conditions Addressed

- Turning trucks or other large vehicles routinely drive over the curb and onto pedestrian facilities and signs adjacent to the roadway.
- Turning trucks or other large vehicles routinely encroach upon other lanes when completing their maneuver, perhaps causing temporary gridlock or forcing other vehicles to back up or change lanes.

## Considerations

- The benefits of providing additional space on the roadway to accommodate large turning vehicles should be weighed against the drawbacks of lengthening the pedestrian crossing.
- While a single circular arc between the edges of pavement of the intersecting roadways provides the simplest design, two alternatives are available for accommodating large vehicles: (1) a three-centered curve, or (2) a simple offset curve with connecting tapers. Each alternative may more closely mimic the turning path of large vehicles.
- If a larger radius is required to accommodate trucks or buses, consider installing a channelizing island with the tail pointing upstream to promote slower right turns. The island should be raised, large enough to accommodate pedestrians, and fully pedestrian-accessible.

## Industry Standard

*AASHTO Green Book*

Section 2.1.2: Minimum Turning Paths of Design Vehicles

