



Realign the Intersection Approach to Reduce or Eliminate the Skew Angle

Realignment of at least one leg to bring the intersection angle closer to perpendicular.

Targeted Crash Types

- Right-angle
- Rear-end (major road)
- Pedestrian
- Bicyclist
- Head-on

Problems Addressed

- Inadequate visibility of intersection or intersection traffic control devices
- Inadequate intersection sight distance
- Excessive intersection conflicts
- Poor operational performance

Conditions Addressed

- Existing intersection skew angle makes it difficult for minor road drivers to detect approaching major road traffic.
- Existing intersection skew angle is conducive to high speeds among turning vehicles or noncompliance with STOP or YIELD signs.
- Observed difficulty for turning vehicles to remain in their proper lane due to skew angle.
- Crash history or observed conflicts related to poor sight distance from the minor road or poor visibility of the intersection from the major road due to the intersection skew angle.

Considerations

- Stakeholders should be involved early in the decision-making process to address any concerns.
- This approach to improving intersection safety should be considered after less-restrictive measures have been tried and have not solved the problem.
- Measures should be taken to alert drivers to the changes in conditions before, during, and after construction.
- Additional right-of-way may be required.

Industry Standard

AAHSTO Green Book
Section 9.4.2: Alignment
Section 9.4.3: Profile

Select Examples

[Daly Waldrop Rd. & US 258, Kinston, NC](#)

Other Resources

[Innovative Operational Safety Improvements at Unsignalized Intersections, Florida DOT](#)
[NCHRP 500 Volume 5: A Guide for Addressing Unsignalized Intersections](#)
[Intersection Safety: A Manual for Local Rural Road Owners, FHWA](#)
[NCHRP 613: Guidelines for Selection of Speed Reduction Treatments at High-Speed Intersections](#)
[Modify Skewed Intersections, PEDSAFE](#)

