



Extend the Left-Turn Lane

Increasing the length of an existing left-turn lane to provide additional deceleration and storage for turning vehicles.

Targeted Crash Types

- Rear-end (major road)
- Sideswipe, same direction

Problems Addressed

- Poor operational performance
- Excessive intersection conflicts

Conditions Addressed

- Queues in existing left-turn lane extend into adjacent through lane.
- Crash history or observed conflicts between vehicles waiting to turn left and following vehicles.
- High left-turn volume.
- Vehicle tracks and rutting on right side of road due to through vehicles bypassing queued vehicles waiting to turn left.

Considerations

- Extending the lane may require additional right-of-way and utility relocation.
- Check left-turn warrants (see NCHRP 193 reference below).
- The length of the left-turn lane is based on the entering taper, deceleration length, and storage length.

Select Examples

[Capital Blvd. & Paragon Park Rd., Raleigh, NC](#)

Industry Standard

AASHTO Green Book
Section 9.7: Auxiliary Lanes

Other Resources

[NCHRP 193: Development of Left-Turn Lane Warrants for Unsignalized Intersections](#)
[NCHRP 500 Volume 5: A Guide for Addressing Unsignalized Intersections](#)

