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

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.

Problems Addressed
- Poor operational performance
- Excessive intersection conflicts

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