



Presence of Exclusive Left Turn (Transit-serviced Locations)

An exclusive left-turn lane reduces crashes by separating turning vehicles from through traffic, minimizing conflict and improving safety at intersections with high left-turn volumes.

Implementation Strategy

How and Where to Apply

- Exclusive left-turn lanes should be applied at signalized or stop-controlled intersections with high left-turn volumes, frequent rear-end or angle crashes, or significant delays caused by turning vehicles.
- Install by widening the roadway or reconfiguring existing lanes to add a dedicated left-turn lane, ensuring proper lane markings, signage, and signal phasing in accordance with **MUTCD** and **AASHTO** standards.

Use in a Safe System Approach

Exclusive left-turn lanes at transit locations advance the Safe System Approach by improving road design to separate turning and through traffic (Safe Roads), reducing conflict points and crash risk, and supporting safer, more predictable road user behavior (Safe Road Users).

Key Stakeholders

Agency maintenance personnel, and active road users

Proactive Implementation

Proactive implementation of exclusive left-turn lanes involves identifying intersections with growing left-turn volumes, transit operations, or patterns of turning-related crashes. Traffic studies and signal timing analyses can help determine where separation of turning vehicles would prevent future conflicts. Installing these lanes early improves safety, reduces delays, and supports efficient transit and general traffic flow.

Countermeasure Overview

Objective: Reduce the frequency and severity of intersection conflicts through geometric design improvements

Strategy: Provide left-turn lanes at intersections

Selected Related Countermeasures

- CM1** Protected left-turn signal phases
- CM2** Offset left-turn lanes
- CM3** Raised medians with directional openings

Cost: \$ (Moderate)

Service Life: 20 years

Targeted Solution



CONTRIBUTING FACTORS

- Improper turn
- Failure to yield



TARGET CRASH TYPE

- Left turn



ROAD FACILITY TYPE

- Not Specified



AREA TYPE

- Urban

Safety Linkage



NCHRP 500 Series

Signalized Intersection



AASHTO'S TOWARD ZERO DEATHS

Safer Infrastructure

SAFE SYSTEM APPROACH

Safe Roads

SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 1

Exclusive Left Turn Source: **MUTCD**

12%

Reduce in all types of crash severities¹

¹ CMF ID: 2090

Resources

- [FHWA Safety Research \(2016\)](#)
- [Safety Effectiveness of Intersection Left- and Right-Turn Lanes, Hardwood et al. \(2002\), FHWA-RD-02-089](#)

