

Install Two-Way Left-Turn Lane (TWLTL) on Four Lane Road



A TWLTL is a center lane on a four-lane undivided road that allows left turns from both directions, improving safety by separating turning vehicles from through traffic.

Implementation Strategy

How and Where to Apply

- TWLTLs are intended to reduce midblock conflicts by providing a dedicated lane for left-turning vehicles on four-lane undivided roads.
- They can be considered where left-turn volumes are high, especially on corridors with frequent driveways or minor street intersections.
- FHWA guidance recommends TWLTLs in locations where a center turn lane would improve safety and reduce crash frequency.

Use in a Safe System Approach

STOP AHEAD pavement markings are a good candidate treatment for implementing the SSA principle of redundancy. They complement other treatments designed to increase the conspicuity of STOP signs and support the separation of different road users in time.

Key Stakeholders

State and local transportation agencies
Traffic engineers and roadway designers

Proactive Implementation

TWLTLs can be applied proactively by identifying corridors with midblock turning conflicts, crash clusters, and high driveway density. They are commonly implemented during corridor restriping or resurfacing projects where widening is not feasible but safety and multimodal improvements are needed.

Countermeasure Overview

Objective: Keep vehicles from encroaching into opposite lane
Strategy: Provide center two-way left-turn lanes for four- and two-lane roads

Selected Related Countermeasures

- CM1 Access management
- CM2 Raised medians and turn bays
- CM3 Road diets with multimodal features

Cost: \$ (Moderate to High)

Service Life: 20 years

Benefit-Cost Ratio:

Targeted Solution



CONTRIBUTING FACTORS

- Lack of separation between opposing traffic



TARGET CRASH TYPE

- Head-on
- Rear-end
- Sideswipe



ROAD FACILITY TYPE

- Not specified



AREA TYPE

- Urban

Safety Linkage



NCHRP 500

Head-on



SAFE SYSTEM APPROACH

Safe Roads



AASHTO'S TOWARD ZERO DEATHS

Safer Infrastructure

SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 4

TWLTL on four-lane road. Source: TWLTL



30% Reduces total crashes¹

¹ CMF ID: 10375

Resources

- [FHWA Proven Safety Countermeasures](#)
- [FHWA Highway Safety Programs](#)

