

Decrease Lane Width from 11 Feet to 10 Feet



Reducing lane widths from 11 feet to 10 feet is a geometric design strategy used to moderate vehicle speeds, reallocate road space for other users, and improve overall street safety.

Implementation Strategy

How and Where to Apply

- Implement during roadway resurfacing projects to restripe existing lanes and reallocate space without requiring costly full-depth reconstruction efforts.
- Ideal for urban arterials, school zones, and transit corridors where pedestrian, cyclist, and vehicle interactions demand speed moderation.
- The **NACTO** states "In urban settings, 10-foot travel lanes are appropriate and desirable as they support a safer, more efficient street."

Use in a Safe System Approach

Reducing lane width aligns with the Safe System Approach by promoting Safer Roads and Safer Speeds. It moderates vehicle operating speeds, enhances space for vulnerable users, and reduces the likelihood and severity of crashes. It supports a forgiving environment that considers human error and limits crash forces to survivable levels.

Key Stakeholders

City Transportation Departments, State DOTs, MPOs

Proactive Implementation

Integrate 10-foot lane designs during resurfacing or street redesign projects, prioritizing areas with high pedestrian and cyclist activity. Coordinate with transit agencies and emergency services to ensure compatibility. Use pilot programs and quick-build methods to test lane reductions before permanent changes, supported by community engagement and context-sensitive design principles.

Countermeasure Overview

Objective: Ensure that roadway design and traffic control elements support appropriate and safe speeds.
Strategy: Use combinations of geometric elements to control speeds (horizontal and vertical curves, cross section), including providing design consistency along an alignment.

Selected Related Countermeasures

- CM1** Road Diets
- CM2** Curb Extensions
- CM3** Raised Crosswalks

Cost: Moderate

Service Life: 20 years

Benefit-Cost Ratio: N/A

Targeted Solution



CONTRIBUTING FACTORS

- Unsafe Speed
- Aggressive driving behaviors



TARGET CRASH TYPE

- Speeding



ROAD FACILITY TYPE

- All



AREA TYPE

- Urban

Safety Linkage



NCHRP 500

Speeding-Related Crashes



AASHTO'S TOWARD ZERO DEATHS

Safer Infrastructure

SAFE SYSTEM APPROACH

Safer Speeds

SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 2

Source: State Smart Transportation Initiative

- Decreasing lane width from 11 feet to 10 feet is associated with an increase in rear-end crashes.
- To improve safety, only reduce lane width where lower speeds are enforced, and combine with traffic calming, enhanced signage, and other safety measures tailored to the specific urban street context.

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Resources

- National Association of City Transportation Officials (NACTO).
- FHWA. Roadway Widths and Lane Configurations on Urban Streets

