

Decreasing Posted Speed Limit on Expressways



Decreasing posted speed limits on expressways involves reducing the regulatory speed limit to a lower value deemed safer based on roadway conditions, crash history, or operational concerns

Implementation Strategy

How and Where to Apply

- This strategy is applied on expressway segments with a history of high-speed crashes, poor geometric design, frequent merging or diverging activity, work zones, or proximity to urban areas or vulnerable users.
- Speed limit changes should follow a traffic engineering study considering factors such as 85th percentile speed, crash frequency and severity, adjacent land use, and roadway design features.

Use in a Safe System Approach

Lowering speed limits supports the SSA by managing safer travel speeds (Safe Speeds), reducing the energy involved in crashes to protect people (Safe Road Users), and helping road design better accommodate human mistakes (Safe Roads). This reduces the likelihood and severity of fatal and serious injury crashes.

Key Stakeholders

Traffic engineering departments, Law enforcement agencies

Proactive Implementation

Speed limit reductions can be implemented proactively through corridor safety assessments, systemic speed management programs, or in response to evolving land use and mobility patterns. Agencies may also adjust speed limits as part of Vision Zero initiatives or when integrating expressways into urban networks with multimodal interactions.

Countermeasure Overview

Objective: Set appropriate speed limits

Strategy: Implement differential speed limits for heavy vehicles if appropriate (High Speed Only)

Selected Related Countermeasures

- CM1** Apply High-Friction Surface Treatment (HFST)
- CM2** Enhanced police enforcement operations
- CM3** Speed limit reduction campaigns

Cost: \$ (Low)

Service Life: 10 years

Targeted Solution



CONTRIBUTING FACTORS

- Unsafe speed
- Aggressive driving behaviors



TARGET CRASH TYPE

- Speeding



ROAD FACILITY TYPE

- Principal Arterial
- Freeways and Expressways



AREA TYPE

- All

Safety Linkage



NCHRP 500 Series

Speeding

SAFE SYSTEM APPROACH

Safer Speeds

SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 2



AASHTO'S TOWARD ZERO DEATHS

Safer Drivers and Passengers

ASE cameras. Source: [NCSL](#)

Safety Benefits

20%

Reduce possible injury and property damage crashes on freeways and principal arterials¹

14%

Reduce all crashes on principal arterials and freeways.²

¹ CMF ID: 2931

² CMF ID: 2928

Resources

- FHWA Speed Management Program
- NCHRP Report 966: Posted Speed Limit Setting Procedure and Tool
- ITE Speed Management for Safety
- MUTCD Section 2B.13: Speed Limit Signs

