



Pedestrian Scramble

A pedestrian scramble halts all vehicle traffic to allow pedestrians to cross in all directions, at intersections with high pedestrian and turning vehicle volumes.

Implementation Strategy

How and Where to Apply

- Apply at signalized intersections experiencing high pedestrian volumes and frequent vehicle turning movements that create conflict and safety concerns.
- Ideal for downtown areas, near schools, or busy transit hubs where enhancing pedestrian priority, comfort, and safety is a key goal.
- The **FHWA** states that this marking can be used "Providing an exclusive pedestrian phase—such as a pedestrian scramble—can significantly reduce vehicle-pedestrian conflicts, especially at intersections with high turning volumes."

Key Stakeholders

City Traffic Engineers and Planners, municipal public works departments, utility companies

Proactive Implementation

Proactively identify intersections with high pedestrian volumes, crash history, or frequent turning conflicts using data analysis and on-site evaluations. Implement pedestrian scrambles during signal retiming, safety audits, or capital improvements to reduce crash risk, enhance walkability, and support long-term Vision Zero or Complete Streets goals.

Use in a Safe System Approach

Pedestrian scrambles manage conflict in time, eliminating vehicle-pedestrian interaction during crossings, reducing crash risk, enhancing visibility, and supporting multimodal safety in high-foot-traffic areas under SSA principles.

Countermeasure Overview

Objective: Reduce Pedestrian Exposure to Vehicular Traffic.

Strategy: Install or Upgrade Traffic and Pedestrian Signals.

Selected Related Countermeasures

- CM1** Leading Pedestrian Interval (LPI)
- CM2** Curb Extensions (Bulb-outs)
- CM3** Accessible Pedestrian Signals (APS)

Cost: Moderate to High

Service Life: 10 years

Targeted Solution



CONTRIBUTING FACTORS

- Jaywalking,
- Lack of pedestrian crossing priority



TARGET CRASH TYPE

- Intersection-related



ROAD FACILITY TYPE

- N/A



AREA TYPE

- Urban

Safety Linkage



NCHRP 500 Series

Pedestrians and Bicyclists



AASHTO'S TOWARD ZERO DEATHS

Safer Vulnerable Users

SAFE SYSTEM APPROACH

Safe Road Users

SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 3

Pedestrian Scramble. Source: Vancouver

Safety Benefits



Allows pedestrians to cross in all directions, eliminating conflicts with turning vehicles.

Resources

- [Pedestrian Facilities Users Guide — Providing Safety and Mobility, FHWA-RD-01-102](#)
- [DESIGN ELEMENT: Exclusive Pedestrian Phase, LADOT](#)

