

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."

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.

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.

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

Pedestrian Scramble. Source: WKRN

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



SAFE SYSTEM APPROACH

Safe Road Users

SAFE SYSTEM ROADWAY DESIGN

- TIER 1
- TIER 2
- TIER 3
- TIER 4

Tier 3



AASHTO'S TOWARD ZERO DEATHS

Safer Vulnerable Users



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



Resources

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

