

Install a Pedestrian Hybrid Beacon (PHB or HAWK)



A Pedestrian Hybrid Beacon (PHB) is a pedestrian-activated signal that stops vehicles to allow safe pedestrian crossing at unsignalized locations.

Implementation Strategy

How and Where to Apply

- Install Pedestrian Hybrid Beacons on multilane roadways with high vehicle speeds, where pedestrian activity is frequent, and traffic signals are unwarranted, but safety concerns persist.
- Use PHBs at midblock or unsignalized pedestrian crossings where driver yielding behavior is poor and crash history indicates a high risk for pedestrian-vehicle conflicts.
- Best suited for marked crosswalks or multiple lanes; avoid locations too close to side streets or driveways with their own stop/yield signs.

Use in a Safe System Approach

This supports the Safe Roads and Safe Road Users elements by accommodating human mistakes and vulnerabilities. By proactively providing multiple layers of protection, it builds redundancy and upholds the principle that death and serious injuries are unacceptable.

Key Stakeholders

State DOTs, MPOs, advocacy groups, community associations, engineering consultants, active pedestrian users.

Proactive Implementation

Transportation agencies can proactively deploy PHBs at high-risk pedestrian crossing locations especially midblock or multilane corridors before crash thresholds are exceeded or signal warrants are formally met. Prioritizing underserved areas, school zones, and transit stops ensures equitable safety outcomes. Integrating PHBs with systemic safety planning helps address crash risk through predictive, rather than reactive, safety improvements.

Countermeasure Overview

Objective: Improve Sight Distance and/or Visibility Between Motor Vehicles and Pedestrians.

Strategy: Signals to Alert Motorists That Pedestrians Are Crossing.

Selected Related Countermeasures

- CM1 Curb extensions or median refuge islands
- CM2 Rectangular Rapid Flashing Beacons (RRFBs)
- CM3 Raised crosswalks at unsignalized locations

Cost: \$\$ (Moderate)
Service Life: 10 years

Targeted Solution



CONTRIBUTING FACTORS

- Risky crossing behavior



TARGET CRASH TYPE

- Crossing-related



ROAD FACILITY TYPE

- All



AREA TYPE

- Urban
- Suburban

Safety Linkage



NCHRP 500 Series

Unsignalized Intersection



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 3

45%

Reduces angle crashes and K, A, B, C severities on urban and suburban, all types of roads (CMF ID: 10596)

32%

Reduces all types of crashes and K, A, B, C severities on urban and suburban of roads (CMF ID: 10594)

Resources

- [Pedestrian Hybrid Beacons – FHWA Proven Safety Countermeasures](#)
- [CHAPTER 4J. PEDESTRIAN HYBRID BEACONS, Manual on Uniform Traffic Control Devices \(MUTCD\)](#)



Pedestrian Hybrid Beacon . Source: City of Chula Vista, CA.

