



# Install a Pedestrian Hybrid Beacon (PHB)

A push-button-activated pedestrian signal that stops vehicular traffic, allowing pedestrians to cross. The PHB is comprised of a yellow beacon centered below two red beacons that remain dark until activated, then flashes yellow for a few seconds, followed by a solid yellow, then a solid red during the WALK phase. At the end of the WALK interval, the vehicle signal will display an alternating flashing red allowing motorists to proceed after stopping and yielding to pedestrians on or approaching their half of the street. Once the pedestrian clearance interval is completed, the vehicle signal returns to a dark mode, and the pedestrian signal rests in a steady DON'T WALK (raised hand symbol). The PHB was originally referred to as the HAWK (High-intensity Activated crossWalk)

Source: Lee Engineering, LLC



A PHB in use as a pedestrian is crossing the street.



Source: Lee Engineering, LLC

A view of what a driver would see as they approach an intersection outfitted with a PHB.

## Targeted Crash Types

- Pedestrian
- Bicyclist

## Problems Addressed

- Vehicle conflicts with non-motorists

## Conditions Addressed

- Crash history or observed conflicts between vehicles and non-motorists crossing at the intersection.
- High volume of crossing pedestrians or bicyclists at the intersection.
- Observed vehicles not yielding to pedestrians in crosswalk.
- High pedestrian delay due to few available gaps in traffic.

## Considerations

- Used in combination with a crosswalk and pedestrian signal heads.
- Must meet MUTCD warrant for installation.
- Install a stop line along each approach approximately 60 feet advance of the crosswalk if overhead signal heads are used.
- The crossing is only across one side of the intersection. Side street vehicle traffic is not stopped. (While the 2009 MUTCD stated that the PHB should not be used within 100 feet of an intersection, the National Committee on Uniform Traffic Control devices has voted to eliminate that provision in the next MUTCD.)
- Public involvement meetings and education may be needed to introduce the public to the operation of the PHB. Police need to be educated, as well.
- Can be modified to better accommodate bicycle traffic (i.e., BikeHAWK).

## Other Resources

- [NCHRP 562 & TCRP 112: Improving Pedestrian Safety at Unsignalized Intersections](#)
- [Pedestrian Hybrid Beacon Guide, Recommendations and Case Study, FHWA](#)
- [Pedestrian Hybrid Beacon, FHWA](#)
- [Safety Effectiveness of the HAWK Pedestrian Crossing Treatment, FHWA](#)
- [Pedestrian Hybrid Beacon \(PHB\), PEDSAFE](#)
- [Pedestrian Hybrid Beacon Fact Sheet, Wisconsin DOT](#)

## Industry Standard

- [MUTCD Chapter 4F. Pedestrian Hybrid Beacons](#)

## Select Examples

- [Huron St. & Chapin St., Ann Arbor, MI](#)
- [Pima Rd. & Jomax Rd., Scottsdale, AZ](#)
- [Mendenhall Loop Rd., Juneau, AL](#)

