

## PEDESTRIAN HYBRID BEACONS

### What is a Pedestrian Hybrid Beacon?

A Pedestrian Hybrid Beacon (PHB) is a type of traffic signal that is activated by pedestrians at a crossing that requires traffic to stop. They are mostly found at midblock pedestrian crossings on major streets, but they are sometimes used at three-legged intersections. (Most intersections have four legs.)



*People crossing at the Pedestrian Hybrid Beacon on Monroe Ave NW between City Hall and DeVos Place.*

### Where are PHBs located Grand Rapids?

Pedestrian Hybrid Beacons are typically used in locations where there are two or more lanes of traffic on streets with heavier amounts of traffic. Sometimes they are installed with raised median refuge islands in between both directions of traffic but this is not required.

1. Monroe Ave NW by City Hall and DeVos Place = installed in 2022
2. Eastern Ave SE/Plaster Creek Trail (between 28<sup>th</sup> St and 32<sup>nd</sup> St) = scheduled installation in 2023
3. Fuller Ave NE at Lyon St = scheduled installation in 2026 (pending federal transportation grant)

The first PHB in the City of Grand Rapids was installed in 2018 on Michigan St NE between Fuller Ave and Plymouth Ave. This beacon was removed in 2022 because the number of people using it significantly dropped after The Rapid stopped serving this part of Michigan St. The PHB equipment from this location was relocated and reused at the Monroe Ave location downtown. Staff is currently reviewing options to improving pedestrian crossings between the two traffic signals at Michigan/Fuller and Michigan/Plymouth.

### How does a Pedestrian Hybrid Beacon work?

The PHB is different from a standard red-yellow-green traffic signal in both its shape and function:

1. There are two signal heads over a third signal head, which remain dark until it is activated by a person to cross the street. When the beacons are dark, the pedestrian crossing heads show the red “Don’t Walk” message.
2. When a person presses the accessible call button to the crossing to activate the PHB, the beacon begins to flash yellow, then changes to a solid yellow Caution light, and finally a solid red STOP light. Once the solid red Stop light is active, traffic on the intersecting should be stopped and the person waiting to cross see the white “Walk” message on the pedestrian crossing heads.



3. After the “Walk” phase has ended, the pedestrian signal head message changes to flashing “Don’t Walk” with count down numbers to notify pedestrians to not start crossing and, if they are still in the crosswalk, how much time in seconds they have left to complete their crossing. During the flashing “Don’t Walk” pedestrian phase, the PHB changes from solid red beacons to flashing red beacons, which allows traffic to proceed after they have stopped *and* if the crosswalk is clear of people crossing.



4. After the PHB cycle is completed, the beacons will become dark again and the Walk/Don't Walk pedestrian signal head will show Don't Walk until someone else presses the button to cross.



This short video from the Massachusetts Department of Transportation also quickly explains how Pedestrian Hybrid Beacons work.

