



## Pedestrian Hybrid Beacons

This new type of traffic signal provides a signalized pedestrian crossing at a mid-block location. It is called a Pedestrian Hybrid Beacon. This signal functions similarly to a traditional pedestrian signal in that it stops traffic to allow pedestrians to cross safely while slightly different in appearance.

### What is a Pedestrian Hybrid Beacon?

A Pedestrian Hybrid Beacon or High Intensity Activated Crosswalk (HAWK) is a traffic signal that provides a safer and more efficient environment for pedestrians to cross busy streets. These signals replace the traditional Red/Yellow/Green pedestrian crossing signals. It differs from a traditional traffic signal in that it remains dark unless a pedestrian activates the pushbutton at which time vehicular traffic is stopped.



Pedestrian Hybrid Beacons are in accordance with Federal Standards and have been installed in numerous cities in the US since 1990's.

### The Pedestrian Hybrid Beacon Sequence



#### As Driver:

When the pedestrian presses the button, approaching drivers will see a FLASHING YELLOW for a few seconds indicating that they should reduce speed and be prepared to stop for a pedestrian in the crosswalk. This is followed by a SOLID YELLOW and then by a solid RED requiring drivers to STOP at the stop line. At this point, the pedestrian receives a WALK indication on the associated countdown timer. At the end of the WALK indication, the pedestrian is displayed a FLASHING DON'T WALK indication and motorist sees an ALTERNATING FLASHING RED. During this period, motorists are required to STOP or remain stopped until crosswalk is cleared, and then may proceed.

#### As Pedestrian:

Pedestrians press the button and watch the pedestrian signal head across the street. When it changes from a Don't Walk symbol (orange solid hand) to a Walk symbol (walking person), pedestrians begin crossing the street in the crosswalk. When the Walk symbol changes to a Flashing Don't Walk with a countdown timer, pedestrians may continue crossing if already in the crosswalk but should not begin crossing if have not left the curb.

This sequence is shown graphically below:

## Pedestrian Hybrid Beacon Operation

	DRIVERS		PEDESTRIANS	
	Will See ...	Will Do ...	Will See ...	Will Do ...
1		Proceed with caution.		Push the button to activate the system.
2	 <b>FLASHING</b>	<b>Slow down.</b> A pedestrian has activated the system.		Wait.
3		Prepare to stop.		Continue to wait.
4		<b>STOP.</b> A pedestrian is in the crosswalk.		Start crossing when all vehicles are stopped.
5	 <b>FLASHING</b> 	<b>STOP.</b> Proceed with caution if the crosswalk is clear.		Continue crossing; the signal will count down.
6		Proceed if the crosswalk is clear.		Push the button to activate the system.

## Pedestrian Hybrid Beacon: Steps for Activation

⇒ When there is no pedestrian waiting to cross, drivers will see that all indication lights are dark; the pedestrian will see a **"DON'T WALK"** symbol. A pedestrian who wants to cross the street will need to push the button to activate the system.

⇒ When a pedestrian pushes the button, approaching drivers will see a **FLASHING YELLOW** light for a few seconds, indicating that they should reduce speed and be prepared to stop for a pedestrian in the crosswalk. Pedestrians will continue to see a **"DON'T WALK"** symbol and should wait.

⇒ Drivers will see a **STEADY YELLOW** light, warning drivers the indication will soon turn to a **STEADY RED** light. Pedestrians will continue to see the **"DON'T WALK"** symbol and should continue to wait.

⇒ Drivers will see a **STEADY RED** light, which requires them to **STOP** at the stop line. At this point, the pedestrian receives a **"WALK"** symbol to cross.

⇒ As the pedestrian crosses the street, drivers will see **ALTERNATING FLASHING RED** lights, indicating that they need to stop. During this period, motorists are required to **STOP** or remain stopped until pedestrians have finished crossing the street. They may proceed with caution if the crosswalk is clear. Pedestrians will see a flashing countdown that indicates how much time they have to cross the street.

⇒ At the end of the flashing countdown, drivers will see that all indication lights are dark; the pedestrian will see a **"DON'T WALK"** symbol. Drivers may continue to proceed through the crosswalk if it is clear; pedestrians waiting to cross will have to push the button to activate the system.

## What are the advantages of a Pedestrian Hybrid Beacon?

- ✓ Pedestrian Hybrid Beacons have shown to increase safety by reducing crash rates at pedestrian crossings.
- ✓ Fewer dangerous driver violations at pedestrian crossings have been confirmed.
- ✓ Pedestrian Hybrid Beacons can eliminate driver delay and frustration considering that they allow drivers to proceed through crossing once it is clear of pedestrians (rather than having to wait for a green light).
- ✓ Traditional Red/Yellow/Green pedestrian crossing signals tend to “blend” to the background. Pedestrian Hybrid Beacons eliminate this scenario since they only turn on when a pedestrian wishes to cross the street.
- ✓ Pedestrian Hybrid Beacons use less energy than standard traffic signals as they are unlit when they are not in use.

## Pedestrian Hybrid Beacons in Houston?

The City of Houston PWE Traffic Operations staff investigates locations that would be appropriate for the installation of a Pedestrian Hybrid Beacon. Respective analysis and identification of funding process take place. The following installations have been completed in Houston:

- Addison at Greenbriar (5400 Greenbriar)
- Bay Area at Moon Rock (2500 Bay Area Blvd.)
- 2300 Blk Berry Rd.
- Tidwell at Montgomery W. (6000 W. Montgomery)
- Hidalgo at Nordstrom's (5190 Hidalgo St.)

## Useful Links:

<http://www.fhwa.dot.gov/publications/research/safety/10045/index.cfm>

## For more information contact:

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