

Hybrid Pedestrian Beacon

Pedestrian hybrid beacons have been successfully used as a traffic control device in areas throughout the United States and have demonstrated a reduction in pedestrian and total crashes at locations studied.

Paulding County has developed plans for the installation of a hybrid pedestrian beacon at the intersection of Rosedale Drive and the Silver Comet Trail at-grade pedestrian crossing. The projected operational date for the hybrid pedestrian beacon is November 2011. It is anticipated that the installation of the hybrid pedestrian beacon will provide pedestrians the opportunity to cross Rosedale Drive in a safe and efficient manner.

Please remember that it is a Georgia Law that motorists must stop for pedestrians in marked crosswalks.

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REQUESTS AND INQUIRIES

If you have questions, requests or suggestions concerning traffic please call the Department of Transportation at: (770) 445-4759 or through the "Contact Us" link at: <http://www.paulding.gov>

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Department of Transportation
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Hybrid Pedestrian Beacon

A Pedestrians and Motorists Informational Guide for the Hybrid Pedestrian Beacon



Theory of Operation









A pedestrian hybrid beacon is a special type of hybrid beacon used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk.

The city of Tucson, AZ, developed the High intensity Activated crossWalk (HAWK) pedestrian crossing beacon in the late 1990s to assist in pedestrian crossings, especially at major arterials with minor street intersections. Today, the HAWK system is more commonly referred to as a hybrid pedestrian beacon.

At a pedestrian hybrid beacon crossing, drivers receive multiple cues to emphasize the potential presence of a pedestrian. These cues include a unique configuration of the hybrid pedestrian beacon (two red lenses over a single yellow lens), high-visibility crosswalk markings, a stop bar approximately 40 ft from the crosswalk, signs that can be illuminated and read "CROSSWALK". When activated, the HAWK uses a red indication to inform drivers to stop, thereby creating a time period for pedestrians to cross the major roadway.

The hybrid pedestrian beacon consists of a Red-Yellow-Red signal format for motorists. The signals remain off until a pedestrian activates the system by pressing a button. First, a FLASHING YELLOW light warns motorists that a pedestrian is present. The signal then changes to SOLID YELLOW, alerting drivers to prepare to stop. The signal then turns SOLID RED and shows the pedestrian a "WALK" symbol. The signal then begins ALTERNATING FLASHING RED and the pedestrian is shown a flashing "DON'T WALK" with a countdown timer. Drivers are allowed to proceed during the flashing red after coming to a full stop and making sure there is no danger to pedestrians. The signal sequence for the hybrid pedestrian beacon is illustrated to the right:

Signal Sequence

	Dwells with dark signal until ped call.
	Flashing yellow to alert drivers of signal change.
	Solid yellow -- prepare to stop.
	Solid red interval prior to walk indication.
	Solid red and walk, pedestrians start to cross.
	Wig-wag red, flashing don't walk. Pedestrians should not enter crosswalk. Traffic may stop, then proceed if crosswalk is clear.
	Wig-wag red, solid don't walk. Pedestrians should finish crossing.
	Back to dark signal heads.

Safety Benefits

The prime objective of a hybrid pedestrian signal is to provide pedestrians with safe crossing opportunities. As such, a reduction in pedestrian crashes would be expected to be associated with the hybrid pedestrian beacon. From studies performed by the Federal Highway Administration (FHWA) at HAWK installations in Tucson, Arizona, a statistically significant reduction in pedestrian crashes was found, with the installation of a hybrid pedestrian beacon. The study also concluded that the installation of the hybrid pedestrian beacon was also found to be associated with a statistically significant reduction in total crashes. It should be noted that the hybrid pedestrian beacon, just like any other warning traffic control device, may not work as effectively if it is overused.

The Paulding County Department of Transportation takes driver/pedestrian safety very seriously and strives to provide a roadway system that is both safe and efficient. The development and implementation of devices such as hybrid pedestrian beacons gives traffic engineers additional means to improve both safety and efficiency on County roads.

