Connecticut Strategic Highway Safety Plan

HAWK Pedestrian Signals

HIGH-INTENSITY ACTIVATED CROSSWALK

HAWK Signal
Stamford Street Smarts Initiative

https://www.youtube.com/watch?v=mwnpDPsHd0U

What is a HAWK Signal?

The High-Intensity Activated Crosswalk (HAWK) pedestrian signal is a traffic control device designed to support safe pedestrian crossings on multilane roadways with relatively high traffic volume.

In many locations, such as near schools, bus stops, retail stores, and major activity centers, long stretches of road without a signalized intersection can make it difficult for pedestrians to cross. HAWK signals can be placed at critical locations between signalized intersections to help pedestrians cross the road safely.

HAWK signals operate only when a road user activates a push button at the pedestrian crossing. The signal activates a sequence of lights that require approaching drivers to slow and come to a stop. It then provides a WALK indication to pedestrians, and allows vehicles to proceed after pedestrians have crossed.

HAWK Signal Benefits

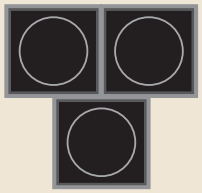
According to the Federal Highway Administration, midblock locations account for more than 70% of the 5,000 pedestrian fatalities that occur each year in the U.S.[1] Vehicle travel speeds are usually higher at midblock locations, contributing to higher injury and fatality rates at these locations. More than 80% of pedestrians are killed when hit by vehicles traveling at 40 mph or faster; however, fewer than 10% die when hit by vehicles traveling at 20 mph.

% OF PEDESTRIAN FATALITIES WHEN HIT BY VEHICLES

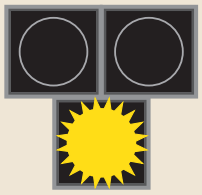
40+ mph

20 mph

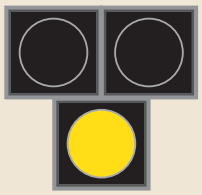
How HAWK Signals Work



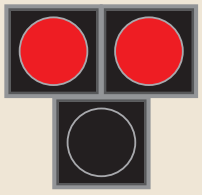
DARK – HAWK signal has not been activated. Vehicles proceed through pedestrian crossing.



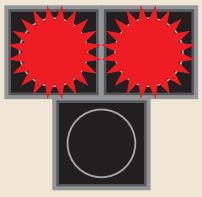
FLASHING YELLOW – Pedestrian has activated the HAWK signal.



SOLID YELLOW – Pedestrian signal is about to change. Motorists are notified their movement is being terminated and a red signal will be displayed.



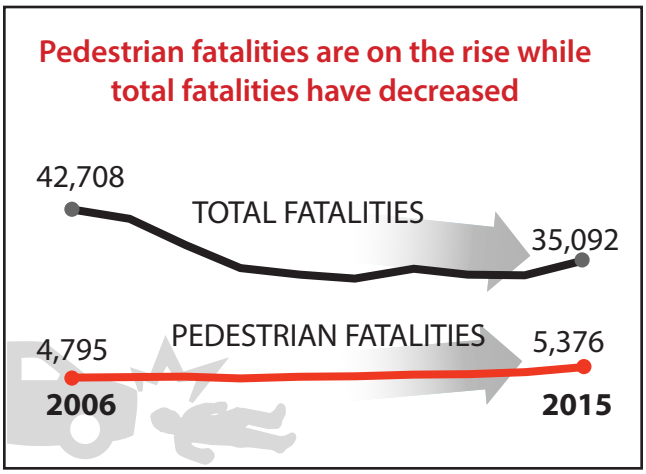
SOLID RED – Pedestrian is in the crosswalk. Motorists must stop.



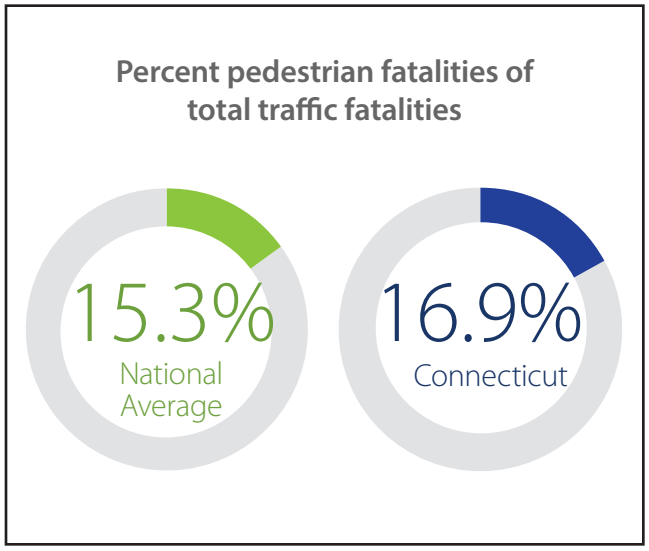
FLASHING RED – The HAWK signal is about to deactivate. Drivers must stop but may proceed when pedestrians have cleared the crosswalk.

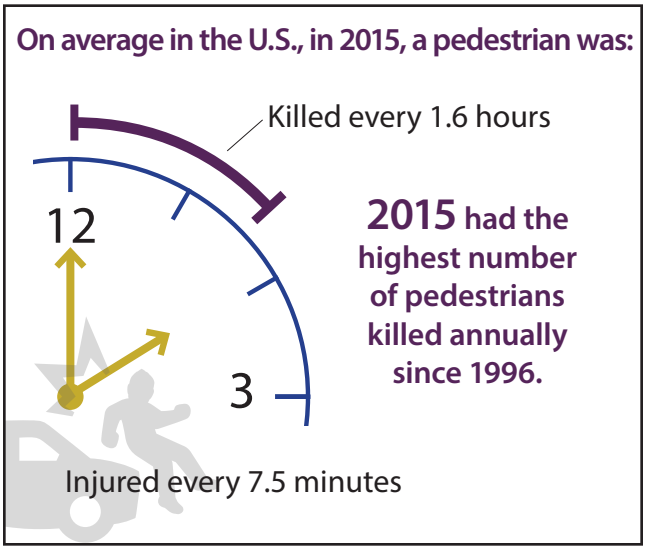
Source: Federal Highway Administration. "Manual on Uniform Traffic Control Devices." Chapter 4F: Pedestrian Hybrid Beacons. Washington, D.C. 2009.

To address this issue, a HAWK signal provides an effective treatment for areas with sporadic signalized intersections, high traffic volumes, and a large number of pedestrian mid-block crossings. HAWK signals can provide significant safety benefits, with research documenting a 69% reduction in pedestrian crashes and a 29% reduction in total roadway crashes. As an added benefit to vehicle users, a HAWK signal results in up to a 50% reduction in delays for motorists when compared to traditional signalized crossings.[2]



Source: Fatality Analysis Reporting System (FARS) 2006-2014 Final File, 2015 Annual Report File (ARF).





Source: National Highway Traffic Safety Administration, "Traffic Safety Facts 2015 Data: Pedestrians", DOT HS 812 375 (Washington, DC: February 2017).. Accessible at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812375.

Resources

- HAWK Signal Public Educational Video. https://www.youtube.com/watch?v=mwnpDPsHd0U.
- Stamford Street Smart Initiative. http://www.stamfordct.gov/stamford-street-smart.
- Connecticut Statewide Bicycle and Pedestrian Plan and Map Update. http://www.ctbikepedplan.org/index.html.

1 Federal Highway Administration (FHWA), Proven Safety Countermeasures, "Pedestrian Hybrid Beacon," FHWA-SA-12-012, last modified: February, 2017. Available at: https://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_012.cfm

2 Kay Fitzpatrick and Eun Sug Park. "Safety Effectiveness of the HAWK Pedestrian Crossing Treatment" July 2010. USDOT, Report No. FHWA-HRT-10-042. Accessible at: https://www.fhwa.dot.gov/publications/research/safety/10042/10042.pdf