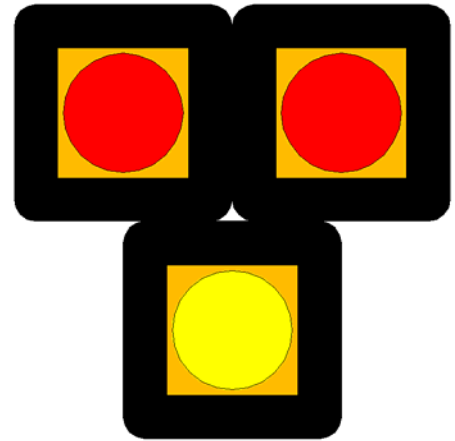


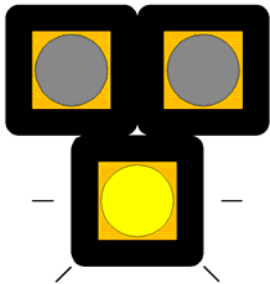
# HAWK Pedestrian Crossing System

by Blake Redfield – City of St. Cloud Traffic Systems Manager

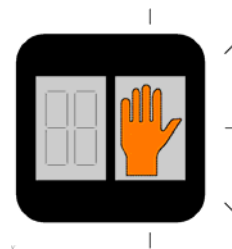
*This article appeared in an earlier edition of this publication. However, with a few minor modification which have occurred in the design of the HAWK system in St. Cloud and the time quickly approaching when it will go into operation, it seemed appropriate that the article be republished with updates to provide both the motorist and pedestrian with the current information on the operation of the HAWK pedestrian crossing system.*



Pedestrian safety has been a concern in the traffic engineering community for many years. Approximately 11% of all fatalities are related to pedestrians crossing a roadway. Updated forms of pavement markings, new signs and other devices have been formulated, implemented and tried with limited success in pedestrian crossings. However, a new form of pedestrian crossing is now being implemented in many cities throughout the country with Tuscon, Arizona leading the way in developing a safer method for pedestrians to cross a street. There are no new technologies or devices being used, only variants on devices already on the street today.

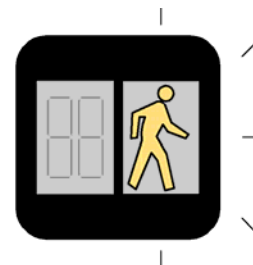
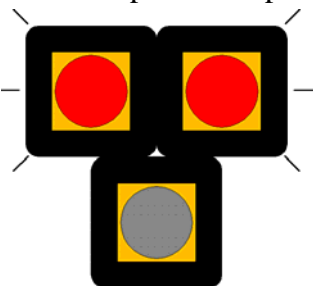


The traffic signal display for the motorist is reconfigured to provide a unique shape that immediately identifies a traffic signal as a pedestrian crossing. Rather than the traditional in-line signal display, the signals are clustered with dual red displays on the top and a single yellow display on the bottom. There is no green display. The traffic signal head for the motorist remains dark until the pedestrian button has been depressed. Meanwhile,

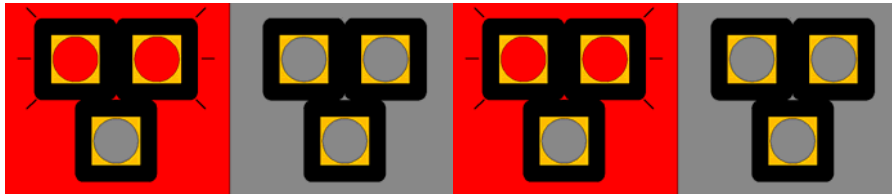


an Upraised Hand is displayed for pedestrians indicating they must wait to cross the street until the Walking Person indication is displayed. The first indication to the motorist is a flashing yellow display that notifies the motorist that the HAWK system has been activated and to start slowing down for the red indications. However, prior to the red displays, the flashing yellow becomes a steady yellow display for a clearance interval and then both of the red signal indications turn on simultaneously. After a red clearance period, the Walking Person indication is displayed.

The walk period for pedestrians starts when the Walking Person display comes on. After a period of time and the pedestrians are into the crosswalk area, the Walking Person display terminates and the flashing Raised Hand and the countdown timer displays become visible. At this same point in time, the dual steady red traffic

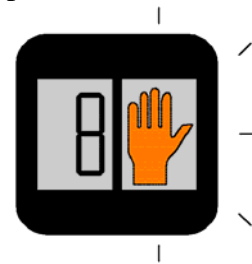


signal displays for the motorists change to a flashing indication, simultaneously flashing the two red signal displays. It now becomes legal for the motorist to proceed provided



there are no pedestrians in their crosswalk lane. Every vehicle that approaches the

intersection during the red flash indication must stop at the crosswalk stop bar and then proceed after verifying that there are no pedestrians in the crosswalk lane in which the vehicle has stopped. After the countdown time has been exhausted, the Raised Hand indication becomes a solid display indicating to the pedestrian that they must wait until the next signal cycle before proceeding across the roadway. Shortly after the continuous Raised Hand display is activated, the signal displays for the motorist will once again go blank and motor vehicles may proceed without stopping.



The first HAWK pedestrian crossing installed in the St. Cloud area will be at 12<sup>th</sup> Avenue & Highway 23 as part of the Highway 23 reconstruction during the summer of 2009 and become operational by mid-October. This will also be the first HAWK system in the state of Minnesota and the upper Mid-West. Further information on the HAWK system will be presented in different formats in the near future.



*To the left is a picture of a HAWK pedestrian crossing in Tuscon, Arizona. Tuscon now has more than 60 of the HAWK systems throughout their community.*

For further information on the HAWK pedestrian systems, please go to one of the following resources:

Blake Redfield – Traffic Systems Manager – City of St. Cloud –  
[Blake.Redfield@ci.stcloud.mn.us](mailto:Blake.Redfield@ci.stcloud.mn.us)

Tom Dumont – MnDOT Traffic Engineer – St. Cloud MnDOT Office –  
[Tom.Dumont@dot.state.mn.us](mailto:Tom.Dumont@dot.state.mn.us)

City of Tuscon Department of Transportation website:  
<http://dot.tucsonaz.gov/traffic3/tspedestrian.cfm>