BACKGROUND

The City of Portland has installed two High Intensity Activated Crosswalk (HAWK) signals for pedestrian and bicyclist users. Studies indicate that HAWK signals have high rates of motorist compliance, but there is limited data about bicyclist and pedestrian user perceptions and behavior change.

RESEARCH OBJECTIVES

The goal of the research was answer three questions about the HAWK signal located at this intersection. First, how do users interact with and perceive the signal? Second, does the HAWK signal impact the route choices made by pedestrians and bicyclists? Third, what is the degree of motorist compliance with the signal? The methods chosen to answer these questions were intercept surveys, comparisons between shortest paths and actual trips, and staged pedestrian crossings.

FINDINGS

39 surveys were completed. The average perceived safety rating for the intersection was 4.2 on a scale of 1 to 5 (1=least safe, 5=most safe). 87% of respondents think the HAWK signal is a good investment. 87% would like to see HAWK signals at other intersections in Portland.

42% of trips deviated from the shortest path between the starting and ending points, with a mean of .15 miles added to the shortest path.

Motorist compliance was 91% over three test periods.

CONCLUSIONS

This analysis indicates that pedestrian and bicyclist user perceptions of HAWK signal are positive and that the presence of the signal may influence route choice. Further study is needed to evaluate motorist perception and to determine specific user behavior patterns.