**Need for Accessible Pedestrian Signals when there are**

**Leading Pedestrian Intervals (LPIs) and Exclusive Pedestrian Phases**

New signal timing strategies that are intended to help pedestrians and improve walkability may have a negative and dangerous effect for pedestrians who are blind, who have low vision, or who are deafblind, if accessible pedestrian signals (APS) are not installed. In most cities, signal timing changes can be made with a few clicks on a computer in the traffic management center. They are simple, quick and inexpensive changes in traffic control that have been demonstrated to reduce crashes with pedestrians. Two of the most popular, being rapidly implemented, are the following.

**Leading Pedestrian Intervals** (LPIs) -- An LPI provides the pedestrian walk signal before motorists receive a green signal on the parallel street, giving pedestrians several seconds (usually 3 to 6 seconds) to start crossing before motorists receive a green signal. Right turning traffic may or may not be prohibited during the LPI. Without APS, pedestrians who have vision disabilities, who typically begin to cross with the onset of through traffic in the nearest lane, are at risk of crashes with vehicles whose drivers aren’t expecting pedestrians to be beginning to cross at the time that they get a green signal.

**Exclusive Pedestrian Phase (**EPP**) – Sometimes called a Barnes Dance or Scramble.** Where there is an exclusive pedestrian phase, all vehicular traffic has a red signal during the pedestrian phase (walk and flashing don’t walk). Right turns on red may, however, be permitted. During the EPP, pedestrians may cross both the parallel and perpendicular streets at the same time. Diagonal crossings are sometimes also permitted. Pedestrians have a ‘don’t walk’ signal when any vehicles have a green signal.

Without APS, pedestrians who are vision disabled find it difficult, if not impossible, to determine the onset of the pedestrian walk interval. There is no parallel through traffic to help with aligning to cross, or with maintaining a correct heading as they cross the street. To make things further confusing, some intersections are timed to have both an EPP and concurrent pedestrian phases.

The installation of APS whenever signals are programmed to provide an LPI or EPP can provide the benefit of this new signal timing strategy while mitigating risks to pedestrians who have visual impairments.

O&M specialists should be aware of these issues and educate their clients about these possible signal timing strategies. They and their clients should advocate for the installation of APS when such changes are being made.