

Accessible Pedestrian Signals (APS)

“All pedestrians, including people with vision impairments, need the same information at an intersection. Providing vital information in multiple, accessible formats (e.g., visual, auditory, tactile) also benefits all pedestrians since information is better recognized and remembered if it is understood by multiple senses” (Office of Planning, Environment, & Realty, 2012).

“Observations have shown that APS benefits all pedestrians by providing audible and vibro-tactile cues.” (SF Better Streets, 2015)

In regards to APS type, experts strongly recommend the Push-Button Integrated style of APS.

An extensive amount of evidence exists regarding their effectiveness, as well as their superiority to other types of APS, in other cities across the US and around the world. This signal design is recommended by the U.S. Access Board, the Federal Highway Administration, and the National Cooperative Highway Research Program (NCHRP), a program of the Transportation Research Board, sponsored by state highway departments making up The American Association of State Highway and Transportation Officials (AASHTO).

The FHWA reports, “New types of APS are integrated into the pedestrian push button and include speakers and vibrating surfaces incorporated in the pedestrian push button housing. These provide crossing indications to the waiting pedestrian at the departure curb rather than from overhead, as in older technology, and permit speaker volume to be set at a significantly lower and less obtrusive level. Tactile arrows and other features—push button locator tones, additional audible or Braille information, crosswalk maps, actuation indicators—enhance the effectiveness of these new devices” (FHWA Office of Safety, 2009).

This signal design has proven to provide the most effective indicator for the visually impaired pedestrian, as well as the least confusing and safest audible APS.

References

- Federal Highway Administration Office of Safety (Nov 2009). “Pedestrian Design for Accessibility within the Public Right-of-Way.” Intersection safety issue briefs: FHWA Safety Program, 11. FHWA-SA-10-005.
- National Cooperative Highway Research Program Project (2008). APS Guide. Guidelines for Accessible Pedestrian Signals. <http://www.apsguide.org/index.cfm>
- Office of Planning, Environment, & Realty (May 2012). US Department of Transportation, Federal Highway Administration. Retrieved from http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/sidewalks208.cfm
- SF Better Streets: A Guide to Making Street Improvements in San Francisco (2015). City and County of San Francisco. Retrieved from <http://www.sfbetterstreets.org/find-project-types/pedestrian-safety-and-traffic-calming/pedestrian-signals/>

Further Reading

- Accessible Pedestrian Signals—America Walks, <http://americawalks.org/accessible-pedestrian-signals/>
- Proposed Guidelines for Public Rights-of-Way—An Overview. US Access Board, <http://www.access-board.gov/prowac/nprm-guide.htm>
- 19% of US Population are People with Disabilities US Census Bureau (July 2012). “Nearly 1 in 5 People Have a Disability in the U.S., Census Bureau Reports.” Retrieved from <http://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html>

Have questions or want more information on a topic?

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