



Pedestrian Forum

Safe Pedestrians and a Walkable America

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http://safety.fhwa.dot.gov/ped_bike/ped/pedforum/index.htm



Each year pedestrian fatalities comprise about 11 percent of all traffic fatalities and there are approximately 4,600 pedestrian deaths. Another 70,000 pedestrians are injured in roadway crashes annually. Safety is important for all roadway users, and the Federal Highway Administration (FHWA) Office of Safety has established a goal of reducing pedestrian fatalities and injuries by 10 percent by the year 2011. Pedestrian safety improvements depend on an integrated approach that involves the 4 E's: Engineering, Enforcement, Education, and Emergency Services. The *Pedestrian Forum* highlights recent pedestrian safety activities related to the 4 E's that will help reach FHWA's safety goals and save lives.

FHWA Begins Project to Develop a Pedestrian Safety Program Strategic Plan

The FHWA's Offices of Safety and Safety Research recently awarded a contract to VHB to develop a long-term strategic plan for reducing pedestrian injuries, fatalities and crashes. The proposed project will create a comprehensive strategic plan for the FHWA's pedestrian safety program area projecting 15 years ahead that will provide the framework for the "big picture" in pedestrian safety. The plan will ensure that the entire program and each project undertaken are aimed at reaching the goal of reducing pedestrian fatalities and injuries.

The strategic plan will be data-driven and the identified knowledge, research and deployment gaps needed to reduce pedestrian fatalities will be based upon crash and injury data. This data will be used to prioritize the research, deployment, and knowledge needs. Projects, programs, deployment, and research identified will be reasonable for the FHWA to accomplish and reflect the FHWA's vision, mission, and goals.

As part of the project, users of pedestrian and bike-related products that FHWA has previously developed will be contacted to determine what level of use these products reached and if they ultimately were effective in helping to improve pedestrian safety and accessibility. FHWA is interested in seeing how these products are being used and how they could be improved, and in determining what other types of products might be useful to develop in the future. Some of the products that will likely be evaluated include the *Pedestrian Forum Newsletter*, Bicycle Safer Journey, Pedestrian

Safer Journey, Ped/Bike Crash Analysis Tool, Pedestrian and Bicyclist University Course, Pedsafe, Bikesafe, How to Develop a Pedestrian Safety Action Plan, Pedestrian Safety Campaign, Pedestrian and Bicycle Safety Materials for Hispanic Audiences, Bicycle Compatibility Index, Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations, and Pedestrian and Bicyclist Intersection Safety Indices. **If you have used any of these materials and would be interested in filling out a survey form, please contact tamara.redmon@dot.gov.**

As part of the project, FHWA held a stakeholder workshop on December 8 to get input from outside interests on the development of the plan and priorities that should be looked at. Stakeholders included people from States, metropolitan planning organizations, local governments, the private sector, researchers, research sponsors, and public interest groups. The stakeholder group will meet one more time when the Draft Strategic Plan is finalized. The Final Strategic Plan is scheduled to be completed in September of 2010.

New! Pedestrian Report to Congress

This Report to Congress on Pedestrian Safety was developed in accordance with requirements of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Section 2003(e) requires the Secretary of Transportation to submit to Congress a comprehensive report on pedestrian safety that builds on the current level of knowledge of pedestrian safety countermeasures by identifying the most effective advanced technology and intelligent transportation systems. Section 2003(e) also requires that the report

include recommendations on how new technological developments could be incorporated into educational and enforcement efforts and how they could be integrated into national design guidelines. The full report can be viewed at: http://safety.fhwa.dot.gov/ped_bike/pedrpt/.

Accessible Pedestrian Signals Result in Safer Crossings

Contributed by Janet Barlow of Accessible Design for the Blind

New types of accessible pedestrian signals (APS) provide better information for pedestrians who are blind and improve safety. Recent research (conducted in Portland, Oregon and Charlotte, North Carolina) evaluated crossings by pedestrians who were blind at complex, unfamiliar signalized intersections. Without APS at pedestrian-actuated signals, participants began their crossings during the WALK phase only 25 % and 10% (Portland and Charlotte respectively) of the time, and completed crossings after traffic began moving on the street they were crossing on 51% (Portland) and 44% (Charlotte) of their crossings. After APS were installed, over 85% (Portland) and 68% (Charlotte) of crossings began during WALK, and 87% of crossings (both cities) were completed before traffic began moving.⁽¹⁾ Anecdotal reports indicate that all pedestrians were more likely to press the pushbutton where pushbutton-integrated APS were installed. Earlier research found that all pedestrians start crossing more uniformly when walk indications are audible.^(2,3)

Older types of loud audible pedestrian signals that provided birdcalls from overhead speakers didn't work well for people who are blind and were annoying to neighbors. New types of APS don't sound like birds and are not generally mounted on the pedestrian signal head and are more easily integrated into neighborhoods. The Access Board's *Draft Public Rights-of-Way Accessibility Guidelines* specify a different kind of APS, generally known as pushbutton-integrated APS. These APS provide a pushbutton locator tone to help people who are blind find the pushbutton, a tactile arrow to indicate the alignment of the crosswalk, and both vibrotactile and audible walk indications. All sounds come from the pushbutton location. Placing the APS close to the crosswalk it signals is important to recognizing the correct walk indication (see photo) The recommended walk indication is a rapid ticking sound during the walk interval, if APS are installed in the recommended locations.



Figure 1: Pushbutton-integrated APS installed on separated poles, beside crosswalk each serves

The volume of pushbutton-integrated APS typically adjusts in response to ambient sound, so the locator tone and walk indication are louder when traffic volume is heavy and quieter when traffic is light. The volume settings often need to be adjusted during installation to fit the location, since sound can be reflected by nearby buildings and objects. Both the pushbutton locator tone and walk indication should be audible from the beginning of the crosswalk, but are not supposed to be heard more than 6 to 12 feet from the pushbutton. More information is available in recent NCHRP Web-Only Documents 117A and 117B, at www.walkinginfo.org/aps, in the Manual on Uniform Traffic Control Devices in sections 4E.06 and 4E.09, and in the Access Board's Public Rights-of-Way Guidelines at www.access-board.gov.

1) Scott, A.C., Barlow, J. M., Bentzen, B.L., Bond, T.L.Y. and Gubbe, D. *Accessible Pedestrian Signals at complex intersections: Effects on blind pedestrians. Transportation Research Record: Journal of the Transportation Research Board*, 2008, No. 2073, pp. 94–103.

2) Hulscher, F. *Traffic signal facilities for blind pedestrians. Australian Road Research Board Proceedings 1976*, 8, 13-26

3) Wilson, D. G. *The effects of installing an audible signal for pedestrians at a light controlled junction. Transport and Road Research Laboratory, 1980, Department of the Environment, Department of Transport, U.K.*

New! FHWA Posts Memo Regarding Snow Removal on Sidewalks

Constructed with Federal Funding

www.fhwa.dot.gov/preservation/082708.cfm

The memorandum addresses questions about maintaining pedestrian facilities, particularly during the winter season. To summarize, two provisions provide the FHWA with authority to require snow removal on pedestrian facilities constructed with Federal funds. Both of these provisions fall under current statutory and regulatory maintenance requirements.

The maintenance requirements of [23 U.S.C. § 116](#) apply to all transportation facilities that are constructed with Federal funds. Section 116 requires a State DOT to maintain projects constructed with Federal-aid funding or enter into a maintenance agreement with the appropriate local official where such projects are located.

Snow removal and treatment for ice on sidewalks is also a pedestrian accessibility issue, for which FHWA has oversight responsibility. In accordance with [28 CFR § 35.133](#), a public agency must maintain its walkways in an accessible condition for all pedestrians, including persons with disabilities, with only isolated or temporary interruptions in accessibility. Part of this maintenance obligation includes reasonable snow removal efforts. See FHWA, Questions and Answers About ADA/Section 504, question 31 under Maintenance, www.fhwa.dot.gov/civilrights/ada_qa.htm#q31.

Memorandum of Understanding to Promote Public Health and Recreation

Contributed by Christopher Douwes of FHWA

The Departments of Health and Human Services, Agriculture, Interior, Army, and Transportation signed a Memorandum of Understanding to Promote Public Health and Recreation ([HTML](#) / [PDF](#) 54 KB). This MOU establishes a general framework to promote uses and benefits of the Nation's public lands and water resources to enhance the physical and mental health and well being of all Americans, through sound nutrition, physical activity, and recreation in America's great outdoors. See [Related Links](#) to recreation resources and [TE Resources](#) for transportation links. As part of the MOU, the FHWA will encourage the use of its funding programs to support projects that promote accessibility, walking, bicycling, Safe Routes to School and other highway safety programs, recreational trails,

transportation enhancements, scenic byways, and access to recreation on federal lands.

Safe Routes to School Conference: Two Steps Ahead

Contributed by Raquel Rivas of the National Center for Safe Routes to School

Learn how Safe Routes to School (SRTS) Programs across the country are changing the habits of an entire generation of schoolchildren and putting thousands of families **two steps ahead** of health and environmental concerns at the 2nd Safe Routes to School National Conference. Save the date: August 19-21, 2009 – pre-conference health workshop on August 18, 2009, at the Hilton Portland, Oregon. Please check

www.saferoutesconference.org for registration information.

The conference will offer 90-minute workshops and interactive 3-hour training sessions directed at a single age group or geographic location (urban, suburban, rural). For more information, e-mail scottyelton@btabikes.org

This *Pedestrian Forum* is available on the Web at <http://safety.fhwa.dot.gov/fourthlevel/pedforum.htm>.

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