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With funding from the National Cooperative Highway Research Program, HSRC began collecting data in 2001 in an effort to determine the best uses for accessible pedestrian signals, or APS, which provide audible and tactile street-crossing information to blind or low-vision pedestrians. As a result of the study's final report, HSRC and subcontractor Accessible Design for the Blind were tasked with writing a guide that would include best practices in the use of APS.

The recent completion of *Accessible Pedestrian Signals: A Guide to Best Practice* provides training information on when, where, and how to install accessible pedestrian signals. The guidelines explain how APS provide optimal information through media such as tones and tactile or verbal indicators, and under what circumstances their installation is recommended. The Guide is designed to serve as a companion resource document to a one-day training course on accessible pedestrian signals. The training materials are intended to facilitate application of the guidelines and installation and operation of APS. This training is oriented toward technical issues and public education.

"The training component is a very important element to the proper use and installation of APS," said Daniel Carter, Engineering Research Associate at HSRC. "We have spent years compiling data for this project and being able to take this information to local towns and cities will allow municipalities to significantly increase intersection safety for blind and low-vision pedestrians.

Workshops will be conducted over the course of the next year and are intended to disseminate updated

APS information to:

- engineers and administrators who may be responsible for making decisions about APS installations,
- signal technicians who are charged with installation and maintenance of the devices, and
- orientation and mobility professionals who make requests for APS devices on behalf of their clients and train their clients on the use of APS.

The guidance provided in the workshops will also be incorporated into the Public Rights-of-Way Accessibility Guidelines and the Manual on Uniform Traffic Control Devices (MUTCD) and will likely lead to an increase in the use of APS as well as improvements in the installation and operation.

To view the NCHRP final report, which documents the research conducted in this study, please visit http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w117b.pdf.

To view a copy of *Accessible Pedestrian Signals: A Guide to Best Practices*, please visit http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w117a.pdf.

If you would like more information regarding the Accessible Pedestrian Signals project, please visit <http://www.walkinginfo.org/aps/home.cfm>, or contact Daniel Carter at 919-962-8720 or daniel_carter@unc.edu.

CSYD evaluates a teen driver cell phone restriction

In June, the Insurance Institute for Highway Safety and the Center for the Study of Young Drivers (CSYD) released the results of a first-of-its-kind evaluation of a teen driver cell phone restriction.

The issue of teenagers and distracted driving, particularly related to cell phones, is one of increasing importance. Presently, 20 states and the District of Columbia restrict cell phone use among teenage drivers. North Carolina implemented a cell phone restriction for drivers younger than 18 on December 1, 2006. CSYD researchers used this opportunity to examine the effects of the new law.



"Distracted driving is an issue among all motorists, but the topic of teen drivers and cell phone use, until this point, had not been studied. This was a great opportunity to learn about the effect of a cell phone restriction for teen drivers," said Arthur Goodwin, a researcher with the Center.

The study included observations of several thousand young drivers at high schools as students were dismissed. In addition, telephone surveys were conducted with North Carolina parents and their teens to examine their awareness and opinions of the cell phone law. South Carolina, which does not have a cell phone restriction, was a comparison state for the study. Baseline data was collected in the Fall of 2006, two months before the cell phone restriction took effect. Follow-up data was collected approximately 6 months later.

Results of the study found that teenage drivers' cell phone use was unchanged in North Carolina after the state enacted its cell phone restriction. About 11 percent of

teens, both before and after the law, were observed talking on their cell phone while driving. Cell phone use was significantly higher among girls than among boys and when teens were alone in the vehicle rather than with friends. For example, 14 percent of female drivers were observed using cell phones in the pre-law survey, compared with 9 percent of male drivers. Prior to the law, cell phone use was 14 percent among teenagers driving alone compared with 8 percent among those with one or more passengers. Phone use also was higher among SUV drivers compared with those in cars.

"The results show the law didn't have a significant effect on cell phone use among teen drivers, at least in the short term," said Goodwin. "However, it's still possible that compliance with the law will increase as more teens learn about the new law."

In post-law telephone surveys in North Carolina, about 60% of teens were aware of the restriction, compared with only about 40% of parents. Still, 88 percent of parents said they restricted their child's cell phone use while driving. Only 66 percent of teens reported such parental limits. Three-quarters of teens and 95 percent of parents said they approved of the law.

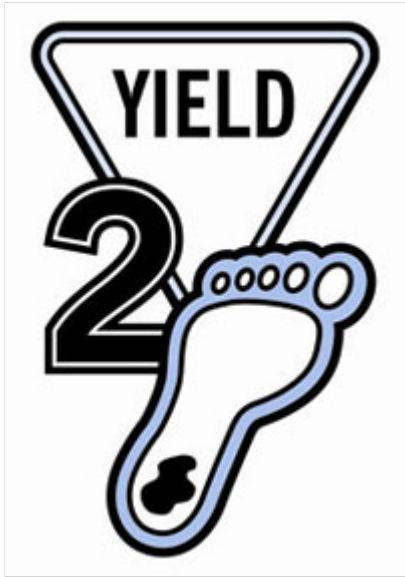
The surveys also indicated that parents and teens alike believe the cell phone restriction isn't being enforced.

"Studies such as these can serve as important tools for researchers and policy makers. What we learn can help us make reforms and adjustments to laws that aim to reduce crashes involving teen drivers," said Goodwin

For a copy of the full text report, visit <http://www.iihs.org/research/topics/pdf/r1106.pdf>.

HSRC encourages pedestrian safety through 'Yield to Heels' campaign

The University of North Carolina at Chapel Hill is not much different from any other college campus. It is bustling with people — students, professors, visitors — all using different modes of transportation to get around campus. What does set UNC apart is that it was one of the first institutions of higher learning in the nation to be proactive about teaching pedestrian safety on campus through a pedestrian safety awareness campaign called "Yield to Heels."



In 1999, UNC established the Pedestrian Safety Committee in response to the death of a UNC postdoctoral dentistry fellow who was struck by a car while crossing at a marked crosswalk on campus. In an effort to support and expand the efforts of the Committee, the University established the "Yield to Heels" campaign in 2001 to promote pedestrian safety on campus. The campaign is coordinated by the UNC Highway Safety Research Center and the UNC Department of Public Safety.

"Yield to Heels is a unique opportunity to stress the importance of safe street crossings to both pedestrians and motorists alike within the crossing environment," said David Harkey, director of the UNC Highway Safety Research Center. "We have had several pedestrian tragedies on and around campus during recent months so 'Yield to Heels' serves as an important reminder to stay alert and use caution while driving and walking in the vicinity of the campus. By encouraging an understanding and consideration among the groups, we hope to increase the safety of all road users across the campus."

In 2000, HSRC conducted a study of pedestrian activity around UNC Chapel Hill. Using 5 years of data between 1995 and 1999, HSRC researchers studied this crash data alongside perception data to determine what were considered to be four "hot spots" on campus for pedestrian crashes. Based on this data, student volunteers along with UNC Public Safety Officers are stationed at four of these identified "hot spot" intersections. Throughout the day, pedestrians, bicyclists and motorists passing through these intersections are educated on the importance of pedestrian awareness as volunteers pass out educational fliers and giveaways to highlight the need to "be aware, be safe and be considerate." Mobile road signs are also placed at the intersections to alert motorists.

"We are certainly pleased when students tell us they recognize the efforts of the campaign and let us know how important the effort is when they see us out there for Yield to Heels day. We consistently hear that Yield to Heels heightens awareness and serves as a good reminder of the need for everyone to travel safely throughout the campus," said Jennifer Bonchak, public relations coordinator for HSRC and "Yield to Heels" planning coordinator.

"Yield to Heels" day is held once during both the spring and fall semesters and is scheduled to take place on Wednesday, September 17. For more information on the "Yield to Heels" campaign, or to read safety tips for pedestrians and motorists, please visit <http://www.hsrc.unc.edu/y2h/>.

HSRC News Briefs

HSRC to evaluate new pavement marking in Chapel Hill

As part of a pilot project by the town of Chapel Hill, North Carolina, researchers at HSRC are working with town officials to study and evaluate recently added shared-use pavement markings.

The markings, referred to as "sharrows", are an experimental road treatment being evaluated as an accommodation for bicyclists under certain roadway conditions. Sharrows identify the shared use of a travel lane by bicyclists and passing motorists, indicating the legal and appropriate bicyclist line of travel. They also serve to cue motorists to pass bicyclists with sufficient clearance.

The markings are on a four-lane corridor popularly traveled by motorists and bicyclists alike, as it serves as a main access to the University of North Carolina at Chapel Hill.

By December 2009, HSRC will submit a report to the Federal Highway Administration for review that summarizes the study. Results will be released upon completion of the review.

Second annual HSRC scholarship awarded

The UNC Highway Safety Research Center awarded its annual scholarship in July to Kathryn Martin, a graduate student at UNC Chapel Hill studying in the School of Public Health. Her dissertation research is on the influence of community resources on North Carolinians' health-related quality of life and functional health status, including accessibility and availability of public transportation for senior citizens in North Carolina.

The \$1,000 scholarship was available to a full-time graduate student with an interest in transportation safety and who will be enrolled in 2008 at any of the 16 University of North Carolina system campuses. Candidates were evaluated on academic performance, extracurricular and professional activities, work experience and an essay on a current highway safety issue.

Ms. Martin is currently working on her dissertation and plans to graduate with her Ph.D. in 2009.

HSRC Research Library goes digital

Members of the HSRC Library staff have recently completed the first phase of an ongoing archival digitization project. A selected group of frequently requested reports published from 1967-1990 is now available for the first time in electronic format for downloading in PDF format.

The newly digitized reports have been contributed to the Digital Collaboratory of the Eastern Transportation Knowledge Network, which is based at the National Transportation Library of the U.S. Department of Transportation. This permanent digital repository will provide continuing access to the full text of HSRC's older reports.

To access the HSRC Library, visit http://www.hsrc.unc.edu/research_library/index.cfm.
