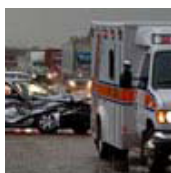




THE UNIVERSITY OF NORTH CAROLINA
HIGHWAY SAFETY RESEARCH CENTER

DIRECTIONS

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Assisting CalTrans identify high crash locations

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Updated resource and workshops on Accessible Pedestrian Signals

International speakers visit HSRC

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Assisting CalTrans identify high crash locations



One of the first steps in effectively managing a roadway network is to identify the locations in need of more formal safety evaluation. The UNC Highway Safety Research Center will be assisting the California Department of Transportation to develop methods for identifying high crash roadway segments and intersections on California roads where potential safety improvements may be implemented. HSRC will evaluate various methods using crash, roadway, and traffic data from California state highway locations and identify the methods that are optimal for determining the locations best suited for cost-effective safety improvements.

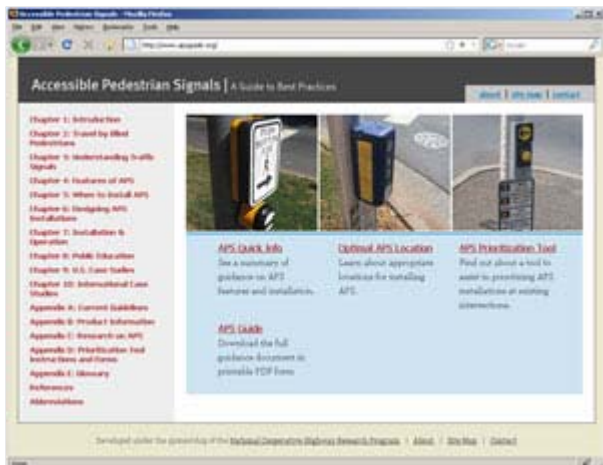
"Conventional methods that only use crash counts or rates are problematic and can trigger 'false positives'," said Raghavan Srinivasan, Ph.D., principal investigator of the project. "These methods do not effectively account for the potential bias due to

regression-to-the mean phenomenon in which sites with a randomly high crash count could be incorrectly identified as being hazardous and vice versa."

Another issue associated with conventional methods that makes use of crash rates problematic is the assumption that crash frequency and traffic volume are linearly related, i.e., that a 20% increase in volume will result in a 20% increase in crashes. Recent studies have shown that the relationship between crashes and volume is non-linear, and this relationship depends on a number of factors, including the type of facility.

The review and evaluation provided by HSRC will provide fresh and independent insights on the most promising methods that should be applied using the data from California state highways. The projected completion date for the project is summer of 2010.

Updated resource and workshops on Accessible Pedestrian Signals



The UNC Highway Safety Research Center (HSRC) is continuing its work in developing guidance on accessible pedestrian signals (APS) to optimize safe and independent crossing at signalized intersections by pedestrians who are blind. An APS is "a device that communicates information about pedestrian timing in non-visual format such as audible tones, verbal messages, and/or vibrating surfaces (MUTCD, Section 4A.02)."

HSRC recently launched an updated Web site on the best practices of APS at www.apsguide.org. The site includes a summary of guidance on APS features and installation, a tool to assist in prioritizing APS installations at existing intersections as well as US and international case studies.

The Center has also developed and implemented a workshop on recommended and optional characteristics of APS. The workshop is a full day course aimed at engineers and administrators who may be responsible for making decisions about APS installations, signal technicians and Orientation and Mobility professionals.

The Web site and workshops are both products of the National Cooperative Highway Research Program Project 3-62, Guidelines for Accessible Pedestrian Signals. This research study used extensive field testing to determine which APS features and locations are most beneficial for blind and visually impaired pedestrians. The Web site content was adapted from the print document produced by the NCSHP study, entitled *Accessible Pedestrian Signals: A Guide to Best Practices*. The guide and research report from the NCHRP study are available for download on the Web site.

For more information on the Web site and workshop, please contact Daniel Carter at 919-962-8720 or daniel_carter@unc.edu.

International speakers visit HSRC



Left to Right: Forrest Council, former director, HSRC; Glen Koorey, senior lecturer, University of Canterbury; Charlie Zegeer, director, Pedestrian and Bicycle Information Center.

The UNC Highway Safety Research Center recently hosted two international guests at the start of 2009. Rob Methorst, a senior advisor with the Dutch Ministry of Transport, and Glen Koorey, senior lecturer with the University of Canterbury, both visited the Center to discuss their international perspective on pedestrian safety with the UNC community.

Methorst presented a lecture titled "Quality for Pedestrians: Pitfalls in Policy Making" on Friday, March 20, 2009. The lecture, in which Methorst discussed his international perspective on the ingredients needed for successful policy making to improve conditions for pedestrians, was cosponsored by the UNC Highway Safety Research Center, the UNC Injury Prevention Research Center, the Carolina Transportation Program and the Department of City and Regional Planning.

Koorey presented at an HSRC "Lunch 'n Learn" event, a monthly Center-sponsored event for HSRC staff to discuss current highway safety research projects. Koorey discussed his current PhD research underway in New Zealand, "Incorporating Safety into Rural Highway Design," aimed at developing crash models for rural highway geometry, particularly the effect of various curve attributes.

HSRC News Briefs

NCSRTS Progress Report

The National Center for Safe Routes to School has completed a three-year progress report mapping the growth of Safe Routes to School (SRTS) throughout the nation. The report includes case studies and updates on current state and national initiatives in support of communities building SRTS programs. Highlights of the report include:

- All 50 States plus the District of Columbia have Safe Routes to School Coordinators.
- \$370.6 million in Federal funds have been awarded by State Departments of Transportation as of January 1, 2009.
- State DOTs have awarded 89 percent of the \$416 million available to States.
- More than 4,566 funded schools throughout the U.S. have been awarded funds.
- 47 States contribute information to the SRTS national database.

To access the report, please go to www.saferoutesinfo.org/report.

Watch the 2009 Waller Lecture

Dr. Robert B. Cialdini, Professor of Psychology and Marketing at Arizona State University, presented the 2009 Patricia F. Waller Lecture on Wednesday, April 15.

The talk, "The Power of Social versus Financial Factors in Behavior Change," focused on how persuasive communications that employ social norms-based appeals for pro-environmental behavior are superior to those that employ traditional appeals. His books including, *Influence: Science & Practice*, *Influence: The Psychology of Persuasion*, and *Yes! 50 Scientifically Proven Ways To Be Persuasive* are the results of his study into the reasons why people comply with requests in business settings.

Dr. Cialdini received his Ph.D from the University of North Carolina and post doctoral training from Columbia University, with many visiting scholar appointments at top U.S. Universities. Currently, Dr. Cialdini holds dual appointments at Arizona State University as a W.P. Carey Distinguished Professor of Marketing and Regents' Professor of Psychology.

The lecture is held annually in memory of Dr. Patricia F. Waller, a UNC professor who founded the UNC Injury Prevention Research Center and was a pioneer in injury control. She worked for nearly two decades as a researcher at the UNC Highway Safety Research Center, where she developed the concept for graduated licensing that would become adopted nationwide.

The Waller lecture is sponsored jointly by the UNC Injury Prevention Research Center, the UNC Highway Safety Research Center and the UNC department of psychology, based in the College of Arts and Sciences.

[Watch the Lecture](#)

HSRC in the News

The following is a highlight of recent media stories that include information and research from the Center. Web links to the following news stories are time sensitive, so some stories might not be accessible after the initial publication date without required registration.

[Texting: a fight to be free](#)

News & Observer

April 26, 2009

[Bill would require tougher standards for older drivers](#)

News & Observer

April 8, 2009

[Cold or not, monthly walking group 'back in step'](#)

Asheville Citizen Times

February 19, 2009

[Report: Traffic Deaths Down in NC. But Up in Wake County](#)

WRAL-TV

February 5, 2009

[Stepped up patrol efforts help save lives](#)

USA Today

February 5, 2009

[AAA Targets cell phone use in graphic ads](#)

Greensboro News & Record

February 1, 2009
