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## Long-time staff member retires from HSRC



After more than 30 years of accomplished dedication, Dr. Jane Stutts retired from the UNC Highway Safety Research Center in July - leaving behind a legacy of a devoted, knowledgeable researcher, and a role model for any working woman.

Dr. Stutts left the Center as Associate Director for Social and Behavioral Research, where she was responsible for coordinating HSRC's research and programmatic activities related to the driver performance aspects of transportation safety. In her tenure at the Center, Jane has managed a variety of projects in a number of related areas to highway safety and has authored over 100 articles and technical reports. Upon retirement, her primary focus was on older drivers and driver distraction.

Jane began her education at Wake Forest University, where she received her bachelor's degree in psychology in 1972. She went on to earn a master's degree from Georgia State University in early childhood education in spring 1974. After moving to Chapel Hill and working in a temporary position elsewhere in the University, Stutts joined the roster at HSRC as a research associate in August 1975. While at the Center Jane began the pursuit of her PhD at the University of North Carolina at Chapel Hill where she graduated with her doctorate in epidemiology, while also successfully filling the roles of wife and mother to her two daughters.

"After spending time in the highway safety arena, I found my interests and focus becoming more defined. I was sure that I wanted to expand my knowledge and further develop my research skills. With having an interest in public health, I saw a great opportunity to pursue my doctorate in epidemiology and link that to the study of highway safety."

Since then, she has led projects that have been funded by the National Highway Traffic Safety Administration, Federal Highway Administration, National Cooperative Highway Research Program, Centers for Disease Control and Prevention, General Motors Corporation, the AAA Foundation for Traffic Safety and the North Carolina Governor's Highway Safety Program.

Even with her many notable accomplishments, Jane says, "I don't think I can say that I accomplished anything entirely by myself. That is, in all my accomplishments, there were always others who helped and contributed to any successful outcome."

But if she had to choose, Jane says her proudest efforts would be those related to older drivers on a state and national level, and her work with distracted driving.

"Since I first began working in the older driver area in the late 1980s/early 90s, there has been a huge increase in interest in the topic, and while there is still much to be learned, I think we're beginning to see results from the research that's been carried out over the past two decades. I'd like to think that I have, and will continue to, contribute to this success. As far as distracted driving, the study that we did for the AAA Foundation for Traffic Safety was one of the first to utilize video cameras to record people's activities while driving. There were many, many challenges to collecting and analyzing these data, so much so that the project was nearly aborted. But this was definitely a case where perseverance paid off, and I was grateful to my colleagues for hanging in there with me!"

In addition to her research career, Dr. Stutts has been an active participant in many Transportation Research Board activities, including six years as chair of the Committee on Bicycling, membership on the Committee on the Safety and Mobility of Older Persons, membership and chair of the safety section on the Group 3 Council, and participation on two National Research

Council appointed committees - the Steering Committee for a Conference on Transportation in an Aging Society, and the TRB-IOM Committee on Physical Activity, Health, Transportation, and Land Use. She is also active in the Association for the Advancement of Automotive Medicine, and served on its Scientific Program Committee from 1998-2001.

A tireless member of the HSRC team, Jane plans to continue her work in highway safety on a semi-regular basis. But her plans for the first day off the job?

"I'm going to clean my house!"

Congratulations on a remarkable career, Jane.

## HSRC project develops an expert system for speed management



Speed limits are set to allow for efficient and safe travel on roadways of all types. The determination of a speed limit on a given roadway is not always based on a scientific formula — rather, engineers and other practitioners rely on experience and judgment in considering speed limits. The Manual of Uniform Traffic Control Devices (MUTCD) cites the use of the "85th percentile" speed for establishing the limit, which is the speed at or below which 85 percent of motorists drive on any given road. This value is based on the premise that the majority of drivers will travel at a safe and reasonable speed. At the same time, the MUTCD and other guides indicate the need to consider other factors in addition to the 85th percentile speed, such as roadway alignment, roadside characteristics, pedestrian activity and crash experience. These elements vary tremendously from one road class to another and from rural to urban environments.

It is important to identify a consistent method for setting speed limits, while taking into account all of the potential factors that may influence speed choice on any given roadway. The University of North Carolina Highway Safety Research Center, along with Wade Trim Associates and PB Farradyne, has developed a Web-based expert system for identifying reasonable and consistent speed limits across a variety of road types called USLIMITS.

"This system is unique in that it is based on knowledge derived from experts only in this country," said Raghavan Srinivasan, lead researcher. We hope that it will be used by practitioners as a tool to help them identify the appropriate speed limit for a speed zone."

Through funding from the National Cooperative Highway Safety Research Program (NCHRP), a panel of experts in highway safety and law enforcement gathered to decide upon a set of rules to follow when determining the speed limit on various types of highways, from rural two-lane roads to urban freeways. One of the goals of this system is to help promote consistency nationwide with respect to how speed limits are established, in the same way the MUTCD provides consistency across the country for traffic signs, markings and signals.

This system takes a comprehensive approach by using decision rules derived from expert knowledge for three types of highways: limited access freeways, roadways in undeveloped areas and roadways in developed areas. Prior to identifying an appropriate speed limit, the system takes into account several factors input by the user, including:

- operating speeds
- terrain
- extent of pedestrian/bike and parking activity (in developed areas)
- number of Interchanges (on freeways)
- number of driveways and traffic signals (in developed areas)
- presence of roadside hazards (in undeveloped areas)
- crash statistics and traffic volume

Some types of speed limits are not addressed by this system — statutory limits such as maximum limits established by State legislatures for certain road categories, temporary or part-time speeds limits (work zones, school zones) and variable speed limits that change with traffic, weather and other conditions.

The expert system can be utilized by anyone who has access to a Web browser. Users of the site have access to the user guide, flow charts that illustrate the decision rules and the study report describing the approach used in developing the

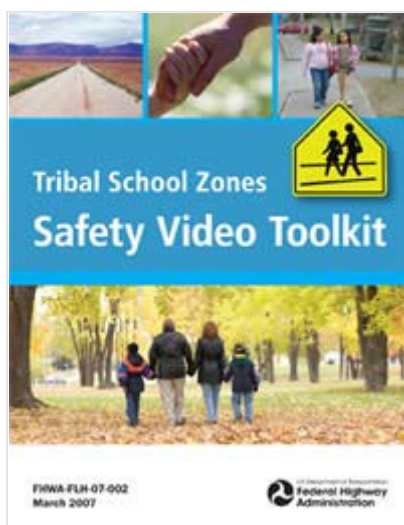
system.

To view the final report, "An Expert System for Recommending Speed Limits in Speed Zones", published in the May 2007 edition of the Research Results Digest 318, please visit [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rrd\\_318.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_318.pdf)

To access the USLIMITS system, or to learn more about the development of the system, please visit [www2.uslimits.org](http://www2.uslimits.org).

## Tribal School Zones Toolkit offered as new pedestrian safety resource

Pedestrian-related fatalities among adults in the American Indian community are significantly higher than those of Caucasians or African Americans — 3.5 times higher. For children, the numbers are even more shocking with the fatality rate being four times that of the overall population.



In response to this alarming trend, the US Department of Transportation Federal Highway Administration (FHWA) teamed with several partners, including HSRC, to create a series of resources to help address these issues among the tribal population.

The first part of the "Tribal School Zones Safety Video Toolkit" includes two videos. The first, "Safety Doesn't Happen By Accident," is an 8-minute video aimed at the 9-12 age group, but may also be appropriate for older and younger children. The video can be shown in the classroom, or at other school or community events. The second, "Pedestrian Safety: A New Tradition," is a 9.5-minute video aimed at the adult population including Tribal/Community Elders, parents, school board members, policy makers and older teens. Both videos aim to bring awareness to pedestrian issues, and individual and community solutions and tips to improve pedestrian safety to all age groups in Tribal communities.

The second part of the toolkit includes a booklet created by HSRC to accompany the 2-part video series. Designed to raise awareness among tribal communities and provide tools and resources to help communities address pedestrian awareness and safety, the 29-page booklet contains educational materials such as pedestrian safety tips for all age groups, promotional tips, and a resource sheet that outlines various organizations and governmental agencies that can provide assistance in addressing pedestrian safety concerns.

The Tribal School Zones Safety Video Toolkit is currently available.

For more information, visit [www.fhwa.dot.gov/flh/safetyvideo.htm](http://www.fhwa.dot.gov/flh/safetyvideo.htm).

## HSRC News Briefs

### HSRC awards annual scholarship

The UNC Highway Safety Research Center awarded its annual scholarship in July to Chava Kronenberg, a graduate student at UNC Chapel Hill studying in the Department of City and Regional Planning, with a concentration in transportation.

The \$1,000 scholarship was available to a full-time graduate student with a career goal emphasis on transportation safety and who will be enrolled in 2007 at any of the 16 University of North Carolina system campuses.

Candidates were evaluated on academic performance, career goals, extracurricular and professional activities, work experience and a 1,000-word essay on a current highway safety issue.

Ms. Kronenberg recently completed a summer internship at Kittelson and Associates, Inc. in their Portland, Oregon, office. She plans to graduate in 2008.

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### 1st Safe Routes to School National Conference in Michigan

The National Center for Safe Routes to School, housed within the UNC Highway Safety Research Center, is proud to present the 1st Safe Routes to School National Conference: Creating, Building and Sustaining Momentum. The conference will be held November 5-7, 2007, in Dearborn, Michigan, and is co-presented with the Safe Routes to School National Partnership and hosted by the Michigan Fitness Foundation.

A number of HSRC staff will be presenting at the Conference on topics such as Safe Routes to School training, establishing Safe Routes to School programs for older children, working with the media for local program exposure and various other themes.

In addition to support for the conference, the National Center for Safe Routes to School will also be providing \$10,000 in stipend funding for representatives of local Safe Routes to School programs who needed travel assistance to attend the conference.

For more information or to register for the conference, please visit [www.saferoutesmichigan.org/nationalconference.htm](http://www.saferoutesmichigan.org/nationalconference.htm).

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### Annual Patricia F. Waller Lecture to take place September 17

The annual Patricia F. Waller Lecture will be held at 4 PM September 17, 2007, at the Sonja Haynes Stone Center for Black Culture and History on the campus of the University of North Carolina at Chapel Hill. A reception follows.

The lecture will feature Dr. Russell T. Jones, a Professor of Psychology at the Virginia Polytechnic Institute and State University. Dr. Jones is a clinical psychologist who specializes in clinical child psychology, community psychology, and issues related to disaster and terrorism. Dr. Jones will be presenting on the psychosocial consequences of Hurricane Katrina.

For more information on the lecture, please contact Karen Demby at the UNC Injury Prevention Research Center at 919-843-3530, or visit [www.iprc.unc.edu/waller.shtml](http://www.iprc.unc.edu/waller.shtml)

The Waller Lecture is an annual lecture in memory of Patricia F. Waller, PhD, an innovative pioneer in injury control and founder of the UNC Injury Prevention Research Center (UNC IPRC). This lecture is sponsored by the UNC IPRC in collaboration with the UNC Highway Safety Research Center and the UNC-CH Department of Psychology.

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