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A researcher at HSRC for over 30 years, Hall has been involved in child passenger safety in NC from the beginning — before laws existed anywhere in the U.S. and before there was an organized effort to protect children from injury related to motor-vehicle crashes.

"Bill has remained incredibly steadfast in his focus to protect children in North Carolina and across the nation," said Forrest Council, former Director of HSRC. "He has stayed with this issue in times where available funding was good and when it was not so good. His successful career is proof positive of his excellent work and his gritty determination."

Recognizing the need for programs and education, he worked closely with colleagues at HSRC and the Governor's Highway Safety Program in the late 1970's and early 80's to help organize the establishment of infant carrier loaner programs through local health departments and local civic groups. He helped to develop and conduct educational programs for a wide variety of groups to place emphasis on the importance of child passenger safety and the need for correct usage of child passenger restraints.

Hall became a key player in the research that would demonstrate the urgency for child passenger safety laws on both the State and Federal level. He played a major role in the 1981 legislation in North Carolina that required the use of child passenger restraints. He became involved with the national organization focused on this issue - the National Child Passenger Safety Association - and served as the organization's president in the late 1980's. He has worked on numerous advisory committees and groups with the National Highway Transportation Safety Administration (NHTSA) and other national organizations.

While remaining dedicated to occupant protection, Hall has also been heavily involved in school transportation safety research and education, as well as a wide range of other projects with his HSRC colleagues ranging from large truck crash analysis to studying the transportation of mobile homes on North Carolina roadways.

Criteria for the Bill Hall Lifetime Achievement Award will be set by the Child Passenger Safety Committee and modeled after the impact Hall's work has had on child passenger safety in North Carolina.

HSRC concludes a nearly decade-long research project in Miami-Dade County

In 2006 there were 4,784 recorded pedestrian fatalities in the United States, representing 11 percent of all U.S. traffic deaths (NHTSA, 2007). In urban areas, pedestrians often comprise 25 percent or more of the traffic deaths.

In October of 1998, the National Highway Traffic Safety Association (NHTSA) sponsored a study aimed at reducing deaths and injuries to pedestrians in large, urban environments. The purpose of this study was to identify and implement a comprehensive countermeasure program that could reduce deaths and injuries among pedestrians by targeting countermeasures toward specific high-crash locations and zones.

With 1700–1800 pedestrian crashes per year, Miami-Dade County, Florida, was chosen as the focal point of the study due to its large number of crashes, the age and ethnic diversity of its population, as well as the willingness of State and county officials to participate in the study and elevate pedestrian safety to a higher priority.

From October 1998 to September 2007, the UNC Highway Safety Research Center, with input from Dunlap and Associates and the Miami-Dade Metropolitan Planning Association, conducted research in the area. Using pedestrian crash data from 1996–2001, four zones were identified within the County as having abnormally high pedestrian crash experiences — Liberty City, Little Haiti, Little Havana and South Beach. Based on locational crash characteristics, as well as pedestrian (age, ethnicity) factors, a total of 16 different types of education, enforcement, and engineering treatments were selected and targeted to reduce pedestrian crashes specifically in the four zones, and also countywide.

A before-after study was used with three separate control groups to evaluate the effects of the comprehensive pedestrian safety program on pedestrian crashes. A three-year "after" period was used (2002–2004). Multivariate intervention auto-regressive integrated moving average (ARIMA) time series analysis was used, along with non-parametric (Mann-Whitney U-tests) to test for statistically significant differences in pedestrian crash experiences.

Results showed that, at the peak of the program effects in 2003 and 2004, the pedestrian safety program reduced countywide pedestrian crash rates by between 8.5 percent and 13.3 percent, depending on which control group was used — that translates to approximately 180 fewer crashes annually in Miami-Dade County, or 360 pedestrian crashes reduced in 2003 and 2004 combined. Countywide, the greatest crash reductions were found among children and adult pedestrians under age 65, likely as a result of the program's intense focus on these groups. After the pedestrian safety program implementation, crashes involving child pedestrians decreased by 32.6 percent in the four targeted zones combined, and decreased by 22.1 percent countywide. Educational and other measures to reduce crashes involving older pedestrians showed no effect.

As program implementation was seen as a success in this project, the project was also successful at institutionalizing a greater emphasis on pedestrian safety in Miami-Dade County. Since the study, the pedestrian safety program has been sustained by full-time personnel, and ongoing and future countermeasure efforts are likely.

A final report on the Miami-Dade study will be released in 2008.

Highway Safety Research Center fulfills research exchange agreement with Dutch organization

As road safety becomes an increasing concern for countries all over the world, the need for information exchange becomes an important method of studying and testing appropriate methods for reducing the number of injuries and fatalities on highways.

Over the past year, HSRC has participated in an information exchange with the Stichting Wetenschappelijk Onderzoek Verkeersveiligheid (SWOV), Institute for Road Safety Research, based in Leidschendam, Netherlands. The two organizations entered an agreement in March 2007 to collaborate on highway safety research, as well as participate in an employee exchange program between the two institutions.

Through the employee exchange program with SWOV, Martine Reuerings, Ph.D., fulfilled a six-week turn with HSRC in mid-April 2007 as a visiting researcher. In response, Laura Sandt, program manager and researcher for HSRC and the Pedestrian & Bicycle Information Center, recently completed a six-week research residency at SWOV in Leidschendam, Netherlands.

"We're now able to have more of a first-hand account of research methods used in other countries and in other institutions," said David Harkey, director of HSRC. "Laura was a perfect candidate for this exchange program. She has demonstrated the ability to be adaptable to new situations, while remaining thorough and detailed in her research. We knew she would embrace the situation and make the most of the opportunity at SWOV."

While at SWOV, Laura reviewed the SUNflower project, which involved the development of an international benchmarking tool for evaluating road safety performance. She studied the project methodology and outcomes and examined relevant U.S. projects related to roadway safety evaluation, data sources and potential partners. This groundwork will hopefully lead to future research to adapt and apply the SUNflower methodology in the U.S. During her stay, she also took several facilities tours to document multi-modal transportation design and operations, and met with officials at SWOV and the Ministry of Transport.

"The exchange program helped familiarize me with the transportation safety research and the planning and policy tools available in the Netherlands and other European countries," said Laura. "To live and travel in the Netherlands enabled me to experience the roadway conditions on a daily basis and better understand how safety knowledge is put to use, what challenges still exist, and how we can assist each other in sharing best practices."

In addition to general research and the employee exchange, the two Centers continue to explore opportunities for collaborative projects to improve road safety in developing countries throughout the world.

HSRC News Briefs

Carolina faculty learn about creating safer and more walkable communities through the *Walk Wise, Drive Smart* program

The most recent Tar Heel Bus Tour included a stop in Hendersonville, North Carolina to introduce faculty to the challenges of an aging community and to learn what can be done to encourage safer and more walkable communities through partnerships such as the *Walk Wise, Drive Smart* program.

Walk Wise, Drive Smart
is a community-based pedestrian safety program working to build community support for and awareness of senior-pedestrian safety issues. Funded by the federal National Highway Traffic Safety Administration (NHTSA), *Walk Wise, Drive Smart* is coordinated by the University of North Carolina Highway Safety Research Center in partnership with the School of Medicine's Center for Aging and Health, the North Carolina Healthy Aging Research Network and the community of Hendersonville.

With more than 31 percent of Hendersonville's population age 65 and above, community and university partners have worked since 2000 to make Hendersonville more accommodating to its older adult population. The latest initiative, *Walk Wise, Drive Smart*, includes educational workshops and a series of walking audits of Hendersonville neighborhoods; gathers extensive community feedback through surveys and interviews; and identifies elements needed to implement a pedestrian safety plan that is responsive to Hendersonville's needs.

Following a discussion of the project with community members and UNC representatives, bus tour participants had the chance to walk a newly opened *Walk Wise, Drive Smart* route.

HSRC adds to current staff

HSRC recently added a new member to its staff. Richard Lytle joined HSRC in April 2008. With an extensive background in programming, Rich serves as a Web Applications Programmer for the Center. In his role, he will be creating and maintaining various Web applications, and will work in the development and maintenance of HSRC's databases.

Prior to joining HSRC, Rich worked for the UNC School of Medicine as the OIS Web and database programmer. He also brought his expertise and knowledge to the UNC Center for Digestive Diseases and Nutrition in a similar role.

Rich has two sons, Edward and Joseph, and enjoys golfing and fishing in his spare time.

State SRTS Coordinators gather for 3rd Annual Meeting

The National Center for Safe Routes to School (NCSRTS), housed at the UNC Highway Safety Research Center, held the 3rd Annual Safe Route to School State Coordinators National Meeting in Minneapolis, MN from May 13 – May 14. Representatives from forty-five states were in attendance at the meeting hosted by NCSRTS and the Federal Highway Administration (FHWA).

The meeting was officially kicked off with opening remarks from City of Minneapolis Mayor R.T. Rybak and Minnesota Department of Transportation Commissioner Tom Sorel. The meeting also included keynote presentations from Tim Torma, Acting Director of the U.S. EPA Smart Growth Program; Dr. Howard Frumkin, Director of the CDC National Center for Environmental Health; and Dr. Arthur Chris Nelson, Director of the Virginia Tech Metropolitan Institute. To view these presentations from the annual meeting, please visit http://www.saferoutesinfo.org/resources/webinars_srts2008.cfm.

State SRTS Coordinators gathered to network and share information about SRTS programs in their states. Coordinators discussed Federal Aid project implementation, school site design, training needs and program sustainability among other topics.
