

SPRING 2012

THE UNIVERSITY OF NORTH CAROLINA
HIGHWAY SAFETY RESEARCH CENTER

DIRECTIONS

35 YEARS OF CPS IN NC

Child Passenger Safety celebrates a
milestone at its 30th conference

Also in this issue:

- Bike to School Day registration opens
- The newest Walk Friendly Communities



Registration now open for inaugural National Bike to School Day

The National Center for Safe Routes to School, in partnership with the League of American Bicyclists, is pleased to be organizing the first-ever National Bike to School Day on May 9, 2012. Let the bike bells ring – event registration is now open at www.walkbiketoschool.org.

“Communities and schools have been holding spring walk and bicycle to school days for years,” said Lauren Marchetti, director of the National Center for Safe Routes to School. “This inaugural celebration not only provides an opportunity for schools across the country to join together to celebrate National Bike to School Day, but also to build off of the energy of National Bike Month.”

Schools, communities and families can join others across the country in this inaugural event and registered events and “resources” will have a chance to win a bike rack. There are several ways to get involved in Bike to School Day:

- **Be a pioneer.** Free event registration is available at www.walkbiketoschool.org for individuals and/or organizations planning a 2012 Bike to School Day event in the United States. Registering an event provides organizers access to a variety of brand new downloadable materials, including stickers, certificates, badges and classroom activities.
- **Be a resource.** Do you have free expertise, time, materials, information, funding or other resources to share? Register as a Resource and help others find you.



WIN A BIKE RACK!

Need an extra incentive to participate in this inaugural event? Registered schools and communities will be entered into the Bike to School Day Bike Rack Giveaway! Each Wednesday beginning April 18, two registrants will be selected to win a Saris bike rack for the school of their choice. A total of 10 bike racks will be given away. The sooner an event coordinator registers, the more chances he or she has to win a bike rack for the school or community. At the end of Bike Month, a registered resource person will win a bike rack for the school of his or her choice.

- **Be a winner...** did we mention you could win a bike rack?

What is Bike to School Day?

The inaugural National Bike to School Day will be the first opportunity for communities across the country to join together to bicycle to school on the same day. The event builds on the excitement surrounding National Bike Month, led by the League of American Bicyclists each May, as well as the popularity of Walk to School Day, coordinated by the

National Center for Safe Routes to School every October.

The National Center is also pleased to launch a newly redesigned website – www.walkbiketoschool.org – to support celebration of Bike to School Day in May, Walk to School Day in October and walking and biking to school every day. The updated website includes new event planning resources as well as a brand-new, GIS-powered mapping tool. Map-a-Route allows users to create and share bicycling or walking routes to school via easy-to-use maps.

National Bike to School Day is an exciting first for both those who are new to the experience and to those who have been celebrating a trip to school on two wheels for years. Stay tuned at www.walkbiketoschool.org/go/whos-biking/2012 to see “Who’s Biking” in 2012. Here’s to a safe and fun – and first ever—National Bike to School Day!

The National Center for Safe Routes to School is housed within HRSC. It serves as the information clearinghouse for the federal Safe Routes to School program. To learn more, visit www.saferoutesinfo.org.



PHOTO BY CAROLINE DICKSON

HSRC staff members who were also present at the first CPS Conference in 1982 pose with Rep. George Miller at the 2012 conference.

35 years of child passenger safety in NC

March marked a milestone for child passenger safety (CPS) across NC and for the UNC Highway Safety Research Center (HSRC). It was the 35th anniversary of the NC CPS program and the 30th anniversary of the first NC CPS Conference, which provides continuing education and networking opportunities to certified child passenger safety advocates and educators.

“Thanks to continued support from the NC Governor’s Highway Safety Program (GHSP) over the past 35 years, and the partnerships we’ve developed among state and local agencies, we’ve been able to make a big impact in child passenger safety across NC,” said Bill Hall, manager of the Occupant Protection Program at HSRC.

ONLINE

To learn more about child passenger safety in North Carolina, as well as see the full list of award winners, go to www.buckleupnc.org.

The 2012 CPS Conference, which was planned and coordinated by HSRC, the NC Child Passenger Safety Training Committee, the NC Department of Insurance Office of State Fire Marshal and the NC Governor’s Highway Safety Program, was attended by more than 320 participants from NC and other states.

Each year the NC CPS Training Committee recognizes advocates, certified CPS technicians and instructors, and programs

for their dedication to the safety of North Carolina’s children.

In addition to annual awards, special awards were presented to the Honorable George Miller, who served in the NC House of Representatives from 1971 to 2000, and Senator William Purcell for their work in passing strong CPS laws in NC. Also, HSRC Director David Harkey presented an award to Becky Wallace, the director of the GHSP, in recognition of GHSP’s support of CPS.

NC’s CPS program is considered by many one of the strongest in the country. This fact is particularly important for HSRC as the Center and several staff have been – and continue to be – involved in the effort since day one.

Recently published study examines role of supervised driving requirements in GDL

In a first-of-its-kind study, researchers at the Center for the Study of Young Drivers (CSYD) found that mandating a specific number of supervised driving hours during the learner stage of Graduated Driver Licensing (GDL) did not have a significant effect on teen crashes. The study, released by the National Highway Traffic Safety Administration (NHTSA) in March 2012, entitled “The Role of Supervised Driving Requirements in a Graduated Driver Licensing Program,” also found that awareness of supervised driving requirements among parents is relatively low. This may help explain why there was no effect of such requirements on young driver crashes.

Most states require learner drivers to complete a certain amount of supervised driving

practice – usually 40 to 50 hours – before they obtain an Intermediate license. Interviews with parents of young drivers and driver licensing bureau employees suggest that the supervised driving practice requirement may not be clearly communicated by licensing officials, as many parents were unaware of the requirement. Even among parents who did know of the requirement, many found it difficult to recall how many hours of supervised driving their teen was required to complete.

“Parents play an indispensable role in helping their children get the large amount of practical driving experience needed to develop the cognitive skills essential to safe driving,” said Rob Foss, director of the CSYD. “The findings of this study suggest that states’ efforts

to convey this point to parents, by requiring a fixed amount of driving, have not produced their intended result.”

A full copy of the report “The Role of Supervised Driving Requirements In a Graduated Driver Licensing Program” is available on the NHTSA website.

The CSYD was established within the UNC Highway Safety Research Center in 2005 to study and improve the safety of young drivers. The Center’s focus is on developing a fundamental understanding of the multitude of factors that contribute to the high crash rate among young drivers. This understanding is essential to the development of effective policies and programs to reduce travel-related deaths and injuries among teens.

New Walk Friendly Communities announced

The Pedestrian and Bicycle Information Center (PBIC) announced in April three new Walk Friendly Communities across the nation and one that elevated its status. This “Walk Friendly” designation means the city or town is being recognized for success in working to improve a wide range of conditions related to walking, including safety, mobility, access and comfort. PBIC recognizes the following four communities for their commitment to improving walkability and pedestrian safety.



To learn more about selection criteria, browse a complete list of all 24 Walk Friendly Communities across the nation, and view information on how to apply for the next round of selections, visit www.walkfriendly.org.

The Pedestrian and Bicycle

Information Center, funded by the U.S. Department of Transportation Federal Highway Administration, is maintained by HSRC in cooperation with the Association of Pedestrian and Bicycle Professionals (APBP). For more information, visit www.pedbikeinfo.org.

HSRC publications and presentations



HSRC Senior Transportation Research Engineer Raghavan Srinivasan, Ph.D., at the 2012 TRB meeting.

HSRC researchers and staff regularly present and publish findings via transportation, safety, research, public health and other trade conferences and venues.

In January, HSRC researchers and staff were among the 11,000 national and international transportation professionals who gathered in Washington, D.C. for the 91st Annual Meeting of the Transportation Research Board (TRB). The 2012 TRB Annual Meeting covered all transportation modes with more than 4,000 presentations in nearly 650 sessions and workshops – including many from HSRC – spotlighting the 2012 theme, “Transportation: Putting Innovation and People to Work.”

- Carter, D. & Srinivasan, R. (2011). *Safety performance functions for North Carolina*, Paper Presented at the NCSITE Annual Meeting, Raleigh, NC.
- Carter, D. (2012). *Recommended protocols for developing crash modification factors*, Presented at the 91st Meeting of the Transportation Research Board, Washington, DC. (Paper #12-6514).
- Foss, R.D. (2012). Unpublished manuscript. *Parent surveys in rural states: Driving age opinions & behaviors. Human Factors Workshop: At what age should teenagers begin to drive: The research evidence*. Presented at the annual meeting of Transportation Research Board.
- Foss, R.D. (2011). *Young driver crashes in the U.S.: Matching a solution to the nature of the problem*. Invited presentation to Young Drivers: The Road Ahead, Tel Aviv, Israel.
- Foss, R.D. (2011). *The myth of binge drinking: Field studies of alcohol use in North America - Adapting roadside survey techniques to other domains*. Invited talk to Ran Naor Foundation Quarterly Researcher Colloquium, Tel Aviv, Israel.
- Foss, R.D., Martell, C.A., Goodwin, A.H., & O'Brien, N.P. (2011). *Measuring changes in teenage driver crash characteristics during the early months of driving*. Washington, DC: AAA Foundation for Traffic Safety. <http://www.aaafoundation.org/pdf/2011MeasuringCharacteristicsOfTeenCrashes.pdf>
- Foss, R.D., Masten, S.V., Goodwin, A.H., & O'Brien, N.P. (2012). *The role of supervised driving requirements in graduated driver licensing programs*. Washington, DC: National Highway Traffic Safety Administration. <http://www.nhtsa.gov/stat-icfiles/nti/pdf/811550.pdf>
- Goodwin, A.H., Foss, R.D., Harrell, S.S., & O'Brien, N.P. (2012). *Distracted driving among newly licensed teen drivers*. Washington, DC: AAA Foundation for Traffic Safety. <http://www.aaafoundation.org/pdf/DistractedDrivingAmongNewlyLicensedTeenDrivers.pdf>
- Goodwin, A.H., O'Brien, N.P., & Foss, R.D. (2012). Effect of North Carolina's restriction on teenage driver cell phone use two years after implementation. *Accident Analysis and Prevention*. In press.
- Gross, F., Lyon, C., Persaud, B., & Srinivasan, R. (2012). *Safety-effectiveness of converting signalized intersections to roundabouts*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper # 12-1658).
- Hauer, E., Bonneson, J. A., Council, F. M., Srinivasan, R., & Bahar, G. (2012). *The value of research about safety effect of actions*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-1099).
- Hauer, E., Bonneson, J.A., Council, F.M., Srinivasan, R., & Zegeer, C. (2012). *Crash modification factors: foundational issues*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-0326).

Continued on next page

HSRC IN THE NEWS

The following is a highlight of recent media articles that include information and research from the HSRC.

Top Teen Driver Distraction? Electronic Devices, Says AAA Study
Family Car Guide, March 27, 2012

AAA report: Teenage girls more likely to use cell phone in car
Delaware Online, March 27, 2012

Study: Girls more likely to text, call while driving
Tampa Tribune, March 27, 2012

States enacting more restrictions on young drivers
Asbury Park Press, March 20, 2012

Graduated driver's licenses: Opinions, policies vary
USA Today, March 16, 2012

New fee is keeping students out of driver's ed
WRAL, March 13, 2012

Declining Driver Ed Enrollment Prompts Safety Concerns, Money Woes
Raleigh Public Record, March 12, 2012

Teen driving deaths up in NC
Asheville Citizen-Times, March 11, 2012

Cells, driving don't mix
The Daily Tar Heel, February 22, 2012

Lawmaker: Skip inspections for new cars
The Charlotte Observer, November 1, 2011

Inconsistency and cheating weaken vehicle inspections
The Charlotte Observer, October 30, 2011

Reading a print version? Find links at www.hsrc.unc.edu.

Hunter, W., Srinivasan, R., & Martell, C.A. (2012). *Evaluation of the Rectangular Rapid Flash Beacon at a Pinellas Trail crossing in St. Petersburg, Florida*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-1637).

Hunter, W., Srinivasan, R., Thomas, L., Martell, C. & Seiderman, C.B. (2011). Evaluation of Shared Lane Markings in Cambridge, Massachusetts. *Transportation Research Record: Journal of Transportation Research Board No. 2247*, 72-80.

Martell, C. (2011). *A PICTURE is worth Alot of PUTs*. Presented at the Southeast SAS Users Group.

Martell, C. A., Lococo, K. H., Staplin, L., & Sifrit, K. J. (March 2012). *Pedal application errors*. (Report No. DOT HS 811 597). Washington, DC: National Highway Traffic Safety Administration.

Richard, K and Srinivasan, R. (2011). Separation of safety effects of multiple improvements by alternate empirical bayes methods, *Transportation Research Record: Journal of Transportation Research Board No. 2236*, 27-40.

Persaud, B., Gross, F., & Srinivasan, R. (2012). *Evaluation of two treatments for reducing crashes related to traffic Signal change intervals*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-4067).

Pullen-Seufert, N. & LaJeunesse, S., (2011). *Addressing older pedestrian injuries in a community context: Assessing change at multiple levels*. Paper presented at the Transportation Research Board: Emerging Issues in Safe and Sustainable Mobility for Older People, Washington, D.C.

Sandt, L., McKeel, D., Beddingfield, E., & McCreedy, M. (2011). *Advancing pedestrian safety in North Carolina: talking the talk and walking the walk*, Presented at the North Carolina – American Planning Association Conference.

Srinivasan, R. (2012). *Effectiveness of engineering treatments at signalized intersections*. Paper presented at NCSITE Annual Meeting, Raleigh, North Carolina.

Srinivasan, R. (2011). *Safety effects of changes in left turn phasing*. Paper presented at the 37th Annual International Forum on Traffic Safety and Highway Information Systems, Charlotte, NC.

Srinivasan, R., Lyon, C., Persaud, B., Baek, J., Gross, F., Smith, S., & Sundstrom, C. (2012). *Crash modification factors for changing left-turn phasing*. Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-2521).

Srinivasan, R., Ullman, G.K., Finley, M., & F. Council (2011). Use of empirical Bayesian methods to estimate crash modification factors For daytime versus nighttime construction zones. *Transportation Research Record: Journal of Transportation Research Board 2241*, 29-38.

Zegeer, C.V., Sundstrom, C.A., Hummer, J.E. Rasdorf, W., & Findley, D.J. *Suggestions on how agencies should apply the Highway Safety Manual to two-lane road curves*. (2012). Paper presented at the 91st Meeting of the Transportation Research Board, Washington, DC (Paper #12-0011).

In remembrance

Our team and the HSRC family is saddened to share news of the passing of a dear friend and long-time colleague Mary Ellen Tucker. Mary Ellen has been an important part of our team for

the last 19 years. Many of you may have worked with her in her role as HSRC librarian and member of the TRB Committee on Library and Information Science for Transportation. Away

from the Center, Mary Ellen was an avid gardener and student of the Japanese martial art, Aikido. We plan to include a full memorial in the next issue of Directions.

HSRC staff changes

HSRC is a great place to work. We are pleased to welcome the following new staff members to the HSRC team:

Caroline Dickson joined HSRC as senior manager of communications, education and outreach in January. She will lead HSRC's internal and external communications, strategic development and education efforts and support individual project communications needs. Previously, Caroline served as the communications and marketing manager for the National Center for Safe Routes to School, which is housed within HSRC, and as a manager for RF|Binder Partners, a strategic communications firm in New York City. Caroline can be reached at dickson@hsrc.unc.edu or (919) 962-5835.

James Gallagher joined HSRC as the Pedestrian and Bicycle Information Center's communications manager in February. He is responsible for managing the marketing and communications needs of the Center, including leading webinars, producing newsletters and press releases, and managing

public service campaigns. Previously, James served as communications manager for the Chapel Hill-based Center from American Support and, prior to that, spent a decade working as a newspaper editor and journalist. James can be reached at james@hsrc.unc.edu or (919) 843-7007.

Patty Harrison joined HSRC as communications coordinator in March and is responsible for a number of communications and outreach initiatives for the Center, including the production of this newsletter. Prior to joining HSRC, Patty worked as a communications specialist for the Florida Dental Association, and as the managing editor of the association's scientific journal. Patty entered the marketing/communications world after several years in broadcast reporting in Great Falls, MT and Tallahassee, FL. Patty can be reached at harrison@hsrc.unc.edu or (919) 843-4859.

Graham Russell began working at HSRC as a graphic designer in January. With Design Services Manager Jonathon Weisenfeld, Graham serves the Center's various print design, web design and multimedia needs. Graham, a

UNC alumnus, previously worked as a designer at The News & Observer and as a freelance writer, editor and web developer. Graham can be reached at russell@hsrc.unc.edu or (919) 962-0167.

Linette Tyson joined HSRC as human resource facilitator and executive assistant in February and is responsible for all aspects of human resources management at the Center and serves as the executive assistant to the Center director. Prior to joining HSRC, Linette was employed as the business services coordinator for the Gene Therapy Center at the University of North Carolina. Linette can be reached at (919) 962-7410 or tyson@hsrc.unc.edu.

Jonathon Weisenfeld joined HSRC in December 2011 as design services manager, overseeing the print and web design activities of the HSRC and its projects. Before joining the HSRC team, Jonathon worked as the creative director for Performance Bicycles and staff designer for Global Knowledge Training. He earned his BFA in Visual Communications from Auburn University. Jonathon can be reached at jonathon@hsrc.unc.edu or (919) 843-1936.

Upcoming HSRC events

HSRC is helping plan or host several events this spring. Take a look and mark your calendars:

BikeAbility

*Saturday, April 21, 9 a.m.-12 p.m.
6850 Millhouse Rd.*

HSRC staff will volunteer at the Chapel Hill BikeAbility event, where children and adults

with special needs and their siblings will learn about safe bike riding techniques that will make the roads safer for everyone. Participants will also try a variety of adaptive bikes. For more information, call (919) 968-2813.



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Managing Editor: Patty Harrison
Graphic Designer: Graham Russell

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