T3S

Are We There Yet?

Summer 2005
Volume 16, Number 2

South Carolina Transportation Technology Transfer Service

In This Issue...

Highway Watch

What is Highway Watch®?

Many of you may be aware of the Highway Watch® Program, but for those of you who are not, we wanted to make you aware of it. Highway Watch® is the highway sector's national safety and security program that uses the skills, experiences, and "road smarts" of America's highway transportation workers to help protect that nation's critical infrastructure and the movement of goods, services, and people. In addition to promoting safety, this program helps transportation professionals learn to be aware of their equipment and workplace to avoid becoming a target for terrorist activity and to avoid having their equipment become weapons of terror.

Administered by the American Trucking Associations (ATA) under a cooperative agreement with the US Department of Homeland Security (DHS), Highway Watch® engages the highway sector's leading organizations to provide safety and security training to hundreds of thousands of transportation workers throughout our country.

Highway Watch® is not a substitute for the existing 9-1-1 system. It is a program that trains participants to use 9-1-1 in life threatening emergencies and to use Highway Watch as a supporting tool in making accurate reports to both 9-1-1 and Highway Watch®.

Program Objectives

To serve this effort, Highway Watch® focuses on the following objectives:

- Prevent commercial cargo from being used as weapons against Americans.
- Protect the Nation's critical infrastructure of bridges, tunnels, and other potential terrorist targets.
- Provide critical security data from highway environments for information sharing analysis.
- Promote important safe driving skills and habits.
- Improve coordination with Federal, State, and local emergency management, public safety, and law enforcement officers.

How Does it Work?

Highway Watch® contains three main components: Training and Recruitment, Information Sharing and Analysis, and Operations Support.

Highway Watch® participants include transportation infrastructure workers, commercial and public truck and bus drivers, and other highway sector professionals such as law enforcement and other expert personnel who will recognize potential security hazards as well as safety hazards on the road. These participants partner with law enforcement to provide additional "eyes and ears" of

(cont. on page 5)

The LTAP Center for South Carolina

Remote Imaging of Culverts and Down-Holes

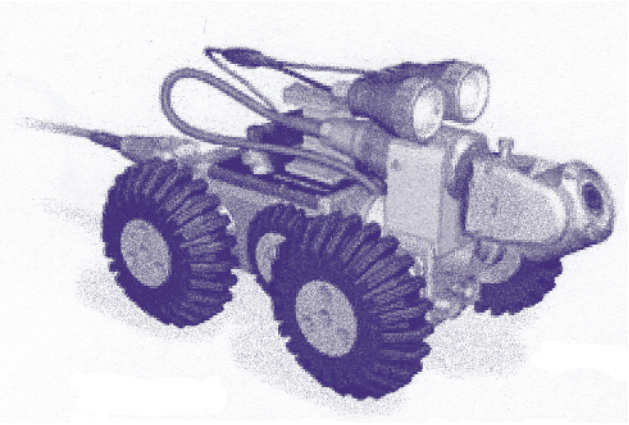
Amit Armstrong, Ph.D., P.E., Technology Deployment Engineer
Bradley J. Roberts, Technology Deployment Systems Coordinator
Western Federal Lands Highway Division, Federal Highway Administration, Vancouver, WA

Why?

During a typical highway design and construction process, the need to assess the condition of existing culverts, cross-drains, and under-drains was the primary reason for acquiring the Rovver® 600 robotic remote imaging tool. This assessment is especially important for the small diameter pipes located under high fills and retaining walls that cannot be inspected manually. Use of this tool has allowed our highway engineers to make "fact based" decisions in either replacing these pipes or accurately identifying the locations for rehabilitation using trenchless technologies. The geotechnical engineers have utilized the down-hole capabilities of this tool for verification of newly installed slope stability measuring devices as well as condition assessments of existing installations. The ability to position the camera into confined, normally inaccessible or unsafe areas allows our construction inspectors to verify structural reinforcement spacing, placing, and clearances for quality assurance and quality control purposes. The ability to push the camera into openings as small as two inches allows for the inspection of most in-place drainage systems and naturally occurring features. During the design process, the data collected once can be shared many times throughout the project life cycle with all of the primary stakeholders.

The Rovver® 600

The Rovver® 600, manufactured by Everest VIT, Inc., is a self-propelled, remotely operated motorized crawler. The versatile and modular component design provides the capability to inspect inside pipes with diameters ranging from 2- to 36-inches. The Rovver can be outfitted with either an axial camera head for down-hole and push pole applications or with a pan and tilt camera head using a fully articulating, manually focused, low-lux lens for larger pipes. Both of these lenses will provide digital video and digital still images. The camera heads can operate independently of the Rovver crawler assembly. Both of these camera heads contain an embedded ring of LEDs around the perimeter of the lens to provide lighting.

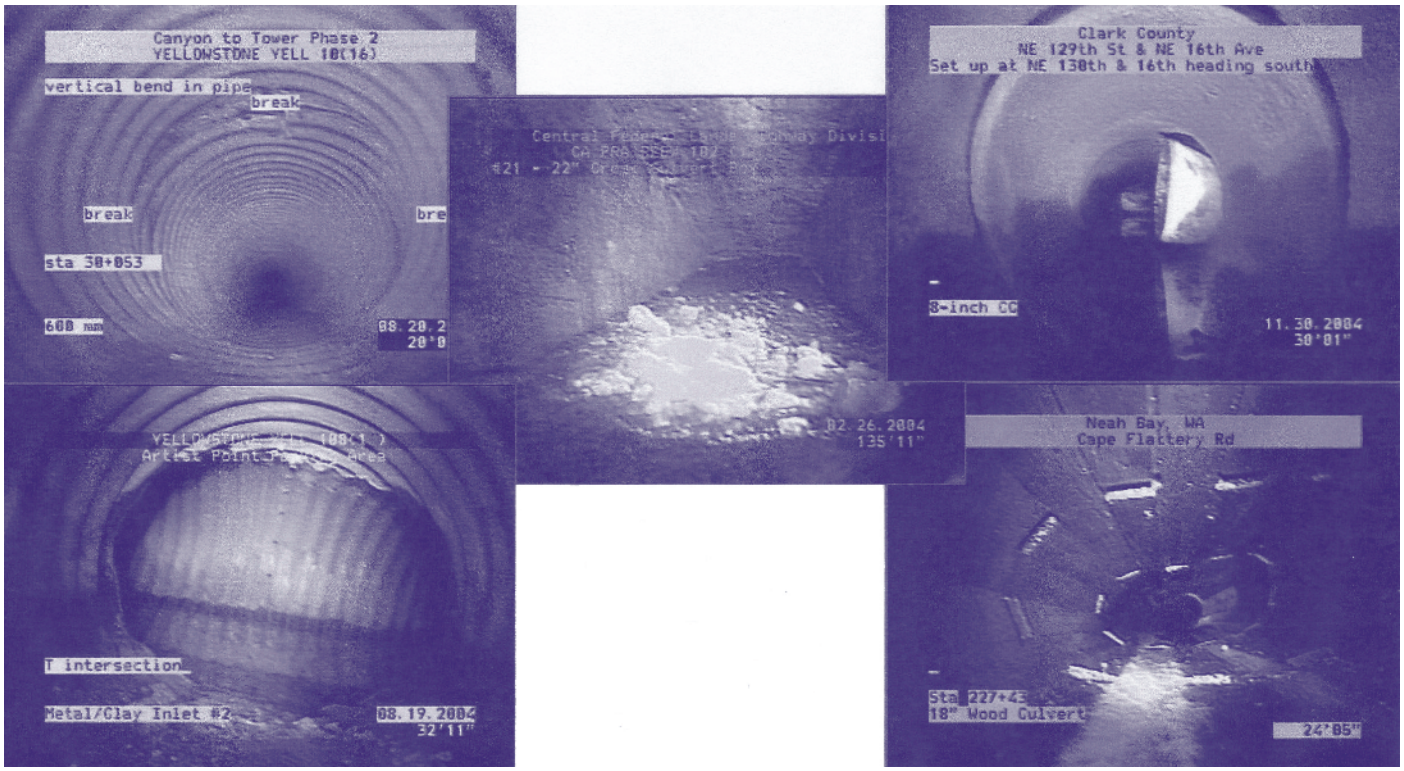


The Rovver Applications

The Rovver was first used to assess the condition of all major poured-in-place box culverts installed by the CCC in the 1930s at Alder Camp Road in Redwood National Park in California. Ryan Tyler, Project Manager of the Federal Highway Administration, realized benefits of using the Rovver: "The ability to actively view the drainage structures on the Alder Camp affords us the ability to make 'fact based' decisions, which significantly mitigated the risk of our decisions. Our clients, the National Park Service, also took part in this effort, which added support and buy-in for the hydraulic recommendations at these sites and strengthened our overall team. Although the use of the Rovver increased PE costs, that amount is minute compared to the potential associated construction costs reflecting unknown conditions of in site structures (as in the case of Alder Camp Road)."

The use of the Rovver tremendously helped the project team in their overall hydraulic analysis and condition assessment of the existing structures in order to accurately determine the appropriate treatment/rehabilitation efforts required. Several box culverts did not require replacement as initially estimated, resulting in significant cost savings.

The Rovver was also used to assess the condition of a 24-inch culvert on the Swamp Creek—East Project located near Libby, Montana. The inlet of the pipe was dry while the outlet was producing a steady stream of water. Richard B. Jackson, Geotechnical Engineer, Montana Department of Transportation was aware that the culvert was being fed by collector pipes that ran parallel to the highway; however, the exact location and number of collector pipes, as well as the overall condition of the entire spring collection system, was not apparent to Montana DOT engineers. After using the Rovver to collect data, Richard Jackson stated: "The information provided by the robotic camera will be invaluable in the design of the roadway embankment and culvert. A decision has to be made as



to whether we extend the existing culvert or build a new culvert and spring collection system. It is estimated that the information obtained by the robotic camera has a 'value added' of up to $100,000. This 'value added' is derived from being able to better design the culvert which will help avoid costly change orders and claims during construction."

In this particular case, the use of the Rovver provided the Montana DOT design staff the condition assessment of the 24-inch culvert and the precise location and number of collector pipes feeding into this culvert.

The Rovver Availability

The Rovver is available for use, free of charge, to any State, County, or City Transportation Department as part of the Technology Deployment Program of Western Federal Lands Highway Division in Vancouver, WA. The Rovver can be requested through your local LTAP/TTAP center or directly through WFLHD (Amit Armstrong, 360-619-7668).

Rovver Specifications

Depth Rating: 1 bar (14.7 psi)–Equivalent to water depth of 10 m (33 ft)
Temperature Rating: 32°-150° Fahrenheit
Power Supply: AC Inverter connection to inspection vehicle battery
Video Format: MiniDV Tapes

Fewer 16-Year-Olds are Getting Involved in Crashes

Insurance Institute for Highway Safety
News Release – February 24, 2005

ARLINGTON, VA — The fatal crash rate for 16-year-old drivers declined sharply after states began enacting graduated licensing laws in the 1990s. Fatal crash involvements based on the population of 16-year-olds fell 26 percent during 1993-2003. This is the main finding of a new Insurance Institute for Highway Safety study.

Licensing of 16-year-old drivers and fatal crash rates involving 16-year-old drivers

	Percentage of 16 year-olds licensed	Fatal crashes per 100,000 population
1993	42	31
1994	42	32
1995	43	35
1996	41	33
1997	43	31
1998	43	29
1999	37	29
2000	37	26
2001	34	24
2002	32	27
2003	31	23

The overall number of 16-year-old drivers in fatal crashes decreased from 1,084 in 1993 to 938 in 2003, while during the same period there was an 18 percent increase in the 16-year-old population.

"This isn't a study of graduated licensing per se. It's a look at the status of 16-year-olds in states both with and without graduated licensing. Still, this study does reveal some very positive effects of the new licensing systems. The main reason for the decline in the crash rate is that fewer beginning drivers are getting their licenses when they turn 16," says Susan Ferguson, Institute senior vice president for research.

While the population-based ratio of fatal crash involvements declined, the 2003 rate based on the number of licensed drivers didn't change compared with the 1993 rate. Seventy-three 16-year-old drivers per 100,000 license holders were in fatal crashes in 1993. This compares with 74 per 100,000 in 2003.

"In time we do expect to see a drop in the fatal crash rates per licensed 16-year-old driver," Ferguson says. "This will happen if more states implement stronger restrictions on night driving and on passengers in cars with beginning drivers. A number of states don't have these policies, and states that do often allow one or more passengers or apply the restrictions during short time periods. These restrictions are expected to have the strongest influence on fatal crashes per licensed driver. In the meantime, studies in several states that have looked at all police-reported crashes, not just fatal ones, have found significant declines per licensed driver."

Teenagers have the highest crash risk of any age group — about four times higher than for older drivers. Teenagers are more likely than older drivers to be in crashes involving driver error and speeding.

"The riskiest time for teens is when they first start driving," Ferguson points out. "The key to the effectiveness of graduated licensing is that it phases in a driver's license over time, keeping teens in the learner phase longer and delaying a full-privilege license until beginners are older, more mature, and more experienced."

An important finding of the new Institute study is that restrictions on 16-year-olds did not simply shift the crash risk to older teens. Crash rates dropped 11 percent for 17 year-olds and 6 percent for 18-19 year-olds.

One of the most dangerous scenarios is when a teenage driver transports other teens and, on a per capita basis, this kind of crash declined 39 percent during 1993-2003. Meanwhile, most other characteristics of 16 year-olds' crashes stayed the same over time.

A full graduated licensing law has three stages. Beginners must remain in each of the first two stages for minimum time periods: supervised learner's period; intermediate license (after the driver's test is passed), limiting unsupervised driving in high–risk situations. A license with full privileges is then available after completing the first two stages. Key elements of the intermediate stage include limits on unsupervised driving at night and transporting teenage passengers. Certification by parents that a learner has driven a minimum number of supervised hours also is important.

"Parents are key to the success of graduated licensing," Ferguson adds. "The laws empower parents to set down

Estimated crash reductions in selected jurisdictions with graduated licensing

	Crash reduction
British Columbia	16%
California	0-28%
Florida	9%
Michigan	29%
North Carolina	23%
Nova Scotia	23-37%
Ohio	23%

Note
The percentage reductions shown for California are based on three studies, two of which found crash reductions of 17 and 28 percent.

their own rules of the road and enforce them. This is especially needed because the laws in many states still aren't strong. They don't all have three stages of a true graduated system, and some laws that do have the stages still don't restrict driving at night or with other teens."

(Cont. from Page 1)
the highway transportation industry by using their professional skills to report conditions or incidents out of the norm in a timely and credible manner.

After completing the Highway Watch® safety and security training, participants receive a unique identifying number that they can use to contact a 24-7-365 Call Center to report highway incidents or conditions. Reports are forwarded to the Sharing and Analysis Center (SAS) where industry analysts can look at all the security reports made across the nation to see if any patterns or similarities develop.

With millions of miles of highways, vast expanses of bridges, tunnels and overpasses, America's highway transportation infrastructure and its highway professionals comprise the backbone of the nation.

Help protect America. Become part of the Highway Watch® team today. Contact highwaywatch@sctrucking.org for more information.

Article printed with permission from the South Carolina Trucking Association.

Intertraffic North America

September 27-29, 2005, Baltimore, MD

Intertraffic North America (INA) is your "one-stop shop" for virtually everything you want to know about the transportation infrastructure market for a remarkably low price. INA combines a major exhibition with a comprehensive conference in one location. The INA exhibition will feature 200 companies promoting the latest products and services for the first time ever in the United Sates.

INA Conference Program:

The INA Conference includes five separate tracks covering Economics and Financial Management; Environmental Regulation and Compliance; Traffic Management and Calming; Traffic and Work Zone Safety; and Transportation Security.

PDH Opportunities:

As an added benefit for attending the INA Conference, anyone interested in obtaining professional development hours (PDH's) can apply for credit for the eligible sessions held during the INA Conference. The conference schedule creates the opportunity to earn up to 13 credit hours in just 2 ½ days—nearly all of the annual PDH requirements for most states.

Endorsements:

INA has been endorsed by the National Association of County Engineers, the International Road Federation, and the National Local Technical Assistant Program Association. INA is being held in partnership with the Federal Highway Administration.

Registration Fees:

The registration fee for the INA Conference is $295.00 for public officials and $395.00 for private companies. Special luncheons featuring keynote speakers are also available for $50.00 each.

You can register on line at www.northamerica.intertraffic.com. Click on "Pre-registration."

Traffic Signal Operation National Report Card: Grade D-

Background

Traffic signals are one of the most familiar symbols of traffic control by the general public. Even the most uninformed traveler recognizes the impact that traffic signals have on travel. In fact, the FHWA 2000 Omnibus survey results showed that improving traffic operations is a significant issue for travelers; when asked what they recommended to improve operations, "improve traffic signal timing" was the second highest response and "checking traffic signals often" was the sixth highest. There is little doubt that signal timing has a greater impact on transportation system efficiency than any other operational measure in the traffic engineering toolkit. Delays experienced in highway travel have been steadily increasing during the past 20 years, and delays at traffic signals contribute an estimated 25 percent to this total. There is little doubt that focusing on traffic signal timing has potentially enormous payoffs for the quality of travel experienced by the U.S. public.

Numerous authors have highlighted the fact that traffic signal timing is one of the most cost-effective actions that can be taken to improve surface transportation in urban areas. Ten years ago, the U.S. General Accounting Office reported, "Properly designed, operated, and maintained traffic control signal systems yield significant benefits along the corridors and road networks on which they are installed. They mitigate congestion and reduce accidents, fuel consumption, air pollutants, and travel times. These benefits are documented in numerous evaluations provided to us [the GAO] by the FHWA, states, cities and other sources. These documents compared before-and-after results when signal systems were installed, expanded, or retimed. For example, the state of Washington recently completed studies quantifying the benefits of upgrading and coordinating signal control equipment and retiming existing signals for six signal systems. These studies showed an annual fuel reduction of 295,500 gallons and annual reduction in vehicle delays of 145,000 vehicle hours."

And yet, necessary staff and funding resources are scarce to adequately operate signals despite the cost effectiveness of improving operation and the interest from travelers.

National Traffic Signal Report Card

Proactive Management	F
Signal Operation in Coordinated Systems	D-
Signal Operation at Individual Intersections	C-
Detection Systems	F
Maintenance	D+
OVERALL	**D-**

Investment Needed

Traffic congestion, frustrated commuters, and polluted air are just three effects that demonstrate the need for changes in how our nation supports the operation of traffic signals. The nation's poor grade shows that not enough money is allocated for traffic signal timing; therefore, local traffic agencies cannot keep up with demand. The nation scored an overall grade of D- according to The National Traffic Signal Report Card, issued April 20, 2005 by a group of transportation associations.

"It's not just about signals turning green, yellow and red," states the Institute of Transportation Engineers Associate Executive Director for Technical Programs, Shelley Row. "Just because the signals change color doesn't mean they are operating efficiently. The problem runs much deeper and can be fixed. With as little as a $4 investment per car each year, or 1 percent of funds spent annually on transportation, agencies can reduce delays—your commute time—and improve their grade to an A."
The group of associations known as the National Transportation Operations Coalition (NTOC) sent out self-assessment surveys last fall to localities across the country. Grading themselves in five areas, 378 agencies in 49 states completed the self assessment and received the composite grades shown in the figure.

Studies around the country show that the benefits of investments in signal timing outweigh the costs by 40:1 or more. Those benefits include:

1) Shorter commute times;
2) Improved air quality;
3) Better fuel efficiency; and
4) Decrease in driver frustration.

NTOC is calling for more support for traffic signal timing, including funding, staff, and attention from public leaders. Coalition members are asking citizens to demand more from their local elected officials in this area.

We depend on these signals to get us to our destination, not put the brakes on our progress," states Gordon Thrall,

(Continued on page 7)

Workzone Safety Facts and Statistics

1 Work zone activity is signifiicant

About 20 percent of the National Highway System (NHS) is under construction during the peak summer road work season. (1)

2 Work zones cause delay

Work zones are estimated to account for nearly 24 percent of non-recurring delay. Fifty percent of all highway congestion is attributed to non-recurring conditions, such as traffic incidents, weather, and special events.

3 There are more work zones in the summer

The total number of highway work zones in the summer is estimated to be more than 6,400 with a corresponding loss of capacity of 6, 157 lanes. Work zones in the winter are about one-half of those in the summer. (1)

4 Motorists are growing more frustrated

The American public cited work zones as second only to poor traffic flow in causing dissatisfaction (2000 traveler survey).

5 Vehicle miles of travel grew at a greater rate than miles of roadway

Between 1982 and 2002, vehicle miles traveled increased by 79 percent while highway lane miles only increased 3.0 percent during the same period.

6 More work is being done on existing roads already carrying heavy traffic

The share of capital funds used for system preservation rose from 47.6 percent in 1997 to 52.0 percent in 2000.

7 Night work is increasing as agencies try to manage work zone delay

A review of project information available on selected states' Web sites showed that approximately 53 percent of work zones are designated as day work, 22 percent as night work, and 18 percent are active all day or nearly all day (18 or more hours). (1)

8 Work zone mobility and safety are linked

As congestion builds in and approaching work zones, crash rates increase.

- The most frequent type of crashes in work zones are rear-end crashes.
- In 2003, 1,028 fatalities resulted from motor vehicle crashes in work zones.
- More than 41,000 people were injured in 2003 as a result of motor vehicle crashes in work zones.

[Fatal crashes and fatalities - Fatality Analysis Reporting System (FARS); Injuries - General Estimates System (GES)]

9 Work Zone Crash/Accident Data

The National Work Zone Safety Information Clearinghouse has created a new section on its Web site that centralizes work zone crash/accident data and information (http://wzsafety.tamu.edu/crash_data).

(1) A Snapshot of Work Zone Activity Reported on State Road Closure and Construction Web sites, Summer 2002 draft, December 2002, by Karl Wunderlich and Dawn Hardesty, Mitretek

Statistics compiled by the Federal Highway Administration on its Web site January 17, 2005.

(Continued from page 6)

Vice President of Sales and Marketing, Guernsey Office Products Inc., a Chantilly, VA based office product company with 150 employees and $40 million in gross annual sales whose success relies heavily on well-timed traffic signals.
A full copy of the National Traffic Signal Report card can be found at www.ite.org/reportcard/.

Safety Zone

For the past two years we have included valuable information concerning your occupational health in the Safety-Zone section of our newsletter. We will continue to focus on work safety issues, but also want to introduce some general health topics to you as well. We are concerned with your well being on and off the job site. One of this issue's featured articles is "Fiber Cuts Heart Attack Risk." This information is provided by the Centers for Disease Control and Prevention www.cdc.gov/. Please visit this Web site often for general health and safety tips and general disease prevention information.

FHWA Launches Updated Safety Site

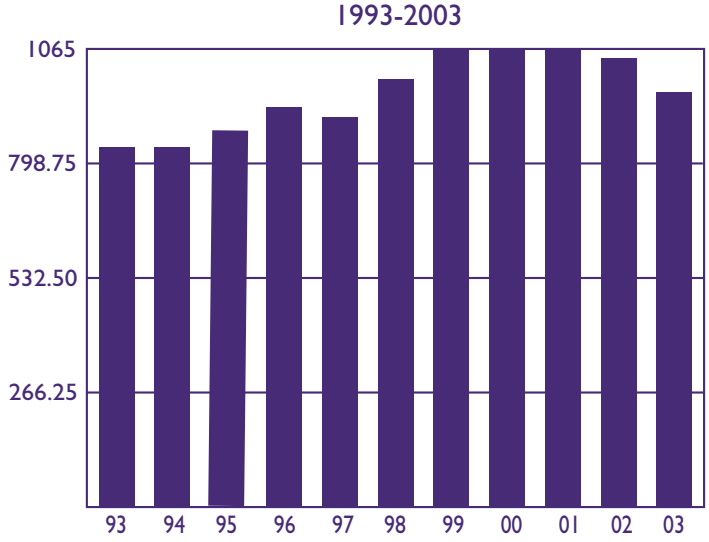
The FHWA safety program works with partners throughout the transportation community to save lives on America's highways. To better serve this community, the FHWA has redesigned the Safety Web site (http://safety.fhwa.dot.gov) and launched this updated version as of late December 2004. The new site emphasizes FHWA safety focus areas of roadway departure crashes, intersection fatalities, pedestrian safety, and a comprehensive approach to safety. Through streamlined access to resources; our goal is to improve support to states, locals, and others involved in highway safety.

State Traffic Safety Information (STSI) Web site

STSI is a by-state profile of traffic safety data and information including: crash statistics, economic costs, legislation status, funding programs, et al. Data can be found at the National Highway Traffic Safety Website at www.nhtsa,dot.gov/stsi/. Statistics for South Carolina are below and on the following page.

Total Traffic Fatalities

1993-2003



Health Zone

Fiber Cuts Heart Attack Risk

High levels of C-reactive protein, or CRP, are thought to be associated with a higher risk of heart attack. One way to reduce your CRP levels, according to the Centers for Disease Control and Prevention, is to eat lots of foods high in total fiber (soluble and insoluble combined). Here are the top 10 fibers the center recommended:

- Bran cereals
- Beans and lentils
- Artichokes
- Bulger
- Cooked spinach
- Raspberries
- Mixed vegetables
- Dried plums
- Green peas
- Wheat spaghetti

2003	South Carolina	US	Best State
Fatalities	968	42, 643	
Fatality Rate per 100M VMT	2.01	1.48	.83
Fatality Rate per 100K Population	23.34	14.66	7.18

2000 Economic Cost of Motor Vehicle Traffic Crashes	
South Carolina	$ 3.335 Billion
US Total	$230.568 Billion

	Fatalities in Alcohol-Related Crashes, 2003			Passenger Vehicle Occupant Restraint Use Rates, 2003	
	Percentage ≥ 0.01 BAC	Percentage ≥ 0.08 BAC	Rate per 100 million VMT	Fatally Injured Occupants (Known Use Only)	Observed Use
South Carolina	50%	44%	1.01	32.2%	73%
US Total	40%	34%	.59	43.2%	79%
Best State	15%	12%	.19	63.2%	95%

Hardhat Exemption Program

If you are one of those hard-headed individuals that wants to let your hair blow in the breeze, who feels a hardhat shortens his/her neck, and that in general, it is just a pain in the you-know-what, this program is for you.

Every employee is required to wear a hardhat on the job. But, if you earn a certificate of exemption, you will be excused from this requirement. The program works like this: if your head meets the standards for head protection, you don't need a hardhat. Contact the company safety department to be scheduled for the testing at the earliest possible date. Upon successful completion of testing, you will receive a beautiful embossed certificate, suitable for framing, identifying your head as conforming to American National Standards Institute requirements (ANSI Z89.1 and Z89.2 classes A, B, C and D). You will also receive a wallet sized card that you must carry at all times. The tests include the following:

You will undergo a 24-hour water immersion test. A maximum of permitted absorption is 0.5% by weight. Air will be provided for the 24 hours at no charge.

Next, an impact test will be conducted. While lying horizontally, with your head resting on a steel plate, an 8-lb. steel ball will be dropped on it several times from a height of 5 feet. If your head is not damaged, you pass.

Next, your head will be subjected to the application of a variety of acids, solvents, oils, and industrial gasses. It must pass with no damage or deficiencies.

A propane torch will be used to determine if your head is fire resistant. If slow burning, you may only achieve a Class A or B rating. If there are any holes in your head, it will restrict you from a Class A rating.

On the final test, you must sustain 2200 volts AC, 60 Hz, for three minutes with leakage currents not exceeding 9 milli-amperes. Breakdown threshold has been established at 30,000 volts.

All tests must be conducted at a variety of temperatures ranging from -20 degrees to 140 degrees Fahrenheit.

If you don't feel you can qualify, don't despair. Although not as pretty as your hairdo, your hardhat does provide protection for your head from all the above. Remember that unless you receive an exemption certificate, you must continue wearing your hardhat. Not wearing one is a privilege that will be granted only to those with proper certification and designated as genuine *hard heads*.

www.toolboxtopics.com

South Carolina Fatality Memorial Web Site

by Sherry Iacobelli
SC Highway Patrol, Blythewood, SC

Editor's Note: Anytime you travel any road in South Carolina, you will see sites where fatal accidents have occurred. These sites are marked with a variety of objects such as flowers, crosses, angels, pictures, flags, etc. I have often thought that there had to be a better way to honor those who have lost their lives so tragically. I was totally unaware that South Carolina had a fatality memorial Web site until I saw an article referencing it in a publication we received from Montana. After looking at the Web site, I contacted Sherry Iacobelli with the SC Highway Patrol and asked permission to use the information for our newsletter. The Web site, located at www.schp.org/inmemoryof, is a very special way to honor those who have died on our highways.

Information About the Web Site

The idea for the Highway Patrol Fatality Memorial site came from the mother of a teen who was killed in a tragic single-vehicle crash in September 2003. Lisa Radvansky —whose son, Chad, is shown on the site—came to Highway Patrol Headquarters to talk with us. She had lost her 17-year-old son just one week earlier. She was searching for answers and looking for a way to prevent future tragedies such as the one involving her son. As far as she knew, Chad had always worn his seat belt, but on the night of his crash, he was unbuckled. He was headed back to school at Coastal Carolina where he was a freshman. He lost control on a rural highway in Marion County and was ejected from his vehicle and killed.

After meeting with Mrs. Radvansky, we knew there were thousands more stories just like hers waiting to be told. An average of 1,000 people are killed on South Carolina highways each year. This leaves an untold number of family members and friends grieving for many years to come. The Highway Patrol wanted to offer those families a forum and an outlet to share their stories and their grief as a way to heal. SCHP also hoped the site would serve as a safety message to others, ultimately changing driving behavior.

We began work on the South Carolina Fatality Memorial site in late 2003. The Colonel of the Highway Patrol sends a sympathy card to the family of every fatality victim from collisions we investigate. In that card, he includes the Web site address and invites families to participate by posting a memorial.

The South Carolina Highway Patrol was the first state to create a Web site such as this. Since that time, several states have called to inquire about the site and have created their own based on the South Carolina site.

The memorial site is only one avenue being used by the Highway Patrol to connect with victims' families. The Highway Patrol in 2004 created a highway safety curriculum – eight DVD multimedia presentations geared toward various audiences. These DVD presentations cover various laws such as occupant restraint and DUI, and several of the presentations include graphic photographs from actual South Carolina collisions as well as testimonials from families who have lost loved ones in collisions on our highways. One of the presentations includes the photographs from the fatality memorial site.

Several of the families whose stories are featured on the web site have also partnered with the Highway Patrol to speak at news conferences and in other public forums using their personal story to promote safety issues.

"Every family who loses someone on our highways has a powerful story to share about their loss, the long-term effects and how the tragedy could have been prevented," said Highway Patrol Colonel Russell F. Roark. "I believe it has been cathartic and healing for the families to be involved with our safety efforts and it has been a great help to us. We are continuing to look for ways to reach out and partner to improve safety on our highways."

There are some guidelines for posting on the site. The posting on the site must come from a family member to ensure privacy. Family members are strongly encouraged to steer away from talking about the legalities of the incident or naming the driver who was responsible for their family member's death. The site is to be used as a way to memorialize the person who died. All entries are subject to editing for content; however, the Highway Patrol strives to leave the entries largely as they are submitted by the family member so the story is in their own words. Additionally, a person who lost a family member many years ago may use this forum. We have contributions as far back as 1980.

A person wishing to contribute may do so by logging on to http://www.schp.org/inmemoryof/ and submitting on-line. An individual may also print the form on the Web site, complete and send to SCHP via mail:

Fatality Memorial Web site
ATTN: Sherri Iacobelli
SC Highway Patrol
P.O. Box 1993,
Blythewood, SC 29016.

Anyone with questions about the site may contact Sherri Iacobelli in the Highway Patrol Community Relations Office at 803-896-8747.

Publications and Videos

Publications

- ☐ NCHRP Synthesis 342, Chip Seal Best Practices—TRB,
  Available on line at http://trb.org/publications/nchrp/nchrp_syn_342.pdf
- ☐ NCHRP Synthesis 341, Integrated Roadside Vegetation Management—TRB,
  Available on line at http://gulliver.trb.org/publications/nchrp/nchrp_syn_341.pdf
- ☐ NCHRP Synthesis 327, Cost-Effective Practices for Off-System and Local Interest Bridges—TRB
  Available on line at http://trb.org/publications/nchrp/nchrp_syn_327.pdf
- ☐ NCHRP Synthesis 336, Road Safety Audits—TRB
  Available on lie at http://trb.org/publications/nchrp/nchrp_syn_336.pdf
- ☐ Intelligent Transportation Systems in Work Zones—FHWA-OP-04-072,
  Available on line at http://ops.fhwa.dot.gov/wz/technologies/albuquerque/its_albuquerque.pdf
- ☐ Prefabricated Bridges Deliver Quality, Safety and Savings, FHWA, *Focus Magazine*

CD-ROM

- ☐ *Endangered Species Act Build Smart*, An interactive explanation of the key elements of the Endangered Species Act (ESA) as it relates to highway construction activities—FHWA of Federal Lands Highway

Videos

- ☐ *Groundskeeping Safety: Dealing with Bugs and Critters*— Source: Coastal, Length: 16 Mins, This videos helps the grounds keeping and facility personnel to recognize and avoid potentially dangerous critters by using caution, personal protective equipments, keeping an eye and by protecting their skin. The video also demonstrates certain basic first-aids for bites and stings.

- ☐ *Working Outdoors: Mosquitoes and Ticks*—Source: Coastal, Length: 15 Mins, This Video helps you to be more aware of bugs. It lets you know where potentially dangerous bugs live, when they tend to be more active, what diseases they carry, what are the symptoms of those diseases and most important how to protect yourself.

- ☐ *Heat Stress: Don't Lose Your Cool*— Source: Coastal, Length: 14 Mins, This video explains the various heat stress disorders which includes sunburn, heat cramps, heat exhaustion, heat stroke, their symptoms and the first aid methods

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Information Request and Address Change Form

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