



FHWA Urges Road Agencies to Consider "Top Nine" Life-Saving Strategies

The FHWA Safety Program urges State and local roadway officials to consider implementation of nine safety countermeasures that show great potential to reduce highway fatalities and injuries. As State highway agencies develop plans to address the safety challenges identified in their strategic highway safety plans, they are urged to consider the benefits of investments in these proven roadway safety tools and techniques.

Road Safety Audits – A road safety audit (RSA) is a formal safety performance examination of an existing or future road or intersection. Audit teams are independent and multidisciplinary. The team reports on potential road safety issues and identifies opportunities to improve safety for all road users.

Rumble Strips and Rumble Stripes – Rumble strips are raised or grooved patterns on the roadway that provide both an audible warning (rumbling sound) and a physical vibration to alert drivers that they are leaving the driving lane. They may be installed on the roadway shoulder or on the centerline of undivided highways. Rumble stripes are rumble strips that are placed at the centerline or edgeline.

Median Barriers – Median barriers are longitudinal barriers used to separate opposing traffic on a divided highway. They are designed to redirect vehicles striking either side of the barrier. Median barriers can significantly reduce the number of cross-median crashes and the overall severity of median-related crashes.

Safety Edge – The Safety Edge asphalt paving technique minimizes vertical drop-off safety hazards. A Safety Edge shape is created by fitting resurfacing equipment with a device that extrudes and compacts the shape of the pavement edge at a specific angle as the paver passes. This mitigates shoulder pavement edge drop-offs immediately during the construction process and over the life of the pavement. Because the technique involves only a slight modification of paving equipment, it has a minimal impact on project cost. Improved compaction of the pavement near the edge is an additional benefit of the Safety Edge.

Roundabouts – A roundabout is a circular intersection where entering traffic yields to vehicles on the circulatory roadway. Roundabouts are designed to channel traffic at the entrance and provide collision deflection around a center island. Modern roundabouts are geometrically designed to reduce speeds and deflect collision forces, which substantially improves safety, while providing excellent operational performance at the intersection.

Left- and Right-Turn Lane at Stop-Controlled Intersections – Left-turn lanes are auxiliary lanes for storage or speed change of left-turning vehicles. Left-turn lanes reduce the likelihood of intersection crashes. They also make turning easier for drivers and improve the intersection's operational efficiency. Right-turn lanes provide a separation at intersection approaches between right-turning traffic and adjacent through-traffic. This reduces conflicts and improves intersection safety.

Yellow Change Intervals – Yellow signal lights that are not timed appropriately are a safety hazard. Yellow change intervals that are not consistent with normal operating speeds create a "dilemma zone" in which drivers can neither stop safely, nor reach the intersection before the signal turns red.



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Medians and Pedestrian Refuge Areas in Urban and Suburban Areas – Medians reduce traffic conflicts and increase safety by providing a buffer area between opposing lanes of traffic. Medians can be open (pavement markings only), or channelized (raised medians or islands) to separate various road users. Pedestrian Refuge Areas—also known as crossing islands, center islands, refuge islands, pedestrian islands, or median slow points—are raised islands placed in the street to separate crossing pedestrians from vehicles.

Walkways – Appropriately designed walkways increase safety for all road users. Types of walkways include:

- Pedestrian Walkway (Walkway) – A continuous way designated for pedestrians and separated from motor vehicle traffic by a space or barrier.
- Shared Use Path – A bikeway or pedestrian walkway physically separated from motor vehicle traffic by an open space or barrier, either within a highway right-of-way, or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Shared use paths also are referred to as “trails” or “multiple-use trails.”
- Sidewalks – Walkways that are paved and separated from the street, generally by curb and gutter.
- Roadway Shoulder – In rural or suburban areas where sidewalks and pathways are not feasible, gravel or paved highway shoulders provide a safer area for pedestrians to walk next to the roadway.

For More Information: <http://safety.fhwa.dot.gov/policy/memo071008/> or <http://safety.fhwa.dot.gov>

or contact:

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On the Web

FHWA Information

Safety Evaluation of Offset Improvements for Left-Turn Lanes

FHWA Publication No: FHWA-HRT- 09-036

<http://www.tfhr.gov/safety/pubs/09036/index.htm>

Safety Evaluation of Advance Street Name Signs

FHWA Publication No.: FHWA-HRT-09-030

<http://www.tfhr.gov/safety/pubs/09030/index.htm>



APWA Information

For information about APWA-NC: <http://northcarolina.apwa.net/>

For information about national APWA: <http://www.apwa.net/>

For information about Professional Development and Click, Listen and Learn schedule: <http://www.apwa.net/Education/>

What's Wrong with this Picture? . . . Turn to page 6 to see the answer.



Art or Vandalism?

<http://www.msnbc.msn.com/id/31395158>

<http://www.newsobserver.com/news/story/1615531.html>

<http://www.youtube.com/watch?v=deXs0VbmoXE>

Bevin Elliott – Heavy Equipment Operator Safety Training Expert – Retires

Bevin Elliott has been using his vacation time from NCDOT to teach heavy equipment operator safety training for North Carolina LTAP and Florida LTAP for many years.

Bevin has decided to retire. His last working day will be October 30, 2009. In December he will move back South Africa to be near his family. He will divide his time between his daughter in Cape Town and his son in Durban.



NC LTAP will miss Bevin- his expert knowledge, his excellent teaching skills, his sincerity and good manners, and his wonderful sense of humor.

We wish him the best of luck and many happy days.

Registration Form: North Carolina Local Technical Assistance Program Summer 2009 Workshops

Register By Mail: Fill out a copy of this form and mail with a check payable to **NC State University**
Attention: Bill Woods
ITRE/NC State, Campus Box 8601
Raleigh NC 27695-8601

By Fax: 919-515-8897

By Email: bill_woods@ncsu.edu

Online: www.itre.ncsu.edu/itremain/education/training_list.html#LTAP

Sign me up for the following courses:

Course descriptions available on website. Also check website for additional training dates.

*NC LTAP on the Road
so you can stay home!*

NC LTAP can come to you. With budgets getting tighter, it is often easier and less expensive for our instructors to bring training to your city or town.



If you are interested in hosting a training session in your area, please let us know. We ask that you provide a classroom for 30 and that you register at least 10 people. We will bring the instructor, materials and snacks.

Sign Up	Date - 2009	Course Title	Cost	RS/ARS	Location
	August 10-11	Road Safety Audits for Local Govt Workshop	99.00		Raleigh
	August 25-26	Flagger Instructor Training	125.00	ARS	Raleigh
	September 14	Flagger training (1/2 day - starts at Noon)	69.00	RS	Elizabeth City
	September 15	Basic Work Zone Safety Training	99.00	RS	Elizabeth City
	September 16-17	OSHA 10-Hour Safety Training	150.00	ARS	Raleigh
	September 16	Intermediate Work Zone Safety Training	99.00	RS	Elizabeth City
	September 17	Advanced Work Zone Safety Training	125.00	ARS	Elizabeth City
	October 2	Asphalt Roller Operator Safety Training	125.00		Raleigh
	October 9	Motorgrader Operator Safety Training	125.00		Raleigh
	October 16	Construction Mathematics Transportation Personnel	99.00	RS	Kings Mountain
	October 22	Writing Skills for Transportation Personnel	99.00	ARS	Raleigh
	October 23	Backhoe Operator Safety Training	125.00		Raleigh
	November 10	Basic Drainage/ Roadway Drainage Maintenance	99.00	RS	Raleigh
	November 12	Managmt and Supervisory First Time Managers	99.00	RS	Raleigh
	November 13	Managmt and Supervisory Experienced Managers	99.00	ARS	Raleigh
	November 16	Excavation Safety	125.00	RS	Raleigh
	November 17	Asphalt Pavement Maintenance	99.99	RS	Raleigh
	November 18	Soils Fundamentals	99.00	RS	Raleigh
	November 19	Maintenance and Repair of Utility Cuts (1/2 day)	69.00	RS	Raleigh
	December 1	Basic Work Zone Safety Training	99.00	RS	Raleigh
	December 2	Intermediate Work Zone Safety Training	99.00	RS	Raleigh
	December 3	Advanced Work Zone Safety Training	99.00	ARS	Raleigh
	December 4	Flagger Training	69.00	RS	Raleigh
	December 8-9	Flagger Instructor Training	125.00	ARS	Raleigh
	December 10	Confined Space Entry and Lockout/Tagout	125.00	ARS	Raleigh

Tuition must be paid in full before the first day of class. Confirmation letters with class detail will be **emailed** 2 weeks prior to the class. Dress is casual.

Name:	Title:		
Agency:			
City:	State:	Zip:	
Phone:	Fax:		
Email:			
Supervisor's Name:			
Confirmation email should be sent to:			

About the NC Chapter of APWA

The NC Chapter of APWA is all about educational and networking opportunities for its members. The NC Chapter has 7 divisions that provide training specific to an individual's particular interests and needs. They also provide the opportunity to meet your peers from other municipalities in a particular discipline. The 7 divisions are listed below:

- Administrative Management
- Buildings & Grounds
- Equipment Services
- Solid Waste
- Streets
- Technology (formed in 2008)
- Water Resources

Each division has an annual conference and some divisions (like Equipment Services) also provide specific training at different times of the year. In addition, the NC Chapter has an annual conference in June of each year. The conferences vary in size from as small as about 40 people for the new Technology Division to close to 200 attendees for the larger divisions. Vendors of various products and services are exhibitors at these events to allow you to see what's available in the marketplace. With nearly 800 members from public and private sector organizations across the state, a tremendous amount of institutional knowledge and experience is available to be tapped through networking.

I encourage you to browse the website to look at upcoming and past events. This will give you a sense of the opportunities that are available through APWA.

Please feel free to contact me with any questions or if you need additional information.

Bob Wilson, P.E.
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1043 E. Morehead Street, Suite 203
Charlotte, NC 28204
704-342-3007
704-342-1666 (fax)

For information about NC APWA events: <http://northcarolina.apwa.net/>

Coming in January 2010

Introduction to Construction Inspection in Public Works Sponsored by APWA-NC and ITRE

(18 PDH credits)

January 25-27, 2010

Raleigh, NC

Sponsored by APWA-NC and ITRE

Get the Picture!

by Timothy B. Baughman, PE

ITRE's Highway Operations and Safety Manager

I am sure you will worry about a couple of things. The STOP/SLOW paddle is stuck in a cone. Is the paddle mounted at the correct height? The flagger is standing in the road. Is he wearing a class 2 vest? His back is to traffic. With all of these concerns, what will happen to him if a driver doesn't make the swerve to pass him? What will happen to him if a driver is not paying attention and distracted while on the phone, messing with a GPS, text-messaging, reading a book, grooming, or eating and drinking?

Since we know motorists are doing everything but driving, my next concern is to worry about this guy's escape route. If something does happen, where does he go with his pick-up parked right next to him? If you've met me in one of my workshops, I hope you remember when I've asked you – no, begged you – please do NOT trust me! Please, do not turn your back on me! I'm trying to be a good driver for you and look out for my friends working on our roads. Unfortunately, we are all human and I am going to make my share of mistakes.

So, again, please don't trust me. Don't put your life in the driver's hands. Someone suggested that as you are flagging, imagine that the driver coming at you woke up this morning with the intent of looking for you in order to kill you. Imagine that the driver has been hunting you down to take you out. Watch all drivers, and fear all drivers. Have an escape plan so that if something does happen, it will hopefully be a quick move in order for you to jump out of their way.

If you have any questions or comments about worker safety and work zone traffic control, give me a call at (919) 515-8654, or e-mail me at tbb@unity.ncsu.edu.

Congratulations to James Martin, NC LTAP Director

At the National LTAP Conference in Pittsburg, Pennsylvania, in July 2009, James Martin, NC LTAP Director, was elected Vice President for NLTAPA.

The National Local Technical Assistance Program Association (NLTAPA) is a not-for-profit organization representing and serving the 58 LTAP and TTAP Member-Centers in the United States and Puerto Rico.

The Association's main objectives are to build awareness about LTAP in the transportation community, assist FHWA with developing strategies for the Program, and build the capacity of each Center to best meet the needs of its customers.



To update your mail information, add a colleague to the database
or obtain information about the Roads Scholar Program, Fax this sheet to 919-515-8897.

Your Name: _____

Company/Organization: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Fax: _____

email: _____

Check Appropriate items:

- Add/update to the Transportation Tracks mailing list
- Send information about Roads Scholar program
- Send schedule of Training opportunities

I would like to borrow (check box below):



	Guide to Promoting Bicycling on Federal Lands FHWA-CFL/TD-08-007 September 2008	Book (198 pages)
	Ground –Based LiDAR Rock Slope Mapping and Assessment FHWA-CFL/TD-08-006 September 2008	Book (103 pages)
	Operators Pre-Start Motor Grader Inspection – Safety and Maintaining Equipment Texas Engineering Extension March 2009	DVD and Video
	Roadway Safety + Training Program – includes multiple languages, interactive modules on temporary traffic control design, training on night work, information on preventing runovers and backovers. (Version 9) Also available online at www.workzonesafety.org	CD

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2009 NC LTAP Advisory Board

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Walt Morgan - Village of Pinehurst

Eric Keravuori, Town of Wake Forest

Joe Geigle - Federal Highway Administration

LTAP Websites

National LTAP website:
www.ltap2.org

NC LTAP website:
www.itre.ncsu.edu/LTAP

NC LTAP Training Registration Website:
www.itre.ncsu.edu/ltap/education/indexEd.asp



Publication Statement

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James B. Martin, P.E., Director; Linda Collier, Assistant Director and Newsletter Editor; and Bill Woods, Program Assistant.

To be added to the mailing list or to submit articles for the newsletter, contact the center at ITRE: NCSU Centennial Campus, Box 8601, Raleigh, NC, 27695-8601. Phone: (919) 515-8899. Fax: (919) 515-8897. Web site: www.itre.ncsu.edu/ltap. Address correction requested. Any opinions, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the findings, policies, or procedures of ITRE, NCSU, NCDOT, or FHWA.



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