

t r a n s p o r t a t i o n
TRACKS
 Technology Transfer Newsletter

Published by the Local Technical Assistance Program (LTAP)
 At the Institute for Transportation Research and Education, North Carolina State University

FALL 2015



Congratulations 2015 Advanced Roads Scholars!

Advanced Roads Scholars must already be an NC Roads Scholar and complete eight of the fourteen Advanced Roads Scholar Training sessions. In addition, each Advanced Roads Scholar must submit a one page paper called the Advanced Roads Scholar Review. This paper reflects their experiences in the program and contains references to at least three of the specific courses in which they participated. The 2015 Advanced Roads Scholars are listed below.

Charles Brown
 City of Durham

John Patterson, Jr.
 City of Elizabeth City

Olin Deaton
 City of Monroe

Robert Gordon
 City of Durham

John Gunter
 City of Greensboro

Frankie Cameron
 City of Wilson

Dwight Murphy
 City of Durham

Bobby Lee Hoxit Jr.
 Town of Matthews

Advanced Roads Scholar Reviews . . .

Each Advanced Roads Scholar candidate must write a summary of their experiences in the program-what they liked, what did not work for them in the program! We also ask that they tell us what impact the program had on their career, family and community! We hope you enjoy reading the summaries from the 2015 graduates. Congratulations to all new Advanced Roads Scholars!!

Dwight Murphy, City of Durham

The North Carolina Advanced Roads Scholar Program is a great combination of continuing education paving the road with real world experiences. I began the original "Roads Scholar" program over 18 years ago as a young and eager Street Superintendent for the City of Sanford, where in less than 3 years my goal for becoming a "Roads Scholar" was met.

In 1998, I made a career move to the City of Greensboro where I became a Construction Maintenance Supervisor over their concrete division. It was here where I started the "Advanced Roads Scholar Program". My position with Greensboro was very demanding, which resulted in little amount of time for me to be able to take the advanced classes. However, once I realized how these classes affected each person's awareness level and how my overall division's level was affected in such a positive way, I vowed to focus on completing these courses for the betterment of myself and group.

Out of all of the classes offered, there are 3 that stick out the most (Designing Pedestrian Facilities for Accessibility, Workzone Traffic Control Supervisor Training, and Trenching "Competent Person"). Coming from the world of concrete, the "Designing Pedestrian Facilities for Accessibility" class was

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transportation TRACKS
 North Carolina Technology
 Transfer Center

Institute for Transportation
 Research and Education

NC State University's Cen-
 tennial Campus
 Box 8601,
 Raleigh, NC 27695-8601



Advanced Roads Scholar Reviews . . .

VERY interesting to me as it enhanced my skillsets in the industry. The "Workzone Traffic Control Supervisor" class helped me in guidance measures for my division in ensuring the safety of themselves and the general public why a workzone had been established. Finally, the "Trenching Competent Person" class enabled me the experience of knowing when something could go wrong, well before it did.

In 2011, I left the City of Greensboro for a wonderful career advancement opportunity with the City of Durham as the Operations Manager for the Public Works Division. Here, I hold the position of guiding the entire labor force of the department, from senior management down. I feel my educational experience I received with both the "Roads Scholar" and "Advanced Roads Scholar" programs helped me achieve this position with confidence, knowing I could deliver leadership with a technical backing. I spent two years "learning the ropes" with Durham and finally in 2013, I finished the "Advanced Roads Scholar" program in its entirety.

In closing, I am forever thankful to the ITRE team for offering such a wonderful group of classes which are of the MOST important knowledge needed in the field of work for which I call home. I promote, give testimony, and sometimes even require these classes offered to ALL who want to grow themselves to be the best in this field!

Olin Deaton, City of Monroe

The Advanced Roads Scholar Program has been a great learning experience for me and has helped me to become more efficient in my job responsibilities as Street Superintendent. The instructors and the open discussions in class are very helpful in assessing my job responsibilities from several different aspects.

In the Snow and Ice Control class, I learned the many different ways to be prepared and to deal with a winter storm. I have applied those ways to more efficiently clean the streets within the City of Monroe during a winter storm event. As the Street Superintendent, I am responsible for all aspects of preparing for winter storms and this class has helped me in the following areas:

- ◆ Storm and operations preparation and scheduling
- ◆ Storm characteristics
- ◆ Road conditions at various points in time during and after the storm
- ◆ Problems including down equipment, insufficient personnel, insufficient materials
- ◆ Actions taken to address problems that may arise In the Advanced Work Zone Traffic Control class, I learned to look at the whole picture from a citizen's point of view. I also learned to make sure that we set up a safe work zone for everyone involved.
- ◆ The Flagger Instructor Training was probably my favorite class because it taught me that no matter how much experience I have or what kind of title I possess, the most important person on the job during flagging operations is the flagger because he has the rest of the crews' lives in his hands. The class also taught me how to instruct my employees to flag safely and the important aspects of flagging such as:
 - ◆ Understanding why proper flagger operations are important
 - ◆ Learning the abilities of a good flagger
 - ◆ Applying standard flagger control references
 - ◆ Identifying proper flagging signals and procedures
 - ◆ Learning flagger practices for various typical situations

I feel very fortunate to have obtained knowledge and training in the Advanced Roads Scholar program. It has honed my skills as Street Superintendent in many useful ways. I feel that I am a more efficient and productive supervisor having completed this program and am ready for any situation that arises from my Department.

Robert Gordon, City of Durham

The classes I have taken through NC ITRE have helped me in my everyday work in Public Works Inspections they have made me take a closer look at the work and give me a sense of pride in my work. The Road Scholar Program and Advance Road Scholar is a great program to help Public Work Inspectors in my Department the classes often use the Trenching "Competent Person" on jobsites to make the contractor is aware of the dangers of trenching. Confined Space Entry and Lockout/ Tag out explaining to the workers the right equipment they need to stay safe and go home every night to their family.

Traffic Sign Retro- reflectivity after that class I talked to our Transportation Dept. about grass beads on the concrete around all the brick crosswalks, Downtown to protect the citizens of Durham at night. Thanks for all the hard work the ITRE group is doing to keep us all informed.

John Patterson, Jr., City of Elizabeth City

I have gained a lot of knowledge being a Roads Scholar recipient. It has helped me in so many outstanding ways. I am currently working on gaining my Advanced Roads Scholar this year. Taking these courses has helped me advance at Elizabeth City Public Works. I am able to lead by example and teach my fellow crew members how to properly work and protect themselves while working. The instructors of the courses are very knowledgeable and puts the course in layman's terms, but after successfully completing these courses I understand that every hour that I work I need to evaluate the safety of the community and myself. It is important to plan our day out daily because this leads to working smarter and safe. My team strive to put out the caution signs, barricades and cones to ensure safety. Being a Crew Supervisor for EC Public Works, I have to continue to make sure my team does periodic inspections and proper repairs on designated assignments. The hands on study in the classroom at North Carolina State University prepared me and gave me more knowledge for the public environment. I am proud to be considered a Roads Scholar, and would recommend these classes to anyone working on public roadways.

John Gunter, City of Greensboro

I just completed the NC LTAP Roads Scholar and Advanced Roads Scholar programs. I found all of the classes to be very informative. Some of the classes were centered more towards my particular job than were others. The hands on experience of the instructors really helped to relate the course materials to our levels. I would encourage anyone working in the right of way field to complete this program.

Some of the classes I found to be the most helpful were Roadside Landscaping for NC, Managing Conflict, Flagger Training, and Basic Work Zone Safety Training. I am a landscape supervisor for the City of Greensboro. Throughout my 25 years of service I have worked in various degrees in most of the courses. It is very interesting to see some of the skills and knowledge needed to perform safely in other fields within our own department. I think now as I carry out my duties as a supervisor I will be better suited to perform in a safe and informed way. This course content and material was very well put together and will be useful to me for the remainder of my time with the city.

Bobby Lee Hoxit Jr., Town of Matthews

The Road Scholar Program has indeed helped me to learn more about legal responsibilities of the town, public and co-workers. I have participated in many courses which have provided vast knowledge concerning my career due to the information the instructors shared on how to accomplish tasks along with their past experiences. The instructors have been very skilled and devoted individuals. Their personal knowledge provided a knowledge that books are the law of what should be done and what shall be done.

Work Road Safety Course provided information of the laws concerning the height of cones and the proper procedure of setting up work zones, advance warnings and taper zones. Safety is the number one goal.

Signs Course provided information concerning the laws in relation to the height, width, the length, color, the markings, reflectivity and distance between the placement of signs.

Supervisor of workers course provided knowledge concerning the responsibility on how to communicate, delegate, motivate and train employees. Well trained employees make for a successful supervisor.

The beginning of these courses have provided the information that was lacking many years ago. Taking these courses has provided the knowledge to keep our town not only current within the laws but the different type of equipment available to assist with our daily work.

By the ITRE providing these classes people come together as one big group and create a universal knowledge/expectation concerning safety, street signs and supervising of employees. I believe knowledge is powerful and ITRE has provided this knowledge. This type of knowledge has helped our town to grow not only in safety but on how other municipalities handle their towns.

These classes make workers aware of the danger and help to prevent workers having to pay an ultimate price in injuries and at times loss of life while making a living trying to service the townspeople in providing a better living environment. I feel these classes let the men and women to know what may happen out there.

In conclusion, thank you for the opportunity to attend these classes and for all the knowledge that has been shared.

Charles Brown II, City of Durham

The North Carolina Advanced Roads Scholar Program is a great combination of continuing education paving the road with real world experiences. I began the original "Roads Scholar" program over 15 years ago as a young and eager Road Worker for the City of Durham, where it took some time but after 10 years my goal for becoming a "Roads Scholar" was met.

In 2003 I became a Crew Chief for the North Section in Street Maintenance Division for Public Works Department. Two years later I got the position of Public Works Supervisor. It was during this time I started the "Advanced Roads Scholar Program". My position was very demanding, which resulted in a little amount of time for me to be able to take the advanced classes. However, once I realized how these

classes affected each person's awareness level and how my overall division's level was affected in such a positive way, I vowed to focus on completing these courses for the betterment of myself and group.

Out of all of the classes offered, there are 3 that stick out the most (Workzone Traffic Control Supervisor Training, Trenching "Competent Person and Experienced Supervisors"). The Experienced Supervisors class was VERY interesting to me as it enhanced my skillsets in the industry. The "Workzone Traffic Control Supervisor" class helped me in guidance measures for my division in ensuring the safety of themselves and the general public why a workzone had been established. Finally, the "Trenching Competent Person" class enabled me the experience of knowing when something could go wrong, well before it did.

As a Public Works Supervisor I felt the experience I received with both the "Roads Scholar" and "Advanced Roads Scholar" programs helped me achieve this position with confidence, knowing I could deliver leadership with a helpful backing. I am still learning the ropes here in Durham and getting better everyday but through hard work in 2015, I finished the "Advanced Roads Scholar" program in its entirety.

In closing, I am forever thankful to the ITRE team for offering such a wonderful group of classes which are of the MOST important knowledge needed in the field of work for which I call home. I promote, give testimony, and sometimes even require these classes offered to ALL who want to grow themselves to be the best in this field!

Frankie L. Cameron, City of Wilson

I am writing to tell about what I have learned from ITRE classes. The classes taught me a lot of different things concerning my job. Three classes I will talk about are Advanced Work Zone Safety, Flagging Instructor Training, and Traffic Calming.

First it will be Advanced Work Zone Safety. Work zone safety is one of the most important things to do before you begin any work so you can give the right information to your workers as well as the public. We were showed what to look for that could be a hazard to our co-worker and the public. I am more aware of potential hazards now than I was before taking this class. This class is very important to men and women who work out in the fields.

Second thing I want to talk about is the Flagger Instructor Training which enables employers or employees of a company or organization to train workers in-house. The training was hands on which was done on the inside to be set up the same way it was if it was on the outside. A flagging operation needs to be done by people who have been trained by an instructor to prevent accidents from happening in the work zone. The flagger's job carries a lot of responsibility for the crew that's working in the work zone to see to it that motorist want hurt anyone while traveling through the work zone. After this training I truly understand the importance of flagging and also training the next person properly.

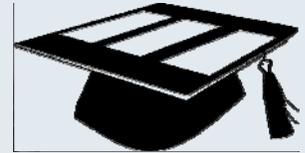
Lastly will be Traffic Calming because without it more deaths could occur. My understanding about traffic calming was not so great. But this class provided me with the knowledge to why it was design and design was to slow motorist down on the behalf of pedestrians and cyclists.

Without speed bumps, narrowed street motorists would drive as fast as they feel through crowd streets. These devices were created to help protect people from getting hit by a speeding automobile. Changes are take place somewhere because people are still dying from speeders.

In my conclusion all these classes have trained me to set up better advanced work zone safely. Also to train flaggers the right way and to know the importance of traffic calming to protect lives.



Dr. Jessica Jameson leads the discussion in the first NCLTAP Master Roads Scholar Class.



2015 Roads Scholar Graduates

North Carolina Local Technical Assistance Program
Institute for Transportation Research and Education
at North Carolina State University

The following individuals have completed at least 7 of the 13 training sessions offered by the NC LTAP Roads Scholar Program. Congratulations to all!

City of Asheville
Tony Chapman
Jonathan Swafford

City of Charlotte
Tori Grissom

City of Durham
Michael Davis
Samuel Dawes
Felcia Torain
Luis Santiago
Pam Campbell
Lydia Brown
Gordon Branch
Cheryl Fuller
Benita Quick

City of Greensboro
Jordan Lambeth
Fred Sparks
Tim Blakley

City of Hickory
Corey Jones
John Bowman

City of High Point
Ronald Taylor
Brian Baer
Tim Dees
Chris Lewis
Randy Stevens

City of Jacksonville
Michael toudle
Kevin Futrell
Brian Parker

City of Monroe
Sarah McAllister

City of Raleigh
John Marks

City of Reidsville
Jerry Craddock
James Mitchell

City of Roxboro
Bobby Painter

City of Wilson
Bradley Moore

Town of Cary
Ken Lentz

Town of Cornelius
Ricky Overcash

Town of Hillsborough
Brian Tatum

Town of Kernersville
Edgar Colop-Pastor
Wesley Parsley
Steven Miller
Brandon Gordy

Town of Matthews
Jean Omoletski

Town of Southern Pines
Tim Brewer

Town of Wrightsville Beach
Tommy Christensen

William E. Mitchell Associates
William E. Mitchell

NEW . . .Master Roads Scholar Classes

We are pleased to announce a new advanced level in the Roads Scholar Program! The Master Roads Scholar Program provides participants an opportunity to develop their knowledge and technical skills to new heights.

How do I become a Master Roads Scholar?

To become a Master Roads Scholar, you must have first completed both the Roads Scholar and the Advanced Roads Scholar Programs and then complete 6 out of the 10 courses listed below and write a case study which focuses on a local transportation project.

Master Roads Scholar Courses:

- ◆ Asset Management
- ◆ 7 Habits of Highly Effective People
- ◆ ADA Regulations and Requirements
- ◆ Communicating with the Public and Media
- ◆ Ethics of Public Works
- ◆ Fundamentals of Government
- ◆ Storm and Emergency Management
- ◆ Team Building



Upon completion of the program, Master Scholars receive:

- ◆ Certificate of training
- ◆ Recognition at the NC APWA Streets Division Annual Meeting
- ◆ Recognition in LTAP's Transportation Tracks newsletter
- ◆ Letter of Commendation, copied to supervisor and mayor
- ◆ Press release announcing achievement in local newspaper
- ◆ Master Roads Scholar shirt

Registration is now open for the following Master Roads Scholar course on the NC LTAP website:

Asset Management (Jan. 20, 2016)

Register online: <http://www.itre.ncsu.edu/LTAP/education/index.htm>

For more information, email bill_woods@ncsu.edu

Preventing and Treating Equipment Corrosion: A Best Practices Manual

The corrosive salts used to deice roadways can ameliorate potentially dangerous roadway conditions in the winter. However, the dissemination of salt often corrodes the metal on maintenance vehicles. "Corrosion of equipment can be expensive for agencies due to reduced equipment service life, depreciation in equipment value, increased equipment downtime, added repair costs, and safety risk."¹

To help maintenance crews protect their vehicles from the risk of corrosion, the Clear Roads research program has published a new manual for managing corrosion of winter maintenance equipment.

"Best Practices for the Prevention of Corrosion to DOT Equipment: A User's Manual" provides detailed instruction and information on corrosion, including methods to minimize corrosion and procedures for handling corrosion when it occurs. The manual is available free of charge at http://clearroads.org/wp-content/uploads/dlm_uploads/Revised_Task-2_Corrosion-Manual.pdf.

Are you ready for the upcoming winter weather? The NC LTAP program is offering a Snow and Ice Control class in Raleigh and Greensboro in mid-October. Visit the NC LTAP website to register today.

¹ Droste, J., & Fay, L. (2015, July). Preventing and Treating Equipment Corrosion: A Best Practices Manual. Research Brief. Retrieved from

http://clearroads.org/wp-content/uploads/dlm_uploads/Clear-Roads-Brief-Equipment-Corrosion-7-23-15-copy.pdf



What classes would you like to see in your area?

Tell us by visiting go.ncsu.edu/LTAP or by scanning this QR code with your phone:



NC LTAP has a new Facebook page

"Like" our page by November 15, 2015 and be entered to win a free LTAP class!



Meet Tracy

Please join us in welcoming Tracy Anderson to NC LTAP. Tracy has been working at ITRE for almost a year- but has just recently started working part time with the LTAP staff on communications and program coordination.

Tracy grew up in Charlotte where her family still lives. She has a Masters Degree in Communication from NC State. Tracy bikes to work most days.

On the Web

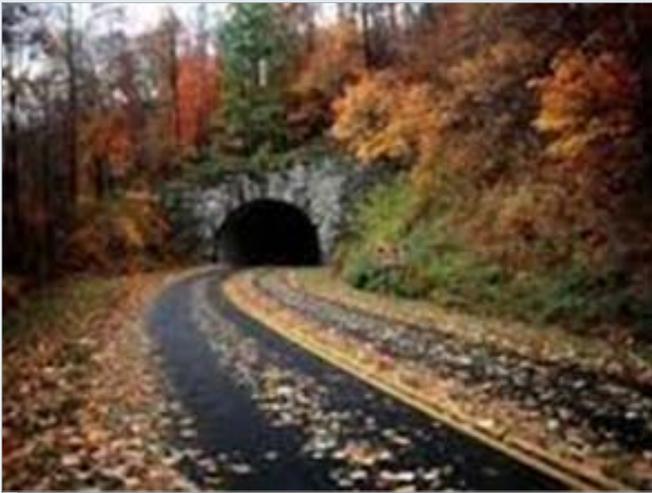
Are you ready for a weekend getaway?

Check out North Carolina's Scenic Byways

<http://www.fhwa.dot.gov/byways/states/NC>

America's Byways

<http://www.fhwa.dot.gov/byways/>



History of Scenic Highways

In July 1988, the FHWA cosponsored a conference called Scenic Byways '88: A National Conference to Map the Future of America's Scenic Roads and Highways. IN preparation for the conference, the FHWA published *Scenic Byways* as a guide and reference for participants. See entire article at link below.

<http://www.fhwa.dot.gov/infrastructure/scenichistory.cfm>

Building Bridges for a Brighter Future- N.C. Department of Transportation

Register your school to participate in NCDOT's 17th Annual Bridge Building Competition

The registration deadline is November 20, 2015

RALEIGH--The N.C. Department of Transportation invites all middle and high schools to participate in what has become an exciting, yet competitive event at the NCDOT -- the 17th Annual Statewide Model Bridge Building Competition. The competition is designed to create a greater awareness of STEM education and its relationship to transportation careers provided by NCDOT.

Article taken from *Better Roads*, October 15, 2015



<https://apps.ncdot.gov/newsreleases/details.aspx?r=11822>

<http://www.equipmentworld.com/north-carolina-dot-opens-registration-model-bridge-building-competition/>



Let Us Know . . .

To update your mail information, add a colleague to the database or obtain information about the Roads Scholar Program,

Fax this sheet to 919-515-8898 or

email to Linda Collier linda_collier@ncsu.edu

Your Name: _____

Company/Organization: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Fax: _____

email: _____

Check Appropriate items:

- Add/update to the NCLTAP listserv NCTROADS
- Send information about Roads Scholar program
- Send schedule of Training opportunities



ITRE's Work Zone Training Goes International

ITRE's Highway Operations and Safety section has just completed its first international work zone safety training course. Just back from Abu Dhabi in the United Arab Emirates, Tim Baughman completed two weeks of training for the City of Abu Dhabi. The course addressed work zone concepts, worker and road user safety, using the Abu Dhabi *Work Zone Traffic Management Manual*, risk assessment, pedestrian considerations, flagging operations and procedures, and proper inspection and maintenance of traffic control devices.



Baughman said learning their standards for traffic control and working with the metric system was the most difficult part of the experience. "I haven't used metric units since college -so I was having to mentally convert between English and metric in order to relate to their speeds, their sizes, and their

distances," he said. "But the biggest challenge was understanding their methods of traffic control. Baughman wanted to relate with their practices and procedures, and accordingly there was a learning curve of understanding the UAE *Manual on Uniform Traffic Control Devices*, as well as in the application of their new *Traffic Management Manual*. Baughman stated, "I have done only a little out-of-country travel, so their sign shapes and colors were very foreign to me - pun not intended!"



Baughman commented, "It was a very unique opportunity and a great experience something. He became convinced that it was more than just an educational opportunity - it was a chance to enhance relationships of people from two very different cultures. Baughman concluded, "I look forward to going back to Abu Dhabi and building more bridges between the USA and the UAE."



You are invited!

December 9, 2015

EDC Exchange for Local and Tribal Agencies

Locally Administered Federal-Aid Projects: Stakeholder Partnering Stakeholder Partnering for Success

The Federal-aid Highway Program contains many moving parts and pieces: effective communication, coordination and cooperation among all involved parties are essential. For the over 6,000 Local Public Agencies (LPAs) that play such a significant role in the delivery of the program, achieving clarity regarding FHWA requirements for LPA administered projects is critical, and “having a seat at the table” can facilitate that clarity.

Stakeholder Partnering offers LPAs an opportunity to join with their state and federal colleagues in navigating the complexities of the Federal-Aid program and successfully delivering projects. This collaboration among representatives at each government level helps ensure the program encompasses the needs of all involved.

Stakeholder Partnering can foster an environment of trust that can be used to resolve challenges and issues at the programmatic level before they adversely impact project delivery. Stakeholder Partnering can establish a platform for ensuring consistent interpretation of requirements and policies that can ultimately shorten project delivery timetables. Stakeholder Partnering enables the type of collaboration that can lead to implementation of process improvements, development of training, and other initiatives that can improve program integrity. For the nominal time investment required to periodically convene “at the table” Stakeholder Partnering can pay significant and long-lasting dividends to the transportation community.

This EDC Exchange will present success stories from both the State and LPA perspective on how Stakeholder Partnering has positively impacted the delivery of the Federal-aid Highway Program. This Exchange will be of interest to LPAs involved with or interested in assuming responsibilities for delivery of Federal-aid projects, and State Department of Transportation LPA leaders and managers.

Please join the Federal Highway Administration, the North Carolina Local Technical Assistance Program Center and the North Carolina Department of Transportation for a presentation on LPA Stakeholder Partnering via a live webinar on

*December 9, 2015
2 pm to 4 pm Eastern Time*

*Location: North Carolina State University Centennial Campus, Research IV, Room 2600,
909 Capability Drive, Raleigh, NC 27606*

Please let us know by email that you will be attending-- bill_woods@ncsu.edu

We will email each parking permits on December 8, 2015

Registration Form

North Carolina Local Technical Assistance Program Winter, 2015

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

By Email: bill_woods@ncsu.edu

Online: <http://www.itre.ncsu.edu/LTAP/education/index.asp>

2016	Class Title	Location	RS/ARS	Cost
Jan 13-14	OSHA 10 Hour Safety Training	Raleigh	ARS	175
January 20	Management and Supervisory Skills for First Time Managers	Raleigh	RS	125
January 21	Management and Supervisory Skills for Experienced Supervisors	Greensboro	ARS	125
January 26	Asset Management	Raleigh	MRS	125
January 29	Trenching Competent Person	Raleigh	ARS	150
February 2	Guardrail Design, Installation and Maintenance	Raleigh	RS	125
February 3	Basic Work Zone Safety Training	Raleigh	RS	125
February 4	Intermediate Work Zone Safety Training	Raleigh	RS	150
February 5	Flagger Training	Raleigh	RS	99
February 8- 10	Work Zone Traffic Control Supervisor Safety Training	Raleigh	ARS	425
February 11-12	Flagger Instructor Training	Raleigh	ARS	225
February 12	Confined Space Entry and Lockout Tagout	Raleigh	ARS	175
February 26	Excavation Safety	Raleigh	RS	150
March 1	Basic Work Zone Safety Training	Durham	RS	125
March 2	Intermediate Work Zone Safety Training	Durham	RS	150
March 3-4	Flagger Instructor Training	Durham	ARS	225
March 17	Fall Protection	Raleigh	ARS	175

Confirmation letters with class detail will be **emailed** 2 weeks prior to the class. Dress is casual.

Name: _____ Department: _____

Title: _____

Agency: _____ Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Supervisor's Name: _____ Title: _____

Confirmation email should be sent to: _____

NC LTAP Staff

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2015 NC LTAP Advisory Board

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LTAP Links on the Web

NC LTAP	http://itre.ncsu.edu/LTAP/
National LTAP/TTAP	http://www.ltapt2.org/
Federal Highway Administration (FHWA)	http://www.fhwa.dot.gov/
Institute of Transportation Engineers (ITE)	http://www.ite.org/
U.S. Department of Transportation	http://www.dot.gov/
NCSITE (NC Section of Institute of Transportation Engineers)	http://www.ncsite.org/NCSITE.html
North Carolina Department of Transportation (NCDOT)	http://www.ncdot.org/
NCDOT Safety & Loss Control	http://www.ncdot.org/doh/safety/
School of Government	http://www.sog.unc.edu/

Transportation Tracks is published quarterly by the North Carolina Technology Transfer Center at the Institute for Transportation Research and Education (ITRE), North Carolina State University (NCSU), in cooperation with the North Carolina Department of Transportation (NCDOT) and sponsored by the Federal Highway Administration (FHWA) through its Local Technical Assistance Program (LTAP). Center staff include: 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) 515-8899. Web site: www.itre.ncsu.edu. 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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