Greetings from your Local Technical Assistance Program for Transportation Agencies – the Alabama Technology Transfer Center. Our primary purpose is helping to meet the training needs for transportation professionals in Alabama. We are looking into diversifying the ways in which this is accomplished. For example, on May 29 and 30, we conducted a two-day workshop that had a classroom component and a field component – the Innovative Erosion and Sediment Control Research and Field Day. Over 140 people attended the workshop and were treated to presentations by many researchers and practitioners from many different agencies and universities on the first day. On the next day, course participants and instructors met at the Auburn University Erosion and Sediment Control Testing Facility (located on the grounds of the Pavement Test Track of the National Center for Asphalt Technology, located just south of Opelika) and saw field demonstrations of 14 different erosion and sediment control practices. The field day was such a success that we plan to have another field day at the testing facility on November 3. We will continue to explore ways by which we can serve the transportation community in Alabama. For example, jointly with ALDOT’s Office of Safety Operations, we are planning the state’s first Rural Road Safety Conference, to be held at Lake Guntersville State Park, September 29 – October 2. Stay tuned for more information on this event and others to come.

I welcome your comments on the center; please feel free to contact me at rodturochy@auburn.edu or at (334) 844-6271.
Dr. Wes Zech demonstrating erosion control blankets.


Dr. Wes Donald demonstrating ditch check systems.


Course participants viewing channel testing.

Among the more significant changes that appeared in the 2009 Edition of the MUTCD pertains to improving the quality and extent of signage used to guide road users through horizontal curves. In an effort to improve safety on horizontal curves, signage requirements have been expanded substantially. These changes are motivated in part by the fact that approximately 25% of fatalities that occur on the nation’s highways occur in horizontal curves. Implementation of these changes, which should result in better guidance for drivers, lower speeds on curves, and fewer and less severe crashes, is required by 2019. The good news is that there are many resources available to support efforts to implement the changes.

In 2011, FHWA released a report entitled Procedures for Setting Advisory Speeds on Curves (Report No. FHWA-SA-11-022), available online at http://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1122. This report is based on research conducted by the Texas Transportation Institute, in support of improving safety on horizontal curves. The report notes “Curve warning signs are intended to improve curve safety by alerting the driver to an upcoming change in geometry that may not be apparent or expected.” Activities that may need to be undertaken in order to bring roads into compliance with the provisions in the current MUTCD may include an inventory of horizontal curves and their geometry, a review of existing signage, determination of maximum safe speeds, and posting of required signs. The FHWA report presents a variety of methods that can be used to determine signage requirements.

Another useful resource is training. The Alabama T² Center is offering a class at four locations throughout the state in September and October to meet this need. This one-day training class has been developed to meet the needs of ALDOT and cities and counties throughout Alabama. Four major topic areas comprise the class: background and a review of available resources, element of horizontal curve signing, methods for assessing signing needs, and field assessment procedures and signing design. If your agency is responsible for roadway signage, we hope to see you there!
The Alabama Rural Road Safety Workshop and Conference is for engineers, planners and others who are responsible for the design, maintenance, and safety of rural roads. It will strengthen your knowledge of available tools, countermeasures and processes to improve safety on your roads, and includes a one-day eight hour Workshop followed by a one and one half day Conference. The Workshop explains how road safety may be integrated into rural/local transportation projects at all stages including planning, design, construction, operation, and maintenance. The Conference emphasizes methods to identify rural road safety issues and appropriate countermeasures. Participants may attend either the Workshop or Conference, or both.

The Workshop presents safety concepts using real world examples and activities and will prepare participants to apply those concepts to roadway operations and maintenance activities within their jurisdictions. The goals of the Workshop are to:

- Demonstrate how design, construction, maintenance, and related activities impact roadway safety.
- Provide practical guidance on improving road safety that is specifically geared to local/rural road project development processes and day to day activities.
- Enable local/rural road owners and practitioners to identify and access pertinent road safety information, and use it effectively.

Upon completion of the Workshop, participants will be able to explain rural road safety issues, how to make roads safer using practical low cost countermeasures at all stages, and how to access and use resources to address safety issues to improve safety.

The Conference agenda was developed to emphasize the implementation of the safety process through all stages of roadway planning, design, operations. Topics include:

- Incorporating safety into the planning process.
- Identifying opportunities to improve safety & potential solutions.
- Implementation of Roadway Departure Countermeasures.
- Implementation of Intersection Countermeasures.

Participants will learn how to identify safety issues, and develop and apply low cost solutions using proven countermeasures. Peer networking during the Conference will provide opportunities for discussion of various safety challenges and potential solutions.

The Workshop and Conference are recommended for county engineers, city engineers, public works officials, transportation planners and DOT personnel.

Provided by ALDOT Office of Safety Operations
A Useful Resource: Roadway Safety Guide: A Primer for Community Leaders

The Roadway Safety Foundation is a non-profit organization created in 1995 whose mission is to “...reduce the frequency and severity of motor vehicle crashes, injuries, and fatalities through improvements to roadway systems and their environment.” Earlier this year, the RSF released an updated version of its Roadway Safety Guide: A Primer for Community Leaders, available online at http://www.roadwaysafety.org/rsf-guide-news-release/. The guide is intended to be a document that is useful for people who are not highway safety professionals (such as elected officials and other community leaders). The guide begins by providing a context for highway safety issues and a general primer on roadway safety. This is followed by a series of stories on case studies and best practices. There is a chapter on vulnerable users – older drivers, young drivers, pedestrians, bicyclists, and motorcyclists, and suggestions on resources for funding and further information.

Calendar of Events

Meetings and Conferences:

September 14-17, 2014: Annual Meeting of the Gulf Region Intelligent Transportation Society, Mobile. See www.its3csummit.com for more details.

October 7, 2014: Fall Meeting of the Alabama Section of the Institute of Transportation Engineers, Auburn. See www.alsite.org for more details.

RTAP News

The Alabama Rural Transit Assistance program held its annual Bus and Van Roadeo in Troy, Alabama March 28th and 29th. That’s right, Roadeo! This is not a misspelling. The name Roadeo is used because this a competition on the road that simulates what rural transit drivers go through on an average work day. The 2014 Statewide Bus and Paratransit Roadeo was an overwhelming success. The weather proved favorable despite forecasts to the contrary. Many thanks to Garry Havron for coordinating this event and to Taylor Rider and the many others for their support. Special thanks and kudos to Donta Frazier and the staff of the Pike Area Transit System for the fine hospitality that was enjoyed by everyone.

Although participation was less than last year, the level of competition this year was phenomenal. In fact, only one point separated the first and second place winners in the bus competition. Also, there were numerous first time contestants; some of whom placed first and represented Alabama at the National Bus and Paratransit Roadeo on June 8, 2014 in St. Paul, Minnesota. The Alabama contestants finished 2nd and 8th in the Body-On-Chassis division, and 8th in the Minivan Division. Once again, there was a very strong presence by Alabama in the national Roadeo. Congratulations to all of the winners!
2014 Alabama Statewide Bus and Paratransit Roadeo Results

Van Category
L-R: 1st Place: Dennis Grove, Cullman County (CARTS); 2nd Place: Jerita Cooley, Baldwin County (BRATS); 3rd Place: David Bass, Morgan County (MCATS)

Bus Category
L-R: 1st Place: Ray Mayo, Baldwin County (BRATS); 2nd Place: Wade Hancock, Cullman County (CARTS); 3rd Place: David Sandlin Cullman County, CARTS)
Upcoming T² Seminars

Roadway Departure Peer Exchange:
August 5-6, 2014 .........................Pelham

National Environmental Policy Act (NEPA):
August 5, 2014 ............................Pelham
August 7, 2014 ............................Huntsville
August 12, 2014 ...........................Montgomery
August 14, 2014 ...........................Mobile

Horizontal Curve Signing:
September 9, 2014 ........................Mobile
September 11, 2014 ........................Montgomery
October 9, 2014 ...........................Pelham
October 10, 2014 ..........................Huntsville

Asphalt Pavement Rehabilitation Strategies:
September 16, 2014 ........................Huntsville
September 17, 2014 ........................Pelham
September 18, 2014 ........................Mobile
September 19, 2014 ........................Montgomery

The History of Transportation in the United States Through the Eyes of Surveyors and Engineers:
September 23, 2014 ........................Mobile
September 24, 2014 ........................Montgomery
September 25, 2014 ........................Pelham
September 26, 2014 ........................Huntsville

First Annual Alabama Rural Road Safety Workshop and Conference:
September 29 - October 2, 2014 ......Guntersville

Erosion and Sediment Control Field Training: NCAT Test Track
November 3, 2014 ..........................Opelika

Surveyors of the Western Lands:
November 11, 2014 ........................Montgomery
November 13, 2014 ........................Mobile
November 18, 2014 ........................Huntsville
November 20, 2014 ........................Pelham
The Alabama T² Center is one of the sponsors of the Annual Transportation Conference. The 57th Conference was held in Montgomery on February 11-12, 2014 and was attended by over 800 people. At the Conference there were 36 technical presentations covering all aspects of transportation. Speakers were given the opportunity to provide us an electronic copy of their presentation for distribution. As a result, 24 of the conference presentations are now available on the Alabama T² website <www.alabamat2.org> and can be accessed by clicking on “Transportation Conference Presentation”. The presentation topics and authors are identified below.

**Bicycle and Pedestrian Tools**
- Getting a TIGER Grant for Pedestrian Infrastructure - Wendell “Butch” Stokes
- Estimating Annual Average Daily Bicyclists - Krista Nordback
- The Birmingham Bike Share Feasibility Study - Ricki Hall

**Sustainable Infrastructure**
- ASCE’s Sustainable Infrastructure Goals and Policies - Lieutenant General (ret.) Hank Hatch
- The Wekiva Parkway Greenfield Project--Navigating a Consensus - Mark Callahan
- Implementing Green Infrastructure--Atlanta’s Post Development Stormwater Management Ordinance - Cory Rayburn

**Construction**
- Corridor X/I-65 Interchange Project - Michael Mahaffey
- Montgomery Outer Loop Project - David Bohannon
- Replacement of the Cottonwood Creek Bridge - ABC Methodology - Jason Langhammer

**Highway Safety**
- Wet Weather Crashes in Alabama - Dave Brown
- Emerging Safety Countermeasures for Wrong-Way Driving Crashes on Freeways - Huaguo Zhou
- SHRP 2 Naturalistic Driving Study and Roadway Information Databases - Charles Fay

**Asphalt Pavements**
- NCAT Pavement Preservation Study - Mary Robbins
- Implementing Intelligent Compaction in Georgia - Sheila Hines
- Warm Mix Asphalt Additives - Shane Buchanan

**Bridges**
- End Zone Design for Pretensioned Concrete Girders - Wei Song
- Performance of Prestressed Self-Consolidating Concrete Bridge Girders - Robert Barnes
- Iron Truss Bridge Restoration - 1883-87 King Bridges - Julie Bowers

**Traffic Operations**
- ALDOT’s Access Management Manual - Randy Braden
- Alabama Intelligent Transportation Systems: State-of-the-State - Chris Hilyer
- Traffic Management Plan for NASCAR Events at Talladega Superspeedway - Ken Cush

*Continued on next page*
(Continued from page 8, 57th Annual Alabama Transportation Conference)

Geotechnical Engineering
● Remediation Strategies for Shrink-Swell Clays: Texas Experience - Anand Puppala
● AL 21 Sink Hole Remediation - Bryan Orange
● Energy Calibration for ALDOT Standard Penetration Test Equipment and Operations - Brian Anderson

Using Railways
● Improving Rail To Support Automotive Manufacturing - Charles Edwards
● Columbus to Atlanta High Speed Rail Study - Kirsten Berry
● Birmingham to Montgomery Passenger Rail Feasibility Study - Brenda Jones

Financing Our Highways
● Transportation Funding and Challenges in Georgia - Todd Long
● Alternative Funding Mechanisms - Lorie Tudor

Stormwater Runoff Control
● Post Construction BMP Inspection and Maintenance - Ted Sherrod
● Hydrologic Modeling Using GSSHA and Other Tools - John Curry
● Lessons Learned from the Large-Scale Erosion and Sediment Control Testing Facility - Wesley Zech

Maintenance
● Impact of Overweight Trucks on Bridge Inventory - Andy Nowak
● ALDOT Fleet Management - Willie Bradley
● Update on ALDOT’s Enterprise Geographical Information Systems (EGIS) Initiative - Pat Broussard, Troy Marsh