



# T<sup>2</sup> ROADS ON THE RANGE

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## *From the Desk of the Director*

2018 passed by so quickly and we are getting ready for 2019. We have been working on multiple projects at the T2 center. The third round of statewide signs project resulted in distributing around 1300 warning signs to 7 counties. Counties that received the signs are requested to install them as soon as it is possible so that the driving public can get the immediate benefit out of them. In addition, counties should inform us at the T2 center when installations of signs are completed so that we can do the final inspection and close the books on this program. The latest round of the Wyoming Rural Roads Safety Program included requests for several safety projects from a couple of counties and three additional requests from the Wind River Indian Reservation. The next round for submitting request will be in August, 2019.

As far as the pavement management system data, Pathways collected the information on all paved county roads on the Eastern side of the state. The T2 center will receive the data in early 2019. That data will be analyzed and then reports will be finalized and submitted to the counties. This year data will include detailed information on various distresses in addition to the overall PCI as requested by counties.

There is an interesting study that we are doing at the center so that dust classification can be identified based on images collected with a smart phone. The findings of this study will be presented at the National Transportation Research Board meeting in Washington DC early in January, 2019.

Back in October, Ken Muller, Sheridan County, and I went to Portland, Oregon to attend the FHWA Fifth Every Day Count Summit. A few technologies were identified at that conference for implementation in Wyoming. These technologies include: Unmanned Aerial Systems (UAS), Virtual Public Involvement, and Project Bundling. I will provide counties with update on these technologies at the upcoming WACERS meetings.

A few weeks ago, we hired a new Transportation Specialist at the T2 center. Austin will provide support for the counties in the area of Pavement Management System. In addition, He will help in conducting speed studies around the state on county paved and unpaved roads. Austin, has done chain saw training when he was working for the Forest service. He will probably provide a short chain saw session at our upcoming safety congress. Austin and Bart will be visiting various counties in the upcoming months to discuss future needs and potential training.

Happy holidays and New Year to you all. All T2 staff members are looking forward to working with you all in 2019.

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## ***Local Project (LPA) Certification***

WY T2/ LTAP provided a day long workshop November 14, 2018 on Local Project Administration (LPA) Certification. There were 20 people in attendance. Beginning with the 2012 fiscal year, WYDOT has required that federally funded local projects be overseen by a certified representative of the local agency. Certification is valid for three years, after which recertification will be required. Federal requirements can be overwhelming to local agencies, especially if federal funds are infrequently used. The goal is to assist local agencies in bringing projects to successful completion, to ensure a sub-recipient agency has a fundamental understanding of the requirements in executing state and Federal Highway Administration rules. Any local public agency employee or consultant project manager who will be responsible for the oversight of the federally funded project should attend this certification workshop. The Local Public Agency (LPA) must have a certified staff member when a cooperative agreement is signed. A certified staff member is defined as one that has taken the certification course and passed the final exam and has the ability to advise on the execution of the project. Attendees are expected to already possess a working knowledge of this subject. WYDOT and FHWA provide the instructors for this training. The topics for the LPA Certification work shop are: Certification Requirements, Program Management, Consultant - Selection Negotiation and Contract Execution, the Federal NEPA Process, Land Acquisition, Federal Requirements, Contract Advertisement Award, Construction Contracting, and Reimbursement. A Short Certification Exam is given at the end of the day. The next LPA Certification will be in Casper, April 9, 2019. Registration can be found on are Web site, [http:// www.uwyo.edu/](http://www.uwyo.edu/)



## ***On-Ramp to Innovation***



The Federal Highway Administration is nearing the end of its fourth round of Every Day Counts (EDC) innovations which include techniques and technologies, such as Automated Traffic Signal Performance Measures, Safe Transportation for Every Pedestrian (STEP), and Pavement Preservation. Our state and local partners are all welcome to request additional technical assistance on any of the innovations used in the four phases of Every Day Counts. You may contact the Federal Highway Wyoming Division office at (307)-772-2101 for more information on any of the current or previous initiatives. Every Day Counts was included in the "Fixing America's Surface Transportation" (FAST) Act, and so is now codified. That codification brings us to EDC 5. Keep an eye on the FHWA Every Day Counts Website! <https://www.fhwa.dot.gov/innovation/everydaycounts/>

Some of the technologies outlined in EDC 5, like 'Reducing Rural Roadway Departures' can be found here: [https://www.fhwa.dot.gov/innovation/everydaycounts/edc\\_5/index.cfm](https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/index.cfm)

## ***23rd Annual Safety Congress***

The 23rd Transportation and Safety Congress included three tracks: Transportation, workzone safety, and LPA. There were 15 vendors in attendance this past year and we are working with new vendors to attend the 2019 Safety Congress.

The transportation track covered timely topics related to transportation safety, pavement maintenance/management, as well as topics related converting paved roads into gravel roads.

The LPA workshop covered a variety of topics to ensure a sub-recipient agency has the fundamental understanding of the requirements in existing State and Federal Highway Administration rules and to certify that a member of the staff attended the LPA workshop and passed an exam.

The Work Zone Safety/Temporary Traffic Control was held in the morning while ATSSA Flagging Certification was held in the afternoon. Both morning and afternoon sessions covered the Manual on Uniform Traffic Control Devices (MUTCD) to select an appropriate layout, along with the procedures that should be followed to make sure that work zones are safe.

Attendees of all three sessions participated in a lunch where Roads Scholars and Master Roads Scholars were acknowledged and provided with certificates. Being recognized as a Roads Scholar requires the successful completion of at least twelve (12) Wyoming Technology Transfer Center workshops. Of these, one must be the Annual Transportation and Safety Congress and one must be Work Zone Safety/Temporary Traffic Control.

Recognition as a Master Roads Scholar requires the successful completion of at least twenty (20) Wyoming Technology Transfer Center workshops, with the same two required workshops as for Roads Scholar recognition.

MARK YOUR CALENDERS for the 24th Annual Transportation and Safety Congress which will be held on April 9, 2019 at the Ramkota Hotel, in Casper, WY. This one day event will have again three different tracks: General Transportation; Local Project Administration (LPA) Certification, Work Zone Safety/ATSSA Flagger Certification. Also, WACERS will hold its annual meeting immediately after the Safety Congress. Should you have any items to add to the WACERS agenda, please contact Ken Muller at [kmuller@sheridancounty.com](mailto:kmuller@sheridancounty.com).

## ***A New Face at T2***



Austin Woody is the latest addition to our team at the Wyoming Technology Transfer Center. Austin was born and raised in Star Valley Wyoming before moving to Laramie to attend the University of Wyoming in 2002. At UW Austin completed a bachelor's degree in Journalism and a master's degree in Public Administration / Environment and Natural Resources.

Austin comes to the T2 center from a background in outdoor recreation management and trail development. He worked for the U.S. Forest Service in Colorado and Wyoming performing maintenance and construction duties on trails and developed recreation sites. Austin continued his trail career as a contractor assisting in the planning, design and construction of trail systems for Glendo State Park, Laramie Bike Net and the City of Laramie.

At the T2 Center Austin will be working on monitoring and management systems for Wyoming's county roads focusing on road condition, maintenance requirements and appropriate speed limits. Additionally, Austin will be assisting with materials and safety trainings offered by the T2 Center. He looks forward to the opportunity to meet and work with local transportation officials throughout the state.

Lucky enough to have been raised in Wyoming, Austin has enjoyed being outside, floating rivers, skiing and riding bikes since his childhood. In his free-time he can usually be found pursuing these activities with his friends and family.



## ***National Rural Road Safety Center***



The National Center for Rural Road Safety was created by the Federal Highway Administration (FHWA) to identify the most effective current and emerging road safety improvements and deploy them on rural roads. In the federal transportation re-authorization bill

(MAP-21, 2012) (<https://www.fhwa.dot.gov/map21/>), Congress explicitly created a next-generation Center that would integrate and advance the work of the previous rural center of excellence and the surface transportation center of excellence. The Center embodies the federal transportation goal for a center focused solely and specifically on enhancing safety on rural roads while supporting surface transportation in general. The Center team is led by the Western Transportation Institute at Montana State University; other members of the team are Iowa State University's Institute for Transportation, Rutgers University's Center for Advanced Infrastructure and Transportation, Bubar and Hall Consulting, LLC., Cambridge Systematics, IDT Group, and the Local Technical Assistance Programs of Iowa, Louisiana, Montana, and New Jersey. In addition to the team, two more groups lead the guidance and management of the Center: the FHWA Technical Panel and the Stakeholder Group. Multiple FHWA offices are represented on the Center's Technical Panel, including the FHWA Resource Center, Technology Partnerships Program, National Highway Institute, Federal Lands Highway, and personnel from the Office of Safety's Local and Rural Road Safety Program, Research and Development, and Communications, as well as the Montana Division Office. This link to FHWA serves to further accessibility to technology transfer opportunities for local and rural users. Center Director Steve Albert says "Despite that over-half of fatalities occur on rural roads, and safety being a priority, there has never been a national focused center that has fulfilled the role of a one- stop shop beyond a single state focus, for research, technical assistance/ transfer and training." The Center will integrate, coordinate and accelerate knowledge transfer safety solutions will include and move beyond engineering as a principle focus to include culture, since 90% of crashes are due in some part to the driver, not the infrastructure. (<http://www.nrd.nhtsa.dot.gov/pubs/811059.pdf>)

The Center's philosophy is to empower as many state, local, and tribal agencies as possible with the most effective safety tools and strategies that are currently available. Building on a growing body of multidisciplinary research, best practices and successful deployments in rural environments, the Center is poised to help agencies with their immediate rural road safety challenges. Albert reflects on the variety of safety challenges- "Addressing rural safety challenges is not straight forward; it requires a comprehensive assessment of needs and a multidiscipline approach to investigate the many factors that have an impact on safety. In other words, safety issues must be viewed through a wider lens, rather than addressing only one pieces of an issue at a time." In essence there is no "silver bullet" to address all rural challenges. Albert's philosophy for the Center is to "employ a safe system methodology to training and technology transfer that provides safety solution tools that address systemic needs, targeted not only at roads, but driver behavior, vehicle capabilities, infrastructure and cultural understanding too." The goal is to deliver training that accelerates change and makes it possible for agency managers, planners, operations staff and maintenance crews to do their jobs better the very next day. The Center approaches roadway safety from every angle, and searches for noteworthy practices and information from a wide variety of assets that are suitable for technology transfer. As an example, when you consider 32% of speeding related fatalities occur in rural areas (<http://www.nrd.nhtsa.dot.Pubs/911637.pdf>), we can derive that a targeted and aggressive education and enforcement campaign might help reduce that number. Finding examples of successful campaigns of this nature does not need to be limited to rural areas, but instead we can look at best practices from any type of location to highlight and replicate effective strategies and programs. To visit the National Center for Rural Road Safety website; [https:// ruralsafetycenter.org](https://ruralsafetycenter.org). The Safety Center will host a FREE, 1-1.5 hour webinar series monthly.



## Free Online TC3 Web Based Training



New online training is offered through AASHTO, American Association of State Highway and Transportation Officials. In the summer of 2000, TC3, Transportation Curriculum Coordination Council, was started to give transportation technical workers more training opportunities outside of the classroom setting. TC3 has given government employees a more convenient and cost effective way to learn through web based training in

addition to in classroom training. Employees are allowed to take the trainings on their time and convenience.

The website is easily accessible to search for new, featured, or free training. If you are looking for a specific training, the classes are divided into 6 sections; Construction, Materials, Employee Development, Pavement Preservation, Maintenance, and Traffic and Safety. TC3 has over 190 online training modules covering variety of topics in areas of construction, maintenance, and materials.

Currently, government employees can enroll in web based training for **free**. Nongovernment employees are also encouraged to participate pricing is included on the website.

**To Register go to: <https://register.transportation.org>**

And follow these instructions:

To make a new account:  
AASHTO Account > Register

Enter Work email address

Click Next > Fill all information with an (\*)

After you have successfully registered:

1. Under services menu (2nd blue button on the top)  
Services > Training & Employment > AASHTO Leadership Training
2. Scroll down to Technical Training  
Click the hyperlink (blue)  
Click on Login (dark blue)
3. Select a training or use the search function to find a specific training



Click on training > Add to cart > Go to cart > Enter promo code:

D5X3-B3D9-52CB-4XCX

Apply > Proceed to checkout > Sign in > Review Order > Place Order

If your order is successful, you will receive a green message saying Order Successful with an order # and printable receipt for your records.

You will receive a confirmation email to your work email address.

**The Wyoming T2 Center will continue to provide regular in classroom training in addition to this free online training.**

## ***Staying Fit for Snow Fighting***

With winter weather comes snow fighting and with snow fighting comes fatigue. Unpredictable weather can lead to long difficult hours on the road with few breaks and little sleep. However, there are several things agencies and drivers can do to make sure crews are in good shape to combat Old Man Winter, maintain our roads, and get home safely.

### **Why does fatigue happen?**

Unpredictable weather leads to varying work schedules which can throw your circadian rhythm out of balance. Your circadian rhythm (also known as your sleep/wake cycle or body clock) is a natural, internal system that is designed to regulate feelings of sleepiness and wakefulness over a 24-hour period. When we make changes to our sleep patterns, it throws our rhythm out of balance and causes fatigue; confusing our body on when it should be sleeping and when it should be awake.

### **What happens to our bodies when we are fatigued? When our bodies are fatigued, the following symptoms result:**

- Increased reaction time – takes longer to take action when a threat is noticed
- Decreased alertness – takes longer to notice a threat
- Reduced situational awareness – lesser ability to notice what is happening around you
- Poor assessment of risk – decision-making is more difficult
- Impaired memory – can be difficult to remember details
- Reduced field of vision – peripheral vision is reduced and tunnel vision can result
- Difficulty in staying awake – eye lids get “heavy” and eyes can shut for longer periods of time

### **What can snow fighters do to fight fatigue?**

Get some rest – try to optimize your sleeping conditions:

- Room temperature should be between 60 and 72 degrees.
- Complete silence is best but using earplugs or using steady background noise or white noise to help mask surrounding sounds can help too.
- Reduce lighting as much as possible. If there are windows in your rest area, use shades to block any sunlight coming in.
- Try to limit your use of technology right before you sleep.
- Think ahead – if you know a storm is coming, be sure to get a good night’s sleep so your body is prepared for the longer hours ahead.

### **Eat Well – feed your body properly and stay awake longer:**

- Stay away from drinks that contain caffeine
- Avoid junk foods that are high in fat and sugar
- Try to include high protein foods to help you stay awake longer.
- Lean meats, nuts, eggs and dairy are all good choices to fuel your body for the long haul.
- Stay hydrated

### **Exercise:**

- After a brief rest break and before a long shift, take a few minutes to warm up your body. Try doing some quick exercises to help increase your heart rate. Even a short walk can increase endorphins to help with physical wakefulness.
- If you find yourself getting tired during a run, take a quick stretch break to wake up your muscles and improve your ability to focus.
- At home, in between storms, exercise regularly to improve your overall sleep quality and to help you fall asleep faster.

For more information on fatigue and snow fighting preparations:

[http://clearroads.org/wp-content/uploads/dlm\\_uploads/11-05-Factors-Causing-FatigueFinal-Report\\_MnDot.pdf](http://clearroads.org/wp-content/uploads/dlm_uploads/11-05-Factors-Causing-FatigueFinal-Report_MnDot.pdf)  
<http://www.themunicipal.com/2014/12/monitoring-and-detecting-snowplow-driver-fatigue/>

## Staying Fit for Snow Fighting (cont.)



# WINTER DRIVING SUPPLY CHECKLIST

Accidents, road closures and other winter events can mean unexpected time in your car. Be prepared. Pick up these items on your next shopping run and then pack them into your vehicle.

If you find yourself stuck or stranded, stay in your car, put on your flashers, call for help and wait until it arrives.

Pick Up Shopping

Packed In Car

☐☐

Flashlight

☐☐

Extra Batteries

☐☐

Blanket

☐☐

Nonperishable Food / Snacks

☐☐

Water

☐☐

Gloves

☐☐

Boots

☐☐

First Aid Kit

☐☐

Cell Phone Charger / Battery Booster

☐☐

Tire Chains

☐☐

Ice Scraper / Snow Brush  
(A Small Shovel Comes in Handy Too)

☐☐

Jumper Cables

☐☐

Flares / Warning Triangle

☐☐

Cat Litter or Sand to Help with Traction

☐☐

Whistle to Signal for Help

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*Return Service Requested*



## Upcoming Workshops

24th Annual Safety Congress-  
Casper - April 9, 2019

- LPA Certification
- Work Zone Safety
- ATSSA Flagger Certification
- Transportation Track Presentation
- WACERS Meeting

OSHA SAFETY TRAINING  
ASPHALT