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From Montana LTAP Director

I hope you are wintering well. Remember Montana winters last long into the spring. Please maintain your roads and drive safely during those unexpected spring time storms.

Preparation for the upcoming construction season:
- Removing plows
- Maintaining equipment
- Processing gravel

Remember LTAP provides cutting edge safety training and gravel roads design and maintenance. The most important preparation you can make for your construction activities is training.

In May we will be holding our Gravel Roads Workshops in three locations:
• May 3, 2016 - Missoula
• May 5, 2016 - Billings
• May 11, 2016 - Great Falls

Gravel Roads Workshop Objective: To give novice and experienced employees practical methods and techniques for constructing and maintaining gravel roads. Each agency will receive the NEW Gravel Roads, Construction & Maintenance Guide. This guide was funded by the Federal Highway Administration and produced cooperatively by several states. It covers the most current developments on unpaved roads.

Gravel Roads Workshop Description: This course will cover drainage, materials, proper blading techniques, motor grader operations, and stabilization and dust control in a classroom setting. This training is a combination of Montana’s course plus the newest innovations gathered from other states.

Who Should Attend: Anyone who deals with the construction and/or maintenance of unpaved roads.

Per your requests, we have redesigned this Gravel Roads Workshop to fit into one day. This hopefully allows more to attend and not have an added cost of lodging. To register, go to this link: [http://www.montana.edu/ltap/training/documents/Gravel%20Roads%20Spring%202016_One_Page](http://www.montana.edu/ltap/training/documents/Gravel%20Roads%20Spring%202016_One_Page).

We also take registrations by phone (1-800-541-6671) or just email Genevieve Houska, our Conference Coordinator, at genevieve.houska@montana.edu.

Also, please join us on our monthly webinars. The next three topics include Low Volume Roads Signing - April 19, Road Stabilization - May 17, and Weed Mowing Safety and Mobile Operations - June 21. We email the link and call-in information to our listserv. If you have not received it, please let us know and we can email it to you. We will also put you on our listserv to receive future notifications.

Many of our past safety webinars are recorded to allow our constituents to click and play at their convenience. Missoula County Road Department told us this has worked out terrific for their monthly safety meetings. We are also joined each month by many county and city street departments, and Montana Department of Transportation employees on our live webinars. Sheridan County Road Department has their crew members participating on our live webinars, too. They commented this has saved on travel expenses and provides a forum for discussion on safety procedures for their monthly safety meeting.

Thanks you for your support and please stay in touch by attending classes, participating in webinars, checking out videos, and giving us a call.

Travel safe,
Steve Jenkins, Montana LTAP Director
Asphalt Conference 2016 - A Hit!

With over ninety participants at this year’s Asphalt Conference in February, Dave Johnson, Asphalt Institute’s Senior Regional Engineer, was pleased not only with the turn out but also the conference agenda.

Dr. Randy West, P.E., Director of the National Center for Asphalt Technology, Auburn University, addressed NCAT/MnROAD’s Research Partnership and quantifying the benefits of preventative maintenance. Scott Quire, P.E., Laboratory and Quality Control Manager, from Bluegrass Testing Labs and Louisville Paving, discussed 3/8 inch superpave asphalt mix designs.

Other topics covered were:
- Pavement Management Systems for Local Governments by John Duval, P.E., Pavement Services, Inc., President
- Mix Designs Incorporating Recycled Materials by Dr. Randy West, P.E., National Center for Asphalt Technology, Auburn University, Director
- PaveXpress, Pavement Thickness Design Software by Dave Johnson, P.E., Asphalt Institute, Senior Regional Engineer

Steve Jenkins, Montana LTAP Director, commented that this partnership with Asphalt Institute to provide these kinds of quality training sessions only strengthens each others’ mission in education. Genevieve Houska, Montana LTAP Conference Coordinator, expressed her appreciation for the support from vendors who attended also: Tractor and Equipment Company and Western Emulsions, Inc.

Safety Congress 2016

Montana LTAP’s 14th Annual Safety Congress was held in Great Falls, January 25 and 26, 2016. The morning session provided Work Zone Technician certifications for participants. The afternoon began the Traffic Control Supervisor course which concluded at the end of the next day with an exam.

The workshop objective is to comprehend work zone safety of roads and streets and learn to implement temporary traffic control plans using the latest standards. A score of 80 percent is needed to pass both the Work Zone Technician and Traffic Control Supervisor exams. The TCS portion has a homework problem to assist students in understanding and following a temporary traffic control plan.

Participants brought their Manual On Uniform Traffic Control (MUTCD) manual in order to follow the instruction provided.

“The two courses are required for the Road Master level in our Roads Scholar program,” said Steve Jenkins, MT LTAP Director. “By attending these two temporary work zone courses, individuals will learn the basic necessary skills to understand work zone areas, receive flagger recertification, and be an effective Traffic Control Supervisor.”

The MUTCD just celebrated eighty years last fall. For a history about its evolvement, go to this link: https://www.transportation.gov/fastlane/happy-80th-birthday-mutcd.

Because the 2009 MUTCD is going through a final revision at this time, it has been recommended to government entities to use the electronic version at this link: http://mutcd.fhwa.dot.gov/htm/2009r1r2/html_index.htm.

As soon as the MUTCD 2016 is announced, Montana LTAP will get that notice out to everyone on how to order it.
Montana Association of County Road Supervisors (MACRS)
President John Stokes thanked his fellow officers who contributed to the outstanding agenda for this year’s 36th Annual Spring MACRS Conference held the end of March in Great Falls. Conference participation was well over 300.

“This four-day event is carefully planned with the MACRS Board meeting at the end of last year’s conference to review what worked and what didn’t,” explained Stokes.

“In November we met again to review with each of the five district representatives who have discussed with their constituents what type of training needs to be addressed at the next spring conference. By covering all these bases, current topics are put on the agenda. There is always valuable information to be used at county road departments.”

Pre-Conference: Day 1
This preconference provided four hours of certified MSHA training that could be followed up with four hours of in-house training with safety videos and recorded LTAP Safety Webinars at http://ou.montana.edu/ltap/resources/webinars/index.html. By tracking dates, times, topics, who attended, and length of time of training, road departments can meet the MSHA requirements for the 8-hour MSHA training requirement for their employees.

Providing this outstanding MSHA Part 46 training was Bill Schwarzkoph, MSHA safety trainer. His overview of various safety training concerns regarding gravel pits, hearing issues, trenching safety, first aid, mobile equipment, electrical hazards, noise issues, and overall health were well received by participants.

MACRS General Session - Tuesday, March 29
Opening the conference was the Presentation of Colors by Marine Corp Honor Guard and the Turner School Choir singing the National Anthem. MACRS President Stokes, Pondera County Road Supervisor, welcomed all and encouraged new and not so new members to introduce themselves to the MACRS officers and be sure to express their concerns. He noted this organization exists for everyone to network and help each other. Sandra Broesder, Pondera county Commissioner, provided a brief welcome and commissioner perspective with regards to county roads and bridges. Joe Briggs, Cascade County Commissioner, thanked the MACRS organization for their continual support by holding the conference in Great Falls.

MACRS Keynote speaker, Blu Santee, provided an enthusiastic discussion on safety in the work place and the importance of establishing a safety culture attitude in the workplace. Although some of his presentation photos were grisly, they emphasized the importance of safety consciousness in the workplace and at home.

Following was Shane Finucane on trenching safety. He provided a real life situation where his wife had been buried when a trench collapsed and how she was rescued.

After the lunch break with vendors, participants had the opportunity of attending either Ladder and Eye Safety by MACo’s Jim Muskovich or Patrick McJannet, Montana Department of Transportation, CDL Department of Transportation Physicals. McJannet reviewed the various updates regarding the Medical Examiner’s Certificate required for commercial drivers. April 20, 2016, medical examiners must use the new MEC form (MCSA-5876) Available by googling “MEC form (MCSA-5876)” or going to this link: https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Medical-Examiners-Certificate-%28MEC%29-Form-MCSA-5876.pdf.

The much requested Round Table Discussion topic this year was “Learning from Our Mistakes.” The following counties provided examples of extreme incidents: Jerry Otto, Hill County; Ovila Byrd, Flathead County; and Shane Escott, Madison County.

MACRS General Session - Wednesday, March 30
After the morning prayer breakfast where MACRS President Stokes welcomed First Timers to the conference, the opening session was Clark Wheeler discussing Operation Life Saver, railroad and train safety.

Wheeler emphasized the importance that trains cannot stop quickly. He pointed out in the green brochure it notes, “The average freight train traveling 55 miles per hour takes a mile or more to stop. That’s 18 football fields. If the locomotive engineer can see you, it’s too late to stop the train.”
He also reviewed the importance of keeping personnel safe during an incident with placement of vehicles.

Brad Bowman, Sun River Electrical, provided half of his time with classroom discussion and the other half with a hands-on demonstration in the parking lot. He also provided an Application Guide for 2012 NESC Table 232-1 (National Electric Safety Code).

Applicaton Guide for 2012 NESC Table 232-1 . . . see NESC for details and exceptions

Wednesday Evening Banquet - March 30

The evening banquet began with the raffle drawing for top donated gifts. Following was the first time presentations by MACRS President Stokes awarding two student MACRS scholarships amounting to $1,000 each, $500 per semester. Amy Bieber, daughter of Duane Bieber, Richland County Road Foreman, and Garet Fowler, grandson of recently retired Dave Fowler, Gallatin County Road Superintendent, were the recipients. These scholastic scholarships will assist them in their college endeavors. Priorities will be given to students who are serious about seeking employment in the transportation industry within the state of Montana and who have a connection to the MACRS organization.

Continued on Page 8 . . .
### Calendar of Events • January 2016 - June 2016

#### January 2016

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1: New Year’s Day - MT LTAP Offices Closed
10-14: 95th Transportation Research Board, Washington, DC
18: Martin Luther King Day - Offices Closed
19: MT LTAP Safety Webinar - Forklift Safety 7:30am-8:00am
25-26: 14th Annual Safety Congress - Great Falls, MT (MT LTAP):
   25am: Work Zone Tech
   25pm: Traffic Control Supervisor
   26: Traffic Control Supervisor

#### February 2016

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1-4: MACo Mid-Winter Conference: Heritage Inn, Great Falls
2: Asphalt Institute - Helena, MT (MT LTAP)
15: President’s Day - Observed (MT LTAP Offices Closed)
16: MT LTAP Safety Webinar - Front End Loader 7:30am-8:00am

#### March 2016

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14-17: MSU Spring Break
14: Work Zone Technician - Missoula (MT LTAP)
15: Work Zone Technician - Great Falls (MT LTAP)
16: Work Zone Technician - Miles City (MT LTAP)
17: Work Zone Technician - Billings (MT LTAP)
18: Flagging Certification Course - Billings (MT LTAP)
22: MT LTAP Safety Webinar - Roadway Signs 7:30am-8:00am
28-31: MACRS 36th Annual Conference - Heritage Inn, Great Falls, MT (MT LTAP)

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11-15: National Work Zone Awareness Week (ATSSA)
19: MT LTAP Safety Webinar: Low Volume Road Signage 7:30-8:00am
24-28: NACE Annual Conference 2016, Tacoma, WA

#### May 2016

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3: Gravel Roads Maintenance & Design - Missoula
5: Gravel Roads Maintenance & Design - Billings
10: Work Zone Flagger Certification - Great Falls
11: Gravel Roads Maintenance & Design - Great Falls
12: Work Zone Flagger Certification - Havre
15-21: National Public Works Week (APWA)
   - http://www.apwa.net/discover/National-Public-Works-Week
16-20: SafetyFestMT - Miles City: www.safetyfestmt.com
18: MT LTAP Safety Webinar: Road Stabilization 7:30-8:00am
22-25: APWA North American Snow Conference: Hartford, CT
   - More info: http://www.apwa.net/Snow
30: Memorial Day - Offices Closed

Some dates and locations are subject to change. Call Genevieve Houska, LTAP, 1-800-541-6671 to confirm.

#### June 2016

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1-2: LTAP North Central Regional Meeting: Laramie, WY
7: Work Zone Flagging - Bozeman
8: MACRS Executive Meeting, 1-5pm - Bozeman
9: MT LTAP Annual Advisory Board Meeting, 9am-12pm - Bozeman
21: MT LTAP Safety Webinar - Weed Mowing 7:30am-8:00am

### Safety Meeting Webinars from Montana LTAP

April 19: Low Volume Road - Signage
May 18: Road Stabilization
June 21: Weed Mowing

Monthly Safety Webinars held at 7:30am usually on Tuesday Mornings. Call Montana LTAP at 1-800-541-6671 for more information.
# Calendar of Events • July 2016 - December 2016

## July 2016

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31: Fourth of July Holiday - Offices Closed

**19:** MT LTAP Webinar: ABC’s of First Aid 7:30-8:00am

18-21: National LTAP/TTAP Summer Conference, Madison, WI

## August 2016

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16: MT LTAP Webinar: Leadership - 7:30-8:00am

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5: Labor Day Holiday - Offices Closed

7 & 8: 27th Annual Equipment Safety Training and Snow Rodeo - Helena, MT (MT LTAP) Brochure available in July

18-22: MACo 107th Annual Conference, Billings, MT

www.mtcounties.org or MACo’s Karen Houston 406-449-4360

20: MT LTAP Safety Webinar: Gravel Road Materials 7:30am-8:00am

## October 2016

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MACRS Fall District Meetings: TBA

5-7: 85th League of Cities & Towns, Hilton Garden Inn, Missoula, MT

5: Public Works Directors Meeting - Hilton Garden Inn, Missoula, MT

TBA: Put The Brakes On Fatalities Day - 16th Anniversary (go to: www.brakesonfatalities.org)

10: Columbus Day - Observed (Montana LTAP Offices Open)

18: MT LTAP Safety Webinar: Protecting Your Hearing - 7:30am-8:00am

18-20: 31st Regional Local Road Coordinators Conference, Rapid City, SD

## November 2016

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8: Election Day - Offices Closed

11: Veterans’ Day - Offices Closed

15: MT LTAP Safety Webinar: TBA - 7:30am - 8:00am

16: LTAP Leadership - Great Falls - 8am - noon

16 & 17: MACRS Planning Meeting, 1-5pm and 8am -noon; Great Falls

24-25: Thanksgiving Holiday - Offices Closed

## December 2016

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20: MT LTAP Safety Webinar: TBA - 7:30am-8:00am

26: Christmas Holiday - Offices Closed

### Some dates and locations are subject to change.

Call Genevieve Houska, LTAP, 1-800-541-6671 to confirm.

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If you injure or kill someone while DUI, you can be convicted of vehicular homicide while under the influence. Expect a prison term up to 30 years and fines up to $50,000, or both. **DON'T DRINK & DRIVE!**  § 45-5-106, MCA
Qualifications for MACRS Scholarship:
• Students must be residents of Montana.
• Students must be degree-seeking and enrolled in at least six credits.
• GPA of 2.5 or better
• If the student does not have a previous grade point average (GPA) to submit, the Scholarship Committee will review GED, COMPASS, ACT, or SAT scores to determine academic eligibility.
• Applicants will be reviewed and awarded up to a $1,000 Scholarship.

Materials to submit when applying for the MACRS Scholarship:
• High school and college (if applicable) transcripts
• One letter of recommendation from a non-relative assessing your abilities, character, motivation, and potential for academic success.
• Submit an essay not exceeding 500 words of how you will benefit from receiving the MACRS Scholarship.
• The completed and signed Scholarship application.

Amount
$1,000 maximum per academic year, $500 per semester

Deadline
Fall Semester Deadline – August 15th
Spring Semester Deadline – December 15th

For more information on these scholarships, please contact Montana LTAP at 406-994-6100.

After these two MACRS Scholarship recipients were announced, Steve Jenkins, MT LTAP Director, spoke about the importance of safety training and appreciated the support LTAP receives from MACRS. He then announced and awarded the twelve 2016 Roads Scholars. (See related article on Page 10.) The evening concluded with entertainment by Kent Messmer, the Illusionist.

MACRS General Session - Thursday, March 31
At this year’s MACRS morning Business Meeting the following were elected:
John Anderson, MACRS President, 2016-2017
Fergus County
Doug Nisbet, MACRS 1st Vice President, 2016-2017
Lewis & Clark County
Dana Rauser, 2nd Vice President, 2016-2017
Broadwater County
Lloyd Omdahl, Secretary/Treasurer (Retained Position)
Toole County
John Stokes, Past President 2015-2016
Pondera County
District #1: John Horat, Ravalli County
District #2: Tim Collins, Meagher County
District #3: Dirk Drugge, Blaine County
District #4: Bobby Wiedmer, Fallon County
District #5: Tim Miller, Yellowstone County

Training Committee Representatives:
Dirk Drugge, Blaine County
John Stokes, Pondera County

MACo Representatives:
John Anderson, Fergus County
Dana Rauser, Broadwater County

Overall review of MACRS 2016 Spring Conference indicated another successful venue. It was determined MACRS Spring Conference 2017 will be held in Great Falls at the Best Western Heritage. The Planning Meeting will be held in November 2016 in Great Falls at the Best Western Heritage Inn.

FHWA Center for Accelerating Innovation

FHWA’s Center for Accelerating Innovation has combined several new initiatives together at this site. One of them is Every Day Counts and their website with many new initiatives. Check out their EDC News at this link: https://www.fhwa.dot.gov/innovation/everydaycounts/edcnews/.

Here’s an example:
EDC News - April 14, 2016
Innovation of the Month: Geosynthetic Reinforced Soil-Integrated Bridge System
FHWA Encourages Work Zone Awareness
Arizona Moves to Online Project Documents
Maine Offers Intersection Workshop
Michigan Workshop Features e-Construction
Oklahoma Towing Companies Discuss Incident Management
Virginia Innovation Council Reviews e-Construction System
Washington Opens World’s Longest Floating Bridge
Western States Participate in Road Diet Exchange
Watch Data-Driven Safety Analysis Video

Another newsworthy publication on the EDC website is “Innovator” and provides a variety of articles on new efforts in the transportation world such as Geosynthetic Reinforced Soil-Integrated Bridge System or Warm-Mix Asphalt Takes Off or States Choose e-Construction to Save Time and Money. Go to this link to read March/April 2016: https://www.fhwa.dot.gov/hfl/innovator/e-version/issue_53/3dissue/.

At the CAI website, click on STIC Network where the State Transportation Innovation Councils list highlights of what is happening around the U.S.

There’s a tab for AID Demonstration, Accelerated Innovation Deployment. On the map, looks like Montana has had five AID Demonstration Projects.

Under their resources is an amazing selection of YouTube videos, publications, presentations under “Multimedia” on numerous topics.
Congratulations Roads Scholars 2016!

Montana LTAP’s Roads Scholar program continues to provide not only an incentive for city and county road personnel, the safety training ensures a safety culture for the future.

“It’s always an honor to present these Roads Scholar awards to these very deserving individuals,” commented Steve Jenkins, MT LTAP Director. “Their commitment to keeping our roadways safe and also keeping themselves safe by attending workshops is commendable. At LTAP, we provide the most updated transportation resources available for city and county transportation personnel.”

The following twelve will join the roster of 289 Roads Scholars. Presently there are 2,720 participants seeking to attain Roads Scholar standing. Congratulations to the following 2016 Roads Scholars:

- M.J. Bothman, Park County
- Russell Boucher, Hill County
- Doyle Grant, Phillips County
- Tyrel Graves, Richland County
- Ted Hafermann, Big Horn County
- Henry Hagstrom, Musselshell County
- Brad Hahn, Lewis & Clark County
- Clint Higgins, Big Horn County
- Charles Kulbeck, Blaine County
- Cody Miller, Dawson County
- Mark Sieler, Fallon County
- Randy Todd, Park County

L to R: Mark Sieler, Fallon County; Henry Hagstrom, Musselshell County; Ted Hafermann, Big Horn County; Clint Higgins, Big Horn County
The Roads Less Traveled
The following article appeared in FHWA’s Public Roads, January/February 2016 and has been edited. To read the entire story go to: https://www.fhwa.dot.gov/publications/publicroads/16janfeb/03.cfm

When most people think of a rural road, they most likely picture a pastoral setting with beautiful scenery. Although it is true that many of the Nation’s rural roadways offer scenic views, they also present challenges for local and tribal governments and agencies when it comes to improving safety for road users.

According to the National Highway Traffic Safety Administration’s Traffic Safety Facts: Rural/Urban Comparison, fatalities on rural roads in 2013 accounted for 54 percent of all traffic fatalities, even though only 19 percent of the U.S. population lived in rural areas at that time. In fact, the fatality rate per 100 million vehicle miles traveled was 2.6 times higher in rural areas than in urban areas.

To help address this issue, the Federal Highway Administration has developed a toolkit and two user guides for transportation professionals and elected officials who are working to improve safety on rural roadways. Improving Safety on Rural Local and Tribal Roads—Safety Toolkit (FHWA-SA-14-072) is intended for local and tribal road practitioners, local public works staff, and Federal and State safety engineers. The Safety Toolkit’s accompanying user guides, User Guide #1: Improving Safety on Rural Local and Tribal Roads—Site Safety Analysis (FHWA-SA-14-073) and User Guide #2: Improving Safety on Rural Local and Tribal Roads—Network Safety Analysis (FHWA-SA-14-074), offer a step-by-step process for safety analysis.

“With over half of all roadway fatalities occurring in rural areas, we believe that providing resources, like this toolkit, to safety professionals in rural and tribal areas will significantly improve their ability to make their roads safer for all users,” says Tony Furst, associate administrator for the FHWA Office of Safety.

Challenges on Rural Local and Tribal Roads
Improving safety on these roadways might be easier if they were all the same. But they are not. A rural road may be straight or winding. It may go through mountains or farmland. The road may be subject to rain and snow. Its surface may be paved or unpaved. A need exists to provide information and assistance to rural local and tribal road practitioners throughout the country to enable them to address safety concerns on these diverse rural roads, and the toolkit is a step toward meeting that need.

In 2013, FHWA reported that 71 percent of the more than 4 million miles (6.3 million kilometers) of roadways in the Nation are in rural areas. Further, the majority of the rural roads (74 percent) are locally owned and maintained.

Resources for Rural Road Safety
The FHWA Office of Safety has a Web page dedicated to local and rural road safety issues; see http://safety.fhwa.dot.gov/local_rural. The site includes information on FHWA’s Highway Safety Improvement Program and specifics on safety issues such as roadway departures, pedestrian and bicyclist safety, and intersection safety. Site visitors will also find links to partner organizations and agencies, such as the Local Technical Assistance Program/Tribal Technical Assistance Program (LTAP/TTAP), National Association of County Engineers, and National Association of Development Organizations.

In addition, FHWA recently launched a center devoted to local and rural road safety issues, the National Center for Rural Road Safety, accessible at http://ruralsafetycenter.org. The major focus of the center is on providing training and technical assistance to rural local and tribal agencies. To this end, the center’s Web site is a resource for putting training tools and resources for rural transportation safety into practice.

Benefits of the Toolkit
The benefits of the Safety Toolkit are inherent in its purpose—a one-stop shop for information on the safety analysis process and resources, presented in plain language for anyone wanting to address roadway safety issues.

The step-by-step approach presented in the toolkit and its user guides is based largely on the safety analysis process given in the American Association of State Highway and Transportation Officials’ Highway Safety Manual. This process involves three components: evaluating the network (road system), selecting improvements, and implementing and monitoring those improvements.

(Complete article has detailed explanations of each step below.)

Step 1: Compile Available Safety Data
Step 2: Conduct Network Screening
Step 3: Select Sites For Implementation
Step 4: Diagnose Site Conditions and Identify Countermeasures
Step 5: Prioritize Countermeasures For Implementation
Step 6: Implement Countermeasures
Step 7: Evaluate Effectiveness

The User Guides
To further assist practitioners with improving the safety of their roads, FHWA created two user guides. Each guide, by presenting a typical scenario on rural roads, shows how to apply the safety analysis process through examples of solutions using methods presented in the toolkit. The user guides’ solutions provide step-by-step procedures for practitioners to apply the methods to comparable situations in any community.

Continued on Page 11…
Welcome to the LTAP Lending Library where publications, videos, DVD’s, and software may be borrowed for a two-week period. We have a limit of three videotapes or DVD’s for a rent-free two-week period. Some publications are free or for a nominal charge upon request.

For information or checkout procedures, please call Genevieve Albert or Michele Beck, LTAP, 1-800-541-6671. If you have computer access, please e-mail us: mltap(at)montana.edu.

We have new lists for the library publications, software, DVD’s, and videos at our web site, just click on Resources: http://ou.montana.edu/ltap/index.html (Note: Many of our publications are electronically available.)

At this web site, you can also keep track of upcoming workshops, past and present newsletters, and workshop announcements.

Our 2015-2016 Needs Assessment Survey is available at this web site. Thank you in advance for taking time to complete it.

Publications

p-5.10 Covered Bridges and the Birth of American Engineering (National Park Service 2015)

This book examines the development of wood trusses and covered bridge construction, explores the function of trusses in covered bridges, and looks at the preservation and future of these distinctly American bridges. A total of eighty covered bridges have been documented with large-format photographs and written historical reports. (234 pages) http://www.fhwa.dot.gov/infrastructure/pavements/ltpp/15036/15036.pdf


p-291.01 Long-Term Pavement Performance Program Determination of In-Place Elastic Layer Modulus: Backcalculation Methodology and Procedures (FHWA December 2015) This report documents the tools, data analyses, Backcalculation and forward calculation packages, and procedures used to calculate the in-place elastic layer modulus of the LTPP test sections. (177 pages) https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/ltpp/15036/15036.pdf

Editorial Contributions Welcome

LTAP welcomes contributions to LTAP MATTERS. Those wishing to submit relevant material to be published in the next newsletter can submit their ideas and articles to: Michele Beck, Local Technical Assistance Program, PO Box 173910, Bozeman, MT 59717-3910 (800) 541-6671 or (406) 994-6100 Fax: (406) 994-5333 email: mbeck(at)montana.edu.

LTAP MATTERS is published quarterly. Funding for this program is provided by the Federal Highway Administration, Montana Department of Transportation, Montana State University, and a portion of Montana’s gas tax revenues. This newsletter is designed to keep you informed about new publications, techniques, and new training opportunities for you and your community.

• Present and past issues are available at http://ou.montana.edu/ltap/newsletter/index.html or by calling 1-800-541-6671.
• Approximately 100 copies of this public document were published at an estimated cost of $2.19 per copy for a total cost of $218.82 for printing. Several copies have been distributed but the majority are now electronically disbursed to over 350 agencies and available on our website.
• LTAP attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity. Alternative accessible formats of this document will be provided upon request.
• Please send us any comments or concerns you may have regarding this newsletter with your name and address in order that we may respond in a timely manner.

The Roads Less Traveled (Cont’d from Page 10)

User Guide #1: Improving Safety on Rural Local and Tribal Roads--Site Safety Analysis. The scenario in this guide involves complaints from a community about safety at a particular curve and high travel speeds. Given the circumstances, the guide walks the reader through compiling data (step 1); diagnosing site conditions and identifying countermeasures (step 4); prioritizing countermeasures for implementation (step 5); implementing countermeasures (step 6); and evaluating effectiveness (step 7). Conducting network screening (step 2) and selecting sites for implementation (step 3) are not necessary in this scenario because the location of interest was pinpointed by the public.

User Guide #2: Improving Safety on Rural Local and Tribal Roads--Network Safety Analysis. The scenario in this guide is set in a small, rural town. In the example, the development of an intersection safety plan is recommended to identify and prioritize safety improvements.

All 15 two-way stop-controlled intersections in the town are selected for a detailed evaluation, and the countermeasures are selected and prioritized. This user guide walks practitioners through all seven steps of the safety process.

Conclusion

By helping to prevent traffic-related fatalities and serious injuries, the Improving Safety on Rural Local and Tribal Roads--Safety Toolkit and user guides can assist individuals tasked with making their roadways safer.

For ease of navigation, the document has color-coded steps, and it is presented in plain language for ease of comprehension. Using the toolkit and user guides can be beneficial for experienced traffic safety personnel as well as those new to safety processes.
Parting Shot . . .

In order to share their wisdom, this special column is dedicated to those who are retiring, or recently retired, and wish to pass on some gems from their years managing county roads or city streets. The following article is from the Cut Bank Pioneer Press, written by Linda Bruch, regarding Bill Bandel’s retirement as Public Works Director for Glacier County in December 2015.

Bill Bandel has been at his job for 13 years. He is proud of the job he did for Glacier County and can say without hesitation, “I think we have one of the best departments in the state of Montana.”

Bill has been the Director of Public Works for Glacier County since September of 2002. Before coming to Cut Bank to work, Bill was the Public Works Director for the City of Lewistown.

“When I got here, there were some troubles, but over the years we have fixed many things and modernized a number of pieces of equipment, making it not only safer to do our jobs, but allow us to do our jobs even better,” Bill stated.

In the summer, Bill’s road crew of 14 guys handles construction and maintenance on over 900 miles of county roads. That same crew tackles those same miles in the winter months, plowing snow and ice covered roads, keeping them safe for winter drivers.

Thirteen years ago, a lot of the work those two departments were doing was being done with old equipment or with equipment that would break down regularly. One of Bill’s biggest priorities was to get newer, better equipment. Not only would that ensure they could do their jobs better, but that he and his staff would be safer while out on the roads of Glacier County.

“I am pretty proud of the fact that we have some great equipment in our department now. For example, we have a gravel crusher that is worth close to a million dollars that I worked hard for us to get. We traded in some older equipment to help with the purchase price and got a good piece of equipment,” he said. “We are lucky we have it, because with it, we can do road construction. Without it, we can only do maintenance and that has made a big difference for our county roads.”

He added, “The gravel crusher can crush 1,500 to 2,000 tons of gravel a day, which is a tremendous amount and much better than what either of our old machines could do.”

The gravel crusher is just one piece of equipment Bill is proud to have gotten for his department. “There are other pieces that we have, all of them being modern, good pieces of equipment. And they are ones that we maintain in as new of a condition as we possibly can,” he shared.

Sometimes in this one county, Bill said there might be one drift of snow on a road that runs for 20 miles and then, it seems like someone drew a line and the drift stops. “So you have to plan for a crew that is ready to plow for drifts of short and long amounts. Montana is not an easy place for road work in the winter.”

Bill is also proud of the fact that when he arrived in Cut Bank, most of the county roads were 16 to 18 feet wide. “Most of the roads got wider and are at 24 feet in width now. That makes them much safer for everyone,” he said.

Bill has reason to be proud of the job he did for Glacier County. And in turn, Glacier County and its residents should be proud and grateful for his years of dedication and service. He and his staff have ensured we all can be safe while out on a county road.