# MATTERS

Montana's Answers To Technical Education of Roads & Streets Vol. 29. No. 2

Spring 2012

From the Director	2
Safety Congress 2012	3
MACRS Conference	4&5
Calendar of Events	6&7
MACRS (Cont'd)	8&9
Road Scholars	9
Nat'l Work Zone Week	10
Work Zone Flagging	10
Every Day Counts	11
LTAP Library	11
Bridge Preservation	11
New MUTCD Sign Layouts	11



# From Montana LTAP Director

In January 2012, Montana LTAP held its 10th Annual Safety Congress in Great Falls. At this week-long training event, most safety topics covered were relevant to state and local transportation providers. I arranged for several other professional speakers and assisted developing their training modules as well.



Pierre Jomini, Retired MDT Safety Management Engineer

The Safety Congress brought together like-minded people to convene in a central location. Participants came from cities, counties and state departments who have responsibilities for permanent signing, work zone signing, or are in charge of overall roadway safety. In the previous Safety Congresses, we appreciated partnering with MACo bringing counties together and jointly enhancing roadway safety.

This year's Safety Congress was expanded to include topics for cities, state, and county road stakeholders in their expertise. Also included were transportation industry professionals such as traffic control and utility companies involved with temporary traffic control issues for signing.



Standing: Russ Albers, Chouteau County; L to R: John Anderson, Fergus County; Austin Schultz, City of Great Falls; Joe Carter, Jefferson County

What we have learned is motor vehicle crashes increase when we exceed drivers' expectations. For example, when drivers see signs they do not understand, they tend to panic and react poorly and the possibility of crashes increases. The mission of Montana LTAP Safety Congress is to provide learning on all aspects of transportation safety.

In our Safety Congress planning for next year, we are including the national parks and Indian reservations. By bringing together transportation stakeholders with similar responsibilities, this event will offer a forum where all can gather to share ideas and knowledge to provide a seamless transportation network, thereby reducing crashes on Montana's roadways.

Travel Safe, Steve Jenkins, MT LTAP Director

### Steven Jenkins, P.E.

Director

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The LTAP/TTAP Mission is to foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers



Local Technical

Assistance Program

LTAP Matters is published by the Local Technical Assistance Program. LTAP is located at Western Transportation Institute, College of Engineering, Montana State University, Bozeman, Montana.

**Local Technical Assistance Program** 

We can be reached at the following:

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FAX: (406) 994-5333

E-Mail: MTLTAP(at)coe.montana.edu

Our website lists upcoming training courses, registration forms, library information, our contact information, newsletters, various links, and MACRS information. Please go to: http://www.westerntransportationinstitute.org/centers/ltap/

The Local Technical Assistance Program/Tribal Technical Assistance Program (LTAP/ TTAP) is a nationwide network of 58 centers - one in every state, seven serving Native American tribal governments and one in Puerto Rico.







Federal Highway Administration

Front Page Photo: WZ Tech Class - Great Falls, MT - By Steve Jenkins, MT LTAP Director

### MT LTAP Advisory Committee Members

The Advisory Board meets annually to make recommendations and evaluate the effectiveness of the Montana LTAP program.

# **Russ Albers**

Chouteau County

### **Debbie Arkell**

City of Bozeman

# **Kris Christensen**

Montana Dept of Transportation

### **Thomas Danenhower**

**MMIA** 

### **Kelly Elser** Town of Ennis

### **Eric Griffin**

Lewis and Clark County

# **Dave Hand**

Montana Dept of Transportation

### **Alec Hansen** Montana League of

Cities & Towns

### **Greg Jackson** MACo

**Russ Huotari Richland County** 

### Jim Rearden City of Great Falls

**Bob Seliskar** Federal Highway Administration

# **Montana LTAP's Tenth Annual Safety Congress**

The four-day Safety Congress in Great Falls, Montana, provided a variety of roadway-related courses for the transportation workforce who participated.

## Day One: Monday, January 23, 2012

"Because spring means roadway repairs and projects, the Work Zone Technician course was well-attended," commented Genevieve Albert, MT LTAP Conference Coordinator. "Our numbers for this morning class was over fifty participants."

"The Work Zone Technician course is a prerequisite for the Traffic Control Supervisor course and attendees receive their flagger card after passing the WZ Tech exam," explained Steve Jenkins, MT LTAP Director. "The 2009 MUTCD (Manual on Uniform Traffic Control Devices) regulations, requiring anyone working next to or on a roadway wear an ANSI 2 vest. Montana LTAP promoted this new regulation by distributing an ANSI Class 2 vest to each participant at the WZ Tech course."



# **Section 6D.03 Worker Safety Considerations** Standard:

04 All workers, including emergency responders, within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to work vehicles and construction equipment within the TTC zone shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled "American National Standard for High-Visibility Safety Apparel and Headwear" (see Section 1A.11), or equivalent revisions, and labeled as meeting the ANSI 107-2004 standard performance for Class 2 or 3 risk exposure, except as provided in Paragraph 5. A person designated by the employer to be responsible for worker safety shall make the selection of the appropriate class of garment.

Link: http://mutcd.fhwa.dot.gov/htm/2009/part6/part6d. htm#section6D03

The WZ Tech course followed information in the Montana Department of Transportation handbook titled *Guidelines For Temporary Traffic Control (2010) Guidelines for Municipalities, Utilities, and Maintenance.* 

Emphasis was placed on keeping the traveling public safe by having consistency in temporary traffic control signage. The other major factor is keeping the work zone employee safe by following safety measures outlined in the class.





Traffic Control Supervisor Class and One Instructor

# Day Two: Tuesday, January 24, 2012

The Traffic Control Supervisor class began Monday afternoon and continued through Tuesday. Participants had to meet the following requirements to attend the TCS course:

- Current Flagger Card (Montana, Idaho, Oregon, Washington, or ATSSA Flagger Certified)
- Successful Completion of Work Zone Technician Course
- 2000 hours Verifiable Field or Design Work Zone Traffic Control Experiences
- Two Reference Letters

Course work included a homework assignment for laying out a temporary traffic control plan on the first day followed by the next day with exam and three TTC problems.

# Day Three: Wednesday, January 25, 2012

"Signing is one of our most requested classes due to new regulations being set by Federal Highway Administration through the MUTCD," Jenkins said. "The old saying about 'too many signs only confuse' is true when trying to establish consistency for drivers, pedestrians, and bicycles. The MUTCD establishes sign height and distance from the roadway, under normal conditions. Recommendations of what signs to use and placement are covered in this class also."

Guest instructor, Scott Keller, MSU Civil Engineering, provided his presentation on Guardrail Construction and Maintenance. The afternoon coursework included Jenkins team teaching with Pierre Jomini, retired MDT Safety Management Engineer, on Prisms, Clear Zones, Safety Audits, and how to apply for safety funding.

Over fifty participants signed up for this day of instructing including county, city, and Montana Department of Transportation employees.

# Day Four: Thursday, January 26, 2012

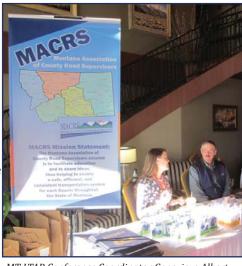
For the final day of the Safety Congress, Jenkins and Jomini presented on Sign Retroreflectivity, Driver Behavior, Traffic Laws, and worker safety.

"We look forward to providing another full schedule of roadway safety topics next January 2013 at our 11th Annual Safety Congress," Jenkins concluded. ❖

# **MACRS 2012 Spring Conference**

Over 300 participants and vendors gathered in Great Falls. Montana at the 32nd Annual MACRS (Montana Association of County Road Supervisors) Spring Conference in March.

"There were over 60 vendor tables this vear." Genevieve Albert, MT LTAP



MT LTAP Conference Coordinator Genevieve Albert and LTAP Field Engineer Bart Kraus

Conference Coordinator, announced. "This year we have seen an additional three vendors from last year. It's great to see the growth. I also had two inquiring vendors drop by during the conference who were ready to sign up for next year. The new layout provided enough space for participants to easily move through the vendor area. This conference definitely has an impact on all 56 Montana counties. There were only several counties who were not able to attend, but all are signed up as MACRS members and receive information about the conference."

President Mitch Urdahl, Gallatin County Road Department, noted the quality program topics and speakers provided for participants keeps folks coming back.

# Day 1 - March 26, Monday

Registration opened in the lobby of the Best Western Heritage Inn at 11 am with Pre-Conference Speaker Mark Wilmarth presenting from 1pm to 5pm on "How to Work with Other Agencies and Other People."

Vendors parked outside equipment in a back lot and set up from 1-5pm for the next three days.

Continued on Page 5...



# MACRS Spring 2012 (Cont'd from Page 4)



Marine Corp Honor Guard

# Day 2 - March 27, Tuesday

The morning session opened with presentation of the colors by the Marine Corp Honor Guard followed by the National Anthem sung by Cyndi

Johnson, Pondera County Commissioner. MACRS President Urdahl welcomed everyone and representatives from Senator Tester and Congressman Rehberg spoke briefly.



USAF Colonel Heraldo Brual speaking to MACRS audience

USAF Colonel Heraldo Brual, from the Malmstrom Air Force Base, was one of the first keynote speakers, referencing missile roads and maintenance agreements with county road departments.



Mark Wilmarth addressing MACRS audience

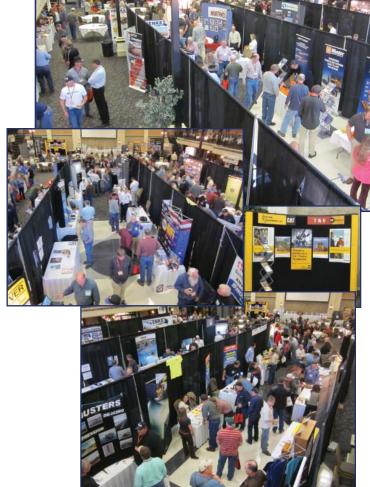
Mark Wilmarth, the second Keynote Speaker provided information on "Four Generations" and how interpersonal communication is developed over the years.

The afternoon session began with the Department of Environmental Quality covering permits, gravel pits and



Chuck Homer, Air Quality; Paul Skubinna, Stormwater; reclamation. Due and J. J. Connor, Open Cut/Gravel Pits

to the number of questions after this session, further training opportunities are being developed.



The afternoon concluded with a split session: 1) Permits for Water Use and Bridge Replacement and 2) Mine Safety and Health Administration.



All breaks were taken in the vendor/convention area where the 61 vendors provided information for the participants as shown in the photos above and below:



# Calendar of Events • January 2012 - June 2012

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2: New Year's Holiday - Offices Closed

16: Martin Luther King Day - Offices Closed

17: MT LTAP Safety Webinar - Leadership - 7:30am-8:30am

22-26: Transportation Research Board, Washington, DC

23-26:10th Annual Safety Congress - Great Falls, MT (MT LTAP):

23 am: Work Zone Tech

23 pm & 24: Traffic Control Supervisor

25 am: Signing/Prisms/Clear Zones

25 pm: Safety Audits

26 am: Sign Retroreflectivity/Driving Behavior

26 pm: Worker Safety

23-25: IMSA Certification - Contact MT LTAP

31: Asphalt Institute, Billings, MT (MT LTAP)

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7-8: FREE OSHA-10 Hour Safety Course, Heritage Inn, Great Falls, MT (Hosted by Montana LTAP)

12-16: ATSSA Convention & Traffic Expo www.TrafficExpoTampa.com

13-16: MACo's Midwinter Conference

Billings Hotel & Convention Center, Billings, MT

16: EDC-Every Day Counts-Exchange Live Webinar FHWA/MDT/MTLTAP 11am - 2pm

20: President's Day - Observed (Montana LTAP Offices Open)

21: MT LTAP Safety Webinar - Materials 7:30am-8:30am

27 - March 2: SafetyFestMT - Billings Hotel & Convention Center, Billings, MT www.safetyfestmt.com

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Feb 27 - March 2: SafetyFestMT - Billings Hotel & Convention Center, Billings, MT www.safetyfestmt.com

6: Work Zone Tech Course - Helena (MT LTAP)

7: Work Zone Tech Course - Missoula (MT LTAP)

8: Work Zone Tech Course - Kalispell (MT LTAP)

10-18: MSU Spring Break

13: Flagging Certification Course - Miles City (MT LTAP)

14: Flagging Certification Course -Glendive (MT LTAP)

15: Flagging Certification Course - Wolf Point (MT LTAP)

20: MT LTAP Safety Webinar - Falls & Back Safety - 7:30am-8:30am

26-29: MACRS 31st Annual Conference Heritage Inn, Great Falls, MT (MT LTAP)

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16: Flagging Certification Course - Plentywood (MT LTAP)

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1-5: NACE 2012, Lexington, KY www.naco.org

9-10: Gravel Roads - Missoula (MT LTAP)

30

11-12: Gravel Roads - Kalispell (MT LTAP)

17: MT LTAP Safety Webinar - Work Zones - 7:30am-8:30am

19: EDC-Every Day Counts-Exchange Live Webinar 11am - 2pm FHWA/MDT/MTLTAP

25-26: Gravel Roads - Sidney (MT LTAP)

23-27: National Work Zone Awareness Week (FHWA)

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8-10: Rocky Mountain Chapter - APWA - 45th Spring Conference,

Nampa, ID More info: http://rockymountain.apwa.net

15: Work Zone Flagging Course - Great Falls (MT LTAP)

16: Work Zone Flagging Course - Lewistown (MT LTAP)

17: Work Zone Flagging Course - Billings (MT LTAP)

28: Memorial Day - Offices Closed

29: MT LTAP Safety Webinar - Culverts/Trenching- 7:30am-8:30am

30 & 31: LTAP Region 7 Meeting - Denver, CO

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

# Training Opportunities at Montana LTAP Website: www.westerntransportationinstitute.org/centers/ltap/

June	2012						
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11: Work Zone Flagging Course - Bozeman (MT LTAP)

12: MACRS Executive Meeting - Bozeman

13: Montana LTAP Annual Advisory Board Meeting - Bozeman

19: MT LTAP Safety Webinar - Summer Survival - 7:30am-8:30am

19: EDC-Every Day Counts-Exchange Live Webinar 11am - 2pm FHWA/MDT/MTLTAP

# Safety Meeting Webinars from Montana LTAP

January 17, 2012 - Leadership February 21, 2012 - Materials

March 21, 2012 - Back Safety & Slips, Trips, Falls

April 17, 2012 - Work Zones

May 29, 2012 - Culvert Placement & Trenching Safety June 19, 2012 - Summer Survival

Monthly Thirty-Minute Safety Webinars held at 7:30am on Tuesday Mornings Call Montana LTAP at 1-800-541-6671 for more information!

# Calendar of Events • July 2012 - December 2012

July	2012						
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4: Fourth of July Holiday - Offices Closed

30-Aug.2: National LTAP/TTAP Conference, Grapevine, TX

Training on Request:
Summer Survival
Hand Safety
Slips, Trips, & Falls

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July 30-Aug.2: National LTAP/TTAP Conference, Grapevine, TX
16: EDC-Every Day Counts-Exchange Live Webinar 11am - 1pm
FHWA/MDT/MTLTAP

26-29: APWA International Public Works Congress & Exposition, Anaheim CA. Go to this link: http://www2.apwa.net/events/

> Training on Request: Forklift Sign Safety Road Audits

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3: Labor Day Holiday - Offices Closed

5&6: Tentative Dates - 23rd Annual Equipment Safety Training and Snow Rodeo - Billings, MT (MT LTAP) Brochure available in July 23-27: MACo 103rd Annual Conference, Heritage Inn, Great Falls, MT www.mtcounties.org or MACo's Karen Houston 406-449-4360

October 2012								
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**TBA: MACRS Fall District Meetings** 

December 2012

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3-5: 81st League of Cities & Towns - Hilton Garden Inn, Kalispell, MT 2 & 3: Public Works Directors - MT LTAP

TBA: Put On The Brakes Day - 12th Anniversary (go to: www.brakesonfatalities.org) 8: Columbus Day - Observed (Montana LTAP Offices Open)

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

TBA: 27th Regional Local Road Coordinators Conference, Rapid City, SD

November 2012								
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6: Election Day (Offices Closed)

12: Veterans' Day - Offices Closed

13 & 14: MACRS Planning Meeting, Heritage Inn, Great Falls, MT TBA - MT LTAP Safety Webinar - 7:30am - 8:30am

22 - 23: Thanksgiving Holiday - Offices Closed

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**TBA - MT LTAP Safety Webinar -7:30am-8:30am** 24 & 25: Christmas Holiday - Offices Closed

Training on Request:
Winter Survival
Winter Maintenance

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

# MACRS Spring Conference 2012 (Cont'd from Page 5)

# Day 2 - March 27, Tuesday

The morning Prayer Breakfast was opened with Pastor Joe Jordan followed by President Urdahl welcoming thirty-one first-timers attending the MACRS conference.

This morning's session began with **FEMA Cost Recovery** and the 2011 flood disasters with Jim Anderson followed by Tim Thennis, Montana Disaster and Emergency



Tim Thennis and Jim Anderson

Services Bureau Chief discussing ways of handling emergencies. Wrapping up this portion was Ed Burlingame, Montana Mutual Aid, focusing on State Roles in Emergencies.



Harold Blattie, MACo

Mid-morning session for the Montana Association of Counties Director Harold Blattie provided opening remarks and introductions for Greg Jackson, MACo JPIA/JPA Trust Administrator; and two gentlemen from Western States Insurance, Rob Logsdon and Brodie Loushin.

After lunch, Montana LTAP Steve Jenkins presented his "Let Nature Be Your Guide" movie with D.J. Vanas and Jenkins outlining safety as well as personal

development within community. This presentation was followed by the Highway-Rail Grade Crossing Safety Panel including John Althof, MDT; Dave Jackson, Montana MP & E Railroad Inspector, Megan McIntyre, BNSF; Ken Naylor, Federal Railroad Administration; and Steve Werner, Montana Rail Link.



L to R: Jamie Winstead, MDT; John Althof, MDT; Ken Naylor, FRA; Jody Toney, MDT; Steve Werner Montana Rail Link

The final session was a round table discussion on the impact of heavy loads on county roads with Duane Williams, MDT, and Dan Brosz, North Dakota County Engineer. With the oil boom a contributing factor in North Dakota, Brosz brought an interesting perspective to this session.



Dan Brosz, North Dakota

The evening banquet included many quality door prizes from vendors and counties being presented to winning participants by President Urdahl and his five Representatives: Ovila Byrd, Dave Fowler, Sandy Broesder, Jerry Backlund and Mo Henman. Other presentations were made to retiring Valley County Road Superintendent Rick Seiler with Sam Gianfrancisco highlighting Seiler's award with the famous "toothpicks" Rick was known to hand out at the banquet; Roads Scholar Awards were presented by Montana LTAP Director Steve Jenkins. 💠



Networking before banquet



L: Sam Gianfrancisco, Rick Seiler



Steve Jenkins



L to R: Gayle Schabarker, Madison Co.; Corey Pilsch, Flathead Co.; Matt Pepos, Cascade Co.; Dave Sutton, Cascade Co.; John Woodward, Madison Co.; Greg Yonkaitis, Rosebud Co.; Mike Paddock, Beaverhead Co.; Troy Hess, Prairie Co.; Clay Caudle, Lewis & Clark Co.; Rick Schutz, Cascade Co.; and Steve Weddle, Madison Co.

Not pictured: Justin Beery, Dawson Co.; Duane Bieber, Richland Co.; Michael Jepsen, Richland Co.; Erik Larsen, Richland Co.; Marc Oren, Rosebud Co.; Jarame Schepens, Richland Co.; Tim Ullman, Richland Co.; Shane Williams, Richland Co.

"The Montana LTAP Roads Scholar program provides an avenue to honor those in the transportation workforce who have continued their education and improved their knowledge about safety and road design," commented Montana LTAP Director Steve Jenkins. "These are dedicated hard working people who strive to keep the traveling public safe on Montana roads and I am proud to award them with this recognition."

Nineteen Roads Scholars were awarded their jacket and certificate this year at the MACRS Annual Banquet. Each individual attended ten required classes with four focusing on equipment safety, work zone certification, winter safety, and leadership.

Jenkins noted there will be several Road Scholars Level II awards next year, referenced as "Road Masters." ❖

# Other MACRS 2012 Events

Kudos to Dave Sutton, Cascade County Road Department, and Tom Gossack, Tractor and Equipment Company, for



# Jerry Martinson, Tractor and Equipment Company, Says Farewell:

To the MACRS Officers & Members: Please accept my sincere thanks for the honor you bestowed on me at your Annual Spring 2012 Convention. I consider it a huge honor; to say that I am deeply humbled is an understatement.



Eric Griffin (L), PWD Lewis & Clark Co.; presents belt buckle to Jerry Martinson (R) , Tractor & Equipment Co.

I could not have been successful without the support of the counties I call on and the ones I don't. I have enjoyed a loyalty from my customers that has been unparalleled, and has been a wonderful inspiration to me. Because of that support we have had very positive impact on the way Caterpillar designs and supports the Governmental Industry, especially the motor grader business. The 160 series was produced primarily for county business.

I believe in the case of the "M" series motor grader from conception until the present, there has been at least 15 members of MACRS directly involved in critical design decisions. Furthermore when we did have hiccups or problems your MACRS's organization stood with us to resolve those problems.

You people have made my life more than wonderful and no words will ever be able to explain how much I appreciate all your help, business, loyalty, and above all else **FRIENDSHIP**.

THANK YOU,

Jong Matu to

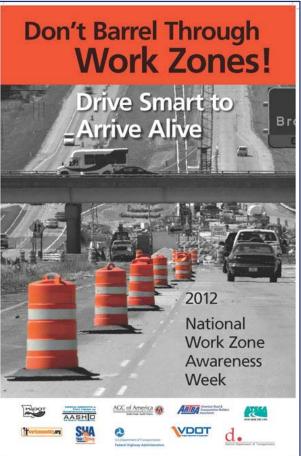
# National Work Zone Awareness Week • April 23-27, 2012

NWZAW began in 1999 when FHWA, the American Traffic Safety Services Association (ATSSA), and the American

Association of State Highway and Transportation Officials (AASHTO) signed a Memorandum of Agreement pledging to increase public awareness of work zone safety issues through a national media campaign. Since then, awareness has continued to grow, with State agencies and other organizations sponsoring high-visibility education and outreach initiatives.

New work zone safety resources released by FHWA include a report on Work Zone Road User Costs—Concepts and Applications (Pub No. FHWA-HOP-12-005). The report provides an economic basis for quantifying adverse work zone impacts. These data can then be used to make decisions about how to improve work zone mobility and safety, including selecting preferred alternatives to maintain traffic during construction. Step-by-step instructions are provided for key computations. Three real-world case studies from FHWA's Highways for LIFE program are also presented. To download the publication, visit http://ops.fhwa. dot.gov/wz/resources/publications/ fhwahop12005/index.htm.

Also available is FHWA's *A Primer on Work Zone Safety and Mobility Performance Measurement* (Pub. No. FHWA-HOP-11-033). The primer



HOP-11-033). The primer describes how to better quantify the effects of work zones on travelers, residents, businesses, and the local workforce (see November 2011 Focus). To download a copy of the primer, visit www.ops.fhwa.dot.gov/wz/decision\_support/performance-development.htm.

Another valuable resource is FHWA's Work Zone Safety and Mobility Peer-to-Peer (P2P) program, which matches agencies with experienced transportation professionals who can provide guidance on how to address common challenges in implementing work zone management strategies.

To be matched with a peer, call 866-P2P-FHWA (866-727-3492), or send an email to workzoneP2P@dot.gov. There is no cost to participate in the program. ❖

# **Work Zone Flagging Classes**

In order to assist local government agencies and train the workforce, Montana LTAP will be offering three sites for flagging certification in May:

May 15, 2012 Great Falls, MT Location: Best Western Heritage Inn 1700 Fox Farm Road

May 16, 2012 Lewistown, MT Location: MSU Northern - Central MT Education Center - Room 2 773 Airport Road

May 17, 2012 Billings, MT Location: Billings Hotel & Convention Center 1223 Mullowney Lane

Participants **must be registered** through Montana LTAP to attend these workshops. Call 1-800-541-6671 for registration forms or go to http://www.westerntransportationinstitute. org/centers/ltap/Training/Calendar to download form and information. ��

# EDC - April - June - August 2012

On April 19, 2012, FHWA will be presenting their third Every Day Counts Dynamic Webinar, In Montana, the location is at the FHWA Helena office, 585 Shepard Way from noon to 2pm. Topic being covered is Flexibility in Right of Way (ROW). The Right of Way (ROW) process is currently a major part of the project development process. Significant time savings can be achieved by employing flexibilities already provided for in statute and FHWA regulations. This initiative will underline opportunities for improved coordination of ROW activities with other key project development actions in preliminary design; land acquisition, relocation, utilities accommodation and to certify ROW for a project; NEPA mitigation land needs; and a number of other areas where streamlined approaches may prove beneficial. The proposed initiative deals only with flexibilities allowed under existing regulations and statutes. Legislative changes required for additional flexibilities will need to be addressed separately.

Although the other Montana Department of Transportation sites are not listed, please contact Montana LTAP (1-800-541-6671) if interested in attending this dynamic webinar or any of the next two and locations will try to be set up:

June 21, 2012 - In Lieu Fees/Mitigation Banking August 16, 2012 - ASCT (Adaptive Signal Control) &

# **Montana LTAP Library**

Welcome to the LTAP Lending Library where publications, videos, DVD's, and software may be borrowed for a twoweek 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: mtltap(at)coe.montana.edu.

We have new lists for the library publications, software, DVD's, and videos at our web site:

http://www.westerntransportationinstitute.org/centers/ltap/Resources

At this web site, you can also keep track of upcoming workshops, past and present newsletters, and workshop announcements. Our 2012 Needs Assessment Survey is available at this web site. Thank you in advance for taking time to complete it.

# **New Publications**

p-3215 Transportation Design & Construction Leadership Directory & Buyers' Guide 2012 (ARTBA 2012) The Leadership Directory is a list of who's who of companies and individuals that work in the transportation development arena. The Buyers' guide describes each firm's capabilities allowing you to learn about and connect with a wide variety of material suppliers, manufacturers, design firms and contractors. Online:

http://www.artba.org/mediafiles/publicationsmembershipdirectory.pdf http://www.artba.org/mediafiles/about2012buyersguide.pdf

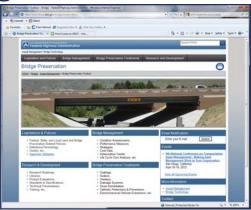
## **New DVDs**

**DVD 716** Field Guide to Testing Deicing Chemicals (Clear Roads 2011) This video demonstrates how to apply the methodology developed in Clear Roads' Field Guide for Testing Deicing Chemicals, which outlines three levels of field testing to evaluate the effectiveness of a deicing chemical. More information is also available at www.clearroads.org. Chapter I: Overview; Chapter II: Simple Garage Test; Chapter III: Single Roadway Test; Chapter IV: Side-by-Side Test. Video also available at YouTube: http://www.youtube.com/watch?v=cIPTRCXRBDM

(25 minutes)

# **NEW Bridge Preservation Resources from FHWA**

"A successful bridge program seeks a balanced approach that incorporates both preservation and replacement," said Anwar Ahmad of FHWA. Focusing only on replacing deficient bridges while putting off preservation needs will be inefficient and costly in the long term, as this will allow bridges in good condition to deteriorate. Preservation treatments generally cost much less than major reconstruction and replacement activities.



"The initial content of the Toolbox highlights some of the great work that has been done by the bridge community. We will make every effort to continue to update the contents as new material becomes available," said Ahmad.

The Bridge Preservation Treatments section features information on preservation and maintenance methods and procedures, including repair methods and protective systems. Visit the Legislation section to find the latest on Federal, State, and local laws and bridge preservation-related policies.

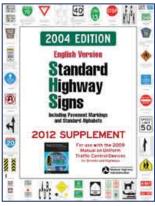
The Bridge Preservation Toolbox (www.fhwa.dot.gov/bridge/ preservation) serves as a compendium of bridge preservationrelated information and strategies. The information is structured under four main categories: Legislation and Policies, Bridge Management, Bridge Preservation Treatments, and Research and Development.

Visit the Bridge Preservation Toolbox at www.fhwa.dot. gov/bridge/preservation. For more information on bridge preservation resources, contact Anwar Ahmad at FHWA, 202-366-8501 (email: anwar.ahmad@dot.gov)

From FHWA FOCUS March 2012 at www.fhwa.dot.gov/publications/focus/ 💠

# 2009 MUTCD Sign Layouts

The Federal Highway Administration has developed the design details of the new signs added in the 2009 Edition of the MUTCD and signs whose designs have been modified in the 2009 MUTCD. The new designs are provided in the form of a Supplement to the 2004 Edition of Standard Highway Signs.



The contents of the 2012 Supplement will be incorporated into the new edition of Standard Highway Signs and Markings, which is due to be released later this year. The new edition will contain the details for all signs and pavement markings in the 2009 MUTCD, expanded sign design guidelines, and details for symbolic traffic and lane-control signal indications. Information on the 2012 Supplement is available at http:// mutcd.fhwa.dot.gov/ser-shs\_millennium.htm

Or go directly to the 2012 Supplement: http://mutcd.fhwa.dot.gov/SHSe/shs\_2004\_2012\_sup.pdf .



**Assistance Program** 

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### **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:

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Present and past issues are available at http://www. westerntransportationinstitute.org/ centers/Itap/Newsletter or by calling 1-800-541-6671.

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