

LTAP MATTERS

Montana's Answers To Technical Education of Roads & Streets
Vol. 28, No. 1

Winter 2011

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From the Director

Montana LTAP Fall training provided a variety of avenues to transfer technology to our local governments. MACRS workshops were held in five locations across Montana where county road employees participated in hands-on Rural Safety Reviews and were provided examples of low cost countermeasures to identify and modify hazards on public roadways. While on location during the Reviews, participants used the Dynamic Cone Penetrometer to measure load-bearing capacity of soils used on their gravel roads and plotted graphs.



Ovila Byrd, Flathead County Road Supervisor with DCP

Practical methods for constructing and maintaining gravel roads through use of Gravel Road Design Standards were covered as well as the use of the Roadway Prism Design to further longevity of gravel roads being built or reconstructed. While in the field, I had the opportunity to discuss concerns with public workers, meet new operators, and deliver the most up-to-date methods in road design.

During the League of Cities and Towns 79th Annual Conference at the Public Works Directors Meeting this fall, I had the honor of presenting the first City employees with Montana LTAP Roads Scholar Level I awards. Please see Page 8 for in-depth information about these awards. At this meeting, my selection of FHWA's Roundabouts DVD was viewed and discussed. MT FHWA Division Administrator Kevin McLaury addressed Every Day Counts Initiative also.

The year ended with two winter maintenance/winter survival workshops filled to capacity indicating Montana LTAP is filling the training requested from our constituents.

Looking to the New Year, we have Signing Basics and the new MUTCD training scheduled for the first part of January in three locations. The next week is MACo's Loss Control Conference. My presentation during the Road Session Track will cover recent county lawsuits and the importance of record keeping. This presentation ties in with my fall training on Safety Road Reviews and Signing Basics course. Local governments need to have recorded data showing they are responsible road stewards.

In February we are looking forward to partnering again with Dave Johnson, Asphalt Institute, and offer another Asphalt conference on February 1, 2011. Brochures are available at our new website: <http://www.westerntransportationinstitute.org/centers/ltap/Training>.

Speaking of asphalt training, recently I received an e-mail from Master Sergeant Joe Carter, U.S. Air Force, 219th RED HORSE. Most of you know Joe as Jefferson County's Road Supervisor. He was deployed to Afghanistan and sent some interesting photos regarding an asphalt paving job for an air strip, as well as pouring concrete pads. I responded that we were glad that he was safe and using his experience to benefit our country. We are humbled that he and all troops are risking their lives for our peaceful life here in the states. Please see Page 3 and 4 for more information from Joe.

Note on our calendar, Pages 6 and 7, numerous classes available to those requesting flagging certification in February and March. At the end of March, MACRS Spring Conference will be providing another outstanding list of presentations (Page 10). All in all, we are looking forward to a new year of training opportunities, be sure to let us know your needs.

**Happy New Year and Travel Safe,
Steve Jenkins, Director**

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.

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Front Page Photo:
By Michele Beck
City of Bozeman Crew with
Spanish Peaks in background

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On our website, we list 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.

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.



New Ordinance Banning Cell Phone Use In City of Billings

By Michele Beck, Montana LTAP

The City of Billings decided it was time to move forward and take preventative action due to vehicle accidents and cell phone incidents.

Effective October 31, 2010, the City of Billings' new ordinance states that if a Billings city police officer can see a driver with "immediate physical possession," meaning holding the phone to one's ear or texting while driving, the driver will be pulled over immediately and given a written warning or a citation with a fine of \$110. The hope is drivers will be compliant with the law and will put their phones down while they drive.

The ordinance states that drivers include anyone operating a motor vehicle, motorcycle, quadricycle, or a bicycle on a public highway within the city limits of Billings.

Of course anyone reporting a health, fire, safety or police emergency is an exception. The same exception holds true for governmental agencies such as emergency responders, governmental fire, ambulance, or law enforcement.

Being a passenger in a motor vehicle using a cell phone is permissible, along with those who pull over and are in a stationary position, not in gear, or in a parking lane or space out of moving traffic lanes.

The provision allows use of a "hands free device" as long as the driver is not touching the wireless telephone device with one's hands while operating a motor vehicle. If you want to read more, go to <http://ci.billings.mt.us/DocumentView.aspx?DID=6377> to view the entire new cell phone ordinance.



Most texters are using two hands to text, no hands on the steering wheel, device is in their lap.

Texting drivers take their eyes off the road for an average of 4.6 seconds out of every 6 seconds.

Texting driver traveling at 55 miles an hour would travel the length of a football field without ever looking up!

(From a 2009 Virginia Tech Transportation Institute Study on texting while driving.)

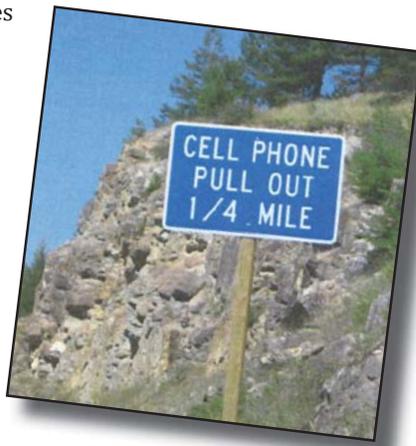
For those interested in reading what the Governors' Highway Safety Institution has put together on cell phones and states actions, go to: http://www.ghsa.org/html/stateinfo/laws/cellphone_laws.html

Cell Phone Pull-outs on Montana Highways

Permission was granted by Sandra Waddell, MDT Newsline Editor to reprint information from their September 2010 Cell Phone Article

There is a new sign of the times being displayed on Montana's Highways - "Cell Phone Pull Out 1/4 Mile."

In an effort to be proactive in saving lives, Montana Department of Transportation has begun placing these signs in pull-out areas where cell phone coverage is available. The cost for posting signs is minimal and the outcome potential means reducing crashes and saving lives.



Eighteen turnout signs have been posted on US-2 East of Kalispell, MT-83, US-93 between Polson and Kalispell, US-93 South of Missoula, and MT-200 East of Lincoln. Future signs will be posted across the entire state.

If you have a favorite highway turnout location with cell coverage and would like a sign installed, contact Duane Williams at duwilliams@mt.gov or by phone at 406-444-7312.

Using cell phones and texting are now a way of life. Making a habit of NOT using them while driving should become a way of life also.

ADVISORY COMMITTEE MEMBERS

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

Debbie Arkell
City of Bozeman

Bob Seliskar
Federal Highway
Administration

Kelly Elser
Town of Ennis

Fred Hansen
MACo

Jim Rearden
City of Great Falls

Russ Albers
Chouteau County

Thomas Danenhower
MMIA

Eric Griffin
Lewis and Clark County

Russ Huotari
Richland County

Kris Christensen
Montana Dept of
Transportation

Alec Hansen
Montana League of
Cities & Towns

Lynn Miller
Montana Dept of
Transportation

Asphalt Application by RED HORSE

Montana LTAP Director Steve Jenkins received the following photos and e-mail information this month from Master Sergeant Joe Carter, US Air Force 219th RED HORSE, stationed out of Great Falls. Carter, better known as Jefferson County's Road Supervisor, is on deployment to Afghanistan.

While stationed in Afghanistan, Carter's Unit was picked for a special mission in November: an asphalt paving job because Carter and one other guy from another base were the only ones that knew anything about asphalt.

They were flown by helicopter to the Afghanistan mountains to pave an air strip 50 feet x 1300 feet for unmanned aerial planes. The FOB (Forward Operating Base) was small but had good food. There was a ten-man Afghanistan crew with a foreman that could speak a little English and knew very little about paving.

Interestingly enough, the Mix design was of good quality and came in Hot at 250-289 degrees from three hours away at Kandahar. The trucks had to be escorted by security personnel.

RED HORSE: Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers

RED HORSE squadrons provide the Air Force with a highly mobile civil engineering response force to support contingency and special operations worldwide. They are self sufficient, 404-person mobile squadrons capable of rapid response and independent operations in remote, high-threat environments worldwide. They provide heavy repair capability and construction support when requirements exceed normal base civil engineer capabilities and where Army engineer support is not readily available. They possess weapons, vehicles/equipment and vehicle maintenance, food service, supply and medical equipment.



Their major wartime responsibilities are to provide a highly mobile, rapidly deployable, civil engineering response force that is self-sufficient to perform heavy damage repair required for recovery of critical Air Force facilities and utility systems, and aircraft launch and recovery.

In addition, they accomplish engineer support for bed-down of weapon systems required to initiate and sustain operations in an austere bare base environment, including remote hostile locations.



The primary RED HORSE tasking in peacetime is to train for contingency and wartime operations. They participate regularly in joint chiefs of staff and major command exercises, military operations other than war, and humanitarian civic action programs. They perform training projects which assist base construction efforts while at the same time honing wartime skills.



Units possess special capabilities, such as water-well drilling, explosive demolition, quarry operations, concrete mobile operations, material testing, expedient facility erection, and concrete and asphalt paving.

A rapid engineer deployment, heavy operational repair squadron engineering (RED HORSE or RH) squadron is a separate squadron within the

Air Force that is not aligned with any particular air wing or base. The RED HORSE concept of operations states that the unit's primary mission is to provide major force bed-down, heavy damage repair, and heavy engineering operations within its regional area of responsibility.

Concrete Project by RED HORSE (cont'd from Page 5)



Concrete Project

After the asphalt project was finished the Unit was flown back to their original base and had two projects to complete involving concrete helicopter refueling pads.

The depth of the concrete was ten inches thick. One project had two pads 100 feet x 200 feet and the other job had one pad 240 feet x 280 feet.



This is how equipment is delivered.



Life of a Soldier

When living in a combat zone, Carter stated that you never know what's going to happen next. Although everybody in the Squadron is fine he noted they have been taking on quite a lot of indirect fire lately. Unfortunately they get hit by mortars about every week at night.

The work week is six days with Sunday off. They are out on the flight line all the time. The elevation on the runway is around 4,860 feet with planes and jets taking off and landing constantly. Carter noticed that the daylight hours are becoming shorter. With the amount of work they accomplish he was experiencing the days themselves going by fast.

He reports the weather is good with cool mornings and daytime temps around 65 with no rain since he arrived three months ago. Carter has four months to go before he returns to Montana.

"We look forward to your return, Joe, and thank you and all the American soldiers," Director Jenkins replied.



Master Sergeant Joe Carter, US Air Force 219th RED HORSE

Calendar of Events • January 2011 - June 2011

January 2011

S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- 4, 5, 6: Signing Basics & 2009 MUTCD (MT LTAP):**
4: Bozeman 5: Lewistown 6: Billings
 9-13: Transportation Research Board, Washington, DC
11-13: Loss Control Conference (LTAP Safety Congress) MACo;
12: MT LTAP Steve Jenkins
 17: Martin Luther King Day - Offices Closed
 25: MT LTAP Safety Webinar - Every Day Counts: 7:30am-8:00am

MACo Loss Control Conference:

January 11-13 - Red Lion Colonel Inn, Helena, MT
 January 12, Wednesday - Steve Jenkins Presents
 Preregistration Required - www.maco.cog.mt.us

February 2011

S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

- 1: Asphalt Institute, Colonial Inn, Helena (MT LTAP)**
7: Work Zone Tech, Wingate, Helena, MT (MT LTAP)
8&9: Traffic Control Supervisor Two-Day Course, Helena (MT LTAP)
 21: President's Day - Offices Closed
22: Flagging Certification Course - Bozeman (MT LTAP)
23: Flagging Certification Course - Lewistown (MT LTAP)
24: Flagging Certification Course - Billings (MT LTAP)

Traffic Control Supervisor Two-Day Course

February 8 & 9 - Tuesday & Wednesday - Helena - Wingate
 Pre-registration Required - Montana LTAP - 1-800-541-6671
www.westerntransportationinstitute.org/centers/ltap/

March 2011

S	M	T	W	Th	F	S
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6	7	8	9	10	11	12
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27	28	29	30	31		

- 8: Flagging Certification Course - Helena (MT LTAP)**
9: Flagging Certification Course - Missoula (MT LTAP)
10: Flagging Certification Course - Kalispell (MT LTAP)
14: Flagging Certification Course - Miles City (MT LTAP)
15: Flagging Certification Course - Glendive (MT LTAP)
16: Flagging Certification Course - Wolf Point (MT LTAP)
17: Flagging Certification Course - Plentywood (MT LTAP)
 14-18: MSU Spring Break
28-31: MACRS 31st Annual Conference
 Heritage Inn, Great Falls, MT (MT LTAP)

April 2011

S	M	T	W	Th	F	S
					1	2
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17	18	19	20	21	22	23
24	25	26	27	28	29	30

- 11&12: Gravel Roads - Helena (MT LTAP)**
13 & 14: Gravel Roads - Lewistown (MT LTAP)
20 & 21: OSHA-Ten Hour Safety Training (MT LTAP) Billings, MT
 17-21: NACE 2011, Hilton Minneapolis, MN, www.naco.org
27 & 28: Gravel Roads - Miles City (MT LTAP)

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

May 2011

S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- 17: Flagging Certification Course - Great Falls (MT LTAP)**
18: Flagging Certification Course - Lewistown (MT LTAP)
19: Flagging Certification Course - Billings (MT LTAP)
24: Flagging Certification Course - Bozeman (MT LTAP)
25: MACRS Executive Meeting - Bozeman
26: Montana LTAP Annual Advisory Board Meeting - Bozeman
 30: Memorial Day - Offices Closed

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

June 2011

S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

- 1&2: LTAP Region 7 Meeting - Nebraska

Newsletter Costs Have Gone Up!

This newsletter costs \$2.03 each to print and mail. If you prefer to receive this newsletter electronically, please call Montana LTAP at 1-800-541-6674 or e-mail Michele Beck: mbeck@at.coe.montana.edu with your e-mail address. OR if this newsletter is going to an incorrect address, please let us know so we can correct our mailing addresses. Thanks for your help.

Calendar of Events • July 2011 - December 2011

July 2011

S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August 2011

S	M	T	W	Th	F	S
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1-4: National LTAP Conference - Boston, MA

4: Offices Closed

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

Training on Request:
 Forklift
 Sign Safety
 Road Audits

September 2011

S	M	T	W	Th	F	S
				1	2	3
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

5: Labor Day Holiday - Offices Closed
 7 & 8: 22nd Annual Equipment Safety Training and Snow Rodeo - Helena, MT (MT LTAP) Tentative Dates

October 2011

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2	3	4	5	6	7	8
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23	24	25	26	27	28	29
30	31					

MACRS Fall District Meetings: Topics, Dates & Locations TBA (MT LTAP)

80th League of Cities & Towns - Dates & Location TBA

10: Columbus Day - Observed

9: Put On The Brakes Day - 11th Anniversary
 (go to: www.brakesonfatalities.org)

26th Regional Local Roads Conference, Rapid City, SD - Dates TBA

November 2011

S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
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20	21	22	23	24	25	26
27	28	29	30			

2: Election Day: Offices Closed
 2 & 3: MACRS Planning Meeting, Heritage Inn, Great Falls, MT
 11: Veterans' Day - Offices Closed
 24-25: Thanksgiving Holiday - Offices Closed

December 2011

S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

26: 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.**

First City Street Employees Receive Roads Scholars Awards

“It is my goal to continue to promote Montana LTAP’s Roads Scholar program in both city street and county road departments,” Montana LTAP Director Steve Jenkins commented. “This past fall it was my pleasure to announce the very first City Roads Scholars, Level I, their certificates and Roads Scholar jackets.”

City Street Roads Scholar Level I Awardees:

- Todd Adler, City of Hamilton
- Joe Dennehy, City of Bozeman
- Steve Kurk, City of Bozeman
- Bill Taylen, City of Bozeman
- Wendell Ewan, City of Three Forks



Steve Jenkins presenting to Todd Adler, City of Hamilton



Steve Jenkins presenting to Joe Dennehy, City of Bozeman



Wendell Ewan, City of Three Forks

Montana LTAP began the Roads Scholar Program in 2000 by recording specific workshops that each individual participant from local governments, such as city street and county road departments, had taken.

Jenkins explained in order to attain a Roads Scholar Level One, a participant is required to attend ten courses. Four required courses are equipment safety operation, work zone certification, winter maintenance, and leadership. Filling out the six optional classes, attendees can select Montana LTAP courses such as asphalt

and pavement management, winter survival, trench safety, surveying and grading techniques, summer survival, and a variety of other Montana LTAP safety training workshops.

He further noted that with increased traffic as Montana grows and new technologies become available, there is a need for more diverse skills and knowledge necessary for maintenance and preservation on roadways as well as on-the-job safety training.

The Roads Scholar curriculum is designed to provide participants with the fundamentals of safety, management, and advanced technologies, as well as exposure to a wide variety of other topics relevant to the transportation field.

Through this program, Jenkins emphasized, local agencies will be providing an opportunity to develop the agencies’ greatest asset -- its employees.



Steve Jenkins presenting to Steve Kurk, City of Bozeman



Steve Jenkins presenting to Bill Taylen, City of Bozeman

2011 MACRS Spring Conference - President's Message

By Montana Association of County Road Supervisors President Wayne Buck, Rosebud County Road Department

After the MACRS Planning Meeting in November, this year's Spring Conference is shaping up to be an outstanding event with the theme of "Stimulating Growth and Development of County Roads Through Positive Attitudes."



Her primary research areas presently relate to workforce development, mobility of the elderly and disadvantaged, as well as transit planning and management. She is the instructor of the graduate level course on public transportation.

To provide keynote speakers addressing this theme, two keynote speakers have been selected: Terry A. Fleck, the Attitude Doctor, and Dr. Jill Hough, Ph.D, Program Director of Upper Great Plains Transportation Institute's Small Urban and Rural Transit Center.

Terry A. Fleck, The Attitude Doctor

Fleck will be the pre-conference speaker on March 28, 2011, Monday, from 1-5pm. He will also be addressing the General Session on Tuesday, March 29. His *Institute of Attitude* program will cover the Attitude Virus - is your attitude worth catching? High job performance is directly attributed to a positive attitude. In his promo materials, Fleck will help you determine if your attitude needs adjusting and has an action plan for you.

You will learn how to create a positive impact on attitudes, diagnose the cause of a negative attitude, clarify goals, get rid of clutter in your job, create new strategies, cure negative attitudes collaboratively and prevent negative attitudes.

Dr. Jill Hough, Ph.D., Program Director, SURTC, Advanced Research Fellow

Dr. Hough's focus as Director of UGPTI's SURTC is on research, education, and training for the public transportation industry. She has more than twenty years of transportation research experience and has published more than 45 reports and journal articles in the areas of public transportation, low-volume roads, logistics, and economic development.

More Topics

MACRS Planning Committee selected these program topics:

- Hybrid Equipment and Tier IV engines
 - Alternative Surfacing for Heavy Roads
 - Geo Tech Options
 - Driver Behavior and Safety Issues
 - Sign Retroreflectivity
 - Avoiding Personal Liability for County Road Personnel
- One split session is on the agenda:

- Asphalt
- OR
- MPWA Standards & AASHTO's Low Volume Road Standards

The participant and vendor registration forms are available on-line, just go to:<http://www.westerntransportationinstitute.org/centers/ltap/Training>

Questions can be directed to the friendly staff at Montana LTAP, 1-800-541-6671.

With all 56 counties as MACRS members, and fifty vendors providing information on their products, this MACRS Spring Conference always has something for everyone.

On behalf of MACRS, we look forward to seeing everyone there!
MACRS President Wayne Buck
Rosebud County Road Supervisor

OSHA 10-Hour Training Program Offered April 20-21, 2011

This course, accredited by the Occupational Safety & Health Administration (OSHA), was developed by the American Road & Transportation Builders Association (ARTBA) in cooperation with the National Safety Council (NSC). The 12.3-hour curriculum is designed to directly address the core safety and health hazards common to the roadway construction industry. This program focuses on highway construction activities that are responsible for the majority of work zone fatalities and serious injuries.

Montana LTAP in partnership with ARTBA will be providing this OSHA-10-Hour Training specifically for the roadway construction industry on April 20-21, 2011, in Billings, Montana, at the Crowne Plaza. Normally a \$200 fee per participant, this one-and-a-half-day training is **FREE!**

The course material is geared toward roadway work zone construction supervisors and experienced workers. The program design focuses on practical approaches to recognizing and controlling OSHA identified construction hazards, accompanied with "hands-on" activities to reinforce the formal instruction.

OUTCOMES: This OSHA 10-Hour Course provides an overview of 11 key construction work zone-related safety and health topics.

Upon completion of this course, participants should be able to recognize and take corrective action to address the following issues and hazards:

- Understanding OSHA
- Roadway Work Zones (Temporary Traffic Control)
- Personal Protective Equipment and High Visibility Clothing
- Collisions between workers and vehicle operators
- Night Work
- Mechanized Equipment
- Electrical Safety
- Excavations and Trenching
- Confined Space
- Fall Prevention and Protection
- Occupational Health and Environmental Controls

TARGET AUDIENCE: This course is designed to enhance the safety knowledge of Safety Directors, Superintendents, Project Managers, and others within the organization with safety responsibilities. All attendees completing the entire course will be issued the OSHA 10-Hour card from the OSHA Training Institute and a certificate from ARTBA.

Class size is limit and pre-registration is required. Look for Montana LTAP's brochure in the mail in mid-January or go to the LTAP website: <http://www.westerntransportationinstitute.org/centers/ltap/Training> after January 15 where an on-line registration form will be available.

Montana LTAP Library

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 the 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: [mtlap\(at\)coe.montana.edu](mailto:mtlap(at)coe.montana.edu).

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

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

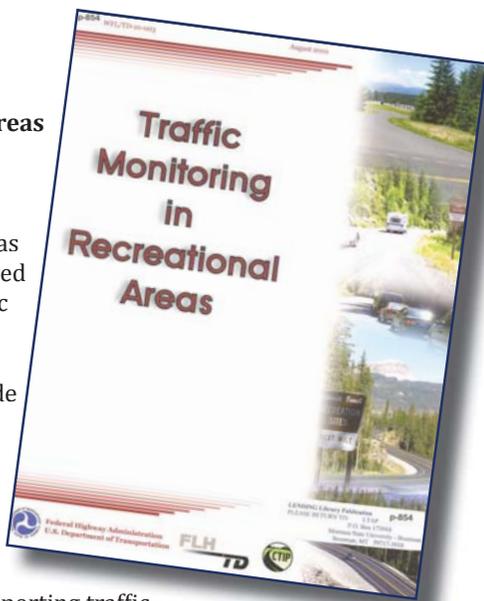
At this web site, you can also keep track of upcoming workshops, past and present newsletters, and announcements about upcoming workshops. Our 2011 Needs Assessment Survey is available at this web site. Thank you in advance for taking time to complete it.

New Publications

p-794 Crash Impact of Smooth Lane Narrowing with Rumble Strips at Two-Lane Rural Stop-Controlled Intersections (FHWA June 2010) As a low-cost remedy to address crashes at unsignalized intersections on two-lane rural roads, the Federal Highway Administration developed and evaluated a treatment to reduce approach speeds by narrowing lanes using rumble strips in the median and on the right-lane edge. Results showed a 32 percent reduction in total crashes and a 34 percent reduction in fatal/injury crashes (in eight experimental sites between 2007 and 2008).(8 pages)

p-853 Traffic Monitoring: A Guidebook (FHWA July 2010) This guidebook does not attempt to cover every aspect and detail of traffic monitoring. Instead, this document provides a starting point that leads the user to the locations of relevant and more detailed information to assist in the establishment of a successful traffic monitoring program. (39 pages)

p-854 Traffic Monitoring in Recreational Areas (FHWA August 2010) Traffic monitoring in recreational areas is often challenged by distinct traffic and roadway characteristics and the multitude of agencies responsible for the management of Federal lands and/or the collection of supporting traffic data. In an effort to improve/lend consistency to traffic monitoring in recreational areas, the Coordinated Technology Implementation Program tasked the Office of Federal Lands Highway-FHWA with conducting an assessment of the nationwide practices for recreation traffic data collection. Key findings from these activities (review of pertinent literature, targeted survey, workshop) are briefly described. (37 pages)



p-2558 Step Frequency Ground Penetrating Radar Characterization and Federal Evaluation Tests (FHWA October 2010) Step frequency ground penetrating radar (SF GPR) technology offers unprecedented subsurface three-dimensional (3D) imaging capabilities. Subsurface material deterioration, void imaging, and precise material and geometry measurements of civil infrastructure are all accurately and efficiently carried out using this specialized technology. Through previous evaluations and reports, the FHWA has determined that SF GPR can be applied to subsurface infrastructure evaluation problems to meet needs in the national interest. In addition to infrastructure applications described in these reports, it is notable that land mines, runway pavements, and buried historic sites can be imaged using SF GPR. (81 pages)

p-2706 Build a Better Mousetrap National Competition (FHWA LTAP/TTAP 2010) This National Entry Booklet has all the descriptive entries for 2010 with photos and winners. (46 pages) Cut and paste this address into your web browser for an on-line view of the pdf: <http://www.ltap.org/resources/downloads/NationalEntryBooklet2010.pdf>

New Software

SW770.1 Anti-Icing and Road Weather Information System (AASHTO Version 2 - September 2008). Computer-Based Training (CBT) This program contains seven modules with the final module being a scenario room where the student can take the information that has been learned to solve true winter problems. To be used for training on computer - not a DVD. (24 hours of training)

SW770.2 Selecting Snow & Ice control Materials to Mitigate Environmental Impacts. (AASHTO Version 1.5, April 2009) Computer-Based Training (CBT) This CBT contains 8 units that cover snow and ice control materials. To be used for training on computer - not a DVD. (2 hours of training)

SW770.3 Equipment Maintenance (AASHTO Version 1.3, September 2009) Computer-Based Training (CBT) This CBT contains 8 units that cover equipment maintenance information. To be used for training on computer - not a DVD. (2 hours of training)

Montana LTAP Library

New Software (cont'd from page 10)

SW770.4 Proper Plowing Techniques (AASHTO Version 1.3, September 2009) Computer-Based Training (CBT)
This CBT contains 8 units that cover snow plowing techniques. To be used for training on computer – not a DVD. (2 hours of training)

SW770.5 Deicing (AASHTO Version 1.3, April 2009) Computer-Based Training (CBT) This CBT contains 8 units that cover deicing and common materials. To be used for training on computer – not a DVD. (4 hours of training)

SW770.6 Blowing Snow Mitigation (AASHTO Version 1.3, September 2009) Computer-Based Training (CBT)
This CBT contains 7 units that cover blowing snow topics. To be used for training on computer – not a DVD. (3 hours of training)

SW770.7 Winter Maintenance Management (AASHTO Version 1.2, April 2009) Computer-Based Training (CBT)
This CBT contains 7 units that cover management issues dealing with winter conditions on roads, including budgeting and staffing. To be used for training on computer – not a DVD. (2 hours of training)

SW770.8 Performance Measures for Snow & Ice Control Operations (AASHTO Version 1.0, April 2010) Computer-Based Training (CBT) This CBT contains 7 units that cover why performance measures are important, input and output measures, and develop measuring systems. To be used for training on computer – not a DVD. (4 hours of training)

SW846 Comprehensive Intersection Resource Library (Version 4) (FHWA April 2010) Resources included in this library represent a broad cross section of publications, educational materials and other media published by the Federal Highway Administration and other transportation safety partners. Topics are organized into five broad categories, including traditional signalized and unsignalized intersections, roundabouts, highway/rail grade crossings, and nontraditional intersection designs such as single-point intersections.

SW2540 Region 7- 2010 You Show Us Entries (Better Mousetrap Competition) (CD-ROM) Colorado, North Dakota, Nebraska, and South Dakota Entries for 2010 competition. Cut and paste this address into your web browser for an on-line view of the pdf: <http://www.ltap.org/resources/downloads/NationalEntryBooklet2010.pdf>

Montana LTAP's New Website

We recently moved our web site and have a brand new look! As part of the College of Engineering's protocol to have all like-minded departments organized together, we recently had our website moved under Western Transportation Institute's website location. Please replace the old url with our new one:

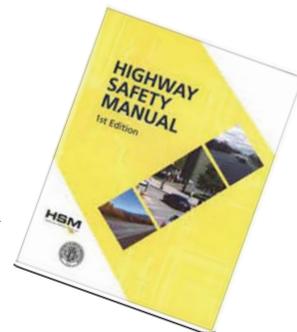
<http://www.westerntransportationinstitute.org/centers/ltap/>

One new item is a training calendar with actual days and dates to assist in workshop scheduling. If you have any difficulties, please contact us at 1-800-541-6671.



MT LTAP's Monthly Webinar

In these tough economic times, Montana LTAP is now offering a 30-minute monthly safety webinar to reach as many local government entities as possible without the travel expense and time away from the office. December's webinar introduced AASHTO's Highway Safety Manual and outlined what it is and what it is not. The webinar ended with Snow Plowing Policies and why a written policy is helpful for new employees and answering the general public's questions.



If you missed this webinar, we can send you the webinar in a pdf format, just let us know - 1-800-541-6671. Following are valuable links regarding the Highway Safety Manual:

Primer document on the HSM

<http://www.highwaysafetymanual.org/Documents/HSMP-1.pdf>

Web recording – "HSM Application"

<http://www.highwaysafetymanual.org/Pages/FHWAResourceCenterHSMWebinarSeries.aspx>

AASHTO Bookstore

https://bookstore.transportation.org/item_details.aspx?ID=1581

Crash Modification Factors Clearinghouse

<http://www.cmfclearinghouse.org/>

Next MT LTAP Monthly Safety Web:
January 25, 2011: 7:30am - 8:00am
FHWA's Every Day Counts Initiative





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Local Technical
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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Local Technical Assistance Program
Montana State University
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This newsletter is designed to keep you informed about new publications, techniques, and new training opportunities that may be helpful to you and your community.

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

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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.