

LTAP MATTERS

Montana's Answers To Technical Education of Roads & Streets
Vol. 28, No. 4

Fall 2011

<i>From the Director</i>	2
<i>Snow Rodeo</i>	3-5
<i>Calendar of Events</i>	6&7
<i>Snow Rodeo Winners</i>	8
<i>Are You a Leader?</i>	9
<i>Lewis & Clark PTH Event</i>	10
<i>LTAP Library</i>	11



From the Director

After attending the LTAP/TTAP National Conference in Boston this summer, we are reminded once again the importance of training not only for our constituents but for ourselves. By attending workshops on Toward Zero Deaths, Best Practices from the SHSP Peer Exchange, and Highway Safety Manual Resources for LTAP/TTAP centers, this rejuvenation of ideas are brought back to Montana LTAP to further assist us in transferring technology to local governments.

I moderated a session on locating effective instructors, course development, training formats, and distant learning. Montana LTAP also won second place in the poster division outlining the monthly safety webinars we provided to our constituents. Be sure to check our newsletter calendar for these webinars in the coming months.

Montana LTAP has worked extensively with Montana Department of Transportation and Montana FHWA representatives through a Safety Committee to insure continuity in work zone and traffic control procedures, based on the 2009 MUTCD. In 2011, over 850 flaggers and work zone technicians have been certified through the Montana LTAP Work Zone Program established through this committee. Although we measure how effective our work zone training is through crash data gathered over the years,



Montana LTAP Winning Poster

I would like to share the following July 2011 quote from Research Librarian Hong Yu, National Work Zone Safety Information Clearinghouse:

Recently I travelled to Big Sky, Montana. I was not only impressed with the beautiful scenery but also their work zone setup. There was a work zone from West Yellowstone to Big Sky. They used warning signs, work zone speed limit signs, flaggers, portable traffic signals, pilot cars, and drums. Every single device was put to its best use, no confusion and nothing extra. At the end of the day, when no construction work was going on, all devices were removed. I feel that was the safest and the most efficient work zone I have ever travelled.

With continued fall road work, we held an additional Work Zone Flagger Certification training in September due to the volume of requests for flagger certification. This training provides the workforce to obtain roadway jobs.

Other events, such as our 22nd APWA Annual Equipment Safety Training and Snow Rodeo, continue with this same emphasis on worker safety and equipment safety. On pages 3-5 and 8, the photos and story line indicate the value of training an agency's most valuable asset--the employee. Through Montana LTAP's Roads Scholar Program, I'm proud to have those Roads Scholars assist during training sessions. Their experience is invaluable to not only new employees, but also a reminder to long-term employees the importance of safety in every aspect of their work day.

This fall Montana LTAP training will include the Fall District MACRS meetings throughout the state in five locations and the Public Works Directors meeting in conjunction with the League of Cities and Towns conference in Billings. Be sure to save the dates for the 10th Annual Safety Congress in Great Falls, January 23-26, 2012. More information is available on our website.

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.

We can be reached at the following:

Phone: (800) 541-6671
(406) 994-6100

FAX: (406) 994-5333

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

Front Page Photo: By Michele Beck at the 22nd Annual Snow Rodeo, Lewis & Clark County Fairgrounds

Local Technical Assistance Program

Steven Jenkins, P.E.
Director
stevenj(at)coe.montana.edu

Genevieve Albert
Administrative Associate/
Conference Coordinator
galbert(at)coe.montana.edu

Michele Beck
Graphic Designer/
Librarian
mbeck(at)coe.montana.edu

Kali Vergeront
Student Assistant

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.

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.



22nd Annual Snow Rodeo

Michele Beck, Montana LTAP

Late August 2011, over sixty participants gathered at the Lewis & Clark County Fairgrounds to partake in the two-day 22nd Annual Equipment Safety Training and Snow Rodeo.

The first day was filled with a variety of training topics:

- Disaster Coordination
 - Jim Anderson, FEMA Representative
 - Tim Thennis, State DES Public Assistance Officer
- Preparedness for Emergency Situations
 - Steve Jenkins, Montana LTAP
- Snow Plow Panel
 - Ovila Byrd, Flathead County
 - Larry Chapman, Lewis & Clark County
 - Andy Dean, Yellowstone County
- Flood Situations in Fergus County
 - John Anderson, Fergus County Road Superintendent
- Watch Your Back
 - Dee Hadfield, Utah LTAP
- Motor Grader Operations
 - Dee Hadfield, Utah LTAP
- GPS/GIS Training & Caching (Field Exercises)
 - Jackson Beighle, Electronic Data Solutions
- New Equipment Walk-Around
 - Tom Gossack, Tractor and Equipment Company
 - Jerry Ridgeway, RDO Equipment Company



Due to tremendous spring flooding causing road damage throughout Montana counties, Steve Jenkins, Montana LTAP, opened up the training session focused on ways of being prepared during times of emergencies. Jim Anderson and Tim Thennis followed with how crucial documentation is and must be kept when dealing with disasters, such as flooding. Anderson recommended to keep a small notebook and record exactly what the job entailed such as hours, employees, site location, and equipment. He also recommended photos of disaster sites.

John Anderson, Fergus County Road Superintendent, showed numerous roadway washouts, bridge destruction, and personal damages caused by this spring's devastating floods. He said his estimate to date is near \$11,000,000 to repair everything back to working order. *(The five photos on this page were part of Anderson's slide show.)*

Continued on Page 4 . . .

ADVISORY COMMITTEE MEMBERS

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

Russ Albers
Chouteau County

Kris Christensen
Montana Dept of
Transportation

Kelly Elser
Town of Ennis

Alec Hansen
Montana League of
Cities & Towns

Jim Rearden
City of Great Falls

Debbie Arkell
City of Bozeman

Thomas Danenhower
MMIA

Eric Griffin
Lewis and Clark County

Fred Hansen
MACo

Bob Seliskar
Federal Highway
Administration

Dave Hand
Montana Dept of
Transportation

Russ Huotari
Richland County

22nd Snow Rodeo (Cont'd from Page 3)

The last afternoon training module was instructed by Jackson Beighle, Electronic Data Solutions, regarding GPS/GIS training. GPS stands for Global Positioning System using GIS, geographic information systems. GPS systems collect, store and transfer data from a field system to an office-based GIS. He said that basically your GIS data is collected onto the GPS through some type of software. The importance of GIS coordinates, according to Beighle, is being able to navigate out in the field, collect data and then use this data in mapping information such as road inventories, bridges, culverts, and signs back at the office on a computer with some type of GIS software. There are numerous types of electronic GPS devices with various price ranges, usually the more expensive the unit, the more accurate.



The Snow Plow Panel discussed the importance of driving snow plow routes before the snow arrives to discover any new obstacles operators will need to remember to watch for when winter arrives. Panel speakers emphasized the difficulty of obstacles buried in snow. Several examples of plows turned over initiated audience participation and their experiences with snow plow accidents.

Dee Hadfield, Utah LTAP, presented on two different topics. The first session covered backing up safety, especially around young children. He noted there is a reversing accident every 1.6 minutes. Of the 300,000 reported backing accidents in a year, he said 400 people died. This equated to \$1.3 Billion in driver damages. He also noted 30% of all non-occupant victims are backing accidents. Unfortunately Hadfield said there was an increase of 57% of backing accidents from 2006 to 2007 due to the large blind zones of SUVs, vans, and pickups. He believed it was because more folks are purchasing these type of vehicles rather than cars. His message was good drivers develop habits that let them prevent backing accidents:

1. Stay alert and concentrate 100%
2. Always plan ahead
3. Walk around vehicle BEFORE backing
4. If in doubt, stop the vehicle and get out to check area
5. Assign a helper to guide and signal - always keep helper in view
6. Honk truck's horn two times before backing
7. Stop truck immediately if you cannot see crew members

Hadfield also recommended the creation and support of a training program for a driver's course including backing techniques, equipment usage, hand signals, and dangers to avoid.

After lunch, Hadfield covered various aspects of how to level your motor grader as well as safety operations around equipment.



Hadfield, Utah LTAP, discusses motor grader leveling with Andy Dean, Yellowstone County



Jackson Beighle (left) coordinate GPS settings with MT LTAP Director Steve Jenkins (right)



City of Bozeman (l to r): Bill Taylen, Joshua Watson, Keith Blewett, Steve Kurk, Matt Heckel



Richland County(l to r): Erik Larsen, Tim Ullman, Richard Damm

22nd Snow Rodeo (Cont'd from Page 4)



With over \$2,500 in prizes to be won and trophies to be awarded, the second day of

Lewis & Clark County (l to r): Wayne Effertz and Doug Nisbet
the Snow Rodeo was filled with challenging obstacle courses for snow plow, motor grader, front end loader, and backhoe. Contestants also had to discover walk-around inspection discrepancies as well as take a written safety exam. All these efforts accumulated points.

2011 Snow Rodeo Sponsors

Great West Engineering
Stahly Engineering & Associates, Inc.
Robert Peccia & Associates
Western States Insurance
NAPA Central Auto Parts
Carquest Automotive

(Bold are Rodeo Cash Award Sponsors)

Tractor & Equipment Company	Montana Department of Transportation
RDO Equipment Company	Tabbert Construction
Montana LTAP	Murdoch's Ranch and Supply
Lewis and Clark County	Spieker Sprinklers
Jefferson County	Mountain West Holding
City of Helena	APWA - Rocky Mountain Chapter
City of Great Falls	Green Meadow Market

"This year went a little bit smoother than last year," commented organizer Doug Nisbet, Lewis & Clark County. "We had a handle on what needed to be accomplished and the volunteers did an excellent job. The support we received from sponsors was outstanding. Please give these sponsors a big "thank you" when you visit their establishments."

"Having been involved in the Snow Rodeo from its inception twenty-two years ago, it always is a thrill to see who is going to capture the All-Around position," said Debbie Kimball, City of Great Falls. "This event provides transportation employees the opportunity to learn about new equipment, reminders about equipment safety, and network with their peers. It definitely provides a win-win situation for all involved. Having Maria Penna, Lewis & Clark County, helping out is always a bonus too."



Debbie Kimball, City of Great Falls



Maria Penna, Lewis & Clark County



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						

4: Offices Closed

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

August 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			

1-4: National LTAP Conference - Boston, MA
Aug. 31 - Sept. 1: 22nd Annual Equipment Safety Training and Snow Rodeo - Helena, MT (MT LTAP) Brochure available in July

Training on Request:
 Forklift
 Sign Safety
 Road Audits

September 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	

Aug 31 - Sept. 1: 22nd Annual Equipment Safety Training and Snow Rodeo - Helena, MT (MT LTAP)
 5: Labor Day Holiday - Offices Closed
 18-21: APWA International Public Works Congress & Exposition, Denver, Colorado. Go to this link: <http://sites.apwa.net/congress/2011/home.aspx>
 25-29: MACo Annual Conference, Best Western GranTree, Bozeman, MT
www.mtcounties.org or MACo's Karen Houston 406-449-4360

October 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					

MACRS Fall District Meetings: Gravel Pits/Materials, Winter Survival
 4: Miles City 6: Billings
 11: Bozeman 12: Conrad 13: Kalispell
 4-6: Rocky Mountain West Pavement Preservation Partnership Annual Meeting
 Reno, NV (www.tsp2.org/rmwppp)
5 - 7: 80th League of Cities & Towns - Crowne Plaza, Billings, MT
5: Public Works Directors - MT LTAP

9: Put On The Brakes Day - 11th Anniversary (go to: www.brakesonfatalities.org)
 10: Columbus Day - Observed (Montana LTAP Offices Open)
18: MT LTAP Safety Webinar - Preparedness - 7:30am-8:30am
 26 & 27: 26th Regional Local Road Coordinators Conference, Rapid City, SD

November 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			

7-9: Second Road Dust Best Management Practices Conference,
 Las Vegas, NV Info: <http://roaddustinstitute.org/conference>
 8: Election Day
15 & 16: MACRS Planning Meeting, Heritage Inn, Great Falls, MT
 11: Veterans' Day - Offices Closed
22: MT LTAP Safety Webinar - Winter Maintenance 7:30am - 8:30am
 24-25: Thanksgiving Holiday - Offices Closed
29: Winter Maintenance/Winter Survival: Missoula

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

1: Winter Maintenance/Winter Survival: Billings
 5-9: SafetyFestMT: Hilton Garden Inn, Missoula, MT
www.safetyfestmt.com
20: MT LTAP Safety Webinar - Winter Survival - 7:30am-8:30am
 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.



Calendar of Events • January 2012 - June 2012

January 2012

S	M	T	W	Th	F	S
	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				

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**

26: **IMSA Certification**

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

February 2012

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			

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

20: President's Day - Offices Closed

21: **MT LTAP Safety Webinar - Back Safety - 7:30am-8:30am**

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

March 2012

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

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)**

16: **Flagging Certification Course - Plentywood (MT LTAP)**

20: **MT LTAP Safety Webinar - Slips, Trips, Falls - 7:30am-8:30am**

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

April 2012

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					

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

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

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

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

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

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

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

May 2012

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		

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

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)**

22: **Work Zone Flagging Course - Bozeman (MT LTAP)**

23: **MACRS Executive Meeting - Bozeman**

24: **Montana LTAP Annual Advisory Board Meeting - Bozeman**

28: **Memorial Day - Offices Closed**

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

June 2012

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

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

Safety Meeting Webinars from Montana LTAP

October 18, 2011 - Preparedness

November 22, 2011 - Winter Maintenance

December 20, 2011 - Winter Survival

January 17, 2012 - Leadership

February 21, 2012 - Back Safety

March 20, 2012 - Slips, Trips, Falls

April 17, 2012 - Work Zones

May 8, 2012 - Materials

June 19, 2012 - Summer Survival

Call Montana LTAP at 1-800-541-6671 for more information!

Some dates and locations are subject to change.

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

Snow Rodeo (Cont'd from Page 5)

Snow Plow Winners

- 1st: Clint Walker, Missoula County Road
- 2nd: Mark Zipperian, Broadwater County
- 3rd: Will Wertz, Broadwater County
- 1st Timer – Erik Larsen, Richland County

Front End Loader Winners

- 1st: Marty Hanley, Butte Silver Bow County
- 2nd: Andy Dean, Yellowstone County
- 3rd: Clay Caudle, Lewis & Clark County
- 1st Timer – Jed Shue, Flathead County



**Snow Rodeo All-Around Champion
Will Wertz, Broadwater County**

Backhoe Winners

- 1st: Rocky Teeters, City of Missoula
- 2nd: Andy Dean, Yellowstone County
- 3rd: Eric Lee, City of Missoula
- 1st Timer – Jess Murphy, Blaine County

Motorgrader Winners

- 1st: Will Wertz, Broadwater County
- 2nd: Clint Walker, Missoula County Road
- 3rd: Erik Lee, City of Missoula
- 1st Timer – Ovila Byrd, Flathead County



Some Snow Rodeo Winners (l to r): Clint Walker, Marty Hanley, Andy Dean, Jess Murphy, Mark Zipperian, Clay Caudle, Rocky Teeters, Eric Lee, & Will Wertz



Are You a Manager or a Leader? By David Kolman

Reprinted by Permission of Fleet Maintenance Magazine, June 2011 Issue

Do you Know the Difference?

I believe there is a big difference between being a manager and being a leader. A manager's job is to plan, organize and coordinate. A leader's job is to inspire and motivate.

I can recall a conversation early on in my career about management versus leadership with a U.S. Marine and a long-time trucking journalist, Bob Deierlein, who has since become a dear friend.

To help me clearly understand the difference between a manager and a leader, Deierlein stated that the Marines consider leadership the sum of those qualities of intellect, human understanding and moral character that allow a person to inspire and control a group of people successfully. No organization can rise above the quality of its leadership, he said. The character of the leaders is essential.

Cornerstone Attributes

Traits that made for a successful leader was the topic of an address by Donald R. Knauss, chairman and CEO of the Clorox Company, to this year's Heavy Duty Aftermarket Week event. Knauss, who served as an officer in the U.S. Marine Corps, knows about leadership. During his career, he has established himself as a change agent, bringing entire organizations with him.

Leadership is about rallying people to a better future, he said. That involves focusing on two key elements:

- thought leadership - energizing the future, and
- people leadership - energizing others in the vision for the future.

Necessary Qualities

Knauss outlined five key traits of successful leaders:

1. Integrity

There has to be an adherence to moral and ethical principles. Build trust. Tell the truth. Do the right. Are you proud of yourself? A handshake should be enough. "It's all about character," said Knauss.

2. Curiosity

"Ideas drive organizations and progress," he said. "World-class leaders are world-class learners."

Knauss stressed the importance of creating a safe environment for debate because as a person moves up in an organization, the ability to get the truth becomes more difficult.

"A desk is a dangerous place from which to watch the world," he said. "You've got to get out and be curious to understand what is going on."

3. Optimism

Lead from optimism because it nurtures dreamers and expands possibilities.

"Optimism creates positive energy throughout the organization," Knauss said. "Pessimism engages no one."

"Optimists are problem-solvers because they are always looking for that better way."

4. Compassion

"Have more concern for your people than yourself," said Knauss. "When people know that, it's amazing what they will do for you."

He said the spirit of the law is as important as the letter of the law. To emphasize his point, he paraphrased Alexandr Solzhenitsyn, the Nobel Prize-winning author whose novels chronicled the daily horrors of life in Soviet gulags: "Any society based solely on the letter of the law and never reaching any higher fails to take advantage of the full possibilities of the human experience."

"Successful leaders use authority, not power."

Because life is not fair, Knauss said successful leaders use their power to make it fair. "Each of us has the ability to make things a little bit more fair."

"Tough love is required, too. We all have to make tough decisions. But if it's done transparently, and you involve other people in those decisions, the right outcome will be there."

5. Humility

Successful leaders use authority, not power. Rather than ordering people around, talk to them and explain what you want to get done, said Knauss. "It's amazing how much more they will get done."

"Be approachable. You'll learn what's really going on."

Don't think you are indispensable, but don't discount your own importance, Knauss said. "People are always observing what we are doing as leaders."

Your Impact

Focus on those five traits - integrity, curiosity, optimism, compassion and humility - and you "can truly inspire people and organizations" to be productive and valuable, emphasized Knauss.

Bringing his address to a close, he mentioned baseball great Jackie Robinson, the first African American athlete to play in baseball's major leagues in the 20th century, joining the old Brooklyn Dodgers in 1947.

Knauss noted that epitaph on Robinson's tombstone had nothing to do with baseball. It reads: "A life is not important except in the impact it has on other lives."

"That," concluded Knauss, "is what leadership is all about at the end of the day."

A free subscription of Fleet Maintenance is available at:
<http://www.ameda.com/cgi-win/fms.cgi?login>



Lewis & Clark County Gravel Road Project



Eric Griffin, L&C County PW Director

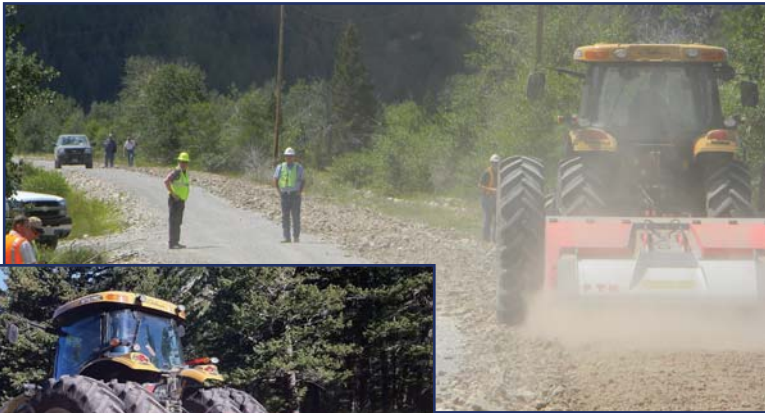
On July 26, 2011, over 40 interested viewers gathered to watch the PTH Crusher Demo on Dearborn Canyon Road near Augusta, Montana. This particular road, located in a glaciated valley, was selected because it had extreme rock issues.

“My staff discovered the PTH Crusher this past spring at the Las Vegas trade show. After reviewing video clips, I wanted to see it actually crushing rock on one of our county roads,” said Eric Griffin, Lewis & Clark County Public Works Director. “Because of the labor-intensive gravel road work our county deals with, this innovative piece of equipment appeared to have far-reaching capabilities and time-saving capacities. After this demo, I believe it will be the ticket.”

Griffin thanked Tractor & Equipment Company and PTH Crusher representatives from Austria, Germany, and Minnesota for their help; and all who took time out of their busy schedules to attend this demo.



Step 1: A two-mile section was ripped using Lewis and Clark County’s motor grader in order to bring the rocks to the surface.



Step 2: Tractor and Equipment Company provided their Challenger MT675C to pull the PTH Crusher 2500HD that crushed the rock in place.



Above: Ripped Roadway Gravel



Above: Crushed roadway gravel on left-hand side after one pass with PTH Crusher 2500HD



Above: Ripped Roadway Gravel Crushed



Step 3: The road was then bladed out and shaped.

Step 4: Final step was compacting the road.



Tom Gossack, Tractor & Equipment Company

Tractor & Equipment Company kicked off the event with a FREE barbecue at noon. Gossack displayed yet another skill as master chef!

For more info: www.pthusa.com ❖

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 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](mailto:mtltap(at)coe.montana.edu).

New Publications

p-228.1 Low Volume Roads 2011, Volume 1, TRB No. 2203 (TRB 2011) The three volumes of this series present a keynote paper and 90 technical papers pertinent to low-volume roads, 44 by authors from the United States and 46 by authors from 18 other countries. Volume 1 contains topics on Environment; Safety; Economics, Finance, and Planning; Design (225 Pages) For full color versions go to www.TRB.org/TRROnline

p-228.2 Low Volume Roads 2011, Volume 2, TRB No. 2204 (TRB 2011) The three volumes of this series present a keynote paper and 90 technical papers pertinent to low-volume roads, 44 by authors from the United States and 46 by authors from 18 other countries. Volume 2 contains topics on Maintenance; Stabilization; and Geotechnical Engineering. (266 Pages) For full color versions go to www.TRB.org/TRROnline

p-228.3 Low Volume Roads 2011, Volume 3, TRB No. 2205 (TRB 2011) The three volumes of this series present a keynote paper and 90 technical papers pertinent to low-volume roads, 44 by authors from the United States and 46 by authors from 18 other countries. Volume 3 contains topics on Materials and Pavement Management. (253 Pages) For full color versions go to www.TRB.org/TRROnline

p-570 SNAP (Soil Nail Analysis Program) User's Manual (FHWA Sept 2010) Soil nail walls are internally stabilized earth-retaining structures. This user's manual discusses the theoretical basis for the computer program, gives a comparison of available soil nail wall design guidelines, discusses program execution including inputs and outputs, and includes two worked examples to demonstrate use of the program. (118 pages)

p-571 Hollow Bar Soil Nails, Pullout Test Program (FHWA May 2010) This report reviewed the current practice of design of grout-to-ground bond strength and testing protocol for the hollow bar soil nail (HBSN) installations. The study evaluates if there is a correlation between a conventional solid bar soil nail (SBSN) and the installed HBSNs. (60 printed pages; 367 on CD ROM included)

p-572 Hollow Bar Soil Nails, Review of Corrosion Factors and Mitigation Practice (FHWA August 2010) The scope of this report is limited to the preparation and distribution of a survey questionnaire, evaluation of various parameters for HBSNs as they relate to corrosion, preparation of a summary of the responses to the questionnaire, and a review of existing corrosion guidance. (82 pages)

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 workshop announcements. Our 2011 Needs Assessment Survey is available at this web site. Thank you in advance for taking time to complete it.

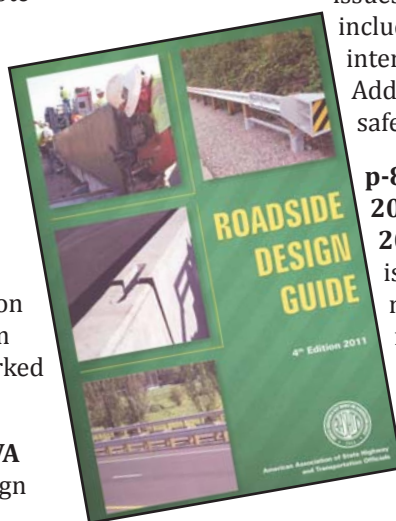
New Publications (Cont'd)

p-784 Access Management in the Vicinity of Intersections (FHWA Feb 2010) This Technical Summary is an overview for roadway professionals by providing safety considerations involving access management, referring to the design, implementation and management of entry and exit points between roadways and adjacent properties. (15 pages) Electronically available at: <http://safety.fhwa.dot.gov/intersection>

p-785 Roundabouts (FHWA Feb 2010) This Technical Summary is an overview of key considerations for planning, analysis, and design of single-lane and multilane roundabouts. (26 Pages) Electronically available at: <http://safety.fhwa.dot.gov/intersection>

p-786 Intersection Safety - Issue Briefs - 16 (FHWA Nov 2009) These 16 four-page briefs covering intersection safety issues are for all roadway planners, including the general public to promote intersection safety issues. (64 pages) Additional electronic information at: safety.fhwa.dot.gov

p-843 Roadside Design Guide 2011 (AASHTO 4th Edition 2011) The purpose of this guide is to present the concepts of roadside safety to the designer in such a way that the most practical, appropriate, and cost-effective roadside design can be accomplished for each project. (165 pages)



New Software

SW809 Implementing High Risk Rural Roads Program (FHWA March 2010) On this CD is a report, in pdf format, documenting common challenges, noteworthy practices and lessons learned experienced through the implementation of the High Risk Rural Roads Program. States can use these documented practices to launch their HRRRPs, identify next steps for a program already moving forward, or implement noteworthy practices to improve an established program. (52 pages) see also p-809





Montana LTAP
PO Box 173910
Bozeman, MT 59717-3910

Presort Standard
U.S. Postage
PAID
Permit No. 69
Bozeman, MT 59718

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
Montana State University
PO Box 173910
Bozeman, MT 59717-3910

Street Address:
MT LTAP
2327 University Way
Bozeman, MT 59715

(800) 541-6671 or (406) 994-6100
Fax: (406) 994-5333
email: mbeck(at)coe.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://www.westerntransportationinstitute.org/centers/ltap/Newsletter> or by calling 1-800-541-6671.

Approximately 800 copies of this public document were published at an estimated cost of \$2.06 per copy for a total cost of \$1,648.41 which includes \$1,210.51 for printing and \$437.90 for distribution.

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.