

Idaho Technology Assistance Newsletter

December 2010 - Volume 4, Number 2



Alger CRC Implements Asset Management Understanding Between Engineers and Elected Officials Paves the Way

By John Ryyanen, Editor, Michigan's LTAP

As Engineer and Manager of the Alger County Road Commission in Michigan's Upper Peninsula, Bob Lindbeck, P.E. realizes the pressures placed on road commission officials to fix rough roads. He knows that road users almost always encourage decision-makers to rebuild roads that are structurally deficient instead of doing preventive maintenance on roads that the public views as good. That's a political reality.

As a professional engineer, Lindbeck knows the intricacies of pavement deterioration. He knows that early pavement distress—such as transverse cracks—allow water to penetrate into the base material, which leads to more costly structural damage. He also knows that sealing cracks to prevent water infiltration is a simple, relatively inexpensive way to extend pavement life. That's a technical reality.

Lindbeck works where political and technical realities clash. Much of his job involves communicating technical

information to elected officials in ways that help them counter public pressure so they can make wise road management decisions. "The work can get pretty complicated," Lindbeck said. "When we're able to communicate clearly and understand the problems from both points of view, good things happen."

Last spring, good things happened in Alger County. Lindbeck's experience with starting an asset management program is a powerful example of how un-

"To start an asset management program I had to convince our decision-makers that preventive maintenance was the best way to extend the serviceability of our road system."

Bob Lindbeck - Alger County Road Commission

derstanding between engineers and elected officials can help improve the way local roads are managed.

Good time to make a change

When Alger County transportation agencies, which include Alger County Road Commission, Alger County Transit, a city and a small village, received \$337,000 through the American Reinvestment and Recovery Act (ARRA) in March 2009, Lindbeck recognized an opportunity to start an asset management program.

Preventive maintenance activities, including crack sealing, chip sealing, and various similar activities, are generally considered the bread and butter of any asset management program because they provide such a great return on maintenance dollars invested. "To start an asset management program," Lindbeck explained, "I had to convince our decision-makers that preventive maintenance was the best way to extend the serviceability of our road system."

Near the end is a great place to begin

Lindbeck decided that pavement deterioration, which is the beginning of the end for roadways, would be the best place to start a conversation about road maintenance and asset management. While preparing for a public meeting to vote on how to use the ARRA funds he remembered a PowerPoint slide from an asset management

Continued on Page 3...

In This Issue...

- Alger CRC Implements Asset Management.....Pages 1, 3 & 7
- New Council Member at LHTAC.....Page 2
- New T2 Center Advisory Board Members.....Page 2
- Safety Edge Scores Gains in Iowa.....Pages 4 & 5
- Free New Run-Off Road/Rumble Strip DVD & Other Available Resources.....Page 5
- Local and Rural Roads Safety Peer to Peer Programs.....Page 6
- Safe Routes to School. (SR2S) Application—ITD.....Page 7
- Prepare Your Vehicle For Winter Driving.....Page 8
- Snow Plow Safety.....Page 8
- Sick Time.....Page 8
- Precautions to Avoid Hypothermia.....Page 9
- Idaho T2 Center Library.....Page 9
- Idaho T2 Center Spring Classes 2011.....Page 10
- Lewiston Safety Fest of the Great Northwest—Update.....Page 11
- Safety Fest of the Great Northwest 2011 Schedule.....Page 11
- Idaho T2 Center 2010 Road Scholar and Road Master Recipients.....Pages 12-14
- City of Nampa—Street Division—Training Benefits.....Page 15
- Calendar Of Events.....Back Page





LOCAL HIGHWAY TECHNICAL ASSISTANCE COUNCIL MEMBERS

Idaho Association of Highway Districts

Lawrence (Dick) Edinger, Chairman
Commissioner, East Side Highway District

Clark Kauffman
Commissioner, Filer Highway District

Dan Schaeffer
Commissioner, Hillsdale Highway District

Idaho Association of Counties

Lan Smith, Vice Chairman
Commissioner, Gem County

Don Ebert
Commissioner, Clearwater County

Lee Staker
Commissioner, Bonneville County

Association of Idaho Cities

Mac Pooler, Secretary/Treasurer
Mayor, City of Kellogg

Randall Prescott
Councilor, City of Soda Springs

Kevin Poole
Mayor, City of Lewiston

Ex-Officio Members

Stuart Davis, Executive Director
Idaho Association of Highway Districts

Tony Poinelli, Deputy Director
Idaho Association of Counties

Ken Harward, Executive Director
Association of Idaho Cities



IDAHO T2 ADVISORY BOARD

The members listed below help guide and direct the policies and activities of the Idaho T2 Center. You are invited to contact any of them to comment, make suggestions, or ask questions about the T2 Program.

Jim Buffington – Chairman
Maintenance Manager
Ada County Highway District
208-387-6323

Kelly Brownsberger
Road Supervisor
Post Falls Highway District
208-765-3717

Stuart Davis
Executive Director
Idaho Association of Highway Districts
208-345-5176

Dan Copeland
Supervisor
Bannock County Road & Bridge
208-233-9591

Kim Reed
Road/Bridge Director
Gem County Road/Bridge Dept.
208-365-3305

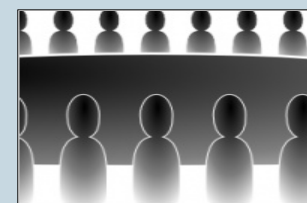
John Zamora
Director
Buhl Highway District
208-543-4298

T2 Ex-Officio Member
Lance Holmstrom
LHTAC Administrator
800-259-6841

Steve Hyndman
Training Specialist
Idaho Transportation Department
208-799-4242

T2 Associate
Ned Parrish
ITD Research Program Manager
208-334-8296

Lori Porreca, PhD
Community Planner
FHWA-Idaho Division
208-334-1843 Ext. 132



LHTAC STAFF

- Lance Holmstrom, M.U.P.**, Administrator
- G. Daniel Shirilla**, Deputy Administrator
- Susan Lasuen**, Office Manager
- Cindy Stewart**, Publication/Council Manager
- Nancy Ziebarth**, Secretary/Receptionist
- Gerald H. Flatz, P.E.**, Federal-aid Manager
- Wayne Herbel, P.E.**, Deputy Federal-aid Manager
- Dan Coonce, P.E.**, Deputy Federal-aid Manager
- Michael Moffett**, Assistant Federal-aid Manager
- Vicki Courtois**, Federal-aid Administrative Assistant
- Todd Bartolome, P.E.**, Construction Engineering Manager
- Jessica Martinez**, Construction Records Inspector
- Byron Walker**, Construction Engineering Intern
- Jim Zier**, Asset Manager
- Dylan Karaus**, Highway Certification Coordinator
- Matthew Syphus**, GIS Specialist
- Bruce Drewes**, T2 Manager
- Lorie Cover**, T2 Training Coordinator
- Denise Shields**, T2 Event Coordinator

New Council Member at LHTAC

We would like to welcome our newly appointed member that will be serving on the Local Highway Technical Assistance Council. *Lee Staker, Bonneville County Commissioner* has been appointed by the Idaho Association of Counties.



New T2 Center Advisory Board Members

We would like to welcome our newly appointed T2 Center Advisory Board Members and thank those past members for their service.

- Jim Buffington, Maintenance Manager, Ada County Highway District (Chairman)*
- Kelly Brownsberger, Road Supervisor, Post Falls Highway District*
- Dan Copeland, Supervisor, Bannock County Road & Bridge*
- John Zamora, Director, Buhl Highway District*
- Lori Porreca, PhD, Community Planner, FHWA-Idaho Division*

- Nate Marvin, Public Works Superintendent, City of Weiser (Past Chairman)*
- LeRoy Lewis, Road Supervisor, Jerome Highway District*
- Kevin Eckersell, Public Works Director, Bonneville County Road & Bridge*
- John Perry, Field Operations Engineer, FHWA-Idaho Division*



We look forward to working with all of our members, and to an exciting new year!

Local Highway Technical Assistance Council (LHTAC)
Idaho Technology Transfer Center (T2) - LTAP
 3330 Grace Street, Boise, ID 83703
 Phone: (208) 344-0565 (800) 259-6841
 Fax: (208) 344-0789
 LHTAC webpage, www.lhtac.org
 Idaho T2 Center webpage, www.idahot2.org



...Continued from Front Page

workshop that he had attended. The workshop, sponsored by the Michigan Transportation Asset Management Council, was designed to help local agencies develop and implement asset management programs. “The graphic I had in mind showed how various maintenance treatments affect the rate of deterioration for pavement,” he said. “I had a rough idea about what the graphic looked like, and I had costs for various treatments, basic deterioration rates and a general idea about what I wanted to communicate, but I needed help assembling it so it would make sense.”

Lindbeck found the help he needed at the Michigan LTAP office. Through a phone conversation and a brief exchange of Emails, Lindbeck worked with members of the LTAP staff to create a one-page handout that summarized pavement deterioration.

Pavement deterioration 101

Using the summary at the public meeting, Lindbeck explained that the rate of deterioration for pavement can be described by an S-shaped curve (see Figure 1). The x-axis of the curve is time. The y-axis is the pavement surface rating which, using the Pavement Surface Evaluation and Rating (PASER) system, is a number between one and ten. In the PASER system, the rating is based on distresses that are visible on a pavement surface; a rating of one indicates failed pavement; a rating of ten is brand new pavement.

Lindbeck also explained that pavement life can be extended considerably by performing appropriate maintenance activities when the pavement is showing certain types of distresses. The shaded areas of Figure 1 list types of activities that are appropriate within different “windows of opportunity” along the deterioration curve. After pavement deteriorates below a rating of four, which to a pavement expert is the critical distress point (CDP), the cost of fixing the pavement gets much more expensive.

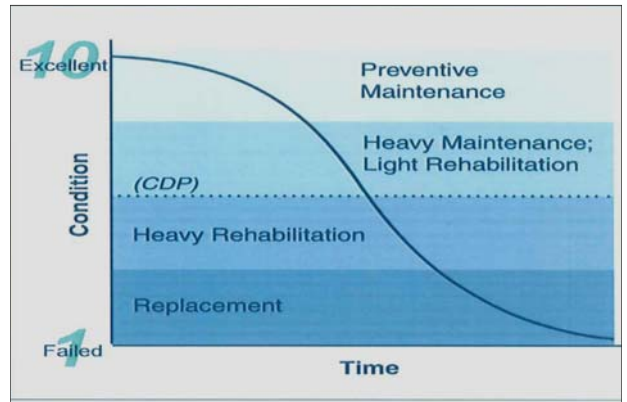


Figure 1. “S” curve that describes basic pavement deterioration

Overcoming misunderstandings

“One of the big misunderstandings about road maintenance that I had to change among our decision-makers is that the worst stretches of road should be improved before those that are less deteriorated,” Lindbeck said. “With the summary, I was able to show that we can get more bang for our buck by chip-sealing an 11 year-old road that looks pretty good instead of reconstructing a 20 year-old road that’s structurally deficient.”

Lindbeck used an example (see Figure 2), in which he explained that paving a road costs approximately \$180,000 per mile for Alger County Road Commission. If the road commission performs no preventive maintenance, the road typically lasts about 15 years, which works out to a total cost of ownership per year of about \$12,000 per mile (\$180,000/15 years).

Lindbeck went on to explain that chip-sealing the same road at 11 years and 18 years will extend the pavement service life approximately 14 years, and the

...Continued on Page 7

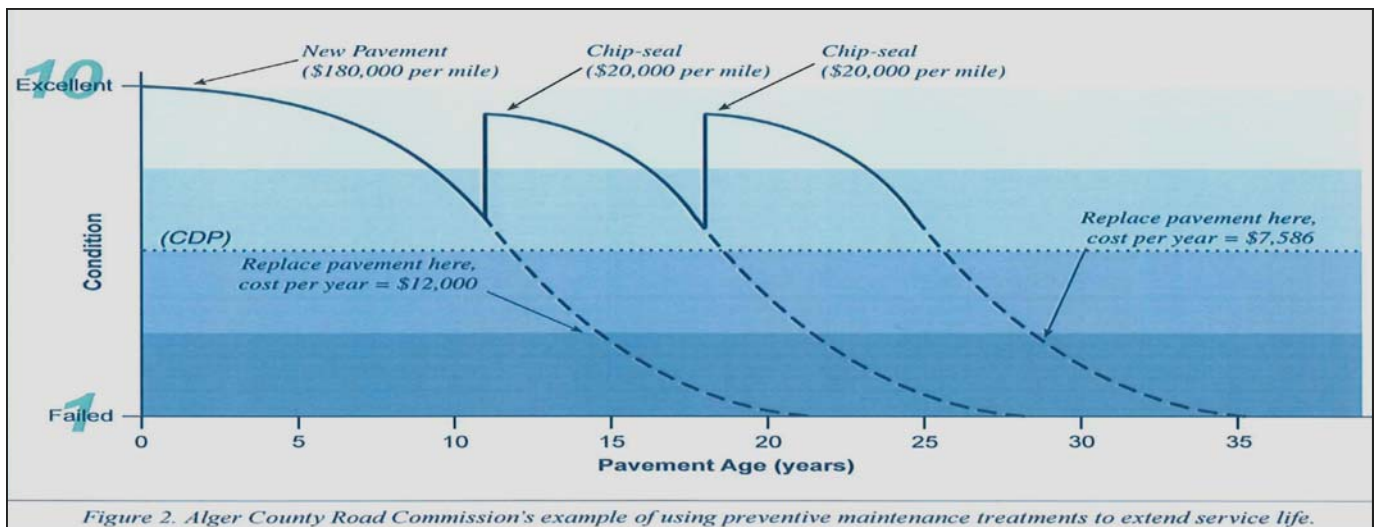


Figure 2. Alger County Road Commission's example of using preventive maintenance treatments to extend service life.



Safety Edge Scores Gains in Iowa



The nation's first safety edge in concrete was placed in Jones and Linn Counties in Iowa.

The safety edge, a paving technique that can reduce roadway departure crashes, is steadily becoming a standard practice in Iowa.

Forty-four percent of the state's traffic fatalities occur on secondary roads. And paved secondary roads account for a substantial share of Iowa's single-vehicle roadway departure fatality and major injury segments.

Iowa's paved two-lane roads carry a wide range of traffic, including semi-tractor-trailers and farm equipment, which accelerates erosion of gravel and earth shoulders and increases the likelihood of crashes when vehicles' right-hand tires drop off the pavement edge. The sudden drop-off makes it difficult for a driver to return smoothly to the proper travel lane.

All of those factors explain why paved secondary roadways are ideal candidates for the safety edge, a Highway for LIFE Vanguard Technology. With the safety edge, an attachment, or shoe, is added to an asphalt or concrete paver to create a 30- to 35-

degree taper from the top of the pavement to the graded shoulder.

Success with the safety edge led the Iowa Department of Transportation to adopt a policy requiring it on all projects with a paved shoulder less than four feet (1.2 meters) wide. The contractor has the option of using the safety edge on roadways with wider paved shoulders in lieu of placing a temporary gravel fillet to reopen newly paved lanes to traffic.

The Vanguard Technology process uses dedicated teams, proven marketing approaches and designated funding to accelerate the deployment of innovations such as the safety edge. As part of the safety edge effort, the Federal Highway Administration's Safety Edge Team is evaluating up to a dozen demonstration projects to document the safety, constructability and quality of the innovation.

More Demonstration Projects

Since 2008, FHWA has worked with state and county officials and con-

tractors in Iowa to hold three demonstrations, each with an open house, to showcase the safety edge. More are coming.

"We plan to construct 19 more demonstration projects in 10 Iowa counties this construction season," said Jerry Roche, safety and traffic operations engineer with FHWA's Iowa Division. "Some of those will have open houses and some will not. We recently did one in concrete pavement, and there will be one more concrete project this year. The rest of them will be done with asphalt."

What jump-started the demonstrations was \$50,000 in funding, half from FHWA's Technology Deployment Fund and half from the Iowa DOT, which provided the following:

- Purchase of hot-mix asphalt paving shoes to loan out to agencies willing to construct a demonstration project
- Formation of a multidisciplinary committee of public- and private-sector transportation professionals
- Construction of at least nine safety edge projects
- Promotion of the safety edge through open houses, newsletters and presentations
- Evaluation of the safety edge from constructability, durability and maintenance perspectives

The first safety edge project under that effort was built in Louisa County on County Road X-99. The contractor was a willing partner, Roche said, to improve safety of the traveling public and reduce liability during construction. The contractor found no adverse impact on production and no significant increase in the amount of material used. An open house was held with speakers from Louisa County, Iowa DOT, As-

Continued on Page 5...

...Continued from Page 4

phalt Paving Association of Iowa, the contractor and FHWA.

"As we finished up paving that project, the contractor requested permission from the Iowa DOT to incorporate the safety edge on their next paving project, State Highway 143 in Cherokee County," said Roche. "That project was also successful, and demonstrated that the safety edge could be built using warm-mix asphalt with no adverse effects."

PCC Safety Edge

Success on the asphalt projects sparked interest in the portland cement concrete (PCC) paving industry. Roche said the multidisciplinary committee provided the perfect forum for the creation of a PCC safety edge design. Mike

McClain, Jones County engineer, had a previously let federal-aid project and agreed to incorporate the safety edge by contract modification.

That became the first PCC safety edge project in the country—County Road E-34 in Linn and Jones Counties. Several stakeholders, including FHWA, the Institute for Transportation at Iowa State University (InTrans), Jones County, Linn County, the Iowa Concrete Paving Association, and the contractor all hosted an open house for the project.

InTrans has a contract with FHWA and Iowa DOT to evaluate the safety edge technology. Activities include measuring the edge drop after placement, photographing each project,

obtaining cost records if safety edge costs can be separately identified, and interviewing contractors and agencies for their reactions.

"The \$25,000 received in Technology Deployment funding has greatly advanced the state of the practice of highway paving in Iowa by providing a recoverable slope at the pavement-shoulder interface," said Roche. "The end product is systematically improving safety at minimal cost."

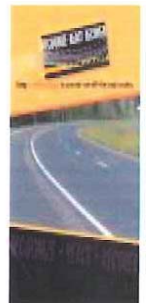
To learn more about the safety edge, go to safety.fhwa.dot.gov/roadway_dept/pavement/safedge.

Reference: *INNOVATOR*, V3, Issue 20, August/September 2010

FREE New Run-Off-Road/Rumble Strip DVD From the Roadway Safety Foundation (RSF)



NEW! RSF in conjunction with the South Carolina DOT has launched a safety public education campaign called Recognize, React, Recover: Using Rumblestrips to Prevent Run-off-the-Road Crashes. A new DVD details the benefits of rumblestrips in preventing run-off-the-road crashes. The Idaho T2 Center has copies of the DVD and brochure available, *free of charge*, to those who are interested in helping to prevent ROR crashes. To order please send an email to IdahoT2@lhtac.org or call (800) 259-6841.



Brochure also available →

OTHER AVAILABLE RESOURCES: (at a minimal cost for quantities)

The Roadway Safety Guide presents roadway safety information and key resources in a format designed for local elected officials, safety groups, and community leaders. The Guide shows how to identify roadway hazards, choose countermeasures, build coalitions, and where to get help to implement roadway safety initiatives. It also provides a roadway safety checklist for assisting community hazards and examples of successful roadway safety efforts. This publication is only available electronically and print copies are no longer available.



A mini-reference to roadway signs and other communications devices for improving driver awareness about the roadway. A great refresher for all drivers or a basic resource for driving newcomers. This resource is coproduced by RSF and the Federal Highway Administration.

This mini-booklet produced by the Federal Highway Administration features key roadway safety tips and definitions of various road signs. This booklet is popular for new drivers. It is free of charge. Contact 202-857-1200 to order copies.

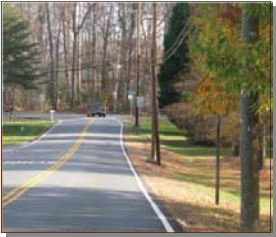


References: *Missouri-LTAP Quarterly Newsletter*, Spring 2010.
<http://www.roadwaysafety.org/rsf-materials/>
Edited by LHTAC Staff



Local and Rural Roads Safety Peer-to-Peer Programs

What is the Local & Rural Road (LRR) Safety Peer-to-Peer (P2P) Program?



In order to reduce fatalities and serious injuries on our Nation's road network, local and rural highway practitioners have to routinely integrate safety in their projects and programs. FHWA established the Peer-to-Peer (P2P) Program as a form of technical assistance for local

and rural highway agencies to adequately address safety problems on the roads they maintain. Experts with knowledge in various local and rural road safety issues volunteer their time to provide assistance to their peers requesting help. Whatever the safety issue your local agency is facing, there is a Peer ready and willing to help.

How Can Transportation Agencies Benefit from the LRR Safety P2P?

The FHWA Peer network provides access to valuable guidance and information as well as input from people who share a similar background and have faced the same challenges. The list of benefits is long, but here are just a few that you can expect.

- Free and convenient access to professionals experienced with local and rural road safety.
- Expert assistance to recognize local and rural road safety issues and identify solutions.
- Increased understanding of how to improve safety on local and rural roads.

The biggest benefit of all is safer roads that result in a reduction in crashes ultimately saving lives, time and money.

What types of assistance does the Peer-to-Peer Program offer?

Peer assistance can be in the form of phone calls, email exchanges, general instruction or site visits; all depending on your agency needs.

How to get Peer Assistance

The first step to using the P2P Program is to let us know you need assistance. There are several ways to reach us; you can call, email, or even send us a note by fax. Whichever method you use, an FHWA sponsored P2P Coordinator will

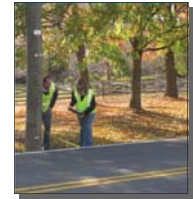
be ready to assist. The coordinator will determine your specific question or issue and match you with the best Peer for your case.

CONTACT

P2P Hotline (866) P2P-FHWA

Fax (877) 663-2263

SafetyP2P@dot.gov



TYPES OF ASSISTANCE provided by the LRR Safety P2P:

- How to analyze crash data and determine locations needing immediate attention.
- Low cost safety improvements that can be installed quickly.
- Various funding options available for safety improvements on local and rural roads.

"Rural road safety is a particular concern in the United States. In 2007, 57% of traffic fatalities occurred on rural roads and the fatality rate per 100 million vehicle miles traveled was 2.5 times higher in rural areas than in urban areas. Over 70% of the 3 million miles of rural roads are owned and operated by local entities. These owners should have access to road safety information, knowledge and resources needed to address their issues."

— John Dewar,
FHWA State and Local Programs Team Leader

FHWA resources for local rural roads safety improvement: http://safety.fhwa.dot.gov/local_rural/

Contact FHWA for more information

Rosemarie Anderson

Local & Rural Roads Program

Office of Safety

Federal Highway Administration

(202) 366-5007

rosemarie.anderson@dot.gov

Reference: U.S. Department of Transportation, Federal Highway Administration
FHWA Publication Number FHWA-SA-10-014

Safe Route to School (SR2S) Application—ITD

Overview: Idaho receives \$1 million each year in SR2S funding for projects that enable and encourage more K-8 students to walk or bicycle safely to school. The applications are reviewed by a statewide SR2S Advisory Committee (SR2SAC). The SR2SAC selects the projects and recommends a prioritized list to the ITD Board for approval. Applications should aim to demonstrate most of the following items to have a good chance of being funded:

- Good potential to increase the safety of students walking and biking to school;
- Good potential to increase the number of students walking and biking to school;
- School support and commitment to the project, and school based task force to champion the project;
- A plan to conduct regular walking and biking encouragement efforts and safety education;
- Agree to hold a minimum of two special events;
- International Walk to School Day in October;
- Bicycle Safety Awareness Month in May;
- A plan for the project to become sustainable;
- Partnerships that include community stakeholders;
- The community supports active living choices through local policies and initiatives.



Current Funding Cycle: The application deadline is March 31, 2011 at 5 p.m. for all applications. They must be delivered to ITD HQ to the address listed. Applications that include infrastructure improvements must be submitted to the SR2S contact at the ITD District offices by March 1, 2011 and subsequently submitted to HQ by the March 31, 2011 deadline.

...Continued from Page 3

road will last 29 years before replacement is necessary. At \$20,000 per mile, the cost per year for chip-sealing twice would be about \$2,857 per mile (\$40,000/14 years). The total cost of ownership per year would be about \$7,586 per mile (\$180,000 + \$40,000/29 years).

Cracks are sealed

“The road commission received \$253,000 from the ARRA funds. I basically showed our decision-makers that we could use the money to either crush, shape and repave about a mile and a half of bad road, or we could use a preventive maintenance treatment to prevent over 12 miles of good road from deteriorating further,” Lindbeck explained. “They chose preventive maintenance;

New for FY13: Projects that include infrastructure may include up to 10% of construction costs for project design, development and project administration fees paid to outside consultants. All applications that include infrastructure must be submitted to the ITD District offices by March 1, 2011. SR2S is a Federal-Aid reimbursement program, projects must comply with all of the provisions in Title 23. Force account work is not recommended for Idaho SR2S projects. To learn about Title 23 project requirements please see the SR2S Project Manual under the Tools tab.

SR2S Questions: If you still have specific questions regarding the application after reading the SR2S Guidelines please contact the ITD SR2S Coordinator, Jo O'Connor jocconnor@itd.idaho.gov or Phone 208-334-4475.

The **FY13 ID SR2S Application** and **Guidelines** can be found at: <http://itd.idaho.gov/sr2s/howtoapply.html>

Mail one original and one unstapled photo copy of the application to:

Josephine O'Connor
Safe Routes to School Coordinator
Idaho Transportation Department
PO Box 7129
Boise, ID 83707-1129
Phone (208) 334-4475
Fax (208) 334-8595

Physical address for UPS, FedEx or hand delivered packages:

Safe Routes to School Coordinator
Idaho Transportation Department
Annex Building
3293 Jordan Street
Boise, ID 83702

Reference: Idaho Transportation Department

nance; we ended up spending the money on chip-sealing.

“Today, thanks to the asset management program implemented last spring, motorists in Alger County are enjoying 12.6 miles of good road that will cost them an average of just over \$7,500 per mile annually, instead of driving on about a mile and a half of new road that would have cost them \$12,000 annually. “Making a prudent decision is pretty easy when you have all the information in front of you and it makes sense,” Lindbeck said.

Reference: *The Bridge*, Vol. 23, No. 4, April 2010, Michigan LTAP



Prepare Your Vehicle for Winter Driving

Reliable transportation is essential in the winter. It is especially important to keep your vehicle in top operating condition to avoid any unpleasant or dangerous situations while traveling in frigid weather. Below are some tips:

- ✓ Winterize your vehicle. Check with a mechanic to make sure your brakes, wipers, defroster, and heater are working properly.
- ✓ Fill your antifreeze and wiper fluids to the proper levels.
- ✓ Make sure your tires are properly inflated and tread is in good condition.
- ✓ Equip your car with proper materials in case of an emergency (blankets, food, water, flashlight, ice scraper, and extra clothing).
- ✓ Keep your gas tank full. You may use more gas while traveling because it may be necessary to change routes or turn back during a bad storm.

Reference: www.countryfinancial.com
Edited by LHTAC Staff

SNOW PLOW SAFETY

Driving a snow plow is hard work. It requires driving for long hours in the worst weather conditions. Although you are concerned with providing safe travel for motorists, you must not overlook your own safety. Here are a few tips to make your work safer:



- * Start work physically and mentally rested and properly clothed.
- * Check all equipment before each use. Inspect the lights, brakes, windshield wipers, defroster, plow bolts and chains, spreader and auger, flares and other safety equipment.
- * Know your route. Perform pre-storm route inspection observing landmarks and the locations of possible hazards (guardrails, curbs, railroad tracks, mailboxes, manhole covers, etc.) that may be hidden by snow.
- * Choose the speed appropriate for conditions. Resist the urge to get the job done in a hurry.
- * Be considerate of motorists having trouble driving in snow. Keep your temper and patience when vehicles pass or tailgate.
- * Be brief when using the radio. Report emergencies when possible.
- * Before leaving the cab, set the brakes and disengage the power to the spreader and snow plow.
- * Watch for signs of fatigue. Staring for hours at the driving snow can have a hypnotizing effect.

Reference: *Nevada Milepost, Winter 2008*

SICK TIME

Does a hacking and sneezing co-worker make you grimace? According to Ron Goetzel, the director of Cornell University's Institute for Health and Productivity, you probably should. Why? It's likely that person is going infect others as well.



Here are a few ways to stay healthy in the office, even when co-workers are not.

- Keep a clean desk, disinfect it every day.
- Clean your desktop tools: phone, mouse and pad, and other items touched regularly.
- Wash hands frequently, for 20 to 30 seconds with soapy water.
- Keep tissues on hand for sneezes and to muffle coughs.
- Stay in good general health. Get enough sleep, eat a healthy diet, and drink lots of liquids.
- Maintain a regimen of cleanliness at all times. People are more contagious before they show symptoms and after their symptoms are gone.

Reference: *UNH T2 Center, Road Business, Winter 2006, Vol. 21, No. 4*

In an effort to help save the environment by reducing paperwork and cost, we are offering to provide this publication by E-mail. If you would prefer an E-mailed copy of this publication *instead* of a printed copy, please send your request to: cstewart@lhtac.org

Thank you!

PRECAUTIONS TO AVOID HYPOTHERMIA

Prolonged exposure to freezing or cold temperatures can result in health problems such as trench foot, frostbite, and hypothermia. Workers exposed to the cold need to be especially mindful of its effects on the body, proper prevention techniques and treatment of cold-related disorders.

Causes

Cold is the most common cause of hypothermia. Chilled air cools down the body. You also can become hypothermic at temperatures above freezing if you are exposed to a combination of factors such as a cold wind along with wet clothing.

If you work where there is a wind chill, your head, the sides of your chest, and your groin are areas of your body that are especially vulnerable.

Clothing that is wet from sweat or precipitation speeds up the heat loss from the body. Fatigue also will increase your vulnerability to the risk of hypothermia.

Care

Hypothermia can occur even on a mild winter's day or on a damp day in fall or spring. Proper clothing and adequate insulation work together to trap the warm air around the body.

Wear warm head covering. Up to 50 percent of your body heat is lost through the head.

Wear layered clothing. The first layer of clothing should allow skin to breathe by permitting sweat to escape. Underwear, socks, and glove liners made of polypropylene or knitted silk allows sweat to escape from next to the skin.

The second layer of insulating clothing should be one that absorbs perspiration but doesn't allow heat to escape. Wool is an ideal fabric because it will stay warm even when wet. It also comes in many thicknesses.

The third layer of clothing also should trap body heat as well as keep water or dampness out. Lightweight micro fibers that trap heat are ideal, provided they are waterproof.

Protect your feet and hands. Wear waterproof boots. If possible, wear mittens. They warm the hands more effectively than gloves.

Drink plenty of non-alcoholic fluids. Doing this will help prevent dehydration and exhaustion, which can lead to hypothermia. Heated drinks can be helpful, but limit your intake of coffee and tea.

Pace yourself during vigorous activity. Take regular breaks to get away from the cold. Don't let yourself become weakened through fatigue. People who are fit are less prone to hypothermia.

Symptoms

37°	Normal Body Core Temperature	
36°	Feel Cold	Still alert and able to help oneself Numbness in legs and arms
35°	Mild Hypothermia	Shivering
34°		Clumsy, irrational, confused May appear drunk. Slurred speech Denies problem
33°	Moderate Hypothermia	Muscle stiffness
32°	Severe Hypothermia	Shivering stops. Collapse
31°		Semi-conscious
30°	Critical Hypothermia	Unconscious. No response to pain. Skin cold, may be blue/grey in colour.
29°		Slow pulse and breathing – may be difficult to detect
28°	Cardiac Arrest	No obvious pulse or breathing. Pupils dilated. May appear dead.

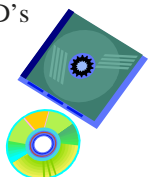
Degrees noted in Celsius. Graphic provided by: WaterSafety.org. Visit their website for further information. www.safety.org.nz/goodadvice/hypothermia.asp

Reference: Vermont Local Roads, December 2008

IDAHO T2 CENTER LIBRARY



We invite you to look at our lending library at www.idahot2.org. These videos, DVD's and CD's are very helpful to be used during your agency training meetings, or for individual viewing. We have videos on Health, Safety and any number of job related subjects. We also have many videos in Spanish. If you need help finding a certain subject, or help signing on to the website, please contact Denise Shields at 800-259-6841, 208-344-0565 or send an e-mail to dshields@LHTAC.org.





Idaho T2 Spring Classes 2011

See our website for more details: www.idahot2.org

Date	Workshop	Instructor	Workshop Location	Road Scholar Program	Registration Deadline
February 28, 2011	Pavement Maintenance II	John Duval	Boise	Road Master	14-Feb
March 1, 2011	Idaho Paving Materials	John Duval	Twin Falls	Road Master	15-Feb
March 2, 2011	Pavement Maintenance II	John Duval	Pocatello	Road Master	16-Feb
March 3, 2011	Idaho Paving Materials	John Duval	Idaho Falls	Road Master	17-Feb
March 10, 2011	ATSSA Traffic Control Technician	Chainey Rhoades	Idaho Falls	Road Master	24-Feb
March 23, 2011	ATSSA Traffic Control Supervisor	Chainey Rhoades	Idaho Falls	Elective	9-Mar
March 29, 2011	Gravel Road Maintenance & Design	Steve Monlux	Pocatello	Elective	15-Mar
March 30, 2011	Gravel Road Maintenance & Design	Steve Monlux	Twin Falls	Elective	16-Mar
March 31, 2011	Gravel Road Maintenance & Design	Steve Monlux	Payette	Elective	17-Mar
April 5, 2011	Roadway Drainage	TBD	Pocatello	Road Master	22-Mar
April 6, 2011	Roadway Drainage	TBD	Twin Falls	Road Master	23-Mar
April 12, 2011	Idaho Paving Materials	John Duval	Coeur d' Alene	Road Master	29-Mar
April 13, 2011	Pavement Maintenance II	John Duval	Lewiston	Road Master	30-March
April 19, 2011	Roadway Drainage	TBD	Coeur d' Alene	Road Master	5-Apr
April 20, 2011	Roadway Drainage	TBD	Lewiston	Road Master	6-Apr
May 9, 2011	Speed Limits & Speed Zones	TBD	Coeur d' Alene	Road Master	25-Apr
May 11, 2011	Speed Limits & Speed Zones	TBD	Sandpoint	Road Master	27-Apr
May 18, 2011	Road Safety 365: A Safety Workshop For Local Governments	TBD	Idaho Falls	Elective	4-May
May 19, 2011	Road Safety 365: A Safety Workshop For Local Governments	TBD	Hailey	Elective	5-May

The Idaho T2 Center will also be offering the following classes in 2011:

Advanced & Basic Math • ATSSA Flagger Certification • Basic Survey • Beginning and Advanced Welding • Heavy Equipment • MUTCD 2009 • Retroreflectivity • Traffic Monitoring for Technicians • Winter Survival

Registration Fees		How To Register
<p>Agency Local: \$45 State or Federal: \$80 Out-of-State & Private: \$105</p> <p>Heavy Equipment Courses Local government : \$300 Outside organizations \$450</p>	<p>ATSSA Traffic Control Technician & Traffic Control Supervisor Courses <i>Please see our website for the requirements, class description, and cost information.</i></p>	<p>Go to the Idaho T2 Center website: www.idahot2.org and log into the site with your user name and password. If you do not have a user name and password, on the left side of the webpage, click on the link "request logon". Once logged in you can register by viewing available classes on the training calendar or go to "Your Info" on the left navigation bar.</p>

Class Information

- Class information is posted online: www.idahot2.org
- All classes start at 8:30 AM unless noted otherwise. Attendees will have a one-hour lunch break; lunch will not be provided.
- Register two or more weeks in advance to receive a \$5 discount per person (*early registration discount does not apply to heavy equipment courses.*)
- Registration Cut Off: Is 10 business days prior to the class
- Cancellation Policy: If you must cancel, please call us at 208-344-0565 or at 800-259-6841. There will be no refunds unless a cancellation is received at least two (2) business days before the class.

Please contact the Idaho T2 Center if you need assistance with class registration.
Contact us at IdahoT2@lhtac.org or call 208-344-0565 or 800-259-6841.

Lewiston Safety Fest of the Great Northwest—Update Hosted by the Idaho T2 Center, September 2010

The Idaho T2 Center hosted the Lewiston Safety Fest of the Great Northwest on September 21-24, 2010. We are pleased to announce this event saw 352 participants who received training through the 27 *free* classes. Also presented were OSHA's 10 hour Construction and General Industry classes with the 25 other Safety courses, *all available at no charge*.

We had many gracious vendors and sponsors who helped us offer break refreshments to all the attendees each day. Our

32 qualified instructors *volunteered* their time to make this event possible.

We look forward to the upcoming 2011 Idaho Safety Fest events (see schedule below) and we anticipate an increase in attendance at each event. The T2 Center and LHTAC want to thank everyone involved for their commitment to the safety and training of Idaho's workforce...*Thank you!*

Reference: Bruce W. Drewes, T2 Manager & Denise D. Shields, T2 Event Coordinator



* FREE TRAINING *

SAFETY FEST OF THE GREAT NORTHWEST — 2011 SCHEDULE

Safety Fest of the Great Northwest is beginning its 6th year of **FREE** 4 day training conferences available to the construction and general industry communities to provide safety and health training to the Northwest Region's front line workers. This includes anyone who desires to improve the safety performance of their business! Please visit our websites:

BOISE, ID

Dates: January 25-28, 2011 – REGISTRATION IS NOW OPEN!

Location: URS/Washington Group, 720 Park Blvd., Boise, ID 83702

<http://www.safetyfest-boise.org/>

POST FALLS, ID

Dates: February 21-25, 2011 – REGISTRATION IS NOW OPEN!

Location: Post Falls Armory and Fire Station of Post Falls, 5453 E. Seltice Way, Post Falls, ID 83854

<http://www.safetyfest-northernidaho.org/>

TWIN FALLS, ID

Dates: March 22-25, 2011

Location: College of Southern Idaho, 315 Falls Ave., Twin Falls, ID 83303

<http://www.safetyfest-southernidaho.org>

POCATELLO, ID

Dates: April 26-29, 2011

Location: Idaho National Guard Armory, 10714 Fairgrounds Rd., Pocatello, ID 83201

<http://www.safetyfest-easternidaho.org>

LEWISTON, ID

Dates: October 25-28, 2011

Location: LCSC – Williams Conference Center, 500 8th Avenue, Lewiston, ID 83501

<http://www.safetyfest-lewiston.org>

The Idaho T2 Center will be hosting the Pocatello and Lewiston events. For information about these or any of the Safety Fest events, please contact Denise Shields, T2 Event Coordinator at 208-344-0565, 800-259-6841 or email to: dshields@LHTAC.org





Road Scholar 2010 Recipients

Eric Killen, City of Coeur d'Alene, Street Department



From left to right: Eric Killen & Aman Sterling

Eric Killen is originally from Springfield, Illinois and he has been with the City of Coeur d'Alene Street Department for eight years. Eric's professional background includes the U.S. Army, Kootenai County Sheriff's reserve deputy and he is licensed with the State of Idaho as a Water system Operator. Eric's personal involvements include PANTRA Trail Riders Association, Boy Scouts of America, and LCEA E-Board member. Eric enjoys being involved with his family and likes to help with their sports activities by coaching or assisting in any way he can. Eric also enjoys the outdoors and likes activities such as, hunting big game, fishing, riding dirt bikes and scuba diving. "I would like to thank everyone for their involvement including the Idaho T2 Center staff and instructors; the City of Coeur d'Alene staff Tim, Jim, Terry, Dick and Diana. I appreciate the opportunity receive the Road Scholar status, it's a great program." – Eric Killen

Aman Sterling, City of Coeur d'Alene, Street Department

Aman was born and raised in Coeur d'Alene. Aman's background includes a list of activities: Level 1 Firefighter, EMT-B, HAZMAT Technician, Wild Land Firefighter, Advanced Extrication, High Angle Rescue, Trench Rescue, and Incident Safety Officer. He is also on the committees for

ADA, ped bike, City Fit, and Centennial Trail Member. Aman loves to be with family and friends, especially the love of his life, his daughter Elery. He also enjoys the outdoors and riding dirt bikes, camping, backpacking and has participated in a couple of Ironman competitions.

Clint Boren, City of Post Falls, Street Department

Clint is from Palmdale, California and he has worked for the City of Post Falls Street Department since 2007. Clint is involved with Highway Watch and his personal interests include spending time with family, playing football, basketball, and reading. He is also a member of the Cornerstone Baptist Church.

Kevin Desilets, City of Post Falls, Street Department, Street Worker

Kevin is originally from Attleboro, Massachusetts. Kevin has experience with automotive repair and as an equipment operator. He is also involved with Highway Watch. Kevin likes to take early morning rides on his Harley and he enjoys cooking and restoring old cars and trucks.



From left to right: Kevin Desilets, Bruce Drewes-Idaho T2 Center Manager & Clint Boren





*Rick Lamoreaux & Bruce Drewes
from the Idaho T2 Center*

Rick Lamoreaux, City of Rigby

Rick is a native of Rigby, Idaho. He graduated from Rigby High School in 1979 and has taken several continuing education courses. Rick has been employed with the City of Rigby since 1979. He worked part-time doing park maintenance from 1976 to 1979 and he has experience with many of the positions with the city. Rick attended Idaho State Fire School, and has taken classes from the National Fire Academy. He was a volunteer fire fighter for over 20 years. He served as Captain for eight of those years. Previously Rick was on the Idaho Centennial Committee and is currently on the Parks and Rodeo Board. Rick enjoys music, concerts, NHRA Drag Racing, history, and cars. If it's fast and loud, he likes it! "I am proud that I have worked hard for the citizens of Rigby for over 32 years and am proud to call this community my home" -Rick Lamoreaux

Dustin Howe, Worley Highway District

Dustin is from Rose Lake Idaho. He graduated from Kellogg High School and has taken several continuing educational classes. Dustin likes to go hunting, fishing, camping and he likes to work on vehicles. "I enjoy learning new ways and techniques to maintain public roadways. The safety of the traveling public is my number one goal." – Dustin Howe



Stephen Backman, Lakes Highway District, Equipment Operator

Stephen is from Lake Stevens, Washington and he has been with the Lakes Highway District for 25 years and is a member of their Safety Committee. Stephen has had Vocational Training and spent four years as a firefighter and four years road building in the private sector. Stephen likes motorcycles, 4-wheelers, and building/remodeling houses.



Rex Lutes, Lakes Highway District, Road Maintenance

Rex is from Idaho and was in the logging industry for 30 years. He has also spent seven years in road construction and is a member of the Lakes Highway District Safety Committee. Rex's personal interests include hunting, fishing, camping, hiking and riding ATV's and motorcycles.

Kenny Womochil, Lakes Highway District, Road Maintenance

Kenny is from Northern Idaho and is a member of the Lakes Highway District Safety Committee. Kenny enjoys flying, auctioneering, hunting, and fishing.

*From left to right: Stephen Backman,
Rex Lutes & Kenny Womochil*





Road Master 2010 Recipients

City of Nampa, Street Division

The City of Nampa Street Department has done it again! This year they had several employees who completed Level I of the Road Scholar Program and just recently, the Nampa Street Department had nine employees complete the Level II Road Master Program! The Idaho T2 Center would like to applaud their efforts. They have worked very hard towards their accomplishment.



From left to right: Curt Hensley, Doug Standley, (back) Mark Hadley, (front) Matt Stanley, Les Gibbens, Don Barr, Shawn Fournier, Jeff Keeney, and Scott Hensley.

Chainey Rhoades, Canyon Highway District #4, Sign Technician/Safety Coordinator

Chainey is from Pocatello, Idaho and moved to Boise in 1989. He has worked for Canyon Highway District #4 for eleven years and he also teaches a series of ATSSA certification courses for the Idaho T2 Center. His personal interests include spending time with family, camping, hunting, fishing, and trap shooting. "I would like to thank management and commissioners for giving me the opportunity to complete the Idaho Road Master Program through the T2 Center." – Chainey Rhoades



Chainey Rhoades & Bruce Drewes



CITY OF NAMPA-STREET DIVISION TRAINING BENEFITS

By Don Barr, Street Superintendent, City of Nampa, Idaho

Training our workers has been a tremendous yet worthwhile drain on our time and resources. The training we have received from the Idaho Technology Transfer (T2) Center has had positive effects for the employees and the Street Division.

Training increases employee productivity: In addition to learning how to complete new tasks and take on more responsibility, our employees have learned advanced techniques to help them complete everyday tasks more efficiently. The maintenance they are accomplishing is universal. In other words, they are all receiving the same training and gaining the same knowledge. When utilizing the training that all have received we have more of a concerted effort in repair and maintenance procedures.

Training improves job satisfaction: Investing time and money in Street Division employees' skills makes them feel valued and appreciated, and it provides them with ownership of both the projects and the maintenance activities. In the end, I believe that higher job satisfaction will result in reduced turnover as well as higher productivity.

Training reduces turnover: Employees are less likely to leave if they have the opportunity to learn new skills and keep up within their jobs. This helps us to eliminate the direct costs of rehiring and training as well as the indirect costs such as morale loss, decreased service and loss of Street Division knowledge.

Training aids in the recruiting process. By being committed to training, I believe we will hire more desirable candidates who may lack specific skills. Providing training makes the Street Division a more desirable place to work for potential employees. It allows the employees to grow and accept responsibility and ownership of their work. In addition, training and cross training existing employees eliminates the need to hire new staff.

Training rewards long-time employees: I will be more willing to promote existing employees. My goal is to ready all employees with the knowledge and ability to be future managers. It is up to each employee to utilize their training and to take on new challenges.

Training reduces the need for employee supervision: Not only does training teach employees how to do their jobs better, but it also helps them to work more as a team. With the same knowledge, there will be less discourse and more agreement on how the job should be completed.

Other Training Benefits: We have incorporated training received from the T2 Center in a number of ways. We have standardized our patching program by saw cutting areas to be repaired. In the past, most work had a "throw and go" attitude. We have re-evaluated how we do chip sealing and added additional equipment (Rollers). We also migrated to a ¼" chip in sub divisions while continuing to use ½" on the mains and arterials. This practice has allowed us to use less oil in the subdivisions. The training reinforced the need to replace our 1966 chip spreader. This has allowed us to maintain a proper application of our chip, saving wasted material, cleanup of excess material, labor, and wear and tear on our sweepers. Additionally, we added a shaker / screener to our equipment to recycle reclaimed chips. This piece of equipment was expensive and we estimate that it paid for itself in the first season. We had budgeted for this years chip sealing and with the new spreader, smaller chips, and additional rollers we saved roughly \$200,000. We also added length to our distributor and for the first time ever we began doing our own fog sealing. This helped save the cost of distributor service. All of this money was put back into our Pavement Management fund allowing us to utilize it for construction. We had better control of our oil, our chips, and our cleanup as well as more control of timing and planning.



Local Highway Technical Assistance Council (LHTAC)
 Idaho Technology Transfer Center (T2) LTAP
 3330 W. Grace St.
 Boise, Idaho 83703

Prsrt Std
 U.S. Postage
 PAID
 Boise, ID
 Permit No. 767



VOLUME 4, No. 2 IDAHO TECHNOLOGY ASSISTANCE NEWSLETTER DECEMBER 2010

CALENDAR OF EVENTS

January 14, 2011	2011 Federal-aid Incentive Program—STP Applications due to the ITD District Offices	1-Coeur d'Alene, 2-Lewiston, 3-Boise, 4-Shoshone, 5-Pocatello, 6-Rigby, Idaho
January 27, 2011	Association of Idaho Cities (AIC) 2011 City Officials Day at the Capitol	Boise, ID
January 28, 2011	2011 Federal-aid Incentive & Bridge Programs—STP Applications due to LHTAC	Boise, ID
February 7-10, 2011	Idaho Assoc. of Counties (IAC) Midwinter Legislative Conference & Affiliate Assoc. Meetings	Boise, ID
February 13-17, 2011	American Traffic Safety Services Assoc. (ATSSA) 41st Annual Convention & Traffic Expo	Phoenix, AZ
March 11, 2011	Local Highway Technical Assistance Council Meeting (LHTAC)	Boise, ID
April 3-6, 2011	Institute of Transportation Engineers (ITE) 2011 Technical Conference and Exhibit	Lake Buena Vista, FL
April 10-13, 2011	American Public Works Association (APWA) 2011 North American Snow Conference	Spokane, WA
April 17-21, 2011	National Association of County Engineers (NACE) Annual Conference	Minneapolis, MN
April 26-27, 2011	Idaho Transportation Department (ITD) Project Development Conference	Boise, ID

If you are interested in additional information regarding any of the above referenced meetings and/or training sessions, please contact LHTAC/T2 at 1-800-259-6841 or lhtac@lhtac.org.