

The Center Line

North Dakota Local Technical Assistance Program • Upper Great Plains Transportation Institute • North Dakota State University

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OIL PRODUCTION AND ROAD IMPACT HIGHLIGHT ND ASPHALT CONFERENCE

By Steve Chase

The North Dakota Asphalt Conference was held at the Doublewood Inn in Bismarck April 6-7. The event was sponsored by Associated General Contractors of North Dakota (AGC), Dakota Asphalt Paving Association (DAPA), North Dakota Department of Transportation (NDDOT), and Upper Great Plains Transportation Institute (UGPTI). Approximately 140 attendees representing contractors, consultants, NDDOT, counties and cities.

The agenda included presentations on the status of oil production in ND by Lynn Helms, director of ND Department of Minerals; oil production impact on roads by Jack Olson, NDDOT; perpetual pavement by Mark Blow, Asphalt Institute; saving money with RAP by Ken Swedeen of DAPA, Mark Blessen, Wirtgen America Inc., and Justin Grusing, Dustrol Inc.; and warm mix asphalt by Tim Clyne, MnDOT. Two breakout sessions were conducted with Track 1 covering intelligent compaction by Larry Keach, Bomag Americas Inc., and quality control milling operations by Justin Grusing and Mark Blessen. Track 2 covered full-depth reclamation research by Don Johnson, SD School of Mines and Technology; and 4.75 superpave mixtures research by Nabil Suleiman, University of North Dakota.

This year's Bronze Sponsors (\$250-499) are Ackerman-Estvold Engineering, Border States Paving Inc., General Equipment & Supplies Inc., Gravel Products Inc., Midstate Reclamation S.D. Inc., Midwest Testing Lab Inc., Swanston Equipment Corp., and Wold Engineering PC. Silver Sponsors (\$500-749) are CHS Asphalt Inc., Duninck Construction, Mayo Construction Co Inc., and Northern Improvement Co. Thank you to all the sponsors for your support.



Ken Swedeen, DAPA; Justin Grusing, Dustrol Inc.; Mark Blessen, Wirtgen America Inc.

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Upcoming Events

Regional Local Road Conference
October 20-21, 2010 - Rapid City S.D.

Winter Roads Maintenance Workshops
Oct.26 - Stark County Shop,
Dickinson 8:00 AM - 3:30 PM MST
Oct. 28 - Barnes County Shop, Valley City
8:00 AM - 3:30 PM CST

Last year's Asphalt Conference was cancelled because of the severe flooding that occurred across the state of North Dakota. This year's conference evaluations were very positive and we plan to hold the conference annually.



SAFETY CORNER: WORKING SAFELY

By Steve Chase

It's up to your employer to provide you with a safe workplace. Your employer's safety programs serve as a foundation and guide to safety. The bottom line, however, is **you**. It's up to **you** to follow the safety rules and safe procedures that are in place.

No single program will guarantee safety, but there are plenty of guidelines to help you work safely:

- Understand the organization's safety goals. Use them to guide your actions.
- Make and offer suggestions if you have the opportunity. Each and every worker is an important part of the total safety effort.
- Keep in mind that we are all responsible for our own safety.
- Be aware that you are more accident-prone if you are not concentrating on the job. Focus on the job and your safety. If you are thinking about personal problems or are daydreaming, you aren't giving all your attention to your safety as you work.
- Follow procedures for reporting accidents, hazards, and injuries. Reporting gives your employer the opportunity to find ways to keep the incident from happening again.
- Remember that accidents frequently happen when you hurry or take short cuts. Also, when you become very familiar with your job, you can get complacent about safety. The more you know about a process, the easier it is to be tempted to take short cuts. Short cuts are accidents waiting to happen.
- Ask questions about anything you do not understand or about any procedure that is not clear. If something seems wrong, ask before you do something that could lead to an injury.
- Remember that there is no such thing as a "freak accident." If it happens once, it can happen again.
- Take safety training seriously. Your employer has identified the hazards involved in your work, and training gives you the knowledge you need to keep yourself and others safe.
- Understand that rules, regulations, policies, and procedures serve essential purposes in providing safety. Ultimately, however, it is up to you to think and act safely for your personal benefit.

Content source: National Institute for Occupational Safety and Health (NIOSH)





PLAN TO ATTEND THE 25TH ANNIVERSARY OF THE REGIONAL LOCAL ROAD CONFERENCE, OCTOBER 20-21 - RAPID CITY, S.D.

The Regional Local Road Conference is celebrating its 25th year in operation. This conference is sponsored by FHWA Local Technical Assistance Program and Transportation Technology Transfer Centers of Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota and Wyoming. The conference is attended by county road department staff, city public works staff and other transportation-related agencies.

This year the conference agenda will include the following topics:

- Alternatives to paving roads that carry heavy loads
- Emergency road closures/incident management
- Ethics
- Benefits of GIS (panel discussion)
- Green asphalt technology
- How to select the best pavement repair method
- Returning roads to gravel
- Gravel roads study
- Rural road surface management tools
- Geotextiles for base reinforcement

The Regional Local Road Conference will also feature the “You Show Us” contest. The contest consists of competing County road department and other public works entities from the region, that have submitted safety and operational efficiency improvements. The winner will be awarded at the time of the conference.



NDLTAP will be organizing a bus trip to the conference. The fee for the bus trip (round-trip) will be \$10.00 per person. This fee includes a box lunch, refreshments, snacks and door prizes. Contact Denise Brown at 1-800-726-4143, (701) 328-9855 or by e-mail denise.brown.1@nds.u.edu for information on the bus schedule and to reserve a seat on the bus.

WINTER WORKSHOPS 2010 RECEIVE FAVORABLE EVALUATIONS

By Steve Chase

NDLTAP recently completed its winter workshops for erosion and sediment control, asphalt pavement control, and solid and hazardous waste issues.

The Erosion and Sediment Control Workshop instructors were Dallas Grossman with N.D. Department of Health and Tom Huncovsky with N.D. Department of Transportation. The agenda included: regulatory framework, permits, principles and temporary erosion and sediment control, and what works at NDDOT.

The Asphalt Pavement Repair Workshop instructor was Bruce Nord with N.D. Department of Transportation. The agenda included pavement failures, new material and techniques, crack repair, and work zone signing and personal protective equipment.

The Solid and Hazardous Waste Issues Workshop instructors were Steve Tillotson and Curtis Erickson with N.D. Department of Health. The agenda included emergency and natural disaster debris, recycling and disposal options, inert facilities, what is hazardous waste and who generates it, and brownfields.

All workshop attendees indicated a good to excellent evaluation rating for the class material and instructors. These workshops and others are in the planning stages for the next training season.

As we move forward into our training season, please feel free to contact our office with your training needs.

LTAP/TTAP REGION 7/8 MEETING HELD IN BISMARCK

By Steve Chase

The LTAP/TTAP Region 7/8 meeting was held in Bismarck June 2-3 at the Radisson Hotel. Nine states were in attendance and reported on updates for their centers and the challenges they face in the future.

A special interest topic, "Gravel Road Maintenance Methodology and Preview to Asset Management Train-

the-Trainer," was presented by George Huntington from WY LTAP. Another special interest topic was "New Highway Safety Manual and CERS Resources" presented by Keith Knapp from IA LTAP. An update on the FHWA & Clearinghouse and future strategic planning was presented by Cameron Ishaq and Susan Monahan. The next Region 7/8 meeting will be hosted by Nebraska.



ARE YOUR ROADS READY FOR THE SNOW?

by Dave Levi

We are coming into fall and before you know it winter will be here. It may seem early, but it is time to start thinking about getting ready for SNOW. If you haven't reviewed your snow removal policy you should update it before winter sets in. Check with the schools for bus routes and with the mail carriers for their routes. If there are hospitals or other emergency routes make sure those routes are included. Record your snow removal plan and priorities on a county map. You might want to pass it by your County Commission for their approval and then give a copy to each of your operators.

As we get closer to winter, you should travel the routes and check for objects that may cause drifts. Make sure the ditches have been mowed and obstructions that will stop snow have been removed.

If you need to stockpile sand and salt or if you need to prepare your gravel roads, you should start planning now. If you have storage for the sand and salt mix that is great, if not you need to prepare a site and cover the mix.

Removing snow from gravel roads is different than removing snow the ditch along with the snow. Get out early and prepare your gravel roadways for winter maintenance. Make sure your roadways have the proper crown to allow water to drain off the road. Remove any high ridges or secondary ditches, as some like to call them, along the shoulder that hold water on top of the roadway or on the shoulder. Smooth the surface and re-compact the gravel. Remember, when you start the plowing operation, don't plow the gravel off of the roadway. Leave a little snow on the roadway and allow traffic to blow it off or just let it melt. If you do get ice on your gravel road you might have to use a scarifier blade to break it up and remove it. Remember, it's not a good practice to use too much salt on gravel roadways as a deicer.




Sometimes traffic pounds out the fines on gravel roadways. When this happens the gravel will not bind when you try to relay and compact it. Binding the gravel or driving surface together not only prepares you for winter maintenance but it provides a much safer roadway for driving on year round. If you have a lot of loose gravel on the road top and are unable to compact it, you may have to pull in the shoulders and remix the clay fines with the gravel. This is the least expensive option for sweetening the gravel. If it appears there is an excessive amount of one size rock on the road, it's a good idea to test the gravel to determine what needs to be added to sweetened the material and make it compact. You may have to haul in material to get the gradation correct. Early planning will help you complete these projects before the snow flies.

If you have paved roads the Salt Institute has an abundance of training materials available on winter maintenance using salt. These training materials are developed using a sensible salting approach for snow and ice control. These training materials can be found at: <http://www.saltinstitute.org/Education-Center/Snowfighters-training/Snowfighting-training>

A good example of what is on this website is the "Snow Fighter Handbook" - This is the "Bible" on fighting snow with salt. The handbook can be found at <http://www.saltinstitute.org/content/download/484/2996>

When you do begin to plow snow, remember to set the wing or moldboard to cast the snow into the ditch without leaving a ridge. Any ridge left in place will cause drifting snow to catch and accumulate. If you do get into a situation where the ditches are overfilled, try to set your wing or moldboard to slope the snow away from the road. A gentle slope will be more likely to allow the snow to drift across the bank.



MEETING THE CHALLENGES OF TODAY'S TRANSPORTATION NEEDS BY MAKING EVERY DAY COUNT

For the nation's highway community, meeting the challenges of today's transportation needs while working more efficiently, sustainably, and cost effectively means going beyond innovation and ingenuity. It means making every day count. Rapid deployment of proven technology and solutions to speed up project delivery are at the heart of the Federal Highway Administration's (FHWA) new Every Day Counts (EDC) initiative.

"EDC is designed to identify and deploy innovation aimed at shortening project delivery, enhancing the safety of our roadways, and improving environmental sustainability," said FHWA Administrator Victor M. Mendez.

EDC will initially focus on getting promising new technologies into the marketplace faster and speeding the delivery of major highway projects. Administrator Mendez has asked FHWA Deputy Administrator Greg Nadeau to lead this initiative. Priority technologies featured are:

- **Warm Mix Asphalt**—Warm mix asphalt (WMA) technologies allow the producers of hot-mix asphalt pavement to lower the temperatures at which the material is mixed and placed on the road, which can result in significant cost savings and reduced greenhouse gas emissions. WMA projects have been constructed in more than 40 States to date.
- **Prefabricated Bridge Elements and Systems**—The use of prefabricated bridge elements and systems (PBES), ranging from superstructures or substructures to totally prefabricated bridges, offers both faster and safer bridge construction and better quality. PBES can also reduce costs and the environmental impact of projects.
- **Adaptive Signal Control Technology**—Adaptive signal control systems, such as Adaptive Control Software Lite (ACS-Lite), coordinate the control of traffic signals across a network by adjusting the lengths of green lights based on prevailing traffic conditions.

These adjustments can improve travel time reliability, reduce congestion, and provide a smoother flow of traffic.

- **Safety Edge**—The Safety Edge technology provides a simple but extremely effective solution to reduce pavement edge-related crashes and help save lives. By shaping the edge of a pavement to 30 to 35 degrees, the Safety Edge helps eliminate the problem of vertical drop-off, enabling vehicles to return to the paved road smoothly and easily.
- **Geosynthetic Reinforced Soil (GRS)**—Instead of conventional bridge supported technology, GRS technology uses alternating layers of compacted fill and sheets of geotextile reinforcement to provide support for the bridge. The technology can reduce construction time and costs and also offers flexible design and the ease of using common equipment and readily available materials.

Along with new technologies, FHWA aims to make innovative contracting standard business practice by supporting the deployment of accelerated project delivery methods. The construction manager/general contractor (CM/GC) is a project delivery method where the owner contracts with a construction manager to provide constructability, scheduling, and pricing information during the design process. CM/GC allows state departments of transportation to remain active in the design process while assigning risks to the parties most able to mitigate them. CM/GC occupies the middle ground between design-bid-build and design-build. The CM/GC method has the potential to lower project costs, accelerate project completion, and reduce change orders.

In the alternative design-build project delivery method, the design and construction phases of a project are combined into one contract. This can result in significant time and cost savings and also provides the contractor with increased flexibility to be innovative.

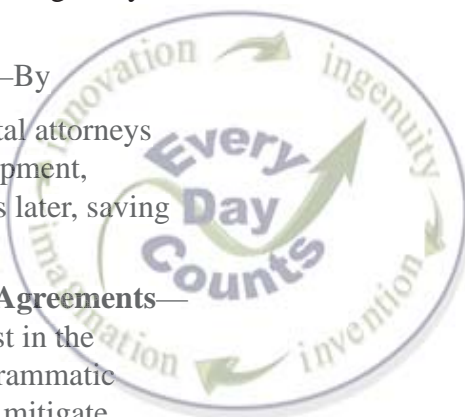
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(EDC continued)

The EDC initiative will also provide innovative approaches to improving the delivery process for projects that require an Environmental Impact Statement (EIS) or other environmental document. The proposed initiatives will help State and local agencies speed project delivery by using the following time-saving practices:

- **Planning and Environmental Linkages**— This initiative will provide a tool to increase incorporation of planning documents and decisions into the environmental review process, minimizing duplication of effort, promoting environmental stewardship, and reducing delays in project implementation.
- **Legal Sufficiency Enhancements**—By consulting with FHWA environmental attorneys early in project planning and development, decision-makers can avoid problems later, saving time and money.
- **Expanding Use of Programmatic Agreements**— This initiative will identify and assist in the expansion of new and existing programmatic agreements to avoid, minimize, and mitigate project impacts.
- **Use of In-Lieu Fee and Mitigation Banking**— Expanded use of in-lieu fees and mitigation banking will create a more streamlined process to expedite project delivery.
- **Clarifying the Scope of Preliminary Design**— The initiative will identify the amount of design work allowable under current law prior to completion of documents required under the National Environmental Policy Act. FHWA will also develop guidance to provide consistency in applying this definition of preliminary design.
- **Flexibilities in Right of Way (ROW)**—FHWA will highlight opportunities to achieve project time savings by using ROW flexibilities already provided for in statutes and FHWA regulations.

- **Flexibility in Utility Accommodation and Relocation**—Existing flexibilities for accommodating and relocating utilities will be spotlighted, as well as techniques for fostering effective utility coordination during project development.
- **Enhanced Technical Assistance on Delayed EISs**—This initiative will provide additional FHWA technical assistance to identify major challenges on a few ongoing EIS projects and to implement solutions to resolve project delays where feasible.



For more information about EDC, contact Victoria Peters, special assistant to the deputy administrator, at victoria.peters@dot.gov. Focus will continue to provide updates on EDC initiatives in future issues.



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