# The Center Line

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

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# Congratulations to Three NDLTAP Pioneers

In November, Dr. Don Andersen, Vernon Monger, and Russell McDaniel were presented with the first North Dakota Technical Assistance (NDLTAP) Appreciation Awards. This new award has been created to honor individuals who have provided outstanding service to the NDLTAP. The awards were presented in conjunction with the NDLTAP Advisory Board meeting.

Andersen was the first NDLTAP director and served in that capacity from 1984 to 2007. Known for his ability to make training and outreach fun, Don's quick wit and humor melded with his in-depth technical knowledge proved to be a formula for success. Dr. Don continues to teach courses in Civil Engineering at NDSU.

McDaniel started his transportation career with the NDDOT in 1951 and retired from the agency in 1991 as a program manager. He started work with NDLTAP in 1992 as a technical circuit rider specializing in helping local governments utilize automation for record keeping for transportation inventory and accounting purposes. He has developed several software programs tailored to practical applications for local road departments. Russ has been diligent in helping local agencies install and operate the programs. The software has been made available to others outside North Dakota. The ease of use and practical applicability of the programs have gained national recognition. Russ continues to work with NDLTAP and provide software services as needed.

Vernon Monger also started his career in civil engineering with the NDDOT where he worked for over 33 years. After retiring from the NDDOT in December 1992, he was convinced to come to work with the NDLTAP in January 1993. His years of experience in transportation engineering made him a perfect technical outreach person for

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local governments where he was able to share his knowledge with the transportation community. After contemplating full retirement from his LTAP duties for years, Vern retired in November to spend additional time improving his golf game and traveling with his wife, Enid. His career in transportation has spanned approximately 50 years.

These three individuals have done much to establish a firm base for LTAP operations in North Dakota and advance its objectives. They have been true pioneers. Their dedication and service have been greatly appreciated. From the North Dakota LTAP community, we thank you.



Vernon Monger, Donald Andersen, Russell McDaniel

#### CHASE JOINS NDLTAP AS CIRCUIT RIDER

Steve Chase recently joined the UGPTI/NDLTAP as a circuit rider. Steve will provide expertise and advice on road maintenance and construction issues to local agencies across the state. He will have a special emphasis on promoting traffic and employee safety.

Steve has 36 years of experience in employee and traffic safety. He retired in 2009 from the North Dakota Department of Transportation after a 31, year career. He was a safety officer for 24 of those years where he managed the department's safety and health program. His responsibilities included field inspections, training, and analyzing accidents. Prior to that, he was a member of the North Dakota Highway Patrol for five years as a trooper serving in Crosby and Garrison. Steve holds an associate's degree from Bismarck State College and also served as sergeant a in a military police company with the U.S. Army.



#### MORTON COUNTY HIGHWAY SUPERVISOR RETIRES

By Vernon Monger

Charles Morman, Morton County Highway Supervisor, retired from the road department Sept.30. He worked for the department for 45 years, serving as highway supervisor for the past 32 years. His initial years were spent in the engineering department. He is also a registered land surveyor.

As highway supervisor, Morman oversaw about 1,600 miles of roads throughout the county and the 30 employees who maintain them. Because the county has no organized townships, they are responsible for all rural roads in the county.

Morman states that management of the roadway system has changed significantly over the years. He notes that earlier in his career there was limited information available for making decisions. Now, with computer technology and information-gathering systems in place, better decisions can be made to improve the roadway system.

During his career he has seen the number of employees reduced by approximately half. With major updates in equipment, trucks, loaders and specialized equipment, the road department has been able to better maintain the roadway system in a more efficient manner. The department is no longer in the road-building business, and therefore disposed of scrapers, retaining one for minor dirt-moving activities. Another major accomplishment during his career was obtaining adequate facilities in northwest Mandan for the operation of the road department.



Morman says he has worked for a great group of county commissioners over the years, making the job very interesting. He notes that there are three wind farms scheduled to be built in the next year, placing an additional burden on the local road system to provide adequate service to those facilities. The road department has been working with the city of Mandan to determine how they can better utilize common facilities and equipment relative to operating more efficiently.

Morman has been active in the LTAP program. He and his staff are participants in the training sessions offered. In turn, LTAP has utilized Morton county facilities to conduct various training sessions.

Morman and his wife, Sonja, have three children and five grandchildren. They plan to spend their time visiting family and they also expect to enjoy traveling around the country to do some sightseeing.

#### MIKE AUBOL NAMED MORTON COUNTY ENGINEER

by Vernon Monger



Morton County recently hired Mike Aubol as its engineer. The county has been without the services of an engineer on staff for several years. Aubol will oversee the construction and maintenance activities of the road department.

Aubol has 16 years of service in private and public engineering.

He is a New Town native, has a civil engineering degree from North Dakota State University, and is a registered professional engineer. Aubol served with the Burleigh County Highway Department for 12 years and also worked at Ulteig Engineers.

Morton county has about 1,600 miles of roadway. The road system in the county continues to face repairs from last flooding last winter and spring. Aubol also notes that energy development in the county and proposed wind farms are creating additional engineering problems.

Aubol and his wife, Jodi, have two children.

#### WINTER MAINTENANCE OPERATIONS -THANK YOU

by Vernon Monger

Each fall we like to have an article in our LTAP newsletter pertaining to winter maintenance operations with some tips and reminders on how to better handle the snow-plowing activities. The past year, with all the snowfall and then spring flooding, was not easy on equipment operators responsible for clearing the roads. I don't think the public can fully understand the stress the operators are under during a snowstorm. They not only have to be concerned about operating the plowing truck but also must be concerned with sharing the roadway with other vehicles during severe weather conditions. Public expectations are high for winter road maintenance and when individuals are not satisfied, they usually know who to call to get action.

We want to share with you one contact that was made to one of our local departments. The bus drivers and students at Taylor-Richardton Elementary school presented a THANK YOU to the Richardton district of Stark County road department to recognize the county employees for their excellent work in keeping their roads open. We know that most of the public is very aware of the conditions under which the employees must work and are very appreciative of it. However, the message is not always conveyed to the workers.



## LIABILITY CHECKLIST FOR LOCAL TRANSPORTATION AND PUBLIC WORK AGENCIES

If you can answer yes to the following questions, your agency is in a good position to defend itself against tort liability. If you have other concerns, add them to the list. Consider sharing this list with your council members and other elected officials.

#### **TRAINING**

- Do all employees receive regular training for the work they perform and the materials and equipment they use?
- Do employees understand the importance of using reasonable care in performing their duties?
- Are employees instructed to report hazardous conditions and to solve them?

#### SIGNS AND MARKINGS

- Do we have an up-to-date copy of the Manual on Uniform Traffic Control Devices (MUTCD) and other governing documents? Are these available to all employees?
- Are employees familiar with the MUTCD and other governing documents?
- Are signs and markings adequate, properly installed, and well maintained?
- Do we have an up-to-date inventory of signs, signals, and markings and a plan for maintaining conformance with the MUTCD and other governing documents?
- Do we have and follow a plan for periodic dayand-night review of signs and markings?
- Are identified road hazards posted with the appropriate warning signs based on the MUTCD and other governing documents?
- Are all bridges properly posted for weight restrictions and low clearance?
- Are all dead-end roadways and railroad crossings properly signed?
- Do we provide proper temporary traffic control in workzones?
- Are sight lines clear at intersections?

# **ROADS, CULVERTS, AND BRIDGES**

- Do we have a current inventory of road, culvert, and bridge conditions and a plan for addressing deficiencies?
- Do we keep good records on agency activities including roadway conditions, crashes and maintenance?
- Do we use current versions of accepted guidelines in road design, construction, operations, and maintenance.

#### **ADMINISTRATION**

- Are all of our roadways inspected on a regular basis?
- Is our equipment in good repair and are employees instructed to report faulty equipment?
- Do we follow objective procedures in setting priorites?
- Are our maintenance standards achievable with the resources available?
- Do we have an established procedure for receiving complaints, acting on them, and recording all actions?
- Do we have an established procedure for receiving complaints, acting on them, and recording all actions?
- Do we meet periodically with our legal counsel to review the status of roadway-related claims filed against the agency?

Reference: This article had been adapted and reprinted from the NE LTAPCenter with permission on Sep 27, 2009.

The original article had input from Dr. Ron Eck, PE, FL LTAP Center instructor for Tort Liability and Risk Management, and from articles appearing in Lone Star Roads Mar/Apr 2004, Nuggets & Nibbles, Fall 1996 and Technology News, Nov/Dec 2004.



#### ND INSURANCE RESERVE FUND - SAFETY GUIDE AVAILABLE

The North Dakota Insurance Reserve Fund (NDIRF) developed a Safety Guide and distributed copies to all of its members. This is an excellent safety guide and is probably on file in an office near you. If you have not had the opportunity to see the guide you need to take a look at it, this guide is a must read. All of you work hard and all of you deserve to go home this evening and every evening.

It is important that you know about safety, but it is just as important to you that your coworkers know about safety. Their actions can have a dramatic affect on your well being. NDIRF has the guide available on-line. We encourage you to click on the following link to review the safety information that is pertinent to you and encourage your coworkers to do the same.

http://www.ndirf.com/?id=17&page=Safety+Guide

REMINDER: PLEASE PRE-REGISTER FOR ALL WORKSHOPS 48 HOURS IN ADVANCE.

#### **COMING EVENTS**

#### ND LTAP/TLN EVENTS

(Tentati	ve)	
Seal Coat	2/3/2010	9 - 1
Microsurfacing/Slurry	2/4/2010	9 - 1
Erosion & Sediment Control - NDLTAP		
Valley City (VFW)	2/09/2010	8 - 3:30
Mandan (Morton Co. Shop)	2/10/2010	8 - 3:30
Listen Up! Improving Your Ability to Listen Effectively	2/10/2010	9 - 5
Cold-in-Place/Full Depth Recycling	2/17/2010	9 - 1
Maintenance & Short Duration (ATSSA)	2/18/2010	9 -5
OSHA Work Zone Safety - 10- hour course	2/24/2010	9 - 4
OSHA Work Zone Safety (continued)	2/25/2010	9 - 2
Asphalt Pavement Repair- NDLTAP		
Minot (Ward Co.Courthouse)	3/09/2010	8 - 3:30
Valley City (VFW)	3/10/2010	8 - 3:30
Northland Chapter of ATSSA - "How To" Conference - Ramada Plaza Suites - Fargo	3/16/2010 3-17/2010	
Northland Chapter of ATSSA - Sign Maintenance and Management Workshop, Ramada Plaza Suites - Fargo	3/17/2010 3/18/2010	
Work/Life Balance	3/17/2010	9 - 5
ND Asphalt Conference - Doublewood Inn, Bismarck	4/06/2010 4/07/2010	Noon - 5 8 - Noon
Tractor/Mower Operator Safety	4/15/2010	9:30 - 3:30
Are You Ready to Supervise	05/12/2010	9 - 4
ABCs of Employee Engagement	06/02/2010	9 - 5

Please visit the NDLTAP website for a current workshop listing http://www.ndltap.org/

## YOU SHOW US CONTEST - 2009 DISK FOR MOTOR GRADER

**COUNTY:** Stutsman

**CONTACT PERSON:**Mike Zimmerman, Highway Supervisor

Murray Gunke

Telephone (701) 252-9040

**ADDRESS:** 1508 4TH St West

Jamestown, ND 58401



#### PROBLEM STATEMENT:

Stutsman County has always had issues with vegetation and debris along the edges of the roadway. During regular maintenance of the roadway the vegetation has caused problems during grading operations. With the debris that results, it has been necessary to leave the material in a windrow on the edge of the roadway to become dry. This is not acceptable, especially in the winter, when snow plowing operations result in gravel being removed.

#### **SOLUTION:**

We determined we could fabricate a disk to mount on the front of the motor grader. It would chop up the debris, allowing the operator to spread the material and blade the roadway in one pass, thereby eliminating the need for a windrow being left on the roadway.

One-way disks were obtained from area farmers, who had discontinued using them, and were pleased to give them to us. The disk was then modified, using salvaged steel material, for a quick hitch attachment to the motor grader, as noted in the photo. The disk width is approximately 8 feet, with the disk spacing of 6 inches. When operated at an angle it covers a width of 4 feet. The circular disks were replaced with notched disks, enhancing the disk rotation and mulching ability through the vegetation.

We initially had a rigid frame mount on the disk assembly. While it worked well, there were some difficulties when rocks (small aggregates) were in the windrows. After some experimentation we came up with the idea of having a spring cushion system, with a spring suspension on each end of the disk assembly. In this manner, if a hard object is encountered, such as rocks, there is some give in the suspension, allowing it to move with the terrain and greatly reduce breakdowns..

#### LABOR, MATERIALS AND COSTS

The disk assembly was obtained from local area farmers at no cost. Material for modifying the assembly for attachment to the motor grader was salvaged yard material. New disks were purchased for a cost of \$260 and labor estimated to be \$560 per unit.

#### **SAVINGS AND BENEFITS**

Breaking up the vegetation and grading the roadway in one pass has reduced the number of times the roadway has to be graded each season, perhaps by two or more passes. This is very significant in savings, particularly on the township road system. Also, eliminating the windrow has considerably reduced the aggregate loss on the roadway. Eliminating the windrow on the edge of the roadway is also a very important safety feature to the traveling public.

We have been very pleased with how well this idea has worked. We feel the savings from fewer passes while grading the roadway, from reduced aggregate loss from the roadway and from increased safety to the traveling public is well worth the expense of having the disk. The operators are very pleased to be using them. We built one for each of our motor graders.

# REGIONAL LOCAL ROADS CONFERENCE HELD

By Vernon Monger

The 24th annual Regional Local Roads Conference was held at Rapid City on Oct. 21-22. Again, there was very good attendance by the county road departments. Ken Skorseth, SD LTAP, welcomed the group and spoke on behalf of Clark Martin, FHWA, who was unable to attend. An update on the proposed new federal highway bill was presented by Mark Schroeder, ND FHWA. Also, Keith Berndt, Cass County Engineer, presented information on the National Association of County Engineers (NACE) and their activities.

Several very interesting technical sessions were held. Sessions focused on: dust suppressants, litigation, geotextiles, wind energy, roadway management, county land use, snow and ice management, and other topics. The vendors again had very good displays, which is a big part of the conference.

One of the highlights of the conference is the "You Show Us" contest which features innovative ideas that have been submitted by the local agencies on ways to improve the efficiency and safety of their operations. North Dakota's submittal was from Stutsman County, which appears elsewhere in this newsletter. The selected winner was from Colorado, "Utility Safety Cone Zone," which is available for viewing on our website.

Next year's conference will be Oct. 20-21 at the same location. The program will again be organized by NDLTAP. To suggest technical subjects for presentations, contact Dave Levi at NDLTAP.



Jon Mill - Emcee



### Looking for your ideas and news articles

Contact Denise Brown at (701) 328-9855 or denise.brown.1@ndsu.edu to share your ideas and articles for upcoming editions of The Center Line.

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