

The Center Line

North Dakota Local Technical Assistance Program • North Dakota State University • A Service for Local Transportation Agencies

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Summer 2010

RUSSELL MCDANIEL



Born in North Dakota on Sep. 30, 1929

Departed on Nov. 28, 2010 and resided in Bismarck, ND.

Visitation: No Visitation

Service: No Service

Russell McDaniel, 81, Bismarck, ND, died November 28, 2010, at Missouri Slope Lutheran Care Center, Bismarck.

Russ's family is honoring his request of cremation and no formal service.

Russ is survived by his wife, June, Bismarck; his children, Mike (Maureen), Bismarck, Tim (Janet), Hanover, MN, Kent, Altoona, WI, and Laura McDaniel (Terry Steen), Fargo, ND; and his seven grandchildren, Trevor, Brianna, Connor, Logan, Isabel, Davis and Crosby.

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RUSSELL MCDANIEL SCHOLARSHIP

A scholarship endowment fund has been established at Upper Great Plains Transportation Institute, North Dakota State University in honor of Russell McDaniel. Russ worked in transportation for more than 60 years. His self-taught software knowledge and passion for automated transportation records led to the development of user-friendly software packages for local governments which revolutionized the record keeping process for many local governments across North Dakota and the nation. The scholarship will be awarded annually to an undergraduate computer science student with an interest in transportation. To contribute to the fund, checks can be made payable to the **NDSU Development Foundation** for the **Russell McDaniel Scholarship** and sent to the NDSU Development Foundation, 1241 N. University Dr., Fargo, ND 58102, or on-line credit card payments can be made at <http://www.ndsufoundation.com/>. To make payments over the phone, call (701) 231-6834.

2010 YOU SHOW US CONTEST: CUTTING EDGE LIFT

County: Dunn

Contact: Randy Keller - designer
711 1st Avenue SW
Halliday, ND 58636
(701) 938-4485

Problem Statement:

Changing cutting edges on equipment as been a hardship for employees because of the size and weight of those parts. An eight foot cutting edge can weigh up to 110 pounds. Cutting edges are normally stacked in piles and must be lifted and moved to a piece of equipment to be mounted. The process requires two people and still presents a risk of injury. Back and foot injuries are very common.

Solution:

Randy built a cutting edge lift as shown in the photo to transport a cutting edge from a stack to the piece of equipment where it is to be mounted. This cutting edge lift is unique because it has multiple adjustments. The adjustments include being able to raise the lift arm by a means of a ratchet from ground level to a height of six feet. The cutting edge can be secured to the lift arm by two screw clamps on each end of the arm. The angle of the lift arm can be angled so a single person can remove an old cutting edge and mount a new one without getting on the ground or under the equipment.

The cutting edge lift can be used to mount cutting edges on motor graders, front end loaders, and snowplow truck wings and plows. On a motor grader the moldboard can be angled so the old cutting edge can be removed and a new one mounted from a standing position. Randy has built two lifts to date.

Cost:

The cost of the material to build the cutting edge lift was approximately \$200. That cost included the purchase of a ratchet, three caster wheels, and varies sizes of steel square tubing. The cost of labor was 10 hours @ \$30 an hour for a cost of \$300. All the labor was done in the shop during slack periods of time in the winter when there was no snow removal required. Total cost of material and labor was approximately \$500.

Safety:

Cutting edge removal and replacement on equipment is very labor intensive and employees are prone to injury. The weight of cutting edges and positions it requires operators to place themselves into to get the job done makes the task particularly hazardous. Back, foot, knee and hand injuries are very common in this work activity. The design of this cutting edge lift requires minimal manual lifting. It has multiple adjustments which limit the amount of lifting and the need for an operator to get under a piece of equipment. Other cutting edge lifts designs are built from modified jacks having limited height capabilities and still require two operators to do the job safely. Randy's designed cutting edge lift eliminates hazards from manual lifting and from getting into awkward working positions.





2010 YOU SHOW US CONTEST: SHARING EQUIPMENT

County: Morton

Contact: Nick Kraft, Morton County Road Department
2916 37th Street NW
Mandan, ND 58554

Problem Statement:

The city of Mandan, ND, population 15,000, is the county seat for Morton County. Most government agencies are being asked to cut budgets or come up with solutions to help save money. The city's budget doesn't allow for a half million dollars for a scraper to use at the city landfill and it would not be feasible to spend those dollars on a machine that would sit idle for 11 months out of the year.



In the past the city of Mandan has hired a contractor to dig the inert pits and stockpile the dirt on a large pile stored until the pit is full. The contractor then has to come back to cover up the garbage at a later date plus work while working around other scheduled work. It was usually difficult to line up a contractor in late fall because that time of the year is the hurry up and rush time before freeze up.



Solution:

The past couple years Morton County and the City of Mandan have worked together to save tax payer dollars by sharing equipment. We plan to help out at the city landfill in the late fall after county construction projects are winding down. As we dig a new inert pit for the city with Morton County's scraper, we also use the dirt to cover existing open pit instead of stockpiling. In other words, killing two birds with one stone. Moving dirt once helps save fuel, time and labor.

Labor, Equipment and Materials Used: As the county scraper hauls the dirt on top of the old garbage pit, the city crews use their motor grader and blade to move the dirt into place.

Costs, Savings and Benefits:

The largest benefit is the great reduction in expenses to the city of Mandan. Morton County does charge a reduced minimal fee for scraper maintenance. Another benefit is the improved public relations that results from the county and city working side by side.

The direct savings for the local taxpayer and city are illustrated below.

Cost 5 years ago with contractor = \$1.00/CY or	\$30,000
This year's contractor bid = \$1.75/CY or	\$52,500
County cost to the city =	<u>\$17,500</u>
(Total job savings)	\$35,000 saved in 2009

Upcoming Events

TLN – Erosion and Sediment Control Workshop

Jan. 12, 2011 – Multiple Locations

Composite Concrete Pavements – Wet on Wet

Jan. 13, 2011 – Webinar

TLN – Chip Seals

Jan. 19, 2011 – Multiple Locations

TLN – Microsurfacing/Slurry Seals

Jan. 20, 2011 – Multiple Locations

TLN – Cold in Place Recycling/Full Depth Repair

Feb. 2, 2011 – Multiple Locations

TLN – Gravel Roads

Feb. 3, 2011 – Multiple Locations

Feb. 17, 2011 – Multiple Locations

Solid & Hazardous Waste Issues

Feb. 8, 2011 – Minot Research Center, Minot

Feb. 9, 2011 – Williston Research Center, Williston

Feb. 10, 2011 – Dickinson Research Center, Dickinson

TLN – Maintaining a Safer Roadway

Mar. 2, 2011 – Multiple Locations

Asphalt Conference

Apr. 5-6, 2011

Doublewood Inn, Bismarck

TRANSPORTATION AND LIVABILITY

The FHWA Office of Planning just completed the *Livability in Transportation Guidebook: Planning Approaches that Promote Livability*. The primary purpose of the guidebook is to illustrate how livability principles have been incorporated into transportation planning, programming, and project design, using examples from State, regional, and local sponsors. It is intended to be useful to a diverse audience of transportation agency staff, partners, decision makers, and the general public, and is applicable in urban, suburban, and rural areas.

You can access the guidebook along with a multitude of other resources on livability here: <http://www.fhwa.dot.gov/livability/index.cfm>

This link has also been posted for you in the General Discussion Forum located at www.ltmap.org.

Looking for your ideas and news articles

Contact Dave Levi at (701) 328-9857 or dave.levi@nds.u.edu to share your ideas and articles for upcoming editions of The Center Line.



SAFETY CORNER: AVOID BACKING ACCIDENTS

by Steve Chase

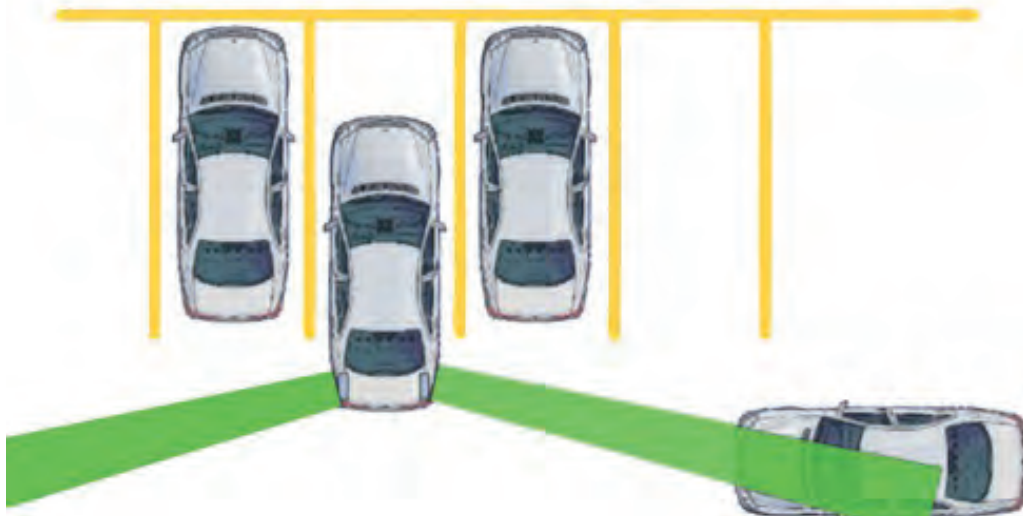
Roughly one out of every four vehicle accidents resulting in injury or damage involves backing. Considering that the average driver operates in reverse less than one mile every year, this statistic becomes even more alarming. Almost all backing accidents are preventable, and tend to be the fault of the driver. Some of the most common errors resulting in backing accidents include:

- Failing to look before backing
- Backing at a unsafe speed
- Neglecting to check mirrors often
- Failing to check blind spots
- Not doing a walk-around before backing

Following these guidelines will reduce your risk of being involved in a backing crash:

- Avoid backing whenever you can. Park your vehicle so you do not have to back.
- In parking lots – When no traffic is present, back into the parking spot, so later when there is traffic congestion, you can drive from the spot instead of backing.
- Walk around the vehicle and check for hazards before backing.
- Back slowly and at a steady speed.
- When backing with a view obstruction, back to the driver's side.
- Continuously check all mirrors.
- Whenever available, use a passenger to guide you during backing operations.

Following these few safety tips will go a long way towards eliminating crashes and in the prevention of injuries and costly damage to agency and personal vehicles. **IT'S UP TO YOU.**



Source: <http://menscrunch.com/wp-content/uploads/2010/06>



TOWNER COUNTY HIGHWAY DEPARTMENT EARNS NATIONAL AWARD

The Towner County Highway Department has won a national award for designing an innovative trailer for handling large tires from equipment like motor graders and front end loaders.

The trailer was designed and built by road foreman Larry Halvorson and his staff. The trailer won first place in the “Build a Better Mousetrap” contest sponsored by the Federal Highway Administration’s Local Technical Assistance Program/Tribal Technical Assistance Program (LTAP/TTAP) Clearinghouse. The award was announced at LTAP/TTAP national conference in Oklahoma City, OK, in July. The LTAP/TTAP program provides technical assistance to local road agencies through centers in each state.

The Build a Better Mousetrap competition is intended to share real world examples of best practices and tips from the field and frequently focus on improving safety and efficiency.

The North Dakota LTAP Center submitted the winning entry, Large Tire Trailer Transport, on behalf of Towner County. “We recognized the ingenuity of this idea,” noted NDLTAP director Gary Berreth. “This was an outstanding example of how local road workers across North Dakota continually work smarter to meet the demands of the large volume of roads in their care. Our local crews are second to none when it comes to innovation and creative ideas to improve productivity and efficiency.”

Halvorson and his staff built the trailer because they needed a safer and easier way of handling large tires when doing repair. Full details of the trailer are available on page six of the NDLTAP Summer 2007 newsletter at www.ndltap.org/newsletter/downloads/2007Summer.pdf.

A booklet of all the entries will be available for download on the FHWA LTAP/TTAP program website at www.ltap.org.

CONFERENCE PRESENTATIONS NOW ONLINE

Presentations from the North Dakota Asphalt Conference and the 2010 Regional Local Roads Conference are now available on line at the NDLTAP website, www.ndltap.org. Look for the conferences under the “events” tab.

“Both of these events provide updates on new technology and address critical needs for local roads agencies,” notes NDLTAP director Gary Berreth. “The presentations provide an excellent overview for those who could not attend and a great reminder for those who were there.”

The 2010 ND Asphalt Conference was held April 6-7 in Bismarck and focused on advances in asphalt paving technology. Presentations included:

- Superpave Mixes for Thin Overlay Applications
- Intelligent Compaction
- Oil Production Impact on Roads
- Quality Management Practices in Milling
- Utilization of Reclaimed Asphalt Pavement

The 2010 Regional Local Roads Conference was held Oct. 19-21 in Rapid City. This 25th Annual Conference focused on helping local road agencies face difficult challenges and budget concerns. Presentations included:

- Alternatives to Paving
- Emergency Road Closures Incident Management
- Ethics
- How to Select the Appropriate Pavement Rehabilitation Option
- GIS Systems and Applications
- Returning Roads to Gravel
- Rural Road Surface Management Tools



LOCAL ROAD SAFETY DOMESTIC SCAN REPORT

The Noteworthy Practices: Addressing Safety on Locally-Owned and Maintained Roads A Domestic Scan Report is now available on the Office of Safety Website. To download a copy please go to http://safety.fhwa.dot.gov/local_rural/training/fhwasa10027/.

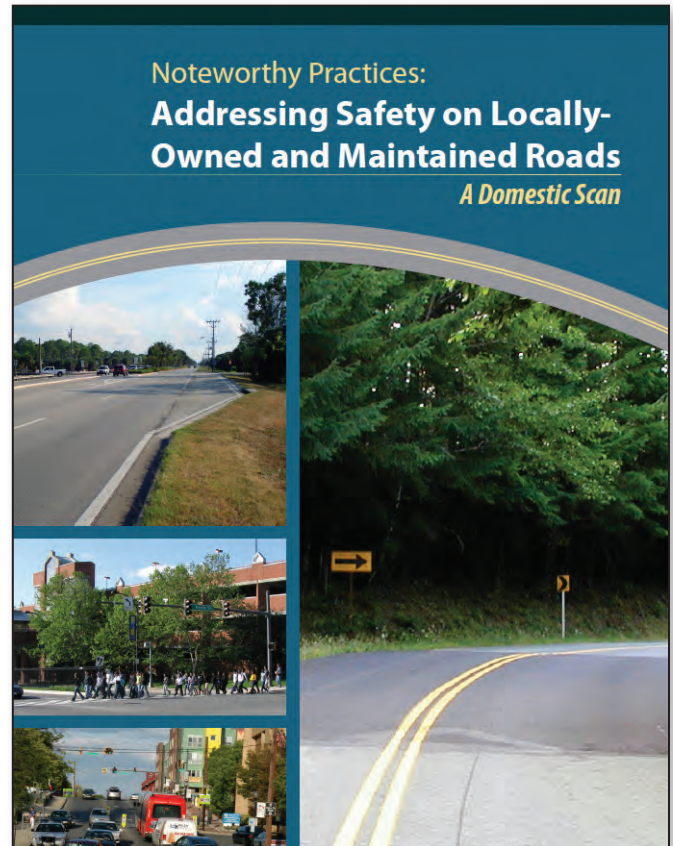
This report documents the local road safety practices of seven states, the results of a domestic scan conducted in Fall 2009. Federal Highway Administration conducted the Local Road Safety Domestic Scan to identify and document noteworthy practices in planning, programming and implementation used by State and local agencies to improve local roadway safety. The objective is to share identified noteworthy practices in funding, coordination, and technical assistance with States and local agencies. By sharing information, States will gain insights on how to launch a local road safety program; or identify practices that will improve an established program.

These practices are presented in six common themes that encompass a variety of similar practices that are used successfully in most or all of the seven States to improve local road safety – Data Collection and Analysis, Local Project Identification, Local Project Administration, Funding, Training and Technical Assistance, and Outreach and Partnerships.

The report describes processes, methods, and techniques the scan states have employed to effectively improve the safety of their local road network. These include: roadway safety training requirement of county engineers to be eligible for federal funds in Alabama; Georgia's funding of off-system (local) coordinator positions to provide technical assistance to local practitioners; Illinois utilizing HSIP funds to collect and geo-locate crash data on local roads; Michigan providing technical assistance to local agencies through the Local Safety Initiative program; Minnesota developing county-level road safety plans to create funding targets for local agencies; New Jersey overall coordination with regional planning agencies to administer the local safety program; and Washington State' multidisciplinary Corridor Safety Program.

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Due to the low volume of calls that have been received on the toll free number with NDLTAP we have discontinued the toll free number effective immediately.