

Gravel saver for grader blades

OUR COLLEAGUES in South Dakota have developed a simple, inexpensive device to keep gravel on the road during maintenance. Blading spreads gravel and smooths the surface, but material can easily slip around the toe or leading edge of the moldboard. Dry weather or lack of fines in the gravel can make the problem worse. In time less gravel is on the roadway surface where it belongs and there is a build-up on the shoulder that can block drainage.

Jeff Hargens, a motorgrader operator from Hand County at Miller, SD, experimented with different ways to mount a disk blade to a grader's moldboard. Eventually he devised an effective method which the county has been using for three years.

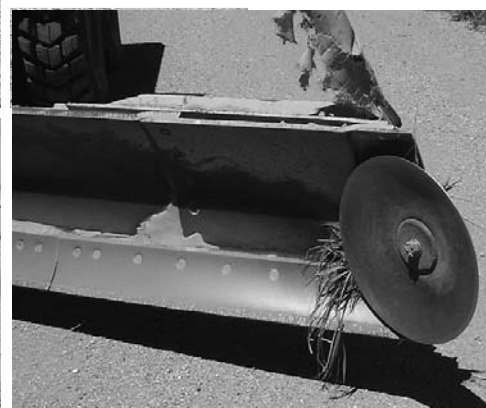
Working with a salvaged bearing and housing bracket from a farm plow's rolling couler, Hargens experimented with different blades and different

methods of mounting. They got the best performance by putting a single disk blade on the couler housing bracket and mounting it directly to the grader's moldboard. The blade turns as the grader moves forward. It recovers gravel and pushes it in front of the moldboard again. The moldboard's end bit needs to be modified slightly, but the original strength is not affected.

Operators using the device need to make a small change in the pitch and angle of the moldboard. With that adjustment it works well and is easy to use. "Jeff demonstrated this to us on the road last summer," says Ken Skorseth, Field Services Manager of the South Dakota LTAP Center. Skorseth taught at TIC pavement maintenance workshops in northern Wisconsin earlier this year.

"We are pleased to recognize another local employee who has done something innovative to help his department," says Skorseth. "It took some real persistence on Jeff's part to continue to make modifications until he got the design perfected. But, it is very rewarding when you finally have a product that works effectively."

Adapted from an article in the Fall 2005 newsletter of the South Dakota LTAP Center.



UPPER LEFT "Gravel saver" disk mounted on the moldboard. BOTTOM LEFT The disk has a simple mount. BOTTOM RIGHT Disk keeps gravel from flowing around the toe of the moldboard.

Web ratings entry easier, quicker

WORD IS that WEB WISLR works "slick as a whistle" for entering pavement ratings. "It was really easy to do," says Marilyn Bhend, Clerk for the Town of Johnson in rural Marathon County. "The hardest part was to have somebody go out and actually rate the roads."

The town was among the 45% of local municipalities that submitted their 2005 pavement ratings by entering them directly into WISLR. An equal number sent their ratings on paper, and the remaining 10% used electronic spreadsheets, according to Susie Forde, Chief of WisDOT's Data Management Section.

Overall completion rate was 94%, about the same as 2003. "Some locals asked for extensions due to weather," says Forde. "Others are working directly with WisDOT to build a better interface between their local system and WISLR to load a higher percentage of pavement rating data."

Each new user has to complete a training program first. A computer-based tutorial is available for local officials or staff who want to submit annual physical roadway changes through WISLR anytime during the year. It simulates WISLR entry screens and gives step by step instructions. The user can practice and repeat until she or he is comfortable with the process. Instructions are also printed in pamphlets you can refer to while in WISLR.

"It's laid out simple enough, if you follow the instructions," says Bhend. "If you have questions there are people you can call and talk to."

The entry process is fairly quick. You only put in new or changed information, and ratings stay the same on many segments. Using a paper printout from WISLR to write down your ratings in the field makes it easier; the road segments are in the same order. ▶

Direct entry puts all your road information in once place, under your control, and at your fingertips. You can update and certify your inventory with WisDOT online while entering ratings or any time during the year. Entering physical changes online takes the place of submitting them on the Construction Report Form. WISLR automatically updates transportation aids so you always have a current report.

"You can have a better handle on your local system," Bhend says. "You put the information in as it happens instead of waiting a year and then trying to remember when that road had gone from gravel to blacktopping. I would really recommend to locals to get certified."

To gain first-time access to WEB-WISLR, follow the instructions under the heading "How to access and get started using

WISLR" at the following Web location: www.dot.wisconsin.gov/localgov/wislr/index.htm

Only people affiliated with the municipality, like the clerk or chair, will be authorized for Pavement Entry Access. If you contract for pavement rating and submission you can grant permission to a consultant firm.

Pavement ratings are submitted every other year. The next deadline is in December 2007.

"It was really easy to do. I would recommend that locals get certified."

– Marilyn Bhend, Clerk
Town of Johnson

Questions regarding 2005 Pavement Rating Submittal?

Contact Corissa Engel,
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WISLR data study validates department's work

ROADWAY BUDGETS are big, so administrators ask tough questions. Is the budget too high? Is a backlog of capital improvement projects building up? How do we compare to similar counties or other municipalities?

In La Crosse County a new administrator and the County Board recently got answers to those kinds of questions using county road data in WISLR. A consultant analyzed the Highway Department's 5-year plan using current ratings along with historic ratings stored in PASERWARE.

"Basically they confirmed that were doing the best we could with our budget," says Keith Back, Assistant Commissioner, La Crosse County Highway Department. "As a department we felt pretty good that we weren't where we want to be but we are not way behind either."

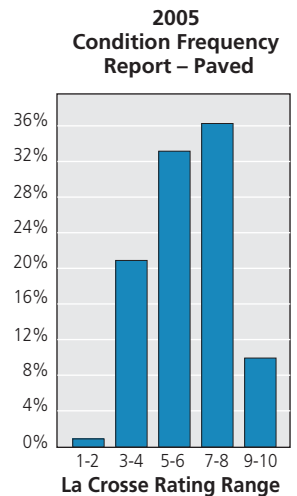
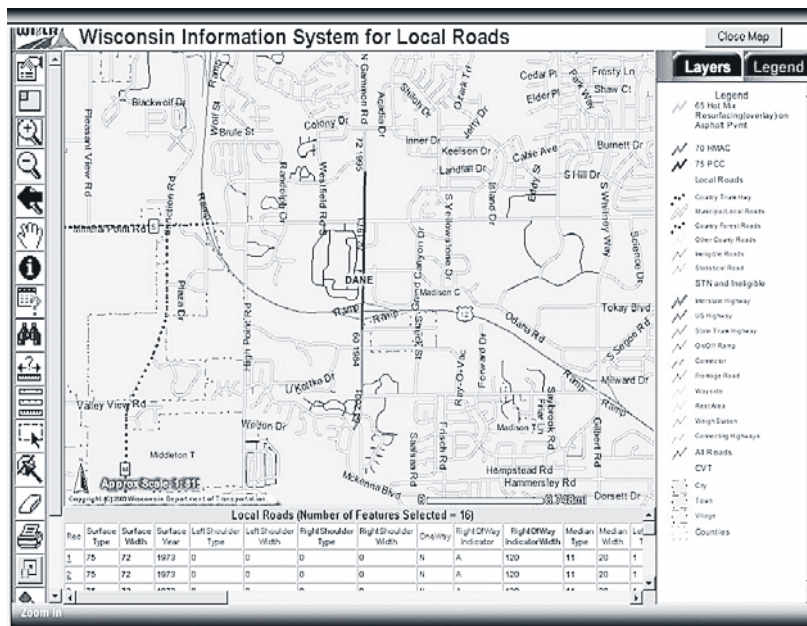
The results showed that roadway funding was being allocated appropriately and there was no serious backlog. The study also compared county reconstruction and maintenance costs to WISLR default unit costs, showing that they were in line with costs reported by other local government units.

"The graphical maps and some of the figures that can be produced from WISLR are very helpful," says Brandon Bourdon, Project Engineer with Kimley-Horn and Associates of St. Paul which completed the study. "We used the maps to recommend grouping projects by geographic areas to minimize mobilization costs."

The Highway Department will use current condition data and WISLR reports to develop the five-year plan for 2007–2012. They will also be keeping the database current by entering summer maintenance results each fall, as the consultant recommended.

Regular data entry spreads the workload and provides a current picture of the road system. Using WISLR printouts to record data helps make the entry process easier; the numbers and segments are identical to what is on the WISLR screen.

In summary, WISLR works for La Crosse County. "I would totally recommend using WISLR," says Back. "It's a good way to know for sure where you are. And if you haven't been keeping good records it's a good way to get caught back up and feel confident about your data."



Based on 283.47 miles of rated roadways.

La Crosse County's pavement condition was ranked third among five comparable county systems.

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