

Roadware has varied uses, benefits

Local streets and highway officials, from County Highway Commissioners to newly elected town supervisors, find *Roadware* and the *PASER* Pavement Surface Evaluation and Rating system very helpful. Over 450 people learned about them at the one-day October–November T.I.C. workshops on **Managing Local Road Pavements**, and there are 150 new users who have adopted the systems.

Getting started

Installing *Roadware* and reading in WisDOT's basic highway inventory files is pretty easy, says Craig Galhouse, Town Supervisor, Town of New Glarus. "The training class was very helpful," he says. "Anybody who can do data entry could load it and get the data on the computer. That's worth having the software by itself."

Rating the roads using *PASER* took a little more time. Galhouse, the road patrolman and another supervisor rated a mile stretch of road and then compared notes. "Our road patrolman had a better eye for the individual defects," he says. (Doing a visual survey of road conditions and entering the data into the program are key components.)

They are modifying the files to work better for them, says Galhouse. For example, some road problem areas didn't line up with the WisDOT sections, so they have divided some sections and combined others. Galhouse has also added maps by scanning each road from township maps into a WordPerfect file, then copying the *Roadware* information into the file. "Having the image is really nice," he says.

They started rating roads in October 1994, but the system has been useful already. *Roadware's* "what if" scenarios helped convince the town board to require that all new roads must have a permanent surface before being accepted from a developer. "We looked at the cost of maintenance in five years for a double seal coated road versus a paved road. We showed that the town would start incurring yearly maintenance costs in five years, where if the developer paved it we wouldn't have to do any maintenance for 15 years."

Galhouse expects to use *Roadware* reports for presentations at the April Town Electors meeting, in making maintenance plans, in applying for grants, and in passing on information to newly elected supervisors.

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Resources

All items are available from the T.I.C. unless otherwise noted. To get your copy, call 800/4424615 or use the form on page 7.

A Summary of the FHWA Contract Administration Techniques for Quality Enhancement Study Tour (CATQUEST), FHWA-PL-95-019, June 1994, 36 pp.

This booklet summarizes the observations, conclusions, and recommendations of the FHWA study team that toured Germany, France, Austria, and Spain in fall 1993. Key areas that resulted in high-quality roadways included contractor and owner commitments to quality and testing, excellent preventive maintenance, staged construction and a strong pavement base, use of life-cycle cost goals, and a sound level of highway investment.

Speed Humps Successfully Launch Gwinnett DOT Program, Georgia Roads, May 1994, 2 pp.

This reprint of an article describes Gwinnett County's pilot test and subsequent use of speed humps to control speed on local streets. Also summarizes the Institute of Transportation Engineers (ITE) guidelines for using speed humps and the typical sections of those used by Gwinnett County.

Using Shredded Waste Tires as a Lightweight Fill Material for Road Subgrades, MinnDOT Report 94-10, April 1994, 26 pp.

Minnesota began using shredded tires as a lightweight fill material in 1985 on logging roads through areas with weak soils. The main features of this study are the seven case

studies, that include a discussion of the cross section, construction methods, and a performance evaluation at each of the seven locations and the environmental studies that were done in Minnesota and Wisconsin on the use of shredded tires as lightweight fill.

A User's Guide to Guardrail Warrants for Low Volume Roads, Chapter 3, Warranting Process, from an unpublished report for NCHRP, 34 pp.

This chapter helps you decide when to use roadside guardrail on low volume roads and what kind of guardrail to use. The decision process answers the questions: Is there a hazard? What are the alternatives to reduce the risk? What is the best alternative?

Video tapes

The T.I.C. Videotape Lending Library has over 200 videotapes. You can borrow these tapes through your county Extension office. Your only cost is the postage to return the tape. Recent additions to the Library include:

SI Metric For The Workplace (Workplace Training)

Lesson 1 (#17710, 15 min.) Gives brief history of the metric system and compares English and metric units. Emphasizes the simplicity of using metric measurement.

Lesson 2 (#17711, 16 min.) Defines seven basic metric units. Describes and applies some and offers seven common conversion factors. **Lesson 3** (#17712, 18 min.) Introduces basic reading and writing in metric including proper use of upper and lower case letters in identifying metric units.

Helping staff and elected officials

Rating roads helped bring Sun Prairie's public works and maintenance staffs together, while the rating results persuaded the Vernon County Board to invest in preserving their road system.

"It helped get their heads thinking in the same direction," says Sun Prairie Assistant City Engineer Dan Kaler, "and we ended up with a more well-rounded score for our roads." Kaler works with two departments: engineers who do designs and public works people who do treatments. When he started using PASER, Kaler sent them out to rate the roads independently. Then they compared notes and worked out a compromise on the rating. The Director of Public Works and the City Engineer randomly selected 10 percent of the rated roads to verify the ratings.

"Once we had the scores, we did a tour with the aldermen and showed them what we were going to do," says Kaler. "PASER is a good tool for educating the alders about the need for money for our roads," he says. One strategy he is using is to do maintenance, mostly sealcoats, on streets that are about to deteriorate into a condition that is more expensive to repair.

Bill Stahl had been warning the Vernon County Board about their deteriorating road system for years — unsuccessfully. In 1992 he hired consultants to evaluate the county's 300 miles of roads, using the PASER system. That fall they reported that the county had 117 miles of road that were ranked 4 or below (needing structural improvement).



Sealcoats are keeping some Sun Prairie streets from getting worse. Roadware helps select the streets and shows the payoffs.

"It proved that we have troubles out there," says Stahl. "I got an additional half-million dollars for work in 1994." The highway department has installed *Roadware* and integrated the consultant's ratings into it. They have also updated the files to include the work done in 1993 and 1994. The files will be helpful to Vernon County's new Highway Commissioner since Stahl retired in January.

For information about *Roadware* and copies of the *PASER* manuals, contact the T.I.C. Use the form on page 7, or call 800/442-4615. See also the article "Roadware helps with pavement management and planning" in the Fall 1994 issue of *Crossroads*.

Reader Response

If you have a comment on a *Crossroads* story, a question about roadways or equipment, an item for the *Idea Exchange*, a request for workshop information or resources, or a name for our mailing list, fill in this form and mail *in an envelope* to:

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University of Wisconsin-Madison FAX 608/263-3160
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