



New program awards funds for hazard elimination

Local officials have an opportunity to make their roads safer through the Small Local Hazard Elimination Safety (HES) Program which began this year. Projects must cost less than \$25,000; \$400,000 was available statewide. At least two projects can be funded in each WisDOT district.

"The objective is to respond quickly to local, spot safety problems," says Chuck Thiede, who coordinates the program. "Projects are approved by the districts and the goal is to reduce paperwork and keep administrative costs to a minimum."

Replacing hazardous bridge railings in the Marinette County Village of Wausaukee is one project funded as of the new federal fiscal year in October. The bridge is very narrow and railings are weak. "The ends of pipe stick out at you. They are real dangerous," says Larry Wacker, planning and program supervisor in WisDOT District 3. The new railing, projected to cost \$15,000, will have safer turned back ends.

"This program requires a lot less paper work," says Wacker. "The locals took photographs and drew up a simple plan with one or two pages of sketches. Sometimes, under other programs, it can be more trouble than it's worth to seek funding for these small projects."

In Vernon County, HES funds will rebuild a doubly blind intersection. "Traffic traveling 55 mph (or faster!) comes from the west on V over a blind knoll and traffic from St. Patrick's enters from a very steep incline," wrote Kathryn Granger, Town of Greenwood town clerk. The intersection is also very difficult to plow and sand, and erosion gullies make it impassable after a rainstorm. Improving it involves raising the town road 30 feet at the intersection and blending it into the slope of the hill. The old "Y" intersection will become a safer "T."

About 13 proposals came in to District 5. The V-St. Patrick's intersection and another proposal to convert a Y intersection to a T were chosen because the proposed solutions were "the obvious fix," according to Preliminary Design Engineer Allan Johnson. "Some proposals wanted to do things



Bridge railing made of pipe is flimsy and dangerous (left). The intersection of County V and St. Patrick's Road is blind to drivers on both roads (right).

that we weren't sure would fix the problem," he says.

Local officials may want to begin thinking about potential projects for next year's HES program. Only construction or hardware installation is funded. The project must stand alone and not be part of something bigger. To help streamline the process, competitive bidding is not permitted; work must be done only through negotiated contracts.

"This is the program's first year. We plan to evaluate it and may make changes or add dollars to the program," says coordinator Chuck Thiede. The program will be publicized and managed through the districts again next spring.

For help in identifying street and highway hazards, plan to attend the T.I.C. Safety Workshop, in January. You can also request a free copy of the T.I.C.'s 40-page SAFER Manual. See Resources on page 6.

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Idea Exchange

Software assesses plowing routes

For every major snowstorm, St. Croix County crews plow more than 2100 lane miles. The county's highway department recently invested in developing a detailed computer database to help them evaluate plowing routes and site a new highway garage.

Starting with the best electronic road maps from the regional planning commission, engineering consultants OSM and Associates developed a detailed database with attributes for each route segment. The highway department's management staff supplied intersection and ramp information, corrected problem segments, and refined the information until it was completely accurate.



St. Croix County plow routes will be adjusted following a computer review which revealed some minor problems.

"It took considerable effort," says Highway Commissioner Dan Fedderly. "More than 1000 nodes had to be evaluated." Nodes are map points where the electronic version of the route was interrupted. Some nodes were cul de sacs or route ends, but many others needed to be connected to produce an accurate electronic map.

At the same time, they were developing a plowing model that correctly reflected capacity at each existing shop, cycle times and average plowing speeds for each jurisdiction—township, county, state and Interstate routes. A software program compared the existing system to ideal or optimized routes. A report revealed a few problems which will be solved by some minor route adjustments.

"We knew we were short in some areas in our ability to provide the level of service desired," says Fedderly. "Now we have the foundational data and evidence to support that experience." The database and model also give St. Croix County a sophisticated tool for projecting resource needs. This will be crucial in preparing for a new four-lane from Holton to New Richmond to be completed in two or three years.

The county has already used the information to identify a location for a new facility to be built next year, and plans to use it for siting several other facilities in the following four or five years. They plan to keep the database up to date as routes are revised and roads are built, and Fedderly also hopes to integrate into it their pavement surface condition and highway improvement information.

For additional information, contact Dan Fedderly at 715/796-2227.

Handy job guidebook available

Do you ever need to figure how many tons of stone you'll need to place on a road 18 feet wide using an application rate of 15 pounds per square yard? OR how many tons of hot mix you'll need if you plan to lay down a one-inch mat over a road that is 1/4 mile long and 21 feet wide? OR how much crushed stone or sand your new stockpile can store if its base is 45 feet long and 25 feet wide? If you so, the new pocket-sized guide from the T.I.C. is just what you need. There are also hundreds of other tips and suggestions on how to do your job better. See **Resources**, pg. 6 for how to get a copy.

Do you have an idea to exchange? Have you designed a gadget or found a new way to do something that other streets and highway people can use? Let us know about it! Use the form on page 7, call, or e-mail Don Walker or Steve Pudloski.

Crossroads

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Analyze total cost when buying equipment

The key to efficient fleet management is to keep costs and numbers low while maximizing use and revenues. Using lease/purchase or purchase with guaranteed maximum repair cost and buy-back can help you get the most out of your equipment budget, says Tom Walther, Eau Claire County highway commissioner.

The traditional approach, outright purchase, is good when you plan to keep the unit for a long time or you don't know how long you'll keep it and there is limited resale demand or little remaining value when you dispose of it.

Lease/purchase is like outright purchase with some added advantages. You can spread out payments which evens out your cash flow. In addition, if you find during the lease period that you don't really need the machine, you can usually end the contract. This means you have only invested the lease payments and not the full cost of the machine.

Purchase with guaranteed maximum cost of repairs and guaranteed buy-back price works well if:

- you can accurately estimate how much you will use the unit over a given time period
- you can project the wear and tear on the unit
- the unit has a good resale value

Repair maximum and buy-back advantages

A guaranteed maximum cost for major repairs can save a lot of money if you get the occasional lemon. If an engine, transmission or major hydraulic motor goes down after the normal warranty ends, you only pay up to the limit set in the initial bid.



On some five- or six-year buy-backs, manufacturers sometimes offer extended warranties for the entire time you own the machine. This means that the vendor pays for anything that breaks beyond the normal wear and tear items. You specify those items in the bid document.

At the end of the buy-back period you may choose to sell the unit back for the guaranteed price, keep it, or dispose of it by some other method.

"We commonly list the buy-back unit as a possible trade-in on the next round of bids," says Walther. "That way we may get a return value from some other vendor that is even higher than the guaranteed buy-back price."

Selling or trading a unit after a relatively short period has two advantages:

- the machine is gone before it needs costly repairs
- your fleet keeps up with rapid technology changes

Most major vendors will participate in bidding on maximum repair costs and guaranteed buy-back prices.

"If they don't want to do this, ask why," says Walther. "I contend that if a vendor is not willing to protect us in these ways, then I must question the quality of their unit."

For a copy of Eau Claire County's specifications for maximum repair cost and guaranteed buy-back, contact Tom Walther, 715/839-2952.

Walther's top 10 purchasing tips

- 1. Determine what tasks the unit will perform**
Make equipment do several tasks. For example, Walther mounts oil distributors on trailers and uses plastic slip-in water tanks to minimize the number of expensive trucks chassis in the fleet.
- 2. Consult with equipment operators on their needs and desires**
- 3. Evaluate leasing or renting. It may be more economical than buying**
Carefully consider such specialized equipment as truck mounted snow blowers, all-wheel drive trucks with V-plows, rock crushers, cranes
- 4. Spec in detail, but be generic for maximum number of bids**
Use performance specific items to ensure the unit will do the job; standardize features of multiple units to streamline repair operations
- 5. Don't assume anything is standard equipment**
- 6. Buy the smallest size or capacity unit that will do the job**
If your patrol truck weighs only 22,500 lbs./axle fully equipped and loaded, don't pay extra for a 26,000 lb. axle
- 7. Require 5% or more bid security if you don't know potential vendors well**
- 8. Require a performance bond that covers at least 50% of the buy-back bid amounts**
- 9. Check the delivered unit against every item in the specs**
- 10. Withhold final payment until parts books and repair manuals are delivered**



Total cost bid variations for rough terrain forklift (Eau Claire County)

Limits on maximum repair costs and guaranteed repurchase price can significantly reduce the 5-year total cost of a piece of equipment.

Bid item	Vendor A	Vendor B	Vendor C	Vendor D	Vendor E
1. Net price with trade-in (County pays this amt.)	\$49,515	\$50,835	\$66,761	\$68,371	\$58,000
2. Repair expense maximum (5 yrs. or 2000 hours)	\$8,152	\$8,800	—	\$0	\$7500
3. Interest cost @ 0.3382	\$16,746	\$17,192	—	\$19,741	\$19,615
4. Guaranteed buyback price (at 5 yrs. or 2000 hrs.)	\$21,350	\$26,200	—	\$41,000	\$25,000
Total cost bid (1+2+3-4)	\$54,063	\$51,627	\$66,761	\$37,112	\$60,115

Sharp tools for effective winter maintenance



Improved weather information, pavement temperature sensing, written plans, and anti-icing techniques are some of the best tools around for managing winter's snow and ice. Streets and highway maintenance personnel learned of the latest developments and shared tips at the T.I.C.'s fall workshops on Winter Road Maintenance.

Satellite weather data

Seventy of the state's 72 county highway maintenance shops have now installed the DTN satellite weather data system. This commercial weather information vendor supplies radar maps, satellite cloud photos, and wind speed maps along with a host of other weather condition and forecast information. The easy-to-use system includes a satellite dish, monitor, mouse, and keypad. It is relatively inexpensive, costing \$70 a month plus a \$350 set-up fee.

"Good weather information is an important decision tool in deciding when to call people out and what strategy you want to use for fighting a particular storm," says Mike Adams, program manager for WisDOT's Road Weather Information System (RWIS).

One of the most useful components is the regional radar images that are updated every 15 minutes. These are composite pictures from all the National Weather Service NEXRAD Doppler radar sites in the upper Midwest, like those broadcast on local and national television weather shows. Sitting at the DTN monitor the operator can replay three hours' worth of images to check the speed, size and track of storm systems.

Pavement temperature tools

WisDOT operates a network of 51 pavement sensor and weather stations on Interstates and major highways around the state. The stations continuously report data which is readily available via computer. All stations report pavement surface temperature and condition, sub-surface temperature, and the relative amount of chemical present in solution. Some also report depth of standing moisture, percentage of ice in solution, freezing point of solution, and percentage of chemical in the solution.

In addition, pavement forecasts are prepared under contract to WisDOT by a company called SSI. Reports are available both on-screen and in hard copy, and can be accessed by telephone from remote sites such as the homes of supervisors. Starting last March those forecasts were also being distributed to

county maintenance shops through the leased DTN link.

SSI's 24-hour forecast of projected pavement temperatures can help you decide when to begin salting or if a round of salting can be eliminated. A few degrees difference between the pavement and air temperatures can be critical when temperatures are hovering around freezing.

"Having DTN and SSI together is a very slick package," says Dane County Highway Superintendent Steve Haag. "Just a couple of clicks of the button and you've got all the information you need to make a decision." Haag plans to have the county's night dispatchers work out of his office this winter so they can have continuous easy access to the system's data. The information will help them decide when to call crews in and when to send them home.

New this winter are more specific forecasts from SSI based on important operating criteria established by WisDOT. Criteria include snow amount within specified time periods, winds greater than 15 mph, pavement and air temperatures below freezing.

Vehicle-mounted pavement temperature sensors

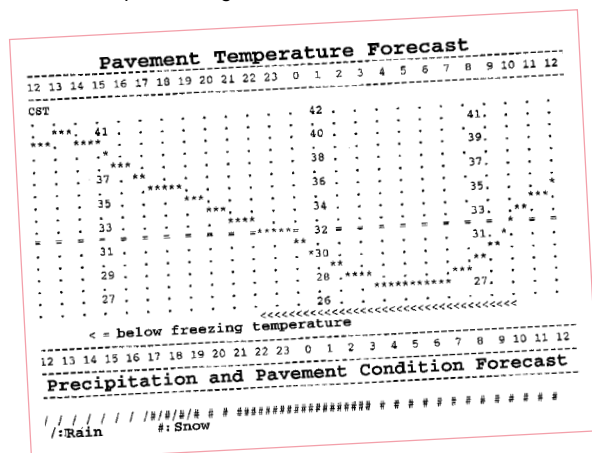
Recently developed infrared sensors can be mounted on vehicles to supply local pavement temperatures. Supervisors can use this information to make maintenance decisions and to monitor roads with special characteristics like those which are heavily shaded or exposed to winds. WisDOT distributed at least one vehicle-mounted sensor to nearly every county last winter; some counties had two.

"It was a pilot program to evaluate the units," says Mike Adams, RWIS program supervisor. "Usage and acceptance was very good but we had some reliability problems." Temperature information was very accurate when checked against in-ground sensors, but about a third of the \$2500 units produced by Control Products, Inc. failed because of a problem part. An upgraded unit available for this winter at around \$1300 should eliminate the part problem along with adding a new feature: an air temperature reading.

A competing sensor from Sprague Heavy-Duty Technology Group is considerably less expensive at around \$400, but initial indications are that its temperature readings were not as accurate, according to Adams. There was about a three degree variation from WisDOT's in-ground sensors.

Anti-icing to prevent ice bond

Maintenance crews have traditionally used a de-icing approach to snow and ice control, breaking the bond between ice and the pavement surface after it has formed. Anti-icing prevents ice/pavement bond formation and has several benefits. These include producing better pavement conditions and using less chemical which can result in lower costs. Liquid anti-icing applications



have been reported to last for several days, particularly in preventing frost on bridge decks.

Anti-icing involves applying small amounts of liquid chemical to pavements in advance of a storm. It is commonly used on roadways requiring a high level of service or bare pavements throughout the storm. It requires accurate and detailed weather predictions and specialized equipment to apply the specified small amounts of chemicals. The effectiveness of a specific chemical depends on the temperatures and costs involved. Anti-icing is not recommended when pavement temperatures fall below 15° F.

Pre-snow planning

Planning plow routes, setting priorities, and putting winter maintenance policies in writing before the snow flies prevents confusion and saves time. Policies, which may only be a

couple pages long, should include priority categories for all roads along with conditions and times when plowing will take place. Also include local rules such as those about mandatory equipment in trucks, prohibitions on towing private vehicles, mailbox installation requirements, and controls on dumping snow from private property onto roadways.

It is easier for elected representatives and maintenance office staff to answer questions from the public when policies are written down. Preparing publicity early in the winter season can help remind everybody what the policies are.

For more good ideas about winter maintenance, check last year's winter issue of Crossroads (Winter 1997). If you don't have a copy use the form on page 7 to get one from the T.I.C. For information on the DTN satellite-delivered weather information system call DTN at 800/485-4000, ext. 3141. The regional sales manager will refer you to a nearby sales representative.

Calendar

Specific details and locations for workshops are sent to all Crossroads recipients. For additional announcements, or more information, call the T.I.C at 800/442-4615.

Chainsaw Safety, Maintenance and Operation Learn about personal protective equipment, proper maintenance procedures, and the most effective techniques for chainsaws and brushsaws. Taught by expert trainers from the Forest Industry Safety & Training Alliance, Inc. Morning classroom session and afternoon outdoor demonstrations.

Dec. 8	Green Bay	Dec. 17	Eau Claire
Dec. 9	Tomah	Dec. 18	Cable
Dec. 10	Barneveld	Dec. 19	Rhineland
Dec. 11	Brookfield		

Pavement Management for Local Roads A two-part workshop that meets a range of training needs for PASER and PASERWARE pavement management systems users. **Part 1, Jan 5, a.m.**, covers the basics of pavement management, how to rate pavements using PASER and an introduction to the logic of PASERWARE.

Part 2, Jan 5, p.m. & Jan 6, a.m., demonstrates the features of PASERWARE 1.0 with an opportunity to try the program in the computer lab, testing various maintenance strategies by running simulations with several data bases, including your own if available. Register for either or both: January 5 & 6 in Madison.

Highway Safety Make your local road system safer. This workshop covers sign inventories and maintenance, sensible signing for local roads, using crash information to reduce hazards, improving safety at intersections and driveways, locating and mitigating roadside hazards, and funding for safety projects.

Jan 7	Green Bay	Jan 21	Cable
Jan 8	Brookfield	Jan 22	Eau Claire
Jan 9	Barneveld	Jan 23	Tomah
Jan 20	Minocqua		

Legal Town Road Right-of-way Issues Review the legal procedures to establish, abandon, vacate, and discontinue town highways on open roads and in subdivisions. Part of an ETN series on local transportation issues. For a brochure, call your local county extension agent or 608/262-9960.

January 13th, 9-10:20 a.m., ETN locations in every county

Load Posting This ETN workshop will review your authority and procedures for establishing load limits on local roads. (Part of a series on local transportation issues). If you need a brochure, call your local county extension agent or 608/262-9960.

February 10th, 9-10:20 a.m., ETN locations in every county

Roadway Maintenance Improve your street and road maintenance operations. Workshop includes preventive maintenance techniques and investigating and repairing pavement failures.

Mar 11	Green Bay	Mar 17	Cable
Mar 12	Brookfield	Mar 18	Eau Claire
Mar 13	Barneveld	Mar 19	Tomah
Mar 16	Minocqua		

UW-Madison seminars

Local government officials are eligible for a limited number of scholarships for the following engineering courses in Madison. For details, use the form on page 7, call 800/442-4615, or e-mail: ranum@engr.wisc.edu.

Stream Stability & Scour for Bridge Inspectors, Dec 8

Bridge Inspection Update, Dec 10-11

Nondestructive Evaluation of Bridge Conditions, Dec 11-12

Maintaining Asphalt Pavements, Feb 2-3

Pavement Management, Feb 4-5

Urban Street Design, Feb 11-13

Bridge Rehabilitation, Feb 16-18

Steel Bridge Fatigue Repair, Feb 18-19

Improving Public Works Construction Inspection Skills, Feb 23-25

Highway Environmental Impacts, Mar 2-3

Managing Fleet Maintenance Operations, Mar 26-27

Pesticide Applicator Training

Certification is required for workers who apply pesticides in right-of-ways, or their supervisors. Registration deadlines for 1998 training sessions are January 14 and 15. Pre-registration cards are available from county Extension offices as are self-study units and videotapes.

Jan 28	Arlington	Jan 29	Wausau
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Resources

Materials listed here are available from the Wisconsin T.I.C. unless otherwise noted. To get your copy call 800/442-4615 or use the form on page 7.

✿ Inspectors Job Guide and Highway Maintenance Tables
How many tons of stone do you need for your project? How much hot mix for that 1/4-mile-long overlay? How much stone can you put in your storage facility? This new pocket-sized guide can help. Includes hundreds of tips and suggestions on doing your job better. In two versions: English or metric units. Multiple copies are available. Get one for each inspector, supervisor, and road crew leader.

The SAFER Manual (Safety Evaluation for Roadways) is the newest publication of the Transportation Information Center (40 pp.). It offers a hazard rating scale and is illustrated by many pictures and brief text. The manual will help you identify potential hazards along roadsides, at intersections, at railroad crossings, and associated with roadway geometrics. The SAFER Manual will help you rate safety needs, address immediate problems, and budget for longer term safety improvements. Use this manual to plan your work for next year.

Understanding and Using Asphalt, Wisconsin T.I.C. Bulletin No. 1, Revised March 1996, 8 pp. This updated fact sheet on asphalt is an outstanding introduction for new highway officials. It includes a discussion and description of asphalt types, typical uses, physical properties, standard tests used for evaluating and specifying asphalt, and a list of related publications and resources.

Highway Accidents Involving Hazardous Materials, A Primer for First Responders, UWEX, 10 pp. This booklet describes step-by-step procedures for a safe and effective response to an accident involving hazardous materials. Helps you prepare yourself and your team to successfully follow the five simple but essential safety rules.

Handbook on Successful Supervision for Local Road Supervisors, FHWA-RT-91-002, 1990, 130 pp. Written specifically for local government road supervisors, this how-to approach includes chapters on MANAGING, MOTIVATING, and COMMUNICATING. Topics include delegating responsibilities; handling conflicts, grievances, and complaints; performance appraisal and disciplining; face-to-face, group, and written communications; working with elected officials and working with the public.

W-Beam Guardrail Repair and Maintenance, FHWA-RT-90-001, 1990, 34 pp. This guide will help highway maintenance personnel inspect, secure, maintain, and repair guardrail in a safe and cost-effective manner. It includes a list of tools and equipment needed for the job and how to plan and estimate the work. It covers work zone traffic control layouts and checklists.

A Study of the Use and Operation of Advanced Warning Flashers at Signalized Intersections, MinnDOT Report 93-1, 1993, 55 pp. This report of research concludes that advanced warning flashers can be useful in reducing right angle and rear end accidents at high speed intersections (45 mph and above), but can increase accidents at lower speed intersections. Includes guidelines for use and location of devices.

New videotapes

Videotapes are loaned free through Wisconsin County Extension Offices. If you do not have a video catalogue, you may request one at T.I.C.'s 800 number.

Son of Privatization: Managed Competition in Public Works #18075, Transportation Information Center, Dept. of Engr. Prof. Development, UW-Madison, Tape #1, 116 min; Tape #2, 58 min.

This two-tape set is from a 5/14/97 satellite conference that explored privatizing local public services by the public agency department bidding against contractors to provide a service. Includes examples of public agencies both winning and losing bids. Experts from those communities discussed: (1) What is necessary to have a fair competition? (2) How can a public agency prepare to compete? and (3) How is a managed competition contract managed effectively?

System Management Series This eight-part series of video tapes from FHWA and IRF is recommended for viewing by management, administrative and supervisory personnel. Detailed copies of each tape narrative are available with the tape.

Traffic Safety Series (59 min) #18068
Identifying highway safety problems and solutions, evaluating and selecting the best safety alternatives, evaluating safety program results.

Highway Management Series (3hrs, 8 min) #18069
Tape #1: Introduction to highway management systems; pavement management systems overview, data collection/management; developing and implementing pavement management systems.
Tape #2: Maintenance Management Systems (MMS): Overview; developing maintenance standards; MMS work planning process, authorization and scheduling, reporting and evaluation.

Contract Maintenance Series (1hr) #18070
Contract maintenance: overview, procedures, supervision.

Technology Transfer Series (43 min) #18071
Effective technology transfer methods; establishing a technology transfer program.

Low Volume Road Series (43 min) #18072
Setting maintenance priorities, managing maintenance for low-volume roads.

Equipment Management System Series (1hr, 54 min) #18073
Introduction to EMS, equipment inventory, equipment maintenance, parts and supplies management, financial management, equipment management information sub-system, and EMS implementation.

Construction Management System Series (1hr, 35 min) #18074
Construction management system overview and planning; developing contract staffing guidelines and planning values; manpower budgeting/scheduling procedures; construction management system monitoring and updating.

Rustic Roads easy, attractive



Usually a citizen group proposes a Rustic Road, says Katherine Yeaple, Rustic Roads administrator for the Wisconsin Department of Transportation. People who live on a unique road, or those who enjoy its scenic qualities, often want to protect it from change. As a Rustic Road, it remains under local control and is eligible for state aids just like any

other highway. There are now 75 roads covering more than 402 miles in 46 counties participating in the program.

Riley Road in Rock County joined the system recently, becoming Rustic Road No. 68. "I got involved when they took out a little plank bridge on the road," says Tom Veek, a Riley Road resident who made the Rustic Road proposal. "I wanted to keep the esthetics of the road and to make sure that the bridge would blend into the scenery." He describes Riley Road as "an old roller coaster road that is fun for people to ride or bike down." Veek and his neighbors petitioned the Town of Porter town board to request the Rustic Road designation.

"We had a series of meetings and got input from the Rustic Roads people at the state," says Porter Town Chairman David Viney. "We wanted to be assured that there wasn't some hidden thing that we would be forced to do, or that we would not be allowed to have development on it down the road." According to Viney, the bridge on Riley Road had been condemned and the town was faced with replacing it or closing the road.

Under the program, when a road is approved by the state Rustic Roads Board, the maximum speed limit is set at 45, and can be as low as 25 mph. The road should be lightly traveled and no major improvements should be anticipated,



Riley Road, Rustic Road No. 68. A Rustic Road should have outstanding natural features that set it apart: rugged terrain, native vegetation, wildlife, or open agricultural vistas.

but normal repairs to maintain safety and drainage may be done. In general, nothing much changes except the speed limit. While the state posts Rustic Roads designation signs, the town has to pay for any new speed limit signs. The \$800 cost for new speed limit signs on Riley Road is a concern, according to Viney.

WisDOT District offices can help municipalities who are considering a section of road for Rustic Road designation. A booklet, *Wisconsin's Rustic Roads...A Positive Step Backward*, is available, and rules for the roads are printed in Chapter Trans-RR1 of the Wisconsin Administrative Code.

For information on Rustic Roads, contact the Rustic Roads Board, WisDOT, P.O. Box 7913, Madison, WI 53707, 608/266-3661.

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:

Crossroads
Transportation Information Center
University of Wisconsin-Madison
432 North Lake Street
Madison, WI 53706

Or call, fax, or e-mail us:
phone 800/442-4615
fax 608/263-3160
e-mail Ranum@enr.wisc.edu

Please put me on your **Crossroads** mailing list.

Please send me information on _____

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(We'll contact you to get more details or answer your question.)

Name _____ Title/Agency _____
Address _____ City _____ State _____ Zip _____
Phone () _____ fax () _____ e-mail _____



Quarry, asphalt open house a success

In July more than 150 state and local officials attended a T.I.C.-sponsored visit to the Columbia County asphalt plant and quarry. Visitors learned about running a modern plant including complying with environmental regulations, remaining compatible with neighbors, controlling quality, and ensuring adequate safety.

This one-day field demonstration was a new approach for the T.I.C. "It was a very effective and worthwhile outreach activity," says Director Don Walker. "Next year we plan field demonstrations on asphalt street maintenance techniques." The summer 1998 program in the City of Monroe will address crack sealing, patching, milling, overlay, pothole repair, and surface sealing.

Advanced electronic plant controls ensure a high quality, consistent asphalt mixture.



Quality quarry operations are critical to getting a consistent asphalt mix.



Modern disposal techniques ensure protection of local water resources.



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