Roadside Maintenance

when the trees were cut.
The main feature of the policy is “lots of advance
notice,” says Dale Peterson, Portage County State Patrol
Superintendent. Every property owner now gets a letter
when a rehabilitation project is in the idea stage. The town
chairman is notified. There are ads in the newspapers and a
public hearing. If there are objections to the project that
can’t be resolved, the county highway committee makes the
final decision on the project.

Trimming back trees can improve
safety. Clusters of trees and varied
vegetation types are more appealing
than straight rows (left). You may
want to cut back heavy forests, but
clear cutting is ugly. Brush left along
the roadside is also unsafe (right).

“I’d much rather go through public hearings than I
would a controversy,” says Peterson. “Our goal is to make
the taxpayer feel at ease with the project.” Public hearings
can be helpful, Peterson says. Through them highway
department staff have learned about unique timing issues
from special businesses along the road, about small trees
that may be very old or historically significant, and about
special drainage problems that they were not aware of.

When brush removal is planned the supervisor talks to
each property owner ahead of time, marks trees and brush
for removal and carefully identifies right-of-way lines.

“We’ll make every effort to save significant trees, and
if we can’t we may offer to plant wildflowers on the right-of-
way or even to plant new trees off the right-of-way if the
landowner will maintain them,” says Peterson. The Portage
County policy also specifies no herbicide use and no
clearcutting. Each roadside segment is considered
individually. “It is time-consuming for the supervisors,”
says Peterson. So is the alternative.

Videotapes of Maintaining and Controlling Roadside Vegetation
(20 min. #17917) are available on loan. Call or fax the T.I.C. for
copies of the program handouts (or use the form on page 7).
Tthus recommends a book: Views from the Road (see Resources).
For more information on Portage County’s brush & tree removal
policy, contact Dale Peterson, State Patrol Superintendent,
715/345-5230.

Maintaining roadside vegetation can sometimes take the
balancing skill of a high-wire acrobat. Neighboring land-
owners and others may have very different ideas about
what’s desirable. Safety has to be balanced with visual
attractiveness, cost and environmental concerns must be
addressed. Cutting trees on the public’s favorite “shady lane”
or letting noxious weeds flourish next to farm fields can
produce a public relations disaster; so can a car crashing
into a roadside hazard.

Experts and those who have been through it advise:
plan ahead and publicize.

First: specific policies

“You can head off problems if you have specific policies in
place,” says Dick Stark a landscape architect and WisDOT’s
roadside maintenance specialist. He is a panelist on the
T.I.C.’s program Maintaining and Controlling Roadside
Vegetation, offered by satellite last February. Stark advises
that the goal should be to have a policy that is so thorough
and so soundly reasoned that new staff and administrators
can, and will, carry it out.

“The policy should describe the what, how, when and
where of specific actions,” Stark says. Document the whys
too, even if you choose not to include them in written
policies. Stark and other WisDOT staff are writing a compre-

hensive vegetation management plan for state highways.

Changes to the new state mowing policy took discussion
and compromise. “We had to address conflicts between
drainage and environmental concerns,” Stark says. A clean,
completely mowed ditch bottom will carry four times as
much water, quickly getting it away from the road’s subsoil.

However, fast-moving water can damage streams and ponds
with pollutants and sediment. It may also cause erosion and
flooding. With taller vegetation in the ditch bottom, water
flow slows down and sediments drop out. Ditches with a
minimum slope should be maintained so they provide
continuous and effective drainage.

“We’ve decided that wherever possible, road edges will be
mowed and the mow line will be hidden in the ditch-
line,” Stark says. This protects the safety and comfort of
motorists, balances drainage with water quality concerns,
and also takes the roadside’s visual qualities into account.

Sometimes safety and scenic beauty conflict on roadsides.
Experts say you can manage for both.

Safe roads for motorists

A significant number of crashes in Wisconsin involve a
single vehicle leaving the road and hitting a fixed
object. Having a “clear zone” in the roadside is a
recommended way to improve safety. Clear zones for
state highways may be 20 to 30 feet wide. The size for
other roads depends on traffic speed and volume and
the topography of the roadside. Trees larger than four
inches in diameter and other obstacles should not be in
the clear zone, but removing them may be controversial
or unreasonably expensive.

Address the difficulty by individualizing your
approach. “Start by identifying high hazard areas. Look
for narrow pavements with hills, curves, and rows of
Continued on page 7

Inside

Idea Exchange: Sign repairs get step up; Spray
pothole repair update; report on new spreaders

Roadside maintenance—cutting can become a “hot” issue

TRANSPORTATION Information Center
University of Wisconsin-Madison
Sign repairs get step up

Green County’s patrolmen are finding it easier to replace road signs thanks to an idea from patrolman Alan King. A small step welded to back of the side wing plow puts the worker at just the right height. The step is much more stable than ladders on the sloping ground along roads and the worker’s hands are free to easily replace the sign. The 12 x 18 inch step grid costs about $35 to fabricate from non-slip floor grating.

“We feel these steps have helped us continue to be effective with one-person sign replacements and, more importantly, made them safer operations,” says Green County General Superintendent Jeff Wunschel.

Spray pothole repair update

A Wisconsin business is patching cracks and potholes using the spray injection method we described in the spring ‘96 Spray pothole repair update. The equipment propels chips and asphalt at 65 mph which produces a 94% compaction, according to Crossroads.

Last fall counties put 103 zero-velocity spreaders with prewetting systems into service as part of the WisDOT Winter Maintenance Initiative. Under the program, every Wisconsin county received at least one new piece of equipment for winter maintenance of state and federal roads. The zero-velocity spreaders propel salt backwards at the same speed that the truck is traveling forward. As a result, decelerating material effectively is at a standstill relative to the road surface (it has a velocity of zero).

There were the usual problems with the new equipment: plugging of augers, hose breaks, and equipment calibrations. Some counties modified connections and found ways to help resolve the problems. Tom Lorfeld of WisDOT’s Maintenance Office is surveying counties on equipment performance and preferences.

Sample county reported increased efficiency and effectiveness from using the new equipment. Patrolmen could salt at speeds of 35-40 mph compared to the 20-25 mph maximum with ordinary auger/spinner combinations. Directional controls permit them to salt the high sides of curves without having to drive on the shoulders. According to research, pre-wetting salt saves money and makes roads safer through quicker salt action. When salt was pre-wetted with liquid sodium chloride, 40% remained on the roadway after 1000 vehicle passes at 55 mph, compared to only 10% of dry salt applied at the same rate. Salt pre-wetted with calcium chloride and applied under the same conditions had a 50% retention rate.

The WisDOT Winter Equipment Committee will work through the summer to plan for ‘96-’97. At their May meeting the committee agreed to order several mobile pavement temperature sensors. (See Winter ‘96 Crossroads page 2 for a description.) These should help supervisors more quickly and easily determine what are the effective de-icing levels and chemicals they should be using.

Some information in this article is adapted from stories in the January and March issues of Highway Maintenance Matters, a newsletter of the WisDOT Office of Highway Maintenance.

Counties report on new spreaders

A lawn-like roadside is safe and simple to maintain, but visually boring.

Roadside Maintenance

Roadside Maintenance from page 1

trees near the pavement edge, and for places where drivers tend to speed” says the T.J.C.’s Steve Pudliski who also participated in the satellite course panel. Consider using other techniques to enhance safety where the recommended clear zone width is not possible. Pudliski suggests, for example:

- Remove trees and objects with a crash history
- Widen travel lanes and shoulders
- Reduce excessive road crown
- Paint center and edge lines
- Install signs
- delineators along shoulder edges
- chevrons at curves
- object markers on trees or other obstacles
- advanced warning signs
- speed advisories
- Reduce speed limits
- Install guardrail
- Plant protective shrubs between road and object

Roadside Maintenance

Roadsides with tall grass and wildflowers are just as safe, but also more attractive.

Protect visual quality

Good quality road surfaces contribute to a community’s economy, as does the scenic beauty of its roadsides. Surveys show that natural beauty is the visitor’s top reason for choosing a place for recreation and four out of five people mention sightseeing and driving for pleasure as forms of recreation. Wisconsin’s excellent local roads also attract people who bike and walk.

“People generally agree on what they value as scenic in a setting,” says Wayne Tiusty, UW Extension landscape architect. These include:

- Tree canopies
- Diversity of vegetation
- Naturalness
- Fall color
- Shrubs and large trees
- Vistas and views

Roadsides can be managed for more scenic beauty, says Tiusty. The key is individualizing and planning ahead.

Policy-making the hard way

It took a year of hard feelings, a lot of bad press, and meetings attended by several hundred people before Portage County had a workable brush/tree removal policy. The policy was developed after a public controversy over cutting large trees in a roadside. Neighboring farmers had requested that their deteriorated, flooding-prone road be improved to accommodate their large trucks. Other county residents who used the road for recreation became very disturbed.

Continued on page 8

Roadsides

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Continued on page 8

Crossroads

A monthly providing information on roads and bridges to local officials, published quarterly by the Transportation Information Center, located at the UW-Madison, Draft of Engineering Professional Development, 432 N. Lake St., Madison, WI 53706. Phone: 800/442-4615. Fax: 608/263-3160.

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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
FAX 608/263-3160
432 North Lake Street
Madison, WI 53706

Please send me information on ____________________________.

Please put me on your Crossroads mailing list.

My idea, comment or question is ____________________________.

(We’ll call you to get more details or answer your question.)
Drivers license and CDL news

Grader operators removing snow Federal interpretation of the Commercial Drivers License (CDL) law now mandates CDLs for grader operators doing snow removal. This means these operators must also be in a drug and alcohol testing program. Employers should move forward with getting these operations properly licensed.

CDLs not needed for small vehicles Drivers of small dump trucks (GVWRs below 26,001 pounds) used for snowplow operations do not need CDLs. This applies only so long as the registered and actual loaded weights are also below 26,000 pounds.

Drug testing programs As of January 1, 1996, employers of CDL drivers (regardless of size) are required to have testing programs in place to check drivers for alcohol and drugs. If you don’t yet have a program in place, you need to establish one.

Backup snowplow drivers law As yet, Wisconsin has not implemented the federal CDL exception for backup snowplow drivers employed by a governmental unit with population of less than 3000 people. It may be in place for the 1996-97 winter.

If you have questions about CDLs, call Julie Clark, at WisDOT, the 1996-97 winter.

Snowplow drivers employed by a governmental unit with

Snowplow drivers law

Back-up snowplow drivers

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winter.
Replacing a culvert can have a big effect on the stream it carries. Set the culvert a couple inches too high and fish can’t get to upstream spawning grounds. Speed up water flow and you may cause scouring of the stream bottom and flooding downstream.

Most bridge and culvert projects must meet the standards of Trans 207 of the Wisconsin Administrative Code. In addition, there are erosion control and stormwater runoff regulations that apply to most road rehabilitation or maintenance projects. If a wetland is affected, there may be other local, state and federal protection laws. Sorting through the guidelines and figuring out which apply can be pretty confusing. Fortunately, help is available.

The best rule of thumb is to contact the local DNR liaison for each project. It can take just one phone call to ensure you’re protecting or maintaining the stream. Says Al Stranz of DNR’s Green Bay office. He’s one of eleven DNR staff responsible for coordinating environmental protection with highway and road projects and for seeing that Trans 207 and other environmental guidelines are followed.

“Every 36 inch culvert in some of my areas has the potential to be a Class I trout stream,” Stranz points out. “Set the culvert six inches too high and you block fish from spawning migration. That means you’ve effectively eliminated it as a trout stream.”

Stranz and the other DNR Transportation Liaisons can quickly advise on whether any permits or plans are needed and the depth it should be placed at. They can also recommend ways the contractor can protect the stream during construction.

Replacing culverts, cleaning ditches?

Mike Exford, Oconto County Highway Engineer concludes that getting an early start means few delays. “I normally get a letter off to Al [Stranz] in the early part of the year listing the major culvert replacement projects I’m planning. He checks them out and gets back to me by letter with his conditions and concerns.” With that little notice, projects come up, Exford says, he gives Stranz a call. “Usually he gets back to me pretty quickly.”

Contractors, county highway engineers, DOT district engineers, culvert suppliers, and consulting engineers who have worked with WisDOT also know the guidelines and can often help local officials plan for culvert projects. Stranz and other DNR liaisons know of work with towns,” says Jack Dittmar, Waupaca County highway engineer. “We can do the calculations and usually we can show that they’re not going to make things any worse.” Dittmar suggests that the extra time and paperwork required can be a burden on towns and on small maintenance projects. If a wetland is affected, there may be other local, state or federal protection laws.

Protecting stream hydraulics

“Sizing is a critical issue for culverts,” says Jim Morrisey, the Milwaukee area DNR liaison. “Too fast a flow will quickly scour out stream bottoms and destroy spawning areas; too large a culvert can spread out the flow, making water too shallow for fish to pass.”

You should not just replace a culvert with another of the same size, either. If upstream areas have changed from farmland to residential development, there will be more runoff. Flooding may result. “You have to think about land use activity in the watershed which impacts the flow and velocity of stormwater,” says Morrisey.

It’s easy to think of streams, especially urban ones, that only flow in wet weather, as just a pathway for moving water, but they often have a high degree of environmental value, Morrisey points out. It’s a value that you can’t necessarily recognize just by looking at them.

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Hal Mieier from the Madison-area DNR office advises: "A lot of people think that channelizing the stream is the best way to get water away from roads, but that just causes problems downstream. We've got to keep stormwater on the land so it adds to our water table instead of going down the Mississippi River." In general, the goal is to install a culvert that maintains the stream’s water velocity and direction with minimum interference.

Ditches also need care

When maintaining roadside ditches, it's important to recognize the power of moving water and the polluting effects of the sediment it carries. Plan ahead and start early for projects to grade shoulders, remove sediment from ditch bottoms, or reshape slopes and ditches. Local officials have new responsibilities for stormwater management under NR-216 of the Wisconsin Administrative Code. WisDOT has developed standards for erosion control and stormwater management in Trans 201 (Wisc. Admin. Code). These guidelines can also help local officials. Here are some general guidelines to consider:

• Make an erosion control plan ahead of time and have erosion control materials on site before you open any soil
• Review plans with a DNR liaison and/or county highway staff person
• Consider the pitch of the ditch.
• Slow down water movement to let sediment drop out before the water enters a stream or pond
• Open as little soil as possible
• Use proper erosion control materials

Guidelines for effective erosion control are described in Trans 207, and in Chapter 10, Erosion Control of the WisDOT Facilities Development Manual. See the Resources section on page 6 for information on how to get copies. Gayle Stearn at WisDOT can answer questions on erosion control. Call her at 608/267-3766.

You can get the name and phone number of your county's DNR Transportation Liaison from the list at the back.

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Drivers license and CDL news
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View from the Road: A community guide for assessing rural 366 landscapes, by David Capponi, editor, Madison, D.C., 1995, $25. This easy-to-use guide can help the non-expert understand the characteristics of scenic beauty and identify it along roadways.

Chapter 10, Erosion Control, WisDOT Facilities Development Manual (FDM), about 150 pp. A detailed description of materials and installation of erosion control devices. Copies are $5 from Mark Truby at WisDOT, 608/266-9349, P.O. Box 7654, Madison, WI 53707-0965. Future updates and revisions are not automatic.

Transportation Design and Highway Bridges in or over Navigable Streams, 13 pp. This chapter of the Wisconsin Administrative Code has specific guidelines for environmental protections during bridge design or bridge replacements and includes erosion control measures.

Bidding Small Road Improvement Projects, audio tape of ETN broadcast, 2/23/96. Discusses legal background for bidding small projects and using sample documents. Copies are $6.00 payable to UW-Extension. Request by name and date from: ETN Tape Orders, IC-75, 175 Observatory Dr., Madison, WI 53706.

Bidding documents for small road projects Sample documents prepared by the T.I.C. appropriate for simple paving or sealcoat project. Also includes owner checklist. These documents have been updated from those provided at the February ETN workshop.

New tapes in video library


A Traffic Plan to Live By (13-tape series) A new resource for your in-house work zone traffic control training programs. Designed especially for low-speed, urban environments, the tapes include maintenance crews and inspectors. Each module is a 45-minute session focusing on a particular traffic control safety problem. Included is an easy-to-follow training leader’s guide, a master copy of a participant handbook, and a video of real-life examples of proper work zone traffic control. Produced by Traffic Education and Consulting Services and Wausau Insurance.

Three traffic control concepts are stressed throughout: visibility, advanced warning and control, and the P.L.A.N. method of setting up work zone traffic control. Preview the location. Lay out the traffic flow on a diagram. Analyze the diagram and design the control. Navigate through the work zone as if you were a motorist and then make necessary revisions. Basic concepts and the P.L.A.N. method are introduced in the first tape. The series then applies the concepts and method to twelve problem areas:

1. Introduction to Low Speed Traffic Control (TIC#19) Devices (TIC#905)

Traffic Control Procedures (TIC#96)

Unattended Work Sites (TIC#97)

Patching/Shoulder Work (TIC#98)

Low Speed Lane Closures (TIC#909)

Intersection Work (TIC#10)

Pedestrians (TIC#715)

Protection of Locators and Surveyors (TIC#712)

Flagging (TIC#713)

Street Closures (TIC#710)

City Maintenance Operations (TIC#710)

Moving and Mobile Operations (TIC#710)

New wage laws

Daily overtime requirements for work performed on public works projects changed recently when Governor Thompson signed a new wage law. As of April 30, 1996, people can work four 10-hour days before overtime is required. Time and one-half will also be required for Saturdays, Sundays and six selected holidays. Several other changes in the new bill also took effect at the same time.

Contracting agencies now must post “white sheets” with prevailing copy wage rates. These are at least one and one-half times the prevailing wage rate, and must be accessible at the company’s office. If there is no company site on the project, the general contractor will post them at a place normally used to post such information. Three traffic control concepts are stressed throughout: visibility, advanced warning and control, and the P.L.A.N. method of setting up work zone traffic control. Preview the location. Lay out the traffic flow on a diagram. Analyze the diagram and design the control. Navigate through the work zone as if you were a motorist and then make necessary revisions. Basic concepts and the P.L.A.N. method are introduced in the first tape. The series then applies the concepts and method to twelve problem areas:

1. Introduction to Low Speed Traffic Control (TIC#19)

Devices (TIC#905)

Traffic Control Procedures (TIC#96)

Unattended Work Sites (TIC#97)

Patching/Shoulder Work (TIC#98)

Low Speed Lane Closures (TIC#909)

Intersection Work (TIC#10)

Pedestrians (TIC#715)

Protection of Locators and Surveyors (TIC#712)

Flagging (TIC#713)

Street Closures (TIC#710)

City Maintenance Operations (TIC#710)

Moving and Mobile Operations (TIC#710)

Metrciation Clearinghouse offers help

AASHTO, the American Association of State Highway and Transportation Organizations, has set up a Metrciation Clearinghouse to help supply information to local government officials. It is housed at the Texas Transportation Institute in College Station, Texas.

Local officials are invited to take advantage of information in the Clearinghouse’s database. Topics covered include transportation related metric issues, metric publications, metric standards, metric conferences, and metric contacts.

MTB, World Wide Web site: http://tti.tamu.edu/metric or you could call 409/845-5770, fax at 409/845-9848, or e-mail at ameneff@ttu.edu

For a listing of metric publications and other resources available from the Wisconsin DOT call 608/267-0763.

Calendar

T.I.C. workshops Specific details and locations for workshops are in the announcements mailed to all Crossroads recipients.

Livable Neighborhoods: Rethinking Residential Streets Are you getting requests from neighborhoods to do something about the speed, volume, or character of traffic on their streets? Do they say it's too noisy, too fast, too much? Are you ready to respond to their requests in a satisfactory way? This national T.I.C. workshop is developed to help you use the latest ideas on traffic calming and crime prevention through environmental design. Hear from experts and learn from three case studies with very different approaches to this issue.

June 19, 11:00 am to 2:30 pm at four locations in Wisconsin.

Winter Road Maintenance Your opportunity to rethink your approach from others and tune up your approach to snow and ice control and other winter maintenance activities.

Sept 11 Brookfield Sept 19 Tomah

Sept 12 Green Bay Sept 18 Eau Claire

Sept 12 Barneveld Sept 19 Cable

Sept 20 Rhinelander

UW-Madison seminars Local government officials are eligible for a limited number of scholarships for the following engineering courses in Madison. Use the form on page 7 for details or call 800/442-4615.

Cost Effective Drainage System Design, Aug. 13-16

Effective Detention Basin Design Techniques, Sept. 9-12

Traffic Analysis and Urban Modeling, Oct. 11-13

Managing Snow and Ice Control Operations, Oct. 7-8

Traffic Signal Design Software, Oct. 21-23

Advanced Traffic Signal Design Using TEPAC, Oct. 24-25
Sign repairs get step up
Green County’s patrols are finding it easier to replace road signs thanks to an idea from patrolman Alan King. A small step welded to the side wing plow puts the worker at just the right height. The step has helped them replace signs faster, making roads safer and reducing repair costs.

Spray pothole repair update
A Wisconsin business is patching cracks and potholes using the spray injection method we described in the spring ‘96 Crossroads. The equipment propels chips and asphalt at 65 mph which produces a 94% compaction, according to Kevon Haser of Fahrner Asphalt Sealers, Inc., Plover, Wisc. “It’s especially effective for potholes on hills,” says Haser. They also use the system to prepare and repair chip sealed roads, and to fix surfaces where cracks have caused them to sink or cup. The injected material fills and levels the area.

Counties report on new spreaders
Last fall counties put 103 zero-velocity spreaders with prewetting systems into service as part of the WisDOT W Inner Maintenance Initiative. Under the program, every Wisconsin county received at least one new piece of equipment for winter maintenance of state and federal roads. The zero-velocity spreaders propel salt backwards at the same speed that the truck is traveling forward. As a result, deicing material effectively is at a standstill relative to the road surface (it has a velocity of zero).

Roadside Maintenance
roadsides with tall grass and wildflowers are just as safe, but also more attractive. Some experts believe that native vegetation can be more effective at reducing noise, improving air quality, and providing habitat for wildlife.

Idea Exchange
Roadside with tall grass and wildflowers are just as safe, but also more attractive. Some experts believe that native vegetation can be more effective at reducing noise, improving air quality, and providing habitat for wildlife. Protect visual quality
Good quality road surfaces contribute to a community’s economy, as does the scenic beauty of its roadsides. Surveys show that natural beauty is the visitor’s top reason for choosing a place for recreation and four out of five people mention sightseeing and driving for pleasure as forms of recreation. Wisconsin’s excellent local roads also attract people who bike and walk. “People generally agree on what they value as scenic in a setting,” says Wayne Tlush, UW Extension landscape architect. These include:

- Tree canopies
- Diversity of vegetation
- Naturalness
- Fall color
- Shrubs and large trees

Roadsides can be managed for more scenic beauty, says Tlush. The key is individualizing and planning ahead.
Roadside maintenance—cutting can become a “hot” issue

Maintaining roadside vegetation can sometimes take the balancing skill of a high-wire acrobat. Neighboring landowners and others may have very different ideas about what’s desirable. Safety has to be balanced with visual attractiveness; cost and environmental concerns must be addressed. Cutting trees on the public’s favorite “shady lane” or letting noxious weeds flourish next to farm fields can produce a public relations disaster; so can a car crashing into a roadside hazard.

Experts and those who have been through it advise: plan ahead and publicize.

First: specific policies

“You can head off problems if you have specific policies in place,” says Dick Stark a landscape architect and WisDOT’s roadside maintenance specialist. He was a panelist on the T.I.C.’s program Maintaining and Controlling Roadside Vegetation, offered by satellite last February. Stark advises that the goal should be to have a policy that is so thorough and so soundly reasoned that new staff and administrators can, and will, carry it out.

“The policy should describe the what, how, when and where of specific actions,” Stark says. Document the whys and so that everyone involved will know what’s desirable. Safety has to be balanced with visual attractiveness; cost and environmental concerns must be addressed. Cutting trees on the public’s favorite “shady lane” or letting noxious weeds flourish next to farm fields can produce a public relations disaster; so can a car crashing into a roadside hazard.

Experts and those who have been through it advise: plan ahead and publicize.

Safe roads for motorists

A significant number of crashes in Wisconsin involve a single vehicle leaving the road and hitting a fixed object. Having a “clear zone” in the roadside is a recommended way to improve safety. Clear zones for state highways may be 20 to 30 feet wide. The size for other roads depends on traffic speed and volume and the topography of the roadside. Trees larger than four inches in diameter and other obstacles should not be in the clear zone, but removing them may be controversial or unreasonably expensive.

Address the difficulty by individualizing your approach. “Start by identifying high hazard areas. Look for narrow pavements with hills, curves, and rows of trees,” Stark says.