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CROSSROADS

WISCONSIN TRANSPORTATION INFORMATION CENTER – LTAP



A well thought-out communication plan anticipates what the public needs to know and creates a consistent process for getting the word out in a timely way.

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Add communication plan to pre-winter checklist

LOCAL OFFICIALS are busy right now reviewing pre-winter checklists, making sure orders are in for deicers and abrasives, plows are ready, spreaders calibrated and crews trained. Highway commissioners and public works directors should add one more thing to the list: Develop and implement an effective plan for communicating with the public.

It is easier to explain a winter maintenance operation to the public *before* the cold winds blow. Having to present the rationale behind an operation while fighting a storm, and fielding a blizzard of questions and complaints from frustrated members of the public, only makes a hard job harder.

A well thought-out communication plan anticipates what the public needs to know and creates a consistent process for getting the word out in a timely way. This proactive approach also intercepts potential problems and improves public relations for the department.

Compile frequently asked questions

Start by listing topics and issues residents frequently raise during the winter season. A short list should cover 80 percent or more of the usual queries and concerns. Some examples are:

- When will my street be plowed?
- Why did you pile snow at the end of my driveway? *Will you come out to remove it?*
- Where can I park during a snowstorm?
- Do I have to shovel/salt/sand my sidewalks? *Or . . . my neighbor hasn't shoveled/salted/sanded his sidewalk!*
- What will you do about my damaged mailbox?

Records from past seasons and input from staff members who field calls can help with compiling a good list. The next step is to think about the information, policies and resources available to provide answers.

Update policies, develop message

Prepare to communicate winter maintenance plans to the public. Provide general information and specific

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Order deicers and abrasives.



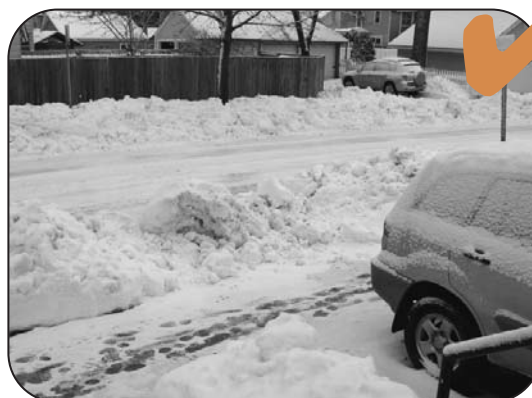
Conduct crew training.



Maintain plows.



Review snow-and-ice policy.



AND

Develop and implement a plan to communicate with the public.

"We want you to know!"

Idea EXCHANGE

"We gave it a try because the nature and shape of the material flexes over time and gives with the movement of the roots."

Sidewalks made of rubber offer tree-saving option

TREE-LINED STREETS.

Cracked and heaving sidewalks. The scene repeats in many Wisconsin communities where public works departments routinely budget to repair and replace concrete sidewalks made hazardous by soil and shallow-growing roots pushing individual slabs up and out of place.

Now two of those communities are experimenting with sidewalk pavers made from rubber. The Village of Poynette and the City of Fitchburg installed lengths of a rubber-based sidewalk paving system in recent years. Both saw the system as a solution for preserving desirable mature trees while giving neighborhoods longer-lasting walkable stretches of pavement.

A California company called Rubbersidewalks, Inc., introduced the unique paving product about seven years ago. Their high-

density paving tiles are made of 100 percent recycled tire rubber, crumbed and combined with polyurethane binder and colorant, then heated and molded under pressure. The manufacturer describes them as sturdy, resilient and reversible, with an expected life of seven years per face.

Poynette first in region

Poynette installed the product at three locations in December 2006. Administrator Dennis Linn notes the Village was the first community in a four-state region to do so. A year later, Poynette provided Fitchburg with input as they considered going the rubber route.

Linn says so far the system is an effective replacement for existing sidewalks that does not damage healthy, established trees. The three sites include residential sidewalks that carry foot traffic to a school complex and several that intersect with private walks.

"We gave it a try because the nature and shape of the material flexes over time and gives with the movement of the roots," he explains. "Eventually, we'll see some vertical heave, but it should be easy to lift, adjust and level any pavers that shift."

The sidewalk system Poynette installed consists of individual 2-foot-square pavers set side-by-side along the length of the section. The modular design creates permeable seams between the pavers that allow rain and melting snow to drain directly into the ground.

After two years and two winters, Linn reports the sidewalk system is performing well. There are no signs of wear or fading. In winter, the dark pavers absorb the sun so moisture from snow melts quickly, preventing ice buildup.

The biggest challenge for Poynette was finding a contractor to install the tiles. Because the system was new, Linn says he

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Resources

<http://www.rubbersidewalks.com/>

Link to product site with information on the recycled material, an installation Q&A and photos of installations around the country.



expected a learning curve for whoever took the job. Eventually, the Village contracted with Ziegler Landscaping in DeForest. Ziegler laid fine base gravel according to manufacturer's instructions and did all the work necessary to match new pavers with existing sidewalk and private walks.

According to Linn, total costs for the project, paid for on a time-and-materials basis, worked out to approximately \$24 per square foot. Although twice what Poynette spends on concrete replacements, he considers the cost reasonable for a spot fix that supports community goals of maintaining valuable urban trees.

Alternative worth it for Fitchburg

Transportation Project Engineer Ahnaray Bizjak says Fitchburg's decision to use the compressed rubber-sidewalk product was all about "the trees." The project involved two installations in locations that did not have sidewalks before, but they did have several large oak trees in good condition.

Bizjak recalls City Forester Ed Bartell learned about the porous, flexible sidewalk system Poynette used and thought it held potential for resolving serious conflicts between trees and paved walkways in Fitchburg. "Hearing about their experience was encouraging when we decided to do a pilot project on our new installations in August 2007," she says.

Fitchburg used larger pavers measuring 2.5-feet-square. The City paid for the sidewalk project on a time-and-materials basis with costs totaling \$16.63 per square foot, substantially more expensive than concrete. The City bid the project as an alternate method and also worked with a contractor new to the product. Bizjak expects costs to decrease once contractors are more familiar with the application.

A year after installation, one section of new sidewalk sustained some heaving that created a trip hazard. Because of the flexible pavers, Bizjak notes, a maintenance crew is able to correct the problem easily by lifting the



Rubber pavers make room for a large terrace tree along a section of sidewalk, part of a 2006 City of Poynette replacement project.

pavers, doing some minor root cutting and repositioning the pavers.

Bizjak says it helps having a real alternative to either relocating a stretch of sidewalk or destroying quality trees. But she predicts the expense means Fitchburg will install the system only where the situation justifies it. ■

Bizjak recalls learning about the porous, flexible sidewalk system Poynette used and thought it held potential for resolving serious conflicts between trees and paved walkways in Fitchburg.

Additional scholarships available for EPD courses

LOCAL GOVERNMENT

employees in Wisconsin who take a transportation-related course offered by Engineering Professional Development (EPD) at UW-Madison can offset course costs by taking advantage of scholarships from the Transportation Information Center (TIC). TIC support covers two-thirds of a qualified participant's registration fee. Now additional money is available as TIC doubles its scholarship budget for fall and spring to help offset tightening local government training resources.

EPD short courses run from one to three days, exploring a technical topic in depth with expert instructors from industry, research, private practice,

government and education. Topic areas include bridge design, construction inspection, drainage design, fleet maintenance, municipal engineering, liability in public works, pavement design and maintenance, project management, soils engineering, traffic engineering and winter operations.

The curriculum targets technicians, engineers, managers, and superintendents. One or more of the EPD courses can help a new employee, a new supervisor or technician, or an employee who is taking on new responsibilities at the local level succeed.

Each issue of *Crossroads* includes calendar listings of the EPD seminars that qualify for a

TIC scholarship. The *Calendar* also lists upcoming one-day workshops presented by TIC that do not qualify for the scholarship program.

Apply for scholarships by contacting TIC at 800-442-4615 or tic@epd.engr.wisc.edu. Identify the local government agency requesting the scholarship; provide the name of the EPD course, course dates and location, the name and title of the person registering, and agency contact information. Approved applicants receive a scholarship form to submit with their registration. TIC awards the scholarships on a first-come, first-served basis, so apply early. ■

Resources

The EPD site has complete short-course curriculum and registration information.

PHONE
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FAX
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EMAIL
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WEBSITE
<http://tic.engr.wisc.edu>

T Wisconsin
LTAP

FALL 2008

3

Worker visibility rule in effect November 24



Reflective vests must meet ANSI requirements.

“Worker” refers to those on foot whose duties put them in the right-of-way of a federal-aid highway.

Resources

www.safetysafetyequipment.org
Link to the International Safety Equipment Association (ISEA) publication on worker-visibility standard.



HIGH-VISIBILITY

apparel is important protection for workers in the danger zone of a highway where motor vehicles, construction vehicles and equipment pose a threat to safety. Congress adopted the rule mandating such apparel two years ago in response to an increase in fatalities and injuries to workers exposed to moving vehicles while working on federal-aid highways. It goes into effect on November 24, 2008. This brief Q&A covers some of the essentials.

Q What is the rule?

A All workers (public and private) within the right-of-way of a federal-aid highway who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

Q What qualifies as high-visibility safety apparel?

A Personal protective safety clothing that is conspicuous during both daytime and nighttime use. Apparel must meet ANSI Performance Class 2 or 3 requirements. Details available in the ANSI/ISEA 107–2004 publication “American National Standard for High-Visibility Safety Apparel and Headwear,” from the International Safety Equipment Association (ISEA).

Q Who qualifies as a “worker” under the rule?

A The term “worker” refers to people on foot whose duties place them within the right-of-way of a federal-aid highway. This includes highway construction and maintenance forces, survey and utility crews, responders to incidents within highway right-of-way, and law enforcement personnel who direct traffic, investigate crashes, or handle lane closures, obstructed roadways, and disasters. The rule is broad to ensure that approaching motorists or equipment operators can see and recognize workers who cannot see them.

Q What is a federal-aid highway?

A federal-aid highway is defined by its state functional classification. Roads classified as Major Collector, Minor Arterial, Principle Arterial, Freeway-Expressway or Interstate are on the federal-aid system. Almost 25 percent of Wisconsin’s 113,000 miles of roads qualify, including all US highways, most state highways, many county highways, and some city and village roads. County highway departments have maps showing the county’s functional classifications.

Q If the rule does not apply to local roads, why should local governments be concerned?

A Although Congress limited application of the rule to federal-aid highways, the 2003 *Manual on Uniform Traffic Control Devices* provides strong guidance for worker safety in Section 6D.03, stating that workers on local roads face the same risks from moving traffic or construction equipment and should wear safety apparel that meets ISEA requirements. ■

TIC work zone training marks 10 years



ONE OF TIC’S popular training programs recently turned 10. The first work zone and flagger course debuted in the spring of 1998, targeting a need by local agencies to stay up-to-date on important safety practices.

More than 6,000 people have attended 162 work zone courses since then. TIC delivered over half of them on-site for local highway agencies, public and private utilities, state agencies and contractors. Many on-site courses are customized to meet a specific agency training need or time frame. The sessions give the agency a chance to re-evaluate work zone procedures and improve communication between

departments involved in work zone activities, such as inspecting construction, issuing permits, reviewing building permit plans, performing utility maintenance and enforcing traffic regulations.

Publications reinforce best practices

Along with the training program, TIC developed materials that reinforce best work zone practices. ►



Participants in an on-site training session collaborate on practical work zone applications.

After the storm: emergency cost-recovery easier with planning

SEVERE WEATHER triggered a federal disaster declaration for 30 southern Wisconsin counties between June 5 and July 25 of this year. The situation called attention to the need for advanced planning by agencies responsible for keeping local roads safe and passable.

When torrential rains, flooding, tornadoes, destructive winter storms or other adverse events affect transportation infrastructure, the chief concern is a swift response to damage or hazards that endanger public safety.

According to emergency management officials—and local governments with a few notches in their own disaster belts—a close second to mobilizing immediate protective measures is having a dependable method for tracking costs incurred during or after a disaster event. Thorough, real-time documentation speeds the process of recovering those costs from federal and state sources.

Communities in Wisconsin commonly tap emergency highway aid from an Emergency Relief

Program administered by the Federal Highway Administration (FHWA), the Public Assistance Program run by the Federal Emergency Management Agency (FEMA) and Flood Damage Aids managed by the Wisconsin Department of Transportation (WisDOT).

Public Assistance is a partnership between FEMA and state and local officials. WisDOT's Flood Damage Aids program uniquely assists local governments to replace or improve roads and roadway structures that suffer major damage from flooding. These funds target repairs to any public highway, street, alley or bridge not located on the State Trunk Highway system. All the programs tie reimbursements to careful tracking of emergency costs.

Track costs by site

Bob Fasick, a Highway Operations Engineer with WisDOT, coordinates emergency highway aid programs in the state and works closely with the federal agencies that provide assistance to state and local governments.



An example of serious damage to road infrastructure from Wisconsin's storms of summer 2008.

With experience of more than a dozen events that qualified for federal disaster declarations over the past 17 years, Fasick says nothing beats an efficient system of documenting labor, equipment, materials and contracted work for reporting accurate numbers and hastening the approval of reimbursement requests. He recommends tracking costs on a site-by-site basis.

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An efficient system of documenting labor, equipment, materials and contracted work hastens the approval of reimbursement requests.

To date, TIC has distributed more than 100,000 copies of its *Work Zone Safety* pocket-sized guide and more than 50,000 copies of the *Flagger Handbook*.

Both publications are handy resources for police officers, engineers, inspectors, road work crews, supervisors and flaggers. Periodic updates by a team of TIC work zone instructors and WisDOT engineers keep the guide and handbook current with changes in the *Manual on Uniform Traffic Control Devices* (MUTCD). New editions of the two publications are planned in 2009 to include the most recent proposed MUTCD changes.

Outstanding instructors

The work zone program has benefited from outstanding instructors throughout its history. One of those instrumental in developing



Don Gordon demonstrates best work zone practices.

the program was Don Gordon, who retired this past spring.

Don brought great expertise to the work zone training curriculum from the start. Before joining TIC, he was a member of the MUTCD national committee focusing on work zone provisions. Don took the lead in drafting revisions to Wisconsin publications to reflect

new provisions. He team-taught most of the work zone courses with Jim Schneider who will continue in the role. Everyone at TIC will miss Don's many contributions to the program.

Upcoming courses

With a single work zone instructor available for the upcoming winter sessions, work zone courses will have a maximum class size of 30 participants. To provide more training opportunities, TIC has scheduled work zone courses for April 2009. See the *Calendar* section of this issue for dates and locations.

Agencies with a number of people who need training should contact TIC to talk about scheduling an on-site work zone course. The one-day session is available at a cost of \$600 for up to 30 participants. ■

On-site sessions give the agency a chance to re-evaluate its work zone procedures and improve communication between departments involved in work zone activities.

After the storm: emergency cost recovery easier with planning

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Emergency highway aid programs differentiate between MAJOR DAMAGE, like the condition of the washed-out road TOP, and damage defined as HEAVY MAINTENANCE, depicted BOTTOM by shoulder erosion from flood-waters. Major damage qualifies for reimbursement; heavy maintenance does not.

"It's challenging to stay on top of every detail when deploying resources quickly in the aftermath of a storm event," Fasick notes. "But it makes a difference in the long run if you can stay organized and separate costs by site and activity."

He suggests using record-keeping software, creating a system of basic spreadsheets, following a manual method or combining all three to develop a logical tracking approach. Strategies include keeping close records on daily work. Have crew members keep diaries of the hours they work and materials they haul, by site.

Ready response

Sauk County contended with miles of inundated and damaged roads when the June storms hit. The County's patrolmen and highway crews were on the scene quickly thanks to a well-established, familiar plan that includes careful tracking of costs by activity and site. County Highway Commissioner

Steve Muchow says crews moved fast, erecting signs and barricades to alert the public to conditions and clearing debris.

The County tracks work related to these two critical, first-response actions—emergency protective measures and debris removal—under two activity codes that are not site-specific. Nonetheless, from the time a patrolman alerts the department to a section of affected road, administrators assign a site number to the location that follows it through all subsequent disaster-related activity.

Crew members at the site photograph the damage and call in information about conditions. Sauk County uses the CHEMS cost-accounting system to track materials and crew and machinery

time. Muchow says the system—developed by WisDOT to help Wisconsin counties record and charge back costs for maintaining state roads—is invaluable during disaster response and for cost recovery.

"CHEMS let's us efficiently maintain all the roads data that comes in over the course of a storm event, by site number and activity code. And if there's a declaration, we use it to run reports for FEMA or the state to apply for aid."

Site definition

It is important to separate costs by site. But what defines a site? Typically, emergency road aid agencies consider a site one location with significant damage. The federal agencies may decide a group of adjacent locations with similar damage also qualifies as a single site for reimbursement.

Sauk County gives individual site numbers to multiple road sections along a half-mile stretch of highway, for example, even when authorities expect aid agencies to combine them later for reimbursement. Defining sites narrowly at the start helps ensure thorough documentation of the damage and the costs of recovery. Other examples of grouped locations are a watershed or waterway.

Fasick says Public Assistance aid from FEMA often allows an entire municipality to qualify as a site under the categories of debris removal and emergency protective measures.

WisDOT establishes project ID numbers and activity codes to separate costs accrued from damage response and those from routine maintenance costs.

Emergency aid sources vary

Reimbursement programs vary in coverage, activation, eligibility, time limits and other factors. It takes a State of Emergency Declaration from the Governor to activate the FHWA Emergency Relief Program. FEMA's Public Assistance Program for individual counties requires

both a state emergency declaration and a Presidential Disaster Declaration. Petitions for aid to the state's Flood Damage Aids program do not depend on disaster declarations, but local officials can apply for reimbursement of costs not eligible under the FEMA or FHWA programs. Applicants cannot use Flood Damage Aids to recover the local match portion of the federal programs.

Fasick reiterates that what the programs share in common is the need for good inventory of costs by site and detailed documentation of damages—site descriptions, site maps and photographs. "This is especially important in circumstances like this year with so many locations statewide involved in the declarations and such widespread damage," he adds. "Good records from those requesting aid makes it easier to monitor requests closely and avoid overlapping payments from multiple sources."

A WisDOT information packet about its Flood Damage Aids program includes a table comparing key elements of its program with the aid programs from FHWA and FEMA. Fasick says each agency follows different functional classifications for eligible roads or sites.

- FEMA covers damages to roads not on the federal-aid system—those with a functional classification of minor collector and below.
- FEMA pays for debris removal and emergency protective measures on ALL roads regardless of functional classification.
- FHWA covers damages on federal-aid roads only—those with a functional classification of major collector and above.
- WisDOT's Flood Damage Aids Program pays for damages on any local roads not part of the State Trunk Highway System.

Maps in county highway departments and WisDOT regional offices show all current classifications.

Criteria for reimbursement

Another distinction is the criteria for reimbursement. Disaster aid agencies generally define as "major" any damage to transportation infrastructure that endangers motorist safety. Examples include debris removal, pumping, sand-bagging and restoring washed-out roads. FEMA and FHWA set minimum dollar limits. The WisDOT program is more flexible.

- **FEMA Public Assistance Program** Costs to repair a damaged site to pre-disaster condition must be at least \$1,000. Additional improvements tied to hazard mitigation or code requirements allowed on case-by-case basis.
- **FHWA Emergency Relief** Damage-related costs must be a minimum of \$5,000 per site. No reimbursement for repairs classed as heavy maintenance, like minor shoulder washouts. Permanent restoration projects and betterments require prior approval.
- **WisDOT Flood Damage Aids** No minimum dollar value for repairs to a site if it meets disaster definition of major damage (roadway closed or rendered impassable). Heavy maintenance is ineligible. Requests totaling less than \$200 receive greater scrutiny.

Using contractors

Hiring contractors to do major repairs after a storm is an option when a local government lacks resources or expertise to meet the scope of work required. This includes bringing in outside crews and equipment to help with the immediate-response actions required to protect lives and

property—like debris removal, erecting barricades and sand-bagging.

Cost-recovery for all disaster-related work depends on whether or not there is a disaster declaration. Stay in touch with the county emergency management director to learn whether the impact of a storm is likely to prompt one.

A federal declaration means access to FEMA's Public Assistance Program, which reimburses all contracted work related to the disaster at 87.5 percent. By contrast, the program does not cover the cost of regular hours when local governments use their own crews for debris removal and protective measures, but applies the reimbursement percentage to **overtime labor hours only**.

Work involving permanent repairs to transportation infrastructure damaged in a declared disaster is reimbursed at the 87.5 percent rate for regular **and** overtime hours, and equipment and materials costs incurred by contract or local crews.

In all cases, itemized invoices from outside contractors must separate emergency from routine work. For local governments, this includes requesting special invoices from county highway departments that itemize disaster-related costs.

David LaWall, Public Assistance Officer with Wisconsin Emergency Management, observes that local officials generally follow normal procedures in the hours or days before a declaration comes and do not base their disaster response on the likelihood of cost recovery. He adds that a basic understanding of how the program defines eligible costs is useful when setting up a tracking system.

Another element of that system is a documented equipment rate schedule. Fasick recommends having an ordinance or policy on record and written proof the rates are in use. Without this, local governments must accept reimbursement based on FEMA rates that often are lower than rates used by WisDOT and county highway departments.

FHWA Emergency Relief requires more coordination of contracted work than FEMA and often stipulates a bidding process.

Training opportunities

Another facet of disaster preparedness is taking advantage of training opportunities. LaWall says there are national and local resources that local officials can include in their planning initiatives.

FEMA operates an Emergency Management Institute, based in

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Resources

<http://www.dot.wisconsin.gov/localgov/index.htm>

Link to *Flood Damage Aids* information packet with overview of emergency highway aid programs.

<http://training.fema.gov/>

Information on the Emergency Management Institute and other FEMA training resources.

<http://emergencymanagement.wi.gov/>

Link to Wisconsin Emergency Management services, including training programs.

A basic understanding of how each program defines eligible costs is useful when setting up a tracking system.

Defining the 100-year rain

Heavy rains and widespread flooding often prompt comments about the 100-year storm and confusion about what the expression means. Frequently misunderstood, 100-year rain does not refer to a biblical deluge that occurs every 100 years. It is engineering shorthand to describe rainfall of a certain magnitude that has a **1-percent chance of being equaled or exceeded each year**. Engineers define the actual size of a 100-year storm by the amount of rain that falls over a specific period of time—like 4.5 inches of rain in five hours. When conditions are right, such events can occur more than once in a short period of time.

Engineers follow a similar approach to describe capacity and design standards for drainage systems. A closed-pipe storm sewer system commonly conveys a 10-year storm event freely

with a 10-percent chance of being equaled or exceeded each year. A ditch-and-culvert system has a 25-year storm design and a 4-percent chance of being equaled or exceeded each year. Floodplain maps show 100-year flood elevations along and adjacent to rivers, streams and other tributaries. These areas face the greatest threat from flooding during a 100-year rain, but localized flooding elsewhere also occurs because drainage systems that flow into the river system are built for 10- or 25-year rain events.

Most federal and state agencies use the 100-year flood as the standard for floodplain management. Many local ordinances now require detention areas to hold back floodwaters of 100-year rains and an analysis of 100-year storm-flow patterns to determine the impact outside the floodplain.



Thanks to stormwater consultant Ron Rossmiller, P.E., a nationally recognized expert on street and highway drainage and long-time instructor of the UW-Madison course on the topic, for his help with this explanation.

Add communication plan to pre-winter checklist

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A sound communication plan uses a variety of media and methods to get the message out.

answers to the recurring questions. In the process, identify any policies that are out-of-date or ambiguous.

Begin with the list of typical questions and develop information that explains winter-storm priorities and service levels for different types of streets. Describe the time it takes once a storm ends to restore each street type to normal winter driving conditions. Define the **normal** conditions service level for each type.

Outline the agency's snow-removal policy. Does it call for providing bare pavement curb-to-curb, bare pavement in wheel paths or plowed curb-to-curb with packed snow that is sanded? Let people know what road conditions to expect during and after a storm.

Avoid shorthand and acronyms in public-information materials and policy descriptions. Using unfamiliar terminology like

Average Daily Traffic (ADT), arterial and collector can confuse. Instead, refer to streets as major, neighborhood, residential, two-lane, four-lane or in other recognizable terms.

Write or speak about the levels of service and time-till-completion after a storm as "goals." Explain that long-lasting storms, multiple storms close together and extreme cold can increase the time it takes to restore roads to normal winter driving conditions.

For issues like parking and sidewalk shoveling, translate relevant ordinances into simple language and make clear why they exist. Give people reasons behind the rules—so that snow-removal crews can do their jobs efficiently and effectively, and get safe streets open sooner—to help them appreciate how important it is to comply. Direct people to a source where they can read the complete ordinance if interested.



OZAUKEE COUNTY HIGHWAY DEPARTMENT

Communicate information about snow-removal operations early so the public knows what to expect.

Use multiple outlets

A sound communication plan uses a variety of media and methods to get the message out. Combining multiple outlets is the best way to reach local residents who depend on the community's winter maintenance services. It improves the ►

After the storm . . .

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Sauk County highway crews responding to disaster sites in June photographed the damage they found. The photos are an important element of the record used in cost recovery.

"With FEMA, having good records is the key to everything. Nothing gets done without it."

Emmitsburg, MD, with courses on public assistance, and disaster response and recovery topics. Training options include distance learning and independent study.

Closer to home, Wisconsin Emergency Management provides exercise and training programs that address the skills first responders, volunteers, elected officials, emergency managers and others need to protect lives and property. LaWall says the department works closely with county emergency management directors to organize and present on-site courses on disaster recovery and damage assessment for local municipalities. The programs range from three-day courses and four-hour sessions to applicant briefings for a specific storm event.

During and after a declaration period, LaWall travels to affected areas doing assessments for FEMA and sees first-hand what kind of information and training is helpful. He echoes Fasick's advice, saying the key lesson is to develop a bulletproof approach to document-

ing costs. "When everything is happening, it's hard to track things closely. It's even harder to recreate it days or weeks later," LaWall says. "With FEMA, having good records is the key to everything. Nothing gets done without it."

Gather resources, apply lessons

Many local officials in Wisconsin know from experience, dealing with a disaster that disrupts normal use of roadways and puts lives and property in peril is easier with an organized plan in place. Sauk County stands as proof.

"Anytime we have damage to roads or bridges and think a declaration is possible, we use the system that's in place because otherwise, it would be hard to reconstruct the circumstances and relate them to costs," Muchow says, adding that being prepared to document everything all the time has gotten the County and its municipalities through many disasters.

He credits tight coordination between staff members in the office and in the field for the recent successful response. Debriefing everyone on staff after a storm or other disaster event has, over time, helped them identify ways to enhance operations.

Along with an effective system for documenting all work to improve cost-recovery, Sauk County relies on mutual aid agreements with neighboring communities and regularly discusses ways to share resources in an emergency. Juneau County came to their aid in June under such an agreement.

Finally, besides being in touch with county highway officials, local officials should connect with county emergency management directors to guarantee good communications during future storms or other disaster events.

Before and after the storm, local governments are wise to gather resources and apply lessons that help them prepare for the unexpected and recover the exceptional costs of disaster response. ■

odds of reaching everyone in the target audience and gives them repeat exposure to the message. Effective options include:

- Run an article in agency brochure or newsletter distributed to the public.
- Do a separate mailing about winter maintenance operations.
- Send a press release to local media—including daily or weekly newspapers, TV and radio outlets, shoppers and neighborhood newsletters.
- Hold a press conference to kick off the winter season.
- Create TV video and news photo opportunities by holding a media day at the maintenance yard to showcase seasonal equipment, introduce staff members and talk about the winter maintenance operation.
- Invite media contacts, elected officials or members of the public to ride along on a dry-run of snow routes or during an actual storm event.
- Add or update information about winter operations on the local government's website and refresh the information frequently.
- Explore opportunities to air information on a community-access cable station.
- Make presentations on the topic at meetings of service or community groups, like Rotary, Kiwanis, Chamber of Commerce.
- Tailor a presentation for school groups to give children a hands-on experience that gets them excited about snow plowing and eager to share what they learn with parents.
- Exchange key contact information with media outlets so they have direct link to department during a storm and the department knows whom to reach with critical information for immediate broadcast or publication.
- Provide news about winter operations via a prerecorded telephone hotline, webpage or email message as a subscription service for residents. (Make updating this information integral to routine procedures.)
- Add a staffed phone line to take questions and complaints during the winter season.

Keep it positive

Much of the time, the contact highway and public works agencies have with the public emphasizes prohibitions, what **not** to do. Warnings and alerts are important for public safety, but proactive communication about upcoming winter maintenance offers a chance to be in touch with a positive message that invites interest and cooperation from customers.

A good plan covers the operation's practical details and answers the top questions. It also informs the public which streets constitute the department's territory. Let

them know about the people, equipment and materials available to fight winter storms. Describe anything innovative or different about the operation and how it improves outcomes for the public.

Let the public know what they can do to help make it a safe winter season. Highlight important issues or problems that hamper the maintenance operation, like residents shoveling, blowing or plowing snow into cleared streets, causing a safety hazard and requiring crews to plow the street again.

Include information about resources for staying safe on the roads in winter. The WisDOT website offers basic tips on safe winter driving. Promote this link and incorporate tips into agency communications.

Worth the investment

An organized communication plan is a good addition to any road maintenance operation. It is worth the investment because it reaches both the media and the public with the message that the local agency is serious about running a professional, effective operation. Reinforce that message with ongoing communication as the season progresses. Educating these important audiences improves the relationship with customers and limits complaints and controversies during the snow season. ■

Attend October Winter Road Maintenance Workshops

Local officials can review and update their winter maintenance plans with practical information on topics from driving skills for plow operators and how to improve the effects of salt and sand to information on new equipment and procedures. Choose from seven locations and dates.

Tomahawk	Oct 13
Hayward	Oct 14
Eau Claire	Oct 15
De Pere	Oct 20
Pewaukee	Oct 21
Barneveld	Oct 22
Tomah	Oct 23

Contact TIC at 800-442-4615 or go to <http://tic.engr.wisc.edu/Workshops/Listing.lasso> for more information and to register.

Resources

http://www.apwa.net/Publications/Reporter/ReporterOnline/index.asp?DISPLAY=ISSUE&ISSUE_DATE=102006&ARTICLE_NUMBER=1379

Link to October 2006 APWA Reporter article "Never Underestimate the Power of PR—Public Relations for Winter Operations."

http://americancityandcounty.com/features/government_getting_drift/

Online source for September 2006 article "Getting the Drift" from American City and County.

www.dot.wisconsin.gov/safety/motorist/winterdriving/driving-tips.htm

WisDOT web page featuring winter driving tips.

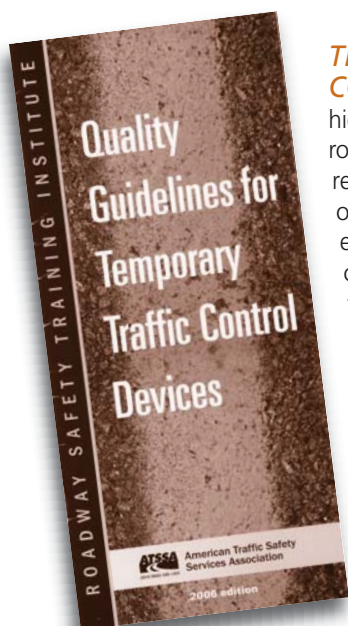
Pre-Winter PR



- ☐ Run article in agency newsletter/website
- ☐ Send info flyer to customers' homes
- ☐ Hold media day and/or press conference
- ☐ Schedule ride-alongs for media/public
- ☐ Speak at service club meetings
- ☐ Create program for school groups
- ☐ Set up phone hotline or email alert
- ☐ Establish key media contacts

Proactive communication about upcoming winter maintenance offers a chance to be in touch with a positive message that invites interest and cooperation from customers.

Quality standards for traffic control devices in work zones



TEMPORARY TRAFFIC CONTROL devices support highway safety and efficient use of roadways during construction and repair projects. Wear and tear over time reduces the visible effectiveness of signs, drums, cones, tubular markers and other work zone devices, making them unsafe for use.

An updated handbook from the American Traffic Safety Services Association (ATSSA) gives local agencies guidelines for evaluating the condition of used devices to assure they still do the job. The guidelines

An updated handbook from the American Traffic Safety Services Association (ATSSA) gives local agencies guidelines for evaluating the condition of used devices to assure they still do the job.

address day-to-day operations of traffic control devices within a work zone but do not cover emergency situations.

This pocket-sized publication reviews all major temporary traffic control devices and has descriptions and color photographs that identify three levels of device condition: **acceptable**, **marginal** and **unacceptable**. It also features sample specifications to help agencies interested in formally adopting the ATSSA standard.

The Wisconsin Department of Transportation recently adopted the standard for all work zones on federal and state roads. The department encourages local governments to do the same for their own traffic control devices, contracts and permits. ■

Quality Guidelines for Temporary Traffic Control Devices is available from ATSSA's online store at www.atssa.com/store/bc_item_detail.jsp?productId=1.

Or contact ATSSA at 540-368-1701 in Fredericksburg, VA. The Transportation Information Center has a limited number of handbooks available for free. See *Resources* on page 11 for details.

Examples from ATSSA Guidelines

Used devices in the **ACCEPTABLE** category maintain their intended original shape and show minor tears, scratches or dents that do not seriously reduce reflectivity.



A device classed as **MARGINAL** continues to maintain its shape and, despite numerous abrasions, discoloration and permanent splatters, satisfies the lower end of acceptability.



The **UNACCEPTABLE** rating refers to devices with marring over a large surface area that reduces legibility and reflectivity, and punctures or dents that seriously alter its shape and strength.



CALENDAR

UW–Madison Seminars

continued from page 12

DECEMBER 2008

- 2-3** Implementing a Sidewalk Management System #J965
- 4-5** Solving Neighborhood Traffic Problems #K215
- 4-5** Essentials of Hydraulics for Civil Engineers and Designers #K496
- 8-10** Highway Bridge Design #K013
- 8-9** Comprehensive Practices for Effective Construction Project Management #K018
- 10** Principles and Practices of Construction Project Scheduling #K019
- 11-12** Principles and Practices of Estimating for Construction and Design Professionals #K020

JANUARY 2009

- 20-21** Improving Public Works Construction Inspection Skills #K098
- 21-23** Foundation Engineering and Design #K417
- 22-23** Maintaining Asphalt Pavements #K117

Independent Study – Enroll Anytime

Project Management 100: The Basics, Plus Important Insights #K205

Other Events

Pesticide Applicator Certification

Training manuals and other resources for Wisconsin Commercial Pesticide Applicator certification available online at the University of Wisconsin Pesticide Applicator Training Program website, <http://ipcm.wisc.edu/pat>, or contact:

Rose Scott at 608/262-7588 or PAT-program@facstaff.wisc.edu

Publications

Quality Guidelines for Work Zone Traffic Control Devices.

American Traffic Safety Services Association (ATSSA). Pocket-sized book for inspecting of traffic control devices. Includes color photos and rates signs, barricades, drums, cones and other work zone devices as acceptable, marginal or unacceptable for use. Available in limited quantities from TIC.

Pavement Preservation Checklist.

Provides inspection checklists for various asphalt pavement maintenance processes, including seal, chip seal, and thin overlay. Available as of pocket-sized flipbook or as a downloadable PDF at <http://www.pavementpreservation.org/reference/brochures.php>.

Websites

"Never Underestimate the Power of PR – Public Relations for Winter Operations," *APWA Reporter*, 10/06 http://www.apwa.net/Publications/Reporter/ReporterOnline/index.asp?DISPLAY=ISSUE&ISSUE_DATE=102006&ARTICLE_NUMBER=1379

"Getting the Drift" from 10/06 issue of *American City and County*. http://americacityandcounty.com/features/government_getting_drift/

100-Year Flood, US Geological Survey Fact Sheet 229-96. <http://pubs.usgs.gov/fs/FS-229-96/>

Federal Emergency Management Agency (FEMA) programs to assist local governments. <http://www.fema.gov/government/grant/palindex.shtml>

Information on counties designated in Wisconsin's June 2008 FEMA disaster declaration. <http://www.fema.gov/news/eventcounties.fema?id=10028>

Viewable flood maps from FEMA. Click on "flood maps." Interactive maps also available for some areas by clicking on "Map Viewer-Web (DFIRM Viewer)" link. <http://msc.fema.gov>

DVD/VHS/Multimedia

Timely resources new to the TIC collection or related to topics in this newsletter.

Introduction to Winter Operations,

1 of 5 in "Winter Operations Training Program" series, Iowa Department of Transportation (DOT), 1997, 11 min., #18172, VHS. Equipment types and use include trucks, graders, loaders and plows. Good introduction for new employees.

Pre-Season Preparation, 2 of 5 in "Winter Operations Training Program" series, Iowa Department of Transportation (DOT), 1997, 30 min., #18173, VHS. Mounting snow-removal equipment and pre-season check of equipment. For operators and shop personnel.

Equipment Operation, 3 of 5 in "Winter Operations Training Program" series, Iowa Department of Transportation (DOT), 1997, 10 min., #18174, VHS. Routine equipment checks before and after plowing, proper radio procedures and winter clothing tips. For operators.

Plowing Techniques, 4 of 5 in the "Winter Operations Training Program" series, Iowa Department of Transportation (DOT), 1997, 30 min., #18175, VHS. Excellent review of snowplowing techniques on two-lane and multi-lane roads. Includes intersections, bridges, rail crossings and ramps. Covers plowing, winging ice blades and V-plow use. For operators and supervisors.

Anti-icing/Deicing, 5 of 5 in "Winter Operations Training Program" series, Iowa Department of Transportation (DOT), 1998, 30 min., #18187, VHS. Review of

chemicals and abrasives for snow and ice control. Special topics on snow fences, salt brine production and use of brine for prewetting salt. Excellent guidelines on use of salt brine for anti-icing. Intended for supervisors.

Sand and Salt Spreader Calibration,

Baystate Roads Program, Massachusetts Local Technical Assistance Program, 2006, 13 min., #18928, DVD. Information about importance of spreader calibration, procedures for calibration of salt and sand spreaders, and calculations needed to determine proper calibration.

Anti-icing/RWIS Training,

American Association of State Highway and Transportation Officials (AASHTO), 2003, unlimited minutes, #18790, CD. Interactive CD provides hands-on learning via computer. Assists individuals responsible for using liquid chemicals in anti-icing operations. Topics focus on understanding weather forecasting, use of forecasts and application of anti-icing chemicals. Includes seven lessons. Complete in one session or over several days.

Safe Winter Driving Considerations,

Coaching Systems, LLC, 2001, 2006, 21 min., #18950, DVD. Basic winter driving advice for drivers of cars and light trucks. Covers preparation and typical road hazards. Discusses how a driver should react to winter conditions including low visibility, slippery roads, snowplow operations and sight obstructions. Helpful for new auto drivers or a refresher. Does not discuss equipment operations from snowplow driver's perspective.

RESOURCES

Print copies of listed publications available free from TIC while supplies last. Download electronic copies for some items at: <http://tic.engr.wisc.edu/publications>.

Video, CDs, and DVDs loaned free through county UW-Extension offices. Print copies of the current TIC Lending Library Catalog were distributed in July 2007. Also look for titles on the TIC website.

TIC website

<http://tic.engr.wisc.edu/>

CROSSROADS provides information on roads and bridges for local officials. Published quarterly by the Wisconsin Transportation Information Center (TIC)—part of the nationwide Local Technical Assistance Program (LTAP)—with assistance from the Federal Highway Administration, WisDOT, and the University of Wisconsin—Extension. For permission to reproduce articles or graphics, please contact us.

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 Wisconsin
LTAP

FALL 2008

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FEEDBACK

Please fill out this form and fax or mail (in separate envelope) with the mailing label below.

NAME _____ TITLE/AGENCY _____
 ADDRESS _____ CITY _____ STATE _____ ZIP _____
 PHONE _____ FAX _____ EMAIL _____
☐ Mailing list change/addition ☐ Information/resource request ☐ Idea/comment

☐ Other



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CALENDAR

TIC Workshops

Details, locations and registration forms are sent to all **Crossroads** recipients prior to each workshop. Additional workshop information and online registration available at: <http://tic.engr.wisc.edu/workshops/listing.lasso>

Winter Road Maintenance Practical information and procedures for snow and ice control on local roads. Includes discussion of de-icing material, equipment and operational issues. Fee: \$45

Oct 13	Tomahawk	Oct 21	Pewaukee
Oct 14	Hayward	Oct 22	Barneveld
Oct 15	Eau Claire	Oct 23	Tomah
Oct 20	De Pere		

Work Zone and Flagger Safety Learn to apply Wisconsin standard practices and other guidelines for good work zone traffic control as well as strategies for better communication between departments. Fee: \$45

Jan 13	Eau Claire	Jan 23	Barneveld
Jan 14	Hayward	Mar 31	Eau Claire
Jan 15	Tomahawk	Apr 7	De Pere
Jan 16	Stevens Point	Apr 8	Waukesha
Jan 21	De Pere	Apr 9	Barneveld
Jan 22	Waukesha		

Highway Safety Review signing and marking basics with emphasis on good sign installation and maintenance practices on local roads. Identify roadside hazards and learn to use crash information to improve safety. Fee: \$45

Feb 19	Barneveld	Feb 25	Cable
Feb 20	Waukesha	Feb 26	Eau Claire
Feb 23	De Pere	Feb 27	Tomah
Feb 24	Tomahawk		

TIC On-site Workshops

Save time and travel costs by bringing instruction to your shop or office. Schedule training that is convenient and tailored to your specific needs. On-site workshops let you train more people for the same cost or less, including staff from other municipal departments, nearby communities, and businesses you contract with. Contact TIC early to book the program and date you want. On-site workshops include:

- Basic Surveying for Local Highway Departments
- Basic Work Zone Traffic Control
- Flagger Training

Road Maintenance Learn to recognize problems early and apply the right methods to stretch budgets and maintain good local roads, streets and highways. Fee: \$45

Mar 16	Tomah	Mar 20	De Pere
Mar 17	Eau Claire	Mar 23	Pewaukee
Mar 18	Hayward	Mar 24	Barneveld
Mar 19	Tomahawk		

UW-Madison Seminars

Local government officials are eligible for a limited number of scholarships for these Engineering Professional Development courses held in Madison. Go to <http://lepd.engr.wisc.edu> or 800-462-0876 for course details.

OCTOBER 2008

- 6-7** Managing Snow and Ice Control Operations #K119
- 6-8** Traffic Engineering Fundamentals #K206
- 9-10** Improving Intersection Safety and Efficiency #K207
- 27-28** Legal Aspects of Engineering, Public Works, and Construction #K208

NOVEMBER 2008

- 17-18** Storm Sewer System Design #J892
- 19-20** Storm Water Detention Basin Design #J891

Seminar listing continues on page 10