

Crossroads

Fall 1998



TRANSPORTATION Information Center — LTAP

University of Wisconsin—Madison

New programs promote pedestrian safety and convenience

Walking, the oldest but often the least visible form of transportation, is getting some well-deserved attention from state agencies, private groups and the Federal Highway Administration (FHWA).

Safety is a key issue. Each year in the US about 6000 pedestrians are killed in motor vehicle crashes. Last year 62 Wisconsin pedestrians were killed and 1,825 were injured. More than two-thirds of the crashes happened on neighborhood streets with the elderly being almost twice as likely as working-age adults or children to be the victim.

A new FHWA-supported statewide program, **The Pedestrian Road Show**, helps communities make walking safer, easier and more pleasant. In Wisconsin 12 facilitators are available to offer half-day Pedestrian Road Show seminars for local leaders. The program gives participants concrete information about elements that make a community safe and accessible to pedestrians, encourages them to further explore ways to make their community more walkable, and helps them begin to formulate a plan of action for their community. Facilitators are based in Eau Claire, Green Bay, Madison, and other cities around Wisconsin.

The FHWA's year 2000 goals are to reduce the number of injuries and fatalities occurring to pedestrians and bicyclists by 10% and to double the national percentage (from 7.9% to 15.8%) of transportation trips made by walking and bicycling.

To help achieve this, the state will soon begin developing a Statewide Pedestrian Plan under the guidance of Tom Huber, statewide bicycle/pedestrian coordinator. "We don't know yet what the plan will include," he says, "but the process is a serious commitment to meeting the goal of doubling the number of pedestrian and bicycle trips. Much of the work has to take place in local communities where most people walk. We can offer encouragement, technical support and guidance," says Huber. He is also a Pedestrian Road Show facilitator.

Walking benefits communities

Walking offers numerous benefits. Increased walking helps reduce traffic and parking congestion. It also promotes a sense of community, reduces crime, cuts pollution, congestion and noise, and helps stimulate the local economy.



Pedestrian/vehicle crashes cause 6000 deaths and 90,000 injuries annually.

Beyond that, walkers get health benefits from the exercise.

In cities from Florida to Oregon, making streets attractive and safe for walkers has helped increase property values and business growth. This summer the Milwaukee suburb of Wauwatosa rebuilt 16 blocks of its North Avenue East Town business district. The primary purpose is to cut traffic congestion and ease parking problems by encouraging neighbors to walk to shop.

Continued on page 4

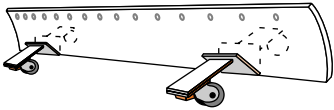
Inside

Idea Exchange: Dolly moves blades easily; Pulling device eases post removal; Salt-tolerant grasses	2
New policy on utility installations	2
Local safety Rodeo gets drivers winter-ready	3
Budgeting —a balancing act	3
Calendar	4
Resources	6
Participants applaud chain saw tips	6
What you don't know CAN hurt you—safety code seminars	7
T.I.C. marks 15th year	8

Idea Exchange

Dolly moves blades easily

A simple dolly for handling cutting edges for underbody plows has gone from a handmade highway shop device to part of a Michigan company's regular product line. The dolly is a pair of large angle irons on heavy casters. Since blades are five to seven feet long and 50-100 pounds, the dolly makes installation much simpler. The price is \$85 a pair.



"The most important thing is that they reduce injuries—back injuries and finger pinches," says Scott Bachelor,

vice president and marketing director at Hyde Equipment which makes the devices.

The dollies have quickly become favorite tools for transporting a variety of items: front-mounted blades, pieces of steel, bundles of pipe, even large display units.

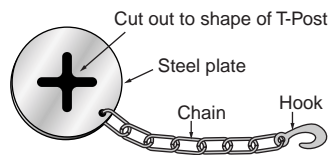
For information about the Hydra-Dolly™ call 800/678-4933 or visit the Hyde Equipment web site at www.hydeequipment.com. Thanks to the Michigan T2 center newsletter, *The Bridge*, for their April/June 1997 story highlighting this device. Mention of commercial products does not constitute endorsement by the T.I.C.

Pulling device eases post removal

With a small piece of steel plate, a short length of chain and a chain hook, you can make a simple device to pull out fencing T-posts.

Cut out the shape of the T-post from the center of the plate. Attach chain and hook.

Fasten device to the bucket of a front loader or a handyman jack and jerk the T-post out of the ground. The device was designed by the street superintendent and assistant in Elko, Nevada.



Thanks to the *Nevada Milepost* newsletter for this nifty idea.

Study reports on salt tolerant grasses

Turf grasses can be damaged by salt from winter deicing materials. While most salt tolerance studies are conducted in laboratories and greenhouses, the UW-Madison did a one-year field study of 18 turf grass varieties. The study ranked the species' salt tolerance in terms of percent of ground covered on March 12 and April 2, 1997. Four species which showed moderate salt tolerance were Dawson, Park, Boulevard Mix, and DOT mix. Four other species, SR 5 100, Scaldis, Reliant, and Nordic, showed very low salt tolerance. Alkali grass, reported to be the only truly salt-tolerant turf grass, unfortunately didn't germinate and couldn't be tested.

Reports are available from Amy Sausen, *UW-Extension Turf Grass Specialist*, 608/262-1689.

New policy on utility installations

"The right-of-ways are getting crowded, and with deregulation a lot of newcomers want space out there," says Glen Speick, Marathon County Highway Commissioner. "One company came through here with a rip and slash attitude. They ran over driveway culverts, put cable in the shoulders, and damaged the blacktop. I'm real glad we adopted our new utility policy last spring," he says.

Utilities have a statutory right to use right-of-ways, while municipalities have a right/obligation to regulate that use. These competing rights are coming into conflict more often. An upcoming ETN workshop, **Local Authority to Manage Roads** will address these issues. (See *Calendar* on page 4).

An earlier Marathon County policy simply required the utility to file drawings. There was no inspection or follow-up. Working with the county attorney, they developed new guidelines, adapting the state's utility accommodations policy to local conditions.

They declare that the primary purpose of highways is transportation. Utilities using highway corridors must not adversely affect that function or make construction and maintenance more difficult or expensive. Requirements for securing permits, locating and installing utilities including clearance minimums and backfill specifications, and providing work zone traffic control are included.

"We put some enforcement teeth into it," says Speick. "Now we can go out and shut a job down if they're not abiding by the permits. And if they don't clean up their last mess, they don't get more permits any place in the county."

More oversight means more staff time and expense, so Marathon County developed a new set of fees. Utilities pay \$100 a year to do general maintenance: \$25 for each new installation, and \$50 for inspection. A \$250 fee for open road cuts helps discourage that activity.

Since it may be easier and cheaper for utility contractors to move their installations onto unregulated town roads, the county started writing model town policies. Several towns in Marathon County are considering a short version taking less staff time as well as a longer one with more administration.

Copies of Marathon County's utility policy, and the two model town policies, are available from Glen Speick, 715/842-2205, Ext. 301. See the Calendar on page 4 for ETN session details.

Crossroads

This newsletter provides information on roads and bridges to local officials and is published quarterly by the Wisconsin Transportation Information Center, part of the nationwide Local Technical Assistance Program (LTAP). **Crossroads** is produced with assistance from the Federal Highway Administration, the Wisconsin Department of Transportation, and the University of Wisconsin-Extension.

Non-profit organizations are welcome to reproduce articles appearing here. Please contact us first for any updates or corrections.

Wisconsin Transportation Information Center, UW-Madison Department of Engineering Professional Development, 432 N. Lake St., Madison, WI 53706

Phone: 800/442-4615 Fax: 608/263-3160, or e-mail to individuals below.

Don Walker, *director*
Steve Pudloski, *staff*
Mercy Ranum, *program assistant*
Lynn Entine, *writer and editor*
Susan Kummer, *graphic artist*

donald@engr.wisc.edu
pudloski@engr.wisc.edu
ranum@engr.wisc.edu
Lynn Entine Writing & Editing
Artifax

Local Safety Rodeo gets drivers winter-ready

For the last two years Manitowoc County drivers have sharpened their winter plowing skills at a local, half-day Safety Rodeo held in October. The staff test their knowledge and skills on a plowing obstacle course, a loader course, a written quiz, and a vehicle inspection test. Top scorers in each category get prizes. Everybody takes the course including regular and backup drivers and shop employees.

"At first the employees were skeptical, but now, after they went through it one year, they'd be very disappointed if we didn't do it," says County Highway Commissioner Gary Kennedy. That enthusiasm is the biggest benefit, Kennedy says, along with what they learn from taking and discussing the various tests. More importantly, the program gives employees a clear message that management cares about safety.

Program basics—obstacle course layout, written quiz, judging criteria, etc.—come from the American Public Works Association (APWA) and the WisDOT Rodeo Manual. All judges are from outside the department and include WisDOT maintenance staff, other county highway superintendents, and sheriff's staff. It takes Kennedy and his two patrol superintendents most of one day to set up the course at the County Expo grounds and prepare for the lunchtime "fry-out."

In the afternoon are sessions on equipment updates, information on the county's planned projects, and reminders about WisDOT and county winter maintenance policies. One year, for example, the automatic sanding controls supplier came and demonstrated how to operate that equipment.

"We used to have safety meetings upstairs in a big room," says Kennedy. "It was hard for the guys to sit there all day." Looking for an alternative, Kennedy and his patrol superintendents attended a 1997 Rodeo program in Marquette County. "We were really impressed with what that program accomplished."

The local newspaper prints photos of the event and the category winners. The publicity is good community relations and promotes pride among the staff.

For more information contact Highway Commissioner Gary Kennedy at 920/683-4353. For a copy of the WisDot Rodeo Manual, contact Tom Martinelli, WisDot Bureau of Highway Operations, at 608/266-3745.

Budgeting—a balancing act

by Don Walker, T.I.C. Director

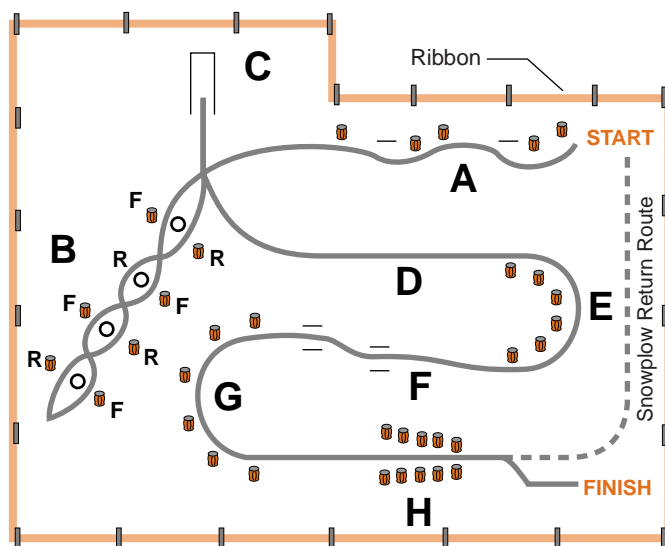
The annual process of budgeting is challenging and often frustrating. With many competing needs for limited public funds, it is very difficult to prepare a balanced budget. The obvious needs overwhelm the more subtle ones when there is not enough money to go around.

It is easy to justify reconstruction for pavements that are in poor condition. These usually receive a high level of public support. On the other hand, preventive maintenance projects (crack sealing, surface treatments, etc.) are widely recognized as cost-effective, but the need isn't as apparent. It is difficult to convince some decision makers these should have priority over more obvious needs. Highway and public works managers have a responsibility to encourage balanced budgets that include cost-effective preventive maintenance projects along with reconstruction needs.

Drainage and safety projects are other opportunities to provide balance by addressing less obvious needs. When a roadway pavement needs major rehabilitation, it is important to consider drainage and safety, even though this adds cost to a project and the need for adequate drainage and safety upgrading is normally not apparent to citizen boards and the public. It is a definite challenge to include these improvements with more obvious upgrading.

The measure of truly effective managers is their ability to balance a budget between obvious needs and the not-so-obvious but essential components of public works projects. Review your 1999 budgets for appropriate safety, drainage and preventive maintenance projects.

Obstacle course layout for local Rodeo



- | | |
|--|---------------------------------------|
| Event A: Parked Vehicles | Event D: Straight Line |
| Event B: Serpentine
(F – Forward)
(R – Reverse) | Event E: Outside Curve |
| Event C: Alley Dock | Event F: Offset Alley |
| | Event G: Inside Curve |
| | Event H: Diminishing Clearance |

New programs promote pedestrian safety and convenience

continued from page 1

"We found from a study that the North Avenue businesses tended to be patronized very heavily by people in the neighborhood. We wanted to encourage that," says Howard Young, engineering and operations administrator for the City of Wauwatosa. They are constructing bulges at intersection corners to slow vehicle traffic and make it easier for pedestrians to cross the street. They are also adding benches, bike poles, flowers, and new streetlights to make the area more attractive to shoppers. "It's the largest set of projects the city has undertaken in 15 years," says Young.

Walking has good support around the state. Hundreds of projects which combined pedestrian and bike facilities with new road construction or rebuilding were approved for state and federal funding last year. In addition, there were dozens of stand-alone pedestrian projects including: a sidewalk retrofit through the Beltline interchange on Madison's Gammon Road, sidewalks for shopping and employment access to Brookfield Square on Moorland Road in Brookfield, Eclipse Avenue and Portland Bridge improvements in Beloit, Milwaukee's Riverwalk development, Catlin Avenue

continued on next page

Calendar

T.I.C. workshops

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

Winter Road Maintenance Time to prepare for winter operations. This workshop covers equipment preparation, winter driving skills, the latest on ice-control materials, operations planning, and an opportunity to share experiences and tips. Past participants report that they improved their operations using what they learned in this workshop.

Sept 21	Tomah	Sept 28	Green Bay
Sept 22	Eau Claire	Sept 29	Brookfield
Sept 23	Cable	Sept 30	Barneveld
Sept 24	Rhineland		

Chainsaw Safety, Maintenance, and Operation Learn about personal protective equipment, proper maintenance procedures and the most effective techniques for using chainsaws. Taught by expert trainers from the Forest Industry Safety & Training Alliance, Inc., this workshop will include a classroom session in the morning and outdoor demonstrations in the afternoon.

Nov 2	Rhineland	Nov 9	Green Bay
Nov 3	Cable	Nov 10	Brookfield
Nov 4	Eau Claire	Nov 11	Barneveld
Nov 5	Tomah		

Basic Work Zone Safety This workshop is for road supervisors and maintenance personnel who plan, set up and inspect work zones. It covers temporary traffic control devices, the parts of a work zone, how to set up a work zone, mobile operations, and pedestrian, worker, and flagger safety.

Jan 20	Green Bay	Jan 27	Cable
Jan 21	Brookfield	Jan 28	Eau Claire
Jan 22	Barneveld	Jan 29	Tomah
Jan 26	Rhineland		

Local Transportation Issues on ETN

The following programs are offered jointly with the UW-Extension Local Government Center over the Educational Teleconference Network (ETN). There are ETN locations in every county. Register early to receive information packets before the session. If you haven't received a series brochure contact your local CNRED Extension agent for registration materials which must be sent to Madison, or call 608/262-9660.

Local Authority to Manage Roads Learn the authority and techniques local governments can use to manage roads through ordinances, permits, and processes on speed limits, weight limits, parking regulations, driveways, and utility cuts.

Oct 7 10:00 to 11:50 am

Local Transportation Aids and Other Grants Learn about funds availability, procedures, and requirements for general transportation aids and local road improvement aid programs.

Nov 5 10:30 to 12:20 pm

Bidding for Local Road Construction Projects Learn what specifications, processes, documents, management, and quality control to use to get the best value for local road projects.

Jan 14 10:30 to 12:20 pm

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

Managing Snow and Ice Control Operations, Oct 5-6

Implementing a Sidewalk Management System, Oct 7-8

Stormwater Detention Basin Design, Oct 26-29

Municipal Engineering for Non-Engineers, Nov 2-3

Evaluation and Rehabilitation of Pavements, Nov 4-6

Managing Urban Forestry Programs, Nov 5-6

Highway Bridge Design and Rating, Dec 7-9

GIS for Public Works Operations, Feb 8-10

Effective Bridge Rehabilitation, Feb 15-17

Maintaining Asphalt Pavements, Feb 22-23

Improving Public Works Construction Inspection Skills, Feb 24-25

Other Training Opportunities

The Wisconsin Chapter American Public Works Snow Plow Rodeo is an opportunity for your best crews to challenge the best crews from other communities in friendly competition. It's also a great way to get everyone tuned up and ready for winter. Held Wednesday, October 7, at the Waukesha County fairgrounds. Call Bill Kappel at 414/286-2369 for more details.

improvements in Superior, and walkways at Algoma Lakeshore, Marinette Bayshore, and Boulder Junction.

"Sidewalk placement is especially economical and cost-effective for municipalities if they agree to their construction when the street is done," Huber notes. Many sidewalk and bicycle projects fall under the federal "Enhancements" funding category.

Sidewalks and walkable communities

Inspecting and repairing existing sidewalks is basic to making walking safer. Pedestrians face many inconvenient and unsafe walking conditions including: broken, uneven surfaces and missing curb ramps; narrow, blocked or poorly maintained sidewalks; "uncrossable" street intersections; inadequate separation from vehicle traffic; and sidewalks that end abruptly or have sections missing.

The "Walker's Dirty Dozen" illustrated in the sidebar gives you a quick summary of pedestrians' top complaints about roadway safety and sidewalk design. Beyond the inconvenience and discouragement these conditions produce, they also put the municipality at risk of liability lawsuits for injuries.

One community with an excellent sidewalk maintenance program is Wauwatosa. "We inspect all sidewalks every year to identify 'trippers.' We take immediate action on them with temporary asphalt wedges," says Engineering and Operations Administrator Howard Young. They also respond immediately to complaints from neighbors and walkers. Their routine maintenance programs include a city-wide, 10-year cycle for permanent repairs and making sidewalk repairs part of street reconstruction projects.

"Our mission, of course, is to avoid hurting people not just to avoid lawsuits," says Young, "but the two go together. It's been a long time since we paid any claims at all on sidewalk liability." Young will be

one of the speakers at a two-day sidewalk management seminar in October.

Implementing a Sidewalk Management System, a UW-Madison Engineering Professional Development workshop, will offer practical techniques and tools for sidewalk planning, design, construction, and inspection. It includes a demonstration of WALKER, a new sidewalk maintenance software program similar to the PAVER pavement maintenance program for streets.

WALKER will include point and click images of common types of distress in concrete sidewalks and can be used in the field on a laptop. It will run on a PC under Windows 95/98 or NT. The program is being developed by Army Corps of Engineers Project Director M.Y. Shahin with funding from FHWA. It should be available early next year.

Videotapes on walkable communities are listed in Resources, page 6. More resources are listed below.



The Walker's "Dirty Dozen"

Pedestrians' top complaints about roadway safety and sidewalk design:

1. Missing sections of sidewalk, especially on key walking routes.
2. Bad sidewalk surfaces (uneven or broken concrete, uplifted slabs over tree roots).
3. Misuse of sidewalks (e.g. vehicles parked on sidewalk).
4. Bad sidewalk maintenance (overhanging bushes or trees, unshoveled snow on sidewalks).
5. Narrow sidewalks (no room for wheelchairs, or two people walking side by side; utility poles in the middle of sidewalk).
6. Missing curb ramps.
7. Poorly designed crossings of major streets, especially near schools or shops.
8. Motorists not stopping for people in crosswalks.
9. Barriers on potential walking routes.
10. High traffic levels and/or high speeds, especially near schools or parks.
11. Motorists cutting through neighborhoods to avoid busy arterial streets.
12. Locations with a documented history of crashes or near misses.

Source: The Campaign to Make America Walkable



For information on Wisconsin Pedestrian Road Shows, contact WisDOT Bicycle/Pedestrian Safety Program Manager JoAnne Pruitt Thunder at 608/267-3154. Also see the FHWA web page at <http://www.ota.fhwa.dot.gov/walk>. See the Calendar on opposite page for details on Implementing a Sidewalk Management System.

Participants applaud chain saw tips

"There were a lot of neat tricks they taught us," says Mike Endres, park supervisor, Village of Waunakee, "like when you want to lay down a tree, going the opposite way that the tree wants to go. I would have done it differently before." Endres was one of eight Waunakee employees who attended the T.I.C.'s **Chain Saw Workshop** last fall.

Nearly every street and highway maintenance crew uses chain saws at one time or other. But do you have the proper tools and equipment, use proper techniques, or know how to maintain them for safety and efficiency? Participants in last year's workshops say they learned a lot. "There were a lot of good little tidbits," says John Stoss, a Milwaukee maintenance mechanic. "I learned new sharpening techniques."

Workshops are being offered again in early November at seven locations around the state. The instructors will be qualified trainers from the Forest Industry Safety & Training Alliance, Inc. (FISTA) which was founded in 1991 to train loggers in safety and proper techniques to reduce injuries and improve production. FISTA recently added training for road maintenance operations and urban forestry.

"I think the basics were the safety equipment. I never

wore chaps before. I do now," says Robert Gruenwald, Town of Port Edwards town supervisor. He attended with the town's two employees who occasionally use chain saws to brush out roads. He also cuts and burns wood at home. Now he uses a hard hat and goggles regularly.

"We bought chaps, hearing protection, and eye protection equipment that we needed," says Stan Abing, Grant County Highway Commissioner. He and two patrol superintendents attended the workshop for an overview on chain saw safety and to help them plan to train their crews. "We'll look at FISTA's costs and availability," he says. FISTA offers on-site training programs for street and highway departments.

Even if you already know a lot about using chain saws, workshops can be helpful as Rex Zemke, village forester for the Village of Rothschild, learned. "I had gotten safety training in college," says Zemke, who has an urban forestry degree. "I actually had hands-on experience. But I still learned a lot, mostly in felling techniques. It's given me more comfort and peace of mind about what I can and cannot do."

*Seven **Chain Saw Safety, Maintenance, and Operation** workshops from November 2-11 (see Calendar, page 4) include a half day of outdoor demonstrations. The fee is \$35 per person. Details will be sent to all **Crossroads** recipients in early fall. Or contact Steve Pudloski at 800/442-4615. Videotapes are also available, see below.*

Resources

A limited number of copies of the printed materials listed are available from the Wisconsin T.I.C. unless otherwise noted. Call 800/442-4615 or use the form on page 7.

People Skills, by Robert Bolton, Simon & Schuster, Inc., 1986, 300 pp. A great book for new supervisors, this simple-to-read and apply handbook can help you be a better communicator. Learn skills to listen better, assert yourself, resolve conflicts, work out problems, and communicate calmly, even in stressful, emotionally charged situations. Only a few copies available.

Highway Accidents Involving Hazardous Materials, A Primer for First Responders, UW Extension, 10 pp. Describes step-by-step procedures for a safe, effective response to a hazardous materials accident. Five simple but essential safety rules help prepare you and your team for a successful response.

SAFER Manual, T.I.C., 1996, 40 pp. Uses pictures and brief text to identify potential hazards along roads, at intersections and railroad crossings, and related to roadway geometrics. Addresses the role of proper signs and pavement markings in reducing hazards. A hazard scale helps rate safety needs, identify problems needing immediate attention, and budget for future safety improvements.

State of the Art Design of Roundabouts, by Joe Bared, William Prosser, and Carol Esse, FHWA, presented at 1997 US Transportation Research Board Annual Meeting, 26 pp. This paper synthesizes current international and

US practice and makes practical design recommendations about geometrics, accident prediction, capacity and delays, and bicycle and pedestrian considerations. Includes a good list of references and design guidelines.

Inspectors Job Guide and Highway Maintenance Tables A handy, pocket-sized laminated guide full of valuable information for inspectors, supervisors, or anyone who has to plan, lay out, or inspect road and drainage projects. It covers the steps to follow when inspecting paving, walk, base course, geotextiles, culvert pipe installation, sewer work, structures, grading, and seeding. It has tables for figuring quantities for road maintenance activities. Comes in English units or metric. Get a copy for each of your inspectors, supervisors, and road crew leaders.

New videotapes in T.I.C. library

Tapes are loaned free through Wisconsin County Extension Offices. If you need a video catalog, call 800/442-4615.

Chain Saw Safety, Maintenance, and Operations #18 115, FISTA, 19 min. Demonstrates chainsaw maintenance, proper use of protective equipment, and felling, limbing, bucking, and topping techniques.

Body Mechanics for Arborists #18116, FISTA, 23 min. Detailed description for preventing back pain and injury while doing forestry activities in urban, suburban, and rural settings. Designed for municipal, utility, and tree service workers.

Snow Removal Application with Motor Graders #18137, CAT, 21 min. Plowing techniques using a CAT H Series motor grader. Covers safety, winging, benching, and use of tire chains. Applications include moldboard, V-plows, and wing plows. Intended for operators and foremen.

Using Snow Plows on Motor Graders #18171, FHWA-LTAP, 15 min. Snow plow attachment and safety checks. Good review of basic snow plowing with a grader. Best for operators with limited experience.

Winter Operations Training, Iowa DOT:

Introduction to Winter Operations #18172, 11 min. Equipment types and use including trucks, graders, loaders, and plows. Good introduction for new employees.

Pre-Season Preparation #18173, 30 min. Mounting snow removal equipment. Pre-season check of equipment. Intended for operators and shop personnel.

Equipment Operation #18174, 10 min. Routine equipment checks before and after plowing. Proper radio procedures and winter clothing tips. Intended for operators.

Plowing Techniques #18175, 30 min. Excellent review of snow plowing techniques on two-lane and multi-lane roads. Includes intersections, bridges, rail crossings, and ramps. Covers plowing, winging, ice blades, and V-plow use. Of value to operators and supervisors.

What you don't know CAN hurt you — safety code seminars

"You find out that as good as you think your safety program is, there are certainly areas that can be beefed up to comply with the interpretation given by the Department of Commerce," says Mike Pertmer, Director of Public Works for the City of West Allis.

Pertmer had attended a seminar where specialists from the department covered 11 topics from recently revised worker safety regulations. Safety code workshops designed for supervisors and key personnel are being offered by Commerce again this fall at three or four locations.

"We would like to hear from communities around the state that are interested in hosting a seminar," says Eric Hands, Program Manager for Public Safety and Health. Municipalities are regulated under state administrative code ILHR 32 administered by the Department of Commerce. Main topics of the regulations covered in the seminars are:

- Confined spaces
- Excavations
- Flammable liquids
- Hazard communication
- Hearing conservation
- Lockout/tagout
- Machine guarding
- Personal protective equipment hazard assessments
- Street/highways safety
- Ventilation and welding
- Walking working surfaces

Personal protective equipment (PPE) is one area where many participants realized they were deficient, according to Pertmer. The code calls for analyzing each job and piece of equipment to determine what PPE is necessary. Not only must PPE be available, it also must be described in a policies and procedures manual.

Unsafe conditions are also commonly found in confined spaces, according to Andy Victorey, Department of Commerce Health and Safety Officer. Toxic gases, like hydrogen sulfide gas and carbon monoxide, combustible



Confined spaces, like this underground tank, are one of 11 topics offered at safety seminars this fall.

gases like methane, and possible leaks of industrial hazardous materials and chemicals are the primary concerns.

"Hydrogen sulfide gas is very toxic. At 100 parts per million your sense of smell fatigues within a couple minutes and you no longer notice its distinctive

rotten egg smell. As little as 1000 parts per million is fatal with one breath. And it's also flammable," says Victorey.

Storm sewers, tanks, silos, storage bins, hoppers, vaults, pits. Any space large enough that an employee can enter and perform assigned work, that has restricted entry or exit, and that is not designed for continuous employee occupancy is a confined space. They are categorized as level one or two with different requirements for each type.

Employers are responsible for training employees and for having written procedures on how to enter a confined space and how to rescue from one. They must also evaluate their workplaces to identify, label and lock confined spaces, excluding street manholes.

Sadly, according to Victorey, the vast majority of confined space fatalities are rescuers rather than entrants. It is one of several areas of safety where what you don't know can not only hurt you, but might even kill you, says Pertmer.

Dates and locations for Commerce's Code Awareness Training Seminars were not set as of newsletter deadline. For information contact Program Manager Eric Hands at 608/267-4434.

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@engr.wisc.edu

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

Please send me information on _____

My idea, comment or question is _____

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

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



T.I.C. marks 15th year

This fall the Transportation Information Center celebrates 15 years of helping make your roadway job easier. Wisconsin was among the second group of 10 centers begun by FHWA.

Now Local Technical Assistance Program centers are operating in 50 states, Puerto Rico, and six Native American sites.

We face many of the same challenges in 1998 that we did in 1983: limited budgets, pavement and drainage problems, snow plowing operations, staff management, and communications with elected officials and citizens.

But over the years we have developed a generous supply of print materials, video resources, computer programs, training workshops, and other tools that help make the job easier and more efficient. Thanks are due, in large part, to the many streets and highways professionals who shared their experience and wisdom with each other through the medium of the T.I.C.

From a modest beginning—part time director, four to six workshops a year, and a quarterly newsletter—the T.I.C. has grown into a rich and effective resource.

In 1997 we mailed out 4262 reports and fact sheets and sent 596 videos from our lending library. We held 39 days



Happy 15th Birthday!

of T.I.C. workshops for 2114 participants, ran four workshops for 415 local participants, and sponsored two satellite workshops for 107.

Over the years we have developed and continue to offer 18 fact sheets, three PASER Manuals and a SAFER Manual, and the PASERware pavement management software. Since the first **Crossroads** newsletter appeared in December 1984, we've published 54 quarterly issues, growing from four to eight pages. The latest addition is our Web site <http://www.engr.wisc.edu/centers/tic>.

T.I.C. now has six part-time staff: Don Walker, who has been the Center's director since the beginning, along with coordinators Steve Pudloski and Bob Fey, clerical staff Mercy Ranum and Donna Fenske, and computer support staff Judy Pounders. Writer/editor Lynn Entine and graphic artist Susan Kummer complete the team.

Address incorrect?
Please call or write us with
the correct information

Route To

Do not use for return mail

Nonprofit Organization	
U.S. Postage	
PAID	
Madison, Wisconsin	
Permit No. 658	

TRANSPORTATION Information Center — LTAP
University of Wisconsin—Madison
432 North Lake Street
Madison, WI 53706



Local Technical Assistance Program (LTAP)

phone 800/442-4615 • fax 608/263-3160 • e-mail ranum@engr.wisc.edu

