

CROSSROADS



WISCONSIN TRANSPORTATION INFORMATION CENTER – LTAP at the University of Wisconsin–Madison



U-turn legal at more intersections

WISCONSIN adopted a revised rule on U-turns in January that makes it legal to execute a U-turn at signalized intersections unless it is unsafe to do so or there is a sign prohibiting a U-turn. Since

the announcement, state and local road officials have been busy evaluating the intersections they control and, only where a safety issue exists, posting *NO U-TURN* signs.

A benefit of allowing U-turns is improved access to properties along divided roadways with barrier medians.

Why the change

Representatives from the Wisconsin Department of Transportation and engineering consultants say a benefit of allowing U-turns is improved access to properties along divided roadways with barrier medians. They note that transportation authorities across the state are upgrading many congested streets and highways with new barrier medians to improve capacity and increase safety. Such improvements affect access to businesses and residences along the roadway by eliminating left turns mid-block. The revised law offers motorists the remedy of a legal U-turn at the nearest intersection. Studies show that high volume roads with barrier medians and U-turns at intersections are safer than similar roads with no median control.

The change also aligns Wisconsin with 48 other states that allow U-turns at signalized intersections, reducing cross-border confusion with drivers from neighboring states.

State Traffic Engineer of Design Tom Notbohm explains that the basic rules of a safe U-turn remain



Sign in median prohibits both U-turns and left turns at intersection on a divided highway.

in force with the revised law. Motorists must make the turn from the left-most lane and use their left-turn signal indicator. Vehicles on an intersecting street attempting to turn right on red must yield to the U-turn.

Exceptions also remain. Besides prohibiting U-turns at mid-block on undivided through streets and other undivided roadways in business districts, the law specifies no U-turns at intersections with:

- Signs prohibiting the maneuver posted by an agency in charge of maintaining the road
- Visibility less than 500 feet on a curve or hillcrest on an undivided highway
- Traffic officer controlling intersection, unless officer directs the U-turn
- Conditions that make U-turns unsafe or likely to interfere with other traffic

Post signs sparingly but put safety first

Since U-turns at signalized intersections are the rule now rather than the exception, WisDOT recommends road officials resist posting unnecessary signs. Matt Rauch, WisDOT Signing Engineer, says the new provisions rely on drivers to exercise “due care” in judging whether they can make a safe U-turn at an intersection without a sign that warns them not to.

Safety, however, is the primary measure for deciding where *NO U-TURN* signs make sense. Rauch advises local road officials to look first at any problem intersections, locations where layout, traffic patterns, volume or other factors make U-turns difficult or risky.

“Where you know there is a conflict point, evaluate the intersection and get it posted if it isn’t already,” Rauch suggests. “After



Side-by-side comparison of new and old U-Turn laws on page 4.

Q&A on invasive species



Definitions

Adapted from the Wisconsin DNR's new *Field Guide*.

Prohibited species

Not established in the state or present in limited numbers. Do not transport, possess, transfer, sell or introduce these plants. Goal is to eradicate.

Restricted species

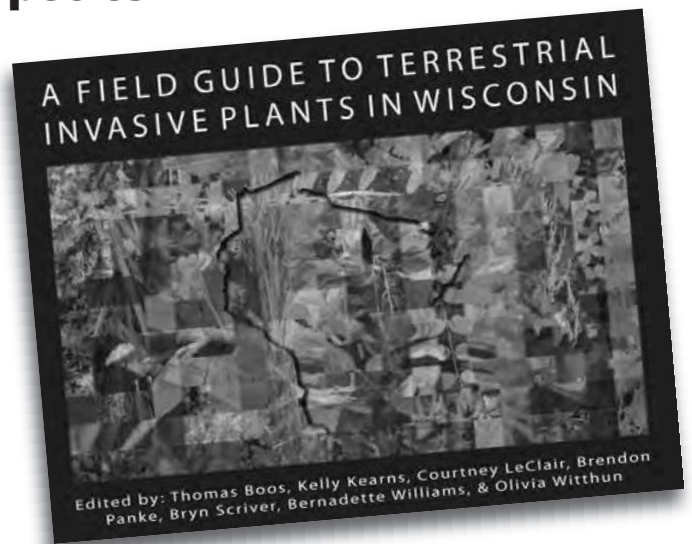
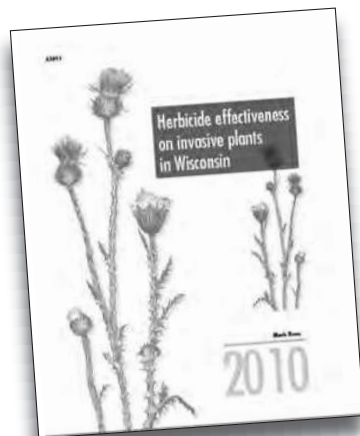
Widespread presence in the state. Do not transport, transfer, sell or introduce these plants. Removal preferred but not required.

METHODS for stopping the spread of invasive plant species in rights of way (ROW) was one of the topics covered in the Transportation Information Center's *March Road Maintenance* workshops. Representatives from the state Department of Natural Resources (DNR) reviewed new state regulations that address how local road officials are to incorporate management of prohibited and restricted plants into their maintenance programs.

They also introduced *A Field Guide to Terrestrial Invasive Plants in Wisconsin*, a publication to help ROW managers identify and control invasive plants. The field guide (pictured right) is available online through the DNR. The Wisconsin Towns Association is distributing one free copy to every town and about half of Wisconsin counties have ordered copies for all staff members. The DNR says that each local government placing a first-time order receives one free. Local officials can purchase additional copies this summer for \$5 a piece.

Answering workshop questions

Workshop participants raised a range of questions about working effectively with the regulations. This cross-section of questions and answers from those sessions highlights concerns shared by local road officials across the state.



Q *If I see something that is on the list of prohibited plants, what do I report to the DNR?*

A If the species is prohibited under NR 40 in any part of the state, the DNR needs to know the location, the name of the landowner (if possible) and the size of the population in order to help control it. A photo or plant specimen sent to the DNR's invasive plant team is helpful. Find "reporting instructions" at <http://dnr.wi.gov/invasives/classification/Report.htm>. There is no need to report restricted species.

Q *If I have a prohibited plant in my back 40, where can I learn what to do about it?*

A The Wisconsin DNR has Fact Sheets with control information on its website at <http://dnr.wi.gov/invasives/plants.asp> that describe recommended control methods based on the species. The UW-Extension also offers a new publication (*Herbicide Effectiveness on Invasive Plants in Wisconsin*, pictured left) that identifies which herbicides work on which individual species based on the labels. See link under *Resources*, page 3.

Q *What should we do in cases where these plants come in with purchased gravel or soil?*

A Look for alternative sources of gravel or soil if possible or request clean materials from current suppliers. If your agency is responsible for a gravel pit, make an effort to control any invasive plants growing in and above the pit.

Q *How can we adjust our mowing schedule when WisDOT limits our mowing on state roads to once a year?*

A It is not necessary to revise your mowing schedule on all roadsides. Mow early only on those stretches with restricted or prohibited species. Figure out mowing times based on when the weeds will flower and try to mow just prior to or in the early flowering stage. The Wisconsin Council on Forestry has developed mowing guidance charts as part of the *Transportation and Utility Rights-of-Way Best Management Practices*. These are available at <http://council.wisconsinforestry.org/invasives/>.

Q *Do we need to mow fence-to-fence earlier in the year?*

A If you have invasive species on some of your roadsides, mowing fence-to-fence earlier in the year might be a good practice but only where it will prevent seed from spreading.

Q *Where is the money going to come from to do this work?*

A There is no additional funding currently available. However, ROW managers can do a lot to prevent the spread of invasive plants by changing the time mowing occurs. For prohibited species, it is possible that DNR and local volunteers can aid with some control work.

Q *How should we dispose of brush or woodchips of invasive shrubs? Is it OK to take the material to the local yard waste facility?*

A If the brush has seeds, it is best to dispose of it on the site or burn it. On-site disposal includes chipping brush, and piling, burying or mulch mowing materials (clean mower after mulching).

Q *How do these management methods affect nesting birds?*

A Research has shown that in Wisconsin, few species of native grassland birds use roadsides for nesting habitat. If there are large amounts of invasive plants in the ROW, most nesting birds will not find these habitats suitable. Managing the spread of the invasive plants outweighs consideration of a few possible nests. The US Fish and Wildlife Service knows about this change in policy.

Q *Can we spray these weeds?*

A Targeted use of the correct herbicide is a good method for controlling most of these invasive species. Mowing prevents their spread, but herbicide is necessary to kill them. At this time, counties do not have WisDOT approval to spray on state highways, but counties, towns and other local units of government can determine what controls work best on their roads.

Q *Do I need to be certified to spray pesticides on town roadsides?*

A Government and municipal employees need commercial pesticide applicator certification and an individual license if they are treating an invasive species with a restricted-use pesticide product with the goal of maintaining a safe, effective right-of-way. The UW-Extension publication on herbicide effectiveness contains information on which are restricted use. Applications done strictly to control invasive plants require individual certification under either the *Field and Vegetable* category for rural areas or the *Turf and Landscape* category for work in urban areas. Maintaining a right of way or managing the spread of invasive plants with non-restricted use



Wild parsnips bloom mid-summer and are prevalent along roadsides.

pesticides does not require certification or licensing. Employees of public agencies that need certification (good for five years) can sign up for the University of Wisconsin Pesticide Applicator Training Program. See link under *Resources*. Although exempt from paying the license fee, public employees must obtain and hold a valid license.

Call DNR to learn more

The more ROW managers know about identifying and managing invasive species in their areas, the easier it is to include the techniques in routine maintenance practices. DNR Plant Conservation Program Manager for Endangered Resources Kelly Kearns encourages local road officials who want to learn more to contact her. ■



The more ROW managers know about identifying and managing invasive species in their areas, the easier it is to include the techniques in routine maintenance practices.

Contact

Kelly Kearns
Wisconsin DNR
608-267-5066
kelly.kearns@wisconsin.gov

Resources

<http://dnr.wi.gov/invasives>

Link to site for downloading or ordering *A Field Guide to Terrestrial Invasive Plants in Wisconsin*.

<http://ipcm.wisc.edu/pat>

Website of University of Wisconsin training and testing program for Wisconsin Pesticide Applicator Certification. Information about training manuals and other resources. Or contact Rose Scott at 608/262-7588 or PAT-program@facstaff.wisc.edu.

<http://learningstore.uwex.edu/invasive-species-C296.aspx>

Link to publications on the UW-Extension Learning Store site about identifying and managing invasive species, including *Herbicide Effectiveness on Invasive Plants in Wisconsin*.

U-turns legal at more intersections

from page 1

Local road officials should consider reviewing locations throughout their jurisdiction then remove U-turn signs that are no longer relevant, decide if the signs they leave in place are adequate and add signs where necessary.

that, take a look at your entire inventory of existing *NO U-TURN* signs and remove any that no longer make sense.”

He estimates WisDOT will remove more than half of its existing *NO U-TURN* signs as part of the evaluation process related to the revised law.

Priority intersections

Three intersection types lead the priority list of signalized locations that Rauch says WisDOT views as critical. The department has or will update traffic control signage at these locations. The list is a good guide for local governments as they evaluate where and when to install *NO U-TURN* signs.

1) Left turn/right turn overlap

Turn signal in left lane on one leg of the intersection is synchronized with right-turn arrow on an intersecting street. Consider prohibiting U-turns at intersection or post *U-TURN YIELD TO RIGHT TURN* sign at U-turn position.

2) Prohibited left turn

No left turn allowed and no space for U-turners to stop out of traffic before making the turn. Post sign that combines *NO U-TURN* with *NO LEFT TURN* arrows.

3) Proximity to railroad tracks

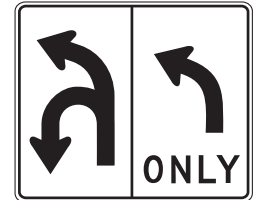
Intersection close to RR crossing where traffic signal inter-connects with RR crossing and operates with advance pre-emption. Post *NO U-TURN* sign on approach that crosses RR tracks.

Other situations that might call for posting signs include an intersection where it is hard to see oncoming vehicles or there is inadequate width to make a safe turn—no backing up to make a U-turn under the new law. Another example for restricting U-turns is an intersection with streets that cross at odd angles. Road officials need to determine if conditions at these locations warrant posting *NO U-TURN* signs or if they can count on motorists to judge what is safe.

Be specific with signs

Removing the blanket prohibition on U-turns at signalized intersections requires local road officials to review safety issues at locations throughout their jurisdiction to remove signs that are no longer relevant, decide if the signs they leave in place are adequate and add signs where necessary. Rauch describes some scenarios and the options WisDOT is using.

There are locations where a passenger car can make a safe U-turn but trucks cannot. Because the statute bans backing up to complete a U-turn, this might be a place for a *NO U-TURN* sign with a *TRUCKS* plaque underneath to specify the prohibition. “Resist automatically prohibiting *all* turns at these locations,” Rauch advises.



At an intersection with dual left-turn lanes, the rule requires U-turns to use the left-most lane. A sign like the revised R3-8 above addresses this distinction.

And a *NO U-TURN*/time-of-day plaque combination is a solution on roads or streets where peak-hour volumes are an issue or there are other reasons to restrict when U-turns are allowed.

Design for U-turn safety

The U-turn change also affects design of road projects that feature signalized intersections. Pat Hawley, Traffic Planning Project Manager with Wisconsin-based



NOTES:

Business district means the territory contiguous to a highway when 50 percent or more of the frontage thereon for a distance of 300 feet or more is occupied by buildings in use for business.

Residence district means the territory contiguous to a highway not comprising a business district where the frontage on such highway for a distance of 300 feet or more is mainly occupied by dwellings or by dwellings and buildings in use for business.

U-TURN DESCRIPTION

OLD LAW

U-turn at signalized intersection

Prohibited.

U-turn at intersection controlled by a traffic officer

Prohibited unless instructed by the officer.

U-turn at intersections controlled by stop or yield control
U-turn at uncontrolled intersections
U-turn midblock on a road in a residence district that is not a through highway

Allowed.

U-turn midblock on an undivided street in a business district
U-turn midblock on an undivided through highway in a residence district
U-turn at a place where the maintenance authority has placed a *NO U-TURN* sign

Prohibited.

U-turn midblock on a divided highway in a business district
U-turn midblock on a divided highway in a residence district

Allowed at an opening or crossover established by the authority in charge of maintenance of the highway.

Backing a vehicle to make a U-turn

Prohibited at intersections controlled by a signal or traffic officer.



Choosing sign location

WisDOT Signing Engineer Matt Rauch suggests this hierarchy of sign placement when choosing where to post signalized intersections on divided highways for No U-turns.

- FIRST** – Far side median signal pole if no conflict with *KEEP RIGHT* sign
- SECOND** – Side-by-side with *KEEP RIGHT* sign on far side median
- THIRD** – Near side median
- FOURTH** – Underneath *KEEP RIGHT* sign on far side median

The far side median location is the first choice for a NO U-TURN sign on a divided street or highway.

“Legal U-turns create a smoother pipeline for traffic flow and reduce crash rates.”

R.A. Smith National, sees the change in the law from both the operational and safety sides. He advocates the safety benefits of medians, saying they separate traffic lanes, restrict locations for left-turns and provide refuge for left-turning vehicles where allowed.

“Legal U-turns enhance those benefits,” Hawley says. “They create a smoother pipeline for traffic flow and reduce crash rates.” He cites studies that show a 40 to 60 percent reduction in

overall crashes and a 45 percent reduction in pedestrian-involved crashes when raised medians are in place.

Hawley’s design considerations parallel many of the same points road officials will take into account as they evaluate U-turn safety at existing intersections. For example, U-turn maneuvers require more sight distance than left turns, so a road design needs to allow adequate visibility for U-turns. Any intersection operational analysis should include U-turn

volumes. More cars or trucks doing U-turns at signalized intersections may require a longer left-turn lane to prevent having a line of vehicles bring the through lane to a standstill.

Another consideration is leaving enough distance between driveways and an intersection where it is safe to do a U-turn. Drivers exiting from one driveway who intend to do a U-turn at the next intersection need enough length to move across traffic lanes to the left-most lane to make the U-turn.

Signal timing is an important component of safe U-turn traffic control. Hawley says a strategy to consider when there are high U-turn volumes is to add more green time and consider protected phasing for left turns.

Respond with orderly process

News of the legalization of U-turns at signalized intersections initially surprised many local government agencies. But as public information efforts by the state spread the word to Wisconsin motorists—through motorist flyers or handbooks, drivers education materials and other programs—local officials responsible for road safety need to respond with an orderly process of installing signs at intersections where U-turns pose a safety risk and eliminating any unnecessary NO U-TURN signs. ■

Contacts

Pat Hawley
R.A. Smith National
262-317-3204
Pat.Hawley@rasmithnational.com

Tom Notbohm
Wisconsin Department of Transportation
608-266-0982
thomas.notbohm@dot.wi.gov

Matt Rauch
Wisconsin Department of Transportation
608-266-0150
matt.rauch@dot.wi.gov

Resources

<http://www.dot.wisconsin.gov/drivers>

WisDOT page that links to details on the law changes that include legal U-turns through “laws and regulations.”

<http://mutcd.fhwa.dot.gov/>

Federal Highway Administration *Manual on Uniform Traffic Control Devices (MUTCD)* site with information on standard highway signs and markings, including No U-turn options.

NEW LAW

Allowed, exercising due care, when the U-turn can be made safely without interfering with other traffic. Except that U-turns are prohibited where there is less than 500 feet sight distance at curves and hills on an undivided highway.

Prohibited unless instructed by the officer.

Allowed, exercising due care, when the U-turn can be made safely without interfering with other traffic. Except that U-turns are prohibited where there is less than 500 feet sight distance at curves and hills on an undivided highway.

Prohibited.

Allowed at an opening or crossover established by the authority in charge of maintenance of the highway, provided that due care is exercised and the U-turn can be made safely without interfering with other traffic.

Prohibited at an intersection controlled by an official traffic control device.

Agreement expands mutual assistance concept

*The statewide agreement does not supersede existing local agreements; it augments or enhances them instead. Local governments can maintain agreements they have **and** belong to the statewide mutual assistance network.*

PUBLIC WORKS and highway departments across Wisconsin often help each other out during flooding, windstorms and other emergencies, or at times when a routine situation becomes more than routine. The trend toward formal local agreements to provide needed resources to neighboring agencies expanded late last year when Wisconsin approved a Statewide Mutual Assistance Agreement that establishes a uniform approach to how public works officials assist one another with equipment, personnel and expertise in the event of natural or man-made disasters.

Part of an effort by Wisconsin Emergency Management (WEM) to improve coordination of an effective and efficient regional emergency response, the agreement's guiding principles mirror the standardized agreement local fire departments use.

WEM spokesperson Lori Getter says the agreement recognizes public works as an important component of Wisconsin's emergency response. "When disaster strikes, we assume public works will be there to remove debris, set

up roadblocks and maintain other essential services," she explains. "Yet their resources are finite, too. The network created through the statewide agreement gives local agencies a way to access backup resources in a moment."

Consulting with the Wisconsin Chapter of the American Public Works Association (APWA) about the agreement, WEM worked with the Chapter's Emergency Management Committee to develop what became the final draft of a document that formalizes inter-governmental collaboration in public works. Bruce Slagoski, a Supervisor with the City of Beloit Public Works Department and Chair of the committee, says the statewide mutual assistance agreement helps make sure every agency that provides or asks for available resources uses the same language and has the same expectations.

The document defines public works as "The physical structures and facilities... to provide services and functions for the benefit and use of the public, including water, sewerage, waste disposal, utilities, and transportation."

Augment existing agreements

Slagoski explains that local governments are not required to adopt the statewide public works mutual assistance agreement but doing so strengthens the framework of Wisconsin's multi-jurisdictional, multi-agency emergency response. At the same time, the statewide agreement does not supersede existing local agreements; it augments or enhances them instead. Local governments can maintain agreements they have **and** belong to the statewide mutual assistance network.

The statewide agreement includes definitions of key terms and an orderly process for requesting or rendering aid. It addresses jurisdiction, insurance and indemnification issues. The new provisions also require departments to name an authorized representative who manages the process.

Slagoski says the section on compensation clarifies an important point that other agreements rarely address. In most emergencies, communities cover their own costs of rendering aid. But under



Barrier erected on a road in Spring Green during the area's flood events of 2008.

the new agreement, if a disaster-stricken community is eligible to recover costs from other parties, including the Federal Emergency Management Agency (FEMA), aiding units can invoice the stricken unit to request and receive compensation to cover their costs.

Rendering assistance is not mandatory under the agreement. "Having the statewide agreement on the books does not require departments to give up their equipment or people at a time when they can't or don't want to," Slagoski explains. "But it makes it easier to act quickly without excessive paperwork getting in the way."

Getter says WEM is expanding its E-sponder emergency operation database to include public works resources from participating local governments. The software tracks events and makes it easier for fire, police and now public works to identify and contact other communities for help in an emergency.

Culture of mutual aid

The resources give-and-take between communities is familiar to public works agencies. The growing culture of mutual aid in Wisconsin includes departments sharing the purchase of specialty equipment or leasing equipment from a neighbor to complete a project. One department's idle dust control tanker truck and sprayer meets another department's need for an anti-icing vehicle. Its proponents say the statewide mutual assistance agreement builds on this kind of non-emergency cooperation.

Jim Hessling, Public Works Director for the Village of Cottage Grove, who also serves on the APWA committee, has his own experience with mutual assistance agreements. In 2005, he formed one with other small communities in south central Wisconsin, a group that now includes 14 local governments. Each community responds based on their ability to help.

Hessling tested his local agreement in 2008 when Cottage Grove suffered flash floods following heavy rains. The City of Stoughton arrived with pumps and someone to run them. In return, when Stoughton needs extra equipment for traffic control during an annual local event that brings big crowds to town, they borrow from Cottage Grove. Hessling says the agreement is based on services in kind, they do not charge one another.

The City of Wauwatosa also initiated a public works mutual assistance agreement in 2005 with several area communities and is part of a countywide agreement that connects all Milwaukee County communities. William Kappel, Wauwatosa's Director of Public Works and a past president of the Wisconsin APWA, offers examples of how a formal agreement can streamline the process. In one case, a mutual aid partner needed equipment and personnel to speed the removal of downed trees on main roads after a wind-storm. When a major garage fire caused substantial equipment loss for another nearby community, Kappel's department was one of four agencies that supplied them with trucks to keep refuse pickup and other activities going on an emergency basis.

Emergencies are local

Kappel notes the new statewide agreement effectively resolves grey areas in previous agreements—like clarifying terms and equitable distribution of FEMA dollars. It also raises the bar for public works staff members now that they are designated as first responders along with police and fire.

"The expectation is that public works is part of a multi-agency response," Kappel says. "And since most emergencies are local, we have to be ready." He adds that as more people train in the National Incident Management System (NIMS), a FEMA program for managing incidents at all jurisdictional and functional levels, the more valuable they become in a



Drums warn motorists of a washed-out road.

mutual assistance emergency management scenario.

The NIMS training covers preparedness, communications, resource management and other emergency procedures. Kappel and Slagoski point out that Wisconsin is a leader nationally in getting public employees trained in NIMS.

Something to contribute

There is a precedent in local government for sharing resources across town and county boundaries. These relationships are important, especially in smaller communities. The statewide mutual assistance agreement does not diminish or replace those relationships or prohibit public agency managers from honoring their local agreements.

What if officials managing public works in smaller communities hesitate to participate in a formal mutual assistance agreement because of limited resources? "All of us have something to contribute," suggests Hessling. "Even sending one person to the scene of an emergency for a short time provides additional manpower. And every response is easier with an agreement in place."

The APWA committee is recruiting members to help inform public works directors in their regions about the Wisconsin agreement and urge local governments to adopt it. Local public works officials can download copies of the statewide public works mutual assistance agreement at the Wisconsin APWA website. ■

"All of us have something to contribute, even sending one person to the scene of an emergency for a short time provides additional manpower. And every response is easier with an agreement in place."

Contacts

Randi Wind Milsap
General Counsel
Wisconsin Department
of Military Affairs/WEM
608-242-3072
randi.milsap@wisconsin.gov

Bruce Slagoski
City of Beloit
608-364-2929
slagoski@ci.beloit.wi.us

Resources

<http://emergency-management.wi.gov/>

Wisconsin Emergency Management site with links to preparedness, response and recovery information.

<http://wisconsin.apwa.net/>

Downloadable copy of statewide public works mutual assistance agreement at documents link under Resources at the Chapter website.

Manage an effective bid process



Central to the bid process is development of bid documents that describe the scope of the proposed work in clear and complete detail to ensure comparable competitive bids.

LOCAL GOVERNMENTS must use a sealed bid process for many street and highway construction projects. Central to this process is development of bid documents, including an advertisement for bids, bid forms and specifications that describe the scope of the proposed work in clear and complete detail to ensure comparable competitive bids.

Even the best effort to produce and circulate comprehensive bid materials can generate questions. To maintain a fair process and secure qualified bids from the majority of bidders, bidding agencies should take a consistent approach that includes communicating every answer to **all** prospective bidders.

Use available resources

Wisconsin Statute 66.0901 governs municipal public works, contracts and bids. Consult with legal counsel on any concerns about meeting requirements specified in the statute. The Transportation Information Center (TIC) offers

sample specifications and bid forms that are a useful starting point to assembling the bid documents. Contact TIC to request these materials.

Strengthen process

This article suggests how local road officials can strengthen or upgrade their existing bid process, from requesting bids to the bid opening. Send a bid package to prospective bidders. Keep a list of all those who hold a bid package and anyone who requests a package that is not on the original roster of bidders. The list should include company names, primary contact person and complete contact information (address, phone, fax and email) for every contractor. Make sure any information related to the bid goes to every contractor on the list.

Develop an orderly approach for dealing with questions from prospective bidders and make sure everyone in the bidding agency who fields bid questions follows it. Consider incorporating some or all of the ideas outlined here into the bid process.

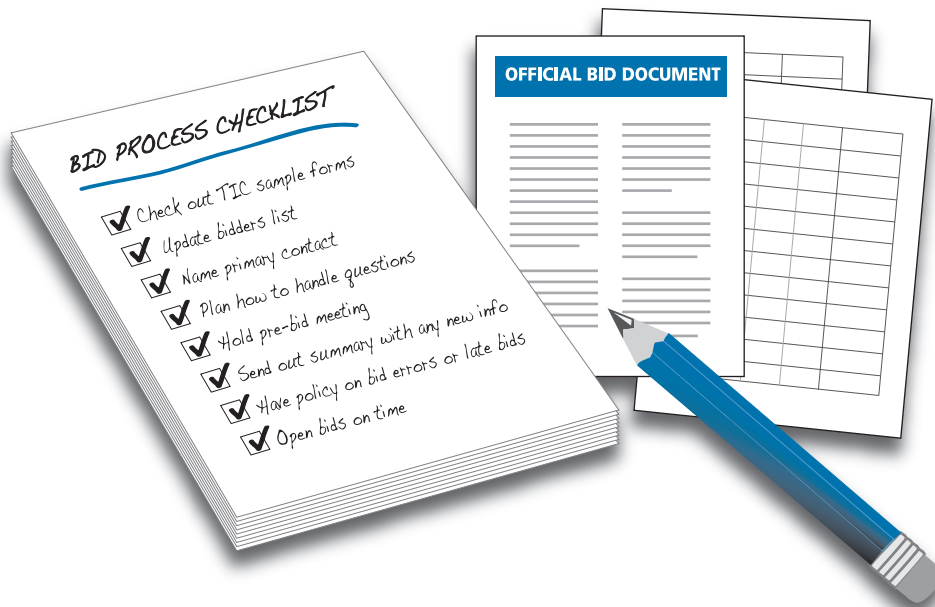
Send a summary from the pre-bid meeting to the contractor list as an addendum to the bid documents, especially if points raised at the meeting change anything in the specifications.

Host pre-bid meeting

A face-to-face session with prospective bidders provides additional project information and a forum for questions. Require all participants to sign in and, if possible, include a visit to the project site. Document all questions and answers then circulate a written summary to all prospective bidders, even those who do not attend. Some local agencies keep an audio or video record of their pre-bid meetings.

Schedule the pre-bid meeting two to three weeks before the bid opening so estimators have time to review bid documents and the project site. This gives the bidding agency time to answer questions and circulate changes identified in the pre-bid meeting.

Should the pre-bid meeting be mandatory or optional? Mandatory meetings make sure all bidders attend and get the same information about the project. The presence of a large number of contractors at a pre-bid meeting can get bidders to sharpen their pencils on price. When mandatory attendance is sparse, they will know there is less competition for the job. Be prepared to reject bids from bidders who do not attend a mandatory session.





Road construction projects benefit from a bid process that attracts competitive bids from reputable contractors.

Send a summary from the pre-bid meeting to the contractor list as an addendum to the bid documents, especially if points raised at the meeting change anything in the specifications. Outline all changes clearly and ask bidders to acknowledge receiving the addendum.

Establish contact and deadlines

Designate one person in the bidding agency as the primary contact in a bid process. He or she is responsible for documenting all questions and responses, and providing consistent information to prospective bidders and others concerned with the project.

Although it might discourage some prospective bidders from submitting them, consider requiring questions in writing to limit confusion. This approach also makes it easier to document inquiries and responses.

Give contractors a deadline for submitting questions so there is adequate time to document and distribute the answers to all prospective bidders.

Use formal bid opening process

Open the bids at the time and location specified in the bid advertisement. Do not change the time or location without notice and stay on schedule. Keep all bids sealed and secure until the scheduled opening.

Choose a location where bidders can observe the process. Have at least two people from the bidding agency present. One person opens and reads the bids aloud while the other person records bid amounts. Prepare a recording form in advance with the names of all prospective bidders.

Anticipate late bids

Be prepared for surprises. The general advice for dealing with a bid submitted after the deadline is to return it to the bidder unopened. Some court decisions, however, indicate it is alright to accept a late bid if doing so is in the best interests of the bidding agency, it is clear the bidder gains

no advantage and there was no collusion involved in the late bid. It is smart to have a local policy in place before this situation occurs.

Manage requests to withdraw

If a contractor asks to withdraw a bid before the bid opening, return the submission unopened. Document the date of the transaction and inform the bidder they cannot resubmit on the same project after the initial bid is withdrawn. If the bidding agency rejects all bids and rebids the contract, the bidder who withdrew can participate in the rebid.

State statutes are specific about how to handle the situation when a contractor wants to withdraw a bid *after* the bid opening due to an error. The bidder must provide “clear and satisfactory evidence of the mistake, omission or error” in writing as part of their request and prove the error was not the result of “any careless act or omission on the bidder’s part in the exercise of ordinary care in examining the plans or specifications.” The bidding agency can decide to accept the bidder’s request to withdraw an erroneous bid and release the bid bond.

Careful process secures realistic bids

Bidding agencies must take a thorough and even-handed approach in communicating with and responding to prospective bidders—from answering questions to dealing with bid errors. A good and careful process ensures fair treatment of all bidders, minimizes risk and uncertainty and offers the best chance of securing realistic bids from reputable contractors. ■

Some court decisions indicate it is alright to accept a late bid if doing so is in the best interests of the bidding agency.

Resources

Transportation Information Center

To request sample bid and specification forms:

TEL 800-442-4615
FAX 608-263-3160

<http://www.legis.state.wi.us/>

The Wisconsin Legislature site provides links to state laws that include the General Municipality Law and Statute 66.0901 that covers public works, contracts and bids.

Training pays off even when budgets are tight

Wisconsin local governments have access to a wide choice of affordable training resources in their own backyards.

CUTTING BACK on staff training has a measurable downside. Budget-strapped public agencies that eliminate training altogether or rely on minimal on-the-job training will see the hidden costs as the lack of technical training keeps new hires from getting up to speed quickly and leaves current employees in a rut. Economizing in this area might save money in the short term, but over the long haul the approach can undermine productivity and morale.

Studies show that employees energized by programs where they learn something new go back to work with valuable ideas for getting things done more efficiently and effectively. Targeted training also helps agencies retain good people. Researchers say one of the top reasons good employees move to other organizations is a lack of opportunity to learn new things, and develop and grow on the job.

Wisconsin local governments have a wide choice of affordable training resources in their own backyards. Reasonably priced quality options for management training, important for improving leadership skills in an organization,

and training in technical skills are found throughout the state.

Practical programs

The Transportation Information Center (TIC) offers one-day workshops in seven locations around the state that focus on technical topics of interest to local officials responsible for maintaining local streets and highways. Updated annually to include current issues and new methods, equipment and requirements, these practical programs cover the basics:

- *Winter Road Maintenance and Operations*
- *Highway Safety*
- *Work Zone and Flagger Safety*
- *Road Maintenance*
- *Using PASER and WISLR to Manage Your Roads*

Other training courses offered by UW-Madison Engineering Professional Development (EPD) address more advanced and focused technical topics, including Fleet Management, Storm Water Management, Soils Engineering, Repair of Concrete, Concrete Bridge Repair, Project Management, and Public Works Construction Inspection. TIC scholarships for

these intensive, multi-day courses cover two-thirds of the registration fee. In the past fiscal year, 17 local government employees received scholarships, saving their communities a total of more than \$10,000 in registration fees.

TIC also offers On-Site Workshops in Work Zone Traffic Control and Basic Surveying that allow one or several local agencies to train employees at their own facility. The TIC Video Lending Library is a good source for transportation-related training videos and DVDs that agencies can fit into their work schedules.

Management and supervisory training

Co-sponsored by the UW-Madison Department of Continuing Studies and the Wisconsin Chapter of the American Public Works Association (APWA), two training programs provide participants with the chance to build essential leadership skills that prepare them to supervise and manage people and projects. The national APWA recognizes both the Public Works Supervisory Academy (PWSA) and the Public Works Management

Resources

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

TIC site has information on training workshops and free library materials.

<http://www.dcs.wisc.edu/pda/public-mgmt/academy.htm>

Link to Public Works Supervisory Academy site with class and registration details on the fall 2010 and spring 2011 program.

<http://www.dcs.wisc.edu/pda/public-mgmt/institute.htm>

Link to Public Works Management Institute site with information about the fall/spring program registration. *Classes also available individually.*



Other training opportunities

Programs to gain certification in correct and safe procedures are available to local governments. And many groups in the state offer training programs that make it possible, at low cost, to keep employee skills up to date.

Pesticide Operators Training (now on DVD) from the University of Wisconsin <http://ipcm.wisc.edu/pat>

Highway Technician Training Certification Program <http://www.uwplatt.edu/htcp/>

Chain Saw Safety Training (DVD/hands-on) from Forest Industry Safety & Training Alliance (FISTA) <http://www.fistausa.org/>

Wisconsin County Highway Association Conferences <http://www.wcha.net/>

American Public Works Association Wisconsin Chapter Conferences <http://wisconsin.apwa.net/>

League of Wisconsin Municipalities Public Works Conference <http://www.lwm-info.org/>

Wisconsin Towns Association Regional Meetings and Conferences <http://www.wisctowns.com/>

Wisconsin Technical Colleges for specific skills training <http://www.witechcolleges.org/>

Institute (PWMI). APWA members are eligible for scholarships.

The expanded PWSA curriculum covers basic skills including good communication, customer service, personnel management, workplace safety, assessments, purchasing and inventory control, and fundamentals of government/ethics for lead workers and first- and second-line supervisors. The nine one-day courses (54 hours of course work) follow a fall and spring timetable.

PWMI is the next step in training for managers and those who seek management positions. Participants study advanced communication skills, budgeting, fund accounting and grant administration, labor relations and negotiating, and the fundamentals of municipal engineering. The program's 90 hours of coursework include these PWMI courses plus the nine PWSA courses.

Valuable return

A well-trained, competent and committed workforce is essential when it comes to stretching tight budgets to fit the demands of managing local roads. Thanks to resources available through TIC, the UW-Madison, statewide member organizations and other outlets, it is easy to find dynamic, relevant training programs close to home that provide a valuable return on the investment local governments make in staff development. ■

CROSSROADS provides road and bridge information for local officials. Published quarterly by the Wisconsin Transportation Information Center (TIC) at the University of Wisconsin-Madison, it is part of the nationwide Local Technical Assistance Program (LTAP). TIC is operated by UW-Madison and sponsored by the Wisconsin Department of Transportation and the Federal Highway Administration. Please contact us for permission to reproduce articles or graphics.

Steve Pudloski, Director
pudloski@epd.engr.wisc.edu

Ben Jordan, Staff Engineer
jordan@epd.engr.wisc.edu

Katie Pawley, Program Associate
pawley@epd.engr.wisc.edu

Mary Maher, Writer/Editor
 WRITING & CREATIVE CONCEPTS

Susan Kummer, Graphic Designer
 ARTIFAX, PUBLICATIONS BY DESIGN

RESOURCES

Publications

Sign Retroreflectivity Guidebook, FHWA, 2009. Guidebook and CD-based "Toolkit" developed to help small agencies meet new Federal traffic sign retroreflectivity requirements. Includes information to guide local agency in decision making for implementation of sign retroreflectivity management and inspection methods. Limited number of copies available from TIC.



Complete current Wisconsin Statutes Chapter 346 **Rules of the Road** which incorporate the U-turn law changes.

<http://www.legis.state.wi.us/statutes/1969/69Stat0346.pdf>

The National Asphalt Pavement Association funds research and education programs in technical and management areas.

<http://www.hotmix.org/>

The American Concrete Institute has education resources that include webinars and other e-learning programs.

<http://www.concrete.org>

Link to **Field Guide to Terrestrial Invasive Plants in Wisconsin** at the Wisconsin Department of Natural Resources site.

<http://dnr.wi.gov/invasives>

Print copies of listed publications available free from TIC. Download or request items at [Publications](#) on TIC website. Video, CDs, and DVDs loaned free at county UW-Extension offices. Also see [Video Catalog](#) on TIC website.

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

Web Sources

Link to **Operational and Safety Effects of U-Turns at Signalized Intersections** Transportation Research Board journal article. Focused primarily on four-lane roads with medians, it explores conditions associated with more frequent U-turn accidents.

<http://pubsindex.trb.org/view.aspx?id=761624>



Links to text of 2009 Wisconsin Act 97 with changes to the U-turn law.

<http://www.legis.state.wi.us/2009/data/acts/09Act97.pdf>



Get Crossroads via email

Local governments receiving **Crossroads** can get the newsletter in electronic form starting with the Fall 2010 issue. Contact Katie Pawley at pawley@epd.engr.wisc.edu to request optional email distribution. As part of an effort to update our current mailing list, we also ask other readers who did not return their postcard and want to continue receiving the publication via email or in print to contact Katie with their request.



FEEDBACK

CONTACT US VIA EMAIL, PHONE, FAX OR MAIL ►

NAME _____ TITLE/AGENCY _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

PHONE _____ FAX _____ EMAIL _____

Mailing list change/addition Information/resource request Idea/comment

EMAIL tic@epd.engr.wisc.edu
 TEL 800.442.4615
 FAX 608.263.3160

Wisconsin Transportation Information Center
 432 N. Lake Street Rm 805
 Madison, WI 53706

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



- 1 U-turn law changes
- 2 Invasive species Q&A
- 6 Mutual assistance idea expands
- 8 Effective bid process
- 10 Training pays off
- 11 Resources/Feedback

“The expectation is that public works is part of a multi-agency response and since most emergencies are local, we have to be ready.”

page 6

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

CROSSROADS



Wisconsin Transportation Information Center
432 N. Lake Street Room 805
Madison, WI 53706

PRSR-STD
U.S. Postage
PAID
Madison, WI
Permit No. 658

See page 11 for news on getting the next issue of *Crossroads*!

CALENDAR

TIC Workshops

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

Winter Road Maintenance

Practical information and procedures for snow and ice control on local roads. Topics include safe winter driving, basic winter road maintenance, winter operations and equipment maintenance.
Fee: \$60

September 13	Pewaukee
September 14	Green Bay
September 15	Tomahawk
September 16	Eau Claire
September 17	Tomah
September 20	Hayward
September 27	Barneveld

Highway Safety

Workshop reviews the basics of signing and marking, including the major changes in the 2009 MUTCD. It highlights good sign installation and maintenance practices on local roads, as well as low-cost safety improvements. Also includes discussion of new retroreflectivity standards and how to develop a plan to meet them.
Fee: \$60

November 11	Waukesha
November 12	Barneveld
November 15	Tomah
November 16	Eau Claire
November 17	Hayward
November 18	Tomahawk
November 19	Green Bay

On-Site Workshops

Save time and travel costs by bringing instruction that is tailored to your specific needs to your shop or office. 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 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

UW-Madison Seminars

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

SEPTEMBER 2010

- 14-15 Maintenance Management: Organization and Systems #L131
- 14-16 Preventing and Detecting Deficiencies in Design and Construction Documents #L503
- 16-17 Reducing Maintenance MRO Inventories #L607
- 27-28 Introductory Principles of Engineering Project Management #L504

OCTOBER 2010

- 5-6 Managing Snow and Ice Control Operations #L675
- 13-14 Establishing an Effective Preventive/Predictive Maintenance Program #L032
- 25-27 Effective Concrete Bridge Repair #L611
- 26-27 Essentials of Hydraulics for Civil Engineers and Designers #L596

Independent Study

Project Management 100: The Basics, Plus Important Insights #L742 [Enroll Anytime](#)

Other Events

September 22 – Green Bay **2010 Snow Plow Rodeo and Exposition**

Teams from across the state compete at Lambeau Field in this annual event hosted by the Wis Chapter of the American Public Works Association. Contact Bob Rauchle at (262) 896-8000 or brauchle@waukeshacounty.gov or visit <http://wisconsin.apwa.net/events/5605> for additional information.

