

NOVEMBER 2010

# INSIDE



## What's INSIDE

Ice and Snow ... Take It Slow • 3

Iowa DOT evaluates TowPlow: equipment promises powerful punch • 4

Winter and the novice driver • 5 | Green alternative to petroleum-based asphalt binder tested in Des Moines • 6

24th Street bridge project • 7 | Get involved - Winter Steering Committee looking for research projects • 8

Portable RWIS fills in the gaps • 9

GPS as a business tool • 10 | GIS seminars highlight what's hot • 10

Mark and Rod go "Over the Edge" • 11 | 2010 Supervisors' Conference • 16



## ONE 2 ONE

WITH DIRECTOR NANCY RICHARDSON

I am writing this Oct. 25, which is amazing in that this has to be the earliest I have ever started my column. Fact is my column is always the very last thing completed for Inside and the edition comes out when my column is submitted. That explains why it sometimes comes out one of the first days of the month and other times not until as late as the 10th!

I think having to wait for my column makes the editor nervous; I know it makes me nervous. I always say it's kind of like being back in school and leaving the term paper, book review, or special project until the last minute. That was my M.O. then and I guess it still is. I do the same thing for speeches I give. I make opening comments, keynote speeches, and panel presentations at meetings and conferences of all types, and I often moderate or facilitate panels of speakers. All of these things require me to prepare comments and I am inevitably scribbling out my notes the night before or even in the minutes just before.

I also chair various committees, task forces and working groups both here in Iowa and nationally for AASHTO and, again, preparation for meetings is essential. I am preparing outlines and grabbing copies of things right before the meetings. Thank goodness I have such an able assistant in Cheryl, who can always find the things I am thinking of but can't find, and get them copied and ready for me on very short notice. Behind every boss is a great assistant!

You know me from these columns—I analyze everything! I am always wondering what to make of things and this is no exception. Why do I always leave preparation for such things until the last possible moment? Like most things, there are more reasons than one. Of course part of it is my schedule; my days are busy, often leaving little time to sit and prepare amidst all of the “doing.”

Another part is my confidence in my ability to do these things. I get talked into — or have a hard time saying no to — many speeches, panel presentations, committee chairmanships, and the like. Actually, it's not so much getting talked into them as my mentality of wanting to say “yes” whenever possible so as to have the opportunity to talk about what we do, what we need, and what we've accomplished. Because I do a lot of them, I have a pretty high

comfort level that I don't need a lot of preparation to pull them off.

I think the biggest reason that I leave to the last moment preparation for these “big” moments where people will be listening just to me, whether through my column or through comments in front of a group, is that the pressure of having so little time to prepare is what gets my adrenaline going and helps me to “perform.” I have actually experienced instances where I have knowingly put off—and put off—preparation so long that it is almost as though I am pushing to see just how little time is still enough. It's like my risk-taking moment ... how long can I delay and still be okay.

I think we all have in us the urge or need to take risks, as though surviving the “danger” makes something seem more worthwhile. Of course, what we consider risky varies. Some people are exhilarated by physical risk ... bungee jumping, skiing, or running a marathon. Others get their kicks out of taking financial risks such as playing the market or some entrepreneurial effort. There are risky behaviors related to personal health, relationships and every aspect of our lives, including career risks. I think that I am generally a pretty risk-adverse person ... except for living on the proverbial edge when it comes to preparing what I am going to say when called upon to communicate with a group.

This is all leading up to something ... I have something to tell you that I have put off for some while and now it is time. However, I think this time I have delayed the inevitable not so much because I need the adrenaline rush to get it done, but simply because telling you this is a very hard thing for me to do. But, here goes ...

I have decided to embark on what feels to this risk-adverse person like a pretty risky adventure. In a letter dated Aug. 19, 2010, I notified my boss, Governor Culver, of my intention to leave my position as Iowa DOT director at the end of this year; I identified Dec. 23 as my last day of work. I asked for two favors: that it not be made public by any of us until a time closer to my depart date and that I be able to first personally tell you —my fellow DOT employees—in my November column.

The Governor agreed and so here it is November. Even now I am putting off until later the hardest part of preparing my comments. Today I only tell you of my decision. Next month, in my last column as Iowa DOT director, I will tell you how I feel about it. That's a column that I had better start writing today as it will not be easy to put those thoughts into words ... that's not something to leave for the last minute this time.

*Nancy*

## Ice and Snow ... Take It Slow

**A**lthough the past several winters have provided lots of practice driving in severe weather, all Iowans, including those working at the DOT, could use a reminder to use extra caution when driving on snow and ice. The "Ice and Snow ... Take It Slow" campaign was developed in 2007 by the multistate pooled-fund partners of Clear Roads, which includes the Iowa DOT. As the slogan suggests, the campaign encourages drivers to use extra caution during winter weather.

A typical Iowa winter can include more than 30 inches of snow, freezing rain causing ice, subzero temperatures, and lots of blowing and drifting snow. These challenges are faced head-on by a dedicated force of approximately 1,200 snowplow operators, mechanics and supervisors at 110 maintenance garages.

"At the DOT, our snowfighters are well-trained and ready for winter. But for all of us who don't spend the winter in a snowplow, we need an annual reminder of just how dangerous winter driving conditions can be," said Annette Dunn, Iowa DOT winter operations administrator in the Office of Maintenance. "At the DOT, one focus area is the protection of our snowfighters on the road. So to drivers, we emphasize taking it slow. We also caution drivers to allow plenty of room on all sides of a snowplow engaged in a snow run and make sure not to cut back too closely in front of the plow when passing."

Dunn says typically, when the plow is down, snowplows operate at 25-35 mph, but are often moving even slower if the snow is deep or conditions warrant a slower speed. She warns drivers to always be on the lookout for the snow-

plow's yellow flashing warning lights during a winter storm and use caution when passing a plow due to the extra space needed for the extended plow. She said, "Maintenance vehicles plow far and wide — sometimes very wide. The front plow extends several feet in front of the truck and may cross the centerline and shoulders during plowing operations."

When planning to hit the road during a winter storm, keep in mind the following information.

### Preparing for the trip

- Before leaving home, check driving and weather conditions. Call 511 or log on to [www.511ia.org](http://www.511ia.org) for the latest road condition reports. The Iowa DOT's Weatherview Web site provides detailed weather information at <http://weatherview.iowadot.gov>.
- Safe drivers weigh the risks of driving in a winter storm. If road conditions have deteriorated and your trip is not absolutely necessary, postpone it until the conditions improve.
- If you must travel, give yourself extra time to safely reach your destination.
- Make sure you can see and be seen. Clear any snow from your vehicle's windows and lights, including the brake lights and turn signals.
- Be sure that your vehicle is in good operating condition. Check your vehicle's tires, brakes, fluids, wiper blades, lights, belts and hoses. A breakdown is bad on a good day, and can be dangerous on a cold wintery day.
- Keep a winter survival kit in your vehicle. This kit should contain items to help sustain your life and that of your passengers should your vehicle become stranded. These items can include: a cell phone, booster cables, candles and matches, a flashlight with fresh batteries, extra blankets and warm clothes, non-perishable food items, a can for melting water, and a snow shovel.

### When driving

- Ensure that everyone in the vehicle is wearing their seat belt. Iowa law now requires all passengers under the age of 18 to wear seat belts, no matter where in the vehicle they are sitting.
- Focus your attention on the driving task. Avoid distractions like talking on a cell phone, eating or changing radio stations. Remember, texting while driving is not only a distraction, it is illegal in Iowa.
- Avoid excessive maneuvers while steering, braking or accelerating to lessen the chances of losing control of the vehicle.
- Do not use the vehicle's cruise control.

**Use caution when approaching a snowplow.**  
Snowplows typically operate at 25-35 mph.

**Never pass on the shoulder side of a plow.**  
Plows will move snow to the shoulders.

**Don't assume plow drivers see you.**  
Their fields of vision are limited.

IOWA DEPARTMENT OF TRANSPORTATION

# Iowa DOT evaluates TowPlow: Equipment promises a powerful punch

Expected to double performance – use less fuel – reduce capital investment

**T**here will soon be a new plow on Iowa’s roadways that will likely be turning heads while removing snow. The name says it all – TowPlow is a plow towed by a snowplow truck that can clear a huge swath through fallen and drifted snow. One truck does the work of two. When fully configured, a TowPlow can clear two and one-half highway lanes or two lanes and part of the shoulder.

## Test locations

The DOT is deploying three TowPlows as a pilot project in the Des Moines, Waterloo and Sioux City areas to test the equipment and use of the towed-plow concept during the 2010-2011 season.

TowPlows have been used extensively in Missouri for four years and in Minnesota since 2008, and are currently ready to be used in 10 other states this winter.

## Towed-plow concept

The towed-plow concept is simple. The trailer-mounted TowPlow is designed to tow behind and work alongside a truck with a standard plow mounted on the front. This combination increases the single unit’s clearing path – allowing one truck to effectively do the work of two.

## TowPlow features

- The two 18,000-pound steering axles are capable of turning 30 degrees.
- When connected to a truck with a 14-foot front plow, a total of 25 feet of clearing is accomplished with a single pass.
- The unit is capable of plowing at normal winter driving speeds (tested at 55-60 mph), which reduces the potential for rear-end crashes.
- The TowPlow is equipped with an antilock air brake system that keeps the wheels from locking up during hard brake applications.
- Further expanding the versatility of the unit, the TowPlow can be equipped with a hopper for salt or two 1,025-gallon poly tanks for brine application; or the unit can be used strictly for spreading materials when plowing is not necessary. The three units Iowa has purchased include the poly tanks.
- When not in use, the TowPlow pulls directly behind the plow truck similar to a normal trailer.
- During the nonwinter months, the TowPlow can be used as a water tank.
- Operators are required to complete overview and familiarization training, which is provided by the vendor.

*Iowa’s new TowPlows are equipped with brine tanks.*



*TowPlow, continued on next page*

## TowPlow, continued from previous page

- For the operator, the TowPlow has fewer controls than the traditional side wing – two compared to three (one lever steers the trailer in and out; another lowers the blade).

## TowPlow benefits

If the pilot project proves successful, the Iowa DOT could experience the following savings.

- Eliminating the need for a second truck means a significant capital equipment savings. A standard Iowa DOT snowplow truck costs approximately \$150,000. Each TowPlow costs approximately \$70,000. Required truck modifications costing approximately \$3,000 include a rear hitch module, lights, hydraulic upgrade, and two in-cab controls. The capital savings resulting from elimination of the second vehicle are approximately \$77,000.
- Fuel savings. While the added weight of the TowPlow increases fuel consumption by about 10 to 15 percent compared to using two trucks to do the same job, the actual fuel saving could be 85 to 90 percent.
- Less maintenance. The TowPlow requires standard plow and trailer maintenance, a savings compared to maintenance that a second truck and plow require.
- Increased level of service. The TowPlow can be used in a plow train, in place of a truck that could be deployed on a different route, thus increasing overall level of service.

## Origin of the TowPlow

The technique of plowing multiple-lane roadways with several snowplow trucks is the accepted practice on urban multilane expressways, interstates and rural, high-speed

divided highways. The use of a towed plow is still relatively new in the United States and Canada.

The invention of the TowPlow was the brainchild of retired Missouri DOT (MoDOT) employee Bob Lannert who applied his knowledge of farm equipment to snowplows. MoDOT worked with snowplow manufacturer Viking-Cives to fine-tune the design and build the towable plowing units.

The patented TowPlow is manufactured by Viking-Cives Ltd, the Mount Forest, Ontario-based Canadian division of the international company. The company operates its Midwest Division in Missouri. [For photos and video, visit: <http://www.towplow.com>]

MoDOT began using the TowPlow in Kansas City, Mo., Jan. 5, 2005. Today, MoDOT uses more than 60 TowPlows. MoDOT reports a savings of about 28 to 50 percent in labor and fuel by using the TowPlow concept.



Iowa's TowPlows include a 1,000-gallon poly tank on each of the three units.

## Winter and the novice driver

The first time behind the wheel of a car when the snow flies can be nerve-racking, even for an otherwise invincible teenager. Learning to drive can be scary for both the student and the driving instructor, typically a parent or caregiver. When you add snow and ice to the mix, novice drivers need to have solid instruction on the safest methods of driving on snow and ice.

Some tips for those assisting a novice driver include:

- Allow your young driver to practice in a vacant, snow or ice covered parking lot where slow-speed maneuvers can be mastered with little risk. Practice hard braking and steering in skidding situations.
- Explain to your young driver the importance of maintaining adequate space between vehicles, demonstrating the difference in stopping distance on dry pavement and on ice or snow if possible in a safe location.
- A novice driver's first on-the-road experience with winter-weather driving should not be during a major blizzard. It is better to wait until conditions are less severe.
- If possible, have your teenager practice driving on slippery roads in daylight only. Exposure to slippery roads at night should be limited until beginners have gained more experience driving in various types of winter weather.
- Make sure the vehicle your novice driver operates is in good working order and is stocked with a winter survival kit, including essential emergency equipment.
- View the Iowa DOT's winter preparedness video on YouTube with your novice driver at <http://www.youtube.com/iowadot>

# Green alternative to petroleum-based asphalt binder tested in Des Moines

**T**here was a lot of talk about “green” asphalt Oct. 6, as the first demonstration project using bio-binder on the Waveland Trail in Des Moines along the west side of Glendale Cemetery from University Avenue to Franklin Avenue was highlighted. The project was a cooperative effort among the Iowa departments of Transportation and Economic Development, Iowa State University (ISU), the city of Des Moines, Asphalt Paving Association of Iowa, Elder Construction, Grimes Asphalt and Avello Bioenergy.

“Even though there were a lot of players involved, the project came together pretty quickly,” said Scott Schram, Iowa DOT bituminous engineer. “All of the entities involved felt this project was a perfect fit for the first bio-binder field trial.”

A portion of the 0.9-mile, 10-foot wide trail was paved with an asphalt mixture containing 4 percent bio-binder. The bio-binder, developed by ISU and licensed by Avello Bioenergy as Bioasphalt®, was originally evaluated as an additive to enhance the hot- and cold-weather performance of pavements. What researcher Christopher Williams found was a possible green replacement for asphalt derived from petroleum.

The material is produced when nonfood biomass, such as corn stover, switch grass and wood wastes, are rapidly heated without oxygen in a process known as fast pyrolysis. The process produces several liquid bio-oil fractions that can be used to manufacture fuels, chemicals and bio-binder, plus a solid product called biochar that can be used to enrich soils and remove greenhouse gases from the atmosphere.



If the bio-binder trail demonstration and other tests go well, “This would be great stuff for the state of Iowa,” said Christopher Williams, an associate professor of civil, construction and environmental engineering and the creator of the original bio-binder.

Williams is so positive about the product for many reasons. Asphalt binders derived from agricultural products could replace petroleum-based products in both paving and roofing applications. That could create a new market for Iowa crop residues. It could be a business opportunity for Iowans. And it saves energy and money because asphalt made with bio-binder can be mixed and paved at lower temperatures than conventional asphalt.

Jeb Brewer, Des Moines’ city engineer, said, “We have a fairly active program for finding ways to conserve energy and be more sustainable,” he said. “We’re interested in seeing how this works out and whether it can be part of our toolbox to create more sustainable projects.”

“This demonstration project is a great opportunity,” Williams said. “We’re proud to be introducing a green technology into a green environment in Des Moines. And it’s a technology that’s being developed here in Iowa.”



Congressman Leonard Boswell got a turn on a paving machine laying down a 4 percent bio-binder asphalt mix on the Waveland Trail in Des Moines.



Local and national media and others interested in green paving technology gathered at the demonstration project site.



## 24th Street bridge project tops in AASHTO regional contest



*24th Street Bridge in Council Bluffs, Iowa*

**A**n Iowa DOT bridge project was recently named the winner in one category of the America's Transportation Awards (ATA) sponsored by the American Association of State Highway and Transportation Officials (AASHTO), American Automobile Association (AAA) and the U.S. Chamber of Commerce.

The 24th Street bridge is the first in a series of efforts to improve capacity of the interstate system in the Council Bluffs area. Regional judges selected the Iowa bridge project as one of 43 semi-finalist projects because of its innovative design and use of accelerated construction techniques, which involved complex staging of the work to allow the busy roadway to remain open throughout construction.

To get to the top 10, the 24th Street bridge project in Council Bluffs won the "On Time/Small Project" ATA category. As a top 10 finisher, the project was eligible to be named either the "2010 Best Transportation Project in the United States" or the "People's Choice" award winner. Nationwide, online voting was in place from Sept. 7 to Oct. 18.

While the 24th Street bridge project did not take home either of the top awards at the AASHTO annual meeting in Biloxi, Miss., Oct. 31, Iowa DOT Director Nancy Richardson said, "This was an opportunity to showcase nationwide Iowa's innovation, creativity and commitment to great customer service and high quality transportation infrastructure. Iowans cast thousands of votes on the Web site for the Council Bluffs project as America's best. That's a huge success for those involved in the project."

John Horsley, AASHTO executive director, added, "These transportation projects improve travel and create hundreds of thousands of jobs in communities across the country. It's important to recognize the outstanding job state DOTs are doing to deliver both quality and value to the American people."

### **The 2010 award categories include:**

Submitted in three size categories: large (\$200 million and over), medium (\$26 - \$199 million) and small (\$25 million and under):

#### **On Time**

This award recognizes a project that demonstrates specific measurement, process management, and quality assurance methods used to deliver a quality product and demonstrate effective schedule management from conception to completion. The award also demonstrates involvement and interaction with the surrounding community and illustrates the degree to which traffic movement was improved for customers/users.

#### **Under Budget**

This award honors a project demonstrating transportation efficiency while promoting economic and fiscal responsibility. The award recognizes a successful project brought in under budget that provided the greatest cost savings to the state while offering maximum performance.

#### **Innovative Management**

This award celebrates excellence in innovative management techniques and use of technology. The award recognizes new policies or procedures and creative transportation solutions that enhance the effective movement of people, goods and services; increase transportation efficiency and choices; improve safety, accessibility and aid traffic management; and enhance community life.

#### **Best Recovery Act Project**

This award recognizes a project completed by Dec. 31, 2009, using funding from the American Recovery and Reinvestment Act. Projects were judged based on how well they achieved several criteria, including job creation, improvement to the state's infrastructure, speed of implementation and impact on the community.

For more information on America's Transportation Awards, go to <http://www.americastransportationaward.org/>

## Get involved Winter Steering Committee looking for research projects

**"T**he best new ideas usually come from the field," said Jim Dowd of the Office of Maintenance. "In the past, we've been able to showcase the maintenance innovations in our 'Build a Better Mousetrap' competition at the Winter Maintenance Expo. Due to several factors, the expo has not been held for several years. That is unfortunate because we know the innovations are continuing, there just isn't a way to easily share the ideas."

Dowd said the Winter Steering Committee is one venue where ideas can be brought and shared. "This committee has representatives from each district and several central office maintenance employees," he said. "If a field employee has an idea for a new piece of equipment or way of doing things, I would encourage the employee and the supervisor to bring that to the committee."

According to Dowd, there is some concern that funding new ideas takes money away from operations. "The Winter Steering Committee and its three subcommittees use research dollars, provided by the Research and Technology Bureau, for new ideas and pilot project equipment," said Dowd. "So no funds are needed from a garage's operations budget if there is something an employee wants to try and the committee decides to fund the project. These funds are specifically for research and can't be used for other purposes. With the recent retirements and new people being

hired, this is a good time to remind employees that we're always looking for good ideas on how we can improve the way we do business."

Contact information for members of the Winter Steering Committee is on DOTNET under Highway, Maintenance, Winter Operations. The committee chair is Dick Banowetz, highway maintenance supervisor in De Witt at 563-659-3550. The Winter Steering Committee helps determine what research and training are needed to support winter operations, what subcommittees are needed and the help needed to manage their efforts.

The deicing subcommittee investigates and evaluates new deicing materials, additives, practices and equipment used in the production of salt brine. The deicing subcommittee is led by Steve Scott, highway maintenance supervisor in Chariton (641-891-4718).

The winter equipment subcommittee is led by Todd Cogdill, equipment operator senior in Onawa (712-423-2040) and Larry Shriver, mechanic in Neola (712-485-2591). This committee is always looking for innovative ideas on winter equipment upgrades.

The roadway weather information system (RWIS) subcommittee investigates new RWIS sensors, weather forecast products, and weather-related issues for the department. This group is led by Tina Greenfield in the Office of Maintenance (515-233-7746).



# Portable RWIS fills in the gaps

The numbers tell a story. Pavement temperature, air temperature, wind speed, visibility and other factors play a key role in determining how to best treat a roadway when ice and snow fall. Iowa's 62 permanent road weather information system (RWIS) locations stand as silent sentinels, relaying valuable data and images to the Internet for Iowa DOT employees and the public to use when making critical maintenance or travel decisions. Because the permanent stations do not cover the entire highway network, there are some areas lacking weather collection equipment.

A stop-gap measure being deployed to some areas uses portable RWIS stations to collect basic information. "While the portables don't have all the bells and whistles of a permanent RWIS station, they certainly provide the critical data garage employees need to help make roadway treatment decisions," said Tina Greenfield from the Office Maintenance.

The portable units measure most of the atmospheric parameters covered by a permanent RWIS station, but they lack cameras, traffic speed sensors and deeper soil temperature probes. "While that information is extremely helpful at times, often the most important information for a supervisor is the atmospheric data and pavement temperature that the portables provide just as well as a permanent unit," said Greenfield.

Last winter, one portable unit was in use in New Hampton and another in Osceola. "The Osceola unit was used to supplement a permanent RWIS station positioned on a bridge that was under construction," said Greenfield. "While the permanent unit was down, this portable supplied the pertinent information needed for the area supervisor."

This year, three stationary portables set on tripods will be in use. One is positioned near Lime Springs on U.S. 63, a second on Iowa 27/U.S. 218 near the Missouri border at Keokuk and a third south of Spencer on U.S. 71. A fourth portable unit mounted to a trailer, will be in use on U.S. 20 near Rockwell City. "Two cool things about these assets are their portability and affordability," said Greenfield. "A tripod-mounted portable unit can be set up in an afternoon. The model mounted to the trailer is even more mobile. It takes very little time to pack it up and move it. We can use them where and when we need them. And for the cost, about 10 percent of the cost of a full unit, the tripod-mounted portable stations are very affordable."

Even more affordable are the mini-RWIS units, now being used at two locations --- a mainline test site on Iowa



*(From left) Tina Greenfield, Maintenance; Alan Gray, Donnellson garage; Jim Dowd, Maintenance; and Bob Porter, Donnellson garage, install a portable RWIS station.*

150 near Maynard and bridge application on U.S. 218 near Ainsworth. "These are very basic sensors," said Greenfield. "We use these near an airport where we can get the majority of the atmospheric information from the airport weather observation system (AWOS) unit, but are lacking pavement temperature data."

This simple sensor is embedded in the pavement or bridge deck, then wired to a modem located in a weatherproof electrical box secured to a fence post or bridge. "The mini-RWIS units cost less than \$3,000 each and can be installed in an afternoon," said Greenfield. "Aside from the

**Portable RWIS, continued on page 15**



*Tina Greenfield from the Office of Maintenance installs a pavement temperature probe for a portable RWIS station.*

## GPS as a business tool

**T**echnology can take some interesting turns. What began as a military satellite navigation tool in the 1960s has morphed into a relatively inexpensive hand-held device used by millions to find the nearest fast food restaurant or gas station.

Global positioning systems (GPS) as they are used today also have many practical business applications for Iowa DOT employees. The Iowa DOT's Office of Transportation Data collects a vast amount of geographic information system (GIS) data. This GIS data can be developed into GPS applications for objects with fixed latitude and longitude coordinates. Ryan Wyllie, transportation planner in Transportation Data, said, "A by product of all the GIS information we have at the DOT is the ability to program very specific GPS data sets. We have already built databases that can be programmed into individual GPS units to find specific geographic locations. All E-85 gas stations in the state have been programmed into the units for the Motor Pool. The Office of Rail Transportation is using a program on their units to easily locate all crossings in the state for inspection. In our own office, 25 units have been programmed with the traffic count locations to assist our summer employees with finding their appropriate destination more efficiently."

Currently, Wyllie says, the database applications they have programmed are for Garmin® and TomTom®-brand GPS units. "But if an office has already purchased another brand of GPS, we can more than likely program it," said Wyllie.

"The basic GPS unit is all that is needed to hold these databases. There is no need for any office to buy top-of-the-line models or other special equipment," said Wyllie. "Each unit is about \$100. If an office has a need for location information loaded into a GPS, the Office of Transportation Data would like to help by programming the units once the requesting office has purchased them. We feel this could increase efficiency and save fuel and other costs by allowing employees to navigate the quickest route to a destination."

If your office would like to explore the possibilities of using a GIS dataset in a GPS unit, contact Ryan Wyllie at 515-239-1560 or ryan.wyllie@dot.iowa.gov.



## GIS seminars highlight what's hot

**I**n an effort to highlight the importance of geographic information systems (GIS) to everyday business processes, the Iowa DOT's GIS practitioners group is hosting a series of GIS-related events. Visit the north lobby at the Ames central complex to see a series of posters highlighting how spatial mapping is being

used in the agency. The information is also available at W:\Highway\Maintenance\GIS\GISDay\GISDayPresentations.

The group is sponsoring a series of focused seminars about GIS. Employees can access the Monday and Tuesday seminars by either going to the conference room or logging on to <http://iowadepoftransport.adobeconnect.com/gismgmtseminar> and use conference number 18666851580 and participant code 0009990532.

**Date: Monday, Nov. 15**

Time: 11 a.m. – noon

Location: East Materials conference room

Subject: Come learn more about what GIS is and how it is being used at the Iowa DOT

**Date: Tuesday, Nov. 16**

Time: 11 a.m. – noon

Location: Second Floor administration building conference room. Because of limited seating, the live seminar is limited to invited guests. Anyone can join online.

Subject: Seminar focused on managers and supervisors learning about the important of implementing GIS into everyday business processes and see how other offices are using GIS

**Date: Wednesday, Nov. 17**

Time: Morning seminars will be held by Iowa State University in the Durham Building. From 1 to 4 p.m. there will be a walk-in learning lab session to pick up the basics of using GeoMedia, ArcMap and Quick Terrain Modeler. See how computer-aided drafting and design and GIS data can be shared between software. Bring questions, and even some data, and we will work with you one-on-one with mapping and spatial analysis techniques. The first 15 minutes of each hour will be a demo of the software – GeoMedia at 1 p.m., ArcMap at 2 p.m. and Quick Terrain at 3 p.m. Users can walk in anytime for help in any of the software.

**For more information contact Shawn Blaesing-Thompson at 515-239-1805 or via E-mail.**

## Mark and Rod go “Over the Edge”

**A**re they crazy? Maybe ... but Motor Vehicle Division Director Mark Lowe and Motor Vehicle Sergeant Rod Rhiner went “Over the Edge” Sept. 22 to participate in a fundraiser for Special Olympics Iowa. The two were part of a group of 100 to rappel 345-feet off the Financial Center at 666 Walnut St. in downtown Des Moines. The Iowa DOT’s Motor Vehicle Division, and especially the Office of Motor Vehicle Enforcement, has a long history of support for Special Olympics Iowa.

“I’m scared to death of heights,” said Rhiner. “I did ‘Over the Edge’ both to confront my fear and to do the right thing for an awesome cause. Over the 17 years I’ve been involved with Special Olympics, I have met so many neat athletes and their families. It really has become one big family to me. How could I not do this event?”

“Over the Edge” was just one of many events under the Law Enforcement Torch Run (LETR) umbrella of fundraisers that include Cop on Top, Polar Plunge, truck convoys, and many others. Rhiner says in total LETR events are expected to raise more than \$500,000 this year, \$122,000 from the “Over the Edge” event alone. “Just a few years ago our goal was \$250,000,” said Rhiner. “But when Iowa hosted the national Special Olympics in 2006, the public’s awareness level was raised so much that more people get involved now than ever before.”

Lowe said he became involved with Special Olympics Iowa at the last LETR. He said, “My family and I have been blessed and these events are an opportunity to give thanks and share the blessings we enjoy. I have had the opportunity, personally and through my children, to see the physical and mental benefits that athletic activity and competition offers. In my kids, I have seen them develop discipline, strength and confidence, and most importantly, they’ve made friends and

had fun. Challenged individuals benefit equally and in the same ways from athletic activities, and we need to make sure that they have equal opportunities to participate.”



**“Let me win. But if I cannot win, let me be brave in the attempt.”**  
*-Special Olympics oath*



Rod Rhiner overcomes his fear of heights in “Over the Edge.”



Mark Lowe goes “Over the Edge” to raise money for Special Olympics Iowa.



Mark Lowe (left) and Rod Rhiner (right) joined approximately 100 others to rappel off a building in Des Moines Sept. 22.

## Family happenings

### Design

July Lensing



LaDana Sogard, secretary 1 in Design, and her husband, Brent, welcomed Bella Ann July 19 at 2:59 p.m. Baby Bella weighed 7 pounds 5 ounces and was 21 inches long. She is currently

being spoiled rotten by her very proud big brother Jordan, 12, and big sister, Mariah, 11.



Mark Muxfeldt, construction technician assistant in the soils section, and his wife, Valerie, welcomed their first child Oct. 13. Hayden Conner entered the world

weighing 8 pounds 2 ounces and was 20 inches long. Grandpa Kevin Muxfeldt in Bridges and Structures and Grandma Peg Muxfeldt in Contracts are thrilled. So is great uncle Bill Gurnett in the Office of Design.

### Planning, Programming and Modal Divison

Jodi Malin



Brian Carlson, program planner 2 in Transportation Data, and his wife, Stacey, welcomed Lilly Madalyn Sept. 13. Lilly weighed 7 pounds 9 ounces and was 22 inches long.

### In memory

Ronald I. Olson, 67, of Story City, passed away Wednesday, Aug. 18, at his home. Olson was born March 23, 1943, in Ames, to Lester T. and Esther (Hovland) Olson. He had been an active member of Salem Lutheran Church in Radcliffe. He also was an active member of the Gideons International. Olson retired July 8, 2005, after 21 years at the Iowa DOT working in the printing section of Document Services. He is survived by his wife, Marcy, of Story City; five children, Anna Olson, of Pilot Mound, Ruth Munn, of Story City, Kathryn (Todd) Bleeker, of Maple Grove, Minn., Fred (Jennifer) Olson, of Vail, and Christie (Dan) Cody, of Mesa, Ariz.; 18 grandchildren; two step-granddaughters; and four great-grandchildren.

\*

Donald "Duane" Littleton, 81, died Tuesday, Aug. 31, at the Cass County Memorial Hospital in Atlantic. Littleton was born June 11, 1929, to William Hobart and Beatrice J. (Atkinson) Littleton in Elliott. He lived in Elliott until the age of 14 when the family moved to Anita where he attended high school. He served in active duty in the United States Army from 1951 – 1953 receiving the Korean Service Medal, United Nations Service Medal and Combat Infantry Badge. Upon his honorable discharge, he returned to Anita and in 1953 married Bonnie Lou Christensen.

For 38 years he worked as an equipment operator for the Iowa DOT until his retirement in 1991. Littleton was a member of the Anita Fire Department for 20 years, serving as chief for eight years. He was a member of the American Legion, and served as commander of the VFW. He was also a member of the Church of Christ in Anita. Littleton enjoyed fishing, as well as having coffee with friends at the Weather Vane Café in Anita, where he was considered a permanent fixture.

Most importantly of all was his love for his family. He is survived by his wife, Bonnie, of Anita; his children, Kevin (Sandi) of Des Moines; Rebecca Ray of Anita; Delbert (Jodi) of Atlantic; and Darren (Jean) of Council Bluffs; 18 grandchildren; 11 great-grandchildren; and many other relatives and friends.

\*

*Family happenings, continued on next page*

**Family happenings,  
continued from previous page**



Norbert "Nubs" Gotto, 82, of Le Mars, died Wednesday, Oct. 6, at Mercy Medical Center in Sioux City. Gotto was

born June 6, 1928, in Remsen, the son of Bernard and Anna (Schleis) Gotto. Gotto was raised in the Remsen area and attended school and graduated from Union Consolidated, rural Plymouth County. He was united in marriage to Virginia Kinzey Nov. 22, 1949, at St. Michael's Catholic Church in Kingsley.

Gotto worked various jobs before going to work for the Iowa Department of Transportation. After 38 years of service, he retired in 1990 as an equipment operator 2 in the Le Mars garage. His grandson-in-law, Brandon Lafrenz, continues the family's DOT connection, working at the Grundy Center garage.

Following his retirement, Gotto enjoyed hauling metal, playing cards, fishing, and spending time with his family and friends. Gotto was a long-time member of St. James Catholic Church in Le Mars. He was a member of the Knights of Columbus and Fraternal Order of Eagles. He was an active supporter and spent the last three years organizing fund raisers for the Le Mars Area Dialysis Services.

Survivors include his wife of more than 60 years, Virginia of Le Mars; five children, Mike Gotto of Azusa, Calif., Rick (Betty) Gotto of Eldora, Rhonda (Ron) Kayser of Le Mars, Kevin (Myra) Gotto of Windom, Minn., and Laurie (Jeff) Kayser of Le Mars; 11 grandchildren; four stepgrandchildren; 10 great-grandchildren; a sister; two sisters-in-law; and many nieces and nephews.

\*



## Kudos!

*These are letters that have been submitted to the editor. They may have been edited for length and continuity.*

To: State of Iowa maintenance crews  
From: Doug Rothfus, board president, Dallas Center Grimes Community Schools

First, we want to apologize for this thank you being so late, it's time for winter again! We just wanted to take a moment to thank you for the outstanding snow removal and road care over the very difficult 2009-2010 winter. We appreciate the time and effort you put into our roads and streets.

To: Nancy Richardson, Iowa DOT director  
From: Carole Magilton, Friendship Force of Central Iowa

On behalf of the Friendship Force of Central Iowa, I want to thank the Iowa DOT for producing and sharing materials dealing with our roadside climate, growing season and land use.

Steve Holland was kind enough to provide a variety of these items to help our Australian visitors better understand our lovely state of Iowa. The group was home-hosted from Aug. 13-20. The informative items Holland provided were included in each person's welcome bag. What a wonderful way to promote Iowa.

To: David Miller, Office of Motor Carrier Services  
From: Peter Grandgeorge, MidAmerican Energy Company

MidAmerican Energy would like to thank you for the assistance following severe winds and thunderstorms July 18 in the Des Moines area and July 23-24 in the Quad Cities, Maurice, Waterloo, Independence, Des Moines, Knoxville and Oskaloosa areas. The breadth of the latter storm stretched across all of Iowa. Over the course of these storms, MidAmerican responded to significant issues. With your assistance, we were able to return the affected customers back to normal operations in a timely manner under difficult conditions.

(Editor's note: David Miller was able to assist MidAmerican Energy with after-hours vehicle permitting and routing of emergency power crews from several states that were responding to power outages.)

## Personnel updates

Information supplied by the Office of Employee Services for Aug. 20 to Sept. 16

### New hires

**Daniel Amos**, information technology specialist 4, Information Technology Division; **Rainy Bedenbender**, driver's license clerk, Cedar Rapids, DL station; **Mark Blasius**, construction technician assistant, Design; **Brad Ebersole**, highway technician associate, Jefferson garage; **Tom Lovan**, design technician, Location and Environment; **David Meyers**, executive officer 3, Motor Vehicle Division; **James Nervig**, executive officer 2, Systems Planning; **Todd Riley**, construction technician assistant, Design; **Sunny Sandry**, driver's license clerk senior, Davenport DL station

### Promotions

**John Adam**, from public service executive 6 to highway division administrator, Highway Division; **Nicole Fox**, from transportation engineer, Contracts to transportation engineer specialist, Local Systems; **Matthew Hovar**, from driver's license examiner, Ames DL station to driver's license hearing officer, Driver Services; **Pamella Lee**, from transportation planner 2 to executive officer 2, Public Transit; **Ronald Schmidt**, from highway technician associate, Sabula garage to highway technician senior, Maquoketa garage; **Randy Turner**, from highway technician associate to equipment operator senior, Oakland garage

### Transfers

**Vivian Broesder**, driver's license clerk senior, from Fort Dodge DL station to Mason City DL station; **Timothy Elliott**, design technician specialist, from Design to Bridges and Structures; **Ryan Fox**, highway technician associate, from Grimes garage to Des Moines garage; **Christopher Gerling**, highway technician associate, from Washington garage to Wapello garage; **Lloyd Henderson**, highway technician associate, from Anamosa garage to Marion garage; **Chad Lohrer**, construction technician, Davenport construction to highway technician senior, Cedar Rapids materials; **Robert Mycka**, highway technician, Sioux City-Hamilton garage to District 3 Office; **Kyle Ripple**, mechanic, Anamosa garage to Marion garage; **Todd Tielbur**, highway technician associate, Grimes garage to Spirit Lake garage

### Retirements

None

## Service awards

Information supplied by the Office of Employee Services for November 2010

### 35 Years

**Clare Wilson**, Sign Shop

### 30 Years

**Pamella Lee**, Public Transit; **Ned Lewis**, Motor Vehicle Enforcement

### 25 Years

**Gordon Accola**, Support Services; **William Austin**, Manchester construction; **Max Gibson**, Grimes garage; **Randy Kuhl**, Davenport garage; **Carey Lewis**, Manchester garage; **Mark Lloyd**, Grinnell garage; **Robert Martin**, Oskaloosa garage; **Norman McDonald**, Bridges and Structures

### 20 Years

**Michael Dukes**, Clarinda garage; **Kelly Meyer**, Waverly garage; **Dale Pierce**, Rockwell City garage; **Gary Schroeder**, Red Oak garage; **Scott Smyth**, Des Moines maintenance

### 15 Years

**Desiree Burrows**, Vehicle Services; **Thomas Dibble**, Sioux City construction; **Robert Doty**, Altoona garage; **Tim McQuillen**, Dubuque garage; **Kirk Montange**, Sioux City-Leeds garage; **Randy Moore**, Motor Vehicle Enforcement; **Sandra Ross**, Driver Services; **Ross Rusch**, Denison garage; **Loren Waterman**, Motor Vehicle Enforcement; **Jeffrey Weir**, Boone garage

### 10 Years

**David Bare**, Bridges and Structures; **Pamela Cook**, Motor Carrier Services; **David Harless**, Grimes garage; **Steven Hill**, Des Moines garage; **Kevin Huss**, Highway Helper; **Lionel Miller**, Cedar Rapids garage; **Craig Tigges**, Carroll garage; **Michael Todd**, Washington garage; **Donald Trenkamp**, Dubuque garage; **Wendell Wanek**, Cedar Rapids construction

### 5 Years

**Warren Fiddelke**, Alton garage; **William Gitautis**, Malcom garage; **Jason Langstraat**, Alton garage; **Mark Muxfeldt**, Design; **Courtney Schiebout**, Alton garage

## Portable RWIS, continued from page 9

sensor and modem, the installation materials can be picked up at any home improvement store."

Greenfield says the portable and mini-RWIS units are not the most advanced answer for roadway weather information, but they serve a valuable purpose in filling in gaps in data collection. "It is really easy to just pop one of these in to fill in the most important information in an area where placement of a large RWIS unit is not possible," she said. "Whether those data gaps are caused when a permanent station is located in a construction site or if the traffic volume just doesn't warrant a large RWIS unit, these smaller cousins do a great job of gathering the most critical information to keep Iowa travelers safer during the winter."



The modem for a mini-RWIS can be housed in an electrical box and mounted to a bridge or fence post.

## TIPS FROM THE GREEN TEAM

Thanks in part to greening routines and lifestyles, there have been a number of different and easy ways developed that people can make their lives more environmentally friendly. One of those ways is replacing plastic water bottles with reusable bottles that can be refilled at drinking fountains and sinks. These water bottles have a number of different advantages and are easy to use.

**Safety** - Water bottles that are designed to be reusable do not have the health issues attached to them that disposable bottles do. When a disposable bottle is reused, it can leak carcinogens. This problem does not exist in bottles made to be reused.

**Price** - If everyone in the United States switched to using reusable bottles, it has been estimated that consumers would save \$7 billion a year.

**Cleaning** - Reusable water bottles are easy to clean, and can be rinsed out after each use or soaked in hot, soapy water. They can also be thoroughly cleaned by simply using baking soda.

**Materials** - Reusable bottles come in a number of different materials, including plastic, stainless steel and aluminum.

**Storage** - To keep bacteria from building up inside the bottle, store it in the freezer.

Adapted from [www.ehow.com](http://www.ehow.com)

# INSIDE

INSIDE is developed to help keep all Iowa DOT employees informed about critical issues affecting them, recognize DOT employees for their excellent service and share interesting aspects in the lives of our co-workers. For more information, contact Tracey Bramble, Office of Media and Marketing Services, at 515-239-1314 or e-mail [tracey.bramble@dot.iowa.gov](mailto:tracey.bramble@dot.iowa.gov).

**Nancy J. Richardson**, Director

**Tracey Bramble**, Multimedia Services, editor  
**Christina Andersen**, Multimedia Services, desktop publisher  
**Printing Staff**, Multimedia Services, printing



800 Lincoln Way, Ames, IA 50010 • 515-239-1372



**PLEASE RECYCLE THIS ISSUE**

**On the cover:** This photo of the Mississippi River at Savanna, Ill. looking over at Iowa was taken by Alan Atwood, design technician in District 6.

**November I-Spy clue:** Stuffed or basted ... can't wait to be tasted.

**October I-Spy solution:** The headlight on one train on the left side is a jack-o-lantern.

District 1 .....	<b>Lori Wilkens</b> , Des Moines .....	515-261-9500
District 2 .....	<b>Lu Mohorne</b> , Mason City .....	641-423-7584
District 3 .....	<b>MaryBeth Banta</b> , Sioux City .....	712-276-1451
District 4 .....	<b>Marlene Jensen</b> , Atlantic .....	712-243-3355
District 5 .....	<b>Brenda Hadley</b> , Fairfield .....	641-472-6142
District 6 .....	<b>Sandi Byers</b> , Cedar Rapids .....	319-364-0235
Bridges and Structures .....	<b>Judy Whitney</b> , Ames .....	515-233-7917
Construction .....	<b>Nancy McMenamin</b> , Ames .....	515-239-1353
Contracts .....	<b>Peg Muxfeldt</b> , Ames .....	515-239-1422
Design .....	<b>Judy Lensing</b> , Ames .....	515-239-1469
Driver Services .....	<b>Theresa Kern</b> , Ankeny .....	515-237-3253
General Counsel .....	<b>Chris Crow</b> , Ames .....	515-239-1509
Information Technology Division .....	<b>Colette Simpson</b> , Ames .....	515-233-7728
Local Systems .....	<b>Gail Nordholm</b> , Ames .....	515-239-1528
Location and Environment .....	<b>Susie McCullough</b> , Ames .....	515-239-1225
Maintenance .....	<b>Cindy Shipley</b> , Ames .....	515-239-1971
Materials .....	<b>Brian Squier</b> , Ames .....	515-233-7915
Modal offices .....	<b>Cathy Mather</b> , Ames .....	515-239-1140
Motor Carrier Services .....	<b>Diann McMillen</b> , Ankeny .....	515-237-3250
Motor Vehicle Enforcement .....	<b>Anthony Batcheller</b> , Ankeny .....	515-237-3218
Operations and Finance Division .....	<b>Sheri Anderson</b> , Ames .....	515-239-1340
Research and Technology Bureau .....	<b>Tami Bailiff</b> , Ames .....	515-239-1646
Right of Way .....	<b>Mary Netten</b> , Ames .....	515-239-1216
Systems Planning .....	<b>Peggy Riecken</b> , Ames .....	515-239-1664
Traffic and Safety .....	<b>Stephanie Anderson</b> , Ames .....	515-239-1746
Transportation Data .....	<b>Jodi Malin</b> , Ames .....	515-239-1289
Vehicle Services .....	<b>Becky Sawatzky</b> , Ankeny .....	515-237-3182

Federal and state laws prohibit employment and/or public accommodation discrimination on the basis of age, color, creed, disability, gender identity, national origin, pregnancy, race, religion, sex, sexual orientation or veteran's status. If you believe you have been discriminated against, please contact the Iowa Civil Rights Commission at 800-457-4416 or Iowa Department of Transportation's affirmative action officer. If you need accommodations because of a disability to access the Iowa Department of Transportation's services, contact the agency's affirmative action officer at 800-262-0003.

## 2010 Supervisors' Conference

**P**ay attention. That was the initial message of the 2010 Iowa DOT Supervisors' Conference opening speaker, Jon Stetson. Stetson used what he called "mind games" to show the crowd of 214 Iowa DOT managers and supervisors the power of observation. While Stetson's level of observation amazed the crowd when he was able to glean personal information from several audience members without having spoken to them at length, his general message was that investing in intuition, keeping an open mind, playing by the rules and keeping communication lines open pay dividends for everyone. He encouraged attendees to take risks and left the audience with this sports analogy, "You miss 100 percent of the shots you never take."

Following Stetson's presentation, the group was split into four sections for breakout sessions titled "Diversity 101: A New Paradigm" by Andre Koen, cultural coordinator for Anoka County, Minn; "Memory Power Tools" by Richard



Stanley, professional counselor and professor at Liberty College in Missouri; "Document Lessons Learned" by David Gorham, special assistant attorney general assigned to the Iowa DOT; and an update on Iowa DOT personnel issues including retirements, changes in the selection/hiring process and Title IV Program by Iowa DOT Office of Employee Services employees Walter Reed, Elvie Laudencia and Scott Zalaznik.

The second day of training included a session titled, "Relationship Management: Emotional Intelligence and Diversity in the Workplace," by Dr. Dorothy Simpson-Taylor, director of Diversity Resources in the Office of Equal Opportunity and Diversity at the University of Iowa.

The closing session, "Heading for Home," was presented by Kent Stock, a teacher, coach, middle school principal, banker, author and coach of the Norway baseball team during their now-famous final season as depicted in the 2007 film "The Final Season."



*Special Assistant Attorney General David Gorham explains document issues.*



*Keynote speaker Jon Stetson (left) engages a group of supervisors during his presentation.*



*Speaker Richard Stanley assists supervisors to increase memory power.*