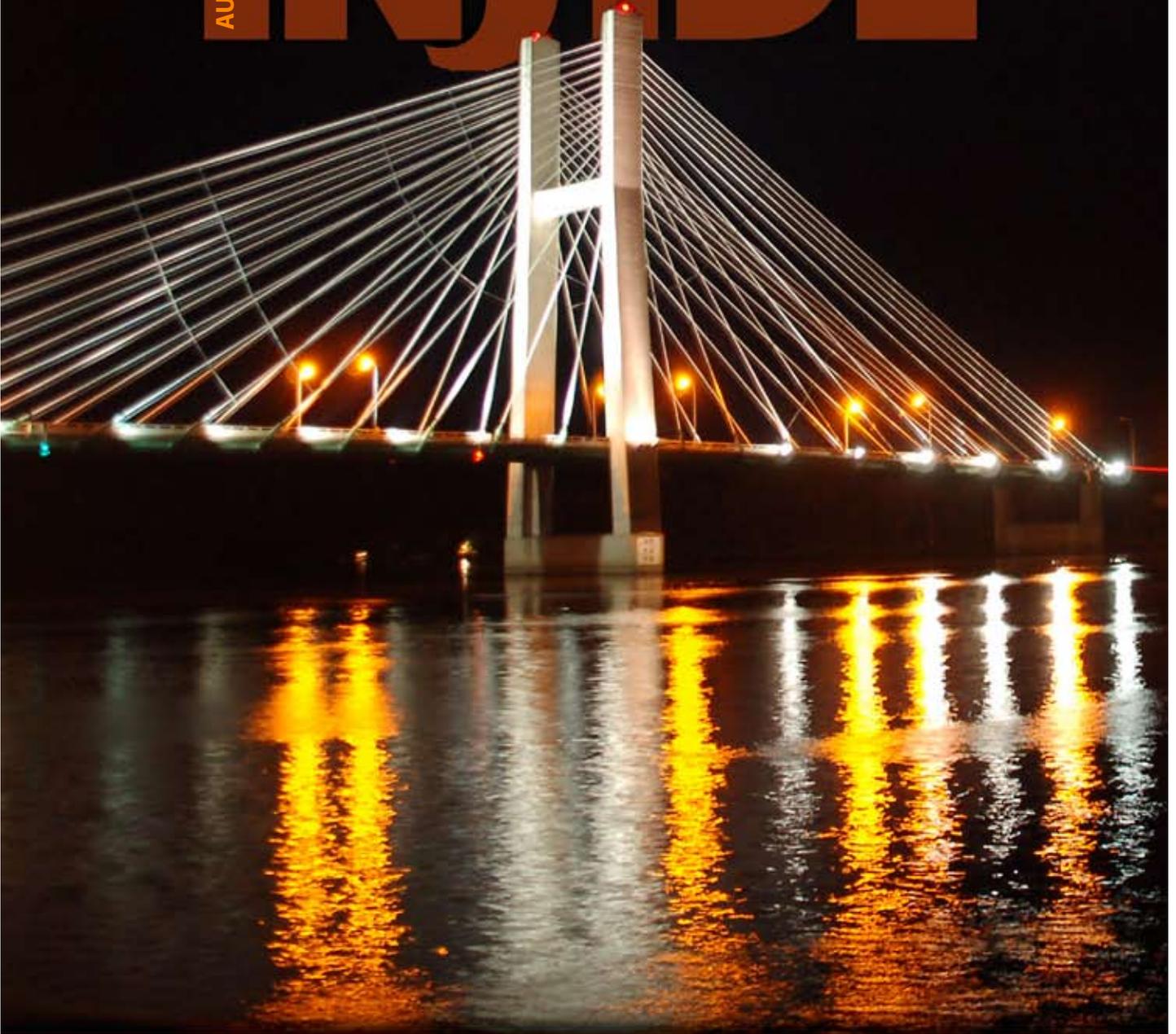


AUGUST 2009

# INSIDE



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## ONE 2 ONE

WITH DIRECTOR NANCY RICHARDSON

***It is time again for a little bit about a lot of things. ...***

**T**he thought occurs to me that we, and others, sometimes think Iowa DOT only is involved in roads. I have previously written about activities in other transportation modes, and it seems time to do that again.

There is a LOT going on in passenger rail right now. This past month, Office of Rail Transportation staff submitted pre-applications for federal Recovery Act funds to expand service from Chicago to Dubuque and Chicago to the Quad Cities and Iowa City and eventually on to Des Moines and Omaha, plus improvement to track on a current AMTRAK route through southern Iowa. We participated in another train ride, this one from Iowa City east to Moline, with Governor Culver to raise awareness of the benefits of passenger rail. And we joined Governor Culver in Chicago at a Midwest Rail Summit that brought together governors and DOT representatives from eight Midwestern states. Watch for more about this in next month's INSIDE. The Office of Rail is a small (about 13 employees) but mighty (as in mighty busy and mighty productive) part of the Iowa DOT.

Not to be left out, public transit also had some good news this month. I was asked to speak at the unveiling of the first hybrid transit bus (running on both diesel fuel and battery power) in Iowa, being added to the Des Moines DART fleet. Because it is a hybrid, it is expected to get approximately 50 percent better fuel mileage than regular buses, significantly reducing green house gas (GHG) emissions. Since transportation is responsible for about 30 percent of this country's GHG emissions, better mileage is a very good thing. My mantra as I speak to groups about climate change issues facing the transportation industry and this county is that we need to shift from just being part of the problem to being part of the solution...and introducing vehicles that are powered in ways that do not burn as much fossil fuel (like hybrids) and getting people out of single occupancy vehicles (through public transit and passenger rail) are all part of the solution.

Of course, we have also been busy with highway things. We received approval from the Iowa Transportation Commission to add 55 additional bridge repair or replacement projects for \$50 million to the first two years of the current 2010-2014 highway program. We are able to advance these projects on deficient bridges due to the passage this past session of Governor Culver's signature piece of legislation, I-JOBS. The Office of Bridges and Structures has been and is

very busy with all the work it takes to identify which bridges can be done and get them ready for lettings over a very short time; the first will be let in October. The result will be less structurally deficient and functionally obsolete bridges on our state system, a very important achievement.

There is good news from our federal Recovery Act efforts. For example, the House Transportation and Infrastructure Committee chair recently recognized Iowa for how quickly we got the money out working in the economy, and an independent organization that is ranking states' federally required Recovery Act Web sites ranked Iowa 12th best among DOT sites. All of this positive recognition is the result of Iowa DOTers' hard work.

The final milestone of note is a doozie. For the fiscal year ending June 30, 2009, Iowa DOT let to contract over \$1.03 billion (yes, with a "b"...\$1,030,000,000!!) in projects. The next closest annual letting amount was \$643 million. That is a whopping 60 percent increase over the next highest year! No more employees, no less work in other areas, just a tremendous example of us delivering more with less.

On a more personal note:

- In July I took over as president of the AASHTO Mississippi Valley Conference of States. This is the ten state DOTs in the Midwest and upper Midwest who work together on common interests and issues. We will host the annual meeting of more than 400 attendees in Des Moines next July. So, no more Director Richardson;

now it's President Richardson! Oh, okay, it's still just Nancy...

- I experienced a real Rodney Dangerfield "I don't get no respect" type moment that I thought you would get a kick out of. You may have noticed that I was recognized a couple months ago in INSIDE for 35 years with the state. What you didn't know was that I had to remind them about it. I was reviewing the previous month's INSIDE prior to publication and when I saw someone's picture for 35 years of service it struck me: I had been with the state for over 35 years! I asked why my name had never appeared and was told that the system that automatically identifies anyone reaching that milestone is programmed to identify all employees OTHER THAN the director for this recognition. Seems no one ever thought a director would be someone who had been around that long! Hmm, maybe there is a message in this...

- Speaking of being part of the climate change solution rather than just part of the problem, I am now the proud owner of a 2010 Prius Hybrid. It is rated at 48 mpg highway and 51 mpg in town (yes, hybrids get better mileage in town than on the highway because the battery kicks in more when the vehicle is in stop and go traffic). I purposely bought a hybrid to try to, as they say, "reduce my carbon foot print." So far so good; I like it! However, many things about it are unconventional so my biggest worries are how to get into it (it senses the key fob is near as you reach for

**ONE 2 ONE,**  
*continued on page 15*

## Following through to make bridges safer

**D**o you ever wonder if discussions held at meetings ever yield results? Last summer, the long-term bridge performance (LTBP) project group from the Iowa DOT, Iowa State University and others held a discussion on potential collaboration with New Jersey's Rutgers University about better ways to evaluate bridge deck deterioration.

Out of that meeting came a contract between the LTBP group and Rutgers to travel to Iowa this summer and perform research on bridge deck deterioration mapping using nondestructive evaluation (NDE) methods on nine Iowa bridges. Ahmad Abu-Hawash from the Iowa DOT's Office of Bridges and Structures led the research team's efforts. "Everyone is looking for a better way to test bridge decks for deterioration," said Abu-Hawash. "The Iowa DOT's testing equipment is aging and doesn't take advantage of modern nondestructive test methods. We are looking to replace the old technology and see this as an opportunity to validate current high-tech research methods."

The project, partially funded with \$55,000 in technology transfer funds from the Federal Highway Administration, was the leading research project submitted to the FHWA for this pooled fund. State research funds added an additional \$125,000 for testing on the nine bridges.

The research project, completed in June, utilized several test methods to determine the condition of the bridge decks, including ground-penetrating radar, ultrasonic, seismic and impact echo. "The nondestructive nature of these technologies gives us faster and safer methods to evaluate bridge deck conditions. Because there is more than one test method, we can use the new tools in combination to double check results and increase accuracy," said Abu-Hawash.

Six of the nine bridge decks chosen for the research project will be resurfaced this summer, allowing Iowa DOT engineers to verify the accuracy and relative value of the various testing

methods. Abu-Hawash said, "We are also taking core samples of the bridge decks to verify the NDE test results. So far, they have matched very well."

While the Office of Bridges and Structures and Research and Technology Bureau led the research team, Abu-Hawash said many people from the Iowa DOT's district offices, materials testing centers and field offices have been involved in planning the testing over the last six months. He said, "We relied on the field personnel to assist in choosing test sites. We have test sites in five of the six districts, and we really appreciate the high level of cooperation between the central office and field offices."

*Impact echo device is mounted on a remote-controlled robot in action*



# Preserving the past while moving into the future



*Computer-generated image of the completed Bellevue bridge*

**T**he historic Jackson County river town of Bellevue is home to many transportation resources with the adjacent Lock and Dam #12 on the Mississippi River, and the Iowa, Chicago and Eastern Railroad running down the center of North Second Street, just a block away from U.S. 52, known as the Great River Road, one of only two National Scenic Byways in the state. At the base of Bellevue State Park on the south end of town where the railroad crosses under U.S. 52, Iowa DOT historic preservationists, bridge designers, engineers, and construction professionals have been working together to design and build a new bridge that addresses several issues unique to the project site.

## Historical significance

Many Iowa DOT offices are working together and collaborating with other state agencies and contractors on this project. Judy McDonald from the Office of Location and Environment is the DOT's contact with Iowa's State Historic Preservation Office (SHPO). Officials from SHPO review and comment on the cultural resource reports concerning

properties affected by federally funded construction projects according to the National Historic Preservation Act. For the U.S. 52 bridge construction project, one property now used as a motorcycle shop was deemed historic and will be protected and monitored during the construction process.

"To provide protection to the historic motorcycle shop building, a precondition survey was conducted to document its existing condition. The consultant made a recommendation of a vibration limit that would provide protection for the building," said McDonald. "Prior to starting construction, a seismograph with an alarm system was installed along with a system to record the vibration activity during construction. The alarm system is set to alert the contractor and DOT resident construction engineer if vibrations near a predetermined vibration limit. Crack gauges were placed on existing cracks to monitor any changes that may be caused by construction vibrations. If the seismograph alarm should go off, or if a crack has opened up, vibration-causing activities would be halted, the

contractor and resident construction engineer would evaluate the cause and makes modifications to the construction methodology to avoid further occurrences. Of course, the goal is for the contractor to work carefully to minimize risk to historical properties near the construction zone."

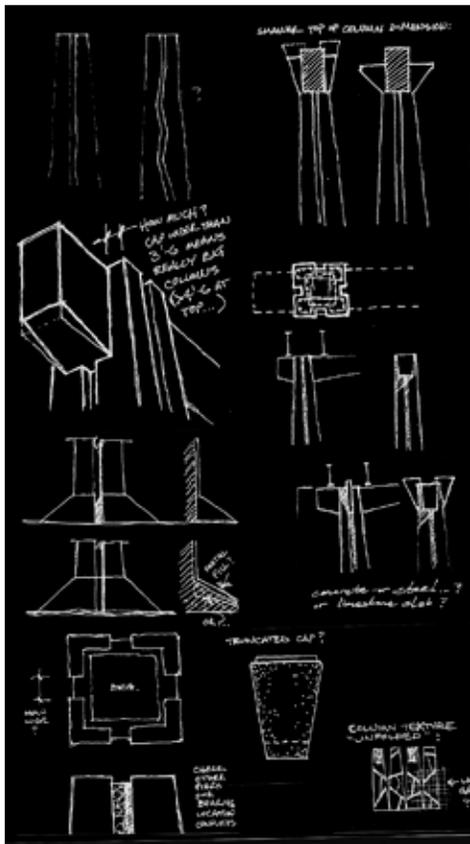
## Engineering challenges

While preserving the historical value of nearby properties is one challenge on the project, an even more daunting task came with engineering the new bridge to straddle the railroad track with an acceptable amount of vertical clearance. Jim Nelson of the Office of Bridges and Structures, said, "There is a very tight angle between the road and railroad that caused some challenges. The railroad requires a minimum 23 feet of clearance under the bridge. Designers were challenged with how to provide the clearance without raising the grade of the road above. Steve Seivert of the Office of Bridges and Structures prepared the bridge layout and coordinated with the railroad. Nelson said, "To provide railroad vertical clearance without raising the grade, a straddle bent pier with an integral pier cap was used at the intersection of the railroad tracks and bridge. The straddle bent pier has a column on either side of the tracks with heavy construction to meet the railroad

*Bellevue, continued on page 5*

*Straddle bent pier columns were used to provide adequate clearance for the railroad below the bridge*





A few of Olson's original pier concept sketches

**Bellevue**, continued from page 4

requirements since the columns are in the horizontal clear zone. The bridge girders frame directly into a steel pier cap so that the cap and girders are at the same elevation, which maximizes vertical clearance under the pier cap and over the railroad. Other options, like using a very long span or raising the grade, would have been costly in comparison. "

**Aesthetics and imagery**

Aside from the historic preservation and engineering challenges of the six-span, 657-foot long steel bridge replacement, the natural beauty of the area called for unique aesthetic treatments for the new bridge. Because of the bridge's proximity to scenic Bellevue State Park, the Iowa Department of Natural Resources expressed concerns about the appearance of the new structure and the roadway barriers that would flank the park's entrance. During



A concrete texture mock-up of a bridge tower is given a water blast finish

discussions with park officials and representatives of the city of Bellevue in the planning stages of the project, it became clear that the structure's design should be sensitive to the site's natural surroundings and multiple viewing opportunities. The replacement of the current bridge would also be a chance to create an artistic statement that both complements the environment and celebrates its task of carrying the Great River Road through such a beautiful setting. "This is the prettiest bridge site I have ever been to," said Nelson.

Kimball Olson of the methods section of the Office of Bridges and Structures was tasked with developing the aesthetic elements of the new structure. He found his inspiration for

features of the bridge in the limestone bluffs that rise above the south end of the site. Olson said, "In a typical scenario with this type of dominant physical context, a designer might simply make the bridge's concrete surfaces appear to be made from blocks of the local stone by using form liners that mold concrete to look like stone walls. Rather than build yet another bridge of this kind, we asked a question: Instead of making it appear to be MADE of stone, what would the bridge look like if it actually WERE the stone?"

Olson continued, "The quest to define this abstract notion became a driving force that helped to determine

**Bellevue**, continued on page 6



Olson's computer rendering of the new pedestrian facility on the Bellevue bridge

**Bellevue**, continued from page 5

the form and finish of the bridge's piers, traffic barriers, abutments, and towers. Flat (and normally featureless) concrete surfaces exhibit erratic rustications, like fractures in weathered rock. Deep fissures run the height of the monolithic pier columns, exposing rock-like strata within. Multiple form

*Weathering steel butterflies will adorn the towers of the new bridge to connect the structure visually to the butterfly area in the nearby state park (below, computer-generated image; right, photo of steel butterfly)*



Olson explained that the crowning feature of the bridge was inspired by a special place within nearby Bellevue State Park: "The 'Garden Sanctuary for Butterflies' is a unique area with flowers and other plantings especially chosen to provide food and habitat for many different species of butterflies," He said. "Each of the paired towers at the ends of the bridge have four abstract weathering steel butterflies perched atop, like a gathering of butterflies themselves appearing much like a flower. Their wings are made of perforated steel, which will make them appear to shimmer when viewed by motorists while they cross this new addition to their journey along the Great River Road."

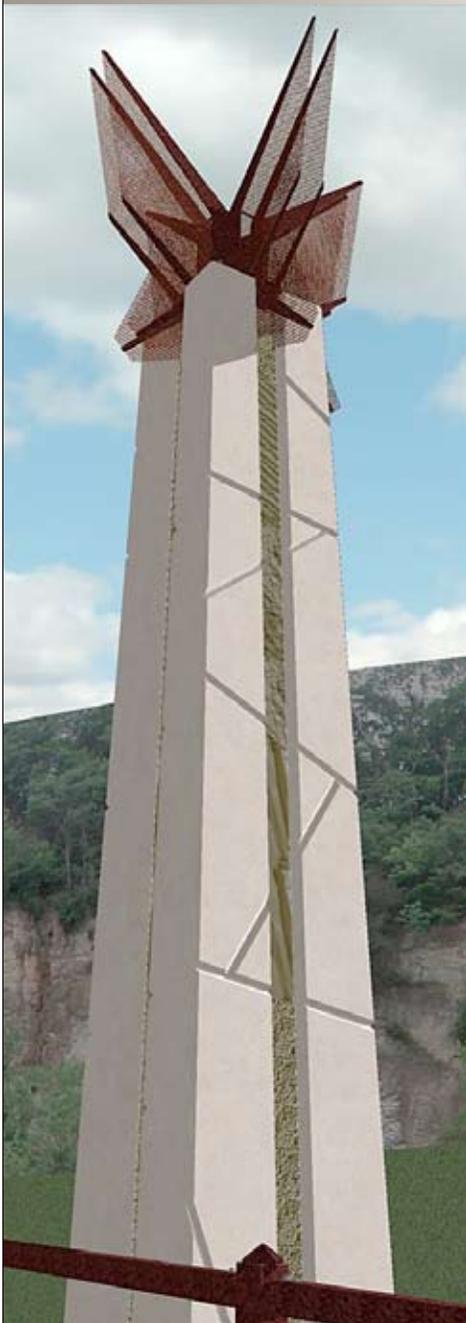
### Construction inspection

Cramer and Associates Inc. was chosen as the contractor on the project, with the Davenport construction office in charge of inspection. Steve Smithson, construction technician, is in his first year inspecting projects on his own. "I had a lot of experience inspecting in the shared worker program, but this is my first job on my own as a construction technician. If I have questions on the plans, I know I can always call Kimball or the construction technician seniors in my office for advice, and the Cramer people are a great group to work with; they go above and beyond what we ask of them."

liners were used in unconventional ways to create variegated layers of stone textures, as if laid down by natural geologic processes. The bridge's abutments appear as limestone outcroppings projecting from the landscape. There are even piles of broken limestone at the base of pier columns to suggest debris resulting from natural erosion."

The bridge's superstructure is constructed of naturally weathering steel which, over time, gains a protective, rich red-brown patina from exposure to the elements. The same material is used for the pedestrian railings, which will help the bridge blend with the scenic natural setting, and lends color to the railings without the maintenance concerns that a painted railing would have suffered.

*Computer-generated image of bridge detail*



## MVE recognition for Vigilant Guard

**W**hen 1,400 National Guard soldiers and airmen from Iowa, Kansas, Missouri, and Nebraska gathered in Iowa and Kansas June 17-24 as part of the Vigilant Guard exercise, the Iowa DOT's Office of Motor Vehicle Enforcement had just one question for the military, "What can we do to help?"

The military responded with a request to use the east-bound I-80 weigh station in Dallas County as a checkpoint for the National Guard, acting as the nation's first military responders to domestic emergencies such as mock chemical spills, animal disease and terrorism during the exercise. The exercise also provided an opportunity for cooperation between the guardsmen and local, state and federal emergency responders to test their ability to work together in a domestic emergency.

Lt. Col. Steve Warnstadt of Sioux City said the exercise had been in the planning stages for 14 months. "This is a national exercise," he said. "It was Iowa's turn to host the complicated training mission, and I believe we performed very well and forged bonds with agencies like the Iowa DOT that will serve us very well in the event of an emergency."

The guardsmen took up a position at the weigh scale to process 200 incoming guard troops from Nebraska. Accounting for the personnel and their equipment, and getting them on their way quickly, were the orders for those serving at the scale location. Not only did the Iowa DOT provide the location, MVE officers also escorted the Nebraskans to the exercise site in downtown Des Moines, the scene of a mock train derailment and toxic chemical spill.

Warnstadt, whose main responsibility is commanding the unit supporting out-of-state units, said the positive working relationship developed between the Iowa DOT and National Guard is not something to be taken lightly. "Staging the operation at the weigh station went exceptionally well. I think this is the first time I've heard nothing but positive comments from an organization that went through this process during the after-action review. There were no complaints or even suggestions on how to improve this part of the operation. This sets out Iowa as an example of cooperation between agencies."

Officials said primary goals in the exercise include:

- Development of interagency coordination and cooperation.
- Evaluation of the response during the training events.
- Integration and synchronization of emergency responders.
- Providing opportunities for emergency responders to exchange best practices.
- Community preparedness and awareness.



*Lt. Col. Steve Warnstadt (second from right) presented commendations to (from left) Major Ned Lewis, Capt. Robert Johnson and Chief David Lorenzen for the high level of cooperation from the Iowa DOT's Office of Motor Vehicle Enforcement during the Vigilant Guard exercise in mid-June.*

*(Editor's note: During the exercise, the State Emergency Operations Center at Camp Dodge in Johnston was activated. The transportation desk was staffed by John Haas, Pebble Holland, and Bonnie Castillo from the Emergency Operations Center; Barb Coon from Maintenance; and Sgt. Joe Farnsworth from Motor Vehicle Enforcement.)*

## International Road Check held June 2-4



**T**he Iowa DOT's Office of Motor Vehicle Enforcement, Iowa State Patrol and Federal Motor Carrier Safety Administration participated in Road Check 2009 June 2-4. The Iowa agencies worked together as part of the

22nd annual international truck and motor coach safety and security event consisting of 72 continuous hours of enforcement activity throughout Canada, Mexico and the United States.

Iowa DOT motor vehicle officers conducted more than 1,000 commercial driver/vehicle inspections at locations throughout the state on roadways identified as high-crash corridors. The inspections were done to determine driver and vehicle compliance with federal motor carrier safety and hazardous materials regulations. From these inspections, 173 trucks or buses with serious safety violations were taken out of service and not allowed to continue until they were repaired. Inspectors found 2,714 driver- and vehicle-related violations during the check. Also, 163 unqualified drivers were taken out of service, while 270 drivers and vehicles were found to have no violations.

## Sun kinks – another consequence of searing temperatures

**M**ore than roads buckled under Iowa's extreme heat earlier this summer. Railroad tracks are also susceptible to the high temperatures, and this is keeping railroad crews and Iowa DOT track inspectors busy as well.

For decades, researchers have tried to figure out how to keep steel railroad tracks from warping in high temperatures. Despite the successful prevention measures adopted by the railroad industry, no technology exists that can completely prevent it from happening. The so-called "sun kinks" can happen out of the blue. If undetected, they can result in a derailment.

The buckling happens to welded rails, rails that do not have joints. Rails come from the welding plants in strings one-quarter mile long. Once the rails are laid in the track, the ends are welded to each other to create strings of rail that are continuous. The United States began using a welded rail system instead of jointed in the 1950s because it provides a smoother ride, eliminates the "clickety-clack" of traditional rails and reduces maintenance costs.

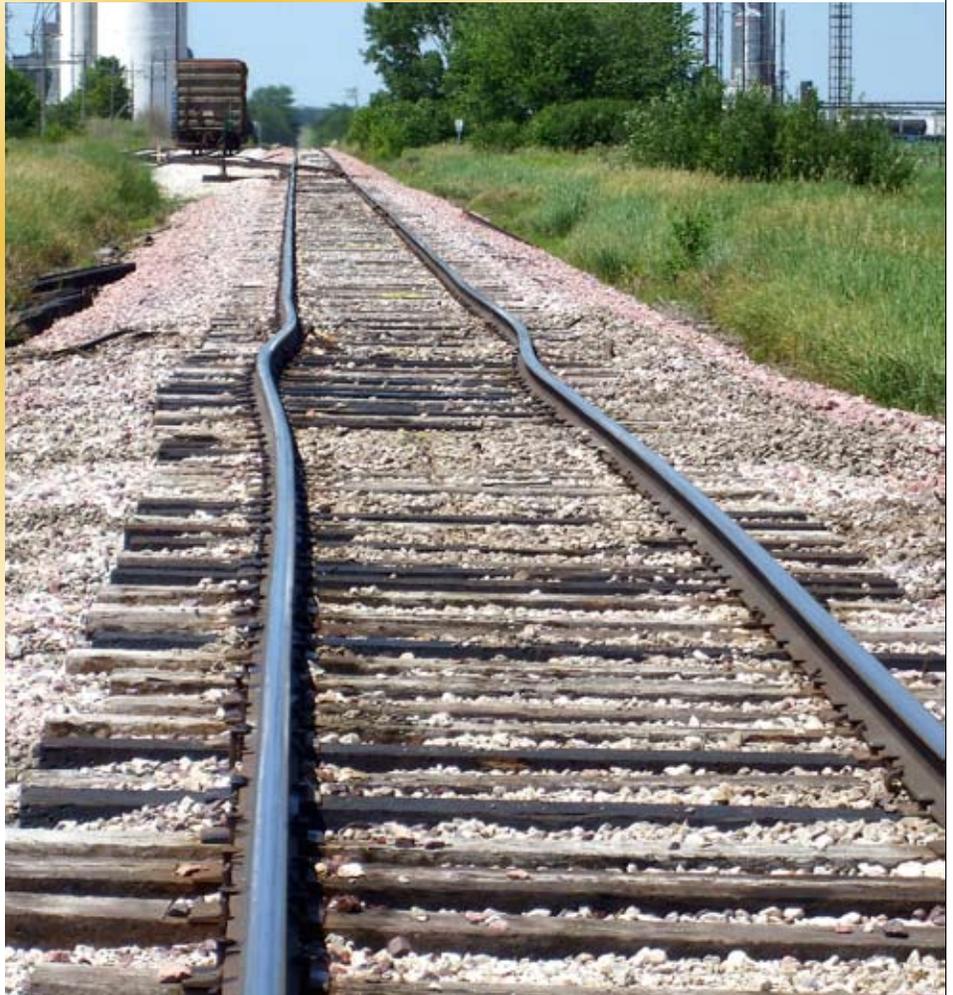
Steel rails slowly expand and contract as temperatures rise and fall. An 1800-foot length of rail will expand almost a foot with an 80-degree change in temperature. Before welded rail, expansion was absorbed by a small gap (joint) between the rails. With welded rail the normal tendency to expand must be constrained internally by securing the rail.

Careful engineering measures, including heating the rail, are taken when rail is installed to account for rail expansion and contraction. The railroad spikes, tie plates and cross ties, supported by the rock ballast, as well as rail anchors that are applied in a strict pattern to contain the rail from movement, can normally contain these stresses. However, in some cases these measures cannot hold the extreme amount of force that high temperatures can create. A sudden release of these stresses may occur, resulting in the rapid (and often audible) development of a kink or sideways movement in the track.

That is where the heat inspectors come in. To add an extra measure of safety, track inspectors are sent out

when the temperature rises quickly from night to day or when the daytime temperatures become extreme and the rail attempts to rapidly expand. These inspectors look for signs the track is under extreme compression and in danger of kinking. Signs include wrinkles in the track and disturbances of the ballast. When a kink or high tension is discovered in the track, it is taken out of service, repaired and then returned to service.

If warranted, a heat restriction or order may be imposed by the railroads as an additional safety measure. During these restrictions, trains must operate more slowly through the affected areas.



*This railroad track near Goldfield kinked earlier this summer.*

# UHPC to be used in waffle deck panels

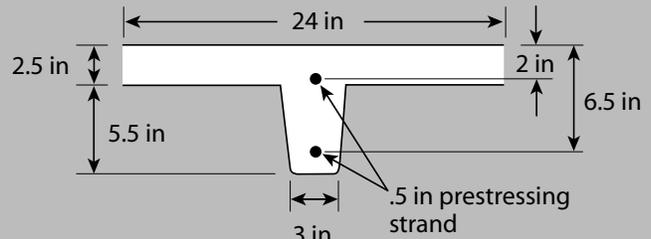
**W**apello County is quickly becoming the ultra-high performance concrete (UHPC) capital of the United States. In 2005 and 2006, a county bridge was transformed with the use of the super-strong substance in the bridge beams. The material, patented under the name Ductal, consists of cement, silica fume, metallic fibers, superplasticizer, fine sand, and a very small amount of water.

In June, the Federal Highway Administration awarded a \$382,971 grant through the Highways for Life program to Coreslab Structures Inc. of Omaha to manufacture the deck for another Wapello County bridge using UHPC. This is the first use of UHPC in "waffle" bridge deck panels. While UHPC is typically very expensive to use, this particular design with less material in the cross sections makes it less costly to use. The panels also will be fabricated off-site and then placed onto the bridge, resulting in less construction time.

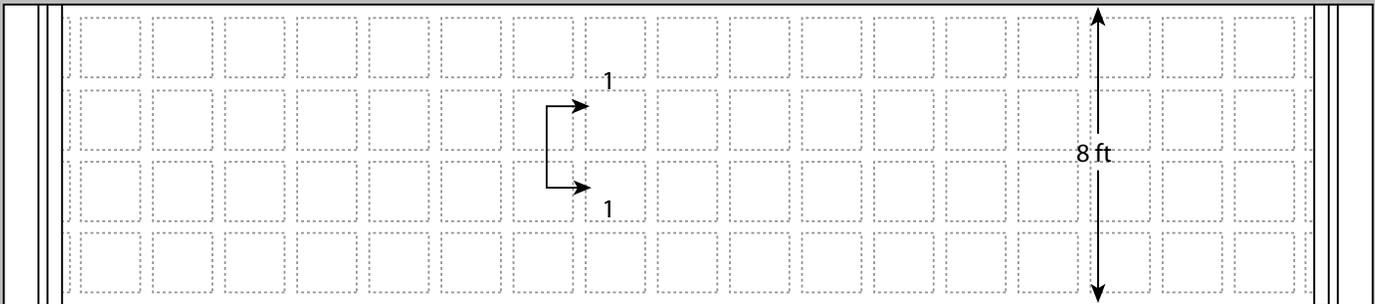
Iowa is also home to a bridge in Buchanan County that used UHPC in the construction process. With three Iowa bridges using UHPC components, all firsts in the nation, our state is becoming a leader in the use of the high-strength material.



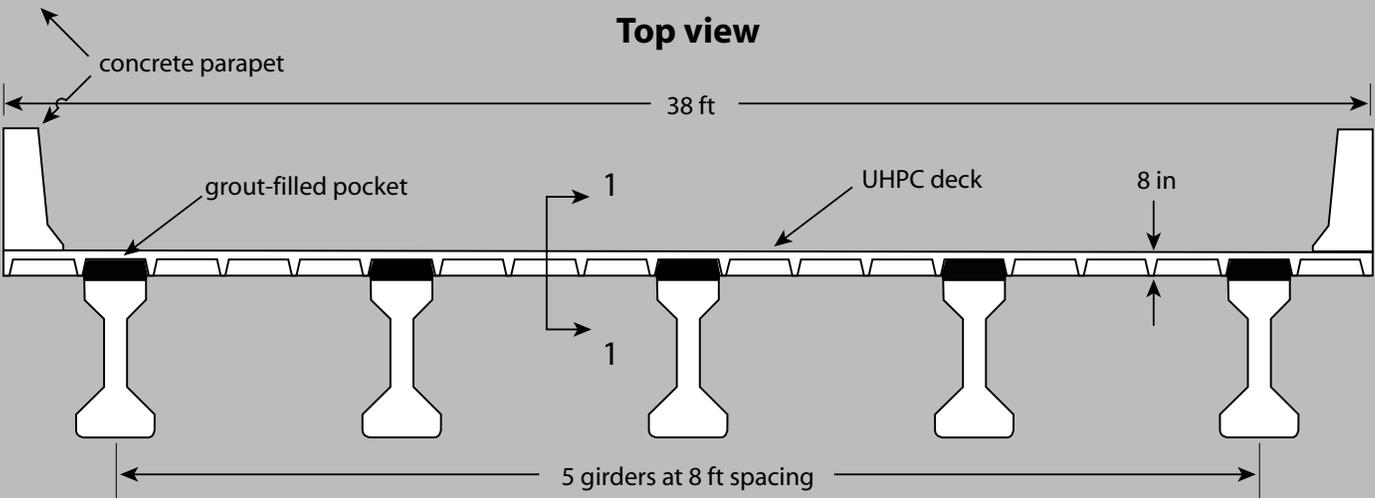
A new technology called ultra-high performance concrete is being used on some Iowa bridges. The texture of the mix is much different than traditional concrete mixes.



**UHPC beam cross section**



**Top view**



**Cross section**



From the left, Carol Burt, Denise Wieland, John Wieland, Julie Hart, and Brian Hart

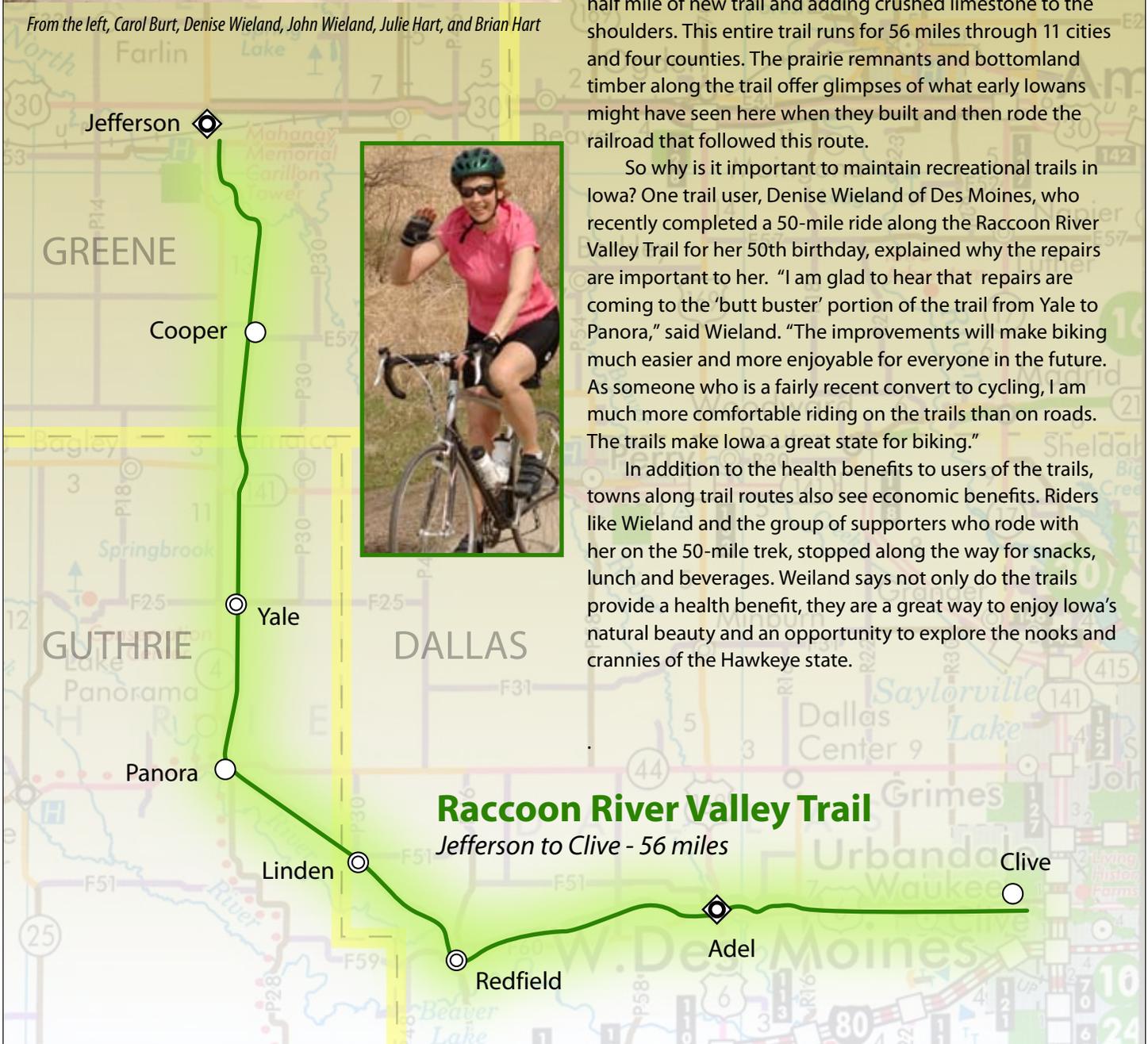
## 50 miles for 50 years

**A**s part of the American Recovery and Reinvestment Act of 2009 (Recovery Act), all modes of transportation in Iowa have received additional funding. One transportation mode used a great deal this time of year is the state's recreational trail system. One section of the Raccoon River Valley Trail in Guthrie County has been chosen by the Iowa DOT as a showcase project on the Recovery Act Web site, [www.iowadot.gov/recovery](http://www.iowadot.gov/recovery).

The trail rehabilitation project, set to be let Aug. 18, involves placing a four-inch concrete overlay on five miles of the existing Raccoon River Valley Trail, developing one-half mile of new trail and adding crushed limestone to the shoulders. This entire trail runs for 56 miles through 11 cities and four counties. The prairie remnants and bottomland timber along the trail offer glimpses of what early Iowans might have seen here when they built and then rode the railroad that followed this route.

So why is it important to maintain recreational trails in Iowa? One trail user, Denise Wieland of Des Moines, who recently completed a 50-mile ride along the Raccoon River Valley Trail for her 50th birthday, explained why the repairs are important to her. "I am glad to hear that repairs are coming to the 'butt buster' portion of the trail from Yale to Panorama," said Wieland. "The improvements will make biking much easier and more enjoyable for everyone in the future. As someone who is a fairly recent convert to cycling, I am much more comfortable riding on the trails than on roads. The trails make Iowa a great state for biking."

In addition to the health benefits to users of the trails, towns along trail routes also see economic benefits. Riders like Wieland and the group of supporters who rode with her on the 50-mile trek, stopped along the way for snacks, lunch and beverages. Wieland says not only do the trails provide a health benefit, they are a great way to enjoy Iowa's natural beauty and an opportunity to explore the nooks and crannies of the Hawkeye state.



Microsoft  
Office Outlook 2007

**Tips and tricks**

**W**hile most Iowa DOT computer users know how to perform simple E-mail functions in Outlook, there are many options you may or may not have explored in this program. By now, many DOT computers have been upgraded to Outlook 2007. While the upgraded program may look a little different, many of the options function in a similar way to previous versions. Over the next several months, the knowledgeable folks in the Information Technology Division will share tips and tricks for Outlook. Many of these tips and tricks are also on DOTNET; click the drop-down menu for Employee Resources



and Information and select "E-mail and eVault How-To's."

eVault is the DOT's approved method for archiving E-mail. All E-mail is automatically moved to eVault after six months and cannot be deleted once it is archived into eVault. There is a training document on how to use eVault located under the same DOTNET section.

**Quick tips for eVault**

At the top of your Outlook window there are three icons for using eVault (Search Vaults, Archive Explorer and Store in Vault). If you are unable to find these icons, call the Call Center for assistance at 515-239-1075.

**Logging into eVault** – When you click on these items you MAY be prompted to login. Enter "idotcentral\username" (your username here) in the User name field, then enter your network password in the Password field and put a check mark in the box to "Remember my password."

**Search vaults** – Use this button to search all items in your eVault. There is a 10-page limit for this view, but you can use the links at the top of the page for a Browser Search or Advanced Find to help narrow your search.

**Archive Explorer** – Use this button to view the same folder structure as your Outlook mailbox. You can browse through the folders to view the E-mails in that folder. There is a 10-page limit on this view, so use the Search button at the top of this page to narrow the search within this folder. For more advanced search options, go to the Search Vaults button and use Advanced Find or Browser Search. The close button for this page is in the upper, right-hand corner.

**Store in Vault** – If there are items in your mailbox that you know you will want to keep, or if your mailbox is getting too large, you can store items in eVault before the six-month period. You can select one message or a group of messages and click on the Store in Vault button. They will be removed from your Outlook view the next day.

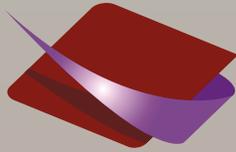
*Richardson  
named president  
of MVC*



Iowa DOT Director Nancy Richardson was elected president of the Mississippi Valley Conference of State Highway and Transportation Departments (MVC) at the group's annual meeting July 14-17 in Grand Rapids, Michigan. MVC is one of four regional organizations within the American Association of State Highway and Transportation Officials (AASHTO). The Midwest group is made up of state transportation departments from Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

Member states cooperate to:

- Develop and improve methods of administration, planning, design, construction, operation, and maintenance of highways, and other transportation modes.
- Study and research problems connected with all transportation.
- Promote needed transportation legislation.
- Develop technical administration and highway and other transportation operation standards and policies.
- Coordinate with the U.S. Department of Transportation, AASHTO and other agencies to strengthen and improve a balanced transportation system.



## Urban Youth Corps



There's nothing like the great outdoors on a sunny summer day, especially if you're making money enjoying Mother Nature. Teens working in the Urban Youth Corps (UYC) program, many working their first jobs, get to be outside, learn the value of a good day's work, make new friends, and develop skills that can be used throughout their lives. Nearly three dozen Iowa youth involved in the Iowa DOT-administered UYC program experience a wide variety of activities, and learn what a sense of accomplishment and earning a paycheck are all about.

The federal program was established to: offer meaningful full-time or productive summer work for individuals from the ages of 16 to 21 in transportation settings; give participants a mix of work experience and on-the-job training that includes a minimum of five hours per week of the participant's time for basic life skills, education, training, and safety; and provide youth an opportunity to develop citizenship values and skills through service to their communities.

Iowa DOT is in its 13th year of administering UYC. This summer's projects supported many outdoor activities with six agencies hiring at-risk young people through the program that aims to complete transportation-related projects, mostly on recreational trails and county park facilities that would not ordinarily be accomplished within the budgets of the sponsoring agencies. In addition to accomplishing much-needed work, the programs strive to teach the youth problem solving in real-world situations.

Each UYC project is designed to provide a transportation-related service to citizens, including: providing facilities for pedestrians and bicycles; landscaping and scenic beautification within highway rights-of-way or in proximity to transportation facilities; preservation or rehabilitation of historic markers, buildings, structures or facilities having significance to transportation; and preservation of abandoned railway corridors. Each successful applicant group must provide local matching funds of at least 30 percent of the project cost.

All six agencies funded through UYC this summer are veterans of the program. The Iowa Natural Heritage Foundation provides opportunities for four youth to work in Page, Fremont, Mills, and Pottawattamie counties on Wabash Trace Nature Trail projects. The Dubuque County Conservation Board enters its second year as a UYC participant with four young people completing trail maintenance on several Dubuque County facilities. Three workers were hired by the Mahaska County Conservation Board, a long-time UYC participant, to complete work in the county's park system.

The five crew members hired by the Black Hawk County Conservation Board (BHCCB) experienced the ongoing cleanup and recovery efforts from the devastating floods of 2008. The group had a great sense of accomplishment as they refurbished a scenic overlook along a trail at Bullfrog Bayou in Cedar Falls that had been closed since last summer. Constance Grimm from BHCCB said, "This overlook is very popular. Having it repaired will be great for the community, but wasn't something we probably would have gotten done this summer without the assistance of the UYC team members." UYC team member Louis, a 16-year-old from Black Hawk County, says he is learning team work from his experience and would rate the program as a 10 on a scale of 1 to 10.



*Two Black Hawk County Conservation Board UYC workers help repair a scenic overlook damaged by last year's flooding.*

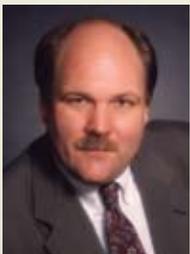
In Iowa City, ResCare Inc. of Iowa is the sponsor group, and supervision is provided to the five crew members, one assistant crew leader and crew leader by ResCare and the Army Corps of Engineers staff members. Thomas, an 18-year-old known to his co-workers as the "Flying Hawaiian," says he has had a very positive experience in UYC and is learning lots of life skills. Another Iowa City crew member, 17-year-old Jeffery, is in his second year of the program. He says he decided to try working for UYC again this summer and "continues to learn how to work hard."

In Marion, Trees Forever is participating in UYC again this year, hiring nine crew members and three crew supervisors. Karen Brook of Trees Forever pointed to her group's hiring of former UYC crew members as supervisors this year as her organization works to complete a three-year tree inventory in Marion. Fadre, an 18-year-old who was a crew member last year and is now a leader, said, "I think people really learn a lot from this experience. When I worked here last year, I know I learned a lot and this year I'm learning leadership, working with and teaching people about the work."

## In memory

Lillian Borseth, age 89, of Decorah, died Thursday, May 28, at Wellington Place in Decorah. Lillian Gertrude (Peterson) Bakken Borseth was born Feb. 20, 1920, the daughter of Even and Ida (Borseth) Peterson on the family farm in Madison Township. Lillian married George Bakken June 17, 1967, he died in 1987. She married Norman Borseth May 15, 1989, in Colorado. She worked as a secretary for the Iowa State Highway Commission and then the Iowa DOT's Decorah maintenance residency for 34 years. Borseth's survivors include her husband, Norman of Decorah; one step-daughter, Ann Borseth of Brooklyn Park, Minnesota; one sister, one sister-in-law, one brother-in-law, and many nieces, nephews, and great nieces and nephews.

Thomas Harold Maze, 57, of White Bear Lake, Minnesota, died Monday, June 8, after a long struggle with heart disease. Maze was a professor of civil engineering at Iowa State University Institute for Transportation. In addition to research, teaching and mentoring, Dr. Maze was intensely involved in enhancing transportation technology transfer through professional training and outreach activities. One of his legacies is the Midwest Transportation Research Symposium, a conference he initiated in 1996 in partnership with the Iowa DOT. This biennial event provides a Midwest venue for disseminating national research in a format similar to the Transportation Research Board's annual meeting. Through ongoing activities like the symposium, as well as the extensive body of work he leaves behind, Dr. Maze's accomplishments will continue to have an impact across



Iowa, the country and beyond for a very long time. He is survived by his loving wife, Leslie Maze; stepdaughters, Lauren Krause and Julie Crothers; two sisters and their families.

Bernard A. "Benny" Halvorson, 77, of New Hampton, died Friday afternoon, June 19 in Charles City. Halvorson was born Aug. 19, 1931, in New Hampton, the son of Henry and Anna (Olson) Halvorson. He married Janice C. Hartson Oct. 3, 1953. Halvorson worked at the Iowa State Highway Commission, later the Iowa DOT, retiring after 41 years. Halvorson especially loved working on the farm; socializing with friends and family; and in his later years fishing, camping, gambling, and watching old westerns. Survivors include two sons, Bradley "Bucky" (Pam) Halvorson of New Hampton; Todd (Krista) Halvorson of Erie, Colorado; four daughters, Brenda (Mike) Kellogg of Nashua, Lori (Mike) Rosonke of New Hampton, Debra (Steve) Lahr of Fairfax Station, Virginia; Tamara (Dan) Halvorson of Madrid; 10 grandchildren; seven great-grandchildren; and two sisters.

George Rowe, 94, of Sioux City, died Tuesday, June 23. Rowe was born to Carroll George and Laura (Shear) Rowe in Hampton. In 1936, he married Viola Reed in Iowa Falls. Rowe was a veteran of World War II. After the war, he returned to Iowa, where he went to work for the Iowa State Highway Commission in 1946. While working for the state, he earned his engineering license.

Work led him to live in Britt, New Hampton and Ames, eventually ending up in Sioux City. He retired from the Iowa DOT in 1978.



Rowe's hobbies included golf, fishing and handyman work. His family meant the world to him, and he was very proud of his military service.

Survivors include son, Gary (Debbie) Rowe of Sioux City; a daughter, Barbara Rinehart of Coral Springs, Fla.; grandchildren, Toi Mulder, Todd Rowe, Jeffrey Rinehart, Jerry Rinehart, and Dawn Kraft; 15 great-grandchildren; a half-brother; and many friends.

Floyd K. Brown Jr. died June 22 at his home in Chariton. Brown was born in Leon, June 21, 1923, to Floyd and Nettie Brown. He married Florence King in 1948. He served in World War II and joined the Iowa DOT in 1962 as an instrument man on a survey crew. He was later promoted to construction technician 1 and then construction technician 2 in 1971. He retired Sept. 29, 1983, after 21 years of service in the Chariton construction office. He is survived by his brother, Don of Des Moines; sister, Dorothy Myer of Waterloo; and nieces and nephews.

## Thank you

I would like to take this opportunity to thank all who offered me help and encouragement as I went through treatment for my blood cancer (myelofibrosis). The whole process has been quite a journey. The E-mails, calls, cards, and notes on my Carepages helped me keep a positive attitude during this time, especially when I went through the bone marrow transplant. To those who donated leave, you helped reduce the stress I endured at being off work for a while. I really appreciate the help given to me and my family during this time. I cannot thank you all enough.

Thank you,  
Edwin Hinz,  
equipment operator senior  
DeWitt/Sabula garages

## Personnel updates

Information supplied by the Office of Employee Services for May 15 to June 11, 2009.

### New hires

**John Dostart**, transportation engineer specialist, Local Systems; **Cody Kerkove**, information technology specialist 2, Information Technology Division; **Jeff Larson**, construction technician assistant, Design

### Promotions

**Clint Ammenhauser**, from highway technician associate to highway technician senior, District 5 bridge crew; **Shannon Anderson**, from secretary 1 to engineering office assistant 1, Ames maintenance; **Kristopher Bliven**, construction technician associate to highway technician senior, District 3 Office; **Patrick Ketchum**, from highway technician associate to highway technician senior, District 4 bridge crew; **Kenneth McLaughlin**, from highway technician associate, Sigourney garage to highway technician senior, District 5 bridge crew; **Randy Moser**, from highway technician associate, Iowa Falls garage to highway technician senior, District 6 bridge crew; **Roger Rohlf**, from information technology specialist 5 to information technology administrator 2, Information Technology Division; **Jeffrey Shelton**, from construction technician senior, Sioux City construction to engineering technician senior, District 3 Office; **Kim Siems**, from highway technician associate to highway technician senior, District 2 bridge crew; **Laura Sievers**, from transportation engineer intern, Sioux City construction, to transportation engineer senior, District 3 field staff; **Jeremy Weber**, from highway technician associate to highway technician, Hampton garage; **Robert Welper**, transportation engineer, Design to transportation engineer specialist, District 2 Office (inadvertently omitted from May INSIDE); **James Wittwer**, from equipment operator senior, Council Bluffs-north garage to highway technician senior, District 4 bridge crew

### Transfers

**Michael DeJong**, highway technician associate, from District 3 bridge crew to Sioux City-Hamilton garage; **Timothy Grell**, highway technician associate, from Sioux City-Leeds garage to Sioux City-Hamilton garage; **Mary Thompson**, secretary 2, from Bridges and Structures to Contracts

### Retirements

**Karen Lidman**, secretary 2, Contracts; **Cassandra Jo Messingham**, right-of-way agent 2, Right of Way; **Wayne Strovers**, right-of-way agent 2, Right of Way

## Service awards

Information supplied by the Office of Employee Services for August 2009.

### 40 Years

**Linda Gardner**, Driver Services

### 35 Years

**Darrill Burgett**, Bridges and Structures; **Daniel Collins**, Elkader garage; **Lionel Keeney**, Maquoketa garage

### 30 Years

**Joseph Golinvaux**, Public Transit; **Kevin Gramlich**, Maintenance; **Douglas Johnson**, Bridges and Structures; **Roger Jones**, Materials; **Eugene Last**, Altoona garage; **Edward McDonald**, Des Moines-north garage; **Diann McMillen**, Motor Carrier Services; **Eileen Nelson**, Information Technology Division; **Kevin Petty**, Adair garage; **Gary Pickett**, Newton garage; **Douglas Samuel**, DeWitt garage

### 25 Years

**Timothy Brown**, Design; **Lisa Hennessey**, Driver Services; **Mona Kretlow**, Design; **Julia Lucas**, Carlisle garage; **Treva Petersen**, Right of Way; **Ronald Pexa**, Williamsburg garage; **Larry Shriver**, Neola garage; **David Widick**, Right of Way; **Darrell Wiegand**, Motor Vehicle Enforcement; **Joe Worthington**, Red Oak garage

### 20 Years

**Rhonda Andresen**, Construction; **Tammy Bailey**, Ames DL station; **Brent Christian**, Right of Way; **Sheri Harris**, Document Services; **Kirk Johnson**, Cherokee construction; **Elvie Laudencia**, Employee Services; **Kerry Morris**, Grimes garage; **Evelyn O'Loughlin**, Design; **E. Jon Ranney**, Program Management; **Scott Suhr**, District 4 Office; **John Vu**, District 6 Office

### 15 Years

**Phoumine Baccam**, Motor Carrier Services; **Troy Calvert**, Des Moines construction; **Daniel Carlson**, Procurement and Distribution; **J. Thomas Lind**, Right of Way; **Lester Mahlstedt**, Charles City garage; **Chris Moline**, Motor Vehicle Enforcement; **Kimball Olson**, Bridges and Structures; **Dee Simons**, Right of Way; **Travis Tinken**, Rail Transportation; **Ethan Tuttle**, Centerville garage

### 10 Years

**John Bogert**, Donnellson garage; **Donald Briggie**, Des Moines-north garage; **Ruth Browning**, Finance; **Rozann Dallenbach**, Waterloo DL station; **Jean Gustafson**, Procurement and Distribution; **Richard Hughes**, Carlisle garage; **William Kaufman**, Bridges and Structures; **Miriam Long**, Contracts; **Steven Robinson**, Motor Vehicle Enforcement; **Kyle Schuchmann**, Motor Vehicle Enforcement; **Mary Stahlhut**, Traffic and Safety; **James Wright**, Council Bluffs construction

### 5 Years

**Jeffrey Conis**, Facilities Support

## TIPS FROM THE GREEN TEAM

Every year **1.5 million barrels of oil** go to making plastic water bottles used in the United States. Less than a quarter of those bottles are recycled, so **choose a reusable bottle** instead.

Source: [idealbite.com](http://idealbite.com)



### ONE 2 ONE, continued from page 2

the door), how to start it (no key in the ignition, but a foot on the break and push of a button), how to know it is running (no sound when you start it so a digital readout that says "ready"), how to shift (no gear shift to put into drive or reverse, but a shifter that you just toggle to what gear you want and then it toggles back), and how to turn it off (no key to turn, but buttons to push for park and off). So, other than getting into it, starting it, driving it and shutting it off, all the rest is easy! It is funny how programmed we are to the same way of doing things. I think this will be a "you can teach an old dog new tricks" moment and it will all be intuitive in a couple weeks....but if I'm late for an event, chalk it up to not being able to turn my car off!

Speaking of teaching an old dog new tricks, as I close let me share a personal story with you that might also teach you something you didn't know. If it does not do that, it will most certainly show how dumb a smart person can sometimes be. My husband and I are walking out of Paul's, an eclectic, "Farm Fleet" kind of store in Iowa City, and we spot a bag that says "Horse Feed" on it. In one of those inane type conversations you have only with your spouse, I turned to him and said, "Hey farm boy, what's in horse feed anyway?" He responded, "Oats." I then (keeping in mind that the mind works in mysterious ways) began singing a children's gibberish song as follows: Mairzeedotes and dozeedotes and little lamzeedivey, a kiddledzeedivey too, wouldn't you? My husband looks at me and says, "You do know the words to that song are 'Mares eat oats and does eat oats and little lambs eat ivy. A kid will eat ivy, too. Wouldn't you?'" Well, I do now!!

*Nancy*

# 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).

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**PLEASE RECYCLE THIS ISSUE**

On the cover: Burlington bridge at night

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# What's in a name?



*Sherri Hiatt (right) speaks to the group gathered to honor her husband, Jeff, among others killed in work zones.*

**M**any of us delight in seeing our names printed on an announcement for a major occasion or in the local newspaper for some good deed. At other times, we would give anything to have names removed from the headlines or from a program listing.

Since 2002, the American Traffic Safety Services Foundation (Foundation) has honored the memories of those killed in work zone crashes by inscribing their names on a memorial display. This traveling memorial made its first-ever Iowa stop June 24 at the southbound Interstate 35 rest area in Story County. A ceremony to honor the 23 Iowans listed on the memorial was held that morning, with dignitaries from the Iowa DOT, Iowa Department of Public Safety, Federal Highway Administration, American Traffic Safety Services Association, Foundation, and Associated General Contractors speaking to nearly 100 family, friends and co-workers of those killed in Iowa work zone crashes.

Following the presentation of colors by the Office of Motor Vehicle Enforcement's color guard, DOT Director Nancy Richardson welcomed the group. Speakers reminded attendees of the importance of minimizing distractions, reducing speed and being alert in a work zone. The ceremony concluded with comments from Sherri Hiatt, whose husband Jeff was killed in a work zone crash last September on I-35. Jeff Hiatt, a 48-year-old employee of Iowa Plains Signing, was on a traffic control crew in a work zone with Brian Stoneburner, 19, when they were struck and killed by a semi-tractor trailer. Two other men were injured. In her comments, Hiatt spoke of the dangers in a work zone and responsibilities of workers to do whatever they can to be safe, but also about the responsibilities of drivers to remain vigilant to the task of driving and the warnings provided in work zones. Once the speakers had finished, they all joined Hiatt and Brian Stoneburner's mom, Debi, in laying flowers at the base of the memorial where Jeff Hiatt's and Brian Stoneburner's names are listed.

## *Quick facts about Iowa work zone fatalities*

- **Seven people die in Iowa work zones each year (10-year average).**
- **227 injury crashes per year occur in Iowa work zones.**
- **411 property damage crashes occur annually in Iowa work zones.**
- **86 percent of Iowa work zone crash fatalities are motorists (10-year average).**
- **14 percent of Iowa work zone crash fatalities are DOT or contractor employees (10-year average).**

## *Quick facts on national work zone fatalities*

- **990 fatalities occur each year in work zones around the country (10-year average).**
- **More than 40,000 people are injured each year as a result of motor vehicle crashes in work zones.**
- **85 percent of those killed in a work zone are drivers or vehicle passengers.**
- **On average, from 2002 to 2006 approximately 15 percent of the fatalities resulting from crashes in work zones were nonmotorists, which include pedestrians, workers and bicyclists.**
- **Approximately one-half of all fatal work zone crashes occurred during the daylight hours.**
- **More than twice as many fatal work zone crashes occurred on weekdays compared to weekends.**
- **Fatal work zone crashes occurred most often in the summer and fall.**



*Debi Stoneburner's (center) son Brian was killed in a work zone crash on I-35 in 2008. She has his image tattooed on her left calf as a memorial.*