

DECEMBER 2010

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ONE 2 ONE

WITH DIRECTOR NANCY RICHARDSON

As I reflect on the past month for this column, I realize it is a microcosm of this past year as relates to reminding me what is good in my life. With the end of the year approaching, my thoughts are of anticipation of upcoming holiday activities and reflective of this year about to end. There is no other time of year when looking back and looking forward so collide as they do now. This is always a bittersweet time for me, but I strive to focus on the ways that I am blessed... and all of you are included in that reflection.

I started November in Biloxi, Mississippi, and ended it on a plane to Washington, D.C. Both are very different worlds than the one I'm used to. Even though I always find something I like about other places, the strongest feeling for me when I travel is how much I like home. I like my own house, my own bed, my own workplace and my own things. And, I like my home state—the people, the way of life and the overall reasonableness of things here.

I have rarely been gone from home for more than a week. I get uneasy about being away very long, something I hope changes when I no longer work full time. But, I have found a way to ease that anxiety—by taking my most important things (Riley the dog and Charlie the husband, in no particular order of importance!) with me. It reminds me again that, in life, it's really all about the people.

I was Christmas shopping last weekend and the person at the checkout said, "You don't remember me but I work at DOT in Cedar Rapids." Although it always frustrates me when I don't recognize a DOTer, I try to give myself a break. After all, there is one of me to remember 3,000 of you! Neat experience ... Connie tells me she is settling in after a recent transfer and she was so upbeat. She admitted that change is unsettling and she missed her former co-workers, but summed it up by saying, "I like my job and all is good!" What a great sentiment. I understand why DOT has a reputation for good customer service when I meet employees like Connie who are our ambassadors with the public. Talking with her reminded me how fortunate I am to work here with people who care about the work they do.

I also ran into a recently retired central office employee at a wrestling meet. Bill and I share an interest in Hawkeye wrestling. Well, mine is an interest and Bill's is a passion. I asked about his few months of retirement and he reported it was good, but he was spending a lot of time on personal and family health matters. Another gentle reminder—or is it validation for a soon-to-be retiree—that there really are things more important than work, so one may want to get started on "the future" sooner rather than later.

I'm writing this column as we enjoy a week of Toys for Tots fundraising activities at central office. I got my chocolate-peanut butter fudge made for the bake sale and my double batch of crab bisque made for the soup lunch. My husband has been known to suggest, as I'm scrambling at night to shop and cook for such events, that it would be easier to write a donation check, and he is, of course, right. But, I wouldn't feel as good. First of all, I like being involved in some small way with the other employees who organize and pull off these volunteer events. And second, I don't know why it is, but I always feel a greater sense of giving when I donate something in which I invested my time and energy versus writing a check. Giving of ourselves to others in need truly is a win-win deal.

I was invited by Mike Kennerly to attend "grazing" day in the Office of Design. I assumed it to be the typical everybody-bring-holiday treats day. Little did I know that it was the day that LOTS of people brought in LOTS of holiday treats! I lost count of how many stations there were spread around—six, maybe more. It was fun to banter back and forth with all of the employees and, of course, the snacking was excellent.

But, the highlight for me was the "lighted" holiday tree in the Road 3 Section, a reminder of how clever and ingenious (with maybe just the right amount of sarcasm thrown in) we can be. Not to be dissuaded by the "no holiday lights" ban, the Road 3 gang created its own string of lights for its tree. Sheets of paper are attached to the tree, each bearing a large picture of an old-fashioned tree bulb. They are in all colors, "strung" around the tree, and

the "string" even includes the inevitable couple of burned out bulbs that are black. They topped it off with a large paper double socket on the wall to accept the imaginary cord. I cannot do it justice in this column, but it's a hoot! I applaud their creativity and sense of humor...I'm thankful I work in a place where we can laugh.

These are just some examples of what I like about the DOT. It has been a stable, comfortable and fulfilling "home" for me for nearly 29 years; I am always glad to get back here after I am away. I have met and gotten to know so many great current and former employees who have both professionally and personally enriched my life in many ways. And I am encouraged about the future of this organization when I see the service orientation, work ethic and creativity that abounds. As 2010 ends, I am reminded how lucky I am and have been to be a part of the Iowa DOT. Happy holidays and a safe and fulfilling new year to all of you!

(Note: As my planned retirement date of Dec. 23 slides to a delayed date sometime in early 2011, I am reminded to never say never, nothing is cast in stone, I should always hold my horses, you can always stop the presses or hold the phone, well laid plans often go astray, the rumor of one's demise can be exaggerated, a bad penny often returns, and my personal favorites, as the very funny Gilda Radner's alter ego, Roseanne Rosannadanna, said..."It just goes to show you, it's always something," and her Emily Litella most succinctly said, "Never mind!" I am still retiring, I am just unsure of the exact date, but will let you know as soon as I do!)

Nancy

Iowa and Illinois receive \$230 million for Chicago-to-Iowa City intercity passenger rail route

Riding the rails to the windy city could be in your future. In late October, the Iowa and Illinois departments of transportation received \$230 million from the Federal Railroad Administration (FRA) to initiate intercity passenger rail service on a route from Iowa City to Chicago via the Quad Cities.

"The Green Line between Chicago and Iowa City ... which has been funded today in an extraordinarily tough competition with passenger rail proposals across America, will set a new national standard for reliable, cost-effective, fuel-efficient passenger rail service in the United States," Governor Chet Culver said.

The 219.4-mile route will provide twice-daily, round-trip service at maximum speeds of 79 mph, and have an expected trip time of less than five hours. The Amtrak trains will operate on a route that begins at Chicago's Union Station and travels on BNSF Railway's line to Wyanet, Ill., and then the Iowa Interstate Railroad's line from Wyanet to Iowa City, Iowa. Each train can accommodate 230 passengers and offers coach seating and food service. First-year ridership is projected to be 246,800 persons. New stations will be established at Geneseo and Moline, Ill., and Iowa City, Iowa.

The Illinois and Iowa departments of transportation submitted a joint \$248-million application under the FRA's High-Speed Intercity Passenger Rail (HSIPR) program. The total cost of the project is \$310 million; the federal grant will provide \$230 million. Each state will provide a prorated share of the required match, based on the share of investment in each state.

A total of 20 applications from 10 states were submitted to the FRA, totaling approximately \$7.8 billion in rail projects. Funds available in this round of the program were \$2.1 billion.

The HSIPR funding will support continued environmental impact analyses, track infrastructure construction and improvements, layover facility construction, equipment acquisition, and station improvements to implement services.

Iowa's share of funding will come from a combination of state appropriations and local funding. The legislature appropriated \$3 million for fiscal year 2010, \$2 million for 2011 and \$6.5 million for 2012. Lawmakers also approved intent language to provide up to \$20 million over four years to help fund Iowa's commitment for matching federal passenger rail funding. Iowa is among nine states that have been working together for several years to develop a regional intercity passenger rail system with Chicago serving as the hub.

Route and train characteristics

- Initial maximum speed of 79 mph; average speed of 53.5 mph
- Two daily round trips
- Each train can accommodate 230 passengers and will offer coach seating and food service
- Total route 219.4 miles
- Trains at Chicago's Union Station, 0.8 miles; BNSF Railway from Chicago to Wyanet, 116.2 miles; and Iowa Interstate Railroad from Wyanet to Iowa City, 102.4 miles
- New stations at Geneseo and Moline, Ill. and Iowa City, Iowa

Project costs

- Overall cost: \$310 million
- Costs allocated between Iowa and Illinois
- Iowa and Illinois submitted a joint application for \$248 million (up to 80 percent of the project cost) from the HSIPR program through the FRA.
- FRA awarded \$230 million under the HSIPR program to the Chicago to Iowa City route; U.S. DOT awarded a \$10 million TIGER II grant to Moline for the passenger rail station

Service outcomes

- Projected annual ridership is 246,800 for 2015
- Passengers diverted from other modes annually: 148,000 passengers from automobiles; 59,200 from air; 22,200 from buses; and 17,200 from new riders who otherwise would not have made the trip
- On-time performance will be 90 percent or higher

Passenger rail, continued on next page

Passenger rail, continued from previous page

Collaboration

- Iowa and Illinois departments of transportation have a strong partnership to initiate Chicago to Iowa City passenger rail service.
- The Midwest High-Speed Rail Steering Group, representing nine Midwestern states, executed a memorandum of understanding in 2009 supporting Midwest routes connecting to the Chicago hub.
- Agreements in principle with Iowa Interstate Railroad, BNSF Railway and Amtrak have been established.
- Agreements in principle were established with the cities of Iowa City, Moline, and Geneseo for station development, demonstrating local support.

State of Illinois support

- Illinois announced in January 2010 that it would use \$45 million from its state capital plan for construction of the route.

Public and economic benefits

- Helps create jobs, improve our nation's transportation infrastructure and assist in providing transportation alternatives to the citizens of Iowa and the Midwest

- Supports the framework of livable, sustainable practices and communities
- Returns for every public dollar of investment (including all long-term costs of operation and maintenance) of \$1.70 back to the public in reduced costs for transportation, fuel and pollution
- Attains \$7.4 million in highway safety benefits per year
- Creates job growth estimated at 588 per year over the first four years during design and construction
- Increases business activity estimated at \$25 million per year following service initiation
- Encourages transit-oriented development
- Enhances intermodal connectivity with existing rail, bus, air and transit services
- Provides improved rail lines for freight rail
- Improves public safety by improving dozens of highway-railroad crossings

Environmental benefits

- Reduces greenhouse gas emissions by 89,943 tons in the first 30 years of operation
- Fuel savings of 10,791,109 gallons during first 30 years
- Reduces vehicle miles of travel by 25,611,484 in the corridor annually
- Reduces congestion
- Saves \$16.3 million in highway user costs
- Incorporates Iowa and Illinois DOTs' "GreenLine" vision – a program advancing innovative, sustainable practices



(from left) Amanda Martin, Tammy Nicholson, Governor Culver, Diane McCauley, and DOT Director Nancy Richardson accept \$230 million from the U.S. DOT for passenger rail projects



U.S. Secretary of Transportation Ray LaHood came to Iowa to present grant award

Safety edges - simple change, big potential

This sounds too good to be true – one simple pavement change that does not cost much, if any, additional money, reduces contractor hours, yet can increase pavement edge durability and save lives.

Jerry Roche, safety engineer for the Federal Highway Administration (FHWA), says Iowa is now a leader in installing this pavement innovation.



Steep, vertical edges can cause problems for drivers

The safety edge, as it was named by FHWA, is a simple 30 degree sloped edge designed into new pavements, whether mainline or paved shoulders, to minimize vertical pavement edge drop-off. The vertical drop-off observed on both asphalt and concrete pavements across the nation can produce

dangerous conditions for motorists. Over the lifespan of a road, especially a rural, two-lane highway, the material adjacent to the pavement settles, erodes or is worn away, causing a drop-off along the edge of the road.

"When there is a pavement drop-off and a motorist drives off the road, getting the vehicle back on the travel portion can be difficult because the vehicle's tires rub against the edge of the pavement. The driver often overcorrects to pull the vehicle back onto the pavement, sometimes with the catastrophic result of losing control or swerving into oncoming traffic in the opposing lane."

National statistics show 53 percent of highway fatalities are related to lane departure crashes. One AAA study showed pavement edges as a contributing factor in as many as 24 percent of rural run-off-the-road crashes on paved highways with unpaved shoulders in Missouri. The same study found drop-off crashes in Iowa were four times as likely to be fatal as all rural crashes and twice as likely to be fatal as other rural run-off-the-road crashes. Roche noted that the one study recently completed on the use of the safety edge showed a 5.7 percent reduction in crashes, but, he said, "The test sections for the study were predominately low-volume roads, so I think the benefits will be found to be even more substantial as the safety edge is incorporated on roads with more traffic."

Increasing safety by decreasing the level of difficulty in re-entering a roadway and reducing the risk of overcorrecting on the part of the driver is only one benefit of the safety edge. As research has been completed over the last seven years, pavement edge durability has also been noted in roadways enhanced with safety edges. "The first safety edges were installed in Georgia about seven years ago and are holding up well," said Roche. "FHWA is currently conducting a national evaluation and all projects have shown that the density in the outside foot of the mat of a safety edge is as good as or better than paving with the traditional edge."

Roche, who serves on a national safety edge research

team, said, "Since the roads that would benefit most from safety edges are rural, two-lane highways with granular or earth shoulders, we began working with contractors on county projects. The only change needed when installing an asphalt pavement with a safety edge is a relatively inexpensive, reusable shoe attached to the paver to create the 30 degree angled edge. There is little or no increase in the amount of material used."

Iowa contractors have been quick to adopt the technology and so have county engineers. The Iowa DOT allowed change orders on a number of projects over the summer to install safety edges. As of the Oct. 19 letting, all Iowa DOT projects with shoulder widths of four feet or less include a safety edge. Contractors bidding projects with shoulder widths of more than four feet are given the option to include the feature. "This construction season, Iowa contractors installed more roads with safety edges than projects in all the other states combined," said Roche.

When installing the safety edges, Roche says Iowa asphalt contractors notice an immediate benefit. "Because the safety edge eliminates dangerous drop-offs, most projects are not required to have temporary granular fillet before a lane is returned to traffic. The change reduces the length of the work zone because the contractors don't have to run shouldering operations immediately following paving operations. They can reopen a roadway once the asphalt is cool and perform shoulder work when the paving is complete."

Roche says there is a little more preparation needed to include a safety edge in concrete pavement. "There are design considerations that need to be incorporated into a concrete project," he said. "There is a small amount of additional material required, approximately 5-9 percent, but the cost to include a safety edge on concrete pavement is relatively small when considering the total cost of construction."

In terms of roadway edge durability, the gentle slope reduces the edge breakage. The oldest project in the country is now seven years old. "And even if the sloped edges eventually do break off, which we haven't seen yet, we would be no worse off than what we see today with traditional construction," said Roche.



The safety edge slopes at a 30 degree angle, making re-entering the roadway easier and safer.

Preserving our history

View historic collections at:

http://historicalphotos.iowadot.gov/ermportal/historicalphotos_home.aspx

In the weeks and months leading up to June 24, 355 Iowa DOT employees retired, taking with them thousands of years of institutional knowledge.

With so many of our veteran employees leaving state service, it is now more important than ever to preserve the history surrounding transportation in Iowa, the Iowa State Highway Commission (ISHC) and Iowa DOT.

Since 2005, a group of Iowa DOT employees known as the Historic Archives Committee (HAC) have been diligently meeting, planning, applying for funding, and completing projects related to the preservation of Iowa DOT historical documents, photographs and artifacts. Staff on the Information Technology Division's electronic records management system (ERMS) support team handle the day-to-day management of the archives, with input from the HAC. These two groups are dedicated to preserving and making available the rich history of transportation in Iowa.

The HAC, working from DOT policy 030.08, was awarded \$50,000 in transportation enhancement (TE) funding in 2005 to hire an archival consultant and two part-time assistant archivists, as well as purchase the materials necessary to begin work on identifying, cataloging, rehousing, digitizing, and offering for public access the DOT's historic photos, maps and other records, in addition to providing storage space for several other kinds of historic DOT artifacts. Since then, the historic archives project has been awarded two more TE grants, one for \$50,000 and the other for \$120,000, to continue the projects.

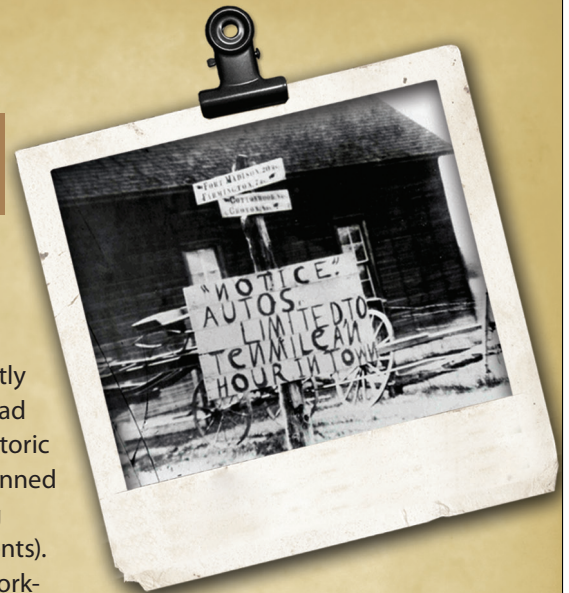
Thirteen collections, totaling approximately 13,600 images, can be accessed from the Iowa DOT Web site.

In addition to the images on the historic photos Web site, the following projects are in progress.

- All materials, predominantly correspondence, in the road association collection (Historic Auto Trails) have been scanned and are awaiting indexing (more than 2,000 documents). The assistant archivists, working with Dena Gray-Fisher from the Office of Multimedia Services, have also continued compiling the histories of the road associations that are offered on the Iowa DOT Web site at <http://www.iowadot.gov/autotrails/indexauto.htm>.
- In the video collections, one of the rarest and most valuable films in the archives, a 1959 ISHC 16-mm film titled "Highway Relocations," has been restored and digitized for public offering. A second video, "The Benton Street Bridge Collection" (Iowa City, 1949), that features an interview with Sam Carstens, the engineer who oversaw the project, has been added to the Web site.

The group has five projects planned.

- Scanning and indexing the federal-aid collection of approximately 1,200 images donated by Systems Planning
- Cataloging several hundred historic maps
- Indexing the road association materials
- Digitizing and offering to the public approximately 800 images and documents dealing with the 86th Street overpass (over I-35/80) in Urbandale,



which in 1958 was the world's first welded aluminum bridge.

- Scanning and indexing negatives of images taken by former DOT photographers, beginning with images from the 1960s

Of the third TE grant, \$80,000 was earmarked for a book scanner to handle fragile, bound documents that could otherwise not be scanned without compromising the integrity of, or even destroying, the original artifacts. Among the projects requiring the scanner are:

- Scrapbooked materials from E.W. Dunn, District 3 engineer between 1918 and 1940.
- Countless bound materials from the Office of Transportation Data.
- Bound ledgers, journals and books donated by DOT employees.

Other future projects are:

- Surveying materials donated by DOT employees during the Office of Multimedia Services' campaign for donations in honor of the DOT's upcoming 100th anniversary.
- Conducting a comprehensive survey of materials from Transportation Data.

Neat old stuff

Are you the type who just loves poking around in grandma's attic? Even at work, many DOT locations have closets, attics and other storage areas filled with historic documents and artifacts waiting to be discovered. Now would be a great time to go on a treasure hunt through those old items.

The Office of Transportation Data has a storage attic filled with items that were of value at one time, but may or may not have retained any benefit for the department. The attic has shelves and file cabinets full of documents, photos and old maps, along with various drafting tools, from pre-computer aided design (CAD) days. Mark Hansen, transportation planner 3, said, "Some of these things are our legacy and it is important to hang on to them. They tell the story of where we were and how we have become more efficient over the years. Projects that used to take days with the manual equipment can now be accomplished in minutes with computers, CAD and geographic information systems (GIS)."

Hansen continued, "Many of our veteran employees left the department recently, taking with them some of the details behind the stored artifacts and documents. I think we need to tap into the resources of the people who are still here and get their assistance with cataloging the information we have stored."

With the Iowa DOT's 100th anniversary coming up in 2013, the Historic Archives Committee (see previous page) is looking to collect and catalog as much transportation history as they can between now and the celebration.

Here are a few examples of treasures donated to the Iowa DOT for the 100th birthday.



New Hampton garage employees found and shared old oil containers and a survey instrument from the 1800s called a "Gunter's Chain." The Gunter's Chain was invented and introduced in 1620 by Edmund Gunter (1581-1626), a mathematician, professor of astronomy at Gresham College, London, and measurement instrument maker.

In 1785, the "chain" (a unit of linear measure as determined through use of Gunter's chain instrument) became the basis of survey of public lands in the United States. It was this same year that Congress established the "Point of Beginning" at East Liverpool, Ohio, which started the surveying of the grid of square plots that eventually covered the United States.

The linear distance of a chain is 66 feet; there are 80 chains in a mile; and one acre is 10 square chains. A chain is determined by taking a measurement from the outside of one handle of the instrument to the outside of the other. Use of Gunter's chain in the United States for land survey was largely discontinued in the first half of the 20th century. Today, most surveying is performed by using a global positioning system.



Hank Zaletel, the Iowa DOT librarian, has a treasure trove of artifacts waiting to be cataloged and donated to the DOT (see article on previous page). One item he has already provided is a "Storm King" kerosene street and highway utility torch used as an illuminated traffic control device.

The "Storm King" street and highway utility torch featured in this photo has its origin in Springfield, Ill. It was first made by a firm better known for the production of carbide miners' lamps. George Shanklin of Springfield copyrighted a design for a carbide lamp in 1913 and incorporated the Shanklin Manufacturing Company in 1924.

The spherical Shanklin Storm King torch was similar in design and function to a torch made in Toledo; however, the rugged body had vertical corrugations and the cam lock burner hood had triangular flame openings, giving it a distinctive appearance. The Storm King torch was fueled by kerosene and used a cotton wick to bring the fuel up to the top of the pot where it burned. The torches required little maintenance, had longer burning times and provided a bright signal. The torches were marketed as being "weatherproof" and could stay lit despite rain or wind. In 1950, the Storm King No. 101 spherical torch sold for \$21 per dozen and torch wicks for \$1.70 a dozen.

If there are items in your work area that might have value to the historic preservation effort, please contact Beth Collins at 515-239-1702 or beth.collins@dot.iowa.gov.

A trail of a different type

*We do not go to the green woods and crystal waters to rough it, we go to smooth it.
We get it rough enough at home, in towns and cities.*

—NESSMUK (G.W. Sears), Woodcraft, 1963

When someone mentions a recreational trail, what picture pops into your head? Many can visualize the enjoyment of the out-of-doors, scenic views and getting a little exercise. Now, in your mind's eye, look down. Do you see gravel, pavement or water? The Iowa DOT recreational trails program began developing water trails around 2002, said Steve Bowman, formerly the recreational trails coordinator in Systems Planning. "Water trail projects involve adding signage, improving access points and portages to the water for both motorized and nonmotorized watercraft enthusiasts, as well as making improvements to area amenities adjacent to the water trail."

Upgrades to one of Iowa's most-used water trails were recently dedicated near the Maquoketa River in Jones County. The Iowa DOT, through both the state and federal recreational trails programs, awarded \$425,140 to support critically needed improvements to trail access and staging points along the Maquoketa River at the Mon Maq Dam and Pictured Rocks, a wildlife management area near Monticello.

Larry Gullett, director of the Jones County Conservation Board (JCCB), said, "So many people from all over the Midwest use the Maquoketa River. These improvements will

not only boost tourism and economic development, but they have been designed to protect the natural resources, reducing the erosion that can be caused by heavy use. We couldn't have done this without the Iowa DOT's trails program and especially Steve's assistance in coordinating all the entities involved."

"This was a very diverse project with many components. It involved a lot of collaboration and coordination with several groups," said Bowman, who worked on the project from its inception. "It was an atypical project in location and scope, but there was widespread local support and a team dedicated to the project's success."

Maintaining the local character, improving access, dam safety, parking, and addressing drainage concern were key elements," Bowman said. "The Mon Maq Dam area contained the remnants of an old mill that Larry Gullett wanted to incorporate in the design. Working closely with the Iowa DOT, DNR and other parties, Larry was able to see his vision become a reality that all visitors can enjoy. Low-head dam safety was also a focus of the project. Portage improvements and signs alerting water trail users of low-head dams and the need to exit the river were installed."

(below) Cave and wall landing at Pictured Rocks

Maquoketa trail, continued on next page



Maquoketa trail, continued from previous page

A second major component of the project was increasing the safety and accessibility to the caves at Pictured Rocks.

Gullett said, "With the completion of the project, this area is now safe and accessible to everyone. People with mobility challenges can now use the area due in part to cooperation from the staff from nearby Camp Courageous who assisted in making sure the upgrades were practical and useful."

At Pictured Rocks, Gullett said local contractors helped out in a big way. He said, "Local limestone producers in the area provided materials, and donated time and labor."

Bowman said, "There were challenges with making sustainable improvements to accommodate large volumes of users in such a small area; and, because the type of improvements involved in developing water trails is still relatively new, there were new challenges for all of the parties involved. Everyone did a great job."



Local volunteers cut the ribbon on the improvements in August



Newly constructed shelter located along trail



IOWA DEPARTMENT OF TRANSPORTATION

T R O P H Y C A S E



Kolby Shackelford, 8-year-old son of **Kurtis Shackelford**, engineering technician senior in the District 1 Office, won the final 2010 Iowa PGA Pee Wee Tournament Championship July 28 at Brown Deer Golf Club in Iowa City. Young Mr. Shackelford shot a one-over-par 37 for nine holes, netting his first eagle on a par four. Photo is Kolby Shackelford with Brown Deer Golf Club professional, Sean McCarty.

Motor Carrier Services, recently received her bachelor of science degree in human resources. Stock's college career spanned 13 years, four states and four colleges, continuing her education while traveling as a military wife. Finally, after a divorce, settling in Ankeny to raise her three daughters, and becoming remarried, Stock was able to complete her degree from Upper Iowa University. Stock says, "Without the support of my husband and daughters, I would have never been able to accomplish this."

Pattie Stock, clerk-specialist in

Warm-mix asphalt and recycled-asphalt shingle demonstration draws a crowd

Information and photos courtesy Asphalt Paving Association of Iowa

The Iowa DOT, in cooperation with the Asphalt Paving Association of Iowa (APAI), Manatt's Inc. and Wendling Quarries Inc., sponsored a warm-mix asphalt (WMA) demonstration open house Friday, Oct. 15, showcasing a WMA and recycled-asphalt shingle shoulder project on U.S. 61 between Muscatine and Blue Grass.

Warm-mix asphalt (WMA) is the use of chemical additives with asphalt cement or foaming device attachments on asphalt plants that allow the production of traditional hot-mix asphalt (HMA) at temperatures 50-100 degrees Fahrenheit below normal HMA production temperatures. WMA was introduced in the United States from Europe nearly 10 years ago and has seen a surge in use over the past three years. WMA reduces plant fuel costs up to 30 percent, reduces volatile organic compound emissions (already under EPA limits) between 50 to 90 percent, reduces fumes and odor, improves compactability, dramatically improves asphalt worker conditions, and may actually increase the life of asphalt pavements by decreasing the oxidation of asphalt cements during mix production.

More than 65 interested onlookers explored how to reduce the amount of virgin asphalt cement needed to make an asphalt mix. Attendees included contractors, Iowa DOT personnel, county engineers and a group of engineering students from the University of Iowa. The U.S. 61 project is one of several test projects by the Iowa DOT this year studying the use of recycled shingles alone or in interaction with WMA.

Scott Schram, Iowa DOT bituminous engineer, said, "These two technologies complement one another. Performance testing will help us evaluate the benefits while understanding the limitations of both of

these materials. Eventually this project will help us develop permissive specifications."

Following an overview of the technologies, the group toured the Manatt's plant site and were able to see and touch the recycled-shingle product, ground to the consistency of black sand. The tour continued to Wendling's quality control lab and finally to the project itself. Manatt's was placing new asphalt shoulders along existing U.S. 61. The construction train included a milling operation removing the existing rock shoulders, placement of a 4-inch asphalt base course and a final 2-inch surface course, with production averaging three miles per day.



A group interested in the future of asphalt pavements gathered for the warm-mix asphalt demonstration project on U.S. 61



Flexible-edge snowplow blade pilot project expands this year

Why question the way we have always done business? "Because there may be a better option out there," says Jim Dowd of the Office of Maintenance. Finding options to traditional carbide snowplow blades has been one mission of the Office of Maintenance working with the Winter Equipment Committee for the last several years. The traditional 3-foot and 4-foot steel blades with carbide edges have been the only cost-effective option for years. But these traditional blades have drawbacks. They are heavy and difficult to handle. They wear unevenly and must be replaced several times during a busy snow season. Luckily, times are changing as several flexible-blade options are becoming industry standard around the country.

Over the past few years of testing, the Iowa DOT has determined that flexible blades, including the JOMA brand blades that are now in use on more than 300 snowplow trucks, work well. But Dowd says his office and the Winter Equipment Committee are always looking for improvements and do not want to get comfortable with just one product. "Last year we tested three different flexible blade options," said Dowd. "The JOMA blades work great. We also tested a prototype version built here at the DOT and another commercial variety called 'POLARFLEX' produced by Valley Blades."

While last year's testing data showed the JOMA blade to be the most cost-effective, both the DOT-built prototype and another commercial blade showed promise as an alternative to the regular carbide. Dowd said, "The cost of the other commercial product was prohibitive and the DOT-built flexible edge blade needed further development to become a viable option. When we discussed the cost of the other commercial blades with the manufacturer, they were willing to take our suggestions and redesign the mounting system they were using," said Dowd. "We discussed a similar mounting system we used to mount the prototype blades the Iowa DOT's repair shop had built last year that could possibly reduce the cost. In essence, the manufacturer merged the features from the more expensive commercial blade with the DOT prototype's mounting system. We know from the testing last year that these blades are effective, so this year the emphasis of data collections in each district will determine the cost-to-benefit ratio."



Commercially produced flexible snowplow blade

Possible benefits of flexible blades:

- They appear to clean the roadway better than standard carbide blades because the smaller sections conform to the road contours.
- The flexible-edge system allows for multiple contact points with the roadway instead of just at the high points of the pavement.
- Flexible-edge blades are also being tested on high speed, under-body plows to determine if they do a better job of removing snow, ice and slush than regular carbide blades.
- There is much less vibration and noise with a flexible-edge blade than a traditional carbide blade. This reduces wear and tear on the trucks, and lessens driver fatigue.
- The flexible-edge blade lasts three to five times longer than a traditional blade resulting in less blade changes.
- Worn blades can be replaced in one-foot sections.
- The smaller blade sections are lighter and easier to handle and install.

The Winter Equipment Committee is always looking for ways to improve DOT's winter operations processes. Dowd said, "We have several different funding sources each year that can only be spent on research and do not impact our operational budget, so it provides us with a great opportunity to try new equipment and ideas to make our winter operations more cost effective and efficient. Anyone can submit an idea to the committee for evaluation and testing." Ideas can be submitted by contacting a district Winter Equipment Committee representative (see the Office of Maintenance page on DOTNET) or Jim Dowd at jim.dowd@dot.iowa.gov or 515-239-1724.

Family happenings

District 3

MaryBeth Banta



Laura Sievers, transportation engineer specialist in Storm Lake, and her husband, Josh, are the proud parents of a baby boy. Marshall James was born Sept. 17 at 8:54 a.m. Baby Marshall weighed 6 pounds, 12 ounces and was 21 inches long. He joins big brother, Owen, 3, at home. Mommy Laura says, "Owen is quite the proud brother. When asked what his baby brother's name is he will say 'my baby' or 'my baby brother.'"

Transportation Data

Jodi Clement



Melissa Dimond, planning aide 3 in Transportation Data, and her husband, Jamie, welcomed Noelle Elise Aug. 14. Baby Noelle weighed 7 pounds, 13 ounces (17,718 carats according to her daddy) and was 20 inches long. She joins sister, June, 2, at home.

In Memory

Charles S. "Bill" Carmean, 94, of Story City, formerly of Ames, died Tuesday, Oct. 12, at Bethany Manor. Carmean was born May 16, 1916, in Leon, the son of Barden and Hazel (Coffin) Carmean. He graduated from Leon High School and attended the University of Iowa, later receiving his civil engineering degree and professional engineering license. He married Elva Erickson May 4, 1941, in Fremont, Neb. He was a World War II Army veteran reaching the rank of First Lieutenant. He was a 41-year Iowa DOT employee as an engineer in Harlan, Sidney, Creston, and Storm Lake, before moving to Ames. He retired in 1978. He was a member of Bethesda Lutheran Church and American Legion Post 37. He enjoyed golfing and dancing. Bill is survived by his wife, Elva, of Story City; daughters, Jennifer (Bob) Thomsen of Centennial, Colo. and Carol (Curt) Houge of Ames; daughter-in-law, Arla Carmean of Ames; five grandchildren; four great-grandchildren; and one sister.

*

Vernon F. "Red" O'Meara, 89, of Sioux City passed away Wednesday, Nov. 3. O'Meara was born April 17, 1921, in Mapleton, the son of Joseph Francis and Myrtle Margaret (Gallup) O'Meara. He graduated from Oto Public School in 1941. On Sept. 17, 1942, Vernon enlisted in the U.S. Army. During his time in the Army, Vernon was assigned to the Battery A, 17th Field Artillery. He was awarded the Normandy Campaign Battle Star, Central Europe Campaign Battle Star, Ardennes Campaign Battle Star, Rhineland Campaign Battle Star, American Theatre Ribbon, World War II Victory Ribbon, and European African Middle Eastern Ribbon. O'Meara also received the Northern France Campaign Battle Star as he was one of the first to arrive on Omaha Beach.

O'Meara married Bernice J. Kunkel on April 2, 1948, in Oto, Iowa. She preceded him in death on Jan. 28, 1988, in Sioux City. O'Meara worked as an equipment operator for the Iowa State Highway Commission and Iowa DOT for 30 years until retirement in 1983.

He and Bernice loved to ballroom dance and play cards with their friends. He also had a great love for his family, watching and playing baseball, and playing horseshoes, and he loved horses. Vernon was a baseball enthusiast, playing all through high school and on the traveling team for the American Legion and in the Army. He also enjoyed reading. O'Meara will be remembered for his great sense of humor and kind heart. He was a member of St. Boniface Catholic Church, a life member of the American Legion in Oto, a member of the D.A.V. in Sioux City, and a past member of the Eagles.

Survivors include his daughters, Susan O'Meara, Maggie (Larry) Locke and Kathleen Middaugh, all of Sioux City; six grandchildren; nine great-grandchildren; one great-great-grandchild; and one sister.



Supporting Susan G. Komen for the Cure, a grassroots organization dedicated to eradicating breast cancer as a life-threatening disease, was as easy as a one-mile stroll through downtown Des Moines or as challenging as a timed 5K run Oct. 24. Nearly 24,000 walkers and runners donated \$25 each and raised other money on personal support Web pages for the cause. Two teams submitted photos from the Des Moines Race for the Cure.



The Motor Vehicle Division team, led by **LaVonne Short** (front left), was 81 members strong this year. Not all team members are pictured.



The Information Technology Division team included: front row (from left) Andrea McNamara, Judy Gibson and Heather Thompson; middle row (from left) Deb Corwin, Christine Jones, Linda Torgeson, Nancy Goecke, and Olya Arjmand; back row (from left) Colette Simpson, Kirsten Adams, Linda Fevold, Barb Weigel, Deb Thompson, Gina Perez, Jose Perez, and Lynette Leopold. Other DOTer team members, but not in the photo, are Mary Johnson, Tim Mortvedt, Deb Shafer, and Angie Sires. Also joining the team for race day were many friends and family members.

Personnel updates

Information supplied by the Office of Employee Services for Sept. 17 to Oct. 28

New hires

Yunfei Cai, information technology specialist 2, Information Technology Division; **Justin Capps**, mechanic, Donnellson garage; **Kenneth Cooper**, highway technician associate, Donnellson garage; **Richard Crawford**, reproduction equipment operator 2, Multimedia Services; **Aaron Dicks**, accounting clerk 2, Vehicle Services; **Lucas Eichenberger**, highway technician associate, Algona garage; **Aaron Ellensohn**, construction technician assistant, Design; **Bruce Fingalsen**, highway technician associate, Hanlontown garage; **Nathan Greene**, highway technician associate, Cedar Rapids garage; **Bruce Hanson**, highway technician associate, Garner garage; **Eric Harms**, highway technician associate, Grundy Center garage; **Stacey Huston**, receptionist, Policy and Legislative Services; **Joel Keim**, highway technician, District 6 Office; **Jerome Keller**, highway technician associate, Council Bluffs-south garage; **Steven Lamoureux**, highway technician, Sioux City-Leeds garage; **Ryan Paulson**, highway technician associate, Swea City garage; **Jodi Rhoads**, administrative assistant 1, Systems Planning; **Daniel Schneider**, accountant/auditor 1, Finance; **Jim Scott**, highway maintenance supervisor, Grimes garage; **Melissa Spiegel**, administrative assistant 2, Driver Services; **Bradley Tegtmeier**, highway technician associate, Algona garage; **Murray Thackery**, highway technician associate, Swea City garage; **John Thatcher**, program planner 1, Transportation Data; **Jeffrey Timmins**, highway technician associate, Newton garage; **Kenneth Williams**, materials technician 3, Materials; **Tristan Worley**, program planner 1, Transportation Data; **James Wright**, highway technician associate, Newton garage; **Benjamin Yutzky**, highway technician associate, Leon garage

Promotions

Christina Andersen, from information specialist 2 to information specialist 3, Multimedia Services; **Debra Arp**, from transportation planner 2 to transportation planner 3, Systems Planning; **Wade Bartz**, from design technician associate, Design to design technician, Right of Way; **Kelly Bell**, from transportation engineer to transportation engineer specialist, Design; **Michelle Bush**, from driver's license clerk senior to driver's license examiner, Iowa City DL station; **Shane Campbell**, from highway technician associate, Osceola garage to highway technician, Martensdale garage; **Robert Close**, from equipment operator senior, Marshalltown garage to garage operations assistant, Grundy Center garage; **Debra Coles**, from accountant 2, Finance to executive officer 1, Systems Planning; **Jesse Denker**, from program planner 2 to program planner 3, Transportation Data; **Gregg Durbin**, from transportation engineer, Bridges and Structures to transportation engineer specialist, District 1 Office; **Edward Freeman**, from highway technician associate to equipment operator senior, Avoca garage; **Barton Hofeldt**, from highway technician associate, Davenport garage to highway technician senior, Davenport construction; **Wayne Hohl**, from highway technician associate to equipment operator senior, Altoona garage; **Jason Holst**, from transportation engineer to transportation engineer senior, Design; **Carol Iske**, from typist advanced to clerk specialist, Driver Services; **Michael Kingery**, from highway technician associate to equipment operator senior, Knoxville garage; **Ronald Lauer**, from highway technician associate to equipment operator senior, Greenfield garage; **Shawn Lawson**, equipment operator senior, Williams garage to highway maintenance supervisor,

Fort Dodge garage; **Ryan Miller**, from transportation engineer to transportation engineer specialist, Design; **Gregory Mowery**, from construction technician senior to construction technician supervisor, Council Bluffs construction; **Dwayne Myers**, from right-of-way agent 1 to right-of-way agent 2, Right of Way; **Cheryl Parrish**, from secretary 1, Jefferson construction to secretary 2, District 1 Office; **Randall Rice**, from motor vehicle officer to motor vehicle investigator, Motor Vehicle Enforcement; **Jay Ridlen**, from equipment operator senior, Bloomfield garage to garage operations assistant, Ottumwa garage; **Jason Strum**, from transportation engineer to transportation engineer specialist, Design; **Douglas Swan**, from equipment operator senior to highway maintenance supervisor, Washington garage; **Bertina Vonstein**, from driver's license clerk to driver's license clerk senior, Des Moines DL station; **Jeremy Weber**, from highway technician, New Hampton garage to highway technician senior, District 2 bridge crew; **Brian Wiedenhoef**, from highway technician, Davenport garage to highway technician senior, Davenport construction

Transfers

Kevin Anderson, engineering technician senior, from District 4 to Office to Systems Planning; **Rufus Brown**, materials technician 4, within Materials; **Timothy Carey**, highway technician associate, from Avoca garage to Atlantic garage; **Roger Conzemius**, materials technician 3, within Materials; **Troy Dice**, mechanic, from Alton garage to Le Mars garage; **Cory Glover**, mechanic, from Osceola garage to Carlisle garage; **John Hart**, from transportation engineer manager, Jefferson construction to transportation engineer specialist, District 1 Office; **Shawn Hunter**, highway technician associate, from Ames garage to Iowa Falls garage; **David Roorda**, highway technician associate, from Des Moines garage to Carlisle garage; **Norbert Shoumaker**, motor vehicle investigator, within Motor Vehicle Enforcement; **Mark Stocker**, highway technician associate, from Highway Helper to Des Moines garage; **Jeffrey Weir**, mechanic, from Fort Dodge garage to Boone garage

Retirements

None



Annual holidays

New Year's Day	Friday, Dec. 31, 2010
Martin Luther King Jr. Day	Monday, Jan. 17, 2011
Memorial Day	Monday, May 30, 2011
Independence Day	Monday, July 4, 2011
Labor Day	Monday, Sept. 5, 2011
Veterans' Day	Friday, Nov. 11, 2011
Thanksgiving	Thursday, Nov. 24, 2011
Day after Thanksgiving	Friday, Nov. 25, 2011
Christmas	Monday, Dec. 26, 2011
New Year's Day	Monday, Jan. 2, 2012

Service awards

Information supplied by the Office of Employee Services for December 2010

35 Years

Cathy Miskell, Materials; **Jerry Shepherd**, Motor Carrier Services

30 years

Jim Dowd, Maintenance; **Mark Frein**, Driver Services; **Donald Herdliska**, Clarinda garage; **Patricia Montgomery**, Storm Lake maintenance

25 Years

William Gettings, District 5 materials; **Paul Hasenmiller**, DeWitt garage; **Steven Haxton**, Mason City garage; **Douglas Lickteig**, Waterloo garage; **Dennis Marquart**, New Hampton garage; **Jeffrey Owen**, Creston garage; **David Wells**, Construction

20 Years

Alan Beddow, Location and Environment; **Larry Blumer**, Algona garage; **Rickey Bowman**, Fort Dodge garage; **Terri Delaney**, Mount Pleasant construction; **Roy Gelhaus**, Britt construction; **James Hanson**, Willilamsburg garage; **Katrina Huffman**, Waterloo DL station; **William Kaller**, Chariton construction; **Gary McAtee**, Wapello garage; **Rollin Nemitz**, Sioux City construction; **Dwight Pierce**, Newton garage; **Barbara Rasmus**, Finance; **Danny Wagner**, Tipton garage

15 Years

Timothy Branam, DeSoto garage; **Lori Dittmer**, Support Services; **Paul Flattery**, Design; **Kevin Hockett**, Design; **Daniel Holmes**, Car-

roll garage; **Andy Janus**, Information Technology Division; **Rebecca McDaniel**, Marshalltown construction; **Kevin Merryman**, Construction; **Adriana Reyes**, Materials; **Jason Ruter**, Britt construction; **Gary Teague**, Information Technology Division; **Chad White**, Motor Vehicle Enforcement; **Joy Williams**, Design; **Jorge Zamora**, Location and Environment

10 Years

Joe Ashmore, Le Mars garage; **William Boles**, Spirit Lake garage; **Ray Braband**, Spirit Lake garage; **David Chapman**, Davenport construction; **Alan Downs**, Martensdale garage; **Richard Fitzgerald**, Davenport garage; **Joshua Hamilton**, Pocahontas garage; **Carmen Homrighausen**, Tipton garage; **John Jepsen**, Sioux City-Leeds garage; **Laura Linduski**, Support Services; **Todd Mabbitt**, Council Bluffs-north garage; **Ronald Nehl**, New Hampton garage; **Earl Ogden**, Support Services; **Gina Perez**, Information Technology Division; **James Rose**, Mount Pleasant garage; **Mark Sadler**, Sioux City construction; **Kathryn Scott**, Information Technology Division; **David Staab**, Urbana garage; **James Thomson**, Le Mars garage; **William Tinkle**, Grinnell garage; **Myron Zabel**, Davenport garage

5 Years

James Albers, Correctionville garage; **Randy Boekelman**, Swea City garage; **William Brown**, Des Moines garage; **Elijah Gansen**, Design; **Steve Gaulke**, Design; **Christopher Gebel**, Charles City garage; **Cheryl Hunter**, Ames garage; **William Mitchell**, Britt construction; **Gregory Moore**, Latimer garage; **Jeff Titus**, Ames garage; **Gabriel Zittergruen**, Elkader garage



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.

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Iowa Department of Transportation

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PLEASE RECYCLE THIS ISSUE

On the cover: Winter under a Mississippi River bridge

December I-Spy clue: Displaced wildlife

November I-Spy solution: outline of a turkey in lower left tree

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

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"The Flu Ends with U"

By Polly Carver-Kimm, information officer at the Iowa Department of Public Health

The Iowa Department of Public Health (IDPH) recently launched an information campaign intended to encourage Iowans to get the seasonal influenza vaccination. "The Flu Ends With U" campaign includes television ads, radio spots, Web banners, and print messaging.

The visual centerpiece to the campaign is a yellow shirt with the words "I'VE GOT THE FLU." The attention-grabbing ads suggest that it would be nice if it were this easy to tell who had influenza; then we could simply avoid people wearing those shirts. Because this is not possible, the best way to protect yourself and others is by getting a seasonal influenza vaccination every year. "It's easy. It's effective. The Flu Ends With U."

"We want everyone to know that the most effective way to stop the spread of the flu is to get the flu vaccine each year," said IDPH Immunization Bureau Chief Don Callaghan. "IDPH and the Centers for Disease Control and Prevention recommend influenza vaccination for everyone over the age of six months." This year's flu vaccine protects against two seasonal influenza strains and the H1N1 flu.

Approximately 300,000 Iowans get the flu every year. Healthy people, including healthy children and young adults, can get very ill from the flu and can spread the flu to others. By getting a yearly flu vaccine, you can protect yourself from illness, and protect those around you. It is especially important to be vaccinated if you have vulnerable people in your household such as babies, children with asthma and elderly people.

Influenza is a respiratory illness that most often causes fever, headache, extreme tiredness, coughing, sore throat, and a runny or stuffy nose. Occasionally, nausea and diarrhea can accompany the respiratory symptoms. The flu virus is spread when a person who is ill coughs or sneezes without covering their mouth and nose, sending tiny droplets of saliva into the air for others to breathe in and get sick. A person can also get the flu by touching a surface or object (such as a door handle) that has been touched by someone with the flu (who coughed into their hand), and then touching their own mouth, eyes or nose.

The flu vaccine is plentiful this year, and is available in both the "shot in the arm" and "spray in the nose" formats. Contact your health care provider or local public health department for information on upcoming flu shot clinics. For more information about "The Flu Ends With U" campaign, visit www.TheFluEndsWithUIowa.com.

Make your own flu prevention public service announcement - contest ends Dec. 20

The flu season is upon us and the Centers for Disease Control and Prevention (CDC) is continuing to explore new, creative avenues to help fight the flu. CDC has launched a social awareness program around the importance of getting the flu vaccine for the 2010/2011 flu season. The program, "The Flu Ends With U" asks consumers for their help in creating public service announcements (PSAs) to assist in getting the word out via online and social media. The producer of the winning PSA will be awarded \$2,500.

The PSAs should resonate with the flu program message, "The Flu Ends With U." Participants can get the facts at www.flu.gov, and then put together creative videos or designs urging people to stay healthy this cold season by getting their flu vaccines.

CDC's "The Flu Ends With U" social awareness program ends Dec. 20. For complete details, visit <http://www.brickfish.com/Lifestyles/TheFluEndsWithU>.