

FEBRUARY 2012

# INSIDE



Oct. 5, 2011

I-680 Crescent exit

Nov. 2, 2011

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# Kelly Bell

## Design employee of the year



**K**elly Bell, transportation engineer specialist, in the design projects – rural 3 section of the Office of Design, tackled a mighty challenge in 2011. As the main designer for the Missouri River flood repair projects, she was in charge of compiling

a four-lane, 3.1-mile, lump-sum reconstruction project on I-680. For her outstanding work, Bell has been named the 2011 Design Employee of the Year.

Bell, an eight-year DOT veteran, is quick to point out that she had help on the flood projects from many DOTers. She said, “It was a crazy few months, but it worked because many people were willing to drop what they were doing and focus on the flood projects.”

She specifically notes Clayton Henningsen, survey party chief from the Office of Design, who traveled to western Iowa to complete survey work on very short notice. Bell’s supervisor, Paul Flattery, and co-worker, Elijah Gansen, helped complete much of the new design work. Bob Stanley, transportation engineer manager in the soils section, and Chris Brakke, transportation engineer specialist in pavement management, provided the special subgrade and pavement design that was given to the contractors. Wes Mayberry, transportation engineer intern in the methods section, worked on the ramp alignment design.

“Last fall is kind of a blur,” said Bell. “But we worked as a team and were able to get a plan for the I-680 reconstruction put together in a week, so contractors had a bare-bones plan they could use to get quantities for their bids.”

Flattery, who nominated Bell for Design Employee of the Year, said, “Throughout the summer, the Office of Design had multiple projects due for special lettings each week. Kelly put in the extra time and effort to get these projects completed correctly and on time. Her talents were put to the test when



she put together the I-680 letting plan. A lot of information was being delivered daily from other offices and consultants.” He continued, “Kelly’s organization and communication skills are what kept these projects on task.”

Mike Kennerly, director of the Office of Design, has great respect for Bell’s abilities. “I specifically chose Kelly to take the lead on coordinating all the design work associated with the Missouri River flood. I had a great deal of confidence in her ability to get the job done, coordinate all the design issues, work well with all those involved, and handle the stress and pressure that would come with trying to accomplish something that was both high profile and constantly changing. She did an excellent job. I was extremely proud of her efforts.”

Bell’s knowledge in GEOPAK and the Iowa DOT’s design process with regard to the computer application are the tools that enable her to quickly complete her assignments, according to Flattery. He continued, “She is a quick learner, is able to work independently, is very thorough in plan development and review, and understands engineering principles. She has a great working relationship with everyone in the office, and her biggest strength is her positive attitude. As my assistant, I can count on her to help where needed on plans and make sure they are done correctly and on time. Her involvement in these projects has made the difference in successfully keeping them on schedule. Kelly also has excellent teamwork and leadership skills. Co-workers are comfortable asking her questions and she is always willing to answer their questions and to help train those who need help.”

Bell says, “I’ve been lucky in my years in the Office of Design to take part in the design of a number of higher profile and challenging projects. It keeps things interesting. I have also appreciated working with the field personnel on construction projects I’ve designed. They have given me great feedback and helped me improve upon my plan development.”

Bell lives in Ames with her husband, Zak, and 5-year-old son, Jakson.

## New Iowa DOT processes speed flood recovery efforts

**W**hile the Missouri River flooding last summer took a toll on public infrastructure in western Iowa, the disaster also provided an impetus to take a fresh look at some processes used by the Iowa DOT for roadway damage inspection reporting and record keeping, as well as the highway reconstruction process itself.

For an emergency roadway project to be eligible for 100 percent reimbursement under the federal Emergency Relief (ER) program, the Federal Highway Administration (FHWA) requires that mitigation or repair work be completed within 180 days of the beginning of the disaster. If the work is not completed within that period, it would be eligible for reimbursement at a rate of 80 percent for noninterstate roadways and 90 percent for interstate highways.

To assure receipt of full federal reimbursement for state roadways damaged by the flooding, the Iowa DOT relied on two never-before-used processes; one involved acceleration of the federal funding application process and the other fast-tracking of repair and reconstruction of damaged public infrastructure.

### Technology changes the way damage inspection reports are filed

Following the 2008 floods, the Iowa DOT automated its paper-based Detailed Damage Inspection Report (DDIR) system through development of an electronic submittal system. It was used for the first time during the western Iowa floods of 2011.

The system was developed in-house by the Iowa DOT's Information Technology Division. It is used by employees with the Iowa DOT, counties, cities, Iowa Department of Natural Resources (DNR) and railroad companies. Along with the DDIR form that is eventually submitted to FHWA, the system produces a map depicting the location of the damaged site, and allows documents and pictures to be attached. In addition, the system warns users if certain fields are not entered

correctly or information is missing, allows the user to select certain information from drop-down menus and automatically creates a report number.

Once the DDIR entry is complete, the system generates an e-mail notifying the ER program administrator that a new DDIR has been created. This automated system saves time and money, and reduces the incidence of errors on the DDIR forms.

Watch upcoming editions of INSIDE for updates on how the Iowa DOT's DDIR system is being studied by the Federal Highway Administration for use in other states.

### Limited-design contracting and a lump-sum bid process allows I-680 to be rebuilt in record time

Preparing for a "normal" interstate reconstruction project, which involves environmental and design work and bid preparation, can take up to five years. When I-680 was severely damaged by the Missouri River flooding, the Iowa DOT recognized that this western Iowa lifeline needed to be repaired in months, not years.

Working closely with the contracting industry, the Iowa DOT's offices of Design and Contracts developed construction plans and a bid package that included one, lump-sum bid item – I-680 reconstruction.

Kelly Bell, Iowa DOT transportation engineer specialist, who spearheaded the process for the Office of Design, said many pieces fell into place to allow her office to produce the necessary plans in less than a week, instead of the two to three years typically allotted for this type of project.

Because I-680 was to be reconstructed on the existing highway alignment or footprint, the Iowa DOT was able to bypass the often time-consuming environmental process associated with new construction. Utilizing elements of the as-built plans from the original interstate project constructed in the 1960s was a significant time-saver.

*Recovery efforts, continued on page 4*

## Recovery efforts, continued from page 3

Another major factor in the quick turnaround time was so many Iowa DOTers were willing to drop what they were doing and focus specifically on the I-680 project. Several employees in the Office of Design, District 4 and others spent weeks working exclusively on the I-680 project.

At the same time the plans were being finalized, the Office of Contracts was preparing to solicit bids from contractors. Typically, contractors bid separately on several individual elements of a project. For I-680, contractors were asked to bid on one line item, I-680 reconstruction. This was the first major lump-sum bid of its kind in Iowa. While several specific items were listed in the proposal, contractors were asked to bid the project as a whole. Accomplishing the bid process at the same time as the design was being finalized was another significant time-saver, as these processes are not typically accomplished concurrently.

Other alterations to the bid letting process were made to accommodate a tighter time frame. These included: (1) limited bid advertising, which was authorized through an emergency governor's proclamation; (2) inclusion of incentives and a bonus to accelerate project completion; and (3) having Iowa DOT field staff available seven days a week to answer contractor questions and resolve issues.

Iowa's contracting community came alongside the Iowa DOT in accomplishing this reconstruction project in record time. Prebid meetings were held with contractors to solicit ideas and the contractor selected for the project signed the contract the same day as the bid letting.

## Updated details on flood damage

The Iowa DOT administers the ER program for eligible Iowa disasters. The program applies to federal-aid eligible transportation systems. The DDIRs submitted to the FHWA for the Missouri River flooding came from the Iowa DOT, counties, cities and railroad companies. The total value of approved DDIRs statewide was \$53,529,827.

Flooding forced the closure of and caused substantial damage to several primary and secondary roads in Iowa. Approximately 60 miles of the Primary Highway System (PHS) were closed, including sections of Interstate 29 and 680, and three Missouri River crossings between Iowa and Nebraska.

Iowa DOT staff initially identified 21 locations on the PHS as flood mitigation sites; places where work could be done in an attempt to keep the roads open. As the flooding event unfolded, this listing was narrowed to 14 sites; seven of these sites were eventually closed, five were kept open due to the mitigation measures in place and two remained open without active mitigation measures in place.

The governor proclaimed six Iowa counties (Woodbury, Monona, Harrison, Pottawattamie, Mills, and Fremont) as state disaster areas: all were eventually declared Presidential disaster areas as well.

The damage breakdown includes an estimated cost of ER work, along with an estimated cost of permanent work. There are several differences in ER projects versus permanent work. FHWA will pay 100 percent of all costs associated with emergency work if completed within 180 days of the beginning of the disaster. This work can be completed by internal workforces or contractors.

*Recovery efforts, continued on page 5*

## Interstate 680 recovery reconstruction timeline

*Historic flood leaves I-680 in ruin. Bid for repairs let Sept. 23.*

Sept. 20, 2011



*Crews make progress with fast-track recovery efforts.*

Oct. 13, 2011



## Recovery efforts, continued from page 4

Emergency work is defined as:

- Restoring essential traffic.
- Minimizing the extent of the damage.
- Protecting remaining facilities.

The Missouri River flooding began May 25, 2011; therefore, any ER work completed after the 180-day period is reimbursed by FHWA at permanent work reimbursement rates (80 percent noninterstate, 90 percent interstate). Permanent work can only be completed by contract.

Federal-aid transportation systems eligible for the ER program include:

- All roadways maintained by the Iowa DOT.
- Any county or Iowa DNR road classified as a “major collector” or above.
- Any city route classified as “collector” or above.
- Railroad crossings on FHWA ER routes damaged during eligible disasters.

## By comparison, 2008 flooding – at the time, the largest natural disaster in Iowa history

The table below shows a summary of projects submitted and approved by FHWA as a result of the storms that began May 25, 2008. The storm systems spawned severe weather, including tornadoes, heavy rains, wind, hail and thunderstorms, causing severe damage, flooding and impacts to transportation systems. Flooding forced the closure of 464 miles of Iowa’s PHS system, and 303 bridges and culverts. The Secondary Road System also suffered substantial damage. The governor proclaimed 87 counties disaster areas; DDIRs for damage in 63 counties were submitted to FHWA for approval.

2008 Iowa flooding ER program submittals				
	Number of projects	Emergency work	Permanent work	Estimated total
Iowa DOT	164	\$7,096,218	\$11,952,881	\$19,049,099
County/City	151	\$6,479,719	N/A	\$12,064,703
Iowa DNR	3	\$89,577	\$5,584,984	\$89,577
Railroad	8	\$461,577	N/A	\$461,577
<b>2008 totals</b>	<b>326</b>	<b>\$14,127,091</b>	<b>\$17,537,865</b>	<b>\$31,664,956</b>
2011 western Iowa flooding ER program submittals				
Iowa DOT	39	\$37,067,396	\$10,933,374	\$48,000,770
County/City	12	\$1,170,592	\$4,310,080	\$5,480,672
Iowa DNR	0	\$0	\$0	\$0
Railroad	1	\$48,385	\$0	\$48,385
<b>2011 totals</b>	<b>52</b>	<b>\$38,286,373</b>	<b>\$15,243,454</b>	<b>\$53,529,827</b>

## Interstate 680 recovery reconstruction timeline

On-site work continues seven days a week.

Roadway reopens to traffic.

Oct. 26, 2011

Nov. 2, 2011



# Advance warning signs deployed to reduce winter crashes

Driving in an Iowa winter can frazzle the steeliest of nerves. One minute the road is clear and the next, you're skidding on unseen ice. Recent research conducted for the Iowa DOT is seeking to pinpoint locations on the state highway system where crashes occur most during winter weather.

Tina Greenfield in the Office of Maintenance said, "Since 2006, the Institute for Transportation at Iowa State University has been studying the circumstances surrounding reportable crashes that occur in winter driving conditions on every mile of Iowa's interstate system. In the past few years, the data was expanded to all state highways. Once all the data was collected, we sat down to analyze which sites seemed to have the highest number of severe crashes during winter weather conditions and brainstorm ideas of how to mitigate crashes at those locations."

Greenfield said the data showed several sites had significant numbers of reportable crashes during winter weather. Three sites were chosen for further study, I-35 in the Williams/Dows area, I-29 near Sloan and I-80 east of Iowa City.

"Once the areas were identified," said Greenfield, "We could go back and draw out common themes with these crashes. Two of the areas, the Williams/Dows and Sloan locations, showed themes that we thought we could positively impact."

In general, the issue of blowing snow combined with high vehicle speeds has been identified as a recurring reason for winter crashes in these areas. Also common to these two locations is the lack of rights of way available to capture snow and erect snow fence. "Both of these areas are very flat and there are few windbreaks," explained Greenfield. "They also have fairly narrow rights of way, so snow fences haven't been as effective. We decided it was time to take a different tactic with these areas. While we will continue to do everything we can to keep the snow off the road, we also want to be proactive and warn motorists about these trouble spots in order to get motorists to slow down."

While it is difficult for us at the Iowa DOT to help people hone their focus on the task of driving, Greenfield said they wanted to try a location-specific tactic with winter driving messages on these two stretches of rural Iowa interstate by placing portable dynamic message signs in these areas to warn motorists of impending winter driving conditions.



Each of the two locations will have four signs, two in each direction of traffic. Greenfield said, "After the trigger condition has been observed and reported, the first sign will display a message like 'blowing snow ahead.' The second will be more specific with a message indicating, 'Caution Blowing Snow, Reduce Speed.'"

She said, "Situational messaging may take place depending on crashes or lane closures, but will be verified by the local highway maintenance supervisor or other identified contact. The implementation cost of this pilot project is fairly low. We are using signs the Iowa DOT already owns and there is minimal other cost involved."

Greenfield says the signs will be activated by the State-wide Operations Support Center after receiving an activation request from law enforcement management, the Iowa DOT's district operations maintenance manager or local highway maintenance supervisor.

"It would be unrealistic to think we can eliminate crashes in these areas by just lighting up signs, nor will we be able to catch every event," said Greenfield. "But we've all been in situations where the road conditions are pretty good in one location and then turn bad. What we hope to do with this research is pinpoint the areas where winter weather more significantly impacts the roadway and then do everything we can to let people know about these spots."



# Winter Quick Facts

## FISCAL YEAR 2011

	Statewide	District					
		1	2	3	4	5	6
<b>Primary Roadway Responsibilities</b>							
<b>Centerline miles of roadway</b> (ramps included)	9,403	1,594	1,621	1,656	1,479	1,577	1,476
<b>Lane miles of roadway</b> Miles of roadway times the number of lanes (ramps included)	23,989	4,407	3,905	3,857	3,663	4,029	4,127
<b>Lane miles of Interstate</b> (ramps included)	3,687	927	324	255	1,039	297	846
<b>Number of bridges</b> (includes state park bridges)	4,109	795	629	605	657	615	808
<b>Equipment</b>							
<b>Snow removal trucks</b> Each snow removal vehicle is equipped with a plow, deicing material spreader, liquid deicer prewetting system, and most vehicles are also equipped with a wing or underbody plow.	901	162	150	146	130	142	171
<b>Motor graders</b>	53	8	11	9	9	8	8
<b>Endloaders</b>	134	20	22	27	23	22	20
<b>Heavy-duty, self-propelled snow blowers</b> Heavy-duty snow blowers are dispatched throughout the state as needed and not used exclusively by a single location.	11	1	5	4	0	0	1
<b>Medium-duty snow blower attachments for endloaders or tractors</b>	30	4	7	11	4	0	4
<b>Light-duty snow blower attachments for tractors</b>	34	7	7	3	0	7	10
<b>Workforce and Facilities</b>							
<b>Winter operations permanent staff available</b> Includes mechanics, garage office assistants, equipment operator seniors, highway technician associates, highway technicians	1,094	231	172	155	170	159	207
<b>Supervisors</b>	53	11	8	8	8	8	10
<b>Garages</b>	109	17	17	23	18	18	16
<b>Salt permanent storage capacity (tons)</b>	212,418	36,300	31,700	32,300	36,325	30,693	45,100
<b>Materials Use - 5 Year Average</b>							
<b>Rock salt (tons)</b>	233,336	43,447	32,014	26,031	46,074	33,825	51,945
<b>Liquid salt brine (gallons)</b>	15,499,553	2,578,193	2,152,360	560,197	1,245,405	5,356,795	3,606,603
<b>Liquid calcium chloride (gallons)</b>	89,159	492	20	285	58,878	26,799	2,685
<b>Calcium chloride flake (tons)</b>	2,929	512	1,619	0	61	413	324
<b>Sand (tons)</b>	35,031	4,940	9,711	3,390	2,576	3,113	11,301
<b>Financial</b>							
<b>Average annual winter operations expenditures (FY08-10)</b>	\$40 million						
<b>Roadway Weather Information Systems</b>							
<b>Road Weather Information Systems (RWIS)</b> RWIS sites are full service weather stations along the roadside that provide atmospheric and pavement specific weather information, such as the temperature of the pavement surface.	62 3 mini's 3 portables	13	7 1 mini	9 1 mini 2 portable	9	10 1 mini 1 portable	14 1 mini
<b>Climate Data</b>							
<b>Average snowfall (inches)</b> (5 year average - FY2007-2011)	40	40	46	43	34	35	42
<b>Average winter season precipitation days</b> (5 year average - FY2007-2011) A precipitation day is any day in which .01" of liquid precipitation is received	54	57	59	56	50	49	54
<b>Average number of snow events</b> (5 year average - FY2007-2011)	34	37	40	37	29	28	34

## 511 gets social with Twitter

The 511 website is SO 12 seconds ago ...

Today's information flies by faster than some of us can keep up. But for social media users, the hunt for new and better ways to harness the information flow and make their lives better, safer and more interesting never ends. Instead of going out to find information, technology users today are looking for information to be fed directly to them, most often via smartphones. Luckily, the latest development in 511 pushes road information directly to Twitter.

Sinclair Stolle, the Iowa DOT's 511 coordinator in the Research and Technology Bureau, said, "For Twitter users, the Iowa DOT has enabled a variety of targeted Twitter feeds. Information on the Twitter feeds comes from the same data displayed on the 511 Traveler Information website, but is formatted to be delivered to your computer or Web-enabled phone via Twitter."

The Iowa DOT has Twitter feeds for:

- Cedar Rapids/Iowa City, Council Bluffs, Des Moines, Quad Cities and Sioux City.
- Each of the state's 99 counties.
- All traffic alerts.
- Breaking news - alerts that scroll at the top of the Iowa DOT's 511 website.

Signing up for the Twitter feeds is quick and easy.

- Log on to [www.511ia.org](http://www.511ia.org).
- Click on the Twitter icon.
- Choose which Twitter feeds you would like to follow.



In addition to the tweets, Twitter users can also choose to have traveler information sent directly to their mobile phones in the form of a text message.

Only active events are displayed on Twitter. Once an event, such as a traffic incident, has been cleared, it will be automatically removed. If you have received the information via text message, the text will be crossed out if the event has been cleared.

An example of a Tweet from the 511 Quad Cities metro might be:

I-80 WB: Ramp blocked at Exit 295A - US 61; Brady Street (Davenport). [bit.ly/vslUUC](http://bit.ly/vslUUC)



*These 511 Twitter accounts are provided for the convenience of our visitors as another means of disseminating traveler information. The Iowa DOT does not respond to any unsolicited questions or comments received via these Twitter accounts. For questions or comments to the Iowa DOT, please use the department's online comment form at <https://secure.iowadot.gov/contact.aspx>.*

*Iowa law prohibits all persons from using a hand-held electronic communication device to write, send or read a text message while driving a motor vehicle. Teen drivers with restricted licenses are prohibited from using any electronic communication or entertainment device while driving. While traveling, mobile communication devices should be used only when the motor vehicle is at a complete stop off the traveled portion of the roadway.*

# New online resource – Iowa DOT’s Style Manual

**A**ccuracy and consistency in the information provided by all offices at the Iowa DOT has long been a departmental goal. Because we are a government agency linked to many other agencies that all seem to have their own vocabularies swimming in a sea of acronyms, achieving consistency across all Iowa DOT publications can be a daunting task. A new tool, put together by the Office of Public Affairs, is now online to help maintain consistency for all Iowa DOTers who write content for any document published by the agency.

Jari Mohs, information specialist in the Office of Public Affairs and the Iowa DOT’s technical writing editor, said, “Some time ago, Office of Public Affairs staff started putting notes together. I used sticky notes and put them on my wall, desk and edges of the computer monitor,” says Jari Mohs. “When these started piling up, I moved the notes to a three-ring binder that became full of e-mails, typed and handwritten pages, and printouts from Internet sources. This was all great information, but sometimes the binder was nowhere to be found when I needed it.”

As staff started thinking about cost-efficient methods of sharing this information, Dena Gray-Fisher, Office of Public Affairs director, came up with the idea of creating an online resource where information can be easily updated by assigned staff. “This method provides access to the most up-to-date materials all in one location,” says Gray-Fisher. “The style information can be used by all Iowa DOT employees writing content for reports, brochures, newsletters, pamphlets, news releases, Web pages and other publications that represent the Iowa DOT.”

The link to the online guide is available on DOTNET in the “Publications” drop-down menu and the Iowa DOT’s website in the A-Z index under:

- Iowa Department of Transportation’s Style Manual, and
- Style Manual, Iowa Department of Transportation’s

If you have an entry to include in the style guide or a question about the guide’s content, contact Mohs in the Office of Public Affairs at 515-239-1663 or [jari.mohs@dot.iowa.gov](mailto:jari.mohs@dot.iowa.gov).

## How do you use this style manual?

The style manual’s design includes a navigation box on the left side of the page where style topics are listed alphabetically. To move through the manual, just click on the desired topic or return to the “Style manual – home” page.

## Why use this style manual?

Although the Iowa DOT uses The Associated Press Stylebook as its primary style guide for publications, the department also uses a writing style adopted over many years that is unique to the agency and transportation industry. This Iowa DOT Style Manual is also updated with names of new transportation programs, Iowa Code references, etc. (e.g., the American Recovery and Reinvestment Act [Recovery Act] of 2009) specific to the administration of the department.

This Iowa DOT Style Manual is not intended to repeat what is published in The Associated Press Stylebook, but rather to complement it with the Iowa DOT-specific styles and usage. The overriding principle is that style and formatting be used consistently within an article, publication or Web page.

While each division and office within the Iowa DOT is distinctive, each is also part of the whole department. Many readers who start with one publication from the Iowa DOT also receive, or seek out, other publications from the department.

If each division or office produces a publication with its own look and stylistic conventions — with no similarities to other department publications — then it becomes difficult for readers to associate the program with the Iowa DOT. That association is important because the Iowa DOT benefits from the success of each of its parts. When any one program makes a positive impression on the public, the Iowa DOT’s reputation is strengthened. As the department’s reputation gets stronger, every program benefits.



## Those were the days

### Snowfighter images from the Iowa DOT's historic photo collections

The Iowa DOT is gearing up to celebrate its 100th anniversary in 2013. Every now and then it is fun to take a look back and see how far things have come. These photos are all from the Iowa DOT's Historic Archives Digital Collections, which can be found at [http://historical-photos.iowadot.gov/ermportal/historicalphotos\\_home.aspx](http://historical-photos.iowadot.gov/ermportal/historicalphotos_home.aspx).

Many of the photos in the collections remain unidentified or only partially identified. If you have information that might add to the description of the archived photos, complete and submit the form provided on the historical photos website.



Tractor and grader, circa 1921



Lincoln Highway snow removal, circa 1928



Clinton County snow removal crew, circa 1929



Horse-drawn snowplow, circa 1923



Rolling out snow fence, circa 1928



HyVee.

# Nutrition Notes

with Amy Clark



**W**hile people become vegetarian for many different reasons, one thing seems to hold true: Vegetarians have substantially reduced risks for heart disease, high blood pressure, obesity, diabetes mellitus and some forms of cancer.

There are actually many different types of vegetarians. Vegetarian diets are often characterized by the degree in which animal foods are excluded. Lacto-vegetarians avoid meat, poultry, fish and eggs, but will consume dairy products. Ovo-vegetarians will avoid meat, poultry, fish and dairy foods, but will include eggs. Lacto-ovo-vegetarians avoid meat, poultry and fish, but - you guessed it - will include eggs and dairy products. Vegans exclude animal-derived foods of all types. How is that for a vocabulary lesson?

Many people following a vegetarian diet are concerned about including adequate protein in their diets. Before considering alternate sources of protein in a vegetarian diet it's best to determine the daily amount of recommended protein. For a healthy individual, protein needs are calculated as 0.8 grams per kilogram of body weight. For instance, an individual weighing 165 pounds should consume 60 grams of protein per day. To compute your protein needs in grams, divide your weight in pounds by 2.2 (kg/lb.), then multiply that result by 0.8.

It once was thought vegetarians needed to consume the right combinations of complementary proteins at every meal to assure amino acid balance. Current thinking is the combination of foods doesn't matter as much as the variety and amounts being consumed throughout the day. Typically, eating a variety of foods that meet the protein requirements for an individual should provide the necessary amounts of essential amino acids. All amino acids consumed go into an amino acid pool, from which the body then makes the necessary proteins.

Enjoying a plant-based meal once or twice a week is a great way to reap the benefits of a vegetarian diet. Become a part-time vegetarian with these quick and easy meal ideas:

- Replace meat in a stir-fry with nuts or tofu (11 grams of protein in 4 ounces).
- Use tempeh (1 cup has 41 grams protein) in chili, stir-fries, soups, salads, sandwiches and stews. Tempeh is a soy product that has been described as nutty, meaty and mushroom-like.

- Make a soup with lentils (18 grams of protein in just 1 cup).
- Fix black beans (1 cup has 15 grams of protein) and brown rice; top with salsa and reduced-fat cheese.
- Replace rice with quinoa (9 grams of protein for 1 cup).
- Mix cold pasta salad with vegetables, beans, reduced-fat cheese and low-fat Italian dressing.
- Prepare whole-grain pasta and mix with steamed vegetables, edamame and stewed tomatoes. Top with shredded Parmesan cheese.
- Fill a soft tortilla with fat-free refried beans, salsa, low-fat cheese and vegetables for a zesty meal.
- Try Smart Deli meat substitutes and make a sandwich on whole grain bread with vegetable fixings.
- Morning Star or Boca meat substitutes are a wonderful replacement for meat patties.
- Try Daiya cheese to replace dairy if you are vegan or ovo-vegetarian.

## Edamame Couscous

### Ingredients

1 cup frozen, shelled edamame  
 1 cup uncooked couscous  
 2 tbsp sesame oil  
 1 (3.5-oz) package shiitake mushrooms, stems removed, sliced  
 3 tsp reduced-sodium soy sauce, divided  
 1/4 cup sliced green onions

### Preparation

Bring 1 1/2 cups water to boiling in medium saucepan. Add edamame; cook 30 seconds. Stir in couscous. Cover and remove from heat. Let stand 5 to 7 minutes.

Meanwhile, heat oil in large skillet over medium heat. Add mushrooms and cook 3 minutes. Add 2 teaspoons of the soy sauce and cook 1 minute more.

Fluff couscous mixture with fork. Gently fold in mushrooms and green onions. Stir in remaining 1 teaspoon soy sauce. Season with salt and pepper to taste.

Source: Try-Foods International

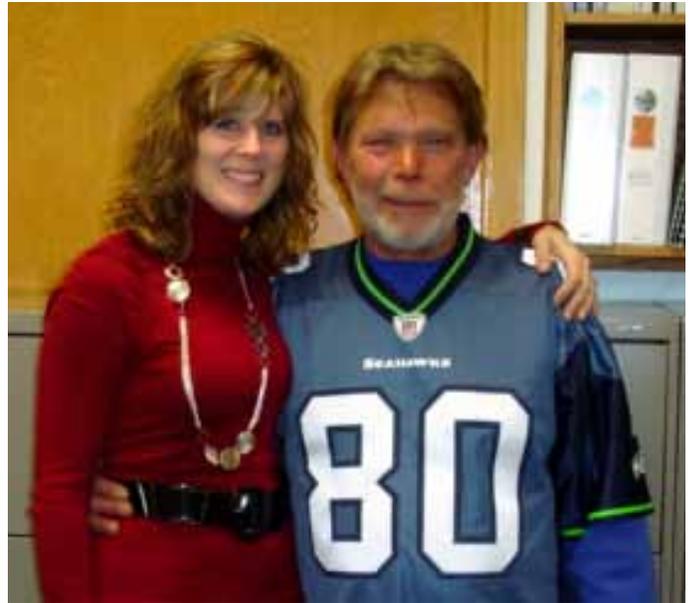
# Family happenings

## District 2

Lu Mohorne



**Gabe Zittergruen**, highway technician associate in the Elkader garage, and his wife, Andrea, are the proud parents of a baby boy. Cade Gabriel was born Oct. 30 at 2:36 a.m. He weighed 7 pounds, 5 ounces and was 21 inches long. Baby Cade joins big brothers Vaughn, 5, and Tyce, 2.



Family and friends gathered on Dec. 22 to celebrate **Bruce Forbes'** retirement. Originally from Washington state, Bruce began his 27 ½-year career at the Waterloo construction office as an engineering aide 1 and retired from his current job of survey coordinator at the District 2 Office in Mason City Dec. 30. The office gave Forbes a personalized jersey of his favorite team, the Seattle Seahawks. Forbes is pictured here with his wife, Meta.



Staff from Mason City driver's license station, District 2 office, annex and materials lab teamed together to adopt an elderly north lowan for the Christmas holiday. Pictured delivering the gifts to Lori Brandt (lower left) of North Iowa Community Action are District 2 Office employees (back row) **Nick Humpal** and **Dave Little** and (front row right) **Krista Rostad**.



**Gary Zidlicky (left)** and **Rich Millard (right)** were honored at a retirement party held Dec. 29 at the District 2

*Family happenings, continued on next page*

## Family happenings, continued from previous page

materials office in Mason City. Both men retired that day.

Rich Millard began his career in the Mason City construction office as an engineering aide 1. In 1984, he began work in the District 2 materials office as materials technician 2. He retired as materials technician 4, after working in nearly every area of materials inspection.

Gary Zidlicky was hired in 1986 as a materials technician 1 in the Decorah materials lab. He became materials inspector in 1989, and retired after 25 years as materials fabrication inspector 1. In addition to the retirement party, a coffee was held in the Decorah maintenance garage Dec. 27, where several former co-workers from the Decorah construction office attended to wish Zidlicky a happy retirement.



## Bridges and Structures

Judy Whitney

A retirement party was held Dec. 28 for **Norbert Kotlers**. Kotlers retired after 19 years at the Iowa DOT, all in the Office of Bridges and Structures, first in the design section and the last three years in the inspection section as assistant bridge inspector. Employees from the office and the bridge inspections teams from around the state wished Kotlers a happy retirement.



Edmund Gerrit Nop was born Dec. 30, three weeks early, to **Mike Nop**, transportation engineer specialist, and his wife, Sonja. Edmund weighed 7 pounds, 3 ounces and was 20 inches long. Despite his early arrival, everyone is doing fine. Edmund is child number six for Mike and Sonja, who now have four boys and two girls. They are definitely busy parents.



You can't imagine your life with kids until you have them, then you can't imagine your life without them.

— Anonymous



A bouncing baby boy, Brandon Lu Qiao, was born Sept. 13 to **Ping Lu**, transportation engineer, and her husband, Daji Qiao. Brandon weighed 7 pounds, 10 ounces and was 20.5 inches long. He is the first child for Ping and Daji.



## District 1

Lori Wilkens



**Chuck Thompson**, highway technician at the Des Moines garage/construction office brought smiles to the faces of all in attendance as he portrayed Santa Claus at the AFSCME Council 61 Christmas party.



*Family happenings, continued on page 15*

## Service awards

Information supplied by the Office of Employee Services for February 2012

### 40 years

**Fred Cerka**, Design

### 35 years

**Gary Gross**, Dyersville garage; **Michael Krohn**, Distric 1 Office; **Glen Lyall**, Information Technology Division; **Dwight Peters**, Transportation Data; **Lance Starbuck**, Des Moines maintenance

### 30 years

**Wesley Vetter**, Bridges and Structures

### 25 years

**Fereidoon Behnami**, Design; **Sharon Brown**, District 5 Office; **Robin Fitch**, Driver Services; **Gary Grinna**, New Hampton construction

### 20 years

**Stuart Anderson**, Planning, Programming and Modal Division; **David Dorsett**, District 4 Office

### 15 years

**Norma Bode**, Information Technology Division; **Michael Loyd**, Waterloo garage; **Jerry Melcher**, Grundy Center garage; **Vincent Poush**, Chariton construction; **Tim Way**, Waterloo garage

### 10 years

None

### 5 years

**Andres Amador**, Information Technology Division; **Bradley Box**, Donnellson garage; **Devin Carr**, Sloan garage; **Richard Frampton**, Clarinda garage; **Diane Govi**, Motor Carrier Services; **Joshua Halterman**, Motor Vehicle Division; **Joseph Kilburg**, Dubuque garage; **Michael Loerts**, Spencer garage; **Scott Mitchell**, Sioux City construction; **Rob Strickler**, Des Moines garage; **Ryan Sundine**, Boone garage; **Todd Tielbur**, Grimes garage; **Joshua Tostlebe**, Information Technology Division; **Devon Wagner**, Waterloo garage

## Personnel updates

Information supplied by the Office of Employee Services for Dec. 9, 2011, to Jan. 5, 2012

### New hires

**David Disterhoft**, highway technician associate, Coralville garage; **Eric Nelson**, mechanic, Avoca garage; **Michael Paglia**, information technology specialist 2, Information Technology Division; **Garrett Raulston**, information technology specialist 4, Information Technology Division; **Larion Yoder**, highway technician associate, Williamsburg garage

### Promotions

**Todd Cogdill**, from equipment operator senior, Onawa garage to highway maintenance supervisor, Sioux City-Leeds garage; **James Deppe**, from right-of-way agent 2 to right-of-way agent 3, Right of Way; **Randall Dykstra**, from highway technician associate, Grinnell garage to equipment operator senior, Des Moines garage; **Michael DeJong**, from highway technician associate to highway technician, Sioux City-Hamilton garage; **Kenneth Huseman**, from highway technician associate to mechanic, Dubuque garage; **Todd Lenning**, from highway technician associate to garage operations assistant, Williamsburg garage; **Greg Mulder**, from transportation engineer manager, Des Moines construction to transportation engineer executive, District 5 Office; **Scott Neubauer**, from transportation engineer specialist to transportation engineer administrator, Bridges and Structures; **Troy Schroeder**, from highway technician associate to highway technician, Davenport garage; **Dale Sexton**, from highway technician associate to garage operations assistant, Cedar Rapids garage; **Jeffrey Utter**, from construction technician to construction technician senior, Manchester construction

### Transfers

**Roger Dyke**, from mechanic to equipment operator senior, Bloomfield garage; **Timothy Simodynes**, transportation engineer specialist from Traffic and Safety to Research and Technology Bureau

### Retirements

**Darrell Adams**, highway technician associate, Ames garage; **Donald Bishop**, highway technician associate, Jefferson garage; **Jim Dowd**, program planner 2, Maintenance; **Bruce Forbes**, construction technician senior, District 2 Office; **Larry Hopp**, garage operations assistant, Williamsburg garage; **Karen Jackson**, accounting clerk 3, Vehicle Services; **Norbert Kotlers**, transportation engineer manager, Bridges and Structures; **Tim Kuhn**, locksmith, Support Services; **Katherine Martin**, design technician associate, Design; **Richard Millard**, materials technician 4, District 2 materials; **Kevin Petty**, garage operations assistant, Adair garage; **Vaughn Saxton**, highway technician associate, Spirit Lake garage; **Ole Skaar**, roadside development specialist 2, Design; **Gary Zidlicky**, materials fabrication inspector 1, District 2 materials

Family happenings, continued from page 13

## Local Systems

Gail Nordholm



**John Dostart**, transportation engineer specialist, and his wife, Deena, are proud to announce the birth of their son, Benjamin Dostart, Oct. 19 at 8 p.m. Little Benjamin was 8 pounds and 8.2 ounces and measured 20¾ inches long. Everyone is doing well.



## In memory

**Richard Cunningham**, 73, passed away on Saturday, Dec. 31, at his home in Johnston after a brave battle with cancer. Born in Cedar Rapids, Richard graduated from St. Patrick's High School and then married his high school sweetheart, Jane Craig. He worked for the Iowa DOT in Ames for 36 years before retiring in 1996. A graduate of Iowa State University, he took great joy in the fact that all of his children also graduated from Iowa State. Richard was a strong family man who placed the comfort and pleasure of his wife and children above everything else. He will be missed by his wife, Jane, of Johnston; daughters Jeanne (Steve) Low, of Johnston and Julie Steenhoek of Ames; his sons Craig (Tonya) of West Des Moines, John (JaiLi) of Panora and Matt (Ann) of St. Louis; 14 grandchildren and six brothers and sisters.



# 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 Public Affairs, 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:** Fast-track construction on I-680 at the Crescent interchange on Oct. 5 (left) and Nov. 2, (right)

**February-Spy clue:** I think the Doughboy™ might live here.

**January I-Spy solution:** The Eiffel Tower is in the right side of the cover.

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## TIPS FROM THE GREEN TEAM

Every day we make choices that can impact our environment. Buying greener is one way of showing your commitment to an environmentally and socially responsible way of living. By purchasing green products for your everyday consumer needs, such as home products, food and personal items, you'll be making a contribution to the environment.

### What is a green product?

Green products are made with their environmental impacts in mind; for example, organic produce grown without toxic chemicals or furniture made from recycled wood. Producers and consumers of green products have a sense of accountability to places that provide them and people who inhabit those places.

### Common green products

Green products are divided into several broad categories based on similarities in certification standards:

- Personal products (accessories, clothing, cosmetics, bath and bedding)
- Home (cleaning supplies, appliances, furniture, home improvement, housekeeping, kitchen and garden and pest control)
- Electronics (computers)
- Food and drink
- Automobiles

### Frequently asked questions about green products

#### ***Are green products comparable in quality to regular products?***

As consumers, we are conditioned to marketed products and feel obliged to buy them. Some products, such as cleaning supplies, appear more effective because they contain powerful chemicals. However, most green detergents are equally effective, and are safe for your health and for the environment. Organic foods often taste better, especially produce. Organic fabrics made of natural fibers, such as silk, bamboo and cotton, do not cause irritation and let your skin breathe.

#### ***How can I be sure that a product is really "green"?***

Green products are identified by ecolabels, such as Energy Star in the United States, Environmental Choice in Canada, and Green Label in Singapore, among many others. An ecolabel identifies products made with the most environmentally friendly technologies, and the least possible environmental impact. It also labels companies as environmental leaders in their fields.

There is an extensive range of labels, but not all certifications are official. Most are not held to high standards, and it can be difficult to determine which are genuine. Before making a purchase, research the company and its green labeling system. Look for trusted retailers with established reputations who evaluate their own products.

#### ***Does fair trade equal eco-friendly or green?***

Fair trade is a movement to create greater equity and partnership in the international trading system. Part of the commitment is supporting environmental sustainability to alleviate the environmental impacts of production, sourcing and transportation. Buying a product with a Fair Trade Federation logo qualifies your purchase as green (Fair Trade Federation is an association of companies and organizations that is fully committed to fair trade).

#### ***Is the premium for green products worth it?***

The most important benefit of buying green is that it encourages personal responsibility by each individual for the well-being of the community and the world. Individual commitment to eco-friendly practices is based on understanding and awareness of serious threats to the environment and potential consequences on future generations. Because green products involve sustainable practices, the premium is justified by our commitment through daily practices and product choices.

Personal paybacks are obvious in some cases, such as energy saving appliances, which significantly reduce utility bills. Green products are always safer than conventional products because they contain less or no harmful chemicals. Reducing exposure to unsafe products may avoid costly medical bills in the long run.

Reducing pollutants in our water systems reduces the need for larger treatment plants. Reducing waste in our landfills reduces our need for trash services. These are cost reductions to society at large - a cost we all pay.



Adapted from [www.go-green.com](http://www.go-green.com).