

# INSIDE

IOWA DEPARTMENT OF TRANSPORTATION NEWSLETTER

APRIL 2006



## INSIDE INSIDE

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# ONE 2 ONE

WITH DIRECTOR NANCY RICHARDSON

In this week's newspapers across Iowa, there were articles about the DOT deferring projects from the highway portion of the 2006 - 2010 Iowa Transportation Improvement Program. I want to share with you some background on why that is happening and what it means to future programs.

The highway program includes nearly \$2 billion for highway construction. When the Transportation Commission approved the five-year highway program November 1, 2005, it was a balanced program. This means that, based on the financial assumptions used, the expected revenues would be sufficient to cover the costs of the projects approved in the program.

Unfortunately, two of the three financial assumptions are not performing at the predicted levels. The financial assumption that is performing as predicted is state transportation revenues deposited into the Primary Road Fund (PRF). These revenues are currently running slightly ahead of the prediction... that's the good news. The not so good news is that the forecasted growth is only one-half of one percent, far lower than the annual growth we used to experience in state revenues. This is due to a number of things, but mostly stems from high fuel prices, which impact our travel habits in several ways like driving less, using more fuel-efficient vehicles, and buying smaller, less expensive vehicles. These things combine to limit fuel tax revenues, the use (sales) tax on new vehicles and vehicle registration fees, the primary sources of state transportation funding.

A second financial assumption was that Congress would allow states to spend 90 percent of the funds authorized in the federal transportation reauthorization bill. However, when the dust settled from the appropriations process late last year, the spending limit ended up being about 86 percent. This roughly four percent difference in spending authority means about \$11 million less available federal funding for the FY 2006 portion of the five-year highway program.

The third and final financial assumption was related to project costs. When the program was approved November 1, we hadn't really started our major letting schedule. Now we have let about three-fourths of the year's work and the letting prices are running 15 to 20 percent higher than our projected costs, primarily due to higher construction materials costs and fuel prices. While increased project costs don't mean less money to spend like the reduction in federal funding does, it means less "buying power" – our money won't buy as much as we thought.

Taken together, these financial factors have resulted in the FY 2006 highway program being about \$46 million over the programmed amount. We're predicting the over-programmed amount will increase by another \$23 million over the remaining lettings, resulting in a projection of \$69 million over-programmed by June. Because we cannot spend more than we have, we have no choice but to eliminate some expenditures from the FY 2006 program. That's where the deferrals come in.

We reduced about \$25 million in FY 2006 expenditures in the program by reducing the amounts available for some non-construction things like consultant services, purchase of right-of-way, and contingency funds. The remaining \$44 million was reduced by scaling back the scope of three projects (about \$5 million) and by deferring 28 projects (\$39 million) into FY 2007. The deferred projects are scattered throughout the state and vary in type and size. Some of them will be let early in FY 2007 (which starts July 1, 2006) and be completed yet this calendar 2006. Others will be let next winter for completion next construction season.

Clearly, project deferrals are not desired, but a delay of a few months to one year is tolerable in order to "keep the books balanced." Of greater concern to me is what this means for future highway program years. The remaining four years of the five-year program will experience a domino effect due to these deferrals – projects will need to move to the outer years to accommodate the deferrals. In addition, when we update the program this summer and

## To salt or not to salt...

In an arsenal filled with weapons to fight winter storms, one of the most effective tools is accurate information. Reliable information regarding storm start time and storm characteristics helps decision-makers plan the best road treatment options. Good decisions can save time, money and materials, but most importantly increase the safety of Iowa drivers.

For the past several years the Iowa DOT has participated in an effort to improve the information we use to make road treatment and personnel scheduling decisions prior to and during a winter storm event. The first phase of this program, called Maintenance Decision Support System (MDSS), was highlighted in the March 2003 edition of INSIDE, while still a Federal Highway Administration prototype project.

During the first phase, three Iowa garages, Ames, Grimes and Des Moines, were the only test locations in the nation. Information incorporated into the MDSS during this phase was provided by several national weather research laboratories. In the second generation of MDSS, the system project was shared with seven other states through a pooled-fund study. This stage of the MDSS relied on a private weather-forecasting agency to provide forecasts and treatment recommendations. Jim Dowd of the Office of Maintenance monitors the MDSS system for the Iowa DOT. "The first phase was to use the federal prototype to prove the technology would work," said Dowd. "The second phase used the pooled-fund study to move the technology into the private sector. We're hoping more vendors will see the need for this technology



and continue to improve on what has been started. We want to make this a very good one-stop-shop for weather information and treatment recommendations."

Now in the third phase of the study, set to conclude next winter season, the first three DOT garages, plus Alton, Sheldon, Spencer, and Spirit Lake are testing and evaluating the system. The most recent version of MDSS, a combination of data-collection sources, weather data from the private forecast agency, roadway weather information systems, automated weather observing sites at Iowa airports, the National Weather Service, and other government weather information, was brought together to assist in the decision-making process.

Using the weather and pavement data, MDSS can suggest treatment options for specific roadways. The MDSS program can also be used to compare and contrast the effects of alternative, user-defined treatment options. Actual treatment actions can be entered into the system, allowing the MDSS to calculate the effect residual chemicals and past maintenance actions have on future treatment options.

Dowd said, "We've always used weather information and forecasts, now MDSS can put all the pieces together and suggest the optimum treatment options based on data. Although this is a useful decision-making tool, the final decisions are still left up to the highway maintenance supervisors."

The MDSS is just one tool to use; it's not the final word on forecasts or on treatment options. Richard Hedlund from the Grimes shop said, "The biggest pitfall I see is that a supervisor may take the information MDSS gives him and use it not as a guide, but as truth written in stone. This is a tool that can be very useful, but no tool should be the only one in the box. We as supervisors should use MDSS to help us make better decisions."

Ed Mahoney, highway maintenance supervisor in the Des Moines shop, says, "We want and need the best forecast available to put the material, staff and equipment resources to the best use. MDSS is another way to look at all the weather information together and come up with a more accurate prediction of the weather.

## Pull out the orange cones - construction season is here

**I**t's time to put away the plows and pull out the orange cones. Although our mild winter has allowed for many projects to be continued all year long, the DOT is now gearing up for another busy construction season. To highlight that increased activity, the Iowa Department of Transportation is observing National Work Zone Safety Awareness Week April 2-8. This emphasis on work zone safety is promoted each year in early April to remind motorists of the need for extra caution as roadwork swings into full gear across the nation.

The theme of this year's observance is "Working at the Speed of Night" to highlight the specific dangers posed by roadwork performed in the over-night hours. While Iowans see a limited number of night work zones, mostly in urban areas, this is a good time to make note of safety concerns in all work zones.

Many road work zone crashes in Iowa can be prevented each year if drivers would simply obey posted work zone speed limits and maintain safe stopping distances, state transportation and safety officials say. Signs warning of work zones are typically posted two to four miles in advance of the work zone to give motorists ample time to slow down and prepare for possible lane changes, sudden stops, merging traffic, detours and work zone flaggers, says Mark Bortle, traffic safety engineer for the Iowa Department of Transportation.

Approximately 360 crashes occur in Iowa road work zones each year. Since 1997, these crashes have claimed at least 70 lives and have injured another 600 people. Bortle says approximately three-fourths of non-fatal crashes in highway work zones are rear-end collisions caused by speeding or following too closely.

"The general rule of thumb is to allow two seconds of braking distance between you and the vehicle in front of you, up to 30 miles per hour," says Bortle. "For every 10 miles per hour you increase your speed, you should add another second of braking distance." He added, "Once you see the orange warning signs indicating a work zone, turn off the cruise



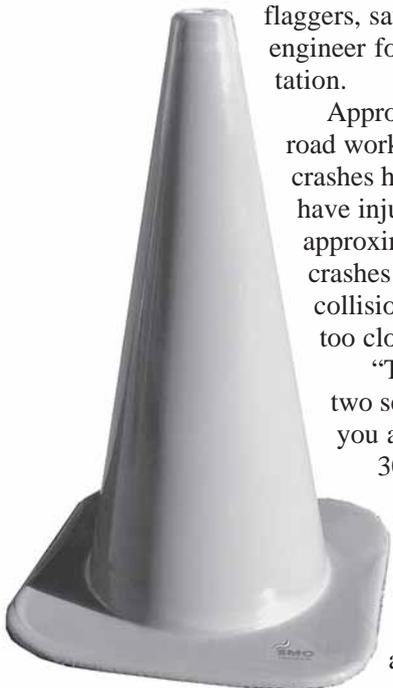
control, slow down to the posted speed limit and dedicate your full attention to the roadway."

Bortle says the same rules apply when approaching "lane closed ahead" signs. "Don't speed right up to the lane closure, then try to barge in. Motorists can help maintain traffic flow and posted speeds by moving to the appropriate lane at first notice of an approaching work zone," said Bortle. "If everyone cooperates, traffic moves more efficiently."

Being well informed about where major work zones are located can assist you in planning a safer trip. On the Internet, go to [511ia.org](http://511ia.org) to see a map and find details of work being conducted on the route you plan to travel. You can also call 511 from most telephones to get the same information. For work zone delays throughout the U.S., visit the Federal Highway Administration's National Traffic and Road Closure Information Web site at [www.fhwa.dot.gov/trafficinfo/index.htm](http://www.fhwa.dot.gov/trafficinfo/index.htm).

Although the following roadways are major areas of concentration for the Iowa Department of Transportation this year, work zone signs will be popping up on many state highways, as well as county roads and city streets. Major DOT work is scheduled throughout the state, including:

- I-235 in Des Moines;
- Iowa 60 in northwest Iowa; and
- U.S. 34 and U.S. 218 in southeast Iowa.



## Tips for driving safely in work zones

**E**ven though we work for the DOT, many of us have spent little time in a work zone. Please follow these safe driving tips to keep our employees and contractors' employees safe in work zones.

- **EXPECT THE UNEXPECTED.** Normal speed limits may be reduced, traffic lanes may be changed, and people may be working on or near the road.

- **SLOW DOWN.** Speeding is one of the major causes of work-zone crashes.

- **DON'T TAILGATE.** Keep a safe distance between you and the vehicle ahead of you. The most common crash in a highway work zone is the rear-end collision.

- **KEEP A SAFE DISTANCE BETWEEN YOUR VEHICLE AND THE ROAD WORKERS AND THEIR EQUIPMENT.**

- **PAY ATTENTION TO THE SIGNS.** The warning signs are there to help you and other drivers move safely through the work zone. Observe the posted signs until you see one that says you've left the work zone.

- **OBEY FLAGGERS.** The flagger knows what is best for moving traffic safely in the work zone. A flagger has the same authority as a regulatory sign, so you can be cited for disobeying his or her directions.

- **STAY ALERT AND MINIMIZE DISTRACTIONS.** Dedicate your full attention to the roadway and avoid changing radio stations or using cell phones while driving in a work zone.

- **KEEP UP WITH THE TRAFFIC FLOW.** Motorists can help maintain traffic flow and posted speeds by merging as soon as possible. Don't drive right up to the lane closure and then try to merge.

- **PREPARE FOR YOUR TRIP TO TAKE A LITTLE LONGER.** Check radio, TV and Web sites for traffic information. Expect delays and leave early so you can reach your destination on time.

- **BE PATIENT AND STAY CALM.** Work zones aren't there to personally inconvenience you. Remember, roadworkers are improving the road for your use.



## DOT publications eLibrary

**T**here's so much information available on the Internet, sometimes finding just the right exit on the information superhighway gets a bit frustrating. On the Iowa DOT's Web site, a new feature might help those searching for publications produced by the agency.

Our new Publications eLibrary is online now. With the click of a mouse, library users can search for more than 60 DOT publications. "This is just the start of what could be offered on this site," said Dena Gray-Fisher, director of the Office of Media and Marketing Services, where the site was developed. "We initially identified several publications that might be of interest to the public, but I'm sure we'll be adding more as time goes on."

The library has four search criteria. Documents can be found by title, topic, originating office or publication number. "We're assuming most people who don't have a lot of knowledge about the DOT's internal structure will search this library by topic,"

said Gray-Fisher. "For DOT users, the office or publication number searches may be easier. The system was designed to be easily expandable as more documents are added."

The stipulations for inclusion in the library are fairly broad. First, all documents must have been produced by or for the Iowa DOT. Next, the document must already exist somewhere in cyberspace. The eLibrary simply links to existing documents, it does not upload new ones. These publications may be .pdf files of printed brochures, booklets or information pages; Web pages that were formerly offered as printed documents; reports; or other information that would be useful for the public.

Check out the eLibrary at <http://www.dirstaff.dot.state.ia.us/pubs/default.asp>. If you know of publications to be considered for the library, please contact Tracey Bramble at 515-239-1314 or [tracey.bramble@dot.iowa.gov](mailto:tracey.bramble@dot.iowa.gov).

## Todd Hanson

# 2005 Materials employee of the year

**W**hat characteristics make up an office employee of the year? In Materials, the traits noted in the 2005 outstanding employee, Todd Hanson, are a hands-on, team-focused approach to the tasks at hand, and the ability to foster great working relationships, both within the DOT and with our concrete industry partners.

“When Jim (Berger) started to announce the nomination, he mentioned something about a concrete choice,” said Hanson, the DOT’s PCC engineer. “I still didn’t know he was talking about me until he said my name.”

In his announcement to the group, Materials Office Director Berger said, “Todd was recognized by several people in our office as a person who exceeds the professionalism and exemplary commitment deserving of this extraordinary recognition.”



In the nomination materials, it is noted that Hanson “isn’t the typical bureaucrat.” It goes on to say, “Todd is always helping contractors, inspectors, engineers and designers with concrete or testing problems. He’s constantly looking for ways to improve specifications or guidelines, and is well-respected by the field inspectors, both those from the DOT and contractors.”

Hanson says, “I’m just a hands-on guy. I like to help in the lab and work with the materials.”

Berger said, “Todd is more than a proactive leader in concrete materials, he’s also an industry-respected engineer and team player. He leads the Iowa DOT and industry to consensus on new technology and implementation of new specifications. The changes are administered quickly and without fanfare. Often, new specifications are written for review and submission so efficiently that they are ready for the specifications committee before most of the players have had time to return to their offices from the working meeting where the changes were discussed. Todd is most deserving of this honor for a job well done.”

Hanson began his DOT career in 1986 as an engineer-in-training in the special investigations unit of the Office of Materials. After a short stint in the Office of Design, he came back to Materials and has held several positions.

Hanson and his wife, Becky, also an employee in Materials, live in Ames with their two sons, Kyle, 5, and Zach, 2.

### MDSS, from page 5

We also get treatment recommendations that go along with the forecasts. For this past winter season MDSS has helped us use the right material at the right place at the right time.”

Mahoney added, “MDSS has helped in crew readiness and scheduling. The system can be used as a sounding board for the supervisor with a lot of experience or a helping hand to new supervisors to cover all aspects prior to the arrival of a storm.

The variety of weather information has been helpful to Jim Van Sickle of the Ames garage. “MDSS lets me see in real time what is going on. There may be too much emphasis on pre-storm treatments and scheduling of crews and equipment right now, but I think in time functions will be added that will be more helpful during the middle and end of a storm.”

Dowd says, “This was the first year to try the pooled-fund version, which provided seven garages with treatment options and pavement forecasts in a Web-based, graphical format. Next year we hope to expand and add more garages. This process is very much an evolution. We are looking to add new vendors and see what each can bring to the table.”

## In the driver's seat

Many of us have spent time, either at home, a carnival or an arcade, in the driver's seat of a race game. We pretend to speed around a track at a simulated 200 miles per hour, zipping past obstacles and other vehicles to reach the finish line. But can this type of experience be translated into a meaningful learning environment? The Iowa DOT is working with the Center for Transportation Research and Education (CTRE) at Iowa State University to teach equipment operators critical decision-making skills using a driving simulator, coupled with computer-based training and instruction from a DOT trainer. Although participants in the training, which began March 13 in Ames and will continue in each of the districts beginning in late June or early July, may have a good time while they learn, the critical skills they are being taught are definitely not a game.

John Haas from the Office of Maintenance is overseeing the simulator project. "In a recent survey our operators told us they wanted more computer-based training and more hands-on training. This incorporates both. In the initial phase of the training, we're working with CTRE, ISU's virtual reality lab and 200 of our operators to collect data allowing us to analyze the effectiveness of simulator training. This is being done in part by using eye motion of the participants while they are operating the simulator. We'll use this data and other lessons learned from the pilot to fine-tune continuing training for all our operators. Because of the research element, we were able to tap into research funds to pay for the \$200,000 cost of the project."

As any operator can tell you, driving a truck takes full concentration and the ability to process a great deal of information in a short period of time. "The company that built the simulator actually said the truck/snowplow scenarios are much more involved and technically challenging than many other forms of simulations such as a flight simulator," said Haas. "The simulator does not teach driving skills, it is meant to test and develop the critical decision-making of a driver placed in a variety of situations and to do that in a non-hazardous environment."

The simulator is located in a trailer, along with two computer work stations for training and a computer to run the simulator. The entire "classroom" is portable and will be moved from district to district, as there is a need. The plan is to keep the unit in Ames until the pilot is finished and then rotate it around to each of the districts for four to



Top photo: The driving simulator and computer training center are located in a mobile trailer.

Center photo: Sheri Anderson from the Office of Maintenance takes the simulator for a spin.

Bottom photo: This computer can be programmed to run many scenarios on the simulator.



five weeks at a time. Two students can train at once allowing at least four participants a day.

While sitting in the simulator, the driver has three 43-inch plasma screens positioned to provide a 180-degree view of the front and to each side. On these screens the driver sees the simulated environment, including rear-view mirrors. The setup has a

# Extreme Makeover – Bridge Edition

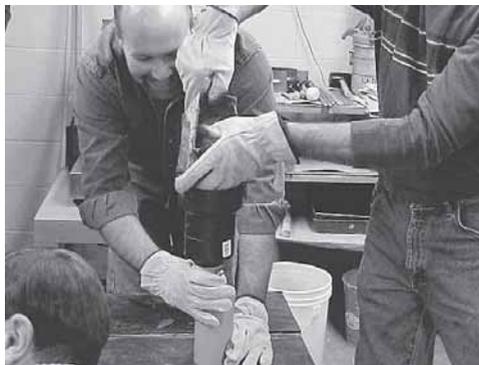


Wapello County truss bridge to be replaced (2003)

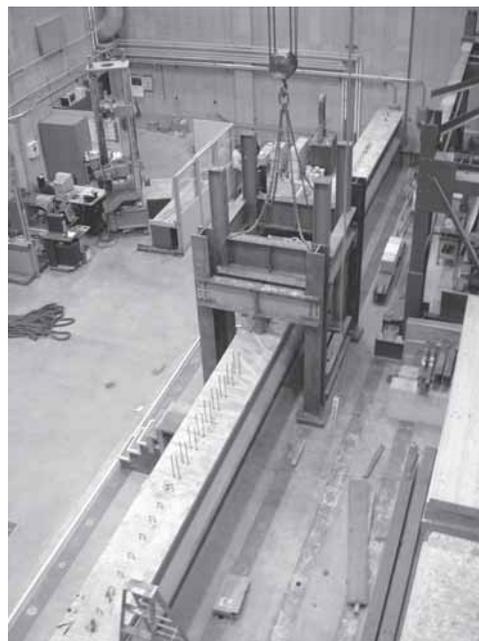
**I**t's been a long process, but a lonely Wapello County bridge now shines as the first bridge in the nation to have ultra-high performance concrete (UHPC) precast beams. As you read in last May's *INSIDE*, the span was identified in 2003. A concrete mix called "Ductal," a unique concrete mix of cement, silica fume, metallic fibers, superplasticizer, sand and a very small amount of water was to be used. The testing and production beams were manufactured by a company in Winnipeg, Canada.

With construction now complete, the bridge beam performance will be monitored and results recorded over the next two years.

In late 2003 and early 2004, test mixes of UHPC were produced at the DOT's materials lab. PCC Engineer Todd Hanson assisted with the mix



Gary Novey (right), assistant bridge engineer, and Dean Bierwagen (left), bridge methods engineer and designer for the bridge superstructure, inspect the test beam



The test beam at the ISU Structural Engineering Laboratory



Test one - flexure. Brian Degen, ISU graduate student and former Iowa DOT coop student, marks cracks in the test beam



Test two - shear. The crack is jagged because the steel fibers hold parts of the beam together



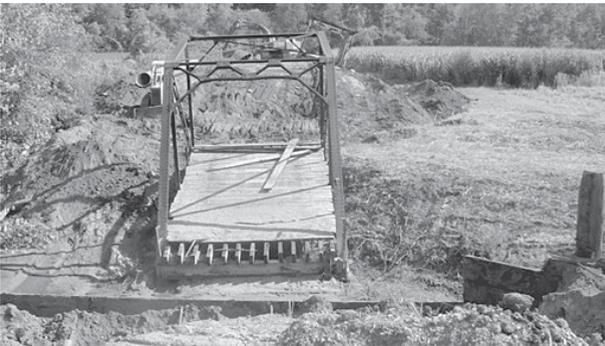
Placing the third bridge beam



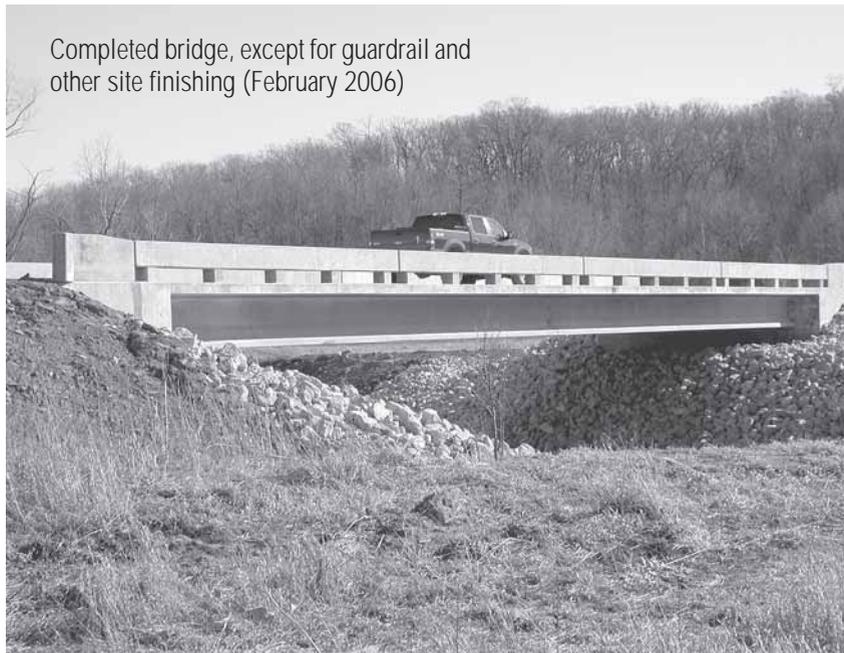
Test three - flexure-shear - Although the beam has a visible sag at the loading frame, cracking was minimal



Site prepared for placing the bridge deck



Start of construction in Wapello County



Completed bridge, except for guardrail and other site finishing (February 2006)



One of the beams, as delivered to the site from Winnipeg

# Highway Instrument Training School launches DOT careers



Don Fetters and his level near Cumming on I-35, April 1957

**W**hen funding for the Interstate Highway System was secured in 1956, the push was on for states to begin grading and paving the very next spring. According to a paper submitted to the County Engineers' Conference held in December 1956, Iowa Highway Commission Personnel Engineer James Hoag said Iowa's 1957 construction program was expected to almost quadruple the highway plan of 1955.

During this time period a shortage of qualified highway engineers was being felt around the country. With the additional work brought by the interstate, Hoag said some state departments were as far as five years behind in the design of plans for appropriations that were already available. In Iowa, cooperation between Iowa State College (now Iowa State University) and the Iowa Highway Commission provided a training school for technicians to alleviate the pinch in our state. While the school stressed that the

participants were not going to be trained engineers, the engineering work they would be able to complete would free up a great deal of time for the professional engineers on staff.

The first highway instrument training school, called "Road Scholars" by some, was held in early 1956. In planning the 10-week session, six assistant resident engineers were chosen and enthusiastically accepted the responsibility to teach the course to be held at Iowa State. The six were brought to Ames in advance to learn methods of adult instruction.

Once the instructors were ready, it was time to select candidates for the school. Each resident engineer chose several employees to take the entrance exam for the program. Arithmetic, clerical speed, mechanical aptitude and written expression were tested in 116 men (there were no women in the field offices at that time). Upon grading those tests, 64 men were notified of acceptance to the school. From the 64, some had as little education as sophomore status in high school. Others had some college experience, but most were high school graduates with no additional training.

The course began by the men moving into the Memorial Union in Ames where they would live and study for the duration of the course. The Iowa Highway Commission paid full salaries and furnished meals, housing and transportation home each weekend. All reports are that morale among the men was very high. They seemed to fully understand that this was a chance for them to substantially increase their career potential without having to attend a full four years of college.

The group of 62 (one man dropped out following major surgery and another was disqualified for dishonesty) was divided into three subgroups, two sets of 20 men each and one set of 22 men. Two teachers were assigned to each group. Each instructor was to teach one-half of each day, leaving the other half for preparation and grading of work.

[Instrument training](#), go to next page

## PART EIGHT IN A SERIES



*The beginning of construction on the Interstate Highway System celebrates 50 years in 2006. Each month until the 50th Anniversary Celebration in June, INSIDE will highlight the history of this system of roads. Information for this article was derived from personal accounts of the school and also written reports presented at Iowa County Engineers' annual conferences. The next installment will focus on facts pertaining to the interstate system in Iowa.*

**Instrument training**, from previous page

Classes included instruction on basic arithmetic and mathematics, followed by a three-day study of field trigonometry. All classes were based on field use and followed the procedures used by the Iowa Highway Commission to simulate on-the-job conditions, rather than delving into theory. The use of equipment such as levels, transits and other field work instruments was also covered by surveying points on the Iowa State campus. Field work of all types was taught, ranging from topography through centerline establishment, cross sections, setting of grades, simple curves, compound curves and spiral curves. In his paper, Hoag stressed that practical aspects of this training was the key. Teaching survey theory was not the intended purpose.

In his paper to the County Engineers' Conference in 1956, Chester Wells, assistant resident engineer and one of the session's instructors, wrote, "The presentation of new ideas to the men was at a rapid rate, and many subjects were returned to as time was available."

Daily, seven hours of classes with two to five hours of homework were common. Wells wrote, "Within a period of 9 ½ weeks we crammed in a major part of three quarters of surveying. Most of the information would take five years field experience to come into contact with."

While enthusiasm for the class ran high from both instructors and students, the real test of success would come in the field. Following completion of the first class, all six district engineers and 24 resident construction engineers were quizzed on the work of the graduates. Only one resident engineer returned a negative report. Upon investigation it was learned that instructions as to the qualifications of the graduate were not adequately conveyed to the engineer. He had given the graduate work to do that had not been presented in the class and so he failed in his assigned duties.

In the year following graduation, 10 of the 62 men were being used as instrumentmen, with little or no supervision. Two resident construction engineers stated they each had a graduate who was a better instrumentman than current, more experienced employees.

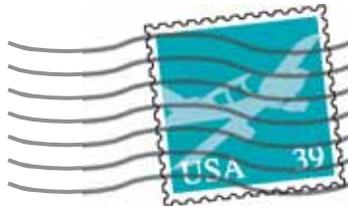
Of the remaining 52 men, 30 were working as assistant instrumentmen, which was the goal of the class in the first place. Of these 30, it was reported that 10 would likely be ready for a promotion in the next construction season. The least accomplished of the graduates were still very successfully working as inspectors and many becoming top inspectors, as the school also taught the reading of construction plans and preparation of construction reports. Many engineers commented that additional supervisory instruction would be needed for these men to advance further, since many of them were younger and lacked that element.

The class was continued at some level for the next five years. In a report to the county engineers in December 1959, Iowa Highway Commission Personnel Engineer Don Zierath said, "This course is not an amateur effort. It is a professional product and, as such, stands very high, we feel, in the field of technical training. The course material is reviewed annually and being improved by addition, deletion and shifting all the time."

According to Zierath, part of this shift included the addition of four and one-half days devoted to inspection procedures and a full day for a trip to see projects in progress. During the process it was found that not all attendees were suited for survey work. Many had more aptitude as inspectors and the coursework was modified to cover a wider variety of topics to fill that need. It was thought the inspectors that came out of this class had much more rounded perspectives than did other inspectors because of their exposure to survey work.

Another point used to illustrate the value of this school is the low turnover rate of graduates. Zierath states that of the 250 current graduates, 203 were still on the payroll at the end of 1959, which he noted "is a lower turnover rate than any other single group of employees in our organization."

Of the 203 employees who attended the program from 1956 to 1959, 88 had become inspectors, 75 were instrumentmen, 33 were party chiefs, and 7 were office workers. In a breakdown of those 47 graduates no longer on the payroll, 16 had left to attend college, 7 entered the military, 7 were terminated, and the other 17 resigned for various reasons.



# Kudos!

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



Officer Tracy Barker, Sgt. Calvin Enfield, HazMat Specialist Joseph Farnsworth, Officer Steven Robinson, Officer Kyle Tigges, Officer Roquel Oldfield, and Ray Monson

(Editor's note: Ray Monson spent time with the crew of Jasper County scales as an intern.)

To: **Captain Don Page**, Motor Vehicle Enforcement  
From: Ray Monson

I would just like to take a minute to say thank you. I truly enjoyed the chance that you gave me to intern with you and your officers. I learned more than I ever thought I could from **Officer Kyle Tigges**. He was fun to follow. He was very patient with me and made sure that I understood what was going on. He never once left any of the questions that I asked him, unanswered. I feel that I left there with more knowledge than I walked in the door with. Even more importantly, I felt like I was treated equally and with respect around your officers, instead of being treated like a college kid who didn't know anything. I can truly say that I will miss working with **Officers Tigges, Oldfield, Rice, Robinson, and Barker and Sgt. Enfield**. I couldn't thank you guys enough for the opportunity that you all have given me. Thanks again, and good luck to everyone in future endeavors.

To: **DOT Web site**  
From Brian in Center Point

I would like to express my thanks to the road crews which have done an outstanding job in the I-380 corridor today (Feb. 16). It's probably rare to hear from a commuter about excellent road conditions, but I couldn't pass up this chance. Thanks!

To: **Mark Hanson**, Transportation Data  
From: T.J. Juskiewicz, RAGBRAI Director

Thank you to the Iowa Department of Transportation for providing updated maps to use when planning RAGBRAI. I really appreciate the excellent work that you guys do to provide this information.

To: **DOT Web site**  
From: C. Fisher

I realize you and your crews are working very hard today (Feb. 16). Just to let you know, this am (4 a.m.) I went from highway 169 north, 92 east, I-35 north, then 235 east and saw a total of 10 snowplows being very effective putting chemicals down. At that time I went through moderate freezing rain, changing to sleet to snow and was able to get to work early enough to get the previous shift home early and before the storm got really bad. Winter is back and thanks for the good work. I know things are hectic.

To: **Steve McMenamin**, rest area coordinator  
From: Brian Hayes, Minneapolis, Minn.

I wanted to say how much my wife and I enjoyed the Franklin County I-35 rest stop on a recent drive up from Des Moines. The facility is obviously well-appointed, but I particularly enjoyed the Civil War floor and wall art, as well as the relevant theme of the entire outside area. These sort of things are appreciated; congratulations on a job well done.

## Family Happenings

### Location and Environment

Jean Jesse



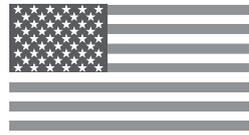
**David Stember**, historic preservation specialist, and his wife, Genevieve, are the proud parents of their second son. Levi Thomas was born March 5 weighing 6 lbs. 14 ozs. and was 20 ½ inches long. Levi joins big brother, Samuel, 16 months, at home. Congratulations to the Stember family.

### District 2 Lu Mohorne

**Rich Millard** of the District 2 Materials Office has been selected for the Employee Spotlight with the Mason City Recreation Department. He has been an adult softball umpire for the last 10 years. Prior to becoming an umpire, Rich was a league softball player and youth softball coach. Congratulations, Rich!



Millard



## Another DOTer leaves for Iraq

**Joel Bryan**, bridge inspector 1 with the District 3 bridge inspection team located in Cherokee, was deployed March 16 to Iraq with the 133rd Infantry (Iowa-Minnesota). Bryan, a staff sergeant, is in a support unit of personnel from throughout Iowa that has been training at Camp Shelby, Miss., since September. He is expected to be in Iraq for approximately one year.

## In memory

**Verlin Benson**, 82, of Sioux City passed away Feb. 8. He was a decorated World War II veteran, having been awarded two Bronze Star medals and a Silver Star, as well as several rifle medals. Benson retired as a highway maintenance manager at the Sioux City Leeds shop in 1976. Benson is survived by his wife of 63-years, Frances; his children, George, Eldina and Edward Benson and Carolyn Muhs; as well as seven grandchildren, nine great-grandchildren, two brothers, three sisters and other relatives.

### Simulator, from page 7

functioning brake, clutch, accelerator, parking brake, trailer air supply, ignition key and start, two- and four-cylinder engine brakes, lights, steering column, turn signal, and adjustable truck seat with seat belt. Surround sound simulates normal vehicle operation noise including engine, skidding and collision sounds. Multiple driving scenarios are synchronized with vehicle dynamics, sound, visual, and mechanical subsystems.

“We make sure the operators know this isn’t training on how to drive a truck, it’s designed to teach decision-making skills,” said Scott Robinson, equipment operator senior in the Ames garage and a trainer for the equipment. “This simulator, the computer-based training and classroom instruction are designed to help operators identify problems and how to react to them.”

Robinson and those like him who administer the training are seen as one key to its success. “We asked each district for one or two volunteers to become trainers on this equipment,” said Haas. “The response was great and over the last few months we’ve worked to provide these people the tools needed to conduct training. Many of them had never been in the position to teach before, but they’ve all stepped up and I know they’ll be successful. I think it’s important to have our own people teaching this. They know the specific issues and can tailor the simulation scenarios and training to address specific issues in their area of the state.”

Whether a seasoned veteran or a newly hired equipment operator, this simulator can be configured to the level of each driver and, using the computer-based teaching and classroom instruction, the three methods work together to increase the decision-making skills of our workers.

## SERVICE AWARDS

Information supplied by the Office of Employee Services for April 2006

### 40 Years

**Mary Kay Reimers**, Systems Planning; **LeRoy Robison**, Fairfield materials

### 35 Years

**Mardel Huebner**, Cedar Rapids materials; **Cheri Lou Johnsen**, Right of Way; **Lynn Rupp-Clinton**, Denison maintenance; **Herschel Wilber**, Avoca garage

### 30 Years

**Valerie Goethals**, Right of Way; **Wallace Rippie**, Materials; **Steve Tudor**, Driver Services

### 20 Years

**Darrell Adams**, Ames garage; **Joel Bryan**, Bridges and Structures; **Daryl Carr**, Sioux City materials; **Robin Harris**, Facilities Support; **Willie Mohorne Jr.**, District 2 Office; **Timothy Schwarz**, Davenport garage; **Debra Shafer**, Information Technology Division

### 15 Years

**Darren Bierl**, Clarion garage; **Cole Cobb**, Correctionville garage; **Kevin Mollenbeck**, Latimer garage; **Brenda Sanders**, Ottumwa field staff; **Dakin Schultz**, District 3 Office

### 10 Years

**John Fleig**, Systems Planning; **Michael Thayer**, District 3 Office; **Terry Weinfurtner**, Council Bluffs-south garage

### 5 Years

**Belefa Parks**, Grimes garage; **Tiffany Slagg**, Employee Services; **Connie Velder**, Fort Dodge DL station

# 35 YEARS

 Iowa Department of Transportation



**Herschel Wilber**  
Avoca garage



**Cheri Lou Johnsen**  
Right of Way



**Mardel Huebner**  
Cedar Rapids materials

## PERSONNEL UPDATES

Information supplied by the Office of Employee Services for Jan. 27 to Feb. 23, 2006

### New Hires

**Thad Bloom**, equipment operator, Highway Helper; **Richard Crawley**, equipment operator, Highway Helper; **Rachel Crowley**, management analyst 1, Document Services; **James Fox**, equipment operator, Highway Helper; **Todd Hauge**, equipment operator, Williams garage; **Shannon McGowan**, equipment operator, Burlington garage; **Joseph Salazar**, equipment operator, Highway Helper; **Varsha Sehgal**, transportation planner 1, Systems Planning; **Mary Starr**, secretary 1, Research and Technology Bureau

### Promotions

**Jennifer Bell**, from motor vehicle officer to motor vehicle sergeant, Motor Vehicle Enforcement; **John Carns**, from transportation engineer specialist to senior transportation engineer, District 4 Office; **Shanna Kaufmann**, from driver's license clerk senior, Iowa City DL station, to driver's license examiner, Muscatine DL station; **William Kreinbring**, from equipment operator senior to garage operations assistant, Grimes garage; **Martin Sankey**, from senior transportation engineer, District 1, to public service executive 5, Right of Way; **Angela Sires**, from program planner 1, Transportation Data, to information technology specialist 4, Information Technology Division

### Transfers

**Stephen Armstrong**, construction technician, New Hampton construction; **John Perrott**, construction technician, Britt construction; **Ross Weinman**, accountant 3, Finance

Correction from March INSIDE: **Kari Pint**, driver's license clerk senior, from Des Moines DL station to Ames DL station

### Retirements

None

One 2 One from page 2

fall, we will need to increase the project costs throughout all the years in response to these higher prices. Plus, based on this year's experience with federal funds, we'll likely reduce the federal funding projections in the outer years.

What does that mean? We need money for the program! Without an influx of new transportation revenue, we will have very difficult programming decisions to make. There are some things – both big and small – that we can try to do to address the situation. One big thing we can do is help the policy-makers understand the need for state transportation funding. We have a legislative mandate from last year's session to do an assessment of the highway system needs, to quantify (determine their projected cost) those needs, and to develop recommendations to generate revenue to meet those needs. We are in the midst of that two-year assessment and are required to present a report to the Legislature in December 2006. I believe that report will serve as the foundation for the Legislature to consider and debate transportation revenue needs during their session next winter. We are working jointly with

counties and cities in this effort, and I'm hopeful this cooperative approach will enhance our chances for a positive outcome in the 2007 legislative session.

There is a smaller thing that each of us can do. Funding for the highway program and funding for our operating budget both come from the same source. Therefore, the less spent on the department's budget, the more that remains to be spent on the program. Whatever budgeted operating funds don't get spent each year, revert back to the funding source to be used on highway projects. As we work our way through this last quarter of the fiscal year, I ask you to be aware of that fact. The less spent in the department's day-to-day expenses, the more we can revert, and the more funding available for projects. So, thanks for doing whatever you can to save operating budget as we approach the end of this fiscal year on June 30.



**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 coworkers. For more information, contact Tracey Bramble, Office of Media and Marketing Services, 515-239-1314 or e-mail [tracey.bramble@dot.iowa.gov](mailto:tracey.bramble@dot.iowa.gov).

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On the cover: I-80 "World's First" aluminum bridge west of Merle Hay Road in Des Moines, July 15, 1958

## History in the making

Will our grandchildren have any idea how the roads they drive on were built? What about the advancements in highway safety? Capturing historic documents and photographs for future generations is not only a nostalgic undertaking, it's essential. Peggy Baer of the Office of Rail Transportation said, "These records assist in preserving our institutional history, and serve to educate and inform new employees, or employees new to a particular office. Plus, they are the history of the making of the transportation system of Iowa and belong to the citizens of Iowa."

With an agency as broad-reaching as the DOT, both in scope of work and geography, one central collection point for information has been identified as key to maintaining our historical archive. A committee has been formed to write a request for proposal (RFP) to hire a consultant who will determine a plan for archiving our rich history.

The DOT has a rich historical abundance of photographs, maps, bulletins, reports and other records that document more than 90 years of transportation development in Iowa. Hank Zaletel, the DOT librarian, said, "While we know the photos and documents are out there, we want to make sure they are being properly identified and stored. Right now, even here in the library, this historical information is being stored under less than ideal conditions, generally inaccessible, and without benefit of proper identification or conservation. These items are a priceless historic record of road building and the development of the transportation system in Iowa."

Does that mean all the documents, photographs and other information will be housed in one spot? "Not necessarily," said Baer. "What we hope to



Paving Main Street Ames circa 1940

achieve will be a record of our historic information listing the asset and its location, and to make sure all historic documents are identified and stored properly. If there are historic documents out in the field, we don't necessarily need to have them in Ames; we just need to know that what's out there is being properly cared for. That said, we would gladly accept anything from the field offices to be included in the archives we have at the central office."

"As you can imagine this will be a huge undertaking," said Carol Culver of the Research and Technology Bureau and another member of the committee. "We intend to preserve thousands of photographs, slides, aerial photos, Highway Research Board documents, and many other items."

"A project of this scale has not been undertaken in any state DOT that we're aware of," said Kelly Popp, electronic records management system (ERMS) coordinator and committee member. "We'll be using transportation enhancement funds for the project, which we also believe is a unique approach to funding this multi-stage project."

A consultant was recently chosen to begin the process and provide guidance on issues like: What should be permanently preserved? How accessible does the original item need to be? What are the technical standards for scanning, preserving and storing documents? How do we best utilize our ERMS system for this project?

After these questions and others have been sufficiently answered and recommendations made, phase two will be the implementation of those recommendations and archiving of 10,000 photographic prints and negatives from the 1910s to the 1930s that are currently in the DOT library.

"It's exciting for us to get started with this project," said Baer. "This historical information is priceless and it would be negligent of us not to preserve it."

