

August 2017 Director's Report

Hi, everyone! I'm finishing this month's report from the back of our van as we drive back from Glacier National Park in Montana. As I mentioned earlier this year, our oldest son Dan (known among park staff as Tall Dan Lowe from Iowa) is working in the Many Glacier area of the park, so we drove the other three kids out to see Dan for a family vacation. It was a super trip – lots of hiking, scenic trails, lakes, mountains, glaciers, huckleberry _____ (fill this space with pop, ice cream, cobbler, and pie), and wildlife, including black bears, grizzly bears, mountain goats, big horn sheep and two extremely close moose (a bull the first day about



The Lowe family mid-hike, post Doris.

40 feet off the trail and a cow that popped out of the forest and sent us scrambling as she walked directly through our lakeside picnic to get a drink of water). Definitely reminded me that transportation and mobility connects families and adds vitality to our lives.

I hope you're all having a good and interesting summer. As always, there have been lots of good and interesting things around the Iowa DOT to talk about. Here's this month's report.



We named this moose Fred, after the moose that liked to drink a lot of juice.



We named this one Doris. It just seemed to fit.

Iowa DOT on a stick?

One of the best things about the Iowa State Fair is all of the great things that are served up on a stick. But this year we will be serving up something much cooler, much less fattening, and completely stick-free at the State Fair – the new plate designs! As I reported last month, earlier this year Governor Branstad and Governor Reynolds challenged us to reinvigorate our standard county license plate design (the blue and white plates with the silver grey city and country scene), and our graphic designers in Strategic Communications rose to the occasion, brainstorming over 40 designs that (with some input from Governor Reynolds) we narrowed to three options.

I couldn't unveil the new designs last month and I can't just yet this month either, but we're just a couple days away! We are going to unveil the three competing designs at a press conference with Governor Reynolds and Lt. Governor Gregg at our state fair booth in the Varied Industries building on the first morning of the Fair, Thursday, August 10, and at that time we will open up an online poll to let the public vote to pick the design they

like best. We'll send out a fact sheet with the new designs and a link to the voting to everyone at that time so we can all be part of the final selection process, and we will also be posting links to the poll on our Facebook and Twitter pages throughout the duration of the Fair.

In addition, our Fair booth this year will feature license plates, and will let people that visit vote through the online poll and learn trivia and history about Iowa's license plates, as well as take a selfie in a cartoon cutout of a Motor Vehicle Enforcement vehicle or Iowa DOT snowplow. If you go to the Fair, stop by and visit! It's along the south wall of the Varied Industries Building, in the same location we've been in for the last three years (right across from the Iowa Hawkeye booth – I've never been in that booth but I hear it's nice 😊).

Another place to stop and visit Iowa DOT colleagues and friends is the Hall of Law under the Grandstand. Our Motor Vehicle Enforcement officers host a booth there every year to help the public learn about commercial motor vehicle laws and safety, and that's been such a popular topic that we have an officer in our booth in the Varied Industries building as well. In addition, the first day of the Fair Motor Vehicle Enforcement officers will be at a trailer south of the Varied Industries Building provided by Truckers Against Trafficking (TAT), which is an organization dedicated to combating and preventing human trafficking. Motor Vehicle Enforcement has been a long time partner with TAT and a nationwide leader in collaborative law enforcement efforts to combat human trafficking. The trailer will feature content that educates people on the realities of human trafficking and how to spot signs of trafficking, and will be another opportunity to strengthen our partnership with TAT. If you're at the Fair, make sure you stop by and say thanks to the men and women in gray who patrol our highways to help keep them safe.

Total eclipse of the...sun

On Aug. 21 portions of the U.S. will experience a total eclipse of the sun. This is proving to be a significant event, as eclipse watchers across the U.S. are scrambling for positions in the path of the eclipse, which will be the first coast to coast total eclipse in the U.S. since June of 1918. I have to admit that I underestimated its impact on Iowa, as only a tiny portion in extreme southwest Iowa will be in its direct path, but it turns out the impact will be felt across the state. From about 11:45 a.m. to 2:30 p.m., the Iowa sky will darken as the sun is covered by the moon, and most of the state will experience between 80 and 90 percent obscuring of the sun. You can see how much of the sun will be obscured where you are at https://eclipse2017.nasa.gov/sites/default/files/interactive_map/index.html. (Keep in mind the times on this map are in Universal Time, which I had never heard of before but now suspect my oldest son is operating on, as he's never on the same schedule as the rest of us.)

Although this is truly a celestial event, it will have transportation impacts, even here in Iowa. Our neighboring states of Nebraska and Missouri, which are more directly in the path of the eclipse, are planning for millions of visitors, and we're likely to see increased traffic on our highways, especially the interstates, the day before and after the event. Our main concern on eclipse day will be people pulling off the side of the road to get a glimpse of the moon photobombing the sun, but we're also concerned about rest area overcrowding, people trying to

watch the eclipse while driving (a really bad idea), and people wearing opaque eclipse glasses while driving (another really bad idea).

To promote safe driving during the eclipse, Strategic Communications worked with Traffic Safety and Traffic Operations to develop these tips, which we have been sharing through social media:

- Don't stop along the interstate or park on the shoulder of any roadway to view or photograph the eclipse – exit the highway completely and stop to view it or take photos.
- Don't watch the eclipse or wear eclipse glasses while driving.
- Don't take photographs while driving.
- Turn your headlights on during the eclipse and don't rely on your automatic headlights – they may not turn on but it will still be safer to have your headlights on if driving during the eclipse.
- Watch out for pedestrians along smaller roads, especially in areas closer to the direct path. People may be randomly parking and walking alongside roads in the hours before the total eclipse to get to good spots to view the eclipse.
- Prepare for extra congestion, especially on the interstates in the path of the eclipse the day before, day of, and day after the eclipse.
- Check traffic conditions on at <http://www.511ia.org> or through the Iowa 511 app, which is available for download for android and apple devices.

Feel free to share these with anyone interested and of course follow them yourself to stay safe during the eclipse.

Onboarding? Online!

Ok, so I have to admit – onboarding is not my favorite term. I like to think of us as welcoming new employees and people joining our team, and the term onboarding always seems so impersonal to me – almost like something you do to someone rather than something you do with someone. (And, as I often say when I hear the term, this isn't a boat -- no one's boarding anything.) But welcoming new employees to our DOT team and engaging them is a really important and exciting thing to do, and our Office of Employee Services (OES) and the Information Technology division just made it easier for us to do that, by moving most of the stacks of paperwork that comprised the hiring paperwork into an electronic human relations onboarding system called ServiceNow.

Before ServiceNow, every new employee was confronted with a stack (a big stack) of paperwork to fill out by hand, and then OES staff had to manually re-enter much of that information into our personnel systems. Now, every time a P1 is generated for a new employee the system automatically compiles and pre-fills portions of the necessary documents with the new employee's information, and generates an email to the employee at his or her personal email address before the employee even begins work. The employee simply logs into the system and completes the documents, and then the system prompts the employee's supervisor (again by email) to complete any tasks required of the supervisor (such as reviewing identification documents and completing the I-

9). Because the system draws information from the P1, it's important to make sure the personal information entered there is correct.

This moves that mountain of paperwork out the way on the employee's first day, and lets us focus more personally on all the big and little things that really matter when we welcome a new employee, like introducing them to their team, helping them learn their way around, and helping them learn more about what we do, what their work is, and how it fits within what we do. (As a small aside, whenever you have the privilege of bringing a new employee to your team, work hard to make their work space ready and to make them feel expected and welcome. Make sure their workspace is clean and has everything they need (down to the trash can), have a plan for introductions and people to meet with, have a plan for how they will be introduced to their work, make sure they know their way around and have someone to have lunch with that first day. Remember how nervous you were when you started and do everything you can to ease that and make them feel comfortable!)

At this point the new system has been in place for a couple of months and nearly 200 employees, including many of our summer employees, have successfully used it for their onboarding paperwork. It's proven to have a triple return on investment and positive impact on productivity, by saving time and effort for the new employee, the supervisor, and OES. And the great thing is that the new system has capacity for even more tasks that extend beyond the onboarding process to make it easier and faster to complete a host of employment-related tasks and transactions. This is a terrific improvement, and great reminder that being smarter, simpler, and customer driven extends to internal processes and customers.

Finding the right way(s) to curb wrong way driving

Wrong-way driving crashes are on the rise nationally, and because driving the wrong way on a road has such a propensity for serious injury and death, we have been putting some focus on identifying and preventing wrong-way driving and wrong-way collisions. Over the last three years, we studied wrong-way driving along US 30 from Nevada to Boone and identified a startling 69 occurrences of wrong way driving. (Luckily, none of these resulted in a crash.) As a result of our studies, we implemented traffic engineering related countermeasures on ramps and at-grade intersections to reduce the chances of a driver going the wrong way on US 30, such as large white arrows painted on the pavement and signing enhancements. Since employing these countermeasures we have seen a significant reduction in the number of wrong way drivers in this corridor, as measured by our sensors and cameras as well as calls to 911 reporting wrong-way drivers.

Although these have been effective solutions, we think there's even more we can do with smart roadway technology to prevent wrong-way driving. Some states are using cameras and/or sensors at key points of entry to detect vehicles entering the wrong direction, and when detected they trigger flashing signs to alert the driver and notify the state's traffic management center, which can alert local law enforcement.

We're currently working with Iowa State University to study how other states are using these new tools and how and where we might deploy them in Iowa. Just this month, we installed a demonstration project on the eastbound US 30 exit ramp at University Drive on the south side of Ames. The system includes a pair of WRONG WAY signs located on the ramp that have built-in LED lights that flash when a vehicle travels the wrong way. Within seven seconds of detecting a wrong-way driver, the system sends us an email that includes a picture of the vehicle, which demonstrates the capacity to generate and communicate information that could be used to proactively intervene with the driver. Because of our innovative work in this area, companies like TAPCO, Panasonic and TrafficVision are coming to Iowa and asking us to test their equipment. I'm excited to see the results of this initial phase of study, which we expect to have at the end of this calendar year. It's an area where smart and simple solutions can help us better deliver safe mobility (getting you there safely, efficiently, and conveniently) and come closer to our goal of Zero Fatalities. Thanks to everyone that's pushing this initiative!



Flashing wrong-way sign triggered by sensors that detect vehicle entering from the wrong direction.

AASHTO & MAASTO – 50% vowels, 100% awesome

Sorry – I stole that from Raygun, which has a shirt that reads “IOWA – 75% vowels, 100% awesome.” (Totally true on both counts, by the way.) But it's true that a lot of awesome things are happening under the auspices of those unrevealing acronyms. As many of you know, AASHTO is the American Association of State and Highway Transportation Officials. It's a non-profit organization that represents transportation departments across the U.S, and supports development and education for professionals who work in air, highways, public transportation, rail, and water. AASHTO supports and promotes a variety of committees and subcommittees that represent all these aspects of transportation. In addition, ASSHTO supports regional organizations to help states engage in regional collaboration. The region we belong to is the mid-American region, which functions through MAASTO – the Mid America Association of State Transportation Officials. (MAASTO covers the following states: Michigan, Ohio, Kentucky, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, and Kansas.)

AASHTO committees, subcommittees, and regional organizations meet throughout the year and throughout the country to facilitate national and regional work and collaboration. We were fortunate to be the site of a joint

committee meeting in Des Moines in mid-July and to attend and be recognized at the annual MAASTO meeting in Cleveland this year. Here's a little more about both.

Joint Environment and Design meeting in Des Moines. On July 16 to July 20, Iowa hosted a joint meeting of AASHTO's Standing Committee on Environment (SCOE) and its Subcommittee on Design (SCOD) in Des Moines. This is the first time these two groups have met jointly. The meeting included 250 participants from state DOTs around the country, and brought environmental and design expertise together to discuss important national transportation issues. Some of the topics discussed included environmental laws, regulations and processes, natural resources, community and cultural concerns, emerging technologies, innovative design solutions, hydrology and hydraulics and more.

The joint meeting also got participants out of the conference room and in the field. On Tuesday, participants traveled to Living History Farms to see a stream mitigation site we established in partnership with Living History Farms. While at Living History Farms, participants were able to travel through time by seeing the historic farm sites and a demonstration by our Cultural Resource staff using a handheld LiDAR unit, which helps us document cultural resources at project sites. (LiDAR stands for light detection and ranging. It's a surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor.) Tour participants also had the chance to experience riding in a vehicle of the past as well vehicles of the future. Living History Farms brought out their Model T while the University of Iowa offered rides in a Volvo and Tesla featuring automated technologies. Another tour visited a virtual reality demonstration at Iowa State University in Ames and experienced projects where Iowa DOT and ISU are collaborating on virtual reality technology for highway design and environmental mitigation.

Tammy Nicholson, director of the Office of Location and Environment, had this to say about the meeting, which I think is true of many meetings and conferences of this nature: "The wonderful thing about these events is that they work hard to get you out of the meeting room setting. There are a variety of networking opportunities as well as chances to get out and about to see transportation issues, technologies, and projects up-close and personal."

Council Bluffs Rail relocation project picks up another award at the MAASTO annual meeting. MAASTO's annual meeting was held July 25 to July 27 in Cleveland. This was my first full AASHTO or MAASTO event, and I was pleased and impressed to see so many members of our team participating in and leading sessions that ranged from workforce development to resiliency to design. A particularly gratifying moment was to see Planning, Programming, & Modal Division Director Stu Anderson and Highway Division Director Mitch Dillavou jointly accept a regional America's Transportation award in the Operations Excellence – small project category for the Council Bluffs Interstate System (CBIS) Rail Relocation project. "Operations Excellence" is a new category that showcases projects that demonstrate successful strategies and actions that reduce congestion, improve reliability, address maintenance, or advance transportation systems management and operations efforts within a state or region.

This is the third award this project has garnered. As I reported earlier this year, the project relocated rail lines to accommodate the larger CBIS project, which is working modernizes and increases the capacity and safety of Interstates 80, 29 and 480. The project required a lot of coordination and collaboration with stakeholders to assure that it would meet the needs of the interstate project and the business and economic needs of the railroads. The CBIS Rail Relocation project successfully met safety concerns for those in and traveling through the area, reducing congestion, improving emergency response time and travel reliability while supporting freight and commerce. The rail relocation project is just one of 25 projects in the CBIS construction project.

We don't accomplish these types of projects on our own, so I again acknowledge our partners, HDR (our consultant), the City of Council Bluffs, Iowa Interstate Railroad. Ltd., and BNSF Railway for their contributions to the success of this project. Thank you and congratulations again to all of our partners and everyone at the Iowa DOT that made this award-winning project a reality.

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Organ donation – little question, big impact

One of the really cool things that we do, and that people often don't associate with us or realize, is help people become organ donors – people that want to become an organ donor can register to become one whenever they get a new driver's license or ID card or renew or replace their driver's license or ID card. At first blush it may seem incongruous with what we do, but it really just demonstrates, in a very positive way, the role we have through Driver & Identification Services in establishing and maintaining people's identity, and the way we can leverage identity management to connect people with services and programs and facilitate good results and outcomes.

A little over two years ago Driver & Identification Services started taking a deeper look at organ donation and our role in it. What they found was that making the election as part of a driver or identification transaction was the number one way in which people become donors. But they also found that the demand for organ transplants far exceeds the number of available organs at any given time – there are currently more than 123,000 in the U.S. on the transplant waiting list, and more than 700 here in Iowa. So they decided to look at our performance and see whether it could be improved.

From the outset, it turned out we were doing pretty well – the election rate for Iowa driver's license or ID holders was over 50%, which put us ahead of most state licensing agencies nationally. But as I like to say, there's never any harm in asking yourself to do better, so they looked at their processes to see if there were opportunities to improve. They found out some people felt rushed and were asking customers if they would like to become an organ donor too quickly, or in a way that suggested they were only asking if the customer was already an organ donor (as opposed to whether the customer wanted to sign up to be one that day). They also found that some people didn't think they should be asking the question at all, and were shying away from helping people understand

Interested in becoming an organ donor?

If you would like to register as an organ donor, you can do it right now, online, at lowadonornetwork.org. Here's the information we try to share with our customers:

You're never too old.

You're never too young.

Don't let a medical condition prevent you from becoming an organ donor.

Many conditions will not prevent donation of some or all of your organs, and medical professionals will make that decision when the time comes.

Don't worry that someone will withhold or alter medical care because you're a donor. Medical care decisions are kept entirely separate from donation decisions.

what organ donation was about and why they should become one. So they developed and implemented communication, guidance and training that helped people understand the legal authority (and imperative) to promote organ donation, good techniques for effectively asking the question to help customers understand the opportunity, and basic information for people that had questions or were uncertain in some way. And they started tracking their performance, generating monthly reports for each team (state and county treasurer) that showed the overall state election rate and the election rate for each location. A year ago they started adding inspirational messages and stories to these reports (with much of the credit for this part of the effort going to Mindi Nguyen, administrative assistant to the Motor Vehicle Division director, who organizes these monthly and was nominated by the Iowa Donor Network for a national organ donation award).

Now, a year later, I'm happy to report that our overall election rate has risen to almost 60%, with opportunity to climb higher. It's powerful because it means there will be more potential donors and more potential matches. It's also powerful because it demonstrates the value of engaging in performance management – when we're willing to measure and know our performance, choose strategies to improve it, and measure results to see if those strategies had their intended effect, we can achieve remarkable things. Great job to every person that asks this important question – you are life savers every day!

Song of the month

In light (slight pun intended) of the eclipse, I was tempted to go with "Total Eclipse of the Heart" (there's an organ donation tie there as well) by Bonnie Tyler, but to be honest I never really liked that song and it's kind of a downer. Let's take a more positive spin with "Here Comes the Sun," written by the Beatles' George Harrison that first appeared on their 1969 Abbey Road album. As George said, it's alright!

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As I reach this point I just got back to Iowa. My kids have a tradition of making a speech every time we cross a state line, that goes like this, "Wow, America! Where you can go from state to state without a visa, or a passport, or anything. Wow, America!" (This is something the learned from their mother, who started it with her brothers and sisters.) They said it again as we passed the Iowa "welcome" sign, and on this occasion I would amend it to "Wow, Iowa DOT!" We help people go places and bring them home again, and that is a pretty cool thing. Until next month, thank you, and stay safe in all you do!

Mark