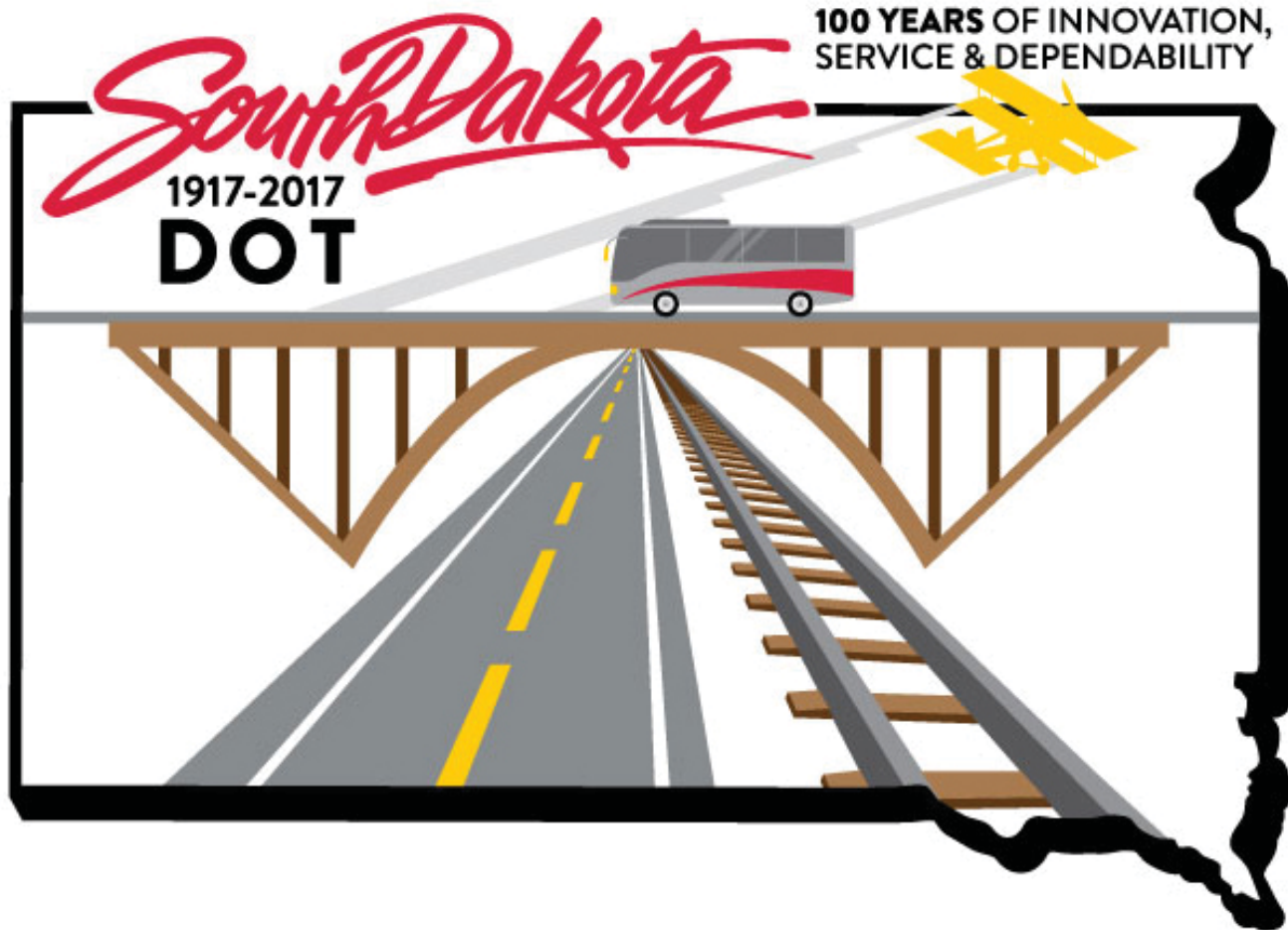
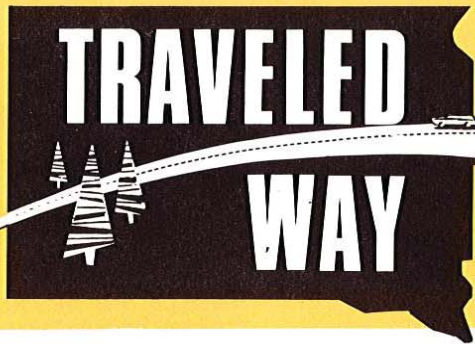


the



Beginning September 18, the Pierre and Sioux Falls fuel sites will have an E30 blend that will be used for FLEX FUEL vehicles only. If you are fueling up a flex fuel vehicle make sure you use the E30 pumps in Pierre or Sioux Falls which will be labeled E30, flex fuel only, and have a yellow and black striped hose. When you take a vehicle, the checkout book for that vehicle will indicate if the vehicle is flex fuel and will have a yellow gas cap indicating E30 needs to be used. Please use caution that you do not use E30 in any vehicle that is not flex fuel. If you have any questions please contact Chris Ott at 773.4114 or by email at chris.ott@state.sd.us.

Action Plans – What's It All About?

by John Forman, Pierre Region Engineer

“Action Plans”, we’ve all heard this catch phrase thrown around multiple times around the office over the past few years, but what are they, what have we done and where are we going?

The South Dakota Department of Transportation has been utilizing strategic planning for many years now. How do you achieve a strategic plan? You set goals and formulate plans (action plans) to achieve those goals. It’s no different than planning for your child’s education or saving for that new boat. From my standpoint, I think one thing I’ve learned, or perhaps re-learned, is that it doesn’t happen overnight and changing the direction of this huge machine called DOT takes a lot of effort by everyone.

The Department has many action plans – some very formal and some not so formal, some long term and some short term. Some involve entities outside of DOT, such as the Associated General Contractors (AGC), the Federal Highway Administration (FHWA), or the Bureau of Information and Telecommunications (BIT). Some action plans are department-wide, some are within a division, and some only affect an office or a shop.

At the outset of this endeavor to write this article, my thought was that I could list all of the action plans and provide a brief synopsis of each. It became quite evident that to do that would probably involve writing a book rather than a short article. So Plan B is to choose a few and provide highlights of those. So here it goes:

- 1. Road Condition Reporting Improvements –**
This action plan looked at making improvements to winter, summer, incident and event reporting. Results from customer surveys showed *winter time reporting* was predominately considered pretty accurate. It was noted that timeliness was sometimes in question, as was infrequent reporting during the morning commute time. To remedy this, maintenance staff was asked to make another report after their first round of the morning – roughly in that 6-7 a.m. time-frame. *Summer time reporting* – new guidelines were provided for construction and maintenance staff alike to help provide more accurate reporting of activities they were doing that affected the

traveling public. Incident reporting is still an activity in progress, as the DOT is working with Highway Patrol and State Dispatch to coordinate computer systems to allow better information to be placed into the road condition reporting system when there are incidents on the highway that DOT might not be aware of.

- 2. Backing Crash Reduction –** Backing crashes were identified as incidents we should be able to reduce with some effort. The action plan called for increased emphasis in this area. As a result, new vehicle stickers were placed on all SDDOT vehicles, posters were put up in various locations calling attention to checking before backing and new safety guidelines were created. Fiscal year 2017 results showed the department missing its goal of 24 backing accidents by 1, with a total of 25, down from 36 the year before.
- 3. Question and Answer Forum for Bid Letting** - This action plan was initiated to provide better information to bidders without the effort of creating so many formal addendums on projects being let to bid. Initial development of this process was started last summer and was implemented in January 2017.
- 4. To Let 70% of state construction projects in the federal fiscal year as originally programmed** - This sounds easy, but how to measure it? As in many of the action plans developed, being able to measure or report on progress is a huge issue. Working with BIT, a report is being developed with the C2C module to identify numbers and percent of projects within the given fiscal year. Parts of this long term goal have been completed, such as establishing letting dates for all programmed projects by Oct. 1. Another completed action plan was to establish formal guidance on time-frames when certain types of projects can be let due to construction time-frames, environmental issues, etc.

For information on other action plans, check with your Division Director or one of the Region Engineers. They should be able to point you in the right direction.

continued on page 3

Action Plans continued from page 2

There are also a number of individual action plans in place. Each supervisor has action plans developed from the employee engagement survey to help them become better supervisors. On a personal note, my action plans have been to get out of the office and into the field more often, and to ensure that information gets passed along to staff rather than sitting in my inbox. To be honest, I have not been 100% successful at this achieving my goals, but I keep working at them. Others have action plans dealing with employee development, timely feedback, employee recognition and the list goes on and on.

So to answer the initial questions, what are action plans? They are plans to help us reach a goal, whether they are personal, by office or department wide.

You may be surprised to know the action plan process really isn't new, we have just formalized the process, the accountability and what we call it.

What have we done? Lots of good work has been accomplished by the employees within DOT. Many action plans are ongoing. Many have spawned new action plans, or new or improved processes.

Everyone wants to get better, so action plans are around to stay, which leads me to the last question, where are we going?

By the time you read this, an updated strategic plan will have been released. Some action plans will inevitably have been completed. As an organization, we will continue to try to improve our efficiencies and provide better service to the public.

Celebrate the successes - large or small. They all contribute to a better organization and hopefully, a better you!!

Be the Champion! Be part of the Team!

by the P&E Innovation Team

The Innovation Team is working on identifying Champions and Team Members for the BIG 10. These people will be a part of taking the innovations from concept to practice to implementation.

Each team is in the beginning phases of coming together and discussing the “meat and potatoes” of the innovations. The teams are identifying the WHO, WHAT, WHERE, WHY, WHEN and HOW of each idea. As the teams dig deeper into the topics they will be outlining the timeline, process, and goals for implementation. Or possibly during the review process, the group may determine to not proceed with the innovation. Either way, having a solid plan will make the intermediate activities feel like the natural progression to the end goal. It's not uncommon to spend 90% of your time on the plan and 10% on the execution of that plan.

You may be asked to participate as a team member and we encourage you to contact your supervisor about helping out if you see an idea on the list that you have a special interest or strong background that you feel you could add value to the effort.

BIG TEN

1. Develop an Organizational Chart with Pictures
2. Drone Technology Opportunities
3. Contours on Plan Sheets
4. Naming Convention for Electronic Files
5. Succession Planning & Continuity of Operations
6. Design & Procedures Manual
7. Development of Project Move Checklist
8. Development of Additional Smart Mobile Apps
9. Safe Driving Practices
10. Landowner Information

Big change is like a marathon; over ups and downs with short moments of sprints.

The Road is Long (with many a winding turns...)

by Peggy Laurenz, Project Delivery

Project Delivery and Scheduling have been moving steadily forward in the effort to improve DOT's processes and success rate in delivering pre-construction projects to Letting as scheduled in the STIP. Much of the work to date has evolved around ensuring we have accurate schedules in Primavera and developing methods to monitor, control and communicate project status.

The base schedule networks were updated to ensure project schedules reflect current business practices and timeframes needed to complete the work. Then, active project schedules were updated to ensure we have current project status information and realistic project schedules. This has been a significant effort taking over 6 months to accomplish. Next steps involve evaluating available vs needed resources and actively monitoring schedules.

To keep schedules accurate and current, we have identified standard Review Points that will occur throughout the life of a project. Schedules will be reviewed approximately every 6 months. At each of these Review Points, the schedule will be updated based on work completed on activities at that point in time. At each Review Point, the project will be assigned a Risk Status identifying if project activities have been completed as planned or if there are issues with the project and project schedule. Risk Status is a simple red, yellow or green system. A Green status indicates the project is on schedule. A Yellow status indicates the project schedule is up to 3 months behind. A Red status indicates the project schedule is 3 or more months behind. Future Work Center Meetings and project team meetings will focus on Risk Status and determining course of action to bring yellow and red project schedules back in line with the schedule.

The purpose of maintaining accurate and current

schedules is to be able to track and monitor a busy and fluid STIP. There are many projects, activities and project teams involved in successful delivery of the STIP. Each project has a schedule to guide the project team from project beginning to end within a designated timeframe. Knowing where the status of a project any point in time is a critical project management tool. Each project schedule is made up of multiple activities each with planned start and planned finish dates. Schedules are intended to guide the team activity by activity. Project team members focus on the activities assigned to them and meeting those schedule dates. Everyone doing his or her piece collectively moves the project forward ultimately arriving at the end of the schedule.

One notable change to the way DOT is managing projects is that schedules will no longer identify a specific Letting Date in Primavera schedules. The end point of project schedules will instead be Ready Date, which is the date that the complete project is due in the Bid Letting Office. After a project reaches the Bid Letting Office, a Letting Date will be assigned based on a variety of factors to identify the best possible date to let the project. Ultimately, projects will be "ready" earlier than they have in the past. The reason for the change is to provide the department the best opportunity to let a project when we anticipate getting the best bid prices and also to ensure that all permits, design changes, and clearances have been obtained prior to setting a letting date.

Keeping activities updated and project status current by entering activity dates is critical to managing projects and managing the program. Ultimately, the focus on project delivery is help the department become more successful in delivery projects by providing processes and methods that can assist projects teams in managing their work and their time.

Deleted Policy: S-2-00, "Memorandum of Agreement Between South Dakota Department of Highways, State Conservation Commission, U.S. Soil Conservation Service Conservation Districts"

Deleted Policy; "Short Form Contracts," OM-2005-04

South Dakota's First RICWS Goes Operational

by John Less, Road Design; Photos by Andy Vandel, Project Development

On a muggy, Bon Homme County summer afternoon, nothing about the intersection of highways 46 and S 37 makes it stand out from the thousands of similar locations throughout the state. The multiple "Why Die" signs installed here though give a hint of the intersection's darker past and why it was chosen to be the first location in South Dakota to have a rural intersection conflict warning system (a.k.a RICWS) installed. Several safety countermeasures were installed over the years, but severe injury and fatal crashes continued to occur. After learning of the Minnesota DOT's experiences with RICWS installations, state safety engineer Andy Vandel knew that he'd found the perfect pilot project location for South Dakota.

A RICWS is a recently developed safety countermeasure that is intended to reduce the number of right angle ("T-bone") type crashes by giving drivers on both highways a warning when traffic is present on the intersecting highway. Although the concept isn't new, the RICWS takes advantage of the logic processing ability of the latest traffic signal controllers to provide accurate and reliable warnings to drivers. The Minnesota DOT pioneered the development and use of the RICWS, and their post-installation studies have shown up to a 60% reduction in fatal or serious injury crashes.

The concept of the RICWS is simple and uses a stripped down version of a typical traffic signal cabinet. Traffic detector loops identify approaching vehicles on the side road and the traffic signal controller activates sign mounted warning beacons on both approaching legs of the main highway. These beacons "prime" the approaching driver and can reduce their reaction time to begin braking should a vehicle suddenly pull out. It might not sound like an important element, but a fraction of a second can mean the difference between

a crash and a heart-stopping close call. Even the smallest reduction in reaction time can mean avoiding a tragic crash.

Similarly, detector loops on the main highway detects approaching vehicles and the controller activates sign mounted warning beacons for both legs of the minor road. Instead of a standard highway sign, these signs are LED display signs so in the event of a power outage, drivers at the stop sign will see a black sign.

Construction of the RICWS finished in July, and the system went into operation on Aug. 15, after the final inspection. A second RICWS install is planned in 2018 for the intersection of Highway 281 and Highway 20 in Spink County. Highway 281 is a divided roadway, so this installation will provide valuable data on how well a RICWS works for this geometry. Post-project evaluations will be conducted for both locations and if we see the same results as MnDOT, state engineers will have another resource to use towards achieving zero traffic deaths in South Dakota.



Warning Signs for SD 46 Traffic - above & right

RICWS Control Cabinet - left

Photos by Andy Vandel



Steel Inspection in Portland Cement Concrete Pavements using Ground Penetrating Radar

by Darin Hodges, Jason Smith, and intern Nickolas Zolnowsky - Material & Surfacing

The concrete section of Materials and Surfacing (M&S) recognizes the significance of designing and enhancing construction practices to provide longer lasting pavements. M&S adopted the use of Ground Penetrating Radar (GPR) in 2008 to improve on the construction inspection for tie bars in concrete pavement. A GPR scan can be performed by a few different methods.

The most convenient for longer stretches is using a UTV with the GPR antennae mounted in front and a computer mounted in the cab to record the scan produced (pictured right). The UTV version requires the work of two people, where one drives down the center of the longitudinal joint and the other watches the GPR Scan for discrepancies.



A little background on the steel reinforcement used in concrete pavements:

The longitudinal joints, for a 2 lane roadway being the center line high point, typically have 30" long 5/8" diameter rebar called "Tie Bars" that hold the lanes together. The transverse joints, or those that go from one side of the road to the other, typically get 18" long and 1.25" diameter smooth steel bars called Dowel Bars. These dowel bars are spaced one foot apart



and are supplied in a dowel basket assembly (pictured left) that keeps them held together. Dowel bars provide



Other methods commonly used by M&S for GPR inspection are a push cart and a handheld version



(pictured left). The push cart and handheld GPRs allow more flexibility in

pinpointing the location and orientation of tie bars and dowel bars.

load transfer from one slab to the next and keep the transverse joints from faulting.

So why do we need GPR? A GPR scan allows us to locate deficient tie bars and dowel bars in hardened concrete. One way that can make a tie bar deficient is if the saw cut nicks the tie bar. The nick in the tie bar allows water to surpass the epoxy coating causing the tie bar to rust and corrode over time, ultimately making the tie bar ineffective.

The specification for tie bars requires:

- Even distribution within panels
- Correct number in each panel
- Placement within middle third of concrete depth
- Placement a minimum of 15" from the midpoint of the dowel bars
- Placement to be centered on longitudinal joint with 3" tolerance

A GPR Scan also allows the technician to analyze the placement of dowel baskets. The dowel baskets must be located in the middle of the transverse joints.



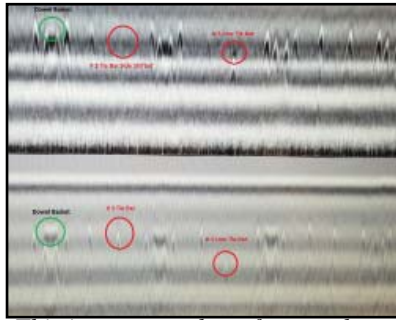
All three GPR scan options

Continued on page 7

GPR...continued from page 6

During a GPR scan inspecting the tie bars, the technician will stop occasionally to check dowel baskets. The location of dowel baskets is most commonly found by the push cart, but can also be found using a handheld GPR.

The depth to a tie bar and dowel bars are also double checked during a stop by using a cover meter or the handheld GPR. The depth and location of all the tie bars is performed in the office by analyzing the saved scan using a software program called RADAN. If there is any concern over accuracy, cores can be used to verify the depth of a questionable tie bar.



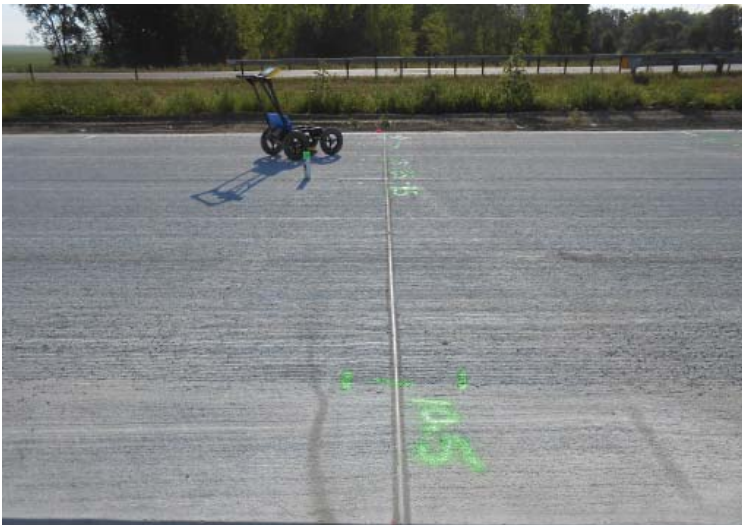
This is a screen shot of a two channel GPR scan and the green circles were added to show where the dowel basket is and the red circles are showing what misplaced tie bars look like.

After thorough review of the GPR scan (*pictured right*), the concrete office will send out an inspection report containing deficient tie bar and dowel bar locations. The report also contains remediation recommendations including repairs, replacement or price deductions. The recommendation for price deduction or repair

depends on the number, type, and degree of deficient tie bars or dowel bars.

So what projects do the SDDOT perform GPR inspections on? All DOT funded and special request projects that have concrete pavement. The GPR scans are collected soon after the contractor has paved a sufficient distance. Initial scans allow the DOT to determine any tie bar or dowel bar problems and, by notifying the contractor, minimize these issues for the remainder of the project. If the initial scan looks good with few discrepancies, GPR inspection is reduced on the remainder of the project. However, the entire project will be GPR scanned if it appears the contractor is consistently having problems.

Thanks to GPR, the DOT has improved new concrete paving projects with better reinforcement placement. The decision to prohibit centerline tie bar inserter attachments was based on GPR scans. The scans determined contractors were consistently having issues with tie bar placement when using the inserter attachment. Currently, tie bars are placed using either a stake or a tie bar basket method. Identifying steel placement issues early during construction with the GPR has saved the DOT future repair costs and provides longer concrete pavement life.



The Above picture: This is a transverse joint with the dowel basket located in green paint, discovered that the basket was not centered on the joint toward the far end of the picture.



Right Center picture: A misplaced tie bar is visible and caused spalling at the intersection of the transverse and longitudinal joint.



Far Right picture: Core sample showing a cut tie bar from being placed too shallow.

17 Years Flies By....

by Mark Peterson, Aberdeen Region Operations Engineer

Wow, I just wrote that and can't believe it. Have I been with the SDDOT for 17 years? Now I know that is not that long of time (Jack Stuchl just retired last spring with 51+ years in up here) but it's a while. So I thought I might take time to ponder and reflect on the different positions I have worked in, people I have worked with and experiences I have had over the last 17 years.

Where did it all began? Well I was graduating from SDSM&T in the summer of 2000, engaged to be married and wondering where I might begin my career. I had worked road construction and railroad construction the past 4 summers leading up to graduation so I was ready to not be swinging a spike maul, hauling & setting paving forms, standing in concrete and in general getting handed all the jobs nobody else wanted. I was ready to be on the "smart" side of the construction going on.

I had an interview set up with the DOT during the career fair in which I got to set down with Larry Weiss and Dale Russell. After the interview I got offered a position with the DOT, but the kicker was I got to pick which open position I wanted. I can't remember all the open spots at the time but I know there were quite a few scattered throughout various locations in the state. So, I looked at the map and discussed the options with my soon to be wife, Lisa, and the location chosen was Aberdeen. Now Aberdeen was not really ideal in my mind, as I really wanted to be in the field on construction, not designing, but it was ideal for my fiancée as she needed to finish college and wanted to go for teaching, which NSU fit into that nicely.

So I accepted the position with the Aberdeen Region working with Scott Schneider as an assistant design engineer. What I originally, reluctantly, accepted for the betterment of my wife and our lives turned out to be a great decision as I got outside of my own, limited area of knowledge and had the privilege to learn under an excellent teacher, Scott Schneider. I spent a little over a year in the region design office, but still to this day believe it is one of the best experiences of my career and I probably have not thanked Scott enough for beginning my journey with the DOT on the right foot. He was an excellent mentor, guide and teacher to

start a career off with.

So, after a little more than a year doing region design work a position opened up in the Aberdeen Area Office. I had been loaned out on a temporary basis (Larry Afdahl always told me "You are a field engineer") to the Area off and on for a little bit when we finally made it formal and I got to move my office downstairs. It was a young office with an experienced leader at Engineering Supervisor in Harvey Michlitsch and Area Engineer Phil Dwight along with fairly young project engineers and technicians.

To say we were swamped on construction is an understatement, I remember one summer I had 10 miles of grading, 4 bridge deck overlays, 1 new 300' structure over the James River, 12 miles of AC and a bunch of other miscellaneous work. We did it with a bag phone (hey you could get service everywhere), 5-6 project diaries, a laptop that may or may not work and a lot of good people. We also had the expressway grading and paving going on, lots of bridge deck work, bridge replacements, paving and of course being in NE SD Emergency Flood Relief Projects. For five years I worked my way up as a project engineer on every type of work we did. Phil & Harvey guided me through rough spots, Mavis made sure I kept my sanity when I was in the office, although I don't know how much I put into the office swear jar but she caught me a lot, I always had Bob Ward to also bounce questions off of and we had a great technician staff that really helped all of us engineers a lot.

After a little more than 5 years as a project engineer in the area office I was selected to replace Harvey as the Engineering Supervisor. While it was exciting, it was also daunting, as now I am responsible for more than just my own projects and project personnel. I was responsible for the entire area engineering personnel. I was lucky as I had Phil Dwight to learn and guide me on my path. Phil is probably the most level headed field person I have worked with. In 16 years of knowing and working with Phil I don't know that I could ever say he made a bad decision or lost his temper in dealing with many difficult situations. He was a great mentor and I only wish a little more of his patience and listening skills had rubbed off on me.

continued on page 9

17 Years Flies By continued from page 8

Being engineering supervisor, I was also very appreciative as I had a very experienced and high quality technician group in the area. (Rafe, Marc, Scott, Roger, Aric, Ken and others) were great in the field and also were not afraid to talk to me. They had great ideas, were a great help in training young field engineers and technicians and they were the glue that held us all together. Often asked to work long hard hours, longer than the actual construction crews due to testing, these guys just kept plugging along. We all sort of grew up together over those years of being project engineer and supervisor. Some have moved on from the DOT, some to other positions with the DOT and some remain, but I can't tell you how important these guys were and are to myself and the success we had together.

Seven years later I got the call back to the Aberdeen region office as the Operations Engineer. While I was a bit sad to leave a lot of my friends in the Area office I was only going "upstairs", right? I had to admit that I had also tired of fighting with poor contractors on construction. I will say I truly loved construction, both as a project engineer and engineering supervisor, part of that came from working with some really good and honest contractors that truly wanted to do good work and they worked together with you on the projects in a way that felt like everyone had the same goal. The downside was that I also worked with some not so good contractors whom we constantly had to fight with to get them to follow the specs. I was ready for a change and a new challenge.

Well, almost 4 years into this latest step in the DOT I can say it has been another great experience. The best part of my current position is that I am working with mostly DOT personnel. The reason I say that is that I have found almost all DOT personnel want to do their best and do a good job for the state. It's easy to work with people that want to do a good job day in and day out. This position has had its challenges for me as I had to venture into areas I didn't have the greatest amount of experience but I have a really good group of people to work with from all of the engineering specialists, repair shop personnel and individual crews that I work with, which has allowed me to make a smoother transition and has improved me as well. I have also been gifted with another good supervisor Jeff Senst, as Jeff allows me to have the freedom to learn and try new ideas. He knows when to reign me in and when to give me an ear to vent to and I appreciate him for that.

So, here I am, 17 years in. I figure I am maybe half way through what I intend to make a career of with the DOT. I don't know where the next steps will lead me in my travels but I am sure it will be good as all the rest of my different spots have been great experiences.

The best part of my career has been the people here that I cannot thank enough or tell them that I appreciate what they do and have done for me over the course of my career.



Above photo of "Dignity" being installed at the Chamberlain rest area by Laurie Schultz.

Right photo of "Dignity" in the evening by Ben Orsbon.



Mentoring Corner

Taking Care of Business as a Situational Mentor

by June Hansen, Mentoring Program Co-Coordinator



Do you ever get a song stuck in your head? Recently the one tune in my head is “Taking Care of Business” by BTO (Bachman Turner Overdrive). It’s so stuck on repeat that the mini marquee in my cubicle pays tribute to the 1974 hit. Though the song is about the joys of being a self-employed musician and not having to deal with the grind of a regular job – I think the chorus is totally about working at the DOT. The chorus is:

“And we’ll be taking care of business (every day).

Taking care of business (every way).

We’ll be been taking care of business (it’s all mine).

Taking care of business and working overtime.”

Isn’t that what DOT does every day? We take care of the people’s business by ensuring there is a safe and efficient transportation system in South Dakota. When the chorus says “it’s all mine” that’s

right. It’s each individual’s responsibility to take care of business at hand. That includes our responsibility to mentor and strengthen the department for the challenges ahead.

With all due respect to Randy Bachman who wrote the song, I think the song can serve as a reminder that as we are “taking care of business” we have a responsibility to help the next generation of rock stars at the DOT become just that...rock stars! One of the ways we can do that is by being a situational mentor.

A situational mentor is someone who is the right person at the right time. It’s the subject matter expert who can shed light on a topic of interest or provide that technical expertise needed for a particular project. There are individuals who consistently volunteer to be situational mentors for the mentoring program. The mentoring committee is grateful for their commitment to serving the program. Even with the variety of situational mentors in the program, there is a need for others to be situational mentors.

There will be mentors and mentees reaching out to folks who are not signed up as situational mentors because they have the knowledgebase and expertise to help the mentee achieve his or her mentoring goals.

If contacted please help us “take care of business” by sharing your time and talents with the mentee.

So the next time “you get up every morning from your alarm clock’s warning, take the 8:15 into the city.” Or in most cases in South Dakota, the five minute drive to your shop or office. Think about how you are “Taking Care of Business” and be ready to step up as a situational mentor.

Upcoming Mentoring Events:


October Mentoring Event – October 26 – 9 a.m. - 5 p.m. (CDT) -- Pierre
Transportation Commission Meeting & Debrief (9 a.m. – noon
Executive Team Meeting (1 p.m. – 5 p.m.)

ArcGIS Tips & Tricks























Moving to SQL14

by Kimberley Zerr, GIS

If you've discussed data management with anyone on the GIS team within the last year, there's no doubt you heard one (or all) of us mention SQL14. The SQL14 server is the new home for DOT GIS data and we've been slowly migrating data to it. The new SQL14 server has updated software that gives us some new behind-the-scenes controls, like filtering capabilities in ArcGIS Online, better editing in Collector for ArcGIS, and windows authentication for editors so editors only see what they can edit. We've done a little reorganization to the TR database on the new server too; if you have a connection to SQL14, you can see the reorganization in ArcCatalog or through your add data button in ArcMap.

There are a lot more feature datasets on SQL14 than on the old server. Feature datasets have icons like this  and usually contain several features that are related in some way. For example, several of the datasets on SQL14 are organized by owner, i.e. TR.TR_ADMIN.TIM contains features like intersections and highway class that are updated by the Transportation Inventory Management office. The features in a feature dataset can be lines, points, or polygons. Tables cannot be in feature datasets.

Most of the features retained the same name during the move to SQL14. If you can't find a particular feature, look inside the feature datasets. If you have questions about the new server or data that you want to share, let us know!

Name	Type
 TR.TR_ADMIN.Assets	SDE Feature Dataset
 TR.TR_ADMIN.Collector	SDE Feature Dataset
 TR.TR_ADMIN.Features	SDE Feature Dataset
 TR.TR_ADMIN.LGAStip	SDE Feature Dataset
 TR.TR_ADMIN.Operations	SDE Feature Dataset
 TR.TR_ADMIN.ProjectDev	SDE Feature Dataset
 TR.TR_ADMIN.Research	SDE Feature Dataset
 TR.TR_ADMIN.Route_Systems	SDE Feature Dataset
 TR.TR_ADMIN.Safety	SDE Feature Dataset
 TR.TR_ADMIN.Specials	SDE Feature Dataset
 TR.TR_ADMIN.STIP	SDE Feature Dataset
 TR.TR_ADMIN.TIM	SDE Feature Dataset
 TR.TR_ADMIN.Transportation_Inventory	SDE Feature Dataset
 TR.TR_ADMIN.Utilities	SDE Feature Dataset
 TR.TR_ADMIN.WEB	SDE Feature Dataset
 TR.TR_ADMIN.HM42_Sign	SDE Table
 TR.TR_ADMIN.HM42_SignAssembly	SDE Feature Class
 TR.TR_ADMIN.HM42_SignAssembly__ATTACH	SDE Table
 TR.TR_ADMIN.HM42_SignAssembly__ATTACHREL	SDE Relationship Class
 TR.TR_ADMIN.HM42_Support	SDE Table
 TR.TR_ADMIN.Mileage_Reference_Markers	SDE Feature Class
 TR.TR_ADMIN.MRM_GIS_511	SDE Table

Longevity (July/August)

Robert Kern	30	Isabel
Ben Orsbon	40	Secretariat
Glenn Walz	20	Mitchell Region
Ken Brilz	20	Right of Way
John Mehlhaff	30	Pierre Region
Peggy Laurenz	30	P&E Admin
Brian Raecke	30	Road Design
Gena Boren	30	Right of Way
Jerry Ortbahn	40	Project Development

Benefits Connection

by Heidi Olson, BHR

Plan now to accept one or more of the FY18 beneFIT well-being challenges listed below! This is a great way to get to your 100 wellness points goal quickly. Log in at <https://benefit.staywell.com/> to learn more.




Participate in the 6-week Calm Relay Challenge to discover how the practice of mindfulness and gratitude can have you navigating stressful situations with improved clarity. Track your progress, participate in weekly Zen Quest Challenges, learn how to manage stress and stay resilient in tough times.

The Calm Relay Challenge starts in October 2017.



Adventure lies ahead. Take a virtual trip through trails in the Pacific Northwest or along Snowman Trek to boost your energy and embrace your inner explorer. Join the HealthTrails challenge to track your daily habits and reach new heights in your journey to look and feel your best.

The HealthTrails challenge starts in January 2018.



Remember – Status changes (marriage, divorce, birth of child, adoption, death of immediate family member, insurance loss/gain from spouse's employer, etc.) must be made to your health insurance plan within 30 days of the qualifying event. The plan used to allow 60 days, so this is a change. After the 30 day deadline passes, the next chance to add/remove someone from your benefits is during next year's annual enrollment. Find the change form at <http://benefits.sd.gov/Forms.aspx> or contact BHR at 773-3148.

The Winds of Change.....

by Doug Sherman, Winner area engineer

In giving some thought about what to write for the DOT Newsletter, I thought it would be a good idea to somehow tie in the DOT's 100th anniversary as a department. I personally have been with DOT as a permanent employee since 1988, although I also worked two summers in Clear Lake as a highway maintenance seasonal in 1986 and 1987 prior to becoming a permanent employee. Hence, I've been associated with DOT now for roughly 30 years. The math lover inside me then equates that to being part of this Department for roughly 30% of the time it has existed. I have to say I feel very proud of that math as there really is no better organization a person could work for - in my opinion.

Over the years, I've seen a lot of changes take place within DOT and throughout our world that have drastically affected how we do business. As such, I thought I'd write about the importance of us being willing to accept and embrace change as things come at us to ensure we survive as an organization for another 100 years and beyond. Had we not done that in the past 100 years, we wouldn't be as strong today as we are.

Even though we are a government agency, we still have to think and act like a private business would in many ways if we want to continue surviving as an agency for another 100 years. The strongest businesses in the world today are ones that readily adapt their business practices to incorporate change and keep up with technology. Businesses that fail are the ones that get caught up in their comfort zones they resist and refuse to change. They refuse to keep up with and adapt to new technology and new ideas. They refuse to take a smart risk every now and then that could help them. They make a conscious decision to just live within their comfort zone.

Unfortunately for them, they often get passed by and eventually become extinct. As a very proud DOT employee with nearly 30 years of experience, I can say I don't ever want to see that happen to us. That is why we need to always be on the lookout for new and innovative ways to do business and to continuously try to improve our business practices. For us to survive another 100 years, we need to recognize that

this philosophy can never end. We need to constantly strive for continuous improvement to ensure that some entity out there doesn't pass us by and cause us as an organization to become extinct. It's our job as current DOT employees to make sure that never happens. We owe it to all the thousands of people who have helped turn the SDDOT in to what it is today and we owe it to the future generations that will work here to teach them that change is an ever present constant and we cannot survive as an organization without it.

As humans, our ability to reason things out and be innovative or inventive is really what sets us above the rest of the animal kingdom. Oddly enough though, change is never simple for us. Changes challenges us to let go of the past and move forward. This is tough on us humans as we get very comfortable in our old ways of doing business and really don't like change. We like our comfort zones and we detest it when we are forced outside of those comfort zones.

That is why we as humans generally fight back and resist change. We like our comfort zones so much that we resent someone who dares try to get us to do something we are sure will never work. Over and over again through the years I've heard comments like this is stupid!! Why are they making us do this??? This will never work!!! Sadly enough here, I have to come clean and admit that I too am human. I've been very guilty of saying those types of things many times over the years myself, because as a human I love my comfort zone as much as the next person. The problem is that if we succumb to that way of thinking we are doomed to fail as we will lose out on opportunities to continuously improve ourselves, and when we lose out on those opportunities, someone else will take advantage and pass us by. Food for thought: What would our work and lives be like if computers didn't exist? When they first came out there were many naysayers who said it was just a passing fancy. Can you imagine!! If we still did plans & other work by hand?! We certainly would not be living up to our mission to provide a safe and efficient transportation system in a cost-effective manner.

Sometimes the winds of change are what make us strong.

One Step at a Time

by Patricia Saukel & Kristi Sandal

STRESS. Admit it. We all have it and we all have our ways to relieve it. Some of us like to read. Some of us like to paint. Some of us even like to go for a leisurely Sunday drive. Not Sallie Doty, transportation specialist for the Department of Transportation's, Air, Rail, & Transit Division in Pierre. She likes to run. **Fast.**

Sallie is originally from the Twin Cities in Minnesota. She is married and her husband Ben encourages her in all of her athletic efforts. Sallie's background in running started in high school where she was a mid-distance runner and swimmer, but her first love was swimming. She attended college at USD in Vermillion and swam competitively all four years, setting the 100 meter breaststroke record in her senior year. She was also an All-American in high school finishing 2nd in the 200 yard Freestyle Relay. Sallie is also an avid hunter, which you may know if you follow her on Facebook, but that's another story.

Sallie's brother inspired her to start running seriously when he qualified to run in the Boston Marathon. It was then that she took up her second love - running - again. Sallie trained hard and ran her first half marathon (13.1 miles) in 2013 at the Deadwood Mickelson Trail. Since then, Sallie has run four half-marathons and most recently her first full marathon (26.2 miles) in Fargo, North Dakota, accomplishing her personal best time.

Training for a marathon takes discipline and patience. Sallie used an 18-week program to train for her first full marathon in Fargo this past May. This included running 45 miles per week from January through April and following the workout schedule below:

- Monday – Lift and run
- Tuesday – Swim and run
- Wednesday – Run
- Thursday – Swim (easy swim)
- Friday – Prep run (short)
- Saturday – Long run (10-20 miles)
- Sunday – Day off



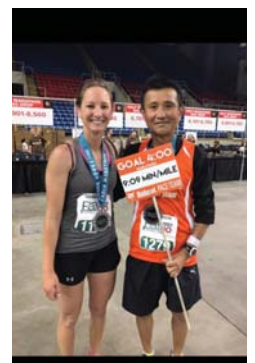
The week before the race, Sallie prepared her body by balancing her electrolytes and keeping fueled. The night before the big race, she carbed up at the Olive Garden. Carbing up, or carb loading, is eating a large amount of carbohydrates to increase the amount of glycogen in the body. This gives the athlete energy to race longer before “hitting the wall.” Hitting the wall is the point when exerting your body so much and the carbohydrate reserves are so depleted that the athlete cannot reach their highest level of performance. They literally stop running, and some collapse.

To prevent this, Sallie eats about 300-400 calories for breakfast on the morning of the race. For the Fargo marathon, oatmeal and yogurt were on the menu. She estimates she burns about 100 calories per mile and needs to consume about 300-400 calories during the race to keep her energy up. She does this with sport beans (Jelly Belly) with electrolytes, fruit snacks and GU's (gel packs).

At the Fargo race, there were Aid Stations every two miles that supplied water, Gatorade and orange slices. Sallie likes to alternate between water and Gatorade as she passes each station. For her best comfort, Sallie wears smart wool socks and Asics Gel Kayano running shoes. She's not superstitious per say, but she always has Ben pin on her bib before the race – why mess with a good thing. She also has an extra pair of shoes & socks at mile 14 - just in case.

Sallie said that the marathon in Fargo was different than others that she had seen. There were bands every mile, which was a nice distraction to the runners (distraction from pain is a good thing!). She remembered feeling that mile 12 was a good mile for her. She was feeling sharp and on pace, which was not the case just two miles back at mile 10. Mile 10 was Sallie's hardest mile of all as she started to feel the effects of her running, but she kept putting one foot in front of the other and pushed through.

Sallie said that her turning point mile was about mile 18, when she realized she was going to finish and was feeling really strong and determined. She found the pacer, Sergio (pictured right), caught up and ran with him from mile 20 through 24. A pacer is a runner that helps other runners finish the race in a specific time. Sallie then pulled ahead of him at mile 24 and sprinted to the end of the race



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DOT Softball Challenge Game



Front/Middle Row: Jason Smith, Jerry Schaefer, Ben Brown, Kathryn Johnson, Joe Feller, Bill Englehart, Jesse Gaede, Chad Howard, Gill Hedman, Bob Laleman

Back Row: Scott Rabern, Coleman Varty, Bryce Chambers, Bob Schilling, Shea Lemmel, Bryce Kampa

Not Pictured: Nick Zolnowsky

Team Materials & Surfacing came out strong in the first two innings of the DOT Softball Challenge racing to a 13-1 lead with 15 hits over the Office of Bridge Design. Injuries played a significant role for both squads, as the “game within the game” began to unfold early. In the end, the M&S club claimed victory in the battle of attrition with a 23-3 final score.

Both offices received great fan support as a large crowd showed up despite temperatures topping 100o earlier in the day.

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to finish 22nd overall. She said on mile 25, the Johnny Cash song, “Hurt”, was blaring from her iPod as she passed the Aid Station. Although funny, it was not very encouraging for someone almost to the finish line.

Sallie’s first half pace was holding 9:09 miles at the halfway point and dropped to 8:55 miles after that, which means her second half was faster than her first which is called a “negative split”. Now anyone who runs knows this is very uncommon and difficult to achieve. She finished the race with an official time of 3 hours, 58 minutes and 1 second and reached her personal goal of finishing in under four hours.



This race was special for Sallie - she ran in memory of her grandma (pictured left), one of her biggest supporters in life. She saw her husband, aunt and uncle, and other relatives cheering for her near the end, as well as all of the encouraging signs from other fans. She loved the person dressed as the Grim Reaper with a sign saying “The End is Near”.

If you see Sallie walking down the hall or running along the trails and streets of Pierre with her dog Boone (pictured right), say Hi and congratulate her on her achievement.



New Employees

Brunsvig, Tyler	Engineer II	Brookings	07/09/2017	Promotion
Patton, Shawn	Hwy. Maint. Worker	Aberdeen	07/09/2017	Lateral Transfer
Druyvestein, Thomas	Engineer II	Pierre	07/09/2017	Lateral Transfer
Klein-Greba, Amy	Training Specialist	Pierre	07/10/2017	New Hire
Saathoff, Michael	Jrny Transp Tech	Sioux Falls	07/10/2017	New Hire
Weisbeck, Dale	Hwy. Maint. Worker	Herreid	07/24/2017	New Hire
Meier, Kyle	Hwy. Maint. Worker	Pierre	07/24/2017	Voluntary Demotion
Barrera, Tom	Hwy. Maint. Worker	Newell	07/24/2017	Lateral Transfer
Climmer, Aaron	Hwy. Maint. Worker	Mitchell	07/24/2017	New Hire
Noem, Jay	Transp. Specialist I	Custer	07/24/2017	Promotion
Keeler, Stephen	Jrny Transp Tech	Huron	07/24/2017	New Hire
Douglas, Leland	Lead Hwy. Maint. Worker	Rapid City	07/24/2017	Promotion
Anderson, Katherine	Secretary	Pierre	07/31/2017	New Hire
Winsell, Leslie	Jrny Transp Tech	Pierre	08/09/2017	Promotion
Vanneman-Maskovich, Sarah	CAD Technician	Pierre	08/09/2017	Lateral Transfer
Evans, Carol	Transportation Specialist I	Pierre	08/09/2017	Promotion from DPS
Whittington, Jedidiah	Hwy. Maint. Worker	Tyndall	08/09/2017	New Hire
Bittner, Christopher	Jrny Transp Tech	Rapid City	08/09/2017	New Hire
Cranton, Trevor	Hwy. Maint. Worker	Sioux Falls	08/09/2017	New Hire
Anglin, Dominique	Lead Hwy. Maint. Worker	Ipswich	08/09/2017	Promotion
Jensen, Dennis	Hwy. Maint. Worker	Wall	08/14/2017	New Hire
Roehler, Merlin	Hwy. Maint. Worker	Wall	08/14/2017	New Hire
Van Ommeren, Ward	Hwy. Maint. Worker	Rapid City	08/14/2017	New Hire
Salim, Andra	Jrny Transp Tech	Huron	08/24/2017	New Hire
Nelson, Dalton	Jrny Transp Tech	Huron	08/24/2017	New Hire
Duncan, Seth	Hwy. Maint. Worker	Aberdeen	08/24/2017	New Hire
Litka, Aaron	Engineer I	Pierre	08/24/2017	New Hire
Haug, Ryan	Lead Hwy. Maint. Worker	Sturgis	08/24/2017	Lateral Transfer

Promotions (reclassifications) within the same position - this was not previously being reported:

Ganje, Benjamin	Engineer III	Aberdeen	01/09/2017	Reclassification
Sorlie, Tanner	Project Technician	Belle Fourche	02/09/2017	Reclassification
Houdyshell, Ryan	Engineer II	Belle Fourche	02/24/2017	Reclassification
Witt, Dustin	Engineer III	Pierre	04/24/2017	Reclassification
Lampy, Andrew	Engineer II	Pierre	04/24/2017	Reclassification
Rapp, Ryley	Engineer II	Pierre	05/24/2017	Reclassification

Robert Hanson, Lead Highway Maint. Worker at Highmore, passed away Sunday, August 27, 2017. Robert retired Aug. 8, 2017 due to illness. He had 14.5 years with DOT.

Celius Wherry, 95 of Faulkton, passed away Friday July 21, 2017 at the Faulkton Area Medical Center. Celius worked 29 years with the DOT in Faulkton and was Maintenance Foreman when he retired in the 80's.

Craig Orke passed away on July 30. He was a former Project Technician at the DOT Sioux Fall Area Office for 25 years.