



JUNE 2021

Connecting the DOTs

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Public STIP Meetings



Strategic Objective: Provide Excellent Services

Increase engagement to inform, influence, and listen to customers to improve services

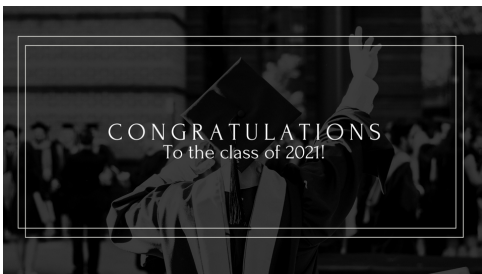
Click on the graphic below to view meeting locations and times; and the social media mp4 video designed to encourage public participation in the upcoming STIP meetings!

SD
DEPARTMENT OF
TRANSPORTATION

PUBLIC STIP MEETINGS

Statewide Transportation Improvement Program
Learn About the **NEXT 4 YEARS** of State Highway Construction

Pierre July 8	Sioux Falls July 14
Aberdeen July 13	Rapid City July 15



Click on the graphic to watch our updated 2021 video.
Congrats to all DOT families celebrating graduates this year!

Our Mission:

To efficiently provide a safe and effective public transportation system

Our Vision: what success looks like . . .

Better lives through better transportation by being the best



The Secretary's Corner

SDDOT Strategic Objective:



Value All Team Members

Leadership Development Program (LDP)

SDDOT is committed to providing the resources, equipment, and training our employees need to grow and advance within their positions.

We are excited to announce that Cohort 2 of SDDOT's Leadership Development Program (LDP) will be offered in person beginning in September 2021.

This training program is open to all SDDOT employees! The program is designed to build upon the collective energy and expertise that moves SDDOT toward our shared vision of "better lives through better transportation."

The LDP provides the opportunity for the Department to foster employees' professional and leadership development across the SDDOT and within the transportation industry overall.

Each of you demonstrates leadership every day. This leadership arises from your unique mixture of personality, technical training, and experiences you have gained in working with other SDDOT staff, as well as with our customers and partners. The LDP enhances existing leadership strengths and provides participants with a common core of leadership understanding and skills.

To maximize group participation and interaction, the class size is limited to 16 individuals. Therefore, the LDP involves an application and selection process. All employees are encouraged to apply. As part of the selection process, criteria will be established to help guide the selection of candidates from the application pool.

Brenda Thomas will serve as the Coordinator for the LDP. She works closely with an experienced leadership training provider, Lumin Consulting of St. Paul, MN, to provide the comprehensive series of leadership workshops customized to the needs of our staff and the strategic goals of the DOT.

Please consider how LDP participation might enhance your leadership skills!

The application deadline is Friday, July 23, 2021!

LDP program description: <https://app.box.com/v/DOT-LDP-Description-FY22>

LDP Application: <https://www.surveymonkey.com/r/DOTCoh2App>

Supervisor Support: <https://www.surveymonkey.com/r/DOTSupervisorEndorsementCohort2>



EXTRA MILE MENTORING BOOK CLUB

Announces the next book - "The Outliers" by Malcolm Gladwell



Outliers



THE STORY OF SUCCESS

MALCOLM
GLADWELL

#1 bestselling author of *The Tipping Point* and *Blink*

Learn what sets high achievers apart -- from Bill Gates to the Beatles -- in this #1 bestseller from "a singular talent".
(New York Times Book Review)

In this stunning new book, Malcolm Gladwell takes us on an intellectual journey through the world of "outliers"--the best and the brightest, the most famous and the most successful. He asks the question: what makes high-achievers different?

His answer is that we pay too much attention to what successful people are like, and too little attention to where they are from: that is, their culture, their family, their generation, and the idiosyncratic experiences of their upbringing. Along the way, he explains the secrets of software billionaires, what it takes to be a great soccer player, and what made the Beatles the greatest rock band.

Brilliant and entertaining, *Outliers* is a landmark work that will simultaneously delight and illuminate.

The EMM Book Club is scheduled for Tuesday, August 24 from 11 a.m. – 2 p.m. (CT). The meeting will be held in-person in the DOT Commission Room as well as via Microsoft TEAMS. This gives everyone the option of participating in person or virtually. Matt Lacey (LGA Consultant Management Engineer) in Local Government Assistance will be leading the discussion.

The book club is open to anyone who wishes to participate. There is a limit of 35 participants based on a first-come, first-serve basis. If you wish to join us for the discussion, please be sure you are available on **August 24 from 11am – 2pm (CT)** and check with your supervisor.

To sign up for the August EMM Book Club, please email Scott Eisenbeisz at scott.eisenbeisz@state.sd.us.

The deadline to sign-up is July 1. Books will be distributed in July.



Fallen Hero Bridge Naming Program

The Fallen Hero Program was created to honor and remember South Dakota's fallen veterans by naming bridges on the state highway system for those who were either killed or are still missing in action while defending our country in an armed conflict. Naming bridges in honor of our combat veterans is an initiative of Governor Noem and the Departments of Military, Transportation, and Veterans Affairs.

A ceremony was held on June 1 at the Bison High School. This 2020 dedication was delayed due to Covid. The community event honored Pvts. Dale and David Crow. (Photo by Todd Seaman)



The Highway 73 bridge near Summerville will be dedicated to these two cousins, formerly of Lemmon. Dale distinguished himself on Sept. 6, 1950, while participating in an attack on a strongly defended enemy position located on Hill 285, in Korea.

David was killed instantly by enemy small arms fire on September 6, 1950, while his unit was waging a bitter fight on Hill 285 against an offensive by numerically superior hostile forces. He too made a gallant stand and died a soldier's death.

The Transportation Commission approved the designation of the 12 bridges in honor of the 13 fallen heroes at their April 2021 meeting. The DOT will create and install the signs. The Department of Veterans Affairs is working with the families to plan and schedule the dedication ceremony.

2021 Dedication ceremonies scheduled for July:

July 3 - Specialist Mark R. Horner: (Army) Killed on Feb. 15, 1970, while on foot patrol in Vietnam; shot while attending to wounded.

~Bridge on S.D. 20 over the Lake Kampeska Outlet on the northeast side of the lake in Watertown

July 15 - Lieutenant Corporal Kenneth R. Jamerson: (Marine) Died on April 5, 1967, from injuries from a landmine while on patrol in Vietnam.

~Bridge on S.D. 63 over the Grand River south of Little Eagle

July 17 - Staff Sergeant Jeremy D. Vrooman: (Army) Killed on July 15, 2008, from injuries sustained by an explosion, while clearing buildings; saving teammates' lives in the action during Operation Iraqi Freedom and Operation Enduring Freedom.

~Bridge on S.D. 11 over the Sioux River between Sioux Falls and Brandon



Being a Good Mentee By: Bridget Carnahan



I thoroughly enjoyed my time in SDDOT's Mentoring Program during the 2018-2019 session and honestly cannot say enough good things about it. While I was a mentee, I was fortunate to have been matched with a phenomenal mentor, Steve Palmer, an Engineering Supervisor based out of the Rapid City Area Office. Steve had been a mentor for several sessions before mine, so he was very familiar with the program. He told me that he had learned something new from each mentoring pair, which is an awesome thought, because we all have expertise in different areas, and have something to teach others.

I took so much away from my participation in the program, that when my session ended, and I was asked to join the Mentoring Committee, I accepted without hesitation. As the committee gears up for the next mentoring session to begin in the fall, I began to reflect on my time in the program. I thought I would give some advice to those who are considering applying for the next mentoring cohort.

Be Driven. You might have heard that the mentoring program is mentee driven. Now, while I can see some truth in that statement, I think it's important to recognize the mentor/mentee relationship is a partnership. As with every partnership, it takes work from both parties to succeed. Think of the mentee/mentor relationship like a pendulum. When the pendulum swings too far one way, one party is doing all the work, and the other is not pulling their weight. The goal is equilibrium, where both parties are actively engaged and contributing to the partnership. It really helps to keep your goals in mind when working with your mentor. If there was ever a time I was slacking, Steve called me out on it and helped me get refocused on the tasks at hand.

Be Organized. After you have been accepted into the mentoring program, and assigned a mentor, you will be asked to create a mentoring plan. It is important to be driven and focused to achieve the goals laid out in your mentoring plan. When I got together with Steve, I would put together and send out an agenda in advance of our meetings. I'm not saying an agenda is necessary, but it helped us focus our time on recent events or activities that had occurred within the program and discuss how they helped me in working towards my goals. Using your outlook calendar is a great way to keep track of upcoming mentoring events. I assigned them a color category, so I knew when an event was coming and could set aside time to prepare for it.

Flexibility is Key. You are meant to get together as mentoring pairs every month. Whether the meeting is in person, over the phone, or virtual is entirely up to the mentoring pair. I think we can all agree that the current pandemic situation has taught us to be flexible. I would encourage folks to remain flexible even as things get back to normal. Now that we have all worked with Teams, why not continue to use it? Perhaps your mentor is located on the other side of the state and meeting in person is challenging. Perhaps construction season is your busiest time of year. Virtual meetings would be a great fit in your busy schedule.

Since Steve was based out of the Rapid City Area Office and I was based in the Central Office, we had to be creative when scheduling our in-person mentoring sessions. If he was coming to Pierre for a training session we would try to get together before his training started, over the lunch hour, or after the training session ended. If I was heading out to Rapid for some fieldwork, we would schedule a meeting at his office to take advantage of my trip. We went on a few construction inspections and I chose projects on the west side of the state, so we weren't spending an inordinate amount of time driving. We would communicate through messenger on Skype, but we also regularly exchanged emails and spoke over the phone at least once a month.

Continued . . .

Continued . . . Being a Good Mentee

By: Bridget Carnahan



Communicate. I would encourage you to keep lines of communication open while you are working through the program. If during your partnership something isn't working, talk about it. If you need to reschedule a meeting, get ahold of your mentor, and find a time that works better. If you want to revise your plan during the program be open and honest with your mentor. An important part of personal and professional growth is constructive criticism, so be accepting of that. If criticism is truly constructive then it is meant to point out areas where improvement is possible. Try not to take it personally, rather, reflect on the criticism and see what changes you can make. Constructive criticism does go both ways, so share any thoughts with your mentor or the Mentoring Committee if you have ideas on how to make the program better.

Make time for mentoring. This is probably a tagline that you've heard before or seen in an email, but it is true. You will get out of the program what you put into it, so be sure that you have the time to participate before you apply. If you don't give it the effort it deserves what are you really getting out of it? It's also important to recognize how valuable everyone's time is, as we all have other work tasks that are your primary job duties. Participating in the mentoring program is a wonderful opportunity, but it is secondary. With that said you should value the time that your mentor sets aside for you in their schedule, and vice versa.

Recognize opportunities & support. The mentoring committee schedules an event every other month for the entire group to come together. The mentoring committee plans and runs these events, which is meant to engage the whole group. The mentoring committee is also a wealth of knowledge. They would give suggestions about potential opportunities or options for situational mentors. The unique thing is that you may even look to a member of your mentoring cohort for a situational mentor during the program since there is such widespread knowledge and experience within the department.

I will wrap up with one of the best things about the program, in my opinion . . . the level of support the mentoring program receives from the Department Secretary and the Executive Team. They support the personal and professional growth associated with participating in the program and encourage personnel to participate. The value of support from above is immeasurable.

My goal was to share some of my thoughts on what it takes to be a good mentee. Again, these are things that really worked for me and my mentor to keep us engaged. Hopefully, some of the guidance will be helpful to those considering applying for the mentoring program. Lastly, if you have questions about the program itself you can reach out to me or any member of the mentoring committee for more information

DOT Mentoring Committee:

Joel Jundt, Program Champion

Kellie Beck

Scott Eisenbeisz

Brad Norrid

Greg Rothschadl

Bridget Carnahan

June Hansen

Wyatt Reis

John Villbrandt

Matt Dorfschmidt

Tim Wicks

Brad Remmich

Rick Walton



PROCESSES

Value Engineering (VE) By Transportation Planning Engineers - Hannah Covey and Keith Winter

VE can be defined as a systematic approach that focuses on the “function” of a project. By evaluating the function instead of the purpose of a project, it has the propensity of adding alternatives. Although this process can lead to cost savings, **the goal of the VE is not to solely reduce cost, but to increase project value.** In the VE process, value is defined through the following six steps:

- **Information Phase** – the VE Team reviews and defines the current conditions of the project and identifies the goals of the Study.
- **Function Analysis Phase** – the VE Team defines the project functions using a two-word active verb/measurable noun context. The Team analyzes the functions to evaluate whether it needs improvement, elimination, or creation to meet the goals of the project.
- **Creative Phase** – the VE Team brainstorms ideas to identify other means to complete project’s functions.
- **Evaluation Phase** – the VE Team uses a structured evaluation process to eliminate/select alternatives that contain the potential for an improvement to value while performing the functions of the project.
- **Development Phase** – the VE Team develops the selected ideas into proposals or design suggestions which allows the “decision makers” an opportunity to determine if they will be incorporated.
- **Presentation Phase** – the VE Team presents findings to Leadership and develops a report on the VE Study.

Currently, any DOT employee chosen to participate in a VE study will be asked to commit to a four-day study. Two days with a 1-4 day break followed by the final two days then concluded with a presentation to upper management, consultants, project managers, etc.

VE answers the following question:

What does it do? What does (should it) cost? What else will do the job? Will it be acceptable? Can we afford it?

VE gives us the following benefits:

Aids in thinking logically	Explores a range of solutions	Facilitates creative thinking
Documents decision making	Delivers a better product	Does not just reduce cost

Brief History – 1947 Larry Miles at General Electric found other products perform as good at less cost!

“If I can’t get the product, I’ve got to get the function!”

1954 – DOD Bureau of Ships began VE

1969 – NASA begins VE program

1974 – GSA requires CVS certification

1976 – VE mandatory on EPA projects >\$10M

1995 – National Highway System Designation Act requires VE on projects >\$25M

2006 – SDDOT begins VE for select projects

Why do we perform Value Engineering?

It is a requirement for projects that have federal funding and are on the National Highway System. This Final Rule modifies Federal regulation, Title 23 Code of Federal Regulation (CFR) part 627, to reflect the revisions made in Federal law (Section 1503(a)(3) of Moving Ahead for Progress in the 21st Century Act, MAP-21). The changes to the regulation are:

- Increases the project thresholds for required VE analyses to;
- Projects on the National Highway System (NHS) receiving Federal assistance with an estimated total cost of \$50,000,000 or more; and
- Bridge projects on the NHS receiving Federal assistance with an estimated total cost of \$40,000,000 or more;
- Removes the VE analysis requirement for projects delivered using the design/build method of construction; and
- Provides VE analysis guidance for projects delivered using the construction manager/general contractor (CM/GC) method of project delivery.



TRAFFIC CONTROL TECHNICIAN COURSE

July 19 Sioux Falls
 July 20 Pierre
 July 21 Rapid City
 Oct. 26 Sioux Falls
 Dec. 14 Rapid City

TRAFFIC CONTROL SUPERVISOR COURSE

Oct. 27-28 Sioux Falls
 Dec. 15-16 Rapid City

See DOTLMS for details

Training Notes:

Logo Roll-Out: Business Cards

Please check out our DOT branding page for the newly developed business cards that feature several background options ranging from Mount Rushmore to a snowplow operator in action!

<https://www.dot.sd.gov/inside-sddot/media/branding-and-identity-guidelines>

Business cards are ordered through the state contract with ThermCraft.

Please order through the usual ordering process within your office.

If you need assistance with branding items; please let us know!

taylor.brusven@state.sd.us or bret.mattice@state.sd.us



Project Development held their annual picnic on Wednesday, June 9. It was a hot evening, but everyone had fun.

Mark Leiferman and Intern Amy Gilkerson won the cornhole tournament which includes a coveted trophy and a year's worth of bragging rights.



Congrats to **Preston Norrid, son of Brad Norrid**,
 Engineering Supervisor - Winner Area!
 Preston placed 3rd in the 2021 State Class A Discus competition.



For this month's GIS Tips and Tricks, we're looking at the evolution of GIS in the DOT. Roger Brees was an integral part of GIS throughout his 28 years with the DOT, he retired on June 8.

A look back at GIS in the SDDOT

From beginning to everyday use, how GIS came to be and where goes from here

By Roger A. Brees

The SDDOT has always had innovators in its midst. From developing a highway referencing system over 30 years ago (that some states recently adopted as their standard) to using GIS/GPS for roadway inventory and mapping (SDDOT was one of the first DOTs in the nation to do that), the SDDOT is a leader in forward-thinking and innovative solutions. So, when did all the GIS stuff start?

A long time ago in a galaxy far, far away . . . in the year 1993, the Office of Data Inventory (now Transportation Inventory Management) authored a pilot project to determine if GPS could be used to collect the Non-state Trunk Road Inventory (NSTRI) and features on or near the roads. The pilot project had some mixed results. GPS proved that it could inventory the roadway and features, but the system used in the pilot was cost prohibitive and the CAD based mapping/LRS component lacked many desired dynamic features. In 1994 Data Inventory selected GeoResearch Inc. (later the Michael Baker Corp.) to help design an efficient GPS data-collection process. About the same time, the South Dakota Office of Emergency Management was finalizing the South Dakota Rural Addressing System. Regional planning districts from around the State were enlisted to help their member counties with the rural addressing. Because many existing maps were outdated and accurate geographic information often unavailable, the planning districts planned to drive all the roads in their counties to gather up-to-date rural addressing information. SDDOT capitalized on the districts' intentions by contracting with them to gather roadway inventory data and create GIS-based county datasets. SDDOT provided each participating district with computer hardware, software, technical support, training, and GPS receivers.

Development of the CAD based LRS was part of the 1993 pilot program. The process was involved. It required hand coding highway names, MRMs, and mileages for structures, intersections, junctions, and discontinuities for every route segment. The CAD based LRS was completed and functioned, however, the mapping aspect lacked the dynamic components desired. In 1995 Data Inventory GIS staff moved the state's highway network out of CAD and into GIS. Much of the highway information translated out of the CAD data (not the measures), so once again hand coding was required. It became abundantly clear that an accurate LRS and a better understanding of the state MRM system was necessary. The SDDOT LRS measures are the mileage values from the DOT TIM MRM inventory, not the MRM's name/value. It was a painstaking effort to go through pages of an MRM printout to code values into the LRS. The LRS brought life to the MRMs. Before GIS, MRMs existed in tables, printouts, and CAD highway maps. For the first time you could see over 10,000 MRMs all at once. Systemically each highway was reviewed and corrected for measures and names. Ever wonder why LRS highway names are like '010' or '090 L'? It came out of RES, the DOT mainframe database that was developed back in the 1980s. As ingenious as it was, the database structure back then did have some drawbacks. Database highway names were a six-character field. Each place in the character field had to be populated with a number, letter, or a space. As vendors and consultants included GIS as part of a solution for DOT contracts, SDDOT GIS provided the data necessary for successful implementation.

The late 90s were a boomtown for GIS in State government. The departments of Ag, DENR, and GF&P had GIS in place before the DOT got involved. Weekly meetings involving agencies' GIS staff were held sharing experiences, innovations, and cooperative problem solving. The same year BIT created a state standard for GIS software, the winter of '96 happened. Using any type of data available, GIS users mapped out locations of stranded families, where snow moving equipment was, stockpiles of feed, and farmers who had large tractors. The flooding that next spring was biblical. DOT and other agencies were tasked with generating flood maps for towns and counties east of the Missouri River. GIS met the hour by hour needs of Governor Janklow and produced hundreds of maps to show residents projected flood inundation and help in the decision-making process. (continued)

Continued: A look back at GIS in the SDDOT

Following the 1997 spring flood, data collection procedures and software had to be rebuilt from a continuous data collection to starting and stopping data collection due to flooding.

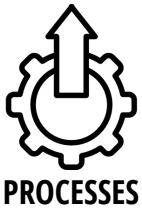
Moving forward into the new millennium (remember that Y2k end of the world thing) data collection was in full operation. Routines and procedures were established for data collection, review, and submission by the planning districts. In 2001 GIS provided the road track to Beilfuss & Associates for an overweight/over height permitting system. Safetravelusa (SD511.org) used SDDOT GIS data for inclusive year-round weather and construction information in 2002, and in 2009, Federal Highway began requiring GIS road networks in shapefile format as part of the HPMS submittal. Not a problem, SDDOT met the requirement. Around 2014 Federal Highway upped the ante. All states must submit all public roads as an LRS, but in an ESRI personal geodatabase format. This was huge. SDDOT went from and 8,000 miles LRS to over 80,000 miles. Once again, SDDOT met a deadline that few could. Some states with more resources spent millions of dollars and couldn't find a solution. The key to SDDOT success was in the data. Lucky? No. Thoughtful database design kept all fields separated for management, reporting, and editing. Forward thinking years ago enabled today's SDDOT GIS to meet a deadline without any extra time or expense.

In 2004 the U.S. Census Bureau began a program called the TIGER Accuracy Improvement Program. South Dakota was the first state to provide a standardized GIS dataset to the Census Bureau. Not just a county or two, but all 66 counties were provided. In 2005 the DOT began sharing the statewide dataset with mapping firms like Tele Atlas. In 2006 the initial statewide data collection had been completed. The total cost for the 11-year project was less than \$1.5M. In 2010 the U.S. Census Bureau approved the spatial accuracy of the SDDOT dataset. SDDOT GIS data replaced the TIGER road layer in the 2010 Census data. This was a big deal. Few states were able to meet the rigorous testing for Census Bureau acceptance and supply a whole state worth of data.

The most important part of this is how much work went into data collection and clean up. In the 1990s, real-time GPS accuracy became available to the public. However, the U.S. government introduced an error into GPS data collection called "Selective Availability". The location positional error was put in to protect US military activities in exact locations. This error would "move" your data 100 meters (you never really knew what direction) from its true location. Many hours of post-processing were required to realign the data and clean up extraneous collection points. Contractors had to plan when the most satellites were available for data collection. Collection could be going along fine when a horizontal issue or some other effect caused a satellite to get dropped. Data collection stopped, right there on that spot. Crews would have to sit and wait for a satellite to link up again. Selective Availability was turned off in May 2000. A huge step forward in data QA/QC was the use of satellite imagery. In the late 1990s South Dakota and the U.S.G.S worked together to acquire statewide DOQQs (digital ortho quarter quads). They were the size of U.S.G.S. toposheets. Roadway alignment and point locations could be reviewed using one standard imagery dataset for the state.

So where does GIS go from here? Where do you want it to go? True, there are people, standards, and agencies who control what's on your desktop or laptop; but they don't control you. GIS has always been about people working, exploring, sharing, and asking "what if". GIS technologies are getting easier to work with. The days of highly trained staff performing specific tasks are gone. The intuitiveness and decentralization of GIS squash the idea of it being a tool for certain people doing certain work. GIS is for everybody, every day.

Thank you everyone. I'll be seeing you around.



PROCESSES

Strategic Objective: Continually Improve Plan-Do-Check-Act

By Travis Dressen, Mitchell Region Engineer



ASSETS

The Department of Transportation and the South Dakota Chapter of the Associated General Contractors Association (AGC) have a long-standing partnership to work collaboratively and make improvements to our industry. In the summer of 2012, what started as contractor-led pre-construction meetings soon resulted in a long-term AGC-DOT Workgroup process.

The agencies formally meet twice per year to identify potential workgroup topics with the goal of making improvements to any aspect of the heavy highway industry. Since 2012, there have been 20 formal workgroups that have investigated and made recommendations on a wide range of subjects that affect both the SDDOT and the contracting industry. Some of the efforts of these workgroups resulted in changes to our daily business that are being implemented to this day. Some groups remain active as they work to address items that will always be our priority (Work Zone Safety) and progress as new ideas and technology come forward. Other groups did their initial investigation and determined that an idea would not be carried forward due to other priorities or the realization that change wasn't necessarily needed at this time.

The AGC-DOT workgroups are a perfect example of continuous improvement. I think we would all agree that we do a great job designing, building, and maintaining our transportation system, we have data to confirm it. However, continuous improvement is all about focusing on specific functions or processes in any aspect of our business and asking ourselves "how can we be better"? I hear the collective groan now.....we are all very busy with our day-to-day activities and this just adds extra work to an already full plate! In many cases, yes, there is some extra work upfront, but the change will likely save resources in the future. A workgroup consisting of 3 – 10 people gathers ideas and input from different perspectives and distributes that workload so that no one person has the carry all the water.

Once an improvement has been made, our efforts shouldn't stop there. The process should then be subject to systematic evaluation. The **plan-do-check-act cycle is a four-step model for doing just that.** The PDCA cycle encourages a methodical way of solving problems and implementing solutions and, just like a circle has no end, the PDCA cycle is repeated and the desired outcome is refined with each iteration. It also improves the critical thinking skills of our team and helps our organization reach a more integrated system.

Over the past nine years, many productive discussions, and actions, have derived from these workgroups. In many cases, special provisions noted in construction plans became a standard. When DOT and AGC collaborate, the process is not simply to look at the way SDDOT operates, but also to discuss how our industry partners do business. The ultimate goal is that by analyzing all aspects; we provide better construction projects overall.

I would like to take this opportunity to talk a little more about **Item #20 - Development and Delivery of Digital Plans.** SDDOT has dipped its toe in the electronic plans pool and we've been providing electronic files to our contractors for the past 7-8 years as GPS controls have become common on almost every project. The main workgroup will continue to evaluate the implementation of digital plans and 3D modeling which goes hand-in-hand with our e-construction initiative. If you had a chance to attend the engineering Winter Meetings last year, you heard presentations on 3D modeling, the transition to Open Roads and examples of applications/hardware that support e-construction.

continued . . .

Continued . . . Plan-Do-Check-Act

The transition to electronic files presents challenges for our construction staff. Gone are the days of seeing hundreds of reference stakes on a project. Without a distance meter in a vehicle, it can be difficult to tell where you are at on a project, even then, information is limited and accuracy may be in question.

This construction season, the Mitchell Area staff on the S.D. Highway 50 project in Chamberlain (Brule County PCN 6953) will participate in a subgroup of Item #20. The group is investigating how we can get the same GPS resources that our contractors are using into the hands of our field staff. The group has developed a plan to expand innovation and technology on the jobsite.

The prime contractor, Loiseau Construction, has been working with their vendor (RDO) to “rent” a Topcon GPS rover and data collector for SDDOT use. The vendor has agreed to provide training to our field staff on setup, use and care of the equipment. The contractor furnished rover will work off the contractor’s base station and the cost for the equipment will be added to the contract via construction change order. This “rental” approach will eliminate potential equipment compatibility issues, the need for DOT to replace, repair and update owned equipment and reduce the possibility of error in working off 2 independent base stations. Unlike mobile phone apps, this equipment provides the same survey grade accuracy used to build the project. The intent is not to replace anything the contractor’s surveyor is doing, it is only to be a resource for our staff. Caleb Horstman, Mitchell Area Project Engineer, sees value in being able to verify ROW and easement limits, check station, offset and elevation prior to the work being done and track grading quantities as the project progresses.

Topcon FC5000 field controller



This subgroup is just getting started but the concept behind it is promising and I’d like to thank the SDDOT team that is involved: Brandon Riss, Steve Palmer, Jay Peppel, Caleb Horstman, Travis Holthaus, Doug Endorf, Ryan Johnson, and Rick Gordon.

I appreciate the extra work these folks are doing upfront, if this idea ends up becoming part of our regular business, it has the potential to provide efficiencies in the field, give our project staff readily useful information and, ultimately, a better project. Watch for more updates on this project, and technology, as we work through **Plan-Do-Check-Act!**



Strategic Objective: Value all Team Members

New Hires:

Daniel Youngblood, Journey Transportation Technician (Custer)

John DeBoer, Engineer I (Pierre)

Austin Weiss, Journey Transportation Technician (Sioux Falls)

Ayssra Al-Khafaji, Engineer II (Pierre)

Terry Nickels, Journey Transportation Technician (Yankton)

Robert Week, Highway Maintenance Worker (Winner)

Beau Walker, Highway Maintenance Worker (Winner)

Logan Patrick, Senior Secretary (Sioux Falls)

Monte Meier is the new Transit Lead. Monte has worked in the transit industry for years at the provider level and has been part of the SDDOT finance team and transit team.

Promotions:

Montana Rivard, Engineer I (Custer)

Thad Bauer from the Office of Research has been selected as the Program Manager for the combined offices of Inventory Management & Research.

Longevity:

Myron Simons, Equipment Technician – 25 years (Huron Area)

Justin Purintun, Highway Maintenance Worker – 20 years (Huron Area)

Jim Brooks, Highway Maintenance Supervisor – 20 years (Mobridge Area)

Cary Cleland, Road Design Engineering Supervisor – 25 years (Sioux Fall Area)

Wade Dahl, LGA Urban Systems Engineer – 30 years (Central Office)

Brian VanDam, Transportation Project Manager – 30 years (Sioux Falls Area)

Kris Royalty, Survey Crew Chief/Chief Driller – 20 years (Mitchell Area)

Doran Raymond, Lead Highway Maintenance Worker – 20 years (Mitchell Region)

Eric Stroeder, Project Engineer Supervisor – 30 years (Mobridge Area)

Dave Huft, Program Manager – 50 years (Central Office)

**Our thoughts and prayers are with our SDDOT co-workers
 and their family members who have experienced the recent passing of a loved one.**

Chad Downs, husband of Sonia Downs, passed away in March due to Esophageal Cancer. Chad previously worked in the SDDOT Materials & Surfacing and Hydraulics Offices. Sonia is a Transportation Planning Engineer in Project Development.





WORKFORCE

Employee Celebrations:

Lance DeMers, DBE Program Coordinator in the Operations Support Office, received his 20-year longevity pin from Rick Gordon, Operations Construction Engineer.



The DOT hosted many retirement celebrations in June. Congrats to all retirees, and thank you for your dedicated public service through the SDDOT!

A few celebratory photos were shared of the various parties! Please feel free to share more! We will include them in July!

June Retirees & years of SDDOT service:

- Gregory Kilian (Mina) 9 years
- Randy Kieborz (Custer) 4 years
- Vern Bormann (Sioux Falls) 29 years
- Roger Brees (Pierre) 27 years
- Barry Bruce (Piedmont) 35 years
- James Dyer (Miller) 10 years
- Lorry Hansen (Rapid City) 22 years
- Rocky Hook (Pierre) 36 years
- John Koch (Pierre) 27 years
- Kenny Marks (Pierre) 36 years
- John Mehlhaff (Ft. Pierre) 33 years
- Rich Rowen (Pierre) 39 years
- Kim Salzsieder (Custer) 25 years
- Cindy Stiegelmeier (Pierre) 43 years
- Thomas Van Dem Hemel (Salem) 16 years
- Jennie Weingart (Pierre) 18 years



Retirees featured: Cindy Stiegelmeier, Roger Brees, and Rocky Hook