



DEPARTMENT OF
TRANSPORTATION

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ANNUAL
REPORT



BETTER LIVES THROUGH BETTER TRANSPORTATION

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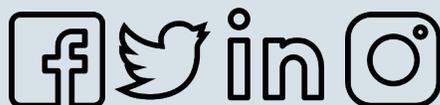
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Better Lives Through Better Transportation

SECRETARY'S MESSAGE

One of our SDDOT strategic objectives is to **Provide Excellent Services** to our customers, stakeholders, and partners. We take this objective very seriously and continually strive to make this a reality for all who use our highways, airports, railroads, and public transportation systems. Over the past twenty plus years, the SDDOT has commissioned a Statewide Customer Satisfaction Survey every two to three years to gather data from residents and persons who impact transportation decisions in the State of South Dakota.



Secretary Joel Jundt

This process is key to identify short and long-term transportation priorities. Our SDDOT team uses the survey results to objectively assess how well the Department is meeting our State's transportation needs and to identify methods to improve the quality of services through our annual strategic planning processes.

Maintaining and improving a transportation system that is efficient, effective, and most of all safe, does not happen without the dedicated work from each of our employees at the South Dakota Department of Transportation (SDDOT). In 20 years of performing customer satisfaction surveys, the 2021 survey outcomes provided by our customers are the best in the Department's history! Satisfaction by our customers significantly improved over our 2018 survey results in nearly every single category evaluated.

Our results were higher than the same benchmark survey given to neighboring States who comprise our North Central Region. Among the 43 performance-related questions on the survey, SDDOT outperformed the average for the North Central Region in all 43 areas.

By objectively assessing the opinions of the public and key customer groups, this research provides a framework to help our team continually identify and respond to the needs of our customers. To all SDDOT

customers, please know we always appreciate your willingness to engage with us to share thoughts and opinions, whether on construction projects or winter maintenance.

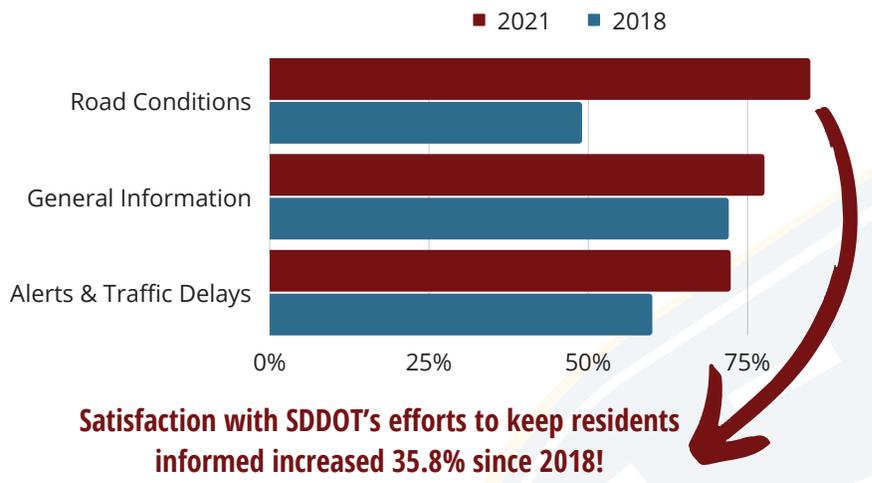
We are dedicated to continually provide a safe and effective public transportation system to connect the great State of South Dakota with the nation.

Sincerely,

Joel Jundt, Secretary



Level of Satisfaction with Communication from the SDDOT per Specific Efforts





The Sioux Falls area maintenance crew removes damaged signs after the May 2022 derecho storm.

ABOUT US

OUR MISSION

To efficiently provide a safe and effective public transportation system.

OUR VISION

Better lives through better transportation by being the best.

Five strategic objectives form the heart of the plan and guide our path forward as we build better lives through better transportation. Throughout this report, icons highlight various strategic objectives and accomplishments met in 2022.



SAFETY

EVERYONE HOME SAFE EVERYDAY

SDDOT aims to improve safety by decreasing highway crashes and reducing workplace accidents and employee injuries.



WORKFORCE

VALUE ALL TEAM MEMBERS

SDDOT is a service organization: engaging, training, developing, and retaining our workforce provides the greatest opportunity to be a top employer.



SERVICE

PROVIDE EXCELLENT SERVICES

SDDOT recognizes the importance of listening to customer and stakeholder concerns and reacting to their needs.



PROCESSES

CONTINUALLY IMPROVE

As a highly visible public agency with regulated funding, SDDOT processes must operate as innovatively, efficiently, and effectively as possible.



ASSETS

PROVIDE THE BEST TRANSPORTATION SYSTEM AND ASSETS

SDDOT diligently maintains and manages South Dakota's pavements and bridges, the assets with the highest financial value and greatest public impact.

Investing in Our Transportation Future Today

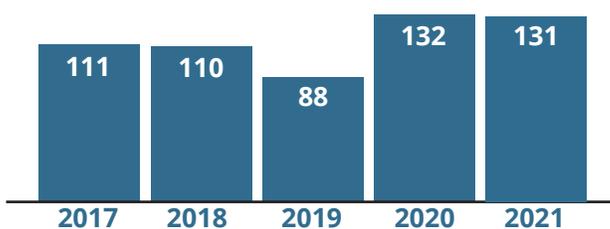
PROGRESS ON STRATEGIC OBJECTIVES

Over the past year, the SDDOT continued our efforts toward our strategic objectives and carrying out core duties. The figures and statistics on the following pages highlight this progress and identify areas for continued improvement.



EVERYONE HOME SAFE EVERYDAY

Number of fatal crashes in South Dakota

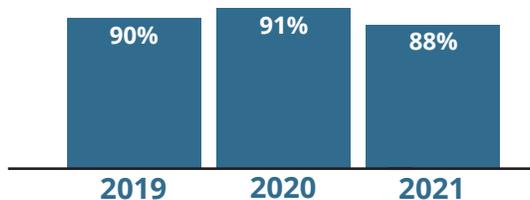


The three biggest contributing factors to these fatalities are alcohol, speed, and unbelted occupants.



VALUE ALL TEAM MEMBERS

Percent of new employees retained each year

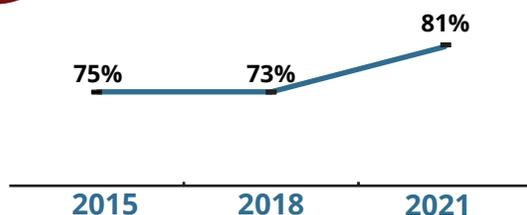


Our goal is 90% retention. The SDDOT is committed to retaining employees and continually provides opportunities such as leadership development programs and flexible work schedules.



PROVIDE EXCELLENT SERVICES

Percent of customers satisfied with the overall delivery of services



SDDOT has a goal of reaching 85% of customers satisfied with overall delivery of services. Engagement with our customers drives our internal and external communication efforts.

"SDDOT has a long history of using performance metrics to measure success and progress toward Strategic Plan objectives and goals. SDDOT is responsible for many roadway miles and over 1,800 structures. Detailed inspections are completed on these assets to develop a current condition assessment. We are fortunate to have such dedicated and technically gifted employees leading our State. In fact, the work on our pavement management system has been noted as one of the best in the nation."

- Mike Behm, Director of Planning and Engineering



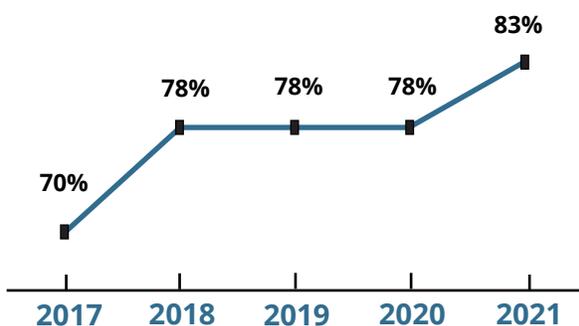
"As a public agency, SDDOT relies on various funding sources to support its work each year. SDDOT is committed to making responsible investments which achieve the greatest benefit for all residents and visitors today and for generations to come. No matter the program or service, the SDDOT is focused on being productive, efficient, and fiscally responsible."

-Kellie Beck, Director of Finance and Management



CONTINUALLY IMPROVE

Satisfaction with winter maintenance



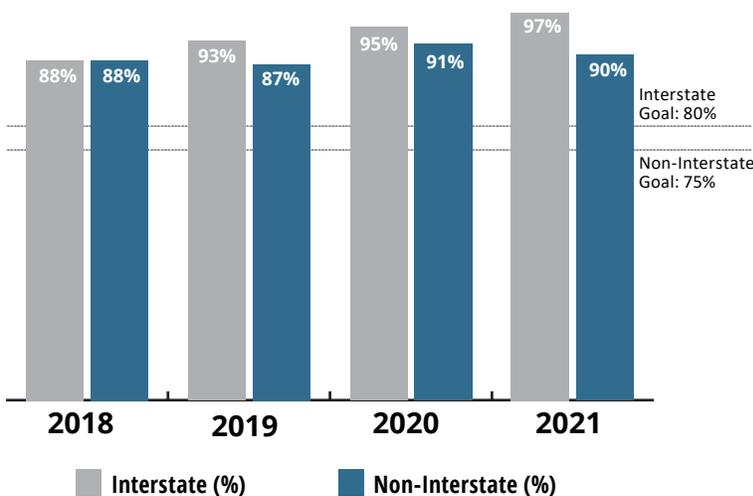
Our goal is 85%. The SDDOT is **driven by technology innovations** including: tow plows, MDSS system, and road side cameras. *(More info on innovations here: dot.sd.gov/inside-sddot/media/media-kits)*

SDDOT has established level of service standards, **improved traveler info through SD511**, expanded our hours of service, and helped to increase driver awareness.



PROVIDE THE BEST TRANSPORTATION SYSTEM

Percent of pavements in good or excellent condition



The SDDOT is able to obtain our goal through **asset management** and annual investment planning.

The pavement management system allows the SDDOT to assign the **right treatment at the right time**; providing highest impact to keep roads in good or excellent condition.



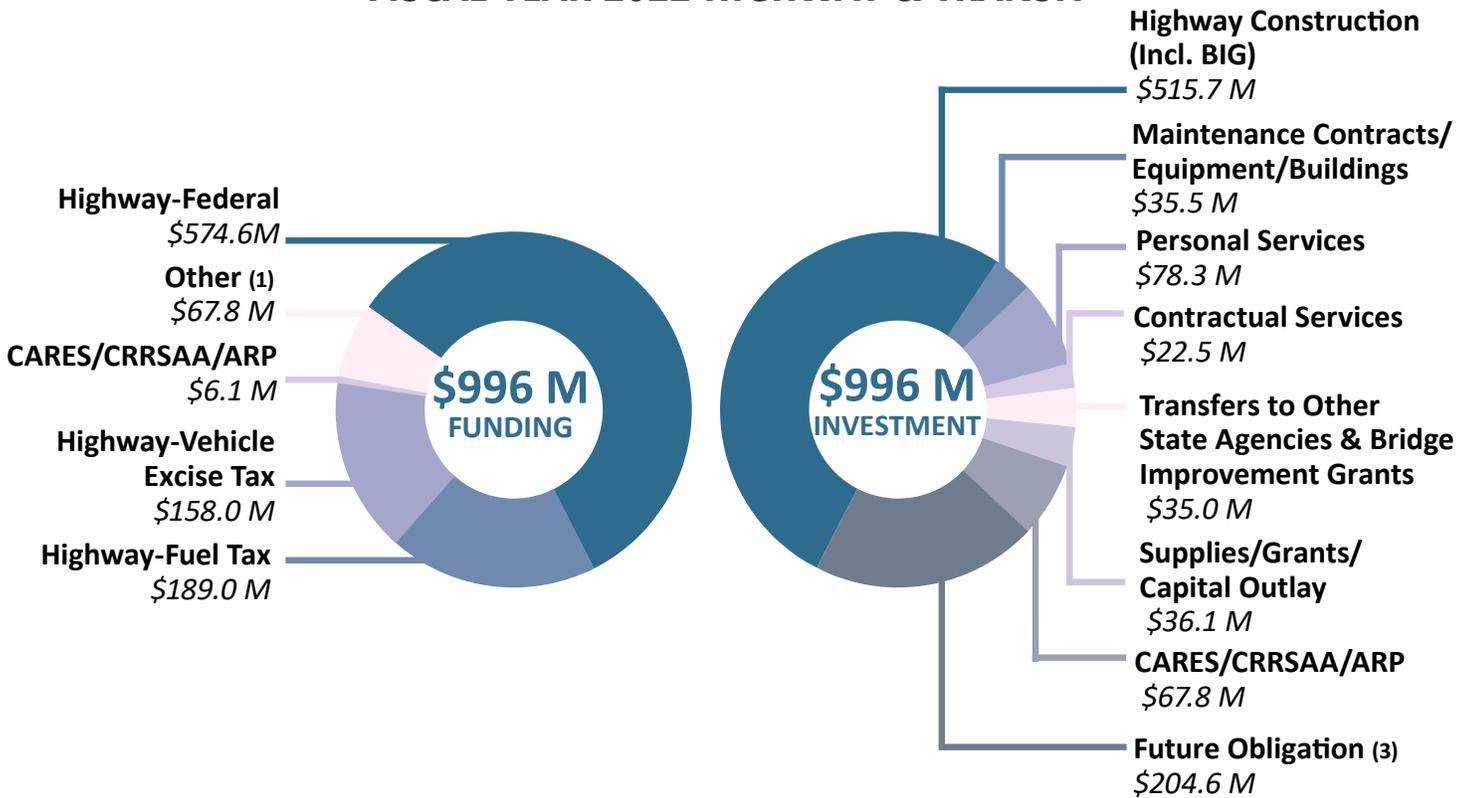
"Safety on our roadways is our number one priority and innovation is key. Recent innovations include around 450 miles of centerline rumble strips to reduce the potential of cross centerline crashes. Through teamwork with various agencies throughout the state, we've set a goal of fewer than 100 fatalities and 400 serious injury crashes by the end of calendar year 2023. This is an aggressive goal, but our strategic objective is to get everyone home safe every day and this cannot be accomplished without setting aggressive targets."

- Craig Smith, Director of Operations

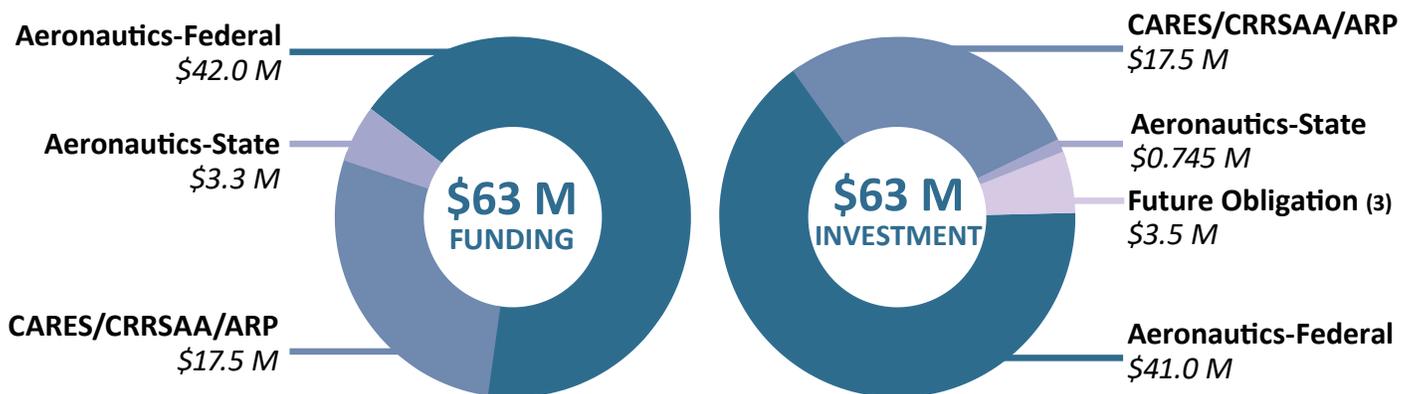
FUNDING

As a public agency, SDDOT relies on various funding sources to support its work each year. SDDOT is committed to making responsible investments which achieve the greatest benefit for all residents and visitors. The figures below show our Fiscal Year 2022 revenues and expenditures in the areas of Highway, Transit, and Aeronautics.

FISCAL YEAR 2022 HIGHWAY & TRANSIT



FISCAL YEAR 2022 AERONAUTICS



1 Other funding includes licenses, permits, and fees; interest, dividends, and rent; charges for sales and services; administered program revenues; non-operating funding including transfers from other State agencies for SDDOT to administer; surplus property sales, Bridge Improvement Grants (Federal Program).

2 Transfers to Other State Agencies refers to funds that SDDOT transfers to other agencies to administer highway patrol, radio communications, and other programs that keep roads safe.

3 Future Obligation - funding to be spent on construction projects that have not been obligated to date.

2022 SDDOT Feature Stories

A FEW HIGHLIGHTS FROM SDDOT'S 2022 ROAD TRIP TO SUCCESS

REBUILDING THE MISSOURI RIVER CROSSING

In the early 1920s, the state of South Dakota decided to build five modern highway bridges across the Missouri River to facilitate transportation. Locations included Mobridge, Chamberlain, Wheeler, Pierre, and Forest City. Fast forward to 2016, through the Major Bridge Investment Study the SDDOT has identified 18 major bridges in need of replacement.



Pierre/Fort Pierre - 60 years old

Replacement 2021-Open to Traffic in 2024, fully complete in 2025

Between Pierre and Fort Pierre, the Missouri River is a half-mile wide. The two towns remained seasonally isolated until the railroad bridge, constructed in 1907, and the first highway bridge, constructed in 1926, joined the two towns. The 1960 bridge is a four-lane structure built from steel girders with a steel deck. The construction of the new Lt. Cmdr. John C. Waldron Memorial Bridge is estimated to be substantially complete in 2024.

Photo 1: A 1900's pontoon bridge spanning Missouri River from Pierre to Fort Pierre.

Photo 2: The current bridge structure with construction equipment working on the new bridge.

Platte Winner Bridge - 56 years old - Replacement 2024

Given the spacing between crossings of the Missouri River in South Dakota, the consequences of closing the existing bridge can be quite dramatic for users of the S.D. Highway 44 corridor between the cities of Platte and Winner. The current structure will remain in place while construction of the new bridge takes place; this will alleviate an 85 mile detour. This is the longest bridge in the state of South Dakota.

Photo 3: The current Platte Winner bridge.

Photo 4: Construction of the Platte Winner bridge in 1966.



Forest City Bridge - 64 years old - Replacement 2030

The U.S. Highway 212 corridor provides a vital connection across the Missouri River (Lake Oahe), connecting communities, commerce, and recreational uses. However, the existing aging structure has been heavily impacted by landslides. The south approach of the existing Forest City Bridge is affected by current active landslides which have resulted in millions of dollars in repair and mitigation expenses since the bridge opened to traffic in 1958.

In June, 2021, the public was invited to engage with the SDDOT in a public meeting about the replacement of the current Forest City Bridge.

Photo 5: The current Forest City bridge.

Photo 6: Construction of the current bridge, showing the largest crane in the world at the time, specially built for the project.

The SDDOT also has a large focus not only on state structures, but local ones as well. Through the Bridge Improvement Grant (BIG) the SDDOT has helped to replace 15 local structures, with 28 grants awarded last year and another 30-40 grants expected within the next two years. Through the Local Federal Bridge Replacement Program (LFBPR), 49 bridges are approved for work in the next two years, 35 bridge projects are expected to be let by 2024 (2021 LFBPR), and seven additional bridge projects are expected to be let in 2025 (2022 LFBPR).



— FEDERAL FUNDS BOLSTER SDDOT IMPROVEMENTS AMID INFLATION —



In November 2021, a new federal transportation bill, called the Infrastructure Investment Jobs Act (IIJA) or Bipartisan Infrastructure Law (BIL), was passed by Congress and signed by President Joe Biden. For the most part, federal transportation funding bills have been funded by the highway trust fund. In recent years, the federal trust fund has been insolvent which has required a transfer from the general fund into the highway trust fund. This transfer has taken place to ensure our nation’s infrastructure remains in a state of good repair through a strong federal investment.

Federal funds are extremely important to South Dakota, as over 70% of our construction budget is funded through federal aid. The IIJA, like previous federal transportation bills, has a five-year life cycle. With each federal bill, changes are made to the individual programs and funding eligibility. As with previous federal bills, the core programs remained a major focus however, several new programs and grant opportunities were created.

As an agency, SDDOT focuses upon efficiently providing a safe and effective transportation system. Our investment strategy is based generally on condition, capacity, and safety. This strategy has leveraged well in most of the new programs. PROTECT funding, for example, is focused on building a resilient transportation system that can withstand natural disasters. The carbon reduction program is focused on developing projects which reduce energy use and therefore carbon production. Projects such as replacing roadway lighting with LEDs, installation of dynamic message boards, or increasing the use of recycled materials into our projects, are things we’ve incorporated and will continue in the future.



This sign is located in Spearfish Canyon along U.S. Highway 14A.



Animation of an electric vehicle and charging station.

One of the most unique new programs is the National Electric Vehicle Infrastructure (NEVI) program. Although the funding represents less than 2% of the annual allocation for South Dakota, this new program has drawn attention. The intent of this program is to provide a national network of electric vehicle charging stations and provides funding to each state to oversee the installation of those stations. SDDOT recently developed a National Electric Vehicle Infrastructure Deployment plan, which can be found on the SDDOT’s website dot.sd.gov/ev. This plan was required by the IIJA and looked at how NEVI funds could be used within South Dakota to develop electric vehicle charging infrastructure.

Overall, the IIJA provided a funding increase of approximately 21% compared to the previous bill. Unfortunately, due to inflation, construction costs have increased significantly. According to Ken Simonson of the Associated General Contractors, as of mid-October the bid price index rose 24.1% year over year. Looking into 2023, we are hopeful that we’ll see stabilization in the market.

As we look to the future, we're focused upon delivering programs and services to make better lives through better transportation by being the best.



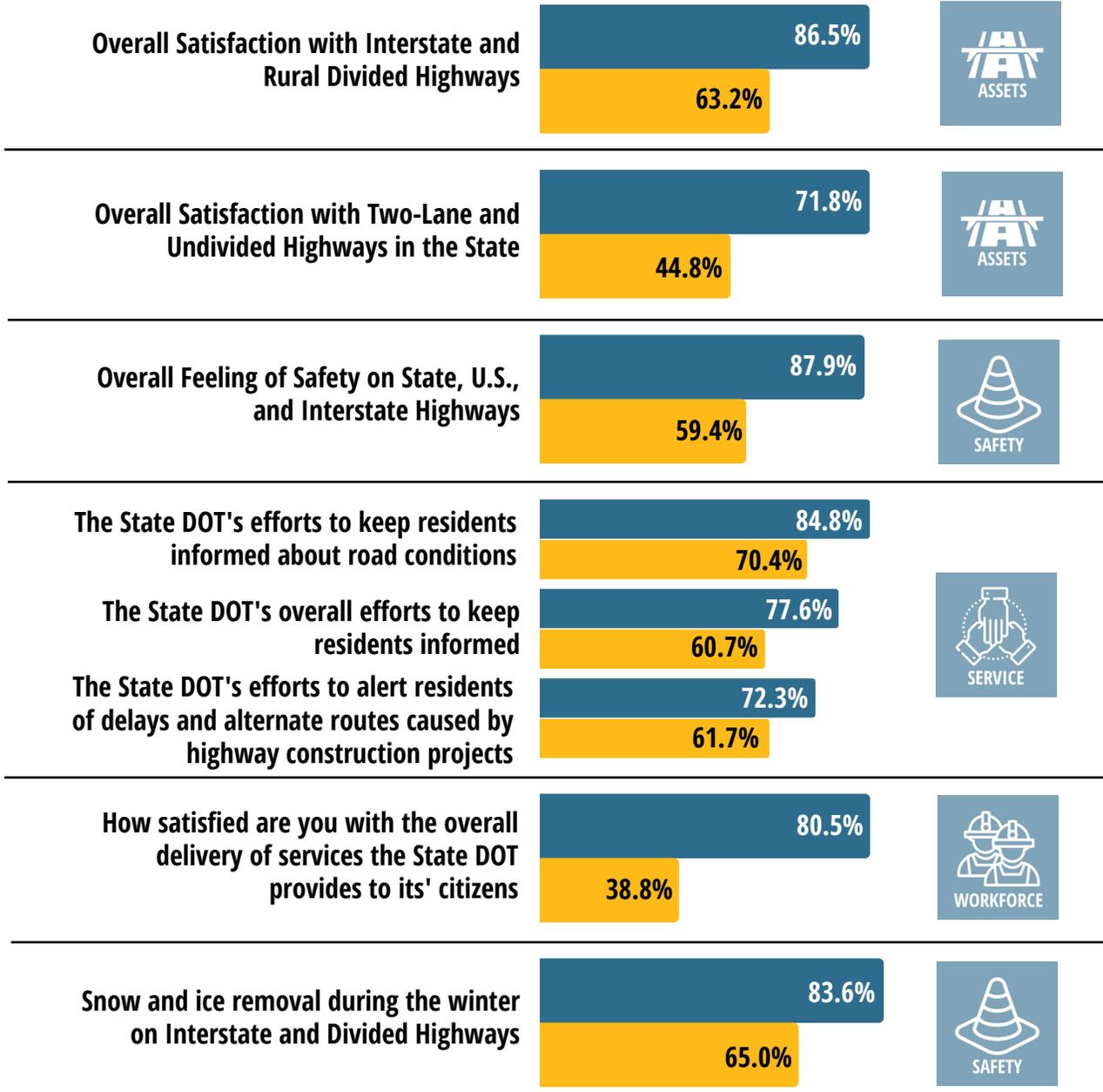


2021 STATEWIDE CUSTOMER SATISFACTION SURVEY

The SDDOT always appreciates the willingness of our customers to engage with us to share thoughts and opinions, whether on construction projects or winter maintenance. We are dedicated to continually provide a safe and effective public transportation system to connect the great State of South Dakota with the nation.

SDDOT v. North Central U.S. States

■ SDDOT ■ North Central States
 SDDOT's results were higher than the same benchmark survey given to neighboring states who comprise our North Central Region.



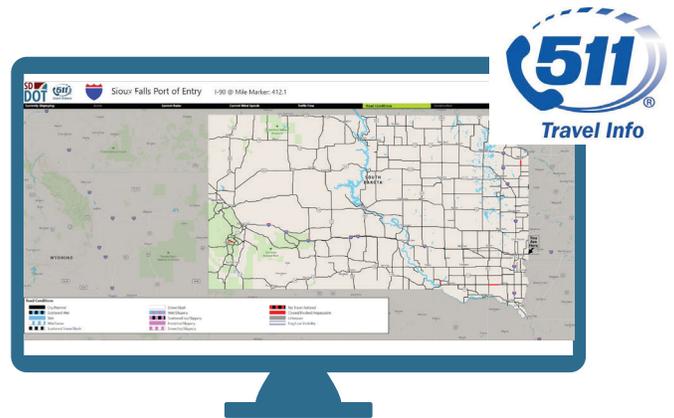
Snow and ice removal is one of our key services. We have focused improvement and innovation in this area to be more efficient and provide a better level of service. These improvements have included the addition of tow plows to our fleet, using the maintenance decision support system (MDSS), providing expanded hours of service in high volume locations such as the Interstate 90 corridor near Rapid City and the Interstate 29 corridor from Brookings to Sioux City, and expanded traveler access to real-time information in rest areas and through SD511. View the full Winter Highway Maintenance Plan: dot.sd.gov/inside-sddot/media/media-kits



— INFORMING TRAVELERS THROUGH INNOVATION AND TECHNOLOGY—

Travelers using the Interstate system across South Dakota will find rest areas at twelve locations where they can stretch their legs, walk their pets, or have a picnic lunch. Many visitors to our state’s rest areas journey long distances and need travel information to help them complete their trips confidently and safely.

To ensure that travelers receive up-to-date information, SDDOT is installing Traveler Information Kiosks at each rest area. The kiosks display a series of maps depicting winter road conditions and road closures, wind speed and direction for trucks and other high-profile vehicles, traffic flow, construction work zones, traffic incidents, amber alerts, and more. The kiosks also show images from roadside cameras at locations along the Interstate highways, so travelers can clearly see the road conditions they will encounter as they continue their trips.



Example of a rest area information kiosk.

SDDOT has installed kiosks at nine rest area locations to date. Within the next year, kiosks will be installed within the remaining rest areas. For the benefit of truckers, SDDOT also will place kiosks at the state’s four Interstate commercial vehicle ports of entry. View the South Dakota Truck Info website: sdtruckinfo.sd.gov

Customer Review: "Keep up the good work! I just stopped at a rest area, and, wow: - Live view cameras around the state - Live weather radar, traffic, construction, wind speeds - Fresh clean water bottle filling at the drinking fountain. - Very clean You have made my travels easier. Thank you."

- Aaron W. Indianapolis, Indiana



— U.S. HIGHWAY 83 RECEIVES MONUMENTAL RECONSTRUCTION —



Active construction on U.S. Highway 83.

Work was recently completed on an \$112 million, 68-mile project on U.S. Highway 83, featuring new pavement and a shared-use path, as the SDDOT upgraded the corridor from the Nebraska border to Murdo. The SDDOT completed seven projects in a very short time-frame to improve the entire corridor. Traffic counts along the 68-mile stretch range between 1,500 vehicles to 2,800 vehicles per day on the various segments.

“This overall work involved the placement of more than 250,000 tons of asphalt hot mix, roughly six million cubic yards of dirt excavation, placement of close to 20,000 cubic yards of Portland cement concrete, and placement of roughly 600,000 tons of base material,” said Doug Sherman, Winner Area Engineer.

Highlights include full reconstruction of the northern 23 miles, which included three new bridges and three new reinforced-concrete box culverts. Two new shared-use paths were also constructed to enhance pedestrian safety.

Seven Completed Projects: The first project began in 2017 to reconstruct storm sewers, curbs and gutters, make ADA upgrades, add road lighting and traffic signals, and pave about one and one-half miles with Portland cement concrete in Todd County.

In 2019, the multi-year second project began from the Nebraska state line to south of Mission in Todd County. The work included shoulder widening, placing drainage culverts, spot grading, asphalt concrete resurfacing on shoulders, and creating a shared-use walking path from Rosebud Casino to Sicangu Village.

The third project, started and completed in 2020, entailed cold milling and resurfacing of asphalt concrete and adding rumble strips from west of the junction of U.S. Highway 18 to north of the junction of S.D. Highway 44.

The fourth project began on U.S. Highway 83 to S.D. Highway 44 in Mellette County. The work entailed cold milling and resurfacing asphalt concrete, adding guardrails, reconstructing bridge approaches and improving the shoulders.

The fifth project, in Mellette and Jones Counties, provided grading, a 164-foot-long concrete bridge, two box culverts, and interim surfacing. Work took place in 2019 and 2020.

The sixth project, in Jones and Mellette counties, included grading, two large bridge structures and two large box culvert structures, and interim surfacing from the town of White River to the actual White River. This phase of the project began in 2020 and completed in 2022. Construction activities began in separate work zones at the north and south ends of the 11-mile-long project and met in the middle.

The final project began in March 2022 and was completed in November 2022. The project entailed paving 23 miles with asphalt from White River to Murdo in Jones and Mellette counties; providing ADA upgrades, and constructing and lighting a two-mile-long, \$3.4 million shared-use path.

“There is a lot of pedestrian traffic in that section of highway,” said Mark Peppel, Project Manager. “The 10-foot-wide shared-use path features luminaires and is about 10 feet away from the shoulder of the road to further enhance safety.”

“The field staff worked long hours and were committed to getting things done on time over the past five years. We had help from the Mobridge Area, our own maintenance teams, interns, and consultants.” noted Brad Norrid, Engineering Manager. “Also, the Rosebud Sioux Tribe was great to work with through this long journey from utilities help to supplying local workers through Tribal Employment and Civil Rights Office (TECRO). Everyone played a role in making U.S. Highway 83 a safer and more enjoyable highway for the traveling public. We can all be proud of this reconstruction project.”



Finished construction on U.S. Highway 83 - showcasing the shared-use path.





Active featured construction pages on dot.sd.gov.

— FEATURED CONSTRUCTION PROJECTS IMPROVE CUSTOMER ACCESS —

Each year the SDDOT administers over 100 road construction projects. Some of these projects last only a matter of days and others are part of multi-phase/multi-year projects. No matter the project size, travelers do not want to be surprised when encountering a construction work zone.

This was one of several reasons SDDOT conducted an initiative to share project information that was more in-depth and easier to digest. The newly designed featured project pages on the SDDOT website highlight key projects impacting travelers in the four SDDOT Regions.

The individual project pages consist of a location map, project summary, timeline, work updates, media stories, project photos, and project contact information.

The project pages saw excellent traction with over 20,000+ unique page views with visitors spending an average of two minutes viewing the project information.

The SDDOT will continue to provide active construction project information on the website in effort to keep the traveling public informed on the progress of each featured project in the years to come. Innovations like the featured project pages help the SDDOT earn the 35.8 percent increase in overall communication.

Be in the know in 2023. Keep a look out on our social media accounts and our website for updated featured construction projects for the upcoming 2023 construction season.



SDDOT employee drone pilots operating the drone during flight.

TAKING TO THE SKIES WITH UAS

The idea to implement a drone or UAS (Unmanned Aerial System) as a tool within the SDDOT started a few years ago. It began with a Federal Highway Administration (FHWA) EDC 5 (Everyday Counts) Initiative to introduce innovative technologies within State DOTs.

Currently the SDDOT has five drones, four of which are dedicated to the inspection of our State's bridges and one for survey work. With implementation of the program underway, the benefits have been tremendous for the new UAS initiative.

While drones can't replace a bridge inspector on a bridge site, they can be a valuable tool in an inspector's toolbox. Using the SDDOT's Skydio S2 (the name of the UAS responsible for bridge inspections) drone has considerable advantages over conventional methods of access mainly being speed, cost, accuracy, and most importantly, safety.

The Skydio S2 allows a bridge inspector to make a condition assessment and be comfortable signing off that a bridge or other structure is safe. A UAS can also save an inspector a considerable amount of time depending on the size of the structure. The SDDOT has seen anywhere from a 30 minute to three-hour time savings in inspections per structure, with the use of drones.

As with most SDDOT initiatives, the work of drones is multi-faceted and not focused solely on one goal. Drones are also used to aid surveyors in their work and the SDDOT uses an Autel Evo II drone for these purposes.

A key aspect to this survey work is to measure quantities of material stockpiles. Measuring from the air has considerable advantages over conventional ground surveying since it can provide a far truer representation of the actual shapes of the ground and stockpiles.

As for the future, the SDDOT will begin collecting and creating 3D models with Skydio drones for structures to better show the deterioration. The SDDOT will also look to expand the fleet of drones, drone pilots, and investigate additional innovative ways to use the drones, such as lidar (light detection and ranging) work.



Watertown airport ribbon cutting in August of 2022.



AIR/RAIL/TRANSIT PROGRAM HAS A SOARING YEAR

State Rail Plan: The State Rail Plan (SRP) is a four-year plan that is required by the Federal Railroad Authority for projects to be considered for federal funding. The South Dakota SRP addresses a broad spectrum of rail topics, including identification of objectives and plans for rail, inventory of rail infrastructure, analysis of rail-related economic impacts, and much more. The SRP was approved by the Railroad Board at the November 2022 meeting, and then submitted to FRA for final approval.

Rail Investment Guide: The Rail Investment Guide (RIG) is designed to help rank the projects that have been submitted to the State Railroad Board for grant applications. The RIG is a new document and tool that SDDOT will use to help make decisions when investing in rail activities. The Rail Investment Guide was also approved by the Board at the November 2022 meeting.

Currently the SDDOT Railroad office is managing nine projects for a total of \$39,779,165 of federal grant funding. There are five project proposals being considered for funding through FY22 STC grants for a total of \$20,668,285 federal grant funding.

Airports: A ribbon cutting ceremony for Watertown's new \$26 million airport terminal was held on August 26, 2022. Many dignitaries spoke at the event including Representative Dusty Johnson, First Gentleman Bryon Noem and South Dakota Aeronautics Commissioner Dr. Gerald Rieber. All speakers praised the city's present and past leaders for having the vision and determination to build a new terminal and the role it plays in providing individuals with greater flying opportunities.

An airport pavement management system was developed to identify pavement maintenance strategies which recommends projects for the next 20 years. This tool allows SDDOT to maximize the airport's pavement life and save taxpayer dollars. Some examples of pavement maintenance project recommendations are crack sealing, seal coats, resurfacing, and reconstruction.

Transit: In FY2022, rural public transit agencies in South Dakota traveled 4,726,304 miles and performed 1,086,083 passenger trips. Public Transit played an important role in ensuring that everyone in South Dakota has safe and affordable rides to medical appointments, employment, nutrition services, education, and to shop in their communities.

The SDDOT was recently awarded a discretionary grant totaling \$1,067,774 through the Federal Transit Administration's (FTA) Low or No Emission and/or Buses and Bus Facilities grant program. The SDDOT is receiving this funding on behalf of River Cities Public Transit in Pierre, Prairie Hills Transit in Spearfish, Community Transit of Watertown/Sisseton Inc. and the Rural Office of Community Services (ROCS) of Viborg. The funds will be used to buy eight low-emission propane buses, two propane conversion kits, and the installation of a propane fueling station.



The SDDOT snowplow roadeo in Sioux Falls, SD.



—SADDLE UP YOUR SNOWPLOW - SNOWFIGHTER ROADEOS RETURN IN 2022—

The SDDOT Snowfighter Roadeos are events held every other fall to give snowplow operators a chance to test and improve their winter driving skills prior to snow removal season. The driving course is a scored competition that allows drivers to test their skills against the other drivers in their region. The top five scoring drivers in each region advanced to the Statewide competition held in Pierre.

The Roadeo events are also a great time to engage in learning activities for SDDOT maintenance employees, with sessions sponsored by the South Dakota Safety Council.

“In addition to training, the Snowfighter Roadeos provide staff with an opportunity to share experiences, techniques, and best practices with counterparts in other units,” said Craig Smith, Director of Operations. “Equally as important, the Roadeos encourage team building and build morale for snowplow operators going into the often-long winter season.”

Congrats to the 2022 State ROADEO Winners:

1st place: Nathan Loecker - Yankton

2nd place: Keith Palo - Hayti

3rd place: Curt Theisen - Sioux Falls

4th place: Sam Spence - Kadoka

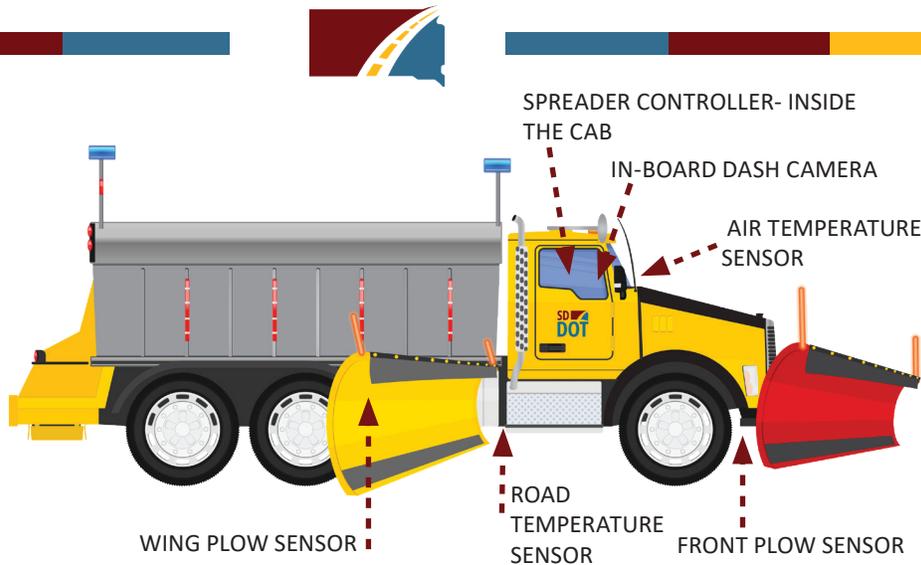
5th place: Luke Neville - Philip

*Find the SDDOT **Winter Highway Maintenance Plan** here: dot.sd.gov/inside-sddot/media/media-kits





MDC Component Locations on a Snowplow



BETTER DATA - BETTER DECISIONS

Data collected for SDDOT serves many purposes including the ability for the public to use the information for making travel decisions.

The SDDOT Office of Transportation Inventory Management operates a road and pavement evaluation system consisting of a vehicle (named the profiler) equipped with roadway evaluation equipment and computers at the SDDOT central office to process data collected by the vehicle. This system acquires roadway and pavement images, pavement roughness, cracking, rutting, and faulting values. Data is used by the SDDOT for the Pavement Management System (PMS) and the Highway Performance Monitoring System (HPMS). Some of the detailed data that the profiler collects can be found in the 2022 SDDOT Fact Book, found here: dot.sd.gov/dot-fact-book.



The SDDOT profiler vehicle.

Environmental Sensor Stations (ESS) provide SDDOT staff and the traveling public with current weather observations and camera images from 121 locations throughout South Dakota. Each ESS includes a high-resolution camera and sensors for air temperature, wind direction and speed, precipitation, and relative humidity. The data collected is available to the public through the sd511.org website and mobile app. Users can select any ESS location and view camera images and weather observations to help plan their travel.



An SDDOT ESS Station.

Road condition information is of utmost importance to the traveling public when South Dakota's coldest season hits. Mobile Data Collectors (MDC) gather data from SDDOT snowplows including: plow location, ambient and pavement temperatures, plow blade position (up or down), and deicing chemical type and application rate. The MDC communicates this information via cellular modem to the Maintenance Decision Support System (MDSS) to ensure its analysis considers the effect of maintenance already performed. The Maintenance Decision Support System (MDSS) informs plow operators of weather and road condition forecasts and recommendations for plowing and chemical application. Frequently updated information for operators fosters higher efficiency and more effective use of deicing materials. For the 2022-2023 winter season, SDDOT added 52 MDC units to the 172 already installed.

SDDOT wants to collect the best data for both internal and external decision making, and to invest resources in the most cost-effective manner. A prime example of these processes in action are notification alerts on sd511.org. Anyone can sign up for free real-time traveler information alerts about road closures and other significant conditions on the SD511 website. Users receive text or email notifications along customized travel routes in their area that notify them via text messages or email.



The availability of SDDOT data to everyone is paramount to the process of making informed and safe travel decisions.

Progress Across the State

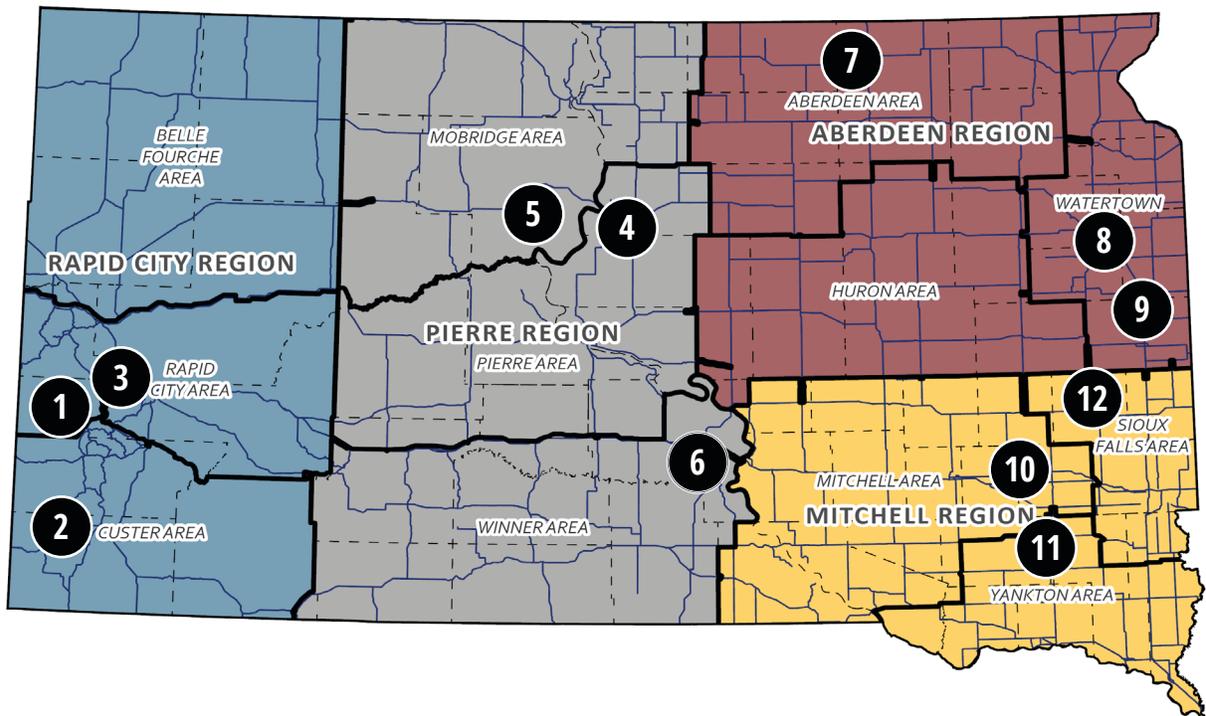


HIGHLIGHTS FROM THE REGIONS

Moving SDDOT's mission forward wouldn't be possible without the concerted efforts of the Rapid City, Pierre, Aberdeen, and Mitchell Region and 12 Area Offices within the regions to provide high-quality services to all South Dakotans. Whether traveling through South Dakota's Black Hills and Badlands, rolling hills and prairies, or towns and cities, the SDDOT's regional workforce is ready to face any challenge confronting our State's transportation system.

MAP OF HIGHWAY CONSTRUCTION HIGHLIGHTS BY REGION

Numbers indicate projects that are described in the upcoming pages.





RAPID CITY REGION



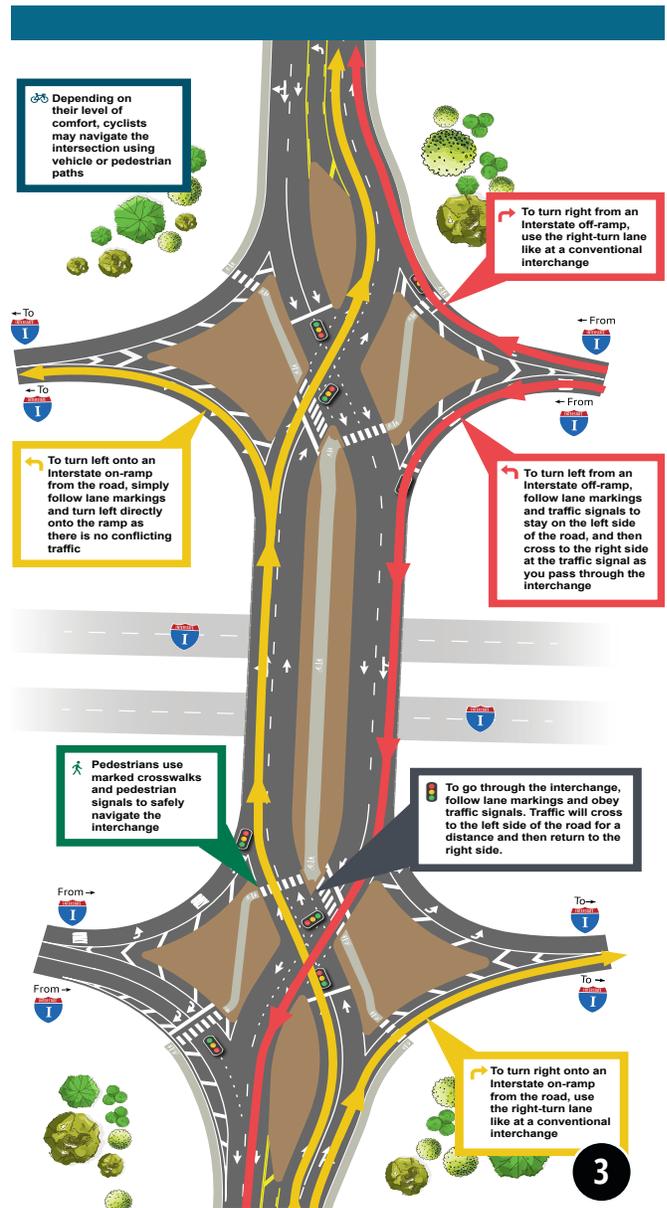
1

Keystone Wye Upgrades The timber arch bridge on U.S. Highway 16 and 16A went through extensive restoration this summer. The concrete decks were replaced with timber decks and asphalt overlay. The project has extended the life of the bridge by another 50+ years.



2

Urban Reconstruction through Hot Springs This project includes portland cement concrete surfacing, lighting, curb and gutter, suspended sidewalk, storm sewer, and the city of Hot Springs water and sanitary main line upgrades. Estimated completion date is December 2023.



3

The First Diverging Diamond Interchange (DDI) in South Dakota The Interstate-90 and LaCrosse Street Interchange Project (Exit 59) will help improve safety, road conditions, and future travel growth. The interchange modification will reduce current delay and traffic issues for motorists by increasing the capacity and extending turn-lanes at the interchange. The DDI configuration was selected to meet the purpose and need for the project. Estimated completion of the interchange is June 2023.



Urban Reconstruction Complete in Gettysburg A two-year, seven phase project to reconstruct U.S. Highway 212 through Gettysburg was completed this year. This urban reconstruction project included grading, storm sewer, new lighting, and better access to local business and parks.



Resurfacing in Central South Dakota A large asphalt resurfacing and pipe repair project between the city of LaPlant to U.S. Highway 83 took place this year. This project included mainline paving, rumble strips, and permanent striping to create a safer driving experience for motorists in the central part of the State.



S.D. Highway 49 Receives a Facelift This much-anticipated project on S.D. Highway 49 in Lyman and Tripp Counties created a safer and more enjoyable driving experience for travelers. The project included the repair of several heave areas, pipe repair, and an asphalt overlay.



ABERDEEN REGION



Ipswich to Aberdeen Upgrades A section of U.S. Highway 12 between Aberdeen and Ipswich received added passing and turn lanes and safety improvements. This project helped to make this widely traveled northern South Dakota corridor safer for all motorists.



Watertown Urban Reconstruction Complete The multi-year U.S. Highway 212 reconstruction project through Watertown was completed this year. The project included grading, storm sewer, new sidewalk, and widening the driving lanes by one foot for safety. Average daily traffic count for this stretch of road in 2020 was 18,444 the SDDOT's projection for 2045 is 26,743.



Interstate 29 Near Brookings Receives New Interchange A new Interstate interchange on I-29 in Brookings is currently being constructed. The new interchange aims to make traveling south from Brookings much quicker and less congested.



10

Hanson County James River Bridge The S.D. Highway 42 Bridge over the James River east of Ethan was replaced this year. The new bridge received significant upgrades; it is 200 feet longer and six feet wider than the previous structure to add safety.



11

Wide Shoulders Safer Roads A shoulder widening project near Menno on U.S. Highway 18 took the existing 26 foot-wide roadway and expanded it to 36 feet-wide. The goal of this project was to increase the width of the shoulders along the roadway, from one foot to six feet, for safer travel.



12

Raising the Grade Between the Twin Lakes U.S. Highway 81 between the Twin Lakes near Arlington had a long history of flood issues during high water years. This project, which was completed ahead of schedule in August 2022, raised the elevation of the road to prevent flooding issues in the future.



DEPARTMENT OF TRANSPORTATION

Becker-Hansen Building
700 E. Broadway Avenue
Pierre, SD 57501-2586



U.S. Highway 85 North of Spearfish, S.D.

"The South Dakota Department of Transportation's customer satisfaction ratings are among the best in the nation! **The Department is clearly meeting the expectations of South Dakota residents and other customer groups.** I have been conducting surveys for state departments of transportation for more than 20 years, and the results for the SDDOT are among the best I have ever seen!"

Chris T., CEO - ETC Institute

"I got to drive Sheridan Lake Road yesterday. **You and your team should be proud of that job.** The road is greatly improved, yet done so by respecting the Black Hills and the beauty of the scenery. Other projects could use more of this as a model."

Dale R., Rapid City, SD

"My wife and I camped at Custer State Park on July 15 - 18, 2022. The main purpose of our visit was to see Badlands and other attractions. We were so impressed with Custer State Park and how well managed it is. What an amazing place! We hope to return not only to CSP, but to see more of South Dakota. **Your state roads are great. Everything is so clean!**

My compliments to you, Governor Noem!

Warren S., Hillsboro, OR

Stay connected with us to learn about upcoming events throughout the year!

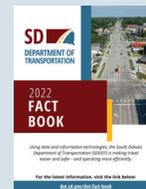


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Learn more about the data that drives the decisions at the SDDOT.



dot.sd.gov/dot-fact-book