

BIENNIAL REPORT

2017-2019



submitted by

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

Bismarck, North Dakota

dot.nd.gov

DIRECTOR

William T. Panos

December 2, 2019

NORTH
Dakota | Transportation
Be Legendary.™

William Panos
Director

Doug Burgum
Governor

December 2, 2019

The Honorable Doug Burgum
Governor of North Dakota
600 East Boulevard Avenue
Bismarck, ND 58505-0001

Governor Burgum:

In compliance with Sections 24-02-01 and 54-06-04 of the North Dakota Century Code, I present to you the Biennial Report of the North Dakota Department of Transportation (NDDOT) for fiscal years 2017 to 2019.

The NDDOT worked hard on many projects to maintain the state's transportation system. A large amount of resources were dedicated to improve safety and traffic movement by enhancing, rebuilding, and repairing highways and bridges throughout North Dakota.

The Department's budget for the 2017–2019 Biennium was \$1.27 billion. Compared to the 2015-2017 biennial budget of \$2.7 billion, this was a \$1.4 billion reduction in State Funds, \$80.9 million reduction in State Transportation User Revenue and a \$56.9 million increase in Federal Funds.

A few of the many accomplishments completed this past biennium include: being selected as one of ten participants in the UAS Integration Pilot Program with U.S. DOT; expanded the motor vehicle self-service kiosk machines to five additional locations throughout the state; launched the Vision Zero initiative to reduce motor vehicle crash fatalities and serious injuries to zero; launched "Track-A-Plow" technology onto our Travel Map for public use; launched ND Moves, the state's first active and public transportation plan; and developed and implemented the new Urban Grant Program for infrastructure improvement projects within business districts of urban cities.

Because of the support of our legislative body, partners, stakeholder groups, and a dedicated group of employees, the Department was able to help meet transportation needs across the state while accomplishing our mission to safely move people and goods.

Sincerely,



William T. Panos
Director

Enclosure

North Dakota Department of Transportation

Biennial Report: July 1, 2017 through June 30, 2019

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Statutory and Constitutional Responsibilities

Creation

The first North Dakota State Highway Commission was created in 1913. The North Dakota Department of Transportation was created by 1989 North Dakota Session Laws Ch. 22, codified as North Dakota Century Code, Title 24.

Function

NDCC § 24-01-01 and 24-03-02 make NDDOT responsible for the construction, maintenance, protection, and control of the highways comprising the state highway system. NDCC § 39-01-01.1 describes the general responsibilities of the Drivers License, Safety and Motor Vehicle Divisions. When authorized under NDCC § 24-04-01, the Department of Transportation Director may enter into contracts and do all things necessary to cooperate with the federal government in the construction of roads under the provisions of a congressional act.

Funding

The state highway fund must be spent in the following

order of priority: (1) maintenance of the state highway system, and (2) the cost of construction and reconstruction in an amount necessary to ensure federal aid available to the state. Monies not spent under (1) or (2) may be spent on state highways for construction, improvement, or maintenance. (NDCC § 24-02-37).

National Highway Safety Act of 1966

Under NDCC § 54-07-05, the Governor has the responsibility of dealing with the federal government with respect to the state's participation in the national Highway Safety Act of 1966. The Governor has designated the Director of the Department of Transportation to act on his behalf in administering that act.

Rail Service Assistance

The department, with the approval of the Public Service Commission, has the authority to qualify the state for rail service assistance under the Railroad Revitalization and Regulatory Reform Act of 1977. (NDCC § 49-17.1-02).

Major Goals

The NDDOT's major goals are established through our Strategic Planning process, which has steadily evolved since its inception in 1997. Through these efforts, the Department continues to be recognized as the State's transportation leader that operates as a progressive and innovative organization that carries out its vision and mission.

Vision

North Dakota's Transportation Leader Promoting:

Safe Ways - Superior Service - Economic Growth

Mission

Safely move people and goods.

As the Department strives to meet the transportation needs of the energy, agriculture, and manufacturing industries it is faced with increasing challenges. To meet these challenges and advance our mission the NDDOT has incorporated five strategic emphasis focus areas and goals.

Strategic Focus Areas and Goals

Safety - Provide a safe and secure transportation system and workplace.

Innovation - Promote a culture of innovation to enhance external and internal services, products, and programs.

Assets - Preserve and enhance assets managed by NDDOT.

Mobility - NDDOT works to improve access to our transportation system through multi-modal solutions to enhance the movement of people and goods, having a positive impact on the quality of life and the economic well-being of North Dakotans.

Leadership - We strive to position the NDDOT as a local, state, and nationally trusted leader. We value service, excellence and diversity, instilling a culture of leadership, which expands the problem-solving capacity of our organization.

Values

In practicing the Department's values of *Professionalism, Respect, Integrity, Dedication, and Excellence* it will be successful in being North Dakota's transportation leader.

Financial Data

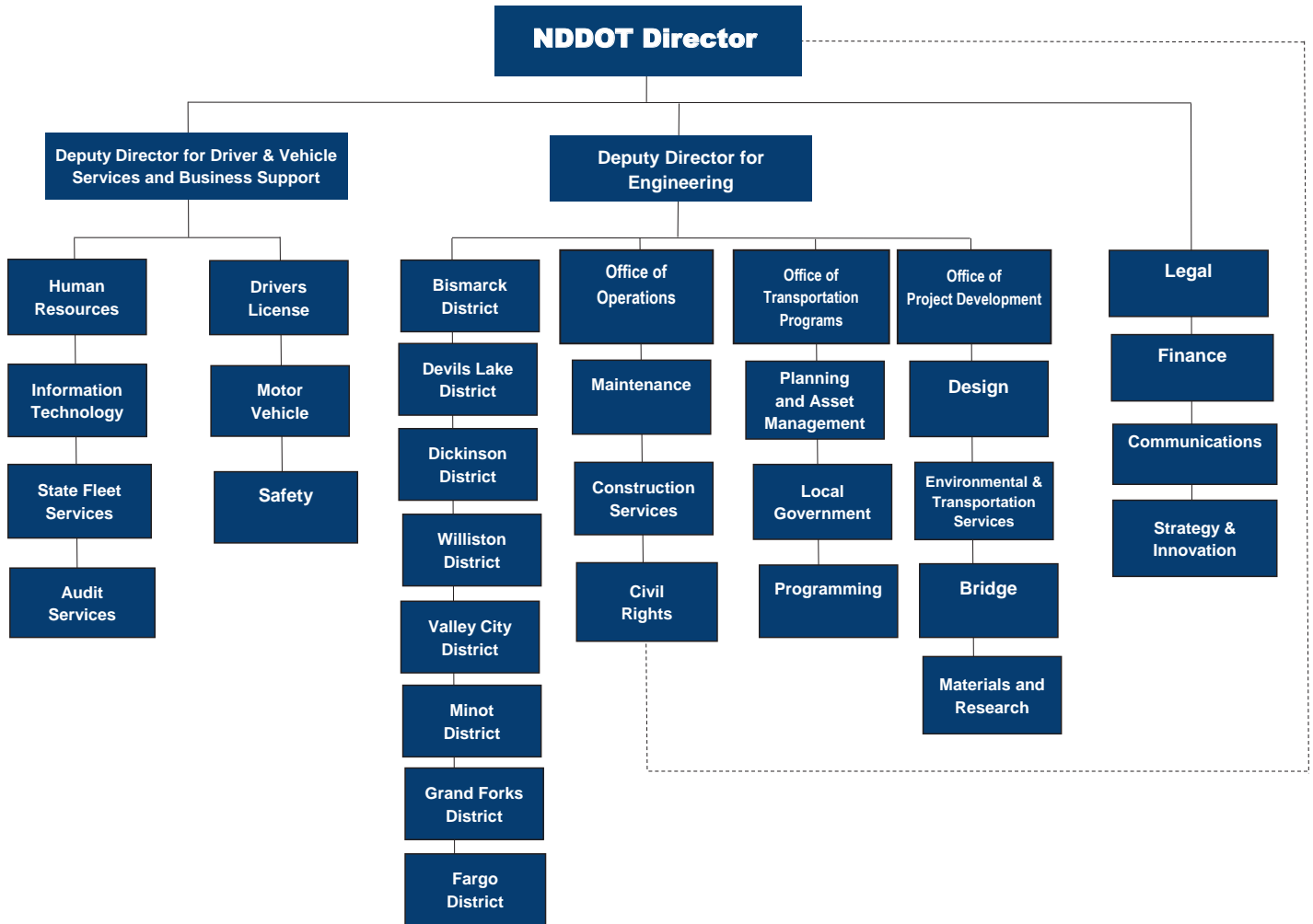
Audited financial information for the Department of Transportation is available from the North Dakota Office of Management and Budget. This information can also be found online at www.nd.gov/fiscal.



Automated Road and Pavement Condition Surveys vehicle that uses cameras and lasers to record the condition of the pavement

Organization Chart

as of June 30, 2019



Effective June 2019

For the current NDDOT Organization Chart, go to <http://www.dot.nd.gov/divisions/exec/docs/nddot.pdf>

Office of the Director



The Office of the Director includes the Communication, Financial Management, Legal and Strategy & Innovation of Transportation Systems divisions.

The Interim NDDOT Director is Ron Henke.

Communications

Peggy Anderson, Director

Responsibilities and Activities

The Communication Division is responsible for all aspects of communication within the North Dakota Department of Transportation (NDDOT). This includes internal communications with NDDOT employees and external communications with the general public, media, legislators, civic groups and stakeholders.

The NDDOT communicates externally through the use of a website that contains up-to-date information about the Department, its programs, policies, goals and its mission. The latest external communication outlet used by the Department is social media, such as Facebook and YouTube. Other avenues for external communication include: public meetings and hearings, letters to the editor, interviews with local TV and radio stations, news releases, ads and notices, press conferences, and presentations with various civic and local government groups.

The Communication Division is also responsible for facilitating internal communications with our employees and constituents. The primary venue for internal communication is an employee-only website known as "MyDOT." The Communication Division also serves as a resource to the entire Department by providing assistance in areas such as: information

campaigns, talking points, speeches, PowerPoint presentations, videos, posters, biennial reports, brochures, handbooks, technical and statistical manuals, study guides, proofreading and graphics.

Also part of the Communication Division is the Multi-Media Section. The Multi-Media Section is responsible for photography, video production, graphic design, web page design as well as various print media such as posters, manuals, reports, brochures and fliers. Multi-media provides many services to NDDOT and other state agencies.



NDDOT videographer, Brian Wallner, getting the right angle

Key Accomplishments

During the 2017-2019 Biennium, the Communication Division worked closely with every Division and District throughout the NDDOT on numerous projects and information campaigns.

The following accomplishments represent some of the highlights of the biennium.



Transportation Expo at the Bismarck Event Center

- NDDOT held a Transportation Expo at the Bismarck Event Center in May of 2018 observing 100 years of service to North Dakota. The event was family-friendly and included activities and exhibits for all ages. The Expo honored the past, present and future of transportation in North Dakota.
- Distributed information to the public by sending out approximately 300 news releases each year in 2017 and 2018.
- The Communication Division received a "Heroes of NDDOT" Award for their extraordinary service in working with other agencies and providing important information to the public concerning the Dakota Access Pipeline (DAPL) protest.



Pictured left to right: Jodi Ueker - ND Governor's Office, Terri Wilhelm, Peggy Anderson, Brian Wallner, Jamie Olson, Poppy Mills - Communication Division, NDDOT Director Tom Sorel

- Created YouTube videos on a regular basis to inform employees and the general public about various NDDOT programs including construction, safety, REAL ID and snow and ice control.
- Continued to provide up-to-date information regarding travel alerts, travel advisories, public meetings and events through the use of news releases, the department's website and Facebook page.
- Worked on several ribbon cutting events for completed construction projects throughout the state.
- Created a media campaign to promote the REAL ID Campaign to spread the word about the October 2020 deadline for REAL ID credentials.



Lieutenant Governor Brent Sanford & NDDOT Director Tom Sorel along with many state and local officials and NDDOT employees gather to cut the ceremonial ribbon on the new Lewis & Clark Bridge just before it is opened to traffic

Financial Management

Shannon Sauer, Director

Responsibilities and Activities

The Financial Management Division is responsible for the fiscal operations of the agency including accounting and financial reporting, budget preparation and monitoring, some payroll activities, procurement, revenue forecasting, central supply, cash management, FHWA 500-series statistical reporting, rate development, p-card administration, legislative activities, fiscal note development, and disposal of highway equipment and materials.



NDDOT Chief Financial Officer, Shannon Sauer, talks about funding history during the North Dakota Symposium on Transportation Funding

Key Accomplishments 2017-2018

The division more than doubled the number of p-card holders by adding over 70 new users. The procurement section coordinated and ensured that all new users received the proper training and level of procurement certification commensurate with their purchasing limits.

The Financial Management Division, in conjunction with the Information Technology Division, tested and implemented a significant upgrade to the Work Force Time & Labor System.

The Financial Management staff updated and rewrote the online Work Force Manuals for employees and supervisors.

Key Accomplishments 2018-2019

The Financial Management Division, in conjunction with the Human Resources Division processed 55 additional employee separations resulting from the Voluntary Separation Incentive Program between September 2018 and June 2019.

The Financial Management staff updated definitions for all account codes used by NDDOT and, in conjunction with the Information Technology Division, developed an on-line account code tool that will provide users with up to the minute current information on account codes and their related descriptions. This tool will go on-line in late fall of 2019.

Legal

Dreux Kautzmann, General Counsel

Responsibilities and Activities

The Legal Division provides general counsel legal services and advice to NDDOT in all areas, with emphasis on: pre-litigation issues; driver's license and motor vehicle administrative matters; contract development, negotiation, drafting, and administration assistance; review of non-construction and construction-related contract documents; risk management; legislation; and administrative rulemaking.

Key Accomplishments

July 1, 2017 – June 30, 2018

- Legal Division held 2,306 driver's license hearings; 1,713 were implied consent hearings (DUIs).
- Legal Division reviewed and assisted with the administration of approximately 1,475 contract documents.

July 1, 2018 – June 30, 2019

- Legal Division held 2,404 driver's license hearings; 1,737 were implied consent hearings (DUIs).
- Legal Division reviewed and assisted with the administration of approximately 1,554 contract documents.

July 1, 2017 – June 30, 2019

- Legal Division held 4,710 driver's license hearings. Implied consent hearings (DUIs) increased slightly over the previous biennium.
- Legal Division reviewed and assisted with the administration of approximately 3,029 contract documents.

The Legal Division is expected to meet additional challenges during the 2019-2021 biennium in the areas of right-of-way acquisition, contracts and risk management.

Strategy & Innovation of Transportation Systems

Russ Buchholz, Director

This division is newly developed and is currently working on the following initiatives:

- Connected and autonomous vehicle (CAV) technology/infrastructure



Electric bus offered rides to attendees at the Tailgate/Meet & Greet Event on the Capitol Grounds

- Future advancement and placement of charging stations for electric vehicles
- Unmanned Aircraft System (UAS) applications and implementation throughout the state, integration of connected commercial vehicles (ie. truck platooning)

Establishing SMART corridors using intelligent transportation systems (ITS) that enhance the safety, efficiency, management of our transportation networks such as variable/dynamic message signs, pan, tilt, zoom cameras, wrong-way ramp detection systems, and road weather information systems.

North Dakota's UAS Integration Pilot Program



US DOT representative Steve Bradbury joined NDDOT and partners at the Capitol when USDOT and FAA announced NDDOT as one of the agencies selected to partake in an Unmanned Aircraft Systems (UAS) Integration Pilot Program

In 2018, U.S. DOT selected the North Dakota Department of Transportation as one of 10 participants in the Federal Aviation Administration's UAS Integration Pilot Program. NDDOT works with partners and stakeholders to accomplish North Dakota's pilot program mission to provide operational efficiencies, create new opportunities, build industry

to grow the economy, reduce traffic fatalities and serious injuries. The three-year program gives state, local and tribal governments a chance to establish innovation zones for testing complex UAS operations. The UAS Integration Pilot Program technology will enhance North Dakota in many areas such as pipeline or infrastructure inspections, traffic crash reconstruction, and emergency response during a life-threatening event in rural areas, such as finding a missing person in the Badlands or on lakes and rivers.

The pilot program has completed two missions in the past year:

- The first mission was flight over people during a college football-tailgating event, flying 2 drones (media and law enforcement) simultaneously in a controlled airspace.



Drone mission flying over people

- The second mission was Beyond Visual Line of Sight flight operations over an Urban Area to inspect Xcel Energy's distribution lines. The waiver was a first, flying in an urban environment using only electronic means to observe the flight of the aircraft while performing its mission.
- Through the pilot program, the North Dakota Department of Transportation was the first state agency to receive an Operation Over People (OOP) waiver. This 4-year waiver, awarded on June 24th, 2019, allows the DOT to fly over people using a DJI Mavic 2 with a ParaZero SafeAir Parachute.

Other Programs include:

- IdeaScale is an idea management software platform that uses insights and crowd wisdom to extract ideas and are refined in order to populate a sustainable innovation channel.

Office of Business Support



The Office of Business Support includes Audit Services, Human Resources, Information Technology and State Fleet Services Divisions. The Deputy Director is Mark Nelson.

Audit Services

Terra Miller-Bowley, Director

Responsibilities and Activities

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. At its simplest, internal auditing involves identifying the risks that could keep an organization from achieving its goals, making sure the organization's leaders know about these risks, and proactively recommending improvements to help reduce risk.

The Audit Services Division of the North Dakota Department of Transportation (NDDOT) is responsible for performing internal audits of NDDOT district and division activities and conducting cognizant reviews of architectural and engineering consulting firm indirect cost rates. The Audit Services Division is also responsible for motor carrier program audits, including federally required audits of International Fuel Tax Agreement (IFTA) and International Registration Program (IRP) registered North Dakota based motor carriers. Auditors focus on ensuring applicable policies and regulations are followed and ensuring proper use of federal and/or state funds.

The Audit Services Division is comprised of a Division Director and five staff auditors.

Key Accomplishments:

During the past biennium, the Audit Services Division accomplishments included:

- Completed audits of 82 motor carriers enrolled in the International Fuel Tax Agreement and audits of 128 motor carriers enrolled in the International Registration Program. The Audit Services Division audits on average 3% of North Dakota registered motor carriers each year to ensure compliance with record keeping requirements. The Audit Services Division also provided training to North Dakota registered motor carriers at annual North Dakota Motor Carriers Association member educational sessions.
- Conducted cognizant reviews of 17 indirect cost rates proposed by architectural and engineering consulting firms. The Audit Services Division reviews indirect cost rates submitted by architectural and engineering consulting firms to ensure they comply with applicable federal regulations. In addition to completing cognizant reviews of proposed indirect cost rates, the Audit Services Division also revised our cognizant audit program to improve overall efficiency and effectiveness.
- Aided the Local Government Division and the Safety Division with subrecipient monitoring activities required by federal regulations by reviewing 98 financial and/or single audit reports. The Audit Services Division reviews the financial and/or single audit reports of grant recipients to assess the overall risk of the entity receiving federal pass through funds.

Human Resources

Nikki Sackman, Director

Responsibilities and Activities

The Human Resources Division is responsible for agency compliance with federal and state employment laws as well as performing and overseeing the following: recruitment, selection, salary administration, position classification, workforce assessment/planning, workforce development and training, leadership development, coordination of payroll processing, personnel policies, employee files, human resource consultation, employee leave program administration, performance management, awards and recognition, wellness program, book club, community engagement events, tuition reimbursement program, internships, educational scholarship and grant programs.

- Created and implemented a random drawer audit program for the Motor Vehicle Division. Random drawer audits are an important preventive internal control designed to prevent errors, inaccuracy or fraud before it occurs. A total of five random drawer audits were conducted with the assistance of front counter associates in the Motor Vehicle Division. The Audit Services Division also provided fraud awareness training to all Motor Vehicle Division employees to further enforce the importance of strong internal controls.
- Created and implemented a transit audit program for the Local Government Division. The Audit Services Division audits transit organizations who receive federal pass through funding to ensure compliance with applicable federal regulations. In addition to completing audits of two transit organizations, the Audit Services Division also provided information related to operational best practices, which if implemented, will ensure future compliance with federal regulations.
- Observed annual inventory counts at four District locations. The Audit Services Division observes annual inventory counts to confirm that financial records and the actual physical count of goods are consistent. Inventory represents a key asset of the NDDOT, the verification that strong internal controls are in place reduces the risk that inventory fraud and misappropriation may occur.



Auditing salt stock at a district



Book Club at NDDOT

Key Accomplishments:

One of the Human Resources Division (HRD) major accomplishments this biennium was developing and launching “Your DOT Leadership Development Journey” to assist with preparing ND Department of Transportation for the future by discovering and utilizing employee strengths to enhance collaboration and innovation. Other large-scale efforts and accomplishments included proactive recruiting and retention efforts, regional pay and salary adjustments due to competitive environment for CDL drivers, particularly in the northwest region of the state. HRD successfully facilitated a Voluntary Separation Incentive Program (VSIP). In total, 72 employees applied, 14 rescinded applications, 3 were not eligible and 55 were approved and took advantage of the early separation.

HRD also attended community engagement events to discuss position vacancies, Vision Zero and NDDOT (ND State Fair, NDDOT Transportation Expo, NDDOT Community Fairs, Job Fairs, various high school/college/university events, North Dakota State Library Reading Celebration, Mandan Touch a Truck Event, and Transportation Day).



Career information at Transportation Day at the State Capitol

HRD worked with other divisions to increase employee awareness of career development and advancement opportunities. This included developing a training page, promoting learning opportunities, assisting supervisors to ensure increased involvement in professional growth of employees. All career opportunities are now featured on the home page of Department intranet and current employees receive automated email notifications.

HRD was involved in a variety of projects this biennium to unify and streamline HR programs and processes across all state agencies. This includes the following:

- Developing universal policies and performance evaluation process
- Developing and implementing statewide leadership training and development
- Simplifying the application process as part of statewide PeopleSoft Fluid upgrade to provide a user and mobile friendly platform.

The division is actively engaged in a number of recruitment and talent advisory boards including Bismarck State College Career Advisory Board, Young Professionals Network, Society for Human Resources Management, State of North Dakota Talent Acquisition, State of North Dakota Joint Economic Committee, State of North Dakota Classification Transformation, and State of North Dakota Internship Development.

Information Technology

Shannon Sauer, Interim Director

Responsibilities and Activities

The Information Technology Department (IT) is organized to offer seamless and sophisticated transportation and telecommunication infrastructure and internal operational support. Evolving technologies push each NDDOT division to be innovative and capitalize on financial investments and alliances with other state and federal agencies to move goods and people safely. IT is responsible for all technology-related activities including information systems, network and PC support, telecommunications, video conferencing, wired and wireless technology, information processing, technology training, web development and implementation, e-business, records management, printing, mailing, and building security.



Motor Vehicle self-service kiosk

Key Accomplishments:

- Obtained legislative funding to modernize the Driver's License Legacy system. The current system is a 1984 mainframe-based system that has reached its end of life (EOL).
- Initially self-service Motor Vehicle kiosks were placed in three locations in Bismarck as a pilot program. The self-service terminals proved to be a success, to where they were expanded to StaMart Travel Centers in Fargo and Grand Forks and with CashWise Foods in Minot, Williston, and Dickinson. These terminals are a fully automated motor vehicle registration renewal station that will dispense license plate renewal registration cards and motor vehicle tabs on demand.
- Completed the NDDOT Internet responsive

designed to improve access for the public and business partners by making the website viewable across all devices including mobile.

- Purchased an existing West River Telephone (WRT) tower and shelter in the vicinity of New Leipzig. This filled the radio communication gap reported by local law enforcement and first responders in the SW region of the state.
- Incorporated Microsoft 365 across the entire department, enabling more functionality for every employee.
- Heightened security awareness in the Central Office by installing security cameras in the Motor Vehicle and Motor Carrier operations area.
- Driver License programming changes to implement Real-ID were put in May 2018 and the Online Renewals application was created in September of 2017.
- Motor Vehicle enhanced the temporary registration online application to help prevent fraud. Implemented legislative change for emergency responder plates. Enhanced the VINTelligence interface to handle electric and hybrid vehicles per legislation.



State Fleet vehicles at the Motor Pool on the Capitol Grounds

State Fleet Services

Robin Rehborg, Director

Responsibilities and Activities

The function of State Fleet Services is to purchase, manage, operate, maintain and dispose of the state's licensed motor vehicles (approximately 3,400 vehicles). In addition, State Fleet Services conducts defensive driving course training for all state vehicle drivers, manages the alcohol and controlled substance testing for all state agency and university Commercial Drivers

License (CDL) drivers, the state fuel contract and driver ID program, and the NDDOT insurance programs.

Key Accomplishments

As a part of Vision Zero, in July 2018, State Fleet implemented a statewide Distracted Driving policy (DDC). No cell phone or other mobile devices can be used while driving State Fleet or other vehicles while conducting state business. Also, in an effort to better educate State Fleet users a driver agreement was developed. Every user must read and sign the driver agreement before they are allowed to drive a fleet vehicle.

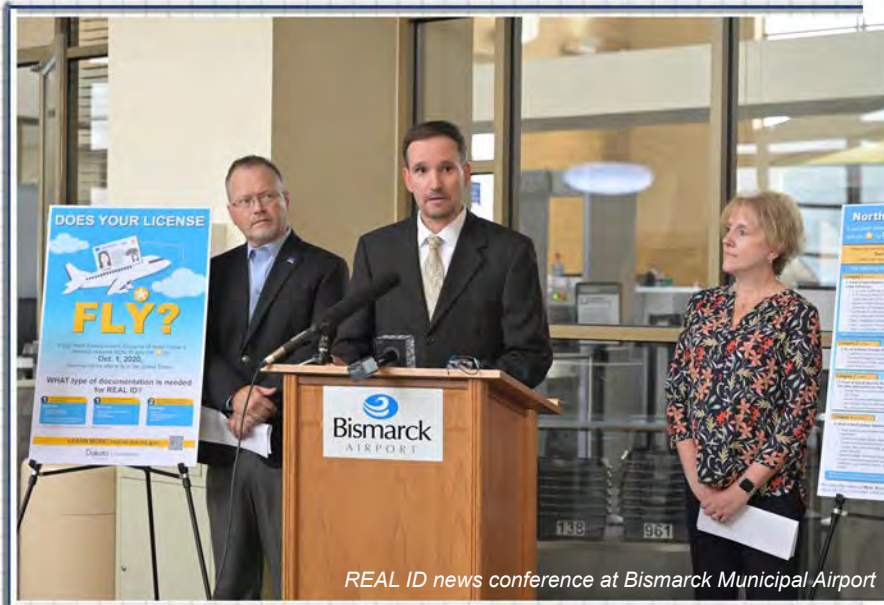
All state employees who drive state vehicles at least once a month are required to take a DDC course every four years. State Fleet offers both classroom and online classes. In 2018, State Fleet held 31 instructor led classes training 698 employees and 1,370 employees took the online course. From January - June 2018, 18 instructor led courses were held training 375 employees and 749 state/university employees took the online courses. The State Fleet DDC instructor has been awarded the Outstanding Safety Instructor award from the ND Safety Council for eight years in a row.

In June 2019, State Fleet held the first auction sale of the year introducing simulcast online bidding. This allows customers to bid on vehicles without having to come to the public auction. One can bid on a vehicle via computer or mobile device. If an online user is the high bidder, they have 7 business days to pick up the vehicle from the auction location.



State Fleet vehicle auction now has online bidding

Office of Driver and Vehicle Services



REAL ID news conference at Bismarck Municipal Airport

The Office of Driver and Vehicle Services includes the Driver's License, Motor Vehicle and Safety Divisions. The Deputy Director is Mark Nelson.

Driver's License

Robin Rehborg, Interim Director

Responsibilities and Activities

The Driver's License Division provides identification validation, licensing, and driver record management services for all North Dakota drivers.

Driver's License Examiners process each applicant for licensure in the state, who are evaluated for identity, residency, and qualification, to include both knowledge and skill, and issue the pertinent permit, license or non-driver identification card, by conducting vision screenings and reviewing medical and vision information and determining if any restrictions need to be applied or if any additional medical documentation or testing is required, thereby ensuring individuals licensed in North Dakota are fully authorized and capable. Our responsibilities are regulated by both state and federal laws, regulations, and policies.

Driver's License Licensing Specialists provide record management services for the division that links the driving record with the court system, to ensure that only convictions for driving errors become part of the record. Responsibilities are interpreting, processing, and inspecting documents from chemical dependency programs, court dispositions, and maintaining the integrity of the driving record for use in administrative hearings, court proceedings, attorneys, employers, law enforcement, insurance companies, professional

licensing boards, other state and federal agencies. Proficiency, communication, and customer service are critical elements that must be adhered to. The division also provides administrative support for all sites, from logistic support to financial management, to ensure the statewide division team has all the tools necessary for success.



Driver's License examiner helping customer

Key Accomplishments

July 1, 2017, through June 30, 2019

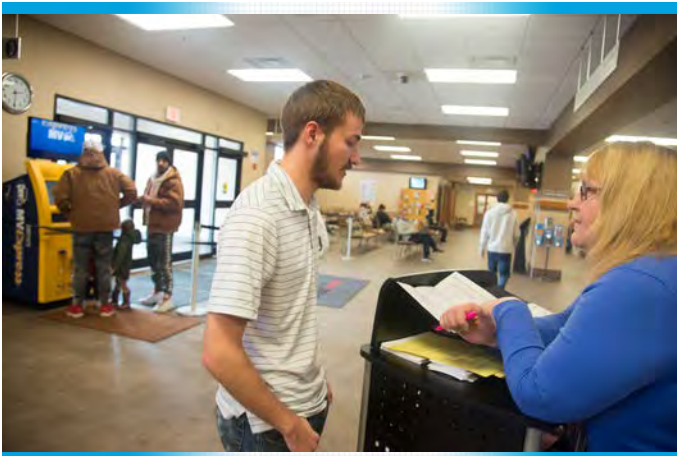
- The division processed 438,432 permits, licenses, and identification cards
- Administered 90,230 written tests
- 37,856 driving tests

- 290,685 vision screenings
- Processed 94,294 suspensions, revocations, and cancellations
- 271,275 traffic citations
- 16,350 Temporary Restricted Licenses
- 10,206 implied consent violations
- 6,812 hearings
- In May of 2018 the division started issuing Real ID credentials across the state

The addition of ILINX management system to the email process has decreased the processing time and allows the employee to attach documents to the driving record without having to print and scan the information.

Programming adjustments were made to FileNet to ensure that the convictions for commercial permit and license holders are worked as a priority to meet the reporting requirements and keep ND in compliance with The Federal Motor Carrier Safety Administration (FMCSA) at one of the highest percentages in the country.

Thirty public and seven private driving schools have been approved in the road test waiver program along with six accredited third party CDL testers. The division also implemented an online non-commercial renewal application that has processed 9,293 renewals.



NDDOT employee assists customer at Central Office

Motor Vehicle

Lindi Michlitsch, Director

Responsibilities and Activities

The Motor Vehicle Division administers all programs relating to the titling and registration of vehicles. The

division regulates motor vehicle dealers, interstate motor carriers, mobility-impaired parking privileges and intrastate household goods carriers.

It also is responsible for maintaining and making available records created by its various activities.

The division serves the public throughout the state through services provided at its central office in Bismarck, four privatized branch offices, seven chamber of commerce offices and nine county treasurer's/city offices. Services are provided in person, by mail, by fax, by email and online. Five of the branch offices also provide partial registration services to interstate motor carriers, who no longer need to conduct their transactions in Bismarck. Branch offices located within the same building as the department's driver's license testing sites are in Bismarck, Minot, and Dickinson. All of these licensing and registration operations provide enhanced customer service for the citizens of our state.

Key Accomplishments

During the 2017-2019 biennium, the division processed almost 3 million customer transactions, and responded to approximately 334,000 customer inquiries via telephone, email, letter and fax.

The division registered 1,134,838 vehicles in FY2018 and 1,166,491 in FY2019. During the 2017-2019 biennium, 557,567 vehicles were renewed online, for an average of approximately 31 percent of all renewals processed.

The Motor Carrier section renews approximately 1,978 IFTA accounts and 2,140 IRP accounts each year. The Motor Vehicle Division implemented the following enhancements:

- Increased kiosk usage from 2% to over 8%
- Two additional branch offices began to issue titles for a total of eight branch offices that currently issue titles
- Transitioned the Motor Carrier section from a paper-based filing system to an electronic filing system
- Increased online filing of IFTA quarterly tax returns by customers to 48% of all IFTA accounts
- Launched a record review process for new IRP and IFTA account holders to help educate customers on the record keeping requirements
- Implemented Online Mobility Impaired placard renewal

Safety

Karin Mongeon, Director

Responsibilities and Activities

The NDDOT Safety Division is the designated State Highway Safety Office (SHSO) for the State of North Dakota. The Safety Division is responsible to coordinate North Dakota's Vision Zero strategy to reduce motor vehicle crash fatalities and serious injuries to zero. Vision Zero is a joint effort between the NDDOT, the North Dakota Highway Patrol, the North Dakota Department of Health and the North Dakota Governor's Office.

- Coordinated the development, implementation and evaluation of the Strategic Highway Safety Plan (SHSP) – North Dakota's Vision Zero Plan in cooperation with local, state, federal, tribal and private sector safety stakeholders. The SHSP is a data-driven, multi-year comprehensive plan that establishes statewide goals, objectives, and key emphasis areas and integrates the four Es of highway safety – engineering, education, enforcement and emergency medical services (EMS). The SHSP allows highway safety programs and partners in the state to work together to align goals, leverage resources and collectively address the state's safety challenges. The SHSP is a federal requirement to access federal grant funds for safety infrastructure improvements through the Highway Safety Improvement Program (HSIP) and behavioral safety programs through the Highway Safety Plan (HSP).
- Applied for and received annual funding through the National Highway Traffic Safety Administration (NHTSA) to develop and implement the Highway Safety Plan which includes behavioral strategies to address identified traffic safety issues including: lack of seat belt use, drug and alcohol impaired driving, distracted driving, young drivers, speed, motorcycle safety, pedestrian and bicycle safety, and other concerns.
- Worked with law enforcement statewide to collect and maintain traffic records data (primarily crash data) and to analyze the data to identify traffic safety problems in North Dakota to be addressed through the safety planning processes administered by the NDDOT and partners. This includes coordinating with other data sources including driver, vehicle, roadway, injury, court and other data sources.

The Safety Division also: assured broad stakeholder involvement in the Vision Zero initiative; conducted

public information and outreach; coordinated and built program capacity through partnerships; provided technical assistance and training to partners; planned and conducted traffic safety conferences and events; assured compliance with state and federal rules and regulations; and many other activities.



Vision Zero Kickoff

Key Accomplishments

- Launched the North Dakota Vision Zero initiative in January 2018 with lead partners and the Governor's Office.
- Convened six regional stakeholder meetings to identify priority crash problems and solutions to advance through the Vision Zero Plan. Strategies are being advanced through strategy implementation teams comprised of expert stakeholders.
- Developed a logo, Vision Zero. Zero Fatalities. Zero Excuses., to brand the Vision Zero initiative.
- Held the 2019 Vision Zero Partner Summit in Bismarck with over 150 partners attending - the largest Summit held to date. The Summit provides best practice information and networking opportunities.
- Completed the annual Crash Summary and data analysis for agency safety plans including the Highway Safety Plan, the Highway Safety Improvement Program, and the Strategic Highway Safety Plan (i.e., the Vision Zero Plan). This includes performance measure development and evaluation.

Office of Project Development



The Office of Project Development includes Bridge, Design, Environmental and Transportation Services & Materials and Research Divisions. The Office Director is Chad Orn. This office is administered by Ron Henke, Deputy Director of Engineering.

Bridge

Jon Ketterling, Engineer

Responsibilities and Activities

Bridge Division is comprised of three sections; Preliminary Engineering and Hydraulics, Design, and Structural Management. Primary responsibilities within each of these sections are as follows:

Preliminary Engineering & Hydraulics

- Complete environmental documents for structure rehabilitation and replacements
- Perform hydraulic analysis for bridges, box culverts, and pipe culverts
- Perform hydraulic analysis and design for urban storm sewer systems
- Perform hydrologic and hydraulic analysis for drainage complaints
- Provide recommendations for complex erosion control measures
- Issue drainage permits
- Update and maintain the Design Manual

Design

- Design and prepare plans for rehabilitation and replacement of structures including bridges, box culverts, pipe culverts, sign structures, high mast lighting, street light standards, and traffic signal foundations

- Review consultant designs and plans
- Review Shop Drawings
- Provide technical support to Districts, Construction Services, and consultants with construction, contract administration, and claim related issues
- Update and maintain the Design Manual

Structural Management

- Manage bridge inspection program on state and local system
- Monitor or perform routine, underwater, fracture critical, special and emergency bridge inspections on the state and local system
- Load rate bridges on state and local system and issue load restrictions as necessary
- Process overload permit requests and assist ND Highway Patrol with automated truck routing system
- Review requests for 129,000 lb load network
- Utilize the bridge management system (BrM) to assist in planning and development of priorities for the rehabilitation and replacement of structures on the state highway system
- Assist in the review and update of the Transportation Asset Management Plan (TAMP)
- Develop, update, and maintain the bridge preservation program
- Update, and maintain the Load Rating, Bridge Inspection, Bridge Management and Bridge Preservation Manuals



Construction of the US 83 Bypass in Minot

Key Accomplishments

Preliminary Engineering & Hydraulics Section

- Completed environmental documents for 17 stand-alone structural improvement projects
- Prepared hydraulic reports for 3 new structures
- Designed urban storm drainage systems for 3 projects
- Hydrologic and hydraulic analysis and culvert size recommendations were performed for approximately 25 rural highway projects on the state system
- Drainage investigations relating to approximately 16 drainage complaints or problem locations were completed
- Reviewed requests, and prepared 4 permits for drainage revisions on highway right of way
- Completed reviews for all rural and urban roadway and bridge hydrology and hydraulic activities associated with consultant-developed projects on the state highway system



Sheyenne Street Interchange

Design Section

- Designed and prepared plans for 5 new bridges and 2 deck replacements, 8 new box culverts, 5 box culvert extensions, and 74 additional projects consisting of bridge rail-retrofits, approach slabs, deck overlays, bridge painting, and general maintenance
- Provided consultant oversight and reviewed designs and plans on 7 projects
- Provided technical support to Districts, Consultants, and Construction Services during construction of multiple structures such as the replacement

of the Lewis & Clark Bridge south of Williston, Sheyenne Street Interchange in West Fargo, 83 Bypass in Minot, 83 Viaduct in Minot, and widening of the 32nd Ave Interchange structure in Fargo

Structural Management Section

- Worked with District Maintenance to significantly increase the amount of bridge maintenance and preservation work completed to extend the service life of North Dakota's bridges
- Managed the Bridge Inspection program to provide timely and thorough inspection of more than 4,930 state and local bridges to ensure the safety of the traveling public
- Provided bridge inspection refresher and snooper truck training for District bridge inspectors
- Participated in the SHRP2 R06A non-destructive evaluation research and implementation program for improved assessment of current and future bridge condition
- Provided load ratings for new and rehabilitated bridges, as well as bridges with changed conditions and issued load restrictions as necessary
- Worked with North Dakota Highway Patrol on the automated routing system and verified bridge capacity for large overloads
- Worked with AASHTOWare BrM and NDT to update and customize deterioration modeling and decision trees in our bridge management system to improve planning and programming capabilities
- Provided data and assisted with planning structure rehabilitation and replacement of structures for the Statewide Transportation Improvement Plan (STIP)
- Provided current and forecasted structure management program deterioration and condition information for the Transportation Asset Management Plan (TAMP)
- Performed emergency bridge inspections in response to damage or critical findings
- Provided information to consultants, counties, and cities regarding the condition of local bridges to assist in planning and programming structural improvements



Bridge inspection on Long X Bridge

Design

Kirk Hoff, Engineer

Responsibilities and Activities

The Design Division's primary responsibilities are to develop engineering and environmental documents, plans, and specifications for construction projects on the state and federal highway system; provide CADD support; provide research and innovation; provide project management; perform roadway safety audits; prepare right of way plats; coordinate and conduct aerial photographs and surveys; provide utility coordination on state highways; maintain design policies and Design Manual; and provide technical support for design consultants.

Key Accomplishments

US 2 and 297 Demers Ave Grand Forks

A four-block segment of Grand Forks DeMers Avenue was reconstructed to replace the aging deteriorated roadway. The project consists of constructing an urban three-lane section with wider sidewalks, improved storm sewer, signals and decorative lighting. The project development included coordination with downtown stakeholders, business owners, city staff and commissioners. The selected build alternative incorporates curb extension bump outs on side street intersections. The bump outs are an effective way to slow traffic and reduce the distance for pedestrians crossing the street. The project also includes many streetscape enhancements that were identified as part of the Downtown Vision Plan. The streetscaping includes brick paver sidewalks, park benches, trees, planters, bike racks, colored concrete crosswalks and colored curb ramps. The project will improve the walkability of the downtown district in coordination with goals identified in North Dakota's Main Street Initiative.

New Town ND 23B Truck Reliever Route

The New Town Northwest Truck Reliever Route started in 2014 with project development, and started construction in 2018. The project was a very complex project with extensive state and federal agency involvement. The project had several environmentally sensitive areas, which in the end routed the new alignment in the middle of the existing Edgewater Golf Course. This was mitigated by constructing 3 new holes, a practice green, a driving range, and a new clubhouse. The completion of this multi-year project is anticipated to be Spring of 2020.

Completion of ND 1804 Corridor between New Town and Williston

The 71-mile segment of ND 1804 from New Town to Williston is a 2-lane roadway that has undergone reconstruction in seven segments since 2014. During the summer of 2019 one of the remaining two segments was reconstructed, and the finishing touches of project development was completed for the last segment from Epping Road to Red Mike, which will be reconstructed starting in 2020.



New Town Northwest Truck Reliever Route and relocated golf course

VISION 2030

In January of 2018, NDDOT, the city of Bismarck, and Bismarck Public Schools launched a pilot program called Vision 2030. The program engaged education, city, and state government to work with community leaders along with prospective engineers on the future planning needs within Bismarck. Vision 2030 was developed to give students hands on Project Based Learning (PBL) that they can apply in their careers. During their 10 weeks of work with the program, students put together what their future community might look like in 2030.



Vision 2030 winning students and officials

In total, approximately 250 students from Bismarck's Horizon Middle School and 11 high school (various schools) students took part in the program. Bringing these students together to showcase what the NDDOT

and state government has to offer was a fantastic way to speak to future city and state leaders. This program is a prime example of bringing government and education together in a learning environment. The City, Students, Teachers, and parents all had positive feedback. The school system and teachers involved with this project also received several state and national awards for the success of this pilot project. Since this project, the school system has instituted several different projects using the same model.

LiDAR Expanded to Drones

A remote sensing method known as Light Detection and Ranging (LiDAR) was added to the NDDOT land surveying toolbox in 2016. Since then the NDDOT has expanded its use from a vehicle mounted and manned aircraft to small unmanned aircraft systems (sUAS) or otherwise referred to as drones. In 2018, a project along ND 3 from Harvey north to ND 19 became the first drone LiDAR project for the Department. The single rotor drone flew approximately 200 feet above the ground and collected LiDAR data along with images for the corridor. Lessons learned from this project will be applied to future drone LiDAR projects. The Department has begun utilizing drone LiDAR on two additional projects currently under project development.

Safety Corridors / District Wide HSIP

The NDDOT is implementing low cost safety improvements on roadways to reduce crashes and fatalities. Three safety corridors have been selected: US 85 from Watford City to Alexander, Minot on US 2/US 52 from Brooks Junction to Velva, and US 83 from Bismarck to Washburn.

A number of safety features will be added to each corridor including:

- New wider edge lines and center lines with larger glass beads for better visibility in all weather conditions.
- Pavement marking messages (such as "DO NOT PASS" OR "EXIT ONLY") in driving lanes at selected locations to draw further attention to the motorists.
- Painted tick marks on the edge lines at varying spacings in speed reduction areas to encourage motorists to slow down.
- Larger roadside delineators to delineate edge of roadway.
- Shoulder turn lanes in areas with 9 foot to 10 foot shoulders.

- Electronic "YOUR SPEED" radar signs to alert drivers to their speed in speed reduction areas.

The entrance to each corridor will have "Safety Corridor" signage along with an electronic sign to display safety messages. These corridors will be in place for 3 years. They will be reviewed to determine their effectiveness at reducing crashes.

High Tension Guardrail

High tension cable guardrail was installed for the first time in North Dakota. In 2019, 6.1 miles of guardrail was installed in the median on I-29 in Fargo, 4.8 miles on I-29 in Grand Forks and 4.9 miles on I-94 in Bismarck to reduce cross median crashes. The high tension cable guardrail system is in compliance with Manual for Assessing Safety Hardware (MASH), the latest crash testing standard. The locations chosen provided higher Average Daily Traffic (ADT) and higher probability of vehicles leaving one roadway, crossing the median and entering the other roadway into opposite direction of traffic. High tension cable guardrail has been proven to reduce fatal and major injury crashes in other states.

Smart Work Zone

The Smart Work Zone was utilized on an interstate project in Bismarck-Mandan area. The project consisted of concrete pavement repairs, mill and hot mix asphalt overlay, bridge deck overlay and replacement, structure repair and slurry seal. A Queue Detection System was placed to measure vehicle speeds and then display messages on permanent and portable changeable message signs. Doppler radar sensors detected vehicle speed and traffic volumes, communicated to an automated system manager, which in turn communicated the appropriate message to the changeable message signs. Based on vehicular speed, messages such as "Slow Traffic Ahead" or "Stopped Traffic Ahead" could be displayed informing drivers of expected traffic conditions well in advance of the actual traffic queue. There were several changeable messages signs in-place to adequately warn the traffic. The Queue Detection System helped to control speeds entering and reduce rear-end crashes.

Solar Power Lighting

A destination light is a single light placed to inform the traveling public that they are approaching an intersection. Solar powered destination lights were installed at locations where electricity was not readily

Environmental & Transportation Services

Mark Gaydos, Engineer

available in rural areas. Access through computer or a cell phone app can be used to remotely evaluate how the solar powered system is performing, notify the NDDOT if the system has a failure, or make any necessary changes to the system settings.

Context Capture

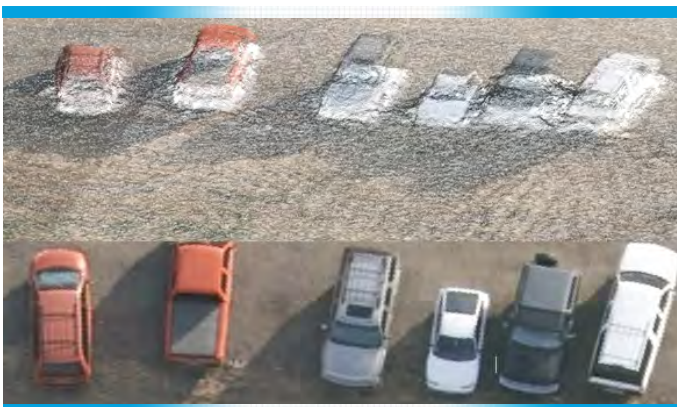
The software Context Capture was used to assist with surveys to ensure that we could achieve compliance with the Americans with Disability Act in the construction of pedestrian facilities. Simple photographs from hand held cameras and smart phones were processed into a "Reality Mesh." Reality Meshes are a 3-D digital surfaces that show the project sight in extremely fine detail with minimal effort. The data can provide an engineer with every tiny detail of a site and requires much less time for the surveyors to collect.



Left: 3D photograph of curb ramp. Middle: Zoomed in image of truncated dome and curb. Right: Final product Reality Mesh

Point Clouds from Imagery

Imagery captured with the NDDOT's DMC aerial camera can be converted to point clouds similar to LiDAR using ISAE-E software. Every pixel of the 100-megabit images are given a XYZ coordinate value as well as an RGB value. The density of the point cloud rivals that of the best high-density LiDAR scanners. Point cloud data is then processed using the latest automated LiDAR extraction software packages like TopoDOT. A surface can be created for the engineers to use requiring $\frac{1}{4}$ the time as traditional stereo compilation techniques.



Top: Colorized point cloud derived from digital imagery. Bottom: Aerial image.

Responsibilities and Activities

The Environmental and Transportation Services Division provides support and allied services necessary to carry out the project development activities within the department. Activities are coordinated with roadway design, bridge design and material divisions to assure that projects are developed in a timely and cost effective manner while maintaining appropriate sensitivity to environmental and cultural resource concerns and assuring that affected property owners are treated fairly in conformance with applicable state and federal laws and all applicable rules and regulations. The division is comprised of five major functions, which include: Environmental Services, Cultural Resource Services, Right of Way Services, Consultant Administration Services and Technical Services.

Environmental Services:

Provide guidance, procedures, and project documentation to assure proposed projects comply with the National Environmental Policy Act, and other related federal and state laws and regulations. They perform wetlands services such as delineations and development and monitoring of mitigation sites and banks. Other responsibilities include studies and coordination with threatened and endangered species, migratory birds, wildlife, biological assessments, noise, stormwater and material clearances. They prepare and obtain necessary project permitting associated with federal and state requirements and environmental commitments and mitigation are tracked to ensure compliance for impacts related to highway construction projects.

Cultural Resource Services:

Provides guidance, procedures, and project documentation to assure proposed projects comply with the National Historic Preservation Act and other related federal and state laws and regulations. Services performed are archaeological services, inventories, mitigation, monitoring of historical sites and monitoring of construction projects to ensure compliance. Other cultural services provided are tribal consultation, agency coordination, and completing the necessary project permitting associated with federal and state requirements.

Right of Way Services:

The Right of Way section provides services related to the acquisition and management of all real properties necessary for highway purposes including highway right of way, rest and recreation areas, and tracts of land necessary for the restoration, preservation, and enhancement of scenic beauty adjacent to the state highway system.



Flower and plants adorn the Carrington Roundabout

Technical Services:

The Technical Services Section develops the department's Standard Specifications for Road and Bridge Construction, Supplement Specifications, Special Provisions, Value Engineering for construction projects and other associated engineering studies. Technical Services is the department's liaison with tribal governments on Tribal Employment Rights Ordinance (TERO) issues. The section develops and negotiates agreements with TERO offices for department projects on reservations.

Consultant Administration Services:

The Consultant Administration Section performs solicitations for consultant services, including preliminary engineering, construction engineering and architectural services. The section prepares request for proposals, conducts interviews and selections, and negotiates contracts (scope of work and fees) and supplemental agreements with the consultants. In addition, the section processes payments for preconstruction engineering, maintains current status of preliminary engineering contracts, maintains consultant expenditures.



Tribal Consultant meeting

Key Accomplishments:

Held multiple Tribal Consultation Committee meetings. The latest meeting included 30 tribal partners from 14 tribes, as well as federal representatives from FHWA, NPS, FAA, BLM, USFS, USACE, and also the ND National Guard. The Committee reviews various projects from STIP to construction, as well as following the tribal leads in their interests.

Completed approximately 400 Special Provisions. Approximately 20 of those Special Provisions have been Tribal Employment Right Ordinance. Developed other specifications such as Solar Destination Lighting, Gravel Surfacing, and High-Tension Cable Guardrail.

Preliminary valuation reviews and preliminary negotiation reviews were implemented. Preliminary valuation review meetings help ensure the most efficient form of valuations are completed when acquiring right of way. Preliminary negotiation review meetings are a kick-off meeting with the consultant to trouble shoot upcoming issues and set expectations for project negotiations.

The Rural Approach Modification Agreement (RAMA) was created to streamline rural approach reconstruction coordination with landowners by eliminating unnecessary forms and plats. This approach gives landowners the option to have the NDDOT reconstruct their approach at no charge.

Curb Ramp Sidewalk Quitclaim Deed/Construction Agreement/Easement were created to streamline ADA sidewalk ramp installations by eliminating unnecessary forms and plats.

The ROW Manual was updated to comply with new FHWA standards and the Stewardship and Oversight Agreement.

The NDDOT ETS Division in collaboration with

FHWA and the US Fish and Wildlife Service developed a programmatic biological assessment (PBA), which is a comprehensive document that analyzes the effects of the NDDOT Transportation Program on ESA species in North Dakota. The PBA allows the NDDOT to complete ESA consultations on a much shorter timeline; creating significant reductions in both review and approval times as well as consultant costs. The NDDOT has covered 16 projects under the PBA since it has been implemented.



Certified Pollinator Garden at a North Dakota rest area

A submittal to the NDDOT Innovation Jam (I-Jam) for promoting pollinator habitat at rest areas was approved in December of 2018. The Beach Rest Area would be the first location to showcase a voluntary pollinator planting as a partner of the North Dakota Game and Fish Department (NDGF) North Dakota Monarch Butterfly and Native Pollinator Strategy. The objective is to plant and develop pollinator gardens at rest areas that contain native grasses and forbs to provide larval and nectar source habitat for insects as well as forage and nesting habitat for migratory birds. Pollinator plantings are also planned to be done at the Hebron Rest Area in conjunction with the highway project.

Training and certification are required for all NDDOT projects that require a NPDES Construction General Permit. The certification is required for the project engineer, prime contractor's erosion control supervisor and any erosion control subcontractor. The NDDOT has certified about 700 people.

Develop wetland banks and on-site mitigation credits for transportation projects that have unavoidable impacts to wetlands and other aquatic habitats.

The Technical Services Section participates in the Transportation Innovations Program. The program identifies and implements innovative ideas in the transportation projects, processes and products. Once ideas are approved, Technical Services coordinates implementation and reporting of results.

Materials and Research

Matt Linneman, Engineer

Responsibilities and Activities

Materials & Research Division assures the quality, economy, and reliability of highways and structures through the performance and innovative use of materials. This is accomplished by:

- Providing materials quality assurance programs and manuals.
- Testing highway construction materials.
- Training and certifying materials testing personnel.
- Collaborating on the development of highway improvement projects.
- Providing support for highway construction projects and maintenance activities.
- Collecting and analyzing highway construction materials data.
- Conducting, communicating, and implementing research.

Key Accomplishments:

Testing Laboratory

Maintained national AASHTO accreditation of the department's materials testing laboratory. Provided testing of highway materials such as aggregate, cement, concrete, soils, paint, and glass beads.



Employee using a mobile lab to test aggregate

Served as a testing resource across the state during all phases of highway construction. Collaborating on incorporating National Transportation Product Evaluation Program test data in the acceptance procedures for materials. Provided inspections of precast concrete plants and their products such as concrete beams and culverts.

Bituminous Materials

Evaluated and provided expertise on asphalt mix designs during highway project design and construction. Developed specifications for centerline joint density and performance graded asphalt. Provided testing of asphalt binders, emulsions, and cutbacks used in highway construction. Provided guidance and oversight of the asphalt Quality Control/Quality Assurance program, inspected and evaluated QC and QA labs across the state, and coordinated with the FHWA for their evaluation of this program.

Gravel Prospecting

Located, optioned, and managed gravel material deposits totaling 7,000,000 tons. This included the drilling, testing, and preparation of pit plats and boring logs to be shown on highway construction projects. Studied and confirmed a 9:1 benefit to cost ratio by creating a competitive bid environment for aggregate materials. Maintained an aggregate information database for pits used on current projects from across the state and compiled annual usage reports for NDDOT and Tax Department.



Ground anchors used to stabilize roadbed on I-94 through Valley City

Geotechnical

Instrumental in the stabilization of several landslides affecting NDDOT infrastructure. One such project consisted of stabilizing a section of ND 73 with the use of 151 – 5 ft diameter drilled shafts along with a

1000-ft long by 35-ft deep ground water interceptor trench. Another project involved the use of 285 – 9-ft by 9-ft blocks with ground anchors to stabilize a section of I-94 that runs through Valley City. Began implementing cloud based slope stability monitoring devices deployed in three locations. The devices provide real-time information accessed remotely to monitor ground movement.

Research and Pavement Design

Issued pavement design recommendations for upcoming roadway projects. Supplied statewide falling weight deflectometer data for use in spring load restrictions. Provided high-speed profiling data to administer ride quality specifications for highway construction acceptance. Became a member of the National Road Research Alliance. Championed a department effort to incorporate intelligent compaction and paver mounted thermal profiling techniques for asphalt paving projects. Identified a need and obtained culvert inspection equipment to inspect and optimize culvert rehabilitation or replacement strategies.

Technical Certification Program

Provided certification training for individuals working in highway construction for sampling and testing of aggregate, asphalt mixtures, soils and concrete, in addition to asphalt inspection and asphalt mix design. Participants included employees from NDDOT, contractors, consultants, cities, and counties. Over the last two seasons 28 classes or test-out exams were offered to 471 new students and 245 five-year certification renewals, with at least 1,000 participants receiving one or more certifications. The total program has approximately 2,400 current certified participants.

Office of Operations

The I-94 west bound rest area near Medina was reopened to the public in 2018



The Office of Operations includes the Civil Rights, Construction Services and Maintenance Divisions. The Office Director is Wayde Swenson. This office is administrated by Ron Henke, Deputy Director of Engineering.

Civil Rights

Ramona Bernard, Director

Responsibilities and Activities

The Civil Rights Division manages eight federally mandated (USDOT) programs:

- Disadvantaged Business Enterprise (DBE)
- On-the-Job Training (OJT)
- DBE and OJT Supportive Services (DBE/SS and OJT/SS)
- DBE Business Development Program (BDP)
- Contractor Compliance Reviews
- Labor Compliance
- Title VI/Nondiscrimination and ADA Program
- Internal EEO/AAR/Title VII
- Printing and Mail Services

Key Accomplishments:

Title VI/Nondiscrimination and ADA Program:

2017-2018

- USDOT, FHWA, recognized NDDOT's Title VI/ Nondiscrimination and ADA Program with two best practices for our Public Participation Survey used to gather demographic data and the New Title VI Specialists Training Program.

- The 2018 Construction Season was the first where all projects moved to LCPTracker, a cloud-based software program, with over 7,000 payrolls filed.

2018-2019

- By 2019, the LCPTracker Program had expanded to 426 contractors and 250 engineers and support staff. To date, over 20,000 payrolls have been filed in the NDDOT LCPTracker system, with a huge savings of dollars and project staff hours.
- The New Title VI Specialists Training Program and New Employees Title VI Training were developed into online training programs in ELM.
- A Title VI/Nondiscrimination and ADA Program brochure was created and is disseminated to the public at Public Hearings.
- Between July 1, 2018 to June 30, 2019 we certified 24 DBEs.
- In 2018 and 2019 we met our OJT Trainee Completion Goals of 15 trainees to finish their skilled craft approved programs.
- Began creating a new BOSS (Bid Opening Submission System) program with ITD for contractors to electronically submit required DBE Special Provision documents for NDDOT Bid Openings.
- The Labor Compliance interview process went paperless in 2019, with the addition of the LCP-tracker Onsite module. Use of the system allowed the forms 1391/1392 reporting process to become

virtually automatic, removing a yearly paperwork burden from the contracting community. The report function in LCPTracker has also simplified the review of federal-aid contractors, greatly reducing time and efforts of both NDDOT staff and the contracting community staff.

- The National Summer Transportation Institute (NSTI) was funded at nearly twice the level as in past years (from a grant by FHWA) and the Department had multiple applications to choose from. The 2020 NSTI will be held at University of North Dakota (UND).
- In January of 2019 the Printing/Mail Services section was moved under the Civil Rights Division



Moving ahead with a road projects in the Grand Forks District

Construction Services

Phil Murdoff, Engineer

Responsibilities and Activities

The Construction Services Division's responsibilities are consolidated into three primary functional areas, along with key activities.

1. Pre-Bid Services

- Prequalify bidders
- Perform plan reviews
- Establish project completion dates
- Advertise projects
- Respond to prebid questions and issue addenda

2. Bid Openings and Contracts

- Administer construction project bid openings
- Prepare bid reports and perform bid reviews
- Administer contract award and contract execution process

3. Construction Contract Administration and Records Management

- Manage the Construction Automated Records System (CARS) program that is utilized to administer construction projects
- Maintain the Construction Records Manual
- Oversee and implement eConstruction initiatives
- Process payments to contractors, consultants, utilities, railroads, etc...
- Process change orders, time extension requests, and equipment rental rates
- Administer dispute resolutions including contractor claims and demands for arbitration
- Coordinate post construction reviews
- Perform project engineering duties during the construction season (two employees)
- Check final project records and manage construction record files

This list highlights many of the division's responsibilities and duties. However, the list is not all inclusive. There are numerous other activities the division performs and is responsible for.



Construction on the Modified Single Point Intersection on the Sheyenne Interstate 94 Intersection Project in West Fargo

Key Accomplishments:

The Construction Automated Records System (or CARS) Updates

CARS is the NDDOT's electronic construction records system. It is a web-based program used by the Department and local public agencies to administer highway construction projects. The following upgrades were made to the CARS program during the biennium.

- Project Diary and Inspection Diaries – This project updated the Project Diary and Inspection Diary modules in CARS. The diary is used to document work progress, site conditions, labor and equipment usage, and the contractor’s ability (or inability) to perform their work. The updates increased efficiency by eliminating double-entry, adding time-saving navigation features, and simplifying data entry. The changes also made the diaries more usable by field staff who use an iPad.
- Materials Dropbox – This module enables CARS users to upload completed materials tests into CARS. It also contains a Viewer tab which organizes and displays the results. Previously, these tests were printed onto paper, placed in files, and delivered in boxes to Construction Services Division. The Materials Dropbox offers project personnel, such as Project Engineers and Materials Coordinators, immediate access to testing results once the documents are uploaded into the Materials Dropbox.

B2GNow – Online Contractor Prequalification

The Department is currently transitioning the annual contractor prequalification and subcontractor registration processes from paper to an online process. Since the spring of 2018, both the paper and online process have been available to contractors. Currently, over half of the approximate 300 contractors that prequalify to bid on NDDOT highway contracts each year are using the online process. The Department plans to discontinue the paper process in July 2020.



Presenter at combined Construction/Project Development Conference

First combined Construction/Project Development Conference

The Construction Services Division helped coordinate the first combined Construction and Project

Development Conference. The conference provides information and training on a variety of highway design and construction topics. It is attended by Department, city, county, and consultant engineering staff involved in highway projects. Approximately 450 people attended the two-day conference.

Contractor payments on highway construction projects

Total contract payments for highway construction during the 2017-2019 biennium was \$755 million.



Paving on a slide repair project on I-94

Maintenance

Brad Darr, Engineer

Responsibilities and Activities

NDDOT Property Management, Facilities, Safety, emergency responses; Emergency Relief for State highways, budgeting for maintenance operations, capital improvements, equipment, pavement marking, maintenance specifications; the pavement preservation program; Roadway Weather Information System (RWIS); static traffic control devices; Intelligent Transportation Systems (ITS); Billboard program/Junkyard Program and load restriction and road condition reports.



Clearing snow with a rotor plow after a big storm

Key Accomplishments:

- Completed construction of the new Cando Section Building.
- Williston and Williams County study completed resulting in a new equipment building being built in the Williston District.
- Award of Contract completed for new Driver's License building in Fargo.
- Began construction to complete brine making buildings at District Headquarters.
- Implemented 129,000 LB Large Truck Network Committee. Committee selected. Committee has approved 3 segments to add to the 129,000 LB Highway Network.
- Completed 2 land sales: an old materials pit in Valley City, and an old rest area property near Fessenden.
- Purchased 8 new Motor Graders to enhance snow and ice control.



Highway Patrol gives a safety message to the media during a Work Zone Safety News Conference in Grand Forks that was put on by NDDOT and Partners



District employees learn a new maintenance process of joint repair on bridge on ND Highway 40 in Tioga



Maintenance's new V Plow vehicle that will be used on clearing large compacted snow drifts especially under underpasses

Office of Transportation Programs



Velva Park Bridge

The Office of Transportation Programs includes the Local Government, Planning/Asset Management and Programming Divisions. The Office Director is Steve Salwei. This office is administrated by Ron Henke, Deputy Director of Engineering.

Local Government

Paul Benning, Engineer

Responsibilities and Activities

Local Government (LG) Division works primarily with Local Public Agencies (LPA's) such as the 12 largest cities and the 53 counties in the state, other smaller LPA's, and also Transit Providers, and the 3 Metropolitan Planning Organizations (MPO's). LG assists and works with these entities in their project development (environmental clearance, plans, bid openings), planning activities, and programming of federal and state funds allocated to them regarding transportation related activities and providing funds for transit services.



Transit driver helping disabled person off of transit bus

The Division also works as a liaison between Federal Highway Administration (FHWA), Federal Transit Administration (FTA), other outside agencies, LPA officials, and NDDOT divisions and districts.

Provided below are the program areas LG is responsible for:

- Interstate (Urban areas)
- Urban Highways & Roads (Regional System and LPA owned federal aid roads)
- Urban Grant Program (UGP)
- County Roads (LPA owned federal aid routes)
- Bridges (LPA owned $\geq 20'$)
- Historic Bridge's
- Federal Lands Access Program (FLAP)
- Safety (LPA owned roadways)
- Transportation Alternatives
- ND Small Town Revitalization Endeavor for Enhancing Transportation (NDSTREET)
- Special Road Fund (SRF)
- Small Rural Economic Development (SRED)
- Emergency Relief (ER) – Statewide on state owned roadways and LPA federal aid routes
- MPO Coordination and Planning activities
- LPA Long Range Transportation Planning

- Transit
- Title VI, Sub-recipient monitoring and Audits (LPA's, MPO's, and Transit Providers)

Key Accomplishments

- A \$3.77 million discretionary grant was received to remodel a transit facility and to purchase new buses for rural and small urban transit agencies.
- 2 historic bridges were rehabilitated, one in Cavalier County and one in Velva. The Brick Mine Bridge in Cavalier County spans the Pembina River in the Pembina Gorge area west of Walhalla. The Velva Park Bridge spans an oxbow from the Mouse River which allows access to the city park.



Brick Mine Bridge in Cavalier County

- Partnered with LTAP/UGPTI to put on Bridge 101 classes across the state for LPA's.
- Awarded 7 projects under the NDSTREET program to assist smaller communities with upgrading their multi-modal facilities along the state highway.
- The \$25 million-dollar US 83 Broadway Bridge Replacement Project in the city of Minot was administered by the Urban Programs Section. This two-year construction project consisted of replacing the bridge over the Mouse River, BNSF and CP Rail in the heart of Minot. The bridge includes a wider pedestrian walkway, railing, and lighting to fit into Minot's downtown revitalization.
- Developed and implemented the new Urban Grant Program for multi-modal transportation infrastructure improvements within the core business districts of urban cities. Began construction on 4 pilot projects in Devils Lake, Fargo, and Valley City (2). Awarded grants for 10 projects to be designed and constructed over the next two

years in Bismarck (2), Dickinson, Grand Forks, Jamestown, Mandan (2), Valley City, West Fargo, and Williston.



US 83 Broadway Bridge in Minot

Planning/Asset Management

Scott Zainhofsky, Engineer

Responsibilities and Activities

Vision:

Our team helps guide the State's future multi-modal transportation system and services, by advocating for data-supported decision-making processes that are service, customer, and goal-oriented.

Division Goal is to Enhance:

1. High-quality and integrated data available to everyone;
2. Understanding transportation performance in relation to quality of life;
3. Transparent decision-making processes that increase effectiveness and add value;
4. One team, within our Division and across the NDDOT; and
5. Insight into state, national, and international trends and future scenarios.

The Division is responsible for planning and management programs, including (among others):

1. Statewide transportation planning and special studies, such as:
 - a. the long-range strategic transportation plan (currently TransAction III),

- b. developing and leading implementation of the statewide active and public transportation plan (ND Moves) with associated rural bike network classifications,
 - c. maintaining the Highway Performance Classification System,
 - d. maintaining the strategic Freight Network classifications and definitions,
 - e. railroad planning and programs, such as: statewide rail plan; rail-highway crossing signals, closures, and surfacing improvements; and rail loan program;
2. Traffic, mapping/GIS, and roadway data collection, analysis, forecasting, and reporting;
 3. Agency-wide asset management, including modeling:
 - a. the current and predicted condition of the state highway system;
 - b. highway system funding needs;
 - c. level of service that can be provided based on budgetary limitations; and
 - d. effects of budgetary tradeoffs among numerous department investment options;
 4. Pavement performance evaluation and condition survey;
 5. Program-level performance management (i.e. performance measure development, target setting, outcome reporting, etc. for major agency-level program areas); and
 6. Policy and legislation evaluation and research.

Key Accomplishments:

1. In furtherance of the Division's goal to enhance high-quality and integrated data available to everyone, our Pavement Management Section developed and continues to implement a Data Quality Management Plan that was approved by FHWA. Additionally, a cross-functional team, led by our Roadway Information Section, incorporated federally-required Highway Performance Monitoring System (HPMS) data into the GIS tool Roads and Highways, created a county road layer (eliminating the need to maintain two HPMS versions), and updated many data features (such as corporate and fire district boundaries, among others). This successful cross-functional team also supported the Division's goal of enhancing the "one team" concept.
2. In support of data-supported decision-making

processes, our Traffic Data Section monitored and maintained 81 automatic traffic recorder (ATR – adding 7 new sites) and 16 weigh-in-motion (WIM) sites, in addition to collecting portable counts for more than two thirds of the state. Additionally, our Pavement Management Section procured and began self-certifying a new roadway data-collection vehicle that utilizes state-of-the-art automated laser, optical, and motion sensors to rate pavement condition on all state highways, annually. Concurrently, the Section updated the pavement distress scoring methodology to more precisely reflect the pavement condition and updated the pavement management computer model decision trees to better align project recommendations with strategic goals. Finally, in this goal area, the Division submitted and received federal approval of the Transportation Asset Management Plan (TAMP), allowing the State of North Dakota to receive and utilize its largest category of federal transportation funding (National Highway Performance Program – NHPP).



Fargo District installed fiber optic cable under and alongside the roadway for traffic counting and monitoring speeds

3. Advancing the goals to enhance "understanding... performance in relation to quality of life" and "insight into... trends and future scenarios" our Planning/Rail Section led the effort, in cooperation with multiple state agencies and staff throughout NDDOT, to develop the State's first-ever strategic active and public transportation plan (ND Moves). This plan, also, included the highly innovative public-input concept of deploying pop-up demonstrations, in cooperation with nine (9) municipalities across North Dakota. These pop-up demonstrations allowed the public to see, walk, bike, and drive full-scale, on-site, temporary models of new-concept transportation

features to provide feedback on the types of things they would like to see incorporated into future projects, but at a fraction of the cost and inconvenience of a permanent construction project. Formal implementation of this plan was also begun with this Section facilitating the effort. Additionally, supporting these Division goals, the Section facilitated the startup of a Freight Advisory Committee, providing our freight-dependent customers (such as the oil and gas industry, agriculture, manufacturers, and parcel shipping companies, among others) with the recurring opportunity to advise NDDOT on issues of significant importance to the State's overall economic wellbeing.



ND Moves project in Rugby

Programming

Jane Berger, Engineer

Responsibilities and Activities

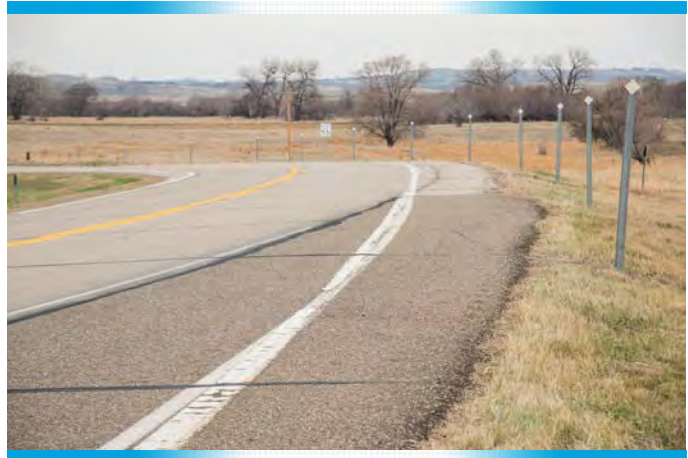
The Programming Division is responsible for coordinating the development of the Statewide Transportation Improvement Program (STIP), managing federal funds, compiling information for bidder's packages, implementing the department's project scoping process, managing the Highway Safety Improvement Program (HSIP) and completing traffic operations activities. These responsibilities include a system wide perspective as well as project level involvement from early project inception through project completion.

Key Accomplishments:

During the 2017-2019 biennium the Programming Division continued to make progress in areas such as safety, project fund management, and programming processes.

Vision Zero Plan Update

Participated in an update of the State Strategic Highway Safety Plan known as the Vision Zero Plan. Continued to implement engineering solutions and collaborations to address the plan emphasis areas.



Delineators on a curve on ND 1804 northbound

Safety Corridors

Development of Safety Corridor projects on three highways within the state. Safety Corridors are a Vision Zero solution in which Engineering, Enforcement, Emergency Response and Education work together to help reach Vision Zero's goal.

Roadway Surface Friction Testing

Worked with Materials and Research on obtaining roadway friction information to be used to improve roadway safety and materials decisions. Assisted in obtaining the use of the Side-Force Coefficient Road Inventory Machine (SCRIM) to collect and analyze the skid resistance of select state highway corridors. There are only two of these types of data collection machines in use in the United States.

District Overview



Dickinson District employees installing a guardrail post on the Gladstone Overpass

Included here are all eight district offices in North Dakota's transportation system. The districts are administered by Ron Henke, Deputy Director for Engineering.

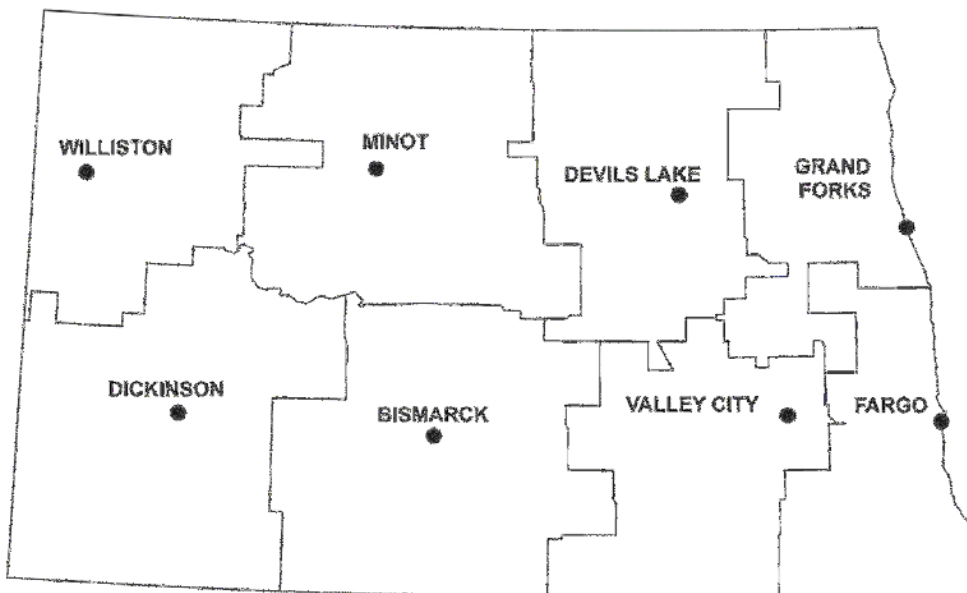
Responsibilities and Activities

North Dakota's transportation system is divided among eight regional districts. The district engineer is responsible for all the construction and maintenance activities in their designated region. District construction activities include monitoring the conditions of bridges and roadways to determine which roadways should receive the highest priority for reconstruction based on need and available funding. The district then works with the appropriate divisions in the Central Office to establish short

and long-term construction programming of the projects. Planning and design of individual projects is a joint effort with the appropriate divisions within the department. The contract administration of the projects is then handled by the district construction staff.

Maintenance activities consist of roadway and non-roadway maintenance. Included in the roadway activities are crack sealing, blade patching, seal coats and snow and ice control activities. Non-roadway maintenance activities include the issuing of utility permits, drive permits, the Adopt-A-Highway Program, the Interstate Haying Program, the Noxious Weed Program, the Billboard Program, and dealing with all other right of way issues.

The districts also have a partnership with cities and counties to work together on transportation issues. Included in this process is the bridge inspection program in which district personnel inspect the bridges for these entities.



Bismarck District

Larry Gangl, Engineer

Responsibilities and Activities

Oversee the construction and maintenance on 2600 lanes miles of district roadways. Our mechanic shop administers the state fleet operations in the Bismarck/Mandan area along with maintaining our fleet of 61 snow plow trucks and numerous tractors, loaders and various pieces of highway maintenance related equipment.

Key Accomplishments:

- Completed a concrete testing site for Drivers License Division in our district lot
- Updated security systems at our 4 rest areas
- Completed construction of a new fuel facility at the district building



Large crane used to install new fuel tanks at the Bismarck District Shop

- Completed 2 large construction projects on I-94 resulting in major improvements to the interstate corridor in Bismarck/Mandan



Asphalt paving of Interstate 94 through Bismarck District

- Completed major improvements in our shop operations and renovated the shop for better overall operation
- Completed the Bismarck section building which houses 22 staff and 22 snow plow trucks.

Devils Lake District

Wyatt Hanson, Engineer

Responsibilities and Activities

The Devils Lake District is located in the north central part of the state and has 2,304 lane-miles on the state highway system. The district has 69 employees who handle duties related to construction, plan development, roadway maintenance, sign maintenance, shop mechanics and welding, monitoring other transportation related programs throughout the district, and administration of the district.

Key Accomplishments:

Construction

- Improved safety and load carrying capacity to multiple areas on ND 17 by doing a grade raise and widening in areas that were being threatened by water.
- Added shoulders and increased the load carrying capacity on ND 3 south of Rugby, and ND 30 north of Maddock.



Grade raise on ND 17 north of Rugby

- Added temporary turnlanes to 2 locations east of Devils Lake on US 2 while a corridor safety study was being completed.
- Completed a full depth reclamation, widening, and curve realignment on US 281 within the Spirit Lake Nation (SLN). This curve was identified as a

major priority by the SLN in the Tribal Transportation Safety Management Plan done in 2016.

- Completed a safety project installing destination lighting, signs, and pavement markings at prominent rural intersections throughout the district, as well as adding additional streetlights through the Fort Totten community.
- Finished work to replace the BNSF bridge over ND 20 within the City of Devils Lake.



BNSF bridge in Devils Lake over ND 20

- The Biennium totals of Preventive Maintenance Overlay projects and Seal Coats within the district were 137 miles and 183 miles.
- Additionally, our construction personnel also lent a helping hand to neighboring districts as the need and availability arose.

Maintenance

During the 2017-2019 biennium, Devils Lake district maintenance forces performed a wide variety of activities to improve/extend the life of roadways and maintain ride quality, including:

- Continued with the preservation of our bridges by epoxying of cracks on all decks.
- Improved the ride on 60 miles of depressed, transverse cracks with the use of the Mini-mac machine.
- Two Dura-patchers were used throughout the district to fix potholes and areas of distressed asphalt.
- Crack sealing district roadways.
- Patch blow-outs.
- Shoulder repair was done on US 2 East Bound from Churchs Ferry to Devils Lake and ND 66 west of Cando.

Addressed many drainage issues within the right of ways of the highways where several approach pipes were replaced as well as repairs made to centerline pipe.

Continue maintenance of signs, trucks, equipment, buildings and yards.

Cross-trained transportation technicians assisted in construction included paving, striping, grading projects and administration of seal coat projects.

Our administrative people together with the Shop personnel manage and maintain the state fleet pool of vehicles located at the district for use by other agencies in the area.

The winters during this biennium presented many challenges including blizzards as well as blowing snow events which forced closures in several locations; crews and mechanics put in many long hours dealing with snow and ice issues, giving up weekends and holidays with family to keep the highways safe for this the state's residents as well as visitors.

Dickinson District

Rob Rayhorn, Engineer

Responsibilities and Activities

The Dickinson District is responsible for 2,005 lane miles of roadways which includes 400 lane miles of interstate, 3 roundabouts and approximately 300 bridges and box culverts. The employees in the district handle duties related to roadway construction and maintenance, sign and guardrail maintenance, shop mechanics, and administration.

The construction activities include monitoring the conditions of bridges and roadways and prioritizing projects based on needs and funding. Coordination is done with numerous divisions during project development. The contract administration of the projects is handled by the district construction staff.

Maintenance activities consist of roadway related maintenance. Examples include crack sealing, pavement patching and sealing, bridge and culvert preventative maintenance and repairs, sign and guardrail maintenance, and snow and ice control activities. The shop manages repairs for the district trucks and equipment.

The district administration issues permits such as drive or utility permits, manages programs such as Adopt-a-Highway, interstate hay harvesting, noxious weed, and billboards, and deals with all other right of way issues.

The district works closely with the city, county and tribal authorities on transportation related issues.

Key Accomplishments:

- Built five slide in truck tanks used to apply salt brine during snow and ice control operations. Saved money by building inhouse with locally purchased materials.
- Supplied five instructors for the NDDOT maintenance training academy and provided bridge preventative maintenance training to neighboring districts.
- Placed seals on 220 miles of highway and 90 miles of interstate.
- Completed milling, underseal, and paving on 45 miles of ND 16 from Beach north.



Mill and overlay project on ND 8 south of Marshall

- Completed a 30-mile paving project on ND 8 north of Richardton.
- Began a 13-mile long interstate reconstruction project near Hebron.



I-94 reconstruction project near Hebron

Fargo District

Bob Walton, Engineer

Responsibilities and Activities

The Fargo District is located in southeastern North Dakota. It is responsible for 1,827 lane-miles of roadway. The District had 81 full-time employees assigned in four sections: highway engineering, roadway maintenance, vehicle maintenance, and administration.

Key Accomplishments:

Construction

In 2017, Construction staff completed several projects - The Fargo I-29/32nd Ave. S. project had the interchange bridge widened to accommodate more traffic lanes and added a southbound interstate off-ramp loop. A Stone Matrix Asphalt overlay project was done on the I-29 southbound lanes from the South Dakota border to mile point 11.00. This project matched the work completed the previous year in the southbound lanes. This pavement overlay consisted of a fractured granite rock and high-grade asphalt mix reinforced with cellulose fibers. The District also upgraded all the hi-mast lights from sodium vapor to LED bulbs. Several hi-mast light poles were also replaced due to age and metal fatigue.

In the second year of the biennium, construction started late due to cool temperatures and snow in April-May. The bulk of the large projects were in or near the metropolitan area. The two-year reconstruction of the West Fargo - Sheyenne St./I-94 modified single-point interchange started. This project will greatly enhance the road network's ability to handle the ever-increasing traffic volumes as development grows south of West Fargo and Fargo. Also, the Fargo - University Drive underpass and ramps were reconstructed so it is safer for pedestrian and bike crossings of the ramps, and pavement condition improved. Fargo - 10th Street (US 81) was reconstructed between 4th and 12th Ave. North.



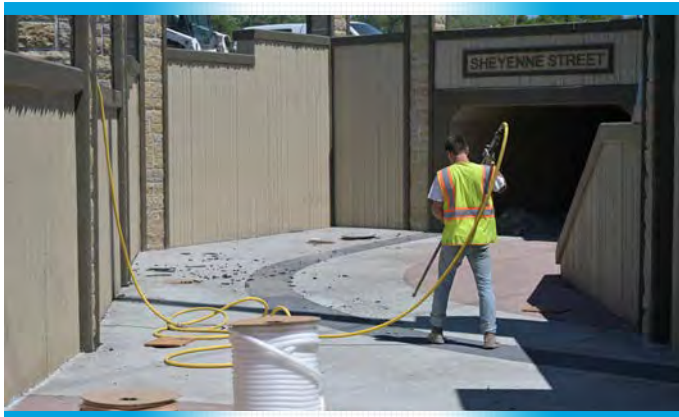
Construction work on 10th Street in Fargo

The District completed an 11-mile interstate reconstruction project south of Fargo, an I-29 interchange lighting project in Hillsboro, and three radial-T projects to correct sharp angles where local roads intersect state highways.

The winter of 2018-19 started early. October and November were much colder than average. The early cold snap affected construction project completion and several projects had to be suspended and carried over to the 2019 construction season.

The 2019 construction season was focused on finishing Sheyenne Street interchange in West Fargo, completing the reconstruction of northbound I-29 from Pitcairn Separation to Christine interchange, and the first year of reconstructing Fargo - Main Avenue in the downtown area.

During the biennium, 112 miles of District highways



Construction on the pedestrian underpass and sidewalks on the Sheyenne Project in West Fargo

had contract chip seals completed, extending the pavement's life through preservation techniques. The District continued using CHFRS-2P oil for chip seals due to improved chip retention and production rates, shortening the construction impacts to the traveling public.

Maintenance

The summer of 2017 was fairly dry. The biennium winters were very challenging for snow and ice control. The winter of 2017-18 was warm early in the season causing slick roads in the mornings and evenings with temperatures often rising above freezing during the day, causing occasional rains. Late December was characterized by cold temperatures with lows in the minus teens to -20's, minimizing the effectiveness of salt treatments. Also, in January of 2018, the I-94 Red River bridge deck anti-icing

spray system was upgraded in partnership with Mn/DOT. The old spray system was originally installed in 2005. The upgrade was necessary as the old system was no longer supported for repair parts or software upgrades. Spring 2018 was cold as March and April temperatures were 20 degrees below normal. Due to the cooler temperatures the freeze-thaw cycle was extended, producing more potholes than previous years.

The summer of 2018 had an unusual high number



Fargo District employees look for delamination on a bridge deck using a process called chaining

of emergency concrete roadway repairs due to the pavement buckling. The majority of pavement failures occurred on I-29 in the Hillsboro area in the late afternoons and early evenings.

The first winter storms of 2018-19 came at the end of December. After the holiday season, the winter was characterized by multiple snow events, strong winds, and an extended period of cold temperatures. I-29 and I-94 were each closed four times between February 7th, and April 11th. February set a Fargo-record for snow fall, and the April snowstorms hit the eastern half of the state especially hard.

During the biennium, District Maintenance forces completed 1,186 lane miles of crack sealing, and 240 miles of shoulder repair. All District guardrail was repaired or reinstalled during the biennium. This was necessary for adjusting it to proper elevations. Frost and numerous vehicle strikes had altered it from original designed positions. A significant amount of ditch repair was conducted due to vehicles driving off pavement edges and gravel shoulders deteriorating due to weather and use.

The HQ maintenance yard was repaved and the new security fence was completed by maintenance

staff. This improved the area auction cars were parked for public inspection, improved neighborhood aesthetics, and provided positive security for law enforcement impounded vehicles, DOT equipment, highway signs, traffic signal parts, and roadway repair material inventories.

Grand Forks District

Les Noehre, Engineer

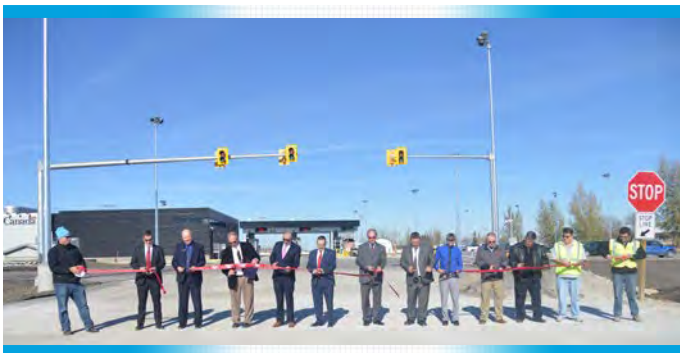
Responsibilities and Activities

The Grand Forks District is in the northeast corner of the state and provides administrative support, construction, operations, maintenance, and fleet support for 1,980 lane miles of state highways in six counties.

Key Accomplishments:

Construction

- Pembina Border Crossing - Installed Commercial Truck Lanes at the Pembina Border beginning at (US/Canadian Border). This work included grading, concrete, DMS signing (Dynamic Message Signs), lighting and sign structures.



Pembina-Emerson Port of Entry ribbon cutting ceremony with representatives from the US congressional delegation, federal agencies, state and local officials

- CPR/Centerline Concrete Replacement on Northbound I-29 - Completed 9.3 miles of centerline replacement of concrete. This work is the longest segment of replacement of this kind in the state of ND. The goal of the project was to repair the deteriorated center line joint and panel corners without doing a full re-construction project.
- Kennedy Bridge - Joint project with the State of Minnesota where the two agencies worked together to complete the construction oversight. Minnesota completed the design of the project and NDDOT provided the construction inspection utilizing



Kennedy Bridge project on US 2 over the Red River in Grand Forks District

MnDOT specifications. The main work on the project entailed replacement of pier #6 on North Dakota side of the Red River, replaced bridge deck which included adding sidewalk/bike path, painting of the entire structure, lighting and incidental items.

- Concrete Overlay & CPR (Concrete Pavement Repair) on US 2 Eastbound - Completed a concrete overlay on eastbound US 2 from the junction of US 2 & ND 1 east for approximately .5 miles, concrete pavement repair from that point east to reference point 300.969 and concrete overlay from reference point 300.969 to 305.22 on the east bound lanes. Total length of project was 9.75 miles.

Maintenance

- Flood Fighting - Deployment of the WHIPS to keep I-29 open. Without the WHIPS and the efforts of our crews, I-29 would have been closed for an extended period of time. After spring flooding, maintenance crews had to undergo a pretty significant debris cleanup along I-29 for approximately a 10-15 mile segment. Crews spent a few weeks removing tree branches, corn stalks (farm field debris), and all other kinds of debris from our right of way for safety reasons (clear zone) and to be proactive to remove the debris before it would clog culverts and create drainage issues.



WHIPS on I-29

- Maintenance was tasked with building the salt brine building under a tight timeline to meet

Minot District

Jim Redding, Engineer

Responsibilities and Activities

The Minot District is located in the northwestern part of the state and is responsible for the construction and maintenance of over 2,300 lane miles of highways. The district has 65 full-time employees. Construction and maintenance activities for the highways in the Minot District are planned, many are designed, and scheduled by the district, and are performed out of the district office and eight outlying maintenance sections. Support services are provided to the cities, counties, utilities, United States Air Force, and public that range from everyday activities to emergency responses. Minot Air Force Base (MAFB) is located north of Minot and includes 150 missile launch facilities and 15 missile alert facilities. District maintenance staff provides winter escorts to nuclear warhead and missile movements to these sites on state, county and township roads.

Key Accomplishments:

Construction Contracts

- The US 83 Broadway bridges in Minot were replaced during this biennium. Work on the \$21M two-year contract started in early 2017 and the bridge was opened to traffic in 2018. Traffic was maintained throughout the project one lane in each direction. The design includes provisions for the bridge embankments to tie into the Mouse River Flood Protection Project.

biennium deadlines. A majority of the work was done with our staff, which allowed us to meet the deadlines and most likely saved the State money by not having to contract out a majority of the work. Grand Forks District, through the impressive efforts of our building crew, was the only district to complete the majority of the building prior to the end of the biennium. The Grand Forks District brine building was toured by all of the other districts and received a lot of positive feedback.

- Concrete pavement repairs - The crew has done full depth repairs before, but this was the first time they have performed concrete spall repairs. Doing the spall repairs with concrete vs. an asphalt patch, will create a longer lasting repair which will ultimately save costs in the long run with materials and labor.



Concrete pavement repair on I-29 conducted by Grand Forks District employees

- A crew was put together to take care of multiple areas where there were pipe separations. Those areas were repaired. There were also a couple areas where the crew had to remove and replace culverts. Again, through the efforts of our staff, we were able to maintain or repair these locations efficiently and provide a cost savings by not having to contract the work out.
- Maintenance crews completed sealing the bridge decks with silane. All bridges in the Grand Forks District (State System bridges) have now been sealed in the last couple of years.
- Grand Forks District shop had LED lighting installed and walls repainted. These improvements have created a brighter work place for our mechanics, which added the benefits of safety and a noticeable difference of morale within that group.



Construction and replacement of the US 83 Broadway Bridge over the Souris (Mouse) River and railroad tracks through downtown Minot



Ribbon cutting ceremony held as traffic opens on the two year Broadway Bridge project on the US 83 through the heart of Minot

- The US 83 Bypass on the west side of Minot was expanded to 4 lanes and began with the southern part of the corridor in 2017-2018. The \$13.5M contract included three bridges. Two Mouse River bridges included provisions for the bridge embankments to tie into the Mouse River Flood Protection Project.
- In 2019 the northern part of the US 83 Bypass corridor 4 lane expansion was bid and construction started. The \$17.5M project was completed in 2019.
- In 2018 the US 2 & 42nd St. intersection was reconstructed to a signalized intersection. The \$4.2M project was to address congestion and crashes occurring due to ongoing development in the area.



Installing curb and gutter on a project off of US 2

- 153.7 miles of asphalt overlay totaling \$26.4M were bid in 2018-2019
- 306 miles of chip seal and micro surfacing surface treatments were bid in 2018-2019
- Several Safety projects were bid and constructed this biennium including;

- » Turn lanes on US 83 at Westhope corner and US 52 at Logan corner.
- » Permanent Dynamic Message Signs installed at 5 locations coming into Minot and for traffic leaving MAFB heading to Minot.
- » The US 83 Ruthville intersection improvements including highway lighting, changes to signing, installed vehicle active speed signs, and pavement marking changes to emphasize the approaching intersection.
- » State Road Safety Project (SRSP) included improvements at many rural intersections including signing and pavement marking changes and adding destination lighting at selected locations.

Maintenance Activity

- Bridge maintenance by district employees has moved to a new level by sealing cracks with epoxy and applying a silane sealer to the entire deck and barrier walls. Keeping moisture out of the concrete elements of the structure will greatly extend the life of the structure.
- Maintenance forces began construction of a salt brine generating building at district headquarters. Previously salt brine was made in a temporary location in a truck barn. Salt brine is used for snow and ice control at all locations.
- The Travel Information Map is kept up-to-date by maintenance employees using iPads.
- Maintenance employees continue to provide excellent snow and ice control services working long hours, weekends and holidays.

Valley City District

Jay Praska, Engineer

Responsibilities and Activities

The Valley City District is located in the south central portion of the state. The district is responsible for the construction and maintenance of 1,965 lane miles of roadway. We have 424 lane miles on the interstate system and 1,541 on the State Highway system. The district has 68 full time employees in four primary areas; roadway maintenance, roadway construction, vehicle and equipment maintenance, and administration.

Responsibilities include administration of roadway construction contracts, roadway designs, roadway maintenance, maintenance of roadside features, snow and ice control, right of way management,

and rest area maintenance. The district is the main contact for questions concerning access points to state highways, utility permits, outdoor advertising, right of way issues, drainage issues, snow and ice control and many other public concerns.

Key Accomplishments:

- Completed 7.5" concrete overlay on I-94 from Valley City to Tower City, westbound roadway. This was the first concrete overlay project in the Valley City District.



Concrete Pavement Repair (CPR) job on eastbound I-94

- Snow and Ice Control. The effort for snow and ice control requires a large effort from the district staff to respond to weather conditions and provide a safe driving condition for the public.
- Completed roadway slide repair and subgrade repairs on ND 46 through the Sheyenne River Valley.
- Completed subgrade repairs and hot bituminous overlay on the district parking lot and many section lots.
- Completed the crack & seal and stone matrix asphalt overlay on I-94 from Crystal Springs to Cleveland, westbound roadway. This was the first stone matrix asphalt project in the Valley City District.
- Completed the replacement of a sanitary sewer system and drain field in the I-94 Medina Rest Area. The rest area had been closed for several months due to high water and a failed existing sewer system.
- Numerous preventive maintenance projects to extend the life of the pavement and maintain a smooth ride for the public.

Williston District

Joel Wilt, Engineer

Responsibilities and Activities

The Williston District is responsible for the construction and maintenance of highways in the northwest corner of the state. The District is at the heart of the state's oil production and has North Dakota's three largest oil producing counties, McKenzie, Williams, and Mountrail. This makes the District transportation system one of the most impacted in the State. Burke and Divide counties are also part of the Williston District. The region includes the communities of Williston, Watford City, Stanley, New Town, Crosby, Tioga, and Bowbells. The district provides support for over 2,052 lane miles of roadway. This includes snow and ice control through the winter months to ensure safe travel for the public, and pavement preservation activities throughout the summer months. Maintenance forces also mow and remove debris during the summer months to promote a good image of North Dakota.

Key Accomplishments:

Administration

- Utility Permits processed - 277
- Approach Permits processed - 31
- Temporary Water Permits processed - 264 (Temp. movement of non-hazardous materials in state R/W)



State and local officials as well as NDDOT employees gather to cut the ceremonial ribbon on the new Lewis & Clark Bridge

Maintenance

District snow and ice control efforts over the 2017/19 winters was challenging. The snow accumulation totals were normal however, at about 75% of normal staffing keeping the road in a safe condition took a tremendous effort from the employees.

Some accomplishments this past biennium are:

- Prepared ground and placed floor for new salt brine building.
- Constructed new district parking lot.
- Constructed a CDL testing course for Drivers License.
- Prepare site for new district equipment building in Williston.
- Place and monitor road closures for spring flooding on ND 58 and ND 200 near the Yellowstone and Missouri Rivers Confluence.
- Roadway repair and patching on various highways.
- Clean paved medians on US 2 and US 85 and all bridge decks.
- ND 200 2019 Spring Flooding Near Yellowstone River.



ND 200 2019 Spring Flooding Near Yellowstone River

Construction - \$167.3 Million

(\$'s are construction contracts only).

A short list of key projects are listed below:

- US 2, 9 miles East of Stanley to 3 miles west of the US 52 Junction, Eastbound, Slurry Seal, (33 miles, \$950,000)



ND 1804 North of New Town

- ND 1804, 131st AVE NW to Temp NE Truck Reliever Route, Reconstruction, Concrete Paving (4 miles, \$16.4 million)
- ND 1804, CO RD 42-Epping W-131 Ave NW near Williston, Grading, Widening, Asphalt paving, (8 miles - \$18.3 million)
- US 52, Portal to N JCT ND 8, Asphalt Overlay, Concrete, (13 miles - \$3.9 million)
- US 85, N of JCT ND 23A to 9TH ST SW, Widening, PCC Paving, (\$3.2 million)
- ND 23 & ND 22 Intersection improvement, lighting and turn lanes (\$1.5 million)
- ND 1804, Truck Reliever Route to 16 miles East of Tioga Road, Grading and Asphalt paving, (18.5 miles - \$24.3 million)
- US 2, US 2 from 32nd Ave to 11th St., Grading, Asphalt Overlay and Widening, (1 mile - \$14.5 million)
- US 2, Ray East to County line - WB, Asphalt Overlay and Lighting, (15 mile - \$5.6 million)
- ND 23, Intersection of ND 23A and 12TH ST SE, Roundabout and Concrete Paving, (0.5 miles - \$3.3 million)
- ND 16, County Road 5 north to Junction ND 68, Thin Lift Overlay, (16.7 miles – \$1.5 million)
- ND 50, Wildrose Junction to McGregor JCT to McGregor, Thin Lift Overlay, (\$12.3 miles - \$1.2 million)
- ND 73, Emergency Slide Repair, (1 mile - \$9.3 million)
- ND 23, Junction US 85B to Junction ND 23B Watford City, (1.5 miles - \$6.2 million)
- ND 23, New Town Northwest Truck Reliever Route, Grade and Asphalt, (\$14 million)
- US 2, 2 miles North of Williston North to 63rd Street Northwest, Concrete Overlay, EB, (9.5 miles - \$8.7 million)
- ND 1804, County Road 5 to Junction County Road 21, Grading and Asphalt, (16.3 miles - \$16.5 million)

NDDOT History

1913

- First State Highway Commission formed with three members. Governor L.B. Hanna chairman. No extra compensation.



Model T on a prairie trail

1917

- To get newly available federal funds, North Dakota abolished old commission, created new five-member body: governor as chairman, commissioners of agriculture and labor, and two members appointed by governor.

1920s

- By mid-1922, construction completed on more than 1,000 miles of state highway: 20 were graveled; the rest were only earth-graded.



Bulldozer pulling a grader in the 1920's

1930s

- **1935:** First drivers' licenses issued.
- The department employed thousands with federal relief funds during the Depression.
- In six years in the 1930s, under six governors, seven men served as highway commissioner.

1940s

- During World War II there was a great shortage of highway materials.

- Many highway engineers and other employees left for armed services.
- Soldiers returning from Germany cited Autobahn, with its high speeds and controlled access, as model for highway design. This led to interstate program.

1950s

- Federal Aid Highway Act of 1956 created.
- **1956:** First interstate contracts in North Dakota let for section of US 10 between Valley City and Jamestown.

1960s

- Interstate work continued.



Concrete paving east of New Salem - 07-1963

- **1968:** Highway Building on State Capitol Grounds completed.

1970s

- **1977:** North Dakota first state in union to let contract for final stretch of I-29 (between Drayton and Pembina).

1980s

- With the completion of the Interstate, department needs changed from construction to maintenance. This philosophy exists to the present day.
- Walter R. Hjelle retires after a total of 25 years as Highway Department director (1961-1983 and 1986-1988), the longest tenure in department history.

1990s

- January 1990: North Dakota Highway Department became Department of Transportation (NDDOT). Motor Vehicle Department merged into NDDOT as Motor Vehicle Division.
- For the first time, more state funding than just enough to match federal funds is necessary to preserve system built

over 75 years. System deteriorating faster than state can maintain it.

- **February 1997:** After months of working with consultant, department issues its first strategic business plan.
- **January 1993 - February 2000:** Director Marshall W. Moore's tenure is the second-longest in NDDOT history.

2001

- Newly elected Governor John Hoeven names new NDDOT Director David Sprynczynatyk to lead the effort to create a Statewide Strategic Transportation Plan involving all government jurisdictions, all modes of transportation, and the public.

2002

- North Dakota's first Statewide Strategic Transportation Plan, TransAction, is completed and introduced by Governor John Hoeven and NDDOT Director David Sprynczynatyk.

2004

- A survey was conducted, in cooperation with the University of North Dakota, to gather information regarding how well the department was meeting the needs of its customers. The results showed that 82 percent of the department's customers were either satisfied or very satisfied. The Drivers License and Motor Vehicle Division's product and service levels earned a 90 percent and 86 percent rating, respectively.
- In late 2004, the Highway Performance Classification System was finalized, which was endorsed by the North Dakota Legislature during the 2005 session.

2005



Four Bears Bridge by New Town

- The new Four Bears Bridge was opened in October, followed by the demolition of the old bridge.

2006

- Francis Ziegler is appointed by Governor John Hoeven as the new NDDOT director.
- North Dakota had 7,385 centerline miles of state highways, and an additional 99,239 miles of county and rural roads, streets and trails. The 7,385 centerline miles equate to 8,458 roadway miles. At the end of 2006, NDDOT had opened an additional 46 roadway miles as a result of the US 2 four-lane initiative.

2007

- TransAction II, the updated Statewide Strategic Transportation Plan, was published in the spring of 2007.
- The I-29 reconstruction projects through the Fargo corridor were completed in 2007. Started in 2000, these projects included the reconstruction of six interchanges, seven new loop ramps, 15 new bridges and the expansion of two bridges.

2008

- NDDOT completed the four-laning of US 2 between Williston and Minot with the total of 97 miles of four-lane highway added to the system when the project was finished in October 2008.
- The new Liberty Memorial Bridge in Bismarck-Mandan was completed in November 2008.

2009

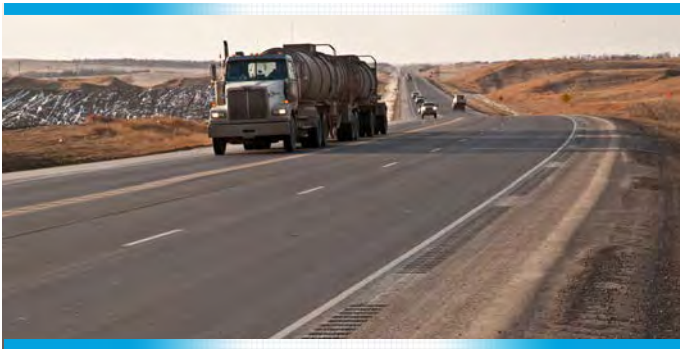
- 2009 was one of the largest road construction programs in North Dakota. The NDDOT awarded bids on approximately 292 projects which amounted to \$383 million in road improvement projects.
- NDDOT launched the new NDteendrivers.com website aimed at informing teens about safe driving habits.

2010

- The new Drayton-Robbin Bridge crossing the Red River near Drayton was completed.
- NDDOT launched a new law enforcement program across the state called the Regional Driving Under the Influence (DUI) Task Force in an effort to deter drunk driving throughout North Dakota.

2011

- Construction was conducted for the US 85 Super 2 Project, with intermittent passing and turn lanes, between Watford City and Williston.



US 85 Super 2 project

2012

- Completed temporary bypasses on the northwest side and northeast side of Williston. Also, completed first roundabout project on a state highway on ND 22 near Killdeer.

2013

- Governor Jack Dalrymple appointed Grant Levi as the new NDDOT Director.
- The 2013 construction program is estimated to bid out approximately \$878 million in infrastructure projects across the state, making it the largest construction program in state history.
- NDDOT launched a County Safety program to provide additional safety measures on rural roads. The safety program provides funding for implementation of safety measures that may include: enhanced signing for road curves; upgraded signing or pavement markings to improve visibility of intersections; larger regulatory or warning signs, and intersection warning rumble strips.

2014

- NDDOT worked on four-laning US 85 between Watford City and Williston; constructed several truck bypasses and truck reliever routes around the communities of Alexander, Dickinson, New Town, Watford City and Williston. The department also renewed nearly one million vehicle registrations.
- The 2014 Customer Satisfaction Survey results illustrated the top four categories that ranged from 83 percent to 96 percent in satisfied or very satisfied were: traveler info, motor vehicle, drivers license, and communications.

2015

- The department worked on a large construction program across the state which included building two roundabouts – one east of Watford City on ND 23 and ND 73, and one near Fairview on ND 200 and ND 58.

- The NDDOT issued a new flat license plate, called the Sunrise Plate. The new flat plate replaced the embossed Buffalo Plate and Lewis and Clark Plate. The Buffalo Plate had been used for 23 years and some vehicles had deteriorated plates that were losing their reflectivity. In 2014, the North Dakota Legislative and Budget Committee approved the new design. The license plate replacement process occurs from November 2015 to June 2017.



Sunrise License Plate

2016

- Completed large construction projects including the Killdeer Truck Bypass, Carrington Roundabout, Dickinson State Avenue Railroad Bridge and West Fargo Main Avenue projects.

2017

- Governor Doug Burgum appointed Tom Sorel as the new NDDOT Director.



Lewis and Clark Bridge Wildlife Crossing

- Opened the new Lewis and Clark Bridge south of Williston. The \$80 million project was the single largest infrastructure project bid in NDDOT's history. The project also included the first wildlife crossing specifically designed for moose in North Dakota.
- Other major construction projects completed included work on I-94 in Bismarck, Valley City and Fargo and Burdick Expressway in Minot.

- Continued to implement new, innovative technologies for customer-focused services such as online driver's license renewal, Motor Vehicle tab renewal kiosks, and smartphone apps such as NDRoads and ND Renewals. These technologies allow customers to get access to our services at their convenience.

2018

- North Dakota was selected as one of 10 participants in the Unmanned Aircraft Systems (UAS) Integration Pilot Program through the US DOT. Through this three-year program, NDDOT along with partners including North Plains UAS Test Site, will help shape the future and safety of UAS (drones) in America.
- Completed the US 83/Broadway Bridge Replacement Project in Minot. The new bridge is nearly 1,000 feet long and due to newer engineering and design capabilities the bridge has fewer piers than the old bridge built in the 1960's.
- Federal and state officials from US Customs and Border Protection, US Department of State, US General Services Administration, Federal Highway Administration and the North Dakota Department of Transportation completed border crossing upgrades at the Pembina-Emerson Port of Entry.

The project included construction of new lanes of traffic to segregate commercial traffic from primary traffic, relocating the outbound inspection area and duty-free pick-up to a location accessible to commercial and primary automobile traffic, construction of auto and truck parking areas, installation of Intelligent Transportation System (ITS) technology and a pedestrian crossing.

2019

- Completed the reconstruction of Interstate 94 (I-94) and Sheyenne Street interchange, along with the Sheyenne Street corridor from 13th Avenue W. to 40th Avenue W.
- Completed the Northwest Truck Reliever Route north of New Town. The project, is the final portion of the truck reliever route around New Town. The truck reliever route diverts traffic from 1804 to ND 23 west of New Town. NDDOT previously completed the northeast side of the truck reliever route in 2014.
- The NDDOT launched a new online bidding opportunity to customers who are interested in purchasing vehicles from the State Fleet Vehicle Auction. The event is also simulcast online to

provide customers the opportunity to place their bid from anywhere using a computer, smartphone or tablet. The onsite auction is held at regular locations in Bismarck and Fargo.

- The NDDOT received a four-year waiver from the Federal Aviation Administration (FAA) to operate Unmanned Aircraft Systems (UAS) over people.

This is the first time a North Dakota state agency has received a waiver to routinely conduct UAS operations over people using a drone – in this case a DJI Mavic 2 series equipped with a ParaZero SafeAir parachute recovery system. FAA approved the waiver and UAS operations over people as part of North Dakota's (UAS) Integration Pilot Program (IPP) which is designed to help FAA create new regulations that will enable the safe and secure integration of UAS (drones) into the national airspace systems.

The North Dakota Department of Transportation (NDDOT) and the Northern Plains UAS Test Site (NPUASTS) facilitated successful UAS (drone) flights in an urban environment. These flights were operated by Airbus Aerial, and SkySkopes, with assistance from NPUASTS, to inspect Xcel Energy electric system infrastructure in Grand Forks.

Waivers allowing UAS operation in urban environments, beyond visual line of sight (BVLOS), and over people were obtained by the NPUASTS and Airbus Aerial for this operation, leveraging existing radar infrastructure, including Echodyne's EchoGuard Radar System, for detect and avoid capabilities. Detect and avoid refers to a UAS being able to detect obstacles in its flight path and avoid a collision.



Russ Buchholz, Strategy & Innovation Director, flying a drone

NDDOT Awards

Awards received in 2017 and 2018

The Bismarck District was awarded the Colonel's Award for Excellence for their work during the DAPL protests. Captain Eric Pederson and Lieutenant Steve Fischer with the North Dakota Highway Patrol nominated the Bismarck District staff. The award is presented to state employees and private citizens as a token of the Colonel's appreciation for efforts and activities that benefit the North Dakota Highway Patrol and the state of North Dakota.



Colonel's Award for Excellence

Boballee Bengson was recognized as 2017 American Association of Motor Vehicle Administrators (AAMVA) Certified Driver Examiner of the Year for the state of North Dakota.



Boballee Bengson

North Dakota was the top-ranked state on performance and cost-effectiveness according to the Reason Foundation's Annual Highway report. North Dakota had excellent scores in several categories including urban Interstate pavement condition (3rd overall), rural Interstate pavement condition (4th), urbanized area traffic congestion (4th) and maintenance disbursements per mile (3rd).

The NDDOT Safety Division placed 1st in American Association of Motor Vehicle Administrators Pace Division - Other Print or Electronic Publications for the annual Crash Report which is a publication about motor vehicle crashes, deaths, and injuries.

The NDDOT Safety Division placed 1st in the American Association of Motor Vehicle Administrators (AAMVA) Advertising Award for a TV Commercial or PSA Externally produced for the Taylor Berhow Campaign which is a story of Taylor driving under the influence and killing three of his friends in a motor vehicle crash over Halloween weekend in 2011.

Four NDDOT entries earned awards at the 2017 North Dakota American Advertising Federation (AdFed) ADDYs in late February, including two Gold ADDYs, two Silver ADDYs (one being the Zipper Merge from Communications) and a Best in Public Service award for two separate TV ads. The People First Award in Public Service, the highest category for public service, was given to the NDDOT Traffic Safety Taylor Berhow TV ad and the NDDOT Traffic Safety Funeral TV ad. Both TV ads were awarded individual Gold ADDYs and are automatically entered in the regional District 8 ADDY competition in April.



Traffic Safety Taylor Berhow TV ad

The NDDOT Medina Rest Area Project recently won in the small projects category for the American Council of Engineering Companies (ACEC) of North Dakota. The facility was closed since July 2014 due to high water levels of Stink Lake which flooded the lower lagoon. This project consisted of two key aspects including the restoration of the site's waste water treatment system and facility update to meet ADA accessibility requirements.



Medina Rest Area Project - American Council of Engineering Companies (ACEC) of North Dakota award.



Jen Einrem

Jen Einrem, Transportation Engineer in the Design Division on receiving the 2018 Governor's Awards for Excellence in Public Service - Frontier Award for Excellence in Continuous Learning for her role in launching Vision 2030.

Awards received in 2018 and 2019



Jon Eide

Jon Eide - Was recognized as 2018 American Association of Motor Vehicle Administrators (AAMVA) Certified Driver Examiner of the Year for the state of North Dakota.

The NDDOT Centennial Illustration created by Odney Advertising for the 2018 Transportation Expo recently won a silver Addy in the illustration category. The AAF's annual American Advertising Awards (ADDYs) program honors excellence in advertising and cultivates the highest creative standards.



NDDOT Centennial Illustration



Engineering Excellence Award

The North Dakota Department of Transportation was awarded an Engineering Excellence Award during the American Council of Engineering Companies (ACEC) 2019 Award Gala for the Sheyenne Street Corridor Study in the Fargo District.

Wes Woehl, Bismarck Shop, was recently presented with the North Dakota Highway Patrol's Colonel's Award of Excellence. Woehl was nominated by Trooper Steven Mayer. The award is presented to state employees and private citizens as a token of the Colonel's appreciation for efforts and activities that benefit the North Dakota Highway Patrol and the state of North Dakota.



Wes Woehl



Pictured Back Row: Scott Zainhofsky, Becky Hanson, Steve Mullen, Bradley Nelson, Paul Benning, Front Row: Ron Henke, Rebecca Geyer, Pam Wenger, Stacey Hanson

The North Dakota Department of Transportation's (NDDOT) Pop-Up Demonstration Projects won a regional award in the "Quality of Life/Community Development, Small Project" category in the 2019 America's Transportation Awards competition.

North Dakota's highway system ranks first in the nation in overall cost-effectiveness and condition for the second straight year, according to the Annual Highway Report published by Reason Foundation.

In highway safety and performance categories, North Dakota ranks 4th in traffic congestion, 1st in urban interstate pavement condition and 9th in rural interstate pavement condition, and 43rd in structurally deficient bridges.

Troy Gilbertson, Fargo District Maintenance Coordinator, received the 2019 Governors Award for Excellence in Innovation. Gilbertson was selected for his innovative vision using existing equipment for new solutions.



Troy Gilbertson

