submitted by

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
Bismarck, North Dakota
dot.nd.gov

DIRECTOR
Tom Sorel

December 1, 2017
December 1, 2017

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

Dear 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 2015 to 2017.

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

The Department’s budget for the 2015–2017 Biennium was $2.7 billion. However, the budget was revised in 2016 as the state of North Dakota experienced a number of changes in energy, agriculture and other areas since budgets were appropriated in 2015. These changes affected state revenue and state agencies were asked to reduce general fund budgets by 6.55% through two allotments in 2016. The NDDOT then reduced its general fund budget by approximately $43 million through the allotment process.

A few of the many accomplishments completed this past biennium include: issuance of a new flat license plate, replacing the former embossed plate that had been in circulation for 23 years; completing several large construction projects including: New Town Main Street and Williston Main Street projects, Sorlie Memorial Bridge in Grand Forks, Killdeer Truck Bypass, Carrington Roundabout and West Fargo Main Avenue project.

The Department also worked on many innovative projects including implementing tow plows for clearing snow throughout the state, pilot projects for fiber optic traffic monitoring near Fargo and kiosks located in three locations in Bismarck for customers to renew motor vehicle registrations.

Thanks to the support of our legislative body and our partners in the counties, cities and townships along with our dedicated staff, the Department was able to help meet transportation needs throughout the state.

Sincerely,

Thomas K. Sorel, Director

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North Dakota Department of Transportation

Director
Tom Sorel

Governor
Doug Burgum

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North Dakota Department of Transportation
Biennial Report: July 1, 2015 through June 30, 2017

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Statutory and Constitutional Responsibilities

Creation
The first North Dakota State Highway Commission was created in 1913. In 1917 the North Dakota State Highway Department was established. The Highway Department became the North Dakota Department of Transportation in 1989 by 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).

NDDOT provides essential transportation system for 100 years
North Dakota’s transportation system is an essential element in the state’s economy as it moves commodities and products grown and manufactured here to other parts of the world, as well as transporting people to various destinations for work, school or travel. The NDDOT continues to develop and maintain its transportation system to accommodate the continued needs of all motorists across the state.

2017 is a significant year for NDDOT as it marks 100 years since the establishment of the State Highway Department in 1917. From the beginning, the NDDOT has relied on dedicated workers to build and maintain highways where only dirt trails existed before. The Department has provided a Century of Service to North Dakotans where challenges have been experienced with snow storms, flooding and traffic changes as well as many transportation accomplishments achieved.

With 100 years completed we look forward to the future as we continue to develop and maintain a quality transportation system for the state. It is not the end of an era in transportation development; it is only the beginning.

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.

Team - Recruit, develop, and retain a high performing workforce that results in everyone working together to achieve our mission and vision.

Service - Be proactive and adaptive to provide superior external and internal services, products, and programs.

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

Assets - Preserve and enhance assets managed by NDDOT.

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.
Organization Chart (2015 - 2017 Biennium)
as of June 30, 2017

For the current NDDOT Organization Chart, go to
Divisions
North Dakota Department of Transportation

Internal audits were conducted annually of district inventory procedures and other NDDOT division procedures. Reviews of department policies and procedures are scheduled or conducted at the request of management personnel. Internal audits are conducted to verify compliance with regulations, contracts or program requirements, to address fraud or other potential risks, and to ensure proper controls are in place to accomplish department goals and objectives.

Audit Services
Daryl Splichal, Director

Responsibilities and Activities
The Audit Services Division is responsible for performing internal audits of NDDOT district and division activities, conducting audits of consultant engineers' indirect cost rates and project costs, and verification of railroad and utility project costs. Audit Services 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.

Key Accomplishments:
The Audit Services Division continues to focus on ensuring applicable policies and regulations are followed and ensuring proper use of federal and/or state funds. This includes completion of mandated motor carrier audits and reviews of consulting engineers' indirect cost rates. IFTA and IRP program requirements include completion of audits for an average of 3 percent of registered motor carriers each year. Approximately 60 motor carrier audits were completed each year of the Biennium. Indirect cost rates submitted by architectural and engineering consulting firms for work on transportation projects are reviewed to ensure they comply with applicable federal regulations. Audit Services follows the AASHTO Uniform Audit & Accounting Guide in its reviews of consulting firms and helps to educate the firms regarding allowable costs. Approximately 15 firms were reviewed each of the past years to verify project costs and overhead rates. Other project audits include review of railroad transportation, safety and other local government transportation projects and contracts.

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: pub-
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 and web page design. Multi-media provides many services to NDDOT and other state agencies by providing photographic services, shooting, editing and producing videos; designing web pages as well as various print media, such as posters, manuals, reports, brochures and fliers.

Key Accomplishments

During the 2015-2017 Biennium, the Communication Division worked closely with every Division and District throughout the NDDOT on numerous projects and information campaigns.

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

- Distributed information to the public by sending out approximately 350 news releases each year in 2015 and 2016.
- Created YouTube videos on a regular basis to inform employees and the general public about various NDDOT programs including construction, safety, 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.
- Began using Flickr to post photos from ribbon cuttings, ground breakings and other events for internal and external use.
- The NDDOT won a TransComm award in 2015 for a TV Commercial or PSA with a consultant for an ad about work zone safety.
- The Communications Division served on a Joint Information Center (JIC) for the state during protests on ND Highway 1806 for the Dakota Access Pipeline in 2016-2017. Protest activity took place for 7 months and the JIC was in place during the duration of the protest activity. The JIC was responsible for disseminating important information to the public about the state’s response to the Dakota Access Pipeline.
- Worked with various division and districts for website updates and social media posts.
- Created logo and banners for NDDOT’s 100 year anniversary in 2017.
- Worked on several groundbreaking and ribbon cutting events for construction projects as NDDOT worked on one of the largest construction programs in state history during the 2015-2017 construction seasons.
Financial Management
Shannon Sauer, Director

Responsibilities and Activities
The Financial Management Division is responsible for performing and overseeing the tasks required to accomplish:

- Accounting and reporting
- Budgeting
- Payroll
- Procurement
- Revenue forecasting
- Central supply
- Cash management
- Rate development
- Disposal of highway equipment and materials

Key Accomplishments
During the past biennium, the Financial Management Division accomplishments included:

- Accounted for $2.6 billion in state and federal revenues and expenditures.
- Processed approximately 120,000 vendor payments.
- Processed and issued approximately 31,000 payroll checks.
- Developed the budget for the 2017-2019 biennium, which totals more than $1.2 billion.

Human Resources
Mike Sandal, 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 and selection, salary administration/position classification, workforce assessment/planning, workforce development and training, tuition reimbursement program, coordination of payroll processing, personnel policies and files, human resource issues consultation, employee leave administration, performance management, employee service and recognition awards, wellness program and educational scholarship and grant programs.

Key Accomplishments
The Human Resources Division was involved in a variety of projects to streamline HR programs and processes. One major project was assisting with the statewide implementation of the Job Description Questionnaire (JDQ) system now integrated with PeopleSoft and the annual performance review process. NDDOT staff provided input, helped with testing and worked on the conversion of all previous information from the NDDOT employee management system into the new system. Other valuable projects included developing tools to aid in the recruiting and talent management processes for MyDOT (the internal website for employees) and provided training and one-on-one consultation on the tools.

The division is actively engaged in a number of recruitment and talent advisory boards including the American Council of Engineering Companies of North Dakota (ACEC/ND), Burdick Job Corps Industry group; University of Mary Employer Advisory Board, and Trend Grant Advisory Board made up of (Bismarck State College, Turtle Mountain Community College, Sitting Bull College, Williston State College, and Nueta Hidatsa Sahnish College) as well as attending career fairs across the state.

As the oil industry slowed and the job market changed in North Dakota, NDDOT began a gradual reduction to the 2011 Oil Patch Add-On Policy in February of 2016 and began a gradual reduction to the Rental Allowance Program in August 2016. Both programs were completely phased out December 2016.

This past biennium, employees benefited from the Tuition Reimbursement Program and the NDDOT Mentoring Opportunities Program (October 1, 2015 to September 28, 2016). Thirty-eight employees attended the American Association of State Highway and Transportation Officials (AASHTO) National Transportation Management Leadership Program. An additional 571 professional growth opportunities were sponsored and attended by NDDOT employees.

Wellness Program participation earned the department $147,020 in savings off the health insurance...
premium. HR partnership with the Maintenance Division for risk management and workers’ compensation premium discount programs resulted in approximately $31,000 yearly savings.

**Information Technology**
Russ Buchholz, Director

**Responsibilities and Activities**

The Information Technology Department 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.

**Key Accomplishments**

- Modernization of State Titling and Registration System (STARS) for all transactions and revenue for the Motor Vehicle Division. Including the issuance of licenses and titles for all vehicles as required by law and the maintenance of registration and title records for law enforcement agencies, dealer licensing and mobility impaired certificate issuance.

- Self-service Motor Vehicle kiosks were placed in three locations in Bismarck as a pilot program. Kiosks are a fully automated motor vehicle registration renewal station that will dispense license plate renewal registration cards and motor vehicle tabs on demand.

- ND was the second state to join State 2 State (S2S) allowing states to electronically check with all other participating states to determine if an applicant currently holds a driver’s license or identification card in another state.

- Implemented Esri’s Roads and Highways solution for state and local roads. Involved creating a linear reference system (LRS) for all state and local roads along with conflating primary road attributes and Highway Performance Monitoring System (HPMS) data items to the new LRS. The Roads and Highways maintained LRS along with the associated events (road attributes/HPMS data items) have become the system of record for the NDDOT. The yearly-certified public road mileage and HPMS data items are submitted to the Federal Highway Administration (FHWA) through the Roads and Highways maintained database.

- Road Condition Reporting System (RCRS) is an HTML5/.Net solution for editing NDDOT’s road conditions, incidents, messages, and load restrictions. The new editing environment is mobile friendly and allows expanded editing from the Central Office (1 editor) to each Maintenance Section (80 editors). The RCRS data editing application was optimized for use on the Section’s iPads.

- NDDOT Internet redesigned to improve access for the public and business partners by making the website viewable across all devices. Improved notification features and enhanced display of information.

- Sign Calculator is a web based program used by NDDOT staff and Consultants to calculate the correct post types and quantities for roadway signs based on height, width, wind speed and ditch information.

- Equipped District field staff with iPads and cellular cards to be able to access the Construction Automated Records System (CARS) system from construction sites.
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 nonconstruction and construction-related contract documents; risk management; legislation; and administrative rule making.

Key Accomplishments

**July 1, 2015 - June 30, 2016**
- Legal Division held 2,433 driver’s license hearings; 1,846 were implied consent hearings (DUIs).
- Legal Division reviewed and assisted with the administration of approximately 1,878 contract documents.

**July 1, 2016 - June 30, 2017**
- Legal Division held 2,265 driver’s license hearings; 1,665 were implied consent hearings (DUIs).
- Legal Division reviewed and assisted with the administration of approximately 1,615 contract documents.

**July 1, 2015 - June 30, 2017**
- Legal Division reviewed and assisted with the administration of approximately 1,878 contract documents.

**July 1, 2016 - June 30, 2017**
- Legal Division reviewed and assisted with the administration of approximately 1,615 contract documents.

**July 1, 2015 - June 30, 2017**
- Legal Division held 4,698 driver’s license hearings. Implied consent hearings (DUIs) decreased by 4.3% over the previous biennium.
- Legal Division reviewed and assisted with the administration of approximately 1,878 contract documents.

**CARS Electronic Field Books** transferred information formally recorded in a physical field book available for entry into an iPad electronic field book. Project added new features to the CARS system as well as made existing features more usable by field staff who use an iPad.

**Project Bids Conversion** converted the NDDOT’s contractor construction project bidding software over from Expedite to Project Bids.

**Advanced Transportation Management System (ATMS)** accommodates data collection and operations of ESS, DMS, CCTV and Vehicle Detection counters in a web based modular system. Used by Safety, Maintenance, Districts and Highway Patrol.

**gINT** streamlines analyzing soils data by capturing the ArcPad program data and processing the field and laboratory results to create the reports in one application. Design recommendations for construction projects via shape files import into Micro Station and ArcGIS for plans resulting in quick access to geotechnical data for employees and consultants.

**Final adaptation of all scanning on the ILINX Capture Platform. Shutdown of outdated Teleform System. Trained districts for Drivers License Application scanning in ILINX.**

**Initiated full usage of DOT Records Management System and DOT Open Records Management System.**

**Built new telecommunications towers in Hillsboro and Westfield, and replaced buildings in Minot, Blaisdell, Ryder, Bowman, Sentinel Butte, Raleigh, Merricourt and New Salem.**

**Telecommunications Department** was heavily involved providing radio communications support for State Radio and the ND Highway Patrol (HP) during the pipeline demonstration. Programmed State Radio and HP units from all over the state with the proper communication channels and encryption keys; reprogrammed the radios back to original configurations after the demonstration. Assisted State Radio in deployment of temporary communication trailers to expand radio coverage, and installed a wireless point-to-point link across the Missouri River to establish broadband connectivity to the operating base just south of Fort Rice.
administration of approximately 3,493 contract documents, an 8.8% decrease over the previous biennium.

The Legal Division is expected to meet additional challenges during the 2017–2019 biennium in the areas of right-of-way acquisition, contracts, and risk management.

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 3,700 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

In September of 2015, State Fleet rolled out a new rental rate structure. The new method changed the way depreciation is being charged for vehicles which are permanently assigned to an agency. The change did not affect vehicles checked out from the motor pools. Prior to the change, depreciation was charged solely on the basis of use. The usage based method was replaced with a flat depreciation charge for each assigned vehicle. The monthly amount varied by vehicle group. This method streamlines the depreciation costs for all. Agencies can better budget for depreciation as it will be a consistent charge rather than fluctuation with vehicle use. The flat depreciation is charged to the agency whether or not the vehicle is driven during the month.

A new fuel site was constructed at the Grand Forks District in the spring of 2017. The old site was inspected by the Health department October 2015. The inspection resulted in the decommissioning of the underground tanks due to failure of the cathodic protection tests and the site was closed shortly after receipt of the report. The system is completely above ground uses new technology such as a completely digital reporting and a heated Diesel Exhaust Fluid dispenser.

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 2016, State Fleet held 42 instructor led classes training 897 employees and 832 employees took the online course. From January – June 2017, 15 instructor led courses were held training 331 employees and 502 state/university employees took the online courses.

Robin Stephens DDC Instructor

State Fleets DDC Instructor was awarded the Outstanding Safety Instructor award in 2016 and 2017. She has received this honor six years in a row.
Drivers License
Glenn Jackson, 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 issued the pertinent permit, license or non-driver identification card, thereby ensuring individuals licensed in North Dakota are fully authorized and capable. 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. This also involves suspending, cancelling and revoking licenses, enforcing the points schedule, processing hearing requests, collecting funds for driver records and abstracts, reinstatements, verification of insurance and other actions to ensure the driving record is accurate. 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.

Key Accomplishments
From July 1, 2015, through June 30, 2017, the division processed 331,971 permits, licenses, and identification cards; administered 188,747 written tests, 93,758 driving tests, and 151,718 vision screenings. In addition, the division processed 90,259 suspensions, revocations, and cancellations; 273,973 traffic citations; 12,603 Temporary Restricted Licenses; 10,884 implied consent violations; and 7,149 hearings. The division implemented a non-commercial driver testing system upgrade to a tablet scoring system, improving efficiency in the process. The division initiated the final step in Real ID compliance by signing the contract for system modification, expecting full compliance in July 2018.
operations provide enhanced customer service for the citizens of our state.

Key Accomplishments

During the 2015-2017 biennium, the division processed more than 3.2 million customer transactions, and responded to approximately 514,779 customer inquiries via telephone, email, letter and fax. The division registered 1,128,591 vehicles in FY2016 and 1,120,989 in FY2017. Use of the online vehicle registration renewal system continues to increase. During the 2015-2017 biennium, 539,488 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 each year. The Motor Vehicle Division implemented the following enhancements: improved online title lookup to include manufactured homes on the public website, have six branch offices that currently issue titles, rolled out a new titling and registration system, completed a general plate issuance, implemented registration renewal kiosks in the Bismarck area, and added an online temporary permit option.

Responsibilities and Activities

The Safety Division develops, implements, and evaluates programs designed to reduce motor vehicle crashes, fatalities and injuries.

Key Accomplishments

Traffic Records Program

• The Traffic Records Program is responsible to collect and analyze crash data and other data sources to identify traffic safety problems in North Dakota to impact through the safety planning processes administered by the NDDOT. Other data sources pertinent to roadway safety include driver, vehicle, roadway, injury, court and other data sources.

• 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 (SHSP). This includes performance measure development and evaluation. And, provided crash analysis to various customers of the NDDOT.

• Converted all law enforcement users from TraCS (Traffic and Criminal Software) 10 to TraCSWeb for improved electronic crash reporting. Nearly 100 percent of crash reports are now received electronically through TraCSWeb.

Strategic Highway Safety Plan

The Safety Division is responsible to coordinate the development, implementation and evaluation of the North Dakota Strategic Highway Safety Plan (SHSP) 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 E’s 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 in an effort to align goals, leverage resources and collectively address the state’s safety challenges.

• The SHSP Executive Leadership Team, Steering Committee and Priority Emphasis Area Teams continued work to implement safety strategies within North Dakota’s SHSP in the areas of education, enforcement, environment (policy) and emergency medical services. And, planned and conducted annual SHSP stakeholder conferences – the North Dakota Traffic Safety Partner Summit.

Traffic Safety Program
The Traffic Safety Program is responsible for the administration of grant programs to change driver and passenger behaviors to reduce fatalities and injuries caused by motor vehicle crashes.

• Applied for and received grant funding through the National Highway Traffic Safety Administration (NHTSA) under the federal requirements of the FAST (Fixing America’s Surface Transportation) Act – the federal transportation bill

- to support behavioral traffic safety programs statewide. These grants total about $3.8 million in new funds annually.

• Provided overtime grant funds, enforcement equipment and training to participating state, county and city law enforcement agencies to conduct sustained, multi-agency, high-visibility enforcement to encourage seat belt use and deter impaired and distracted driving.

• Provided grant funds in support of various community outreach activities to provide information and education about traffic safety to the public. Activities included expanding the North Dakota Traffic Safety Partner Network, sports venue outreach, the Driving Skills for Life program for teen drivers, and tribal and county community traffic safety programs.

• Developed the North Dakota Crash Memorial Wall - a virtual wall to provide an opportunity for the family of an individual lost to a motor vehicle crash in North Dakota to memorialize their loved one. The Crash Memorial Wall was developed in 2016 and recognized by the American Association of Motor Vehicle Administrators (AAMVA) with a Public Affairs and Consumer Education (PACE) Award for outstanding website. It exists to help family and friends cope with the difficulty of the loss and to personalize the impact of motor vehicle crashes to impress upon the public the importance of driving safely to prevent future tragedies on North Dakota roads. The North Dakota Crash Memorial Wall can be viewed at: ndcodefortheroad.org/memorial.

Sobriety Checkpoint

North Dakota Crash Memorial Wall web page
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 rehabilitations and replacements
- Perform hydraulic analysis for bridges, box culverts, and pipe culverts
- Perform hydrologic and hydraulic analysis for drainage complaints
- Issue drainage permits
- Update Design Manual
- Review of Consultant hydrology/hydraulics for all state highway projects.

Design
- Design and prepare plans for rehabilitation and replacement of structures including bridges, box culverts, sign structures, high mast lighting, street light standards, and traffic signal foundations
- Review consultant designs and plans
- Assist with Shop Drawing review
- Update Design Manual

Structural Management
- Manage bridge inspection program on state and local system
- Load rate bridges on state and local system and issue load restrictions as necessary
- Assist ND Highway Patrol with automated truck routing system
- Develop and promote Bridge Preservation Program
- Review Shop Drawings
- Assist in planning and development of priorities for the rehabilitation and replacement of structures on the state highway system
- Perform emergency bridge inspections

Key Accomplishments
Preliminary Engineering & Hydraulics Section
- Completed environmental documents for 16 stand-alone structural improvement projects
- Designed urban storm drainage systems for 6 projects
- Hydrologic and hydraulic analysis and culvert size recommendations were performed for approximately 39 rural highway projects on the state system
- Drainage investigations relating to approximately 6 drainage complaints or problem locations were completed

Precast double box culvert installed in West Fargo in 2015
• Reviewed requests, and prepared 11 permits for drainage revisions on highway right of way
• Completed reviews of all rural and urban roadway and bridge hydrology and hydraulic activities associated with consultant-developed projects on the state highway system

Design Section
• Designed and prepared plans for thirteen new bridges and five deck replacements, seventeen new box culverts, five box culvert extensions, and sixty nine additional projects consisting of bridge rail-retrofits, approach slabs, deck overlays, bridge painting, and general maintenance.
• Provided consultant oversight and reviewed design and plan preparation on 9 projects.

Structural Management Section
• Entered routine bridge inspection reports for over 4,900 bridges and culverts through cooperation with the bridge inspectors from NDDOT’s eight districts
• Load rated new and existing bridges for load carrying capacity in accordance with AASHTO’s Manual for Bridge Evaluation
• Continued improvements to bridge preservation program by assisting Districts in performing maintenance and preservation policies and practices for state structures
• Provided information to consultants, counties, and cities regarding the condition of local bridges to assist in planning and programming structural improvements
• Coordinated with FHWA to remain in compliance with the 23 Bridge Inspection Program Metrics
• Reviewed shop drawings for all NDDOT bridge designs
• Maintained information on all bridges open to public use within the state
• Acquired Infrared camera and other nondestructive tools with SHRP2 funds for inspection of structures

Fargo 32nd Avenue South
The 32nd Avenue South interchange in Fargo was improved to reduce peak hour delays and to accommodate future traffic volumes. The existing four-lane divided roadway was widened to a six-lane facility with additional turn lanes and intersection improvements. This interchange has two truck stops that generate high volumes of truck traffic and is also considered a major retail corridor in Fargo. An additional loop ramp was also constructed in the SW quadrant of the interchange to improve signal timing and delays at the west ramp intersection. In addition, construction of the new loop ramp reduces the amount of traffic stacking on the southbound I-29 exit ramp eventually spilling onto I-29.

Minot NW Bypass
During the 2011 flood in Minot, it became clear that the growing population of Minot has placed...
great demand on the city’s north/south corridor routes. The existing NW Bypass was originally constructed in 1976 as a two-lane bituminous roadway. This roadway is being expanded into a four-lane divided roadway. The existing roadway will become the northbound road and the new roadway (constructed to the west of the existing) will be the southbound roadway. To ensure the entire NW Bypass is above the flood elevation of the 2011 event, the project incorporated portions of the Minot Flood Protection project that included structure elevations, structure lengths and channel widening for the Mouse River bridges. It also included grade raises, drainage improvements and levees through the bypass. The project is a two-year construction project expected to be completed in 2018.

**Carrington Roundabout**

US 52 is an important corridor for the local and national economy. One unique aspect is the designation as a truck route for over-sized and overweight loads. The conversion of the US 52 & US 281 intersection at Carrington into a roundabout was designed in coordination and review with the Specialized Carriers & Rigging Association. The roundabout contains all the safety/operational benefits of a traditional roundabout, but with additional modifications to accommodate larger sized loads. Some of these modifications include: removable signs, a larger inside truck apron, outside truck blisters for wheel over-tracking, and the ability to run oversized vehicles in reverse direction with proper Highway Patrol coordination. The roundabout was completed and opened to the public in 2016.

**Williston US 2 Operational Improvements (2nd Ave W, 9th Ave W, and 42nd St)**

The southbound to westbound leg of the 2nd Ave W and West Dakota Parkway intersection was reconstructed to eliminate merging conflicts for traffic utilizing the free right turn lane. The 6th Ave W access onto West Dakota Parkway was removed to eliminate excessive traffic queues. The traffic that formerly used the 6th Ave W access was rerouted to the 9th Ave signalized intersection. The southeast and northwest frontage road accesses to 42nd St in Williston were removed to improve traffic operations. Turn lanes were added on US 2 at 42nd St.

**ND 23A in Watford City**

The project development for ND 23A in Watford City was completed in 2017, and the ND 23A reconstruction project will be constructed in 2018. This project will tie into the recently reconstructed US 85B and ND 23B. The ND 23A project is a full reconstruction project consisting of an urban 3-lane section with curb and gutter, storm drain, box culvert structure, street lighting, and a shared use path. Coordination with Watford City officials was an essential part of this project due to city projects being constructed near the corridor.

**ND 1804 Corridor between New Town and Williston**

The ND 1804 corridor between New Town and Williston is an existing 2-lane roadway that is ap-
The ND 1804 projects consist of shoulder widening, paving, major earthwork, new structures, installation of passing lanes, climbing lanes, and turning lanes. The urban area near Williston included a multi-lane concrete section with curb and gutter, storm sewer, and continuous lighting. Project development consisted of coordination with several state and federal agencies. Construction began in 2016 with remaining projects scheduled for completion through 2020.

Concrete Overlays

Concrete overlays on state highway projects have typically consisted of milling the existing asphalt roadway surface, and overlaying with approximately 8" of doweled portland cement concrete. This type of work focuses primarily on restoring the structural integrity of the pavement without necessarily changing existing geometrics. Concrete overlays require little to no dirt work, which in-turn minimizes environmental impacts. A majority of concrete overlays have been applied to divided highways where traffic can be diverted head to head on the other roadway while construction takes place. In the 2015-2017 biennium, concrete overlay projects have been developed for US 2 near Williston, US 2 near Lakota, I-94 near Tower City, and others.

High Mast Lighting on Interstate

High mast light standards throughout the state were updated from high pressure sodium to LED luminaires. In addition, high mast tower equipment that was reaching its final useful life or failing were being replaced. The project consisted of installing approximately 1540 LED luminaires. The LED luminaires are more efficient providing potential energy savings.

LiDAR

A remote sensing method known as Light Detection and Ranging (LiDAR) has been added to the land surveying toolbox at the NDDOT. In March of 2016, the project along I-94 from east of Valley City to Tower City became the first LiDAR project for the Department. A vehicle outfitted with a LiDAR scanner drove down the roadway at highway speeds and collected millions of points over the 10 mile stretch of roadway. Utilizing different field survey techniques and software packages the massive amounts of data was processed from the point clouds and delivered to the design team. The survey accuracies obtained from this project outdid the expectation. The Department has since utilized mobile LiDAR tool on six other projects with many more expected, and is currently using aerial LiDAR for a project in the ND 1804 corridor.

Environmental and Transportation Services

Mark Gaydos, Engineer

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.

Environmental Services

Environmental services are provided by two
sections. They 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
The Cultural Resource Section 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.

The section performs archaeological services, inventories, mitigation, monitoring of historical sites and monitoring of construction projects to ensure compliance. The section also provides tribal consultation, agency coordination, and completes 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.

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 and compares these costs with the department’s budget allocation for consultant services.

Key Accomplishments

July 1, 2015 to June 30, 2016

- Published the Consultant Administrative Services Procedure Manual. This manual provides procedure to implement state and federal requirements for the procurement and administration of engineering and design related service contracts.

- Published the Right of Way Manual and Right of Way Acquisition Procedures for Local Public Agency on Federal Aid Projects Manual. These manuals provide procedure to implement state and federal requirements for real property acquisition, relocation, highway beautification, and management on highway projects.
• A Programmatic Categorical Exclusion Agreement between North Dakota Department of Transportation and Federal Highway Administration was approved on June 17, 2016. The programmatic categorical exclusion agreement allows the department to process and approve certain (c) list and (d) list actions of categorical exclusions on behalf the Federal Highway Administration.

July 1, 2016 to June 30, 2017

• A Programmatic Biological Assessment between North Dakota Department of Transportation, Federal Highway Administration, and U.S. Fish and Wildlife Service was approved on February 19, 2017. The programmatic biological assessment fulfills Section 7 of the Endangered Species Act for all federally involved projects with insignificant or discountable effects to listed species and critical habitat within North Dakota. The assessment includes standardized conservation measures to avoid or minimize effects from highway project activities.

• Conduct training program for erosion and sediment control on highway construction projects. A certification course was developed and conducted in partnership with the Upper Great Plains Transportation Institute at North Dakota State University, the Associated General Contractors of North Dakota, the North Dakota Department of Health, and the Department of Construction Management and Engineering at North Dakota State University. The training is part of the Stormwater Management Program, which consists of the planning, maintenance, and regulation of facilities that collect, store, or convey stormwater as well as managing the quantity and quality of stormwater.

• 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.

• Continue to develop wetland banks to provide mitigation credits for transportation projects that have unavoidable impacts to wetlands and other aquatic habitats.

Materials and Research
Ron Horner, Engineer

Responsibilities and Activities
The division’s primary responsibility is assurance of the quality and economy of highways and structures through the performance of materials.

The division is made up of the Testing Laboratory, Bituminous Materials, Gravel Prospecting, Geotechnical, and Research and Pavement Design sections.

Key Accomplishments

Testing Laboratory
• Maintained national AASHTO accreditation of the testing laboratory.

• Tested high volumes of highway materials such as aggregate, cement, concrete, soil, paint, and glass beads used in project construction.
• Served as materials testing resource throughout the state during pre-construction and construction phases.

• Continued the aggregate reference sample program for verification and compliance purposes between NDDOT and industry.

• Provided instruction of test procedures to enrolled participants in Technical Certification Program. Provided certification by participants’ performance in completing all procedures correctly.

• Assisted in the development of new methods in testing for potential use: such as concrete resistivity, super air meter (SAM), and MIT Scan T3 testing for thickness of concrete.

Bituminous Materials Section

• Tested high volumes of asphaltic materials used on NDDOT construction projects such as Performance Graded (PG) binders, emulsions, cutback, and crack sealers.

• Updated Performance Graded (PG) asphalt specifications to include Multi-stress Creep Recovery (MSCR) testing used on high traffic routes.

• Evaluated and approved Superpave mix designs for paving projects.

• As a member of the Combined States Binder Group determined asphalt cement supplier’s compliance with specifications and procedures.

• Developed material recommendations for paving plans based on traffic levels and project location. They are used to estimate plan quantity and incorporate different material quality levels for each project.

• Developed specifications for intelligent compaction of asphalt pavement.

• Developed specifications for Stone Matrix Asphalt (SMA) and implemented into two hot bituminous projects successfully.

• Developed forms to meet FHWA requirements for comparing Quality Control, Quality Assurance and Independent Assurance sampling and testing.

• Served as a resource for questions regarding mix designs, specifications, bituminous materials and construction issues that arise during paving. Provided dispute resolution with contractors and the districts when problems arose.

• Monitored projects for Quality Control/Quality Assurance (QC/QA) compliance.

• Provided instruction of test procedures to enrolled participants in Technical Certification Program. Provided certification by participants’ performance in completing all procedures correctly.

Gravel Prospecting Section:

• Crews located and secured new gravel deposit options for future NDDOT projects totaling 7,600,000 tons.

• Renewed existing options that were expiring which makes the aggregate also available for future construction projects.

• Pit plat drawings, boring logs of test holes of aggregate source, pit analysis, and other pertinent information are incorporated into construction plans for contractors to use in the bidding process.

• Tested, monitored, and evaluated State-owned aggregate sources to be used in upcoming projects, and released exhausted sources.

• Maintained an aggregate information database with pit usage, compiled usage reports.

• Assisted contractors, landowners, aggregate owners, and public with questions and problems concerning aggregate sources and materials.

Geotechnical Section

• Conducted linear soil surveys and borrow area investigations for roadway improvement projects throughout the state.

• Conducted subsurface investigations and recommendations for several bridge reconstructions such as Broadway Viaduct in Minot and Minot Bypass Structures.

• Development of landslide repair projects which included Burlington Landslide Repair, Highway 73 Landslide Repair, Highway 2 at White Earth Landslide Repair, and Donnybrook Landslide Repairs.

• Installed instrumentation and continual monitoring for other active slides throughout the state.
• Provided guidance and support for geotechnical consulting engineers and construction projects throughout the state.

• Continued development of the Geotechnical Asset Management Database and Geotechnical Design Manual.

• Collaborated with the Information Technology Division on implementation of new geotechnical reporting software (gINT).

• Secured Transportation Innovations Program (TRIP) funding for instrumentation to increase the frost heave monitoring in the northeastern area of the state.

Research and Pavement Design Section

• Managed the Research, Development, and Technology Transfer Research Program. This included developing work plans and monitoring construction progress of new research projects, reporting findings to management and developing implementation programs upon completion of research. Worked with NDDOT, FHWA, industry representatives, and manufacturers. Worked with university researchers, Districts, and other NDDOT Division personnel to insure proper coordination of research activities. Planned and conducted the periodic FHWA required Research Program Peer Exchange with other agencies and FHWA.

• Developed pavement thickness recommendations for major project improvements.

• This required using collected data as inputs for the designs such as soil modulus, traffic and truck data, reliability, and material selection.

• Incorporated the new AASHTO-Mechanistic Empirical pavement design methodology into the NDDOT’s standards. Identified key data and criteria necessary for NDDOT implementation. Calibrated the software program model to reflect NDDOT materials and pavement performance.

• Collected Falling Weight Deflectometer (FWD) data for pavement and subgrade strength to support NDDOT Districts’ efforts to administer springtime load restrictions. Used data to determine soil strengths for pavement thickness designs.

• Collected Pavement Profiling Data, analyzed, and reported results to Project Engineers for construction contract administration, and to insure specifications are met. Conducted training on profile data analysis for project personnel.

• Monitored, reported, and made recommendations relating to the performance of new materials and methods.

• Worked with Technical Services to write special provisions for incorporation into construction plans and update existing specifications.

• Procured training services, organized, and facilitated a Steel Bridge Coating Inspection Training Program for NDDOT and consulting engineer inspectors.

• Procured and administered QA inspection services for fabrication inspection contracts for new steel structures such as; welded on plate girders, rolled beams, overhead sign structures, etc.

• Reviewed welder qualifications to certify welders for work on NDDOT field projects.

• Observed and evaluated new technology and techniques for pipe rehabilitation processes such as; pipe joint repair, pipe lining, etc.
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

Key Accomplishments

July 1, 2015 to June 30, 2016

- Updated the ADA Transition Plan in October 2015
- The FHWA and FTA requirements were combined into one program titled: Title VI/Nondiscrimination and ADA Program in October 2016
- LCPtracker: During this last Biennium, the NDDOT moved from the filing of certified payrolls (required on all federal-aid construction projects) via paper, to electronic filing and review to an online payroll system LCPtracker. The Department conducted 25 trainings of all users, including contractors and engineers and support staff during the biennium. In the summer of 2016, approximately half of all certified payrolls were filed electronically, and by June, 2017, 85% of all payrolls were filed electronically. The Department is now set to move to 100% of payrolls filed electronically, which is expected to save the Department upwards of $750,000.00 per biennium.
- The Department conducted 20 contractor compliance reviews during the biennium period, ensuring compliance with federal regulations and protecting federal highway funds.

July 1, 2016 to June 30, 2017

- A Spanish translation of the External Complaints of Discrimination form was procured in April 2017.
- Nine new DBE Firms Certified; 6 Graduations from the DBE Program

The Department also began reviewing the fairness of applicant hiring in 2016, when accurate applicant flow became available. By January of 2017, the Department had no significant adverse impact for any demographic group for which the Department must keep data.

Cara Thompson, Devils Lake District employee
Responsibilities and Activities
The Construction Services Division administers highway construction contracts. The division is responsible for highway construction bid openings, contracts, bonds, and contract payments. The Division provides services in contractor pre-qualifications, construction scheduling, engineering reviews, contractor claims, project staffing, construction records, engineering equipment, and various other services.

The Construction Services Division activities can be consolidated into five key operational functions.

- Bid Openings and Contract Payments
- Contract Services
- Records Management
- Construction Services
- Administrative Support Services

Key Accomplishments

Contractor payments on DOT construction projects
Total contract payments for highway construction for the 2015-17 biennium was $1.274 billion. This compares to the $1.054 billion in the 2013-15 biennium.

IPads For Construction Staff
Equipped field staff in the districts with iPads with cellular cards to give them the ability to access the CARS system from the construction sites.

The Construction Automated Records System, or CARS
NDDOT’s computer based construction records system. The system uses the internet for data entry and stores project records on a central database. The following upgrades were made to the CARS system during the biennium.

- Electronic Field Books - This project made all the information that was formally recorded in a physical field book available for entry into an electronic field book in order to eliminate paper and the need for field staff to maintain a physical field book. This project added new features to the CARS system as well as made existing features more usable by field staff who use an iPad.

- Electronic Certifications - This insures that all of the proper certifications for materials used for a construction project are uploaded to the NDDOT’s FileNet system through the CARS system. Made to be usable by field staff using an iPad.

- Change Order Signatures - Eliminates the mailing and printing of documents by provid-
Responsibilities and Activities

The Maintenance Division is responsible for NDDOT property management and facilities; safety, health, and 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.

Key Accomplishments

Capital Improvements

Buildings that were funded in this biennium include; Bismarck Equipment building, Cooperstown, Hettinger and Hillsboro Section buildings, and a Grand Forks Driver’s License addition. One large salt building was constructed at the Williston District. Repairs were made to a number of other maintenance buildings and containment was constructed around salt brine storage tanks. The Medina Rest Area rehabilitation planning and design was completed.

Intelligent Transportation Systems (ITS)

ITS improves transportation safety and mobility and enhances productivity through the use of advanced information and communications technologies. ITS technologies assist the Maintenance Division in providing better information to the traveling public. The Division’s ITS activities include coordinating the development and deployment of roadway weather information. This includes providing technical assistance to the districts and developing ITS equipment specifications. The Maintenance Division is responsible for collecting and disseminating roadway and weather information. This information is provided to the general public via the Internet, the North Dakota 511 Travel Information Service, a mobile application, and our Dynamic Message systems (DMS). Ten additional cameras were added to aid the traveling public. The division added/upgraded seven Environmental Stations (ESS) and eleven permanent DMS were installed to better inform the public of Amber Alerts, safety messages, travel alerts, no travel advisories, and road closures.

The Maintenance Division oversees a pilot project using Automated Vehicle Location (AVL) and data collection equipment. The project is intended to improve the efficiencies and safety of the traveling public during snow and ice control operations.

Equipment

The department has committed the use of its equipment fleet and personnel to assist other agencies and local governments in responding to emergencies such as flooded highways due to excessive snow fall and spring run-off. The Maintenance Division coordinates the response effort with the North Dakota Department of Emergency Services (DES). Some Dakota Access Pipeline (DAPL) activities were coordinated within the division.

Maintenance Decision Support System (MDSS)/and Automated Vehicle Location System (AVL)

The department is active in implementing MDSS. Several states joined together to form a pooled-fund study to jump-start this project, which will continue into the next biennium. The study is being coordinated with the automated vehicle location and data collection project, which is intended to provide maintenance operators with up-to-date weather information, equipment coordination during adverse weather, and best maintenance strategies to combat poor road conditions caused by the weather.

Tow Plows

The Maintenance Division continues to pursue equipment that will make the department more efficient and effective. The Department has recently purchased eight bidirectional tow plows.

Studies

The Maintenance Division completed a rest area study and section optimization study and presented it to the ND legislature.
Responsibilities and Activities

Local Government (LG) Division works primarily with Local Public Agencies (LPA’s) such as the 12 largest cities, the 53 counties, 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.

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

Provided below are the program areas Local Government is responsible for:

- MPO Coordination and Planning activities
- Interstate (Urban areas)
- Urban Roads (LPA owned federal aid roads and Regional System)
- County Roads (LPA owned federal aid routes)
- Bridges (LPA owned ≥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)
- Transit
- Emergency Relief (ER) - Statewide on state owned roadways and LPA federal aid routes
- LPA Long Range Transportation Planning
- Title VI Sub-recipient monitoring and Audits (LPA’s, MPO’s, and Transit Providers)
North Dakota Department of Transportation

Key Accomplishments

Rural Projects
- The Rural Programs Section administered $456.7 million in state aid provided by SB 2103 and HB 1176 (2015-2017 Legislative Session). These funds were spent on oil impacted and economic developmental access roads to assist all 53 counties in their infrastructure needs due to the increased oil activity and economic related activities. As a result of these funds, roadways were improved to address improved load carrying capacity, smoothness, and safety.
- The Rural Programs Section also administered $38 million in federal funds to improve roadways and bridges in the rural areas of North Dakota.
- Received AASHTO’s (American Association of State Highway and Transportation Officials) 2016 President’s Award for Administration. This award is for “performing exemplary service to the states furthering transportation.”
- These programs remain vital to provide good roads and bridges in the rural areas to allow the oil and agricultural industries to bring their products to the world.

Urban Projects
- The Urban Programs Section administered $69 million in federal funds to improve highways and arterials in the urban areas of North Dakota.
- The Urban Programs Section also administered several projects funded with one-time state funding since 2011. These funds were provided through Legislative Sessions and have allowed NDDOT to build bridges, construct bypass routes, and improve safety for the traveling public.

Transportation Alternatives Projects
Transportation Alternatives (TA) provides funding for projects defined as transportation alternatives and are designed to provide funds for community-based projects to enhance the travel experience for all modes. Funding in the amount of $1.5 million each year help communities create bike trails, develop walkable safe routes to school, improve non-driver access to transit and increase mobility. These investments enhance communities, connections, and access and allocate resources to integrate walking, bicycling, and other modes of active transportation into transportation systems.

Planning/Asset Management
Scott Zainhofsky, Engineer

Responsibilities and Activities
In support of NDDOT’s mission to, “safely move people and goods,” 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.

The Division is responsible for transportation-planning and engineering-management programs, including (but not limited to):
- Statewide transportation planning and special studies, such as:
  » the long-range strategic transportation plan (currently TransAction III)
  » technical planning assistance to local units of government
  » highway-needs and levels-of-service studies
  » transportation policy planning
  » maintaining the Highway Performance Classification System and trending report
  » maintaining the strategic Freight Network classifications and definitions
  » assessing transportation impacts of various economic sectors

State Avenue Railroad Bridge project in the city of Dickinson

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• Railroad planning and programs, such as:
  » statewide rail plan
  » rail-highway crossing signals, closures, and surfacing improvements
  » rail loan program
• Mapping services (e.g. county base maps, highway/tourist map, et al.)
• Traffic data collection, analysis, and forecasting
• Transportation and roadway data collection and analysis
• Department-wide asset management, including modeling:
  » the current and predicted condition of the state highway system;
  » highway system funding needs;
  » level of service that can be provided based on budgetary limitations; and
  » the effects of budgetary tradeoffs between numerous department investment options.
• Pavement performance evaluation and condition survey
• Program-level performance management (i.e. service indicator development, target setting, outcome reporting, etc. for major department-level program areas)
• Department-wide Enterprise Risk Management program for uncertainties related to delivery of services
• Policy and legislation evaluation and research.

Key Accomplishments
• The division counted approximately 5000 traffic locations (or 2/3 of the state) each year of the 2015-17 biennium, in addition to monitoring and maintaining 74 automatic traffic recorders (ATR) and 16 weigh-in-motion (WIM) sites that continuously collect traffic data at permanent installations. Recently upgraded WIM sites are now IP addressable, allowing instant connectivity to the sites for NDDOT and NDHP. Previously, the NDHP could only connect to the WIM sites and receive data through a radio frequency (RF) signal which was very limited in signal range. WIM are used both for traffic data collection purposes and by the NDHP to triage which commercial vehicles should be stopped for weight enforcement inspections, saving the compliant operators time and money. Additionally, the division spearheaded the installation of a fiber optic traffic data collection system test using OptaSense equipment. This installation is a first of its kind for this purpose, anywhere in the world. It has previously been deployed in Europe and New Zealand for traffic speed monitoring and numerous places around the world for site security, but never for both traffic speed and count data collection.
• Planning and Asset Management (P/AM) prepared well over 600 individual maps, each year of the 2015-17 biennium, including updating the State Highway Map. This equates to roughly 2.5 maps per working day.
• The division updated and initiated several strategic transportation plans, including:
  » Updating North Dakota’s State Freight Plan for compliance with new federal regulations adopted after the Plan was completed during the 2013-15 biennium;
  » Initiating an update to North Dakota’s State Rail Plan, last updated in 2007;
  » Initiating development of a statewide Active and Public Transportation Plan, the first known statewide plan in the nation covering these transportation modes in a single document. This approach should reveal opportunities and synergies among these and other modes of statewide transportation;
  » Initiating a department-wide Risk Management program focusing on the uncertainties associated with delivering the NDDOT’s services and meeting the various program goals; and
  » Assisting with the development of new programs and policies for NDDOT’s implementation of the Main Street Initiative.
• P/AM refined the pavement management pro-
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, and completing traffic operations activities. These responsibilities include a system wide perspective as well as project level involvement from early project inception through to project completion.

Key Accomplishments

During the 2015-2017 biennium the Programming Division continued to make progress in areas such as safety, project fund management, programming processes, and project scoping.

Local Road Safety Plans (LRSP) and State Road Safety Plan (SRSP) Project Implementation

Implementation of local road and state road systemic safety projects is underway. Projects include low cost proven safety countermeasures such as enhanced signing and pavement marking, and intersection lighting.

Road Safety Review

Road safety reviews conducted at select high crash intersections and corridors within Grand Forks, Minot, and Fargo. Projects under development from the review recommendations.

Urban Interstate Priority Process

In coordination with other NDDOT Divisions, began development of a new process to gather input and summarize information from NDDOT districts, cities, counties, and MPO’s regarding potential needs at urban interstate interchange locations. This information will be used in project priori-
ity submissions for development of the Statewide Transportation Improvement Program.

**Statewide Transportation Improvement Program (STIP) Tribal Meetings**

Completed annual STIP meetings with each of the four tribes. Included discussions on programmed projects, project needs, and the Local Road Safety Program.

**Improved Project Scoping Meetings**

Expanded the attendance at scoping meetings to provide more expertise to contribute valuable information towards project level decision making. Included visual presentations (PowerPoint, Google Earth view, etc) interactive during the meeting to facilitate understanding and improved discussions of project scope.
Districts
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
Kevin Levi, Engineer

Responsibilities and Activities
The Bismarck District is located in the south central part of the state and lies in nearly even halves on either side of the Missouri River. Of the 2,800 lane miles, 445 are on the Interstate system and 2,355 are on the state highway system.

Key Accomplishments
During this past biennium, the District has had very active construction and maintenance programs.

Construction projects completed in 2015:
- Mill & bituminous overlay on Interstate 94 from Sterling east to the county line.
- Concrete pavement repair and grinding on I-94 from Eagles Nest to the New Salem.
- Grade raise on ND 3 north of Tuttle.
- Several overlay and seal projects throughout the District.

Construction projects completed in 2016:
- Bituminous overlay and widening on ND 3 from Napoleon to I-94.
- Bituminous overlay and widening on ND 21 from Jct. ND 31 to Jct. ND 31.
- Bridge deck overlay projects on the Walter Hjelle & Railroad structures near Washburn.
- Slide repair on ND 200A Near Stanton.
- Traffic signal improvement project throughout the Bismarck/Mandan area.
- Structural painting of the Grant Marsh Bridge.
- Several overlay and seal projects throughout the District.

Regular preventive maintenance on all roadways is an ongoing activity for the District. These activities consist of attempting to seal coat the District roads on a seven-year cycle, contract patching the segments of roadway that show distress from the traffic, and using the mini mac to help reduce the impacts from depressed transverse cracks prior to overlay projects. Microsurfacing and slurry seals have proved to be a cost effective solution on high volume roadways. We continue to crack pour most roadways throughout the district.

Other Maintenance activities in the District include:
- The Dura Patcher and scotch patching were used at several locations throughout the district on four lane as well as two lane highways.
- Rumble Strip repair
- Transportation Technicians assisted with several construction projects.
- Completed building concrete Salt Brine Tank containment systems at each section yard.
- In the process of constructing a 230’x100’ truck storage building which should be completed in October of 2017.
- Sealed cracks and applied deck sealer to several bridges across the District.
- Last winter crews put in many long hours dealing with snow and ice issues to help provide good roads for the traveling public.

In addition to the projects listed above, District employees helped administer several construction projects in other Districts.

DAPL Protest - Some Dakota Access Pipeline activities were coordinated within the Bismarck District throughout the protest.
Responsibilities and Activities

The Devils Lake District is located in the north central part of the state. The district is tasked with the maintenance, construction, and administration for 2,304 lane-miles of the state highway system. The district employs 70 full-time employees who handle duties related to construction, maintenance, sign maintenance, shop mechanics, and administration. The district maintains the roadways and equipment used throughout the year. The district staff also prepares plans, builds projects, and monitors other programs throughout the district.

Key Accomplishments

Construction Projects Completed in 2015:
- Completed the installation of weather stations and cameras on the roadways along the shore-line of Devils Lake.
- Did a safety project at a busy intersection north of Dunseith on US 281.
- Did a structural overlay on ND 15 to increase the load carrying capacity going to and from a major elevator in the area.

Construction Projects Completed in 2016:
- Worked with North Dakota Motor Carriers Association to complete the largest Roundabout in North Dakota on US 52, which is part of a designated over-size, over-weight corridor.
- Widened the non-grade raised areas on ND 19 between US 281 and US 2 to create a uniform driving surface throughout that segment.
- Added shoulders and increased the load carrying capacity on ND 30 from ND 15 up to Maddock.
- Completed an experimental TRIP project on ND 57 to alleviate extreme seasonal frost heaves in a half mile segment between Fort Totten and the community of Crow Hill.

Construction Projects 2017:
- Began work to replace the BNSF bridge over ND 20 within the City of Devils Lake.

Maintenance

During the 2015-2017 biennium, Devils Lake District maintenance forces performed a wide variety of activities to improve/extend the life of roadways and maintain ride quality, including:
- District implemented a bridge preservation program and was able to seal all bridge decks within the district.
- The Mini-mac operation which covered 90 miles of depressed, transverse cracks.
- Two Dura-patchers were used throughout the district.
- Salt brine containment systems were built in the Devils Lake, Cando, Carrington, Fessenden, Langdon, Maddock, Pekin, Rolla, Rugby and Starkweather sections.
- Cross-trained transportation technicians assisted with several construction projects which included paving, district striping, seal coats and grading projects.

2016 - 2017 winter had several blowing snow events which forced closures in several locations; crews 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 Great State’s residents as well as visitors.
- Completed construction of a new section building in Rugby.
- Addressed many drainage issues within the right of ways of the highways where several approach and centerline pipes were replaced.
- Continue ongoing activities of maintenance signs, trucks, equipment, buildings and yards.
- Completed delineator replacement along US Highway 2 corridor from Rugby to Lakota.

Even though Devils Lake has not risen within the past couple of years, the prairie pothole region still presents challenges with the smaller bodies of water next to the roads. Preservation of the highway system is ongoing with contractors and our own forces to provide the load carrying capacity, comfort, and safety to the public.
Responsibilities and Activities

The Dickinson District is located in the southwest corner of the state. Of the 2,000 lane miles of roadways which it manages, 400 are on the interstate and 1600 are on the state highway system. These employees handle duties related to roadway construction and maintenance, sign maintenance, shop mechanics and administration.

Key Accomplishments

Some of the major construction projects in 2015:

• Completed the grading, structure, and paving of the new interchange at Exit 56 in Dickinson
• Widening, turn lanes, passing lanes, and paving on ND 22 south of Killdeer
• Mill and overlay east and westbound I-94 from MT State line east 11 miles

Some of the major construction projects in 2016:

• Reconstruction and new concrete pavement on I-94 westbound form Medora west 12 miles
• Widening and paving of ND 49 south of Beulah including a new bridge over the Knife River
• Completed a two year project adding a grade separation bridge over the railroad tracks on State Avenue in Dickinson

Some of the major construction projects in 2017:

• Completed the two year Killdeer bypass project providing a concrete roadway around the northwest side of Killdeer
• Completed the Dickinson bypass from exit 56 to ND 22 around northwest Dickinson
• Mill and overlay east and westbound I-94 from Belfield to South Heart along with a new bridge at the South Heart interchange
• Added several turn lanes to ND 22 near I-94 in Dickinson

Belfield to South Heart along with a new bridge at the South Heart interchange
• Mill and overlay on eastbound I-94 from Medora west 12 miles

Snow and ice control and preventive maintenance are top priorities for Dickinson District maintenance employees. Maintenance crews are out early in the morning and late in the evening plowing and applying product to the highways to improve road conditions for commuters. Major preventative maintenance activities consist of crack sealing, bridge maintenance, rut filling, roadway patching, and drainage and culvert repair.

Other maintenance activities completed this biennium include:

• Replaced Hettinger maintenance section building
• Constructed brine containment systems at Beach, Hettinger, Dickinson and Belfield maintenance sections
• Performed field trials on various silane treatments for bridge decks
• Implemented online forms using tablets for inspection of safety appurtenances, Stormwater Pollution Prevention Plan (SWPPP), delineators, reference points and overhead span wires
• Inspection of safety appurtenances, Stormwater Pollution Prevention Plan (SWPPP), delineators, reference points and overhead span wires

The district has been participating in the MARWIS (Mobile Advanced Roadway Weather Information Sensor) trial project. This has led to more efficient winter time roadway maintenance by getting real time data to the equipment operator. Based on the success of this trial, MARWIS will begin to be implemented statewide.
Fargo District
Bob Walton, Engineer

Responsibilities and Activities
The Fargo District is located in the southeastern part of the state, and is responsible for 1,827 lane-miles of roadway. The District employees assigned in four sections: highway engineering, roadway maintenance, vehicle maintenance, and administration. Two engineers were temporarily assigned to the Williston District for the 2015 construction season. One engineer stayed through the winter and the 2016 season.

Key Accomplishments - Construction
The 2015 Construction season included the following:
• The northbound I-29 lanes were reconstructed from Argusville to Hunter, including adding 8 new box culverts
• ND 200A was overlaid, including building a new triple 10’ x 12’ box culvert at the North Branch of the Elm
• Began the 2 year project for completing reconstruction of West Fargo - Main Avenue
• ND 46 was milled and overlaid from east junction of ND 18 to Cass County 81
• A Radial T intersection was constructed on ND 18 on the north side of Casselton. The Radial T project took a significant amount of truck traffic off a residential street and provided turn lanes for the numerous trucks hauling sugar beets to the new piling station and corn to the ethanol plant

The 2016 construction season included the following:
• Finishing Main Avenue in West Fargo
• Completing the reconstruction of southbound I-29 from Argusville to Hunter
• Widening and overlaying 13 miles of ND 46 to the east and west of Leonard, and overlaying ND 13 from Wyndmere to I-29
• For the first time in the state, a Stone Matrix Asphalt (SMA) overlay was used. The SMA project was done on the I-29 northbound lanes from the South Dakota border to mile point 11.00. This pavement overlay consisted of a fractured granite rock and high grade asphalt mix reinforced with cellulose fibers
• Turn lanes were installed at the east junction of ND 13 and ND 32. The turn lanes will relieve the traffic snarls that occur with shift-changes at the Doosan-Bobcat manufacturing plant and improve access to a new CHS grain elevator and fertilizer plant

• In early 2017, the Fargo I-29/32nd Ave. S. interchange reconstruction project started. This project impacted about 75,000 vehicles per day and created dynamic challenges for detouring and providing access to area truck stops, businesses, and hospitals

During the biennium, 140 miles of District highways had contract chip seals completed to extend the highway pavement’s serviceability. The District also began using a CHFRS-2P oil for chip seals in an effort to improve chip retention and minimize oil tracking. This oil had not been used in North Dakota previously, but showed great promise at an economical price.

Key accomplishments - Maintenance
The summer of 2015 was fairly wet until mid-July. Roadside and median mowing was delayed due to the wet ditches. The winter of 2015-16 was very warm and rain events occurred as late as mid-December. The area received below average snowfall with the largest daily snowfall being around 4 inches. Freeze-thaw events and frost created slippery roadways for morning and evening commutes at an increased regularity. Potholes were a significant problem on I-29 north of Fargo from January through February primarily due to the multiple freeze-thaw events. The constant winter pothole maintenance kept crews very busy in addition to snow and ice control operations. No interstate closures were required due to winter conditions for 2015-16.

The winter of 2016-17 started out warm then changed with a mid-December cold snap followed...
by about an inch of rain on Christmas Day. I-94 in the Fargo area was closed twice, once for a blowing snow event between Valley City and Jamestown, and once for a freezing rain and poor visibility event the day after Christmas. I-29 in the Fargo area was closed once due to blowing snow from Hillsboro to Canada impacting visibility in early December. With yet another unseasonably warm winter, spring load restrictions were initiated early in the Fargo District with implementation starting February 28th.

During the biennium, District Maintenance forces completed 1,138 lane-miles of crack sealing, and 133 lane-miles of gravel shoulder repair.

In 2015, District Maintenance staff finished paving half of the District HQ lot with concrete to provide an all-weather CDL and motorcycle testing area for the Fargo Drivers License office’s use. Maintenance staff performed major concrete repairs on both Hillsboro Visitor Center’s sidewalks. They also constructed eight new salt brine containment facilities, and expanded another to meet current environmental storage guidelines for roadway chemical needs. In 2016, staff began replacing the HQ maintenance yard fence using salvaged box beam guardrail and wood planks to improve HQ facility inventory security, public safety, and improve neighborhood aesthetics.

**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**

One of the districts biggest and most viewed project in 2015 was the painting of the Sorlie Bridge on the Red River between East Grand Forks and Grand Forks. Along with the painting the project consisted of aesthetic lighting. The lighting system is one of its kind within the state of North Dakota and displays a variety of pre-programmed light schemes which are displayed on holidays and events throughout the year.

The district completed a 6.9 mile Concrete Reconstruction project on Highway 2 WB from Michigan E 1.4 miles and from Lakota E 5.3 miles. The concrete reconstruction will provide years of service to the traveling public.

Another project in 2015 the district completed a concrete pavement repair project on both northbound and southbound I-29 through the Grand Forks Urban area. This project consisted of Next Generation Grinding which is the first of its kind in the state of North Da-
kota. The grinding produces a pattern which provides a very smooth ride and reduces the tire noise at the pavement surface.

The district completed many projects which consisted of concrete pavement repair projects, milling and hot bituminous paving, chip seals, embankment restoration, bridge deck overlays, structural painting projects. These were all very important projects to maintain the roadways and provide many more years of service to the highways within the Grand Forks district.

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. Maintenance activities are scheduled out of the District.

The Minot headquarters is staffed 24/7 during winter months to respond to emergencies. Winter snow and ice control begins at all outlying maintenance sites beginning at 5 a.m., earlier if conditions require during emergencies or storm events. Additional support services are provided to the cities, counties, utilities, United States Air Force, and public from the district, which range from everyday activities to emergency responses. Minot Air Force Base is located north of Minot and includes 150 missile launch facilities and 15 missile alert facilities. District maintenance staff provides winter escorts to certain nuclear warhead and missile movements to these sites on state-county-township roads.

Key Accomplishments

- Series of projects totaling over 70 miles on ND 23 from west of Parshall to near Velva that started in 2012 were completed in 2016. This provides an unrestricted by legal weight corridor from Watford City to Velva, connecting US 85, US 83 and US 52. The segment from US 83 to west of Parshall included widened shoulders and passing lanes approximately every 5 miles.

- 136 highway miles of asphalt overlay projects were bid in 2016 and 2017

- 210 highway miles of chip seal coats or micro surfacing surface treatments were bid in 2016 and 2017.

- The US 83 Broadway viaducts in Minot replacement project was designed in 2015-2016 and bid late 2016 and continues as the biennium ended.

- The US 83 Bypass on west side of Minot expansion was bid and construction began on the 2 year contract in early 2017. The project will include a 4 lane section from junction US 2 north to 4th Ave interchange. The design of structures and embankments includes provisions to become part of the Minot flood protection project. The existing Mouse River bridge will also be removed and replaced with a new one that is double in length (300') of existing bridge (150').

- Several safety projects were constructed this biennium including
  - Upgrading turn lanes on US 2 at several intersections between Burlington and Towner.
  - Intersection lighting installed along US 2 at Burlington Johnson Street intersection.
  - Constructed new turn lanes on US 83 at Glenburn, Upham and Lansford intersections.
  - Constructed intersection realignment at two intersections near Maxbass.
  - Replacement/upgrade of 17 high mast lights along US 2 in Minot was bid and work getting underway as the biennium ended.
  - A project to upgrade various intersections in Mountrail county was bid and construction started in 2017 including intersection reconstruction and lane assignment changes, improved signing and intersection lighting.

- 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 to extend the life of the structure.
2016-2017 winter was especially challenging with several early major blizzards and above average amounts of snow through the winter.

» 4 bulldozers worked hundreds of hours to push snow back and keep highways open.

» Many roadways had banks that covered miles of highway, on some highways crest of almost every hill had a bank that developed.

» March 6-7-8 blizzard included winds gusting above 60 mph for several days. Many highways were closed due to life threatening conditions, zero visibility and drifts blocking roads. Many highways were blocked by drifts, including US 2, US 83 and US 52 in several locations.

» Spill containment structures were constructed at all 13 salt brine storage locations at approximate cost of $260,000. In the event of a tank failure, the tank contents would be contained within the structure minimizing environmental cleanup concerns.

» Road oil heated storage tank at Minot was installed in 2017. This replaced two tanks that had been in service since 1960’s.

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 four primary areas: roadway maintenance, roadway construction, vehicle/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, and many other public concerns.

Key Accomplishments

• New structure on ND 11 over the Maple River and structure rehab on ND 11 over the James River.
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 435
• Approach Permits processed - 101
• Temporary Water Permits processed 168 (Temp. movement of non-hazardous materials in state R/W)

Maintenance
District snow and ice control efforts over the 2015/16 winter was substantial. The snow accumulation totals were normal however, a few strong storm events and a large amount of high wind days made for challenging season. District forces assisted rural EMS numerous times to transfer patients to hospitals. Conditions during these events include plowing through several feet of snow on blocked roadways, miles of travel on ice in near white-out conditions.
• Prepared ground and placed new floor for new 100’x100’ Sand/Salt hoop building at District Headquarters.
• Constructed liquid containment systems at all section yards.
• Constructed an approach and access road on Williston TRR.
• Fixed expansion joints on Lewis & Clark Bridge.
• Repaired welds on Lewis and Clark Bridge.
• Cleaned and crack sealed/repaired bridge decks.
• Placed delineators and chevrons for safety enhancement on US 85 four-lane.
• Roadway repair and patching - 1,600 tons of asphalt was placed with paver or motor grader.
on various highways.

**Construction - $337.8 Million**

- US 2, Stanley to 7.5 miles east of Berthold, Structural Overlay asphalt
- ND 23, New Town Municipal section Reconstruction Concrete

- ND 40, Jct US 2 to Tioga, Reconstruction, Concrete, (3.4 miles)
- US 2, Jct US 85 to Ray, westbound, Structural Overlay, Concrete
- US 2, ND 5, ND 8, ND 40, ND 42, ND 50, ND 73, US 85, ND 1804, & ND 1806, Preventative Maintenance, Seal Coats and Slurry Seals, Various locations
- ND 23, Watford City 4th Ave, Urban Major Rehabilitation Concrete
- ND 23, Jct ND 73 to Jct ND 22, Major Rehabilitation
- ND 200, Montana Line to Yellowstone Bridge, Major Rehabilitation, Asphalt Overlay and Widening
- ND 50, Grenora to Jct US 85, Minor Rehabilitation
- US 85, Jct US 2 to ND 50, Major Rehabilitation, Widening, Bridges Asphalt Overlay
- ND 5, Noonan to Columbus, Structural Overlay, Asphalt
- US 2, Williston 11th Street Intersection Improvement (Phase 2)
- US 85, Williston NW Truck Reliever Route Phases 2 & 3, New Construction, Concrete
- US 2, Williston Main Street, Reconstruction, Concrete
- Intelligent Transportation, Weigh in Motion, Weather Station, Automated Traffic Recorders, Various Locations
- ND 23, Keene Corner, Roundabout, Major Rehabilitation, (0.7 miles)
- ND 5, Crosby to Noonan, Minor Rehabilitation & Structural Overlay, Asphalt
- Safety signage and pavement marking on county roads in Burke, Divide, McKenzie, Mountrail, and Williams Counties

- ND 68, Montana Line to Jct 85, Structural Rehabilitation
- US 85, Watford City, Jct ND 23 to ND 23A, Reconstruction, Urban Section
- ND 200, Yellowstone Bridge to Jct US 85, Major Rehabilitation, Asphalt

- US 2, White Earth Valley, Slide Repair, Major Rehabilitation
- ND 42, Jct ND 50 to Crosby, Major Rehabilitation, Asphalt
- US 2, Watford City to Williston, Turn Lanes and Intersection Lighting, Major Rehabilitation, Safety Improvements
- US 2, Williston, 6th Ave, 9th Ave, & 42nd St. Intersection Improvements
- US 85, Jct US 85 Business Loop, Signals and Realignment of 130th Ave

![New Town reconstruction](image1)

![White Earth slide repair on US 2](image2)
NDDOT History and Awards
**NDDOT History**

*Model T on a prairie trail*

**1913**
First State Highway Commission formed with three members. Governor L.B. Hanna chairman. No extra compensation.

**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.

**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.

*Concrete Paving east of New Salem - 07-1963*
1956: First interstate contracts in North Dakota let for section of US 10 between Valley City and Jamestown.

1960s

Interstate work continued.

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

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.

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 2013, the state legislature recognized the need and provided the resources to replace the general issue plate and indicated it should be a flat plate design. The NDDOT worked with Tourism, Highway Patrol and Roughrider Industry to design the new plate, while taking the history and tradition of North Dakota into consideration. In 2014, the North Dakota Legislative and Budget Committee approved the new design. The license plate replacement process occurred from November 2015 to June 2017.

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.

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.

Awards

NDDOT received a number of awards in 2014 and 2015

- Lieutenant Governor’s Well Workplace Bronze Award. (Human Resources Wellness Committee)
- Advisory Council on Historic Preservation (ACHP) Chairman’s Award for Achievement in Historic Preservation. (Environmental and Transportation Services)
- American Association of State Highway and Transportation Officials (AASHTO) President’s Transportation Award - Local Roads Safety Program. (Local Government, Safety and Programming)

- North Dakota Library Association-Notable State Document - Liberty Memorial Bridge: Proudly Honoring Veterans Since World War I DVD. (Communications & Local Government)
- Robin Stephens - Outstanding Safety Instructor Award in both 2014 and 2015 - North Dakota Safety Council. (State Fleet)
- North Dakota’s plate design won second place honors in the Automobile License Plate Collectors Association Best Plate of 2015 Contest. (Motor Vehicle)
- AASHTO Committee on Transportation Communications (TransComm) 2014 Skills contest - NDRoad Mobile Application received an award in the Mobile Web Application category. (Communications, Information Technology and Maintenance)
- AASHTO Committee on Transportation Communications (TransComm) 2015 Skills contest - TV Commercial or PSA; with a consultant for the work zone safety ad entitled What Would it Take for you to Slow Down? (Communications)
- 2015 Employer of the Year for Chapter 72 of the International Right of Way Association. (IRWA) (Environmental and Transportation Services)
• North Dakota Library Association-Notable State Document - NDDOT history book entitled “North Dakota Department of Transportation: Roads of Progress.” (Communications and Local Government)

• Silver ADDY (2015) - NDDOT Williston TV Spot - American Advertising Federation. (Williston District and Communications)

Awards received in 2016 through 2017

• AASHTO America’s Top 10 Projects Transportation Award - Watford City Bypass Projects. (Williston District)

• AASHTO America’s Top 10 Projects Transportation Award - New Town Rehabilitation Projects. (Williston District)

• Western Association of State Highway and Transportation Officials (WASHTO) Under Budget, Small Project - Sorlie Bridge. (Grand Forks District)

• Robin Stephens - Outstanding Safety Instructor Award 2016 - North Dakota Safety Council. (State Fleet)

• Gold ADDY (2016) - NDDOT Snow Plow Radio Ad (Regional/National Radio Commercial) American Advertising Federation. (Communications)

• AASHTO Committee on Transportation Communications (TransComm) 2016 Skills contest - Crash Memorial Webpage. (Safety)

• Gold Star Award from North Dakota Ready Mix & Concrete Products Association - State Avenue Railroad Bridge in Dickinson. (Dickinson District)

• Bryon Fuchs, P.E. - 2017 WASHTO Dr. L. I. Hewes Award, for his outstanding contribution to the highway development and leadership. (Local Government)

• American Association of Motor Vehicle Administrators (AAMVA) PACE Award for externally produced website for the North Dakota Crash Memorial Wall. (Safety)

• Certificate of Appreciation from Donate Life and Life Source - Drivers License Division ND Drivers Donor Registry. (Drivers License)

• 2017 Governor’s Awards for Excellence in Public Service, Roaming Bison Award (Team) - Bismarck District was one of several agencies recognized for state emergency response. (Bismarck District)

• Bryon Fuchs - 2017 WASHTO Dr. L.I. Hewes Award

• Ben Ehreth, 2017 Governor’s Awards for Excellence in Public Service - Zezula Award (One Who Helps). (Planning and Asset Management)

• North Dakota Army National Guard Recognition Award - NDDOT Maintenance Division for significant improvements to the Camp Grafton Training Academy near Devils Lake. (Maintenance)

• AASHTO President’s Transportation Award - NDDOT’s Local Roads Program for furthering transportation activities of their member department. (Local Government, Programming, Planning/Asset Management)

• Ben Ehreth - 2017 Governor’s Zezula Award

• AASHTO President’s Transportation Award - NDDOT’s Local Roads Program
North Dakota Department of Transportation

Biennial Report: July 1, 2015 through June 30, 2017

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Statutory and Constitutional Responsibilities

Creation
The first North Dakota State Highway Commission was created in 1913. In 1917 the North Dakota State Highway Department was established. The Highway Department became the North Dakota Department of Transportation in 1989 by 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).

NDDOT provides essential transportation system for 100 years
North Dakota's transportation system is an essential element in the state’s economy as it moves commodities and products grown and manufactured here to other parts of the world, as well as transporting people to various destinations for work, school or travel. The NDDOT continues to develop and maintain its transportation system to accommodate the continued needs of all motorists across the state.

2017 is a significant year for NDDOT as it marks 100 years since the establishment of the State Highway Department in 1917. From the beginning, the NDDOT has relied on dedicated workers to build and maintain highways where only dirt trails existed before. The Department has provided a Century of Service to North Dakotans where challenges have been experienced with snow storms, flooding and traffic changes as well as many transportation accomplishments achieved.

With 100 years completed we look forward to the future as we continue to develop and maintain a quality transportation system for the state. It is not the end of an era in transportation development; it is only the beginning.

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.

Team - Recruit, develop, and retain a high performing workforce that results in everyone working together to achieve our mission and vision.

Service - Be proactive and adaptive to provide superior external and internal services, products, and programs.

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

Assets - Preserve and enhance assets managed by NDDOT.

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.
For the current NDDOT Organization Chart, go to
Audit Services  
Daryl Splichal, Director

Responsibilities and Activities

The Audit Services Division is responsible for performing internal audits of NDDOT district and division activities, conducting audits of consultant engineers indirect cost rates and project costs, and verification of railroad and utility project costs. Audit Services 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.

Key Accomplishments:

The Audit Services Division continues to focus on ensuring applicable policies and regulations are followed and ensuring proper use of federal and/or state funds. This includes completion of mandated motor carrier audits and reviews of consulting engineers’ indirect cost rates. IFTA and IRP program requirements include completion of audits for an average of 3 percent of registered motor carriers each year. Approximately 60 motor carrier audits were completed each year of the Biennium. Indirect cost rates submitted by architectural and engineering consulting firms for work on transportation projects are reviewed to ensure they comply with applicable federal regulations. Audit Services follows the AASHTO Uniform Audit & Accounting Guide in its reviews of consulting firms and helps to educate the firms regarding allowable costs. Approximately 15 firms were reviewed each of the past years to verify project costs and overhead rates. Other project audits include review of railroad transportation, safety and other local government transportation projects and contracts.

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: pub-
lic 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 within the Department and 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 and web page design. Multi-media provides many services to NDDOT and other state agencies by providing photographic services, shooting, editing and producing videos; designing web pages as well as various print media, such as posters, manuals, reports, brochures and fliers.

Key Accomplishments

During the 2015-2017 Biennium, the Communication Division worked closely with every Division and District throughout the NDDOT on numerous projects and information campaigns.

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

• Distributed information to the public by sending out approximately 350 news releases each year in 2015 and 2016.

• Created YouTube videos on a regular basis to inform employees and the general public about various NDDOT programs including construction, safety, 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 groundbreaking and ribbon cutting events for construction projects as NDDOT worked on one of the largest construction programs in state history during the 2015-2017 construction seasons.

• 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.

• Began using Flickr to post photos from ribbon cuttings, ground breakings and other events for internal and external use.

• The NDDOT won a TransComm award in 2015 for a TV Commercial or PSA with a consultant for an ad about work zone safety.

• The Communications Division served on a Joint Information Center (JIC) for the state during protests on ND Highway 1806 for the Dakota Access Pipeline in 2016-2017. Protest activity took place for 7 months and the JIC was in place during the duration of the protest activity. The JIC was responsible for disseminating important information to the public about the state’s response to the Dakota Access Pipeline.

• Worked with various division and districts for website updates and social media posts.

• Created logo and banners for NDDOT’s 100 year anniversary in 2017.
Responsibilities and Activities
The Financial Management Division is responsible for performing and overseeing the tasks required to accomplish:
• Accounting and reporting
• Budgeting
• Payroll
• Procurement
• Revenue forecasting
• Central supply
• Cash management
• Rate development
• Disposal of highway equipment and materials

Key Accomplishments
During the past biennium, the Financial Management Division accomplishments included:
• Accounted for $2.6 billion in state and federal revenues and expenditures.
• Processed approximately 120,000 vendor payments.
• Processed and issued approximately 31,000 payroll checks.
• Developed the budget for the 2017-2019 biennium, which totals more than $1.2 billion.

Human Resources
Mike Sandal, 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 and selection, salary administration/position classification, workforce assessment/planning, workforce development and training, tuition reimbursement program, coordination of payroll processing, personnel policies and files, human resource issues consultation, employee leave administration, performance management, employee service and recognition awards, wellness program and educational scholarship and grant programs.

Key Accomplishments
The Human Resources Division was involved in a variety of projects to streamline HR programs and processes. One major project was assisting with the statewide implementation of the Job Description Questionnaire (JDQ) system now integrated with PeopleSoft and the annual performance review process. NDDOT staff provided input, helped with testing and worked on the conversion of all previous information from the NDDOT employee management system into the new system. Other valuable projects included developing tools to aid in the recruiting and talent management processes for MyDOT (the internal website for employees) and provided training and one-on-one consultation on the tools.

Wellness Program participation earned the department $147,020 in savings off the health insurance.
premium. HR partnership with the Maintenance Division for risk management and workers’ compensation premium discount programs resulted in approximately $31,000 yearly savings.

**Information Technology**

Rus Buchholz, Director

**Responsibilities and Activities**

The Information Technology Department 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.

**Key Accomplishments**

- Modernization of State Titling and Registration System (STARS) for all transactions and revenue for the Motor Vehicle Division. Including the issuance of licenses and titles for all vehicles as required by law and the maintenance of registration and title records for law enforcement agencies, dealer licensing and mobility impaired certificate issuance.

- Self-service Motor Vehicle kiosks were placed in three locations in Bismarck as a pilot program. Kiosks are a fully automated motor vehicle registration renewal station that will dispense license plate renewal registration cards and motor vehicle tabs on demand.

- ND was the second state to join State 2 State (S2S) allowing states to electronically check with all other participating states to determine if an applicant currently holds a driver’s license or identification card in another state.

- Implemented Esri’s Roads and Highways solution for state and local roads. Involved creating a linear reference system (LRS) for all state and local roads along with conflating primary road attributes and Highway Performance Monitoring System (HPMS) data items to the new LRS. The Roads and Highways maintained LRS along with the associated events (road attributes/HPMS data items) have become the system of record for the NDDOT. The yearly-certified public road mileage and HPMS data items are submitted to the Federal Highway Administration (FHWA) through the Roads and Highways maintained database.

- Road Condition Reporting System (RCRS) is an HTML5/.Net solution for editing NDDOT’s road conditions, incidents, messages, and load restrictions. The new editing environment is mobile friendly and allows expanded editing from the Central Office (1 editor) to each Maintenance Section (80 editors). The RCRS data editing application was optimized for use on the Section’s iPads.

- NDDOT Internet redesigned to improve access for the public and business partners by making the website viewable across all devices. Improved notification features and enhanced display of information.

- Sign Calculator is a web based program used by NDDOT staff and Consultants to calculate the correct post types and quantities for roadway signs based on height, width, wind speed and ditch information.

- Equipped District field staff with iPads and cellular cards to be able to access the Construction Automated Records System (CARS) system from construction sites.
• CARS Electronic Field Books transferred information formally recorded in a physical field book available for entry into an iPad electronic field book. Project added new features to the CARS system as well as made existing features more usable by field staff who use an iPad.

• Project Bids Conversion converted the NDDOT’s contractor construction project bidding software over from Expedite to Project Bids.

• Advanced Transportation Management System (ATMS) accommodates data collection and operations of ESS, DMS, CCTV and Vehicle Detection counters in a web based modular system. Used by Safety, Maintenance, Districts and Highway Patrol.

• gINT streamlines analyzing soils data by capturing the ArcPad program data and processing the field and laboratory results to create the reports in one application. Design recommendations for construction projects via shape files import into Micro Station and ArcGIS for plans resulting in quick access to geotechnical data for employees and consultants.

• Final adaptation of all scanning on the ILINX Capture Platform. Shutdown of outdated Teleform System. Trained districts for Drivers License Application scanning in ILINX.

• Initiated full usage of DOT Records Management System and DOT Open Records Management System.

• Built new telecommunications towers in Hillsboro and Westfield, and replaced buildings in Minot, Blaisdell, Ryder, Bowman, Sentinel Butte, Raleigh, Merricourt and New Salem.

• Telecommunications Department was heavily involved providing radio communications support for State Radio and the ND Highway Patrol (HP) during the pipeline demonstration. Programmed State Radio and HP units from all over the state with the proper communication channels and encryption keys; reprogrammed the radios back to original configurations after the demonstration. Assisted State Radio in deployment of temporary communication trailers to expand radio coverage, and installed a wireless point-to-point link across the Missouri River to establish broadband connectivity to the operating base just south of Fort Rice.

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 nonconstruction and construction-related contract documents; risk management; legislation; and administrative rule making.

Key Accomplishments

July 1, 2015 - June 30, 2016

• Legal Division held 2,433 driver’s license hearings; 1,846 were implied consent hearings (DUIs).

• Legal Division reviewed and assisted with the administration of approximately 1,878 contract documents.

July 1, 2016 - June 30, 2017

• Legal Division held 2,265 driver’s license hearings; 1,665 were implied consent hearings (DUIs).

• Legal Division reviewed and assisted with the administration of approximately 1,615 contract documents.

July 1, 2015 - June 30, 2017

• Legal Division held 4,698 driver’s license hearings. Implied consent hearings (DUIs) decreased by 4.3% over the previous biennium.

• Legal Division reviewed and assisted with the
administration of approximately 3,493 contract documents, an 8.8% decrease over the previous biennium.

The Legal Division is expected to meet additional challenges during the 2017–2019 biennium in the areas of right-of-way acquisition, contracts, and risk management.

**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 3,700 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**

In September of 2015, State Fleet rolled out a new rental rate structure. The new method changed the way depreciation is being charged for vehicles which are permanently assigned to an agency. The change did not affect vehicles checked out from the motor pools. Prior to the change, depreciation was charged solely on the basis of use. The usage based method was replaced with a flat depreciation charge for each assigned vehicle. The monthly amount varied by vehicle group. This method streamlines the depreciation costs for all. Agencies can better budget for depreciation as it will be a consistent charge rather than fluctuation with vehicle use. The flat depreciation is charged to the agency whether or not the vehicle is driven during the month.

A new fuel site was constructed at the Grand Forks District in the spring of 2017. The old site was inspected by the Health department October 2015. The inspection resulted in the decommissioning of the underground tanks due to failure of the cathodic protection tests and the site was closed shortly after receipt of the report. The system is completely above ground uses new technology such as a completely digital reporting and a heated Diesel Exhaust Fluid dispenser.

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 2016, State Fleet held 42 instructor led classes training 897 employees and 832 employees took the online course. From January – June 2017, 15 instructor led courses were held training 331 employees and 502 state/university employees took the online courses.

State Fleet vehicles

Robin Stephens DDC Instructor

State Fleets DDC Instructor was awarded the Outstanding Safety Instructor award in 2016 and 2017. She has received this honor six years in a row.
Drivers License
Glenn Jackson, 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 issued the pertinent permit, license or non-driver identification card, thereby ensuring individuals licensed in North Dakota are fully authorized and capable. 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. This also involves suspending, cancelling and revoking licenses, enforcing the points schedule, processing hearing requests, collecting funds for driver records and abstracts, reinstatements, verification of insurance and other actions to ensure the driving record is accurate. 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.

Key Accomplishments
From July 1, 2015, through June 30, 2017, the division processed 331,971 permits, licenses, and identification cards; administered 188,747 written tests, 93,758 driving tests, and 151,718 vision screenings. In addition, the division processed 90,259 suspensions, revocations, and cancellations; 273,973 traffic citations; 12,603 Temporary Restricted Licenses; 10,884 implied consent violations; and 7,149 hearings. The division implemented a non-commercial driver testing system upgrade to a tablet scoring system, improving efficiency in the process. The division initiated the final step in Real ID compliance by signing the contract for system modification, expecting full compliance in July 2018.

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, six privatized branch offices, seven chamber of commerce offices and seven county treasurer’s offices. Services are provided in person, by mail, by fax, by email and through the internet. 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 2015-2017 biennium, the division processed more than 3.2 million customer transactions, and responded to approximately 514,779 customer inquiries via telephone, email, letter and fax. The division registered 1,128,591 vehicles in FY2016 and 1,120,989 in FY2017. Use of the online vehicle registration renewal system continues to increase. During the 2015-2017 biennium, 539,488 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 each year. The Motor Vehicle Division implemented the following enhancements: improved online title lookup to include manufactured homes on the public website, have six branch offices that currently issue titles, rolled out a new titling and registration system, completed a general plate issuance, implemented registration renewal kiosks in the Bismarck area, and added an online temporary permit option.

**Responsibilities and Activities**

The Safety Division develops, implements, and evaluates programs designed to reduce motor vehicle crashes, fatalities and injuries.

**Key Accomplishments**

**Traffic Records Program**

- The Traffic Records Program is responsible to collect and analyze crash data and other data sources to identify traffic safety problems in North Dakota to impact through the safety planning processes administered by the NDDOT. Other data sources pertinent to roadway safety include driver, vehicle, roadway, injury, court and other data sources.

- 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 (SHSP). This includes performance measure development and evaluation. And, provided crash analysis to various customers of the NDDOT.

- Converted all law enforcement users from TraCS (Traffic and Criminal Software) 10 to TraCSWeb for improved electronic crash reporting. Nearly 100 percent of crash reports are now received electronically through TraCSWeb.

**Strategic Highway Safety Plan**

The Safety Division is responsible to coordinate the development, implementation and evaluation of the North Dakota Strategic Highway Safety Plan (SHSP) 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 E’s 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 in an effort to align goals, leverage resources and collectively address the state’s safety challenges.

- The SHSP Executive Leadership Team, Steering Committee and Priority Emphasis Area Teams continued work to implement safety strategies within North Dakota’s SHSP in the areas of education, enforcement, environment (policy) and emergency medical services. And, planned and conducted annual SHSP stakeholder conferences – the North Dakota Traffic Safety Partner Summit.

Traffic Safety Program

The Traffic Safety Program is responsible for the administration of grant programs to change driver and passenger behaviors to reduce fatalities and injuries caused by motor vehicle crashes.

- Applied for and received grant funding through the National Highway Traffic Safety Administration (NHTSA) under the federal requirements of the FAST (Fixing America’s Surface Transportation) Act - the federal transportation bill

- Developed the North Dakota Crash Memorial Wall - a virtual wall to provide an opportunity for the family of an individual lost to a motor vehicle crash in North Dakota to memorialize their loved one. The Crash Memorial Wall was developed in 2016 and recognized by the American Association of Motor Vehicle Administrators (AAMVA) with a Public Affairs and Consumer Education (PACE) Award for outstanding website. It exists to help family and friends cope with the difficulty of the loss and to personalize the impact of motor vehicle crashes to impress upon the public the importance of driving safely to prevent future tragedies on North Dakota roads. The North Dakota Crash Memorial Wall can be viewed at: ndcodefortheroad.org/memorial.

- Provided overtime grant funds, enforcement equipment and training to participating state, county and city law enforcement agencies to conduct sustained, multi-agency, high-visibility enforcement to encourage seat belt use and deter impaired and distracted driving.

- Provided grant funds in support of various community outreach activities to provide information and education about traffic safety to the public. Activities included expanding the North Dakota Traffic Safety Partner Network, sports venue outreach, the Driving Skills for Life program for teen drivers, and tribal and county community traffic safety programs.

- to support behavioral traffic safety programs statewide. These grants total about $3.8 million in new funds annually.
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 rehabilitations and replacements
- Perform hydraulic analysis for bridges, box culverts, and pipe culverts
- Perform hydrologic and hydraulic analysis for drainage complaints
- Issue drainage permits
- Update Design Manual
- Review of Consultant hydrology/hydraulics for all state highway projects.

Design
- Design and prepare plans for rehabilitation and replacement of structures including bridges, box culverts, sign structures, high mast lighting, street light standards, and traffic signal foundations
- Review consultant designs and plans
- Assist with Shop Drawing review
- Update Design Manual

Structural Management
- Manage bridge inspection program on state and local system
- Load rate bridges on state and local system and issue load restrictions as necessary
- Assist ND Highway Patrol with automated truck routing system
- Develop and promote Bridge Preservation Program
- Review Shop Drawings
- Assist in planning and development of priorities for the rehabilitation and replacement of structures on the state highway system
- Perform emergency bridge inspections

Key Accomplishments

Preliminary Engineering & Hydraulics Section
- Completed environmental documents for 16 stand-alone structural improvement projects
- Prepared hydraulic reports for 5 new structures
- Designed urban storm drainage systems for 6 projects
- Hydrologic and hydraulic analysis and culvert size recommendations were performed for approximately 39 rural highway projects on the state system
- Drainage investigations relating to approximately 6 drainage complaints or problem locations were completed

Precast double box culvert installed in West Fargo in 2015
• Reviewed requests, and prepared 11 permits for drainage revisions on highway right of way

• Completed reviews of all rural and urban roadway and bridge hydrology and hydraulic activities associated with consultant-developed projects on the state highway system

Design Section
• Designed and prepared plans for thirteen new bridges and five deck replacements, seventeen new box culverts, five box culvert extensions, and sixty nine additional projects consisting of bridge rail-retrofits, approach slabs, deck overlays, bridge painting, and general maintenance.

• Provided consultant oversight and reviewed design and plan preparation on 9 projects.

Design
Roger Weigel, 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 all 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
Fargo 32nd Avenue South
The 32nd Avenue South interchange in Fargo was improved to reduce peak hour delays and to accommodate future traffic volumes. The existing four-lane divided roadway was widened to a six-lane facility with additional turn lanes and intersection improvements. This interchange has two truck stops that generate high volumes of truck traffic and is also considered a major retail corridor in Fargo. An additional loop ramp was also constructed in the SW quadrant of the interchange to improve signal timing and delays at the west ramp intersection. In addition, construction of the new loop ramp reduces the amount of traffic stacking on the southbound I-29 exit ramp eventually spilling onto I-29.

Minot NW Bypass
During the 2011 flood in Minot, it became clear that the growing population of Minot has placed over 4,900 bridges and culverts through cooperation with the bridge inspectors from NDDOT’s eight districts

• Load rated new and existing bridges for load carrying capacity in accordance with AASHTO’s Manual for Bridge Evaluation

• Continued improvements to bridge preservation program by assisting Districts in performing maintenance and preservation policies and practices for state structures

• Provided information to consultants, counties, and cities regarding the condition of local bridges to assist in planning and programming structural improvements

• Coordinated with FHWA to remain in compliance with the 23 Bridge Inspection Program Metrics

• Reviewed shop drawings for all NDDOT bridge designs

• Maintained information on all bridges open to public use within the state

• Acquired Infrared camera and other nondestructive tools with SHRP2 funds for inspection of structures

Structural Management Section
• Entered routine bridge inspection reports for

Jamestown SE Interchange bridge replacement project

Infrared camera showing delaminated areas on bridge deck
great demand on the city’s north/south corridor routes. The existing NW Bypass was originally constructed in 1976 as a two-lane bituminous roadway. This roadway is being expanded into a four-lane divided roadway. The existing roadway will become the northbound road and the new roadway (constructed to the west of the existing) will be the southbound roadway. To ensure the entire NW Bypass is above the flood elevation of the 2011 event, the project incorporated portions of the Minot Flood Protection project that included structure elevations, structure lengths and channel widening for the Mouse River bridges. It also included grade raises, drainage improvements and levees through the bypass. The project is a two-year construction project expected to be completed in 2018.

Carrington Roundabout
US 52 is an important corridor for the local and national economy. One unique aspect is the designation as a truck route for over-sized and overweight loads. The conversion of the US 52 & US 281 intersection at Carrington into a roundabout was designed in coordination and review with the Specialized Carriers & Rigging Association. The roundabout contains all the safety/operational benefits of a traditional roundabout, but with additional modifications to accommodate larger sized loads. Some of these modifications include: removable signs, a larger inside truck apron, outside truck blisters for wheel over-tracking, and the ability to run oversized vehicles in reverse direction with proper Highway Patrol coordination. The roundabout was completed and opened to the public in 2016.

Williston US 2 Operational Improvements (2nd Ave W, 9th Ave W, and 42nd St)
The southbound to westbound leg of the 2nd Ave W and West Dakota Parkway intersection was reconstructed to eliminate merging conflicts for traffic utilizing the free right turn lane. The 6th Ave W access onto West Dakota Parkway was removed to eliminate excessive traffic queues. The traffic that formerly used the 6th Ave W access was rerouted to the 9th Ave signalized intersection. The southeast and northwest frontage road accesses to 42nd St in Williston were removed to improve traffic operations. Turn lanes were added on US 2 at 42nd St.

ND 23A in Watford City
The project development for ND 23A in Watford City was completed in 2017, and the ND 23A reconstruction project will be constructed in 2018. This project will tie into the recently reconstructed US 85B and ND 23B. The ND 23A project is a full reconstruction project consisting of an urban 3-lane section with curb and gutter, storm drain, box culvert structure, street lighting, and a shared use path. Coordination with Watford City officials was an essential part of this project due to city projects being constructed near the corridor.

ND 1804 Corridor between New Town and Williston
The ND 1804 corridor between New Town and Williston is an existing 2-lane roadway that is ap-
proximately 71 miles long. The ND 1804 projects consist of shoulder widening, paving, major earthwork, new structures, installation of passing lanes, climbing lanes, and turning lanes. The urban area near Williston included a multi-lane concrete section with curb and gutter, storm sewer, and continuous lighting. Project development consisted of coordination with several state and federal agencies. Construction began in 2016 with remaining projects scheduled for completion through 2020.

Concrete Overlays
Concrete overlays on state highway projects has typically consisted of milling the existing asphalt roadway surface, and overlaying with approximately 8” of doweled portland cement concrete. This type of work focuses primarily on restoring the structural integrity of the pavement without necessarily changing existing geometrics. Concrete overlays require little to no dirt work, which in-turn minimizes environmental impacts. A majority of concrete overlays have been applied to divided highways where traffic can be diverted head to head on the other roadway while construction takes place. In the 2015-2017 biennium, concrete overlay projects have been developed for US 2 near Williston, US 2 near Lakota, I-94 near Tower City, and others.

High Mast Lighting on Interstate
High mast light standards throughout the state were updated from high pressure sodium to LED luminaires. In addition, high mast tower equipment that was reaching its final useful life or failing were being replaced. The project consisted of installing approximately 1540 LED luminaires. The LED luminaires are more efficient providing potential energy savings.

LiDAR
A remote sensing method known as Light Detection and Ranging (LiDAR) has been added to the land surveying toolbox at the NDDOT. In March of 2016, the project along I-94 from east of Valley City to Tower City became the first LiDAR project for the Department. A vehicle outfitted with a LiDAR scanner drove down the roadway at highway speeds and collected millions of points over the 10 mile stretch of roadway. Utilizing different field survey techniques and software packages the massive amounts of data was processed from the point clouds and delivered to the design team. The survey accuracies obtained from this project outdid the expectation. The Department has since utilized mobile LiDAR tool on six other projects with many more expected, and is currently using aerial LiDAR for a project in the ND 1804 corridor.

Environmental and Transportation Services
Mark Gaydos, Engineer

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.

Environmental Services
Environmental services are provided by two
sections. They 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

The Cultural Resource Section 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.

The section performs archaeological services, inventories, mitigation, monitoring of historical sites and monitoring of construction projects to ensure compliance. The section also provides tribal consultation, agency coordination, and completes 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.

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 and compares these costs with the department’s budget allocation for consultant services.

Key Accomplishments

July 1, 2015 to June 30, 2016

• Published the Consultant Administrative Services Procedure Manual. This manual provides procedure to implement state and federal requirements for the procurement and administration of engineering and design related service contracts.

• Published the Right of Way Manual and Right of Way Acquisition Procedures for Local Public Agency on Federal Aid Projects Manual. These manuals provide procedure to implement state and federal requirements for real property acquisition, relocation, highway beautification, and management on highway projects.
• A Programmatic Categorical Exclusion Agreement between North Dakota Department of Transportation and Federal Highway Administration was approved on June 17, 2016. The programmatic categorical exclusion agreement allows the department to process and approve certain (c) list and (d) list actions of categorical exclusions on behalf the Federal Highway Administration.

July 1, 2016 to June 30, 2017
• A Programmatic Biological Assessment between North Dakota Department of Transportation, Federal Highway Administration, and U.S. Fish and Wildlife Service was approved on February 19, 2017. The programmatic biological assessment fulfills Section 7 of the Endangered Species Act for all federally involved projects with insignificant or discountable effects to listed species and critical habitat within North Dakota. The assessment includes standardized conservation measures to avoid or minimize effects from highway project activities.
• Conduct training program for erosion and sediment control on highway construction projects. A certification course was developed and conducted in partnership with the Upper Great Plains Transportation Institute at North Dakota State University, the Associated General Contractors of North Dakota, the North Dakota Department of Health, and the Department of Construction Management and Engineering at North Dakota State University. The training is part of the Stormwater Management Program, which consists of the planning, maintenance, and regulation of facilities that collect, store, or convey stormwater as well as managing the quantity and quality of stormwater.
• 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.
• Continue to develop wetland banks to provide mitigation credits for transportation projects that have unavoidable impacts to wetlands and other aquatic habitats.

Materials and Research
Ron Horner, Engineer

Responsibilities and Activities
The division’s primary responsibility is assurance of the quality and economy of highways and structures through the performance of materials.

The division is made up of the Testing Laboratory, Bituminous Materials, Gravel Prospecting, Geotechnical, and Research and Pavement Design sections.

Key Accomplishments

Testing Laboratory
• Maintained national AASHTO accreditation of the testing laboratory.
• Tested high volumes of highway materials such as aggregate, cement, concrete, soil, paint, and glass beads used in project construction.
• Served as materials testing resource throughout the state during pre-construction and construction phases.
• Continued the aggregate reference sample program for verification and compliance purposes between NDDOT and industry.
• Provided instruction of test procedures to enrolled participants in Technical Certification Program. Provided certification by participants’ performance in completing all procedures correctly.
• Assisted in the development of new methods in testing for potential use: such as concrete resistivity, super air meter (SAM), and MIT Scan T3 testing for thickness of concrete.

**Bituminous Materials Section**

• Tested high volumes of asphaltic materials used on NDDOT construction projects such as Performance Graded (PG) binders, emulsions, cutback, and crack sealers.
• Updated Performance Graded (PG) asphalt specifications to include Multi-stress Creep Recovery (MSCR) testing used on high traffic routes.
• Evaluated and approved Superpave mix designs for paving projects.
• As a member of the Combined States Binder Group determined asphalt cement supplier’s compliance with specifications and procedures.
• Developed material recommendations for paving plans based on traffic levels and project location. They are used to estimate plan quantity and incorporate different material quality levels for each project.
• Developed specifications for intelligent compaction of asphalt pavement.
• Developed specifications for Stone Matrix Asphalt (SMA) and implemented into two hot bituminous projects successfully.
• Developed forms to meet FHWA requirements for comparing Quality Control, Quality Assurance and Independent Assurance sampling and testing.
• Served as a resource for questions regarding mix designs, specifications, bituminous materials and construction issues that arise during paving. Provided dispute resolution with contractors and the districts when problems arose.
• Monitored projects for Quality Control/Quality Assurance (QC/QA) compliance.
• Provided instruction of test procedures to enrolled participants in Technical Certification Program. Provided certification by participants’ performance in completing all procedures correctly.

**Gravel Prospecting Section:**

• Crews located and secured new gravel deposit options for future NDDOT projects totaling 7,600,000 tons.
• Renewed existing options that were expiring which makes the aggregate also available for future construction projects.
• Pit plat drawings, boring logs of test holes of aggregate source, pit analysis, and other pertinent information are incorporated into construction plans for contractors to use in the bidding process.
• Tested, monitored, and evaluated State-owned aggregate sources to be used in upcoming projects, and released exhausted sources.
• Maintained an aggregate information database with pit usage, compiled usage reports.
• Assisted contractors, landowners, aggregate owners, and public with questions and problems concerning aggregate sources and materials.

**Geotechnical Section**

• Conducted linear soil surveys and borrow area investigations for roadway improvement projects throughout the state.
• Conducted subsurface investigations and recommendations for several bridge reconstructions such as Broadway Viaduct in Minot and Minot Bypass Structures.
• Development of landslide repair projects which included Burlington Landslide Repair, Highway 73 Landslide Repair, Highway 2 at White Earth Landslide Repair, and Donnybrook Landslide Repairs.
• Installed instrumentation and continual monitoring for other active slides throughout the state.
• Provided guidance and support for geotechnical consulting engineers and construction projects throughout the state.

• Continued development of the Geotechnical Asset Management Database and Geotechnical Design Manual.

• Collaborated with the Information Technology Division on implementation of new geotechnical reporting software (gINT).

• Secured Transportation Innovations Program (TRIP) funding for instrumentation to increase the frost heave monitoring in the northeastern area of the state.

Research and Pavement Design Section

• Managed the Research, Development, and Technology Transfer Research Program. This included developing work plans and monitoring construction progress of new research projects, reporting findings to management and developing implementation programs upon completion of research. Worked with NDDOT, FHWA, industry representatives, and manufacturers. Worked with university researchers, Districts, and other NDDOT Division personnel to insure proper coordination of research activities. Planned and conducted the periodic FHWA required Research Program Peer Exchange with other agencies and FHWA.

• Developed pavement thickness recommendations for major project improvements.

• This required using collected data as inputs for the designs such as soil modulus, traffic and truck data, reliability, and material selection.

• Incorporated the new AASHTO-Mechanistic Empirical pavement design methodology into the NDDOT’s standards. Identified key data and criteria necessary for NDDOT implementation. Calibrated the software program model to reflect NDDOT materials and pavement performance.

• Collected Falling Weight Deflectometer (FWD) data for pavement and subgrade strength to support NDDOT Districts’ efforts to administer springtime load restrictions. Used data to determine soil strengths for pavement thickness designs.

• Collected Pavement Profiling Data, analyzed, and reported results to Project Engineers for construction contract administration, and to insure specifications are met. Conducted training on profile data analysis for project personnel.

• Monitored, reported, and made recommendations relating to the performance of new materials and methods.

• Worked with Technical Services to write special provisions for incorporation into construction plans and update existing specifications.

• Procured training services, organized, and facilitated a Steel Bridge Coating Inspection Training Program for NDDOT and consulting engineer inspectors.

• Procured and administered QA inspection services for fabrication inspection contracts for new steel structures such as: welded on plate girders, rolled beams, overhead sign structures, etc.

• Reviewed welder qualifications to certify welders for work on NDDOT field projects.

• Observed and evaluated new technology and techniques for pipe rehabilitation processes such as; pipe joint repair, pipe lining, etc.
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

Key Accomplishments

July 1, 2015 to June 30, 2016

- Updated the ADA Transition Plan in October 2015
- The FHWA and FTA requirements were combined into one program titled: Title VI/Nondiscrimination and ADA Program in October 2016
- **LCPTracker**: During this last Biennium, the NDDOT moved from the filing of certified payrolls (required on all federal-aid construction projects) via paper, to electronic filing and review to an online payroll system LCPtracker. The Department conducted 25 trainings of all users, including contractors and engineers and support staff during the biennium. In the summer of 2016, approximately half of all certified payrolls were filed electronically, and by June, 2017, 85% of all payrolls were filed electronically. The Department is now set to move to 100% of payrolls filed electronically, which is expected to save the Department upwards of $750,000.00 per biennium.

- The Department conducted 20 contractor compliance reviews during the biennium period, ensuring compliance with federal regulations and protecting federal highway funds.

July 1, 2016 to June 30, 2017

- A Spanish translation of the External Complaints of Discrimination form was procured in April 2017.
- Nine new DBE Firms Certified; 6 Graduations from the DBE Program

- The Department made significant progress in its hiring goals for women and minorities and by June, 2017, was nearing parity for all demographic groups. The Department also began reviewing the fairness of applicant hiring in 2016, when accurate applicant flow became available. By January of 2017, the Department had no significant adverse impact for any demographic group for which the Department must keep data.
Responsibilities and Activities
The Construction Services Division administers highway construction contracts. The division is responsible for highway construction bid openings, contracts, bonds, and contract payments. The Division provides services in contractor pre-qualifications, construction scheduling, engineering reviews, contractor claims, project staffing, construction records, engineering equipment, and various other services.

The Construction Services Division activities can be consolidated into five key operational functions.
• Bid Openings and Contract Payments
• Contract Services
• Records Management
• Construction Services
• Administrative Support Services

Key Accomplishments

Contractor payments on DOT construction projects
Total contract payments for highway construction for the 2015-17 biennium was $1.274 billion. This compares to the $1.054 billion in the 2013-15 biennium.

IPads For Construction Staff
Equipped field staff in the districts with iPads with cellular cards to give them the ability to access the CARS system from the construction sites.

The Construction Automated Records System, or CARS
NDOT’s computer based construction records system. The system uses the internet for data entry and stores project records on a central database. The following upgrades were made to the CARS system during the biennium.

• Electronic Field Books - This project made all the information that was formerly recorded in a physical field book available for entry into an electronic field book in order to eliminate paper and the need for field staff to maintain a physical field book. This project added new features to the CARS system as well as made existing features more usable by field staff who use an iPad.

• Electronic Certifications - This insures that all of the proper certifications for materials used for a construction project are uploaded to the NDOT’s FileNet system through the CARS system. Made to be usable by field staff using an iPad.

• Change Order Signatures - Eliminates the mailing and printing of documents by provid-
Responsibilities and Activities

The Maintenance Division is responsible for NDDOT property management and facilities; safety, health, and 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.

Key Accomplishments

Capital Improvements

Buildings that were funded in this biennium include; Bismarck Equipment building, Cooperstown, Hettinger and Hillsboro Section buildings, and a Grand Forks Driver’s License addition. One large salt building was constructed at the Williston District. Repairs were made to a number of other maintenance buildings and containment was constructed around salt brine storage tanks. The Medina Rest Area rehabilitation planning and design was completed.

Intelligent Transportation Systems (ITS)

ITS improves transportation safety and mobility and enhances productivity through the use of advanced information and communications technologies. ITS technologies assist the Maintenance Division in providing better information to the traveling public. The Division’s ITS activities include coordinating the development and deployment of roadway weather information. This includes providing technical assistance to the districts and developing ITS equipment specifications. The Maintenance Division is responsible for collecting and disseminating roadway and weather information. This information is provided to the general public via the Internet, the North Dakota 511 Travel Information Service, a mobile application, and our Dynamic Message systems (DMS). Ten additional cameras were added to aid the traveling public. The division added/upgraded seven Environmental Stations (ESS) and eleven permanent DMS were installed to better inform the public of Amber Alerts, safety messages, travel alerts, no travel advisories, and road closures.

The Maintenance Division oversees a pilot project using Automated Vehicle Location (AVL) and data collection equipment. The project is intended to improve the efficiencies and safety of the traveling public during snow and ice control operations.

Equipment

The department has committed the use of its equipment fleet and personnel to assist other agencies and local governments in responding to emergencies such as flooded highways due to excessive snowfall and spring run-off. The Maintenance Division coordinates the response effort with the North Dakota Department of Emergency Services (DES). Some Dakota Access Pipeline (DAPL) activities were coordinated within the division.

Bidirectional Tow Plow

coordinated with the automated vehicle location and data collection project, which is intended to provide maintenance operators with up-to-date weather information, equipment coordination during adverse weather, and best maintenance strategies to combat poor road conditions caused by the weather.

Tow Plows

The Maintenance Division continues to pursue equipment that will make the department more efficient and effective. The Department has recently purchased eight bidirectional tow plows.

Studies

The Maintenance Division completed a rest area study and section optimization study and presented it to the ND legislature.
Responsibilities and Activities

Local Government (LG) Division works primarily with Local Public Agencies (LPA’s) such as the 12 largest cities, the 53 counties, 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.

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

Provided below are the program areas Local Government is responsible for:

- MPO Coordination and Planning activities
- Interstate (Urban areas)
- Urban Roads (LPA owned federal aid roads and Regional System)
- County Roads (LPA owned federal aid routes)
- Bridges (LPA owned ≥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)
- Transit
- Emergency Relief (ER) - Statewide on state owned roadways and LPA federal aid routes
- LPA Long Range Transportation Planning
- Title VI Sub-recipient monitoring and Audits (LPA’s, MPO’s, and Transit Providers)
Key Accomplishments

Rural Projects
- The Rural Programs Section administered $456.7 million in state aid provided by SB 2103 and HB 1176 (2015-2017 Legislative Session). These funds were spent on oil impacted and economic developmental access roads to assist all 53 counties in their infrastructure needs due to the increased oil activity and economic related activities. As a result of these funds, roadways were improved to address improved load carrying capacity, smoothness, and safety.
- The Rural Programs Section also administered $38 million in federal funds to improve roadways and bridges in the rural areas of North Dakota.
- Received AASHTO’s (American Association of State Highway and Transportation Officials) 2016 President’s Award for Administration. This award is for “performing exemplary service to the states furthering transportation.”
- These programs remain vital to provide good roads and bridges in the rural areas to allow the oil and agricultural industries to bring their products to the world.

Urban Projects
- The Urban Programs Section administered $69 million in federal funds to improve highways and arterials in the urban areas of North Dakota.
- The Urban Programs Section also administered several projects funded with one-time state funding since 2011. These funds were provided through Legislative Sessions and have allowed NDDOT to build bridges, construct bypass routes, and improve safety for the traveling public.
- The State Avenue Railroad Bridge project in the city of Dickinson was administered by the Urban Programs Section. This two-year construction project consisted of constructing a bridge over the BNSF railroad on State Avenue. State and city officials gathered on October 28, 2016 for the opening of the bridge and to celebrate this $33 million dollar project which separates approximately 7,000 vehicles a day from 15-20 trains per day. The project enhances safety for the travelling public and ensures emergency responders are not delayed.

Transportation Alternatives Projects
Transportation Alternatives (TA) provides funding for projects defined as transportation alternatives and are designed to provide funds for community-based projects to enhance the travel experience for all modes. Funding in the amount of $1.5 million each year help communities create bike trails, develop walkable safe routes to school, improve non-driver access to transit and increase mobility. These investments enhance communities, connections, and access and allocate resources to integrate walking, bicycling, and other modes of active transportation into transportation systems.

Planning/Asset Management
Scott Zainhofsky, Engineer

Responsibilities and Activities
In support of NDDOT’s mission to, “safely move people and goods,” 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.

The Division is responsible for transportation-planning and engineering-management programs, including (but not limited to):
- Statewide transportation planning and special studies, such as:
  » the long-range strategic transportation plan (currently TransAction III)
  » technical planning assistance to local units of government
  » highway-needs and levels-of-service studies
  » transportation policy planning
  » maintaining the Highway Performance Classification System and trending report
  » maintaining the strategic Freight Network classifications and definitions
  » assessing transportation impacts of various economic sectors
• Railroad planning and programs, such as:
  » statewide rail plan
  » rail-highway crossing signals, closures, and surfacing improvements
  » rail loan program
• Mapping services (e.g. county base maps, highway/tourist map, et al.)
• Traffic data collection, analysis, and forecasting
• Transportation and roadway data collection and analysis
• Department-wide asset management, including modeling:
  » the current and predicted condition of the state highway system;
  » highway system funding needs;
  » level of service that can be provided based on budgetary limitations; and
  » the effects of budgetary tradeoffs between numerous department investment options.
• Pavement performance evaluation and condition survey
• Program-level performance management (i.e. service indicator development, target setting, outcome reporting, etc. for major department-level program areas)
• Department-wide Enterprise Risk Management program for uncertainties related to delivery of services
• Policy and legislation evaluation and research.

Key Accomplishments
• The division counted approximately 5000 traffic locations (or 2/3 of the state) each year of the 2015-17 biennium, in addition to monitoring and maintaining 74 automatic traffic recorders (ATR) and 16 weigh-in-motion (WIM) sites that continuously collect traffic data at permanent installations. Recently upgraded WIM sites are now IP addressable, allowing instant connectivity to the sites for NDDOT and NDHP. Previously, the NDHP could only connect to the WIM sites and receive data through a radio frequency (RF) signal which was very limited in signal range. WIM are used both for traffic data collection purposes and by the NDHP to triage which commercial vehicles should be stopped for weight enforcement inspections, saving the compliant operators time and money. Additionally, the division spearheaded the installation of a fiber optic traffic data collection system test using OptaSense equipment. This installation is a first of its kind for this purpose, anywhere in the world. It has previously been deployed in Europe and New Zealand for traffic speed monitoring and numerous places around the world for site security, but never for both traffic speed and count data collection.
• Planning and Asset Management (P/AM) prepared well over 600 individual maps, each year of the 2015-17 biennium, including updating the State Highway Map. This equates to roughly 2.5 maps per working day.
• The division updated and initiated several strategic transportation plans, including:
  » Updating North Dakota’s State Freight Plan for compliance with new federal regulations adopted after the Plan was completed during the 2013-15 biennium;
  » Initiating an update to North Dakota’s State Rail Plan, last updated in 2007;
  » Initiating development of a statewide Active and Public Transportation Plan, the first known statewide plan in the nation covering these transportation modes in a single document. This approach should reveal opportunities and synergies among these and other modes of statewide transportation;
  » Initiating a department-wide Risk Management program focusing on the uncertainties associated with delivering the NDDOT’s services and meeting the various program goals; and
  » Assisting with the development of new programs and policies for NDDOT’s implementation of the Main Street Initiative.
• P/AM refined the pavement management pro-
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, and completing traffic operations activities. These responsibilities include a system wide perspective as well as project level involvement from early project inception through to project completion.

Key Accomplishments

During the 2015-2017 biennium the Programming Division continued to make progress in areas such as safety, project fund management, programming processes, and project scoping.

Local Road Safety Plans (LRSP) and State Road Safety Plan (SRSP) Project Implementation

Implementation of local road and state road systemic safety projects is underway. Projects include low cost proven safety countermeasures such as enhanced signing and pavement marking, and intersection lighting.

Road Safety Review

Road safety reviews conducted at select high crash intersections and corridors within Grand Forks, Minot, and Fargo. Projects under development from the review recommendations.

Emergency Relief Project Closeout

The Programming Division, working with FHWA, Local Government Division, and the Financial Management Division, has closed hundreds of Emergency Relief projects. At one time there were over 500 projects, currently there are less than 20 open projects.

Fiscal Management Information System (FMIS-5) Migration

Completed FHWA led migration to new version of software for federal fund management. Continued to provide seamless federal fund management to the Department during the transition.

Urban Interstate Priority Process

In coordination with other NDDOT Divisions, began development of a new process to gather input and summarize information from NDDOT districts, cities, counties, and MPO’s regarding potential needs at urban interstate interchange locations. This information will be used in project prior-

- Through a collaborative effort that included multiple personnel from P/AM and the NDDOT Information Technology Division, the division completed a test project implementing Roads and Highways (R & H) in NDDOT’s GIS environment to support the federally-required annual Highway Performance Monitoring System (HPMS) submittal. R & H is a set of computer tools that are used for maintaining a linear referenced roadway network along with the roadways’ associated attributes. The tools allow for editing the network in a standardized manner and ensuring the attributes are consistently maintained as routes are added, removed, and geometry changes on the network. This has become critically important since the federal government required submission of all certified roads in a linear referencing system (LRS) network. Therefore, this project included development and integration of a statewide LRS covering the federal, state, county, and urban roadway systems, within North Dakota.

- The division fully executed 35 highway/rail crossing safety contracts improving public safety at 145 crossings statewide.
ity submissions for development of the Statewide Transportation Improvement Program.

**Statewide Transportation Improvement Program (STIP) Tribal Meetings**

Completed annual STIP meetings with each of the four tribes. Included discussions on programmed projects, project needs, and the Local Road Safety Program.

**Improved Project Scoping Meetings**

Expanded the attendance at scoping meetings to provide more expertise to contribute valuable information towards project level decision making. Included visual presentations (PowerPoint, Google Earth view, etc) interactive during the meeting to facilitate understanding and improved discussions of project scope.
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.
Responsibilities and Activities

The Bismarck District is located in the south central part of the state and lies in nearly even halves on either side of the Missouri River. Of the 2,800 lane miles, 445 are on the Interstate system and 2,355 are on the state highway system.

Key Accomplishments

During this past biennium, the District has had very active construction and maintenance programs.

Construction projects completed in 2015:
- Mill & bituminous overlay on Interstate 94 from Sterling east to the county line.
- Concrete pavement repair and grinding on I-94 from Eagles Nest to the New Salem.
- Grade raise on ND 3 north of Tuttle.
- Several overlay and seal projects throughout the District.

Construction projects completed in 2016:
- Bituminous overlay and widening on ND 3 from Napoleon to I-94.
- Bituminous overlay and widening on ND 21 from Jct. ND 31 to Jct. ND 31.
- Bridge deck overlay projects on the Walter Hjelle & Railroad structures near Washburn.
- Slide repair on ND 200A Near Stanton.
- Traffic signal improvement project throughout the Bismarck/Mandan area.
- Structural painting of the Grant Marsh Bridge.
- Several overlay and seal projects throughout the District.
- Structural painting of the Grant Marsh Bridge.
- Several overlay and seal projects throughout the District.

Regular preventive maintenance on all roadways is an ongoing activity for the District. These activities consist of attempting to seal coat the District roads on a seven-year cycle, contract patching the segments of roadway that show distress from the traffic, and using the mini mac to help reduce the impacts from depressed transverse cracks prior to overlay projects. Microsurfacing and slurry seals have proved to be a cost effective solution on high volume roadways. We continue to crack pour most roadways throughout the district.

Other Maintenance activities in the District include:

- The Dura Patcher and scotch patching were used at several locations throughout the district on four lane as well as two lane highways.
- Rumble Strip repair
- Transportation Technicians assisted with several construction projects.
- Completed building concrete Salt Brine Tank containment systems at each section yard.
- In the process of constructing a 230’x100’ truck storage building which should be completed in October of 2017.
- Sealed cracks and applied deck sealer to several bridges across the District.
- Last winter crews put in many long hours dealing with snow and ice issues to help provide good roads for the traveling public.
Responsibilities and Activities

The Devils Lake District is located in the north central part of the state. The district is tasked with the maintenance, construction and administration for 2,304 lane-miles for the state highway system. The district employs 70 full-time employees which handle duties related to construction, maintenance, sign maintenance, shop mechanics and administration. The district maintains the roadways and equipment used throughout the year. The district staff also prepares plans, builds projects and monitors other programs throughout the district.

Key Accomplishments

Construction Projects Completed in 2015:

• Completed the installation of weather stations and cameras on the roadways along the shore-line of Devils Lake.

• Did a safety project at a busy intersection North of Dunseith on US 281.

• Did a structural overlay on ND 15 to increase the load carrying capacity going to and from a major elevator in the area.

Construction Projects Completed in 2016:

• Worked with North Dakota Motor Carriers Association to complete the largest Roundabout in North Dakota on US 52, which is part of a designated over-size, over-weight corridor.

• Widened the non-grade raised areas on ND 19 between US 281 and US 2 to create a uniform driving surface throughout that segment.

• Added shoulders and increased the load carrying capacity on ND 30 from ND 15 up to Maddock.

• Completed an experimental TRIP project on ND 57 to alleviate extreme seasonal frost heaves in a half mile segment between Fort Totten and the community of Crow Hill.

Construction Projects 2017:

• Began work to replace the BNSF bridge over ND 20 within the City of Devils Lake.

Maintenance

During the 2015-2017 biennium, Devils Lake District maintenance forces performed a wide variety of activities to improve/extend the life of roadways and maintain ride quality, including:

• District implemented a bridge preservation program and was able to seal all bridge decks within the district

• The Mini-mac operation which covered 90 miles of depressed, transverse cracks

• Two Dura-patchers were used throughout the district

• Cross-trained transportation technicians assisted with several construction projects which included paving, district striping, seal coats and grading projects.

2016 - 2017 winter had several blowing snow events which forced closures in several locations; crews 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 Great State’s residents as well as visitors.

• Completed construction of a new section building in Rugby.

• Addressed many drainage issues within the right of ways of the highways where several approach and centerline pipes were replaced.

• Continue ongoing activities of maintenance signs, trucks, equipment, buildings and yards.

• Completed delineator replacement along US Highway 2 corridor from Rugby to Lakota.

Even though Devils Lake has not risen within the past couple of years, the prairie pothole region still presents challenges with the smaller bodies of water next to the roads. Preservation of the highway system is ongoing with contractors and our own forces to provide the load carrying capacity, comfort, and safety to the public.
Responsibilities and Activities

The Dickinson District is located in the southwest corner of the state. Of the 2,000 lane miles of roadways which it manages, 400 are on the interstate and 1600 are on the state highway system. These employees handle duties related to roadway construction and maintenance, sign maintenance, shop mechanics and administration.

Key Accomplishments

Some of the major construction projects in 2015:
- Completed the grading, structure, and paving of the new interchange at Exit 56 in Dickinson
- Widening, turn lanes, passing lanes, and paving on ND 22 south of Killdeer
- Mill and overlay east and westbound I-94 from MT State line east 11 miles

Some of the major construction projects in 2016:
- Reconstruction and new concrete pavement on I-94 westbound form Medora west 12 miles
- Widening and paving of ND 49 south of Beulah including a new bridge over the Knife River
- Completed a two year project adding a grade separation bridge over the railroad tracks on State Avenue in Dickinson

Some of the major construction projects in 2017:
- Completed a two year project adding turn lanes and passing lanes, regrading and paving on ND 200 from Killdeer to Grassy Butte
- Widening, base and paving on ND 200 from Killdeer east to Dunn Center
- Mill and overlay on east and westbound I-94 from Belfield to Fryburg

Snow and ice control and preventive maintenance are top priorities for Dickinson District maintenance employees. Maintenance crews are out early in the morning and late in the evening plowing and applying product to the highways to improve road conditions for commuters. Major preventative maintenance activities consist of crack sealing, bridge maintenance, rut filling, roadway patching, and drainage and culvert repair.

Other maintenance activities completed this biennium include:
- Replaced Hettinger maintenance section building
- Constructed brine containment systems at Beach, Hettinger, Dickinson and Belfield maintenance sections
- Performed field trials on various silane treatments for bridge decks
- Implemented online forms using tablets for inspection of safety appurtenances, Stormwater Pollution Prevention Plan (SWPPP), delineators, reference points and overhead span wires
- Inspection of safety appurtenances, Stormwater Pollution Prevention Plan (SWPPP), delineators, reference points and overhead span wires

The district has been participating in the MARWIS (Mobile Advanced Roadway Weather Information Sensor) trial project. This has led to more efficient winter time roadway maintenance by getting real time data to the equipment operator. Based on the success of this trial, MARWIS will begin to be implemented statewide.
Responsibilities and Activities

The Fargo District is located in the southeastern part of the state, and is responsible for 1,827 lane-miles of roadway. The District employees assigned in four sections: highway engineering, roadway maintenance, vehicle maintenance, and administration. Two engineers were temporarily assigned to the Williston District for the 2015 construction season. One engineer stayed through the winter and the 2016 season.

Key Accomplishments - Construction

The 2015 Construction season included the following:

- The northbound I-29 lanes were reconstructed from Argusville to Hunter, including adding 8 new box culverts
- ND 200A was overlaid, including building a new triple 10’ x 12’ box culvert at the North Branch of the Elm
- Began the 2 year project for completing reconstruction of West Fargo - Main Avenue
- ND 46 was milled and overlaid from east junction of ND 18 to Cass County 81
- A Radial T intersection was constructed on ND 18 on the north side of Casselton. The Radial T project took a significant amount of truck traffic off a residential street and provided turn lanes for the numerous trucks hauling sugar beets to the new piling station and corn to the ethanol plant

The 2016 construction season included the following:

- Finishing Main Avenue in West Fargo
- Completing the reconstruction of southbound I-29 from Argusville to Hunter
- Widening and overlaying 13 miles of ND 46 to the east and west of Leonard, and overlaying ND 13 from Wyndmere to I-29
- For the first time in the state, a Stone Matrix Asphalt (SMA) overlay was used. The SMA project was done on the I-29 northbound lanes from the South Dakota border to mile point 11.00. This pavement overlay consisted of a fractured granite rock and high grade asphalt mix reinforced with cellulose fibers
- Turn lanes were installed at the east junction of ND 13 and ND 32. The turn lanes will relieve the traffic snarls that occur with shift-changes at the Doosan-Bobcat manufacturing plant and improve access to a new CHS grain elevator and fertilizer plant
- In early 2017, the Fargo I-29/32nd Ave. S. interchange reconstruction project started. This project impacted about 75,000 vehicles per day and created dynamic challenges for detouring and providing access to area truck stops, businesses, and hospitals

During the biennium, 140 miles of District highways had contract chip seals completed to extend the highway pavement’s serviceability. The District also began using a CHFRS-2P oil for chip seals in an effort to improve chip retention and minimize oil tracking. This oil had not been used in North Dakota previously, but showed great promise at an economical price.

Key accomplishments - Maintenance

The summer of 2015 was fairly wet until mid-July. Roadside and median mowing was delayed due to the wet ditches. The winter of 2015-16 was very warm and rain events occurred as late as mid-December. The area received below average snowfall with the largest daily snowfall being around 4 inches. Freeze-thaw events and frost created slippery roadways for morning and evening commutes at an increased regularity. Potholes were a significant problem on I-29 north of Fargo from January through February primarily due to the multiple freeze-thaw events. The constant winter pothole maintenance kept crews very busy in addition to snow and ice control operations. No interstate closures were required due to winter conditions for 2015-16.

The winter of 2016-17 started out warm then changed with a mid-December cold snap followed
by about an inch of rain on Christmas Day. I-94 in the Fargo area was closed twice, once for a blowing snow event between Valley City and Jamestown, and once for a freezing rain and poor visibility event the day after Christmas. I-29 in the Fargo area was closed once due to blowing snow from Hillsboro to Canada impacting visibility in early December. With yet another unseasonably warm winter, spring load restrictions were initiated early in the Fargo District with implementation starting February 28th.

During the biennium, District Maintenance forces completed 1,138 lane-miles of crack sealing, and 133 lane-miles of gravel shoulder repair.

In 2015, District Maintenance staff finished paving half of the District HQ lot with concrete to provide an all-weather CDL and motorcycle testing area for the Fargo Driver’s License office’s use. Maintenance staff performed major concrete repairs on both Hillsboro Visitor Center’s sidewalks. They also constructed eight new salt brine containment facilities, and expanded another to meet current environmental storage guidelines for roadway chemical needs. In 2016, staff began replacing the HQ maintenance yard fence using salvaged box beam guardrail and wood planks to improve HQ facility inventory security, public safety, and improve neighborhood aesthetics.

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

One of the districts biggest and most viewed project in 2015 was the painting of the Sorlie Bridge on the Red River between East Grand Forks and Grand Forks. Along with the painting the project consisted of aesthetic lighting. The lighting system is one of its kind within the state of North Dakota and displays a variety of pre-programmed light schemes which are displayed on holidays and events throughout the year.

The district completed a 6.9 mile Concrete Reconstruction project on Highway 2 WB from Michigan E 1.4 miles and from Lakota E 5.3 miles. The concrete reconstruction will provide years of service to the traveling public.

Another project in 2015 the district completed a concrete pavement repair project on both northbound and southbound I-29 through the Grand Forks Urban area. This project consisted of Next Generation Grinding which is the first of its kind in the state of North Da-
The grinding produces a pattern which provides a very smooth ride and reduces the tire noise at the pavement surface.

The district completed many projects which consisted of concrete pavement repair projects, milling and hot bituminous paving, chip seals, embankment restoration, bridge deck overlays, structural painting projects. These were all very important projects to maintain the roadways and provide many more years of service to the highways within the Grand Forks district.

**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. Maintenance activities are scheduled out of the District.

The Minot headquarters is staffed 24/7 during winter months to respond to emergencies. Winter snow and ice control begins at all outlying maintenance sites beginning at 5 a.m., earlier if conditions require during emergencies or storm events. Additional support services are provided to the cities, counties, utilities, United States Air Force, and public from the district, which range from everyday activities to emergency responses. Minot Air Force Base is located north of Minot and includes 150 missile launch facilities and 15 missile alert facilities. District maintenance staff provides winter escorts to certain nuclear warhead and missile movements to these sites on state-county-township roads.

**Key Accomplishments**

- Series of projects totaling over 70 miles on ND 23 from west of Parshall to near Velva that started in 2012 were completed in 2016. This provides an unrestricted by legal weight corridor from Watford City to Velva, connecting US 85, US 83 and US 52. The segment from US 83 to west of Parshall included widened shoulders and passing lanes approximately every 5 miles.

- 136 highway miles of asphalt overlay projects were bid in 2016 and 2017

- 210 highway miles of chip seal coats or micro surfacing surface treatments were bid in 2016 and 2017.

- The US 83 Broadway viaducts in Minot replacement project was designed in 2015-2016 and bid late 2016 and continues as the biennium ended.

- US 83 Bypass on west side of Minot expansion was bid and construction began on the 2 year contract in early 2017. The project will include a 4 lane section from junction US 2 north to 4th Ave interchange. The design of structures and embankments includes provisions to become part of the Minot flood protection project. The existing Mouse River bridge will also be removed and replaced with a new one that is double in length (300') of existing bridge (150').

- Several safety projects were constructed this biennium including:
  - Upgrading turn lanes on US 2 at several intersections between Burlington and Towner.
  - Intersection lighting installed along US 2 at Burlington Johnson Street intersection.
  - Constructed new turn lanes on US 83 at Glenburn, Upham and Lansford intersections.
  - Constructed intersection realignment at two intersections near Maxbass.
  - Replacement/upgrade of 17 high mast lights along US 2 in Minot was bid and work getting underway as the biennium ended.
  - A project to upgrade various intersections in Mountrail county was bid and construction started in 2017 including intersection reconstruction and lane assignment changes, improved signing and intersection lighting.

- 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 to extend the life of the structure.
• 2016-2017 winter was especially challenging with several early major blizzards and above average amounts of snow through the winter.

  » 4 bulldozers worked hundreds of hours to push snow back and keep highways open.

  » Many roadways had banks that covered miles of highway, on some highways crest of almost every hill had a bank that developed.

  » March 6-7-8 blizzard included winds gusting above 60 mph for several days. Many highways were closed due to life threatening conditions, zero visibility and drifts blocking roads. Many highways were blocked by drifts, including US 2, US 83 and US 52 in several locations.

  » Spill containment structures were constructed at all 13 salt brine storage locations at approximate cost of $260,000. In the event of a tank failure, the tank contents would be contained within the structure minimizing environmental cleanup concerns.

• Road oil heated storage tank at Minot was installed in 2017. This replaced two tanks that had been in service since 1960’s.

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 four primary areas; roadway maintenance, roadway construction, vehicle/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, and many other public concerns.

Key Accomplishments
• New structure on ND 11 over the Maple River and structure rehab on ND 11 over the James River.
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 435
- Approach Permits processed - 101
- Temporary Water Permits processed 168 (Temp. movement of non-hazardous materials in state R/W)

Maintenance

District snow and ice control efforts over the 2015/16 winter was substantial. The snow accumulation totals were normal however, a few strong storm events and a large amount of high wind days made for challenging season. District forces assisted rural EMS numerous times to transfer patients to hospitals. Conditions during these events include plowing through several feet of snow on blocked roadways, miles of travel on ice in near white-out conditions.

- Prepared ground and placed new floor for new 100'x100' Sand/Salt hoop building at District Headquarters.
- Constructed liquid containment systems at all section yards.
- Constructed an approach and access road on Williston TRR.
- Fixed expansion joints on Lewis & Clark Bridge.
- Repaired welds on Lewis and Clark Bridge.
- Cleaned and crack sealed/repaired bridge decks.
- Placed delineators and chevrons for safety enhancement on US 85 four-lane.
- Roadway repair and patching - 1,600 tons of asphalt was placed with paver or motor grader

Williston District
Joel Wilt, Engineer

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Maintenance

District snow and ice control efforts over the 2015/16 winter was substantial. The snow accumulation totals were normal however, a few strong storm events and a large amount of high wind
on various highways.

**Construction - $337.8 Million**

- **US 2**, Stanley to 7.5 miles east of Berthold, Structural Overlay asphalt
- **ND 23**, New Town Municipal section Reconstruction Concrete
- **ND 40**, Jct US 2 to Tioga, Reconstruction, Concrete, (3.4 miles)
- **US 2**, Jct US 85 to Ray, westbound, Structural Overlay, Concrete
- **US 2**, Williston 11th Street Intersection Improvement (Phase 2)
- **US 85**, Williston NW Truck Reliever Route Phases 2 & 3, New Construction, Concrete
- **US 2**, Williston Main Street, Reconstruction, Concrete
- **Intelligent Transportation**, Weigh in Motion, Weather Station, Automated Traffic Recorders, Various Locations
- **ND 23**, Keene Corner, Roundabout, Major Rehabilitation, (0.7 miles)
- **ND 5**, Crosby to Noonan, Minor Rehabilitation & Structural Overlay, Asphalt
- **Safety signage and pavement marking on county roads in Burke, Divide, McKenzie, Mountrail, and Williams Counties**
- **US 2**, White Earth Valley, Slide Repair, Major Rehabilitation
- **ND 42**, Jct ND 50 to Crosby, Major Rehabilitation, Asphalt
- **US 2**, Watford City to Williston, Turn Lanes and Intersection Lighting, Major Rehabilitation, Safety Improvements
- **US 2**, Williston, 6th Ave, 9th Ave, & 42nd St. Intersection Improvements
- **US 85**, Jct US 85 Business Loop, Signals and Realignment of 130th Ave
- **ND 68**, Montana Line to Jct 85, Structural Rehabilitation
- **US 85**, Watford City, Jct ND 23 to ND 23A, Reconstruction, Urban Section
- **ND 200**, Yellowstone Bridge to Jct US 85, Major Rehabilitation, Asphalt
- **ND 68**, Montana Line to Jct 85, Structural Rehabilitation
- **US 85**, Watford City, Jct ND 23 to ND 23A, Reconstruction, Urban Section
- **ND 200**, Yellowstone Bridge to Jct US 85, Major Rehabilitation, Asphalt
- **US 2**, White Earth Valley, Slide Repair, Major Rehabilitation
- **ND 42**, Jct ND 50 to Crosby, Major Rehabilitation, Asphalt
- **US 2**, Watford City to Williston, Turn Lanes and Intersection Lighting, Major Rehabilitation, Safety Improvements
- **US 2**, Williston, 6th Ave, 9th Ave, & 42nd St. Intersection Improvements
- **US 85**, Jct US 85 Business Loop, Signals and Realignment of 130th Ave

**New Town reconstruction**

**White Earth slide repair on US 2**
NDDOT History

1913
First State Highway Commission formed with three members. Governor L.B. Hanna chairman. No extra compensation.

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.

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.

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

1980: 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.

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 Spyrnyczynatyk 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 Spyrnyczynatyk.

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

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.

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 2013, the state legislature recognized the need and provided the resources to replace the general issue plate and indicated it should be a flat plate design. The NDDOT worked with Tourism, Highway Patrol and Roughrider Industry to design the new plate, while taking the history and tradition of North Dakota into consideration. In 2014, the North Dakota Legislative and Budget Committee approved the new design. The license plate replacement process occurred from November 2015 to June 2017.

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.

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.

Awards

NDDOT received a number of awards in 2014 and 2015

- Lieutenant Governor’s Well Workplace Bronze Award. (Human Resources Wellness Committee)
- Advisory Council on Historic Preservation (ACHP) Chairman’s Award for Achievement in Historic Preservation. (Environmental and Transportation Services)
- American Association of State Highway and Transportation Officials (AASHTO) President’s Transportation Award - Local Roads Safety Program. (Local Government, Safety and Programming)

- North Dakota Library Association (NDLA) Notable State Document (Liberty Memorial Bridge Video). (Communications)
- Gold Addy for NDDOT Williston Website (2014) – American Advertising Federation of North Dakota. (Williston District and Communications)
- Bronze Telly Award for video documentary entitled Liberty Memorial Bridge; Proudly Honoring Veterans Since World War I. (Communications)
- North Dakota Library Association-Notable State Document - Liberty Memorial Bridge: Proudly Honoring Veterans Since World War I DVD. (Communications & Local Government)
- Robin Stephens - Outstanding Safety Instructor Award in both 2014 and 2015 - North Dakota Safety Council. (State Fleet)
- North Dakota’s plate design won second place honors in the Automobile License Plate Collectors Association Best Plate of 2015 Contest. (Motor Vehicle)
- AASHTO Committee on Transportation Communications (TransComm) 2014 Skills contest - NDRoad Mobile Application received an award in the Mobile Web Application category. (Communications, Information Technology and Maintenance)
- AASHTO Committee on Transportation Communications (TransComm) 2015 Skills contest - TV Commercial or PSA; with a consultant for the work zone safety ad entitled What Would it Take for you to Slow Down? (Communications)
- 2015 Employer of the Year for Chapter 72 of the International Right of Way Association. (IRWA) (Environmental and Transportation Services)
- North Dakota Library Association-Notable State Document - NDDOT history book entitled “North Dakota Department of Transportation: Roads of Progress.” (Communications and Local Government)

- Silver ADDY (2015) - NDDOT Williston TV Spot - American Advertising Federation. (Williston District and Communications)

**Awards received in 2016 through 2017**

- AASHTO America’s Top 10 Projects Transportation Award - Watford City Bypass Projects. (Williston District)

- AASHTO America’s Top 10 Projects Transportation Award - New Town Rehabilitation Projects. (Williston District)

- Western Association of State Highway and Transportation Officials (WASHTO) Under Budget, Small Project - Sorlie Bridge. (Grand Forks District)

- Robin Stephens - Outstanding Safety Instructor Award 2016 - North Dakota Safety Council. (State Fleet)

- Gold ADDY (2016) - NDDOT Snow Plow Radio Ad (Regional/National Radio Commercial) American Advertising Federation. (Communications)

- AASHTO Committee on Transportation Communications (TransComm) 2016 Skills contest - Crash Memorial Webpage. (Safety)

- Gold Star Award from North Dakota Ready Mix & Concrete Products Association - State Avenue Railroad Bridge in Dickinson. (Dickinson District)

- Bryon Fuchs, P.E. - 2017 WASHTO Dr. L. I. Hewes Award, for his outstanding contribution to the highway development and leadership. (Local Government)

- American Association of Motor Vehicle Administrators (AAMVA) PACE Award for externally produced website for the North Dakota Crash Memorial Wall. (Safety)

- Bryon Fuchs - 2017 WASHTO Dr. L. I. Hewes Award

- Certificate of Appreciation from Donate Life and Life Source - Drivers License Division ND Drivers Donor Registry. (Drivers License)

- 2017 Governor’s Awards for Excellence in Public Service, Roaming Bison Award (Team) - Bismarck District was one of several agencies recognized for state emergency response. (Bismarck District)

- Ben Ehreth, 2017 Governor’s Awards for Excellence in Public Service - Zezula Award (One Who Helps). (Planning and Asset Management)

- North Dakota Army National Guard Recognition Award - NDDOT Maintenance Division for significant improvements to the Camp Grafton Training Academy near Devils Lake. (Maintenance)

- AASHTO President’s Transportation Award - NDDOT’s Local Roads Program for furthering transportation activities of their member department. (Local Government, Programming, Planning/Asset Management)

- Ben Ehreth - 2017 Governor’s Zezula Award

- AASHTO President’s Transportation Award - NDDOT’s Local Roads Program