




HB 1012
BUDGET TESTIMONY
 North Dakota Department of Transportation

NORTH Dakota | Transportation
 Be Legendary.

March 2, 2023

1



NORTH Dakota | Transportation
 Be Legendary.

MISSION
Safely move people and goods.

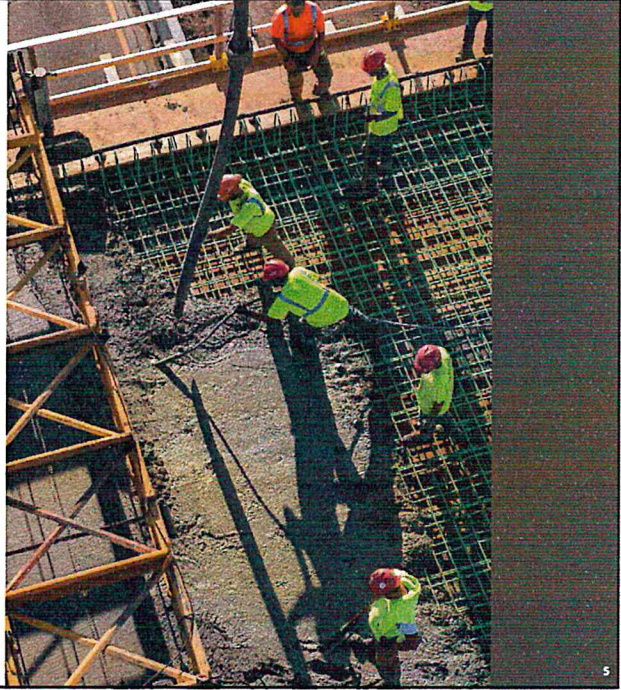
VISION
 North Dakota's transportation leader promoting safe ways, superior service & economic growth.

VALUES | PRIDE
 Professionalism | Respect | Integrity
 Dedication | Excellence

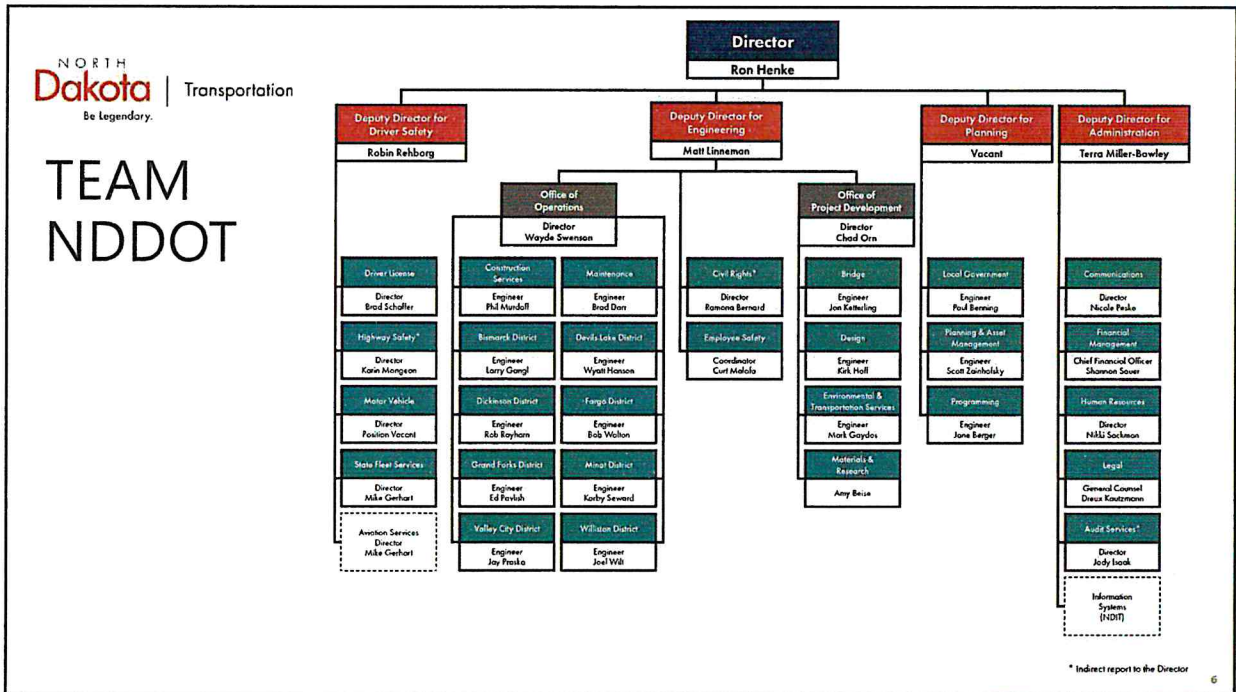
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SUCCESS!

- Construction contracts totaling \$500M+
- 7,655 driver license online knowledge tests completed
- Completed major Motor Vehicle & Driver License System Upgrade to better serve customers (*Licensing Enterprise Gateway Endpoint for North Dakota | LEGEND*)
- \$224.5M in American Rescue Plan Act (ARPA) funds committed | \$105M spent
- \$35M bond for bridges has been committed | \$12.5M spent



5



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STRATEGIC FOCUS AREAS



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



INNOVATION – Promote a culture of innovation to enhance external and internal services, products, and programs.



ASSETS – Preserve and enhance assets managed by the NDDOT.



MOBILITY – Work to improve access to our transportation systems through multi-modal solutions to enhance the movement of people and goods, having a positive impact on the quality of life and the economic wellbeing of North Dakotans.



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

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WHAT WE DO FOR NORTH DAKOTA



Fleet Services

Purchases, manages, operates, maintains and disposes of the state's licensed motor vehicles (about 3,200 vehicles).



Motor Vehicle & Driver License

Provides ID validation, licensing & driver record management, as well as vehicle title, registrations and license plates.



Collaboration

The NDDOT partners with state agencies, local government, tribal nations, townships, etc. to ensure efficiency and effectiveness.



Local Transportation Programs

Work with local governments, maintain the long-range transportation plan, manage grants and various programs.



Construction & Maintenance

Facilitates construction projects (bid, contracts, etc.); also oversees the work to maintain roadways and remove snow.








Highway Safety

Coordinates Vision Zero, the strategy to reduce motor vehicle crash fatalities. The designated State Highway Safety Office.

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HIGHWAY CLASSIFICATION SYSTEM

-  Interstate
-  Interregional
-  State Corridor
-  District Corridor
-  District Collector



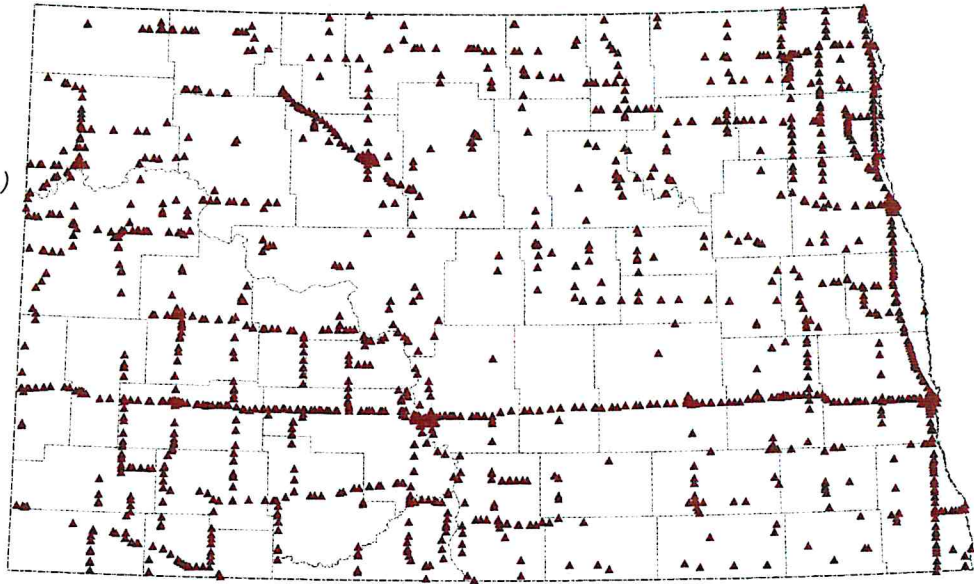
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STATE BRIDGE INFRASTRUCTURE

▲ State Bridges
1,724

Total Bridges
(county, city, etc.)
4,837

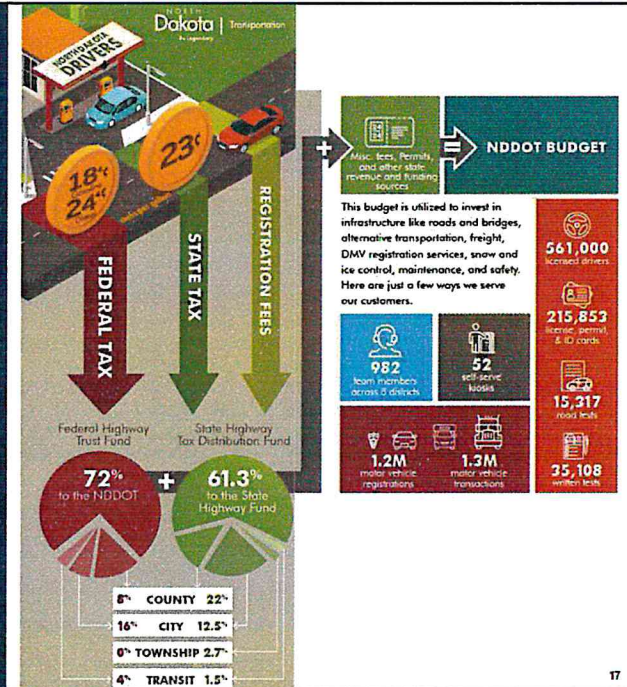


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HOW ARE WE FUNDED?

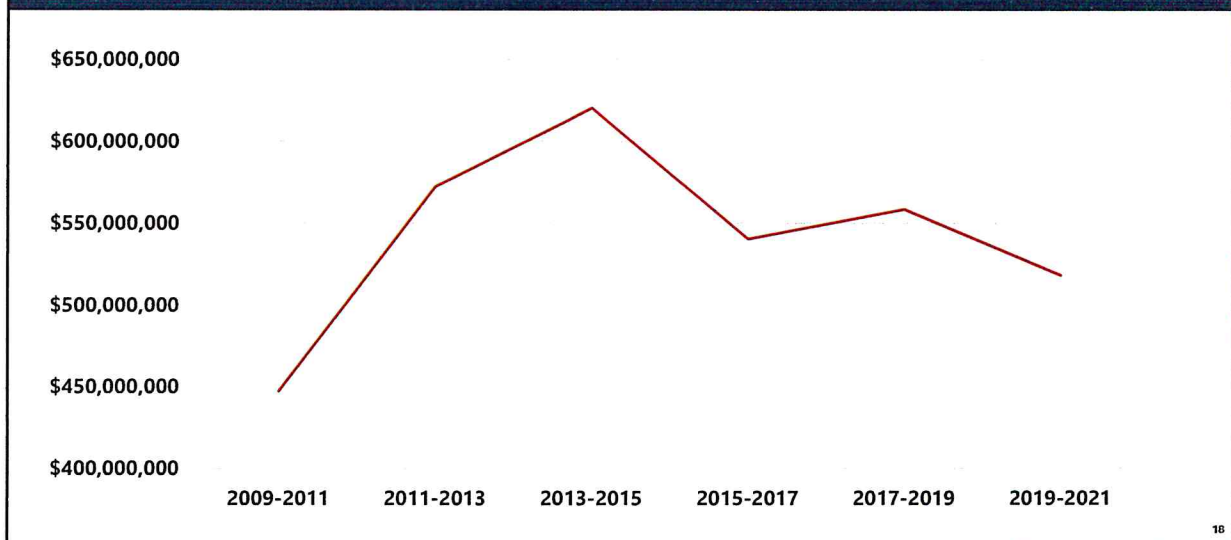
BOTH FEDERAL AND STATE DOLLARS FUND THE NDDOT.

- It all starts with the fuel tax. For each gallon of gas purchased, 18.4 cents goes to the Federal Highway Trust Fund and 23 cents to the State Highway Tax Distribution Fund.
- From there, both funds distribute dollars to county, city, township, transit entities, and the largest portion being directed to fund the NDDOT.
- This allows us to fund the majority of our budget.



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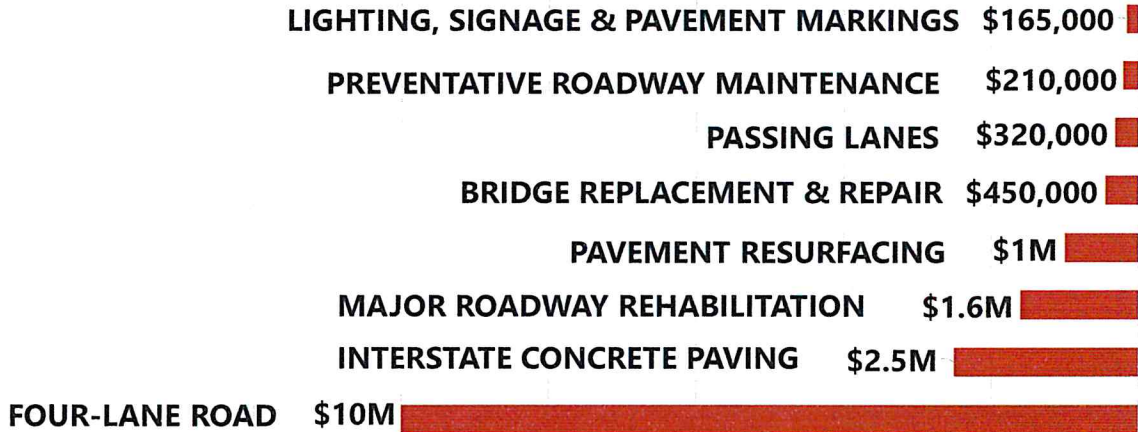
DECLINING STATE TRANSPORTATION REVENUES



18

TRANSPORTATION SYSTEM COSTS

Per Mile



21

21



DISCRETIONARY FUNDING

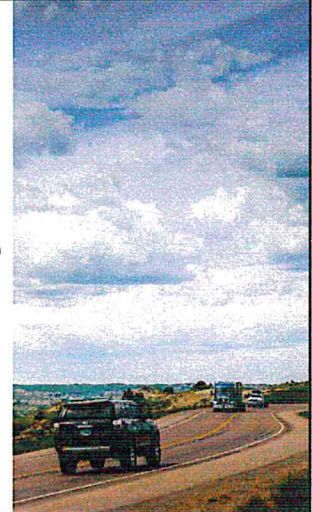
- **Awarded** \$134.7M
- **Applied** \$522M
- **Awaiting** award announcement \$350M+

(As of Dec. 20)

22

DISCRETIONARY FUNDING

- **Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Grant** (*Awarded Aug. 2022*) For electric vehicle charging stations. **\$1.5M**
- **Federal Highway Administration Climate Challenge**
Process for selecting type of pavement. **\$240,000**
 - Technical training on the Life-cycle Assessment Pave tool to evaluate greenhouse gas impacts of existing construction
 - Technical assistance to develop the scope of a university study
 - Perform university study to include greenhouse gas impacts in future grant



25

EQUIPMENT BACKLOG & BUILDING NEEDS

EQUIPMENT | **\$32M** in equipment backlog

- There is a replacement schedule for all equipment and a base fleet inventory for all districts
- Experiencing supply chain issues and costs have increased 20-25% since last biennium

DISTRICT/SECTION BUILDINGS | **\$33M** new
\$15.5M maintenance deficiencies

- **Capital Improvement Plan** – proactive approach that identifies capital projects based on (future) needs, necessities, and priorities within the DOT



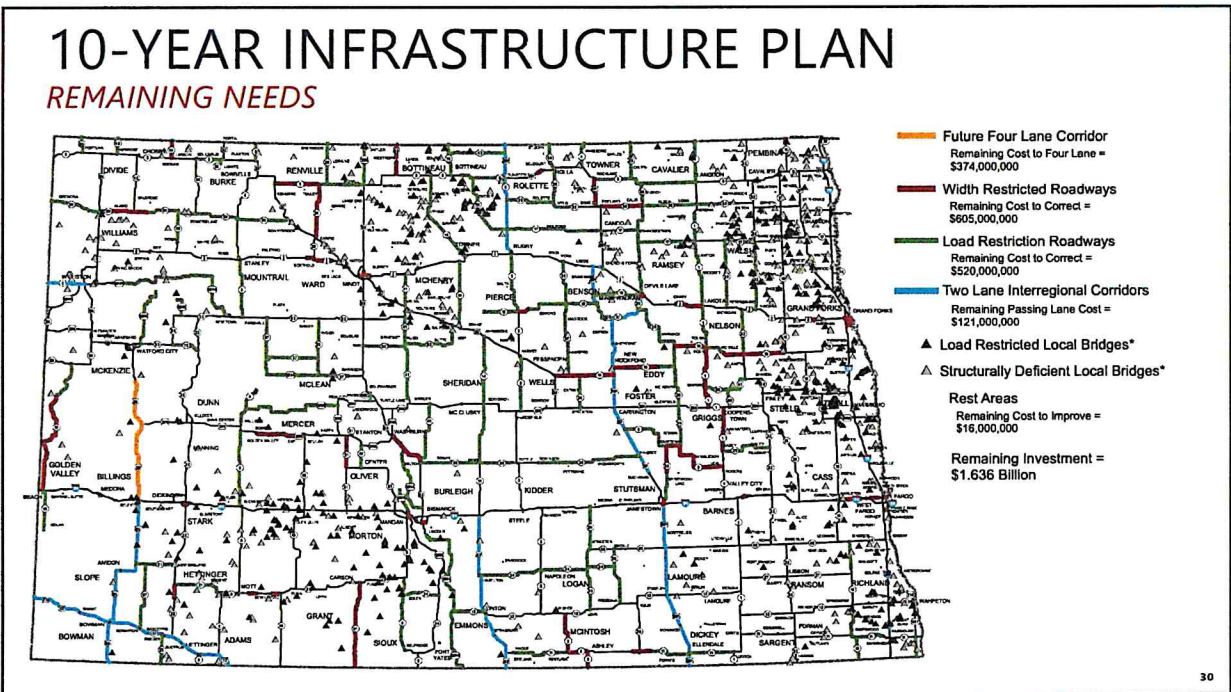
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2023-2025 BUDGET REQUEST

29



30

FEDERAL AID PROGRAM

- Funding used to construct and maintain roadways and bridges on the state highway system.
- Federal aid formula funding is distributed based off a formula determined by Congress and is favorable to rural states.
- Used to fund our 10-year Infrastructure Plan.

BUDGET REQUEST: \$174M

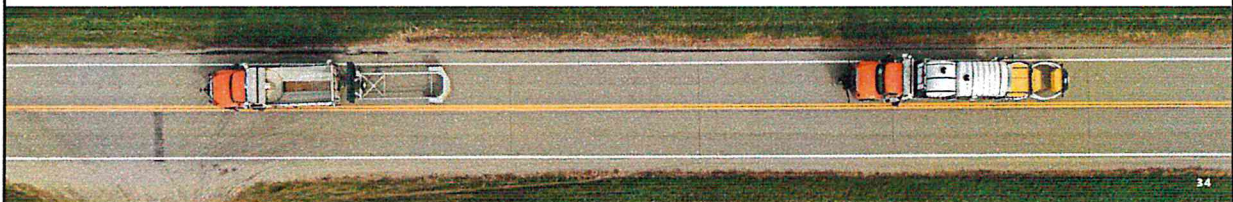
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KEY PRIORITY

INCREASE FLEXIBILITY

- Improve timely response to unanticipated local government needs, economic development support, federal grant wins, and other federal/state funding needs.
- Transition state funding policies away from "federal-connected only" policies to state transportation funding with some federal support.
- Focusing on federal discretionary and state flexible fund.

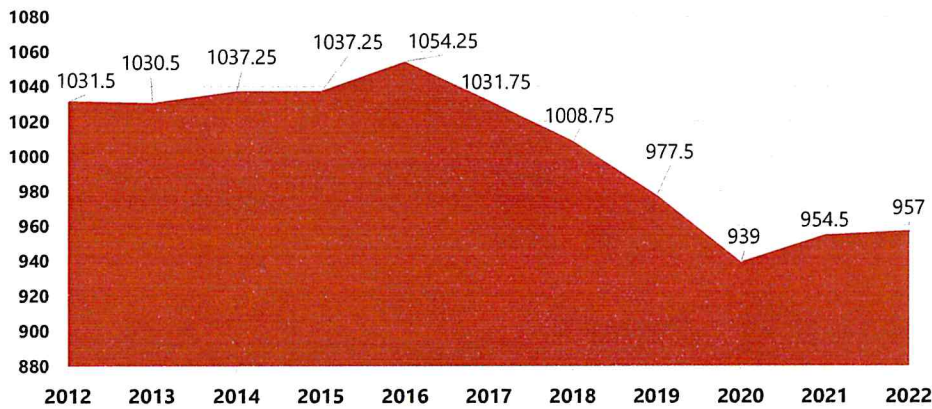


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TEAM NDDOT WORKFORCE

FULL TIME ACTUAL EMPLOYEE COUNT | 10 Year Look



982
FTEs

12.4%
Turnover
Ratio

29
FTEs
Requested

37

37

FULL TIME EMPLOYEE (FTE) REQUEST

- 4 International Fuel Tax Agreement (IFTA)/International Registration Plan (IRP) Auditors
 - Meet regulatory compliance requirements and avoid being sanctioned
- 3 Financial Staff
 - Meet federal aid accounting and reporting requirements
 - Meet increased procurement demands
 - Assistant division director for succession planning
- 14 Operators for Snow and Ice Control
 - Allows for extended hours of service
- 8 Driver License Examiners
 - Allows for reprioritizing existing temporary staff needs
 - Reduce temporary turnovers, hiring and training



38

38

REQUESTED AMENDMENTS



Additional Funding for Capital Improvements/Staffing- \$58.2M

Additional Match:

- **Formula Funding** – \$4.5M
- **Discretionary Funding** – \$26.3M
- **Flexible Transportation Fund** – \$25M

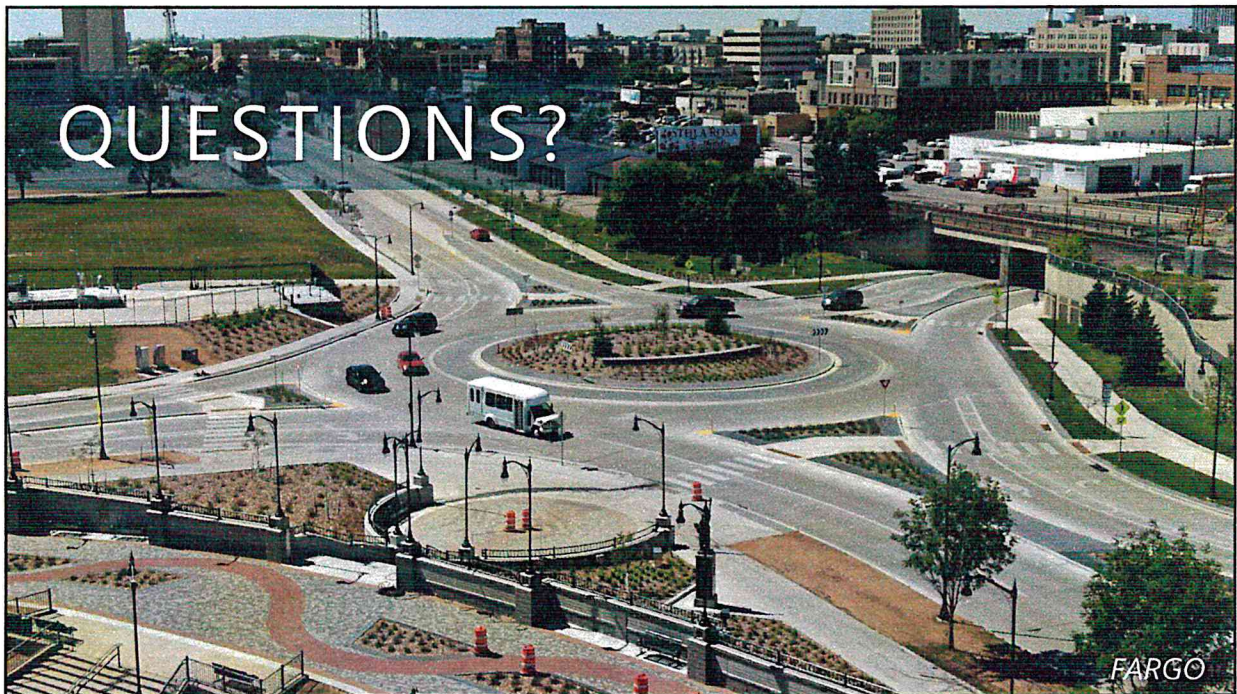
Full Time Employees | 13 Total

Additional: 7 equipment operators & 6 driver license examiners – \$2.4M

41

41

QUESTIONS?



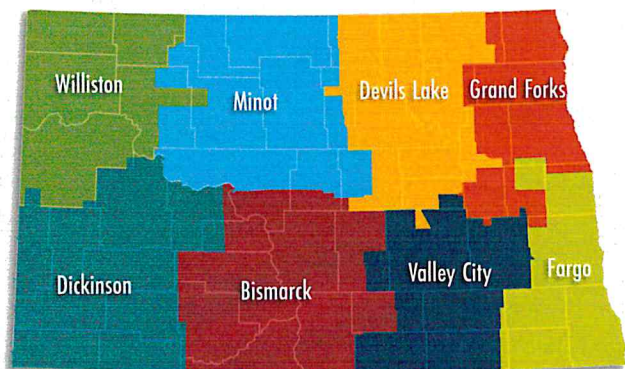
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ENGROSSED HB 1012

Object/Revenue		2021-23 Biennium Appropriations	2023-25 Legislative Base Budget	House Changes to HB 1012	Engrossed HB 1012	Requested Amendments	Proposed HB 1012
Description	Code						
		2,249,534,084	1,495,514,727	912,006,106	2,407,520,833	58,047,995	2,465,568,828
TOTAL BY APPROPRIATIONS ORGS		2,249,534,084	1,495,514,727	912,006,106	2,407,520,833	58,047,995	
Salaries and Wages	80110	204,109,585	204,109,585	28,313,251	232,422,836	2,449,971	234,872,807
Operating Expenses	80130	280,548,188	270,888,188	59,493,286	330,381,474		330,381,474
Capital Improvements	80150	1,227,431,344	902,431,344	741,713,721	1,644,145,065	55,750,000	1,699,895,065
Construction Carryover	80151	-	-	-	-		-
COVID19 - Capital Assets	80152	317,000,000	-	-	-		-
HB 1015 Discretionary Match	80153	100,000,000	-	-	-		-
Enhanced State Highway Invest	80155	-	-	-	-		-
Grants	80160	118,085,610	118,085,610	3,985,848	122,071,458		122,071,458
Contingent Loan Authorization	-	-	-	78,500,000	78,500,000		78,500,000
Short Line Railroad Program	80162	-	-	-	-		-
COVID-19 Transportation Grants	80164	-	-	-	-		-
Grants to Township	80167	750,000	-	-	-		-
COVID19 - Grants	80168	1,609,357	-	-	-		-
TOTAL BY OBJECT SERIES		2,249,534,084	1,495,514,727	912,006,106	2,407,520,833	58,199,971	2,465,720,804
General	GEN	-	-	10,375,000	10,375,000	29,486,663	39,861,663
Federal	FED	1,355,876,156	837,266,799	381,644,655	1,218,911,454	-	1,218,911,454
Special	SPEC	893,657,928	658,247,928	519,986,451	1,178,234,379	28,713,308	1,206,947,687
TOTAL BY FUNDS		2,249,534,084	1,495,514,727	912,006,106	2,407,520,833	58,199,971	2,465,720,804
TOTAL AUTHORIZED EMPLOYEES		982.00	982.00	16.00	998.00	13.00	1,011.00

WHO WE ARE

WHAT WE'RE ABOUT



District Map

982

Full-Time Team Members

39

Temporary Team Members

8

Districts

Mission:

Safely move people and goods.

Vision:

North Dakota's transportation leader promoting safe ways, superior service and economic growth.

Values:

Professionalism | Respect | Integrity | Dedication | Excellence

Goals/Objectives:

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

Innovation - Enhance external and internal services, products and programs.

Assets - Preserve and enhance assets managed by NDDOT.

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

Leadership - A local, state and nationally trusted leader. We value service, excellence, diversity and instilling a culture of leadership.

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Collaboration

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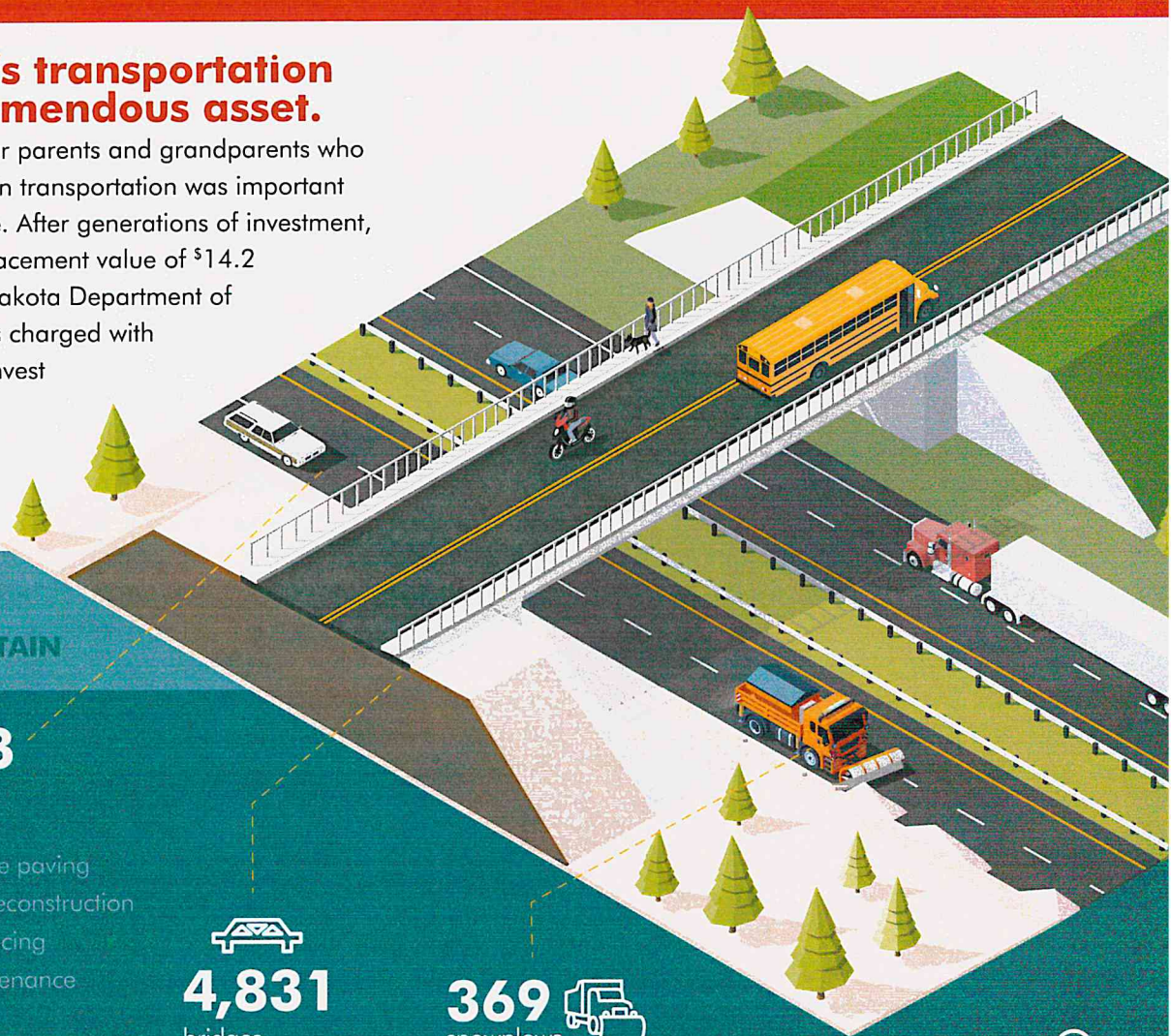


Fleet Service

Purchases, manages, operates, maintains and disposes of the state's licensed motor vehicles (about 3,200 vehicles).

North Dakota's transportation system is a tremendous asset.

The system was built by our parents and grandparents who understood that investing in transportation was important for them and for the future. After generations of investment, the system now has a replacement value of \$14.2 billion. Today, the North Dakota Department of Transportation (NDDOT) is charged with determining how we will invest to ensure that it continues to be an asset for decades to come.



OUR SYSTEM AND COSTS TO MAINTAIN

106,103
miles of roadway

FOR EACH MILE

- \$2.5M interstate concrete paving
- \$1.6M major roadway reconstruction
- \$1.0M pavement resurfacing
- \$210K preventive maintenance

IN 2022

209 construction projects completed
\$564M project investments



4,831

bridges
\$450K for each bridge replacement and repair

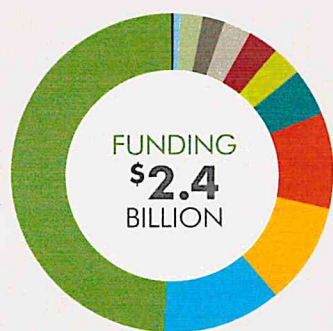
369 snowplows
36 tow plows, 14 rotary snow blowers, 63 payloaders and 16 motor graders

\$23.6M snow and ice control each winter

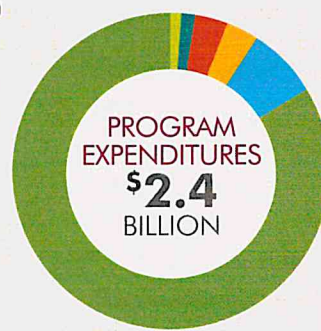
8 North Dakota DOT districts

FUNDING SOURCES AND PROGRAM EXPENDITURES

2021-2023 BIENNIAL BUDGET



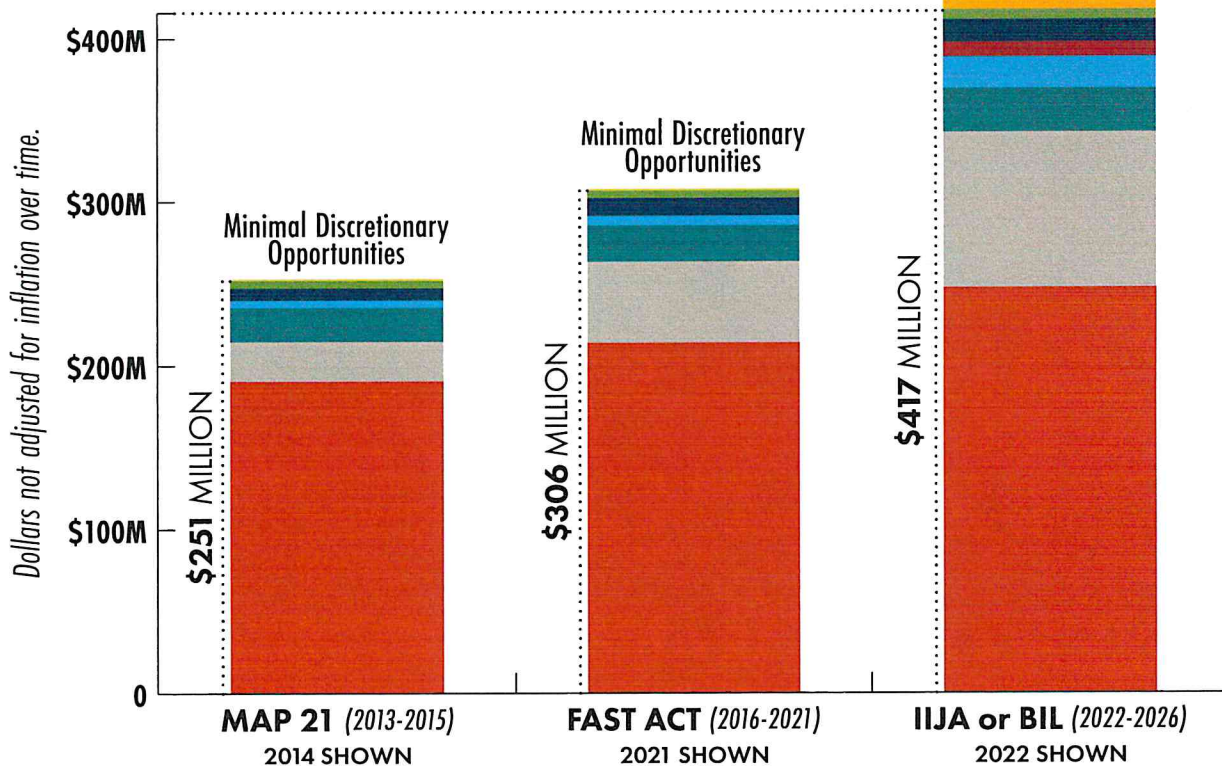
- 0.2% Unmanned Aircraft System Program (SB 2018)
- 0.8% Misc. H/W Fund Revenue
- 2.1% Borrowing (SB 2012 Section 6)
- 2.4% Local Government Reimbursements
- 2.8% Fleet Revenue
- 2.9% Bonding (HB 1431)
- 3.2% License, Fees, Permits
- 4.6% Motor Vehicle Revenue
- 9.7% Fuel Taxes
- 10.4% One-Time Non-Recurring State Funds
- 12.0% COVID-19 & American Rescue Plan Act
- 48.9% Federal Revenue



- 1.3% Driver License
- 1.4% Motor Vehicle
- 3.3% Administrative
- 3.3% State Fleet
- 7.3% Maintenance
- 83.4% Highway

IIJA is the transportation bill, but there are a few details that might surprise you.

- It includes a 30% increase in total federal formula funding for the next 5 years.
- Funding amounts designated for roads is similar to previous bills. There is a 15% increase in roadway funding which is about equal to the inflation.
- The \$1.2 trillion IIJA funding package includes other funding for items such as power and grid, broadband, ports and waterways, airports, water infrastructure, and resiliency. This funding is not accessible by the NDDOT.
- Greatest increase in funding is for bridge work, as well as additional resources for pedestrian/bike and electric vehicle charging stations.
- Increases much needed funding for transit and highway safety programs.
- Includes historic amount of funding for discretionary programs which are competitive; the award success and funding timing are unknown.



FORMULA FUNDING



Subject to federal aid rules and regulations.

WANT TO FIND OUT MORE?

To find out more information about the Infrastructure Investment and Jobs Act (IIJA), click or scan the QR code or go to: www.fhwa.dot.gov/bipartisan-infrastructure-law.



VISION ZERO

Zero fatalities. Zero excuses.

Vision Zero is North Dakota's traffic safety initiative to end motor vehicle fatalities and serious injuries on our roads.

Vision: Establish a culture of personal responsibility where motor vehicle fatalities and serious injuries are recognized as preventable and not tolerated.

Mission: Eliminate motor vehicle fatalities and serious injuries caused by motor vehicle crashes in North Dakota.

"E" STRATEGIES

The North Dakota Vision Zero Plan identifies partners and "E" strategies to meet the Vision Zero goal.

Education – All North Dakota road users should know that they can save their lives and the lives of others from motor vehicle crashes by taking personal responsibility.

Environment – Strengthening traffic safety policies and laws such as mandating seat belt use for all vehicle occupants at all times, increasing fines associated with speed violations, etc. changes driver and passenger behavior and reduces injury and fatality crashes.



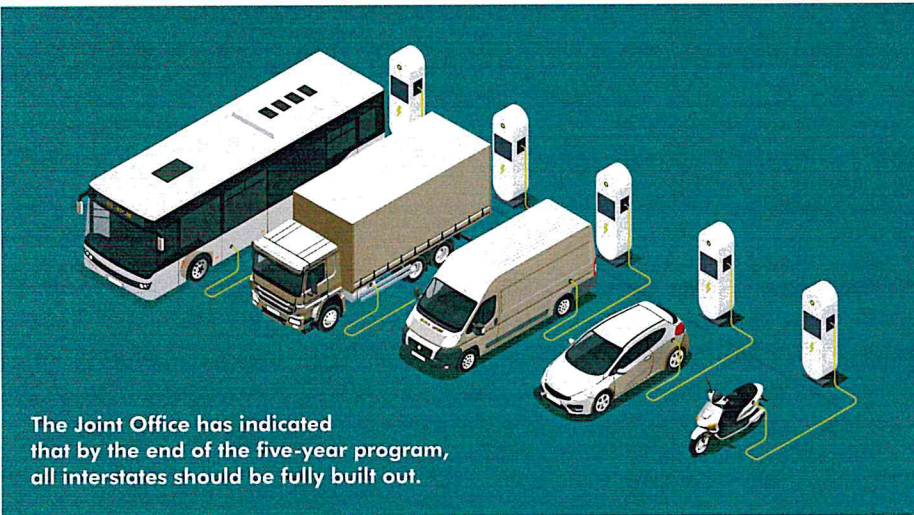
Enforcement – Regular enforcement of traffic safety laws deters unsafe drivers and occupant behavior.

Engineering – State and local North Dakota roads are designed, constructed and maintained with safety as a priority.

Emergency Medical Services – Crash victims are transported to an appropriate level of health care for their injuries in the shortest amount of time possible.



NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE FORMULA PROGRAM OVERVIEW



Basic Requirements of the Charging Infrastructure

The Joint Office has indicated that by the end of the five-year program, all interstates should be fully built out.



Located no more than one mile from an alternative fuel corridor (AFC)



Support up to four vehicles charging at 150kw simultaneously



Open to all vehicle makes (non-proprietary)



Maximum 50 miles between charging stations

The Bipartisan Infrastructure Law (BIL) passed in 2021 has funding available for the development of electric vehicle (EV) infrastructure. As part of the BIL, the National Electric Vehicle Infrastructure Formula Program distributes five billion dollars (\$5B) over the next five years (FY 2022-2026) to state departments of transportation for the development of DC fast charging (DCFC) infrastructure. This infrastructure is intended to serve long distance EV travel along alternative fuel corridors (AFCs).

In order to access NEVI funds, North Dakota was required to submit a plan by August 1, 2022 demonstrating how the network will be completed to meet requirements set by the U.S. Department of Energy and U.S. Department of Transportation's Joint Office for EV Infrastructure Deployment. The Joint Office has indicated that by the end of the five-year program, all interstates should be fully built out. The remainder of the funding can be dedicated to other priority corridors as identified by each state.

A Note on Alternative Fuel Corridors

Alternative Fuel Corridors, or AFCs, is a program run by the Federal Highway Administration (FHWA) that establishes a network of corridors that serve travel using alternative fuels. These corridors serve more than just electric vehicles and may include other fuel types such as propane, compressed natural gas (CNG) or hydrogen (H2). States nominate corridors to FHWA, and work to develop the fueling infrastructure to meet the criteria by each fuel type. In relation to the NEVI program, program funding must be dedicated towards building out existing AFCs. If additional corridors are nominated as AFCs, they must be built out as NEVI-compliant corridors before funding can be used outside of the AFC corridors.

North Dakota's NEVI Plan



North Dakota will receive \$25.9 million in funding from the NEVI Formula Program



The state's first phase of NEVI will be dedicated to building chargers along North Dakota's AFCs, I-94 and I-29.



The later phase will be focused on building chargers throughout the state for more local, community-level charging needs.

ELECTRIC VEHICLES AND MOTOR FUEL TAX REVENUE



Data from 2019



Vehicle Miles Traveled
9,859,000,000



Tax Rate
\$0.23/Gal
 (both unleaded and diesel)



Fuel Sold
762,000,000 Gal
 (both unleaded and diesel)



MFT Revenue Collected
\$175,260,000



Licensed Drivers
559,887
 (561,000 current)



Registered Vehicles
 Passenger **466,248**
 Pickup **279,837**
 Truck **89,746**
Total 835,831

As electric vehicle (EV) use continues to grow in North Dakota, the state must consider how to address the impact on the state's motor fuel tax (MFT) revenue. Because EVs do not require gasoline to operate, they do not contribute to the MFT that helps fund North Dakota's transportation system. North Dakota currently charges an annual \$120 registration fee for fully-electric EVs, \$50 for plug-in hybrid EVs, and \$20 for fully-electric motorcycles in addition to the typical annual registration fees (see N.D.C.C. § 39-04-19.2)

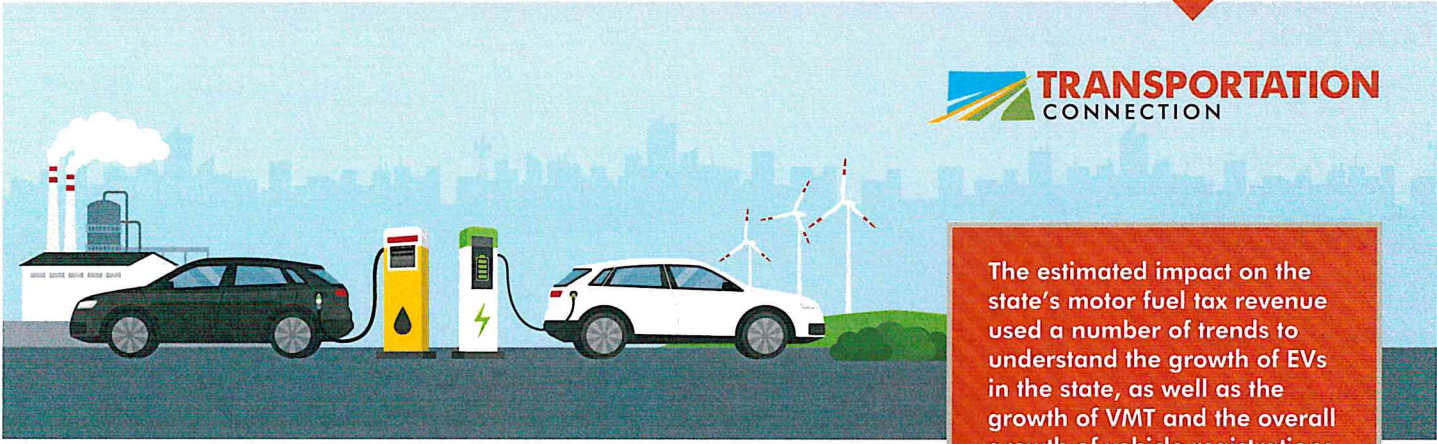
What does the average vehicle currently generate in MFT?

North Dakota DOT conducted a study based on historic state travel data and vehicle registration data to estimate the average contribution of MFT from different vehicle categories. Data from 2019 was used as the base.

Using a cell phone validated travel demand model, the impacts to current MFT from out of state drivers was estimated. Because fuel can currently be purchased out of state for miles driven within North Dakota, the state's total VMT is not an accurate representation of the revenue generated from in-state driving. It is estimated that 94.63% of Commercial Truck VMT are paying MFT and 97.51% of Passenger VMT are paying MFT.

Using a combination of the cell phone validated travel demand model and data from NDDOT, the average mileage driven per year, gallons of fuel consumed per year, MFT collected per vehicle per year, and total MFT collected by vehicle class were estimated.

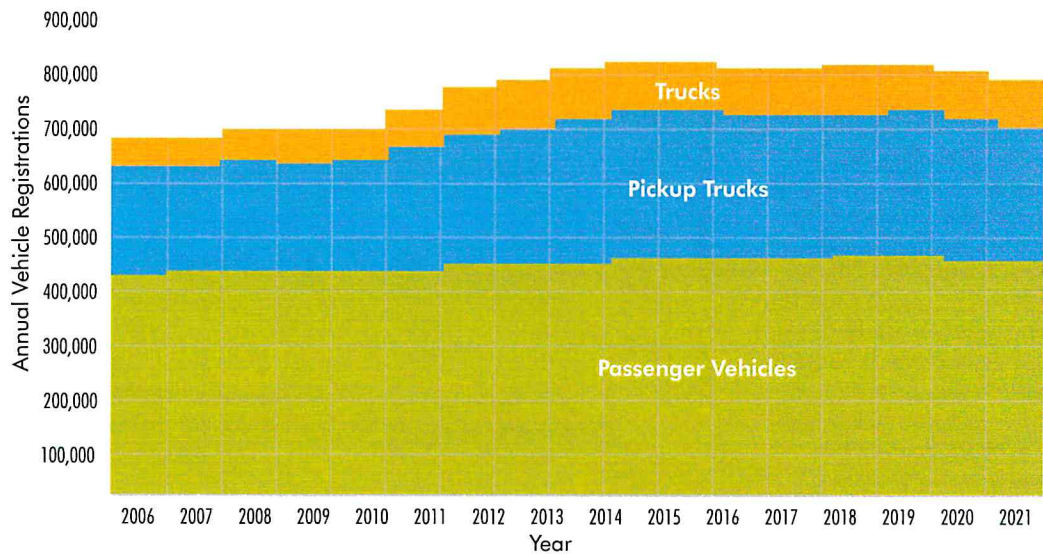
HOW WILL EVs IMPACT MOTOR FUEL TAX REVENUE?



The estimated impact on the state's motor fuel tax revenue used a number of trends to understand the growth of EVs in the state, as well as the growth of VMT and the overall growth of vehicle registrations.

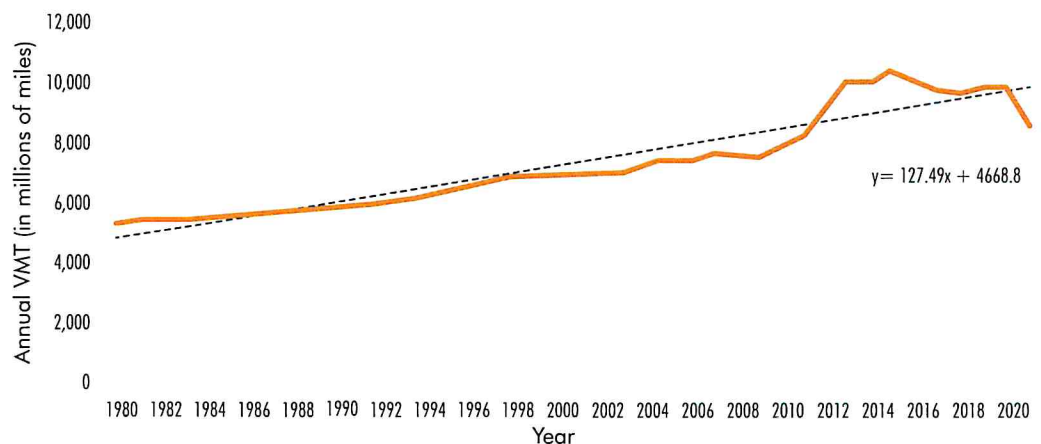
Annual Vehicle Registration

This chart shows the trends of vehicle registrations within North Dakota back to 2006 for passenger vehicles, pickup trucks, and commercial trucks. Overall, the state has averaged an additional 10,259 vehicle registrations per year. This number also accounts for the transfer of vehicles which would count the registration of the same vehicle twice.



Annual Vehicle Miles Traveled (VMT)

This chart shows the growth of annual vehicles miles traveled (VMT), which shows a growth of 127 million miles per year on average since 1980.



WHAT OPTIONS DOES NORTH DAKOTA HAVE TO SUPPLEMENT THE LOSS IN MOTOR FUEL TAX?



As EV purchases increase, most states are considering options to replace lost motor fuel tax revenues.

Implemented Fee Collection Approaches Throughout the U.S. in 2022

Mileage Based Fee

Oregon and Utah

OBD-II device, In-Vehicle Telematics, Annual odometer check (can be visual inspection during registration or captured via smartphone).

Benefits: Proportional to road usage. Captures actual EV driving.

Drawbacks: Does not capture out of state driving. Can be difficult/expensive to collect. Privacy concerns.

Electric Vehicle Registration Supplemental Fee

31 States

Fee paid during vehicle registration.

Benefits: Easy to collect.

Drawbacks: May charge drivers more or less than actual vehicle use. Does not capture out of state driving.

Electric Vehicle Registration Fee By Weight

Oklahoma and Michigan

Fee paid during vehicle registration.

Benefits: Easy to collect. Fees determined by vehicle weight recognize the efficiency differences between lighter and heavier vehicles.

Drawbacks: May charge drivers more or less than actual vehicle use.

Electricity Fee (per kWh) For Public Chargers

Kentucky

Wholesale from EVSE provider.

Benefits: Captures out of state driving.

Drawbacks: Double taxation for in-state drivers who already pay registration fee. Only captures public charging, not private charging.

Additional Fee Collection Approaches to Consider

Further EV fee approaches can be explored and customized to determine the best fit for North Dakota's priorities as EV adoption is anticipated to grow. Those options can be combined to provide flexibility. For example, Utah issues a supplemental registration fee for EV drivers but allows users to opt into a mileage-based fee that caps out at the original EV supplemental fee.

Depending on the fee structure, states may experience a net increase in revenue from their EV fees. Some states are using a portion of the EV supplemental funding for the deployment of electric vehicle infrastructure. This allocation has the potential to cover the 20% non-federal match in funding required for NEVI charging deployment projects. Alabama dedicates 25% of its EV fee revenue to the Rebuild Alabama Fund, which funds electric vehicle charging infrastructure until EV registrations exceed 4% of total vehicle registrations.



Peg Fees To Inflation

Inflation can erode the effectiveness of any fee or tax. Some states have pegged their EV fees to inflation, allowing an annual increase of the fee without annual legislation needed for the increase.



Fees Can Be Tiered

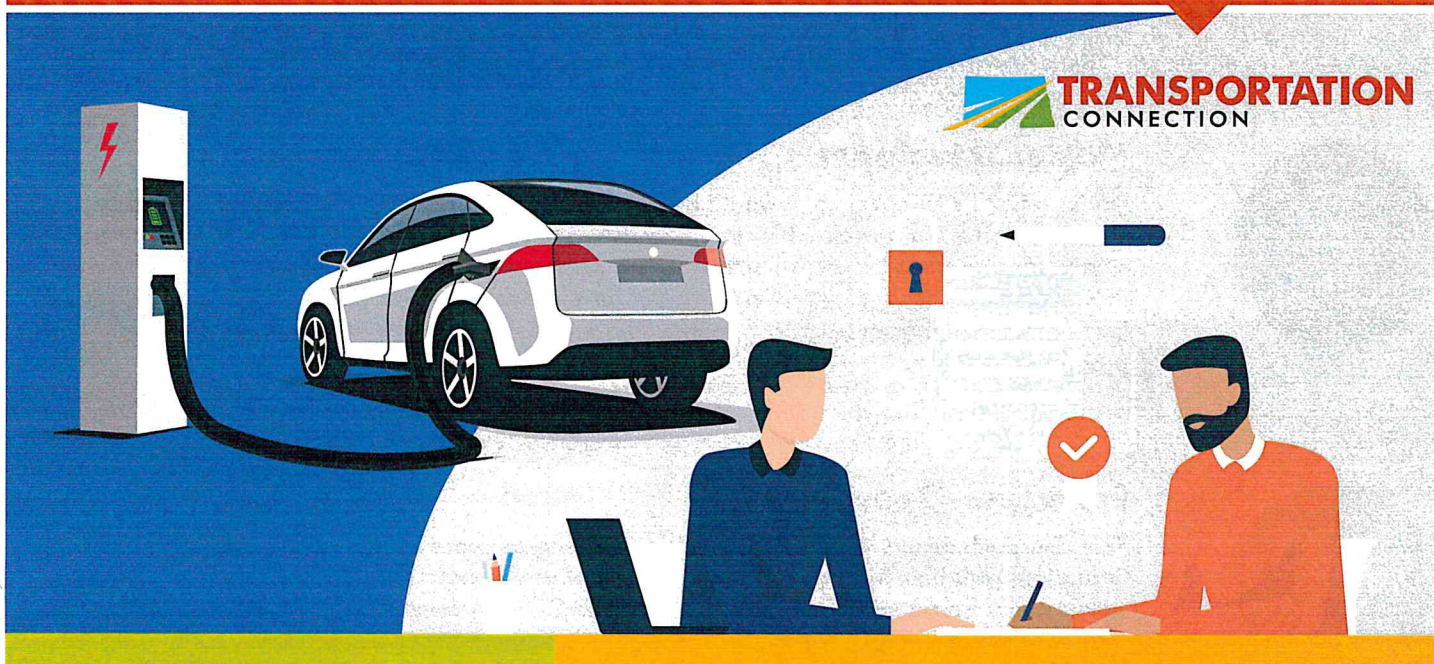
Many states have tiered fees for hybrids, plug-in hybrids, and full battery electric vehicles differently. This approach recognizes that fees are not "one size fits all" and can be adjusted as needed.



Approaches Can Be Combined

Approaches do not need to be a singular solution. North Dakota can explore a combination of approaches such as vehicle registration fees and consumption fees that are calibrated to replace any offset in motor fuel tax collection.

WHAT ARE THE CONTRACTING OPTIONS TO IMPLEMENT THE NEVI PROGRAM?



The North Dakota DOT (NDDOT) is in the process of reviewing state laws to determine which contracting mechanisms are currently permissible and which will need legislation passed to be considered. NDDOT would prefer to enter into agreements with third party businesses to provide operation and maintenance of charging infrastructure and sites, and ultimately to delegate ownership to those same parties.



Grant Program

Rather than procure the contractors and manage all of the work themselves, the DOT could instead award one or more grants to other entities to take on that role. The DOT would establish the goals and objectives for the EV program based on the federal requirements and release a notice of funding opportunity for one or more entities to procure design, construction, and operations and maintenance for a statewide EV charging network.



Traditional Design-Bid-Build Contracting Approach

The North Dakota Department of Transportation typically uses Design-Bid-Build (DBB) for its infrastructure projects. Though DBB is normally a low bid process driven primarily by price, it is possible to set a high bar for experience and qualifications that would guarantee a level of EV charging expertise for a winning proposer. DBB steps could include the procurement of design services, procurement of construction and installation services, procurement of operations and maintenance services, and long-term ownership.