



2019

**Construction &
Project Development
Conference**

Ramkota Hotel, Bismarck

Wednesday, March 6

Kudos

Thanks to all of you for the continued support you provide to our citizens and state highway system.

All of your efforts help move products and goods across the state helping provide a vital component to our state's economy and in providing and maintaining a reliable transportation system.

Vision Zero

The North Dakota Department of transportation along with other partners recently launched the Vision Zero Initiative. The comprehensive, multi-agency effort's goal is to continually work toward zero motor vehicle fatalities and serious injuries on North Dakota roads.

Vision Zero will be implemented through various strategies, including:

- Widespread public education/outreach
- Working with the legislature to ensure state laws represent best practices in traffic safety
- High visibility enforcement of existing laws
- Infrastructure/road safety improvements. Along with the support and action of these lead agencies, private sector stakeholders that share interest in traffic safety will also be included in *Vision Zero* efforts.



Vision Zero



Vision Zero

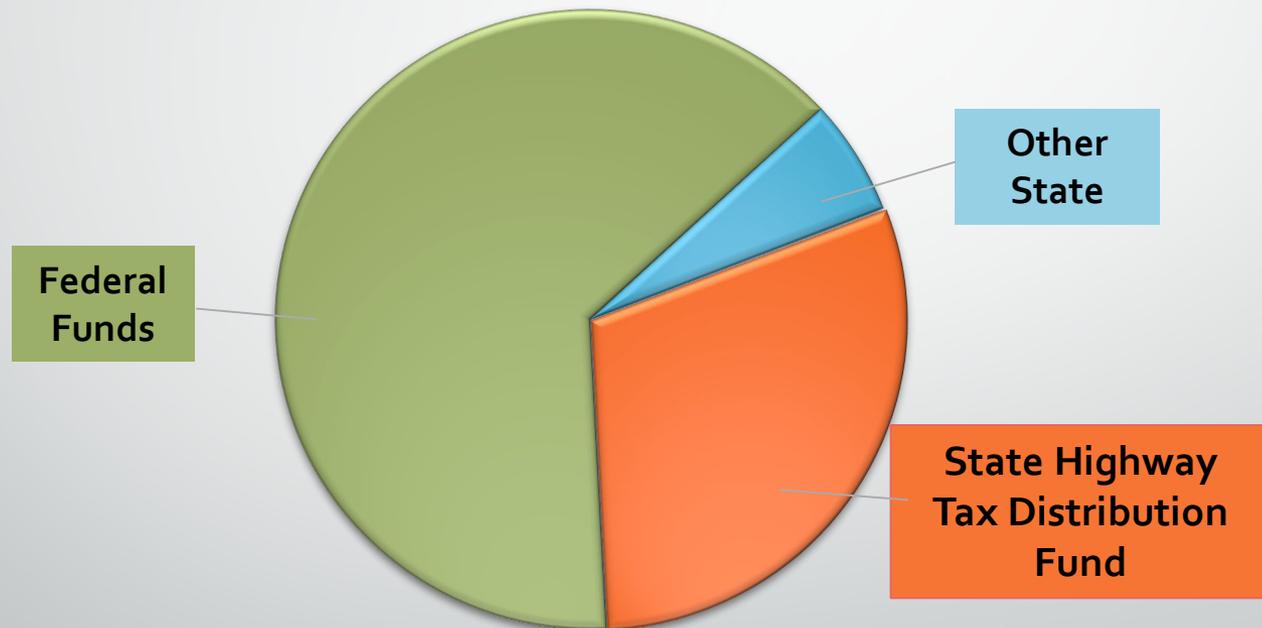
Park River, North Dakota, is our first Vision Zero community.



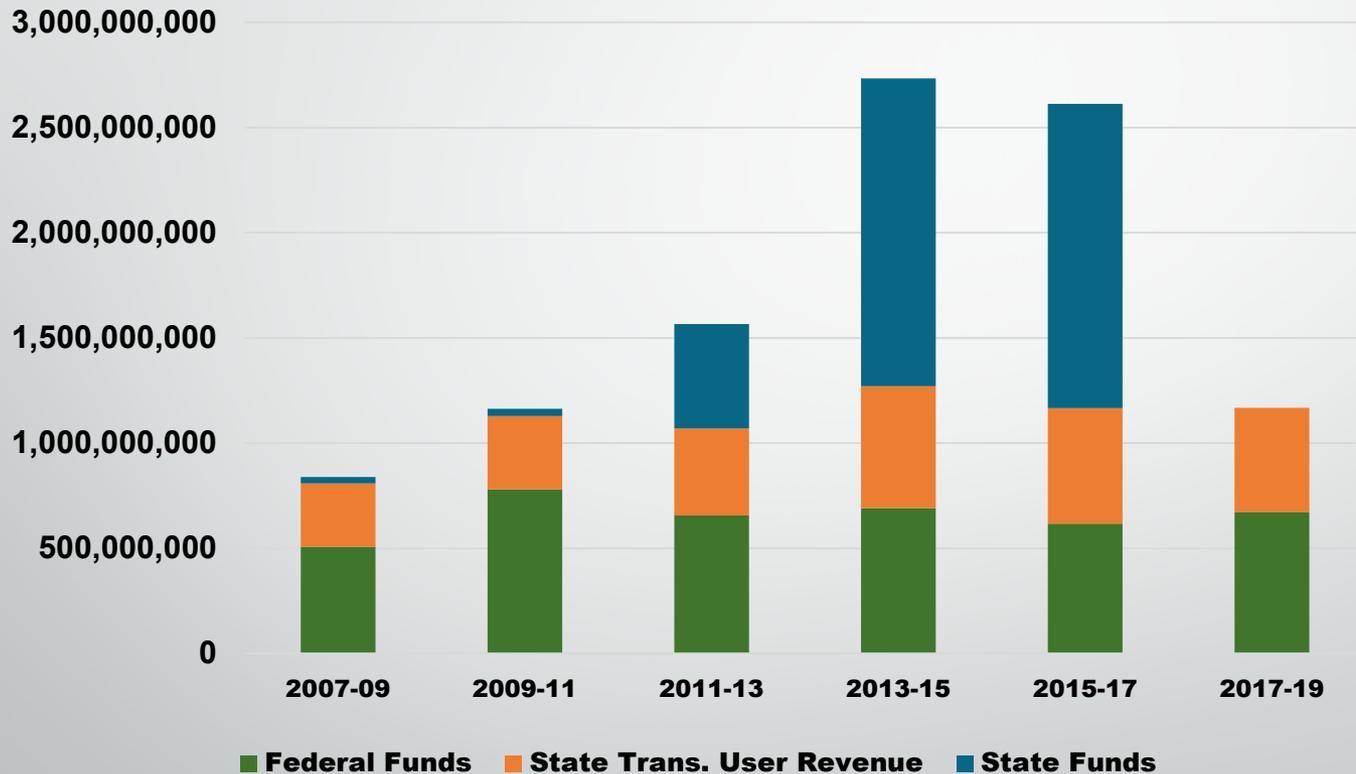
VISION ZERO
Zero fatalities. Zero excuses.

NDDOT Transportation Revenue

The primary sources of revenue provided to NDDOT are Federal Funds, State User Funds from the Highway Tax Distribution Fund and Other state sources primarily Drivers License Fees and oversize/overweight permits.



NDDOT Funding Resources

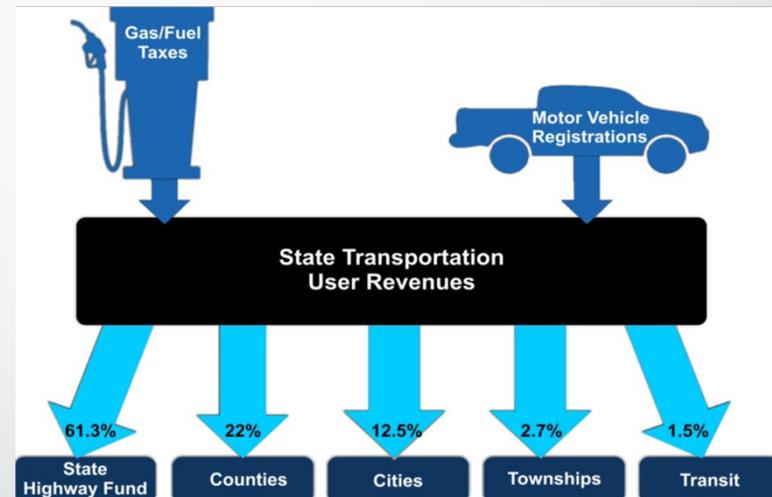


Current State Funded Sources of Transportation Revenue

The largest source of state transportation revenue comes from Highway Tax Distribution Funds = derived from state fuel taxes and motor vehicle registrations.

- **North Dakota Motor Fuel Tax**
 - 23 cents/gallon. Has not changed since 2005
- **Motor Vehicle Registration Fees**
 - Has not changed since 2005

It is important to note that 23 cents per gallon for state fuel tax is collected whether the price at the pump is \$1.99 or \$3.99.



How much do we drive?

12000

The average North Dakotan drives 12,000 miles per year

20 MPG

Average pickup gets 20 miles per gallon



State/ND
Gasoline Tax
\$138/Year
\$11.50/month

VS

CABLE TV



\$1188/YEAR
\$99/MONTH

Electricity to run
REFRIGERATOR



\$468/YEAR
\$39/MONTH

CELL PHONE BILL



\$1,200/YEAR
\$100/MONTH

Infrastructure Needs for City, County, State and Transit

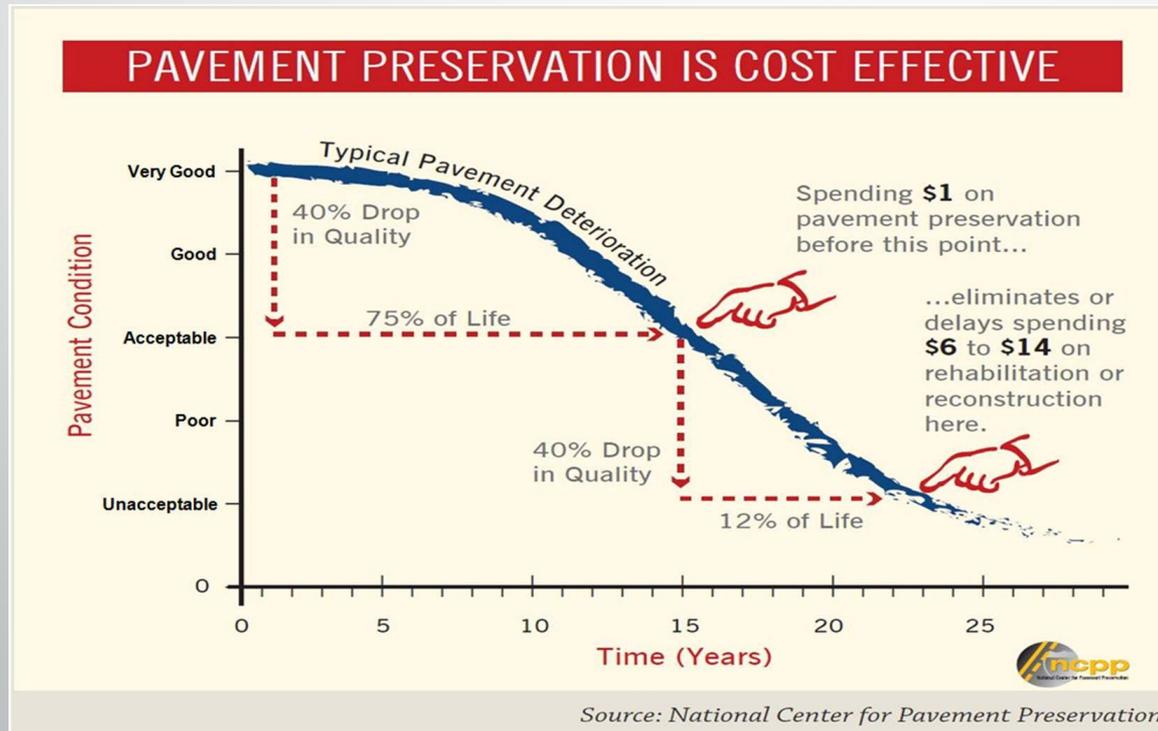
Statewide Infrastructure Needs – All Jurisdictions

Year	State (\$million)	County and Twp (\$million)	Urban (\$million)	Transit (\$million)	Total (\$million)
2016-17	\$1,469	\$1,028	\$149	\$72	\$2,717
2018-19	\$1,223	\$993	\$105	\$66	\$2,388
2020-21	\$818	\$1,025	\$88	\$69	\$2,000
2022-23	\$818	\$985	\$78	\$70	\$1,951
2024-25	\$788	\$926	\$51	\$72	\$1,837
2026-35	\$5,159	\$3,848	\$173	\$369	\$9,549
Harmonization	\$761				\$761
2016-35	\$11,037	\$8,805	\$643	\$718	\$21,202

NDSU UPPER GREAT PLAINS
TRANSPORTATION INSTITUTE

Investment Timing is Critical

- Long-term planning - known funding generates efficiencies.



Traffic and costs have increased while funding remains flat

NDDOT's main sources of funding come from state fuel taxes and vehicle fees (the same since 2005), but costs and traffic have increased.

- **Asphalt surfacing cost \$500,000 per mile in 2005 and costs \$1.1 million per mile in 2017.**
- **Salt used for snow and ice control cost \$55 per ton in 2005 and \$81 per ton in 2017.**

State and Global Economy

- North Dakota's transportation system must be interconnected, maintained and enhanced to allow us to be globally competitive.
- Products and services we deliver must create a transportation system that allows state business to prosper.



Partnerships

To accomplish our mission DOT partners with several entities:

- Cities
- Counties
- Townships
- Tribal Governments
- Metropolitan Planning Organizations
- Businesses
- Transit Providers
- Contracting Industry
- Consultants

Legislative Session

Operation Prairie Dog impact

- Oil and gas counties and hub cities maintain funding levels with no sunset clause
 - Non-oil counties and townships \$115 million
 - \$15 million for townships evenly distributed
 - \$100 million for counties based on UGPTI needs study
 - Non-oil cities
 - \$115 million based on population and property valuations
 - Must be used for infrastructure (streets, water, sewer, etc.)
 - Cannot be used for debt payments or to secure debt
- * NDDOT supports Operation Prairie Dog even though we do not receive any direct funding.

NDDOT Budget Bill - HB 1012

HB 1012 - Governor's Budget Proposal – reduces staff by 26 FTE's and totaling \$1.43 Billion

HB 1012 (House changes to NDDOT's Budget) – reduces staff by 42 FTE's totaling \$1.40 Billion

Ron Henke - Deputy Director for Engineering



Innovation

There are many factors that can affect funding for transportation today and in the future:

- Disruptive technology in vehicles and other transportation modes.
- Increased fuel efficiencies in vehicles.



Innovation

Unmanned Aerial System (UAS) Integration Pilot Program - U.S. DOT selected NDDOT as one of 10 participants in the Unmanned Aircraft Systems (UAS) Integration Pilot Program, an initiative aimed at shaping the future of drones in America. The NDDOT along with its partners successfully completed its first public mission of North Dakota's UAS Integration Pilot Program over a Fargo tailgating event in September 2018. This is the first phase of North Dakota's UAS program designed to help FAA create new regulations that will enable the safe, and secure integration of UAS (drones) into national airspace systems.



LIDAR Drone Operation

Innovation

Driver Assist Technologies



Autonomous Car



Autonomous Bus



Innovation

Safety in Work Zones

•Autonomous Attenuator

■ THE VEHICLE KIT INSIDE THE CAB OF THE ATMA ALLOWS THE VEHICLE TO BE AUTONOMOUS



THE SYSTEM PRECISELY AND SECURELY TRANSMITS THE LOCATION OF THE LEADER TO THE FOLLOWER ALLOWING IT TO FOLLOW THE SAME PATH.

•Portable Work Zone Rumble Strips

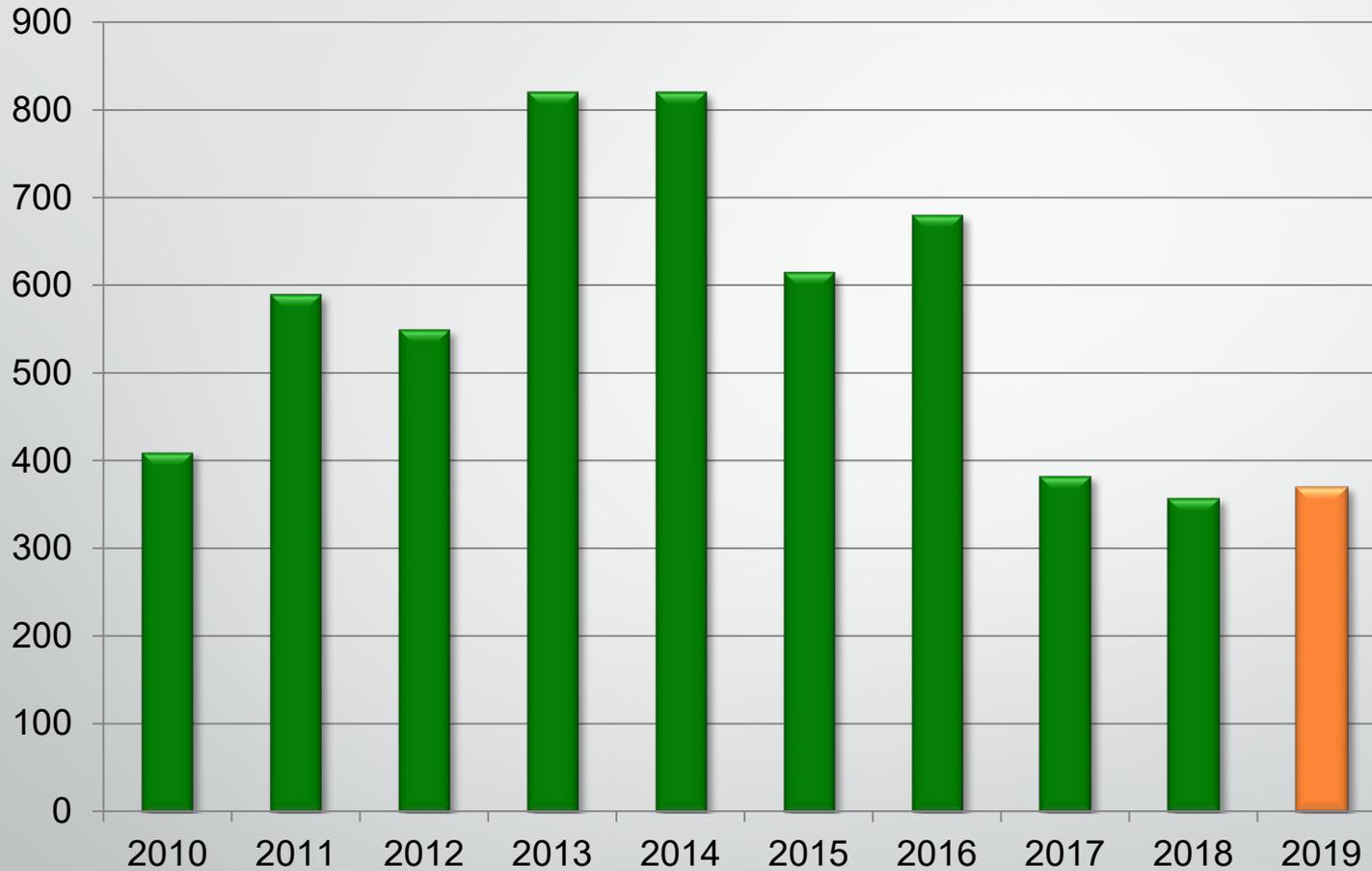


Review of Processes

- Red Line/Green Line of Design Plan Content
- Looking at Design Guidelines
- Finals
 - Tracking
- Process for Project Development
 - Costly to move projects
- Construction Records

NDDOT Construction Program

(\$\$ Millions)



 **Awarded Construction Contracts**

 **Projected Construction Contracts – Subject to change based on actual bids and project movement.**

As of Nov. 30, 2018

2019-21 Biennium Statewide Transportation Improvement Program

2019 Construction Season:

- Reconstruction of I-29 and I-94; I-94 EB from west of Eckelson to the Oakes exit, I-94 WB from east of Richardton to east of Hebron, I-29 NB from north of Gallchutt to Christine
- Replacement of the Long X Bridge on US 85 south of Watford City
- Reconstruction of 52nd Ave S in Fargo from 45th St S to Sheyenne St and the continuation of the reconstruction of Sheyenne St in West Fargo from 40th Ave S to 32nd Ave S
- Paving and bridge work on I-94, I-194, and ND 810 in Mandan east of the Center Exit
- Completion of the 4-laning of the Minot US 83 NW Bypass from 4th Ave NW to the junction of US Highway 83
- Paving and widening on ND Highway 18 from the east junction of ND Highway 5 to the Canadian Border.

2020 Construction Season:

- Reconstruction & widening of ND HWY 1804 from Red Mike Area to Epping to finish corridor between New Town & Williston
- Reconstruction and widening on US Highway 2 westbound from east of Churchs Ferry to Devils Lake
- Reconstruction and widening on US Highway 281 from north of Sheyenne to near the junction of ND Highway 57
- Paving and widening on ND Highway 22 from the east junction of US Highway 12 to New England
- Concrete Overlay on US Highway 2 westbound from Blaisdell to 4 miles west of Berthold
- Paving on US Highway 2 westbound from Arvilla to Grand Forks
- Roadway and bridge construction of 64th Ave S in Fargo from 33th St S to 38th St S
- Intersection improvements at Exit 153 (Mandan Ave) and reconstruction of Mandan Ave from I-94 to 27th St NW
- Slide Repair on US Highway 85 north of the Long X Bridge, 13 miles south of Watford City
- Paving and widening on ND Highway 37 from Parshall to Raub
- Reconstruction of Main Avenue in Fargo from University Drive to west of Broadway.

Questions?

THANK

YOU