# **Transportation Committee**

January 31, 2012 Roughrider Room, State Capitol

North Dakota Department of Transportation Francis G. Ziegler, P.E., Director

Mr. Chairman and members of the committee, I'm Francis Ziegler, Director of the North Dakota Department of Transportation (DOT). Today I will discuss the following topics:

- Update on load limits for bridges.
- Progress on Construction Projects.
- Construction Inflation Costs.
- Emergency Relief Funding.
- Update on Infrastructure Development meetings in western N.D.
- Motor vehicle renewal and temporary registration information.
- Upper Great Plains studies.
- Updating TransAction strategic plan.
- Special Road Fund information.

### **Update on Load Limits for bridges:**

Bridges are posted for load limits when the load, produced by the national truck standard, exceeds the bridge's safe load carrying capacity. Posting of bridges is based on national bridge standards set by the American Association of State Highway and Transportation Officials (AASHTO). The DOT bridge inspection program reviews bridges every two years. If a bridge has adequate capacity to carry the load, no posting is necessary.

In determining load carrying capacity of a bridge, engineers take into account many components such as the bridge material type, size of beams, span lengths, driving surface, etc. They also utilize national truck standards that replicate loads applied by semi trucks, encompassing multiple semi configurations as it moves across the bridge. The calculations determine when damage can occur to a bridge and affect safe movement of traffic. Many counties have bridges posted. These postings are a result of the bridge inspection, review of the condition and calculations that determine the load carrying capacity of the bridge. The state highway system has no bridges that require posting for load limits at this time.

### **Progress on construction projects:**

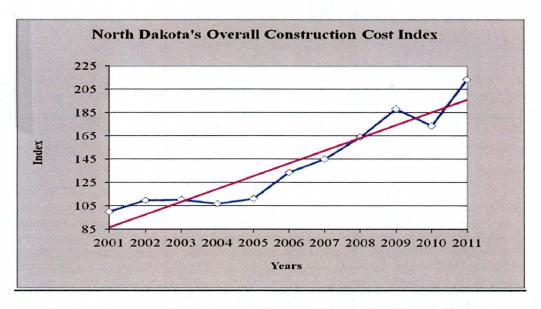
Construction work progressed well this fall due to the mild weather. In 2011, DOT worked on projects totaling approximately \$595.6 million, compared to \$442 million in 2010. This includes Emergency Relief projects.

- As of December 2011, approximately 88% is completed.
- Uncompleted project work will extend into the 2012 construction season.

### **Construction Inflation Costs:**

Over the past ten years North Dakota's overall construction cost index has increased.

- Cost for a thin lift overlay increased 94% from \$80,000/mi. in 2006 to \$155,000/mi. in 2011.
- Road construction industry very dependent on oil based products (asphalt, fuel) and natural resources such as gravel.
- Increased costs impact all levels of government (state, county, township, city, & tribal).



Overall Construction Cost Index				
Year	Total Amount	Adjusted to Base Yr	Index	Yr By Yr % Change
2001	Park Mark Street	\$0.00	100	0.00%
2002	ALCOHOLD DE LA CALIF	\$77,645,225.21	110	9.75%
2003	。1000年101年10日 (1000年10日)	\$77,953,405.60	110	0.40%
2004	<b>"我们是我们的时候</b>	\$75,503,274.94	107	-3.14%
2005		\$78,535,120.58	111	4.02%
2006		\$94,521,332.90	134	20.36%
2007		\$102,581,102.74	145	8.53%
2008		\$115,891,707.30	164	12.98%
2009		\$133,064,329.56	188	14.82%
2010	<b>新疆,在华西</b> 沙西	\$122,788,914.70	174	-7.72%
2011		\$151,097,367.69	214	23.05%

### **Emergency Relief program:**

Record flooding caused extensive damage to state, county and urban federal aid roadways covering 41 counties and three cities. Some areas of the state are still assessing damage to their infrastructure.

• The Department is working on a large number of Emergency Relief (ER) projects; please see Attachment A for map of projects. The table below illustrates when DOT received federal ER funds and the amount distributed.

2011 Federal ER Funds Received

Date Received	Amount Received - \$\$ in Millions
Federal Funds transferred from 2010 ER event	\$4.14 M
June 2011 Federal Allocation	\$5.0 M
November 2011 Federal Allocation	\$31.5 M
January 2012 Federal Allocation	\$276.1 M
Total Federal Allocation received for 2011	\$316.74 M

- The \$316.74 million is an historic amount for North Dakota. It is nearly one quarter of federal ER funds (\$1.6 billion) available for the entire United States.
- Previously, the most ER funding North Dakota ever received in any one given year was \$104.2 million in 2009.

### Update on Infrastructure Development meetings in western N.D.

DOT representatives traveled throughout western N.D. in January as part of the Infrastructure Development meetings with other government agency officials. The meetings were developed to visit with local residents about needs in their community or county. The Commerce Department chaired the meetings. In general the top three topics that were heard at the meetings included:

- a. Transportation infrastructure bypasses, passing lanes, wider shoulders.
- b. Housing infrastructure water, sewer, streets, homes and rentals.
- c. Emergency service needs EMT's and other services.

The Commerce Department is preparing a full report. Attached is the DOT document handed out at the meetings to illustrate work and projects conducted in the western part of the state.

### Motor vehicle renewal and temporary registration information

Motor vehicle renewals hit a new high in 2011 as over one million registrations were processed in North Dakota.

Year	2007	2008	2009	2010	2011
MV Registrations	902,581	960,125	952,616	945,282	1,048,240

SB 2207 changed the temporary motor vehicle registration process and DOT along with the Highway Patrol implemented a new online process for Temporary Motor Vehicle registrations and a public information campaign this summer. The charts below illustrate the increase of temporary registrations and that the revenue almost tripled over the last six months.

Temporary MV Registrations - Old process January 1, 2011 - May 31, 2011			
Highway Patrol	VRTS Transactions Processed	Total	VRTS \$
704	2,114	2,818	\$382,482

Temporary MV Registrations New online process June 1, 2011 - December 31, 2011				
Processed Online at Branch	Processed Online	Total	Dollar Amount Collected	
896	3,135	4,031	\$1,262,890	

### **Upper Great Plains Transportation studies**

Upper Great Plains Transportation Institute (UGPTI) was appropriated and directed by the 2011 Legislature through SB 2325 to update and maintain reports for transportation infrastructure needs for all county and township roads in the state.

Upper Great Plains Transportation Institute is also partnering with NDDOT to develop three studies:

- Western North Dakota Traffic Model Study.
- Needs Study for State Highways in North Dakota.
- Traffic Safety Study which will analyze crash data and conduct a regional survey to assess the public perception of traffic safety issues and priorities in the state's oil producing region.

### Updating state strategic plan

The Department will be conducting eight regional meetings across the state to gather information for the Statewide Transportation Strategic Plan. The meetings will be held during the last two weeks in March. The goal of the meetings is to identify strategies and programs to provide transportation needs for the future.

### **Special Road Fund information**

The Special Road Fund (SRF) program is a grant program to help finance road projects for constructing and the maintenance of access roads to and roads within recreational, tourist, and historical areas. Depending upon the proposed project's location, the application must be sponsored by either a county, a city with a population more than 5,000 or a state agency.

- A Special Road Fund committee consisting of one member of the senate and one member of the house of representatives, the director of the game and fish department, the director of the parks and recreation department and the director of the department of transportation review and approve the grants.
- Eighty percent of the interest derived from the interest-bearing account established for the state highway fund is deposited into the Special Road Fund. (The 2009 Legislature increased the percentage from 40% to 80%.)
- Recent interest rates are very low, which results in small amounts of monies entering the SRF account.
- The maximum award per project is \$250,000.
- Funds for this year's projects will come from the amount of funds that are presently available plus the projected earnings through 2011.

Present amount of available SRF funds	\$154,956.69
Projected earnings for 2011	\$180,000.00
Amount available for award	\$334,956.69

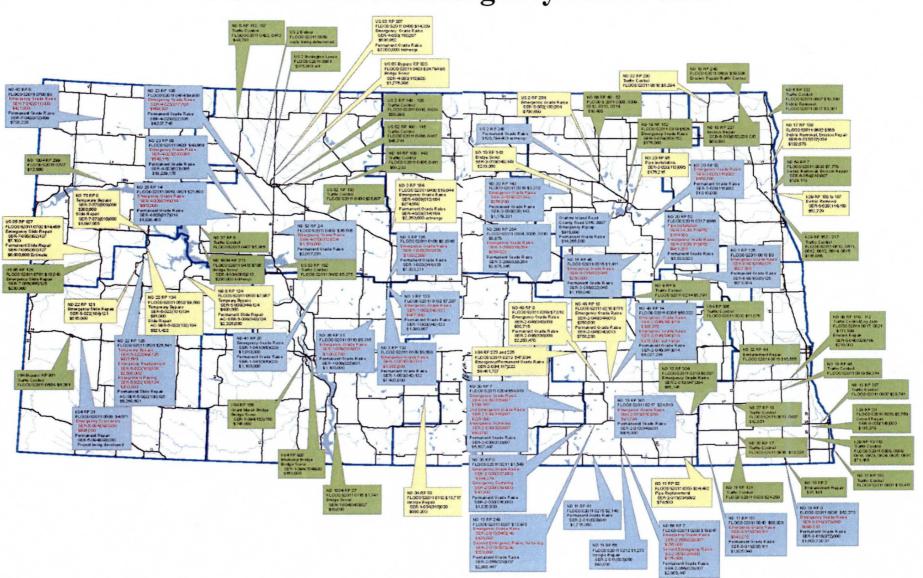
### • <u>Timeline for program:</u>

- September Solicitation of applications begins.
- December Applications are due December 16, 2011.
- March/April 2012 SRF Committee meets to select projects.
- April Applicants are notified of results.

Given the critical needs of North Dakota's existing transportation system which includes state highways, city, county and township roads, it is our recommendation that funding for this program not be increased by taking funds from the Highway Tax Distribution Fund or Highway Fund.

This concludes my testimony, thank you for the opportunity to appear before the committee today.

# North Dakota Emergency Relief Sites



Attachment A

# Transportation in western North Dakota



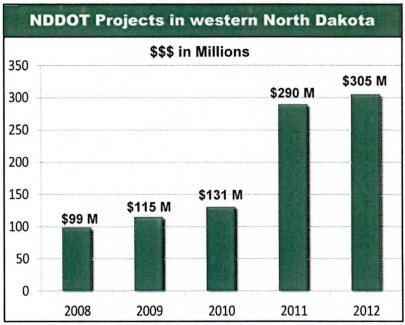
# NDDOT is aggressively addressing infrastructure improvements to enhance safety and traffic movement in western North Dakota

The North Dakota Department of Transportation (NDDOT) invested approximately \$635 million in state projects from 2008-2011 to preserve and improve transportation infrastructure in this area. The state will invest an additional \$305 million in 2012, as well as continue to plan and work on future

road projects.

# Recent highway improvements completed in 2011 include:

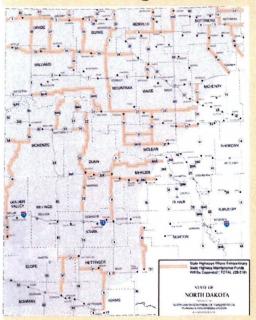
- Super 2 construction on US 85 between Watford City and Williston, providing additional passing and turning lanes.
- Installing traffic signal systems at highway intersections near Tioga, Williston, Watford City and Stanley.
- Completing major construction and widening projects on highways ND 8, ND 22, ND 23 and US 85.
- Expediting repairs on damaged pavement of several state highways in Williston and Watford City areas.
- Adding centerline and edge-line rumble stripes on two-lane highways.



Includes right-of-way, utilities and construction engineering costs.

### Transportation projects planned for 2012 in oil impact areas

### NDDOT is working to enhance traffic movement. Some road projects planned for 2012 include:



### **US Highway 2**

Road repair and reconstruction north of Williston to Junction of US 85.

### **ND Highway 8**

Widening and regrading near Bowbells from Junction of ND 52 to Junction of ND 50.

### ND Highway 23

Improvements include widening roadway and adding passing and turning lanes east of New Town to ND 37.

### ND Highway 22

Expanding to five lanes in north Dickinson to county line.

Adding turn lanes and passing lanes 12 miles north of Killdeer to Lost Bridge.

Widening and adding passing/turning lanes from ND 73 to ND 23.

### Williston Truck Route

Developing a truck-reliever route for the city of Williston.

### Future road projects proposed in STIP for western North Dakota



NDDOT is also working on planning and design for proposed future projects in the State Transportation Improvement Program (STIP) including:

- Additional truck reliever routes are under consideration for Dickinson, Alexander, New Town and Watford City.
- Projects on state highways including ND 23, ND 37, US 85 and other highways in western North Dakota.

# Funding utilized on state, county and township roads

The Governor and legislators passed a comprehensive transportation funding package for the 2011-2013 biennium, which includes maintenance and enhancement of state, county, city and township roadways.

The budget included \$228.6 million of oil impact funds for Extraordinary State Highway Maintenance. The funding was dedicated for projects on state highways within the 17 oil and gas producing counties in western North Dakota.

Funding was also provided for a county and township road reconstruction program. It designated \$142 million in state funds to address local roadway needs.

Oil Impact Area \$\$\$ For Transportation Projects			
Funds	2011	2012	
State Transportation Improvement Program (STIP) Federal, state & local match	\$159.0 M	\$123.8 M	
Extraordinary State Highway = \$228.6 M	\$ 84.5 M	\$144.1 M	
Emergency Relief Funds	\$ 22.7 M	\$ 37.4 M	
Federal Tiger Grant - Minot	\$ 24.1 M	\$ 0	
Sub Total	\$290.3 M	\$305.3 M	
County &Township Roads = \$142 M	\$ 19.5 M	\$122.5 M	
Total	\$309.8 M	\$427.8 M	

Includes right-of-way, utilities and construction engineering costs.

## Safety programs implemented to address driver behavior

NDDOT is implementing additional traffic safety programs to address driver behavior issues on roadways including:

- A statewide DUI Regional Task Force program that brings together city, county, tribal and state law enforcement agencies to coordinate on-going enforcement operations.
- Partnering with Petroleum Council and Highway Patrol to provide the Progress Zone campaign. The public outreach program urges motorists to be patient and to exercise caution in western North Dakota.
- Several other programs informing motorists about safe driving behavior include:
  - The dangers of speeding.
  - The hazards of alcohol and drug impaired driving.
  - The importance of wearing seat belts.



