Western ND Meeting

February 19, 2014
Grant Levi, NDDOT Director
Traffic Trends in North Dakota
Truck Traffic 2012

Average Annual Daily Truck Traffic (Published 2013)
Based on Available Traffic Count Rotation Data

NDDOT
North Dakota Department of Transportation
Western Region Planning Program Division
In Cooperation with the U.S. Department of Transportation, Federal Highway Administration
Average Daily Traffic

Average Daily Traffic
All ATR's

Years

- 2010
- 2011
- 2012
- 2013

ADT

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

280,000
300,000
320,000
340,000
360,000
380,000
400,000
420,000
440,000
Statewide North Dakota saw a 22% increase in traffic from 2010 to 2012. Recent traffic counts show that traffic remained unchanged in 2013.

### Vehicle Miles Traveled (VMT) in Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>VMT (in Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7.4</td>
</tr>
<tr>
<td>2007</td>
<td>7.7</td>
</tr>
<tr>
<td>2009</td>
<td>7.9</td>
</tr>
<tr>
<td>2010</td>
<td>8.3</td>
</tr>
<tr>
<td>2011</td>
<td>9.1</td>
</tr>
<tr>
<td>2012</td>
<td>10.1</td>
</tr>
<tr>
<td>2013</td>
<td>10.1</td>
</tr>
</tbody>
</table>
In the 17 oil producing counties of western ND, there was a traffic increase from 1.7 billion VMT in 2010 to 2.7 billion VMT in 2012. Recent traffic counts show a slight decrease in traffic to 2.6 billion VMT in 2013. Truck traffic also showed a slight decrease last year.

**Western ND Traffic Trend**

- **All Vehicles**
  - 2010
  - 2011
  - 2012
  - 2013

- **Trucks**
  - 2010
  - 2011
  - 2012
  - 2013
Traffic Delays

- Traffic delays occur in the oil impact region of the state.

*US Highway 85 Traffic in Watford City.*
Increased traffic volumes, (particularly heavy trucks), have accelerated the deterioration of state highways in the oil impacted areas. Roadways in the western part of the state were originally built to handle agriculture traffic (small grains and ranching) and were not built to carry the heavy loads associated with oil development.
Construction Costs

North Dakota's Overall Construction Cost Index

Chart illustrates what cost $1.00 in 2001, cost $2.61 for North Dakota construction in 2013.
## Cost Of Doing Business

<table>
<thead>
<tr>
<th>Project Type</th>
<th>West</th>
<th>East</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Overlay</td>
<td>$ 1,066,879.04</td>
<td>$ 660,465.00</td>
<td>61.5%</td>
</tr>
<tr>
<td>Mine &amp; Blend</td>
<td>$ 1,870,656.85</td>
<td>$ 854,075.36</td>
<td>119.0%</td>
</tr>
<tr>
<td>Structural Overlay</td>
<td>$ 655,166.24</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Minor Rehab</td>
<td>$ 509,033.32</td>
<td>$ 292,557.86</td>
<td>74.0%</td>
</tr>
<tr>
<td>Mill &amp; Overlay (4 Lane)</td>
<td>N/A</td>
<td>$ 250,160.16</td>
<td>N/A</td>
</tr>
<tr>
<td>Mill &amp; Overlay (2 Lane)</td>
<td>$ 762,279.55</td>
<td>$ 224,328.68</td>
<td>239.8%</td>
</tr>
<tr>
<td>Thin Lift Overlay</td>
<td>$ 188,057.82</td>
<td>$ 156,991.53</td>
<td>19.8%</td>
</tr>
</tbody>
</table>
Federal Funding

• MAP 21 is a two-year bill signed into law in 2012.
  ▪ Bill expires September 30, 2014.

• North Dakota’s funding apportionment:
  ▪ $241.2 million in 2012.
  ▪ $240.0 million in 2013.
  ▪ $239.6 million in 2014.

• Received $241.2 million in obligational authority for 2013.

• The Appropriations Bill was recently passed by Congress, obligational authority for 2014 should be approximately $229 million.

• There are some concerns that the federal Highway Trust Fund may run out this summer before the September 30th expiration date.
Federal Funding

Estimated Federal Highway and Transit Obligations With No Net New Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Total FHWA Obligations (excl. flex)</th>
<th>Total Safety Program Obligations</th>
<th>Total Transit Account Obligations (incl. flex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>40.8</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>40.3</td>
<td>1.2</td>
<td>0.0</td>
</tr>
<tr>
<td>2012</td>
<td>38.1</td>
<td>1.2</td>
<td>0.1</td>
</tr>
<tr>
<td>2013</td>
<td>39.4</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2014</td>
<td>40.0</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2015</td>
<td>28.2</td>
<td>2.4</td>
<td>0.0</td>
</tr>
<tr>
<td>2016</td>
<td>28.8</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2017</td>
<td>29.5</td>
<td>1.4</td>
<td>0.0</td>
</tr>
<tr>
<td>2018</td>
<td>30.2</td>
<td>1.4</td>
<td>0.0</td>
</tr>
<tr>
<td>2019</td>
<td>30.9</td>
<td>1.4</td>
<td>0.0</td>
</tr>
<tr>
<td>2020</td>
<td>31.6</td>
<td>1.5</td>
<td>0.0</td>
</tr>
<tr>
<td>2021</td>
<td>32.4</td>
<td>1.5</td>
<td>0.0</td>
</tr>
<tr>
<td>2022</td>
<td>33.1</td>
<td>1.5</td>
<td>0.0</td>
</tr>
<tr>
<td>2023</td>
<td>33.9</td>
<td>1.6</td>
<td>0.0</td>
</tr>
</tbody>
</table>

If no new revenues are found, federal highway obligations will fall by almost 100% in FY 2015.
State Funding for 2013-15 Biennium

The State Legislature appropriated about $2.3 billion to rebuild and repair state highways, city, county and township roads, bypass routes and other infrastructure upgrades in every region of the state.

The funding includes:

- About $1.64 billion for highway improvement projects throughout the state.
- $617 million for city, county and township roads.
Historic Road Program

- Working with our partners – county, city, township and tribal agencies - the Department had the largest road construction program in state history, over $878 million in 2013.
  - Several major road projects are two year projects that will be completed in 2014.
- The 2014 construction program = approximately $815 million.
  - County work left to be bid = $173 million
2014 Construction Projects
US 85 Construction Progress

- US 85 four lane project between Watford City and Williston – all phases under construction this year.
  - Watford City to Alexander – project will be paved when conditions allow in spring/summer of this year and then all lanes opened to traffic.
  - Alexander to County Road 16 – work began in August, some dirt work remains, roadway will be open to two lanes of traffic each direction by Fall 2014.
  - County Road 16 to Williston- still waiting on environmental document from FHWA.
Projects Update

**Truck Reliever Routes/Bypasses:**

- Watford City US 85 Southwest Bypass – under construction and will be completed this year.
- Watford City ND 23 Southeast Bypass – bid this spring, construction this summer.
- Alexander Bypass – bid in February, construction completed this year.
- Williston Northwest Bypass – all stages under construction this year.
- Dickinson Interim Bypass – first mile completed and open to traffic, remainder will be completed in 2014.
- New Town Northeast Bypass – construction begins this year.
- Killdeer Bypass – in Design and route selection phase.
Cost estimate to 4-lane remainder of US 85

<table>
<thead>
<tr>
<th>Projects</th>
<th>Today’s Dollars</th>
<th>Costs Adjusted for Inflation (12% per year) Construction average since 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Lane US 85 Watford City to I-94</td>
<td>$735 M</td>
<td>$1,030 M – If construction started in 2016*</td>
</tr>
<tr>
<td>4-Lane US 2 from existing 4-Lane to Montana Border</td>
<td>$120 M</td>
<td>$151 M – If construction started in 2016*</td>
</tr>
<tr>
<td>4-Lane US 85 South Dakota Border to I-94</td>
<td>$825 M</td>
<td>$1,636 M – If construction started in 2019*</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$1,680 M ($1.68 Billion)</strong></td>
<td><strong>$2,817M ($2.817 Billion)</strong></td>
</tr>
</tbody>
</table>

*The assumed construction year is to illustrate the impact inflation has on the cost. The actual construction year will depend on the ability to complete the environmental documents and the availability of funding.*
Traffic Needs Study

NDDOT works in partnership with Upper Great Plains Transportation Institute to look at statewide needs and traffic modeling.
Thank You!