Generating Public Involvement in Transportation

Upper Great Plains Transportation Institute
North Dakota State University

May 2008
Purpose of Workshops

- Educate participants
- Solicit input
- Encourage involvement

“We’re not trying to tell you what to think, we’re hoping to give you something to think about.”
North Dakota Roadways

<table>
<thead>
<tr>
<th>Type</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>571 miles</td>
</tr>
<tr>
<td>Other National &amp; State Highways</td>
<td>6,814 miles</td>
</tr>
<tr>
<td>County Roads</td>
<td>19,043 miles</td>
</tr>
<tr>
<td>Other Rural (Township) Roads</td>
<td>56,509 miles</td>
</tr>
<tr>
<td>City Streets</td>
<td>3,860 miles</td>
</tr>
<tr>
<td>Trails</td>
<td>19,827 miles</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>106,624 miles</strong></td>
</tr>
</tbody>
</table>

North Dakota has more miles of road per capita than any other state.
Despite the steady increase in travel, fuel consumption has been relatively stable since 1995, primarily as a result of increasing fuel efficiency.
Data taken from the North Dakota Transportation Handbook, NDDOT, December 2006.
## North Dakota Transportation Facts

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved State Highways</td>
<td>2,100 miles</td>
<td>7,400 miles</td>
</tr>
<tr>
<td>Paved County Highways</td>
<td>2,800 miles</td>
<td>6,800 miles</td>
</tr>
<tr>
<td>Load Limit (on State Highways)</td>
<td>73,280 GVW</td>
<td>105,500 GVW</td>
</tr>
<tr>
<td>Crop Production</td>
<td>17 billion</td>
<td>57 billion</td>
</tr>
<tr>
<td></td>
<td>pounds</td>
<td>pounds</td>
</tr>
</tbody>
</table>
State Highway Conditions

FLEXIBLE PAVEMENTS

- Very Good – 6%
- Good – 35%
- Fair – 22%
- Mediocre – 39%
- Poor – < 1%

CONCRETE PAVEMENTS

- Very Good – 22%
- Good – 38%
- Fair – 20%
- Mediocre – 18%
- Poor – < 1%

Pavement smoothness based upon IRI measurements (Source: NDDOT)
Current County Conditions

- County Major Collectors
  - 24% Good
  - 43% Fair
  - 33% Poor

- Road Conditions
  - 12% Good
  - 48% Fair
  - 32% Poor
  - 8% Not Rated

Good = Some Signs of Wear
Fair = Noticeable Signs of Wear Throughout
Poor = Significant Wear Throughout
(Source: Survey of County Engineers)
<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND Households Without Vehicles</td>
<td>17,030</td>
</tr>
<tr>
<td>Average Residents/Household</td>
<td>2.41</td>
</tr>
<tr>
<td>Est. Individuals Without Direct Vehicle Access</td>
<td>41,000</td>
</tr>
<tr>
<td>Residents Without Direct Vehicle Access</td>
<td>6.5%</td>
</tr>
<tr>
<td>Est. Non-Driver Trips per Day</td>
<td>2.6</td>
</tr>
<tr>
<td>Est. Need for Transportation by Individuals Without Vehicles</td>
<td>106,600/day</td>
</tr>
</tbody>
</table>
# NORTH DAKOTA TRANSIT FACTS

<table>
<thead>
<tr>
<th>Service Type</th>
<th>2003-04</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Route Bus Systems (Bismarck Fargo, Grand Forks &amp; Minot)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Urban &amp; Rural Dial-A-Ride Services</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>Rides Provided</td>
<td>1.7 million</td>
<td>2.4 million</td>
</tr>
<tr>
<td>Cost/Ride</td>
<td>$5.17</td>
<td>$4.49</td>
</tr>
<tr>
<td>Fare/Ride</td>
<td>$.92</td>
<td>$.80</td>
</tr>
<tr>
<td>Subsidy/Ride</td>
<td>$4.25</td>
<td>$3.69</td>
</tr>
</tbody>
</table>
North Dakota Population Trends

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005
Average Household Expenditures on Transportation - 2005

Private vehicle expenditures = $7,896
Vehicle purchases = $3,554
Gasoline and motor oil = $2,013
Other vehicle expenditures = $2,339
Public transportation expenditures = $448
Airline fares = $285
Mass transit fares = $52
Ship fares = $42
Taxi fares = $24
Intercity train fares = $19
Intercity bus fares = $12
Location transportation on out-of-town trips = $11
School bus = $3

\( ^a \) Includes entertainment, personal care products and services, education, tobacco products and smoking, and miscellaneous.

Note: Numbers do not add to totals due to rounding.

Primary Funding Sources

- Federal
  - Federal Fuel Tax & Miscellaneous

- State
  - State Fuel Tax
  - Motor Vehicle Registration Fees
  - Motor Vehicle Excise Tax

- Local
  - Mill Levies, Bonds, Special Assessments & Misc.
Gasoline: 18.4¢ per gallon (constant since 1993)
- 15.44¢ to Highway Trust Fund
- 2.86¢ to Mass Transit Account

Diesel: 24.4¢ per gallon (constant since 1993)
- 21.44¢ to Highway Trust Fund
- 2.86¢ to Mass Transit Account
State Fuel Tax

- 23¢/gal on gas and gasohol
  - Increased 1¢ in 1997 and 2¢ in 2005
  - Each cent of gas tax generates $5.1 million / year
# Federal Transportation Funding to North Dakota

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Highway Administration</td>
<td>$453.7</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td>$17.6</td>
</tr>
<tr>
<td>FHWA Emergency Relief</td>
<td>$2.5</td>
</tr>
<tr>
<td>Rail Program</td>
<td>$8.6</td>
</tr>
<tr>
<td>Highway Safety</td>
<td>$5.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$488.0</strong></td>
</tr>
</tbody>
</table>

March 2008, in millions per biennium
# ND’s Federal & State Transportation Revenues Sources

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Aid</td>
<td>$488.0</td>
</tr>
<tr>
<td>State Fuel Tax</td>
<td>$251.6</td>
</tr>
<tr>
<td>Motor Vehicle Registration</td>
<td>$114.1</td>
</tr>
<tr>
<td>Truck Regulatory &amp; Miscellaneous</td>
<td>$ 33.0</td>
</tr>
<tr>
<td>Temp. 10% of Vehicle Excise Tax</td>
<td>$ 11.6</td>
</tr>
<tr>
<td>General Fund Support for Transit</td>
<td>$  1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$899.3</strong></td>
</tr>
</tbody>
</table>

March 2008, in millions per biennium
## Distribution of North Dakota’s Federal & State Transportation Revenues

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDDOT</td>
<td>$618.3</td>
</tr>
<tr>
<td>Counties</td>
<td>$109.6</td>
</tr>
<tr>
<td>Cities</td>
<td>$128.9</td>
</tr>
<tr>
<td>Townships</td>
<td>$10.4</td>
</tr>
<tr>
<td>Transit</td>
<td>$23.3</td>
</tr>
<tr>
<td>Miscellaneous (Highway Patrol, Ethanol, Tribal, etc.)</td>
<td>$8.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$899.3</strong></td>
</tr>
</tbody>
</table>

March 2008, in millions per biennium
Additional Local Funding Sources

- Undesignated State Aid
- Bonding
- Special Assessments
- Mill Levies
- Oil, Gas, & Coal Impact Funds
- Sales Tax Revenues
State Transportation Expenditures

National Highway Construction and Maintenance Cost Indices*
(Source: FHWA)

*These indices have been scaled to equal 100 in 1987.
Bituminous Paving Overall Cost Index

![Graph showing the trend of the Bituminous Index over years from 2000 to 2008. The index shows an overall increase with a linear trend line representing the index.](image-url)
Highway System Implications

- Revenues increased 18% from 2001-2005
- Producer Price Index increased 32% over the same time frame
- Reduced buying power is causing deferred maintenance
Timeliness of Improvements

- 75% Time
- 40% Quality Drop
- Will Cost $4 to $8 if Delayed to Here
- Each $1 of Renovation Cost Here

Road Quality:
- Very Good
- Good
- Fair
- Poor
- Very Poor

Years:
- 5
- 10
- 15
- 20
- 25

12% Time
Projected Balances—Highway and Transit Accounts

Assuming no change in revenues or program levels

Source: U.S. Department of the Treasury
Federal Highway Trust Fund Shortfall

- Trust Fund spending has been outpacing revenues
- $1.1 billion shortfall predicted for 2009
- Could result in $100 million cut to ND and tighter restrictions on use of funds
Overriding Trends Facing ND

- Modest increase in federal funding
- Relatively stable state funding
- Increasing demands on infrastructure
- Increasing demands for transit services
- Sharply rising maintenance costs
- Sharply rising transit operating costs
- Possible cuts in federal funding