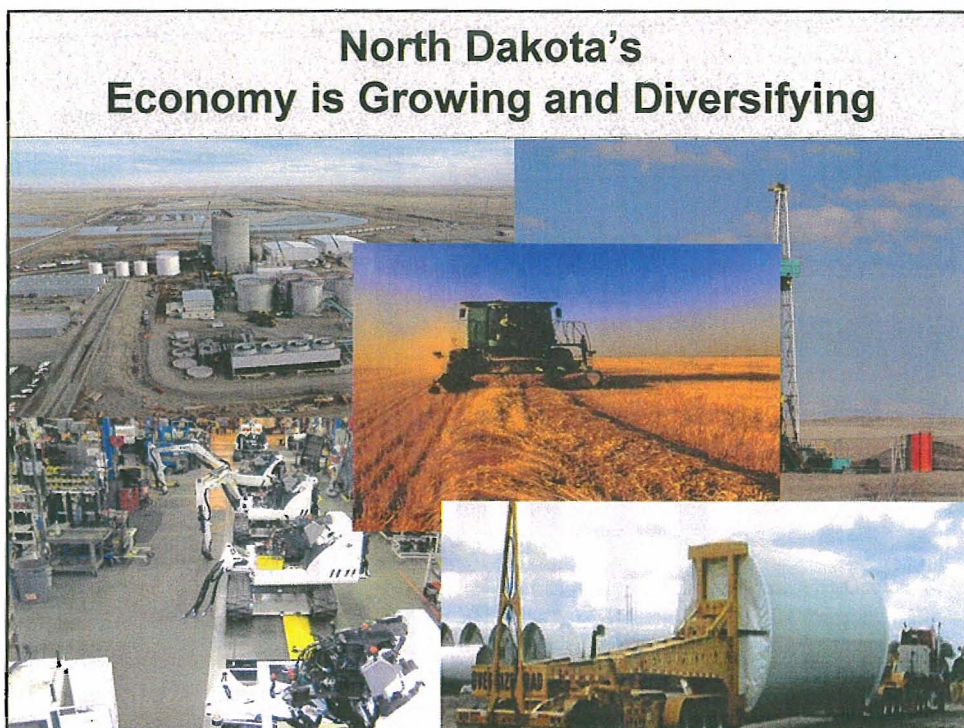
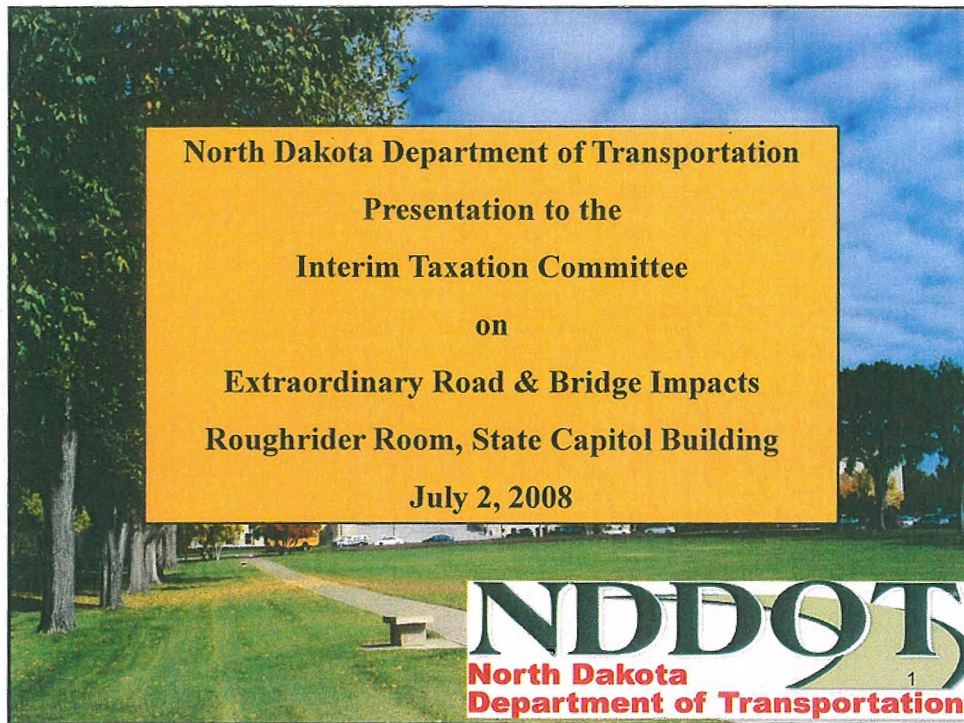
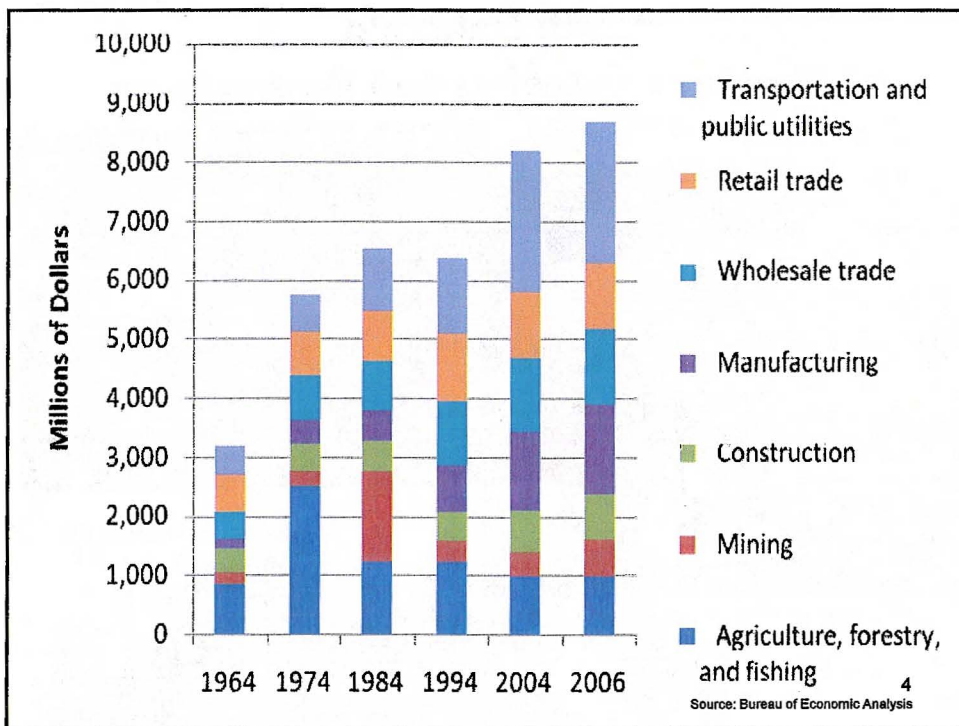
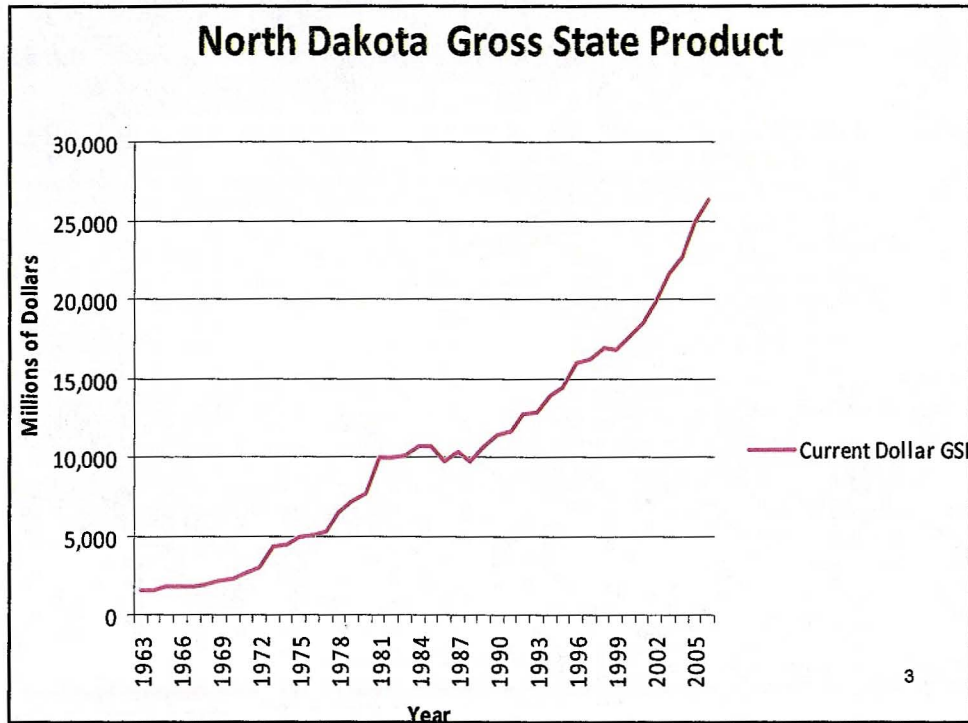
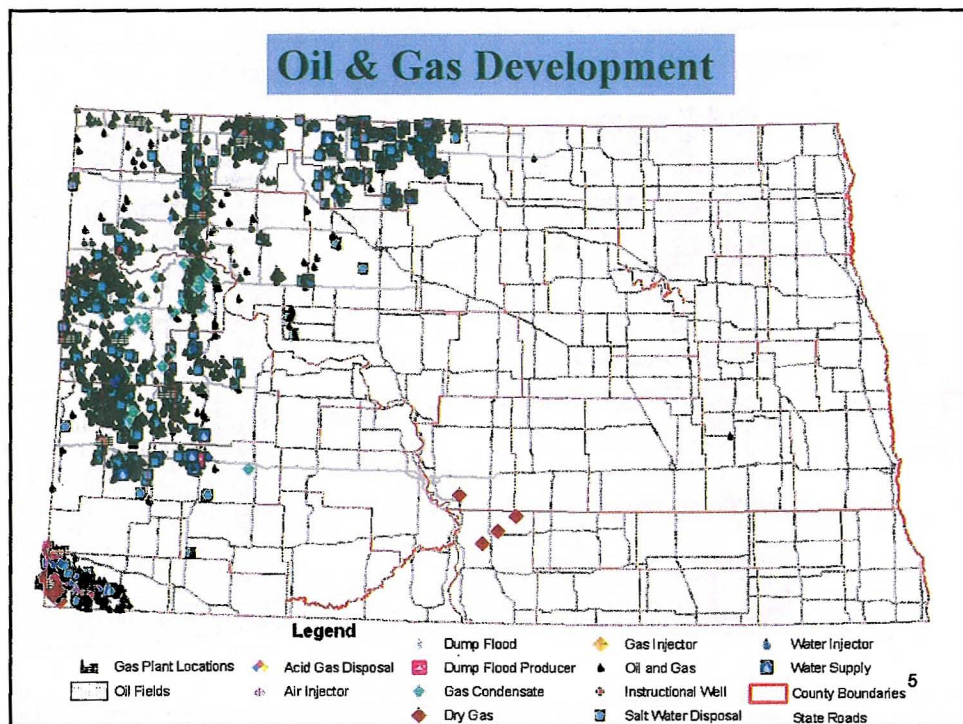


7/1/2008

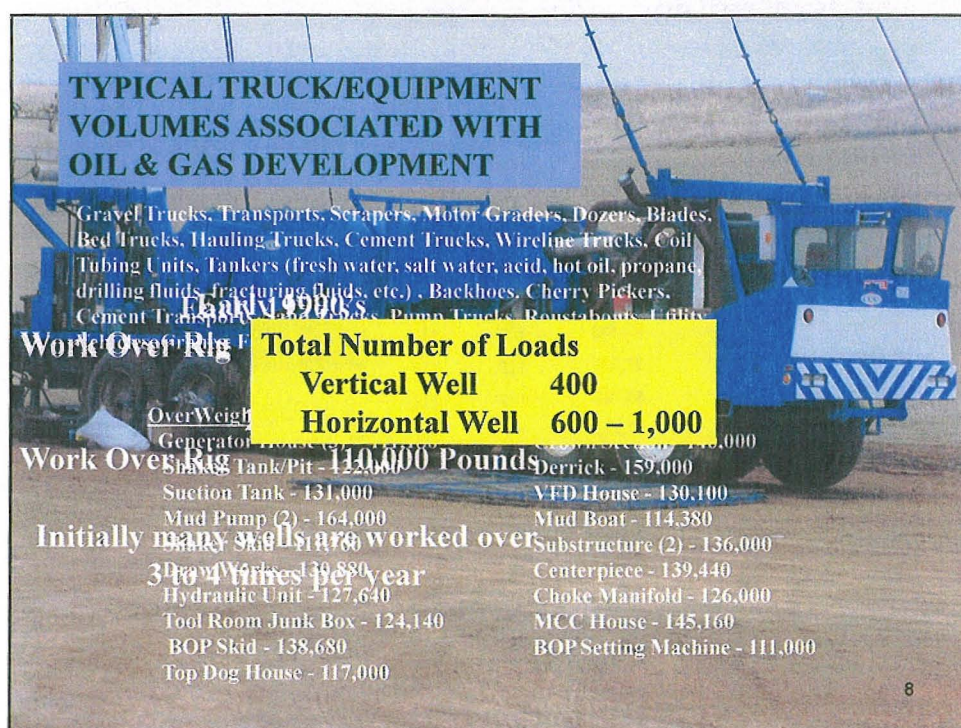
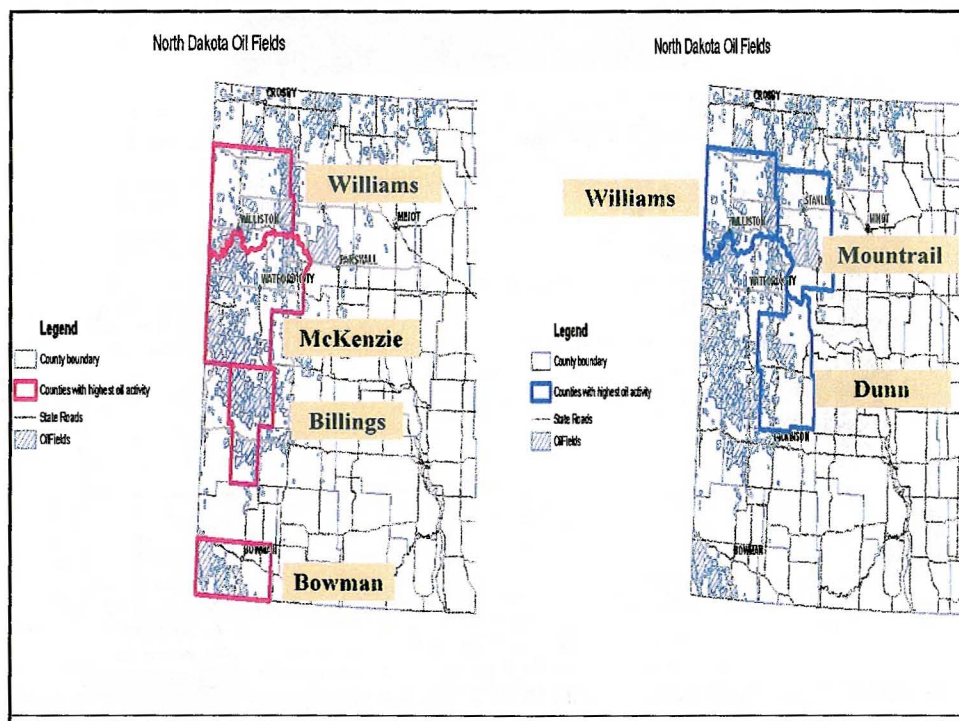


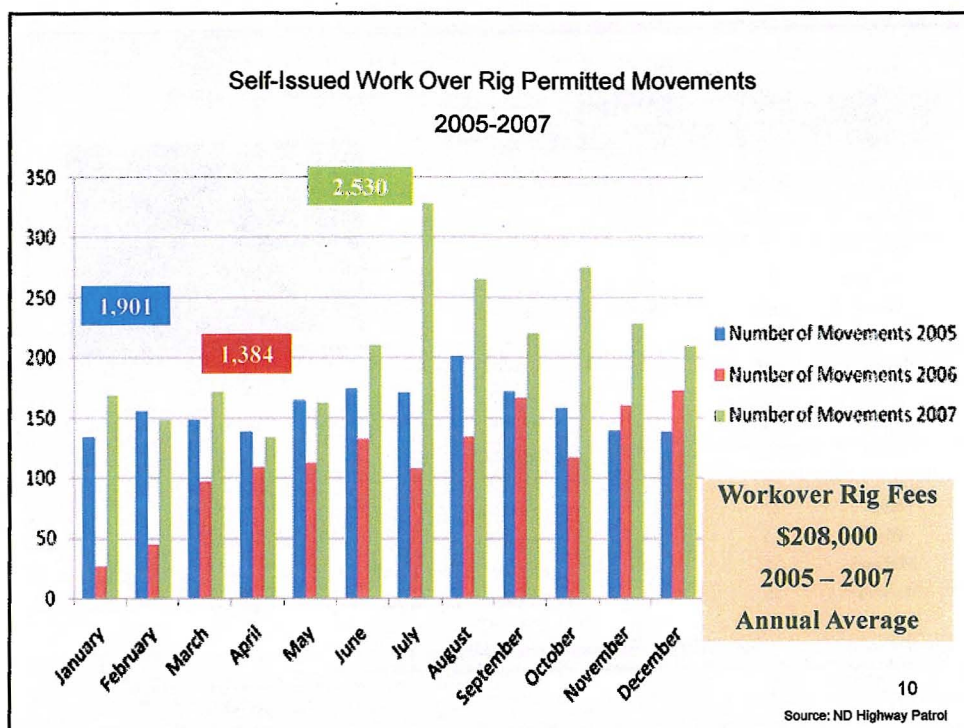
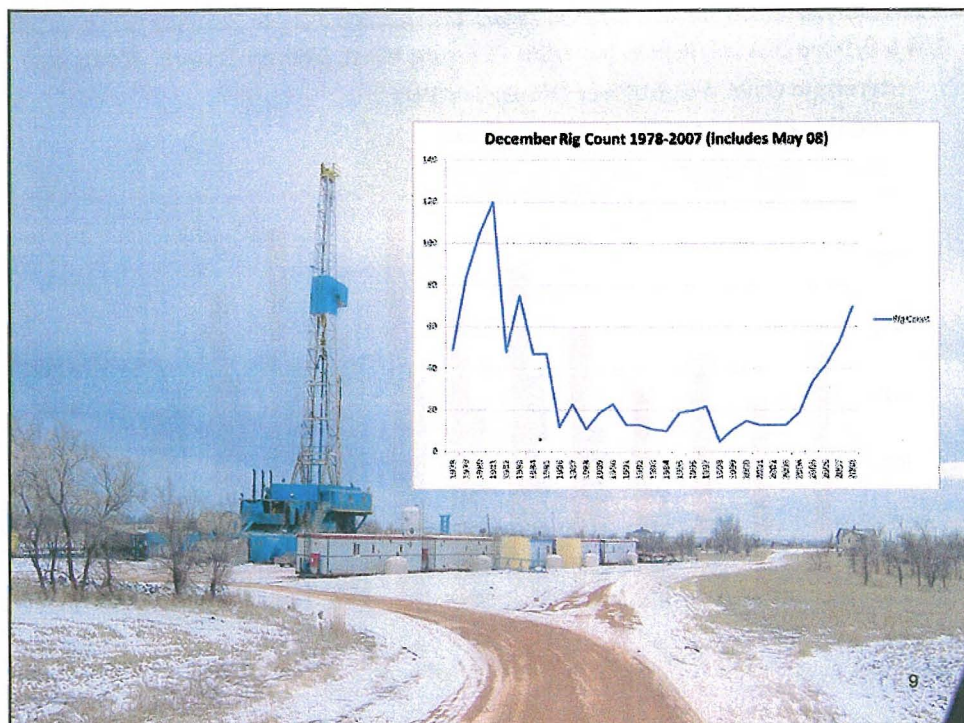




County	Ranking	Mar 08 (bbls)	Wells	Avg Prod/Well
March 2008				
Golden Valley	1	1,484,699	544	2,729
Mountrail	2	661,047	133	4,970
McKenzie	3	576,410	795	725
Williams	4	419,510	430	976
Billings	5	385,086	471	818
Dunn	6	328,360	196	1,675
Bottineau	7	142,709	499	286
Stark	8	126,009	72	1,750
Burke	9	92,552	338	274
Divide	10	72,431	115	630
Renville	11	65,728	267	246
Golden Valley	12	57,025	67	851
Slope	13	35,792	13	2,753
Ward	14	4,414	19	232
McLean	15	3,184	12	265
McHenry	16	2,482	17	146
Hettinger	17	0	0	0
Totals		4,457,438	3,988	1,118

Year	# of Wells
1951	1
1976	1635
2001	3372
2007	3870
2008	?





10

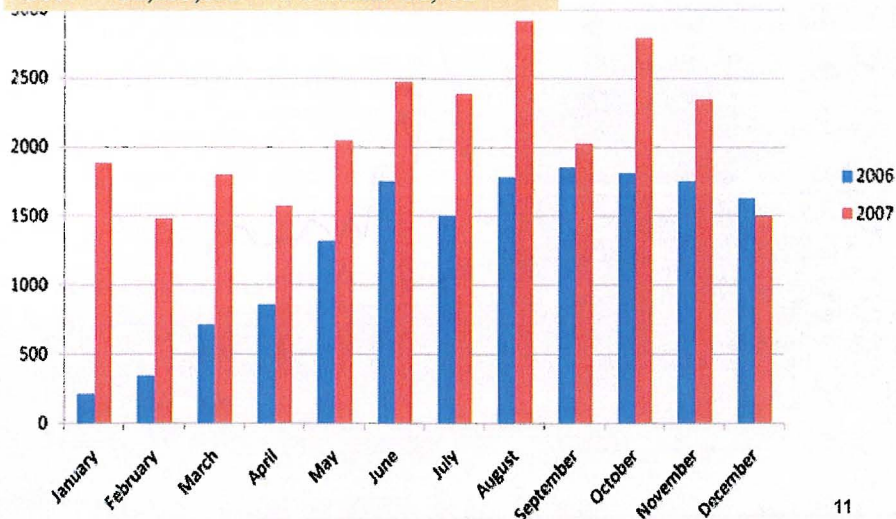
Source: ND Highway Patrol

O/W & O/D and O/D Only Permits (No WOR) (Williston, Minot, Dickinson Districts) 2006 & 2007

Statewide Over Weight/Over Dimension Fees

2006 \$2,043,753 # Permits 33,348

2007 \$2,155,835 # Permits 38,792



11

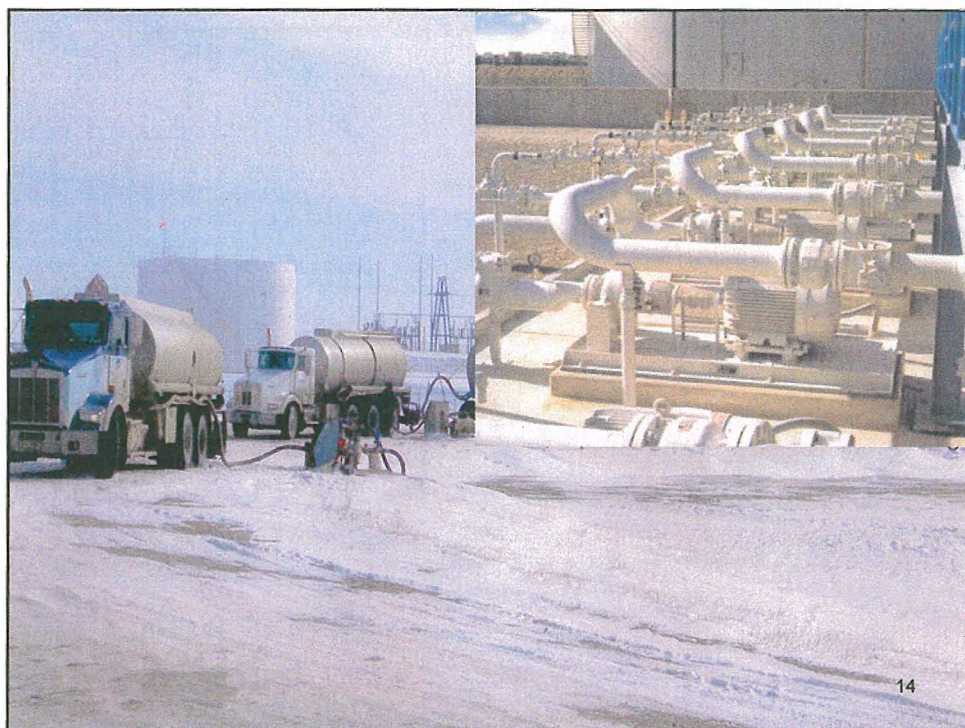
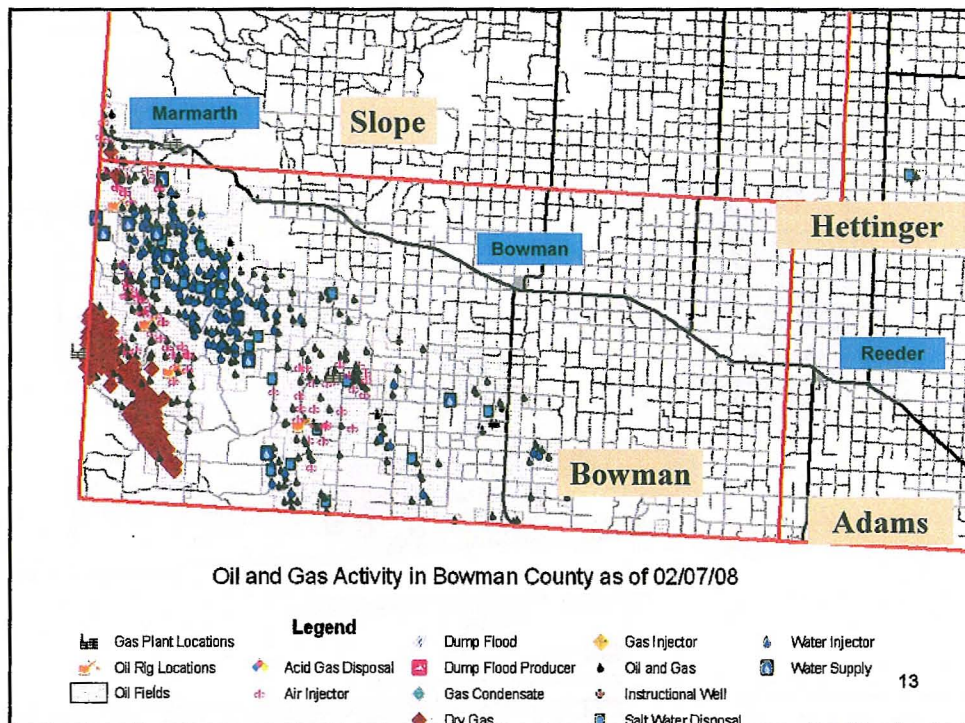
Source: ND Highway Patrol

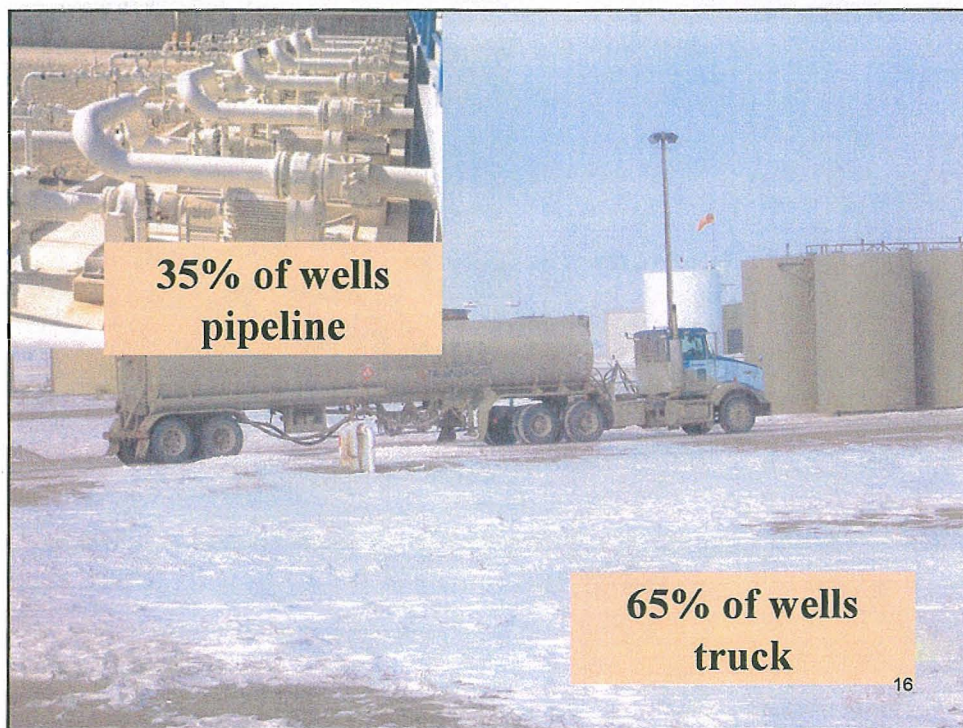
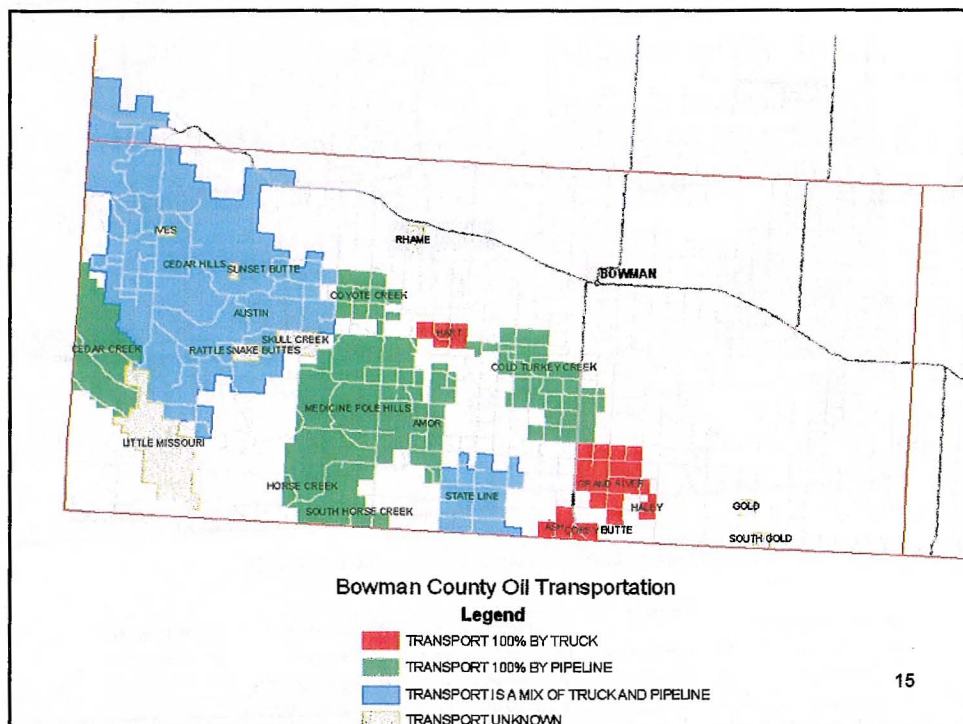
Oil & Gas Development Sites

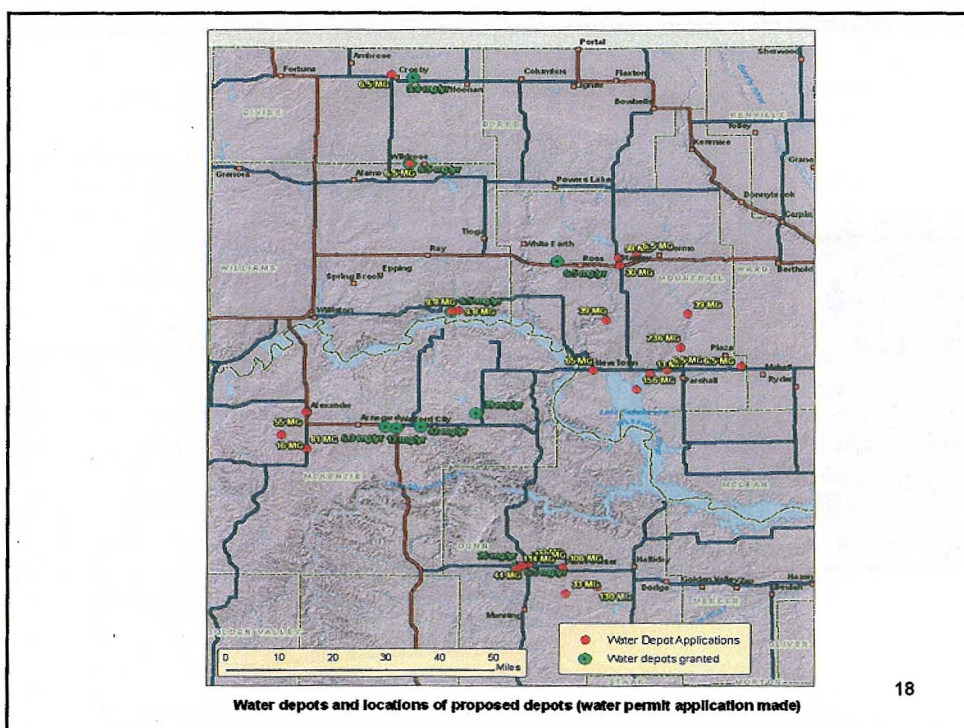
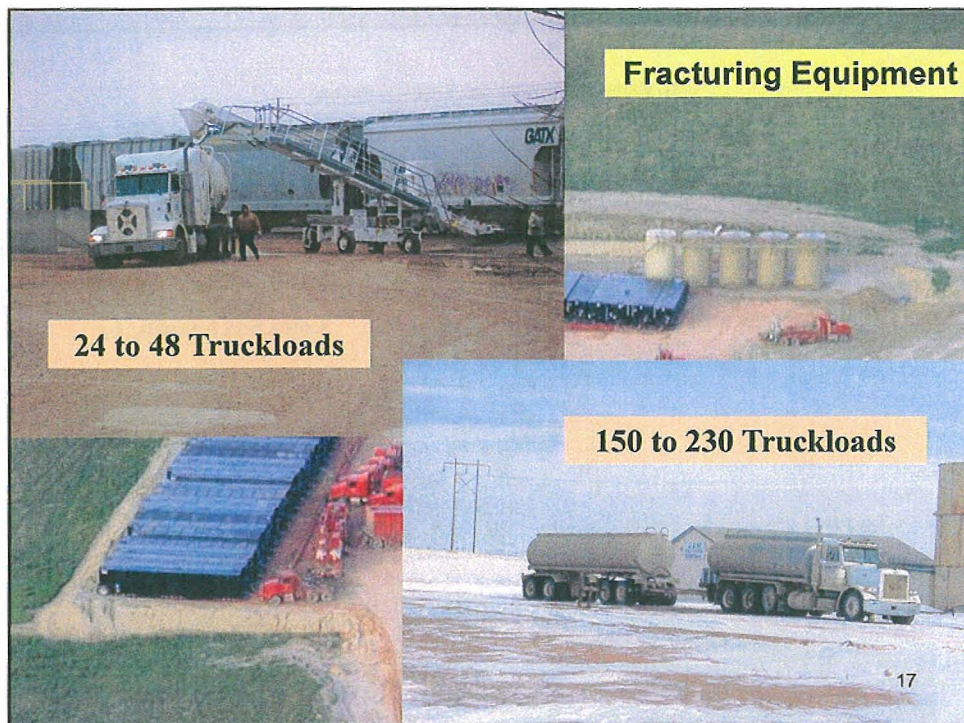
County	# All Sites	1/4 < Mile State Hwy	% More 1/4 Mile
McKenzie	1081	1009	93.34%
Bowman	907	905	99.78%
Bottineau	760	738	97.11%
Billings	671	657	97.91%
Williams	627	581	92.66%
Burke	447	397	88.81%
Renville	382	376	98.43%
Mountrail	381	356	93.44%
Dunn	322	306	95.03%
Divide	158	148	93.67%
Stark	121	103	85.12%
Golden Valley	85	83	97.65%
Slope	27	23	85.19%
Ward	34	34	100.00%
McLean	27	27	100.00%
McHenry	25	25	100.00%
Hettinger	2	2	100.00%
Totals	6057	5770	95.18%

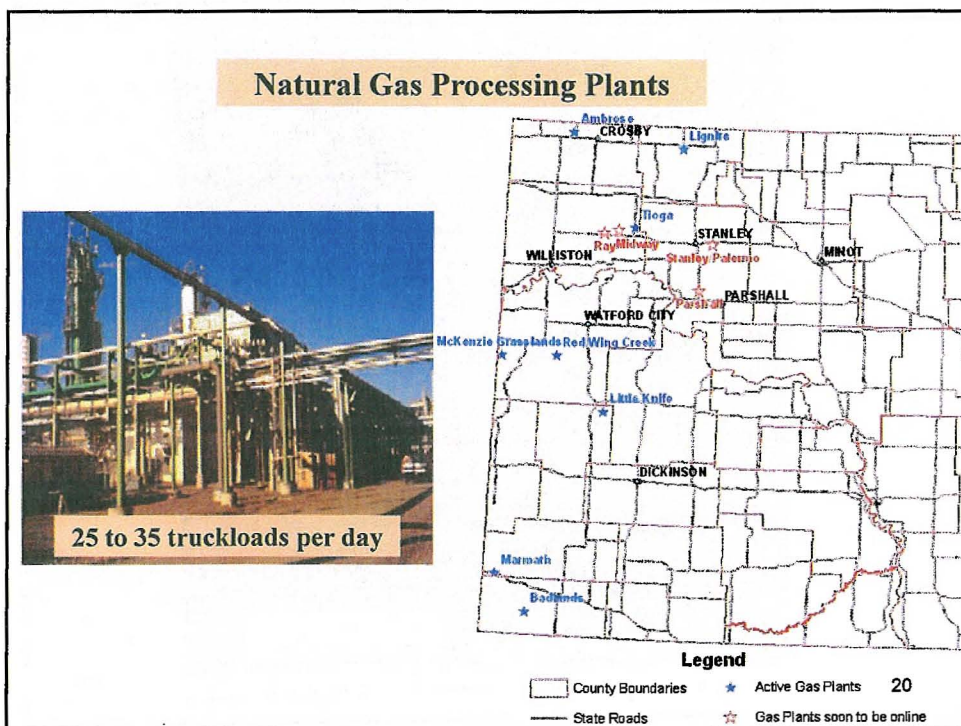
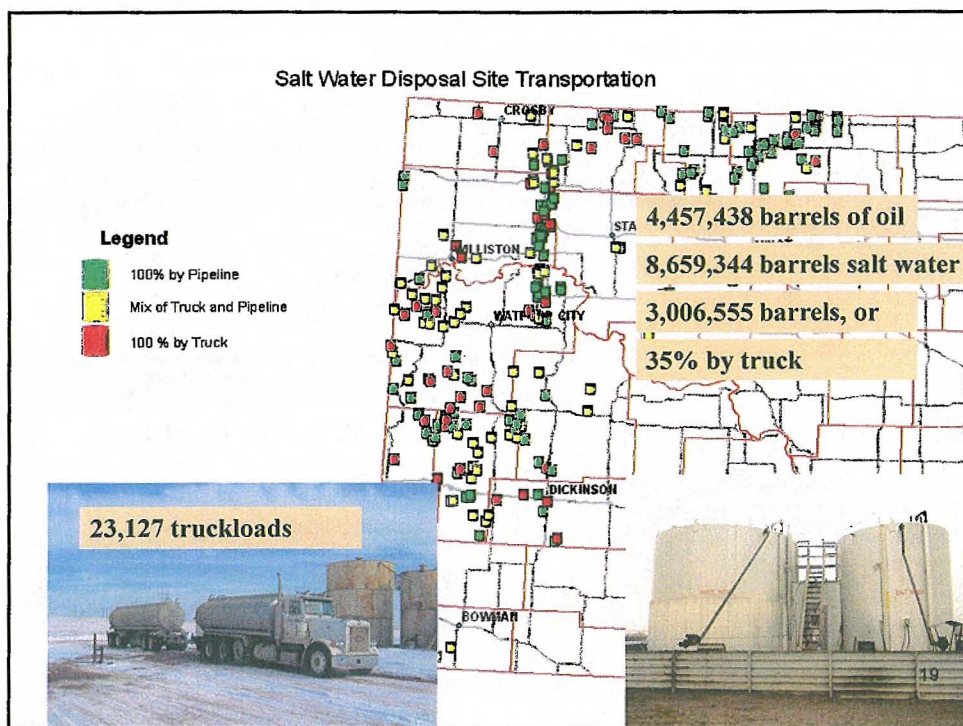
Systems Impacted
 State Highways
 County Roads
 Township Roads
 City Streets
 Tribal Roads

12









	State Highway Miles	Local Road Miles	Federal Lands Road Miles
Billings	48.4	730.4	251.8
Bottineau	173.3	2834.8	8.3
Bowman	79.2	1198.8	0
Burke	126.7	1526.5	21.6
Divide	110.1	1891.9	0
Dunn	146.5	1723.5	119.7
Golden Valley	69.9	1023.6	41.3
Hettinger	99.2	1641.7	0
McHenry	175.1	2839.5	26.7
McKenzie	278.3	2011.2	341.7
McLean	287.4	3088.0	64.8
Mountrail	173.2	2431.8	17.4
Renville	73.0	1493.8	2.6
Slope	71.8	1022.6	21.3
Stark	135.9	1954.9	0
Ward	230.1	3140.0	139.7
Williams	230.7	3176.1	0.2
Totals	2508.8	33729.1	1057.1

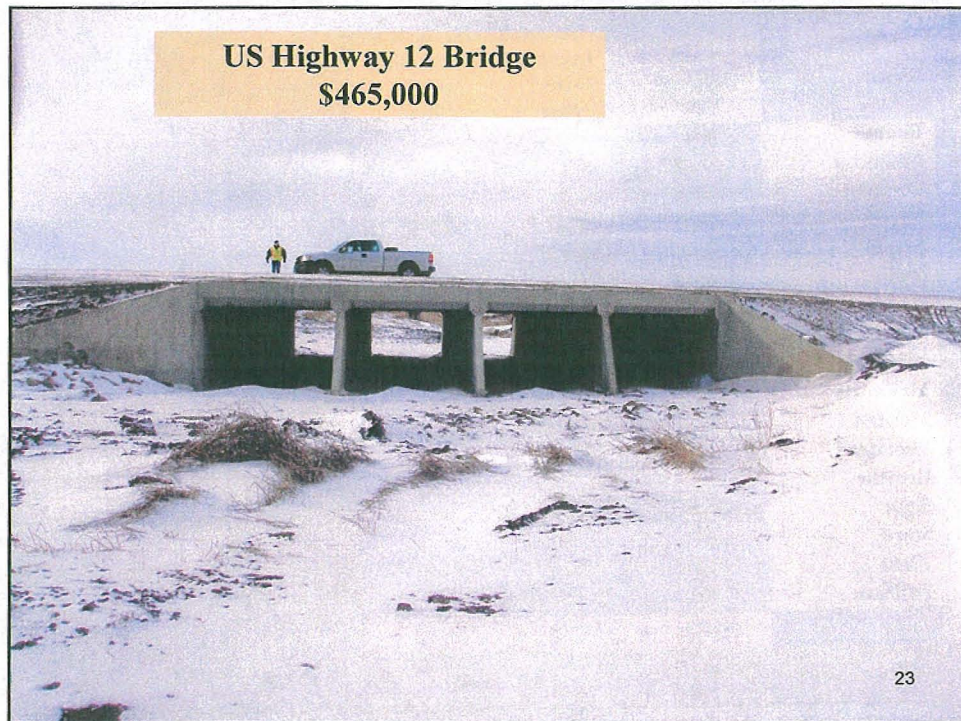
State and Local Road Impacts

21

State and County Structures and Status By County 3/4/2008								
County	State	FO	SD	County	FO	SD	Total	
Billings	25	2	1	31	2	0	56	
Bottineau	27	0	0	123	11	45	150	
Bowman	25	0	0	49	4	0	74	
Burke	24	0	0	16	0	6	40	
Divide	7	0	0	10	0	3	17	
Dunn	40	0	2	58	1	15	98	
		2	0	22	2	5	42	
		0	0	60	5	22	87	
		0	1	96	14	26	117	
		1	5	82	4	6	150	
		0	0	32	3	2	63	
		0	1	22	1	3	38	
		0	0	17	0	1	30	
Slope	28	0	1	30	0	4	58	
Stark	108	1	5	104	9	32	212	
Ward	97	3	3	74	5	6	171	
Williams	56	2	1	66	9	29	122	
Totals	633	11	20	892	70	205	1525	

Structure Replacement Costs County Roads
\$150,000 to \$450,000
Average of \$400,000

22



Highway/Rail At-Grade Crossings

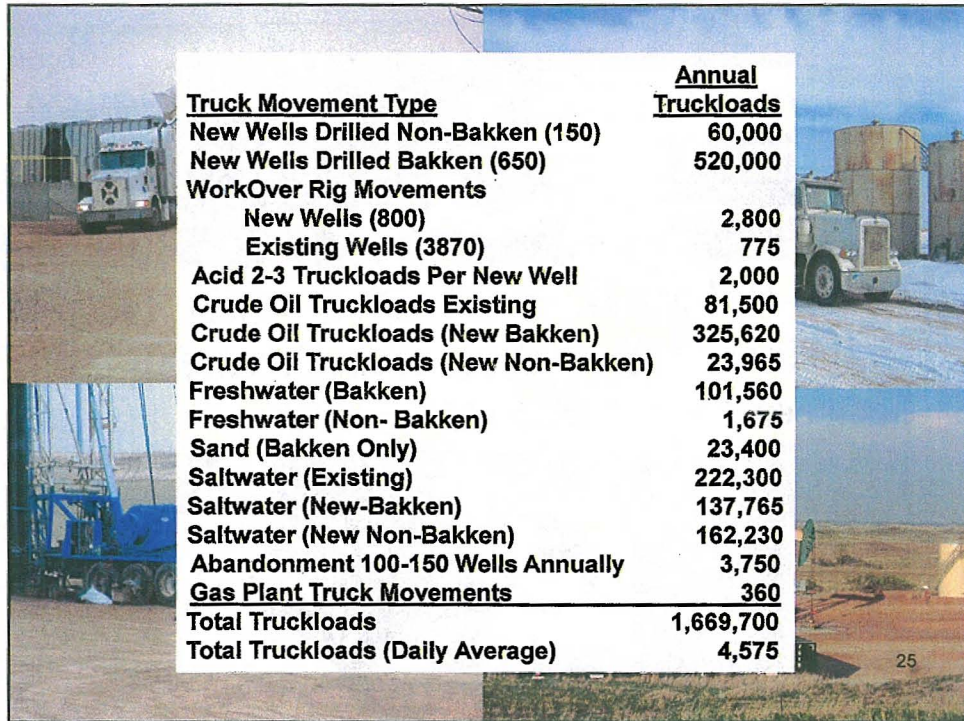
County	Signals	Flashers	Xbucks	Stop	No	Totals
Billings	3	-	1	-	-	4
Bottineau	3	-	96	1	-	100
Bowman	3	1	13	2	-	19
Burke	7	1	107	-	1	116
Divide	-	1	54	-	-	55
Dunn	-	-	-	-	-	0
Golden Valley	6	1	5	1	-	13
Hettinger	-	-	-	-	-	0
McHenry	17	1	99	7	-	124
	2	-	8	-	-	10
	5	1	93	6	5	110
	9	1	67	1	1	79
	1	0	36	-	5	42
	-	-	2	1	-	3
	15	1	29	1	-	46
	49	2	131	3	2	187
	11	1	28	-	8	48
	131	11	769	23	22	956

Signals
\$165,000

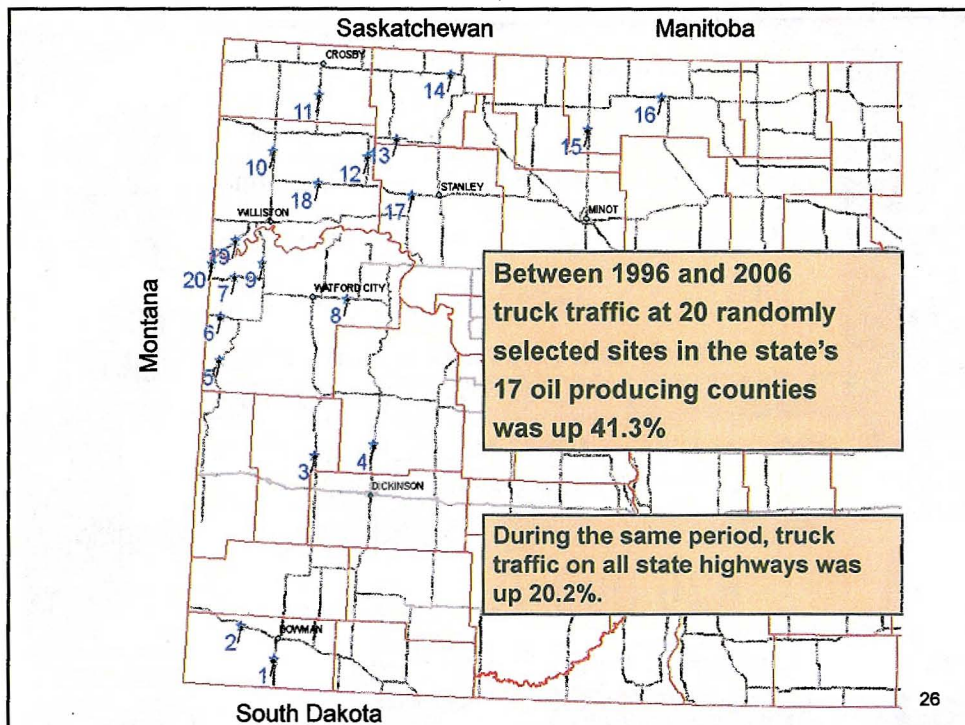
Annual Maintenance
\$ 5,000

Surface Replacement
\$38,000 to \$48,000

24



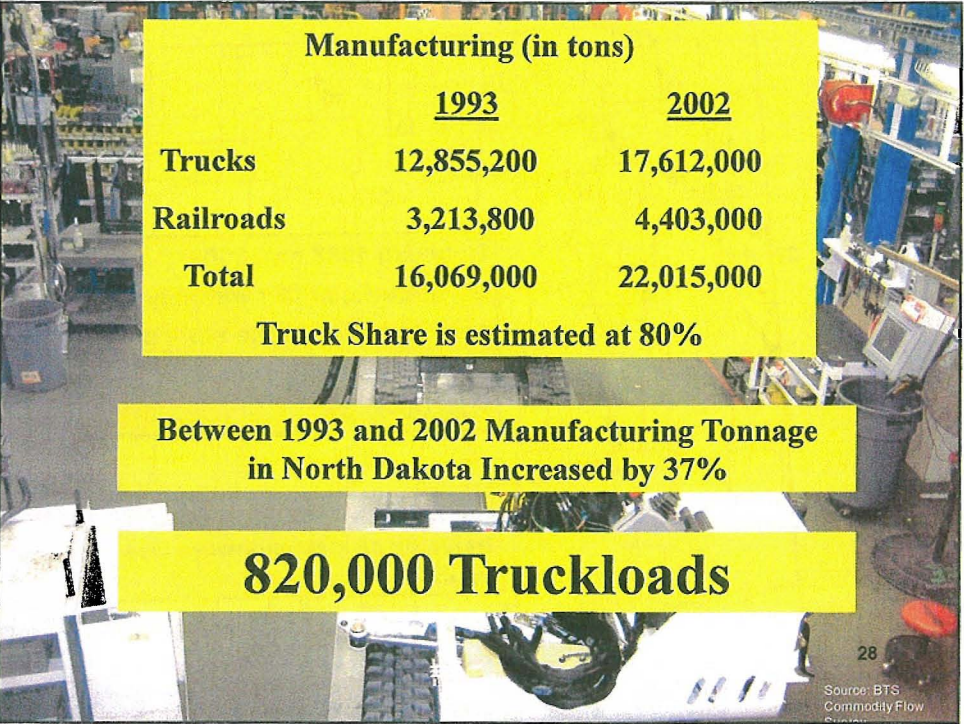
<u>Truck Movement Type</u>	<u>Annual Truckloads</u>
New Wells Drilled Non-Bakken (150)	60,000
New Wells Drilled Bakken (650)	520,000
WorkOver Rig Movements	
New Wells (800)	2,800
Existing Wells (3870)	775
Acid 2-3 Truckloads Per New Well	2,000
Crude Oil Truckloads Existing	81,500
Crude Oil Truckloads (New Bakken)	325,620
Crude Oil Truckloads (New Non-Bakken)	23,965
Freshwater (Bakken)	101,560
Freshwater (Non- Bakken)	1,675
Sand (Bakken Only)	23,400
Saltwater (Existing)	222,300
Saltwater (New-Bakken)	137,765
Saltwater (New Non-Bakken)	162,230
Abandonment 100-150 Wells Annually	3,750
Gas Plant Truck Movements	360
Total Truckloads	1,669,700
Total Truckloads (Daily Average)	4,575





Manufacturing

North Dakota is one of only 3 states to experience a growth in manufacturing between 2000 and 2006.



Manufacturing (in tons)

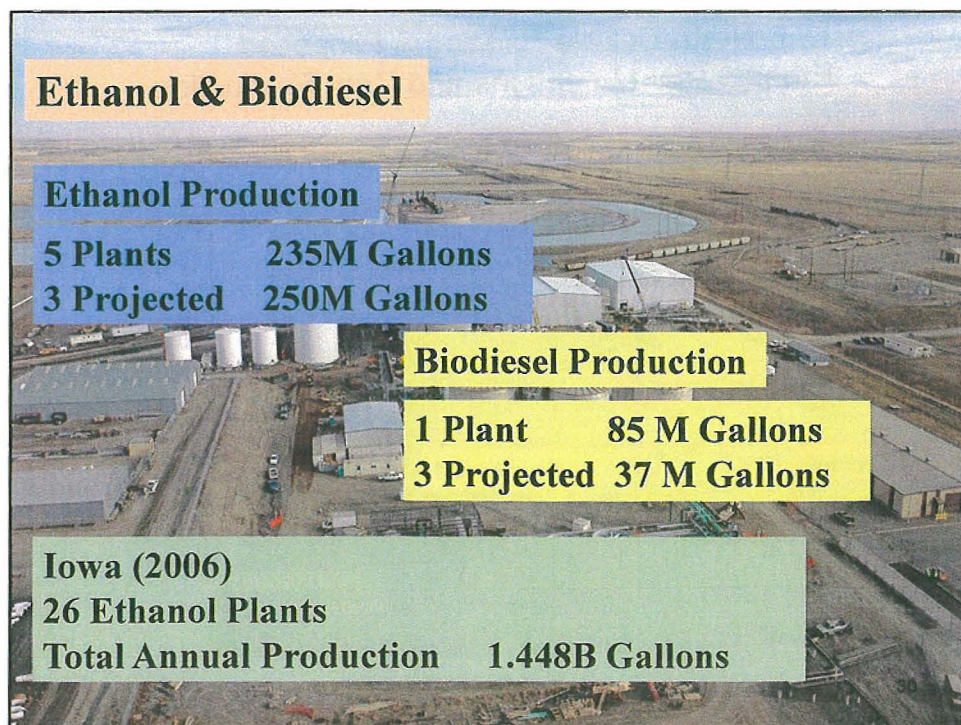
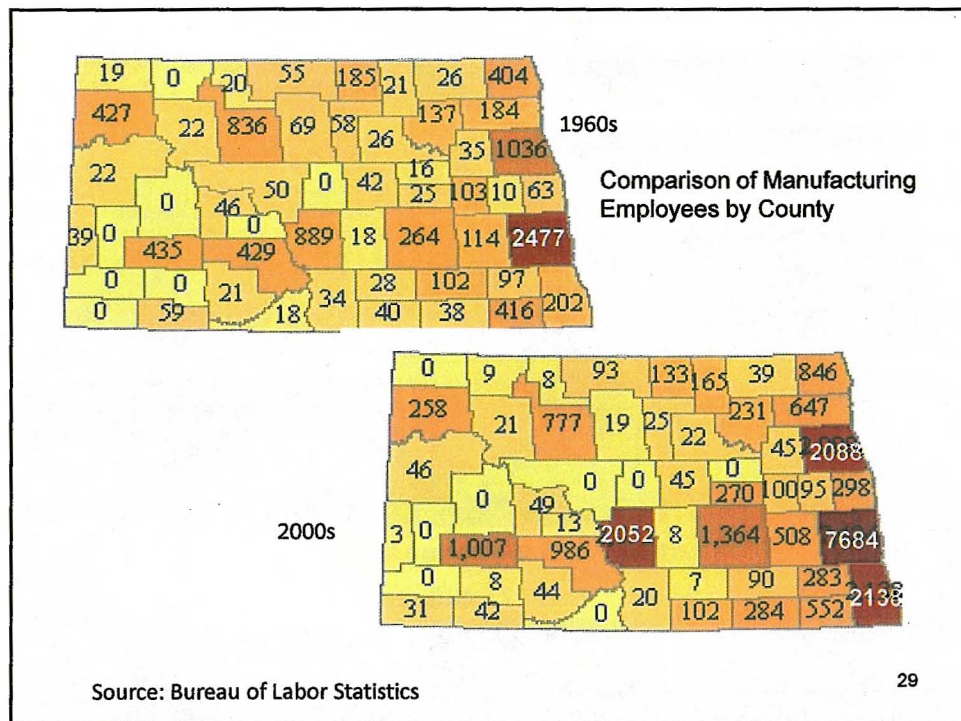
	<u>1993</u>	<u>2002</u>
Trucks	12,855,200	17,612,000
Railroads	3,213,800	4,403,000
Total	16,069,000	22,015,000

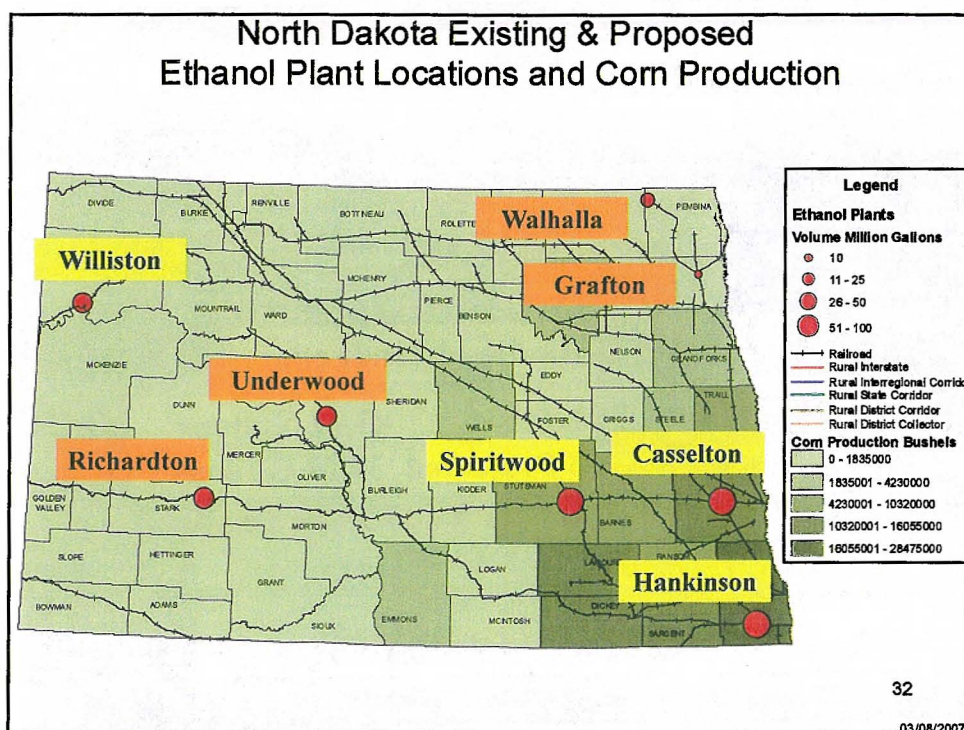
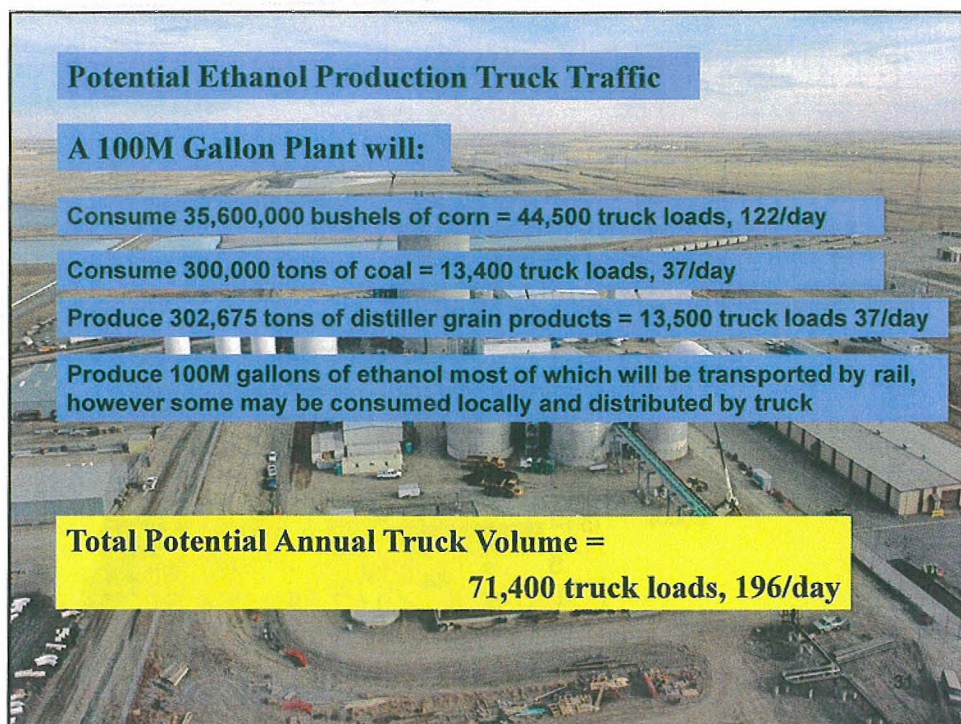
Truck Share is estimated at 80%

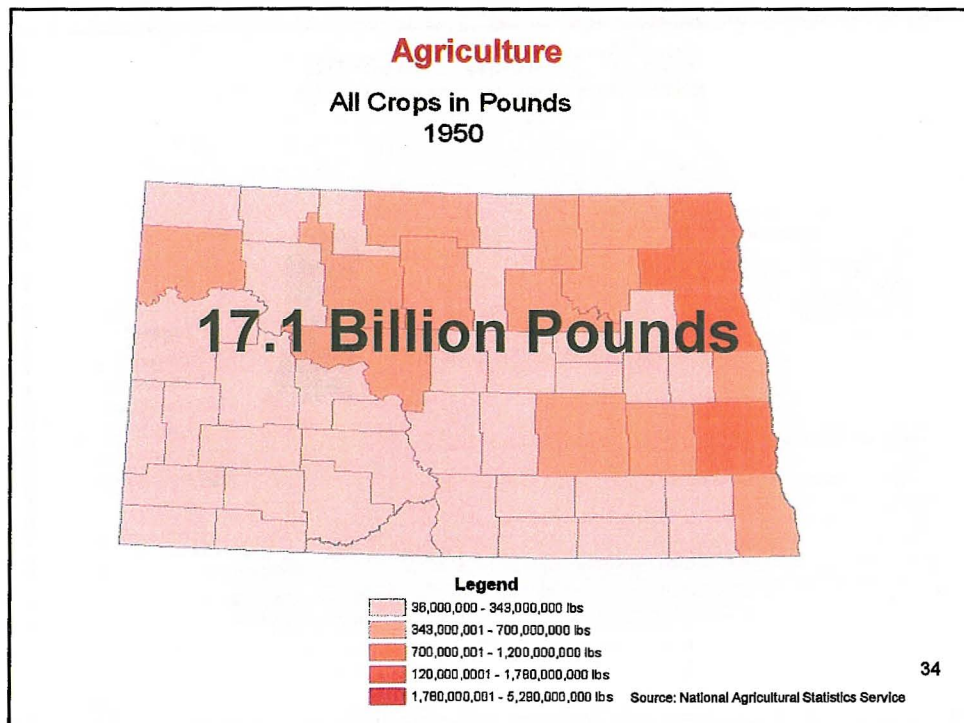
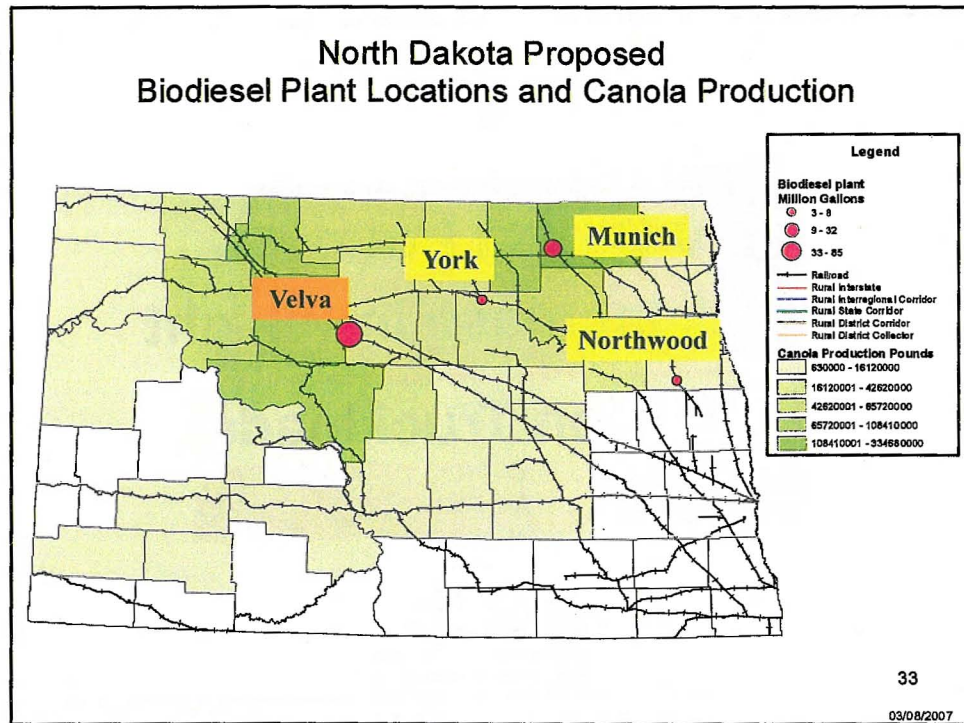
Between 1993 and 2002 Manufacturing Tonnage in North Dakota Increased by 37%

820,000 Truckloads

Source: BTS
Commodity Flow

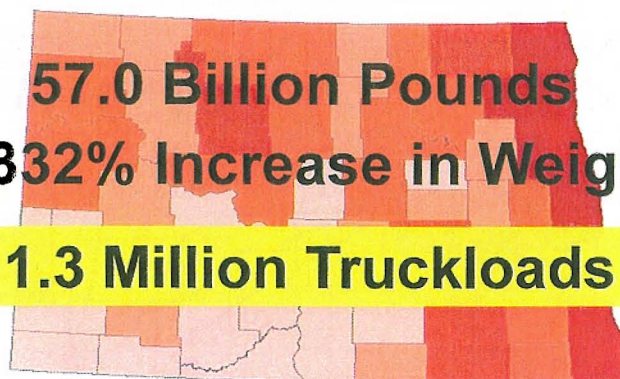




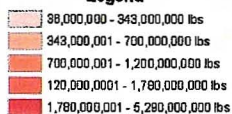


All Crops in Pounds 2006

57.0 Billion Pounds
332% Increase in Weight
1.3 Million Truckloads



Legend

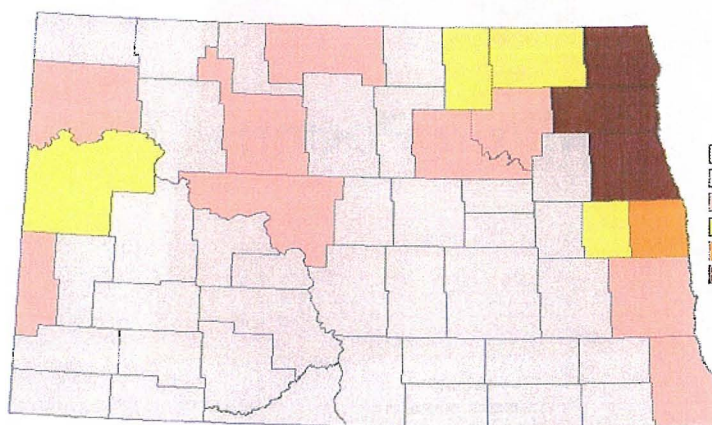


35

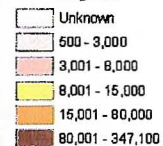
Source: National Agricultural Statistics Service

Shifting Crop Patterns

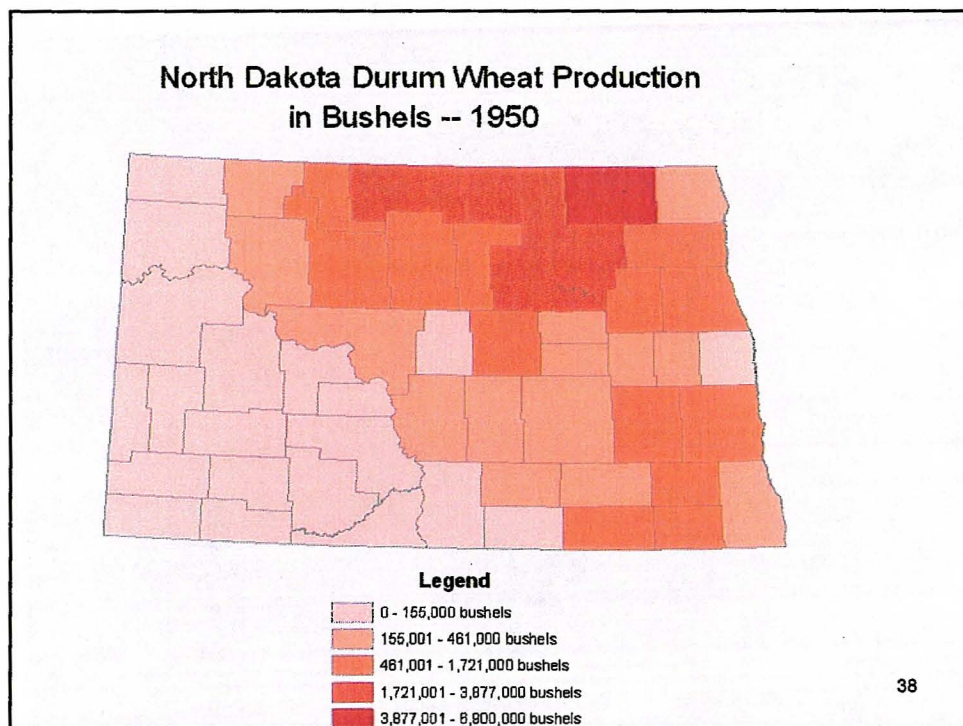
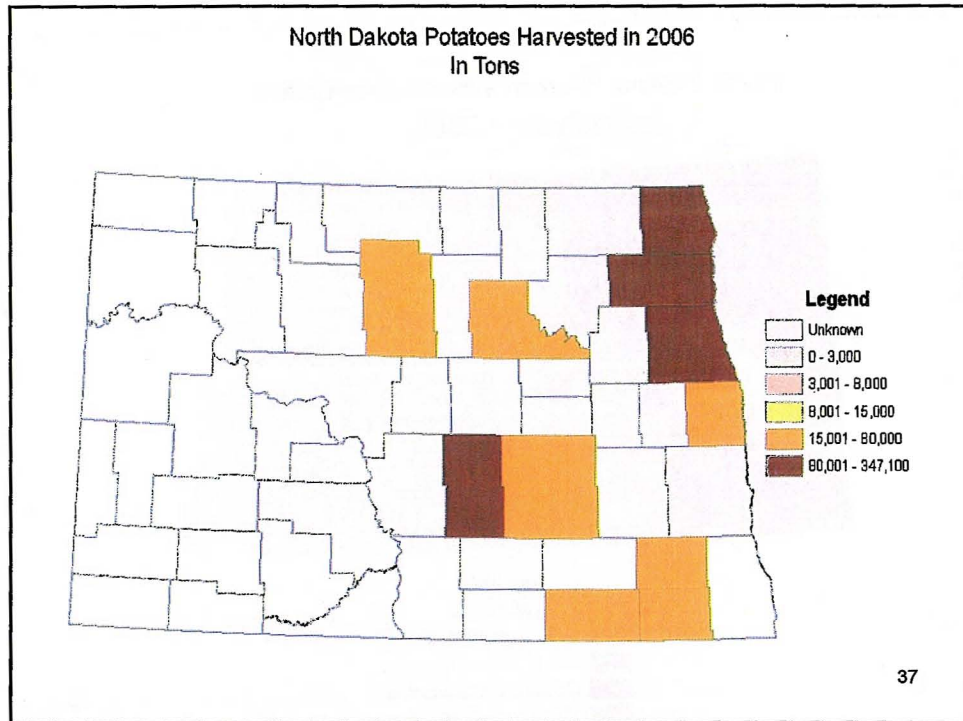
North Dakota Potatoes Harvested in 1950
In Tons

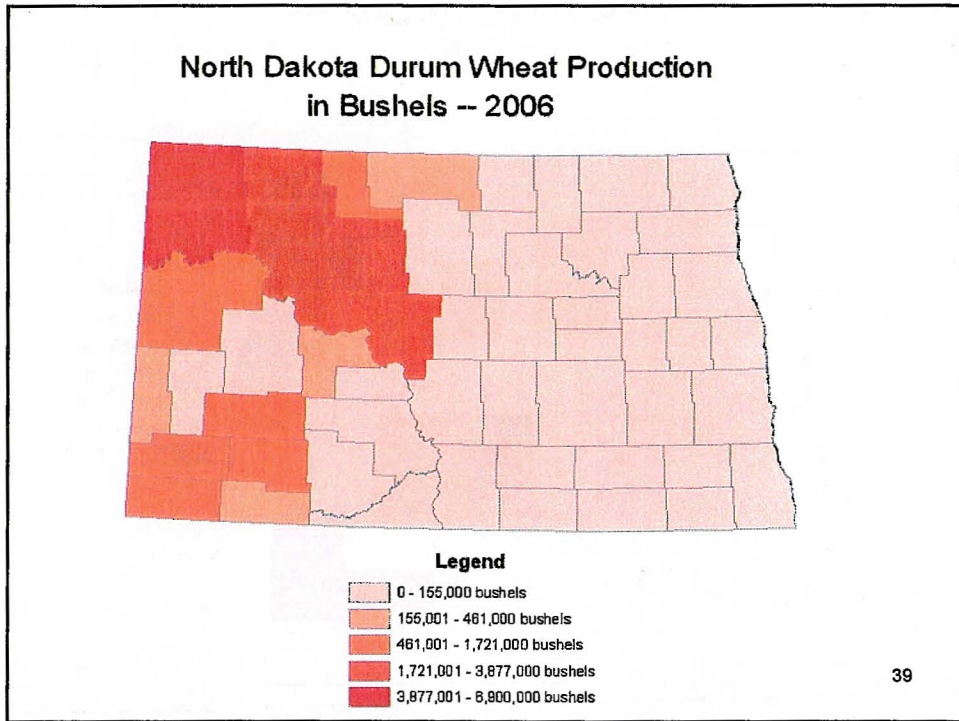


Legend



36



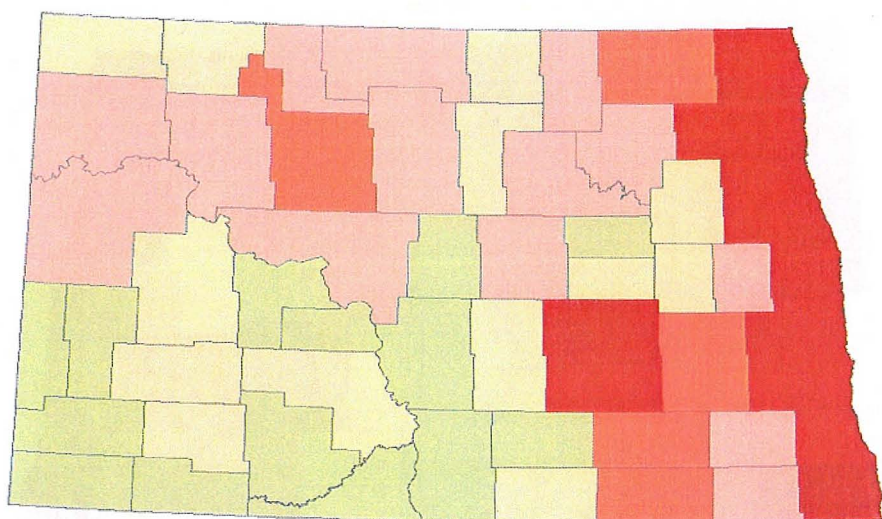


**Average Yield Statewide in
Pounds for 2006
Per Harvested Acre of Land**

Wheat	1,860
Corn	6,216
Potatoes	26,000
Sugar Beets	52,000

40

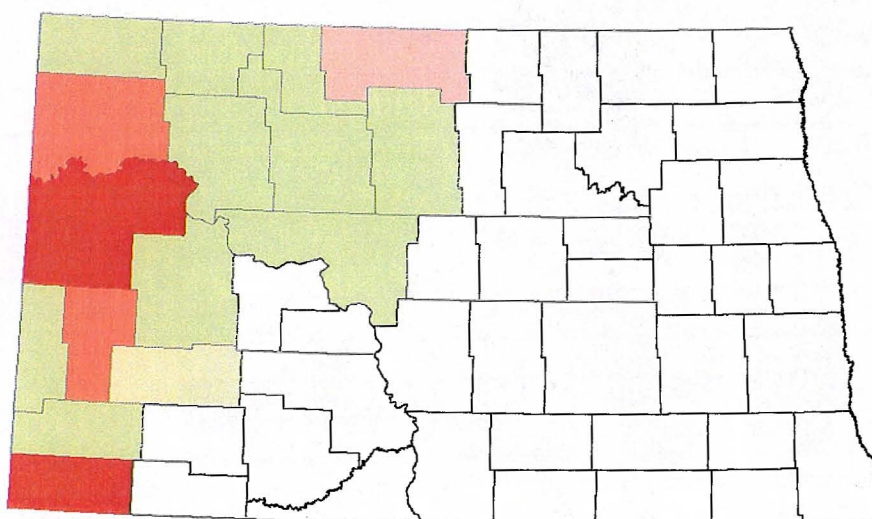
Crops and Livestock Production in Pounds -- 2006



Legend

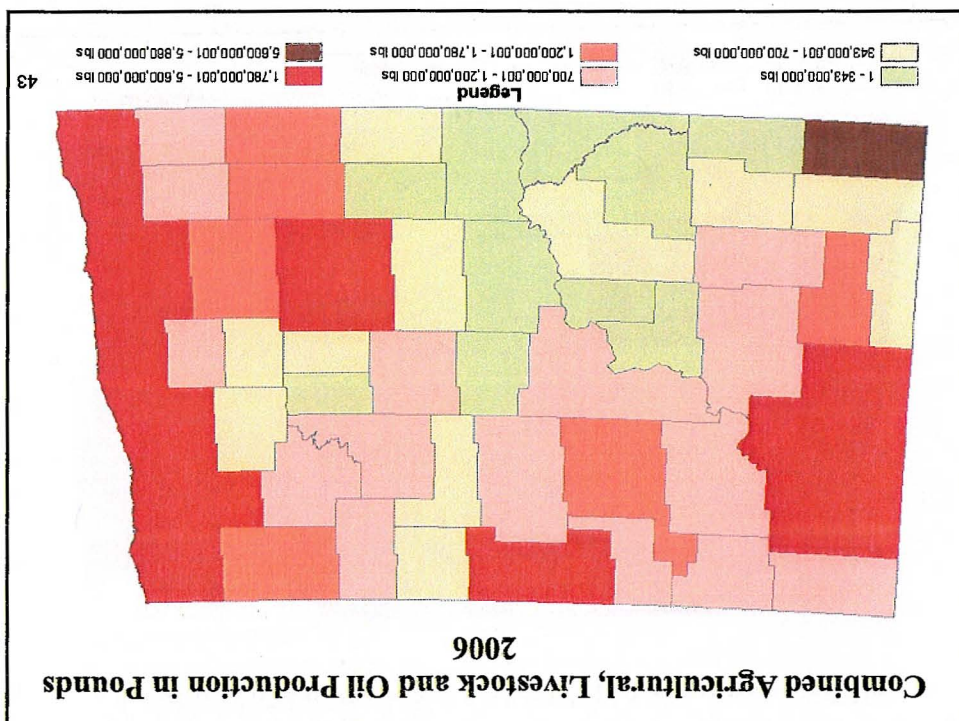
1 - 343,000,000 lbs	700,000,001 - 1,200,000,000 lbs	1,780,000,001 - 5,600,000,000 lbs 41
343,000,001 - 700,000,000 lbs	1,200,000,001 - 1,780,000,000 lbs	5,600,000,001 - 5,860,000,000 lbs

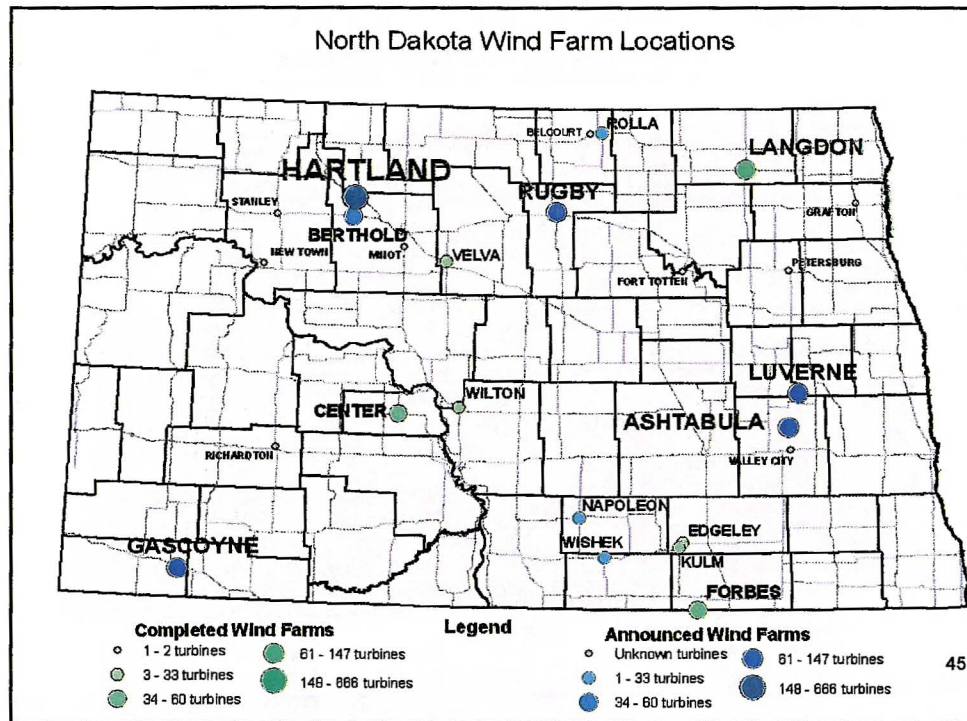
Oil Production in Pounds -- 2006



Legend

1 - 343,000,000 lbs	700,000,001 - 1,200,000,000 lbs	1,780,000,001 - 5,600,000,000 lbs 42
343,000,001 - 700,000,000 lbs	1,200,000,001 - 1,780,000,000 lbs	5,600,000,001 - 5,860,000,000 lbs

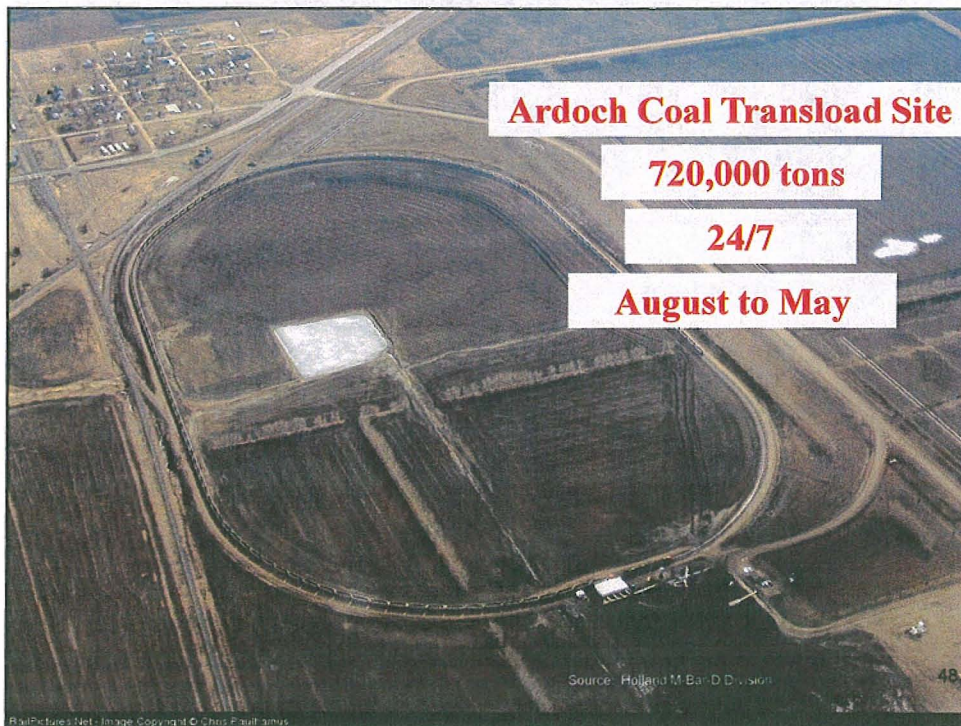
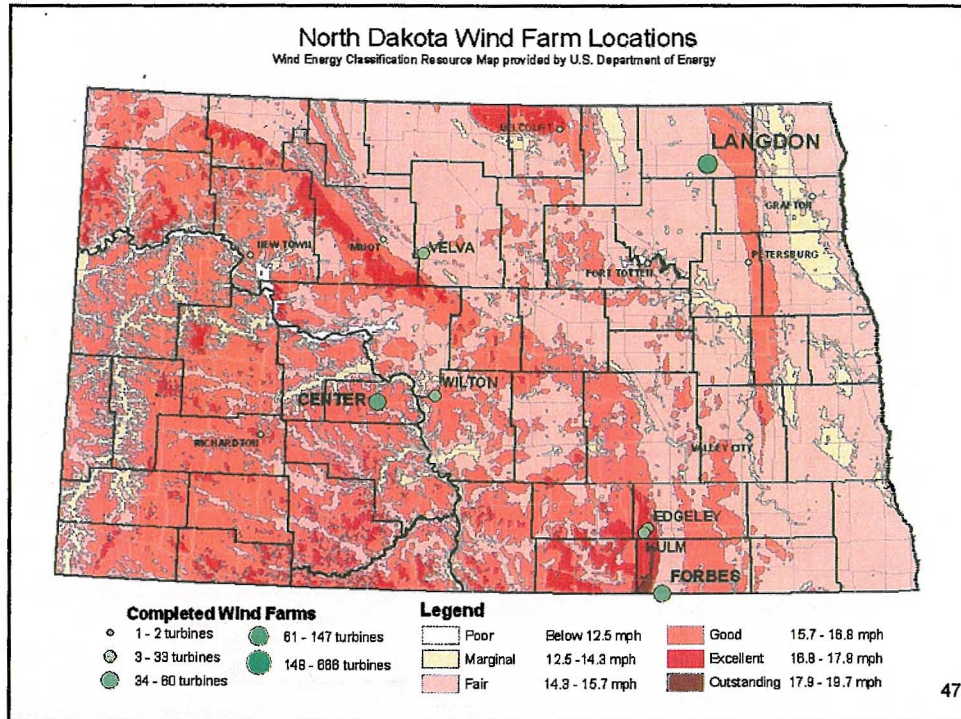


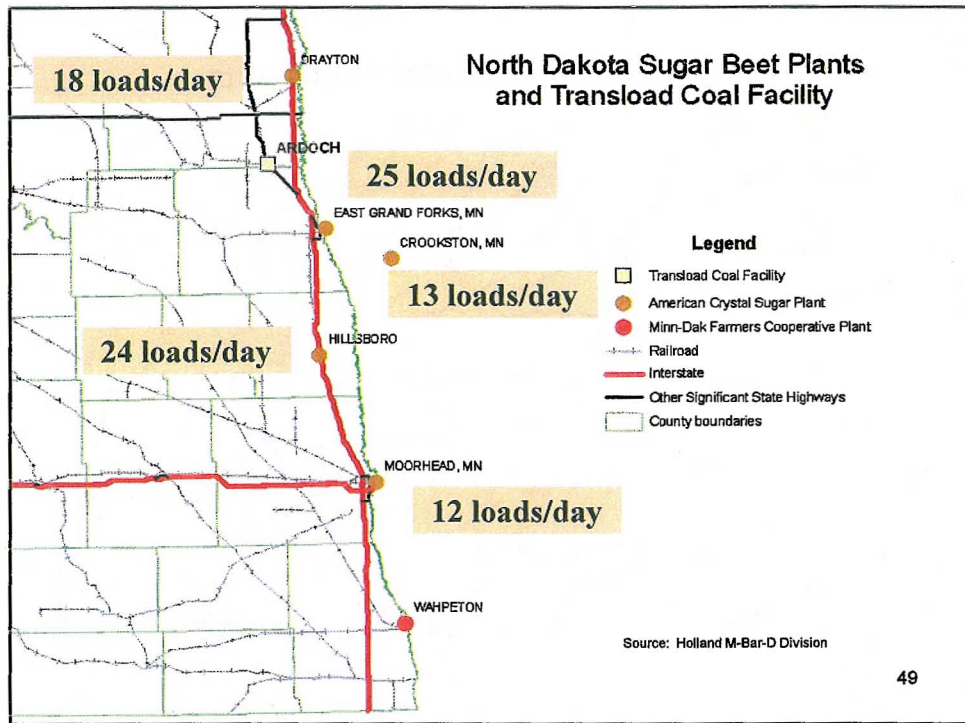


Equipment	Pounds	L x W x H (ft)	Associated Truck Loads
Nacelle	150,000-218,000	36.5-120.6 x 11.5-12.6 x 12.3-14.6	One to Two 19-Axle Trucks per nacelle with permits, restrictions and Escorts
Hub	57,099	14 x 14 x 9.9	One legal lowboy load – just oversized
Spinner	1,103	9.4 x 9.4 x 12.6	One legal lowboy load – just oversized
Blades (3 each)	26,456-80,000	131-170 x 7.2-8.6 x 12.2-14.6	Two to Three specialized blade trailer loads with permits and escorts
Tower Base design "E"	84,000-232,000	36-177 x 12.6-15.1 x 13-15.11	One Schnable trailer load with permits and escorts
Tower Mid design "E"	59,250-176,000	72.3-156.5 x 11.6-14.2 x 10.10-15.6	One Schnable trailer load with permits and escorts
Tower Top design "E"	44,500-134,000	78.6-124 x 7.8-11.6 x 7.8-14.2	One extended Schnable trailer load permits and escorts
Power Unit	17,639	12.5 x 10 x 11.4	One combined for a legal lowboy load – no restrictions
Container	39,683	40	One legal load
Ancillary Equip	228,496		Two combined permit and legal loads
Generator Power Unit	8,512	8.3 x 6.6 x 7.4	One combined for a legal lowboy load – no restrictions
TOTALS	766,650-1,349,532		8-10 Permitted and escorted loads 5 legal loads 13-15 total truck loads per wind tower

46

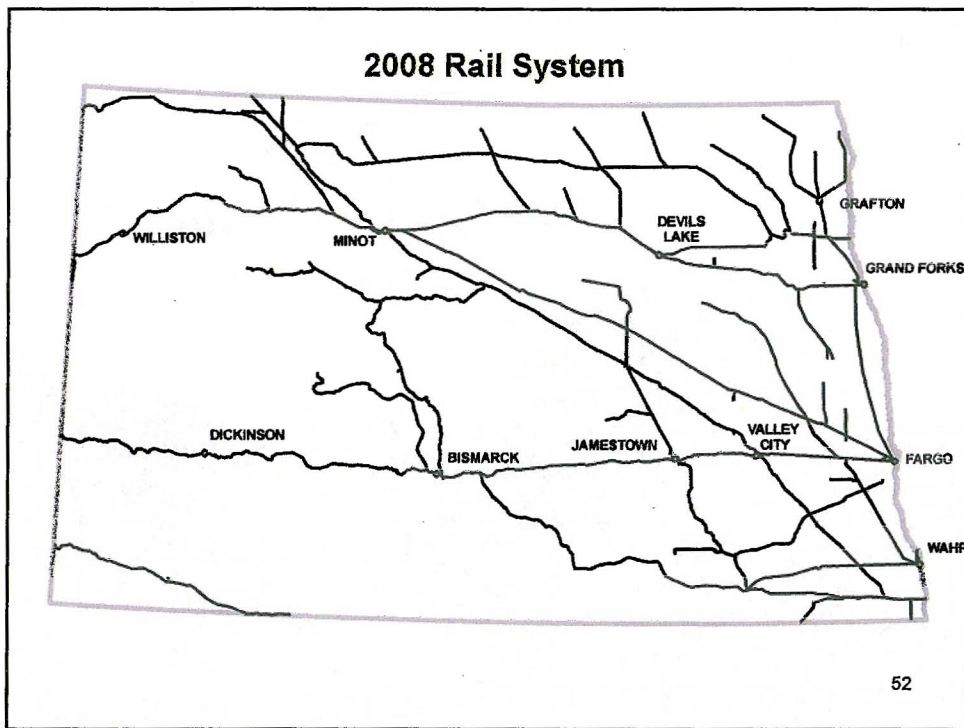
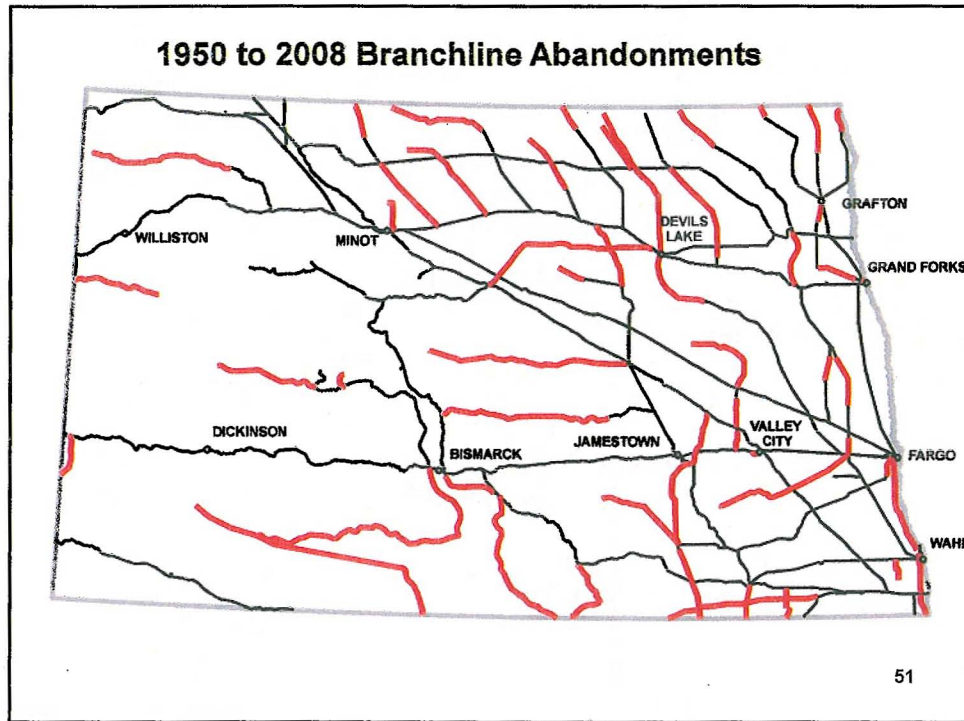
Source: ND Highway Patrol

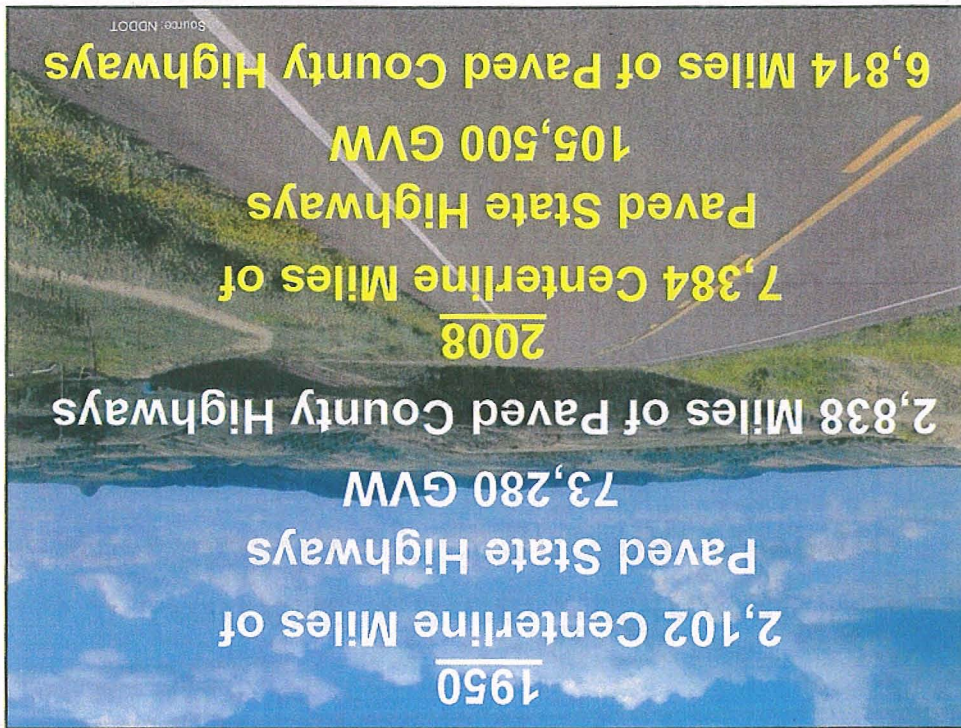


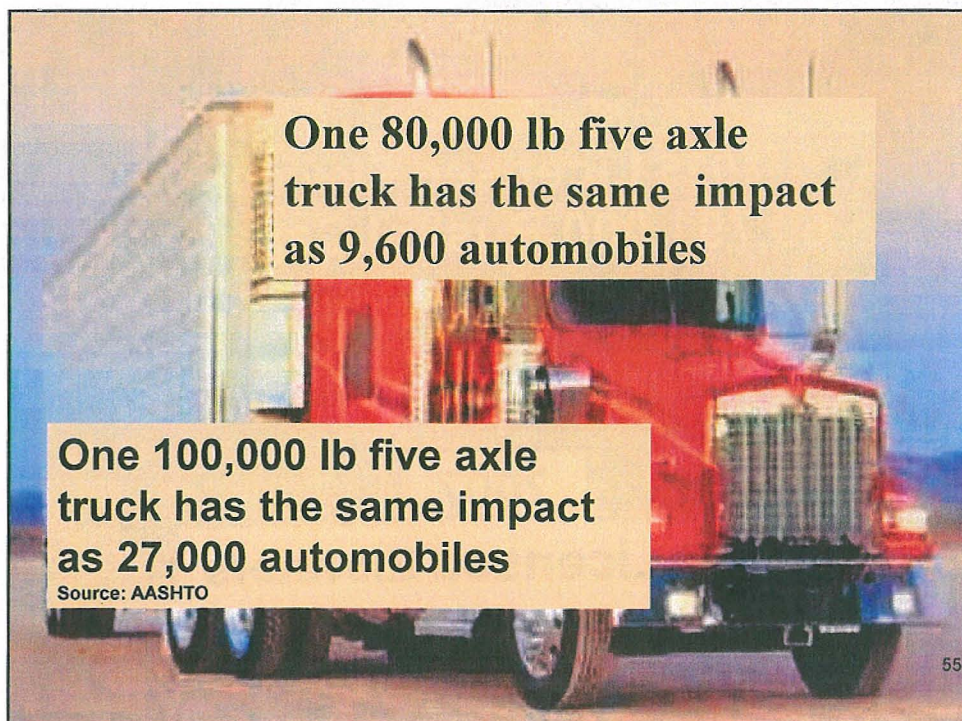


49





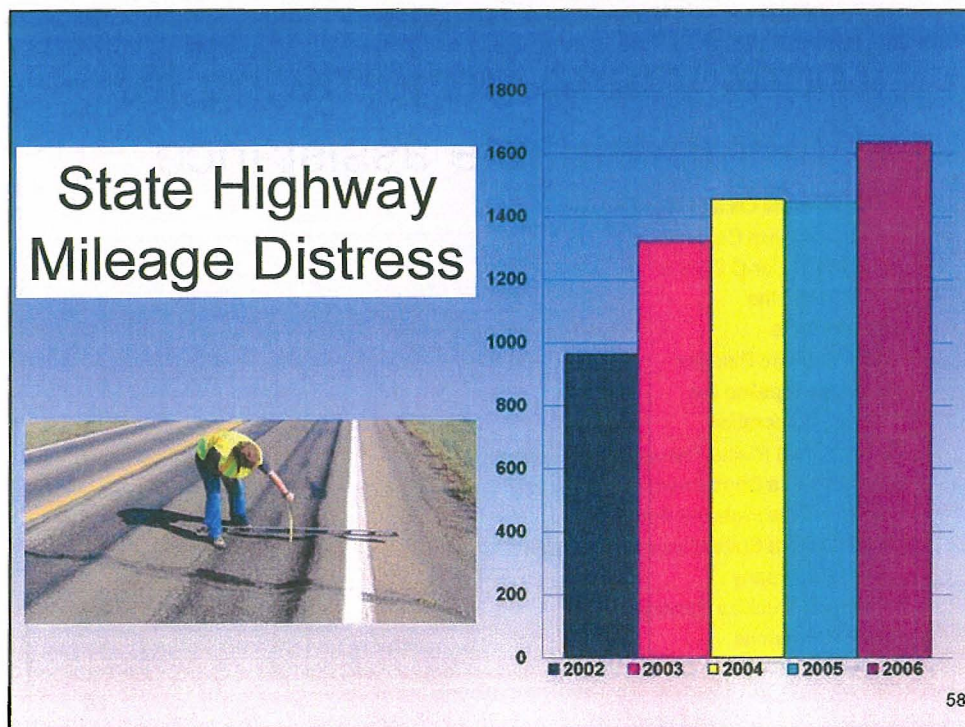
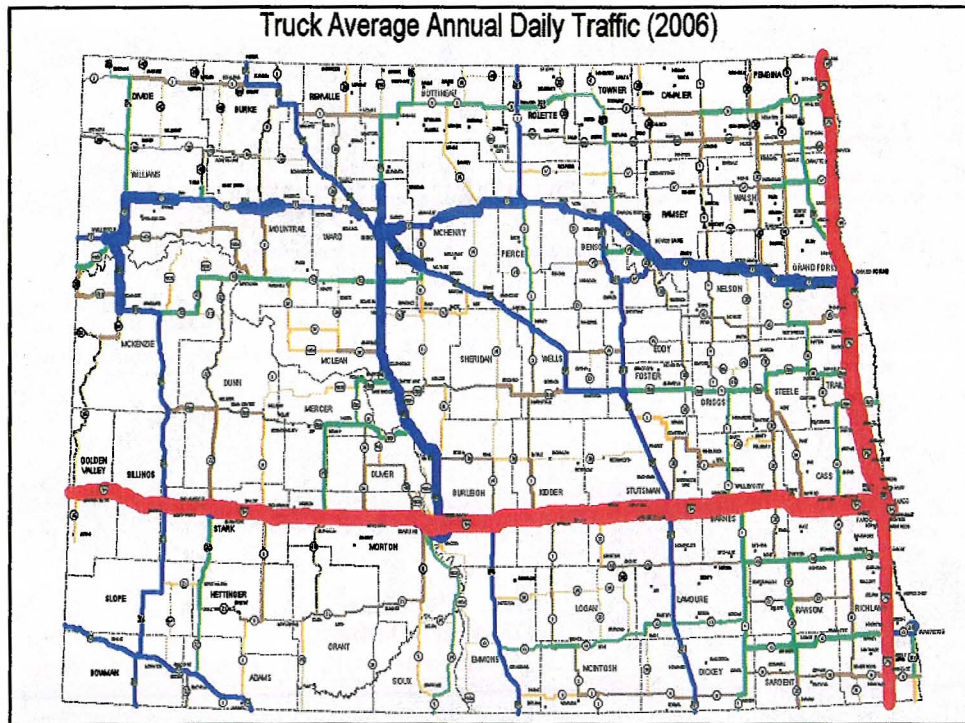




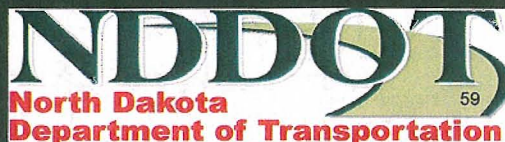
Current Annual Estimated Truckloads by Economic Activity

Oil & Gas Development	1,669,700
Agriculture	1,300,000
<u>Manufacturing</u>	<u>820,000</u>
Total	3,789,700

56



NDDOT will continue to work cooperatively and collaboratively with local and tribal governmental entities, the legislature, congressional delegation, and the private sector to the best of our ability to provide an integrated transportation system that safely moves people and goods.



Thank you to the following for their invaluable assistance

- North Dakota Oil and Gas Division
- Amerada Hess Corporation
- Holland M-Bar-D Division
- S&S Sales, Inc.
- Power Fuels
- Belle Fourche Pipeline
- Enbridge Pipeline Inc.
- Tesoro Corporation
- Upper Great Plains Transportation Institute
- North Dakota Department of Commerce
- North Dakota Highway Patrol
- North Dakota State Water Commission
- Bobcat Company
- Anderson Trucking Service, Inc.
- Chris Paulhamus

Roadway & Bridge Investment Needs in North Dakota

Upper Great Plains
Transportation Institute
North Dakota State University - Spring 2008

Full Research Results at www.ugpti.org

62

Study Overview

- Estimate funding needs to maintain existing roadways and bridges
- Update studies done earlier in this decade
- Does not include normal maintenance activities (mowing, snow removal, signing, etc.)
- Maintain existing systems – no expansion or major upgrades

63

Road Authorities

- NDDOT
- Counties
- Urban Centers (13 largest cities)
- Smaller Cities
- Townships

64

Annual State Roadway and Bridge Investment Needs (\$000)

Highway Performance Classification	\$ 2008/Year		
Interstate	\$43,490		
Interregional	\$49,636		
State Corridor	\$41,212		
District Corridor	\$55,613		
District Collector	\$26,630		
Total	\$216,583		

*Figures reflect improvement needs in 2008 dollars if inflation trend continues into the future

65

Paved County Roads Construction and Maintenance

- Based on survey; estimated expenditures for next 10 years
- 42 counties responded; survey findings expanded to state using miles of road
- Estimated 10-year construction cost = \$306.1 million
- Estimated 10-year maintenance cost = \$398 million
- Extrapolation = \$1.408 billion for 20 years

66

County Roadway & Bridge Needs (\$000)

	\$ 2008/Year		
Paved Roads	\$30,610		
Gravel Roads	\$69,680		
Maintenance	\$39,800		
Bridges	\$19,815		
Total	\$159,905		

*Figures reflect improvement needs in 2008 dollars if inflation trend continues into the future

67

Highway Funding Needs of 13 Urban Centers

- Estimated based on long range plans and past survey responses from "Urban Street and County Road Funding Needs Assessment for 13 North Dakota Cities and 53 North Dakota Counties"
- Amount of detail varies from city to city
- Each plan includes lists of expected improvements for next 15 to 20 years
- Some plans include expected maintenance costs
- When maintenance costs could not be determined, the survey results from the 2000 study were used and indexed
- Estimated funding need in 2008 dollars for all 13 cities is \$70.7 million

68

Estimated Funding Needs Townships and Small Cities (\$000)

- Update of 2002 study

	\$ 2008/Year		
Townships	\$36,250		
Small Cities	\$29,725		

*Figures reflect improvement needs in 2008 dollars if inflation trend continues into the future

**Estimated Roadway and Bridge Funding Needs
(Millions / Year)**

Jurisdiction/Agency	Highways	Bridges
State	\$216.6	\$26.3
County	\$140.0	\$19.8
Small Cities	\$29.7	*
Townships	\$36.3	*
Urban Centers	\$70.7	*
Total	\$493.4	\$46.1
Total Highways & Bridges		\$539.5
*Not estimated		

NDDOT Power Point Presentation to Taxation Committee – July 2, 2008

Slides 1 and 2

North Dakota's economy is growing and diversifying. The oil and gas industry is creating hundreds of new jobs and millions of tax dollars for state and local governments.

Between 2000 and 2006, North Dakota was one of only three states to experience a growth in manufacturing.

North Dakota is also sharing in the growth of the ethanol and biodiesel industries.

Our agricultural sector continues to grow in response to strong domestic and foreign demand.

And new industries are locating in our state. Although the growth in these industries is very positive for the state's economy, it also challenges the ability of governmental entities to provide and maintain transportation systems and other infrastructure.

Slide 3

Not only is our economy growing, but it is growing at a faster rate than it did in the past, nearly doubling since 1996.

Slide 4

Our economy has also become more diversified and balanced. This slide shows how the sectors of our economy that produce significant volumes of freight have grown between 1964 and 2006. Let's look at some of these sectors and their generation of traffic in greater detail.

Slide 5

With the advent of new exploration and drilling technologies, and oil prices over 120 dollars per barrel, North Dakota is experiencing an energy development boom.

Slide 6

In March 2008, North Dakota had 3,988 active oil wells which produced nearly four and a half million barrels of oil.

Slide 7

Recently, one energy industry source predicted that as many 2000 new wells will be drilled in the three counties highlighted in blue during the next two years.

Slide 8

The size and weight of oil related traffic has increased steadily over time. For example, in the early 1990's, work over rigs had gross weights of approximately 90,000 pounds.

By 2007, the weight of a work over rig was approaching 110,000 pounds.

Many different pieces of equipment are necessary to bring an oil well into production.

Several loads involve oversize and overweight movements. Of the 40 to 50 loads necessary to move a drilling rig, almost half require permits since they exceed legal weights, and 3 out of every 4 loads are also oversized.

Slide 9

It takes about 30 to 40 days to bring a well into production. Additional rigs are moving into the state to meet the demand. As of June 20th of this year there were 75 drilling rigs operating in North Dakota.

Slide 10

In 2005 -1901 self-issued overweight permits were sold for workover rigs.

In 2006 -1384. In 2007 -2530.

During the three year period, 30% of the self-issued overweight permits for workover rigs occurred when spring load restrictions were in effect. According to the American Association of State Highway and Transportation Officials an overweight load during the spring load restriction period has 2.6 times the impact on a roadway as the same load when restrictions are not in effect.

Over the past three years revenue from workover rigs has averaged a little more than 200,000 dollars per year; enough to rebuild less than a quarter mile of two-lane highway.

Slide 11

In 2006: a little more than two million dollars of self-issued permits and identification supplements were sold; enough to rebuild about two miles of a two-lane highway. In 2007, a little more than 2.1 million dollars of self-issued permits and identification supplements were sold.

Slide 12

This slide shows that 95% of all oil and gas development sites are more than a quarter mile from a state highway. However, oil and gas development impacts road systems of all levels of government.

Slide 13

This slide shows location of oil and gas wells and other oil related sites in Bowman County relative to the local and state highways.

Slide 14

Crude oil is transported from individual wells to tank batteries and pipeline transfer stations by trucks, or pipelines

Slide 15

This slide shows the method of crude oil transport from wells in Bowman County. The oil from fields shown in red is transported to tank farms or pipeline collection points by truck; the oil from fields shown in green is transported by pipelines; and oil from the fields shown in blue is transported by either truck or pipelines.

Slide 16

Oil from 65% of the state's wells is transported to tank farms by truck.

Oil from the remaining 35% of wells is transported by pipeline.

Slide 17

Many of the oil wells require stimulation to enhance their production. This is done by fracturing equipment which injects the gas or oil bearing formation with sand suspended by polymers in freshwater under great amounts of pressure.

To bring an average well on line in the Bakken Formation requires between 20,000 to 30,000 barrels of water which is the equivalent of 150 to 230 truckloads. And... 1,000,000 to 2,000,000 pounds of sand... which is the equivalent of 24 to 48 truckloads.

Slide 18

The freshwater used for the interjection process comes from wells scattered throughout the oil production area.

The sand used in the fracturing process is trucked to individual well sites throughout western North Dakota.

Slide 19

In addition to oil, almost all wells produce saltwater. In some cases the amount of saltwater produced may be nearly ten times the amount of oil. Saltwater must be disposed of at a permitted saltwater disposal site.

In March of 2008, the oil extraction process produced nearly 4.5 million barrels of oil and more than eight and a half million barrels of saltwater. Of the total amount of saltwater...35% of the saltwater, was transported by truck to permitted disposal sites. This is the equivalent of 23,127 truckloads.

Slide 20

With the production of oil, most wells also produce natural gas. Currently, there are 8 gas plants operating in the state with 4 more to be on line soon. In addition to natural gas, these plants produce propane, butane, pentanes and other natural gas liquids. The three largest plants located at Tioga, Lignite and Sidney, MT. transport their product both by rail and truck. The other smaller plants rely on truck transportation.

When all 12 plants are on line they will generate between 25 and 35 total truckloads per day.

Slide 21

33% of all state highways and 35% of the state's local roads are in the 17 oil and gas producing counties.

Slide 22

In addition to impacting roads, oil development significantly impacts bridges and other structures.

5% of the structures on state highways and 31% of the structures on county roads in the oil producing counties are either functional obsolete or structurally deficient. The cost of replacing a structure on the county system averages about \$400,000.

Slide 23

This bridge on US 12 was recently replaced at a cost of \$465,000 exclusive of approach work.

Slide 24

Another cost of maintaining safe roads occurs at highway/railroad grade crossings. Due to higher volumes of oil-related traffic, energy companies have approached the BNSF Railway seeking the installation of signals at rural crossings.

Currently, it costs about \$165,000 to install signals at a highway/rail crossing.

\$5,000 to maintain annually.

And \$38,000 to \$48,000 to replace the crossing surfaces on a single track line.

Slide 25

The overall volume of oil and gas development traffic is significant. The estimated number of truckloads associated with oil and gas development traffic is currently approaching 1.7 million movements per year.

Slide 26

Between 1996 and 2006, truck traffic at 20 randomly selected sites in the state's 17 oil producing counties was up 41.3%. During the same period, truck traffic on all state highways was only up 20.2%.

Leaving Oil and Gas Development....

Slide 27

North Dakota is one of only 3 states to experience a growth in manufacturing between 2000 and 2006.

Slide 28

In 1993, manufacturing in North Dakota produced an estimated 16 million tons of freight.

Using the most recent data available (2002), manufacturing tonnage in North Dakota increased to more than 22 million tons.

If all of the estimated tonnage that moved by trucks, traveled at maximum legal loads it would be the equivalent of 820 thousand truckloads annually.

Slide 29

There no statistics available on the amount of manufactured tonnage produced in each county but looking at the relative number of people employed in manufacturing gives you some idea of where the freight volumes are generated.

Slide 30

Moving on to Ethanol & Biodiesel, North Dakota is sharing in the growth of the ethanol and biodiesel industries. Currently, we have five operating ethanol plants with a combined annual production capacity of 235 million gallons. Three more plants with a total projected production capacity of 250 million gallons have been announced.

Currently, there is one operating biodiesel plant and three announced plants.

In comparison the state of Iowa had 26 operating ethanol plants in 2006 with a combined output of nearly 1.5 billion gallons.

Slide 31

The potential of truck traffic associated with an ethanol plant is significant.

A 100M gallon plant will...Consume 35.6 million bushels of corn.

Consume 300,000 tons of coal per year.

And produce over 300 thousand tons of distiller grains.

In total, if all of the corn, coal, and distiller grains were moved by truck it would require nearly 200 truckloads daily.

Slide 32

These slide shows the location of the four existing ethanol plants highlighted in orange and the four proposed plants in yellow. The slide also shows the relative concentration of corn production in the state.

Slide 33

This slide shows the location of the one existing (orange) and three proposed (yellow) biodiesel plants.

Slide 34

In 1950 North Dakota produced 17.1 billion pounds of agricultural production.

Slide 35

By 2006, agricultural production in the state was up to 57 billion pounds, a 322% increase, or more than 1.3 million truckloads.

Slide 36

This slide shows where potatoes were grown and the relative volume produced in 1950.

Slide 37

However by 2006, the production of potatoes for processed frozen foods moved to the irrigable soils of the central portion of the state. Ironically, many of the state highways in this portion of the state have relatively thin surfaces.

Slide 38

This slide shows the distribution and production of durum wheat in 1950.

Slide 39

By 2006 durum wheat production had shifted to the state's northwest corner in response to issues primarily related to disease.

Although, the number of durum acres in 2006 is about one-half of the 1950 acreage, due to a doubling of yields the number of bushels harvested is remained nearly the same.

Slide 40

Comparing the yields of four different agricultural commodities using the 2006 statewide average yields...

Slide 41

This slide shows the relative agricultural and livestock production in pounds by county in 2006.

Slide 42

This slide shows the relative production of oil in pounds by county in 2006.

Slide 43

Here we have a slide that shows the combined weight of oil, agricultural and livestock production in pounds by county in 2006. This slide shows the significant volumes of freight produced by the high agricultural production in the eastern and northeastern portion of the state, and the production of oil, agriculture and livestock in western North Dakota.

Slide 44

Recently we have also seen the emergence of new industries and significant changes in other industries.

Slide 45

The locations shown in green are the state's existing wind farm locations; locations in blue are the announced sites that have yet to be built.

Slide 46

Here we see the tower top section of a wind turbine being transported. This truck has 13 axles to accommodate the weight of the tower top. The load is also longer than legal lengths. Many of the loads required to move the components of a wind turbine are overweight or oversize.

The primary impact of wind farm development is during the construction stage when several overweight and oversized loads are moved.

An addition to wind farm development within the state, manufacturing plants in West Fargo and Grand Forks use North Dakota highways to regularly transport wind turbine components to other states and Canadian provinces.

Slide 47

North Dakota is recognized as having significant potential for wind energy development and as you can see from this map we have barely scratched the surface

Slide 48

This slide shows the Ardoch coal transload facility located approximately 25 miles northwest of Grand Forks. Up until 2005, BNSF Railway delivered coal individually to each of American Crystal Sugar's five plants in the Red River Valley.

In an effort to improve its efficiency, the railroad negotiated with American Crystal Sugar to have coal transloaded at Ardoch and shipped by truck to the company's five plants. The facility transloads approximately 720,000 tons of coal annually

Slide 49

The ultimate impact of the Ardoch coal transload facility on the highway system is unknown since the facility's operator is interested in expanding the delivery of coal to other businesses.

Slide 50

Railroads are another industry that is undergoing significant change resulting in impacts to the state and local road systems.

In 1950, ND was served by five Class 1 railroads operating a network of 5,243 miles of track.

Today, the state's railroads operate 3,609 miles of track; a system one third of its former size.

Slide 51

The black lines on this slide show the state's rail system in 2008. The red lines show the branch lines which have been abandoned since 1950.

Slide 52

The 2008 rail system would have even fewer miles of track were it not for the fact that five shortline railroads now operate in the state.

Slide 53

In addition to fewer railroads and less miles of branch lines, changes in rail service and rates resulted in fewer rural elevators and an evolution to high speed shuttle facilities.

In 1950, North Dakota had 1025 licensed elevators. With approximately 61 million bushel capacity

2007– The state had 402 licensed elevators -with 290 million bushels capacity. This change has resulted in different patterns and concentrations of truck traffic.

Slide 54

In 1950- There were 2102 centerline miles of paved state highway, with GVW of 73,280 lbs. And there were 2838 miles of paved county highways. In 2008, **we have 7,384 centerline miles, or 8458 roadway miles of paved state highways**, with GVW of 105,500 lbs. And there are 6,814 miles of paved county highways.

Slide 55

According to the American Association of State Highway Transportation Officials, one 80,000 pound five axle truck has the same impact as 9600 automobiles. And a 100,000 pound five axle truck has the same impact as 27,000 automobiles.

Slide 56

The following truckload information does not include wholesale and retail trade, service industries, the construction sector, or trucks passing through our state.

To give some perspective to the magnitude of these numbers, if these nearly 4 million truckloads were placed end to end they would circle the earth more than two times.

Slide 57

This slide shows the entire state is experiencing the impacts of increasing truck traffic and heavy axle loadings.

The thickest lines show greater than 2,500 per day. The highest counts are found on I-94 in the Fargo area.

Approximately 4,700 trucks a day in Fargo

Approximately 63,050 total vehicles travel in the Fargo area a day

* NOTE- Chart is based on ESAL (Equivalent Single Axle Loads)

Slide 58

All of this truck traffic is contributing to the increasing number of distressed miles of roads at all levels of government. As distress increases performance goes down and the need for additional highway maintenance, rehabilitation, and reconstruction goes up.

Slide 59

As our economy continues to grow, so will the growth of truck traffic.

NDDOT will continue to monitor the trends affecting the growth of truck traffic and the resulting highway impacts.

And we will continue to work cooperatively and collaboratively with local and tribal governmental entities, the legislature, our congressional delegation, and the private sector to the best of our ability to provide an integrated transportation system that safely moves people and goods.