

Estimating North Dakota's Economic Base

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The economic base of a state or region consists of those activities that bring dollars into the state or region (i.e., through sales of goods or services to out-of-state markets). In North Dakota, these activities are in six primary industries, as well as federal government outlays. The state's primary industries include: agriculture; manufacturing; coal mining and conversion; oil and gas exploration, extraction, and refining; tourism; and, exported services. Agriculture includes receipts from sales of crops and livestock, as well as government farm commodity program payments, but excludes agricultural processing. Manufacturing includes agricultural processing, as well as other types of manufacturing. Tourism includes all expenditures by out-of-state visitors to North Dakota. Exported services includes a variety of telemarketing, data processing, customer support, and related activities which primarily serve markets outside North Dakota. Federal government outlays include federal government transfer payments as well as federally funded construction and payrolls.

The most current data available were used to estimate North Dakota's 2016 economic base. These estimates were added to previous year's economic base by industry and are presented for select years (1990-2016) in the attached tables. Economic base for North Dakota and each of the 8 state planning regions is presented in terms of constant (real) and current year (nominal) dollars. Economists typically express time-series data in terms of constant dollars. For this analysis, Gross Domestic Product Implicit Price Deflators were used to convert current year dollars to constant dollars (Bureau of Economic Analysis 2017). Constant dollar values remove the effects of inflation, so dollar values for all years included in the analysis have the same purchasing power as those for the base year (i.e., 2016 for this study).

North Dakota's economic base data set dates back to 1958. It was developed in conjunction with the North Dakota Input-Output Model. The Input-Output Model is different from most input-output models currently in use because it was created using actual expenditures data for each of the state's economic sectors. Economic base data provides the information necessary to validate the North Dakota Input-Output Model's interdependence coefficients, or multipliers. By definition, the gross business volume (or total business activity) of the *Households Sector* is personal income. Comparing personal income from the Input-Output Model with published personal income (Bureau of Economic Analysis 2018) provides an indication of how well the model replicates the state's economy. Personal income estimates from the two sources track quite well for the 59-year period 1958-2016. Personal income estimates from the Input-Output Model were slightly lower than the published personal income (-5.47 mean difference). A Theil's Coefficient of 0.0683 indicates the model is quite accurate for predictive purposes. Considering the variability and recent growth in the North Dakota economy, the Input-Output Model and associated economic base have accurately estimated the state's total business activity. For a detailed discussion of the state's economic base, see Coon et al. 2014.

North Dakota's economic base has grown significantly since 1990, although growth in recent years has not been steady. The State's economic base grew rapidly during the 2008 to 2014 period, with agriculture and oil production driving the economic expansion. However, during that period the North Dakota economic base did not grow from 2008 to 2009 as a result of the United States recession. The 2010 to 2014 period

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represented a time of relatively strong commodity prices. The saying that “the cure for high prices is high prices” seemed to hold true and both agricultural commodity and oil prices worked their way lower. This had an immediate impact on the State’s economic base and the total declined from its peak of \$48.9 billion in 2014 to \$39.2 billion in 2015, and further declined to \$37.2 billion in 2016. The State’s agricultural industry grew from 2015 to 2016 as a result of strong yields and steady prices; however, this growth was not enough to offset the decline in the oil industry that occurred from 2015 to 2016.

Economic base growth from 2000 to 2005 was 24.2 percent (average of 4.8 percent per year) and from 2005 to 2010 was 32.9 percent (average of 6.6 percent per year), compared to annual growth rates of 19.7 percent from 2010 to 2012, 4.7 percent from 2012 to 2013, and 1.8 percent from 2013 to 2014. Natural resource industries (agriculture, coal mining and conversion, and petroleum and natural gas exploration, extraction and refining) have been responsible for much of this growth. Agriculture has transitioned into more profitable crops such as corn and soybeans to help meet world demand. Prices for these crops rose to record levels in recent years and then began to decline. Oil production in the state has increased with the development of the Bakken Formation, approaching one million barrels per day in 2013. During the time of increased oil production, crude oil prices reached record levels during the 2007 to 2011 period. Crude oil prices continued to be relatively strong through the first half of 2014, but dropped significantly by the end of the year. During this period crude oil production declined to slightly below the one million barrels per day level. While the natural resource-based industries in North Dakota were experiencing the effects of large price swings the remaining industrial sectors of the state were generally growing at rates more consistent with historic patterns.

With growth in North Dakota’s natural resource industries, the state’s economy is more dependent on natural resource activities than in previous periods. Efforts to diversify the state’s economy began in the 1970’s, with efforts to expand agricultural processing, manufacturing, and exported services. In 2000, 40.6 percent of North Dakota’s economic base was derived from natural resources industries. This relationship has increased to 47.0 percent in 2010, 63.4 percent in 2014, and 51.1 percent in 2016. Events external to North Dakota (i.e., weather, politics, economics, and world supply and demand) have not only provided a favorable environment for the state’s economic growth, but also have affected the economic slowdown in 2015 and 2016.

References

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Table 1. North Dakota's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	3,082.8	698.6	685.8	599.9	350.5	--	5,417.6	2,887.7	8,305.3
1995	3,450.0	1,014.4	815.4	505.9	810.1	--	6,595.8	3,678.1	10,273.9
2000	3,859.6	1,447.6	1,062.4	1,010.2	2,829.7	381.6	10,591.1	4,037.1	14,628.2
2005	4,789.0	1,895.4	1,490.6	2,104.5	3,603.5	924.7	14,807.7	5,598.3	20,406.0
2010	7,763.9	2,229.8	1,653.0	4,608.8	4,618.4	1,216.7	22,090.6	7,746.8	29,837.4
2012	9,843.2	2,811.8	1,734.9	14,607.1	5,047.2	1,350.6	35,394.8	7,768.7	43,163.5
2013	10,042.0	2,897.4	1,664.8	17,445.3	5,108.0	1,419.8	38,577.3	7,309.4	45,886.7
2014	9,020.5	3,051.0	1,794.5	19,389.1	5,303.6	1,414.1	39,972.8	7,649.1	47,621.9
2015	7,463.0	3,074.1	1,648.8	11,552.5	5,552.9	1,436.2	30,727.5	7,998.7	38,726.2
2016	8,701.3	2,942.5	1,512.3	8,797.6	5,464.0	1,403.2	28,820.9	8,411.9	37,232.8
-----million constant 2016 dollars-----									
1990	5,144.0	1,165.7	1,144.3	1,001.0	584.8	--	9,039.9	4,818.4	13,858.3
1995	5,103.6	1,500.6	1,206.2	748.4	1,198.4	--	9,757.1	5,441.0	15,198.1
2000	5,257.6	1,971.9	1,447.2	1,376.1	3,854.7	519.8	14,427.3	5,499.4	19,926.7
2005	5,807.0	2,298.3	1,807.4	2,551.8	4,369.5	1,121.3	17,955.3	6,788.3	24,743.6
2010	8,557.1	2,457.6	1,821.9	5,079.7	5,090.3	1,341.0	24,347.6	8,538.3	32,885.9
2012	10,457.0	2,987.1	1,843.1	15,518.0	5,361.9	1,434.8	37,602.0	8,253.2	45,855.2
2013	10,509.7	3,032.3	1,742.3	18,257.8	5,345.9	1,485.9	40,373.9	7,649.9	48,023.8
2014	9,257.5	3,131.2	1,841.6	19,898.5	5,442.9	1,451.3	41,023.0	7,850.1	48,873.1
2015	7,559.8	3,114.0	1,670.2	11,702.3	5,624.9	1,454.8	31,125.9	8,102.4	39,228.3
2016	8,701.3	2,942.5	1,512.3	8,797.6	5,464.0	1,403.2	28,820.9	8,411.9	37,232.8
Percent Change									
2015-2016	15.1	-5.5	-9.5	-24.8	-2.9	-3.5	-7.4	3.8	-5.1
2010-2016	1.7	19.7	-17.0	73.2	7.3	4.6	18.4	-1.5	13.2

Table 2. North Dakota State Region 1's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	124.7	23.1	0.1	441.0	19.3	--	608.2	97.1	705.3
1995	181.2	33.6	0.1	260.3	44.5	--	519.7	123.1	642.8
2000	177.0	47.9	0.1	389.4	155.6	11.3	781.3	133.5	914.8
2005	222.8	62.7	0.1	720.5	198.1	34.8	1,239.0	183.3	1,422.3
2010	285.3	73.8	--	2,503.0	254.0	39.3	3,155.4	254.5	3,409.9
2012	369.0	88.0	--	10,547.2	277.6	44.3	11,326.1	253.9	11,580.0
2013	436.1	90.1	0.5	14,207.0	280.9	46.4	15,061.0	238.4	15,299.4
2014	419.6	93.9	0.1	17,495.5	291.7	50.1	18,350.9	249.3	18,600.2
2015	354.5	96.5	0.2	10,956.8	303.5	53.2	11,766.7	260.9	12,027.6
2016	402.9	94.1	--	8,508.4	300.5	55.5	9,361.4	274.4	9,635.8
-----million constant 2016 dollars-----									
1990	208.1	38.5	0.2	735.9	32.2	--	1,014.9	162.0	1,176.9
1995	268.0	49.7	0.1	385.1	65.8	--	768.8	182.1	950.9
2000	241.1	65.2	0.1	530.4	221.0	15.4	1,064.3	181.9	1,246.2
2005	270.2	76.0	0.1	873.7	240.2	42.2	1,502.4	222.3	1,724.6
2010	314.4	81.3	--	2,758.7	280.0	43.3	3,477.8	280.5	3,758.3
2012	392.0	93.5	--	11,204.9	294.9	47.1	12,032.4	269.7	12,302.1
2013	456.4	94.3	0.5	14,868.7	294.0	48.6	15,762.4	249.5	16,011.9
2014	430.6	96.4	0.1	17,955.2	299.4	51.4	18,833.0	255.8	19,088.9
2015	359.1	97.8	0.2	11,098.9	309.5	53.9	11,919.3	264.3	12,183.5
2016	402.9	94.1	--	8,508.4	300.5	55.5	9,361.4	274.4	9,635.8
Percent Change:									
2015-2016	12.2	-3.7	--	-23.3	-2.9	3.0	-21.5	3.8	-20.9
2010-2016	28.1	15.7	--	208.4	7.3	28.1	169.2	-2.2	156.4

Table 3. North Dakota State Region 2's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	369.0	100.5	--	204.9	54.0	--	728.4	550.3	1,278.7
1995	475.3	145.9	--	113.9	124.8	--	859.9	700.7	1,560.6
2000	413.4	208.2	--	185.2	435.7	76.3	1,318.8	764.3	2,083.1
2005	642.5	272.6	--	333.7	554.9	167.2	1,970.9	1,061.3	3,032.2
2010	917.8	320.6	--	4,928.6	711.2	226.7	7,104.9	1,471.5	8,576.4
2012	1,187.9	411.9	--	8,377.2	777.3	239.1	10,993.4	1,478.0	12,471.4
2013	1,204.0	421.1	--	9,225.3	786.7	262.9	11,900.0	1,390.0	13,290.0
2014	1,231.7	444.1	--	10,364.0	816.8	261.5	13,118.1	1,455.5	14,573.6
2015	1,008.6	441.8	--	5,102.4	855.2	268.0	7,676.0	1,521.5	9,197.5
2016	1,181.6	420.2	--	3,283.9	841.5	270.7	5,997.9	1,599.5	7,597.4
-----million constant 2016 dollars-----									
1990	615.7	167.7	--	341.9	90.1	--	1,215.4	918.2	2,133.7
1995	703.1	215.8	--	168.5	184.6	--	1,272.0	1,036.5	2,308.6
2000	563.1	283.6	--	252.3	593.5	103.9	1,796.5	1,041.1	2,837.6
2005	779.1	330.5	--	404.6	672.9	202.7	2,389.8	1,286.9	3,676.7
2010	1,011.6	353.4	--	5,432.2	783.9	249.9	7,830.8	1,621.8	9,452.7
2012	1,262.0	437.6	--	8,899.6	825.8	254.0	11,679.0	1,570.2	13,249.1
2013	1,260.1	440.7	--	9,654.9	823.3	275.1	15,454.2	1,454.7	13,908.9
2014	1,264.1	455.8	--	10,636.3	838.3	268.4	13,462.7	1,493.7	14,956.5
2015	1,021.7	447.5	--	5,168.6	866.3	271.5	7,775.5	1,541.2	9,316.8
2016	1,181.6	420.2	--	3,283.9	841.5	270.7	5,997.9	1,599.5	7,597.4
Percent Change:									
2015-2016	15.7	-6.1	--	-36.5	-2.9	-0.3	-22.9	3.8	-18.5
2010-2016	16.8	18.9	--	-39.5	7.4	8.3	-23.4	-1.4	-19.6

Table 4. North Dakota State Region 3's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total	
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments		
-----million current dollars-----										
1990	312.8	25.9	--	--	30.2	--	368.9	293.7	662.6	
1995	325.4	37.5	--	--	69.6	--	432.5	374.1	806.6	
2000	281.7	53.6	--	--	243.3	16.0	594.6	413.3	1,007.9	
2005	414.1	70.1	--	--	309.9	20.1	814.2	573.5	1,387.7	
2010	816.1	82.5	--	--	397.2	34.1	1,329.9	792.1	2,122.0	
2012	1,052.8	119.2	--	--	434.1	28.6	1,634.7	796.1	2,430.8	
2013	1,024.0	121.7	--	--	439.3	29.9	1,614.9	748.9	2,363.8	
2014	953.6	130.6	--	--	456.1	29.8	1,570.1	782.4	2,352.5	
2015	757.3	123.8	--	--	477.6	32.7	1,391.4	817.0	2,208.4	
2016	878.0	119.2	--	--	469.9	34.3	1,501.4	859.2	2,303.6	
-----million constant 2016 dollars-----										
1990	521.9	43.2	--	--	50.4	--	615.6	490.1	1,105.6	
1995	484.4	55.5	--	--	103.0	--	639.8	553.4	1,193.2	
2000	383.7	73.0	--	--	331.4	21.8	810.0	563.0	1,373.0	
2005	502.1	85.0	--	--	375.8	24.4	987.3	695.4	1,682.7	
2010	899.5	90.9	--	--	437.8	37.6	1,465.8	873.0	2,338.8	
2012	1,118.5	126.6	--	--	461.2	30.4	1,736.6	845.7	2,582.4	
2013	1,071.7	127.4	--	--	459.8	31.1	1,690.1	783.8	2,473.9	
2014	978.7	134.0	--	--	468.1	30.6	1,611.4	803.0	2,414.3	
2015	767.1	125.4	--	--	483.8	33.1	1,409.4	827.6	2,237.0	
2016	878.0	119.2	--	--	469.9	34.3	1,501.4	859.2	2,306.6	
Percent Change:										
2015-2016	14.5	-4.9	--	--	-2.9	3.6	6.5	3.8	3.1	
2010-2016	-2.4	31.1	--	--	7.3	-8.7	2.4	-1.6	-1.4	

Table 5. North Dakota State Region 4's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	452.0	129.7	--	--	48.0	--	629.7	557.1	1,186.8
1995	520.2	188.4	--	--	110.9	--	819.5	711.5	1,531.0
2000	633.7	268.8	--	--	387.7	10.2	1,300.4	782.8	2,083.2
2005	549.0	352.0	--	--	493.7	51.7	1,446.4	1,091.3	2,537.7
2010	950.8	414.1	--	--	632.7	52.9	2,050.5	1,512.3	3,562.8
2012	1,152.1	493.7	--	--	691.5	61.5	2,398.8	1,522.3	3,921.1
2013	1,183.5	505.6	--	--	699.8	59.6	2,448.5	1,432.0	3,880.5
2014	976.2	527.1	--	--	726.6	57.5	2,287.4	1,500.2	3,787.6
2015	811.3	541.8	--	--	760.8	59.9	2,173.8	1,567.0	3,740.8
2016	910.9	528.0	--	--	748.5	67.5	2,254.9	1,647.4	3,902.3
-----million constant 2016 dollars-----									
1990	754.2	216.4	--	--	80.1	--	1,050.7	929.6	1,980.3
1995	769.5	278.7	--	--	164.1	--	1,212.3	1,052.5	2,264.8
2000	863.2	366.2	--	--	528.1	13.9	1,771.4	1,066.3	2,837.8
2005	665.7	426.8	--	--	598.6	62.7	1,753.8	1,323.3	3,077.1
2010	1,047.9	456.4	--	--	697.3	58.3	2,260.0	1,666.8	3,926.8
2012	1,223.9	524.5	--	--	734.6	65.3	2,548.4	1,617.2	4,165.6
2013	1,238.6	529.1	--	--	732.4	62.4	2,562.5	1,498.7	4,061.2
2014	1,001.8	540.9	--	--	745.7	59.0	2,347.5	1,539.6	3,887.1
2015	821.8	548.8	--	--	770.7	60.7	2,202.0	1,587.3	3,789.3
2016	910.9	528.0	--	--	748.5	67.5	2,254.9	1,647.4	3,902.3
Percent Change:									
2015-2016	10.8	-3.8	--	--	-2.9	11.2	2.4	3.8	3.0
2010-2016	-13.1	15.7	--	--	7.3	15.8	-0.2	-1.2	-0.6

Table 6. North Dakota State Region 5's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	617.0	201.8	--	--	64.1	--	882.9	445.0	1,327.9
1995	641.5	292.9	--	--	148.3	--	1,082.7	569.2	1,651.9
2000	857.8	418.1	--	--	517.9	166.1	1,959.9	628.3	2,588.2
2005	882.8	547.4	--	--	659.5	417.7	2,507.4	875.5	3,382.9
2010	1,600.4	644.0	--	--	845.2	598.0	3,687.6	1,214.5	4,902.1
2012	1,962.8	772.9	--	--	923.6	702.3	4,361.6	1,222.4	5,584.0
2013	1,907.1	791.4	--	--	934.8	739.8	4,373.1	1,151.6	5,524.7
2014	1,439.2	825.9	--	--	970.5	714.1	3,949.7	1,207.5	5,157.2
2015	1,187.4	846.2	--	--	1,016.1	718.6	3,768.3	1,262.5	5,030.8
2016	1,560.4	823.1	--	--	999.9	685.5	4,068.9	1,329.4	5,398.3
-----million constant 2016 dollars-----									
1990	1,029.5	336.7	--	--	107.0	--	1,473.2	742.5	2,215.8
1995	949.0	433.3	--	--	219.4	--	1,601.6	842.0	2,443.6
2000	1,168.5	569.5	--	--	705.5	226.3	2,669.8	855.9	3,525.7
2005	1,070.4	663.8	--	--	799.7	506.5	3,040.4	1,061.6	4,102.0
2010	1,763.9	709.8	--	--	931.6	659.1	4,064.4	1,338.6	5,403.0
2012	2,085.2	821.1	--	--	981.2	746.1	4,633.6	1,298.6	5,932.2
2013	1,995.9	828.3	--	--	978.3	774.3	4,576.8	1,205.2	5,782.0
2014	1,477.0	847.6	--	--	996.0	732.9	4,053.5	1,239.2	5,292.7
2015	1,202.8	857.2	--	--	1,029.3	727.9	3,817.2	1,278.9	5,096.0
2016	1,560.4	823.1	--	--	999.9	685.5	4,068.9	1,329.4	5,398.3
Percent Change:									
2015-2016	29.7	-4.0	--	--	-2.9	-5.8	6.6	4.0	5.9
2010-2016	-11.5	16.0	--	--	7.3	4.0	0.1	-0.7	-0.1

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Table 7. North Dakota State Region 6's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total	
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments		
-----million current dollars-----										
1990	623.2	62.0	--	--	50.1	--	735.3	268.7	1,004.0	
1995	600.6	90.1	--	--	115.9	--	806.6	339.0	1,145.6	
2000	686.8	128.5	--	--	404.7	22.8	1,242.8	375.3	1,618.1	
2005	954.1	168.3	--	--	515.3	34.8	1,672.5	515.2	2,187.7	
2010	1,575.2	198.0	--	--	660.4	58.0	2,491.6	703.4	3,195.0	
2012	2,062.2	291.8	--	--	721.7	55.0	3,130.7	703.7	3,834.4	
2013	2,034.3	297.2	--	--	730.4	57.5	3,119.4	663.4	3,782.8	
2014	1,850.9	319.5	--	--	758.4	38.2	2,967.0	691.9	3,658.9	
2015	1,403.3	301.1	--	--	794.0	37.3	2,535.7	722.5	3,258.2	
2016	1,848.0	281.7	--	--	781.3	39.1	2,950.1	759.3	3,709.4	
-----million constant 2016 dollars-----										
1990	1,039.9	103.5	--	--	83.6	--	1,226.9	448.4	1,675.3	
1995	888.5	133.3	--	--	171.4	--	1,193.2	501.5	1,694.7	
2000	935.6	175.0	--	--	551.3	31.1	1,693.0	511.2	2,204.2	
2005	1,156.9	204.1	--	--	624.8	42.2	2,028.0	624.7	2,652.7	
2010	1,736.1	218.2	--	--	727.9	63.9	2,746.2	775.3	3,521.4	
2012	2,190.8	310.0	--	--	766.7	58.4	3,325.9	747.6	4,073.5	
2013	2,129.0	311.0	--	--	764.4	60.2	3,264.7	694.3	3,959.0	
2014	1,899.5	327.9	--	--	778.3	39.2	3,045.0	710.1	3,755.0	
2015	1,421.5	305.0	--	--	804.3	37.8	2,568.6	731.9	3,300.4	
2016	1,848.0	281.7	--	--	781.3	39.1	2,950.1	759.3	3,709.4	
Percent Change:										
2015-2016	30.0	-7.6	--	--	-2.9	3.5	14.9	3.7	12.4	
2010-2016	6.4	29.1	--	--	7.3	-38.8	7.4	-2.1	5.3	

Table 8. North Dakota State Region 7's Economic Base, by Industrial Categories, Selected Years, 1990 – 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	377.7	111.7	667.0	412.9	59.2	--	1,628.5	545.9	2,174.4
1995	436.3	162.2	794.7	345.3	136.9	--	1,875.4	697.0	2,572.4
2000	500.6	231.5	1,062.0	659.3	478.3	66.3	2,998.0	764.2	3,762.2
2005	711.1	303.1	1,489.5	1,201.7	609.0	177.5	4,491.9	1,059.2	5,551.1
2010	1,013.2	356.5	1,652.0	1,488.8	780.5	198.2	5,489.2	1,469.9	6,959.1
2012	1,327.5	465.0	1,733.4	2,497.0	853.0	208.0	7,083.9	1,465.3	8,549.2
2013	1,374.5	497.0	1,662.5	2,691.7	863.2	211.4	7,300.3	1,377.6	8,677.9
2014	1,408.8	528.8	1,793.3	2,500.9	896.3	243.2	7,371.3	1,441.1	8,812.4
2015	1,206.4	529.3	1,647.2	1,571.9	938.4	245.6	6,138.8	1,510.1	7,648.9
2016	1,306.4	486.3	1,511.3	1,386.9	923.5	225.7	5,840.1	1,589.0	7,429.1
-----million constant 2016 dollars-----									
1990	630.2	186.4	1,113.0	689.0	98.8	--	2,717.3	910.9	3,628.2
1995	645.4	239.9	1,175.6	510.8	202.5	--	2,774.3	1,031.1	3,805.3
2000	681.9	315.4	1,446.7	898.1	651.5	90.3	4,083.9	1,041.0	5,124.9
2005	862.3	367.5	1,806.1	1,457.1	738.5	215.2	5,446.7	1,284.3	6,731.1
2010	1,116.7	392.9	1,820.8	1,640.9	860.2	218.5	6,050.0	1,620.1	7,670.1
2012	1,410.3	494.0	1,841.5	2,652.7	906.2	221.0	7,525.7	1,614.4	9,082.3
2013	1,438.5	520.1	1,739.9	2,817.1	903.4	221.2	7,640.3	1,556.7	9,082.1
2014	1,445.8	542.7	1,840.4	2,566.6	919.8	249.6	7,565.0	1,479.0	9,043.9
2015	1,222.0	536.2	1,668.6	1,592.3	950.6	248.8	6,218.4	1,529.7	7,748.1
2016	1,306.4	486.3	1,511.3	1,386.9	923.5	225.7	5,840.1	1,589.0	7,429.1
Percent Change:									
2015-2016	6.9	-9.3	-9.4	-12.9	-2.8	-9.3	-6.1	3.9	-4.1
2010-2016	17.0	23.8	-17.0	-15.5	7.4	3.3	-3.5	-1.9	-3.1

Table 9. North Dakota State Region 8's Economic Base, by Industrial Categories, Selected Years, 1990 - 2016

Year	Industry								Total
	Agriculture	Manufacturing	Coal Mining & Conversion	Oil/NG Exp., Ext. & Refining	Tourism	Exported Services	All Primary Industries	Federal Payments	
-----million current dollars-----									
1990	206.4	43.9	18.7	267.4	25.6	--	562.0	129.9	691.9
1995	269.5	63.8	20.6	231.5	59.2	--	644.6	163.5	808.1
2000	308.6	91.0	0.3	530.7	206.5	12.6	1,149.7	175.4	1,325.1
2005	412.6	119.2	1.0	1,152.9	263.1	20.9	1,969.7	239.0	2,208.7
2010	605.1	140.3	1.0	2,599.4	337.2	9.5	3,692.5	328.6	4,021.1
2012	728.9	193.6	1.5	5,322.6	368.4	11.8	6,602.5	327.0	6,929.5
2013	877.5	173.3	1.8	6,420.6	372.9	12.3	7,858.4	307.5	8,165.9
2014	740.5	181.1	1.1	6,924.5	387.2	19.7	8,254.1	321.2	8,575.3
2015	734.2	193.6	1.4	3,920.3	405.3	20.9	5,275.7	337.2	5,612.9
2016	613.1	189.9	1.0	2,997.8	398.9	24.9	4,225.6	353.7	4,579.3
-----million constant 2016 dollars-----									
1990	344.4	73.3	31.2	446.2	42.7	--	937.8	216.8	1,154.5
1995	398.7	94.4	30.8	342.5	87.6	--	953.6	241.9	1,195.4
2000	420.4	124.0	0.4	722.9	281.3	17.2	1,566.1	238.9	1,805.1
2005	500.3	144.5	1.2	1,398.0	319.0	25.3	2,388.4	289.8	2,678.2
2010	666.9	154.6	1.1	2,865.0	371.7	10.5	4,069.8	362.2	4,431.9
2012	774.4	179.9	1.6	5,654.5	391.4	12.5	7,014.2	347.4	7,361.6
2013	918.4	181.4	1.9	6,719.6	390.3	12.9	8,224.4	321.8	8,546.2
2014	760.0	185.9	1.1	7,106.4	397.4	20.2	8,471.0	329.6	8,800.6
2015	743.7	196.1	1.4	3,971.1	410.6	21.2	5,344.1	341.6	5,685.7
2016	613.1	189.9	1.0	2,997.8	398.9	24.9	4,225.6	353.7	4,579.3
Percent Change:									
2015-2016	-17.6	-3.2	-29.5	-24.5	-2.8	17.5	-20.9	3.6	-19.5
2010-2016	-8.1	22.8	-9.1	4.6	7.3	137.1	3.8	-2.3	3.3