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Adding An Exported Services Component to the North Dakota Input-Output Model's Business and Personal Services Sector



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ABSTRACT

The North Dakota Input-Output model has been used extensively to analyze changes in the state's economy. Within the past decade, exported services (e.g., telemarketing, data processing, reservation and financial centers) have become an important component of the North Dakota economic base. The purpose of this report is to estimate the contribution of exported services firms to the economic base (sales for final demand) of North Dakota and of regions and counties within the state, for 1998 and 1999. Exported services sales for final demand in 1999 totaled \$348 million statewide, or almost 3 percent of the state's economic base. Regions 5, 2, and 7 had the largest contributions from exported services activities, which amounted to 6 percent of total sales for final demand in Region 5, 4 percent in Region 2, and 2 percent in Region 7.

Key Words: exported services, economic development, input-output model

HIGHLIGHTS

The North Dakota Input-Output model has been used extensively to analyze changes in the state's economy. Within the past decade, exported services (e.g., telemarketing, data processing, reservation and financial centers) have become an important component of the North Dakota economic base. The purpose of this report is to estimate the contribution of exported services firms to the economic base (sales for final demand) of North Dakota and of regions and counties within the state, for 1998 and 1999.

A list of exported services firms was developed for each county and planning region in North Dakota, based on information obtained from regional council personnel, community economic development coordinators, and other knowledgeable officials, as well as previous research conducted by the authors. Individual firms were contacted to obtain information concerning the nature of each firm's operations, year it began operation, and current number of employees. This information was originally compiled for 1998 and subsequently updated for 1999. The number of employees was the base upon which sales for final demand were estimated. Occupational wage rates obtained from Job Service North Dakota were used to estimate payrolls of the exported services firms. Payrolls were then used to estimate the firms' total contribution to sales for final demand, based on relationships drawn from a previous survey of firms in this sector.

Exported services were found to contribute substantially to North Dakota's economic base, with the largest contributions occurring in Regions 5 (Fargo), 2 (Minot), and 7 (Bismarck-Mandan). Exported services sales for final demand in 1999 totaled \$348 million statewide, or almost 3 percent of the state's economic base. The contributions from exported services activities amounted to 6 percent of total sales for final demand in Region 5, 4 percent in Region 2, and 2 percent in Region 7.

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Randal C. Coon and F. Larry Leistritz*

Development of North Dakota's Input-Output model was first undertaken in the early 1960s. The model was initially developed to analyze the economic impacts of irrigation associated with the Garrison Diversion Project. This input-output model consisted of 13 basic economic sectors. Increasing importance of energy development in the mid 1970s resulted in four energy-related sectors being added to the model. For a complete discussion of the early development of the North Dakota Input-Output model, see Coon et al. (1985).

The input-output model includes the sectors that describe the North Dakota economy. Some of the model's sectors are basic economic sectors, those industries that earn income from outside the area. Income earned by these sectors is often referred to as the economic base, or sales for final demand. What makes up the state's economic base components has also changed with shifts and diversification of North Dakota's economy. Since the original model was developed, economic base components have been added for coal mining, electric generation, petroleum exploration/extraction, and petroleum refining. More recently, revenue from oil lease-bonus payments, Conservation Reserve Program payments, and coal conversion activities were added to the basic economic sectors. In the last decade, the state's economy has diversified with the addition of numerous exported services firms (Leistritz 1993). Exported services firms include telemarketing, reservation and financial centers, data processing, computer services, and information related businesses. They are essentially service sector firms that primarily provide services to customers (markets) outside North Dakota. It is necessary to estimate the level of income these types of businesses add to the state's economic base so that the input-output model can accurately replicate the North Dakota economy (Leistritz, 1999).

PROCEDURES

A list of exported service firms was assembled from a combination of sources. An initial list was compiled from previous research project (see Leistritz and Coon 1997 and Coon and Leistritz 1997). Regional councils, city economic development coordinators, internet web pages, and knowledgeable officials were contacted to expand, correct, and update the basic list developed in 1997. Some of the individual businesses were contacted to obtain the data necessary to complete the list. Information collected included the business name, the year the firm started operations, and the number of employees. Table 1 contains the list of businesses involved in exported services in North Dakota.

The exportable services component of business and personal services sales for final demand was estimated for 1998 and 1999, with 1999 being the last year data were available for the other basic sectors of the North Dakota Input-Output model. The number of employees was the base upon which sales for final demand were estimated. Employment was aggregated to the state region level. Occupational wages for different areas of the state were available for detailed job categories (Job Service North Dakota 1999, Job Service North Dakota 2000). These data were available for the 1996-1997 and 1996-1998 periods. Hourly wages were available for an extensive listing of occupations for different areas of the state. Mean hourly wage for 6 representative occupation categories (clerks-receptionists and information, computer support, data keyers, travel agents, clerks-insurance claims, and telemarketers) were averaged for the selected areas of the state. Because the average wages were for the 1996-1997 and 1996-1998 periods, the Consumer Price Index was used to update them to 1998 and 1999 levels. Hourly wages were converted to annual salary by using a 2,080 hours per work year (Table 2).

*Coon is research specialist and Leistritz is professor in the Department of Agribusiness and Applied Economics, North Dakota State University, Fargo.

Table 1. Exported Services Firms in North Dakota, By State Region, First Year of Operations, and Current Number of Employees, January, 2000.

City	County	State Region	Firm	Year Started	Employees
Watford City	McKenzie	1	Midland Atlas	1999	17
Williston	Williams	1	Advantage Line	1993	75
Williston	Williams	1	Rosenbluth Int.	1999	200
Bottineau	Bottineau	2	Midwest Telemark, Inc.	1995	48
Bottineau	Bottineau	2	GLS/Great Plains Development	1995	65
Parshall	Mountrail	2	Mandree Electronics	1999	20
Stanley	Mountrail	2	Midwest Telemark, Inc.	1993	30
Rugby	Pierce	2	The Connection	1997	125
Mohall	Renville	2	Midwest Telemark, Inc.	1990	70
Kenmare	Ward	2	Midwest Telemark, Inc.	1997	48
Minot	Ward	2	First-Tel	1993	450
Minot	Ward	2	Choice Hotels, Inc.	1991	360
Minot	Ward	2	Elliance	1995	400
Minot	Ward	2	MLT, Inc.	1999	275
Minot	Ward	2	ReliaStar	1999	400
Langdon	Cavalier	3	Midwest Telemark, Inc.	1997	49
Devils Lake	Ramsey	3	ACI	1998	25
Devils Lake	Ramsey	3	The Connection	1999	137
Belcourt	Rolette	3	Uniband	1987	210
Grand Forks	Grand Forks	4	Direct Tel	1994	225
Grafton	Walsh	4	Midwest Telemark, Inc.	1991	20
Fargo	Cass	5	Rosenbluth Int.	1993	350
Fargo	Cass	5	Cargill Financial Center	1996	214
Fargo	Cass	5	US Bank Services Center	1997	925
Fargo	Cass	5	Teleforce, Inc.	1992	75
Fargo	Cass	5	Great Plains Software	1981	500
Fargo	Cass	5	FCI	1990	200
Fargo	Cass	5	Intellisol	1998	100
Fargo	Cass	5	Community First Service Center	1997	250
Fargo	Cass	5	BC/BS Service Center	1997	300
Fargo	Cass	5	Navigation Technology	1996	200
Fargo	Cass	5	Banner Health Systems	1980	250
Fargo	Cass	5	Clarica	1975	150
Fargo	Cass	5	Norwest Service Center (Wells Fargo)	1998	275
Valley City	Barnes	6	ACI Telcentrics, Inc.	1995	80
Valley City	Barnes	6	BC/BS Information Center	2000	20
Oakes	Dickey	6	Oakes Performance Center	1997	90
Cooperstown	Griggs	6	Dynamics Marketing, Inc	1992	40
Napoleon	Logan	6	Napoleon Performance Center	1999	26
Ashley	McIntosh	6	Tech Link, Inc.	1998	40
Jamestown	Stutsman	6	Dynamics Marketing, Inc.	1994	125
Jamestown	Stutsman	6	Great Plains Directory Service	1991	5
Jamestown	Stutsman	6	Rosenbluth Int.	1998	35
Fessenden	Wells	6	Great Plains Development	1995	50

City	County	State Region	Firm	Year Started	Employees
Bismarck	Burleigh	7	Sykes Enterprises	1995	120
Bismarck	Burleigh	7	Unisys	1994	144
Bismarck	Burleigh	7	US Health Care	1990	525
Bismarck	Burleigh	7	Contact America	1997	96
Linton	Emmons	7	Rosenbluth Int.	1988	150
Garrison	McLean	7	Great Plains Development	1996	50
Hazen	Mercer	7	Impact	1995	37
Flasher	Morton	7	Contact America	1997	29
Mandan	Morton	7	ProMark One	1993	200
Mandan	Morton	7	North Central Data Coop	1968	110
Mandan	Morton	7	Laducer & Associates	1997	200
Dickinson	Stark	8	Rosenbluth Int.	1997	200
Dickinson	Stark	8	Remco Software	1997	45
Dickinson	Stark	8	AN Enterprises	1998	100

Region	1996-1997 Ave Hourly Wage	1998		1996-1998 Ave Hourly Wage	1999	
		Ave Hourly Wage	Annual Salary		Ave Hourly Wage	Annual Salary
-----\$-----						
1	9.24	9.47	19,698	9.42	9.75	20,280
2	9.20	9.43	19,614	9.61	9.95	20,696
3	9.09	9.32	19,386	9.40	9.73	20,238
4	9.72	9.96	20,717	10.48	10.85	22,568
5	9.79	10.04	20,883	10.66	11.03	22,942
6	9.09	9.32	19,386	9.40	9.73	20,238
7	9.76	10.00	20,800	9.81	10.15	21,112
8	9.24	9.47	19,698	9.42	9.75	20,280

Converting exported service payroll to economic base activity was accomplished using previously developed relationships (Coon and Leistritz 1997). Wages and salaries constituted 59.2 percent of the level of business activity for exported services firms. Applying this relationship to salaries produces the exported services component of sales for final demand (Table 3). The final demand vector component generated in Table 3 was added to the Business and Personal Services sector to obtain an enhanced final demand vector for that sector. Results of updating the business and personal services sector final demand vector are presented in Table 4.

Table 3. Employment, Average Salary, Exported Services Payroll, and Exported Services Final Demand Vector Component, by State Region, 1998 and 1999.

Region	Employment	Average Salary	Exported Services Payroll	Exported Services FDV Component
	---workers---	-----\$-----		
	-----1998-----			
1	75	19,698	1,477,350	2,495,524
2	1,616	19,614	31,694,224	53,537,541
3	284	19,386	5,505,624	9,300,041
4	245	20,717	5,075,665	8,573,758
5	3,789	20,883	79,125,687	133,658,255
6	465	19,386	9,014,490	15,227,179
7	1,661	20,800	34,548,800	58,359,459
8	345	19,698	6,795,810	11,479,409
	-----1999-----			
1	292	20,280	5,921,760	10,002,978
2	2,291	20,696	47,414,536	80,092,160
3	421	20,238	8,520,198	14,392,233
4	245	22,568	5,529,160	9,339,802
5	3,789	22,942	86,927,238	146,836,621
6	491	20,238	9,936,858	16,785,241
7	1,661	21,112	35,067,032	59,234,880
8	345	20,280	6,996,600	11,818,587

RESULTS

The addition of exported services to the business and personal services sector helps capture a new component of the North Dakota economy. It would be difficult to estimate the component for years prior to 1998, and because of the recent emergence of this industry, it may not be necessary. Exported services contribute very significantly in State Regions 2, 5, and 7 with additions of \$53.5, \$133.7, and \$58.4 million in 1998 and \$80.1, \$146.8, and \$59.2 million in 1999, respectively. State Region 5 with the Fargo metropolitan area has captured the largest share of the state export services component in 1998 (45.7 percent) and 1999 (42.1 percent). State Region 2 had the second largest export services component in both 1998 and 1999; this region includes the Minot trade center. At the state level, exported services amounted to \$292.7 million, or 38 percent of the \$769.2 million total sales for final demand of the business and personal services sector (the remainder representing sales to tourists) in 1998. In 1999 the exported services component had grown to \$348.4 million, nearly 35 percent of the \$1,003.4 million North Dakota sales to final demand total.

Sector by sector sales for final demand for 1958-1999 period are presented in Appendix Tables 1-9, for the regions and the state. Resulting gross business volumes generated from the

sales for final demand are presented in Appendix Tables 10-18. County-level exported services components of the business and personal services sector are presented in Appendix Table 19 for 1998 and Table 20 for 1999.

Table 4. Components of an Updated Business and Personal Services Sector Final Demand Vector, by State Region, 1998 and 1999			
Region	B&PS FDV	Exported Services FDV	New B&PS FDV
-----million \$-----			
-----1998-----			
1	26.2	2.5	28.7
2	73.4	53.5	126.9
3	41.0	9.3	50.3
4	65.3	8.6	73.9
5	87.2	133.7	220.9
6	68.1	15.2	83.3
7	80.5	58.4	138.9
8	34.8	11.5	46.3
STATE	476.5	292.7	769.2
-----1999-----			
1	36.0	10.0	46.0
2	100.9	80.1	181.0
3	56.3	14.4	70.7
4	89.7	9.3	99.0
5	119.9	146.8	266.7
6	93.7	16.8	110.5
7	110.7	59.2	169.9
8	47.8	11.8	59.6
STATE	655.0	348.4	1,003.4

CONCLUSIONS

Updating the sectors and economic base of the North Dakota Input-Output model is necessary to reflect changes in the North Dakota economy. This model has wide application and is a major component of several comprehensive economic simulation models. Development of a data base and methodology to include the exported services addition to the state's economy has greatly enhanced the model. This addition to the model has updated it with respect to the newly emerging industries in the state. As North Dakota's economy continues to diversify, this type of

model enhancement may be necessary again. The ability to quickly alter the input-output model to reflect a changing economy again highlights the value of this tool for economic analysis.

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APPENDIX

APPENDIX TABLE 1. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	220.3	440.3	18.3	62.5	16.5	5.5	187.0	1.1	--	5.4	13.1	970.0
1959	217.3	394.9	27.2	57.0	18.0	6.0	186.5	1.0	--	10.9	12.9	931.7
1960	175.4	390.9	32.7	66.1	14.9	5.0	187.9	1.0	--	14.5	12.5	900.9
1961	213.9	341.7	24.0	67.5	17.2	5.8	237.2	1.3	--	21.0	12.6	942.2
1962	199.3	476.8	16.5	62.6	18.7	6.3	344.2	1.5	--	22.8	12.5	1,161.2
1963	207.7	543.1	17.1	73.0	21.7	7.2	334.5	1.3	--	23.3	12.5	1,241.4
1964	213.3	451.2	30.2	78.4	26.2	8.7	485.2	1.5	--	25.9	12.7	1,333.3
1965	247.5	554.5	31.0	78.4	33.0	11.0	361.4	1.5	--	28.0	13.4	1,359.7
1966	271.5	609.4	23.3	84.2	45.0	15.0	428.6	1.3	4.4	29.7	14.0	1,526.4
1967	280.9	568.4	24.4	91.7	54.7	18.2	380.8	2.1	8.4	28.0	14.6	1,472.2
1968	264.2	570.5	27.0	101.5	69.7	23.2	447.9	2.4	12.3	34.3	14.7	1,567.7
1969	265.0	641.8	35.2	162.0	75.8	25.3	501.5	2.4	11.7	26.2	14.9	1,761.8
1970	272.5	671.0	182.1	148.1	85.7	28.5	567.7	3.2	13.8	30.3	15.2	2,018.1
1971	304.7	673.7	60.7	162.0	93.8	31.3	605.1	3.5	17.5	32.9	15.9	2,001.1
1972	376.4	975.0	72.9	170.0	86.3	28.8	649.0	3.3	21.4	34.6	16.8	2,434.5
1973	475.9	1,795.7	61.6	243.0	94.5	31.5	726.7	4.1	19.3	38.4	19.1	3,509.8
1974	448.5	2,072.1	72.4	304.8	92.6	31.1	806.0	4.9	22.4	76.1	22.6	3,953.5
1975	452.8	1,555.8	82.9	306.6	112.5	37.5	1,046.9	7.1	20.6	84.3	25.0	3,732.0
1976	484.3	1,194.3	44.9	467.2	134.2	44.8	1,066.7	16.0	38.6	100.8	27.0	3,618.8
1977	483.3	1,178.6	51.7	408.1	143.6	47.8	1,076.7	18.2	46.3	102.0	29.2	3,585.5
1978	529.4	1,615.2	65.8	435.8	165.0	54.9	1,157.8	22.0	65.4	108.5	30.8	4,250.6
1979	694.1	1,692.6	78.0	523.8	147.5	49.2	1,381.9	32.2	91.6	182.5	46.9	4,920.3
1980	781.4	1,721.6	108.1	562.2	144.5	48.2	1,687.4	48.3	120.1	410.4	74.3	5,706.5
1981	594.0	2,339.5	78.8	616.3	160.4	53.5	1,896.5	54.5	140.8	973.1	131.8	7,039.2
1982	604.5	2,306.0	56.0	526.5	167.2	55.7	1,598.2	57.8	162.0	857.3	121.3	6,512.5
1983	662.7	2,607.2	79.7	537.0	196.4	65.5	1,936.5	76.7	196.4	782.8	112.8	7,253.7
1984	690.3	2,317.1	111.6	572.5	176.8	58.9	2,131.7	96.3	226.3	719.9	109.4	7,210.8
1985	698.3	2,586.2	102.5	584.3	190.1	63.3	2,205.3	136.9	261.5	615.4	101.8	7,545.6
1986	675.8	2,323.4	96.9	587.8	193.9	64.6	2,275.5	127.5	261.3	275.2	81.4	6,963.3
1987	795.0	2,258.4	81.5	610.8	207.1	69.1	2,314.9	120.2	498.6	320.4	87.9	7,363.9
1988	849.3	2,490.1	94.9	653.5	219.6	73.2	2,379.0	118.4	569.8	243.9	89.7	7,781.4
1989	642.2	1,940.4	78.2	686.2	237.1	79.1	2,673.9	145.0	535.6	296.3	104.9	7,418.9
1990	813.5	2,269.3	100.2	698.6	262.9	87.6	2,906.5	142.2	543.6	354.5	126.4	8,305.3
1991	699.2	2,390.8	113.3	730.0	290.5	96.8	2,972.3	141.0	565.5	308.6	113.6	8,421.6
1992	754.9	2,781.9	135.4	788.4	326.8	108.9	3,223.7	146.8	623.3	275.8	110.0	9,275.9
1993	706.5	2,791.5	124.1	803.0	398.7	132.9	3,333.1	157.1	655.7	235.2	106.8	9,444.6
1994	627.3	2,764.7	120.6	909.8	478.4	159.5	3,662.4	160.7	660.5	208.7	101.0	9,853.6
1995	565.7	2,884.3	149.6	1,014.4	607.6	202.5	3,631.5	165.9	649.5	299.4	103.5	10,273.9
1996	538.6	3,244.0	106.3	1,100.6	796.0	265.3	3,665.7	153.8	698.5	416.3	122.1	11,107.2
1997	597.7	3,023.6	155.2	1,212.9	1,058.6	352.9	4,139.6	151.6	694.4	483.2	117.8	11,987.5
1998	554.7	2,968.4	167.9	1,313.6	1,429.1	769.2	3,785.1	149.8	739.9	303.5	104.3	12,285.5
1999	647.5	3,090.0	198.6	1,361.8	1,965.0	1,003.4	3,796.1	155.8	735.5	384.1	124.5	13,462.3

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 2. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 1, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstkc	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	10.3	16.2	0.8	2.7	0.9	0.3	5.8	0.1	--	17.6	4.8	59.5
1959	9.8	14.4	1.1	2.3	1.0	0.3	6.4	0.1	--	20.7	4.7	60.8
1960	8.0	19.2	1.4	2.6	0.8	0.3	7.3	0.1	--	25.5	4.6	69.8
1961	10.0	10.5	1.1	2.5	1.0	0.3	7.6	0.2	--	26.5	4.6	64.3
1962	9.2	28.4	0.7	2.2	1.0	0.3	9.5	0.2	--	30.2	4.6	86.3
1963	10.1	36.2	0.8	2.4	1.2	0.4	9.8	0.1	--	32.7	4.5	98.2
1964	10.9	24.2	1.3	2.6	1.5	0.5	12.8	0.1	--	36.3	4.4	94.6
1965	13.2	26.6	1.4	2.6	1.8	0.6	11.0	--	--	37.6	4.6	99.4
1966	14.3	32.9	1.0	2.8	2.5	0.8	12.5	--	--	38.8	4.6	110.2
1967	14.8	28.2	1.1	3.1	3.0	1.0	12.0	--	--	33.4	4.6	101.2
1968	13.9	26.4	1.2	3.3	3.8	1.3	13.7	--	--	33.4	4.6	101.6
1969	13.8	40.0	1.5	5.4	4.2	1.4	21.0	--	--	28.2	4.7	120.2
1970	15.0	38.3	0.7	4.9	4.7	1.6	18.9	--	--	28.9	5.1	118.1
1971	17.9	34.0	0.7	5.4	5.2	1.7	23.0	--	--	31.3	5.7	124.9
1972	21.5	59.6	2.5	5.6	4.7	1.6	22.8	--	--	31.3	6.0	155.6
1973	26.8	115.2	0.3	8.0	5.2	1.7	25.6	--	--	33.2	6.8	222.8
1974	23.4	128.0	1.1	10.1	5.1	1.7	27.3	--	--	72.0	8.2	276.9
1975	24.0	85.0	0.9	10.2	6.2	2.1	31.0	--	--	72.1	9.0	240.5
1976	25.8	70.6	2.0	15.5	7.4	2.5	30.8	--	--	86.8	9.6	251.0
1977	26.4	50.6	2.7	13.5	7.9	2.6	36.0	--	--	97.9	10.3	247.9
1978	29.5	79.6	3.6	14.4	9.1	3.0	37.6	--	--	108.8	10.8	296.4
1979	41.1	70.6	2.4	17.3	8.1	2.7	111.1	--	--	148.1	15.0	416.4
1980	45.0	81.2	5.3	18.6	7.9	2.6	156.3	0.2	--	251.1	22.5	590.7
1981	31.0	104.5	3.7	20.4	8.8	2.9	221.0	0.1	--	515.3	39.4	947.1
1982	30.8	99.4	2.6	17.4	9.2	3.1	150.1	0.1	--	509.7	36.2	858.6
1983	34.7	109.5	3.6	17.8	10.8	3.6	119.0	0.1	--	573.0	33.7	905.8
1984	35.5	56.8	5.1	19.0	9.7	3.2	128.7	0.1	--	652.3	32.7	943.1
1985	34.2	51.6	4.7	19.3	10.5	3.5	112.2	0.3	--	638.3	30.4	905.0
1986	32.9	110.3	4.4	19.5	10.7	3.6	110.3	0.1	--	292.7	24.3	608.8
1987	38.7	100.4	3.8	20.2	11.4	3.8	109.8	0.1	--	360.6	26.3	675.1
1988	43.3	89.5	4.4	21.6	12.1	4.0	110.0	0.2	--	271.2	26.8	583.1
1989	32.5	64.9	3.6	22.7	13.0	4.3	122.0	0.1	--	319.5	31.7	614.3
1990	43.5	81.2	4.6	23.1	14.5	4.8	132.1	0.1	--	362.6	38.8	705.3
1991	38.3	97.2	5.2	24.2	16.0	5.3	131.8	0.1	--	290.8	34.7	643.6
1992	43.7	129.6	6.2	26.1	18.0	6.0	137.1	0.1	--	259.8	33.4	660.0
1993	37.7	184.9	5.7	26.6	21.9	7.3	139.5	0.1	--	224.2	32.5	680.4
1994	32.3	150.4	5.6	30.1	26.3	8.8	149.6	0.1	--	193.5	30.3	627.0
1995	26.7	154.5	6.9	33.6	33.4	11.1	150.1	0.1	--	195.5	30.9	642.8
1996	27.5	149.4	4.9	36.4	43.8	14.6	154.1	0.1	--	216.2	37.0	684.0
1997	32.8	139.8	7.1	40.2	58.2	19.4	163.9	0.1	--	190.2	35.2	686.9
1998	27.7	129.5	7.7	43.5	78.6	28.7	148.7	0.1	--	117.6	30.9	613.0
1999	38.2	154.8	9.1	45.1	108.1	46.0	156.4	0.1	--	152.6	37.5	747.9

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 3. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 2, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	24.2	46.9	2.2	7.8	2.5	0.9	31.3	--	--	7.3	--	123.1
1959	22.9	50.1	3.3	7.4	2.8	0.9	29.1	--	--	12.5	--	129.0
1960	18.8	53.0	3.9	8.8	2.3	0.8	33.0	--	--	16.8	--	137.4
1961	23.3	23.2	2.9	9.3	2.7	0.9	39.1	--	--	20.9	--	122.3
1962	21.5	85.4	2.0	8.9	2.9	1.0	78.9	--	--	21.7	--	222.3
1963	22.4	89.0	2.1	10.6	3.4	1.1	69.7	--	--	21.6	--	219.9
1964	23.3	74.7	3.6	11.3	4.0	1.4	124.1	--	--	24.0	--	266.4
1965	27.2	78.2	3.7	11.3	5.1	1.7	71.0	--	--	25.4	--	223.6
1966	28.4	95.8	2.8	12.1	6.9	2.3	91.8	--	--	23.6	--	263.7
1967	29.9	65.6	2.9	13.5	8.4	2.8	68.8	--	--	21.5	--	213.4
1968	26.2	72.5	3.2	14.7	10.7	3.6	89.0	--	--	21.5	--	241.4
1969	26.0	95.8	2.1	23.3	11.7	3.9	102.6	--	--	20.0	--	285.4
1970	28.1	94.2	2.9	21.3	13.2	4.4	129.5	--	--	21.5	--	315.1
1971	35.5	91.7	5.0	23.3	14.4	4.8	131.4	--	--	24.4	--	330.5
1972	39.7	133.6	4.2	24.5	13.3	4.4	120.4	--	--	25.8	--	365.9
1973	49.2	311.3	7.0	34.9	14.6	4.9	146.7	--	--	25.6	--	594.2
1974	45.2	300.8	5.7	43.8	14.3	4.8	178.0	--	--	47.9	--	640.5
1975	46.9	206.6	5.4	44.1	17.3	5.8	297.3	--	--	46.5	--	669.9
1976	52.9	153.6	1.8	67.2	20.7	6.9	198.3	--	--	54.9	--	556.3
1977	54.3	131.9	11.4	58.7	21.1	7.4	213.1	--	--	51.0	--	548.9
1978	59.0	208.7	17.1	62.7	25.4	8.5	226.4	--	--	49.3	--	657.1
1979	74.8	177.4	15.3	75.3	22.7	7.6	285.5	--	--	62.1	--	720.7
1980	80.4	221.4	12.4	80.8	22.3	7.5	349.7	--	--	100.1	--	874.6
1981	63.2	317.2	13.1	88.6	24.7	8.3	433.2	--	--	194.0	--	1,142.3
1982	62.6	306.8	9.3	75.7	25.7	8.6	340.4	--	--	188.8	--	1,017.9
1983	70.5	323.9	13.2	77.2	30.3	10.1	386.9	--	--	176.7	--	1,088.8
1984	72.4	258.8	18.5	82.3	27.2	9.1	425.6	--	--	176.8	--	1,070.7
1985	71.2	339.1	17.0	84.0	29.3	9.7	431.3	--	--	156.5	--	1,138.1
1986	67.9	308.6	16.1	84.5	29.9	9.9	444.9	--	--	74.3	--	1,036.1
1987	79.9	215.0	13.5	87.8	31.9	10.6	452.2	--	--	90.4	--	981.3
1988	87.6	276.4	15.7	94.0	33.8	11.3	470.4	--	--	91.0	--	1,080.2
1989	63.8	209.2	13.0	98.7	36.5	12.2	531.5	--	--	120.6	--	1,085.5
1990	87.3	281.7	16.6	100.5	40.5	13.5	581.5	--	--	157.1	--	1,278.7
1991	73.1	271.2	18.8	105.0	44.7	14.9	589.6	--	--	118.7	--	1,236.0
1992	76.2	337.9	22.5	113.4	50.3	16.8	634.0	--	--	100.1	--	1,351.2
1993	66.7	473.7	20.6	115.5	61.4	20.5	652.4	--	--	79.5	--	1,490.3
1994	59.3	422.4	20.0	130.8	73.7	24.6	713.7	--	--	69.8	--	1,514.3
1995	58.1	417.2	24.8	145.9	93.6	31.2	710.6	--	--	79.2	--	1,560.6
1996	54.0	421.9	17.7	158.3	122.6	40.9	718.4	--	--	95.2	--	1,629.0
1997	61.1	384.0	25.8	174.4	163.0	54.4	803.8	--	--	90.7	--	1,757.2
1998	59.3	359.9	27.9	188.9	220.1	126.9	734.2	--	--	56.9	--	1,774.1
1999	74.5	257.9	33.0	195.8	302.6	181.0	739.8	--	--	72.2	--	1,856.8

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 4. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 3, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	16.6	58.5	1.8	3.3	1.4	0.5	11.5	--	--	--	--	93.6
1959	16.0	58.2	2.7	2.8	1.6	0.5	13.3	--	--	--	--	95.1
1960	13.1	42.4	3.3	3.0	1.3	0.4	15.2	--	--	--	--	78.7
1961	16.0	46.9	2.4	2.9	1.5	0.5	15.4	--	--	--	--	85.6
1962	15.1	75.3	1.7	2.5	1.6	0.5	16.1	--	--	--	--	112.8
1963	15.3	75.1	1.7	2.7	1.9	0.6	17.7	--	--	--	--	115.0
1964	14.8	65.8	3.0	2.9	2.3	0.8	19.9	--	--	--	--	109.5
1965	17.1	66.7	3.1	2.9	2.8	0.9	20.7	--	--	--	--	114.2
1966	17.4	75.8	2.3	3.1	3.9	1.3	22.5	--	--	--	--	126.3
1967	17.9	77.9	2.4	3.4	4.7	1.6	23.6	--	--	--	--	131.5
1968	16.3	78.7	2.7	3.7	6.0	2.0	25.6	--	--	--	--	135.0
1969	15.9	81.0	0.9	6.0	6.5	2.2	33.8	--	--	--	--	146.3
1970	16.1	78.8	0.9	5.5	7.4	2.5	47.0	--	--	--	--	158.2
1971	17.6	85.1	4.3	6.0	8.1	2.7	48.1	--	--	--	--	171.9
1972	21.1	114.6	5.2	6.3	7.4	2.5	61.5	--	--	--	--	218.6
1973	25.9	221.2	6.2	9.0	8.2	2.7	58.6	--	--	--	--	331.8
1974	24.2	229.1	4.2	11.3	8.0	2.7	81.8	--	--	--	--	361.3
1975	24.8	216.7	5.1	11.3	9.7	3.2	97.3	--	--	--	--	368.1
1976	25.7	151.4	3.7	17.3	11.5	3.8	113.2	--	--	--	--	326.6
1977	24.8	138.9	2.4	15.1	12.3	4.1	114.1	--	--	--	--	311.7
1978	27.0	182.0	4.7	16.1	14.2	4.7	120.2	--	--	--	--	368.9
1979	34.8	228.2	3.4	19.4	12.7	4.2	120.2	--	--	--	--	422.9
1980	38.6	242.0	19.0	20.8	12.4	4.1	135.0	--	--	--	--	471.9
1981	30.1	298.0	6.6	22.8	13.8	4.6	139.5	--	--	--	--	515.4
1982	30.3	306.2	4.7	19.5	14.4	4.8	132.6	--	--	--	--	512.5
1983	33.3	299.5	6.7	19.9	16.9	5.6	182.1	--	--	--	--	564.0
1984	33.8	276.3	9.4	21.2	15.2	5.1	200.6	--	--	--	--	561.6
1985	33.7	332.9	8.6	21.6	16.3	5.4	214.8	--	--	--	--	633.3
1986	32.6	248.1	8.1	21.7	16.7	5.6	223.2	--	--	--	--	556.0
1987	38.4	268.3	6.8	22.6	17.8	5.9	227.9	--	--	--	--	587.7
1988	41.1	306.6	8.0	24.2	18.9	6.3	234.7	--	--	--	--	639.8
1989	31.8	241.9	6.5	25.4	20.4	6.8	263.8	--	--	--	--	596.6
1990	39.5	200.9	8.4	25.9	22.6	7.6	285.3	--	--	--	--	662.6
1991	34.1	298.2	9.5	27.0	25.0	8.3	292.7	--	--	--	--	694.8
1992	38.0	331.1	11.4	29.2	28.1	9.4	319.6	--	--	--	--	768.8
1993	35.9	246.8	10.4	29.7	34.3	11.4	331.6	--	--	--	--	700.1
1994	30.1	301.4	10.1	33.7	41.1	13.7	366.3	--	--	--	--	796.4
1995	27.8	297.6	12.6	37.5	52.2	17.4	361.5	--	--	--	--	806.6
1996	23.8	325.5	8.9	40.7	68.5	22.8	361.9	--	--	--	--	852.1
1997	26.3	292.1	13.0	44.9	91.1	30.4	412.2	--	--	--	--	910.0
1998	24.2	271.1	14.1	48.6	122.9	50.3	377.2	--	--	--	--	908.4
1999	27.3	252.3	16.7	50.4	169.0	70.7	374.8	--	--	--	--	961.2

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 5. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 4, MILLION DOLLARS (CURRENT DOLLARS), 1958-19978

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	11.7	70.4	3.1	6.0	2.3	0.8	36.7	--	--	--	--	131.0
1959	11.4	77.4	4.6	6.5	2.5	0.8	35.4	--	--	--	--	138.6
1960	9.6	72.0	5.5	8.7	2.1	0.7	40.1	--	--	--	--	138.7
1961	11.1	76.7	4.0	9.6	2.4	0.8	46.4	--	--	--	--	151.0
1962	10.5	60.2	2.8	10.0	2.6	0.9	86.4	--	--	--	--	173.4
1963	10.5	78.1	2.9	13.6	3.0	1.0	78.0	--	--	--	--	187.1
1964	10.2	68.7	5.1	14.6	3.6	1.2	133.1	--	--	--	--	236.5
1965	11.4	114.6	5.2	14.6	4.5	1.5	80.7	--	--	--	--	232.5
1966	11.7	96.9	3.9	15.7	6.2	2.1	102.3	--	--	--	--	238.8
1967	11.2	105.1	4.1	17.4	7.5	2.5	79.9	--	--	--	--	227.7
1968	9.9	97.9	4.5	18.9	10.0	3.2	101.1	--	--	--	--	245.5
1969	10.2	107.2	11.3	30.1	10.4	3.5	94.4	--	--	--	--	267.1
1970	8.7	133.3	150.8	27.5	11.7	4.0	107.6	--	--	--	--	443.6
1971	10.2	117.3	28.5	30.1	12.8	4.3	115.7	--	--	--	--	318.9
1972	12.6	171.2	41.2	31.6	11.8	4.0	130.8	--	--	--	--	403.2
1973	15.4	306.2	25.2	45.1	13.0	4.3	158.4	--	--	--	--	567.6
1974	16.4	380.7	41.4	56.6	12.7	4.3	160.9	--	--	--	--	673.0
1975	15.2	275.4	24.6	56.9	15.4	5.2	196.4	--	--	--	--	589.1
1976	18.1	215.4	14.2	86.7	18.4	6.2	274.0	--	--	--	--	633.0
1977	17.2	221.6	7.7	75.8	19.7	6.6	190.9	--	--	--	--	539.5
1978	19.0	271.5	4.0	80.9	22.6	7.6	206.6	--	--	--	--	612.2
1979	24.3	299.8	5.1	97.3	20.2	6.8	221.0	--	--	--	--	674.5
1980	37.5	344.3	12.1	104.4	19.8	6.7	269.5	--	--	--	--	794.3
1981	21.4	387.9	11.1	114.5	22.0	7.4	269.5	--	--	--	--	833.8
1982	21.4	376.1	7.9	97.8	22.9	7.7	256.2	--	--	--	--	790.0
1983	23.4	512.9	11.2	99.7	26.9	9.0	351.8	--	--	--	--	1,034.9
1984	22.6	432.1	15.7	106.3	24.2	8.1	387.6	--	--	--	--	996.6
1985	23.6	450.8	14.5	108.5	26.0	8.7	414.9	--	--	--	--	1,047.0
1986	23.7	465.5	13.7	109.1	26.5	8.9	431.3	--	--	--	--	1,078.7
1987	27.9	471.4	11.5	113.5	28.4	9.5	439.7	--	--	--	--	1,101.9
1988	26.5	646.7	13.4	121.4	30.1	10.0	449.6	--	--	--	--	1,297.7
1989	42.4	318.2	11.0	127.4	32.5	10.8	503.0	--	--	--	--	1,045.3
1990	23.8	428.2	14.1	129.7	36.0	12.0	543.0	--	--	--	--	1,186.8
1991	19.7	465.2	16.0	135.6	39.8	13.3	557.3	--	--	--	--	1,246.9
1992	22.3	525.5	19.1	146.4	44.8	14.9	609.1	--	--	--	--	1,382.1
1993	24.8	445.0	17.5	149.1	54.6	18.2	632.6	--	--	--	--	1,341.8
1994	19.0	452.3	17.0	168.9	65.5	21.8	699.5	--	--	--	--	1,444.0
1995	17.8	502.4	21.1	188.4	83.2	27.7	690.4	--	--	--	--	1,531.0
1996	18.3	520.6	15.0	204.4	109.0	36.3	691.1	--	--	--	--	1,594.7
1997	17.1	498.7	21.9	225.2	145.0	48.3	785.6	--	--	--	--	1,741.8
1998	15.0	557.6	23.7	243.9	195.8	73.9	718.1	--	--	--	--	1,828.0
1999	20.1	627.1	28.0	252.9	269.2	99.0	714.1	--	--	--	--	2,010.4

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 6. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 5, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	30.0	74.3	3.7	20.0	3.0	1.0	56.3	--	--	--	--	188.3
1959	31.0	74.6	5.5	17.9	3.3	1.1	50.8	--	--	--	--	184.2
1960	26.2	69.5	6.5	20.4	2.8	0.9	34.0	--	--	--	--	160.3
1961	30.8	90.2	4.8	20.6	3.2	1.1	68.5	--	--	--	--	219.2
1962	29.7	46.9	3.3	18.7	3.4	1.1	83.1	--	--	--	--	186.2
1963	29.4	87.6	3.4	21.1	4.0	1.3	85.4	--	--	--	--	232.2
1964	28.5	63.7	6.1	22.6	4.8	1.6	103.7	--	--	--	--	231.0
1965	32.6	90.4	6.2	22.6	6.0	2.0	93.5	--	--	--	--	253.3
1966	35.4	101.6	4.7	24.3	8.2	2.8	105.1	--	--	--	--	282.1
1967	36.0	98.9	4.9	27.0	10.1	3.3	103.1	--	--	--	--	283.3
1968	32.3	93.7	5.4	29.3	12.8	4.3	113.2	--	--	--	--	291.0
1969	33.1	104.0	8.1	46.8	13.9	4.6	105.6	--	--	--	--	316.1
1970	33.2	112.7	11.5	42.8	15.7	5.2	100.6	--	--	--	--	321.7
1971	36.0	120.7	12.0	46.8	17.2	5.7	108.5	--	--	--	--	346.9
1972	44.2	175.9	10.9	49.1	15.8	5.3	117.8	--	--	--	--	419.0
1973	57.0	358.4	18.2	70.2	17.3	5.8	114.2	--	--	--	--	641.1
1974	61.8	393.0	12.3	88.0	17.0	5.7	119.3	--	--	--	--	697.1
1975	55.0	241.3	28.0	88.6	20.6	6.9	142.1	--	--	--	--	582.5
1976	58.0	228.9	3.1	134.9	24.5	8.2	154.1	--	--	--	--	611.7
1977	52.4	297.9	7.0	117.9	26.3	8.8	164.6	--	--	--	--	674.9
1978	58.1	357.7	10.3	125.9	30.2	10.1	194.8	--	--	--	--	787.1
1979	67.0	377.9	10.3	151.3	27.0	9.0	194.0	--	--	--	--	836.5
1980	73.8	419.2	16.4	162.4	26.4	8.9	226.9	--	--	--	--	934.0
1981	57.5	470.4	10.2	178.0	29.4	9.8	215.3	--	--	--	--	970.6
1982	57.6	436.9	7.2	152.1	30.6	10.2	204.7	--	--	--	--	899.3
1983	58.7	554.1	10.3	155.1	35.9	12.0	281.0	--	--	--	--	1,107.1
1984	61.7	495.5	14.4	165.3	32.4	10.8	309.7	--	--	--	--	1,089.8
1985	61.4	581.2	13.2	168.8	34.8	11.6	331.5	--	--	--	--	1,202.5
1986	62.4	483.4	12.5	169.8	35.5	11.8	344.6	--	--	--	--	1,120.0
1987	73.4	519.6	10.5	176.4	37.9	12.7	350.8	--	--	--	--	1,181.3
1988	68.2	650.7	12.2	188.7	40.2	13.4	356.0	--	--	--	--	1,329.4
1989	51.9	493.1	10.1	198.2	43.4	14.5	398.4	--	--	--	--	1,209.6
1990	65.6	551.4	12.9	201.8	48.1	16.0	432.1	--	--	--	--	1,327.9
1991	56.4	567.1	14.6	210.8	53.2	17.7	443.6	--	--	--	--	1,363.4
1992	62.7	583.4	17.4	227.7	59.8	19.9	484.9	--	--	--	--	1,455.8
1993	56.1	490.4	16.0	231.9	73.0	24.3	503.7	--	--	--	--	1,395.4
1994	52.8	571.6	15.6	262.8	87.6	29.2	557.2	--	--	--	--	1,576.8
1995	48.7	592.8	19.3	292.9	111.2	37.1	549.9	--	--	--	--	1,651.9
1996	49.6	744.4	13.7	317.9	145.7	48.6	550.5	--	--	--	--	1,870.4
1997	52.0	736.4	20.0	350.3	193.7	64.6	626.7	--	--	--	--	2,043.7
1998	50.1	662.5	21.7	397.4	261.5	220.9	572.8	--	--	--	--	2,186.9
1999	55.3	844.1	25.6	393.3	359.6	266.7	569.6	--	--	--	--	2,514.2

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 7. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 6, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	45.8	83.1	2.4	8.5	2.4	0.8	14.9	--	--	--	--	157.9
1959	45.4	64.7	3.5	7.2	2.6	0.9	17.3	--	--	--	--	141.6
1960	36.8	68.1	4.2	7.8	2.2	0.7	19.7	--	--	--	--	139.5
1961	44.4	61.9	3.1	7.3	2.5	0.8	19.9	--	--	--	--	139.9
1962	42.6	83.3	2.1	6.2	2.7	0.9	21.1	--	--	--	--	158.9
1963	44.6	79.0	2.2	6.5	3.1	1.0	23.1	--	--	--	--	159.5
1964	46.1	71.7	3.9	6.9	3.8	1.3	26.3	--	--	--	--	160.0
1965	52.9	81.9	4.0	6.9	4.7	1.6	27.0	--	--	--	--	179.0
1966	57.5	93.3	3.0	7.5	6.4	2.2	29.4	--	--	--	--	199.3
1967	59.3	89.1	3.2	8.3	7.8	2.6	30.6	--	--	--	--	200.9
1968	55.3	104.3	3.5	9.0	10.0	3.3	33.6	--	--	--	--	219.0
1969	54.9	110.1	2.7	14.4	10.8	3.6	44.6	--	--	--	--	241.1
1970	56.3	107.9	8.7	13.2	12.2	4.1	51.2	--	--	--	--	253.6
1971	60.7	118.1	1.9	14.4	13.4	4.5	58.1	--	--	--	--	271.1
1972	75.7	158.5	2.7	15.1	12.3	4.1	58.9	--	--	--	--	327.3
1973	95.2	221.3	2.3	21.6	13.5	4.6	65.5	--	--	--	--	424.0
1974	86.9	322.6	1.5	27.1	13.2	4.4	68.1	--	--	--	--	523.8
1975	91.9	277.9	3.7	27.2	16.1	5.3	77.7	--	--	--	--	499.8
1976	102.0	184.9	6.7	41.5	19.2	6.4	85.1	--	--	--	--	445.8
1977	99.0	204.7	4.2	36.2	20.5	6.8	95.0	--	--	--	--	466.4
1978	110.4	286.7	5.4	38.7	23.6	7.8	106.7	--	--	--	--	579.3
1979	145.5	320.0	7.6	46.5	21.1	7.0	107.8	--	--	--	--	655.5
1980	138.0	278.8	6.8	49.9	20.7	6.8	130.7	--	--	--	--	631.7
1981	127.2	448.1	7.4	54.7	22.9	7.6	120.5	--	--	--	--	788.4
1982	130.0	444.4	5.3	46.7	23.9	7.9	114.6	--	--	--	--	772.8
1983	140.0	442.8	7.6	47.7	28.1	9.3	157.3	--	--	--	--	832.8
1984	143.6	445.9	10.6	50.8	25.3	8.4	173.3	--	--	--	--	857.9
1985	146.7	442.0	9.7	51.9	27.2	9.1	185.6	--	--	--	--	872.2
1986	142.0	375.7	9.2	52.2	27.7	9.2	192.9	--	--	--	--	808.9
1987	167.0	378.0	7.7	54.2	29.6	9.9	198.6	--	--	--	--	845.0
1988	173.5	372.0	9.0	58.0	31.4	10.5	206.8	--	--	--	--	861.2
1989	139.2	313.9	7.4	60.9	33.9	11.3	235.6	--	--	--	--	802.2
1990	169.3	453.9	9.5	62.0	37.6	12.5	259.2	--	--	--	--	1,004.0
1991	149.3	442.8	10.7	64.8	41.5	13.8	265.6	--	--	--	--	988.5
1992	157.1	503.4	12.8	70.0	46.7	15.6	288.7	--	--	--	--	1,094.3
1993	150.9	468.4	11.7	71.3	57.0	19.0	299.2	--	--	--	--	1,077.5
1994	134.0	479.5	11.3	80.8	68.4	22.8	329.1	--	--	--	--	1,125.9
1995	116.6	484.0	14.0	90.1	86.9	29.0	325.0	--	--	--	--	1,145.6
1996	107.2	594.4	10.0	97.7	113.8	37.9	325.3	--	--	--	--	1,286.3
1997	117.7	519.9	14.6	107.7	151.4	50.4	371.3	--	--	--	--	1,333.0
1998	105.1	540.3	15.8	116.7	204.4	83.3	341.1	--	--	--	--	1,406.7
1999	118.6	492.3	18.7	120.9	281.0	110.5	338.4	--	--	--	--	1,480.4

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 8. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 7, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	54.3	50.2	3.4	11.7	2.8	0.9	24.3	0.6	--	--	38.8	187.0
1959	53.3	31.0	5.1	10.3	3.0	1.0	27.0	0.5	--	--	38.2	169.4
1960	41.6	40.7	6.0	11.6	2.5	0.8	30.7	0.6	--	--	37.1	171.6
1961	52.5	14.1	4.5	11.6	2.9	1.0	32.1	0.8	--	--	37.4	156.9
1962	47.4	63.7	3.0	10.5	3.2	1.1	40.3	0.9	--	--	37.2	207.3
1963	50.7	54.9	3.2	11.7	3.7	1.2	41.3	0.8	--	--	37.1	204.6
1964	53.2	52.5	5.6	12.6	4.4	1.5	54.5	1.1	--	--	37.9	223.3
1965	62.2	60.7	5.7	12.6	5.5	1.8	46.4	1.3	--	--	40.0	236.2
1966	71.6	66.5	4.3	13.5	7.6	2.5	53.1	1.2	4.4	--	42.0	266.7
1967	73.5	54.6	4.5	15.0	9.2	3.1	50.7	1.8	8.4	--	43.9	264.7
1968	72.0	61.0	5.0	16.3	11.7	3.9	57.9	2.1	12.3	--	44.2	286.4
1969	72.5	67.0	6.4	25.9	12.8	4.3	77.3	2.2	11.7	--	44.8	324.9
1970	76.2	63.4	4.7	23.7	14.5	4.8	83.8	2.9	13.8	--	45.7	333.5
1971	83.1	64.3	4.2	25.9	15.8	5.3	97.3	3.2	17.5	--	47.3	363.9
1972	103.4	96.7	4.8	27.2	14.6	4.9	113.1	2.9	21.4	--	50.2	439.2
1973	131.7	148.4	2.1	38.9	16.0	5.3	130.5	3.7	19.3	--	56.8	552.7
1974	119.7	156.9	4.4	48.7	15.6	5.2	141.4	4.4	22.4	--	67.3	586.0
1975	121.7	161.3	13.7	49.0	19.0	6.3	169.2	5.1	20.6	--	74.2	640.1
1976	139.4	106.1	10.9	74.7	22.7	7.5	173.8	8.2	38.6	--	80.4	662.3
1977	133.7	73.5	14.0	65.2	24.3	8.0	219.5	9.8	46.3	--	87.0	681.3
1978	146.8	139.5	13.7	69.7	27.9	9.2	215.4	13.1	65.4	--	93.5	794.2
1979	196.2	134.2	31.4	83.8	24.9	8.3	278.0	19.5	91.6	--	143.8	1,011.7
1980	243.9	93.1	33.6	89.9	24.4	8.1	331.2	30.5	120.1	--	228.8	1,203.6
1981	172.6	211.7	22.6	98.5	27.1	9.0	396.6	36.7	140.8	--	406.6	1,522.2
1982	182.4	216.6	16.1	84.2	28.3	9.3	320.8	41.2	162.0	--	374.0	1,434.9
1983	199.8	223.5	23.0	85.8	33.2	11.1	371.6	60.3	196.4	--	347.9	1,552.6
1984	210.1	209.5	32.1	91.6	29.9	9.9	425.6	75.5	226.3	--	337.4	1,647.9
1985	212.2	257.2	29.5	93.4	32.1	10.7	418.8	112.9	261.5	--	313.9	1,742.2
1986	203.4	211.0	27.9	94.0	32.8	10.9	430.0	109.5	261.3	--	251.1	1,631.9
1987	239.3	185.9	23.5	97.7	35.0	11.7	435.8	103.6	498.6	--	271.1	1,902.2
1988	266.5	94.9	27.3	104.5	37.1	12.4	446.6	108.2	569.8	--	276.6	1,943.9
1989	180.0	111.7	22.5	109.7	40.1	13.4	499.2	127.2	535.6	--	323.2	1,962.6
1990	251.5	126.2	28.9	111.7	44.4	14.8	540.9	123.4	543.6	--	389.0	2,174.4
1991	214.2	155.6	32.6	116.7	49.1	16.4	555.7	119.1	565.5	--	349.6	2,174.5
1992	230.1	222.4	39.0	126.0	55.2	18.4	603.8	127.7	623.3	--	338.8	2,384.7
1993	218.3	286.0	35.7	128.4	67.4	22.5	623.0	136.8	655.7	--	328.9	2,502.7
1994	194.1	242.8	34.7	145.5	80.9	27.0	682.8	138.9	660.5	--	311.4	2,518.6
1995	173.3	263.0	43.1	162.2	102.7	34.2	679.8	145.2	649.5	--	319.4	2,572.4
1996	162.8	297.0	30.6	176.0	134.5	44.8	695.2	151.4	698.5	--	376.1	2,766.9
1997	187.8	280.5	44.7	193.9	178.9	59.6	786.1	151.5	694.4	--	363.2	2,940.6
1998	175.7	288.5	48.3	210.0	241.5	138.9	718.5	149.7	739.9	--	321.8	3,032.8
1999	202.2	299.3	57.2	217.7	332.1	169.9	725.9	155.4	735.5	--	383.7	3,278.9

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 9. SALES FOR FINAL DEMAND, BY ECONOMIC SECTOR, NORTH DAKOTA REGION 8, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(4) Constr	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(10) Bus & Pers Serv	(12) Households	(14) Coal Mining	(15) Coal Conversion	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	27.4	40.7	1.0	2.6	1.2	0.4	6.2	0.3	--	0.8	--	80.6
1959	27.5	24.5	1.5	2.6	1.3	0.4	7.2	0.3	--	0.7	--	66.0
1960	21.3	26.0	1.8	3.2	1.1	0.4	8.2	0.3	--	1.2	--	63.5
1961	25.8	18.2	1.3	3.6	1.3	0.4	8.3	0.3	--	2.3	--	61.5
1962	23.3	33.6	0.9	3.7	1.4	0.5	8.7	0.4	--	3.6	--	76.1
1963	24.7	43.2	0.9	4.6	1.6	0.5	9.5	0.3	--	4.1	--	89.4
1964	26.3	29.9	1.6	4.9	1.9	0.6	10.7	0.3	--	4.0	--	80.2
1965	30.9	35.4	1.7	4.9	2.4	0.8	11.2	0.2	--	5.4	--	92.9
1966	35.2	46.6	1.3	5.3	3.3	1.1	12.1	0.2	--	8.2	--	113.3
1967	38.3	49.0	1.3	4.0	4.0	1.3	12.1	0.2	--	11.0	--	121.2
1968	38.3	36.0	1.5	6.4	5.1	1.7	13.9	0.3	--	16.9	--	120.1
1969	38.6	36.7	2.2	10.2	5.5	1.8	22.3	0.2	--	14.5	--	132.0
1970	38.9	42.4	2.0	9.3	6.2	2.1	29.3	0.3	--	16.9	--	147.4
1971	43.7	42.5	4.1	10.2	6.8	2.3	23.1	0.3	--	14.7	--	147.7
1972	58.2	64.9	1.4	10.7	6.3	2.1	23.9	0.4	--	15.0	--	182.9
1973	74.7	113.6	0.4	15.3	6.9	2.3	27.2	0.4	--	18.1	--	258.9
1974	70.9	161.0	1.8	19.2	6.8	2.3	29.2	0.5	--	37.6	--	329.3
1975	73.3	91.6	1.8	19.3	8.2	2.7	35.7	2.0	--	45.1	--	279.7
1976	62.4	83.4	2.5	29.4	9.8	3.3	37.4	7.8	--	55.6	--	291.6
1977	75.5	59.5	2.3	25.7	10.5	3.5	43.5	8.4	--	66.4	--	295.3
1978	79.6	89.5	7.0	27.4	12.0	4.0	50.1	8.9	--	80.2	--	358.7
1979	110.4	84.5	2.5	32.9	10.8	3.6	64.3	12.7	--	160.8	--	482.5
1980	124.2	41.6	2.5	35.4	10.6	3.5	88.1	17.6	--	375.3	--	698.8
1981	91.0	101.7	4.1	38.8	11.7	3.9	100.9	17.7	--	890.3	--	1,260.1
1982	89.4	119.6	2.9	33.1	12.2	4.1	78.8	16.5	--	820.8	--	1,177.4
1983	102.3	141.0	4.1	33.8	14.3	4.8	86.8	16.3	--	746.9	--	1,150.3
1984	110.6	142.2	5.8	36.0	12.9	4.3	95.9	20.7	--	651.6	--	1,080.0
1985	115.3	131.4	5.3	36.8	13.9	4.6	96.2	23.7	--	555.3	--	982.5
1986	110.9	120.8	5.0	37.0	14.1	4.7	98.3	17.9	--	249.4	--	658.1
1987	130.4	119.8	4.2	38.4	15.1	5.0	100.1	16.5	--	272.9	--	702.4
1988	143.5	53.3	4.9	41.1	16.0	5.3	104.9	10.0	--	192.7	--	571.7
1989	100.6	187.5	4.1	43.2	17.3	5.8	120.4	17.7	--	212.0	--	708.6
1990	133.0	73.4	5.2	43.9	19.2	6.4	132.4	18.7	--	259.7	--	691.9
1991	114.1	93.5	5.9	45.9	21.2	7.1	136.0	21.8	--	236.3	--	681.8
1992	124.8	146.6	7.0	49.6	23.9	7.9	146.5	19.0	--	217.7	--	743.0
1993	116.1	196.3	6.5	50.5	29.1	9.7	151.1	20.2	--	186.7	--	766.2
1994	105.7	144.3	6.3	57.2	34.9	11.6	164.2	21.7	--	162.9	--	708.8
1995	96.7	172.8	7.8	63.8	44.4	14.8	164.2	20.6	--	223.0	--	808.1
1996	95.4	190.8	5.5	69.2	58.1	19.4	169.2	2.3	--	350.0	--	959.9
1997	102.9	172.2	8.1	76.3	77.3	25.8	190.0	--	--	421.3	--	1,073.9
1998	97.6	159.0	8.7	82.6	104.3	46.3	174.5	--	--	269.3	--	942.3
1999	111.3	162.2	10.3	85.7	143.4	59.6	177.1	0.3	--	340.4	--	1,090.3

(Note: 1998-1999 Bus & Pers Serv Sector includes exportable services component)

APPENDIX TABLE 10. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	Thermal-	(15)	(17)	Total
	Ag Lvstck	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	Households	Govt	Coal Mining	Electric Generation	(16) Pet Exp/Ext	Pet Refining	
1958	327.2	614.1	7.0	93.6	11.6	85.1	315.3	725.8	151.0	63.9	67.5	1,022.4	91.7	1.1	--	16.8	13.1	3,607.2
1959	319.5	560.0	6.9	99.4	11.2	81.5	296.9	689.8	143.2	61.2	64.6	978.4	87.2	1.0	--	22.7	12.9	3,436.4
1960	270.4	545.0	6.8	102.7	10.7	78.4	288.2	662.0	137.9	58.2	62.1	942.5	83.8	1.0	--	26.3	12.5	3,288.5
1961	316.7	508.7	6.8	97.9	11.3	83.2	306.8	687.8	143.7	60.8	66.5	1,011.5	88.2	1.3	--	33.5	12.6	3,437.3
1962	315.7	650.1	8.0	109.3	13.5	103.8	316.1	863.5	181.1	75.8	84.2	1,285.8	110.6	1.5	--	35.4	12.5	4,166.9
1963	332.7	732.5	8.5	115.8	14.4	110.2	349.5	926.9	193.6	81.8	88.8	1,353.9	117.8	1.3	--	36.0	12.5	4,476.2
1964	344.5	642.2	9.3	137.2	15.2	120.7	354.1	984.1	206.7	87.3	99.2	1,521.2	127.3	1.5	--	39.0	12.7	4,702.2
1965	386.2	765.4	9.6	138.2	15.9	120.2	385.6	1,010.6	209.2	91.4	96.5	1,470.1	127.8	1.5	--	41.9	13.4	4,883.5
1966	426.1	840.9	10.4	143.6	17.7	135.5	421.9	1,141.0	235.2	105.2	109.0	1,662.4	143.7	2.0	4.4	44.3	14.1	5,457.4
1967	433.6	803.9	10.1	138.9	17.2	129.5	432.6	1,098.6	224.1	104.1	103.4	1,573.0	137.1	3.4	8.4	42.9	14.7	5,275.5
1968	421.9	808.5	10.6	148.9	18.1	138.0	444.5	1,169.1	236.7	113.7	110.5	1,684.5	145.1	4.4	12.3	50.0	14.9	5,531.7
1969	444.3	927.7	12.0	171.2	20.3	154.9	564.3	1,315.0	266.7	127.4	124.0	1,891.0	163.2	4.3	11.7	41.2	15.1	6,254.3
1970	463.6	957.7	17.1	334.6	22.9	174.1	555.7	1,460.7	295.7	141.0	138.7	2,117.3	181.3	5.4	13.8	46.0	15.4	6,941.0
1971	504.7	982.2	14.0	214.8	22.9	176.0	598.6	1,485.4	300.3	145.7	141.2	2,156.6	184.4	6.3	17.5	49.5	16.1	7,016.2
1972	618.8	1,345.8	17.3	261.2	28.0	213.4	704.2	1,814.2	371.0	171.1	170.8	2,601.4	226.1	6.7	21.4	52.1	17.1	8,640.6
1973	822.2	2,330.9	24.4	334.2	40.5	305.3	1,023.9	2,662.2	546.4	244.0	242.1	3,674.7	328.7	7.2	19.3	58.2	19.4	12,683.6
1974	828.6	2,664.6	27.4	381.2	45.6	341.7	1,164.4	2,974.8	612.8	269.9	270.3	4,104.7	367.7	8.5	22.4	102.5	22.9	14,210.0
1975	813.0	2,110.9	25.7	375.7	42.7	327.5	1,098.2	2,773.5	570.7	257.0	262.8	4,009.8	347.0	10.4	20.6	113.5	25.3	13,184.3
1976	857.0	1,834.5	23.7	325.3	41.7	316.5	1,340.8	2,641.1	541.5	251.4	253.0	3,861.0	331.7	22.1	38.6	133.6	27.7	12,841.2
1977	845.5	1,779.7	23.6	329.6	41.2	313.4	1,236.6	2,618.3	535.1	251.6	250.9	3,829.5	328.0	25.6	46.3	136.8	30.0	12,621.7
1978	949.1	2,296.5	28.1	394.3	48.6	369.0	1,388.3	3,126.8	638.3	299.3	294.1	4,481.3	388.7	32.4	65.4	145.5	31.8	14,977.5
1979	1,186.9	2,510.2	32.6	461.2	56.9	426.4	1,660.4	3,533.3	731.9	328.0	340.3	5,187.2	447.3	46.8	91.6	240.4	48.4	17,329.8
1980	1,328.7	2,612.5	37.7	561.7	67.0	488.7	1,800.8	3,937.0	822.6	359.7	388.5	5,930.5	505.3	67.4	120.1	513.8	76.3	19,618.3
1981	1,185.7	3,259.0	43.8	660.5	85.0	581.4	1,904.1	4,626.5	965.3	421.0	451.7	6,899.5	591.0	77.1	140.8	1,179.6	134.2	23,206.2
1982	1,157.1	3,160.3	40.3	589.1	78.6	535.1	1,736.6	4,313.0	895.5	397.2	413.8	6,305.3	546.3	83.7	162.0	1,044.0	123.9	21,581.8
1983	1,279.6	3,530.5	45.4	667.6	85.6	604.7	1,856.0	4,909.0	1,019.5	453.7	473.5	7,223.2	621.5	108.0	196.4	955.7	116.1	24,146.0
1984	1,309.9	3,253.6	45.7	693.3	84.2	605.6	1,897.5	4,847.3	1,015.3	442.9	478.8	7,313.8	621.2	132.3	226.3	884.3	113.3	23,965.3
1985	1,349.3	3,562.2	47.5	704.4	86.8	636.7	1,973.7	5,152.7	1,078.3	471.8	505.4	7,713.5	657.6	178.5	261.5	764.1	106.8	25,250.8
1986	1,301.3	3,268.0	44.2	641.3	77.6	601.4	1,923.5	4,910.9	1,028.2	453.0	486.0	7,425.9	627.4	168.9	261.3	373.5	86.2	23,678.6
1987	1,454.5	3,268.0	45.4	647.4	81.4	624.2	2,042.0	5,058.5	1,069.8	468.6	503.2	7,672.1	650.7	199.2	498.6	430.4	95.0	24,809.0
1988	1,552.8	3,574.2	48.3	686.5	85.3	659.3	2,193.1	5,384.1	1,139.5	498.9	532.0	8,104.6	691.1	208.6	569.8	348.5	97.5	26,374.1
1989	1,288.7	2,921.9	44.6	647.6	80.4	632.4	2,055.2	5,063.5	1,071.2	476.2	514.5	7,868.1	654.5	229.8	535.6	418.7	112.8	24,615.7
1990	1,547.4	3,366.1	51.0	746.0	91.6	714.5	2,242.9	5,733.7	1,210.1	537.6	580.3	8,875.2	740.1	228.3	543.6	500.4	134.3	27,843.1
1991	1,428.4	3,476.0	51.5	759.8	91.3	718.9	2,255.0	5,818.2	1,222.7	552.0	584.0	8,930.9	745.9	230.6	565.5	439.6	121.7	27,992.0
1992	1,559.6	3,973.0	57.2	844.4	100.1	793.0	2,468.9	6,468.1	1,356.7	614.9	644.6	9,854.5	826.0	245.5	623.3	401.2	118.8	30,949.8
1993	1,519.5	3,980.4	57.4	841.0	101.0	807.6	2,479.1	6,633.3	1,379.3	646.9	656.6	10,039.5	840.0	260.9	655.7	354.3	116.1	31,368.6
1994	1,472.2	4,000.9	59.2	866.8	104.6	846.7	2,633.4	6,974.8	1,438.9	695.2	690.3	10,569.1	878.2	265.3	660.5	320.5	110.4	32,587.0
1995	1,440.5	4,179.8	61.8	923.4	109.9	873.8	2,805.9	7,281.9	1,475.7	753.1	704.9	10,783.7	900.8	268.8	649.5	422.2	112.9	33,748.6
1996	1,475.0	4,627.2	64.8	939.0	119.7	933.7	3,013.3	7,914.8	1,572.1	853.6	744.3	11,372.0	958.5	264.5	698.5	566.2	131.8	36,249.0
1997	1,611.9	4,505.8	69.9	1,047.7	129.4	1,008.7	3,241.9	8,602.8	1,669.3	975.6	801.5	12,260.8	1,024.5	261.6	694.4	636.0	127.4	38,669.2
1998	1,598.4	4,502.9	70.1	1,042.9	131.7	1,028.6	3,397.3	8,964.8	1,671.6	1,396.4	794.1	12,101.9	1,028.7	267.0	739.9	427.9	114.4	39,278.6
1999	1,789.2	4,725.4	75.7	1,138.2	145.7	1,113.5	3,585.8	9,987.5	1,777.2	1,671.9	842.0	12,807.8	1,098.3	272.3	735.5	533.2	134.6	42,433.8

APPENDIX TABLE 11. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 1, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(3) Nonmetallic Mining	(4) Const	(5) Trans	(6) Comm & Pub Util	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(9) FIRE	(10) Bus & Pers Service	(11) Prof & Soc Service	(12) House- holds	(13) Govt	(14) Coal Mining	(15) Thermal- Electric Generation	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	15.0	23.8	0.4	5.7	0.8	4.2	13.7	31.5	6.5	2.8	3.0	44.7	4.1	0.1	--	19.8	4.8	180.9
1959	14.3	21.4	0.4	6.2	0.8	4.2	12.5	30.7	6.3	2.7	2.9	44.3	4.0	0.1	--	23.2	4.7	178.7
1960	12.7	26.2	0.4	7.4	1.0	4.8	12.8	35.0	7.3	3.1	3.3	50.3	4.5	0.1	--	28.4	4.6	201.9
1961	14.5	17.5	0.4	6.7	0.9	4.4	12.4	29.8	6.2	2.6	2.9	44.6	3.9	0.2	--	29.5	4.6	181.1
1962	15.0	36.6	0.5	8.3	1.2	6.1	14.5	45.6	9.4	3.9	4.3	64.7	5.8	0.2	--	33.6	4.6	254.3
1963	16.8	45.6	0.6	9.4	1.3	7.1	16.6	53.6	11.1	4.7	4.9	74.7	6.8	0.1	--	36.3	4.5	294.1
1964	17.2	33.1	0.6	9.7	1.3	6.7	15.7	48.1	9.9	4.3	4.6	70.5	6.2	0.1	--	40.3	4.4	272.7
1965	20.1	36.6	0.6	10.2	1.4	7.0	17.3	51.0	10.5	4.6	4.8	73.0	6.5	--	--	41.7	4.6	289.9
1966	22.1	44.1	0.6	10.7	1.5	7.9	19.4	59.2	12.0	5.4	5.5	83.3	7.5	--	--	43.0	4.6	326.8
1967	22.3	39.3	0.6	9.8	1.4	7.3	19.4	55.3	11.1	5.3	5.1	77.4	6.9	--	--	37.1	4.6	302.9
1968	21.4	37.2	0.6	9.9	1.4	7.4	19.1	55.8	11.1	5.5	5.1	78.1	6.9	--	--	37.1	4.6	301.2
1969	23.1	53.5	0.7	11.5	1.5	9.2	25.2	73.2	14.7	7.1	6.8	102.9	9.1	--	--	31.4	4.7	374.6
1970	24.3	51.8	0.7	10.5	1.5	8.9	24.6	71.4	14.2	7.1	6.5	99.0	8.8	--	--	32.2	5.1	366.6
1971	27.9	48.7	0.7	11.1	1.6	9.5	26.7	74.4	14.8	7.4	6.9	105.7	9.2	--	--	34.9	5.7	385.2
1972	34.3	78.2	1.0	15.3	2.0	12.0	33.2	97.8	19.8	9.3	8.9	134.8	12.1	--	--	34.9	6.0	499.6
1973	45.6	142.6	1.4	18.4	2.8	17.7	49.5	150.5	30.6	13.7	13.2	199.8	18.4	--	--	37.1	6.8	748.1
1974	43.7	156.9	1.7	24.8	3.6	20.8	53.8	168.4	34.4	15.2	14.9	225.9	20.8	--	--	79.8	8.2	872.9
1975	41.4	110.4	1.4	21.6	3.2	17.8	47.6	138.3	28.0	12.9	12.6	191.6	17.2	--	--	80.0	9.0	733.0
1976	43.9	99.0	1.5	23.8	3.4	18.0	55.7	135.8	27.3	13.0	12.5	189.7	17.0	--	--	96.2	9.6	746.4
1977	43.3	76.3	1.4	24.7	3.4	17.5	49.7	125.7	25.2	12.2	12.0	181.8	15.9	--	--	108.5	10.3	707.9
1978	49.9	110.0	1.7	30.0	4.1	21.1	58.0	157.3	31.6	15.1	14.6	221.1	20.0	--	--	120.5	10.8	865.8
1979	69.2	108.7	2.3	39.9	5.6	31.3	71.6	220.2	45.9	19.9	22.9	352.5	29.1	--	--	164.1	15.0	1,198.2
1980	79.8	124.6	3.3	60.1	8.1	42.9	80.8	286.3	60.4	25.1	30.7	473.4	38.6	0.3	--	277.9	22.5	1,614.8
1981	73.7	149.1	4.8	95.9	13.6	64.2	85.0	394.5	83.6	33.9	43.3	668.7	54.1	0.3	--	569.6	39.4	2,373.7
1982	67.6	139.6	4.3	87.1	12.7	55.7	75.8	334.6	70.1	29.2	35.7	548.7	45.5	0.3	--	563.2	36.2	2,106.3
1983	72.3	152.0	4.6	93.7	13.8	57.0	79.8	336.8	69.9	29.7	35.0	536.2	45.4	0.3	--	632.4	33.7	2,192.6
1984	71.2	96.3	4.7	101.2	14.7	57.9	75.0	316.1	66.1	27.5	34.3	527.7	43.8	0.3	--	719.4	32.7	2,188.9
1985	68.0	89.9	4.5	97.2	14.2	54.9	73.1	297.2	61.8	26.2	32.0	491.8	41.1	0.5	--	703.8	30.4	2,086.6
1986	65.4	151.3	3.3	61.5	8.6	41.8	78.7	279.0	57.6	25.3	28.2	432.8	36.6	0.2	--	323.7	24.3	1,618.3
1987	72.9	143.7	3.6	68.4	9.8	45.0	82.3	288.4	59.5	26.2	29.4	451.1	38.2	0.2	--	398.5	26.3	1,743.5
1988	76.5	134.0	3.2	58.3	8.2	40.2	84.9	268.7	55.3	24.8	27.3	419.0	35.3	0.3	--	300.4	26.8	1,563.2
1989	63.5	104.2	3.2	61.6	8.8	41.0	77.6	260.7	53.6	24.2	27.3	419.4	34.7	0.2	--	353.9	31.7	1,565.6
1990	79.7	127.2	3.7	70.8	10.1	47.0	88.2	300.3	61.7	27.8	31.2	478.6	39.9	0.2	--	401.9	38.8	1,807.1
1991	73.8	143.0	3.4	64.1	8.9	44.4	89.1	299.0	61.1	28.2	30.4	467.0	39.0	0.2	--	322.6	34.7	1,708.9
1992	83.3	181.7	3.7	65.3	8.9	46.9	100.8	331.8	67.5	31.5	33.0	505.4	42.7	0.2	--	288.5	33.4	1,824.6
1993	80.4	240.1	3.8	65.1	8.9	49.8	107.1	373.4	75.3	36.1	35.8	547.3	46.9	0.2	--	249.3	32.5	1,952.0
1994	72.5	202.8	3.5	59.6	8.1	46.5	104.8	351.7	70.0	35.4	33.9	519.6	43.9	0.2	--	215.4	30.3	1,798.2
1995	67.6	207.6	3.6	61.8	8.2	47.5	108.8	364.6	71.3	38.2	34.4	527.2	44.6	0.2	--	217.6	30.9	1,834.1
1996	70.3	204.8	3.7	62.9	8.8	49.7	114.2	383.8	73.2	42.4	35.5	544.2	46.1	0.2	--	240.9	37.0	1,917.7
1997	78.5	199.5	3.7	63.7	8.6	50.8	123.3	405.9	75.1	47.9	36.6	560.8	47.3	0.2	--	212.2	35.2	1,949.3
1998	72.2	188.3	3.3	54.8	7.3	46.5	124.3	401.5	69.9	55.3	33.8	516.1	44.0	0.1	--	132.1	30.9	1,780.4
1999	91.5	222.8	4.0	65.9	9.1	55.9	139.6	488.9	82.3	77.5	39.5	601.6	52.0	0.2	--	171.2	37.5	2,139.5

APPENDIX TABLE 12. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 2, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	Total
	Ag Lvstck	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	Households	Govt	Coal Mining	Thermal-Electric Generation	Pet Exp/Ext	Pet Refining	
1958	36.9	66.8	0.9	12.1	1.5	10.8	36.6	89.2	18.6	8.0	8.6	130.6	11.4	--	--	8.0	--	440.0
1959	35.5	69.5	0.9	13.8	1.6	11.0	35.6	90.7	18.8	8.1	8.6	131.0	11.5	--	--	13.7	--	450.3
1960	31.3	72.1	0.9	15.2	1.7	11.6	36.4	94.3	19.7	8.4	9.1	138.2	12.0	--	--	18.4	--	469.3
1961	35.0	41.9	0.8	13.2	1.5	10.4	35.3	79.0	16.6	7.1	8.2	124.9	10.4	--	--	23.0	--	407.3
1962	40.3	109.9	1.4	20.7	2.6	19.6	45.3	157.8	33.3	13.7	15.9	244.4	20.4	--	--	23.8	--	749.1
1963	41.4	115.0	1.4	20.5	2.6	19.2	49.0	156.2	32.8	13.7	15.4	236.1	20.0	--	--	23.7	--	747.0
1964	45.3	101.7	1.7	26.3	3.0	24.2	50.8	188.1	40.1	16.5	20.1	310.4	24.9	--	--	26.4	--	879.5
1965	46.9	105.7	1.5	22.3	2.7	19.4	51.4	156.0	32.5	14.1	15.4	236.6	20.0	--	--	27.9	--	752.4
1966	51.4	126.5	1.7	24.7	3.1	23.2	57.3	189.0	39.2	17.3	18.7	287.8	24.1	--	--	25.9	--	889.9
1967	49.7	94.5	1.4	20.4	2.5	18.6	54.8	151.1	30.8	14.5	14.8	226.0	19.0	--	--	23.6	--	721.7
1968	47.6	102.0	1.5	23.0	2.8	21.2	56.8	173.3	35.2	17.0	17.1	262.8	21.8	--	--	23.6	--	805.7
1969	51.8	133.3	1.8	25.3	3.3	25.2	76.0	208.1	42.4	20.1	20.3	312.3	26.1	--	--	22.0	--	968.0
1970	55.8	131.9	2.0	28.7	3.6	28.2	74.7	229.9	47.0	22.2	23.1	355.1	29.1	--	--	23.6	--	1,054.9
1971	65.3	133.5	2.1	32.0	3.8	29.4	82.3	238.8	48.7	23.2	23.9	368.0	30.2	--	--	26.8	--	1,108.0
1972	73.0	181.3	2.4	33.9	4.2	32.2	93.0	266.7	54.5	25.3	25.8	395.8	33.5	--	--	28.3	--	1,249.9
1973	102.2	386.7	4.0	54.7	6.8	51.7	146.4	446.8	91.9	40.7	41.2	628.6	55.3	--	--	28.1	--	2,085.1
1974	100.6	380.4	4.2	58.2	7.4	55.5	159.4	467.4	96.7	42.3	44.2	676.1	58.5	--	--	52.6	--	2,203.5
1975	103.8	281.6	4.2	61.3	7.5	60.6	150.8	484.9	01.5	44.3	50.1	773.8	62.7	--	--	51.1	--	2,238.2
1976	105.0	238.6	3.4	47.3	6.5	48.5	181.9	391.3	80.3	37.4	38.8	596.1	49.7	--	--	60.3	--	1,885.1
1977	104.7	210.4	3.6	56.2	6.4	48.2	165.3	384.5	78.9	37.2	38.9	598.0	49.1	--	--	56.0	--	1,837.4
1978	118.6	299.3	4.4	70.1	7.6	57.4	188.2	470.6	96.1	45.1	46.0	706.2	59.2	--	--	54.1	--	2,222.9
1979	141.5	281.1	4.8	74.3	8.4	63.7	216.5	505.8	04.9	47.2	51.7	795.5	65.2	--	--	68.2	--	2,428.8
1980	157.5	336.8	5.6	85.6	10.3	76.9	239.4	601.9	25.9	55.0	62.2	957.9	78.2	--	--	109.9	--	2,803.1
1981	153.0	442.6	7.1	111.6	13.7	97.7	263.1	755.6	58.3	68.3	77.8	1,200.1	98.2	0.1	--	213.0	--	3,660.2
1982	142.7	420.1	6.3	97.1	12.4	85.6	234.6	668.6	38.8	61.4	67.1	1,031.9	85.8	0.1	--	207.3	--	3,259.8
1983	157.4	444.3	6.8	106.2	13.1	92.8	246.7	729.5	51.1	67.5	73.5	1,131.5	93.5	0.1	--	194.0	--	3,508.0
1984	158.1	378.2	6.8	110.4	12.8	92.1	247.7	707.7	47.8	64.8	73.6	1,136.0	92.1	0.1	--	194.1	--	3,422.3
1985	98.2	445.2	6.8	109.6	12.6	93.5	232.1	737.8	53.3	68.0	75.1	1,159.8	94.6	--	--	171.9	--	3,458.5
1986	156.8	432.2	6.7	101.8	11.7	92.9	256.9	744.7	155.1	68.7	76.4	1,178.4	95.9	--	--	81.6	--	3,459.8
1987	165.5	337.2	6.2	95.3	11.2	88.0	254.9	689.3	143.5	64.5	72.4	1,119.5	89.6	--	--	99.3	--	3,236.4
1988	182.2	411.9	6.9	105.2	12.3	96.6	280.9	765.7	159.2	71.4	79.2	1,222.7	99.0	--	--	99.9	--	3,593.1
1989	154.0	334.0	6.7	104.7	12.4	97.2	267.6	750.8	156.4	70.7	80.1	1,241.1	98.0	--	--	132.4	--	3,506.1
1990	192.8	425.4	8.0	124.9	14.8	113.3	298.6	878.6	182.9	82.2	92.5	1,431.1	114.3	--	--	172.5	--	4,131.9
1991	176.1	411.4	7.8	122.2	14.0	110.9	296.8	868.6	180.0	82.4	91.3	1,413.9	112.4	--	--	130.3	--	4,018.1
1992	190.0	492.2	8.6	134.3	15.1	121.8	326.0	969.3	200.4	92.3	100.7	1,556.9	124.6	--	--	109.9	--	4,442.1
1993	191.4	638.9	9.4	142.4	16.4	134.2	347.2	1,099.3	225.1	106.0	110.6	1,707.5	138.9	--	--	87.3	--	4,954.6
1994	186.7	591.9	9.5	143.2	16.5	137.5	364.4	1,122.8	228.5	111.0	113.9	1,761.9	141.6	--	--	76.7	--	5,006.1
1995	189.8	596.3	9.8	150.5	17.1	140.3	390.3	1,156.7	231.5	118.7	115.3	1,781.4	143.6	--	--	87.0	--	5,128.3
1996	191.1	609.2	9.8	148.0	17.9	145.1	412.2	1,212.3	237.4	130.7	118.0	1,823.0	147.5	--	--	104.5	--	5,306.7
1997	209.9	584.9	10.6	164.3	19.2	156.7	444.0	1,320.0	252.9	149.6	127.4	1,968.5	158.0	--	--	99.6	--	5,665.6
1998	211.3	568.1	10.5	161.2	19.3	157.7	465.4	1,356.4	248.8	221.3	124.2	1,912.1	156.2	--	--	62.5	--	5,675.0
1999	233.3	470.9	10.7	168.0	20.4	163.1	475.2	1,427.0	247.5	274.7	125.1	1,923.8	157.2	--	--	79.3	--	5,776.2

APPENDIX TABLE 13. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 3, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(3) Nonmetallic Mining	(4) Const	(5) Trans	(6) Comm & Pub Util	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(9) FIRE	(10) Bus & Pers Service	(11) Prof & Soc Service	(12) House- holds	(13) Govt	(14) Coal Mining	(15) Thermal- Electric Generation	(16) Pet Exp/Ext	(17) Pet Refining	Total
1958	26.2	72.9	0.7	9.1	1.1	8.1	25.3	72.6	15.0	6.4	6.4	96.2	8.9	--	--	--	--	348.9
1959	25.5	72.1	0.7	10.1	1.1	8.3	24.1	73.6	15.2	6.5	6.5	98.3	9.1	--	--	--	--	351.1
1960	20.9	53.9	0.6	9.4	0.9	6.9	20.3	60.1	12.5	5.3	5.5	83.4	7.5	--	--	--	--	287.2
1961	24.8	60.0	0.6	9.0	1.0	7.5	22.5	65.8	13.6	5.8	6.0	90.6	8.2	--	--	--	--	315.4
1962	25.8	90.3	0.8	10.5	1.3	9.8	25.9	88.4	18.3	7.8	7.8	117.4	10.8	--	--	--	--	414.9
1963	26.2	90.4	0.8	10.7	1.3	10.0	26.4	90.1	18.6	7.9	7.9	120.2	11.0	--	--	--	--	421.5
1964	25.2	80.2	0.8	11.5	1.3	9.6	25.1	85.1	17.5	7.7	7.6	115.4	10.4	--	--	--	--	397.4
1965	28.1	82.2	0.8	12.0	1.3	10.0	26.7	88.8	18.2	8.0	8.0	120.3	10.9	--	--	--	--	415.3
1966	29.5	92.4	0.9	12.1	1.4	11.0	28.8	99.1	20.1	9.2	8.7	132.6	12.0	--	--	--	--	457.8
1967	30.4	95.2	0.9	12.6	1.5	11.5	30.0	103.3	20.9	9.8	9.1	137.6	12.5	--	--	--	--	475.3
1968	28.9	95.7	0.9	13.1	1.5	11.8	30.0	106.5	21.3	10.3	9.3	141.1	12.7	--	--	--	--	483.1
1969	29.6	99.8	1.0	12.3	1.6	12.9	34.4	115.6	23.2	11.3	10.3	156.7	13.9	--	--	--	--	522.6
1970	30.5	97.5	1.0	13.3	1.8	14.2	33.9	124.7	25.1	12.2	11.5	175.4	15.2	--	--	--	--	556.3
1971	33.2	105.4	1.2	17.7	1.9	15.3	36.8	134.4	27.0	13.1	12.3	187.7	16.3	--	--	--	--	602.3
1972	40.6	139.5	1.5	22.4	2.4	19.5	44.6	170.4	34.7	16.0	15.8	240.9	20.9	--	--	--	--	769.2
1973	55.1	259.6	2.3	32.2	3.7	28.9	69.2	261.5	53.4	23.8	22.9	347.4	31.6	--	--	--	--	1,191.6
1974	55.6	269.6	2.5	32.8	4.0	31.9	74.4	284.3	58.5	25.7	25.6	389.8	34.8	--	--	--	--	1,289.5
1975	56.6	256.8	2.5	34.3	4.0	32.7	73.5	289.0	59.3	26.4	26.5	404.1	35.5	--	--	--	--	1,301.2
1976	55.0	190.2	2.2	29.6	3.6	29.5	74.6	254.0	52.0	23.9	24.2	371.8	31.6	--	--	--	--	1,142.2
1977	52.6	174.8	2.0	27.2	3.4	28.3	68.3	243.2	49.6	23.2	23.3	358.2	30.2	--	--	--	--	1,084.3
1978	59.5	223.6	2.4	33.9	4.0	33.2	78.7	288.5	58.7	27.4	27.1	414.9	35.5	--	--	--	--	1,287.4
1979	72.9	279.2	2.8	36.9	4.7	37.8	96.2	331.0	67.8	30.6	30.7	468.5	40.8	--	--	--	--	1,499.9
1980	80.3	297.3	3.5	56.1	5.2	41.9	104.0	362.7	74.7	33.1	34.0	519.1	45.0	--	--	--	--	1,656.9
1981	74.8	356.4	3.5	47.5	5.7	45.8	111.7	403.7	82.9	37.0	37.1	566.2	49.6	--	--	--	--	1,821.9
1982	74.6	363.1	3.4	45.4	5.7	45.4	107.0	403.5	82.6	37.1	36.7	560.2	49.4	--	--	--	--	1,814.1
1983	81.4	358.7	3.7	51.8	6.2	50.8	110.6	441.6	90.7	40.8	41.6	636.8	54.7	--	--	--	--	1,969.4
1984	81.6	334.8	3.8	54.5	6.1	50.9	110.2	436.4	90.2	40.0	42.0	645.3	54.6	--	--	--	--	1,950.4
1985	87.0	397.3	4.2	59.5	6.9	57.2	120.6	494.4	102.2	45.0	47.1	722.3	61.6	--	--	--	--	2,205.3
1986	79.7	304.5	3.7	52.9	6.0	50.9	106.8	431.4	89.2	39.9	42.4	652.5	54.3	--	--	--	--	1,914.2
1987	88.8	329.6	3.9	54.1	6.3	53.7	115.2	456.9	94.4	42.2	44.6	686.0	57.4	--	--	--	--	2,033.1
1988	96.0	373.8	4.2	59.4	6.9	58.2	126.0	498.1	102.8	45.9	48.1	739.0	62.3	--	--	--	--	2,220.7
1989	82.0	301.0	3.8	54.8	6.4	55.2	113.6	462.8	95.6	43.3	46.2	713.0	58.5	--	--	--	--	2,036.2
1990	95.6	339.4	4.3	61.9	7.1	61.1	125.0	514.1	106.1	48.2	51.1	787.8	64.8	--	--	--	--	2,266.5
1991	92.0	365.4	4.5	65.5	7.4	63.8	128.3	540.5	111.1	50.9	53.3	820.6	67.8	--	--	--	--	2,371.1
1992	102.0	407.4	5.0	73.3	8.2	70.5	141.3	598.3	122.8	56.5	58.8	905.0	74.9	--	--	--	--	2,624.0
1993	94.3	313.2	4.5	66.7	7.4	64.9	127.9	544.2	110.6	53.4	54.5	842.0	68.1	--	--	--	--	2,351.7
1994	95.3	374.3	5.1	74.0	8.4	73.5	142.1	622.4	125.9	61.7	61.5	949.8	77.3	--	--	--	--	2,671.3
1995	93.7	372.0	5.1	76.6	8.5	73.9	147.3	633.2	125.8	65.4	61.4	947.9	77.3	--	--	--	--	2,688.1
1996	93.4	403.5	5.3	75.7	9.0	77.4	155.8	677.0	131.6	73.1	63.7	981.9	80.8	--	--	--	--	2,828.2
1997	100.4	373.0	5.6	83.5	9.5	82.7	162.6	725.6	137.9	82.8	68.1	1,050.8	85.3	--	--	--	--	2,967.8
1998	98.3	352.0	5.4	82.1	9.6	81.3	164.9	733.2	132.7	100.9	65.2	1,004.6	82.4	--	--	--	--	2,912.6
1999	105.7	335.6	5.6	86.2	10.2	84.8	169.3	788.4	135.0	122.1	66.5	1,022.2	84.3	--	--	--	--	3,015.9

APPENDIX TABLE 14. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 4, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	Total
	Ag Lvstk	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	Households	Govt	Coal Mining	Thermal-Electric Generation	Pet Exp/Ext	Pet Refining	
1958	23.5	86.5	0.9	13.5	1.5	11.7	30.2	101.1	21.0	9.0	9.5	145.2	12.6	--	--	--	--	466.2
1959	23.8	94.3	1.0	15.5	1.5	12.3	32.0	106.8	22.1	9.4	9.9	151.0	13.3	--	--	--	--	492.9
1960	21.9	89.3	1.0	16.5	1.5	12.3	34.1	105.8	22.1	9.3	10.0	153.2	13.3	--	--	--	--	490.3
1961	24.7	95.7	1.1	16.0	1.7	13.5	37.6	115.7	24.2	10.2	11.1	169.1	14.6	--	--	--	--	535.2
1962	25.4	78.8	1.1	17.0	1.8	16.3	36.9	131.7	28.0	11.5	13.9	214.4	17.2	--	--	--	--	594.0
1963	27.0	100.5	1.2	18.0	2.0	17.2	45.7	142.8	30.1	12.5	14.4	221.8	18.4	--	--	--	--	651.6
1964	29.9	92.3	1.6	24.6	2.5	22.5	48.2	178.3	38.1	15.6	19.3	300.4	23.6	--	--	--	--	796.9
1965	31.5	141.5	1.6	23.8	2.5	21.0	54.1	178.8	37.3	15.9	17.3	265.2	22.5	--	--	--	--	813.0
1966	32.3	123.6	1.6	23.2	2.6	22.0	54.3	183.3	38.2	16.7	18.4	283.2	23.3	--	--	--	--	822.7
1967	31.3	132.9	1.5	22.1	2.5	20.5	57.5	175.9	36.1	16.4	16.8	258.1	21.9	--	--	--	--	793.5
1968	31.1	126.2	1.6	24.0	2.6	22.4	59.2	189.5	38.7	18.0	18.5	285.6	23.6	--	--	--	--	841.0
1969	34.2	143.7	1.9	32.0	2.9	23.8	80.2	202.5	41.3	19.4	19.4	297.8	25.1	--	--	--	--	924.2
1970	39.7	172.2	6.4	181.6	4.7	35.6	82.6	290.0	59.1	26.3	27.8	425.7	36.0	--	--	--	--	1,387.7
1971	37.2	155.6	2.6	53.0	3.4	28.1	83.2	237.1	48.2	22.7	22.9	352.6	29.4	--	--	--	--	1,076.0
1972	45.9	216.9	3.5	72.1	4.3	35.2	96.7	298.5	61.4	27.6	28.6	438.8	37.2	--	--	--	--	1,366.7
1973	63.8	374.8	4.2	69.6	6.2	49.9	144.5	434.2	89.6	39.2	40.3	616.4	53.7	--	--	--	--	1,986.4
1974	73.6	464.2	5.3	93.6	7.4	58.3	177.5	510.6	105.5	45.6	46.7	711.9	62.9	--	--	--	--	2,363.1
1975	66.2	349.8	4.3	70.8	6.4	52.4	161.6	447.7	92.6	41.0	42.8	656.0	55.9	--	--	--	--	2,047.5
1976	75.9	306.8	4.2	64.4	6.8	57.7	208.7	477.0	99.3	44.1	48.0	740.6	60.8	--	--	--	--	2,194.3
1977	67.5	303.9	3.5	49.9	5.9	48.3	186.6	412.1	84.4	39.1	39.4	604.9	51.2	--	--	--	--	1,896.7
1978	75.8	362.9	3.9	52.0	6.7	54.7	205.3	471.3	96.3	44.8	44.5	683.0	58.3	--	--	--	--	2,159.5
1979	88.3	406.8	4.3	57.9	7.4	60.2	242.0	515.9	106.3	47.9	49.0	750.2	64.3	--	--	--	--	2,400.5
1980	112.5	466.6	5.3	74.6	8.7	71.2	271.2	604.2	125.4	55.1	58.2	891.8	76.0	--	--	--	--	2,820.8
1981	98.5	514.5	5.5	76.6	9.1	74.3	286.7	637.1	131.8	58.5	60.4	925.7	79.5	--	--	--	--	2,958.2
1982	93.5	490.4	5.1	70.1	8.6	70.5	255.1	607.4	125.2	56.2	57.4	879.2	75.5	--	--	--	--	2,794.2
1983	113.8	644.5	6.8	93.5	11.2	92.9	285.9	799.4	165.4	73.1	76.1	1,167.6	99.7	--	--	--	--	3,629.9
1984	110.2	561.2	6.6	95.2	10.7	90.4	285.4	761.8	158.7	69.2	74.8	1,150.6	96.3	--	--	--	--	3,471.1
1985	115.2	584.2	6.8	98.2	11.2	95.2	294.0	801.5	166.9	72.9	78.9	1,214.2	101.4	--	--	--	--	3,640.6
1986	117.7	601.1	7.0	100.1	11.6	98.2	298.1	826.5	172.2	75.1	81.5	1,254.3	104.6	--	--	--	--	3,748.0
1987	124.8	612.3	7.1	99.7	11.8	100.3	309.6	845.0	175.9	77.1	83.2	1,280.8	106.8	--	--	--	--	3,834.4
1988	139.1	808.7	8.5	117.0	14.0	116.7	351.3	1,001.9	208.1	90.6	95.9	1,472.1	125.4	--	--	--	--	4,549.3
1989	137.7	461.6	6.6	94.8	11.1	96.9	320.2	791.9	165.2	73.4	81.5	1,259.7	101.8	--	--	--	--	3,602.4
1990	127.4	577.1	7.6	109.4	12.6	109.3	333.2	905.7	188.4	83.9	91.6	1,414.3	115.4	--	--	--	--	4,075.9
1991	127.9	620.3	8.0	115.9	13.2	114.4	347.9	953.3	197.7	88.8	95.6	1,476.2	120.9	--	--	--	--	4,280.1
1992	141.8	695.8	8.9	129.8	14.7	126.6	380.4	1,057.7	219.1	98.6	105.7	1,631.0	133.8	--	--	--	--	4,743.9
1993	141.7	611.6	8.5	124.7	14.2	123.6	375.0	1,026.5	211.1	98.5	103.5	1,599.9	129.7	--	--	--	--	4,568.5
1994	144.6	632.3	9.1	132.1	15.2	133.2	410.7	1,105.6	226.2	107.7	111.7	1,727.0	139.3	--	--	--	--	4,894.7
1995	152.1	699.6	9.6	141.6	16.2	139.6	452.7	1,177.5	237.5	118.1	115.9	1,789.1	145.9	--	--	--	--	5,195.4
1996	159.6	731.0	9.8	139.1	16.9	144.5	485.0	1,237.2	244.8	129.6	118.9	1,833.7	150.4	--	--	--	--	5,400.5
1997	170.7	724.0	10.6	156.3	18.4	157.7	523.0	1,355.7	263.5	148.4	129.6	2,001.7	162.8	--	--	--	--	5,822.4
1998	177.3	799.9	11.1	160.9	19.5	162.4	563.9	1,440.3	270.1	177.1	130.4	2,006.1	166.5	--	--	--	--	6,085.5
1999	198.0	886.3	12.0	175.4	21.5	175.9	597.6	1,609.5	290.3	210.3	138.8	2,129.5	179.0	--	--	--	--	6,624.1

APPENDIX TABLE 15. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUT MODEL, NORTH DAKOTA REGION 5, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	Total
	Ag Lvstk	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	Households	Govt	Coal Mining	Thermal-Electric Generation	Pet Exp/Ext	Pet Refining	
1958	50.0	107.6	1.3	18.4	2.2	16.9	66.6	141.6	29.7	12.4	13.8	210.3	18.1	--	--	--	--	688.9
1959	50.6	106.8	1.3	19.8	2.1	16.5	63.3	138.3	28.9	12.2	13.3	202.7	17.6	--	--	--	--	673.4
1960	43.7	100.5	1.2	18.7	1.9	14.0	63.4	119.5	24.9	10.5	11.1	169.0	15.1	--	--	--	--	593.5
1961	53.2	126.0	1.5	22.0	2.5	19.8	71.2	165.3	34.8	14.5	16.1	246.7	21.2	--	--	--	--	794.8
1962	49.1	77.4	1.3	18.2	2.1	17.4	60.8	138.6	29.4	12.2	14.6	224.2	18.3	--	--	--	--	663.6
1963	52.6	123.4	1.6	21.9	2.6	21.2	71.5	175.6	37.0	15.4	17.5	269.0	22.6	--	--	--	--	831.9
1964	51.3	98.5	1.6	24.5	2.5	21.4	70.6	172.3	36.4	15.3	18.0	276.8	22.5	--	--	--	--	811.7
1965	57.8	129.0	1.8	26.2	2.8	23.1	76.9	191.1	39.9	17.2	19.0	291.8	24.5	--	--	--	--	901.1
1966	63.3	143.8	1.9	27.0	3.1	25.7	83.9	214.4	44.5	19.8	21.2	325.4	27.3	--	--	--	--	1,001.3
1967	64.4	142.9	1.9	27.1	3.2	25.7	88.5	215.5	44.3	20.2	21.1	323.7	27.2	--	--	--	--	1,005.7
1968	61.0	137.6	1.9	28.1	3.2	26.5	90.1	221.7	45.2	21.5	21.8	334.4	27.8	--	--	--	--	1,020.8
1969	65.8	160.4	2.2	32.3	3.5	28.2	122.5	238.3	48.4	23.1	22.8	349.4	29.7	--	--	--	--	1,126.6
1970	65.8	167.3	2.3	36.0	3.6	28.5	116.9	243.2	49.0	24.0	22.9	350.3	30.0	--	--	--	--	1,139.8
1971	71.2	180.0	2.5	38.4	3.9	30.7	127.2	262.4	52.8	25.9	24.7	377.6	32.3	--	--	--	--	1,229.6
1972	86.3	245.2	2.9	43.1	4.7	37.0	145.1	319.0	64.9	30.4	30.0	454.1	39.4	--	--	--	--	1,502.1
1973	120.0	463.3	4.6	67.2	7.3	55.3	218.6	491.8	100.4	45.2	43.5	659.8	59.9	--	--	--	--	2,336.9
1974	132.0	514.6	4.9	65.7	8.0	60.1	258.0	535.1	109.7	48.8	47.3	716.3	65.3	--	--	--	--	2,565.8
1975	114.6	347.6	4.4	71.9	6.6	50.6	232.2	435.9	88.7	41.2	40.1	610.7	53.7	--	--	--	--	2,098.2
1976	126.5	365.4	4.0	49.2	7.0	53.5	312.7	460.5	93.5	44.4	42.3	644.2	56.8	--	--	--	--	2,260.0
1977	122.9	427.9	4.5	58.3	7.6	58.9	291.6	514.2	104.3	49.3	46.7	711.4	62.9	--	--	--	--	2,460.5
1978	138.4	501.6	5.2	70.4	8.9	68.8	320.0	601.2	121.9	57.5	54.7	832.7	73.5	--	--	--	--	2,854.8
1979	155.2	543.5	5.6	73.9	9.5	72.9	372.3	634.2	129.6	59.4	57.7	878.1	78.1	--	--	--	--	3,070.0
1980	171.1	599.5	6.4	87.7	10.6	81.6	403.7	705.6	145.0	65.2	64.9	988.3	87.4	--	--	--	--	3,417.0
1981	157.7	658.8	6.4	84.2	11.0	84.2	429.3	738.3	151.0	68.7	66.6	1,012.9	90.6	--	--	--	--	3,559.7
1982	149.6	605.2	5.9	75.9	10.2	78.3	378.4	687.9	140.1	64.8	62.0	942.8	84.1	--	--	--	--	3,285.2
1983	166.3	737.8	7.3	95.9	12.4	97.1	406.7	851.4	173.9	79.8	77.6	1,183.1	104.4	--	--	--	--	3,993.7
1984	169.1	682.3	7.2	98.8	12.1	96.2	417.8	830.2	170.7	77.0	77.4	1,182.5	103.0	--	--	--	--	3,924.3
1985	177.7	778.7	7.9	106.6	13.4	106.1	438.5	921.0	189.2	85.2	85.3	1,302.3	113.9	--	--	--	--	4,325.8
1986	172.5	673.3	7.4	99.5	12.4	99.5	425.7	853.2	175.3	79.6	80.4	1,230.1	106.1	--	--	--	--	4,015.0
1987	190.4	721.7	7.7	102.1	13.2	104.8	449.6	901.7	185.1	84.3	84.5	1,291.8	111.9	--	--	--	--	4,248.6
1988	197.3	871.0	8.7	115.3	14.8	117.0	489.6	1,020.0	209.1	94.8	93.9	1,432.9	125.7	--	--	--	--	4,790.1
1989	170.3	699.9	7.8	104.0	13.3	107.7	473.2	921.4	188.7	87.3	87.3	1,338.0	114.5	--	--	--	--	4,313.4
1990	194.9	772.4	8.6	116.1	14.6	118.3	498.5	1,013.6	207.4	96.0	95.9	1,468.4	125.8	--	--	--	--	4,730.5
1991	188.1	792.3	8.8	120.3	15.0	121.2	512.2	1,041.9	212.4	99.7	98.1	1,503.1	128.8	--	--	--	--	4,841.9
1992	203.7	824.9	9.4	130.1	16.0	129.6	549.9	1,111.2	226.1	107.0	105.0	1,608.8	137.3	--	--	--	--	5,159.0
1993	191.9	724.4	8.9	123.4	15.3	124.6	539.9	1,065.7	214.3	106.5	101.1	1,552.3	130.9	--	--	--	--	4,899.2
1994	205.2	833.8	10.0	136.7	17.2	140.4	607.9	1,208.8	241.9	122.1	113.6	1,743.6	147.5	--	--	--	--	5,528.7
1995	209.7	875.6	10.4	144.4	18.1	145.6	662.4	1,271.2	250.1	133.3	116.8	1,789.5	152.5	--	--	--	--	5,779.6
1996	230.6	1,058.9	11.6	154.1	20.6	163.1	732.6	1,457.7	281.8	157.6	129.3	1,976.0	171.1	--	--	--	--	6,545.0
1997	249.3	1,076.0	12.6	171.7	22.4	177.9	794.9	1,600.4	302.9	181.4	140.5	2,149.2	184.8	--	--	--	--	7,064.0
1998	258.8	1,028.3	12.9	176.4	24.2	190.4	868.4	1,685.4	308.4	341.1	142.5	2,169.6	190.4	--	--	--	--	7,396.8
1999	288.7	1,229.7	14.7	200.6	27.9	215.9	899.0	1,979.1	349.5	403.5	159.2	2,416.7	215.2	--	--	--	--	8,399.7

APPENDIX TABLE 16. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 6, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	Total
	Ag Lvstck	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	House- holds	Govt	Coal Mining	Thermal- Electric Generation	Pet Exp/Ext	Pet Refining	
1958	64.7	114.8	1.2	14.4	1.9	13.7	55.2	120.6	25.0	10.6	10.7	160.8	15.0	--	--	--	--	608.6
1959	62.7	93.8	1.1	14.2	1.7	12.4	49.9	107.1	22.2	9.5	9.7	146.2	13.5	--	--	--	--	544.0
1960	52.9	94.6	1.1	14.8	1.7	12.2	46.7	105.7	21.9	9.2	9.6	144.8	13.3	--	--	--	--	528.5
1961	61.5	90.5	1.1	13.8	1.7	12.3	49.1	105.8	22.0	9.3	9.7	146.2	13.4	--	--	--	--	536.4
1962	60.8	112.5	1.2	14.3	1.9	14.0	49.7	122.1	25.3	10.7	11.0	165.5	15.2	--	--	--	--	604.2
1963	63.1	108.8	1.2	14.5	1.9	14.1	50.8	122.2	25.3	10.8	11.1	167.1	15.3	--	--	--	--	606.2
1964	64.8	101.8	1.2	16.1	1.9	14.1	51.4	121.7	25.1	11.0	11.2	168.4	15.3	--	--	--	--	604.0
1965	74.0	115.7	1.3	17.6	2.2	15.8	57.0	136.7	28.0	12.5	12.4	187.1	17.0	--	--	--	--	677.3
1966	80.8	130.5	1.4	18.2	2.4	17.5	62.7	153.4	31.2	14.3	13.8	207.6	19.0	--	--	--	--	752.8
1967	83.0	127.2	1.5	18.4	2.4	17.7	64.5	154.7	31.2	14.7	13.9	208.9	19.0	--	--	--	--	757.1
1968	80.0	142.8	1.6	20.1	2.6	19.2	66.2	170.1	34.0	16.5	15.0	226.2	20.6	--	--	--	--	814.9
1969	81.7	152.8	1.7	21.0	2.9	21.2	76.8	186.8	37.5	18.1	16.7	252.7	22.8	--	--	--	--	892.7
1970	83.8	150.5	1.9	27.8	3.0	22.2	75.6	194.7	38.9	19.1	17.6	265.9	23.7	--	--	--	--	924.7
1971	90.5	164.3	1.8	22.6	3.2	24.0	82.1	210.9	42.2	20.8	19.0	288.6	25.7	--	--	--	--	995.7
1972	111.9	214.8	2.3	27.8	3.9	28.9	98.4	254.1	51.4	24.1	22.8	344.8	31.1	--	--	--	--	1,216.3
1973	142.1	295.5	2.9	34.8	5.0	37.2	131.3	329.4	67.0	30.7	29.3	441.7	40.4	--	--	--	--	1,587.3
1974	141.0	406.4	3.6	42.0	6.1	45.5	152.5	410.4	83.8	37.4	35.7	538.3	49.9	--	--	--	--	1,952.6
1975	144.6	360.0	3.4	42.1	5.9	43.6	149.0	389.8	79.1	36.3	34.3	518.6	47.5	--	--	--	--	1,854.2
1976	153.3	272.1	3.1	40.3	5.3	39.1	165.2	341.3	68.7	33.0	30.8	466.1	41.9	--	--	--	--	1,660.2
1977	150.9	289.4	3.2	39.7	5.5	41.1	157.9	360.2	72.5	34.8	32.5	492.5	44.1	--	--	--	--	1,724.3
1978	172.6	385.5	4.0	49.7	6.8	50.8	182.6	450.1	90.6	43.1	40.1	606.3	54.8	--	--	--	--	2,137.0
1979	219.0	440.7	4.6	57.6	7.8	57.4	221.6	504.9	102.7	47.0	45.2	682.8	62.1	--	--	--	--	2,453.4
1980	208.9	395.5	4.4	55.2	7.5	55.9	217.5	484.3	98.9	45.0	44.4	672.6	60.1	--	--	--	--	2,350.2
1981	209.4	579.1	5.5	68.0	9.2	68.6	246.7	613.1	124.8	56.5	53.9	814.3	74.7	--	--	--	--	2,923.8
1982	210.6	570.8	5.3	64.7	9.1	67.3	233.5	603.3	122.5	56.0	52.8	797.6	73.3	--	--	--	--	2,866.8
1983	226.1	575.0	5.7	71.9	9.7	73.1	242.8	648.4	131.6	60.7	57.9	877.7	79.2	--	--	--	--	3,059.8
1984	232.2	582.2	5.9	77.0	9.9	75.6	251.3	664.5	135.8	61.3	60.1	911.7	81.8	--	--	--	--	3,149.3
1985	236.8	580.2	6.0	77.3	10.1	77.0	255.0	675.8	137.9	62.7	61.4	931.9	83.2	--	--	--	--	3,195.3
1986	226.6	506.4	5.5	71.8	9.3	71.9	242.5	624.6	127.4	58.5	57.5	874.6	77.3	--	--	--	--	2,953.9
1987	257.9	520.2	5.8	73.0	9.8	75.2	261.0	624.6	132.9	61.2	60.2	913.7	80.8	--	--	--	--	3,103.5
1988	266.8	519.0	5.9	75.4	10.0	76.7	270.8	663.0	135.0	62.6	61.4	932.4	82.2	--	--	--	--	3,161.2
1989	223.6	444.8	5.4	69.6	9.2	72.1	248.1	617.6	125.3	59.4	58.2	888.1	76.7	--	--	--	--	2,898.1
1990	273.0	611.0	6.8	87.4	11.5	89.6	291.1	777.1	158.0	73.6	72.0	1,095.7	96.0	--	--	--	--	3,642.8
1991	249.4	593.2	6.7	87.3	11.3	88.1	283.2	766.5	155.0	73.7	70.9	1,079.5	94.2	--	--	--	--	3,559.0
1992	266.6	666.6	7.4	97.6	12.5	97.3	307.8	849.9	171.6	82.0	78.2	1,190.7	104.1	--	--	--	--	3,932.3
1993	258.4	627.4	7.2	94.8	12.2	95.9	301.8	839.9	167.6	83.7	77.0	1,173.7	102.0	--	--	--	--	3,841.6
1994	243.9	640.3	7.4	97.9	12.6	100.2	312.3	881.1	174.2	90.0	80.4	1,227.7	106.1	--	--	--	--	3,974.1
1995	226.7	645.0	7.4	101.0	12.8	101.0	320.1	902.6	174.8	96.5	80.5	1,228.3	106.5	--	--	--	--	4,003.2
1996	227.9	767.7	8.1	106.8	14.4	112.2	347.1	1,027.2	195.2	113.7	88.4	1,346.1	118.3	--	--	--	--	4,473.1
1997	243.1	699.4	8.3	113.2	14.8	116.1	362.1	1,069.4	197.1	126.5	91.2	1,390.9	120.6	--	--	--	--	4,552.7
1998	235.9	724.2	8.6	116.7	15.6	120.7	376.2	1,143.4	201.6	161.5	92.3	1,403.8	123.5	--	--	--	--	4,724.0
1999	257.1	682.6	8.7	121.1	16.5	125.2	387.5	1,225.5	203.3	189.1	93.7	1,422.9	125.6	--	--	--	--	4,858.8

APPENDIX TABLE 17. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 7, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1) Ag Lvstck	(2) Ag Crops	(3) Nonmetallic Mining	(4) Const	(5) Trans	(6) Comm & Pub Util	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(9) FIRE	(10) Bus & Pers Service	(11) Prof & Soc Service	(12) House- holds	(13) Govt	(14) Coal Mining	(15)		(17) Pet Refining	Total
															Thermal- Electric Generation	(16) Pet Exp/Ext		
1958	73.9	84.7	1.1	15.2	2.1	13.6	60.9	111.8	23.3	9.8	10.6	159.6	14.5	0.6	--	3.7	38.8	624.2
1959	71.2	62.5	1.1	15.6	1.8	12.2	55.0	97.6	20.4	8.7	9.5	144.2	12.8	0.5	--	3.6	38.2	554.9
1960	58.3	69.4	1.1	16.8	1.8	12.4	52.2	100.4	21.0	8.8	9.8	148.2	13.1	0.6	--	3.5	37.1	554.5
1961	69.5	44.7	1.0	14.1	1.7	11.3	54.3	87.6	18.4	7.8	9.0	135.7	11.7	0.8	--	3.6	37.4	508.6
1962	67.5	96.4	1.3	16.8	2.2	15.7	57.8	129.6	27.1	11.5	12.5	189.4	16.7	0.9	--	3.6	37.2	686.2
1963	71.1	88.9	1.2	16.7	2.2	15.5	60.4	127.0	26.5	11.3	12.3	187.2	16.4	0.8	--	3.5	37.1	678.1
1964	75.2	88.2	1.4	20.5	2.4	17.2	63.7	139.3	29.1	12.5	13.9	210.9	18.2	1.1	--	3.6	37.9	735.1
1965	86.3	100.6	1.5	21.3	2.6	18.0	69.9	148.1	30.6	13.4	14.3	216.7	19.1	1.3	--	3.8	40.0	787.5
1966	99.0	111.6	1.6	21.9	2.9	20.4	78.5	168.5	34.8	15.6	16.2	245.5	21.6	1.9	4.4	4.0	42.1	890.5
1967	100.8	100.4	1.6	21.5	2.9	19.8	80.6	162.9	33.5	15.6	15.7	236.8	20.9	3.1	8.4	4.2	44.0	872.7
1968	100.6	108.1	1.7	23.4	3.1	21.5	83.8	177.9	36.4	17.5	17.0	257.3	22.6	4.1	12.3	4.2	44.4	935.9
1969	104.9	121.6	2.0	27.8	3.5	25.0	102.6	205.6	42.2	20.1	19.9	302.7	26.2	4.1	11.7	4.3	45.0	1,069.2
1970	109.3	118.0	2.0	26.6	3.5	25.8	100.9	211.2	43.3	20.9	20.6	312.8	26.9	5.1	13.8	4.4	45.9	1,091.0
1971	119.3	123.7	2.1	28.2	3.8	28.3	109.7	231.0	47.5	22.9	22.8	346.0	29.6	6.0	17.5	4.5	47.5	1,190.4
1972	147.6	168.4	2.6	34.5	4.7	34.8	129.7	283.6	59.2	26.9	28.0	425.2	36.6	6.3	21.4	4.8	50.5	1,464.8
1973	189.3	244.1	3.3	40.3	6.0	44.4	175.3	366.8	76.5	34.1	35.6	540.3	47.1	6.8	19.3	5.4	57.1	1,891.7
1974	178.2	255.4	3.5	44.4	6.3	46.3	187.6	381.2	79.8	35.2	37.2	564.3	49.1	7.9	22.4	6.4	67.6	1,972.8
1975	183.6	262.2	4.0	57.4	6.8	50.7	191.5	415.9	86.6	38.8	40.9	622.2	53.4	8.4	20.6	7.1	74.5	2,124.6
1976	206.8	226.4	3.9	54.4	7.0	51.3	239.4	412.3	86.4	39.4	41.2	625.1	53.6	14.3	38.6	7.7	80.9	2,188.7
1977	199.2	184.0	4.0	58.7	7.0	53.0	217.1	416.2	87.8	40.0	43.2	658.7	54.8	17.1	46.3	8.4	87.6	2,183.1
1978	221.7	264.9	4.6	65.6	8.1	60.9	244.8	489.8	103.3	47.0	49.1	745.6	63.6	23.4	65.4	9.0	94.4	2,561.2
1979	289.2	290.7	6.0	95.7	10.2	75.5	302.2	589.4	127.1	54.3	61.2	928.1	78.6	34.0	91.6	13.8	145.1	3,192.7
1980	349.8	271.3	6.7	106.3	11.7	85.4	338.8	647.9	141.9	58.8	69.2	1,052.4	88.3	49.5	120.1	22.0	230.5	3,650.6
1981	280.4	381.1	7.2	109.5	13.7	98.9	337.1	762.5	166.6	69.2	80.4	1,222.5	102.8	59.0	140.8	39.0	408.7	4,279.4
1982	285.2	379.8	6.6	96.5	12.9	91.6	317.3	712.3	155.9	65.3	73.7	1,114.0	95.5	66.8	162.0	35.9	376.3	4,047.6
1983	312.7	398.4	7.5	112.1	14.1	102.5	337.5	793.1	174.1	73.3	82.8	1,250.5	106.5	91.4	196.4	33.5	350.9	4,437.3
1984	330.0	393.8	8.2	127.9	14.9	110.8	356.7	844.0	187.6	76.4	90.0	1,360.5	114.7	111.3	226.3	32.5	341.0	4,726.6
1985	338.5	449.9	8.6	131.4	15.8	118.1	373.5	904.1	201.1	81.9	95.4	1,436.2	122.1	154.3	261.5	30.4	318.5	5,041.3
1986	324.8	396.4	8.1	125.3	14.9	113.7	362.2	865.1	193.0	78.9	92.4	1,392.2	117.3	150.8	261.3	24.4	255.6	4,776.4
1987	373.1	393.2	8.7	129.7	16.3	124.5	403.6	930.1	218.4	85.1	101.0	1,507.8	129.7	182.5	498.6	26.5	277.9	5,406.7
1988	403.3	311.8	8.6	132.6	16.4	124.5	422.9	910.2	217.9	83.9	101.1	1,505.9	129.1	198.3	569.8	27.1	284.2	5,447.6
1989	304.9	300.4	8.3	128.5	16.1	124.4	385.9	909.3	215.5	84.6	101.6	1,519.3	128.1	211.9	535.6	31.6	330.8	5,336.8
1990	396.5	347.3	9.5	146.8	18.2	138.2	435.4	1,016.0	238.2	94.3	112.6	1,687.1	142.6	209.4	543.6	37.9	396.6	5,970.2
1991	356.5	369.1	9.6	152.1	18.1	140.0	429.7	1,037.3	242.8	97.4	114.2	1,711.2	144.6	208.6	565.6	34.1	357.4	5,988.3
1992	388.4	458.0	10.9	172.6	20.1	156.4	473.3	1,171.6	273.0	110.0	127.5	1,909.6	162.1	226.3	623.3	33.1	347.3	6,663.5
1993	383.1	526.6	11.4	177.2	21.2	165.5	485.4	1,257.2	290.0	120.3	134.5	2,014.2	171.8	240.5	655.7	32.3	337.9	7,024.8
1994	359.3	483.3	11.3	178.1	21.2	168.5	498.0	1,279.9	293.1	125.5	137.5	2,063.4	174.0	243.4	660.5	30.6	320.5	7,048.1
1995	341.3	508.6	11.7	189.0	21.8	171.8	519.1	1,324.4	297.2	134.6	139.2	2,089.1	176.7	248.0	649.5	31.4	328.5	7,181.9
1996	339.4	553.8	12.0	184.6	23.2	181.4	549.0	1,420.8	313.5	150.8	145.9	2,186.6	186.1	261.9	698.5	36.8	385.8	7,630.1
1997	382.7	561.4	13.3	211.2	25.2	197.8	597.9	1,571.3	337.0	174.2	158.8	2,386.5	201.6	261.4	694.4	35.6	372.8	8,183.1
1998	376.9	578.6	13.6	216.8	26.3	204.9	625.6	1,653.4	343.6	256.1	159.5	2,386.9	205.4	266.8	739.9	31.7	331.9	8,417.9
1999	421.6	609.6	14.6	236.1	28.7	219.2	661.4	1,828.3	361.7	294.1	168.1	2,513.9	217.6	271.8	735.5	37.6	393.8	9,013.6

APPENDIX TABLE 18. GROSS BUSINESS VOLUMES OF ECONOMIC SECTORS ESTIMATED BY THE INPUT-OUTPUT MODEL, NORTH DAKOTA REGION 8, MILLION DOLLARS (CURRENT DOLLARS), 1958-1998

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	Total
	Ag Lvstck	Ag Crops	Nonmetallic Mining	Const	Trans	Comm & Pub Util	Ag Proc & Misc Mfg	Retail Trade	FIRE	Bus & Pers Service	Prof & Soc Service	House- holds	Govt	Coal Mining	Thermal- Electric Generation	Pet Exp/Ext	Pet Refining	
1958	37.3	57.2	0.6	7.2	1.0	7.0	27.2	61.1	12.6	5.3	5.4	81.4	7.6	0.3	--	0.9	--	312.1
1959	36.3	39.5	0.5	6.5	0.8	5.8	24.7	49.0	10.2	4.3	4.5	67.7	6.2	0.3	--	0.8	--	257.1
1960	29.1	39.2	0.5	6.6	0.8	5.5	22.4	46.9	9.7	4.2	4.3	65.0	5.9	0.3	--	1.3	--	241.7
1961	34.0	32.7	0.5	6.0	0.8	5.4	24.5	44.3	9.2	3.9	4.2	62.8	5.7	0.3	--	2.5	--	236.8
1962	32.3	48.6	0.5	6.8	1.0	6.6	25.7	55.7	11.5	5.0	5.1	76.1	7.0	0.4	--	4.0	--	286.3
1963	34.9	60.2	0.6	7.9	1.1	7.7	29.7	66.0	13.6	5.8	5.9	88.9	8.2	0.3	--	4.5	--	335.3
1964	36.0	46.6	0.6	7.8	1.0	6.9	29.1	58.1	12.0	5.2	5.3	80.4	7.3	0.3	--	4.4	--	301.0
1965	42.1	54.5	0.7	8.9	1.2	8.0	32.6	67.2	13.8	6.1	6.1	92.1	8.4	0.2	--	5.9	--	347.8
1966	48.4	68.7	0.8	10.2	1.5	9.6	37.7	81.8	16.7	7.5	7.3	110.4	10.2	0.2	--	9.0	--	420.0
1967	52.2	71.8	0.9	10.8	1.6	10.2	37.7	86.7	17.5	8.1	7.7	116.2	10.7	0.2	--	12.1	--	444.4
1968	52.0	59.2	0.8	11.1	1.6	9.9	40.0	81.7	16.3	8.0	7.4	111.2	10.1	0.3	--	18.6	--	428.2
1969	53.8	62.8	0.9	12.6	1.7	11.1	47.2	91.4	18.4	8.8	8.5	128.0	11.4	0.2	--	15.9	--	472.7
1970	55.0	68.8	1.0	13.8	1.9	12.5	47.1	102.4	20.6	10.1	9.6	145.2	12.8	0.3	--	18.6	--	519.7
1971	60.6	71.3	1.1	15.6	1.9	12.4	51.2	103.1	20.6	10.2	9.4	142.4	12.8	0.3	--	16.1	--	529.0
1972	79.9	101.7	1.3	15.7	2.4	15.6	64.0	130.7	26.5	12.3	11.9	178.9	16.3	0.4	--	16.5	--	674.1
1973	104.7	164.5	1.8	20.7	3.3	22.0	89.4	188.3	38.5	17.2	16.8	252.6	23.4	0.4	--	19.9	--	963.5
1974	105.1	217.5	2.2	28.3	4.2	27.2	102.0	232.1	47.6	20.9	20.5	307.7	28.7	0.5	--	41.3	--	1,185.8
1975	103.4	143.0	1.9	24.6	3.7	22.9	92.9	186.2	37.9	17.3	17.1	257.7	23.4	2.0	--	49.5	--	983.5
1976	92.2	136.7	1.9	26.2	3.8	23.3	103.5	186.1	37.6	17.7	17.1	257.7	23.2	7.8	--	61.1	0.1	996.0
1977	106.1	113.6	1.9	26.7	4.0	23.5	101.2	181.3	36.6	17.4	17.2	259.0	23.0	8.4	--	72.9	0.1	992.9
1978	114.7	149.5	2.4	36.7	4.8	28.4	111.9	221.3	44.7	21.0	20.7	312.4	27.9	8.9	--	88.1	0.2	1,193.6
1979	154.7	160.6	2.9	44.8	6.8	36.8	139.8	265.8	54.6	24.2	25.9	391.0	34.5	12.7	--	176.6	0.2	1,531.9
1980	173.7	122.9	3.9	69.6	10.7	48.4	148.5	301.0	62.5	26.7	31.3	474.8	40.8	17.7	--	412.1	0.3	1,944.9
1981	148.1	181.3	6.5	134.2	20.3	78.5	150.7	434.9	90.4	37.5	45.2	687.4	59.5	18.0	--	977.7	0.3	3,070.5
1982	143.8	195.4	6.1	123.9	19.0	73.4	141.1	415.4	85.8	36.2	42.2	640.8	56.2	16.7	--	901.3	0.3	2,897.6
1983	160.8	224.2	6.1	120.1	18.2	73.7	152.9	438.1	90.2	38.7	43.9	666.1	58.5	16.5	--	820.2	0.3	2,928.5
1984	170.5	230.0	5.9	112.8	16.8	71.2	161.3	436.0	90.2	38.2	43.8	664.3	58.2	20.9	--	715.6	0.4	2,836.1
1985	174.2	220.0	5.4	101.0	15.0	66.1	163.0	415.9	85.8	36.8	41.7	631.4	55.2	23.9	--	609.8	0.4	2,645.6
1986	163.2	204.9	3.9	64.3	9.3	49.1	155.9	347.5	71.4	31.7	34.2	518.0	45.1	18.0	--	273.9	0.3	1,990.7
1987	187.4	212.5	4.2	67.7	10.1	52.2	169.6	367.6	75.5	33.5	36.2	548.1	47.9	16.6	--	299.7	0.3	2,129.1
1988	197.5	146.3	3.5	55.2	8.1	44.1	170.1	312.2	64.1	29.2	31.5	478.2	41.1	10.1	--	211.6	0.2	1,803.0
1989	158.3	278.1	4.3	66.2	9.6	54.8	172.2	412.0	84.3	38.0	39.6	600.2	52.5	17.8	--	232.8	0.3	2,221.0
1990	190.5	167.5	4.1	67.3	9.8	52.3	174.8	363.8	74.4	34.2	36.9	561.0	47.7	18.8	--	285.2	0.3	2,088.6
1991	169.9	183.4	4.0	66.3	9.4	52.0	170.9	370.8	75.4	35.4	37.1	564.1	48.0	21.9	--	259.5	0.4	2,068.5
1992	188.2	248.2	4.5	71.5	10.0	58.0	192.3	431.3	87.5	41.0	42.1	640.2	55.1	19.1	--	239.1	0.3	2,328.4
1993	182.1	299.8	4.7	71.6	10.0	60.9	197.1	471.5	94.8	45.8	44.8	680.8	59.1	20.3	--	205.1	0.3	2,448.7
1994	167.9	243.7	4.3	65.7	9.2	56.9	195.1	440.1	87.3	44.6	42.2	642.3	54.8	21.8	--	178.9	0.4	2,255.2
1995	162.5	276.3	4.8	76.7	10.7	62.8	207.1	485.8	94.8	50.8	45.5	691.2	59.5	20.7	--	244.9	0.4	2,494.5
1996	166.3	299.8	5.5	90.7	13.3	71.5	219.6	541.1	103.8	58.8	49.6	755.2	65.5	2.4	--	384.3	--	2,827.4
1997	179.8	288.7	6.0	103.9	15.0	78.7	235.8	591.8	110.9	67.7	53.7	818.2	70.5	0.1	--	462.6	--	3,083.4
1998	173.3	276.1	5.3	86.7	12.5	71.9	241.2	585.6	104.0	85.8	49.9	758.0	66.0	0.1	--	295.7	--	2,812.1
1999	196.0	289.0	6.0	100.3	14.7	81.2	257.9	671.3	114.1	102.9	54.8	831.2	72.8	0.4	--	373.8	--	3,166.4

Appendix Table 19. Export Services Employment and Component of the North Dakota Input-Output Model's Business & Personal Service Sector, North Dakota by Counties and Regions, 1998

County/Region	Employment	B&PS Sector FDV Component (million \$)
Divide	--	--
McKenzie	--	--
Williams	75	2.5
Region 1	75	2.5
Bottineau	113	3.7
Burke	--	--
McHenry	--	--
Mountrail	50	1.7
Pierce	125	4.1
Renville	--	--
Ward	1,328	44.0
Region 2	1,616	53.5
Benson	--	--
Cavalier	49	1.6
Eddy	--	--
Ramsey	25	0.8
Rolette	210	6.9
Towner	--	--
Region 3	284	9.3
Grand Forks	225	7.9
Nelson	--	--
Pembina	--	--
Walsh	20	0.7
Region 4	245	8.6
Cass	3,789	133.7
Ransom	--	--
Richland	--	--
Sargent	--	--
Steele	--	--
Traill	--	--
Region 5	3,789	133.7

Appendix Table 19 continued		
County/Region	Employment	B&PS Sector FDV Component (million \$)
Barnes	80	2.6
Dickey	90	3.0
Foster	--	--
Griggs	40	1.3
Lamoure	--	--
Logan	--	--
McIntosh	40	1.3
Stutsman	165	5.4
Wells	50	1.6
Region 6	465	15.2
Burleigh	885	31.1
Emmons	150	5.3
Grant	--	--
Kidder	--	--
McLean	50	1.8
Mercer	37	1.3
Morton	539	18.9
Oliver	--	--
Sheridan	--	--
Sioux	--	--
Region 7	1,661	58.4
Adams	--	--
Billings	--	--
Bowman	--	--
Dunn	--	--
Golden Valley	--	--
Hettinger	--	--
Slope	--	--
Stark	345	11.5
Region 8	345	11.5
STATE	8,480	292.7

Appendix Table 20. Export Services Employment and Component of the North Dakota Input-Output Model's Business & Personal Service Sector, North Dakota by Counties and Regions, 1999

	Employment	B&PS Sector FDV Component (million \$)
Divide	--	--
McKenzie	17	0.6
Williams	275	9.4
Region 1	292	10.0
Bottineau	113	4.0
Burke	--	--
McHenry	--	--
Mountrail	50	1.7
Pierce	125	4.4
Renville	70	2.4
Ward	1,933	67.6
Region 2	2,291	80.1
Benson	--	--
Cavalier	49	1.7
Eddy	--	--
Ramsey	162	5.5
Rolette	210	7.2
Towner	--	--
Region 3	421	14.4
Grand Forks	225	8.6
Nelson	--	--
Pembina	--	--
Walsh	20	0.7
Region 4	245	9.3
Cass	3,789	146.8
Ransom	--	--
Richland	--	--
Sargent	--	--
Steele	--	--
Traill	--	--
Region 5	3,789	146.8
Barnes	80	2.7
Dickey	90	3.1
Foster	--	--
Griggs	40	1.4
Lamoure	--	--
Logan	26	0.9
McIntosh	40	1.4
Stutsman	165	5.6
Wells	50	1.7
Region 6	491	16.8

Appendix Table 20 cont.		
	Employment	B&PS Sector FDV Component (million \$)
Burleigh	885	31.6
Emmons	150	5.3
Grant	--	--
Kidder	--	--
McLean	50	1.8
Mercer	37	1.3
Morton	539	19.2
Oliver	--	--
Sheridan	--	--
Sioux	--	--
Region 7	1,661	59.2
Adams	--	--
Billings	--	--
Bowman	--	--
Dunn	--	--
Golden Valley	--	--
Hettinger	--	--
Slope	--	--
Stark	345	11.8
Region 8	345	11.8
STATE	9,535	348.4