

NEBRASKA ENERGY OFFICE

NEBRASKA ENERGY STATISTICS 1960-1989

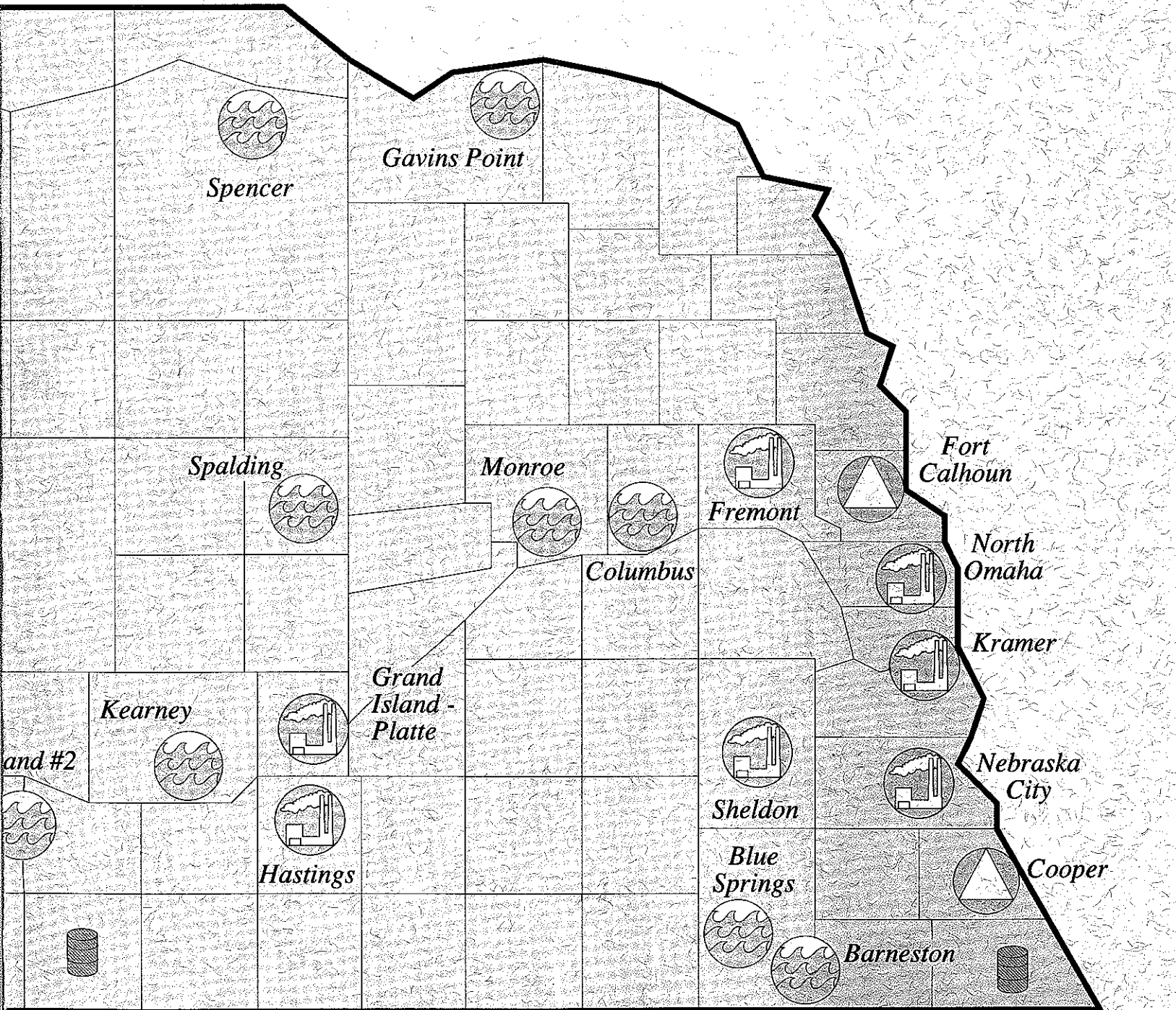


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About Our Cover

The Energy Office logo, a detail of which appears on the back cover, is a mosaic by Hildreth M. Meiere, entitled "Genius of Creative Energy". The figure is a mythical symbol who controls the sun, moon, stars and four winds with his reins. The mosaic is found on the second floor of the Nebraska State Capitol building in Lincoln just inside the north doors.

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INTRODUCTION

Nebraska Energy Office Energy Statistics, 1960-1989 presents the most current information available about Nebraska's energy consumption and production. This publication is intended to provide energy planners, policy makers and consumers with a useful reference so that informed energy decisions can be made.

This report is divided into seven sections. The first presents an overview of energy use and trends in the state. The second section covers energy use and trends in the residential, commercial, industrial, transportation, and electric utility sectors. The third section provides specific information on consumption and trends for natural gas, petroleum, electricity, and coal. Section four contains production information for crude oil, natural gas and ethanol. Electricity generation and facilities are covered in section five. Section six contains miscellaneous energy information such as degree days, population, and motor vehicle data. Section seven contains conversion factors and a glossary of terms used in this publication.

This report was compiled and prepared by the Research Section of the Nebraska Energy Office. The statistical series presented represent those determined to be most useful. Every effort has been made to ensure accuracy.

Suggestions or comments regarding this publication are welcome.

Nebraska Energy Office
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I. TOTAL ENERGY CONSUMPTION AND TOTAL ENERGY EXPENDITURES

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TOTAL ENERGY CONSUMPTION

There are two common ways to account for energy consumption: primary resource consumption and end-use energy consumption. End use refers to the energy content of electricity and other fuels at the point of use by consumers. Approximately 70% of the primary energy used to generate and distribute electricity is lost as waste heat. This loss is referred to as associated energy losses or electric system losses throughout this report. Unless otherwise noted, total energy consumption refers to total primary energy consumption adjusted for net interstate sales of electricity.

Total energy consumption in 1989 was 539.2 trillion Btus, just over a 0.7% increase from 1988. This compares with a peak consumption of 554.2 trillion Btus in 1977. Petroleum use increased 1.6% from 1988, natural gas use decreased 1.9%, coal use decreased 6.1%, nuclear power use increased 18.5% and hydroelectric power decreased 14.5%. Overall, consumption of primary energy resources increased 0.8% in 1989 over 1988. Interstate sales of electricity increased 2.8%.

Per capita energy consumption in Nebraska increased 0.1% in 1989 from 1988 to 334.4 million Btus. This compares to peak per capita consumption of 356.4 million Btus in 1976. Also, per capita consumption for Nebraska was 2.2% higher than the 327.3 trillion Btus per capita for the United States.

Figure 1
Consumption of Energy Resources by Type, Nebraska, 1960-1989
(Trillion Btu)

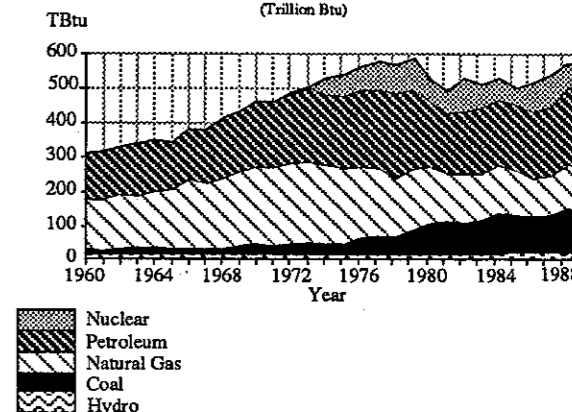


Table I-1
Consumption of Energy Resources by Type, Nebraska, 1960-1989
(Trillion Btu)

	Petroleum	Natural Gas	Coal	Nuclear	Hydro	Primary Total	Net I/S Sales	Total
1960	135.3	140.4	20.0	0.0	10.3	306.5	-1.8	304.8
1961	137.7	144.6	18.2	0.0	9.9	310.8	1.1	311.9
1962	140.7	149.3	23.0	0.0	10.3	323.7	0.7	324.4
1963	150.5	145.8	24.5	0.9	10.6	332.7	-0.6	332.2
1964	146.3	160.5	23.7	1.1	10.5	342.4	2.0	344.4
1965	140.0	164.7	20.8	0.0	11.7	337.2	9.0	346.2
1966	150.9	195.9	19.7	0.0	12.1	378.6	8.3	386.9
1967	157.6	187.9	18.3	0.0	12.1	375.9	6.3	382.3
1968	176.2	202.9	17.2	0.0	13.0	409.4	10.0	419.5
1969	181.4	209.6	27.1	0.0	12.9	431.0	22.0	453.0
1970	191.0	224.1	29.7	0.0	14.4	459.2	25.6	484.8
1971	193.9	225.5	26.3	0.0	14.2	459.9	33.3	493.2
1972	210.0	226.4	33.5	0.0	14.2	484.1	21.8	505.9
1973	212.7	230.8	36.9	6.5	14.2	501.2	17.6	518.8
1974	208.7	223.3	32.8	44.6	13.5	522.8	-7.5	515.2
1975	207.0	217.5	32.9	65.2	12.6	535.1	-13.0	522.1
1976	229.2	197.4	53.7	64.3	13.2	557.9	-5.9	552.0
1977	230.8	188.4	59.3	80.2	12.7	571.5	-17.4	554.2
1978	246.0	162.7	59.8	84.5	12.3	565.3	-11.8	553.5
1979	229.6	169.0	77.6	94.2	12.9	583.2	-35.9	547.3
1980	189.4	159.5	93.9	63.1	13.9	519.8	-17.3	502.5
1981	175.9	135.3	98.6	66.0	12.5	488.3	-13.0	475.3
1982	184.4	135.6	96.7	96.9	12.7	526.3	-39.8	486.5
1983	195.1	127.0	104.8	66.3	14.2	507.4	-8.2	499.2
1984	192.3	131.9	124.3	62.7	13.9	525.1	-17.9	507.2
1985	194.9	123.9	115.5	44.7	14.9	493.8	7.7	501.5
1986	196.9	104.0	109.9	82.7	17.2	510.7	-27.4	483.3
1987	203.3	107.7	116.5	92.6	16.1	536.2	-40.4	495.8
1988	220.9	119.9	139.3	73.4	13.8	567.3	-31.6	535.7
1989	224.5	117.6	130.8	87.0	11.8	571.7	-32.5	539.2

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy, Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Notes: Primary energy consumption includes energy used in the generation of electricity whether that electricity is used in Nebraska or not. Net I/S (Interstate Sales) represents the difference between the energy in electricity sold (including associated losses) and the energy input at electric utilities in Nebraska. (Negative if exports, positive if imports.) From 1960-1964, a small amount of other energy was consumed.

Figure 2
Consumption of Energy Resources by End-Use Sector, Nebraska, 1960-1989
(Trillion Btu)

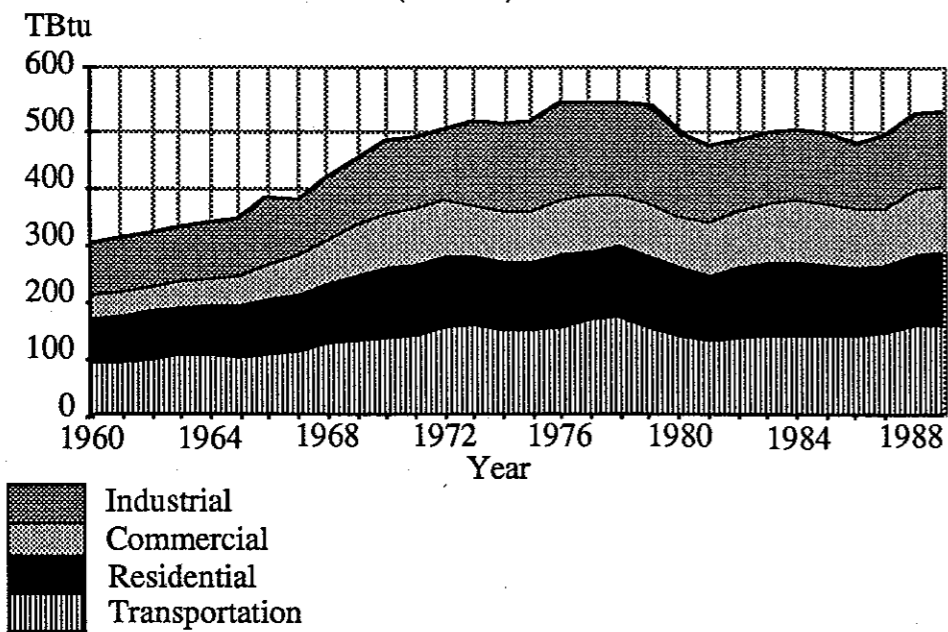


Table I-2
Consumption of Energy Resources by End-Use Sector, Nebraska, 1960-1989
(Trillion Btu)

Year	Residential	Commercial	Industrial	Transportation	Total
1960	75.1	43.9	92.6	93.1	304.8
1961	77.6	45.0	93.9	95.5	311.9
1962	83.0	46.6	94.9	99.9	324.4
1963	82.0	47.9	95.2	107.1	332.2
1964	86.9	50.5	101.1	105.8	344.4
1965	93.6	53.5	98.0	101.0	346.2
1966	99.6	58.4	122.4	106.6	386.9
1967	99.2	69.8	98.0	115.2	382.3
1968	105.2	77.4	108.7	128.3	419.5
1969	115.5	90.4	115.9	131.2	453.0
1970	125.0	94.9	126.7	138.3	484.8
1971	126.4	98.1	127.0	141.7	493.2
1972	127.9	96.7	126.8	154.6	505.9
1973	120.0	91.4	144.9	162.6	518.8
1974	117.5	93.4	152.1	152.2	515.2
1975	123.1	90.8	159.1	149.1	522.1
1976	125.4	99.7	168.7	158.1	552.0
1977	123.5	99.3	163.1	168.3	554.2
1978	124.9	93.4	162.3	172.9	553.5
1979	123.1	95.9	172.2	156.1	547.3
1980	120.0	93.4	148.1	141.0	502.5
1981	114.9	96.0	132.9	131.5	475.3
1982	125.9	100.7	125.1	134.8	486.5
1983	129.3	102.3	124.7	142.9	499.2
1984	125.0	112.9	125.5	143.8	507.2
1985	124.8	110.7	125.3	140.7	501.5
1986	120.0	104.9	116.7	141.7	483.3
1987	117.2	104.3	127.5	146.8	495.8
1988	127.0	113.5	134.9	160.2	535.7
1989	127.1	113.3	135.8	162.9	539.2

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990 1989 Preliminary Estimates. Nebraska Energy Office.

Table I-3
Consumption of Energy by Fuel Type and Consuming Sector, Nebraska, 1987
(Trillion Btu)

Fuel Type	Commercial		Transportation	Electric Utilities	Total Primary	Total End-Use
	Residential	Industrial				
Coal	*	0.1	5.8	-	110.6	116.5
Natural Gas	38.3	33.7	29.6	4.4	1.7	107.7
Petroleum	-	-	-	-	-	-
Motor Gasoline	-	0.7	6.5	86.5	-	93.7
Aviation Fuel	-	-	-	8.0	-	8.0
Propane	6.3	1.1	9.8	0.2	-	17.4
Distillates	1.2	2.1	22.6	45.6	0.2	71.7
Other	0.1	-	10.1	2.1	0.4	12.3
Nuclear	-	-	-	-	92.6	92.6
Hydro	-	-	-	-	16.1	16.1
Total Primary Energy Use	45.9	37.7	84.4	146.8	221.6	536.4
Electricity Sales	21.8	20.3	13.1	-	-	55.2
Net Interstate Sales	-	-	-	-	-40.6	-
Total Net End-Use	67.7	58.0	97.5	146.8	-	370.0
Electric System Losses	49.6	46.3	29.9	-	-	125.8
Total End-Use	117.3	104.3	127.4	146.8	-	495.8

Source: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990

Note: * represents less than 0.05 trillion Btu.

Source: Preliminary Estimates. Nebraska Energy Office.

Table I-4
Consumption of Energy by Fuel Type and Consuming Sector, Nebraska, 1988
(Trillion Btu)

Fuel Type	Commercial		Transportation	Electric Utilities	Total Primary	Total End-Use
	Residential	Industrial				
Coal	0.3	0.5	5.0	-	133.5	139.3
Natural Gas	42.8	38.7	31.8	4.6	2.0	119.9
Petroleum	-	-	-	-	-	-
Motor Gasoline	-	0.7	5.6	91.6	-	97.9
Aviation Fuel	-	-	-	8.9	-	8.9
Propane	6.9	1.2	11.2	0.2	-	19.5
Distillates	1.2	1.7	25.3	52.9	0.4	81.5
Other	0.1	0.1	10.3	2.0	0.5	13.0
Nuclear	-	-	-	-	73.4	73.4
Hydro	-	-	-	-	13.8	13.8
Total Primary Energy Use	51.3	42.9	89.2	160.2	223.6	567.2
Electricity Sales	23.2	21.6	14.0	-	-	58.8
Net Interstate Sales	-	-	-	-	-31.8	-
Total Net End-Use	74.5	64.5	103.2	160.2	-	402.4
Electric System Losses	52.5	48.9	31.6	-	-	133.0
Total End-Use	127.0	113.4	134.8	160.2	-	535.4

Source: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990

Table I-5
Consumption of Energy by Fuel Type and Consuming Sector, Nebraska, 1989
(Trillion Btu)

Fuel Type	Commercial		Transportation	Electric Utilities	Total Primary	Total End-Use
	Residential	Industrial				
Coal	0.1	0.2	4.6	-	130.8	4.9
Natural Gas	44.0	36.7	30.0	4.4	117.6	115.1
Petroleum						
Motor Gasoline	-	0.7	5.6	91.6	97.9	97.9
Aviation Fuel	-	-	-	8.3	8.3	8.3
Propane	6.6	1.1	10.5	0.2	18.4	18.4
Distillates	1.3	1.8	27.0	56.4	86.9	86.5
Other	0.1	0.1	10.5	2.0	13.0	12.7
Nuclear	-	-	-	-	87.0	-
Hydro	-	-	-	-	11.8	-
Total Primary Energy Use	52.1	40.6	88.2	162.9	227.9	-
Electricity Sales	23.0	22.3	14.6	-	-	59.9
Net Interstate Sales	-	-	-	-	-32.5	-
Total Net End-Use	75.1	62.9	102.8	162.9	-	403.7
Electric System Losses	52.0	50.4	33.0	-	-	135.5
Total End-Use	127.1	113.3	135.8	162.9	539.2	539.2

Source: Preliminary Estimates. Nebraska Energy Office.

Figure 3
Per Capita Energy Consumption, Nebraska and United States, 1960-1989
(Million Btus)

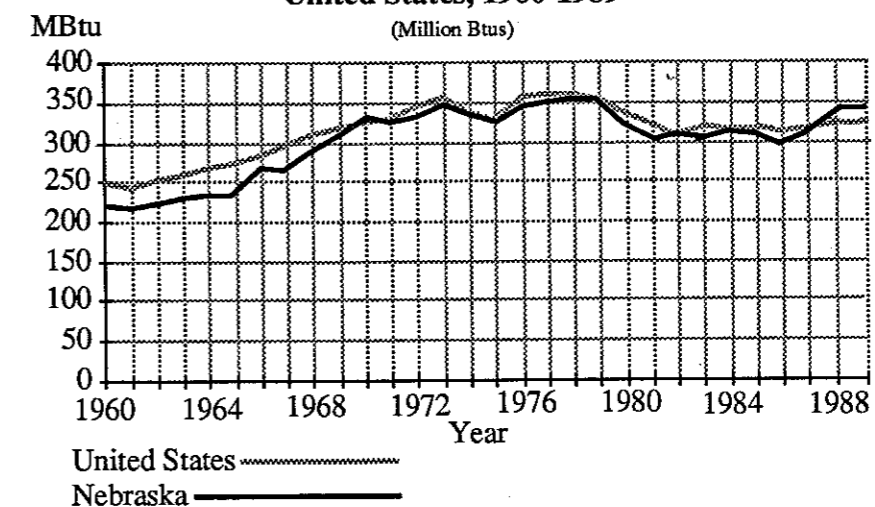


Table I-6
Energy Consumption and Per Capita Energy Consumption, Nebraska and United States, 1960-1989

Year	Nebraska		United States	
	Consumption (trillion Btu)	Per Capita Consumption (million Btu)	Consumption (trillion Btu)	Per Capita Consumption (million Btu)
1960	304.8	216.0	43,794.6	244.3
1961	311.9	216.3	44,455.2	242.9
1962	324.4	222.5	46,530.6	250.4
1963	333.2	226.7	48,341.8	256.5
1964	344.4	232.4	50,507.0	264.3
1965	346.2	235.4	52,696.9	272.3
1966	386.9	265.7	55,670.4	284.6
1967	382.3	262.4	57,591.2	291.6
1968	419.5	286.0	60,999.6	305.9
1969	453.0	307.3	64,173.9	318.6
1970	484.8	326.5	66,334.1	326.4
1971	493.2	327.1	67,788.6	327.8
1972	505.9	333.3	71,275.3	340.5
1973	518.8	339.3	74,351.5	351.7
1974	515.2	335.0	72,527.6	340.0
1975	522.1	338.4	70,569.3	327.5
1976	552.0	356.4	74,392.4	341.9
1977	554.2	355.9	76,317.2	347.2
1978	553.5	353.9	78,158.4	351.9
1979	547.3	349.3	78,920.4	351.4
1980	502.5	320.1	75,985.3	335.5
1981	475.3	300.3	74,022.2	322.4
1982	486.5	306.0	70,806.3	305.2
1983	499.2	312.8	70,486.1	300.8
1984	507.2	316.0	74,042.0	313.1
1985	501.5	312.5	74,018.9	310.1
1986	483.3	302.4	74,232.2	307.9
1987	495.8	311.0	76,792.2	315.5
1988	535.7	334.4	80,245.7	326.5
1989	539.2	334.7	81,230.0	327.3

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. Annual Energy Review, 1989. Energy Information Administration, U.S. Department of Energy. Washington, D.C. May 1990. Statistical Abstract of the United States, 1990. U.S. Department of Commerce, Bureau of the Census. Washington, D.C. December 1989. 1989 Nebraska Preliminary Estimates. Nebraska Energy Office.

Figure 4
Energy Consumption per Constant Dollar of Gross State Product, Nebraska and Energy Consumption per Constant Dollar of Gross National Product, United States, 1960-1989

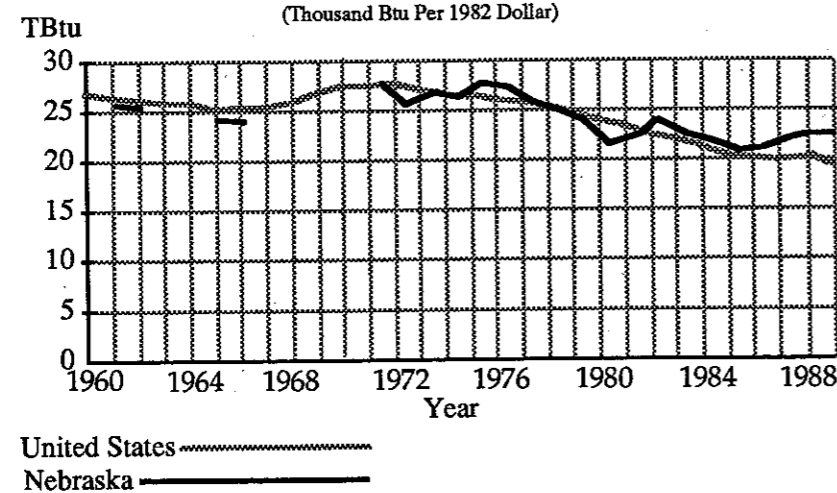


Table I-7
Energy Consumption and Energy Consumption per Constant Dollar of Gross State Product (GSP), Nebraska, and Energy Consumption and Energy Consumption per Constant Dollar of Gross National Product (GNP), United States, 1960-1989

Year	Nebraska		United States	
	Consumption (trillion Btu)	Consumption per GSP (1)	Consumption (trillion Btu)	Consumption per GNP (1)
1960	304.8	n.a.	43,794.6	26.3
1961	311.9	n.a.	44,455.2	26.0
1962	324.4	n.a.	46,530.6	25.9
1963	333.2	25.8	48,341.8	25.8
1964	344.4	n.a.	50,507.0	25.6
1965	346.2	n.a.	52,696.9	25.2
1966	386.9	n.a.	55,670.4	25.2
1967	382.3	24.6	57,591.2	25.4
1968	419.5	n.a.	60,999.6	25.8
1969	453.0	n.a.	64,173.9	26.5
1970	484.8	n.a.	66,334.1	27.5
1971	493.2	n.a.	67,788.6	27.3
1972	505.9	27.9	71,275.3	27.3
1973	518.8	26.0	74,351.5	27.1
1974	515.2	26.9	72,527.6	26.6
1975	522.1	26.6	70,569.3	26.2
1976	552.0	27.9	74,392.4	26.3
1977	554.2	27.4	76,317.2	25.8
1978	553.5	25.9	78,158.4	25.1
1979	547.3	24.9	78,920.4	24.7
1980	502.5	23.8	75,985.3	23.8
1981	475.3	21.5	74,022.2	22.8
1982	486.5	22.9	70,806.3	22.4
1983	499.2	24.1	70,486.1	21.5
1984	507.2	22.5	74,042.0	21.1
1985	501.5	21.5	74,018.9	20.5
1986	483.3	20.4	74,232.2	20.0
1987	495.8	20.6	76,792.2	19.9
1988	535.7	21.8	80,245.7	19.9
1989	539.2	21.6	81,230.0	19.6

Sources: *State Energy Data Report, Consumption Estimates, 1960-1988* Energy Information Administration, U.S. Department of Energy, Washington, D.C. April 1990 *Annual Energy Review, 1989*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. May 1990. *Survey of Current Business*. Bureau of Economic Analysis. U.S. Department of Commerce, Washington, D.C. May 1990. 1989 Nebraska Preliminary Estimates. Nebraska Energy Office.

Note: (1) Thousand Btu per 1982 dollar. 1982 dollars calculated using implicit GNP deflators.

TOTAL ENERGY EXPENDITURES

Expenditures on energy for 1989 were \$2,981.9 million, an increase of 9.1% from 1988, and only 0.1% below the peak expenditures of \$2,986.1 million in 1985. Expenditures for petroleum products and electricity were up dramatically from 1988 expenditures, primarily due to higher prices and increased consumption for these resources.

Per capita expenditures on energy in Nebraska increased to \$1,851.02 in 1989 from \$1,705.62 in 1988. Peak per capita expenditures were \$1,860.50 in 1985. In 1989, expenditures on energy represented 9.5 cents of each dollar of gross state product, a 0.2 cent increase from 1988, which had been the lowest level since 1973.

Figure 5
Total Energy Expenditures for Nuclear, Coal, Natural Gas and Petroleum, Nebraska, 1970-1989

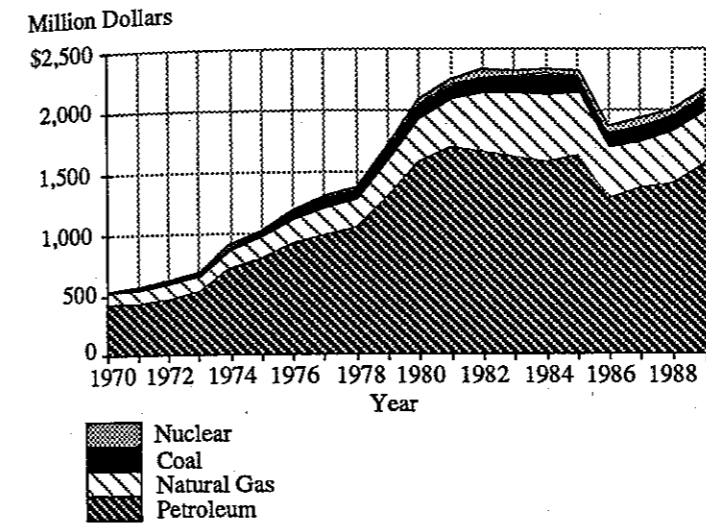


Figure 6
Total Energy Expenditures and Electricity Expenditures, Nebraska, 1970-1989

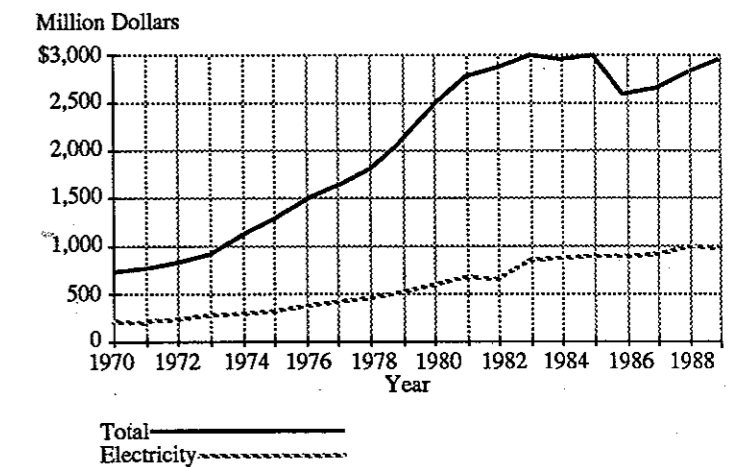


Table I-8
Total Energy Expenditures by Energy Type, Nebraska, 1970-1989
 (Million Dollars)

Year	Petroleum	Natural Gas	Coal	Nuclear	Primary Total	Less		Total
						Electric Utilities	Electricity	
1970	\$404.0	\$104.1	\$9.6	\$0.0	\$517.7	\$22.3	\$170.3	\$665.7
1971	414.8	115.7	10.8	0.0	541.3	24.9	187.8	704.2
1972	447.9	130.7	13.6	0.0	592.2	32.8	191.9	751.3
1973	513.9	134.4	16.0	1.1	665.4	39.5	203.7	829.6
1974	702.2	150.9	19.6	7.0	879.7	53.2	226.0	1,052.5
1975	771.9	184.3	28.4	11.0	995.6	68.1	271.2	1,198.6
1976	896.3	200.6	51.4	12.9	1,161.2	82.2	326.6	1,405.6
1977	959.6	236.1	63.8	16.0	1,275.5	92.6	363.4	1,546.3
1978	1,038.6	227.2	70.8	16.6	1,353.2	99.7	412.0	1,665.5
1979	1,304.2	291.2	94.1	27.5	1,717.0	133.8	447.6	2,030.8
1980	1,561.0	354.1	119.4	27.7	2,062.2	164.7	550.6	2,448.1
1981	1,685.7	395.7	119.0	36.3	2,236.7	154.8	628.9	2,710.8
1982	1,643.7	499.6	117.7	66.2	2,327.1	181.3	644.5	2,790.4
1983	1,593.3	542.5	131.1	41.1	2,308.0	169.7	816.8	2,955.1
1984	1,560.5	567.2	164.0	35.5	2,327.2	191.7	826.9	2,962.4
1985	1,615.0	523.7	135.5	29.3	2,303.5	158.7	841.2	2,986.1
1986	1,273.5	408.4	118.5	52.8	1,853.2	167.8	846.3	2,531.7
1987	1,354.6	383.6	114.1	59.0	1,911.2	169.4	864.2	2,605.9
1988	1,376.5	439.0	121.7	46.5	1,983.7	166.5	915.1	2,732.4
1989	1,556.0	436.4	108.1	56.6	2,157.1	165.9	990.7	2,981.9

Sources: *State Energy Price and Expenditure Report: 1988*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Figure 7
Energy Expenditures by End-Use Sector, Nebraska,
1970-1989

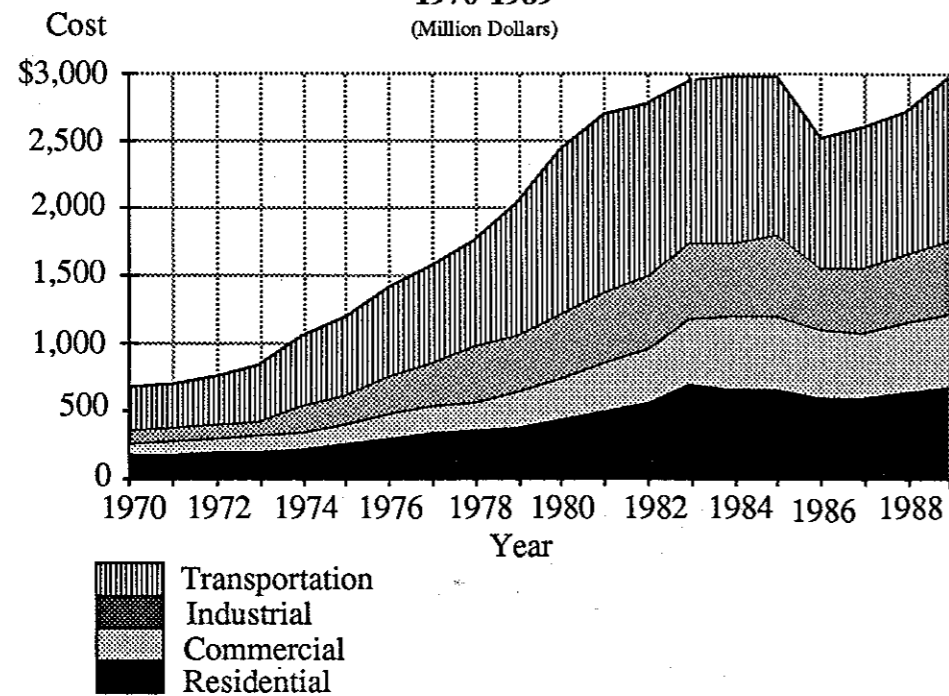


Table I-9
Energy Expenditures by End-Use Sector, Nebraska, 1970-1989
(Million Dollars)

	Residential	Commercial	Industrial	Transportation	Total
1970	\$167.4	\$89.9	\$92.3	\$316.1	\$665.7
1971	178.4	100.4	101.6	323.9	704.2
1972	189.3	103.1	105.7	353.2	751.3
1973	200.4	110.2	111.9	407.1	829.6
1974	214.1	125.4	185.4	527.6	1,052.5
1975	249.4	143.1	229.6	576.5	1,198.6
1976	286.2	180.1	286.2	653.2	1,405.6
1977	323.7	203.9	296.8	721.9	1,546.3
1978	344.3	211.7	327.2	782.2	1,665.3
1979	377.7	254.3	412.3	986.6	2,030.8
1980	433.0	298.5	483.5	1,233.1	2,448.1
1981	493.4	367.5	520.4	1,329.4	2,710.8
1982	558.4	407.1	539.4	1,285.6	2,790.4
1983	687.2	487.8	563.2	1,216.8	2,955.1
1984	662.4	538.3	543.0	1,218.7	2,962.4
1985	660.6	541.3	607.2	1,176.9	2,986.1
1986	602.8	490.0	460.3	978.7	2,531.7
1987	590.3	482.0	493.5	1,040.2	2,605.9
1988	643.5	520.2	504.3	1,064.4	2,732.4
1989	666.1	549.3	535.2	1,231.3	2,981.9

Sources: State Energy Price and Expenditures Report: 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table I-10
Energy Expenditures by Fuel Type and Consuming Sector, Nebraska, 1987
(Million Dollars)

Fuel Type	Consuming Sector				Electric Utilities	Total Expenditures
	Residential	Commercial	Industrial	Transportation		
Coal	\$0.1	\$0.1	\$9.4	\$-	\$104.5	\$114.1
Natural Gas	169.5	126.6	83.2	-	4.4	383.6
Petroleum						
Motor Gasoline	-	5.5	49.6	655.2	-	710.3
Aviation Fuel	-	-	-	36.3	-	36.3
Propane	33.7	8.6	75.8	1.5	-	119.6
Distillates	5.3	7.3	87.1	320.3	0.8	420.8
Other	0.4	0.1	39.3	27.0	0.8	67.6
Nuclear	-	-	-	-	59.0	59.0
Total Primary Expenditures	209.0	148.2	344.4	1,040.3	169.5	1,911.3
Less Utility Expenditures	-	-	-	-	-169.5	-169.5
Electricity Expenditures	381.4	333.8	149.0	-	-	864.2
Total Expenditures	\$590.4	\$482.0	\$493.4	\$1,040.3	\$0.0	\$2,606.0

Source: State Energy Price and Expenditure Report: 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.

Table I-11
Energy Expenditures by Fuel Type and Consuming Sector, Nebraska, 1988
(Million Dollars)

Fuel Type	Consuming Sector				Electric Utilities	Total Expenditures
	Residential	Commercial	Industrial	Transportation		
Coal	\$0.7	\$0.8	\$7.8	\$-	\$112.3	\$121.6
Natural Gas	194.0	147.7	92.1	-	5.2	439.0
Petroleum						
Motor Gasoline	-	5.1	40.4	660.8	-	706.3
Aviation Fuel	-	-	-	38.2	-	38.2
Propane	38.0	9.5	86.8	1.7	-	136.0
Distillates	4.9	5.3	83.5	342.3	1.3	437.3
Other	0.4	0.3	35.5	21.3	1.1	58.6
Nuclear	-	-	-	-	46.5	46.5
Total Primary Expenditures	238.0	168.7	346.1	1,064.3	166.4	1,983.5
Less Utility Expenditures	-	-	-	-	-166.4	-166.4
Electricity Expenditures	405.3	351.6	158.2	-	-	915.1
Total Expenditures	\$643.3	\$520.3	\$504.3	\$1,064.3	\$0.0	\$2,732.2

Source: State Energy Price and Expenditure Report: 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.

Table I-12
Energy Expenditures by Fuel Type and Consuming Sector, Nebraska, 1989
(Million Dollars)

Fuel Type	Consuming Sector				Electric Utilities	Total Expenditures
	Residential	Commercial	Industrial	Transportation		
Coal	\$0.2	\$0.3	\$6.9	\$-	\$100.7	\$108.1
Natural Gas	200.6	140.9	89.1	-	5.8	436.4
Petroleum						
Motor Gasoline	-	5.8	46.6	762.1	-	814.5
Aviation Fuel	-	-	-	42.0	-	42.0
Propane	34.4	7.5	73.4	1.4	-	116.7
Distillates	6.1	6.0	97.4	397.7	1.5	508.7
Other	0.4	0.3	44.0	28.1	1.3	74.1
Nuclear	-	-	-	-	56.6	56.6
Total Primary Expenditures	241.7	168.3	357.4	1,231.3	165.9	2,157.1
Less Utility Expenditures	-	-	-	-	-165.9	-165.9
Electricity Expenditures	424.4	361.4	177.8	-	-	963.6
Total Expenditures	\$666.1	\$529.7	\$535.2	\$1,231.3	\$0.0	\$2,981.9

Source: Preliminary Estimates. Nebraska Energy Office.

Figure 8
Per Capita Energy Expenditures, Nebraska and United States, 1970-1989

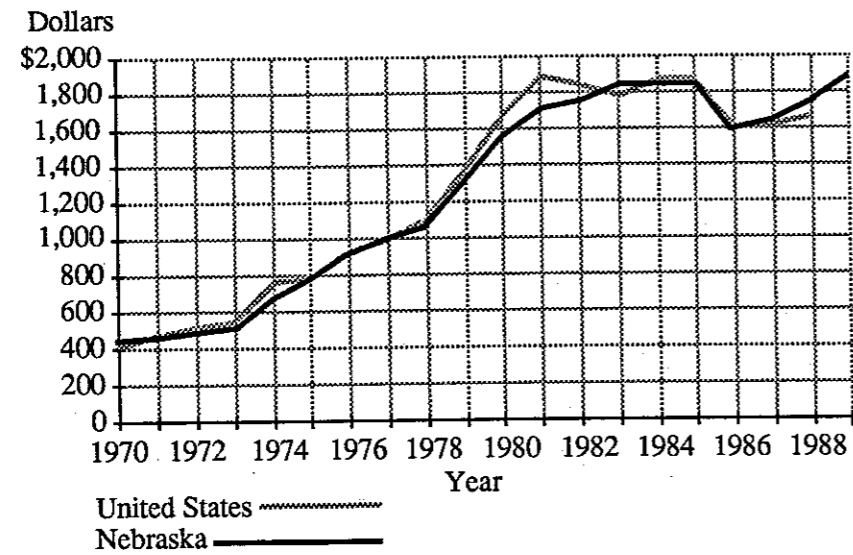


Figure 9
Energy Expenditures Per Dollar of Gross State Product, Nebraska
and Gross National Product, United States,
1970-1989

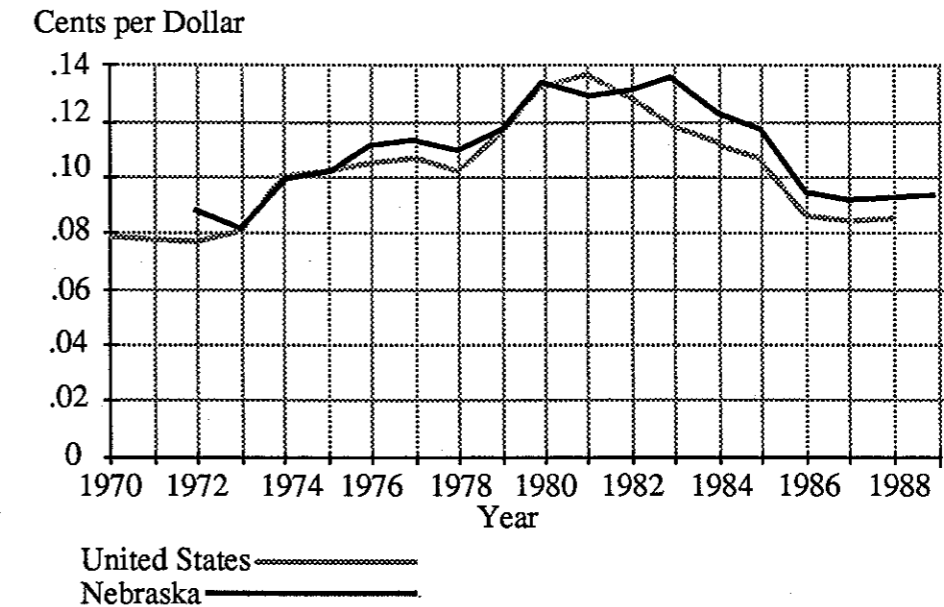


Table I-13
Total Energy Expenditures and Per Capita Expenditures, Nebraska and United States,
1970-1989

Year	Nebraska		United States	
	Expenditures (Million \$)	Per Capita Expenditures (Dollars)	Expenditures (Million \$)	Per Capita Expenditures (Dollars)
1970	\$666	\$448.28	\$82,577	\$406.38
1971	704	466.98	89,754	434.01
1972	751	494.93	97,752	467.04
1973	830	542.58	111,558	527.71
1974	1,053	684.33	153,102	717.78
1975	1,199	776.80	171,788	797.16
1976	1,406	907.42	193,613	889.77
1977	1,546	993.13	220,157	1,001.62
1978	1,665	1,064.77	238,826	1,075.31
1979	2,031	1,295.98	297,047	1,322.56
1980	2,248	1,559.30	373,887	1,650.72
1981	2,711	1,712.44	426,435	1,857.30
1982	2,790	1,754.97	424,813	1,831.09
1983	2,955	1,851.57	415,744	1,774.41
1984	2,962	1,845.73	433,568	1,833.27
1985	2,986	1,860.50	435,617	1,824.96
1986	2,532	1,584.29	381,300	1,581.50
1987	2,606	1,634.82	393,303	1,615.87
1988	2,732	1,705.62	406,054	1,651.97
1989	2,982	1,851.02	n.a.	n.a.

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. Statistical Abstract of the United States, 1989. U.S. Department of Commerce, Bureau of the Census. Washington, D.C. December 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table I-14
Total Energy Expenditures and Energy Expenditures per Dollar of Gross State Product, Nebraska,
and per Dollar of Gross National Product, United States, 1970-1989

Year	Nebraska		United States	
	Expenditures (Million \$)	Expenditures per GSP (Cents/Dollar)	Expenditures (Million \$)	Expenditures per GNP (Cents/Dollar)
1970	\$666	n.a.	\$82,577	8.1
1971	704	n.a.	89,754	8.1
1972	751	8.9	97,752	8.1
1973	830	8.4	111,558	8.2
1974	1,053	10.2	153,102	10.4
1975	1,199	10.3	171,788	10.8
1976	1,406	11.2	193,613	10.9
1977	1,546	11.4	220,157	11.0
1978	1,655	10.8	238,826	10.6
1979	2,031	11.8	297,047	11.8
1980	2,248	13.6	373,887	13.7
1981	2,711	13.0	426,435	14.0
1982	2,790	13.1	424,813	13.4
1983	2,955	13.7	415,744	12.2
1984	2,962	12.2	433,568	11.5
1985	2,986	11.7	435,617	10.9
1986	2,532	9.6	381,300	9.0
1987	2,606	9.2	393,303	8.7
1988	2,732	9.2	406,054	8.3
1989	2,982	9.5	n.a.	n.a.

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. Statistical Abstract of the United States, 1989. U.S. Department of Commerce, Bureau of the Census. Washington, D.C. December 1990. Survey of Current Business. Bureau of Economic Analysis. U.S. Department of Commerce. Washington, D.C. May 1989. 1989 Preliminary Estimates. Nebraska Energy Office.

II. ENERGY CONSUMPTION, PRICES AND EXPENDITURES BY CONSUMING SECTOR

Overview

This section contains information on energy consumption, prices and expenditures for the residential, commercial, industrial, transportation and electric utility sectors.

For the residential, commercial and industrial sectors, a net total (less electrical system losses) is provided to indicate the energy actually consumed by these sectors. In addition, energy consumed in the generation, transmission and distribution of electricity is allocated to each sector based on the electricity consumed by the sector. Thus total consumption represents the energy consumed by the sector as well as that used to provide electricity to the sector.

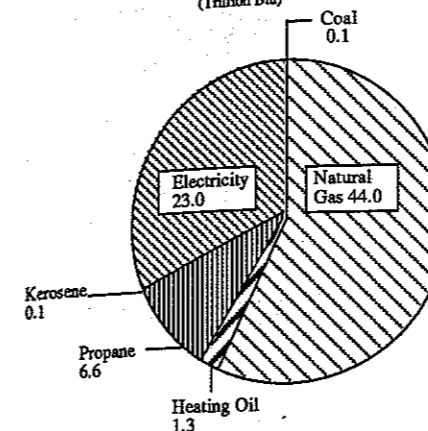
Tables

II-1 Residential Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989	II-8 Industrial Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
II-2 Residential Sector Energy Prices by Fuel Type, Nebraska, 1970-1989	II-9 Industrial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
II-3 Residential Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989	II-10 Transportation Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
II-4 Commercial Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989	II-11 Transportation Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
II-5 Commercial Sector Energy Prices by Fuel Type, Nebraska, 1970-1989	II-12 Transportation Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
II-6 Commercial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989	II-13 Electric Utility Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
II-7 Industrial Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989	II-14 Electric Utility Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
	II-15 Electric Utility Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989

RESIDENTIAL

The residential sector consists of private households.

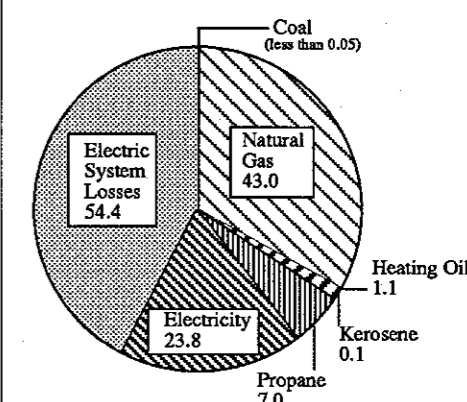
Figure 10
Residential Sector Net Energy Consumption by Fuel Type, Nebraska, 1989
(Trillion Btu)



Energy is consumed primarily for space heating, water heating, air conditioning, refrigeration, cooking, clothes drying and lighting. Fuel used for motor vehicles by household members is included in the transportation sector.

Between 1988 and 1989, residential sector net energy use increased 0.8% to the highest level since 1985. Total energy attributed to the residential sector in 1989 increased 0.1% from

Figure 11
Residential Sector Total Energy Consumption by Fuel Type, Nebraska, 1989
(Trillion Btu)



1988. Electricity use was down 0.9% from 1988, natural gas use was up 2.8% from 1988, and petroleum use was down 2.4% from 1988.

In 1989, energy prices for the residential sector decreased from 1988 prices for coal, propane and kerosene. Natural gas, heating oil, and electricity prices increased from 1988 levels.

In 1989, residential sector expenditures on energy increased nearly 3.5% to \$666.1 million. This compares to peak expenditures of over \$687 million in 1983.

Table II-1
Residential Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
(Trillion Btu)

	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Electricity	Electric System Net Total	Losses	Total
1960	1.6	40.9	0.8	1.9	7.2	6.5	58.9	16.2	75.1
1961	1.1	41.6	0.8	1.8	7.8	7.1	60.3	17.3	77.6
1962	1.1	44.7	0.8	1.9	8.7	7.6	64.7	18.2	83.0
1963	0.8	40.3	0.8	1.3	10.5	8.3	62.0	19.9	82.0
1964	0.6	44.7	0.9	1.3	9.4	8.9	65.8	21.2	86.9
1965	0.4	47.2	0.6	2.6	10.2	9.6	70.7	22.9	93.6
1966	0.3	52.7	0.9	2.0	10.7	9.7	76.3	23.3	99.6
1967	0.2	53.6	1.0	0.5	11.3	9.6	76.2	23.0	99.2
1968	0.3	53.3	1.0	2.5	12.4	10.6	79.9	25.2	105.2
1969	0.5	55.1	0.9	2.1	14.4	12.6	85.5	30.0	115.5
1970	0.3	58.8	1.1	2.1	14.7	14.0	91.0	34.0	125.0
1971	0.2	58.1	1.1	2.6	14.1	14.7	90.9	35.5	126.4
1972	0.3	60.9	1.3	3.0	15.0	13.9	94.4	33.5	127.9
1973	0.2	51.0	1.2	3.0	13.2	15.1	83.7	36.2	120.0
1974	0.1	49.8	1.1	2.3	11.4	15.4	80.0	37.5	117.5
1975	0.1	53.6	1.0	2.1	11.7	16.0	84.5	38.6	123.1
1976	0.1	54.8	1.5	2.4	11.8	16.1	86.6	38.8	125.4
1977	0.1	53.0	1.3	2.1	10.3	16.6	83.4	40.0	123.5
1978	0.1	48.2	1.5	1.6	10.5	18.2	80.3	44.6	124.9
1979	0.4	53.4	2.7	0.1	5.3	18.0	79.8	43.3	123.1
1980	0.1	47.9	2.1	0.1	5.2	18.8	74.2	45.8	120.0
1981	0.1	43.0	2.2	0.2	4.8	19.1	69.4	45.5	114.9
1982	0.2	50.4	2.1	0.2	5.2	19.9	78.0	47.9	125.9
1983	0.4	46.4	1.4	0.3	6.2	22.0	76.7	52.6	129.3
1984	0.7	46.9	1.6	0.4	4.4	21.4	75.3	49.7	125.0
1985	0.1	45.8	2.0	0.3	5.9	21.1	75.3	49.6	124.8
1986	*	42.0	1.6	0.1	5.1	21.6	70.5	49.5	120.0
1987	*	38.3	1.2	0.1	6.3	21.8	67.6	49.6	117.2
1988	0.3	42.8	1.2	0.1	6.9	23.2	74.5	52.5	127.0
1989	0.1	44.0	1.3	0.1	6.6	23.0	75.1	52.0	127.1

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.
Note: * Value less than 0.05 trillion Btu.

Figure 12
Residential Sector Electricity and Coal Prices
by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

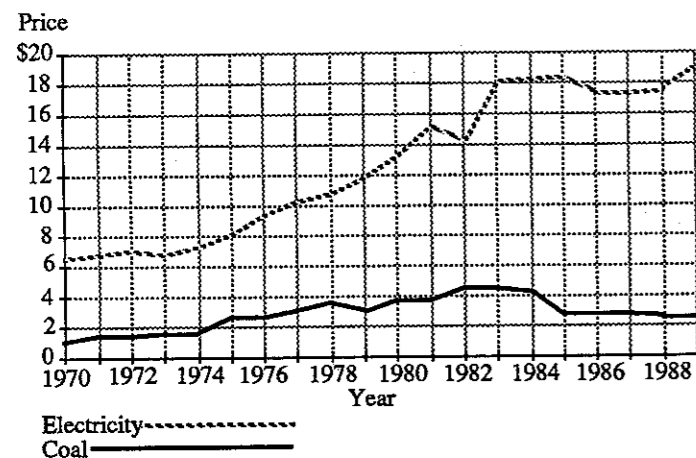


Figure 13
Residential Sector Petroleum and Natural Gas
Prices by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

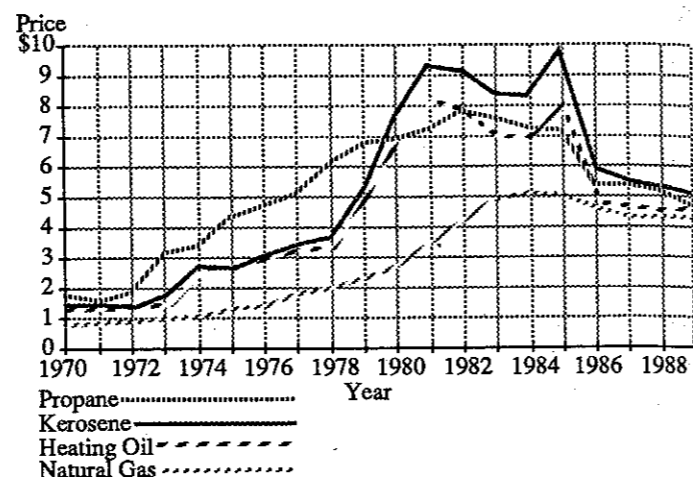


Figure 14
Residential Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Millions of Dollars)

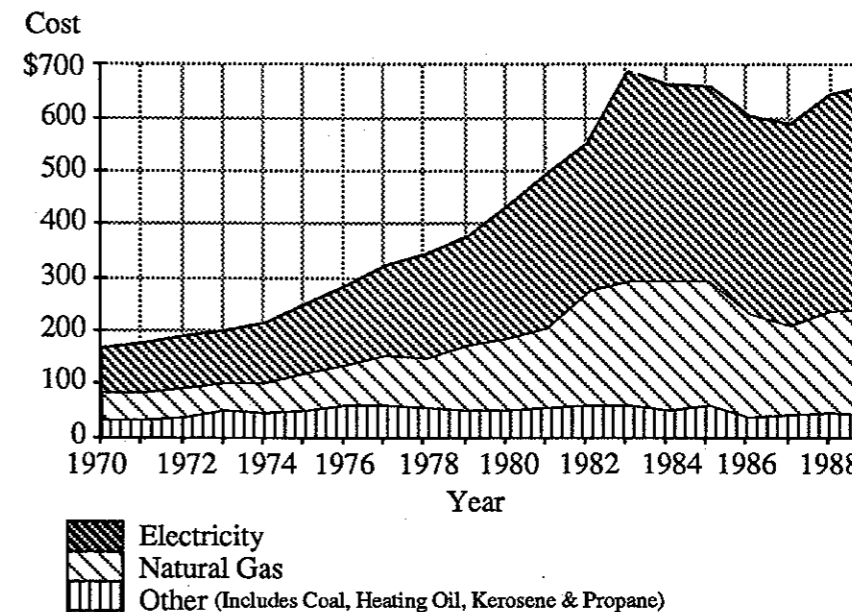


Table II-2
Residential Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Electricity	Average
1970	\$1.08	\$0.84	\$1.19	\$1.39	\$1.78	\$6.21	\$1.84
1971	1.03	0.91	1.29	1.39	1.71	6.52	1.96
1972	1.10	0.98	1.30	1.40	1.82	6.92	2.01
1973	1.16	1.03	1.41	1.73	3.10	6.60	2.39
1974	1.52	1.13	2.43	2.63	3.33	7.22	2.68
1975	2.16	1.29	2.62	2.74	3.57	8.13	2.95
1976	2.22	1.37	2.86	3.04	4.18	9.32	3.30
1977	2.57	1.80	3.22	3.48	4.60	10.20	3.88
1978	3.42	1.97	3.30	3.69	4.87	10.81	4.29
1979	3.68	2.31	4.91	5.09	6.17	11.52	4.73
1980	3.60	2.78	6.85	7.55	6.82	13.22	5.83
1981	3.75	3.52	8.12	9.24	7.08	15.07	7.11
1982	4.26	4.24	7.84	9.24	7.67	14.34	7.16
1983	4.23	5.05	7.20	8.41	7.46	17.88	8.96
1984	4.09	5.18	6.89	8.47	7.18	17.35	8.79
1985	2.76	5.10	7.92	9.74	7.12	17.30	8.78
1986	2.40	4.62	4.88	6.00	5.35	17.27	8.55
1987	2.43	4.43	4.50	5.54	5.35	17.52	8.73
1988	2.49	4.53	4.27	5.25	5.48	17.44	8.64
1989	2.38	4.56	4.67	5.05	4.75	18.45	8.87

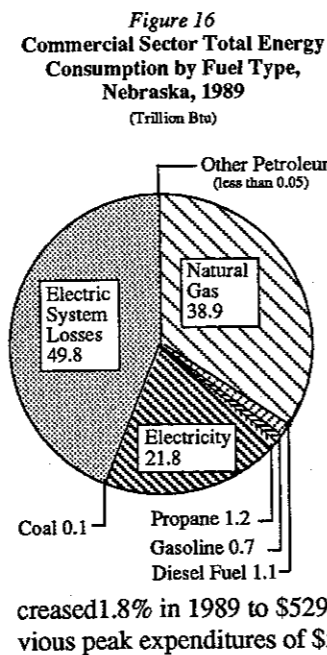
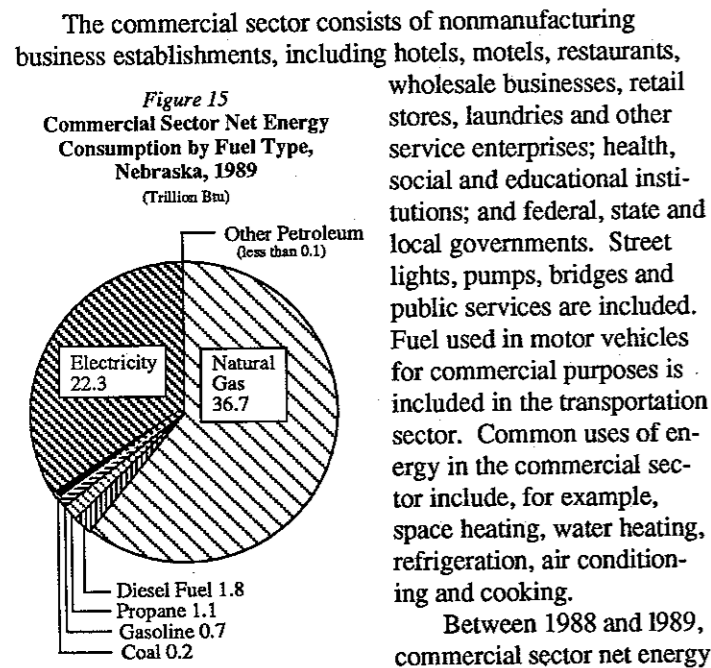
Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table II-3
Residential Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Million Dollars)

	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Electricity	Total
1970	\$0.3	\$49.6	\$1.4	\$3.0	\$26.1	\$87.0	\$167.4
1971	0.2	53.2	1.4	3.6	24.1	95.9	178.4
1972	0.3	59.4	1.6	4.2	27.3	96.3	189.3
1973	0.2	52.4	1.7	5.3	40.9	99.9	200.4
1974	0.1	56.3	2.6	6.1	37.8	111.2	214.1
1975	0.1	68.9	2.6	5.8	41.7	130.3	249.4
1976	0.1	75.1	4.2	7.4	49.2	150.1	286.2
1977	0.3	95.1	4.3	7.4	47.5	169.1	323.7
1978	0.5	94.8	5.1	6.0	40.6	197.1	344.3
1979	1.4	123.3	13.0	0.7	32.4	206.8	377.7
1980	0.4	133.5	14.4	0.4	35.2	249.1	433.0
1981	0.4	151.5	18.2	1.5	33.8	288.0	493.4
1982	0.8	213.6	16.7	1.5	39.8	286.0	558.4
1983	1.8	234.1	10.4	2.2	46.1	392.7	687.2
1984	2.8	243.3	10.8	3.3	31.3	371.0	662.4
1985	0.3	233.9	15.7	3.4	41.8	365.5	660.6
1986	0.1	194.0	8.0	0.6	27.5	372.6	602.8
1987	0.1	169.5	5.3	0.4	33.7	381.4	590.3
1988	0.7	194.0	4.9	0.4	38.0	405.3	643.5
1989	0.2	200.6	5.3	0.4	34.4	424.4	666.1

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

COMMERCIAL



use decreased 2.8%. Total energy attributed to the commercial sector in 1989 decreased 0.7% from 1988. Electricity use was up 3.2% from 1988, natural gas use was down 5.2% from 1988, and petroleum use remained unchanged from 1988.

Energy prices for the commercial sector in 1989 decreased from 1988 prices for coal and propane. Natural gas, electricity and other petroleum product prices increased over 1988 levels but remained below 1985 prices.

Commercial sector expenditures on energy increased 1.8% in 1989 to \$529.7 million. This is below the previous peak expenditures of \$541.3 million in 1985.

Figure 17
Commercial Sector Electricity & Coal Prices, Nebraska, 1970-1989
(Dollars/Million Btu)

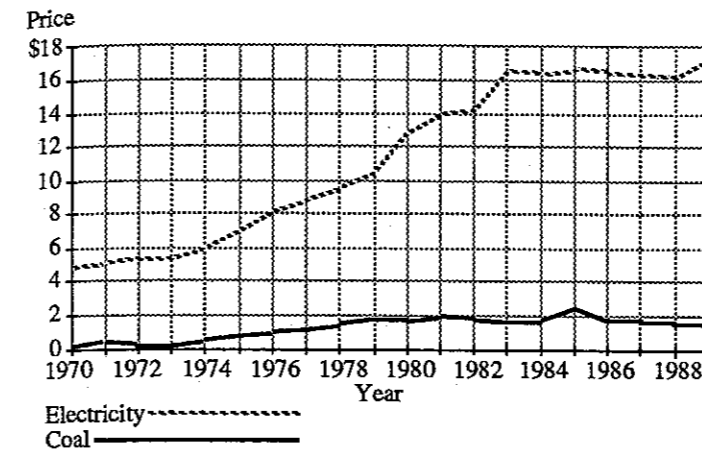


Figure 18
Commercial Sector Gasoline, Propane, Diesel Fuel, Other Petroleum & Natural Gas Prices, Nebraska, 1970-1989
(Dollars/Million Btu)

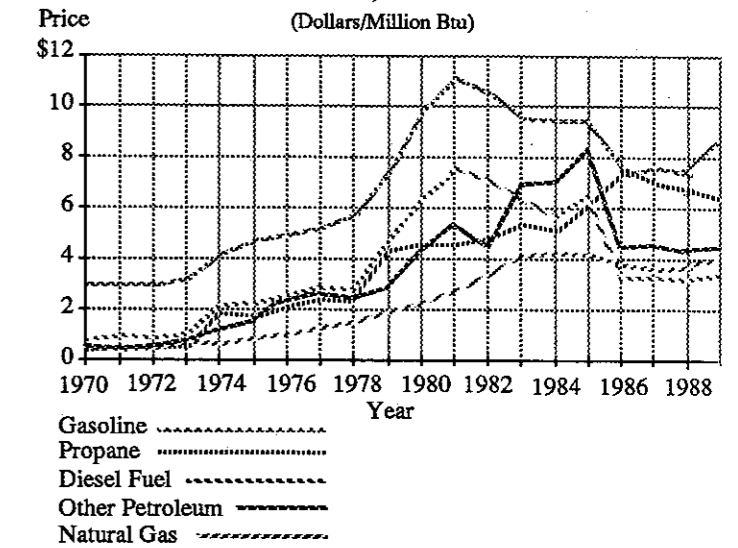


Table II-4
Commercial Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
(Trillion Btu)

Year	Commercial Sector Energy Consumption by Fuel Type (Trillion Btu)						Net Electric System		Total
	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	Electricity	Losses	
1960	3.0	22.7	0.8	1.3	0.4	0.7	4.3	10.8	43.9
1961	2.0	23.2	0.8	1.4	0.5	0.6	4.8	11.7	45.0
1962	2.1	22.4	0.8	1.5	0.5	0.9	5.4	13.0	46.6
1963	1.5	22.2	0.8	1.9	0.5	0.9	5.9	14.2	47.9
1964	1.0	23.9	0.9	1.7	0.5	1.0	6.4	15.2	50.5
1965	0.8	25.3	0.7	1.8	0.5	1.0	6.9	16.5	53.5
1966	0.6	29.8	0.9	1.9	0.5	1.5	6.8	16.3	58.4
1967	0.5	41.3	1.0	2.0	0.5	1.1	6.9	16.6	69.8
1968	0.5	41.7	1.0	2.2	0.5	2.1	8.7	20.7	77.4
1969	0.9	45.9	0.9	2.5	0.6	2.2	11.0	26.3	90.4
1970	0.5	47.2	1.1	2.6	0.6	1.9	12.0	29.0	94.9
1971	0.4	47.6	1.1	2.5	0.6	1.8	12.9	31.1	98.1
1972	0.5	46.2	1.3	2.6	0.6	1.9	12.8	30.8	96.7
1973	0.3	39.2	1.2	2.3	0.6	1.9	13.5	32.3	91.4
1974	0.2	42.6	1.1	2.0	0.6	1.9	13.1	31.9	93.4
1975	0.1	43.0	1.0	2.1	0.6	1.4	12.5	30.1	90.8
1976	0.1	48.5	1.5	2.1	0.7	2.4	13.0	31.4	99.7
1977	0.2	47.0	1.3	1.8	0.7	2.1	13.5	32.6	99.3
1978	0.3	40.8	1.6	1.9	0.7	1.6	13.5	33.1	93.4
1979	0.7	43.4	2.7	0.9	0.7	0.7	13.7	33.1	95.9
1980	0.2	42.5	1.1	0.9	0.8	0.2	13.9	33.8	93.4
1981	0.2	39.8	2.0	0.8	0.8	0.2	15.4	36.8	96.0
1982	0.3	42.2	1.7	0.9	0.7	0.7	15.9	38.2	100.7
1983	0.7	38.4	4.8	1.1	0.6	*	16.7	39.9	102.3
1984	1.3	41.1	5.2	0.8	0.5	0.1	19.3	44.7	112.9
1985	0.2	38.7	4.7	1.0	0.8	0.1	19.5	45.7	110.7
1986	0.1	36.1	1.9	0.9	0.7	*	19.8	45.4	104.9
1987	0.1	33.7	2.1	1.1	0.7	*	20.3	46.3	104.3
1988	0.5	38.7	1.7	1.2	0.7	0.1	21.6	48.9	113.5
1989	0.2	36.7	1.8	1.1	0.7	0.1	22.3	50.4	113.3

Sources: *State Energy Data Report, Consumption Estimates, 1960-1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Notes: * = Value less than 0.05 trillion Btu. Other petroleum includes kerosene and residual fuel.

Table II-5
Commercial Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

Year	Commercial Sector Energy Prices by Fuel Type (Dollars/Million Btu)						Average
	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	
1970	\$0.16	\$0.52	\$1.03	\$1.09	\$3.03	\$0.58	\$4.87
1971	0.41	0.58	1.11	1.18	3.00	0.67	5.08
1972	0.22	0.57	1.11	1.15	3.00	0.74	5.37
1973	0.24	0.75	1.25	1.28	3.21	0.79	5.39
1974	0.57	0.81	2.29	2.40	4.30	1.79	5.94
1975	0.81	1.00	2.45	2.46	4.76	1.93	6.96
1976	1.03	1.16	2.67	2.68	5.06	1.92	8.16
1977	1.17	1.39	3.01	3.16	5.30	2.00	8.94
1978	1.47	1.54	3.07	3.36	5.81	1.88	9.66
1979	1.72	2.01	4.80	3.35	7.45	2.43	10.43
1980	1.69	2.33	6.49	5.19	10.06	5.50	12.86
1981	1.97	3.02	7.80	5.24	11.37	4.50	14.06
1982	1.79	3.56	7.46	5.41	10.71	4.43	14.32
1983	1.67	4.29	6.45	6.01	9.61	6.74	16.66
1984	1.70	4.35	5.91	5.78	9.55	6.91	16.44
1985	2.46	4.29	6.79	6.92	9.67	8.12	16.78
1986	1.70	3.95	3.49	8.25	7.28	4.17	16.55
1987	1.63	3.76	3.54	7.76	7.58	4.20	16.43
1988	1.56	3.81	3.04	7.73	7.22	4.08	16.25
1989	1.49	3.84	3.32	6.70	8.34	4.25	17.42

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Note: Other petroleum includes kerosene and residual fuel.

Figure 19
Commercial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Millions of Dollars)

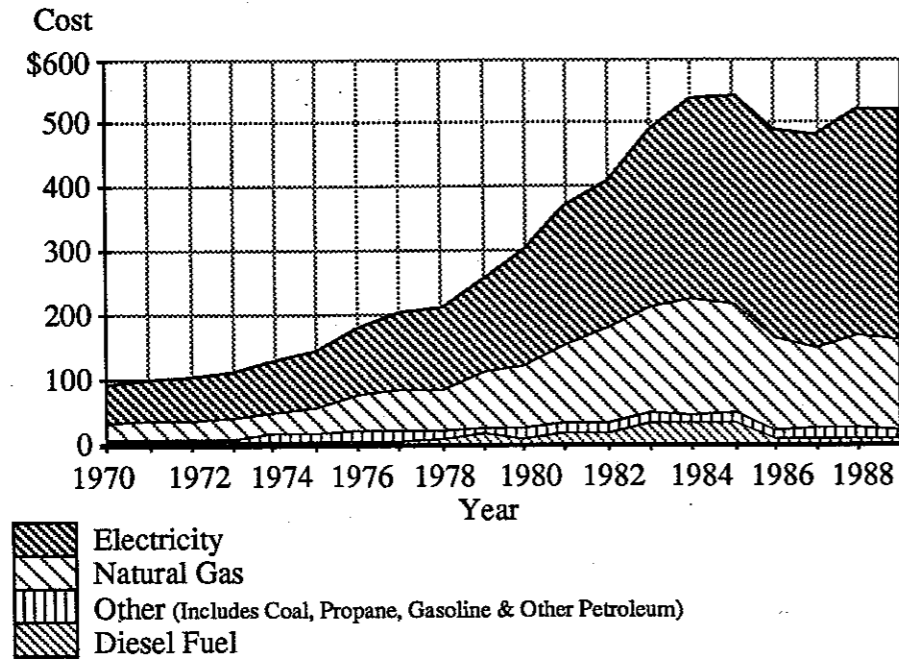


Table II-6
Commercial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Million Dollars)

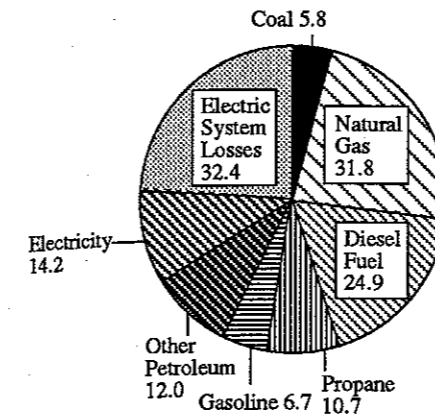
	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	Electricity	Total
1970	\$0.1	\$24.7	\$1.2	\$2.8	\$1.7	\$1.1	\$58.3	\$89.9
1971	0.2	27.7	1.2	2.9	1.8	1.2	65.3	100.4
1972	0.1	26.5	1.4	3.0	1.9	1.4	68.7	103.1
1973	0.1	29.3	1.5	3.0	2.0	1.5	72.8	110.2
1974	0.1	34.3	2.4	4.8	2.7	3.4	77.6	125.4
1975	0.1	42.9	2.5	5.1	3.0	2.7	86.9	143.1
1976	0.1	56.2	3.9	5.6	3.4	4.6	106.3	180.1
1977	0.2	65.5	4.0	5.8	3.6	4.2	120.6	203.9
1978	0.4	62.6	4.8	6.2	3.9	3.0	130.7	211.7
1979	1.2	87.2	12.8	3.1	5.5	1.7	142.9	254.3
1980	0.4	99.1	6.8	4.7	7.9	1.1	178.5	298.5
1981	0.4	120.3	15.4	4.4	9.2	0.9	217.0	367.5
1982	0.6	150.2	13.0	5.0	7.3	3.1	227.9	407.1
1983	1.3	164.7	31.3	6.5	6.1	0.2	277.7	487.8
1984	2.1	179.0	30.9	4.5	4.8	0.4	316.6	538.3
1985	0.4	166.0	31.7	7.2	8.0	0.8	327.2	541.3
1986	0.1	142.8	6.8	7.5	5.4	0.2	327.3	490.0
1987	0.1	126.6	7.3	8.6	5.5	0.2	333.8	482.0
1988	0.8	147.7	5.3	9.5	5.1	0.3	351.6	520.2
1989	0.3	140.9	6.0	7.5	5.8	0.3	361.4	529.7

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.
1989 Preliminary Estimates. Nebraska Energy Office.
Note: Other petroleum includes kerosene and residual fuel.

INDUSTRIAL

The industrial sector consists of manufacturing, construction, mining, agriculture and forestry organizations. Energy used by this sector to transport products to market or inputs to the organizations is included in the transportation sector.

Figure 20
Industrial Sector Total Energy Consumption by Fuel Type, Nebraska, 1989
(Trillion Btu)



Electricity use was up 4.4% over 1988 natural gas use was up 1.4% over 1988, coal use decreased 8.0% from 1988, and petroleum use was up 2.3% from 1988.

In 1988, energy prices paid by the industrial sector decreased from 1988 prices for propane. All other prices increased over 1988 prices. Industrial sector expenditures on energy increased 6.1% in 1989 to \$535.2 million. This compares with peak expenditures of \$607.2 million in 1985.

Figure 21
Industrial Sector Net Energy Consumption by Fuel Type, Nebraska, 1989
(Trillion Btu)

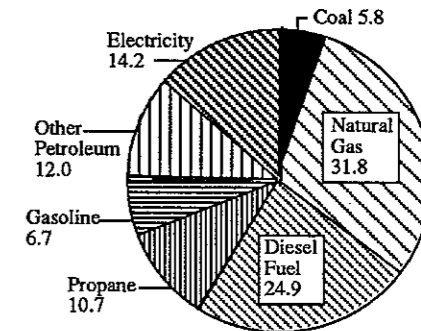


Table II-7
Industrial Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
(Trillion Btu)

	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	Electricity	Net Total	Electric System Losses	Total
1960	9.0	38.3	14.0	1.8	11.3	7.8	3.0	85.1	7.5	92.6
1961	9.9	38.7	14.4	1.4	11.5	7.1	3.2	86.1	7.8	93.9
1962	10.3	42.0	12.2	1.2	11.0	6.9	3.3	86.9	8.0	94.9
1963	10.9	40.6	12.2	1.8	9.9	7.7	3.5	86.8	8.5	95.2
1964	9.8	46.5	14.0	1.5	10.0	6.6	3.7	92.2	8.9	101.1
1965	7.6	47.7	11.4	1.3	9.4	7.0	4.0	88.4	9.6	98.0
1966	8.5	64.7	15.6	2.0	8.9	8.0	4.3	112.1	10.2	122.4
1967	5.4	43.5	16.4	2.1	9.2	6.8	4.3	87.8	10.2	98.0
1968	3.4	49.5	17.4	2.4	7.9	7.7	5.9	94.5	14.2	108.7
1969	3.7	52.1	17.0	3.5	8.4	8.1	6.8	99.6	16.3	115.9
1970	4.9	56.9	19.1	3.1	6.9	10.7	7.3	108.9	17.7	126.7
1971	3.9	57.1	19.3	3.1	7.9	10.2	7.5	109.0	18.1	127.0
1972	4.4	57.6	20.6	4.1	6.5	9.1	7.2	109.5	17.3	126.8
1973	6.3	73.7	20.5	4.6	3.7	9.4	7.9	126.0	18.9	144.9
1974	6.4	72.1	19.3	5.4	8.5	10.0	8.9	130.4	21.7	152.1
1975	5.9	73.5	18.8	6.7	8.6	8.3	10.9	132.8	26.3	159.1
1976	11.6	64.7	25.9	9.5	8.4	7.4	12.1	139.6	29.1	168.7
1977	10.5	61.1	22.3	8.8	8.6	9.8	12.3	133.5	29.7	163.1
1978	10.7	52.3	26.5	6.8	8.5	13.0	12.9	130.7	31.6	162.3
1979	10.1	51.8	32.5	10.4	8.2	11.6	13.9	138.6	33.6	172.2
1980	5.2	50.9	19.9	9.8	7.7	6.1	14.2	113.6	34.5	148.1
1981	7.0	42.2	17.9	8.3	7.1	5.5	13.2	101.3	31.6	132.9
1982	6.1	36.4	19.5	10.6	6.3	6.0	11.8	96.7	28.4	125.1
1983	4.2	36.7	20.7	9.4	5.7	5.4	12.5	94.7	30.0	124.7
1984	5.4	37.9	22.3	7.3	5.0	5.2	12.7	96.0	29.5	125.5
1985	4.9	32.6	25.0	8.0	7.3	4.2	12.9	94.9	30.4	125.3
1986	6.2	20.3	24.8	7.9	6.2	8.8	12.8	87.3	29.4	116.7
1987	5.8	29.6	22.6	9.8	6.5	10.1	13.1	97.5	29.9	127.5
1988	5.0	31.8	25.3	11.2	5.6	10.3	14.0	103.3	31.6	134.9
1989	4.6	30.0	27.0	10.5	5.6	10.5	14.6	102.8	33.0	135.8

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.
Note: Other petroleum includes asphalt, road oil, kerosene, lubricants and residual fuel.

Figure 22
Industrial Sector Electricity & Coal Prices,
Nebraska, 1970-1989
(Dollars/Million Btu)

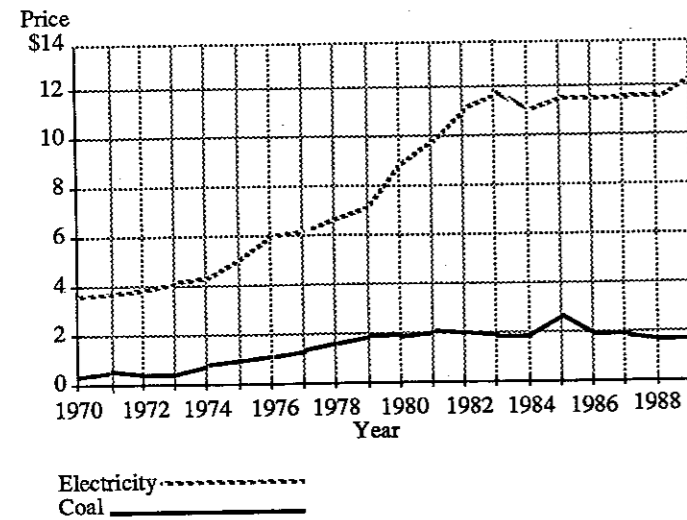


Figure 23
Industrial Sector Gasoline, Propane, Other
Petroleum, Diesel Fuel & Natural Gas Prices,
Nebraska, 1970-1989
(Dollars/Million Btu)

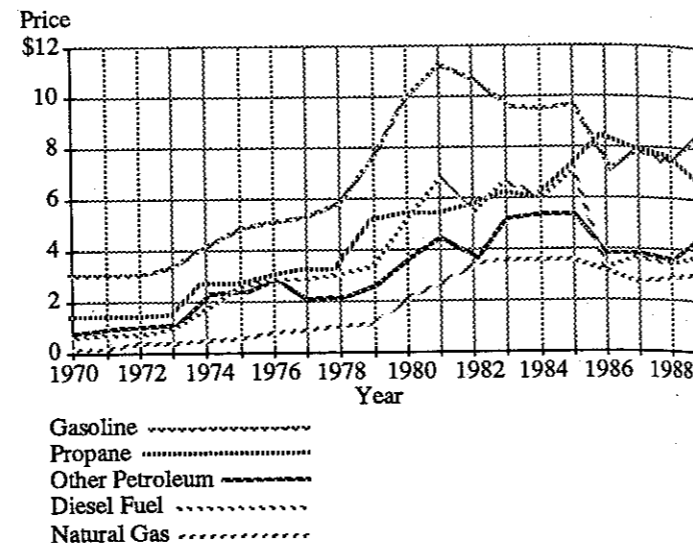


Figure 24
Industrial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Millions of Dollars)

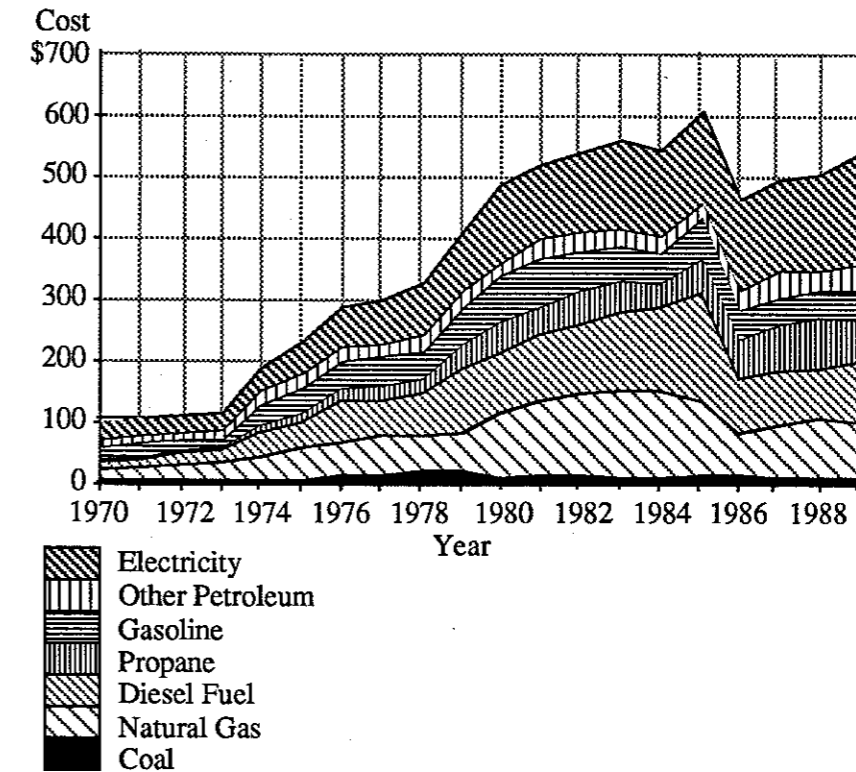


Table II-8
Industrial Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	Electricity	Average
1970	\$0.16	\$0.32	\$0.73	\$1.09	\$3.03	\$1.05	\$3.42	\$0.88
1971	0.41	0.36	0.79	1.18	3.00	1.11	3.57	0.97
1972	0.22	0.48	0.79	1.15	3.00	1.21	3.76	0.99
1973	0.24	0.43	0.94	1.28	3.21	1.40	3.95	0.92
1974	0.57	0.54	1.85	2.40	4.30	2.22	4.20	1.46
1975	0.81	0.69	2.25	2.46	4.76	2.61	4.96	1.77
1976	1.03	0.85	2.39	2.68	5.06	2.73	5.83	2.09
1977	1.17	1.02	2.53	3.16	5.30	2.08	6.02	2.27
1978	1.47	1.11	2.76	3.36	5.51	2.22	6.54	2.56
1979	1.72	1.26	3.34	3.35	7.45	2.67	7.07	3.05
1980	1.69	2.21	4.94	5.19	10.06	3.92	8.71	4.48
1981	1.97	2.84	6.40	5.24	11.37	5.75	9.66	5.30
1982	1.79	3.62	5.72	5.41	10.71	4.97	11.06	5.58
1983	1.67	3.79	6.29	6.01	9.61	5.41	11.71	5.95
1984	1.70	3.71	6.03	5.78	9.55	5.56	10.96	5.66
1985	2.46	3.67	7.09	6.92	9.67	5.71	11.47	6.40
1986	1.70	3.28	3.64	8.25	7.28	4.03	11.42	5.28
1987	1.63	2.81	3.85	7.76	7.58	3.89	11.34	5.06
1988	1.46	2.90	3.30	7.73	7.22	3.45	11.30	4.88
1989	1.49	2.97	3.61	6.70	8.34	4.19	12.18	5.21

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.
1989 Preliminary Estimates. Nebraska Energy Office.
Note: Other petroleum includes asphalt, road oil, kerosene, lubricants and residual fuel.

Table II-9
Industrial Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
(Million Dollars)

	Coal	Natural Gas	Diesel Fuel	Propane	Gasoline	Other Petroleum	Electricity	Total
1970	\$0.8	\$17.0	\$14.0	\$3.4	\$21.0	\$11.2	\$25.0	\$92.3
1971	1.6	19.6	15.2	3.6	23.6	11.3	26.7	101.6
1972	1.0	26.5	16.2	4.6	19.5	11.0	26.8	105.7
1973	1.5	30.5	19.2	4.6	11.8	13.2	31.0	111.9
1974	3.6	37.2	35.7	13.1	36.4	22.2	37.2	185.4
1975	4.8	49.2	42.3	16.5	41.1	21.7	54.0	229.6
1976	12.0	53.8	62.0	25.3	42.8	20.2	70.2	286.2
1977	12.3	60.9	56.4	27.8	45.4	20.4	73.7	296.8
1978	15.8	55.9	73.2	22.7	46.7	28.8	84.2	327.2
1979	17.4	61.3	108.6	34.8	61.1	31.0	98.0	412.3
1980	8.7	101.1	98.1	51.0	77.7	23.9	123.0	483.5
1981	13.8	113.6	113.9	42.6	81.0	31.6	123.9	520.5
1982	11.0	131.1	111.8	57.2	67.8	29.8	130.7	539.4
1983	7.1	138.8	130.1	56.4	55.2	29.2	146.4	563.2
1984	9.2	140.1	134.8	42.5	48.2	28.9	139.3	543.0
1985	11.9	119.4	177.4	55.3	70.7	24.0	148.5	607.2
1986	10.6	66.3	90.4	65.5	45.5	35.5	146.4	460.3
1987	9.4	83.2	87.1	75.8	49.6	39.3	149.0	493.5
1988	7.8	92.1	83.5	86.8	40.4	35.5	158.2	504.3
1989	6.9	89.1	97.4	73.4	46.6	44.0	177.8	535.2

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.
1989 Preliminary Estimates. Nebraska Energy Office.

Note: Other petroleum includes asphalt, road oil, kerosene, lubricants and residual fuel.

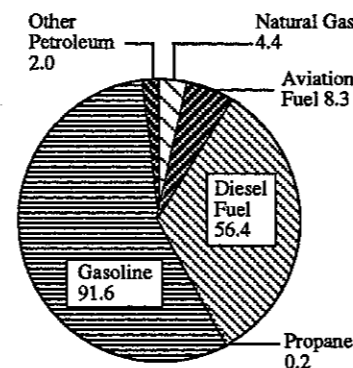
TRANSPORTATION

The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads, aircraft, ships, barges and natural gas pipelines. Natural gas use reflects the fuel needed to move natural gas through a pipeline to end users in the residential, commercial, industrial and electric utility sectors.

Transportation energy use in 1989 increased 1.7% from 1988 with large part of the increase reflected in diesel fuel consumption.

Prices of all petroleum products used in the transportation sector, except propane, decreased from 1988 to 1989.

Figure 25
Transportation Sector Energy Consumption by Fuel Type, Nebraska, 1989
(Trillion Btu)



Transportation sector expenditures on energy increased 15.7% in 1989 to \$1,231.3 million. This compares with peak expenditures of \$1,329.4 million in 1981.

Figure 26
Transportation Sector Aviation Fuel, Propane & Coal Prices, Nebraska, 1970-1989
(Dollars/Million Btu)

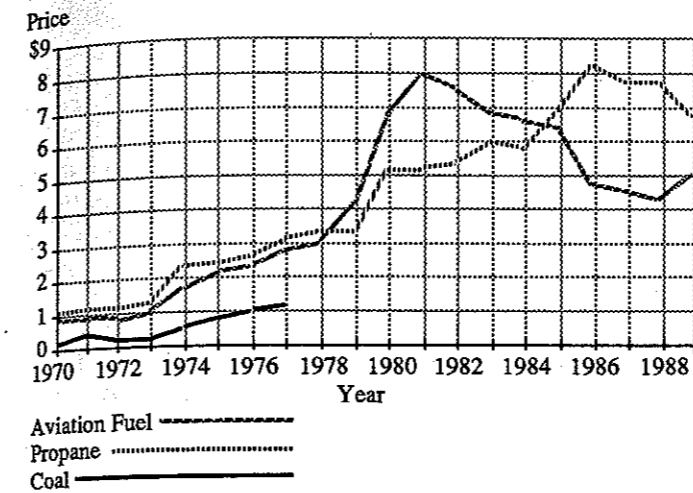


Figure 27
Transportation Sector Other Petroleum, Gasoline & Diesel Fuel Prices, Nebraska, 1970-1989
(Dollar/Million Btu)

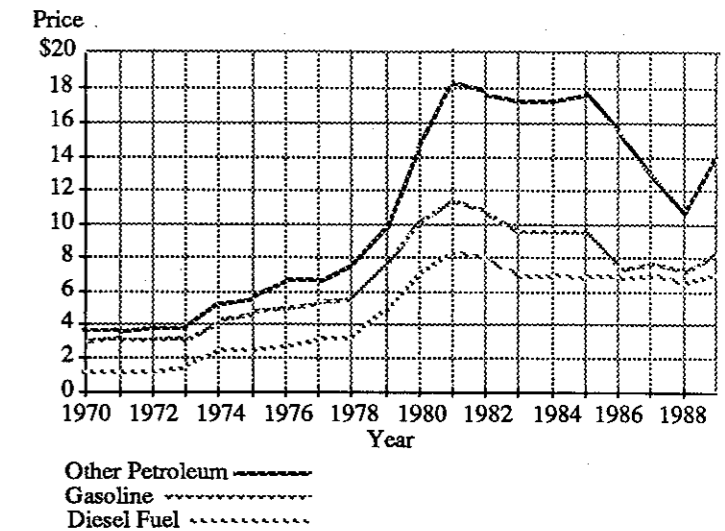


Table II-10
Transportation Sector Energy Consumption by Fuel Type, Nebraska, 1960-1989
(Trillion Btu)

	Coal	Natural Gas	Aviation Fuel	Diesel Fuel	Propane	Gasoline	Other Petroleum	Total
1960	0.2	6.5	7.3	8.2	0.4	67.1	3.6	93.1
1961	*	6.8	8.0	9.5	0.4	66.6	4.1	95.5
1962	*	6.8	8.8	9.6	0.4	69.9	4.5	99.9
1963	*	6.5	8.9	11.0	0.5	73.1	7.1	107.1
1964	*	8.1	9.1	11.1	0.4	70.5	6.6	105.8
1965	*	8.6	8.4	8.4	0.4	72.8	2.5	101.0
1966	*	9.3	8.8	8.3	0.7	76.8	2.6	106.6
1967	*	10.2	10.5	11.6	0.9	78.3	3.7	115.2
1968	*	10.0	12.8	17.9	1.0	83.2	3.3	128.3
1969	*	11.4	11.1	18.4	1.0	86.0	3.2	131.2
1970	*	13.2	9.7	21.3	0.8	89.8	3.3	138.3
1971	*	13.3	9.8	22.0	0.9	92.5	3.0	141.7
1972	*	13.3	8.9	28.2	0.9	100.1	3.2	154.6
1973	*	13.8	9.1	30.0	0.9	105.7	3.1	162.6
1974	*	11.6	9.8	28.6	0.9	98.1	3.1	152.2
1975	*	10.4	9.1	26.9	0.9	99.1	2.7	149.1
1976	*	10.4	10.0	30.2	1.0	104.3	2.2	158.1
1977	*	12.3	10.7	37.0	0.8	105.3	2.3	168.3
1978	0.0	9.0	12.0	41.9	0.9	106.8	2.3	172.9
1979	0.0	7.0	11.4	35.9	0.6	98.6	2.5	156.1
1980	0.0	6.9	9.8	29.8	0.6	91.8	2.1	141.0
1981	0.0	6.0	9.1	25.2	0.8	88.4	2.0	131.5
1982	0.0	5.1	8.5	29.7	0.6	88.9	1.8	134.8
1983	0.0	4.0	8.7	39.8	0.7	87.7	1.9	142.9
1984	0.0	4.5	8.1	40.5	0.3	88.3	2.1	143.8
1985	0.0	5.5	7.9	40.1	0.3	85.0	1.9	140.7
1986	0.0	3.9	8.0	41.5	0.2	86.3	1.9	141.7
1987	0.0	4.4	8.0	45.6	0.2	86.5	2.1	146.8
1988	0.0	4.6	8.9	52.9	0.2	91.6	2.0	160.2
1989	0.0	4.4	8.3	56.4	0.2	91.6	2.0	162.9

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Notes: * Value less than 0.05 trillion Btu. Aviation fuel includes aviation gasoline and jet fuel. Other petroleum includes lubricants and residual fuel.

Table II-11
Transportation Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
(Dollars/Million Btu)

	Coal	Aviation Fuel	Diesel Fuel	Propane	Gasoline	Other Petroleum	Average
1970	\$0.16	\$0.89	\$1.14	\$1.09	\$3.03	\$3.18	\$2.53
1971	0.41	0.92	1.16	1.18	3.00	3.57	2.53
1972	0.22	0.84	1.15	1.15	3.00	3.84	2.50
1973	0.24	1.05	1.52	1.28	3.21	3.81	2.74
1974	0.57	1.74	2.45	2.40	4.30	5.23	3.76
1975	0.81	2.19	2.50	2.46	4.76	5.59	4.16
1976	1.03	2.36	2.79	2.68	5.06	6.64	4.43
1977	1.17	2.79	3.16	3.16	5.30	6.52	4.64
1978	-	3.03	3.26	3.36	5.51	7.48	4.79
1979	-	4.19	4.95	3.35	7.45	9.76	6.64
1980	-	6.72	7.06	5.19	10.06	14.43	9.20
1981	-	7.98	8.39	5.24	11.37	18.25	10.59
1982	-	7.53	7.88	5.41	10.71	17.67	9.91
1983	-	6.83	6.96	6.01	9.61	17.26	8.76
1984	-	6.62	7.00	5.78	9.55	17.29	8.75
1985	-	6.43	6.68	6.92	9.67	17.79	8.70
1986	-	4.73	6.79	8.25	7.28	15.42	7.10
1987	-	4.54	7.02	7.76	7.58	12.86	7.31
1988	-	4.29	6.47	7.73	7.22	10.65	6.84
1989	-	5.06	7.07	6.70	8.34	14.05	7.56

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Notes: Aviation fuel includes aviation gasoline and jet fuel. Other petroleum includes lubricants and residual fuel.

Figure 28
**Transportation Sector Expenditures on Energy
 by Fuel Type, Nebraska, 1970-1989**
 (Millions of Dollars)

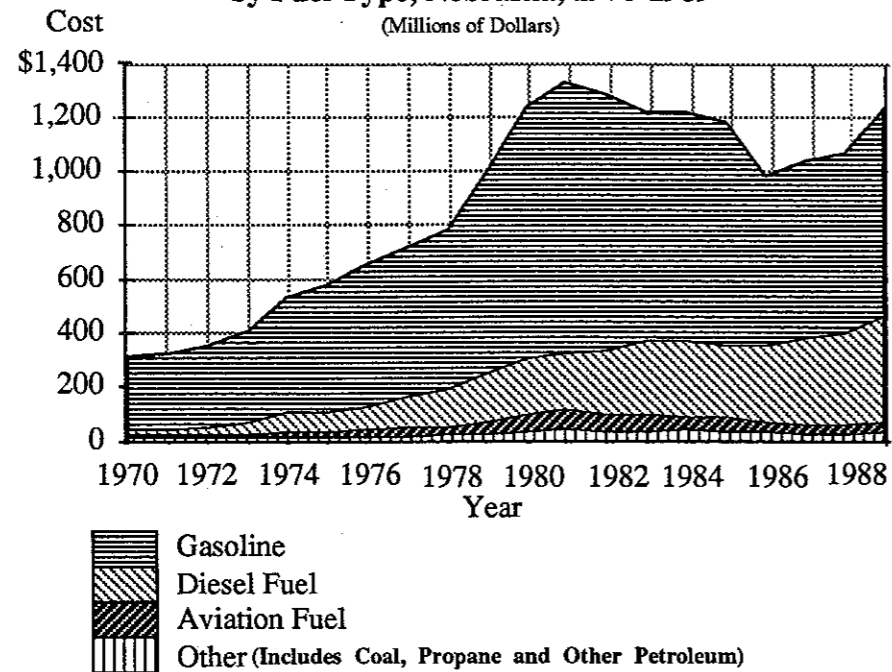


Table II-12
Transportation Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
 (million dollars)

Year	Coal	Aviation Fuel	Diesel Fuel	Propane	Gasoline	Other Petroleum	Total
1970	\$*	\$8.6	\$24.4	\$0.9	\$271.7	\$10.5	\$316.1
1971	*	9.0	25.5	1.1	277.6	10.7	323.9
1972	*	7.5	32.5	1.0	299.9	12.3	353.2
1973	*	9.6	45.5	1.1	339.1	11.8	407.1
1974	*	17.1	70.3	2.2	421.8	16.2	527.6
1975	*	19.9	67.2	2.1	472.2	15.1	576.5
1976	*	23.6	84.4	2.7	527.9	14.6	653.2
1977	*	29.8	116.8	2.6	557.7	15.0	721.9
1978	0.0	36.3	136.9	3.1	588.7	17.2	782.2
1979	0.0	47.8	177.9	2.2	734.3	24.4	986.6
1980	0.0	65.9	210.2	3.3	923.3	30.3	1,233.1
1981	0.0	72.6	211.5	4.0	1,004.8	36.5	1,329.4
1982	0.0	64.0	234.3	3.4	952.2	31.8	1,285.6
1983	0.0	59.4	277.2	4.5	843.0	32.8	1,216.8
1984	0.0	53.6	283.3	1.8	843.6	36.3	1,218.7
1985	0.0	50.8	268.1	1.8	822.4	33.8	1,176.9
1986	0.0	37.8	281.8	1.4	628.5	29.3	978.7
1987	0.0	36.3	320.3	1.5	655.2	27.0	1,040.2
1988	0.0	38.2	342.3	1.7	660.8	21.3	1,064.4
1989	0.0	42.0	397.7	1.4	762.1	28.1	1,231.3

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Notes: * Value less than \$0.05 million. Aviation fuel includes aviation gasoline and jet fuel. Other petroleum includes lubricants and residual fuel.

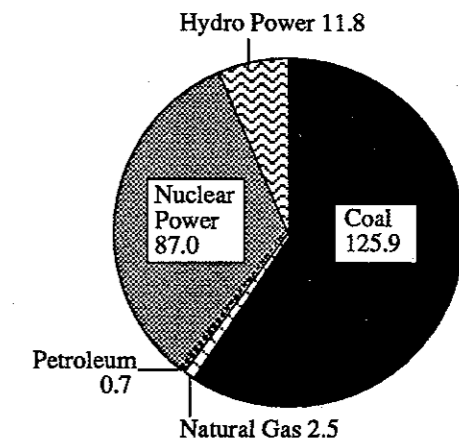
ELECTRIC UTILITY

The electric utility sector consists of generation facilities which generate electricity primarily for use by the public. Energy is used for the generation, distribution and transmission of electric power.

From 1988, energy use in the electric utility sector increased 2.0% to an all time high in 1989. This increase was due to an 18.5% increase in generation by nuclear energy and a 10.3% increase in generation by petroleum and natural gas. However, a 5.7% decrease in generation by coal and a 14.5% decrease in generation by hydro-electric power have offset most of these increases.

Coal and natural gas prices paid by the electric utility sector in 1989 decreased from 1988 prices. Petroleum and nuclear fuel prices increased.

Figure 29
**Electric Utility Sector Energy Consumption
 by Fuel Type, Nebraska, 1989**
 (Trillion Btu)



Electric utility expenditures on energy decreased 0.4% in 1989 to \$165.9 million. This compares with peak expenditures of \$191.7 million in 1984.

Table II-13
Electric Utility Sector Consumption by Fuel Type, Nebraska, 1960-1989
 (Trillion Btu)

Year	Coal	Natural Gas	Petroleum	Nuclear Power	Hydro Power	Total
1960	6.3	32.1	1.0	0.0	10.3	50.2
1961	5.2	34.3	1.0	0.0	9.9	50.8
1962	9.5	33.5	1.3	0.0	10.3	55.0
1963	11.3	36.1	1.6	0.9	10.6	61.0
1964	12.2	37.3	0.9	1.1	10.5	62.3
1965	11.9	35.9	1.1	0.0	11.7	60.6
1966	10.2	39.3	0.8	0.0	12.1	62.4
1967	12.1	39.3	0.7	0.0	12.1	64.3
1968	13.0	48.5	0.8	0.0	13.0	75.3
1969	21.9	45.1	1.1	0.0	12.9	81.1
1970	24.1	48.0	1.9	0.0	14.4	88.4
1971	21.7	49.2	1.3	0.0	14.2	86.5
1972	28.3	48.4	2.7	0.0	14.2	93.6
1973	30.1	53.1	2.3	6.5	14.2	106.3
1974	26.1	47.2	4.6	44.6	13.5	136.0
1975	26.8	37.0	5.9	65.2	12.6	147.5
1976	41.9	19.0	7.9	64.3	13.2	146.4
1977	48.5	15.1	5.5	80.2	12.7	162.1
1978	48.7	12.4	7.8	84.5	12.3	165.8
1979	66.4	13.4	4.6	94.2	12.9	191.5
1980	88.4	11.3	1.6	63.1	13.9	178.3
1981	91.3	4.3	0.5	66.0	12.5	174.7
1982	90.1	1.5	0.8	96.9	12.7	202.0
1983	99.4	1.5	0.5	66.3	14.2	181.8
1984	116.9	1.4	0.2	62.7	13.9	195.1
1985	110.4	1.2	0.4	44.7	14.9	171.5
1986	103.6	1.7	0.6	82.7	17.2	205.8
1987	110.6	1.7	0.6	92.6	16.1	221.5
1988	133.5	2.0	0.9	73.4	13.8	223.5
1989	125.9	2.5	0.7	87.0	11.8	227.9

Sources: *State Energy Data Report, Consumption Estimates, 1960-1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Figure 30
**Electric Utility Sector Energy Prices by Fuel Type,
 Nebraska, 1970-1989**
 (Dollars/Million Btu)

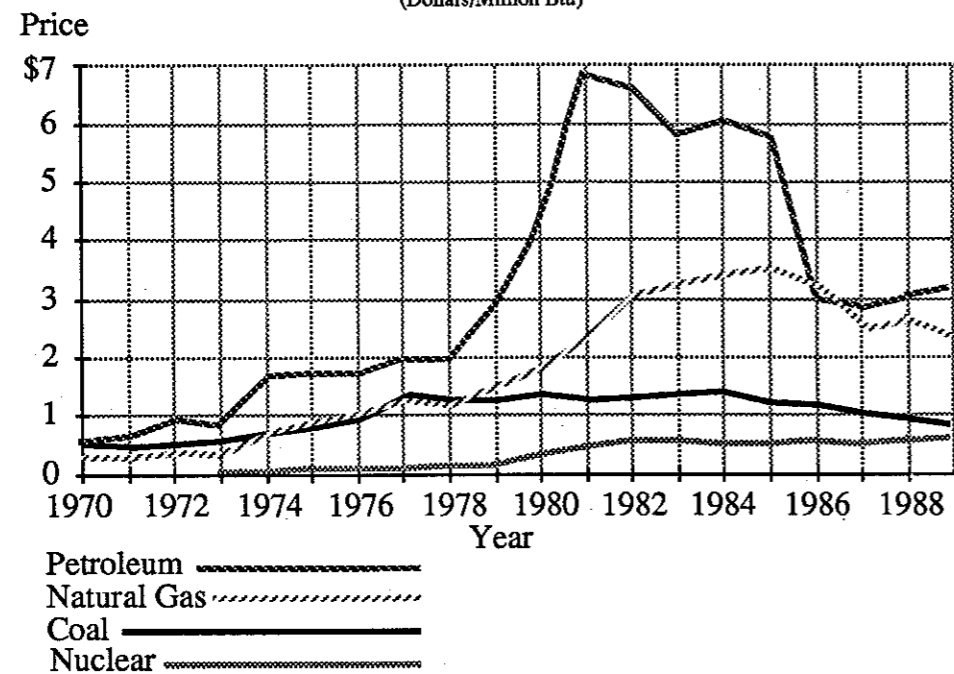


Figure 31
**Electric Utility Sector Expenditures on Energy
 by Fuel Type, Nebraska 1970-1989**
 (Millions of Dollars)

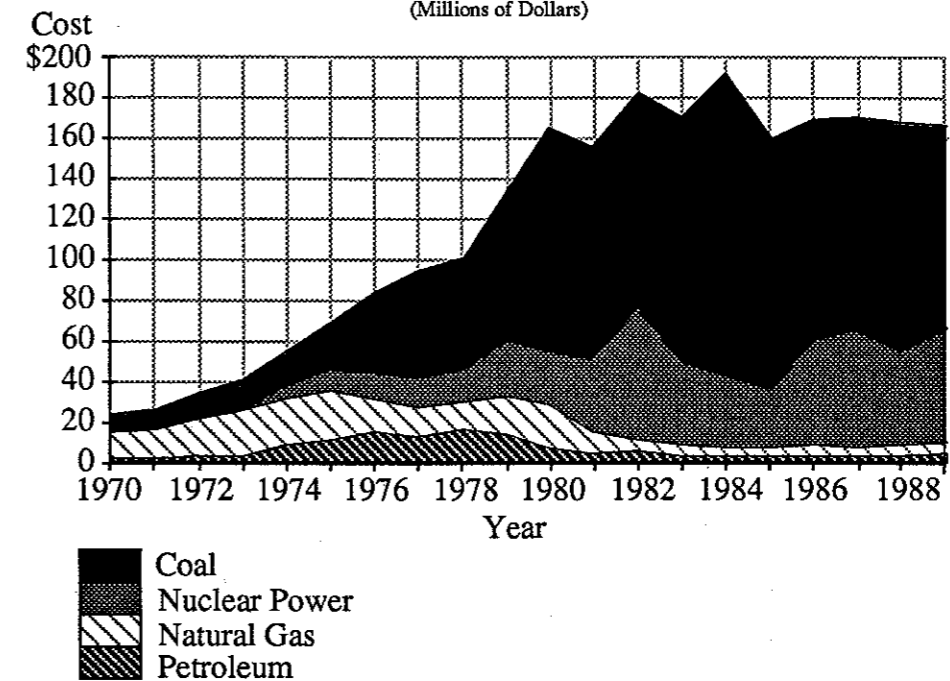


Table II-14
Electric Utility Sector Energy Prices by Fuel Type, Nebraska, 1970-1989
 (dollars/million Btu)

	Coal	Natural Gas	Petroleum	Nuclear Power	Average
1970	\$0.35	\$0.27	\$0.54	\$ -	\$0.30
1971	0.40	0.31	0.69	-	0.34
1972	0.43	0.38	0.88	-	0.41
1973	0.47	0.42	0.91	0.17	0.43
1974	0.60	0.49	1.60	0.16	0.43
1975	0.87	0.63	1.77	0.17	0.50
1976	0.93	0.81	1.86	0.20	0.62
1977	1.05	0.97	2.02	0.20	0.62
1978	1.11	1.11	1.95	0.20	0.65
1979	1.12	1.45	2.79	0.29	0.75
1980	1.24	1.82	4.14	0.44	1.00
1981	1.14	2.40	6.82	0.55	0.95
1982	1.17	3.02	6.65	0.68	0.96
1983	1.22	3.26	5.85	0.62	1.01
1984	1.28	3.40	6.04	0.57	1.06
1985	1.11	3.58	5.89	0.65	1.01
1986	1.04	3.21	3.05	0.64	0.89
1987	0.95	2.56	2.87	0.64	0.82
1988	0.84	2.69	2.83	0.63	0.79
1989	0.80	2.30	3.20	0.65	0.73

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table II-15
Electric Utility Sector Expenditures on Energy by Fuel Type, Nebraska, 1970-1989
 (Million Dollars)

	Coal	Natural Gas	Petroleum	Nuclear Power	Total
1970	\$8.5	\$12.8	\$1.0	\$ -	\$22.3
1971	8.8	15.2	0.9	-	24.9
1972	12.2	18.2	2.4	-	32.8
1973	14.2	22.1	2.1	1.1	39.5
1974	15.7	23.0	7.3	7.0	53.2
1975	23.4	23.3	10.5	11.0	68.1
1976	39.1	15.5	14.7	12.9	82.2
1977	51.0	14.6	11.0	16.0	92.6
1978	54.1	13.8	15.2	16.6	99.7
1979	74.1	19.3	12.9	27.5	133.8
1980	109.8	20.5	6.7	27.7	164.7
1981	104.4	10.3	3.7	36.3	154.8
1982	105.3	4.6	5.1	66.2	181.3
1983	121.0	4.9	2.7	41.1	169.7
1984	149.9	4.8	1.5	35.5	191.7
1985	122.9	4.4	2.1	29.3	158.7
1986	107.7	5.3	1.9	52.8	167.8
1987	104.5	4.4	1.6	59.0	169.4
1988	112.3	5.2	2.4	46.5	166.5
1989	100.7	5.8	2.8	56.6	165.9

Sources: *State Energy Price and Expenditure Report, 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

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NATURAL GAS

Natural gas use in Nebraska for 1989 was 120 billion cubic feet, a decrease of 1.6% from 1988. Natural gas use has shown a general decline in Nebraska since annual consumption peaked at 230 billion cubic feet in 1973.

Natural gas prices for 1989 increased in all sectors from 1988, except for electric utilities. The residential price increased 0.4%, the commercial price increased 0.5%, the industrial price increased 2.5% and the electric utility price decreased 12.4%. Prices in 1988 and 1989 reverse a downward trend in natural gas prices in Nebraska since 1984.

Expenditures on natural gas in Nebraska decreased from \$439.0 million in 1988 to \$436.4 million in 1989. The decrease in expenditures resulted from a lower level of consumption. Expenditures on natural gas peaked at \$567.2 million in 1984.

Average consumption by a residential customer in 1989 increased 1.9% to 110 thousand cubic feet. Similarly, the average residential natural gas bill in 1989 increased 2.5%

from 1988 to \$493. The average residential natural gas bill peaked at \$622 in 1984.

Figure 32
Natural Gas Consumption by Sector, Nebraska, 1960-1989
(Billion Cubic Feet)

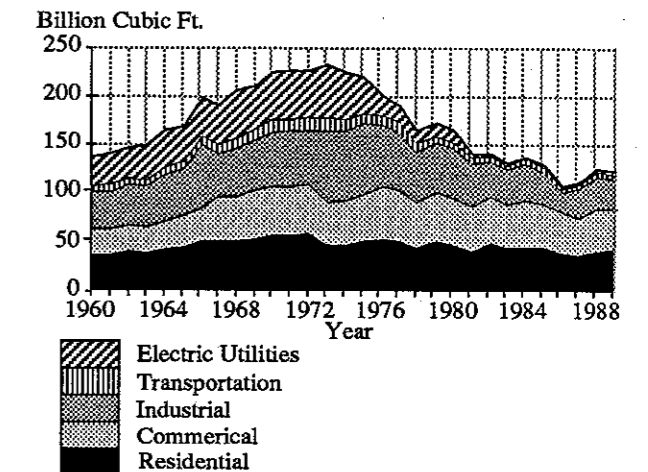


Table III-1
Natural Gas Consumption by Sector, Nebraska, 1960-1989
(Billion Cubic Feet)

	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1960	39	22	37	6	31	136
1961	40	22	37	7	33	140
1962	43	22	41	7	32	144
1963	41	22	41	7	36	147
1964	45	24	47	8	38	162
1965	48	26	48	9	36	166
1966	53	30	65	9	40	197
1967	54	41	44	10	39	189
1968	53	42	50	10	49	203
1969	55	46	52	11	45	210
1970	58	47	56	13	48	222
1971	58	47	57	13	49	224
1972	60	46	57	13	49	225
1973	50	39	73	14	54	230
1974	49	42	72	12	48	223
1975	54	43	74	10	38	219
1976	55	49	65	10	20	199
1977	53	47	61	12	16	189
1978	48	41	52	9	13	163
1979	54	44	52	7	14	170
1980	49	43	52	7	12	163
1981	44	41	43	6	5	138
1982	51	43	37	5	2	138
1983	47	39	37	4	2	129
1984	48	42	39	5	1	134
1985	47	39	33	6	1	126
1986	42	36	20	4	2	105
1987	39	34	30	4	2	109
1988	44	39	32	5	2	122
1989	45	37	31	4	3	120

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Natural Gas Monthly. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Figure 33
Natural Gas Prices by Sector, Nebraska, 1970-1989
 (Dollars/Thousand Cubic Feet)

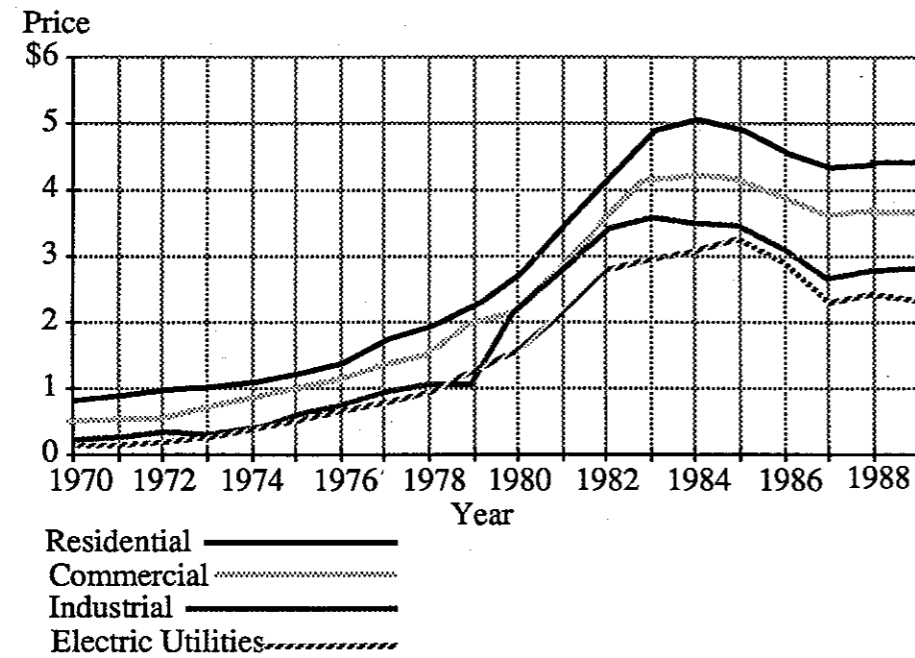


Figure 34
Natural Gas Expenditures by Sector, Nebraska, 1970-1989
 (Millions of Dollars)

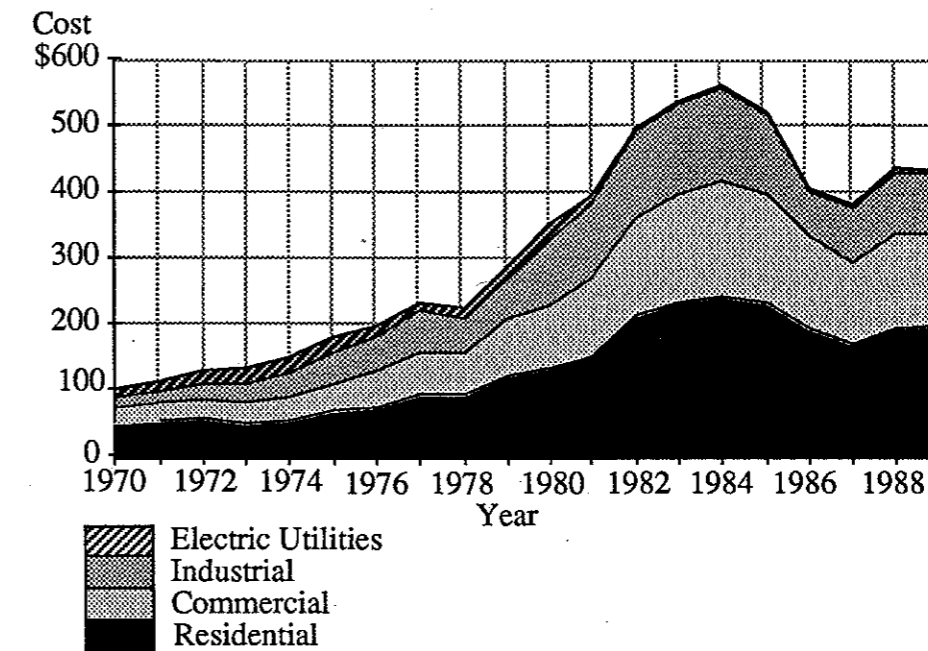


Table III-2
Natural Gas Prices by Sector, Nebraska, 1970-1989
 (Dollars/Thousand Cubic Feet)

	Residential	Commercial	Industrial	Electric Utilities	Average
1970	\$0.85	\$0.53	\$0.32	\$0.27	\$0.50
1971	0.92	0.58	0.36	0.31	0.56
1972	0.99	0.58	0.49	0.37	0.62
1973	1.04	0.76	0.44	0.41	0.63
1974	1.14	0.82	0.54	0.48	0.72
1975	1.28	1.00	0.69	0.62	0.89
1976	1.37	1.16	0.85	0.79	1.07
1977	1.80	1.39	1.02	0.94	1.35
1978	1.97	1.54	1.11	1.08	1.49
1979	2.30	2.00	1.25	1.38	1.82
1980	2.72	2.28	2.16	1.73	2.35
1981	3.45	2.96	2.78	2.26	3.04
1982	4.16	3.49	3.55	2.96	3.76
1983	4.96	4.21	3.72	3.09	4.34
1984	5.09	4.27	3.64	3.29	4.30
1985	4.96	4.21	3.59	3.42	4.34
1986	4.59	3.93	3.25	3.12	4.05
1987	4.36	3.70	2.77	2.51	3.80
1988	4.46	3.75	2.85	2.58	3.88
1989	4.48	3.77	2.92	2.26	3.94

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. *1989 Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-3
Natural Gas Expenditures by Sector, Nebraska, 1970-1989
 (Million Dollars)

	Residential	Commercial	Industrial	Electric Utilities	Total
1970	\$49.6	\$24.7	\$17.0	\$12.8	\$104.1
1971	53.2	27.7	19.6	15.2	115.7
1972	59.4	26.5	26.5	18.2	130.7
1973	52.4	29.3	30.5	22.1	134.4
1974	56.3	34.3	37.2	23.0	150.9
1975	68.9	42.9	49.2	23.3	184.3
1976	75.1	56.2	53.8	15.5	200.6
1977	95.1	65.5	60.9	14.6	236.1
1978	94.8	62.6	55.9	13.8	227.2
1979	123.3	87.2	61.3	19.3	291.2
1980	133.5	99.1	101.1	20.5	354.1
1981	151.5	120.3	113.6	10.3	395.7
1982	213.6	150.2	131.1	4.6	499.6
1983	234.1	164.7	138.8	4.9	542.5
1984	243.3	179.0	140.1	4.8	567.2
1985	233.9	166.0	119.4	4.4	523.7
1986	194.0	142.8	66.3	5.3	408.4
1987	169.5	126.6	83.2	4.4	383.6
1988	194.0	147.7	92.1	5.2	439.0
1989	200.6	140.9	89.1	5.8	436.4

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table III-4
Natural Gas Deliveries to Residential Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Million Cubic Feet)						
January	9,993	8,030	7,874	6,991	8,326	7,006
February	7,172	8,778	6,841	5,998	8,011	7,911
March	6,290	5,783	5,806	4,798	5,788	6,742
April	5,234	3,811	3,479	4,374	3,925	3,687
May	3,128	1,971	2,136	1,755	2,093	1,968
June	1,488	1,381	1,317	1,234	1,179	1,137
July	1,169	1,192	1,118	1,096	1,089	1,078
August	1,071	1,104	1,034	1,065	1,011	1,007
September	1,148	1,269	1,103	1,085	1,030	1,212
October	1,929	2,427	1,599	1,808	1,708	1,972
November	3,622	3,537	3,732	3,222	3,625	3,788
December	5,589	8,062	6,271	5,446	5,717	7,297
Total	47,833	47,345	42,310	38,872	43,502	44,805

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-7
Average Price of Natural Gas Delivered to Commercial Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Dollars/Thousand Cubic Feet)						
January	\$4.49	\$4.52	\$4.15	\$3.76	\$3.84	\$4.05
February	4.61	4.43	4.12	3.79	3.98	3.95
March	4.52	4.39	4.18	3.75	3.90	3.74
April	4.50	4.39	4.11	3.79	3.76	3.67
May	4.52	4.20	4.16	3.71	3.69	3.73
June	4.36	4.28	4.14	3.70	3.55	3.78
July	3.91	3.88	3.80	3.57	3.52	3.48
August	3.66	3.85	3.71	3.55	3.55	3.59
September	3.79	3.91	3.73	3.70	3.64	3.58
October	4.09	4.10	3.75	3.61	3.68	3.62
November	4.16	3.97	3.59	3.69	3.78	3.75
December	4.40	4.18	3.73	3.73	3.87	3.99
Average	\$ 4.27	\$4.21	\$3.93	\$3.70	\$3.75	\$3.77

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-5
Average Price of Natural Gas Delivered to Residential Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Dollars/Thousand Cubic Feet)						
January	\$4.96	\$4.95	\$4.56	\$4.13	\$4.21	\$4.45
February	5.01	4.82	4.53	4.19	4.37	4.31
March	5.05	4.87	4.59	4.27	4.37	4.15
April	5.05	4.95	4.67	4.31	4.37	4.30
May	5.12	5.12	4.92	4.71	4.60	4.70
June	5.45	5.43	5.24	4.99	5.02	5.65
July	5.66	5.64	5.37	5.01	5.05	5.34
August	5.71	5.67	5.36	5.13	5.29	5.46
September	5.68	5.62	5.25	5.34	5.31	5.22
October	5.30	5.10	4.79	4.62	4.91	4.80
November	5.04	4.95	4.23	4.36	4.48	4.47
December	4.98	4.75	4.15	4.18	4.37	4.37
Average	\$5.09	\$4.96	\$4.59	\$4.36	\$4.46	\$4.48

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-8
Natural Gas Deliveries to Industrial Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Million Cubic Feet)						
January	4,002	3,502	1,950	3,181	3,945	3,082
February	3,759	3,255	1,943	2,696	3,815	3,001
March	3,573	3,040	2,363	2,665	2,982	3,201
April	3,345	2,839	2,097	2,323	2,485	2,721
May	2,892	2,788	1,982	2,210	2,301	2,754
June	2,538	2,464	1,779	1,983	2,289	2,574
July	2,744	2,379	1,721	1,980	2,267	2,662
August	2,439	2,137	1,053	1,975	2,064	2,208
September	2,959	2,396	1,072	2,097	2,544	2,680
October	3,224	2,962	1,297	2,020	2,174	1,428
November	3,393	2,659	1,513	3,021	2,556	2,058
December	3,649	2,713	1,618	3,866	2,986	2,175
Total	38,517	33,134	20,388	30,019	32,407	30,544

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-6
Natural Gas Deliveries to Commercial Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Million Cubic Feet)						
January	6,413	5,227	5,209	4,490	5,037	4,202
February	4,576	5,782	4,437	3,886	5,009	4,825
March	4,156	3,692	3,633	3,251	3,656	4,252
April	3,491	2,506	2,318	2,945	2,522	2,505
May	2,021	1,468	1,545	1,425	1,562	1,648
June	1,237	1,248	1,176	1,187	3,115	1,757
July	2,068	2,828	2,512	2,384	4,304	3,381
August	4,704	2,944	3,710	4,019	4,270	4,240
September	3,302	2,496	2,260	2,292	1,578	1,634
October	2,363	2,396	1,857	2,035	2,047	2,109
November	3,564	3,768	3,436	2,700	2,552	2,602
December	4,005	5,843	4,265	3,540	3,668	4,196
Total	41,900	40,198	36,358	34,205	39,320	37,351

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-9
Average Price of Natural Gas Delivered to Industrial Consumers, Nebraska, Monthly 1984-1989

	1984	1985	1986	1987	1988	1989
(Dollars/Thousand Cubic Feet)						
January	\$3.77	\$3.75	\$3.70	\$2.85	\$2.84	\$3.24
February	3.78	3.69	3.70	2.85	2.89	3.29
March	3.66	3.61	3.32	2.84	3.03	2.94
April	3.62	3.55	3.28	2.83	2.84	2.73
May	3.58	3.48	3.20	2.72	2.70	2.69
June	3.56	3.58	3.34	2.71	2.65	2.71
July	3.52	3.52	3.10	2.76	2.63	2.74
August	3.55	3.61	3.34	2.74	2.76	2.76
September	3.54	3.49	3.16	2.74	2.60	2.72
October	3.56	3.48	2.88	2.88	2.99	2.73
November	3.64	3.57	2.76	2.69	3.03	2.84
December	3.71	3.68	2.95	2.70	3.10	3.19
Average	\$3.64	\$3.59	\$ 3.25	\$2.77	\$2.85	\$2.92

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-10
Natural Gas Deliveries to Electric Utilities, Nebraska, Monthly 1984-1989
 (Million Cubic Feet)

	1984	1985	1986	1987	1988	1989
January	127	72	65	237	91	54
February	36	62	78	90	60	249
March	41	82	68	111	94	189
April	173	192	119	106	64	428
May	111	62	82	138	103	89
June	68	91	478	305	615	113
July	119	107	119	326	247	392
August	118	93	92	107	176	189
September	94	132	86	72	154	167
October	296	196	134	84	142	295
November	214	77	252	101	236	357
December	98	119	140	66	64	71
Total	1,495	1,290	1,713	1,743	2,046	2,593

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-11
Average Price of Natural Gas Delivered to Electric Utilities, Nebraska, Monthly 1984-1989
 (Dollars/Thousand Cubic Feet)

	1984	1985	1986	1987	1988	1989
January	\$3.07	\$3.67	\$3.51	\$2.19	\$3.15	\$2.89
February	4.05	3.30	3.45	2.81	3.13	2.50
March	4.24	3.48	3.47	2.56	2.91	2.36
April	2.84	3.20	3.37	2.51	2.79	2.28
May	3.16	3.54	3.30	2.81	2.57	2.79
June	3.67	3.63	3.22	2.48	2.52	2.50
July	3.62	3.53	3.28	2.48	2.30	2.19
August	3.76	3.51	3.17	2.37	2.69	2.32
September	3.55	3.56	3.01	2.46	2.66	2.23
October	3.05	3.33	2.59	2.46	2.27	1.79
November	3.09	3.57	2.82	2.55	2.43	2.06
December	3.48	3.34	2.89	3.01	2.99	3.14
Average	\$3.29	\$3.42	\$3.12	\$2.51	\$2.58	\$2.26

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-12
Natural Gas Deliveries to All Consumers, Nebraska, Monthly 1984-1989
 (Million Cubic Feet)

	1984	1985	1986	1987	1988	1989
January	20,461	16,657	15,098	14,899	17,399	14,343
February	15,520	17,391	13,298	12,670	16,893	15,985
March	14,040	12,491	11,870	10,825	12,519	14,384
April	12,215	9,197	8,007	9,748	8,997	9,341
May	8,175	6,250	5,745	5,528	6,059	6,459
June	5,336	5,127	4,750	4,709	7,198	5,581
July	6,145	6,474	5,470	5,786	7,908	7,513
August	8,468	6,263	5,889	7,166	7,521	7,645
September	7,578	6,124	4,521	5,546	5,306	5,693
October	7,840	7,871	4,887	5,947	6,070	5,804
November	10,771	9,851	8,932	9,044	8,968	8,805
December	13,197	16,800	12,294	12,918	12,435	13,739
Total	129,746	120,496	100,761	104,839	117,274	115,292

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-13
Average Price of Natural Gas Delivered to All Consumers, Nebraska, Monthly 1984-1989
 (Dollars/Thousand Cubic Feet)

	1984	1985	1986	1987	1988	1989
January	\$4.49	\$4.57	\$4.30	\$3.81	\$3.88	\$4.17
February	4.51	4.54	4.26	3.88	4.01	4.06
March	4.46	4.48	4.21	3.86	4.02	3.85
April	4.40	4.38	4.12	3.90	3.93	3.75
May	4.33	4.20	4.10	3.82	3.85	3.89
June	4.20	4.25	4.05	3.75	3.57	4.07
July	4.01	4.06	3.89	3.65	3.59	3.66
August	3.84	4.08	3.92	3.67	3.67	3.74
September	3.92	4.06	3.95	3.84	3.69	3.85
October	4.07	4.15	3.83	3.80	3.92	3.77
November	4.19	4.20	3.70	3.75	3.95	3.87
December	4.36	4.37	3.83	3.76	4.03	4.12
Average	\$4.30	\$4.34	\$4.05	\$3.80	\$3.88	\$3.94

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-14
Average City Gate Price of Natural Gas, Nebraska, Monthly 1984-1989
 (Dollars/Thousand Cubic Feet)

	1984	1985	1986	1987	1988	1989
January	\$4.01	\$3.77	\$3.54	\$2.80	\$2.96	\$3.18
February	4.10	3.79	3.49	3.06	3.06	2.76
March	4.05	4.06	3.78	3.10	3.13	2.86
April	3.99	3.89	3.72	3.07	2.78	2.68
May	4.19	4.00	4.17	3.41	3.08	2.98
June	4.42	4.21	4.26	3.33	3.34	3.34
July	4.40	4.48	4.24	3.34	3.44	3.39
August	4.37	4.43	4.47	3.55	3.38	3.22
September	4.25	4.24	4.03	3.33	3.50	3.15
October	4.03	3.92	2.81	2.68	2.90	2.67
November	3.86	3.57	2.49	2.65	2.73	2.64
December	3.94	3.53	2.87	2.85	3.04	2.90
Average	\$4.09	\$3.88	\$3.42	\$2.99	\$3.03	\$2.91

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-15
Average Annual Consumption, Average Annual Cost and Customers of Natural Gas, Residential and Commercial Sectors, Nebraska, 1967-1989

	Residential			Commercial		
	Consumption (mcf)	Cost (\$)	Customers ('000)	Consumption (mcf)	Cost (\$)	Customers ('000)
1967	179	\$142	301	987	\$476	42
1968	174	138	307	908	441	46
1969	176	146	314	959	491	48
1970	183	156	318	956	505	49
1971	177	164	325	945	555	50
1972	180	178	334	910	531	50
1973	155	161	326	790	577	49
1974	142	162	348	783	636	54
1975	151	194	356	770	765	56
1976	160	218	344	919	1,061	53
1977	146	262	363	870	1,213	54
1978	131	258	367	799	1,228	51
1979	147	339	364	946	1,895	46
1980	125	342	391	903	2,064	48
1981	111	384	395	677	2,004	60
1982	130	542	394	995	3,476	43
1983	119	588	398	659	2,778	59
1984	122	622	391	706	3,014	59
1985	119	595	393	657	2,767	60
1986	107	490	396	596	2,341	61
1987	97	424	400	563	2,084	61
1988	108	481	404	642	2,404	61
1989	110	493	407	619	2,331	60

Sources: *Natural Gas Annual 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.

Note: mcf = thousand cubic feet.

PETROLEUM

Petroleum use in Nebraska for 1989 was 42,385 thousand barrels, an increase of 1.8% from 1988. Petroleum use peaked at 46,218 thousand barrels in 1978 before falling sharply between 1979 and 1981 due to the rapid increase in prices. Use increased in 1982 and 1983, as well as in 1987 and 1988, because of lower prices. In 1989, in spite of price increases for most products, Nebraskans also increased their petroleum use.

Petroleum prices in Nebraska increased by 11.0% in 1989 from 1988 prices. Prices in 1989, although higher than in 1988, were still lower than in 1979. For example, the average

gasoline price for 1989 was \$1.04 per gallon compared with 91 cents in 1986, \$1.42 in 1981, and 93 cents in 1979.

Expenditures on petroleum increased to \$1,556.0 million in 1989, a 13.0% increase over 1988 expenditures. This compares with peak expenditures for petroleum of \$1,690.6 million in 1981.

Gasohol use in Nebraska of 272,210 thousand gallons in 1989 was a 5.4% increase over 1988 and a new record total exceeding the 258,210 thousand gallons used in 1988.

Figure 35
Petroleum Consumption by Product, Motor Gasoline, Distillate Fuel, Jet Fuel & Aviation Gasoline, Nebraska, 1960-1989
(Thousand Barrels)

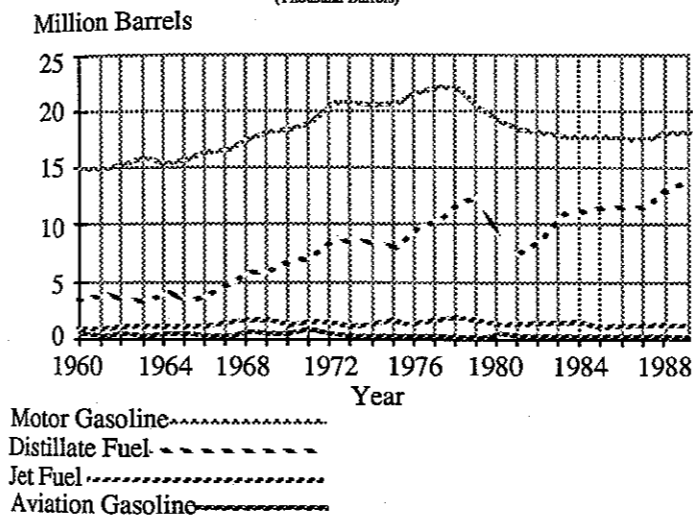
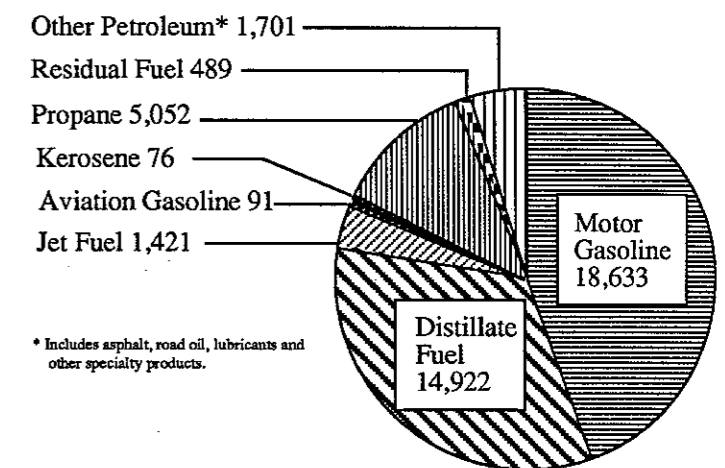
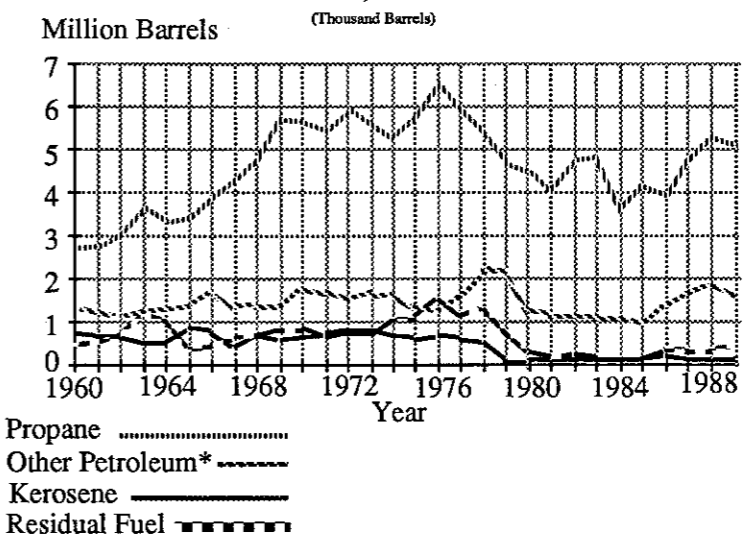


Figure 36
Petroleum Consumption by Product, Nebraska, 1989
(Thousand Barrels)



* Includes asphalt, road oil, lubricants and other specialty products.

Figure 37
Petroleum Consumption by Product, Kerosene, Propane, Residual Fuel & Other,* Nebraska, 1960-1989
(Thousand Barrels)



* Includes asphalt, road oil, lubricants and other specialty products

Table III-16
Petroleum Consumption by Product, Nebraska, 1960-1989

(Thousand Barrels)

	Motor Gasoline	Distillate Fuel	Jet Fuel	Aviation Gasoline	Kerosene	Propane	Residual Fuel	Other*	Total
1960	14,998	4,151	1,000	367	677	2,650	415	1,256	25,516
1961	14,965	4,462	1,104	411	622	2,730	496	1,166	25,955
1962	15,486	4,080	1,242	411	610	2,953	666	1,139	26,585
1963	15,893	4,351	1,264	414	457	3,672	1,161	1,266	28,478
1964	15,422	4,659	1,297	426	496	3,255	983	1,095	27,632
1965	15,745	3,689	1,178	393	790	3,407	332	1,124	26,660
1966	16,412	4,464	1,311	346	722	3,818	430	1,199	28,702
1967	16,763	5,172	1,630	316	348	4,262	586	1,085	30,162
1968	17,451	6,454	1,875	515	638	4,705	643	1,328	33,610
1969	18,082	6,439	1,825	220	526	5,669	779	1,308	34,848
1970	18,525	7,449	1,604	185	582	5,616	793	1,710	36,463
1971	19,231	7,613	1,626	181	680	5,468	579	1,646	37,023
1972	20,414	9,097	1,548	88	771	6,006	720	1,459	40,102
1973	20,948	9,307	1,509	159	782	5,593	670	1,522	40,491
1974	20,412	8,847	1,637	161	623	5,289	1,049	1,592	39,611
1975	20,636	8,507	1,528	132	554	5,740	1,092	1,343	39,532
1976	21,580	10,426	1,692	138	635	6,552	1,505	1,212	43,741
1977	21,810	10,916	1,771	183	559	5,922	1,088	1,582	43,831
1978	22,075	12,630	1,989	207	456	5,469	1,266	2,128	46,218
1979	20,478	12,862	1,900	181	57	4,682	707	2,105	42,972
1980	19,100	9,149	1,588	213	62	4,499	228	1,207	36,045
1981	18,333	8,200	1,466	214	87	4,023	70	1,109	33,502
1982	18,261	9,253	1,453	123	93	4,788	191	1,076	35,239
1983	17,905	11,547	1,482	119	76	4,818	105	1,024	37,075
1984	17,871	11,986	1,385	107	109	3,555	96	1,012	36,119
1985	17,733	12,384	1,357	96	112	4,209	74	852	36,817
1986	17,757	12,051	1,353	117	170	3,888	293	1,300	36,930
1987	17,844	12,299	1,373	90	91	4,752	274	1,596	38,320
1988	18,634	13,995	1,525	96	68	5,371	437	1,520	41,646
1989	18,633	14,922	1,421	91	76	5,052	489	1,701	42,385

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy, Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

*Note: Other includes asphalt, road oil, lubricants and other specialty products.

Figure 38
Petroleum Consumption by Sector, Nebraska, 1989

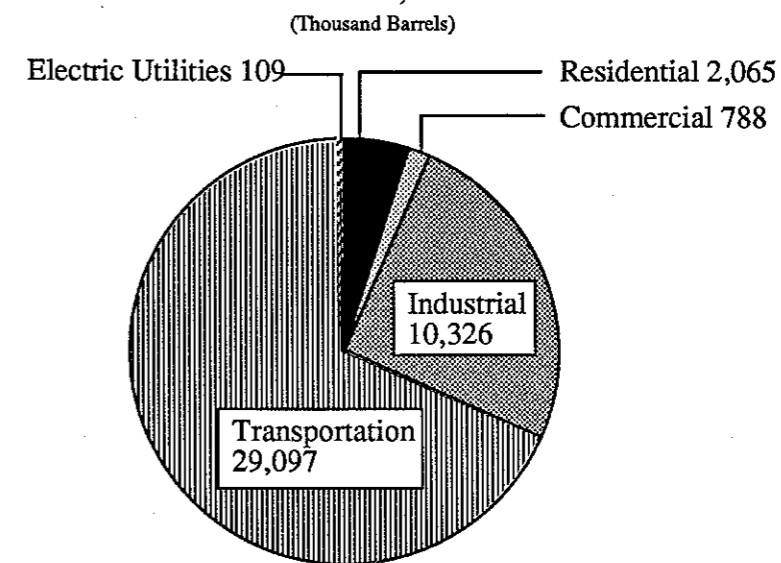


Table III-17
Petroleum Consumption by Sector, Nebraska, 1960-1989

(Thousand Barrels)

	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1960	2,267	649	6,215	16,226	160	25,516
1961	2,405	673	6,121	16,598	158	25,955
1962	2,635	743	5,581	17,415	212	26,585
1963	2,984	845	5,651	18,740	258	28,478
1964	2,738	812	5,736	18,195	151	27,632
1965	3,110	827	5,171	17,374	178	26,660
1966	3,155	963	6,158	18,299	127	28,702
1967	3,204	960	6,216	19,671	110	30,162
1968	3,846	1,176	6,346	22,111	131	33,610
1969	4,305	1,283	6,707	22,367	186	34,848
1970	4,464	1,307	7,073	23,304	314	36,463
1971	4,385	1,264	7,210	23,947	217	37,023
1972	4,738	1,348	7,284	26,278	455	40,102
1973	4,264	1,262	6,901	27,681	382	40,491
1974	3,637	1,155	7,925	26,146	748	39,611
1975	3,688	1,079	7,982	25,816	967	39,532
1976	3,851	1,331	9,768	27,511	1,279	43,741
1977	3,413	1,195	9,386	28,948	888	43,831
1978	3,418	1,167	10,012	30,354	1,267	46,218
1979	1,909	962	11,745	27,605	750	42,972
1980	1,775	622	8,475	24,911	262	36,045
1981	1,726	751	7,556	23,377	93	33,502
1982	1,832	797	8,394	24,084	132	35,239
1983	2,003	1,260	8,078	25,654	80	37,075
1984	1,549	1,217	7,633	25,678	41	36,119
1985	2,033	1,264	8,543	24,916	62	36,817
1986	1,712	732	9,009	25,374	103	36,930
1987	1,936	801	9,335	26,157	92	38,320
1988	2,112	784	10,075	28,535	140	41,646
1989	2,065	788	10,326	29,097	109	42,385

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy, Washington, D.C. April 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Figure 39
Petroleum Prices by Product, Motor Gasoline, Distillate Fuel, Jet Fuel & Aviation Gasoline, Nebraska, 1970-1989
 (Dollars/Gallon)

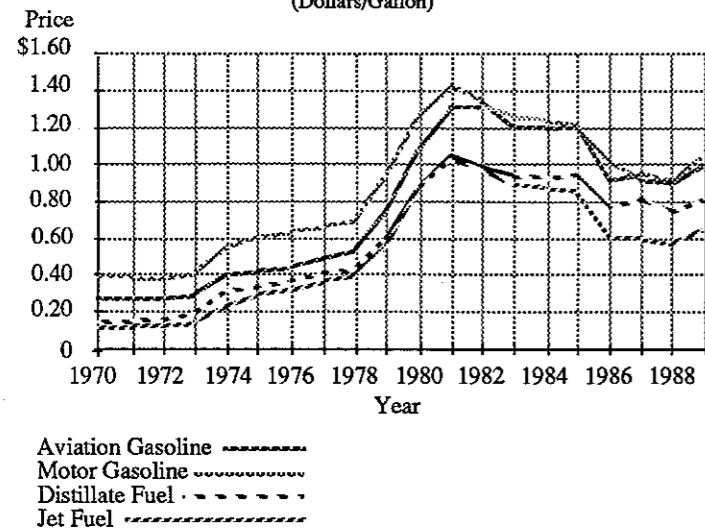


Figure 40
Petroleum Prices by Product, Kerosene, Propane & Residual Fuel, Nebraska, 1970-1989
 (Dollars/Gallon)

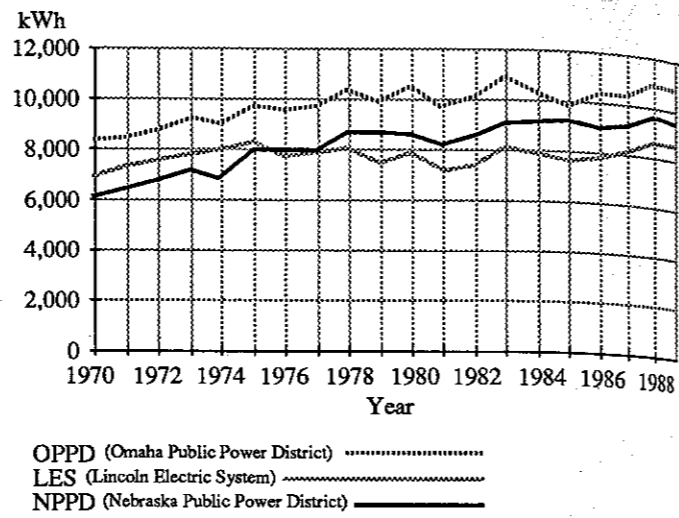


Figure 41
Expenditures on Petroleum by Product, Motor Gasoline, Distillate Fuel, Propane & Other,* Nebraska, 1970-1989
 (Million Dollars)

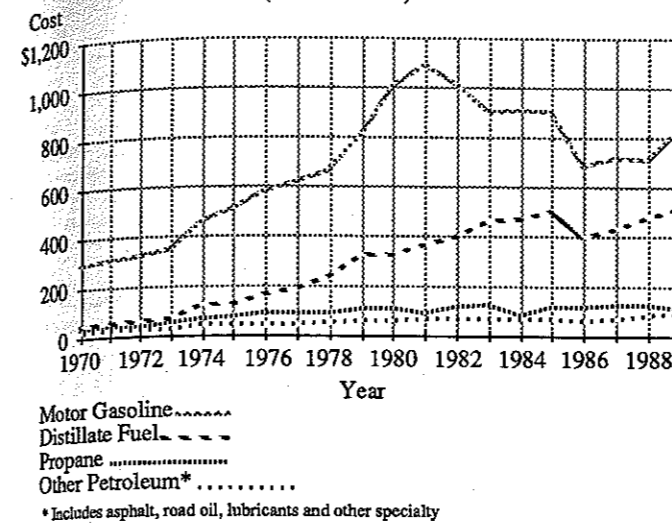


Figure 42
Expenditures on Petroleum by Product, Jet Fuel, Aviation Gasoline, Kerosene & Residual Fuel, Nebraska, 1970-1989
 (Million Dollars)

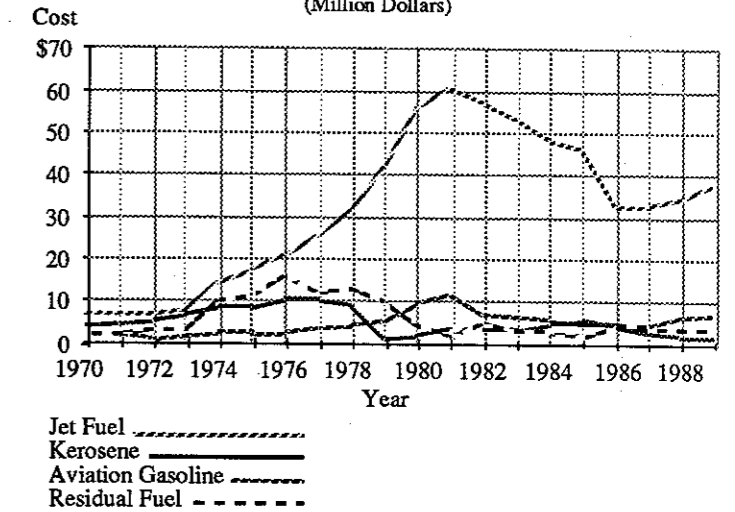


Table III-18
Petroleum Prices by Product, Nebraska, 1970-1989
 (Dollars/Gallon)

	Motor Gasoline	Distillate Fuel	Jet Fuel	Aviation Gasoline	Kerosene	Propane	Residual Fuel
1970	\$0.38	\$0.13	\$0.10	\$0.26	\$0.16	\$0.14	\$0.07
1971	0.37	0.14	0.11	0.26	0.16	0.14	0.09
1972	0.37	0.14	0.11	0.26	0.17	0.15	0.11
1973	0.40	0.18	0.13	0.28	0.20	0.23	0.10
1974	0.54	0.31	0.22	0.39	0.33	0.27	0.24
1975	0.60	0.33	0.28	0.41	0.36	0.28	0.26
1976	0.63	0.36	0.31	0.43	0.39	0.31	0.26
1977	0.66	0.40	0.36	0.48	0.44	0.35	0.28
1978	0.69	0.42	0.39	0.53	0.46	0.33	0.25
1979	0.93	0.59	0.54	0.74	0.57	0.38	0.34
1980	1.26	0.87	0.87	1.08	0.75	0.52	0.48
1981	1.42	1.05	1.03	1.30	1.02	0.53	0.66
1982	1.34	0.98	0.97	1.31	0.95	0.56	0.63
1983	1.20	0.93	0.88	1.25	1.05	0.60	0.67
1984	1.19	0.92	0.86	1.23	1.07	0.57	0.64
1985	1.21	0.95	0.84	1.20	1.22	0.64	0.59
1986	0.91	0.77	0.60	1.01	0.59	0.66	0.36
1987	0.95	0.81	0.59	0.91	0.61	0.63	0.37
1988	0.90	0.74	0.56	0.89	0.55	0.63	0.35
1989	1.04	0.81	0.64	0.99	0.53	0.55	0.40

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table III-19
Expenditures on Petroleum by Product, Nebraska, 1970-1989
 (Million Dollars)

	Motor Gasoline	Distillate Fuel	Jet Fuel	Aviation Gasoline	Kerosene	Propane	Residual Fuel	Other*	Total
1970	\$294.4	\$41.4	\$6.6	\$2.0	\$3.9	\$33.2	\$2.3	\$20.2	\$404.0
1971	303.0	43.9	7.0	2.0	4.7	31.8	2.0	20.4	414.8
1972	321.3	53.4	6.6	0.9	5.4	36.0	3.0	21.3	447.9
1973	353.0	69.4	7.7	1.9	6.7	49.6	2.9	22.7	513.9
1974	460.9	113.2	14.5	2.6	8.5	57.9	10.1	34.5	702.2
1975	516.3	117.9	17.6	2.3	8.2	65.4	11.2	32.8	771.9
1976	574.0	158.2	21.1	2.5	10.4	82.8	15.9	31.4	896.3
1977	606.7	185.6	26.2	3.6	10.2	83.6	11.9	31.8	959.6
1978	639.3	225.4	31.9	4.4	8.9	72.6	13.0	43.1	1,038.6
1979	801.0	317.5	42.3	5.5	1.4	72.5	9.8	54.2	1,304.2
1980	1,008.9	332.7	56.2	9.7	2.0	94.2	4.3	53.0	1,561.0
1981	1,095.0	362.4	60.9	11.7	3.7	84.9	1.7	65.5	1,685.7
1982	1,027.3	380.8	57.2	6.8	3.7	105.4	5.1	57.4	1,643.7
1983	904.3	451.6	53.1	6.3	3.3	113.5	2.9	58.2	1,593.3
1984	896.6	461.2	48.1	5.5	4.9	80.1	2.6	61.4	1,560.5
1985	901.2	494.9	45.9	4.9	5.7	106.1	1.8	54.5	1,615.0
1986	679.4	388.1	32.8	5.0	4.2	101.8	4.5	57.6	1,273.5
1987	710.3	420.7	32.9	3.4	2.4	119.7	4.3	61.0	1,354.6
1988	706.3	437.4	34.6	3.6	1.6	136.0	6.3	50.7	1,376.5
1989	814.5	508.7	38.2	3.8	1.7	116.7	7.2	65.2	1,556.0

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

*Note: Other includes asphalt, road oil, lubricants, and other specialty products.

Figure 43
Expenditures on Petroleum by Sector,
Nebraska, 1989
(Million Dollars)

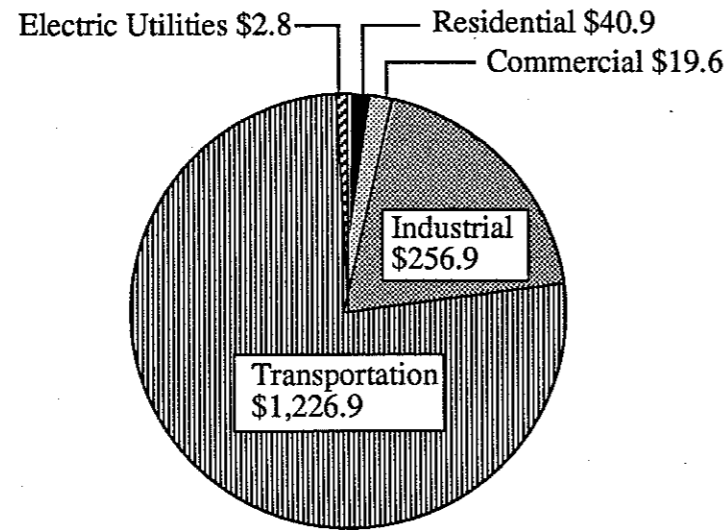


Table III-20
Expenditures on Petroleum by Sector, Nebraska, 1970-1989
(Million Dollars)

	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1970	\$30.4	\$6.8	\$49.6	\$316.1	\$1.0	\$404.0
1971	29.1	7.2	53.8	323.9	0.9	414.8
1972	33.2	7.7	51.3	353.2	2.4	447.9
1973	47.9	8.0	48.8	407.1	2.1	513.9
1974	46.5	13.3	107.4	527.6	7.3	702.2
1975	50.1	13.3	121.6	576.5	10.5	771.9
1976	60.8	17.4	150.3	653.2	14.7	896.3
1977	59.2	17.6	150.0	721.9	11.0	959.6
1978	51.8	18.0	171.3	782.2	15.2	1,038.6
1979	46.2	23.1	235.5	986.6	12.9	1,304.2
1980	50.0	20.5	250.7	1,233.1	6.7	1,561.0
1981	53.5	29.9	269.1	1,329.4	3.7	1,685.7
1982	58.0	28.3	266.7	1,285.6	5.1	1,643.7
1983	58.7	44.1	270.9	1,216.8	2.7	1,593.3
1984	45.4	40.6	254.4	1,218.7	1.5	1,560.5
1985	60.9	47.7	327.4	1,176.9	2.1	1,615.0
1986	36.1	19.9	236.9	978.7	1.9	1,273.5
1987	39.3	21.5	251.9	1,040.2	1.6	1,354.6
1988	43.4	20.1	246.2	1,064.4	2.4	1,376.5
1989	40.9	19.6	256.9	1,226.9	2.8	1,556.0

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy, Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table III-21
Gasoline Available for Sale, Nebraska, Monthly 1979-1989
(Thousand Gallons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	69,602	63,763	60,834	53,344	43,638	41,567	40,389	36,319	36,445	37,217	37,168
February	69,367	59,381	51,122	48,611	38,000	36,361	37,476	33,109	33,789	37,473	37,514
March	73,397	63,151	56,181	55,701	57,799	43,801	43,442	45,396	41,428	43,888	45,265
April	72,399	65,318	61,489	66,296	48,061	45,531	42,893	44,567	43,888	43,609	40,952
May	77,631	72,440	65,221	63,343	51,025	51,788	47,821	50,732	45,467	44,919	44,499
June	75,955	65,801	67,258	62,766	56,713	51,268	48,725	52,778	47,717	54,423	55,151
July	80,054	73,498	71,568	66,996	51,976	53,224	46,042	50,773	54,349	47,366	39,541
August	82,473	72,201	67,641	60,413	52,431	55,198	46,261	52,826	46,407	50,024	49,340
September	72,609	79,754	65,057	55,313	49,571	45,350	41,573	42,161	47,056	46,212	42,585
October	78,565	65,140	70,364	57,093	48,448	51,188	50,503	54,569	50,694	47,654	46,282
November	76,555	60,261	61,203	56,548	43,005	47,681	42,919	44,555	39,145	44,494	41,509
December	74,824	68,169	62,200	51,193	48,299	42,310	40,247	49,966	45,052	41,926	45,296
Total	903,431	808,877	760,139	697,617	588,967	565,264	528,290	557,751	531,438	539,206	525,101

Source: Nebraska Department of Revenue Form 81.

Note: Gasohol is included with gasoline for 1978. Beginning in 1979 gasohol has been reported separately and is reported in Table III-22.

Table III-22
Gasohol Available for Sale, Nebraska, Monthly 1979-1989
(Thousand Gallons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	280	1,729	2,514	3,637	11,379	16,217	18,303	18,629	17,023	19,579	19,705
February	280	1,926	2,308	4,016	11,063	15,102	17,449	16,505	17,165	19,362	20,276
March	296	2,878	2,415	4,817	13,361	15,659	19,720	20,438	20,448	21,139	23,405
April	291	2,687	2,316	4,772	12,522	15,823	20,054	19,898	19,593	19,619	21,211
May	313	2,915	2,397	4,734	14,199	17,564	22,313	19,154	21,348	22,439	23,240
June	306	2,579	2,586	6,188	16,010	18,739	22,160	18,539	21,325	23,768	25,092
July	320	2,749	2,618	7,279	14,861	17,651	20,405	17,273	21,999	21,645	21,349
August	1,413	2,320	2,478	9,254	17,867	18,967	21,392	16,575	20,499	22,608	24,235
September	823	2,761	2,547	10,524	18,545	17,302	19,861	15,469	20,070	21,160	21,875
October	922	2,485	2,631	11,030	17,438	18,389	20,254	18,371	21,636	22,864	22,719
November	802	2,284	2,713	11,431	17,313	18,638	20,355	15,018	18,761	21,917	23,788
December	805	2,826	3,666	12,283	18,959	18,657	20,340	20,405	22,092	22,054	23,315
Total	6,851	30,139	31,189	89,964	183,517	208,707	242,606	216,274	241,959	258,154	272,210

Source: Nebraska Department of Revenue Form 81.

Note: For purposes of the Nebraska motor vehicle fuels tax, gasohol is defined as gasoline containing a minimum of 10% agricultural ethyl alcohol which is at least 99% pure. Gasohol available for sale is calculated as gasohol imported into Nebraska plus gasohol blended in Nebraska less gasohol exported to other states or sold to federal agencies.

Table III-23
Middle Distillates Available for Sale, Nebraska, Monthly 1979-1989
(Thousand Gallons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	40,244	25,381	24,891	26,927	52,166	24,560	24,735	21,342	27,676	23,293	26,621
February	34,600	26,157	59,280	19,013	16,530	18,100	24,719	25,904	15,444	27,961	21,937
March	48,150	23,102	29,449	22,130	33,547	28,486	46,622	48,633	29,283	50,113	38,821
April	40,745	32,255	24,810	49,480	33,993	33,341	36,412	35,860	37,376	27,511	45,902
May	50,992	36,486	28,494	40,284	37,214	43,700	40,660	44,148	38,452	33,923	52,890
June	38,258	31,247	36,640	36,515	37,401	42,480	43,480	45,267	49,261	48,511	52,855
July	46,443	59,339	42,412	44,673	51,582	52,147	52,588	51,268	60,215	45,457	54,673
August	43,635	35,548	28,809	40,073	49,127	43,598	39,332	47,334	42,223	43,260	54,752
September	34,495	29,905	30,594	36,018	40,267	35,417	31,952	32,049	40,943	35,598	35,838
October	38,383	31,691	31,897	34,844	33,550	38,119	46,078	42,766	52,709	40,694	42,813
November	38,326	28,840	28,696	31,526	26,585	35,246	40,163	36,473	28,470	39,605	36,165
December	31,200	27,060	25,464	24,067	33,441	26,121	28,921	32,563	26,231	33,054	36,216
Total	485,471	387,011	391,434	405,550	445,404	421,315	455,662	463,607	448,283	488,980	499,482

Source: Nebraska Department of Revenue Form 81

Table III-30
Unleaded Gasohol Prices at Self-Service Pumps, Nebraska, Monthly 1981-1989

	(Cents/Gallon)									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	
January	*¢	135.5¢	123.7¢	125.4¢	114.6¢	120.1¢	82.9¢	84.7¢	86.2¢	
February	135.6	134.4	121.4	123.3	109.6	106.5	86.3	85.9	88.6	
March	141.9	129.8	118.5	123.7	113.8	91.3	85.1	85.0	90.2	
April	142.1	122.8	123.6	124.1	117.5	84.4	93.0	87.5	103.1	
May	140.0	123.6	126.0	124.4	119.7	89.4	91.4	90.2	110.8	
June	139.4	131.9	128.6	123.2	122.6	98.8	95.9	89.0	112.6	
July	137.7	135.4	129.7	121.0	126.6	94.8	101.4	92.6	114.8	
August	136.2	134.1	129.9	118.7	126.8	90.0	99.2	97.4	110.8	
September	138.3	132.9	129.1	118.1	124.3	90.1	97.9	92.7	108.5	
October	137.9	132.1	125.9	119.8	119.1	87.0	92.3	90.9	104.9	
November	137.1	130.5	126.2	118.8	121.5	81.6	95.8	91.3	100.1	
December	137.9	130.2	126.5	115.7	122.6	82.0	92.3	89.6	97.6	
Average	138.5¢	131.4¢	126.2¢	121.2¢	120.1¢	92.6¢	93.0¢	89.9¢	102.6¢	

Sources: *Monthly Price Survey*. AAA Comhusker Motor Club, Omaha, Nebraska. Monthly. Annual Averages. Nebraska Energy Office.

Notes: * Gasohol prices were included in the monthly price survey beginning in February 1981. The 1981 annual average is based on February - December prices. Annual average prices are weighted by the quantity of gasohol available for sale.

Table III-31
Diesel Fuel Prices at Full-Service Pumps, Nebraska, Monthly 1979-1989

	(Cents/Gallon)										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	63.8¢	111.8¢	121.7¢	135.8¢	125.6¢	134.2¢	128.3¢	138.7¢	101.3¢	107.8¢	104.2¢
February	66.7	114.2	128.0	133.6	118.9	132.5	124.9	116.2	104.8	105.1	106.2
March	69.6	115.2	135.6	129.9	112.0	130.3	123.2	106.9	102.4	102.8	106.6
April	71.9	115.8	134.3	122.1	110.0	126.2	127.6	104.7	104.7	107.9	116.9
May	76.3	114.9	137.4	122.9	119.0	125.2	131.6	103.1	103.9	109.5	115.7
June	88.7	113.9	137.3	131.5	120.6	128.5	128.9	99.9	107.7	108.2	109.2
July	94.2	114.4	136.8	130.4	123.6	130.0	128.7	94.2	108.4	96.6	108.8
August	96.7	116.7	136.9	131.2	123.2	131.1	127.9	91.3	107.0	97.9	106.9
September	99.2	113.3	129.2	129.2	126.8	130.9	128.7	98.1	111.1	99.8	117.2
October	101.8	114.0	134.3	128.9	129.8	131.2	129.9	94.6	107.2	99.5	115.5
November	105.4	115.7	134.0	134.9	128.0	131.7	135.7	94.9	116.8	95.7	115.2
December	109.8	118.3	134.6	131.0	130.7	130.9	137.5	98.6	109.8	102.6	117.9
Average	86.2¢	114.9¢	133.2¢	129.5¢	122.6¢	129.9¢	129.3¢	101.4¢	107.3¢	102.4¢	111.9¢

Sources: *Comparative Fuel Report*. Household Goods Carriers Bureau, Arlington, Virginia. Monthly. Annual Averages. Nebraska Energy Office.

Note: Annual average prices are weighted by the quantity of middle distillates available for sale.

Table III-32
Sales of Distillate Fuel Oil by End Use, Nebraska, 1984-1989

	(Thousand Gallons)					
	1984	1985	1986	1987	1988	1989
Residential	13,362	14,563	12,622	9,150	8,736	12,598
Commercial	44,828	34,230	14,857	16,066	13,128	11,519
Industrial	7,464	8,767	8,328	4,438	5,350	6,080
Oil Company	189	112	706	682	479	27
Farm	161,263	154,349	162,835	151,390	166,328	175,469
Electric Utility	3,047	214	246	2,105	582	3,211
Railroad	92,512	89,555	100,936	114,566	154,686	121,912
Vessel Bunkering	-	47	-	-	-	80
On-Highway	181,983	186,417	188,890	201,094	217,014	208,258
Military	860	435	408	1,362	1,489	1,281
Off-Highway	16,108	20,354	17,673	19,323	18,921	20,582
All Other	6,338	68	957	260	-	-
Total	527,955	509,111	508,458	520,436	586,713	561,017

Source: *Fuel Oil and Kerosene Sales 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Annual.

ELECTRICITY

Electricity use in Nebraska increased to 17,545 million kilowatt-hours in 1989 a 0.3% increase over 1988 and a new all-time record. Electricity use decreased in the residential sector, but increased in the commercial and industrial sectors from 1988, including a 3.3% decrease in the residential sector, a 2.7% increase in the commercial sector and a 2.8% increase in the industrial sector.

Prices for electricity increased in all sectors in 1989, including a 5.9% increase in the residential sector, 7.2% in the commercial sector and 7.8% in the industrial sector. Expenditures for electricity increased to \$990.7 million in 1989, 8.3% more than the \$915.1 million spent on electricity in 1988.

Figure 44
Electricity Consumption by Sector, Nebraska, 1960-1989
(Million Kilowatt-hours)

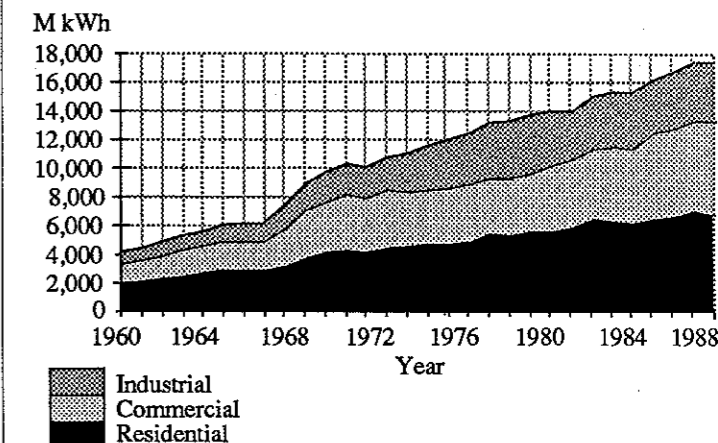


Table III-33
Electricity Consumption by Sector, Nebraska, 1960-1989
(Million Kilowatt-hours)

	Residential	Commercial	Industrial	Total
1960	1,907	1,269	889	4,065
1961	2,082	1,409	937	4,428
1962	2,221	1,589	979	4,789
1963	2,442	1,740	1,039	5,221
1964	2,607	1,870	1,094	5,571
1965	2,816	2,025	1,182	6,023
1966	2,850	1,996	1,252	6,098
1967	2,816	2,036	1,250	6,102
1968	3,099	2,549	1,743	7,391
1969	3,682	3,229	2,005	8,916
1970	4,107	3,505	2,145	9,757
1971	4,308	3,770	2,193	10,271
1972	4,081	3,746	2,102	9,929
1973	4,436	3,957	2,310	10,703
1974	4,512	3,833	2,606	10,951
1975	4,693	3,660	3,200	11,553
1976	4,722	3,817	3,542	12,081
1977	4,859	3,957	3,599	12,415
1978	5,347	3,964	3,784	13,095
1979	5,263	4,014	4,079	13,356
1980	5,521	4,068	4,155	13,744
1981	5,601	4,524	3,881	14,006
1982	5,845	4,665	3,462	13,972
1983	6,438	4,886	3,665	14,989
1984	6,281	5,090	3,907	15,278
1985	6,151	5,135	3,996	15,282
1986	6,384	6,068	3,772	16,224
1987	6,614	6,173	3,984	16,771
1988	6,962	6,370	4,153	17,484
1989	6,733	6,543	4,270	17,545

Sources: *State Energy Data Report, Consumption Estimates, 1960-1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. *1989 Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Figure 45
Electricity Prices by Sector, Nebraska, 1970-1989
(Cents/Kilowatthour)

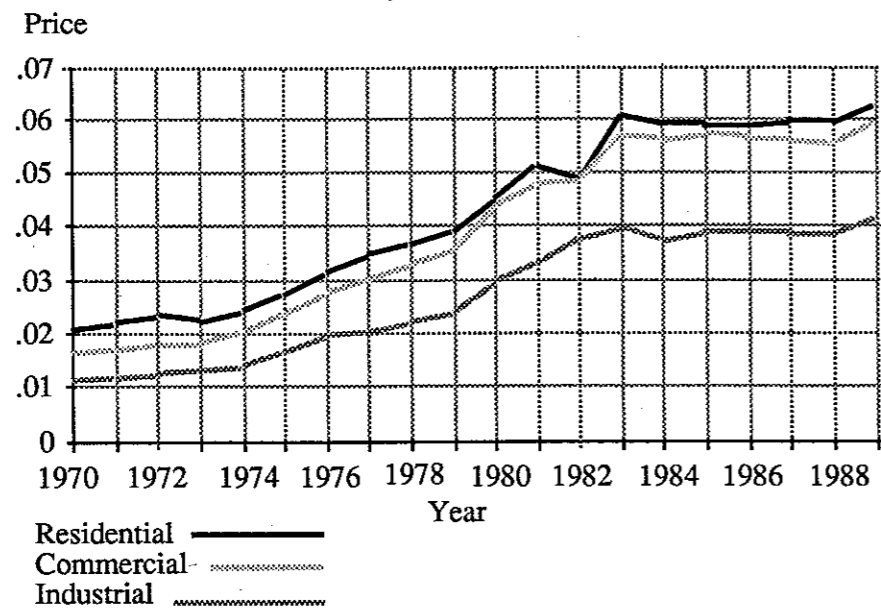


Table III-34
Electricity Prices by Sector, Nebraska, 1970-1989
(Cents/Kilowatthour)

	Residential	Commercial	Industrial	Average
1970	2.11¢	1.66¢	1.17¢	1.75¢
1971	2.23	1.73	1.22	1.83
1972	2.36	1.83	1.28	1.94
1973	2.25	1.84	1.35	1.90
1974	2.46	2.03	1.43	2.06
1975	2.77	2.38	1.69	2.35
1976	3.18	2.78	1.99	2.71
1977	3.48	3.05	2.05	2.93
1978	3.69	3.30	2.23	3.15
1979	3.93	3.56	2.41	3.36
1980	4.51	4.39	2.97	4.01
1981	5.14	4.80	3.30	4.53
1982	4.89	4.89	3.77	4.61
1983	6.10	5.69	4.00	5.45
1984	5.92	5.61	3.74	5.29
1985	5.90	5.73	3.91	5.36
1986	5.89	5.65	3.90	5.33
1987	5.98	5.61	3.87	5.34
1988	5.95	5.55	3.86	5.30
1989	6.30	5.95	4.16	5.65

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Figure 46
Expenditures on Electricity by Sector, Nebraska, 1970-1989
(Million Dollars)

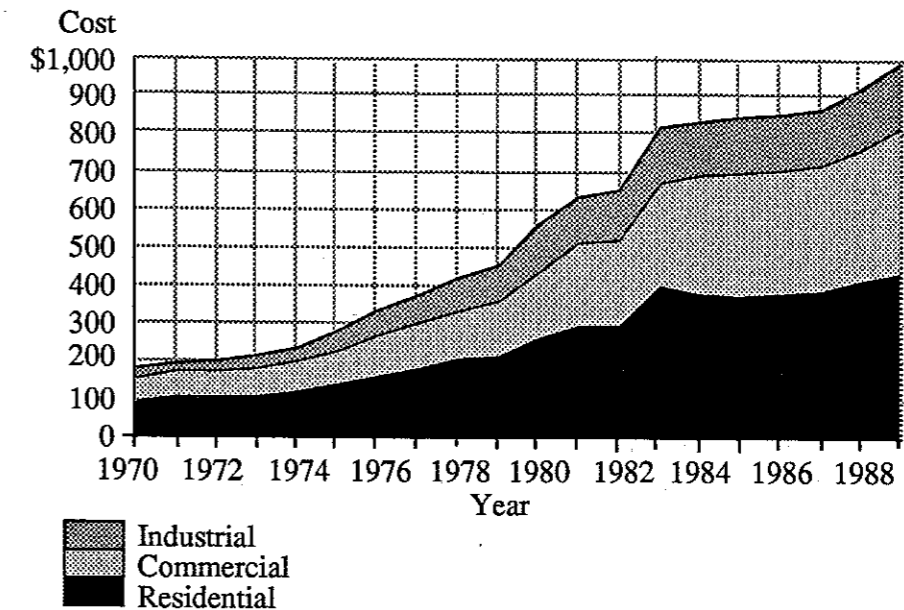


Table III-35
Expenditures on Electricity by Sector, Nebraska, 1970-1989
(Million Dollars)

	Residential	Commercial	Industrial	Total
1970	\$87.0	\$58.3	\$25.0	\$170.3
1971	95.9	65.3	26.7	187.8
1972	96.3	68.7	26.8	191.9
1973	99.9	72.8	31.0	203.7
1974	111.2	77.6	37.2	226.0
1975	130.3	86.9	54.0	271.2
1976	150.1	106.3	70.2	326.6
1977	169.1	120.6	73.7	363.4
1978	197.1	130.7	84.2	412.0
1979	206.8	142.9	98.0	447.6
1980	249.1	178.5	123.0	550.6
1981	288.0	217.0	123.9	628.9
1982	286.0	227.9	130.7	644.5
1983	392.7	277.7	146.4	816.8
1984	371.0	316.6	139.3	826.9
1985	365.5	327.2	148.5	841.2
1986	372.6	327.3	146.4	846.3
1987	381.4	333.8	149.0	864.2
1988	405.3	351.6	158.2	915.1
1989	424.4	388.5	177.8	990.7

Sources: *State Energy Price and Expenditure Report, 1988*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table III-36
Electricity Sales to Residential Consumers, Nebraska, Monthly 1983-1989
 (Million Kilowatthours)

	1983	1984	1985	1986	1987	1988	1989
January	561	659	626	648	633	665	601
February	516	525	609	539	513	589	591
March	452	499	506	504	490	541	583
April	459	468	425	446	463	445	476
May	375	410	386	384	447	419	438
June	385	423	418	427	580	599	481
July	677	618	579	746	768	797	763
August	834	700	586	728	800	852	732
September	773	614	559	515	510	593	549
October	426	411	435	449	399	441	430
November	405	425	410	418	439	444	459
December	573	529	612	580	572	578	629
Total	6,436	6,281	6,151	6,384	6,614	6,963	6,733

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-37
Electricity Sales to Commercial Consumers, Nebraska, Monthly 1983-1989
 (Million Kilowatthours)

	1983	1984	1985	1986	1987	1988	1989
January	405	454	453	519	522	539	516
February	398	407	448	481	471	494	517
March	355	414	404	464	460	489	514
April	371	381	381	449	460	469	495
May	329	371	396	452	484	476	506
June	362	396	405	483	550	582	556
July	455	455	448	603	636	619	652
August	500	499	465	592	600	634	631
September	513	484	462	535	505	567	542
October	390	396	403	525	495	505	520
November	370	400	414	445	476	476	520
December	437	432	457	518	513	536	574
Total	4,885	5,089	5,136	6,066	6,172	6,386	6,543

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table III-38
Electricity Sales to Industrial Consumers, Nebraska, Monthly 1983-1989
 (Million Kilowatthours)

	1983	1984	1985	1986	1987	1988	1989
January	263	311	318	292	302	309	314
February	258	306	313	294	299	316	333
March	285	308	313	292	306	329	330
April	286	309	320	303	309	319	341
May	290	315	334	316	340	370	373
June	316	337	345	328	369	382	376
July	310	347	352	336	370	359	386
August	346	377	374	349	350	398	391
September	360	347	363	348	349	348	348
October	333	318	332	334	335	348	368
November	305	325	330	296	341	340	362
December	312	305	302	284	314	336	348
Total	3,664	3,905	3,996	3,772	3,984	4,154	4,270

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

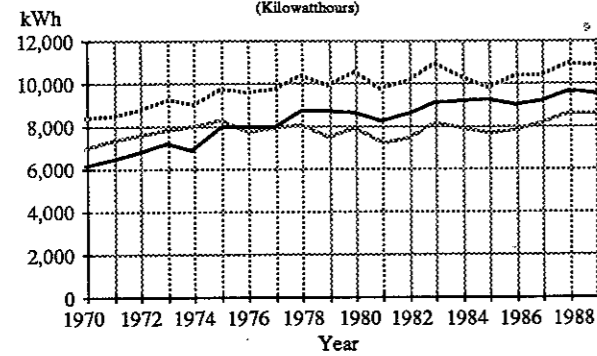
Table III-39
Electricity Sales to All Consumers, Nebraska, Monthly 1983-1989
 (Million Kilowatthours)

	1983	1984	1985	1986	1987	1988	1989
January	1,228	1,424	1,397	1,459	1,457	1,512	1,431
February	1,172	1,239	1,370	1,313	1,283	1,399	1,441
March	1,092	1,221	1,223	1,261	1,256	1,358	1,426
April	1,116	1,159	1,125	1,198	1,232	1,233	1,312
May	994	1,097	1,115	1,153	1,269	1,265	1,314
June	1,063	1,155	1,168	1,238	1,499	1,562	1,413
July	1,442	1,420	1,379	1,686	1,774	1,774	1,801
August	1,681	1,576	1,425	1,668	1,751	1,884	1,759
September	1,646	1,445	1,384	1,398	1,365	1,508	1,439
October	1,150	1,125	1,170	1,308	1,229	1,294	1,318
November	1,081	1,151	1,155	1,158	1,256	1,260	1,340
December	1,322	1,265	1,371	1,383	1,399	1,449	1,551
Total	14,987	15,277	15,282	16,223	16,770	17,498	17,545

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

COAL

Figure 47
Average Annual Electricity Consumption for Residential Customers, Nebraska, 1970-1989
(Kilowatthours)



OPPD (Omaha Public Power District)
LES (Lincoln Electric System)
NPPD (Nebraska Public Power District) _____

Figure 48
Average Annual Electricity Cost for Residential Customers, Nebraska, 1970-1989
(Dollars)

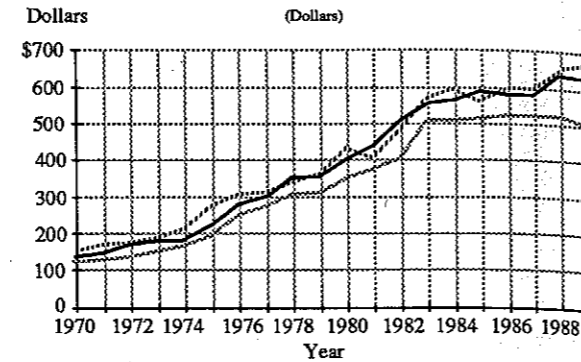


Figure 49
Average Electricity Price for Residential Customers, Nebraska, 1970-1989
(Cents/Kilowatthour)

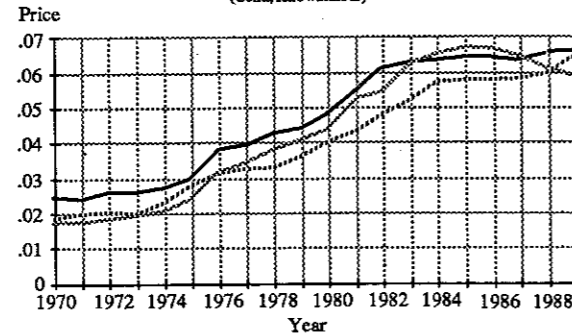


Table III-40
Average Annual Electricity Consumption, Average Annual Cost and Average Price for Residential Customers of Nebraska's Three Largest Electric Utilities, 1970-1989

Year	Consumption (Kilowatthours)			Cost (Dollars)			Price (Cents/kilowatthour)		
	LES	NPPD	OPPD	LES	NPPD	OPPD	LES	NPPD	OPPD
1970	6861	6077	8255	\$119	\$135	\$148	1.73¢	2.22¢	1.79¢
1971	7239	6333	8400	124	140	163	1.71	2.21	1.94
1972	7486	6697	8648	137	160	166	1.83	2.39	1.92
1973	7754	7059	9104	148	171	179	1.91	2.42	1.97
1974	7839	6784	8980	160	168	204	2.04	2.48	2.27
1975	8223	7842	9780	193	218	266	2.34	2.78	2.72
1976	7704	7857	9554	245	276	296	3.18	3.59	3.10
1977	7872	7959	9633	265	293	305	3.36	3.73	3.17
1978	8109	8636	10329	301	349	334	3.76	4.04	3.23
1979	7459	8572	9901	301	362	353	4.03	4.23	3.56
1980	7888	8610	10398	346	398	419	4.39	4.62	4.03
1981	7115	8055	9579	373	425	407	5.24	5.28	4.25
1982	7290	8528	9898	397	501	469	5.45	5.87	4.74
1983	8119	9053	10926	505	549	561	6.22	6.07	5.14
1984	7812	9103	10323	507	561	588	6.49	6.16	5.70
1985	7621	9221	9750	503	586	555	6.60	6.25	5.70
1986	7737	8878	10263	514	570	591	6.65	6.41	5.76
1987	8054	8996	10261	518	575	596	6.43	6.39	5.81
1988	8576	9689	10885	517	635	646	6.03	6.55	5.93
1989	8378	9554	10439	500	628	681	5.97	6.57	6.52

Sources: Annual Report, Lincoln Electric System. Lincoln, Nebraska. Annual. Annual Report, Nebraska Public Power District. Columbus, Nebraska. Annual. Annual Report, Omaha Public Power District. Omaha, Nebraska. Annual.

Notes: Lincoln Electric System data for 1970-1977 are based on a fiscal year, other data is on a calendar year basis. Sales by the Lincoln Electric System, Nebraska Public Power District and Omaha Public Power District residential customers were 55% of total residential consumption in Nebraska in 1989.

Coal use in Nebraska for 1989 was 7,587 thousand short tons, a 5.8% decrease from 1988. Coal use for electricity generation accounted for 96.3% of the coal used in Nebraska in 1989.

Coal prices for 1988 decreased 7.9% to the electric utility sector. Coal prices have shown a general decline since peaking in the late 1970s.

Expenditures on coal in Nebraska decreased to \$108.1 million in 1989, a 11.2% decrease from 1988 expenditures.

This compares to peak expenditures on coal of \$164.0 million in 1984.

Coal shipped into Nebraska was primarily low sulfur coal from Wyoming. In 1989, 96.5% of the coal used in Nebraska came from Wyoming. Also, 98.4% of the coal shipped to generating plants of 50-megawatt capacity or larger contained less than 0.5% sulfur. Nationally, only 26.42% of the coal shipped to generating plants of 50-megawatt capacity or larger contained less than 0.5% sulfur.

Table III-41
Coal Consumption by Sector, Nebraska, 1960-1989
(Thousand Short Tons)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1960	76	142	408	7	256	889
1961	52	96	449	2	209	808
1962	54	100	468	2	388	1,012
1963	38	70	498	2	465	1,073
1964	27	50	447	2	501	1,026
1965	21	39	349	1	486	896
1966	16	30	395	1	417	860
1967	12	22	254	1	501	789
1968	12	23	159	*	534	729
1969	25	46	174	*	901	1,146
1970	13	24	240	*	1,006	1,283
1971	12	22	193	*	947	1,174
1972	15	27	218	*	1,228	1,488
1973	8	15	312	*	1,350	1,685
1974	5	9	319	*	1,228	1,561
1975	3	6	308	*	1,278	1,595
1976	4	7	604	*	2,012	2,626
1977	6	11	553	*	2,277	2,846
1978	8	15	576	0	2,367	2,967
1979	21	39	538	0	3,461	4,058
1980	7	12	269	0	4,702	4,990
1981	6	10	376	0	5,067	5,459
1982	9	18	325	0	5,048	5,399
1983	20	36	216	0	5,656	5,928
1984	32	59	280	0	6,569	6,939
1985	4	8	261	0	6,380	6,653
1986	1	3	339	0	5,945	6,288
1987	1	3	312	0	6,428	6,744
1988	16	29	268	0	7,744	8,057
1989	6	11	267	0	7,303	7,587

Sources: State Energy Data Report, Consumption Estimates, 1960-1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. April 1990. 1989 Quarterly Coal Report. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Quarterly. 1989 Preliminary Estimates. Nebraska Energy Office.

Note: * Value less than 0.5 tons.

Figure 50
Coal Prices by Sector, Nebraska, 1970-1989
(Dollars/Ton)

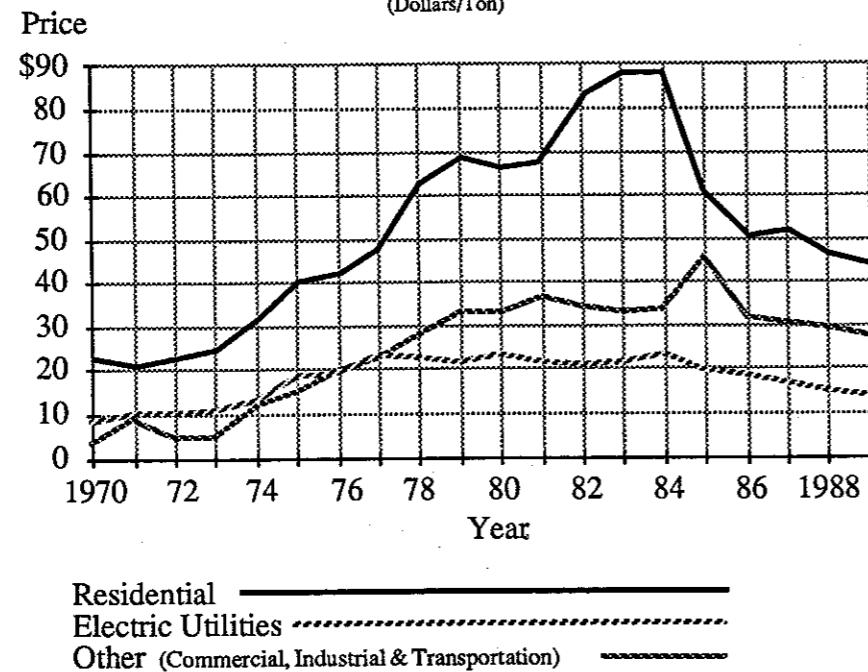


Figure 51
Expenditures for Coal by Sector, Nebraska, 1970-1989
(Million Dollars)

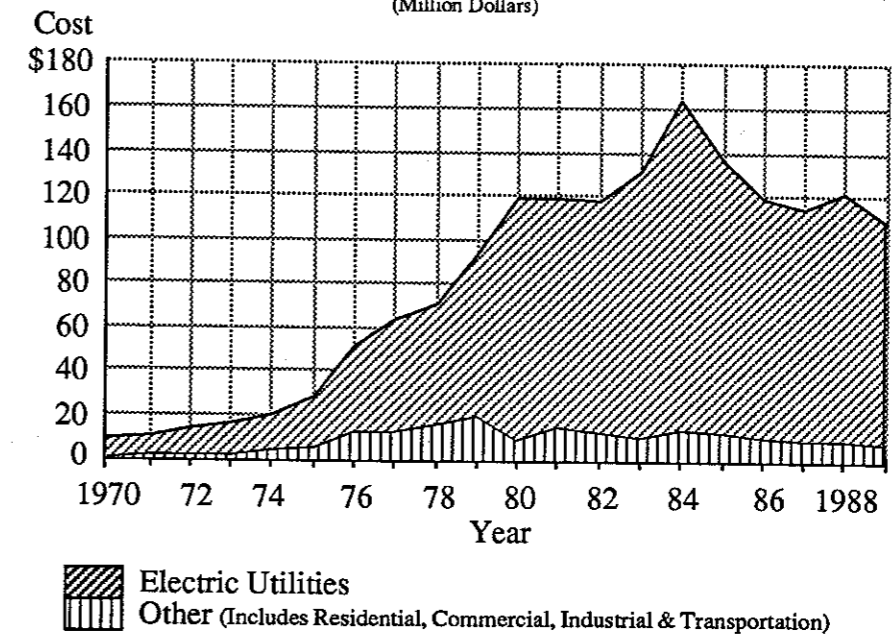


Table III-42
Coal Prices by Sector, Nebraska, 1970-1989
(Dollars/Ton)

Year	Residential	Commercial, Industrial & Transportation	Electric Utilities	Average
1970	\$21.70	\$3.44	\$8.37	\$7.48
1971	20.53	8.30	9.18	9.20
1972	21.86	4.43	9.90	9.14
1973	23.08	4.84	10.49	9.50
1974	29.76	11.41	12.75	12.56
1975	39.76	15.62	18.23	17.81
1976	40.87	19.82	19.37	19.57
1977	46.45	22.28	22.38	22.42
1978	61.45	27.26	22.84	23.86
1979	67.86	32.37	21.48	23.19
1980	64.94	32.44	23.32	23.93
1981	66.38	36.77	20.54	21.80
1982	81.77	33.71	20.89	21.80
1983	87.21	32.90	21.44	22.11
1984	87.42	32.96	22.78	23.63
1985	59.41	45.75	19.20	20.37
1986	49.94	31.30	18.12	18.85
1987	50.87	30.34	16.34	16.92
1988	45.50	29.21	14.48	15.10
1989	43.49	27.90	13.79	14.25

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Table III-43
Expenditures for Coal by Sector, Nebraska, 1970-1989
(Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1970	\$0.3	\$0.1	\$0.8	\$ *	\$8.5	\$9.6
1971	0.2	0.2	1.6	*	8.8	10.8
1972	0.3	0.1	1.0	*	12.2	13.6
1973	0.2	0.1	1.5	*	14.2	16.0
1974	0.1	0.1	3.6	*	15.7	19.6
1975	0.1	0.1	4.8	*	23.4	28.4
1976	0.1	0.1	12.0	*	39.1	51.4
1977	0.3	0.2	12.3	*	51.0	63.8
1978	0.5	0.4	15.8	0.0	54.1	70.8
1979	1.4	1.2	17.4	0.0	74.1	94.1
1980	0.4	0.4	8.7	0.0	109.8	119.4
1981	0.4	0.4	13.8	0.0	104.4	119.0
1982	0.8	0.6	11.0	0.0	105.3	117.7
1983	1.8	1.3	7.1	0.0	121.0	131.1
1984	2.8	2.1	9.2	0.0	149.9	164.0
1985	0.3	0.4	11.9	0.0	122.9	135.5
1986	0.1	0.1	10.6	0.0	107.7	118.5
1987	0.1	0.1	9.4	0.0	104.5	114.1
1988	0.7	0.8	7.8	0.0	112.3	121.7
1989	0.2	0.3	6.9	0.0	100.7	108.1

Sources: State Energy Price and Expenditure Report, 1988. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990. 1989 Preliminary Estimates. Nebraska Energy Office.

Note: * represents less than \$0.05 million.

Figure 52
States Providing Coal to Nebraska, 1989

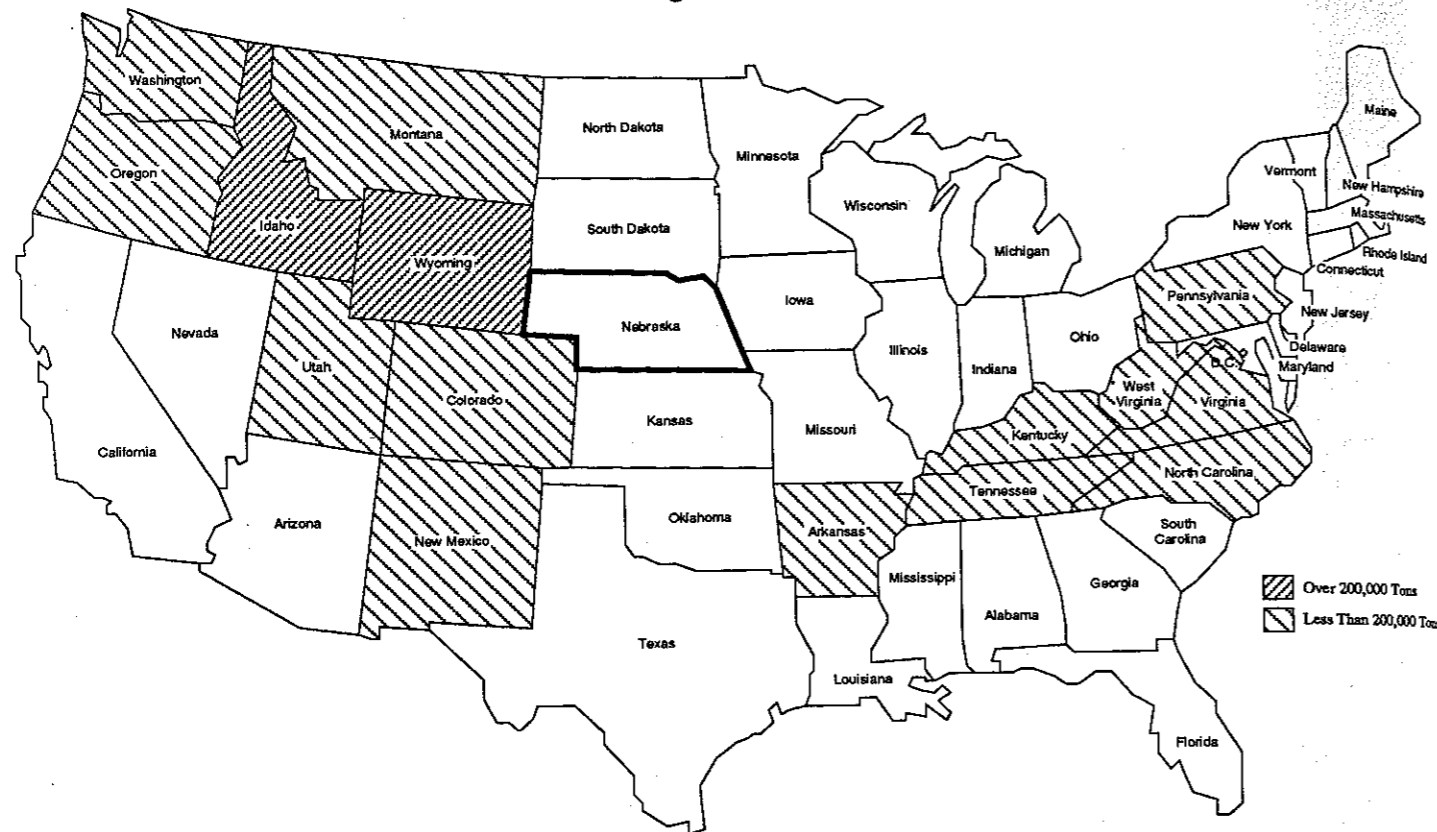


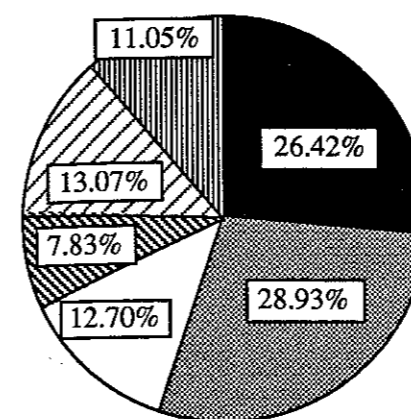
Table III-44
Coal Shipped into Nebraska by State of Origin, 1981-1989
(Thousand Tons)

Coal District	States	1981	1982	1983	1984	1985	1986	1987	1988	1989
3 & 6	WV, VA	-	-	5	-	-	-	-	-	-
4	OH	-	-	-	20	-	-	-	-	-
8	KY, NC, TN, VA, WV	-	-	6	-	-	-	-	1	-
9	KY	-	2	2	47	-	-	-	-	-
11	IN	-	-	-	*	-	-	-	-	3
14	AR, OK	-	-	-	32	-	-	-	-	-
15	KS, LA, MO, OK, TX	*	3	-	31	13	*	-	-	-
16 & 17	CO, NM	202	336	148	316	333	145	100	141	159
19	ID, WY	4,847	5,903	5,254	6,064	6,274	5,695	6,355	7,462	7,465
20	UT	288	134	1	1	*	-	*	*	*
22 & 23	MT, AK, OR, WA	13	15	87	128	124	154	168	121	109
24	PA	*	*	3	*	-	*	*	*	*
Total		5,349	6,393	5,505	6,638	6,745	5,994	6,623	7,724	7,735

Source: Coal Distribution: January-December. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Annual.

Notes: * Less than 500 tons. District 24 is the anthracite producing district in Pennsylvania. Districts 1-23 are regions producing bituminous and subbituminous coal and lignite.

Figure 53
Sulfur Content of Coal Used at Generating Plants of 50-Megawatt Capacity or Larger, United States, 1989
(Thousand Tons)



Legend:
 Less than 0.5%
 0.5% - less than 1.0%
 1.0% - less than 1.5%
 1.5% - less than 2.0%
 2.0% - less than 3.0%
 3.0% and more

Figure 54
Sulfur Content of Coal Used at Generating Plants of 50-Megawatt Capacity or Larger, Nebraska, 1989
(Thousand Tons)

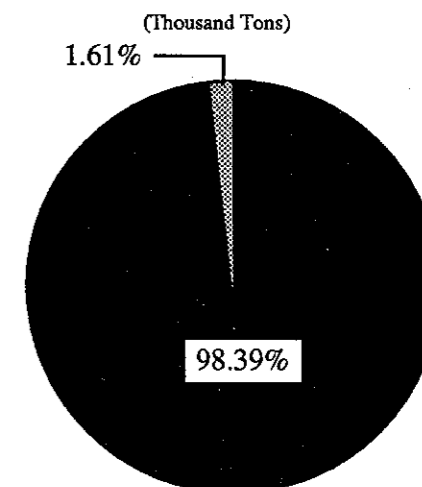


Table III-45
Sulfur Content of Coal Receipts at Generating Plants of 50-Megawatt Capacity or Larger, Nebraska, Monthly 1983-1989
(Thousand Tons)

		0.5%	More Than	More Than	More Than	Total
		or Less	0.5% up to 1.0%	1.0% up to 1.5%	1.5% up to 2.0%	
1983	January	587.6	58.0	-	-	645.6
	February	424.4	46.6	-	-	471.0
	March	341.0	60.3	-	-	401.3
	April	296.2	37.2	-	-	333.4
	May	337.6	37.2	-	-	374.8
	June	446.9	16.7	-	-	463.6
	July	518.2	-	-	-	518.2
	August	515.2	53.3	-	-	568.5
	September	294.4	58.7	-	-	354.1
	October	262.8	60.5	-	-	323.3
	November	454.6	57.0	-	-	511.6
	December	317.4	50.4	-	-	367.8
Total	4,796.3	535.9	-	-	5,332.2	
1984	January	452.9	68.1	5.8	-	526.8
	February	408.2	27.9	53.8	-	489.9
	March	476.1	78.3	-	-	554.4
	April	478.2	69.8	6.5	-	554.5
	May	513.7	56.9	13.1	-	583.7
	June	475.6	66.7	6.6	-	548.9
	July	430.3	41.7	-	8.7	480.7
	August	500.0	32.2	-	5.9	538.1
	September	399.7	25.4	-	-	425.1
	October	499.1	40.7	6.4	-	505.5
	November	434.6	40.2	6.6	-	481.4
	December	505.8	24.4	3.2	-	533.4
Total	5,574.2	572.3	102.0	14.6	5,690.8	

Continued on Next Page

Table III-45 (cont.)
**Sulfur Content of Coal Receipts at Generating Plants of
 50-Megawatt Capacity or Larger, Nebraska, Monthly 1983-1989**
 (Thousand Tons)

		0.5% or Less	More Than 0.5% up to 1.0%	More Than 1.0% up to 1.5%	More Than 1.5% up to 2.0%	2.0% or More	Total
1985	January	522.5	13.9	3.3	-	-	539.7
	February	494.7	19.8	6.5	-	-	521.0
	March	501.7	18.2	3.3	-	-	523.2
	April	577.5	-	-	-	-	577.5
	May	406.4	30.0	-	-	-	436.4
	June	435.9	106.4	-	-	-	542.3
	July	615.1	82.0	-	-	-	697.1
	August	529.9	83.0	-	-	-	612.9
	September	424.8	97.8	-	-	-	522.6
	October	358.6	124.0	-	-	-	482.6
	November	399.0	110.4	-	-	-	509.4
	December	435.8	90.2	-	-	-	526.0
	Total	5,701.9	775.7	13.1	-	-	6,490.7
1986	January	612.7	3.1	-	-	-	615.8
	February	500.0	6.5	-	-	-	506.5
	March	582.6	13.4	-	-	-	596.0
	April	442.5	15.1	-	-	-	457.6
	May	441.0	6.6	-	-	-	447.6
	June	356.6	22.7	-	-	-	379.3
	July	586.6	21.0	-	-	-	607.6
	August	371.2	28.7	-	-	-	399.9
	September	407.1	13.1	-	-	-	420.2
	October	276.4	34.0	-	-	-	310.4
	November	409.0	37.1	-	-	-	446.1
	December	593.5	-	-	-	-	593.5
	Total	5,579.2	201.3	-	-	-	5,780.5
1987	January	486.2	6.2	-	-	-	492.4
	February	376.5	11.2	-	-	-	387.7
	March	533.3	21.0	-	-	-	554.3
	April	472.9	13.1	-	-	-	486.0
	May	486.7	6.6	-	-	-	493.3
	June	534.0	8.3	-	-	-	542.3
	July	674.7	5.0	-	-	-	679.7
	August	604.7	-	-	-	-	604.7
	September	457.4	14.4	-	-	-	471.8
	October	457.9	6.9	-	-	-	464.8
	November	525.0	6.9	-	-	-	531.9
	December	610.1	8.6	-	-	-	618.7
	Total	6,219.4	108.2	-	-	-	6,327.6
1988	January	581.7	6.7	-	-	-	588.4
	February	520.9	15.5	-	-	-	536.4
	March	567.9	32.3	-	-	-	600.2
	April	510.9	6.4	-	-	-	517.3
	May	442.4	8.4	-	-	-	450.8
	June	638.8	7.0	-	-	-	645.8
	July	751.2	12.5	-	-	-	763.7
	August	842.9	1.8	-	-	-	844.7
	September	576.1	18.0	-	-	-	594.1
	October	566.0	16.7	-	-	-	582.7
	November	569.8	18.9	-	-	-	588.7
	December	753.4	19.0	-	-	-	772.4
	Total	7,322.0	163.2	-	-	-	7,485.2

Source: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Quarterly.

Table III-45 (cont.)
**Sulfur Content of Coal Receipts at Generating Plants of
 50-Megawatt Capacity or Larger, Nebraska, Monthly 1983-1989**
 (Thousand Tons)

		0.5% or Less	More Than 0.5% up to 1.0%	More Than 1.0% up to 1.5%	More Than 1.5% up to 2.0%	2.0% or More	Total
1989	January	690.0	5.0	-	-	-	695.0
	February	471.0	5.0	-	-	-	476.0
	March	580.0	18.0	-	-	-	598.0
	April	468.0	18.0	-	-	-	486.0
	May	655.0	20.0	-	-	-	675.0
	June	635.0	11.0	-	-	-	646.0
	July	685.0	8.0	-	-	-	693.0
	August	674.0	5.0	-	-	-	679.0
	September	583.0	11.0	-	-	-	594.0
	October	516.0	13.0	-	-	-	529.0
	November	643.0	6.0	-	-	-	649.0
	December	753.0	0.0	-	-	-	753.0
	Total	7,353.0	120.0	-	-	-	7,473.0

Source: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Quarterly.

IV. CRUDE OIL, NATURAL GAS, ETHANOL AND GASOHOL STATISTICS

Tables

<p>IV-1 Crude Oil and Natural Gas Production, Nebraska, 1960-1989</p> <p>IV-2 Wellhead Prices for Crude Oil and Natural Gas, Nebraska, 1960-1989</p> <p>IV-3 Crude Oil Production, Nebraska, Monthly 1977-1989</p> <p>IV-4 Production of Crude Oil by County, Nebraska, 1982-1989</p> <p>IV-5 Production of Natural Gas by County, Nebraska, 1982-1989</p> <p>IV-6 Drilling Permits Issued, Exploratory Wells, Nebraska, Monthly 1977-1989</p> <p>IV-7 Drilling Permits Issued, Development Wells, Nebraska, Monthly 1977-1989</p>	<p>IV-8 Producing Wells, Nebraska, 1960-1989</p> <p>IV-9 Stripper Wells, Stripper Wells Abandoned, Stripper Well Production, and Percentage of Total Crude Oil Production, Nebraska, 1970-1988</p> <p>IV-10 Proven Reserves of Crude Oil and Natural Gas, Nebraska, 1960-1989</p> <p>IV-11 Gasohol Blended, Imported, Exported (Including Sales to Federal Agencies) and Total Available for Sale, Nebraska, Monthly 1981-1989</p> <p>IV-12 Unleaded Gasoline Price, F.O.B., Omaha, Nebraska, Monthly 1980-1989</p> <p>IV-13 Ethanol Price, F.O.B., Omaha, Nebraska, Monthly 1980-1989</p>
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PETROLEUM, NATURAL GAS AND GASOHOL PRODUCTION

Petroleum production in Nebraska for 1989 was 6,231,544 barrels, an increase of 4.2% from 1988 production of 5,978,429 barrels. This represents the highest production level in Nebraska since 7,097,633 barrels were produced in 1986. There were 61 drilling permits issued in 1989 for exploratory wells, a decrease of 25% from the 81 permits in 1988. Similarly, the 47 permits issued for development wells in 1989 was a 30% decrease from the 67 issued in 1988. Petroleum production in 1989 from Nebraska represented 14.7% of the petroleum consumed in the state, though it should be noted that petroleum produced in Nebraska is first exported from the state for refining.

Natural gas production in Nebraska for 1989 was 878,517 thousand cubic feet, a decrease of 3.5% from 1988 production

of 910,468 thousand cubic feet. Production in 1989 was the lowest reported in Nebraska since production was first reported in 1950. Natural gas production in 1989 from Nebraska represented only 0.7% of the natural gas consumed in Nebraska during 1989.

Ethanol production in Nebraska in 1989 was approximately 11.1 million gallons, or about the same as the previous six years. Gasohol blended in Nebraska was 252 million gallons, an increase of 4.6% over the previous high of 241 million gallons set in 1988. (Note: Gasohol is a blend of 10% ethanol and 90% gasoline.) Ethanol produced in Nebraska was approximately 44% of the total used in blending gasohol in Nebraska in 1989.

Figure 55
Crude Oil Production, Nebraska, 1960-1989

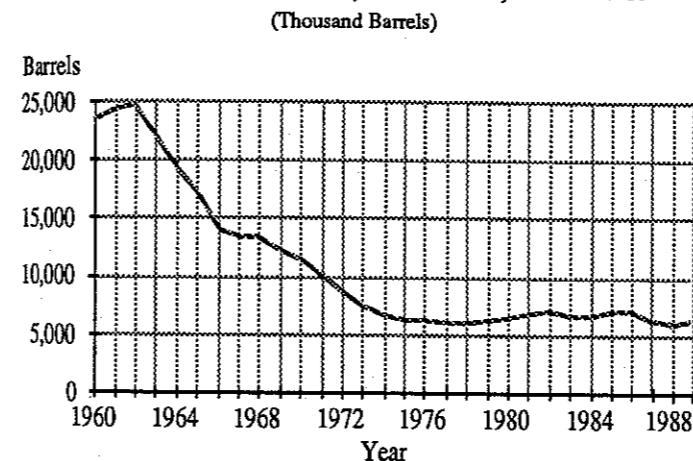


Figure 56
Natural Gas Production, Nebraska, 1960-1989

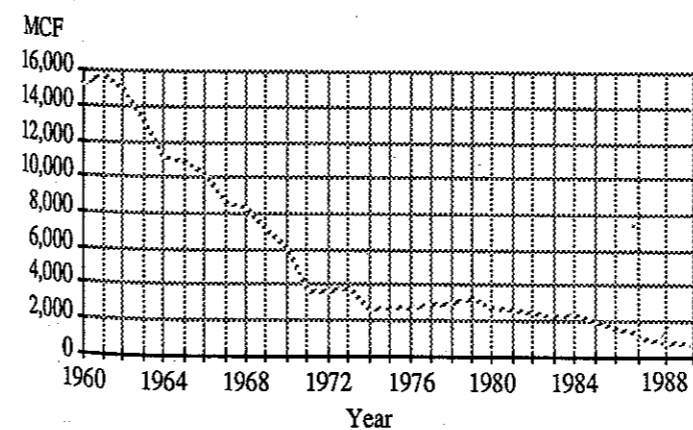


Table IV-1
Crude Oil and Natural Gas Production, Nebraska, 1960-1989

Year	Crude Oil (Thousand Barrels)	Natural Gas (Million Cubic Feet)
1960	23,825	15,258
1961	24,369	15,743*
1962	24,894*	14,880
1963	21,846	13,051
1964	19,113	11,094
1965	17,216	10,720
1966	13,850	10,196
1967	13,373	8,453
1968	13,183	8,129
1969	12,106	6,989
1970	11,451	5,991
1971	10,062	3,496
1972	8,705	3,478
1973	7,240	3,836
1974	6,611	2,538
1975	6,120	2,565
1976	6,182	2,511
1977	5,968	2,789
1978	5,862	2,882
1979	6,068	3,208
1980	6,240	2,550
1981	6,671	2,519
1982	6,872	2,280
1983	6,380	2,091
1984	6,452	2,300
1985	6,943	1,944
1986	7,098	1,403
1987	6,091	1,261
1988	5,948	910
1989	6,232	879

Sources: *Basic Petroleum Data Book, Petroleum Industry Statistics*. American Petroleum Institute. Washington, D.C. May 1989. *1989 Nebraska Oil Activity Summary. Annual Report*. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska.

Note: * indicates year of peak production in Nebraska.

Figure 57
Wellhead Prices for Crude Oil,
Nebraska, 1960-1989
(Dollars Per Barrel)

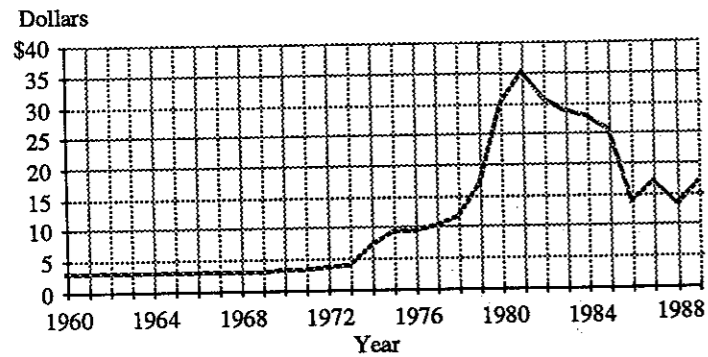


Figure 58
Wellhead Prices for Natural Gas,
Nebraska, 1960-1989
(Cents Per Thousand Cubic Feet)

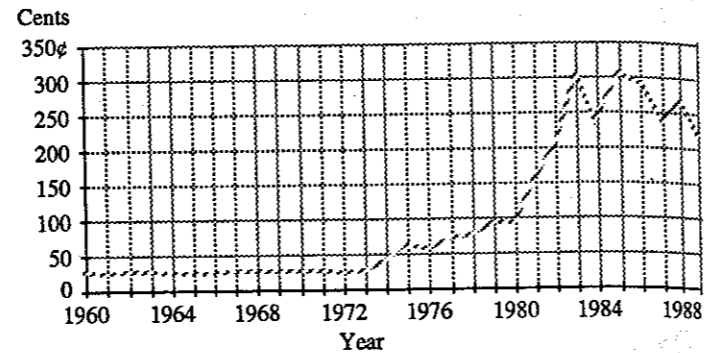


Table IV-2
Wellhead Prices for Crude Oil and Natural Gas, Nebraska, 1960-1989

Year	Crude Oil (Dollars/Barrel)	Natural Gas (Cents/Thousand Cubic Feet)
1960	\$2.87	17.5¢
1961	2.85	16.7
1962	2.83	18.2
1963	2.83	18.8
1964	2.70	15.4
1965	2.66	14.6
1966	2.72	15.9
1967	2.75	17.2
1968	2.79	17.5
1969	2.98	17.3
1970	3.09	17.1
1971	3.38	17.5
1972	3.38	17.8
1973	3.87	18.2
1974	6.83	34.0
1975	9.01	54.1
1976	8.99	51.3
1977	10.46	65.2
1978	11.40	68.0
1979	16.75	85.0
1980	30.49	82.9
1981	35.32	145.0
1982	30.98	19.0
1983	28.58	293.0
1984	27.83	224.0
1985	25.42	301.0
1986	13.70	282.0
1987	17.08	242.0
1988	14.12	266.0
1989	17.36	223.0

Source: Basic Petroleum Data Book, Petroleum Industry Statistics. American Petroleum Institute. Washington, D.C. September 1990.

Table IV-3
Crude Oil Production, Nebraska, Monthly 1977-1989
(Barrels)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	502,774	477,105	483,206	502,703	554,180	560,334	562,152	529,138	556,664	605,376	540,588	475,850	560,755
February	462,938	419,892	451,691	480,512	503,868	532,073	508,864	504,454	514,103	540,827	483,887	459,849	483,927
March	474,328	486,615	515,334	516,836	565,799	605,026	542,398	544,875	588,527	606,889	509,946	477,192	532,398
April	498,104	481,331	501,530	486,000	559,925	591,723	529,810	500,179	579,691	535,548	510,008	473,833	531,987
May	507,641	492,701	525,112	540,000	553,556	594,224	547,386	545,150	605,069	592,198	521,386	497,501	531,549
June	493,312	489,095	507,398	509,397	548,195	568,019	521,587	532,522	570,347	554,068	508,937	491,800	536,038
July	499,061	489,128	518,302	504,840	547,937	586,941	543,190	538,203	586,255	563,366	514,704	506,413	537,398
August	521,958	501,555	543,823	547,833	578,214	580,348	544,998	546,779	601,343	559,749	506,652	518,445	521,793
September	498,536	491,847	508,758	534,617	559,887	556,491	531,989	549,347	583,953	535,490	494,073	500,694	504,189
October	501,188	514,482	536,185	539,889	580,388	571,808	547,738	565,296	608,706	550,047	508,775	532,802	514,255
November	492,881	507,562	458,615	502,264	541,312	551,662	520,463	547,729	572,288	525,208	490,748	516,135	483,913
December	498,482	505,994	501,008	529,079	571,669	558,911	480,481	549,443	579,246	538,137	504,194	534,628	488,017
Total	5,951,203	5,857,307	6,050,962	6,193,970	6,664,938	6,857,560	6,381,056	6,453,115	6,946,192	6,706,903	6,093,889	5,985,140	6,226,219
Annual Summary	5,968,452	5,862,277	6,068,019	6,239,652	6,671,313	6,872,204	6,386,417	6,469,723	6,942,502	7,097,633	6,090,931	5,978,429	6,231,544

Source: Nebraska Oil Activity Summary. Monthly and Annual Reports. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska.
Note: The annual summary data is compiled after corrections and updates have been made which are not reflected in the monthly reports.

Figure 59
Production of Crude Oil by County, Nebraska, 1989

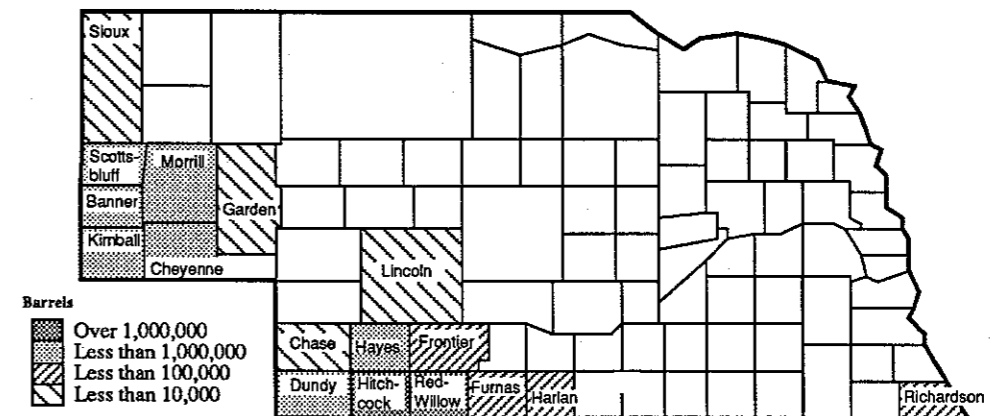


Table IV-4
Production of Crude Oil by County, Nebraska, 1982-1989
(Barrels)

County	1982	1983	1984	1985	1986	1987	1988	1989
Banner	698,471	625,833	592,874	602,762	534,064	462,657	418,562	385,677
Chase	415	-	-	-	-	-	3,925	3,570
Cheyenne	1,288,648	1,154,247	1,123,110	1,156,152	1,594,044	1,099,791	1,063,357	919,001
Dundy	298,693	214,233	187,774	171,415	152,140	141,394	191,568	180,239
Franklin	85	-	-	-	-	-	-	-
Frontier	85,783	89,144	91,138	99,377	78,827	78,394	73,026	70,004
Furnas	34,430	23,769	31,479	27,758	31,950	28,894	30,604	29,106
Garden	4,493	3,857	3,907	3,145	2,743	2,674	1,873	2,608
Harlan	25,892	24,374	29,621	30,742	25,884	22,110	19,872	19,562
Hayes	-	-	-	1,568	23,882	166,610	193,982	241,707
Hitchcock	1,494,798	1,387,993	1,480,969	1,979,897	1,671,689	1,252,940	1,440,318	1,912,424
Kimball	1,055,881	1,097,031	1,053,999	1,053,896	997,013	849,285	751,257	884,888
Lincoln	2,644	10,625	5,708	4,706	3,523	2,566	2,314	2,217
Morrill	233,077	246,592	265,575	302,268	280,397	228,583	193,478	203,752
Red Willow	1,472,260	1,296,305	1,394,111	1,312,608	1,559,491	1,590,513	1,434,475	1,220,950
Richardson	51,621	54,009	65,013	63,718	41,394	46,323	35,349	39,300
Scottsbluff	125,013	158,405	143,874	132,491	119,072	109,736	116,574	110,144
Sioux	-	-	571	-	1,520	8,461	7,895	6,395
Total	6,872,204	6,386,417	6,469,723	6,942,502	7,097,633	6,090,931	5,978,429	6,231,544

Source: Nebraska Oil Activity Summary. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual.

Figure 60
Production of Natural Gas by County, Nebraska, 1989

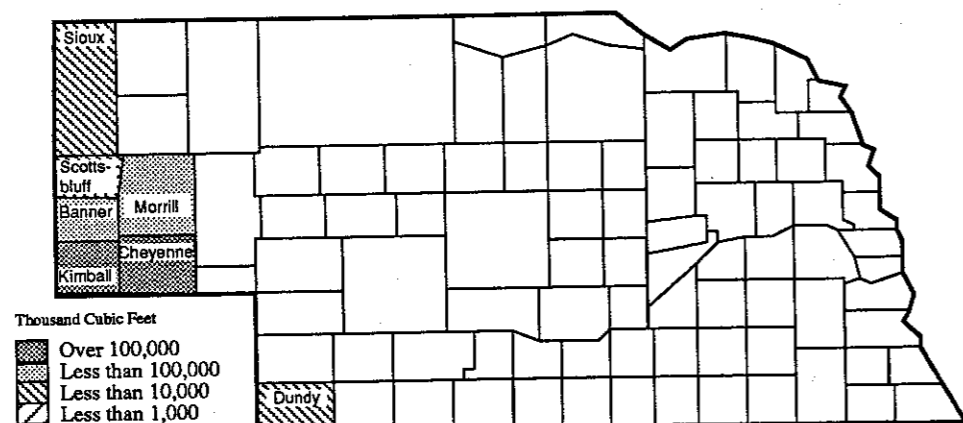


Table IV-5
Production of Natural Gas by County, Nebraska, 1982-1989

County	1982	1983	1984	1985	1986	1987	1988	1989
Banner	118,183	100,909	160,551	144,777	91,632	79,174	57,074	42,152
Cheyenne	1,649,183	1,533,865	1,605,710	1,378,244	941,395	722,013	531,539	477,798
Deuel	41,934	3,281	15,767	11,785	8,569	1,642	282	-
Dundy	811	-	-	-	106	448	933	1,036
Frontier	842	547	1,870	-	-	-	-	-
Hitchcock	58	-	-	-	-	-	-	-
Kimball	439,255	421,419	481,755	384,316	334,349	429,122	290,461	326,149
Morrill	25,502	26,147	27,588	20,251	20,881	19,813	17,735	17,674
Scottsbluff	4,031	5,160	6,243	5,196	4,382	4,432	3,889	4,454
Sioux	-	-	784	-	2,171	3,896	8,555	9,254
Total	2,279,799	2,091,328	2,300,268	1,944,569	1,403,485	1,260,540	910,468	878,517

Source: Nebraska Oil Activity Summary. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual

Table IV-6
Drilling Permits Issued, Exploratory Wells, Nebraska, Monthly 1977-1989

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	21	26	35	45	27	26	15	13	9	22	6	10	4
February	14	20	10	21	22	22	13	14	13	8	7	7	3
March	15	21	20	20	16	27	12	15	14	8	9	8	4
April	15	29	25	19	23	18	20	10	9	3	6	6	3
May	26	21	20	27	15	15	13	14	15	5	4	5	5
June	18	20	18	17	50	13	9	17	16	6	14	5	14
July	26	24	36	14	27	13	19	13	22	2	12	7	3
August	16	30	20	13	39	15	16	25	14	2	13	8	2
September	27	31	24	34	23	18	35	26	18	8	14	8	4
October	32	22	38	41	34	20	19	31	9	7	13	7	6
November	17	20	37	34	41	27	18	31	19	7	12	4	6
December	40	23	30	24	37	47	26	26	18	14	13	6	7
Total	267	287	313	309	354	261	215	235	176	92	123	81	61

Source: Nebraska Oil Activity Summary. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Table IV-7
Drilling Permits Issued, Development Wells, Nebraska, Monthly 1977-1989

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	28	9	22	21	27	23	16	13	23	9	5	0	1
February	13	10	18	27	29	15	13	15	9	4	8	3	4
March	29	11	22	25	22	17	13	10	10	3	5	5	6
April	22	23	27	30	56	7	22	22	12	4	6	9	3
May	21	17	14	28	40	13	18	17	7	1	14	9	5
June	23	24	20	32	30	20	24	14	8	4	11	10	2
July	16	11	17	33	44	22	9	17	8	2	9	5	0
August	21	17	20	16	20	12	14	9	8	1	6	6	6
September	13	18	16	22	24	11	15	9	15	6	6	4	5
October	19	20	18	32	24	12	18	8	19	4	9	6	4
November	14	17	26	30	26	15	17	24	12	7	6	4	5
December	18	21	33	27	32	22	7	12	11	5	7	6	6
Total	237	198	253	323	374	189	186	170	142	50	92	67	47

Source: Nebraska Oil Activity Summary. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Table IV-8
Producing Wells, Nebraska, 1960-1989
(as of December 31, 1988)

	Crude Oil	Natural Gas		Crude Oil	Natural Gas
1960	1,571	53	1975	1,190	19
1961	1,860	49	1976	1,291	17
1962	1,764	47	1977	1,382	18
1963	1,726	44	1978	1,469	22
1964	1,711	41	1979	1,551	20
1965	1,611	39	1980	1,693	22
1966	1,511	37	1981	1,870	25
1967	1,430	37	1982	2,006	23
1968	1,403	36	1983	2,100	23
1969	1,305	35	1984	2,095	23
1970	1,244	35	1985	2,091	19
1971	1,191	29	1986	1,838	16
1972	1,143	29	1987	1,852	20
1973	1,107	29	1988	1,723	18
1974	1,127	25	1989	1,687	15

Sources: Basic Petroleum Data Book, Petroleum Industry Statistics. American Petroleum Institute. Washington, D.C. May 1990. 1989 Nebraska Oil Activity Summary. Annual Report. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska.

Figure 61
Gasohol Blended and Available for Sale,
Nebraska, 1980-1989

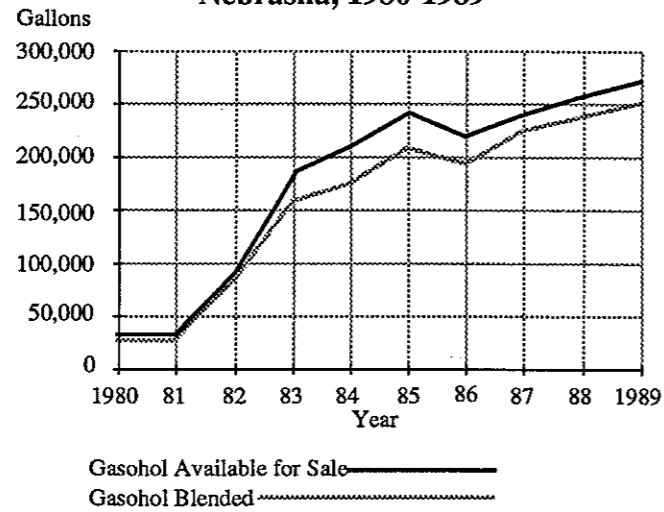


Table IV-12
Unleaded Gasoline Price, F.O.B., Omaha, Nebraska, Monthly 1980-1989
(Dollars/Gallon)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	\$0.850	\$1.000	\$1.040	\$0.920	\$0.840	\$0.741	\$0.744	\$0.536	0.480	0.540
February	0.920	1.090	1.010	0.880	0.864	0.730	0.597	0.524	0.504	0.520
March	0.960	1.130	0.950	0.860	0.865	0.804	0.458	0.542	0.500	0.560
April	0.970	1.110	0.900	0.900	0.883	0.875	0.494	0.564	0.572	0.627
May	0.810	1.090	0.940	0.940	0.879	0.917	0.578	0.586	0.574	0.636
June	0.990	1.080	1.050	0.950	0.866	0.933	0.543	0.605	0.547	0.714
July	0.980	1.070	1.060	0.950	0.840	0.930	0.424	0.635	0.600	0.708
August	0.970	1.070	1.050	0.950	0.838	0.908	0.473	0.633	0.590	0.557
September	0.960	1.070	1.030	0.930	0.838	0.818	0.479	0.571	0.540	0.655
October	0.950	1.070	1.020	0.910	0.845	0.823	0.452	0.579	0.510	0.626
November	0.960	1.070	0.990	0.890	0.836	0.863	0.469	0.578	0.540	0.578
December	0.980	1.070	0.960	0.870	0.741	0.820	0.459	0.492	0.530	0.554
Average	0.942	1.077	1.000	0.913	0.845	0.847	0.514	0.570	0.541	0.606

Source: Unpublished computer printout. Nebraska Gasohol Committee. Lincoln, Nebraska. Monthly.

Table IV-13
Ethanol Price, F.O.B., Omaha, Nebraska, Monthly 1980-1988
(Dollars/Gallon)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	\$1.73	\$1.81	\$1.75	\$1.69	\$1.54	\$1.57	\$1.52	\$0.89	\$1.05	1.15
February	1.80	1.85	1.70	1.68	1.54	1.58	1.35	1.01	1.08	1.13
March	1.80	1.85	1.66	1.64	1.54	1.57	1.27	1.13	1.09	1.23
April	1.85	1.85	1.70	1.70	1.54	1.68	1.22	1.17	1.14	1.40
May	1.85	1.84	1.70	1.70	1.54	1.62	1.14	1.36	1.14	1.38
June	1.85	1.84	1.70	1.70	1.54	1.62	1.04	1.40	1.14	1.36
July	1.85	1.82	1.70	1.70	1.54	1.61	0.95	1.43	1.23	1.31
August	1.85	1.82	1.70	1.73	1.54	1.58	1.05	1.43	1.17	1.17
September	1.82	1.82	1.70	1.80	1.58	1.59	0.96	1.28	1.13	1.25
October	1.80	1.77	1.69	1.65	1.58	1.60	0.84	1.20	1.16	1.24
November	1.80	1.75	1.72	1.65	1.56	1.60	0.77	1.12	1.15	1.09
December	1.80	1.75	1.75	1.54	1.57	1.55	0.75	1.04	1.13	1.05
Average	1.82	1.81	1.71	1.68	1.55	1.60	1.07	1.21	1.13	1.23

Source: Unpublished computer printout. Nebraska Gasohol Committee. Lincoln, Nebraska. Monthly.

V. ELECTRICITY GENERATION STATISTICS

Tables

- V-1 Electricity Generated by Fuel Type, Nebraska, 1976-1989
- V-2 Electricity Generation by Coal, Nebraska, Monthly 1982-1989
- V-3 Electricity Generation by Nuclear Power, Nebraska, Monthly 1982-1989
- V-4 Electricity Generation by Natural Gas, Nebraska, Monthly 1982-1989
- V-5 Electricity Generation by Petroleum, Nebraska, Monthly 1982-1989
- V-6 Electricity Generation by Hydro Power, Nebraska, Monthly 1982-1989
- V-7 Electricity Generation, Total, Nebraska, Monthly 1982-1989
- V-8 Operable Electric Generating Capacity by Energy Source, Nebraska, December, 1987-1989
- V-9 Operable Electric Generating Capacity by Year of Initial Operation, by Energy Type, Nebraska, December 1989
- V-10 Operable Electric Generating Units in Nebraska, December 1989
- V-11 Electricity Generation by Nuclear Power, Fort Calhoun Station, Nebraska, Monthly 1980-1989
- V-12 Electricity Generation by Nuclear Power, Cooper Station, Nebraska, Monthly 1980-1989
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ELECTRICITY GENERATION

Generation of electricity in Nebraska reached a record high of 21,098 gigawatthours (million kilowatthours) in 1989. This was 2.2% above the previous record of 20,635 gigawatthours set in 1988. Coal accounted for 54.9%, nuclear power 38.3%, hydro-electric power 5.5% and natural gas and petroleum 1.3% of the power generated. Nebraska remained a net exporter of electricity.

Generation by coal was 11,582 gigawatthours in 1989, an decrease of 5.3% from the record of 12,225 gigawatthours set in 1988. Generation by nuclear power increased by 18.3% in 1989 to 8,077 gigawatthours from 1988. Generation from hydro-electric power decreased 14.2% in 1989 to 1,158 gigawatthours. Generation from natural gas and petroleum increased 21.2% in 1989 from 1988.

Nuclear power generation by Nebraska Public Power district's Cooper Station was 4,786 gigawatthours. Generation from Omaha Public Power District's Fort Calhoun Station was 3,291 gigawatthours. It should be noted that by contract 50% of the production of Cooper Station belongs to the Iowa Power and Light Company.

Purchases of electricity from the Western Area Power Administration represented approximately 10% of electricity used in Nebraska in 1989. This electricity was obtained by municipi-

ties, state agencies and public utility districts in Nebraska at a cost of 0.98 cents per kilowatthour.

Figure 62
Electricity Generated by Fuel Type, Nebraska, 1976-1989
(Million Kilowatthours)

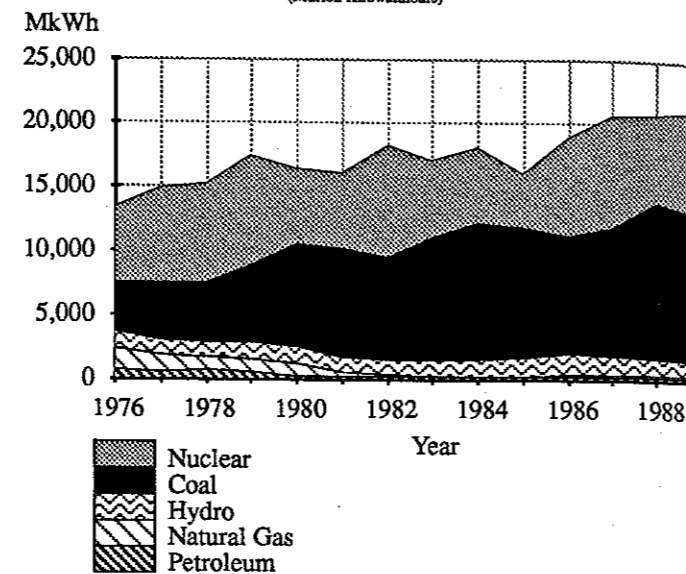


Table V-1
Electricity Generated by Fuel Type, Nebraska, 1976-1989
(Million Kilowatthours)

	Coal	Petroleum	Natural Gas	Nuclear Power	Hydro Power	Total
1976	3,919	673	1,599	5,824	1,276	13,291
1977	4,493	446	1,255	7,452	1,221	14,866
1978	4,664	642	994	7,725	1,187	15,214
1979	6,027	398	1,088	8,658	1,246	17,417
1980	8,122	127	945	5,783	1,336	16,313
1981	8,482	47	351	5,988	1,197	16,063
1982	8,120	65	120	8,753	1,212	18,269
1983	9,471	40	114	6,082	1,346	17,052
1984	10,717	19	117	5,780	1,345	17,977
1985	10,232	24	103	4,134	1,441	15,934
1986	9,319	54	131	7,658	1,678	18,839
1987	10,152	47	135	8,589	1,568	20,489
1988	12,225	69	163	6,828	1,350	20,635
1989	11,582	57	224	8,077	1,158	21,098

Sources: *Electric Power Annual*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Annual.

Table V-2
Electricity Generation by Coal, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	933	954	1,056	1,090	918	942	1,081	1,046
February	758	757	832	981	826	580	848	830
March	506	645	883	692	1,043	756	1,024	718
April	415	683	809	691	805	762	792	724
May	488	571	799	697	602	856	757	1,004
June	620	784	950	730	617	970	1,152	1,087
July	926	1,162	1,034	1,017	1,038	1,165	1,190	1,070
August	874	1,156	1,042	845	787	967	1,291	1,109
September	618	603	716	620	540	735	823	830
October	585	389	723	939	589	809	1,001	899
November	593	578	944	921	673	778	980	951
December	805	1,189	927	1,009	881	832	1,286	1,313
Total	8,121	9,471	10,715	10,232	9,319	10,152	12,225	11,581

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table V-3
Electricity Generation by Nuclear Power, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	893	545	791	361	612	674	818	441
February	783	466	774	327	746	754	592	607
March	844	533	502	325	781	543	307	885
April	846	618	250	348	692	457	334	420
May	668	296	344	358	711	328	354	172
June	340	325	387	341	810	670	480	516
July	680	330	624	348	821	905	808	886
August	820	322	757	377	683	875	776	896
September	786	644	487	616	699	764	674	717
October	700	703	361	76	400	897	568	873
November	803	646	203	95	351	829	554	775
December	588	656	301	563	352	893	563	887
Total	8,751	6,084	5,781	4,135	7,658	8,589	6,828	8,075

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table V-4
Electricity Generation by Natural Gas, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	6	4	8	6	4	16	7	4
February	6	2	3	4	6	7	3	21
March	5	16	3	6	5	8	6	15
April	11	10	14	16	9	8	4	36
May	10	7	8	5	6	11	8	8
June	5	12	6	8	35	26	50	10
July	18	7	9	10	10	25	20	33
August	19	9	10	8	7	9	13	16
September	7	11	8	10	7	6	13	13
October	6	17	23	16	10	6	12	24
November	16	10	18	5	21	8	21	39
December	12	9	8	9	11	5	5	6
Total	121	114	118	103	131	135	162	225

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table V-5
Electricity Generation by Petroleum, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	8	3	4	8	1	2	1	0
February	12	4	2	1	3	1	6	12
March	5	4	1	1	2	0	1	28
April	6	3	2	2	4	3	13	0
May	6	3	2	1	1	22	34	1
June	4	3	1	2	3	10	3	1
July	4	3	1	2	2	1	1	2
August	4	3	1	1	1	1	3	1
September	2	2	1	3	1	1	2	1
October	3	5	1	1	2	1	1	1
November	5	4	2	2	17	5	1	1
December	6	3	1	1	19	0	5	8
Total	65	40	19	24	56	47	71	56

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table V-6
Electricity Generation by Hydro Power, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	78	110	88	95	102	126	87	80
February	77	108	103	91	95	117	87	74
March	86	116	113	129	126	123	117	77
April	93	99	96	110	120	130	134	96
May	98	123	90	124	145	130	143	115
June	93	102	87	130	149	127	135	122
July	116	105	119	148	169	141	146	138
August	120	130	132	138	172	146	125	133
September	111	124	136	120	159	139	123	102
October	113	120	129	137	157	146	119	104
November	119	119	127	120	151	139	68	55
December	109	90	111	99	134	104	67	62
Total	1,213	1,346	1,331	1,441	1,679	1,568	1,351	1,158

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Table V-7
Electricity Generation, Total, Nebraska, Monthly 1982-1989
(Million Kilowatthours)

	1982	1983	1984	1985	1986	1987	1988	1989
January	1,917	1,614	1,947	1,560	1,637	1,760	1,993	1,572
February	1,636	1,337	1,713	1,404	1,676	1,459	1,537	1,545
March	1,446	1,315	1,503	1,153	1,956	1,430	1,455	1,724
April	1,370	1,413	1,170	1,166	1,630	1,360	1,277	1,276
May	1,269	1,000	1,244	1,184	1,464	1,347	1,295	1,300
June	1,064	1,226	1,431	1,209	1,613	1,803	1,819	1,735
July	1,746	1,607	1,787	1,525	2,041	2,237	2,164	2,130
August	1,836	1,621	1,942	1,370	1,650	1,998	2,209	2,155
September	1,524	1,384	1,348	1,369	1,405	1,644	1,635	1,663
October	1,407	1,234	1,238	1,168	1,157	1,859	1,700	1,901
November	1,537	1,357	1,293	1,144	1,214	1,758	1,623	1,822
December	1,519	1,946	1,348	1,681	1,397	1,834	1,926	2,276
Total	18,271	17,054	17,964	15,933	18,840	20,489	20,633	21,099

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Figure 63
Operable Electric Generating Units by Energy Source, Nebraska, 1989

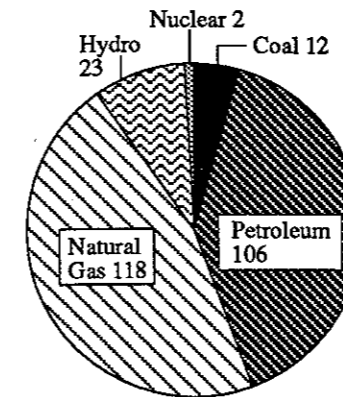


Figure 64
Operable Electric Generating Nameplate by Energy Source, Nebraska, 1989
(Megawatts)

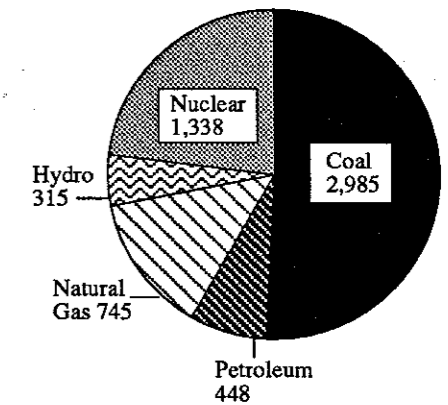


Figure 65
Electrical Generation by Fuel Type, Nebraska, 1989
(Million Kilowatthours)

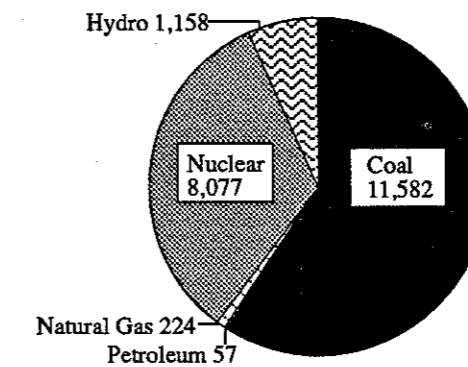


Table V-8
Operable Electric Generating Capacity by Energy Source, Nebraska, December, 1986-1989
(Megawatts)

	Number of Units	Generator Nameplate	Summer Capability	Winter Capability
1987 - Coal	12	2,985	2,841	2,892
Petroleum	110	526	467	551
Natural Gas	121	785	735	772
Hydro	25	282	284	284
Nuclear	2	1,338	1,236	1,270
Total	270	5,916	5,563	5,769
1988 - Coal	12	2,985	2,889	2,892
Petroleum	106	441	372	457
Natural Gas	121	785	736	774
Hydro	23	303	284	285
Nuclear	2	1,338	1,254	1,270
Total	264	5,852	5,535	5,678
1989 - Coal	12	2,985	2,869	2,872
Petroleum	106	448	387	455
Natural Gas	118	745	697	730
Hydro	23	315	300	300
Nuclear	2	1,338	1,254	1,270
Total	261	5,831	5,507	5,627

Source: *Inventory of Power Plants in the United States, 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Annual.

Definitions: Generator Nameplate = The full-load continuous rating of a generator, prime mover or other electrical equipment under specified conditions as designated by the manufacturer.
Capability = The maximum load that a generating unit, generating station or other electrical apparatus can carry under specified conditions for a given period of time without exceeding approved limits of temperature and stress.

Figure 66
Operable Electric Generating Capacity by Year of Initial Operation, Nebraska, December 1989
(Megawatts)

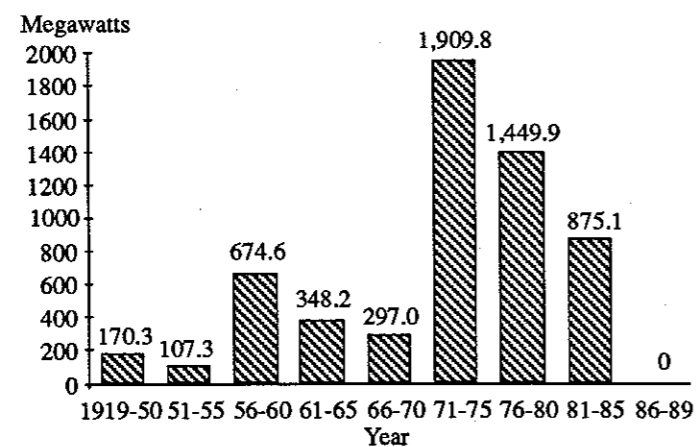


Table V-9
Operable Electric Generating Capacity by Year of Initial Operation, by Energy Type,
Nebraska, December 1989
(Megawatts)

Year of Initial Operation	Number of Units	Generator Nameplate	Summer Capability	Winter Capability
1919-35				
Coal	-	-	-	-
Petroleum	8	2.8	2.3	2.4
Natural Gas	-	-	-	-
Hydro	12	76.4	73.8	73.9
Nuclear	-	-	-	-
Total	20	79.2	76.1	76.3
1936-40				
Coal	-	-	-	-
Petroleum	10	4.3	3.9	4.0
Natural Gas	3	3.0	2.9	2.9
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	13	7.3	6.8	6.9
1941-45				
Coal	-	-	-	-
Petroleum	4	1.7	2.0	2.2
Natural Gas	1	0.8	0.7	0.7
Hydro	5	55.0	55.0	55.0
Nuclear	-	-	-	-
Total	10	57.5	57.7	57.9
1946-50				
Coal	-	-	-	-
Petroleum	24	9.5	8.6	8.8
Natural Gas	13	16.8	13.6	14.8
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	37	26.3	22.2	23.6
1951-55				
Coal	1	73.5	75.6	77.1
Petroleum	14	10.6	8.4	8.5
Natural Gas	17	21.6	19.8	21.1
Hydro	1	1.6	1.0	1.0
Nuclear	-	-	-	-
Total	33	107.3	104.8	107.7
1956-60				
Coal	3	326.4	309.2	309.4
Petroleum	19	16.1	14.5	14.8
Natural Gas	25	199.7	187.9	189.4
Hydro	4	132.4	132.4	132.4
Nuclear	-	-	-	-
Total	51	674.6	644.0	646.0

Continued on Next Page

Table V-9 (cont.)
Operable Electric Generating Capacity by Year of Initial Operation, by Energy Type,
Nebraska, December 1989
(Megawatts)

Year of Initial Operation	Number of Units	Generator Nameplate	Summer Capability	Winter Capability
1961-65				
Coal	2	255.9	251.2	251.3
Petroleum	6	10.9	9.7	9.7
Natural Gas	17	81.4	76.5	77.9
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	25	348.2	337.4	338.9
1966-70				
Coal	1	217.6	198.6	198.3
Petroleum	7	11.9	11.2	11.2
Natural Gas	19	67.5	60.8	61.0
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	27	297.0	270.6	270.5
1971-75				
Coal	-	-	-	-
Petroleum	11	378.0	324.5	391.0
Natural Gas	18	194.2	178.7	206.1
Hydro	-	-	-	-
Nuclear	2	1,337.6	1,254.0	1,270.0
Total	31	1,909.8	1,757.2	1,867.1
1976-80				
Coal	2	1,297.2	1,214.9	1,215.7
Petroleum	1	0.8	0.8	0.8
Natural Gas	3	151.9	147.5	147.5
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	6	1,449.9	1,363.2	1,364.0
1981-85				
Coal	3	814.4	820.0	820.0
Petroleum	2	2.3	2.2	2.2
Natural Gas	2	8.4	8.2	8.4
Hydro	1	50.0	38.0	38.0
Nuclear	-	-	-	-
Total	8	875.1	868.4	868.6
1986-89				
Coal	-	-	-	-
Petroleum	-	-	-	-
Natural Gas	-	-	-	-
Hydro	-	-	-	-
Nuclear	-	-	-	-
Total	-	-	-	-

Source: *Inventory of Power Plants in the United States, 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.

Note: The U.S. Corps of Engineers - Missouri River District hydro units at Gavins Point are included in table V-9.

Table V-10
Operable Electric Generating Units in Nebraska, December 1989

Company -Plant (County)	Unit ID*	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
Alliance, City of -Alliance (Box Butte)	4	7.5	6.8	6.8	ST	N, B	1960
Ansley, City of -Ansley (Custer)	1	0.2	0.2	0.2	IC	P	1953
	2	0.6	0.6	0.6	IC	N	1963
	3	0.9	0.9	0.9	IC	N	1969
Arnold, Village of -Arnold (Custer)	1	0.6	0.5	0.5	IC	P	1960
	2	0.2	0.1	0.1	IC	P	1928
	3	0.2	0.2	0.2	IC	P	1941
	4	0.3	0.3	0.3	IC	P	1949
Auburn, City of -Auburn (Nemaha)	1	2.4	2.2	2.4	IC	N, P	1982
	2	1.0	0.9	1.0	IC	N, P	1949
	3	1.0	0.9	1.0	IC	N, P	1947
	4	0.7	0.6	0.7	IC	P	1939
	5	3.4	3.1	3.4	IC	N, P	1973
	6	2.8	2.5	2.8	IC	N, P	1967
	7	5.6	5.0	5.6	IC	N, P	1972
Beaver City, City of -City Light & Water (Furnas)	1	0.5	0.5	0.5	IC	P, N	1957
	2	0.4	0.3	0.4	IC	N, P	1963
	3	0.3	0.3	0.3	IC	P	1947
	4	0.9	0.9	0.9	IC	N, P	1967
Benkelman, City of -Benkelman (Dundy)	1	0.9	0.8	0.8	IC	P	1952
	2	0.3	0.8	0.8	IC	P	1941
Broken Bow, City of -Broken Bow (Custer)	1	0.5	0.5	0.5	IC	P	1936
	2	3.5	3.5	3.5	IC	N, P	1970
	3	0.8	0.7	0.7	IC	N, P	1945
	4	0.8	0.8	0.8	IC	N, P	1951
	5	1.0	1.0	1.0	IC	N, P	1951
	6	2.1	2.0	2.0	IC	N, P	1961
Burwell, City of -Burwell (Garfield)	1	1.4	1.4	1.4	IC	N, P	1960
	2	1.1	1.1	1.1	IC	N, P	1956
	3	0.9	0.9	0.9	IC	N, P	1968
	4	0.7	0.7	0.7	IC	P	1948
Callaway, Village of -Callaway (Custer)	1	0.2	0.2	0.2	IC	P	1948
	2	0.2	0.2	0.2	IC	P	1950
	3	0.5	0.5	0.5	IC	P	1960
Cambridge, City of -Cambridge (Furnas)	1	0.8	0.7	0.7	IC	P	1957
	2	0.9	0.8	0.8	IC	P	1963
	3	1.4	1.2	1.2	IC	P	1971
Campbell, Village of -Campbell (Franklin)	IC4	1.1	1.0	1.0	IC	P	1983
	1	0.0	0.0	0.0	IC	P	1927
	2	0.1	0.1	0.1	IC	P	1937
	3	0.1	0.1	0.1	IC	P	1946
Central Nebraska Public Power & Irrigation District -Canaday (Gosper)	1	108.8	107.0	107.0	ST	N, P	1958
-Jeffrey Canyon (Lincoln)	1	9.0	9.0	9.0	HC	W	1941
	2	9.0	9.0	9.0	HC	W	1941
-Johnson 1 (Gosper)	1	9.0	9.0	9.0	HC	W	1941
	2	9.0	9.0	9.0	HC	W	1941

*See notes on page 81

Table V-10 Continued on Next Page

Table V-10 Continued

Company -Plant (County)	Unit ID*	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
-Johnson 2 (Gosper)	1	19.0	19.0	19.0	HC	W	1941
-Kingsley (Keith)	1	50.0	38.0	38.0	HC	W	1984
Chappell, City of -Chappell (Deuel)	3	0.2	0.2	0.2	IC	P	1947
	5	1.2	1.2	1.2	IC	P	1982
Crete, City of -Crete Municipal Power (Saline)	1	0.4	0.4	0.4	IC	P	1939
	2	1.4	1.4	1.4	IC	N, P	1955
	3	1.0	0.9	1.0	IC	N, P	1951
	4	1.1	1.0	1.1	IC	N, P	1947
	5	2.5	2.4	2.6	IC	N, P	1963
	6	3.3	2.8	3.3	IC	N, P	1965
	7	6.0	6.4	6.4	IC	N, P	1973
Curtis, City of -Curtis (Frontier)	1	0.4	0.2	0.2	IC	P	1929
	2	0.9	0.8	0.8	IC	N, P	1955
	3	1.1	1.0	1.0	IC	N, P	1969
	4	1.4	1.2	1.2	IC	N, P	1975
Emerson, City of -Emerson (Dixon)	2	1.1	1.1	1.1	IC	N, P	1968
	3	0.1	0.1	0.1	IC	P	1947
	4	0.5	0.5	0.5	IC	N, P	1960
Fairbury, City of -Fairbury (Jefferson)	1	4.0	3.8	4.0	ST	N, P	1948
	2	2.5	2.5	2.5	ST	N, P	1938
	4	12.5	12.5	13.0	ST	N, P	1965
Falls City, City of -Falls City (Richardson)	1	0.7	0.7	0.7	IC	P	1930
	2	1.0	1.0	1.0	IC	P	1937
	3	2.8	2.8	2.8	IC	N, P	1965
	4	1.1	1.0	1.0	IC	N, P	1946
	5	2.0	1.9	1.9	IC	N, P	1950
	6	2.5	2.5	2.5	IC	N, P	1958
	7	6.3	6.3	6.3	IC	N, P	1972
	8	6.0	6.0	6.0	IC	N, P	1982
Franklin, City of -Franklin (Franklin)	1	0.7	0.7	0.7	IC	N, P	1963
	2	1.4	1.4	1.4	IC	N, P	1974
	3	1.1	1.1	1.1	IC	N, P	1969
	4	0.9	0.9	0.9	IC	N, P	1955
Fremont, City of -Lon Wright (Dodge)	6	16.0	16.0	16.0	ST	N, B	1957
	7	22.0	22.0	22.0	ST	N, B	1963
	8	91.0	87.0	87.0	ST	N, B	1976
Grand Island, City of -C. W. Burdick (Hall)	GT1	16.0	14.8	14.8	GT	N, P	1968
	1	18.8	16.5	16.5	ST	N, P	1957
	2	25.0	22.0	22.0	ST	N, P	1963
	3	54.4	54.0	54.0	ST	N, P	1976
-Platte (Hall)	1	109.8	100.0	100.0	ST	S	1982
Hastings, City of -Don Henry (Adams)	1	22.0	19.5	25.0	GT	P	1972
-Hastings Energy Center (Adams)	1	76.3	72.0	72.0	ST	S	1981
-North Denver (Adams)	4	17.0	13.0	13.0	ST	N, P	1957
	5	22.0	20.0	20.0	ST	N, P	1967
Holdrege, City of -Holdrege (Phelps)	1	0.5	0.5	0.5	IC	P	1937
	2	1.4	1.0	1.0	IC	P	1951
	3	0.5	0.5	0.5	IC	P	1944
Imperial, City of -Imperial (Chase)	IC1	0.3	0.5	0.5	IC	P	1946
	IC2	0.3	0.3	0.3	IC	P	1946

*See notes on page 81

Table V-10 Continued on Next Page

Table V-10 Continued

Company -Plant (County)	Unit ID	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
Kimball, City of							
-Kimball (Kimball)	1	1.0	0.7	0.8	IC	N, P	1956
	2	1.0	0.7	0.8	IC	N, P	1955
	3	1.3	1.0	1.1	IC	N, P	1959
	4	1.3	1.0	1.1	IC	N, P	1960
	5	0.9	0.7	0.7	IC	N, P	1974
	6	3.9	3.6	3.7	IC	N, P	1974
Laurel, City of							
-Laurel (Cedar)	1	1.4	1.1	1.2	IC	N, P	1974
	2	0.9	0.7	0.8	IC	N, P	1970
	3	0.7	0.5	0.6	IC	N, P	1965
	4	0.5	0.4	0.5	IC	N, P	1960
	5	0.3	0.3	0.3	IC	N, P	1947
	6	0.2	0.2	0.2	IC	N, P	1956
Lincoln, City of							
-Lincoln J Street (Lancaster)	1	27.0	22.7	27.2	GT	N, P	1972
-Rokey (Lancaster)	1	72.4	59.6	71.5	GT	P	1975
Lodgepole, City of							
-Lodgepole (Cheyenne)	1	0.1	0.1	0.1	IC	P	1937
	2	0.2	0.2	0.2	IC	P	1949
Mullen, Village of							
-Mullen (Hooker)	3	0.5	0.2	0.3	IC	P	1958
	4	0.7	0.6	0.6	IC	P	1966
Nebraska City, City of							
-Nebraska City (Otoe)	10	6.5	6.5	6.5	IC	N, P	1979
	2	1.5	1.5	1.5	IC	N, P	1953
	3	2.5	2.2	2.4	IC	N, P	1955
	4	3.1	3.1	3.1	IC	N, P	1957
	5	2.0	2.0	2.0	IC	N, P	1964
	8	4.1	3.9	3.9	IC	N, P	1971
	9	6.4	6.4	6.4	IC	N, P	1974
-Syracuse (Otoe)	6	2.0	2.0	2.0	IC	N, P	1969
	7	2.0	2.0	2.0	IC	N, P	1970
Nebraska Public Power District							
-Columbus (Platte)	1	13.3	13.3	13.3	HC	W	1935
	2	13.3	13.3	13.3	HC	W	1935
	3	13.3	13.4	13.4	HC	W	1935
-Cooper Station (Nemaha)	1	835.6	778.0	778.0	NB	U	1974
-David City Plant (Butler)	1	1.5	1.0	1.3	IC	N, P	1959
	2	1.0	0.2	0.8	IC	N, P	1948
	3	1.0	0.5	0.9	IC	N, P	1954
	4	2.3	1.5	1.8	IC	N, P	1966
-Deshler Plant (Thayer)	1	0.3	0.2	0.2	IC	P	1937
	2	0.4	0.2	0.2	IC	P	1949
	3	0.2	0.2	0.2	IC	P	1934
	4	0.7	0.6	0.6	IC	P	1955
-Gerald Gentleman Station (Lincoln)	1	681.3	630.0	630.0	ST	B	1979
	2	628.3	648.0	648.0	ST	B	1981
-Hallam Peaking (Lancaster)	1	49.7	50.0	55.0	GT	P	1972
-Hebron Peaking (Thayer)	1	49.7	41.0	54.0	GT	P	1972
-Keamey (Buffalo)	1	1.5	1.0	1.4	HC	W	1920
-Lyons Plant (Burt)	1	1.2	1.1	1.1	IC	P	1966
	2	0.8	0.7	0.8	IC	P	1959
	3	0.5	0.4	0.5	IC	P	1952
	4	0.5	0.5	0.5	IC	P	1948
	5	0.3	0.3	0.3	IC	P	1929
-Madison Plant (Madison)	1	2.1	1.7	1.2	IC	N, P	1968
	2	1.4	1.0	1.4	IC	N, P	1958
	3	1.1	0.9	1.2	IC	N, P	1952
	4	0.7	0.5	0.7	IC	P	1945

*See notes on page 81

Table V-10 Continued on Next Page

Table V-10 Continued

Company -Plant (County)	Unit ID	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
NPPD Continued							
-McCook Peaking (Red Willow)	1	47.7	39.0	52.0	GT	P	1972
-Minnechadua (Cherry)	1	0.2	0.2	0.2	HC	W	1929
-Mobile (York)	1	0.3	0.3	0.3	IC	P	1958
	2	0.3	0.3	0.3	IC	P	1958
	3	0.8	0.8	0.8	IC	P	1979
-Monroe (Platte)	1	2.6	2.6	2.5	HC	W	1935
	2	2.6	2.6	2.5	HC	W	1935
	3	2.6	2.6	2.5	HC	W	1935
-North Platte (Lincoln)	1	13.1	12.0	12.0	HC	W	1934
	2	13.1	12.0	12.0	HC	W	1934
-Ord Plant (Valley)	1	5.0	4.0	4.0	IC	N, P	1972
	2	1.5	1.5	1.5	IC	P, N	1965
	3	2.4	2.0	2.0	IC	P, N	1962
	4	1.0	0.8	0.8	IC	P, N	1946
	5	1.2	1.1	1.3	IC	N, P	1957
-Randolph Plant (Cedar)	1	1.4	1.0	1.0	IC	N, P	1970
	2	0.9	0.5	0.5	IC	N, P	1964
	3	0.6	0.5	0.6	IC	N, P	1955
	4	0.2	0.2	0.2	IC	P	1947
-Schuyler Plant (Colfax)	1	5.0	5.2	5.2	ST	N, P	1957
	2	2.5	2.8	2.8	ST	N, P	1954
-Sheldon (Lancaster)	1	108.8	105.0	105.0	ST	B	1960
	2	119.9	120.0	120.0	ST	B	1964
-Spencer (Boyd)	1	0.8	0.8	0.8	HC	W	1926
	2	1.6	1.0	1.0	HC	W	1951
-Sutherland Plant (Lincoln)	1	0.5	0.4	0.4	IC	N, P	1951
	2	0.9	1.0	1.0	IC	N, P	1958
	3	0.2	0.2	0.2	IC	P, N	1934
	4	1.4	1.2	1.2	IC	P, N	1963
-Wakefield Plant (Dixon)	IC3	0.2	0.2	0.2	IC	N, P	1940
	IC4	0.9	0.5	0.7	IC	N, P	1960
	5	1.4	1.0	1.0	IC	N, P	1965
	6	1.4	1.0	1.0	IC	N, P	1970
Omaha Public Power District							
-Fort Calhoun (Washington)	1	502.0	476.0	492.0	NP	U	1973
-Jones Street (Douglas)	1	65.0	54.7	63.7	GT	P	1973
	2	65.0	54.7	63.7	GT	P	1973
-Nebraska City (Otoe)	1	615.9	584.9	585.7	ST	B, P	1979
-North Omaha (Douglas)	1	73.5	75.6	77.1	ST	B, N	1954
	2	108.8	102.1	102.2	ST	B, N	1957
	3	108.8	102.1	102.2	ST	B, N	1959
	4	136.0	131.2	131.3	ST	B, N	1963
	5	217.6	198.6	198.3	ST	B, N	1968
-Sarpy (Sarpy)	1	55.4	51.4	62.3	GT	N, P	1972
	2	55.4	51.4	62.3	GT	N, P	1972
Oxford, Village of							
-Oxford (Furnas)	1	0.6	0.3	0.4	IC	P	1946
	2	0.7	0.5	0.5	IC	P	1953
	3	0.9	0.8	0.9	IC	P	1956
	4	0.7	0.5	0.5	IC	P	1956
	5	1.4	1.2	1.3	IC	P	1972
Pender, City of							
-Pender (Thurston)	1	1.6	1.2	1.2	IC	N, P	1968
	2	2.1	2.0	2.0	IC	N, P	1973
	3	0.6	0.5	0.5	IC	N, P	1953
	4	0.9	0.8	0.8	IC	N, P	1961
	5	0.3	0.2	0.2	IC	N, P	1939
Plainview, City of							
-Plainview Mun. Power (Pierce)	1	1.0	1.0	1.0	IC	N	1949
	2	0.9	0.9	0.9	IC	N	1958
	3	1.3	1.3	1.3	IC	N	1963
Red Cloud, City of							
-Red Cloud (Webster)	1	0.6	0.5	0.5	IC	P	1949
	2	1.0	0.7	0.7	IC	P	1953
	3	1.4	1.3	1.3	IC	P	1960
	4	1.4	1.3	1.3	IC	P	1968
	5	2.3	2.2	2.2	IC	P	1973

*See notes on page 81

Table V-10 Continued on Next Page

Table V-10 Continued

Company -Plant (County)	Unit ID	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
Sargent, City of -Sargent (Custer)	1	1.1	1.1	1.1	IC	P	1968
	3	0.9	0.9	0.9	IC	P	1964
	4	0.5	0.4	0.4	IC	P	1954
Sidney, City of -Sidney (Cheyenne)	1	1.2	0.8	0.9	IC	N, P	1949
	2	2.2	2.0	2.1	IC	N, P	1952
	3	0.8	0.6	0.7	IC	P	1931
	4	1.0	0.8	0.8	IC	N, P	1947
	5	3.1	2.8	2.8	IC	N, P	1956
Southwest Public Power District -Palisade (Hitchcock)	1	0.3	0.3	0.3	IC	P	1950
Spalding, Village of -Spalding (Greeley)	1	0.0	0.0	0.0	HC	W	1919
	2	0.1	0.1	0.1	HC	W	1956
	4	0.2	0.2	0.2	IC	P	1947
	5	0.5	0.5	0.5	IC	P	1959
	6	1.4	1.4	1.4	IC	P	1975
	Stuart, City of -Stuart (Holt)	1	0.7	0.7	0.7	IC	P, N
2		0.3	0.3	0.3	IC	P, N	1960
3		0.3	0.3	0.3	IC	P, N	1952
4		0.2	0.2	0.2	IC	P, N	1946
Tecumseh, City of -Tecumseh (Johnson)	1	0.8	0.6	0.6	IC	P	1948
	2	1.6	1.4	1.4	IC	P	1968
	3	1.2	1.0	1.0	IC	P	1953
	4	1.4	1.2	1.2	IC	P	1960
	5	0.5	0.4	0.4	IC	P	1957
Trenton, City of -Trenton (Hitchcock)	240	0.2	0.2	0.2	IC	P	1936
	375	0.3	0.3	0.3	IC	P	1947
	561	0.4	0.4	0.4	IC	P	1952
Wahoo, City of -Wahoo (Saunders)	1	2.5	2.0	2.0	IC	N, P	1960
	2	0.5	0.3	0.3	IC	P	1936
	3	4.4	4.0	4.0	IC	N, P	1973
	4	1.2	1.0	1.0	IC	N, P	1947
	5	2.1	2.0	2.0	IC	N, P	1952
	6	3.5	3.0	3.0	IC	N, P	1969
Wayne, City of -Wayne (Wayne)	1	1.5	0.8	0.8	IC	P	1952
	2	1.0	0.9	1.0	IC	P	1946
	3	2.0	1.8	1.8	IC	P	1956
	4	2.0	1.9	1.9	IC	P	1959
	5	3.8	3.3	3.3	IC	P	1961
	6	5.1	4.9	4.9	IC	P	1967
West Point, City of -West Point Municipal (Cuming)	2	0.9	0.9	0.9	IC	N, P	1947
	3	1.3	1.2	1.2	IC	N, P	1959
	4	2.3	2.3	2.3	IC	N, P	1965
	5	4.1	4.1	4.1	IC	N, P	1971
	Wilber, City of -Wilber (Saline)	4	1.1	1.1	1.1	IC	P, N
5		1.0	1.0	1.0	IC	P, N	1960

*See notes on page 81

Table V-10 Continued on Next Page

Table V-10 Continued

Company -Plant (County)	Unit ID	Generator Nameplate (MW)	Summer Capability (MW)	Winter Capability (MW)	Unit Type*	Energy Source*	Year of Initial Operation
Wisner, City of -Wisner (Cuming)	1	0.6	0.6	0.6	IC	P	1954
	2	0.5	0.5	0.5	IC	P	1947
	3	0.8	0.8	0.8	IC	P	1969

Source: *Inventory of Power Plants in the United States, 1989*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September 1990.

Notes: *Unit Types: GT = Combustion (gas) Turbine
 HC = Hydraulic Turbine - Conventional
 IC = Internal Combustion (diesel)
 NB = Steam Turbine - Boiling Water Nuclear Reactor
 NP = Steam Turbine - Pressurized Water Nuclear Reactor
 ST = Steam Turbine - Boiler

*Energy Source: B = Bituminous Coal
 S = Subbituminous Coal
 N = Natural Gas
 U = Uranium
 P = Petroleum
 W = Water

A second energy source for a generating unit denotes alternate fuel capabilities.

Generator Nameplate = The full-load continuous rating of a generator, prime mover or other electrical equipment under specified conditions as designated by the manufacturer.

Capability = The maximum load that a generating unit, generating station or other electrical apparatus can carry under specified conditions for a given period of time without exceeding approved limits of temperature and stress.

Figure 67
Nuclear Power Plants by Location, Nebraska, 1980-1989

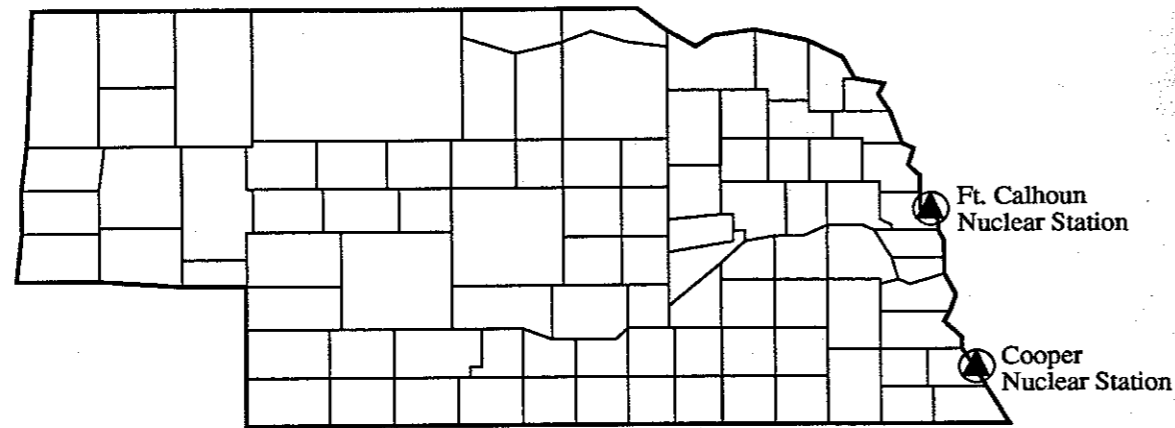


Figure 68
Hydro-Electric Power Plants by Location, Nebraska, 1983-1989

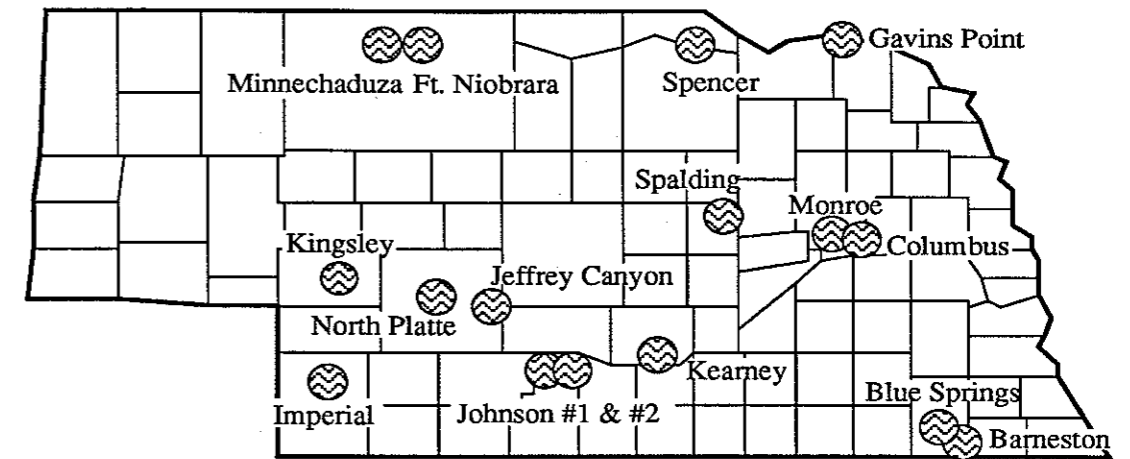


Table V-11
Electricity Generation by Nuclear Power, Fort Calhoun Station, Nebraska, Monthly 1980-1989
(Megawatthours)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	179,333	245,622	354,595	-3,024	338,781	360,548	45,548	357,732	364,312	0
February	-2,321	264,170	282,982	-2,511	303,975	327,218	268,314	328,671	265,880	229,964
March	-2,706	227,613	355,687	-3,584	10,691	325,246	299,945	70,782	246,383	348,889
April	-3,108	138,961	337,621	158,482	-2,413	348,266	341,199	0	334,198	308,433
May	-3,235	156,048	355,325	295,867	-4,643	357,817	352,665	0	354,019	172,324
June	152,086	225,593	340,406	325,330	-4,959	340,692	336,951	172,807	323,803	332,662
July	315,940	323,904	340,183	329,774	127,089	347,599	310,942	352,609	309,051	336,385
August	322,571	318,581	344,339	321,777	347,887	349,855	240,448	354,999	290,624	337,473
September	289,263	166,516	299,504	324,094	329,418	309,015	344,904	348,568	139,148	221,820
October	226,440	-2,895	192,386	338,050	360,988	0	360,929	364,469	0	323,325
November	255,533	-2,487	251,817	314,609	202,785	0	351,243	352,792	0	335,147
December	265,228	75,347	22,140	339,673	300,786	0	352,303	363,193	0	346,640
Total	1,995,024	2,136,973	3,476,985	2,738,537	2,310,385	3,066,256	3,605,391	3,066,622	2,627,418	3,291,062

Sources: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Quarterly.

Table V-12
Electricity Generation by Nuclear Power, Cooper Station, Nebraska, Monthly 1980-1989
(Megawatthours)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	482,289	449,270	538,689	547,541	452,097	0	566,365	316,751	453,516	440,465
February	487,658	417,632	500,259	468,060	469,584	0	477,426	425,583	325,983	379,013
March	11,181	435,956	488,802	536,915	491,524	0	480,805	471,938	60,597	536,610
April	0	267,933	508,489	459,157	252,349	0	351,272	456,534	0	111,857
May	0	0	312,445	0	348,876	0	357,889	327,694	0	0
June	315,966	256,471	0	0	391,512	0	473,407	496,787	156,041	183,544
July	420,121	456,662	340,285	0	497,056	0	510,041	552,087	498,861	550,108
August	394,934	448,044	475,188	0	409,237	27,492	442,260	520,458	485,768	558,593
September	422,898	164,320	486,715	319,864	157,718	307,228	353,632	414,983	535,003	494,837
October	453,412	0	507,500	364,752	0	75,573	39,041	532,498	567,811	550,123
November	333,481	388,558	551,437	331,062	0	94,562	0	476,599	553,854	440,226
December	466,113	566,202	565,750	315,848	0	562,893	0	530,214	563,176	540,585
Total	3,788,053	3,851,048	5,275,559	3,343,199	3,469,953	1,067,748	4,052,138	5,522,126	4,200,610	4,785,961

Sources: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Quarterly.

Table V-13
Electricity Generation by Hydro-Electric Power Plant, Nebraska, 1983-1989
(Megawatthours)

Plant	1983	1984	1985	1986	1987	1988	1989
Central Nebraska Public Power and Irrigation Dist.							
Jeffrey Canyon	101,875	124,544	106,033	143,678	125,499	102,708	82,095
Johnson No. 1	74,009	78,726	73,140	103,589	94,980	67,897	47,939
Johnson No. 2	92,697	85,884	91,518	129,784	118,269	82,995	55,046
Kingsley ⁽¹⁾	-	31,712	114,336	195,983	112,243	95,767	70,948
Imperial ⁽²⁾	0	0	0	0	-	-	-
Nebraska Public Power District							
Blue Springs ⁽³⁾	625	254	294	249	54	0	-
Columbus	115,204	89,391	115,503	121,310	105,191	106,049	97,719
Fort Niobrara ⁽⁴⁾	1,429	1,397	146	-	-	-	-
Kearney	898	624	497	589	466	157	358
Minnechaduzza	609	496	249	407	243	237	149
Monroe	24,826	18,114	23,541	24,967	19,903	21,400	20,443
North Platte	145,225	161,562	133,942	154,376	165,177	99,249	86,254
Spencer	13,518	13,531	11,267	13,688	12,762	12,734	11,066
Norris Public Power District							
Barneston ⁽²⁾	0	0	0	0	-	-	-
Spalding	783	881	753	696	567	379	356
U.S. Corps of Engineers							
Gavins Point	773,977	737,441	769,438	800,685	811,865	760,617	685,743
Total	1,345,675	1,344,557	1,440,657	1,679,001	1,567,219	1,350,189	1,158,116

Sources: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Quarterly.

- Notes: (1) Initial operation in November 1984.
(2) Retired from service in 1986.
(3) Retired from service in 1988.
(4) Retired from service in 1985.

Figure 69
Coal Power Plants by Location, Nebraska, 1983-1989

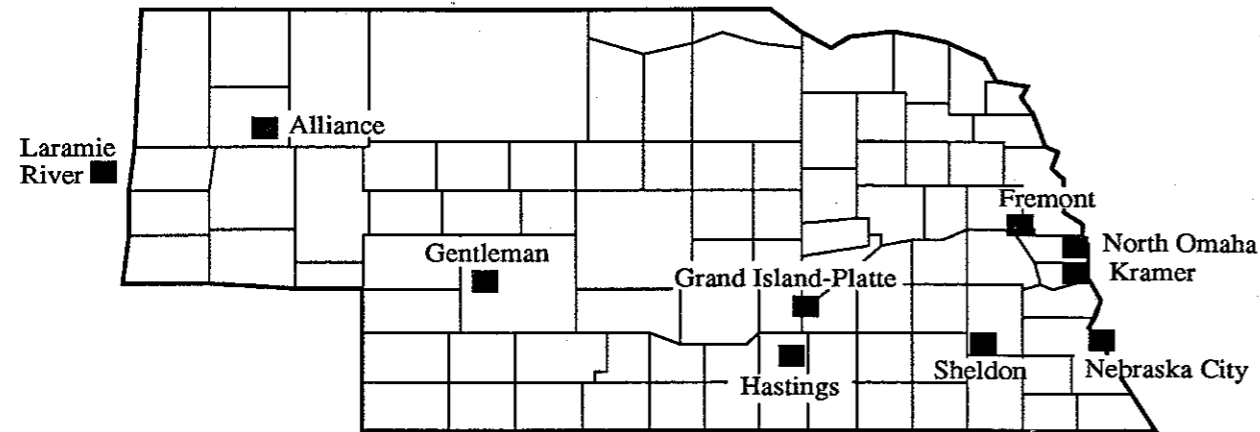


Table V-14
Electricity Generation by Coal Plant, Nebraska, 1983-1989
(Megawatthours)

Plant	1983	1984	1985	1986	1987	1988	1989
Alliance	0	0	0	0	0	0	0
Fremont	228,103	243,432	241,296	209,405	242,078	218,763	249,459
Grand Island-Platte	194,209	274,818	259,864	306,711	244,990	408,357	428,940
Hastings	143,105	158,760	156,322	147,543	135,679	221,569	233,964
Nebraska Public Power District							
Gentleman	4,964,744	5,379,998	5,474,240	4,726,544	4,857,394	5,307,175	5,822,376
Kramer ⁽¹⁾	89,217	84,138	67,719	50,421	28,935	-	-
Sheldon	300,298	188,400	263,466	198,723	242,367	964,903	955,111
Omaha Public Power District							
Nebraska City	2,531,600	3,033,131	2,343,048	2,271,842	2,992,130	2,990,540	1,896,001
North Omaha	1,017,548	1,353,861	1,426,427	1,417,872	1,409,047	2,113,775	1,996,182
Nebraska Total	9,468,824	10,716,538	10,232,382	9,329,061	10,152,618	12,225,082	11,582,033
Lincoln Electric System							
Laramie River ⁽²⁾	963,847	1,099,356	1,191,019	1,345,984	1,265,092	1,163,574	1,054,165

Source: *Electric Power Quarterly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Quarterly.

Notes: (1) Retired from service in 1987.
(2) LES ownership share of Laramie River plant in Wyoming.

Table V-15
Electricity Purchased from the Western Area Power Administration, Total Cost, and Price per kWh, Nebraska, Fiscal Year 1979-1990

	MWh purchased	Total Cost (\$)	Average Price (cents per kWh)
1979	2,423,228	\$22,933,068	0.95¢
1980	2,582,247	22,070,203	0.85
1981	2,603,731	22,865,212	0.88
1982	2,233,519	19,115,046	0.86
1983	2,659,724	24,132,656	0.91
1984	2,321,477	20,547,067	0.89
1985	2,477,032	24,516,430	0.99
1986	2,237,948	22,397,334	1.00
1987	2,313,112	23,266,491	1.01
1988	2,169,880	21,114,065	0.97
1989	2,152,859	21,193,362	0.98
1990	2,062,051	24,587,334	1.19

Source: *Western Area Power Administration Annual Reports*.

Note: Nebraska customers of the Western Area Power Administration in 1990 included were 55 municipalities, 1 rural electric cooperative, 9 state agencies and 2 public utility and 5 other districts.

VI. MISCELLANEOUS STATISTICS

Overview

This section includes other data such as heating and cooling degree days, population, motor vehicle registrations, motor vehicle mileage and irrigation acreage which have an impact on the consumption of energy in Nebraska.

Tables

- VI-1 Heating Degree Days Weighted by Population, Nebraska, Monthly 1970-1989
- VI-2 Cooling Degree Days Weighted by Population, Nebraska, Monthly 1970-1987
- VI-3 Heating and Cooling Degree Days, Chadron, Nebraska, Monthly 1975-1989 and Monthly Normals 1951-1980
- VI-4 Heating and Cooling Degree Days, Grand Island, Nebraska, Monthly 1975-1989 and Monthly Normals 1951-1980
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- VI-6 Heating and Cooling Degree Days, Lincoln, Nebraska, Monthly 1975-1989 and Monthly Normals 1951-1980
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Table VI-1
Heating Degree Days Weighted by Population, Nebraska, Monthly 1970-1989

(Degree Days)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1970	1463	912	973	447	112	26	7	1	114	482	847	1130	6514
1971	1397	1108	906	397	244	14	21	9	107	308	761	1136	6408
1972	1361	1056	729	461	190	27	17	15	111	488	899	1371	6725
1973	1280	1006	714	483	235	25	12	0	147	302	803	1264	6269
1974	1440	926	711	386	164	42	0	32	173	314	771	1157	6115
1975	1271	1201	1029	529	156	45	6	2	160	306	815	1124	6644
1976	1261	784	818	349	229	32	7	7	97	534	961	1194	6274
1977	1539	886	714	286	90	16	1	22	86	399	812	1224	6075
1978	1650	1393	929	425	207	27	9	12	53	399	867	1365	7336
1979	1738	1386	865	492	232	35	14	13	68	368	909	1000	7120
1980	1280	1162	955	419	182	20	0	2	78	427	698	1087	6310
1981	1117	947	722	228	241	20	9	19	99	445	693	1211	5751
1982	1590	1122	884	518	179	86	7	13	123	387	881	1090	6880
1983	1181	927	843	635	282	48	1	0	70	371	786	1757	6901
1984	1304	869	1007	560	230	26	10	1	152	419	771	1176	6525
1985	1407	1154	703	325	133	57	10	29	147	418	1119	1410	6912
1986	1021	1088	648	399	176	16	6	30	90	404	901	1090	5869
1987	1109	796	788	348	108	18	2	22	115	519	697	1081	5603
1988	1434	1119	774	453	109	8	9	2	95	486	767	1054	6310
1989	1035	1349	893	359	185	60	7	12	143	378	834	1431	6686
Normal	1320	1051	861	433	187	35	7	10	103	359	805	1169	6340

Sources: State, Regional and National Monthly and Seasonal Heating Degree Days. Weighted by Population (1980 Census) July 1931-June 1987. National Oceanic and Atmospheric Administration. Asheville, N.C. October 1987. Monthly State, Regional and National Heating Degree Days Weighted by Population. National Oceanic and Atmospheric Administration. Asheville, N.C. Monthly.

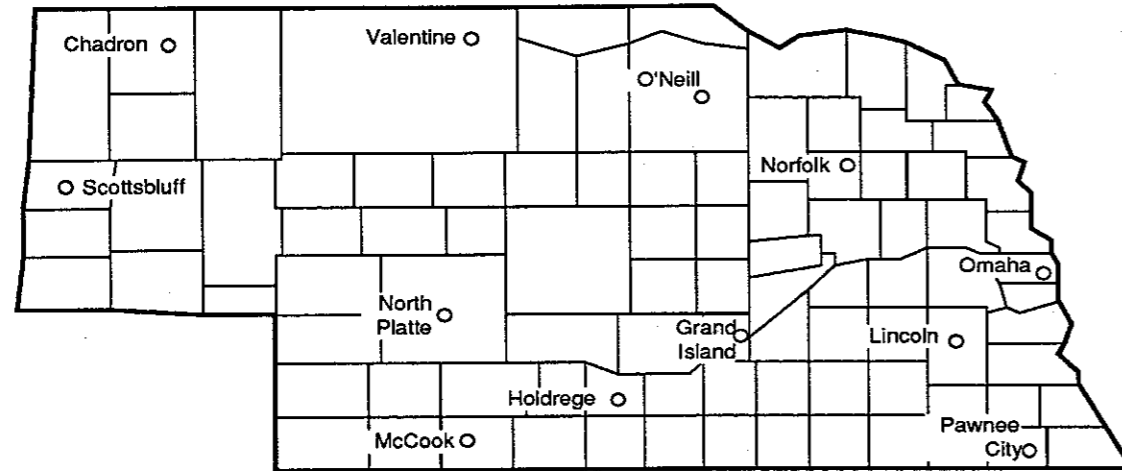
Table VI-2
Cooling Degree Days Weighted by Population, Nebraska, Monthly 1970-1987

(Degree Days)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1970	0	0	0	0	128	241	373	358	93	4	0	0	1197
1971	0	0	0	5	38	312	255	296	104	23	0	0	1033
1972	0	0	5	0	62	226	282	252	96	0	0	0	923
1973	0	0	6	0	41	240	317	367	67	21	0	0	1059
1974	0	0	6	6	80	180	495	182	48	18	0	0	1015
1975	0	0	0	0	92	180	374	368	56	21	0	0	1091
1976	0	0	0	9	43	212	373	323	109	0	0	0	1069
1977	0	0	7	17	152	273	421	217	120	8	0	0	1215
1978	0	0	0	1	53	230	347	276	167	9	0	0	1083
1979	0	0	0	0	44	202	297	268	141	12	0	0	964
1980	0	0	0	1	70	257	458	349	130	6	0	0	1271
1981	0	0	5	29	40	267	352	227	106	5	0	0	1031
1982	0	0	0	0	73	118	370	264	84	10	0	0	919
1983	0	0	0	0	28	177	430	491	142	11	0	0	1279
1984	0	0	0	4	52	228	333	370	114	7	0	0	1108
1985	0	0	0	23	62	137	325	195	131	3	0	0	876
1986	0	0	0	10	28	264	360	187	90	4	0	0	943
1987	0	0	0	27	95	256	394	224	70	0	0	0	1066
Normal	0	0	2	5	75	228	384	315	115	18	0	0	1142

Sources: State, Regional, and National Monthly and Seasonal Cooling Degree Days. Weighted by Population (1980 Census) 1931-1982. National Oceanic and Atmospheric Administration. Asheville, North Carolina. September 1983. Climate Impact Assessment-United States/Industrial World. National Oceanic and Atmospheric Administration. Asheville, North Carolina. Monthly.

Figure 70
Nebraska Cities Represented in Charts VI-3 Through VI-14, Heating and Cooling Degree Days Monthly, 1975-1989 and Monthly Normals, 1951-1980



**Table VI-3
 Heating and Cooling Degree Days, Chadron, Nebraska, Monthly 1975-1989 and Monthly Normals 1951-1980**

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1221	1235	1047	678	308	82	2	9	200	467	927	1037	6746
1976	1311	851	911	497	268	77	0	2	122	604	989	1149	6781
1977	1502	817	884	426	147	10	3	34	105	428	888	1258	6505
1978	1588	1344	863	534	280	62	12	34	117	457	1033	1572	7896
1979	1760	1247	860	518	327	69	1	11	75	411	998	959	7236
1980	1296	1051	984	495	254	33	0	5	99	495	794	1014	6520
1981	1024	996	771	336	293	30	16	2	82	475	706	1191	5922
1982	1528	1068	873	630	297	110	1	0	145	518	892	1140	7202
1983	995	782	845	724	409	90	2	0	164	421	902	1781	7115
1984	1268	910	892	629	253	57	0	0	231	584	831	1284	6939
1985	1396	1164	853	410	116	91	1	13	236	470	1377	1392	7519
1986	1101	1125	641	551	239	18	0	1	171	473	938	1076	6334
1987	1078	879	992	408	153	35	12	40	148	530	735	1122	6132
1988	1406	1105	893	539	215	10	12	18	150	464	993	1087	6892
1989	1089	1340	957	550	259	108	0	0	178	542	814	1389	7226
Normal	1336	1044	952	579	275	74	13	11	167	477	903	1200	7031

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	1	14	82	397	261	34	20	0	0	809
1976	0	0	0	0	5	112	341	266	98	7	0	0	829
1977	0	0	0	4	31	222	337	137	92	0	0	0	823
1978	0	0	0	0	31	150	268	233	165	0	0	0	847
1979	0	0	0	8	20	143	276	202	127	0	0	0	776
1980	0	0	0	11	20	170	390	220	86	3	0	0	900
1981	0	0	0	4	16	151	340	215	97	5	0	0	828
1982	0	0	0	0	7	42	299	348	89	0	0	0	785
1983	0	0	0	0	11	101	363	401	121	0	0	0	997
1984	0	0	0	0	39	118	302	342	62	2	0	0	865
1985	0	0	0	8	64	131	362	261	104	0	0	0	930
1986	0	0	0	0	16	176	284	228	14	0	0	0	718
1987	0	0	0	8	18	126	309	190	36	0	0	0	687
1988	0	0	0	4	62	320	195	204	27	0	0	0	812
1989	0	0	0	9	15	83	402	284	83	0	0	0	876
Normal	0	0	0	0	8	128	298	247	68	0	0	0	749

See notes and sources after Table VI-14.

**Table VI-4
 Heating and Cooling Degree Days, Grand Island, Nebraska, Monthly 1975-1989 and Monthly Normals 1951-1980**

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1302	1221	1052	524	127	31	0	0	178	296	870	1166	6767
1976	1251	791	808	354	198	11	0	0	95	551	944	1139	6142
1977	1461	861	729	280	15	0	0	1	47	380	768	1185	5727
1978	1632	1395	914	409	205	25	0	3	64	400	886	1438	7371
1979	1777	1431	866	492	258	38	9	10	49	366	915	978	7189
1980	1340	1191	946	420	176	11	0	2	71	420	694	1084	6355
1981	1113	934	716	221	255	7	9	0	80	439	713	1245	5732
1982	1612	1148	925	537	148	61	0	12	139	385	896	1120	6983
1983	1216	933	832	635	269	37	0	0	89	349	793	1751	6904
1984	1276	875	974	521	177	3	0	0	184	405	764	1185	6364
1985	1372	1147	664	319	76	39	0	13	217	399	1120	1334	6700
1986	962	1035	587	392	108	0	0	17	49	403	882	1052	5487
1987	1071	793	789	356	68	7	0	32	82	527	708	1103	5536
1988	1441	1109	761	435	87	2	7	8	78	474	770	997	6169
1989	994	1339	864	393	152	22	0	14	152	345	786	1368	6429
Normal	1376	1058	902	447	169	27	7	6	104	377	822	1187	6482

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	2	49	158	373	384	66	28	0	0	1060
1976	0	0	0	9	29	196	387	344	111	12	0	0	1088
1977	0	0	0	24	85	268	437	214	77	0	0	0	1105
1978	0	0	5	5	47	293	355	283	169	2	0	0	1159
1979	0	0	0	0	36	211	294	303	132	2	0	0	978
1980	0	0	0	20	56	261	493	377	133	9	0	0	1349
1981	0	0	0	25	15	259	356	219	74	0	0	0	948
1982	0	0	0	1	24	90	364	248	92	2	0	0	821
1983	0	0	0	0	23	183	460	546	194	8	0	0	1414
1984	0	0	0	2	42	264	374	386	105	4	0	0	1177
1985	0	0	0	33	81	158	335	195	134	0	0	0	936
1986	0	0	10	1	30	306	407	193	95	1	0	0	1043
1987	0	0	0	30	99	273	442	233	76	4	1	0	1158
1988	0	0	0	2	111	366	332	351	111	0	0	0	1273
1989	0	0	2	67	63	147	371	291	94	9	0	0	1044
Normal	0	0	0	0	49	219	366	303	83	8	0	0	1028

See notes and sources after Table VI-14.

Table VI-5
 Heating and Cooling Degree Days, Holdrege, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1165	1142	983	471	137	30	2	1	143	299	910	1119	6402
1976	1239	768	786	386	206	10	0	0	92	534	930	1085	6036
1977	1403	809	710	288	25	0	0	3	27	335	788	1151	5539
1978	1570	1336	862	393	189	25	0	4	44	347	839	1286	6895
1979	1647	1211	802	447	210	26	8	12	38	303	911	940	6555
1980	1262	1191	989	459	161	14	0	8	68	402	682	1037	6273
1981	1047	942	713	265	279	27	4	0	60	426	706	1117	5586
1982	1461	1115	881	532	166	77	0	14	122	403	886	1084	6741
1983	1171	929	845	639	294	47	0	0	91	340	768	1714	6838
1984	1295	888	981	618	217	11	0	0	183	446	774	1160	6573
1985	1373	1142	701	339	86	52	0	13	223	422	1098	1351	6800
1986	931	975	595	390	127	0	0	11	39	393	842	1012	5315
1987	1034	765	829	384	73	2	5	32	78	467	677	1048	5394
1988	1376	1070	778	453	115	2	6	13	93	460	742	1000	6108
1989	1053	1277	907	396	189	49	5	10	184	360	799	1358	6587
Normal	1280	977	846	414	161	28	5	0	99	348	795	1125	6078

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	12	43	140	318	330	71	25	0	0	939
1976	0	0	0	1	27	198	364	340	95	9	0	0	1034
1977	0	0	0	8	45	284	409	228	105	0	0	0	1079
1978	0	0	2	15	48	255	367	262	173	5	0	0	1127
1979	0	0	0	8	33	185	273	258	144	7	0	0	908
1980	0	0	0	9	38	239	440	324	106	13	0	0	1169
1981	0	0	0	23	6	196	312	234	84	0	0	0	855
1982	0	0	0	3	19	76	336	250	93	2	0	0	779
1983	0	0	0	0	19	165	419	499	157	15	0	0	1274
1984	0	0	0	0	26	205	317	364	110	1	0	0	1023
1985	0	0	0	27	69	139	347	167	146	0	0	0	895
1986	0	0	10	3	24	285	380	200	103	0	0	0	1005
1987	0	0	0	30	73	268	360	246	64	5	0	0	1046
1988	0	0	0	0	89	337	317	325	90	2	0	0	1160
1989	0	0	1	51	51	107	317	217	95	11	0	0	850
Normal	0	0	0	0	55	232	374	314	120	13	0	0	1108

See notes and sources after Table VI-14.

Table VI-6
 Heating and Cooling Degree Days, Lincoln, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1338	1250	1059	495	117	20	0	0	168	269	759	1079	6554
1976	1255	810	792	328	206	11	0	0	83	553	979	1254	6271
1977	1604	927	659	256	11	0	0	0	42	413	793	1230	5935
1978	1703	1447	972	410	193	27	0	5	62	392	848	1315	7374
1979	1787	1454	816	463	197	16	3	7	42	324	825	1007	6941
1980	1281	1241	912	387	133	5	0	0	80	402	666	1120	6227
1981	1133	933	680	209	192	0	1	3	71	393	678	1237	5530
1982	1639	1159	880	501	88	52	0	3	118	324	840	1081	6685
1983	1173	931	785	584	238	25	0	0	75	326	763	1758	6658
1984	1334	841	970	496	196	3	0	0	167	366	737	1142	6252
1985	1385	1186	687	326	72	25	0	8	198	343	1071	1345	6646
1986	996	1079	602	353	95	0	0	15	34	344	874	1064	5456
1987	1090	773	713	331	51	2	0	17	51	507	626	1006	5167
1988	1341	1115	728	416	33	2	3	6	44	438	706	1025	5857
1989	968	1359	811	374	140	15	0	3	139	343	807	1424	6383
Normal	1404	1078	887	417	151	16	5	0	79	353	795	1190	6375

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	4	76	204	428	459	74	37	0	0	1282
1976	0	0	0	15	26	216	413	354	144	10	0	0	1178
1977	0	0	0	14	14	124	289	501	231	91	0	0	1250
1978	0	0	5	7	46	230	371	320	193	3	0	0	1175
1979	0	0	0	7	42	235	320	330	160	4	0	0	1098
1980	0	0	0	13	73	293	542	433	142	1	0	0	1497
1981	0	0	0	29	37	308	430	237	102	0	0	0	1143
1982	0	0	0	8	45	111	438	292	124	10	0	0	1028
1983	0	0	0	0	30	235	505	580	211	20	0	0	1581
1984	0	0	0	5	24	264	395	412	114	9	0	0	1223
1985	0	0	0	30	63	152	351	210	162	2	0	0	970
1986	0	0	12	9	43	320	430	209	148	0	0	0	1171
1987	0	0	0	41	130	333	451	267	78	2	0	0	1302
1988	0	0	0	4	117	396	408	427	131	3	0	0	1486
1989	0	0	5	75	63	188	418	321	95	21	0	0	1186
Normal	0	0	0	0	64	235	396	323	94	12	0	0	1124

See notes and sources after Table VI-14.

Table VI-7
 Heating and Cooling Degree Days, McCook, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1060	1121	950	484	165	39	0	4	139	341	898	1089	6290
1976	1197	736	773	358	231	14	0	2	85	495	857	983	5731
1977	1348	764	720	312	41	0	0	4	16	320	705	1066	5296
1978	1442	1249	779	397	223	29	0	7	50	373	880	1289	6718
1979	1614	1175	794	449	277	50	7	20	48	294	929	895	6552
1980	1236	1105	947	502	190	15	0	2	44	390	699	944	6074
1981	1029	927	731	273	290	14	3	4	71	425	697	1054	5518
1982	1353	1033	775	452	124	61	0	14	120	426	907	1086	6351
1983	1156	838	830	662	337	70	0	0	101	371	750	1708	6823
1984	1292	865	932	636	201	20	0	0	185	489	781	1161	6562
1985	1320	1132	706	362	128	65	0	14	220	474	1084	1295	6800
1986	901	936	595	388	196	4	0	3	50	417	744	1043	5377
1987	1064	780	831	420	96	5	10	33	105	489	716	1060	5609
1988	1402	1003	764	488	136	3	0	9	88	429	705	947	5974
1989	991	1182	843	366	166	48	0	4	171	365	729	1282	6147
Normal	1197	921	806	404	172	28	0	0	87	339	765	1066	5785

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	5	21	128	396	317	93	22	0	0	982
1976	0	0	0	1	34	194	415	371	125	17	0	0	1157
1977	0	0	0	22	51	280	433	249	121	3	0	0	1159
1978	0	0	2	8	35	259	427	292	180	12	0	0	1215
1979	0	0	0	1	35	168	307	254	167	14	0	0	946
1980	0	0	0	10	27	236	478	366	119	3	0	0	1239
1981	0	0	0	16	16	229	350	224	89	7	0	0	931
1982	0	0	0	11	18	88	353	297	87	1	0	0	855
1983	0	0	0	0	13	123	433	489	170	9	0	0	1237
1984	0	0	0	0	34	183	326	351	86	3	0	0	983
1985	0	0	0	19	54	124	338	210	142	0	0	0	887
1986	0	0	0	0	23	241	360	233	89	0	0	0	946
1987	0	0	0	20	62	245	384	260	65	3	0	0	1039
1988	0	0	0	0	78	392	364	366	102	2	0	0	1304
1989	0	0	0	34	58	126	356	259	106	8	0	0	947
Normal	0	0	0	5	73	235	397	332	129	16	0	0	1187

See notes and sources after Table VI-14.

Table VI-8
 Heating and Cooling Degree Days, Norfolk, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1369	1275	1107	604	105	25	2	0	207	326	877	1247	7144
1976	1343	900	854	352	191	15	0	1	108	587	1018	1287	6656
1977	1624	951	733	287	6	0	0	5	45	423	882	1318	6274
1978	1756	1477	965	471	187	28	1	9	49	434	900	1476	7753
1979	1836	1506	988	533	248	33	3	14	56	430	954	1046	7637
1980	1332	1258	966	423	174	8	0	1	100	473	738	1190	6663
1981	1180	995	741	238	235	5	9	1	98	464	727	1283	5976
1982	1730	1188	958	537	123	60	0	10	140	389	915	1132	7182
1983	1246	991	858	637	258	38	0	0	120	391	838	1798	7175
1984	1302	969	1109	563	220	6	0	1	196	375	775	1260	6776
1985	1451	1160	730	344	79	52	1	15	241	424	1195	1469	7161
1986	1048	1140	692	434	127	3	0	26	85	413	943	1114	6025
1987	1161	817	783	350	81	9	2	45	89	575	726	1110	5748
1988	1508	1218	783	469	61	6	4	14	96	520	790	1101	6570
1989	1063	1392	956	417	190	45	3	7	156	402	906	1531	7068
Normal	1476	1154	977	489	181	27	6	9	125	417	870	1274	7005

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	1	67	171	398	359	60	24	0	0	1080
1976	0	0	0	11	32	200	387	324	100	6	0	0	1060
1977	0	0	0	30	101	241	415	174	73	0	0	0	1034
1978	0	0	4	0	56	244	330	257	176	2	0	0	1069
1979	0	0	0	2	39	212	297	268	128	0	0	0	946
1980	0	0	0	23	61	236	440	334	115	5	0	0	1214
1981	0	0	0	29	19	229	357	206	70	0	0	0	910
1982	0	0	0	2	26	76	336	255	80	2	0	0	777
1983	0	0	0	0	23	188	416	501	175	3	0	0	1306
1984	0	0	0	2	23	226	326	365	76	6	0	0	1024
1985	0	0	0	34	73	135	283	177	119	0	0	0	821
1986	0	0	4	1	30	249	372	159	56	0	0	0	871
1987	0	0	0	32	119	259	405	207	67	1	0	0	1090
1988	0	0	0	2	111	349	333	345	97	0	0	0	1237
1989	0	0	2	69	39	150	382	278	89	6	0	0	1015
Normal	0	0	0	0	45	198	341	269	74	8	0	0	935

See notes and sources after Table VI-14.

Table VI-9
 Heating and Cooling Degree Days, North Platte, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1216	1160	1032	558	247	62	6	0	228	437	1035	1191	7172
1976	1460	929	956	521	363	70	0	13	178	608	1028	1133	7259
1977	1493	920	858	395	81	2	2	34	96	458	869	1236	6444
1978	1662	1400	924	491	275	71	5	24	99	488	982	1560	7981
1979	1828	1335	862	491	259	56	4	11	52	341	975	957	7171
1980	1233	1102	909	439	166	10	0	6	107	491	780	1019	6262
1981	1089	1000	762	283	318	26	9	4	101	492	749	1179	6012
1982	1479	1030	885	601	239	111	0	18	160	484	946	1138	7091
1983	1167	833	854	672	343	90	2	0	128	419	840	1780	7128
1984	1379	915	953	647	236	33	0	0	247	519	829	1312	7070
1985	1481	1168	752	393	156	83	0	23	252	502	1205	1416	7431
1986	1029	1060	634	479	219	2	0	14	98	446	878	1074	5933
1987	1093	810	868	420	102	15	13	36	139	551	796	1152	5995
1988	1501	1109	839	490	170	3	0	13	128	498	803	1067	6621
1989	1072	1316	902	430	211	67	2	7	180	437	815	1374	6813
Normal	1355	1056	939	522	235	59	8	9	151	463	900	1212	6909

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	10	11	89	311	260	39	7	0	0	727
1976	0	0	0	0	5	62	247	192	27	0	0	0	533
1977	0	0	0	2	26	174	305	149	64	0	0	0	720
1978	0	0	0	1	21	174	307	218	117	5	0	0	843
1979	0	0	0	0	27	156	294	262	123	0	0	0	862
1980	0	0	0	10	27	243	411	289	74	0	0	0	1054
1981	0	0	0	10	9	141	288	168	47	1	0	0	664
1982	0	0	0	0	8	70	314	276	68	0	0	0	736
1983	0	0	0	0	8	103	331	412	128	1	0	0	983
1984	0	0	0	0	13	110	252	317	69	0	0	0	761
1985	0	0	0	14	32	100	326	189	100	0	0	0	761
1986	0	0	0	3	11	201	334	217	43	0	0	0	809
1987	0	0	0	16	48	176	352	208	35	0	0	0	835
1988	0	0	0	1	41	293	301	282	46	0	0	0	964
1989	0	0	0	21	35	99	295	219	67	2	0	0	738
Normal	0	0	0	0	24	158	294	239	58	0	0	0	773

See notes and sources after Table VI-14.

Table VI-10
 Heating and Cooling Degree Days, Omaha-Eppley Field, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1311	1189	1024	469	72	11	0	0	141	251	695	1051	6214
1976	1219	791	757	261	177	4	0	0	61	522	947	1265	6004
1977	1598	883	579	219	10	1	0	1	28	361	754	1196	5630
1978	1637	1375	910	372	160	17	0	0	39	350	754	1255	6869
1979	1676	1333	775	451	156	12	1	6	65	354	867	1070	6766
1980	1318	1290	987	440	158	4	0	3	108	491	735	1198	6732
1981	1259	1018	743	241	221	0	7	3	85	452	723	1299	6051
1982	1721	1183	930	518	102	56	0	13	115	315	829	1131	6913
1983	1240	971	854	638	278	37	0	0	102	405	789	1786	7100
1984	1401	916	1071	552	243	7	0	3	184	391	766	1166	6700
1985	1416	1153	666	325	88	45	0	13	217	378	1089	1501	6891
1986	1095	1176	689	389	134	1	0	15	40	338	913	1096	5886
1987	1122	784	685	322	67	7	1	33	67	512	639	1048	5287
1988	1353	1185	748	433	29	6	1	7	56	488	744	1095	6145
1989	1002	1368	844	380	143	23	0	7	140	356	855	1460	6578
Normal	1389	1058	859	390	130	16	0	0	73	342	765	1172	6194

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	7	115	242	441	464	76	44	0	0	1389
1976	0	0	0	21	34	240	440	358	139	17	0	0	1249
1977	0	0	0	45	179	310	489	236	105	0	0	0	1364
1978	0	0	7	5	67	287	386	333	231	5	0	0	1321
1979	0	0	0	8	64	249	344	345	122	2	0	0	1134
1980	0	0	0	15	61	254	459	368	107	0	0	0	1264
1981	0	0	0	24	29	235	372	196	85	0	0	0	941
1982	0	0	0	5	43	78	383	252	112	12	0	0	885
1983	0	0	0	0	20	183	453	519	167	17	0	0	1359
1984	0	0	0	6	22	220	320	366	96	4	0	0	1034
1985	0	0	0	30	44	116	290	156	137	1	0	0	774
1986	0	0	10	5	26	276	408	181	133	0	0	0	1039
1987	0	0	0	39	145	292	407	235	69	2	1	0	1190
1988	0	0	0	5	109	351	364	394	99	3	0	0	1325
1989	0	0	10	77	68	159	395	306	89	19	0	0	1123
Normal	0	0	0	6	77	256	394	320	97	16	0	0	1166

See notes and sources after Table VI-14.

Table VI-11
 Heating and Cooling Degree Days, O'Neill, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1306	1270	1084	588	167	58	14	1	184	382	979	1291	7324
1976	1448	946	958	424	232	38	2	4	122	586	1041	1202	7003
1977	1587	928	811	326	33	1	0	7	79	399	902	1330	6403
1978	1825	1464	978	489	189	32	0	19	48	426	948	1485	7903
1979	1851	1432	951	526	305	46	5	16	58	417	1033	1062	7702
1980	1358	1188	980	443	186	12	0	5	62	455	752	1131	6572
1981	1124	978	747	236	229	8	17	2	82	463	749	1352	5987
1982	1738	1149	971	585	155	62	0	4	157	409	971	1129	7330
1983	1229	973	904	684	280	44	1	0	113	396	872	1867	7363
1984	1319	951	1080	602	242	18	3	0	221	439	803	1283	6961
1985	1449	1163	748	351	98	82	7	17	259	414	1284	1463	7335
1986	1048	1137	682	478	150	36	0	23	102	397	929	1065	6047
1987	1112	816	821	348	75	10	3	40	132	553	793	1198	5901
1988	1711	1308	882	527	160	2	3	16	171	557	834	1095	7266
1989	1093	1450	1051	461	177	55	5	4	151	452	852	1533	7284
Normal	1435	1123	980	504	201	39	7	10	132	422	879	1256	6988

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	10	42	92	281	258	64	9	0	0	756
1976	0	0	0	3	20	140	302	318	79	5	0	0	867
1977	0	0	0	16	79	209	336	177	64	0	0	0	881
1978	0	0	2	0	43	203	299	245	171	3	0	0	966
1979	0	0	0	0	25	151	263	224	127	1	0	0	791
1980	0	0	0	21	48	238	484	340	113	16	0	0	1260
1981	0	0	0	29	19	208	346	215	77	0	0	0	894
1982	0	0	0	3	22	62	376	306	90	0	0	0	859
1983	0	0	0	0	17	141	385	490	173	8	0	0	1214
1984	0	0	0	0	24	167	277	370	92	5	0	0	935
1985	0	0	0	32	58	134	313	163	125	0	0	0	825
1986	0	0	0	0	32	258	401	216	21	0	0	0	928
1987	0	0	0	26	123	268	439	216	44	0	0	0	1116
1988	0	0	0	5	79	327	331	308	51	0	0	0	1101
1989	0	0	0	32	26	141	386	290	108	1	0	0	984
Normal	0	0	0	0	31	165	320	264	75	7	0	0	862

See notes and sources after Table VI-14.

Table VI-12
 Heating and Cooling Degree Days, Pawnee City, Nebraska, Monthly 1975-1989
 and Monthly Normals 1951-1980

	Heating Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	1125	1068	911	384	53	9	0	0	121	224	619	980	5494
1976	1094	620	653	215	139	3	0	0	49	428	808	1066	5075
1977	1489	790	459	203	6	0	0	0	268	658	1088	1088	4961
1978	1499	1285	850	319	159	12	0	2	56	374	806	1235	6597
1979	1713	1276	636	370	99	15	3	0	39	251	742	887	6031
1980	1126	1144	846	319	87	2	0	0	55	307	584	1023	5493
1981	1001	830	580	129	153	0	0	2	46	342	576	1127	4786
1982	1506	1021	727	450	57	18	0	2	76	243	703	984	5787
1983	1081	812	651	566	139	12	0	0	52	255	643	1656	5867
1984	1255	679	858	402	116	0	0	0	130	238	557	915	5150
1985	1309	1057	525	212	20	6	0	2	134	245	923	1300	5733
1986	872	1002	561	238	45	0	0	8	31	305	845	1011	4918
1987	1044	728	652	305	45	1	0	5	53	434	609	950	4826
1988	1240	1073	724	350	17	0	6	4	49	360	616	886	5325
1989	881	1290	683	326	130	2	1	2	130	268	698	1343	5754
Normal	1246	941	744	314	103	10	0	0	41	264	684	1054	5401

	Cooling Degree Days												Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1975	0	0	0	19	112	241	404	449	114	45	0	0	1384
1976	0	0	0	30	68	287	428	367	154	27	0	0	1361
1977	0	0	0	28	178	323	491	306	157	11	0	0	1494
1978	0	0	6	9	81	272	409	319	194	1	0	0	1291
1979	0	0	0	5	95	261	339	327	155	19	0	0	1201
1980	0	0	0	39	101	341	600	499	224	29	0	0	1833
1981	0	0	1	93	67	325	448	286	144	2	0	0	1366
1982	0	0	0	0	92	185	485	336	186	29	0	0	1313
1983	0	0	3	0	70	296	598	661	253	21	2	0	1904
1984	0	0	0	18	104	351	476	526	225	34	0	0	1734
1985	0	0	0	57	118	225	447	291	164	0	0	0	1302
1986	0	0	31	25	78	390	484	233	205	1	0	0	1447
1987	0	0	0	49	157	331	477	337	86	0	4	0	1441
1988	0	0	0	0	159	389	413	478	144	6	0	0	1589
1989	0	0	6	89	108	207	356	345	104	29	0	0	1244

See notes and sources after Table VI-14.

Table VI-15
Population by Age, Nebraska, 1970 and 1980

Age	1970	1980
Under 5 Years	120,482	122,946
5-9 Years	147,622	118,045
10-14 Years	153,355	120,907
15-19 Years	143,442	147,249
20-24 Years	114,943	148,734
25-29 Years	89,262	134,794
30-34 Years	78,149	114,407
35-44 Years	159,456	163,477
45-54 Years	157,162	150,653
55-59 Years	71,837	75,104
60-64 Years	66,917	67,528
65-74 Years	105,229	114,021
75-84 Years	61,920	67,919
85 Years and Older	15,557	23,744
Total	1,485,333	1,569,825

Source: *Census of Population, 1970 & 1980*. U.S. Department of Census. Washington, D.C.

Table VI-16
Total Population, Nebraska, 1970-1989
(thousands)

	Population
1970	1,485
1971	1,508
1972	1,518
1973	1,529
1974	1,538
1975	1,543
1976	1,549
1977	1,557
1978	1,564
1979	1,567
1980	1,570
1981	1,583
1982	1,590
1983	1,596
1984	1,605
1985	1,605
1986	1,598
1987	1,594
1988	1,602
1989	1,611

Source: *Statistical Abstract of the United States 1990*. U.S. Department of Commerce. Bureau of the Census. Washington, D.C. Annual.

Table VI-17
Number of Occupied Housing Units by Fuel Used for House Heating, Water Heating and Cooking, Nebraska, 1960, 1970 and 1980
(Housing Units)

1960 Total Occupied Housing Units 433,374			
Fuel	Home Heating	Water Heating	Cooking
Utility Gas	260,056	254,000	196,109
Bottled, Tank or LP Gas	39,726	38,231	66,928
Electricity	1,174	93,791	154,820
Fuel Oil, Kerosene, etc.	98,437	6,887	2,686
Coal or Coke	23,975	1,615	3,176
Wood	8,142	486	6,495
Other Fuel	1,647	526	1,091
No Fuel Used	217	37,838	2,069
1970 Total Occupied Housing Units 473,721			
Utility Gas	340,584	319,183	185,628
Bottled, Tank or LP Gas	65,554	44,993	45,061
Electricity	15,119	98,117	238,682
Fuel Oil, Kerosene, etc.	46,864	2,167	746
Coal or Coke	2,508	64	269
Wood	1,121	181	1,514
Other Fuel	1,857	232	205
No Fuel Used	114	8,784	1,616
1980 Total Occupied Housing Units 571,400			
Utility Gas	410,378	386,369	165,759
Bottled, Tank or LP Gas	68,819	50,256	37,218
Electricity	55,410	130,787	366,496
Fuel Oil, Kerosene, etc.	27,341	1,545	-
Coal or Coke	698	-	-
Wood	7,565	-	-
Other Fuel	1,076	613	1,167

Sources: *Detailed Housing Characteristics, Nebraska, 1980 Census of Housing*. Bureau of the Census, U.S. Department of the Census. Washington, D.C. July 1983.
Housing Characteristics for States, Cities and Counties, Nebraska, 1970 Census of Housing. Bureau of the Census, U.S. Department of Commerce. Washington, D.C. August 1972. *1960 Census of Housing, Volume 1: States and Small Areas, Part 5: Michigan-New Hampshire*. Bureau of the Census, U.S. Department of Commerce. Washington, D.C. June 1963.

Table VI-18
Motor Vehicle Miles Traveled, Nebraska, Monthly 1979-1989
(Million Miles)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
January	688	729	775	677	754	778	763	839	868	850	939
February	794	741	770	783	768	811	816	834	916	925	919
March	897	807	865	851	843	857	932	971	908	1,005	1,021
April	981	899	949	934	929	946	982	1,001	1,082	1,097	1,147
May	1,036	989	1,022	1,008	1,035	1,071	1,085	1,109	1,151	1,167	1,211
June	1,091	1,065	1,101	1,101	1,129	1,158	1,154	1,187	1,228	1,258	1,295
July	1,117	1,120	1,136	1,153	1,181	1,190	1,199	1,239	1,295	1,314	1,320
August	1,133	1,126	1,143	1,138	1,162	1,186	1,194	1,248	1,276	1,293	1,341
September	1,041	1,006	1,030	1,038	1,066	1,077	1,052	1,117	1,173	1,186	1,231
October	1,001	982	987	1,001	1,018	1,032	1,062	1,095	1,145	1,165	1,206
November	881	921	902	918	885	975	936	1,019	1,055	1,068	1,126
December	869	837	832	834	764	853	879	971	994	1,043	1,025
Total	11,529	11,222	11,512	11,436	11,534	11,934	12,054	12,630	13,091	13,371	13,781

Source: Total Vehicle Miles by Month. Transportation Planning Division, Nebraska Department of Roads. Lincoln, Nebraska. Monthly.

Table VI-19
Motor Vehicle Registrations, Nebraska, 1970-1990

	Automobiles	Farm Trucks	Other Trucks	Motorcycles	All Other*	Total
1970	679,728	113,127	125,174	31,522	141,599	1,091,150
1971	695,643	113,918	135,692	35,940	145,556	1,126,749
1972	726,670	115,701	142,788	37,649	153,278	1,176,086
1973	753,944	121,671	157,832	41,288	172,107	1,246,842
1974	772,293	128,749	171,837	47,399	184,595	1,304,873
1975	786,655	131,765	183,675	48,198	196,256	1,346,549
1976	810,931	132,126	184,937	49,556	209,832	1,387,382
1977	834,953	136,079	198,617	50,362	220,252	1,440,263
1978	840,579	139,258	201,965	49,871	222,713	1,454,386
1979	765,533	126,176	184,215	44,218	184,977	1,305,119
1980	830,360	147,062	216,679	52,142	240,845	1,487,088
1981	796,130	151,998	202,194	50,371	189,558	1,390,251
1982	803,750	145,180	209,696	47,887	198,953	1,405,466
1983	821,454	148,061	216,735	47,712	212,218	1,445,128
1984	837,810	143,947	221,757	47,384	191,093	1,441,991
1985	831,299	140,187	223,280	43,248	202,844	1,440,858
1986	856,574	140,987	228,188	33,077	208,849	1,467,675
1987	870,291	144,126	231,572	31,599	219,821	1,497,409
1988	882,451	145,460	239,560	29,088	224,954	1,521,513
1989	901,633	145,749	245,664	23,560	243,514	1,560,120
1990	917,722	147,982	250,589	22,375	238,211	1,576,879

Source: Annual Registration Report. Nebraska Department of Motor Vehicles. Lincoln, Nebraska. Annual.

*Note: All other includes buses, trailers, dealers, government and mobile homes.

Table VI-20
Irrigation Wells Registered and Acres Irrigated, Nebraska, 1965-1989

	Wells	Acres
1965	25,803	2,914,000
1966	27,102	3,100,000
1967	28,842	3,313,000
1968	30,806	3,605,000
1969	32,755	3,783,000
1970	34,117	3,998,000
1971	35,685	4,200,000
1972	37,635	4,478,000
1973	39,505	4,783,000
1974	41,628	5,050,000
1975	44,454	5,400,000
1976	49,478	5,900,000
1977	55,078	6,400,000
1978	60,084	6,700,000
1979	61,831	6,950,000
1980	63,821	7,200,000
1981	65,767	7,500,000
1982	68,319	7,600,000
1983	69,471	7,700,000
1984	70,233	7,800,000
1985	70,767	7,900,000
1986	71,388	7,900,000
1987	71,587	7,900,000
1988	71,443	7,900,000
1989	71,858	8,000,000

Source: Nebraska Agricultural Statistics. Nebraska Department of Agriculture. Lincoln, Nebraska. Annual.

Notes: Wells are those registered to January 1 of that year. Acres represent the total acres that have wells or ditch water available and could be irrigated if conditions warrant.

Table VI-21
Average Cost of Electricity for Irrigation by System, Nebraska, 1979-1989
(Cents/Kilowatthour)

System	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Burt	6.7	6.5	8.0	28.1	10.7	11.4	10.8	15.6	12.5	8.0	7.7
Butler	6.3	5.7	7.2	15.5	8.5	9.0	12.1	14.6	8.5	8.1	8.1
Cherry-Todd	3.7	4.2	4.4	5.5	6.5	6.0	4.3	5.4	7.3	6.6	6.1
Chimney Rock	4.4	5.0	5.9	8.1	7.3	7.8	6.3	6.9	7.6	6.1	6.8
Comhusker	5.1	6.2	9.3	16.7	10.4	9.6	10.4	13.6	8.4	7.2	7.2
Cuming	6.0	6.3	9.1	28.4	12.0	10.7	11.3	15.1	10.4	8.4	8.2
Custer	4.9	4.7	7.1	7.4	7.7	7.0	7.4	7.1	7.4	6.7	6.5
Dawson	5.2	5.9	9.2	9.1	8.0	7.9	8.7	7.7	8.3	7.7	8.6
Elkhorn	6.1	5.6	8.5	11.1	9.6	9.3	9.5	10.4	8.8	8.0	7.9
Franklin	7.7	6.5	12.8	12.8	11.0	8.6	9.9	10.2	11.8	10.0	11.1
Howard Greeley	6.1	5.9	7.6	10.8	8.3	8.3	10.1	11.8	8.8	8.4	8.2
KBR	5.6	5.7	6.7	8.4	9.7	8.4	8.0	9.7	8.3	8.6	7.7
Loup Valleys	4.8	4.8	7.1	8.9	7.8	7.5	8.8	9.0	8.3	7.4	7.7
McCook	5.4	5.6	7.0	8.0	7.5	7.7	7.7	7.5	7.6	7.7	7.8
Midwest	5.1	6.1	7.6	8.8	8.3	8.7	7.9	9.5	9.7	8.8	9.0
Niobrara Electric	*	4.0	4.6	5.7	5.3	5.6	6.0	7.5	6.8	6.0	5.4
Niobrara Valley	4.8	5.4	6.4	7.8	7.9	7.8	7.4	8.2	7.3	6.8	7.1
North Central	5.5	4.9	6.4	7.4	7.2	7.0	7.0	7.2	7.0	6.5	6.2
Northeast Nebraska	5.6	5.4	6.4	12.4	7.2	8.5	7.5	9.8	7.6	5.9	6.2
Northwest	5.7	5.9	*	9.5	10.2	8.8	6.8	10.6	8.4	8.3	7.2
Panhandle	4.3	2.4	5.8	7.2	6.8	8.0	5.4	7.3	7.5	7.0	6.2
Polk	6.3	6.1	8.3	23.9	10.0	10.1	14.3	12.7	9.3	7.4	7.4
Roosevelt	3.6	4.0	5.0	6.0	6.4	6.8	7.6	8.5	9.1	7.9	7.5
Rural Electric	3.8	4.2	5.0	6.0	7.8	7.2	5.9	6.4	7.4	6.8	6.1
Seward	5.9	6.4	8.5	11.8	8.4	9.7	10.6	13.1	10.5	8.7	8.6
South Central	5.2	5.4	7.3	9.0	7.8	7.7	8.1	8.8	8.6	6.7	8.3
Southern	7.1	6.7	9.2	12.1	8.7	*	*	*	*	*	*
Southwest	5.3	6.4	7.5	10.6	8.7	8.2	7.9	8.2	8.5	8.2	9.2
Stanton	5.7	5.9	8.7	17.1	10.9	9.6	9.8	13.2	8.8	8.0	8.1
Twin Valleys	5.8	6.3	9.0	8.8	8.0	7.8	8.9	8.4	9.6	9.2	8.2
Wheat Belt	4.9	5.1	6.6	8.7	8.3	6.9	6.7	7.8	9.4	7.4	7.0
Wyrulec	3.9	4.7	5.7	7.2	5.9	6.8	6.0	6.9	7.2	6.1	6.5
York	6.2	6.9	8.0	10.5	8.0	8.4	9.4	10.2	8.9	7.4	8.1
Average	5.2	5.5	7.3	9.1	8.2	8.1	7.5	8.4	8.4	7.6	7.5

Source: *Irrigation Survey*. Nebraska Rural Electric Association. Lincoln, Nebraska. Annual.
Note: * indicates not included in survey.

Table VI-22
Consumer Price Index, All Items, Fuel & Other Utilities, Motor Fuel and Energy, 1975-1989
(1982-84 = 100)

	All Items	Fuel and Other Utilities	Motor Fuel	Energy
1975	53.8	45.4	45.1	42.1
1976	56.9	49.4	47.0	45.1
1977	60.6	54.7	49.7	49.4
1978	65.2	58.4	51.8	52.5
1979	72.6	64.8	70.1	65.7
1980	82.4	75.4	97.4	86.0
1981	90.9	86.4	108.5	97.7
1982	96.5	94.9	102.8	99.2
1983	99.6	100.2	99.4	99.9
1984	103.9	104.8	97.9	100.9
1985	107.6	106.5	98.7	101.6
1986	109.6	104.1	77.1	88.2
1987	113.6	103.0	80.2	88.6
1988	118.3	104.4	80.9	89.3
1989	124.0	107.8	88.5	94.3

Source: *Economic Indicators*. Prepared for the Joint Economic Committee of Economic Advisors.
United States Government Printing Office, Washington, D.C. Monthly.

VII. APPENDIX A. CONVERSION FACTORS

Tables

A-1 Units of Measure A-2 Approximate Heat Content of Petroleum Products A-3 Approximate Heat Rates for Electricity, 1960-1989		A-4 Conversion Factors for Natural Gas and Coal Consumed in Nebraska, 1960-1989
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Table A-1
Units of Measure

Coal		
1 metric ton	contains	1,000 kilograms or 2,204.62 pounds
1 long ton	contains	2,240 pounds
1 short ton	contains	2,000 pounds
Crude Oil		
1 barrel	contains	42 gallons

Source: *State Energy Data Report, Consumption Estimates 1960-1988*. U.S. Department of Energy, Energy Information Administration. Washington, D.C. April 1990.

Table A-2
Approximate Heat Content of Petroleum Products

Product	Million Btu per barrel	Btu per gallon
Asphalt	6.636	158,000
Aviation Gasoline	5.048	120,190
Crude Oil	5.800	138,095
Distillate Fuel Oil	5.825	138,690
Jet Fuel, Kerosene type	5.670	135,000
Kerosene	5.670	135,000
Lubricants	6.065	144,405
Motor Gasoline	5.253	125,071
Propane	3.836	91,333
Residual Fuel Oil	6.287	149,690
Road Oil	6.636	158,000

Source: *State Energy Data Report, Consumption Estimates 1960-1988*. U.S. Department of Energy, Energy Information Administration. Washington, D.C. April 1990.

Table A-3
Approximate Heat Rates for Electricity,* 1960-1989
 (Btu/Kilowatthour)

	Consumption	Fossil Fuel Steam-	Nuclear Power
		Electric Power Plant Generation	Plant Generation
1960	3,412	10,760	-
1961	3,412	10,650	-
1962	3,412	10,558	-
1963	3,412	10,482	-
1964	3,412	10,462	-
1965	3,412	10,453	-
1966	3,412	10,415	-
1967	3,412	10,432	-
1968	3,412	10,398	-
1969	3,412	10,447	-
1970	3,412	10,494	-
1971	3,412	10,478	-
1972	3,412	10,379	-
1973	3,412	10,389	10,903
1974	3,412	10,442	11,161
1975	3,412	10,406	11,013
1976	3,412	10,373	11,047
1977	3,412	10,435	10,769
1978	3,412	10,361	10,941
1979	3,412	10,353	10,879
1980	3,412	10,388	10,908
1981	3,412	10,453	11,030
1982	3,412	10,454	11,073
1983	3,412	10,520	10,905
1984	3,412	10,323	10,843
1985	3,412	10,339	10,813
1986	3,412	10,261	10,799
1987	3,412	10,253	10,776
1988	3,412	10,235	10,743
1989	3,412	10,235	10,743

Source: *State Energy Data Report, Consumption Estimates 1960-1988*. U.S. Department of Energy, Energy Information Administration. Washington, D.C. April 1990.

*Notes: The heat content of a kilowatthour of electricity for consumption is 3,412 Btu regardless of the generation process. The heat content for a fossil fuel steam-electric power plant is assumed to be the average at all such U.S. power plants. This factor is also applied to convert hydroelectricity for distribution.

Table A-4
Conversion Factors for Natural Gas and Coal Consumed in Nebraska, 1960-1989

	Natural Gas (Btu/cubic foot)		Coal (Thousand Btu/short ton)		
	Utility	Non-Utility	Residential/ Commercial	Industrial	Electric Utility
1960	1,035	1,035	20,913	21,975	24,782
1961	1,035	1,035	20,896	21,943	24,796
1962	1,035	1,035	20,890	21,933	24,552
1963	991	991	20,872	21,903	24,316
1964	990	990	20,856	21,873	24,436
1965	991	991	20,804	21,781	24,568
1966	996	996	20,724	21,638	24,484
1967	996	996	20,638	21,485	24,242
1968	998	998	20,626	21,465	24,432
1969	998	998	20,478	21,200	24,356
1970	1,008	1,008	20,093	21,517	23,914
1971	1,008	1,008	19,933	20,232	22,954
1972	984	1,015	19,876	20,130	23,030
1973	981	1,012	19,898	20,171	22,309
1974	983	1,007	19,582	20,023	21,253
1975	982	996	18,406	19,285	20,954
1976	971	997	18,410	19,243	20,823
1977	967	1,001	18,074	19,044	21,313
1978	968	1,000	17,967	18,541	20,575
1979	954	997	18,441	18,821	19,181
1980	950	980	18,038	19,194	18,809
1981	942	979	17,701	18,666	18,015
1982	982	981	19,195	18,830	17,851
1983	949	982	20,616	19,699	17,572
1984	948	981	21,375	19,391	17,797
1985	957	982	21,526	18,597	17,299
1986	971	993	20,809	18,412	17,427
1987	977	985	20,935	18,612	17,202
1988	954	983	18,275	18,722	17,239
1989	954	983	18,275	18,722	17,239

Source: *State Energy Data Report, Consumption Estimates 1960-1988*. U.S. Department of Energy, Energy Information Administration. Washington, D.C. April 1990.

VII. APPENDIX B. GLOSSARY

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing.

Aviation Gasoline: All special grades of gasoline for use in aviation reciprocating engines.

Barrel: A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons.

British Thermal Unit (Btu): A standard unit for measuring the amount of energy required to raise the temperature of one pound of water 1 degree.

Fahrenheit: An average Btu content of fuel is a heat value per unit quantity of fuel as determined from tests of fuel samples.

City Gate Price: Price of natural gas at the point it is transferred from a pipeline to a local distribution company.

Coal: A black or brownish-black solid combustible substance formed by the partial decomposition of vegetable matter without access to air.

Commercial Sector: Nonmanufacturing business establishments, including hotels, motels, restaurants, wholesale businesses, retail stores, laundries and other service enterprises; health, social and educational institutions; and federal, state and local governments. Street lights, pumps, bridges and public services are also included.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

Degree Days, Cooling: The number of degrees that the daily average temperature is above 65 degrees Fahrenheit. The daily average temperature is the average of the maximum and minimum temperatures for a 24-hour period.

Degree Days, Heating: The number of degrees that the daily average temperature is below 65 degrees Fahrenheit. The daily average temperature is the average of the maximum and minimum temperatures for a 24-hour period.

Degree Days, Normal: Simple arithmetic averages of monthly or annual degree days over a long period of time (usually the 30-year period, 1951-1980).

Degree Days, Population Weighted: Heating or cooling degree days weighted by the population of the area in which the degree days are recorded. To compute state population weighted degree days, each state is divided into from one to nine climatically homogeneous divisions which are assigned weights based on the ratio of the population of the division to the total population of the state.

Development Well: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Diesel Fuel: See Distillate Fuel.

Distillate Fuel: Light fuel oils distilled during the refining

process and used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery) and electric power generation. Diesel fuel oils are used in compression-ignition engines.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant use and unaccounted for electrical energy.

Electric Utility Sector: Privately and publicly owned establishments for the generation, transmission, distribution or sale of electric energy, primarily for use by the public.

End Use Energy: A measure of the energy content of fuels at the point where they are consumed. End use energy does not include energy lost in the generation and transmission of electricity.

Exploratory Well: A well drilled to find and produce oil or gas in an unproved area; to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or to extend the limit of a known oil or gas reservoir.

F.O.B.(free on board): The price actually charged at the point of loading.

Gasohol: A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Gasoline: A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Includes finished leaded motor gasoline (premium and regular), finished unleaded motor gasoline (premium and regular), motor gasoline blending components and gasohol.

Heating Oil: A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial and industrial burner units.

Hydroelectric Power (Hydro): Electricity generated by an electric power plant whose turbines are driven by falling water.

Industrial Sector: Sector including manufacturing, construction, mining, agriculture, fishing and forestry establishments.

Jet Fuel: Includes both Naptha-type and kerosene-type jet fuel. Although most jet fuel is used in aircraft, some is used for other purposes, such as fuel for turbines to produce electricity.

Kerosene: A petroleum middle distillate, having burning properties suitable for use as an illuminant when burned in wick lamps. Kerosene is primarily used in space heaters, cooking stoves and water heaters.

Kilowatt: One thousand watts (see Watt).

Kilowatthour: One thousand wathours (see Watthour).

Lubricants: Substances used to reduce friction between bearing surfaces. Petroleum lubricants may be produced from either distillates or residuals.

Megawatt: One million watts, or one thousand kilowatts (see Watt).

Middle Distillates: A general classification of fuels that includes heating oil, diesel fuel and kerosene.

Natural Gas: A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs.

Net Interstate Sales of Electricity: The difference between the amount of electricity sales and electricity losses (due to generation and transmission) within Nebraska and the total amount of energy used in generating electricity within the state.

Nuclear Power: Electricity generated by an electric power plant whose turbines are driven by steam produced in a reactor by heat from the fissioning of nuclear fuel.

Petroleum: A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids and nonhydrocarbon compounds blended into finished petroleum products.

Primary Energy: A measure of the energy content of energy resources consumed including the energy lost in the generation and transmission of electricity.

Primary energy resources include: petroleum products, natural gas, coal, hydro-electric power and nuclear power.

Propane: A normally gaseous hydrocarbon extracted from natural gas or refinery gas streams. Propane is used primarily for residential and commercial heating and cooling and also as a fuel for transportation. Also included for purposes of this report are other liquified petroleum gases such as ethane, butane, etc. Industrial uses of propane include use as a petrochemical feedstock.

Proved Reserves: The estimated quantities of crude oil or natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Residential Sector: Sector consisting of private households which consume energy primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking and clothes drying.

Residual Fuel: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. Residual fuel is used for commercial and industrial heating and electricity generation.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways.

Special Fuels: Fuel which is delivered into a fuel supply tank of a motor vehicle or into special fuel storage facilities designed or equipped to fuel motor vehicles. Special fuels include, but are not limited to, diesel and liquid petroleum gases. Gasoline is not a special fuel.

Stripper Well: Wells which produce less than ten barrels of crude oil per day.

Transportation Sector: Sector including private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroad and railways (including streetcars), aircraft, ships, barges and natural gas pipelines.

Watt: The electrical unit of power. The rate of energy transfer equivalent to one ampere flowing under a pressure of one volt at unity power factor.

Watthour (Wh): An electrical energy unit of measure equal to one watt of power supplied to or taken from, an electric circuit steadily for one hour.

Wellhead Price: The price at which all domestic crude oil and natural gas is first purchased at the point of production.

Source: *State Energy Data Report, Consumption Estimates, 1960-1988*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. April, 1990.

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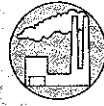
Oil
(barrels)

Natural Gas
(thousand cubic ft.)

Power Plant Locations



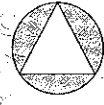
— Over 1,000,000



Coal



🔥 100,000 to 999,999



Nuclear



🔥 10,000 to 99,999



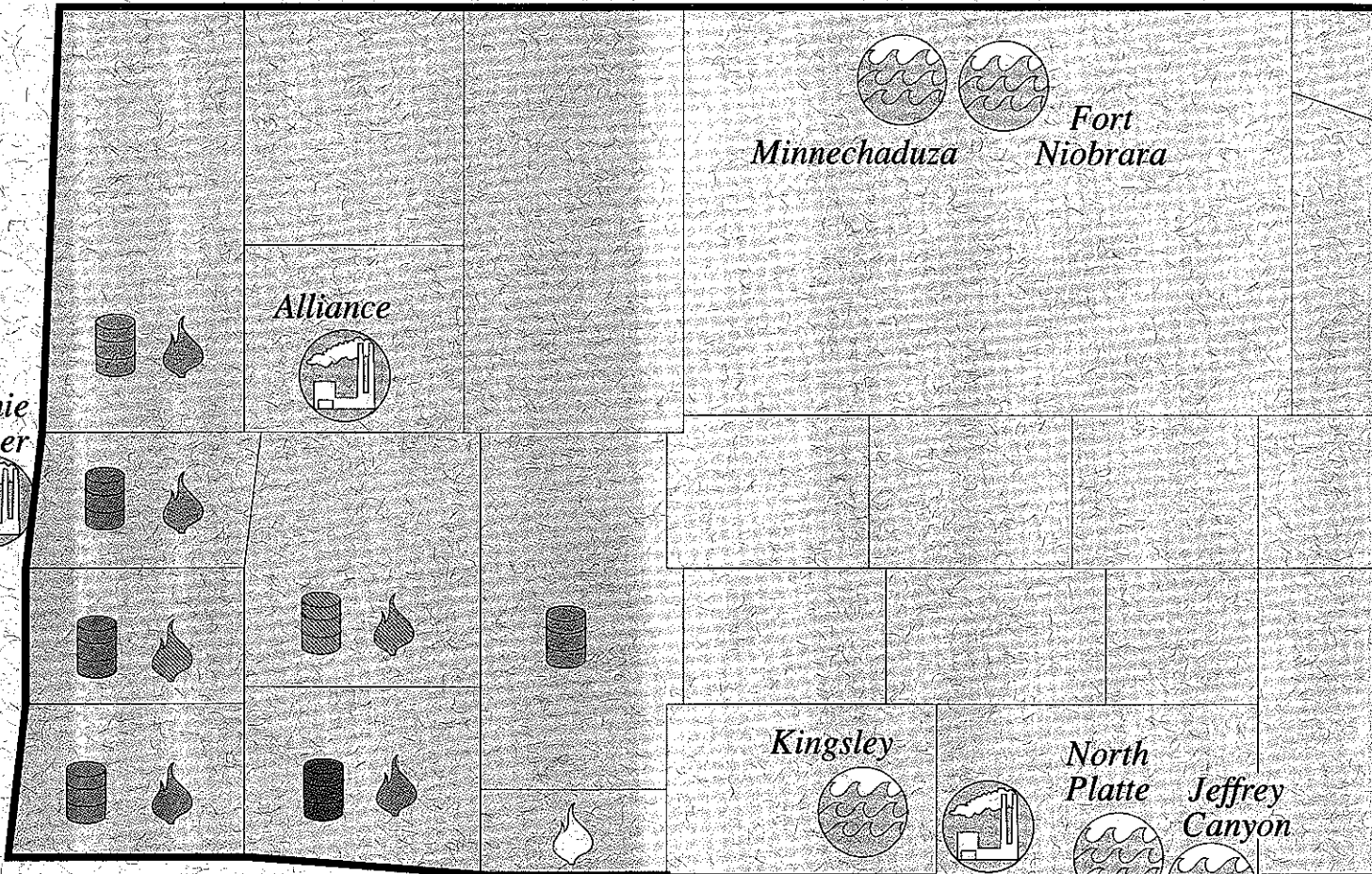
Hydro



🔥 1,000 to 9,999



🔥 Less than 1,000



Laramie
River

Alliance

Minnechadusa

Fort
Niobrara

Kingsley

North
Platte

Jeffrey
Canyon

Gerald
Gentleman

Johnson

E • N • E • R • G • Y



STATE OF NEBRASKA

Imperial

