

Nebraska
Center
for
Rural
Health
Research

The Impact of the Health Care Sector on Nebraska's Economy: Comparing Employment, Labor Income, Output, and Impact on Gross State Product for the Health Care Sector With Other Major Industries

A Report for the Nebraska Office of Rural Health
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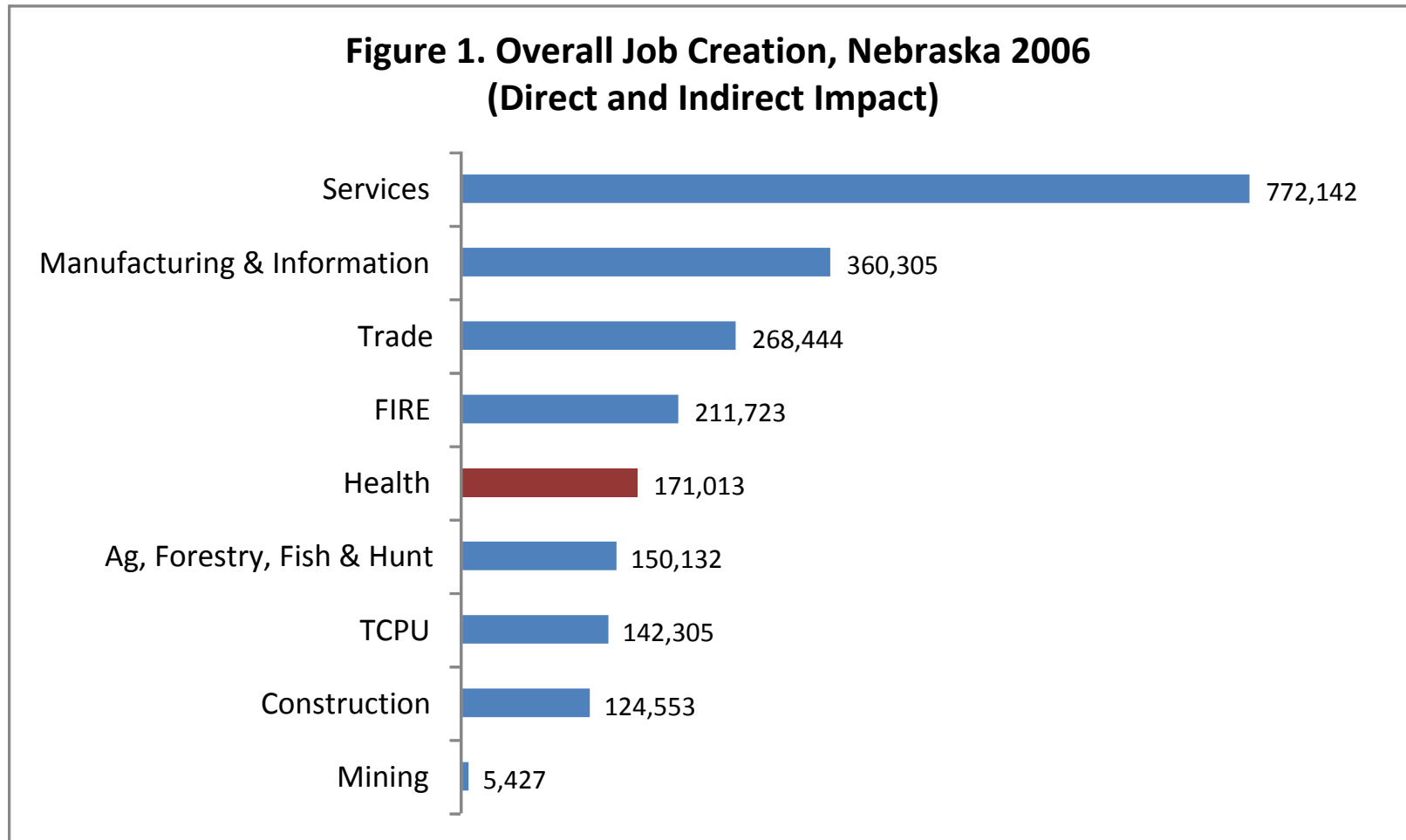
Nebraska Rural Health Works Project
Nebraska Center for Rural Health Research
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Executive Summary

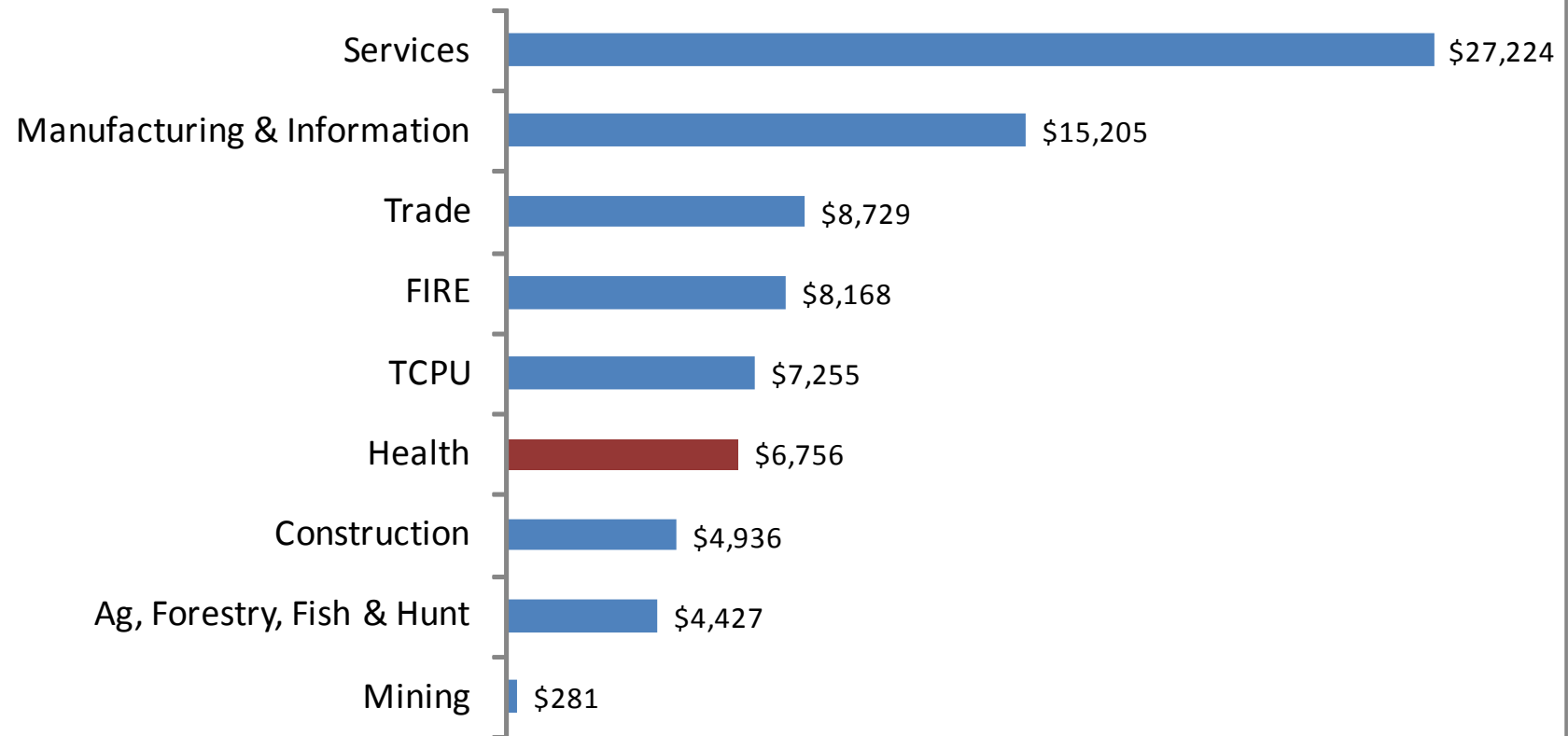
- The overall job creation due to health care (directly and indirectly) in Nebraska is estimated at 171,013 jobs, which accounts for 14% of the state's total employment. The health care sector has the fifth largest overall impact on job creation in Nebraska.
- The overall income earned due to health care (directly and indirectly) in Nebraska is estimated at \$6.76 billion, which accounts for 14% of the state's total income. The health care sector has the sixth largest overall impact on earned income in Nebraska.
- The overall output created by the health care industry (directly and indirectly) in Nebraska is estimated at \$16.21 billion, which accounts for 11% of the state's total output. Health care is ranked seventh in total output produced in Nebraska.
- The overall contribution of the health care sector to the gross state product (directly and indirectly) in Nebraska is estimated at \$9.17 billion. Health care is the sixth largest contributor to gross state product in Nebraska.

This report can be downloaded from our Web site: <http://www.unmc.edu/rural/NeRHW>



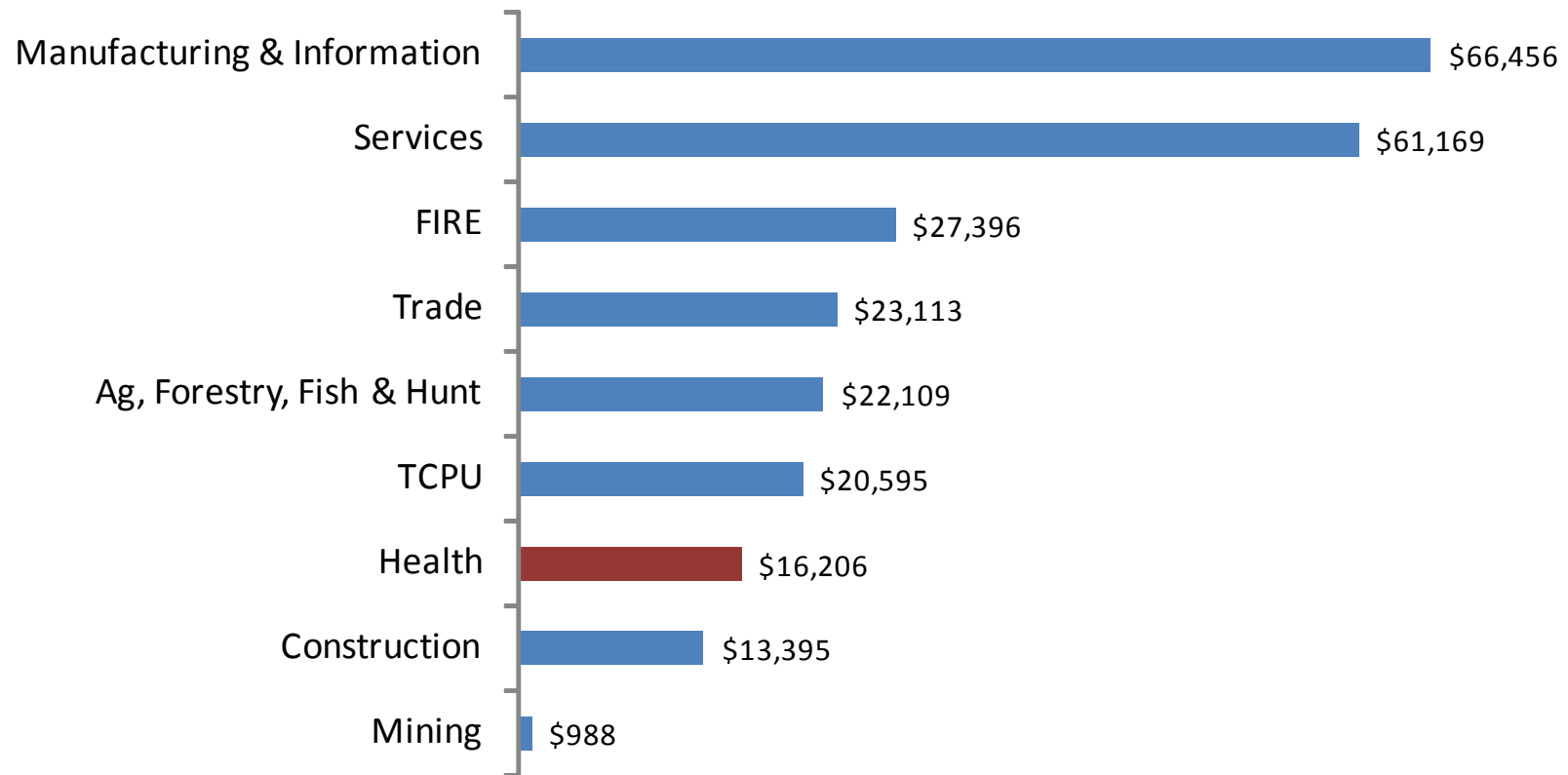
Sources: IMPLAN Data 2006. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2006. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2007. Health Forum, LLC. 2008.

**Figure 2. Overall Income Earned, Nebraska 2006
(Direct and Indirect, in Millions)**



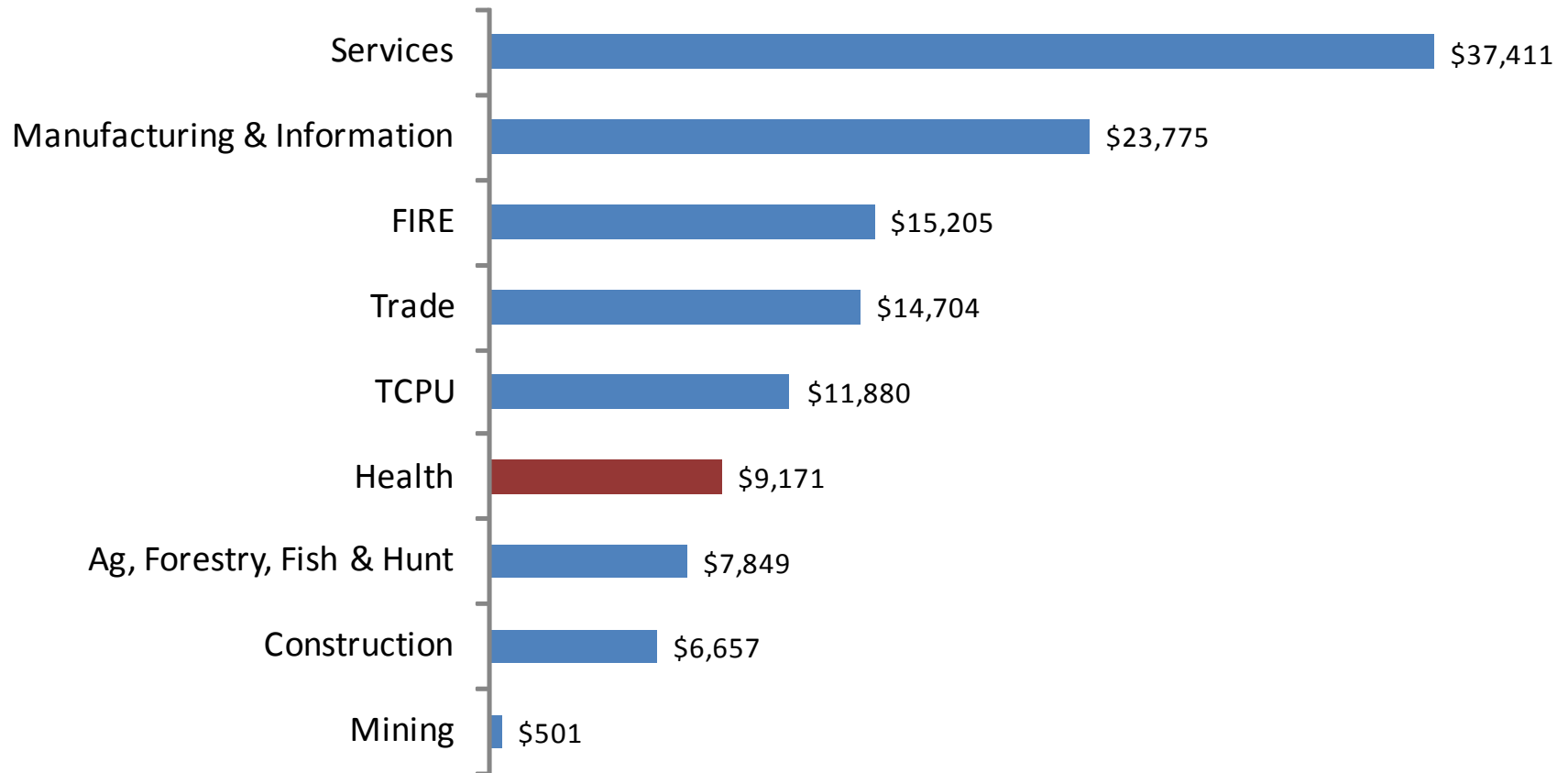
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**Figure 3. Output Produced by Industry, Nebraska 2006
(Direct and Indirect Impact, in Millions)**



Sources: IMPLAN Data 2006. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2006. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2007. Health Forum, LLC. 2008.

**Figure 4. Overall Contribution to the Gross State Product, Nebraska 2006
(Direct and Indirect Impact, in Millions)**



Sources: IMPLAN Data 2006. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2006. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2007. Health Forum, LLC. 2008.

Rank	Industry	Total Employment	Type SAM Multiplier	Overall Job Creation (Direct and Indirect Impact)
1	Services	505,430	1.527694	772,142.38
2	Manufacturing & Information	124,015	2.905338	360,305.49
3	Trade	173,118	1.550641	268,443.87
4	FIRE	98,957	2.139546	211,723.05
5	Health	101,003	1.693147728	171,012.99
6	Ag, Forestry, Fish & Hunt	71,528	2.098928	150,132.12
7	TCPU	68,218	2.086032	142,304.93
8	Construction	69,250	1.798596	124,552.77
9	Mining	2,119	2.561079	5,426.93

Sources: IMPLAN Data 2002. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2002. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2000. Health Forum, LLC. 2002.

Rank	Industry	Total Employee Payroll (in Millions)	Total Proprietors' Income (in Millions)	Total Labor Income (Employee Payroll + Proprietors' Income, in Millions)	Type SAM Multiplier	Overall Income Earned (Direct and Indirect Impact, in Millions)
1	Services	\$16,295.41	\$1,070.37	\$17,365.79	1.567676	\$27,223.92
2	Manufacturing & Information	\$6,183.95	\$376.106	\$6,560.05	2.317861	\$15,205.29
3	Trade	\$4,710.39	\$496.275	\$5,206.66	1.676584	\$8,729.41
4	FIRE	\$3,495.36	\$450.638	\$3,946.00	2.070032	\$8,168.34
5	TCPU	\$3,423.25	\$946.721	\$4,369.97	1.660235	\$7,255.18
6	Health	\$4,487.58	\$16.705	\$4,504.28	1.499979352	\$6,756.33
7	Construction	\$2,122.16	\$812.33	\$2,934.49	1.682082	\$4,936.04
8	Ag, Forestry, Fish & Hunt	\$659.566	\$1,084.25	\$1,743.82	2.538692	\$4,427.01
9	Mining	\$68.508	\$87.699	\$156.21	1.801288	\$281.37

Sources: IMPLAN Data 2002. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2002. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2000. Health Forum, LLC. 2002.

Rank	Industry	Output (in Millions)	Type SAM Multiplier	Overall Output Produced by Industry (Direct and Indirect, in Millions)
1	Manufacturing & Information	\$42,689.72	1.556728	\$66,456.27
2	Services	\$34,486.27	1.773719	\$61,168.96
3	FIRE	\$15,451.32	1.773035	\$27,395.72
4	Trade	\$13,684.74	1.688944	\$23,112.76
5	Ag, Forestry, Fish & Hunt	\$12,281.58	1.800195	\$22,109.24
6	TCPU	\$12,658.99	1.626902	\$20,594.93
7	Health	\$8,915.92	1.817659767	\$16,206.10
8	Construction	\$8,001.09	1.674186	\$13,395.31
9	Mining	\$640.567	1.542272	\$987.93

Sources: IMPLAN Data 2002. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2002. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2000. Health Forum, LLC. 2002.

Rank	Industry	Gross State Product (in Millions)	Type SAM Multiplier	Overall Contribution to Gross State Product (Direct and Indirect Impact, in Millions)
1	Services	\$21,397.13	1.748396	\$37,410.66
2	Manufacturing & Information	\$10,036.39	2.368842	\$23,774.62
3	FIRE	\$8,226.24	1.848401	\$15,205.38
4	Trade	\$9,035.69	1.627374	\$14,704.45
5	TCPU	\$7,151.40	1.661189	\$11,879.83
6	Health	\$4,536.04	2.021851	\$9,171.20
7	Ag, Forestry, Fish & Hunt	\$3,253.73	2.412193	\$7,848.61
8	Construction	\$3,392.20	1.9623	\$6,656.51
9	Mining	\$296.366	1.691472	\$501.29

Sources: IMPLAN Data 2002. Minnesota IMPLAN Group, Inc. 2003. U.S. Census Bureau County Business Patterns, 2002. <http://www.census.gov/prod/www/abs/cbptotal.html>. American Hospital Association Annual Survey Database: Fiscal Year 2000. Health Forum, LLC. 2002.

DATA NOTES and DEFINITIONS

We used the IMPLAN software to predict changes in overall economic activity as a result of change in the health care sector. The IMPLAN software analyzes county level data using an economic input-output model. Certain information required for reporting health sector impact could not be obtained from the IMPLAN database alone. For supplemental data we used the information from the U.S. Census Bureau's *County Business Patterns 2006*, and the *American Hospital Association Annual Survey Database: Fiscal Year 2007* to calculate estimates used to analyze health sector data.

Gross State Product includes employee compensation, proprietor's income, other property income, and indirect business taxes. We use the IMPLAN results for Nebraska's Value Added for the nine major industries and health care, as a proxy for the Gross State Product. For this analysis, reporting the Health Sector Impact to Nebraska's Value Added is preferred over using Economic Output. The figures for Output are more likely to be over-inflated when compared to the actual impact of an industry on the Gross State Product.

Multipliers represent the measure of total change throughout an economy from one unit change for a given sector. Multipliers are derived from the direct and indirect spending, plus induced effects (e.g. household spending based on the income earned from the direct and indirect effects) obtained from the IMPLAN database Total Requirements Table. Specifically, we use Type SAM Multipliers, which are Type II Multipliers that have been adjusted based on household spending patterns. Type SAM multipliers were used because they adjust effects based on spending patterns amongst different income groups and provide the most accurate results. Please note that the 2004 report was analyzed using Type III multipliers, which are not sensitive to the different spending patterns amongst different income levels. Therefore, results from this report cannot be compared to results from the 2004 report.

Classification Systems are consistent with the North American Industry Classification System (NAICS) codes. On January 1, 2002, the United States officially converted from Standard Industry Classification (SIC) codes to the NAICS codes. The change was made in order to standardize classification in Canada, Mexico, and the US. It was also necessary to reflect important changes in the Information sector. Because the reclassification occurred at the facility level, comparisons cannot be made between data analyzed under the old SIC system and data under the new NAICS system. Therefore, this report cannot be compared to the 2004 report.

Health Care includes public and private hospitals, nursing care facilities, long term care and developmentally disabled residential facilities, community care facilities for the elderly, offices of physicians, dentists, and other health care practitioners, health care agencies, outpatient care centers, medical and diagnostic laboratories, and pharmacies. Establishments in the business of health care were extracted from the Services and Retail Trade sectors. Therefore, none of the establishments in this sector are counted twice within this ranking. *Not all of the government owned health care facilities were accounted for in the analysis, therefore these figures may understate the total number of employees and total income for the health sector in Nebraska.*

Agriculture includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

Mining includes all establishments primarily engaged in mining. The term mining is used in the broad sense to include the extraction of minerals occurring naturally: solids, such as coal and ores; liquids, such as crude petroleum; and gases such as natural gas. The term mining is also used in the broad sense to include quarrying, well operations, milling (e.g., crushing, screening, washing, flotation), and other preparation customarily done at the mine site, or as a part of mining activity.

Construction includes establishments primarily engaged in construction. The term construction includes new work, additions, alterations, reconstruction, installations, and repairs. Construction activities are generally administered or managed from a relatively fixed place of business, but the actual construction work is performed at one or more different sites. If a company has more than one relatively fixed place of business from which it undertakes or manages construction activities and for which separate data on the number of employees, payroll, receipts, and other establishment-type records are maintained, each such place of business is considered a separate construction establishment.

Manufacturing and Information includes establishments engaged in the mechanical or chemical transformation of materials or substances into new products as well as establishments engaged in producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data. Manufacturing establishments are usually described as plants, factories, or mills and characteristically use power driven machines and materials handling equipment. Establishments engaged in assembling component parts of manufactured products are also considered manufacturing if the new product is neither a structure nor other fixed improvement. Also included is the blending of materials, such as lubricating oils, plastics resins, or liquors.

The main components of the Information sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; the industries known as Internet service providers and web search portals, data processing industries, and the information services industries.

TCPU Transportation, Communications, Electric, Gas, and Sanitary Services includes establishments providing, to the general public or to other business enterprises, passenger and freight transportation, communications services, or electricity, gas, steam, water or sanitary services, and all establishments of the United States Postal Service.

Trade includes wholesale and retail trade. Wholesale Trade includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractors, or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies. Retail Trade includes establishments engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods. In general, retail establishments are classified by kind of business according to

the principal lines of commodities sold (groceries, hardware, etc.), or the usual trade designation (drug store, cigar store, etc.). Some of the important characteristics of retail trade establishments are: the establishment is usually a place of business and is engaged in activities to attract the general public to buy; the establishment buys or receives merchandise as well as sells; the establishment may process its products, but such processing is incidental or subordinate to selling; the establishment is considered as retail in the trade; and the establishment sells to customers for personal or household use. Not all of these characteristics need be present and some are modified by trade practice.

FIRE includes establishments operating primarily in the fields of finance, insurance, and real estate. Finance includes depository institutions, non-depository credit institutions, holding (but not predominantly operating) companies, other investment companies, brokers and dealers in securities and commodity contracts, and security and commodity exchanges. Insurance covers carriers of all types of insurance, and insurance agents and brokers. Real estate includes owners, lessors, lessees, buyers, sellers, agents, and developers of real estate.

Services includes establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. Hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions; membership organizations, and other miscellaneous services, are included.