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Economic Contribution of North Dakota's Long-term Care Nursing Facilities to the State's Economy for 1991

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The level the of economic contribution of North Dakota's long-term nursing-care facilities has been analyzed for 1991. In 1991, the state had 83 facilities, located in 44 of the 53 counties, with a combined capacity of 6,947 beds (see the Appendix for a listing of facilities by county). One new facility, which had not been in operation for a full year, brings the state's total to 84; this facility was excluded from the analysis.² Estimates of the long-term nursing-care industry's economic contribution³ to the state as a whole are presented in this report. Retail trade activity, personal income, total business activity, employment, and tax revenues are the key indicators used in the analysis.

The information for this study was obtained from a survey of the 83 long-term health care providers in North Dakota. The North Dakota Long-Term Care Association, under the direction of Shelly Warner, Executive Director, administered the survey instrument. All 83 facilities returned completed questionnaires. Information about the facilities' expenditures, summarized from the questionnaires, provided the data for this study, which was performed using an input-output model to estimate economic activity.

The North Dakota Input-Output Model (used in this analysis) consists of sets of interdependence coefficients, or multipliers, that measure the level of business activity generated in each sector as a result of an additional dollar of expenditures in a given sector. For a complete description of the input-output model, a listing of the coefficients and how the model can be used to perform an economic contribution study, see Coon et al. 1985 and 1989. Levels of business activity generated by the input-output model can be used to estimate such economic indicators as tax revenues and secondary (indirect and induced) employment, based on historic relationships (Coon et al. 1984).

North Dakota long-term care facilities made \$177.3 million of expenditures in 1991. Of this amount, \$158.0 million (or 89%) was made within the state for

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²Also excluded were the state's 37 basic care facilities (1991).

³Because the facilities primarily serve the state's residents and therefore receive funding primarily from in-state sources, this analysis is termed an *economic contribution* study. However, a substantial portion of the funds these facilities receive represents federal transfer payments through programs such as Medicare and Medicaid. To the extent that the facilities' receipts are drawn from these out-of-state sources (representing "new wealth" to the state), the analysis of their role in the state's economy could also be termed an *economic impact* study.

supplies, services, and payrolls. Distribution of these in-state expenditures to sectors of the input-output model is presented in Table 1. Expenditures to the household sector for payrolls accounted for \$108.7 million in 1991, almost 69 percent of the total in-state expenditures.

Sector	Expenditures
	-million dollars-
Construction	4.1
Communications & Public Utilities	5.4
Retail	18.0
Finance, Insurance, Real Estate	7.1
Business & Personal Services	10.1
Professional & Social Services	4.6
Households	<u>108.7</u>
Total (All Sectors)	158.0

Business activity generated from the long-term care industry's expenditures totaled \$466.5 million for 1991 (Table 2). This figure is nearly 2 percent of the total state's business activity. Resulting personal income was estimated to be \$203.4 million (about 2.3% of total state personal income), and the level of retail trade activity associated with this industry amounted to \$120.4 million (2.1% of total state retail trade). Other economic indicators estimated from the input-output analysis include state tax revenues for sales and use (\$5.6 million), personal income (\$2.6 million), and corporate income (\$0.7 million) taxes (Table 3). Table 4 presents employment associated with long-term care facilities in North Dakota. Full-time equivalent jobs in this industry were 6,437 in 1991. In addition, 6,556 secondary jobs could be attributed to the industry.

This analysis shows that the long-term care facilities in the state contribute a substantial amount of business activity. The high percentage of this industry's total expenditures that is made within the state maximizes its economic contribution. Perhaps even more important are the 6,437 FTE jobs--over 10,000 full- and part-time positions--it provides for the state's residents. These jobs provide average annual earnings of slightly less than \$17,000 which is slightly less than the average annual earnings of \$18,132 Job Service reported for 1991 (Job Service 1992). Also the earnings of employees in the long-term care industry compare favorably with those of workers in many of the state's newer manufacturing and export-services firms (Leistritz 1991). Furthermore, the state receives tax revenues from of the activities of the long-term care facilities. Since the long-term care facilities are located throughout the state, not just in the largest cities, economic activity and jobs are generated for many areas of the state.

Table 2

**Estimated Economic Activity
From North Dakota
Long-term Care Facilities, 1991**

<u>Item</u>	<u>Economic Activity</u> --million dollars--
Personal Income	203.4
Retail Sales	120.4
Business Activity for All Business Sectors*	233.5
Total Business Activity	466.5

* Includes all sectors except agriculture (livestock and crops), households, and government.

Table 3

**Estimated State Tax Revenue
Resulting From Activities From North
Dakota Long-term Care Facilities,
1991**

<u>Tax</u>	<u>Amount</u> --million dollars--
Sales and Use	5.6
Personal Income	2.6
Corporate Income	<u>0.7</u>
Total Taxes	8.9

Table 4

**Estimated Direct and Secondary
Employment From North Dakota
Long-term Care Facilities, 1991**

<u>Category</u>	<u>Employment</u>
Direct	6,437
Secondary	6,556

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APPENDIX TABLE 1. NUMBER OF BEDS REPORTED IN NORTH DAKOTA NURSING FACILITIES, 1989 AND 1991

County	City	1989	1991	Name of Facility	County	City	1989	1991	Name of Facility
Adams	Hettinger	88	88	Hillcrest Care Center	Mercer	Beulah	70	70	Beulah Community Nsg. Home
Barnes	Valley City*	64	170	Sheyenne Care Center	Morton	Glen Ullin	86	86	Marian Manor Nsg. Home
Bottineau	Bottineau	26	26	St. Andrews Nsg. Home		Mandan*	92	120	Mandan Villa
	Bottineau	-	81	Good Samaritan Center		Mandan	-	9	Dacotah Alpha
Bowman	Westhope	59	58	Westhope Home		New Salem	-	60	Elm Crest Manor
	Bowman	63	65	Sunset Care Corp.	Mountrail	New Town	67	67	New Town Nursing Home
Burleigh	Bismarck	92	124	Baptist Home Inc.		Parshall	-	60	Rock View Good Sam. Ctr.
	Bismarck	223	223	Missouri Slope Luth. Care Ctr.		Stanley*	41	57	Mountrail Bethel Home
Cass	Bismarck	97	101	St. Vincent's Nsg. Home Inc.	Nelson	Aneta	-	51	Aneta Good Samaritan Ctr.
	Arthur	-	90	Arthur Good Samaritan Ctr.		Lakota	-	58	Gronna Good Samaritan Ctr.
Fargo	Fargo	104	103	Americana Healthcare Center		McVile	52	52	Friendship Healthcare Ctr.
	Fargo*	96	192	Bethany Homes Inc.	Pembina	Cavalier	60	60	Wedgewood Manor
Fargo	Fargo	125	128	Elim Home		Walhalla	60	60	Pembilier Nursing Center
	Fargo	102	102	Rosewood on Broadway	Pierce	Rugby*	74	118	Good Sam. Long Term Care
Fargo	Fargo	132	132	Villa Maria Health Care	Ramsey	Devils Lake	108	108	Lake Region Lutheran Home
	Langdon	63	63	Maple Manor Nsg. Home Inc.		Devils Lake	-	84	Devils Lake Good Sam. Ctr.
Cavalier	Osnabrock	-	41	Osnabrock Good Sam. Ctr.	Ransom	Enderlin	-	62	Enderlin Hillcrest Manor
	Ellendale	84	79	Ellendale Nursing Ctr.		Lisbon	45	45	Community Memorial Nursing
Dickey	Oakes	-	120	Oakes Good Samaritan Ctr.		Lisbon	-	40	Parkside Lutheran Home
	Crosby	-	80	Crosby Good Samaritan Ctr.	Renville	Mohall	-	59	North Cent. Good Sam. Ctr.
Dunn	Killdeer	-	40	Hill Top Home of Comfort	Richland	Hankinson	23	23	St. Gerard's Nursing Home
Eddy	New Rockford*	86	86	Luth. Home of the Good Shep.		Wahpeton*	109	192	Wahpeton Healthcare Ctr.
Emmons	Strasburg	80	80	Strasburg Nursing Home	Rolette	Dunseith	40	46	Dunseith Community Nsg. Home
Foster	Carrington	40	40	Carrington Health Center		Rolette*	48	48	Presentation Care Center
	Carrington	60	60	Golden Acres Manor	Sargent	Forman	-	62	Sargent Manor Healthcare Ctr.
Grand Forks	Grand Forks	160	160	Valley Eldercare Center	Stark	Dickinson	110	181	Dickinson Nursing Center
	Grand Forks	-	118	Almonte Living Center		Dickinson	83	83	St. Luke's Home
Larimore	Larimore	-	68	Larimore Good Samaritan Ctr.	Stutsman	Jamestown	100	100	Central Dakota Village
	Northwood	90	90	Northwood Deaconess Home		Jamestown*	116	142	Hi-Acres Manor Nursing Ctr.
Grant	Elgin	25	25	Jacobson Mem. Hosp. Care Ctr.	Towner	Cando	74	74	Resthaven Healthcare Ctr. Inc.
Griggs	Cooperstown	50	50	Griggs County Nursing Home	Traill	Hatton	60	60	Tri County Rel. & Nsg. Home
Hettinger	Mott	-	60	Mott Good Sam. Nursing Ctr.		Hillsboro	50	50	Community Nursing Home
Kidder	Steele	-	42	Golden Manor Inc.		Mayville*	69	99	Luther Memorial Home
LaMoure	LaMoure	-	60	LaMoure Healthcare Manor	Walsh	Grafton	119	119	Lutheran Sunset Home
Logan	Napoleon	-	44	Logan County Home for Aged		Park River	80	80	Park River Good Sam. Ctr.
McHenry	Velva	-	48	Souris Valley Care Center	Ward	Kenmare	12	12	Comm. Skilled Nsg. Home
McIntosh	Ashley	30	44	Ashley Medical Center		Minot	106	106	Americana Healthcare Ctr.
	Wishek	95	105	Wishek Home for the Aged		Minot*	204	325	Trinity Nursing Home
McKenzie	Watford City	49	49	The Good Shepherd Home	Wells	Harvey	116	116	St. Aloisius Nursing Home
McLean	Garrison	71	71	Garrison Nursing Center	Williams	Tioga	30	30	Tioga Medical Ctr. LTC
	Garrison	-	24	Garrison Memorial Hosp. ICF		Williston*	118	179	Bethel Lutheran Home
	Underwood	64	64	Prairieview Homes	North Dakota		4,740	6,947	
					Number of Facilities		59	83	

* Refers to 1989 data indicating combined SNF/ICF facilities.

Source: North Dakota State Department of Health, Division of Health Facilities, Bismarck, 1989 & 1991.