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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 |
| | Westhope | 59 | 58 | Westhope Home | | New Salem | - | 60 | Elm Crest Manor |
| Bowman | 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 |
| | Bismarck | 97 | 101 | St. Vincent's Nsg. Home Inc. | Nelson | Aneta | - | 51 | Aneta Good Samaritan Ctr. |
| Cass | Arthur | - | 90 | Arthur Good Samaritan Ctr. | | Lakota | - | 58 | Gronna Good Samaritan Ctr. |
| | 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 | 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 | 132 | 132 | Villa Maria Health Care | Ramsey | Devils Lake | 108 | 108 | Lake Region Lutheran Home |
| Cavalier | Langdon | 63 | 63 | Maple Manor Nsg. Home Inc. | | Devils Lake | - | 84 | Devils Lake Good Sam. Ctr. |
| | Osnabrock | - | 41 | Osnabrock Good Sam. Ctr. | Ransom | Enderlin | - | 62 | Enderlin Hillcrest Manor |
| Dickey | Ellendale | 84 | 79 | Ellendale Nursing Ctr. | | Lisbon | 45 | 45 | Community Memorial Nursing |
| | Oakes | - | 120 | Oakes Good Samaritan Ctr. | | Lisbon | - | 40 | Parkside Lutheran Home |
| Divide | 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 | - | 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.