

Economic Impact of the North Dakota University System

Executive Summary

The North Dakota University System consists of the North Dakota University System Office and eleven college campuses located throughout the state. Expenditures by institutions of higher education have an economic impact in their respective areas and across the state. Total North Dakota University System expenditures included non-general fund sources (i.e., grants, contracts, donations, etc.). North Dakota University System expenditures for FY2008 comprise the direct economic impact. The North Dakota Input-Output Model was used to estimate the secondary economic impacts based on these expenditures. The model estimates the changes in gross business volume (gross receipts) for all sectors of the area economy. Key economic indicators estimated by the model include increased levels of retail trade and personal income. Gross business volume can also be used to estimate secondary employment and tax revenues based on historic relationships.

Key measures of the economic impact of the North Dakota University System in FY2008 include:

- Direct economic impacts (expenditures) of \$940 million which included \$689 million of non-general fund expenditures
- These expenditures resulted in increased total business activity of \$2.8 billion, which included \$684 million in additional retail trade activity and \$1,073 million of increased personal income
- Increased retail trade activity would generate \$31.7 million in additional sales tax revenue, and increased personal income would result in \$16.1 million in additional income tax revenue
- Direct employment by the North Dakota University System was 10,651 workers
- Secondary (indirect and induced) employment resulting from the business activity generated by the North Dakota University System was estimated to be nearly 26,000 workers
- In the Fall of 2007, The North Dakota University System provides educational opportunities for 35,075 full-time equivalent students
- North Dakota University System student living expenses (direct impacts) were estimated to be \$305 million (these expenditures were in addition to institution spending)
- Increased business activity generated by student spending was estimated to be \$756 million, including \$342 million in increased retail trade activity and an additional \$184 million of personal income
- Student spending would generate enough additional business activity to support over 5,500 secondary jobs

Economic Impact of the North Dakota University System

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The North Dakota University System is comprised of the North Dakota University System Office and eleven college campuses, and their related entities, located throughout the state. These institutions contribute to the state and local economies. Previous studies have estimated the economic impact for fiscal years 1999 and 2004 (Leistritz and Coon, 2005) and fiscal year 2006 (Leistritz and Coon, 2007). This study will provide a similar analysis for fiscal year 2008.

The North Dakota University System experienced substantial growth during the 1999-2006 period, and that trend has continued through 2008. The number of students attending schools in the North Dakota University System has increased since 1999, but the 2008 enrollment is slightly less than the recent peak achieved in 2004. Expenditures to operate the North Dakota University System have increased steadily during the FY1999 to FY2008 period. Much of this growth in expenditures has come from federal government and/or other out-of-state sources, primarily for research and economic development activities. Expenditures by institutions of higher education have an economic impact in their respective areas and across the state. The purpose of this report is to determine the economic impacts of the North Dakota University System for fiscal year (FY) 2008, and compare that to the previously estimated impacts for FY1999, FY2004, and FY2006. Also, the growth during the 9-year period (1999-2008) and the 2-year period (2006-2008) will be presented.

This analysis will include the impact for the total level of expenditures and for non-general fund expenditures. Non-general fund expenditures are those from revenue sources other than the state's tax revenue, i.e., grants, and contracts. The main body of this report will focus on the North Dakota University System, and Appendix B will contain an abbreviated economic impact analysis for each of the eleven campuses in the state and the North Dakota University System Office.

Methods

The initial task in any impact assessment is estimating the expenditures, or direct effects of the activity being studied. For this analysis, the North Dakota University System Office provided FY2008 financial and Fall 2007 FTE enrollment data for each of the eleven institutions and the North Dakota University System Office. These data were consistent with that used for the FY1999, FY2004, and FY2006 analysis. Expenditure data were provided for the same budget categories used for the previous analyses, and aggregated into similar economic sectors. Total expenditures and non-general fund expenditures were available. Capital improvement (building) and capital equipment expenditures for each of the institutions were included. Non-general fund capital equipment purchases at North Dakota State University and at the University of North Dakota were excluded from this analysis. Although this category contained significant levels of

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spending at both the schools, these purchases primarily were for scientific, lab, technical, etc., equipment which in all likelihood would be purchased out-of-state. Out-of-state purchases have no economic impact in North Dakota.

Data for this analysis was obtained from the ConnectND system. Expenditures data for each individual institution may not correspond exactly with that institution's financial statement. Entities whose data are included in the ConnectND data system include:

- North Dakota University System Office
- Bismarck State College
- Dickinson State University
- Lake Region State College
- Mayville State University
- Minot State University
- Minot State University - Bottineau Campus
- North Dakota State College of Science
- North Dakota State University
 - Agricultural Experiment Stations:
 - NDSU Main Research Center
 - Dickinson Research Extension Center
 - Central Grasslands Research Extension Center
 - Hettinger Research Extension Center
 - Langdon Research Extension Center
 - North Central Research Extension Center
 - Williston Research Extension Center
 - Carrington Research Extension Center
 - Agronomy Seed Farm
 - Northern Crops Institute
 - Upper Great Plains Transportation Institute
 - NDSU Cooperative Extension Service
 - North Dakota Forest Service
- University of North Dakota
 - School of Medicine and Health Services
- Valley City State University
- Williston State College

Data for organizations such as development foundations and university/private organizations (ex., NDSU Research & Technology Park) were not included in the ConnectND data base. Therefore, the financial activity of these entities are not reflected in this report. This results in the economic impact for institutions being understated, but the ConnectND data set provides a consistent, accurate, and annual data base for the analysis.

Capital improvements spending consisted of general fund and non-general fund sources. Non-general fund construction would have been funded by an external source such as grants, contracts, donations, etc. All expenditures data were in current year dollar values. This means the dollar values are expressed in terms of the purchasing power of the dollar in the respective years. The Consumer Price Index indicates that inflation during the 1999-2008 period was 30 percent

(Job Service North Dakota 2008). The North Dakota Input-Output Model was used to estimate the secondary economic impacts based on these expenditure data.

The North Dakota Input-Output Model consists of interdependence coefficients or multipliers that measure the level of business activity generated in each economic sector from an additional dollar of expenditures in a given sector. (A sector is a group of similar economic units, e.g., the firms engaged in retail trade make up the retail trade sector.) For a complete description of the input-output model, see Coon and Leistriz (1989). The model estimates the changes in gross business volume (gross receipts) for all sectors of the area economy resulting from the direct expenditures associated with the North Dakota University System. The increased gross business volumes are used to estimate secondary employment and tax revenues based on historic relationships. The procedures used in the analysis are parallel to those used in estimating the impact of other facilities and activities (Leistriz 1995; Bangsund and Leistriz 2004). Empirical testing has confirmed the model's accuracy in estimating changes in levels of economic activity in North Dakota; over the period 1958-2006, estimates of statewide personal income derived from the model averaged within 5 percent of comparable values reported by the U.S. Department of Commerce (Leistriz et al. 1990, Coon and Leistriz 2008).

This analysis will also include the economic impact of student spending. Student spending has an economic impact beyond that of the North Dakota University System. Estimated costs of education for 2007-2008 were available for each of the eleven institutions in the North Dakota University System (North Dakota Career Resource Network 2008). Those expenditures provide an indication of the economic impact student spending would have in the state.

North Dakota University System Economic Impact

The North Dakota University System operating budget grew from \$533 million in FY1999 to \$940 million in FY2008. This represents a \$407 million increase, or 76.4 percent during the 9-year period (Table 1). Operating expenditures grew by \$67 million (8.8 percent) during the FY2004 to FY2006 period and by 13.5 percent (\$112 million) for the FY2006 to FY2008 period. These total expenditures excluded capital equipment items that would not be purchased in North Dakota (computers, laboratory equipment, scientific equipment, etc.) since these out-of-state expenditures would have no direct economic impact in North Dakota. Wages and salaries represent the largest line item for each of the four years presented. Wages and salaries were \$226 million in FY1999 (42 percent of total) and grew to \$374 million in FY2008 (40 percent of total). The percentage of the total budget for wages and salaries has essentially remained unchanged for the 9-year period. Fringe benefits were the second largest line item for each fiscal year presented, increasing from \$56 million in FY1999 (10 percent of total) to \$112 million in FY2008 (12 percent of total). This increase reflects the rising cost of providing health insurance as a benefit. Wages and salaries plus benefits were \$281 million in FY1999, \$405 million in FY2004, \$451 million in FY2006, and \$486 million in FY2008. These items represent 52.8 percent of the total expenditure in FY1999, 53.1 percent in FY2004, 54.5 percent in FY2006, and 51.7 percent in FY2008. These two expenditure categories account for slightly over

Table 1. Total Direct Economic Impacts (Expenditures) for the North Dakota University System, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, FY1999, FY2004, FY2006, and FY2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|---------------------------------|----------------|----------------|----------------|----------------|-------------|-----------|
| | | | | | 1999-2008 | 2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Operating Expenditures: | | | | | | |
| Wages and Salaries | 225,512 | 318,838 | 352,778 | 374,053 | 65.9 | 6.0 |
| Fringe Benefits | 55,809 | 85,718 | 98,123 | 111,650 | 100.1 | 13.8 |
| Travel | 14,102 | 21,194 | 23,136 | 26,684 | 89.2 | 15.3 |
| Data Processing | 4,324 | 7,625 | 13,297 | 16,510 | 281.8 | 24.2 |
| Fees | 22,565 | 38,891 | 28,657 | 36,487 | 61.7 | 27.3 |
| Utilities | 12,054 | 15,780 | 18,173 | 22,562 | 87.2 | 24.2 |
| Communications | 11,284 | 11,050 | 8,057 | 8,340 | -26.1 | 3.5 |
| Insurance | 1,832 | 3,426 | 3,464 | 3,224 | 76.0 | -6.9 |
| Rents and Fees | 10,416 | 14,809 | 9,013 | 10,642 | 2.2 | 18.1 |
| Office | 15,372 | 20,968 | 10,526 | 10,884 | -29.2 | 3.4 |
| Supplies | 9,626 | 17,330 | 19,512 | 21,731 | 125.8 | 11.4 |
| Instructional | 5,677 | 7,155 | 16,916 | 20,868 | 267.6 | 23.4 |
| Noncapital Equipment | 1,777 | 2,981 | 6,441 | 7,114 | 300.3 | 10.4 |
| Merchandise for Resale | 34,696 | 32,785 | 37,858 | 41,861 | 20.7 | 10.6 |
| Repairs | 24,631 | 20,064 | 21,382 | 25,325 | 2.8 | 18.4 |
| Scholarships, etc. | 40,160 | 62,774 | 69,979 | 80,165 | 99.6 | 14.6 |
| General | 10,088 | 24,841 | 49,004 | 57,199 | 467.0 | 16.7 |
| Capital Equipment | 6,468 | 4,793 | 2,300 | 19,754 | 205.4 | 758.9 |
| Recovery of Expenses | - - | (11,945) | - - | - - | - - | - - |
| Capital Improvements | <u>26,529</u> | <u>62,243</u> | <u>39,488</u> | <u>45,246</u> | 70.6 | 14.6 |
| Total | 532,922 | 761,320 | 828,104 | 940,299 | 76.4 | 13.5 |
| Input-Output Model Sectors: | | | | | | |
| Construction | 26,529 | 62,243 | 39,488 | 45,246 | 70.6 | 14.6 |
| Communications and Public Util | 23,338 | 26,831 | 26,230 | 30,902 | 32.4 | 17.8 |
| Retail Trade | 73,616 | 74,066 | 93,553 | 122,212 | 66.0 | 30.6 |
| Finance, Insurance, Real Estate | 68,057 | 103,952 | 110,559 | 125,517 | 84.4 | 13.5 |
| Business and Personal Services | 75,710 | 112,615 | 135,477 | 162,204 | 114.2 | 19.7 |
| Households | <u>265,672</u> | <u>381,613</u> | <u>422,757</u> | <u>454,218</u> | 71.0 | 7.4 |
| Total | 532,922 | 761,320 | 828,104 | 940,299 | 76.4 | 13.5 |

one-half of the total expenditures during the FY1999 to FY2008 period. Wages and salaries and benefits have increased by 73 percent from FY1999 to FY2008.

Capital improvements were \$26 million in FY1999, \$62 million in FY2004, \$39 million in FY2006, and \$45 million in FY2008. Examining construction expenditures at four points in time does not necessarily lend itself to determining a trend. Expenditures for construction are often based on availability of funds from a variety of resources. General fund monies allocated to capital improvements come from tax revenues and generally reflect the economic welfare of the state during each legislative biennium. Most of the change in capital improvements during the last nine-year period has come from non-general fund sources, which will be discussed later in this report.

Expenditures made by the North Dakota University System comprise the direct economic impact in the state. This economic impact is distributed throughout the state through the eleven institutions. Direct impacts were \$533 million in FY1999, \$761 million in FY2004, \$828 million in FY2006, and \$940 million in FY2008. These expenditures were allocated to six industrial sectors of the North Dakota Input-Output Model. The Input-Output Model estimated the secondary economic impacts that result from the spending and re-spending of the original dollars by the multiplier process.

As the state's higher education institutions have expanded their roles in research, economic development, community and industrial partnerships, etc., these funding sources have also changed. Non-general fund revenue (grants, contracts, donations, etc.) has become an important source of growth in the higher education system. In FY1999, \$333 million of non-general fund expenditures comprised 62 percent of the total; these outlays increased to \$535 million in FY2004, 70 percent of the total (Table 2). In FY2006, non-general fund expenditures were \$614 million, which accounted for 74 percent of that year's total budget. Non-general fund expenditures were \$689 million in FY2008, which was 73 percent of the total budget. Non-general fund revenues increased \$357 million from FY1999 to FY2008, which represents a 107 percent change in total expenditures during the 9-year period. Non-general fund wages and salaries were \$116 million in FY1999, \$194 million in FY2004, \$236 million in FY2006, and \$246 million in FY2008. This represents 52 percent, 61 percent, 67 percent, and 65 percent of the total wages and salaries for those respective years. These wages and salaries go to workers who would not have employment on the campuses without the external funding sources. One of the most notable line items in the budget is for capital improvements, or construction. Non-general fund outlays for construction were \$21 million in FY1999, \$52 million in FY2004, \$34 million in FY2006, and \$36 million in FY2008. The non-general fund portion of the North Dakota University System spending for capital improvements has increased from 78 percent in FY1999 to 83 percent in FY2004, reaching 87 percent in FY2006, but declining slightly to 80 percent in FY2008. Similar to total direct expenditures, non-general fund outlays were allocated to six sectors of the Input-Output Model so secondary economic impacts could be estimated. Clearly, the growth of non-general fund revenue has provided a source of growth for the state's higher education system, and had an economic impact in North Dakota.

Table 2. Non-General Fund Direct Economic Impacts (Expenditures) for the North Dakota University System by Budget Category and Allocation to the Input-Output Model Industrial Sectors, FY1999, FY2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|----------------------------|----------------|----------------|----------------|----------------|-------------|-----------|
| | | | | | 1999-2008 | 2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Operating Expenditures: | | | | | | |
| Wages and Salaries | 116,454 | 194,399 | 236,265 | 246,481 | 111.7 | 4.3 |
| Fringe Benefits | 28,161 | 50,243 | 64,446 | 72,168 | 156.3 | 12.0 |
| Travel | 10,839 | 17,170 | 19,323 | 22,177 | 104.6 | 14.8 |
| Data Processing | 2,546 | 5,676 | 11,096 | 11,884 | 366.8 | 7.1 |
| Fees | 17,013 | 34,267 | 26,893 | 33,329 | 95.9 | 23.9 |
| Utilities | 4,195 | 6,975 | 9,893 | 12,580 | 199.9 | 27.2 |
| Communications | 7,683 | 7,991 | 6,227 | 6,326 | -17.7 | 1.6 |
| Insurance | 1,063 | 2,144 | 2,320 | 2,326 | 118.8 | 0.3 |
| Rents and Fees | 7,595 | 13,062 | 7,684 | 9,630 | 26.8 | 25.3 |
| Office | 9,104 | 15,269 | 7,883 | 8,271 | -9.1 | 4.9 |
| Supplies | 8,055 | 14,805 | 16,136 | 18,320 | 127.4 | 13.5 |
| Instructional | 2,654 | 4,349 | 12,645 | 16,103 | 506.7 | 27.3 |
| Noncapital Equipment | 1,122 | 2,159 | 5,401 | 5,895 | 425.4 | 9.1 |
| Merchandise for Resale | 31,704 | 32,784 | 37,857 | 41,860 | 32.0 | 10.6 |
| Repairs | 16,660 | 14,861 | 16,999 | 19,124 | 14.8 | 12.5 |
| Scholarships, etc. | 38,495 | 58,787 | 55,133 | 61,670 | 60.2 | 11.9 |
| General | 6,904 | 18,312 | 42,095 | 47,763 | 591.8 | 13.5 |
| Capital Equipment | 1,847 | 1,789 | 1,238 | 17,351 | 839.4 | 1301.5 |
| Recovery of Expenses | -- | (11,945) | -- | -- | -- | -- |
| Capital Improvements | <u>20,807</u> | <u>51,846</u> | <u>34,266</u> | <u>36,201</u> | 74.0 | 5.6 |
| Total | 332,901 | 534,943 | 613,800 | 689,459 | 107.1 | 12.3 |
| Input-Output Model Sectors | | | | | | |
| Construction | 20,807 | 51,846 | 34,266 | 36,201 | 74.0 | 5.6 |
| Comm and Public Util | 11,878 | 14,966 | 16,120 | 18,906 | 59.2 | 17.3 |
| Retail Trade | 54,486 | 59,211 | 81,160 | 107,801 | 97.9 | 32.8 |
| Finance, Ins, Real Estate | 36,819 | 65,448 | 74,450 | 84,124 | 128.5 | 13.0 |
| Bus and Pers Serv | 53,962 | 90,286 | 116,406 | 134,276 | 148.8 | 15.4 |
| Households | <u>154,949</u> | <u>253,186</u> | <u>291,398</u> | <u>308,151</u> | 98.9 | 5.7 |
| Total | 332,901 | 534,943 | 613,800 | 689,459 | 107.1 | 12.3 |

The total impacts associated with the North Dakota University System were estimated by applying the Input-Output Model coefficients to the total expenditures. Total impacts were estimated to be \$1.6 billion in FY1999, \$2.2 billion in FY2004, \$2.4 billion in FY2006, and \$2.8 billion in FY2008 (Table 3). Total economic impact has increased by \$1.2 billion (77 percent) during the 9-year period. Sectors that received major contributions include households (i.e., personal income of area residents), retail trade, construction, and finance, insurance and real estate. Retail trade activity amounted to \$393 million in FY1999 and \$684 million in FY2008. The change in the level of retail trade during this period was \$291 million, or a 74 percent increase. Economic impact on personal income (households) was an increase from \$613 million to \$1,073 million during the 9-year period, an increase of \$460 million. Levels of business activity resulting from the North Dakota University System would support about 16,000 secondary (indirect and induced) jobs in 1999 and nearly 26,000 in 2008 (Table 4). These jobs are in addition to the 8,120 persons employed by the North Dakota University System in 1999 and 10,651 in 2008. The additional retail sales in FY1999 (\$393 million) resulted in \$18.2 million in additional sales and use tax collections, while additional personal income (\$613 million) would result in about \$9.2 million in additional personal income tax collections. In FY2008, retail trade activity (\$684 million) would produce \$31.7 million in additional sales and use tax revenues, while the increased personal income (\$1,073 million) would generate \$16.1 million in additional personal income tax collections. Table 3 presents a detailed breakdown of the economic impact of the North Dakota University System expenditures for FY1999, FY2004, FY2006, and FY2008, and the growth for the 9-year period.

A similar analysis was done for non-general fund expenditures and is presented in Table 3. Non-general fund outlays in FY1999 generated \$1.0 billion in total business activity, \$1.6 billion in FY2004, \$1.8 billion in FY2006, and \$2.0 billion in FY2008. Growth in business activity was 108 percent during the 9-year period. Increased retail trade activity was estimated to be \$248 million in FY1999 and \$507 million in FY2008; these levels would generate \$11.5 million and \$23.5 million in increased sales and use tax collections for the respective years. Increased personal income in FY1999 (\$368 million) would result in \$5.5 million in additional income tax collections, and FY2008 (\$756 million) would result in \$11.3 million in new income taxes. Non-general fund economic impacts make up a large portion of the total North Dakota University System impact, and its share of the total has increased during the last seven years. This highlights the importance that the higher education institutions play in securing financial support from grants, contracts, donations, etc., and their importance to the North Dakota economy.

Table 3. Total and Non-General Fund Economic Impacts for the North Dakota University System, Fiscal Year 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|---------------------------------|----------------|----------------|----------------|----------------|-------------|-----------|
| | | | | | 1999-2008 | 2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Total Impact: | | | | | | |
| Construction | 65,070 | 117,946 | 100,140 | 112,887 | 73.5 | 12.7 |
| Comm & Pub Util | 76,560 | 103,633 | 110,370 | 125,617 | 64.1 | 13.8 |
| Retail Trade | 392,833 | 536,877 | 597,584 | 684,069 | 74.1 | 14.5 |
| Fin, Ins, Real Estate | 139,715 | 207,621 | 223,761 | 251,652 | 80.1 | 12.5 |
| Bus & Pers Services | 103,849 | 153,552 | 180,280 | 212,297 | 104.4 | 17.8 |
| Prof & Soc Services | 39,731 | 57,512 | 62,822 | 69,725 | 75.5 | 11.0 |
| Households | 612,835 | 887,089 | 968,846 | 1,073,533 | 75.2 | 10.8 |
| Other ¹ | <u>126,456</u> | <u>179,794</u> | <u>196,758</u> | <u>221,915</u> | 75.5 | 12.8 |
| Total | 1,557,049 | 2,244,024 | 2,440,561 | 2,751,695 | 76.7 | 12.7 |
| Non-General Fund Impact: | | | | | | |
| Construction | 44,163 | 90,086 | 78,001 | 84,342 | 91.0 | 8.1 |
| Comm & Pub Util | 44,380 | 68,060 | 77,533 | 87,144 | 96.4 | 12.4 |
| Retail Trade | 247,754 | 376,788 | 444,393 | 507,419 | 104.8 | 14.2 |
| Fin, Ins, Real Estate | 80,184 | 136,560 | 156,023 | 173,842 | 116.8 | 11.4 |
| Bus & Pers Services | 70,970 | 118,369 | 148,781 | 169,984 | 139.5 | 14.3 |
| Prof & Soc Services | 23,867 | 39,196 | 44,941 | 49,224 | 106.2 | 9.5 |
| Households | 367,522 | 603,700 | 691,608 | 756,177 | 105.8 | 9.3 |
| Other ¹ | <u>77,625</u> | <u>124,256</u> | <u>143,421</u> | <u>160,301</u> | 106.5 | 11.8 |
| Total | 956,465 | 1,557,015 | 1,784,701 | 1,988,433 | 107.9 | 11.4 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Table 4. Direct Employment by the North Dakota University System, Secondary Employment Attributed to Higher Education Expenditures, and Student Enrollment, 1999, 2004, 2006, and 2008

| Year | Direct Employment ¹ | Secondary Employment ² | Student Enrollement ³ |
|-------------------|--------------------------------|-----------------------------------|----------------------------------|
| 1999 | 8,120 | 16,072 | 30,720 |
| 2004 | 9,608 | 23,058 | 36,245 |
| 2006 | 10,260 | 24,690 | 35,373 |
| 2008 ⁴ | 10,651 | 25,935 | 35,075 |
| Change 1999-2008: | | | |
| Number | 2,531 | 9,863 | 4,355 |
| Percent | 31.2 | 61.4 | 14.2 |
| Change 2006-2008: | | | |
| Number | 391 | 1,245 | -298 |
| Percent | 3.8 | 5.0 | -0.8 |

¹ North Dakota University System employment is an employee head count consisting of faculty, classified, other non-classified and temporary. Student workers were not included in this total.

² Secondary employment is full-time equivalent workers.

³ Student enrollment is full-time equivalent students.

⁴ Student enrollments were for fall 2007 academic year because they more closely matched the FY2008 financial period.

Student Economic Impact

Student spending creates an economic impact beyond that of the North Dakota University System. These expenditures included all student spending (personal and recreational, books and supplies, and room and board) except tuition and fees. Estimated costs of education for 2005-2006 were available for each of the eleven institutions in the North Dakota University System (North Dakota Career Resource Network 2006). A \$2,800 personal and recreation spending amount was added to books, supplies, room, and board costs to estimate each student's spending for the academic year. Similar data were available for 2007-2008 (North Dakota Career Resource Network 2008). The \$2,800 personal and recreational expenditure was increased to \$3,000 for the 2007-2008, to reflect the 7 percent increase in the Consumer Price Index during that period. Student living expenditures are presented in Appendix Table 10. Student living expenses ranged from \$7,528 per student per academic year at North Dakota State College of Science to \$9,254 for North Dakota State University students.

Multiplying the Fall 2007 enrollment for each school by their respective per student living expenditures provided an estimate of direct economic impacts for each of the eleven institutions. This may overstate student living expenses, because while a large number of students live on-campus or independently off-campus, a small number may live at home. Students living at home would likely not incur any out-of-pocket room and board expenses. Data were not available to determine the number of students attending each school and living at home.

Fall 2007 enrollments were used for this analysis because they more clearly match the FY2008 financial period. In the Fall of 2007, the 35,075 FTE students enrolled in the North Dakota University System spent \$305 million in North Dakota. The average for the 2007-2008 academic year was \$8,681.44. Over 63 percent of the North Dakota University System student population were in the Fargo and Grand Forks communities. Students at North Dakota State University and the University of North Dakota accounted for 66 percent of all student spending in FY2008. A large share of the student spending would occur in the community where their respective institutions are located, due to the nature of their purchases (i.e., books, supplies, and room and board). Some of the student expenditures for recreation and personal items may have been made in cities that are major trade centers. However, for this analysis, all student spending will be assumed to remain in the community where the college or university is located. This analysis will provide an estimate of the economic impact resulting from student spending in North Dakota for FY2008. The respective 2007-2008 per student spending was multiplied by the 2007 Fall FTE students enrollment and totaled for the eleven institutions to estimate total student spending of \$305 million in North Dakota in FY2008 (Table 5). These student expenditures comprise the direct impacts, and are in addition to those of the North Dakota University System. In FY2008, student direct expenditures were 32.4 percent of the total made by the North Dakota University System.

Student spending was allocated to the retail trade (75 percent) and finance, insurance, and real estate (25 percent) sectors of the Input-Output Model. Total economic impacts were estimated to be \$757 million in FY2008. The sector that received the largest impact was the retail trade sector, with \$342 million in retail trade activity. The household sector (personal income) increased by \$184 million. These increased levels of retail trade activity would generate \$15.8 million in sales and use tax collections in FY2008. Personal income tax collections were estimated to be \$2.8 million in FY2008 as the result of increased economic activity in the household sector. Increased levels of business activity resulting from North Dakota University System student spending would support over 5,500 secondary (indirect and induced) jobs in the state in FY2008.

Table 5. Direct and Total Economic Impacts Resulting from Student Living Expenditures, for Students Enrolled in the North Dakota University System, FY2008

| Item | FY2008 |
|-------------------------------------|-----------------|
| | -----\$000----- |
| Direct Impacts: | |
| Student Expenditures | 304,502 |
| Direct Impacts by I-O Model Sector: | |
| Retail Trade | 228,377 |
| Finance, Insurance, Real Estate | <u>76,125</u> |
| Total | 304,502 |
| Total Impacts: | |
| Construction | 13,558 |
| Comm and Public Utilities | 22,137 |
| Retail Trade | 342,306 |
| Finance, Insurance, Real Estate | 100,143 |
| Business and Personal Services | 10,262 |
| Professional and Social Services | 12,515 |
| Households | 183,614 |
| Other ¹ | <u>72,084</u> |
| | <u>756,619</u> |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Conclusions

The North Dakota University System has a significant economic impact in the state. Higher education expenditures injected \$533 million into local economies in FY1999, \$761 million in FY2004, \$828 million in FY2006, and \$940 million in FY2008. Much of the budget growth during this 9-year period has come from non-general fund sources such as grants, contracts, donations, etc. These expenditures have resulted in increased levels of business activity in FY1999 of \$1.6 billion, \$2.2 billion in FY2004, \$2.4 billion in FY2006, and \$2.8 billion in FY2008. Key measures of economic impact are levels of retail sales and personal income. Retail trade sales attributed to the North Dakota University System expenditures were estimated at \$393 million, \$537 million, \$598 million, and \$684 million in fiscal years 1999, 2004, 2006, and 2008 respectively. Personal income generated from this level of business activity was estimated to be \$613 million in FY1999, \$887 million in FY2004, \$969 million in FY2006, and \$1,073 million in FY2008.

Student expenditures create an economic impact in addition to that of the North Dakota University System. Student spending added \$305 million to the state's economy in FY2008. These expenditures are in addition to those made by the North Dakota University System. Student expenditures were 32.7 percent of the total North Dakota University System spending in FY2008. The total economic impact would be \$757 million in FY2008, with increased retail trade activity of \$342 million and increased personal income of \$184 million.

Adding North Dakota University System and student spending provided a total economic impact estimate for the state. Direct economic impacts were \$1.2 billion in FY2008, with the total impact estimated at \$3.5 billion. This level of business activity would produce \$1.0 billion in additional retail trade activity and a \$1.3 billion increase in the household sector (personal income). Retail trade activity would generate \$47.5 million in sales and use tax collections, and \$18.9 million of personal income tax revenues, when the expenditures of the North Dakota University System and student spending were combined.

Institutions of higher education are a significant force in the North Dakota economy. They provide the educational opportunities necessary for a workforce that needs more technological skills, and also serve as centers for local and regional economic development opportunities. In FY2008 these institutions employed over 10,000 workers, were educating over 35,000 students, and their expenditures were at a level that supported over 25,000 secondary workers, or over 30,000 when student spending was included. When measured in terms of economic variables, the North Dakota University System is a key component of the state's economy.

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APPENDIX A

Appendix Table 1. Total Direct Economic Impacts (Expenditures) for the North Dakota University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, Fiscal Year 1999 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|------------------|------------------|--------------------|
| Wages & Salaries | 7,624,362 | 5,633,759 | 2,692,858 | 3,933,608 | 13,780,777 | 1,764,651 | 11,405,658 | 75,085,567 | 95,234,284 | 5,327,108 | 2,242,611 | 786,569 | 225,511,812 |
| Fringe Benefits | 1,856,496 | 1,565,445 | 666,554 | 1,066,327 | 3,437,860 | 495,309 | 3,072,878 | 18,312,018 | 23,233,796 | 1,350,183 | 564,791 | 187,594 | 55,809,251 |
| Travel | 311,741 | 480,363 | 156,701 | 200,885 | 618,289 | 113,737 | 550,371 | 6,096,115 | 5,032,178 | 321,503 | 152,614 | 67,862 | 14,102,359 |
| Data Processing | 109,895 | 67,030 | 53,900 | 118,989 | 114,529 | 29,096 | 243,785 | 1,661,310 | 1,438,529 | 427,223 | 36,587 | 23,224 | 4,324,097 |
| Fees | 474,420 | 1,007,687 | 196,013 | 567,687 | 1,122,676 | 328,649 | 348,983 | 7,324,642 | 10,117,064 | 780,895 | 167,540 | 128,377 | 22,564,633 |
| Utilities | 481,565 | 491,370 | 153,525 | 292,695 | 753,189 | 125,291 | 879,757 | 4,218,318 | 4,212,632 | 335,987 | 109,544 | | 12,053,873 |
| Communications | 255,922 | 329,546 | 71,433 | 165,643 | 309,983 | 86,548 | 782,556 | 3,949,782 | 4,810,922 | 458,170 | 47,554 | 16,156 | 11,284,215 |
| Insurance | 25,700 | 30,186 | 13,557 | 28,265 | 54,362 | 10,103 | 101,902 | 376,748 | 1,151,895 | 29,875 | 8,677 | 150 | 1,831,420 |
| Rents & Leases | 246,088 | 8,893 | 13,864 | 704,269 | 225,896 | 9,161 | 241,281 | 3,190,017 | 5,346,155 | 363,580 | 65,985 | 948 | 10,416,137 |
| Office | 338,831 | 299,072 | 104,844 | 124,504 | 439,558 | 89,197 | 397,234 | 10,293,392 | 2,987,251 | 165,460 | 66,624 | 66,404 | 15,372,371 |
| Supplies | 721,042 | 293,069 | 79,952 | 190,024 | 510,459 | 111,104 | 435,808 | | 6,841,298 | 202,164 | 225,201 | 15,330 | 9,625,451 |
| Instructional | 434,916 | 232,240 | 125,997 | 141,806 | 475,758 | 63,520 | 1,023,268 | | 2,641,202 | 241,489 | 116,367 | 180,809 | 5,677,372 |
| Noncap Equipment | | | 45,028 | 90,488 | 316,079 | 19,110 | 210,160 | 889,989 | | 194,601 | 1,225 | 9,944 | 1,776,624 |
| Merch for Resale | 906,895 | 400,876 | 335,963 | 292,487 | | 101,176 | 2,007,713 | 11,533,334 | 18,428,685 | 282,908 | 406,173 | | 34,696,210 |
| Repairs | 308,845 | 595,803 | 85,007 | 194,265 | 428,991 | 29,747 | 942,152 | 4,650,159 | 17,067,743 | 199,955 | 123,402 | 4,966 | 24,631,035 |
| Scholarships etc. | 1,938,131 | 1,965,302 | 940,073 | 838,810 | 2,959,876 | 707,881 | 2,572,791 | 9,964,304 | 12,793,931 | 1,299,853 | 1,096,413 | 3,082,734 | 40,160,099 |
| General | 435,588 | 230,959 | 128,197 | 125,127 | 456,290 | 144,343 | 1,413,991 | 2,777,946 | 2,452,843 | 208,580 | 165,224 | 1,549,000 | 10,088,088 |
| Capital Equipment | 525,987 | 437,571 | 161,197 | 140,197 | 707,930 | 105,248 | 870,754 | 1,731,519 | 1,275,680 | 326,479 | 185,369 | | 6,467,931 |
| Capital Improvement | 916,398 | 869,272 | 722,973 | 209,806 | 3,375,092 | 241,840 | 3,066,092 | 5,580,589 | 10,342,136 | 841,460 | 363,440 | | 26,529,098 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 17,912,822 | 14,938,443 | 6,747,636 | 9,425,882 | 30,087,594 | 4,575,711 | 30,567,134 | 167,635,749 | 225,408,224 | 13,357,473 | 6,145,341 | 6,120,067 | 532,922,076 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 916,398 | 869,272 | 722,973 | 209,806 | 3,375,092 | 241,840 | 3,066,092 | 5,580,589 | 10,342,136 | 841,460 | 363,440 | 0 | 26,529,098 |
| (6) Comm & Pub Util | 737,487 | 820,916 | 224,958 | 458,338 | 1,063,172 | 211,839 | 1,662,313 | 8,168,100 | 9,023,554 | 794,157 | 157,098 | 16,156 | 23,338,088 |
| (8) Retail Trade | 2,927,671 | 1,662,828 | 852,981 | 979,506 | 2,449,784 | 489,355 | 4,944,937 | 24,448,234 | 32,174,116 | 1,413,101 | 1,000,959 | 272,487 | 73,615,959 |
| (9) FIRE | 2,128,284 | 1,604,524 | 693,975 | 1,798,861 | 3,718,118 | 514,573 | 3,416,061 | 21,878,783 | 29,731,846 | 1,743,638 | 639,453 | 188,692 | 68,056,808 |
| (10) Bus & Pers Ser | 1,640,489 | 2,381,842 | 619,818 | 1,206,953 | 2,740,775 | 645,572 | 3,499,282 | 22,510,172 | 36,108,357 | 1,938,156 | 645,367 | 1,773,429 | 75,710,212 |
| (12) Households | 9,562,493 | 7,599,061 | 3,632,931 | 4,772,418 | 16,740,653 | 2,472,532 | 13,978,449 | 85,049,871 | 108,028,215 | 6,626,961 | 3,339,024 | 3,869,303 | 265,671,911 |
| TOTAL | 17,912,822 | 14,938,443 | 6,747,636 | 9,425,882 | 30,087,594 | 4,575,711 | 30,567,134 | 167,635,749 | 225,408,224 | 13,357,473 | 6,145,341 | 6,120,067 | 532,922,076 |

Appendix Table 2. Total Direct Economic Impacts (Expenditures) for the North Dakota University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, Fiscal Year 2004 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|
| Wages & Salaries | 10,677,953 | 8,449,508 | 3,875,177 | 5,107,680 | 18,289,339 | 2,071,683 | 13,102,386 | 108,330,752 | 138,411,786 | 6,200,614 | 3,181,196 | 1,140,167 | 318,838,241 |
| Fringe Benefits | 3,075,352 | 2,227,221 | 1,104,810 | 1,748,436 | 5,064,750 | 684,626 | 4,044,488 | 28,633,198 | 35,890,600 | 1,979,661 | 969,707 | 294,735 | 85,717,584 |
| Travel | 528,006 | 897,347 | 230,405 | 343,727 | 1,066,284 | 133,337 | 682,995 | 8,740,074 | 7,964,347 | 299,950 | 225,241 | 81,876 | 21,193,589 |
| Data Processing | 175,041 | 168,212 | 74,382 | 139,673 | 277,341 | 44,941 | 205,964 | 3,573,584 | 2,476,813 | 438,545 | 32,761 | 18,225 | 7,625,482 |
| Fees | 1,937,574 | 1,519,806 | 565,394 | 17,311 | 1,894,896 | 400,357 | 976,164 | 14,816,581 | 15,756,380 | 73,682 | 417,180 | 516,118 | 38,891,443 |
| Utilities | 513,452 | 704,119 | 251,062 | 354,274 | 865,867 | 153,410 | 1,064,866 | 5,849,285 | 5,510,969 | 330,980 | 181,683 | | 15,779,967 |
| Communications | 195,012 | 265,110 | 81,955 | 73,800 | 400,092 | 87,587 | 772,948 | 4,335,990 | 4,402,881 | 340,817 | 74,100 | 20,141 | 11,050,433 |
| Insurance | 85,849 | 77,046 | 35,117 | 52,517 | 105,135 | 21,761 | 111,411 | 762,310 | 2,085,877 | 62,215 | 23,396 | 2,933 | 3,425,567 |
| Rents & Leases | 522,825 | 246,343 | 37,246 | 56,662 | 99,326 | 49,545 | 221,126 | 3,466,018 | 9,449,143 | 594,423 | 52,256 | 13,923 | 14,808,836 |
| Office | 485,438 | 617,193 | 112,590 | 235,539 | 507,815 | 129,328 | 540,853 | 14,203,920 | 3,728,638 | 212,103 | 119,034 | 75,807 | 20,968,258 |
| Supplies | 422,027 | 496,188 | 86,098 | 283,568 | 519,378 | 139,117 | 499,540 | | 14,328,562 | 216,850 | 328,271 | 10,289 | 17,329,888 |
| Instructional | 565,110 | 264,664 | 132,458 | 134,743 | 490,796 | 64,094 | 1,304,529 | | 3,468,160 | 231,908 | 108,646 | 389,487 | 7,154,595 |
| Noncap Equipment | 249,205 | 304,200 | 24,414 | 121,542 | 289,763 | 63,675 | 440,677 | 1,324,452 | | 79,110 | 78,100 | 6,323 | 2,981,461 |
| Merch for Resale | 1,556,688 | 730,626 | 400,252 | 416,502 | | 160,204 | 2,308,280 | 15,020,855 | 11,157,239 | 439,836 | 594,473 | | 32,784,955 |
| Repairs | 394,657 | 305,344 | 119,440 | 206,538 | 586,510 | 24,260 | 940,302 | 5,679,687 | 11,422,354 | 274,585 | 105,679 | 4,303 | 20,063,659 |
| Scholarships etc. | 3,469,368 | 3,480,444 | 1,099,405 | 1,292,335 | 4,416,501 | 836,697 | 3,529,367 | 19,394,720 | 18,798,594 | 1,507,728 | 1,720,918 | 3,228,405 | 62,774,482 |
| General | 1,680,689 | 387,487 | 199,696 | 1,323,736 | 2,876,076 | 124,510 | 2,698,206 | 3,030,301 | 4,529,810 | 1,166,469 | 667,931 | 6,156,061 | 24,840,972 |
| Capital Equipment | 784,843 | 174,559 | 117,625 | 93,314 | 981,695 | 44,070 | 448,812 | 1,397,785 | 510,359 | 149,726 | 89,794 | | 4,792,582 |
| Capital Improvement | 365,648 | 1,696,081 | 695,976 | 3,778,013 | 670,525 | 116,870 | 757,340 | 20,138,649 | 25,177,798 | 2,423,340 | 1,117,152 | 5,305,869 | 62,243,261 |
| Recovery of Exp | | | | | | | | (11,945,358) | | | | | (11,945,358) |
| TOTAL | 27,684,737 | 23,011,498 | 9,243,502 | 15,779,910 | 39,402,089 | 5,350,072 | 34,650,254 | 246,752,803 | 315,070,310 | 17,022,542 | 10,087,518 | 17,264,662 | 761,319,897 |
| | | | | | | | | | | | | | |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 365,648 | 1,696,081 | 695,976 | 3,778,013 | 670,525 | 116,870 | 757,340 | 20,138,649 | 25,177,798 | 2,423,340 | 1,117,152 | | 62,243,261 |
| (6) Comm & Pub Util | 708,464 | 969,229 | 333,017 | 428,074 | 1,265,959 | 240,997 | 1,837,814 | 10,185,275 | 9,913,850 | 671,797 | 255,783 | 20,141 | 26,830,400 |
| (8) Retail Trade | 4,063,311 | 2,587,430 | 873,437 | 1,285,208 | 2,789,447 | 600,488 | 5,542,691 | 20,001,654 | 33,192,958 | 1,329,533 | 1,318,318 | 481,906 | 74,066,381 |
| (9) FIRE | 3,684,026 | 2,550,610 | 1,177,173 | 1,857,615 | 5,269,211 | 755,932 | 4,377,025 | 32,861,526 | 47,425,620 | 2,636,299 | 1,045,359 | 5,617,460 | 103,951,987 |
| (10) Bus & Pers Ser | 4,715,967 | 3,278,196 | 1,189,317 | 2,030,985 | 6,701,107 | 727,405 | 5,503,631 | 35,840,227 | 42,149,704 | 2,253,231 | 1,448,792 | 6,776,583 | 112,615,145 |
| (12) Households | 14,147,321 | 11,929,952 | 4,974,582 | 6,400,015 | 22,705,840 | 2,908,380 | 16,631,753 | 127,725,472 | 157,210,380 | 7,708,342 | 4,902,114 | 4,368,572 | 381,612,723 |
| TOTAL | 27,684,737 | 23,011,498 | 9,243,502 | 15,779,910 | 39,402,089 | 5,350,072 | 34,650,254 | 246,752,803 | 315,070,310 | 17,022,542 | 10,087,518 | 17,264,662 | 761,319,897 |

| Appendix Table 3. Total Direct Economic Impacts (Expenditures) for North Dakota State University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, Fiscal Year 2006 (Current Year Dollars) | | | | | | | | | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|------------------|------------------|--------------------|
| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| Wages & Salaries | 12,644,309 | 9,833,672 | 4,184,656 | 5,709,434 | 19,501,429 | 2,284,186 | 14,149,136 | 121,985,291 | 151,183,856 | 6,582,135 | 3,421,147 | 1,298,308 | 352,777,559 |
| Fringe Benefits | 3,743,539 | 2,883,671 | 1,208,378 | 1,835,315 | 5,727,543 | 745,962 | 4,298,317 | 33,549,557 | 40,474,669 | 2,149,184 | 1,166,256 | 340,176 | 98,122,567 |
| Travel | 531,738 | 899,550 | 199,125 | 420,017 | 893,465 | 124,884 | 918,250 | 10,026,826 | 8,370,132 | 370,745 | 282,209 | 98,588 | 23,135,529 |
| Data Processing | 327,367 | 494,722 | 184,741 | 62,302 | 380,011 | 60,331 | 552,598 | 5,050,506 | 5,525,722 | 596,947 | 58,329 | 3,674 | 13,297,250 |
| Fees | 881,266 | 740,900 | 309,159 | 44,424 | 767,935 | 317,634 | 145,201 | 11,431,445 | 13,465,984 | 267,219 | 77,966 | 208,256 | 28,657,389 |
| Utilities | 577,478 | 703,023 | 260,112 | 676,843 | 1,101,064 | 168,465 | 1,196,565 | 7,106,409 | 5,768,536 | 392,415 | 221,992 | | 18,172,902 |
| Communications | 77,029 | 177,133 | 33,518 | 62,153 | 122,147 | 47,688 | 496,731 | 2,859,553 | 3,797,506 | 306,715 | 54,763 | 22,474 | 8,057,410 |
| Insurance | 19,678 | 171,075 | 30,494 | 73,051 | 107,172 | 18,336 | 126,829 | 872,800 | 1,961,727 | 59,458 | 21,240 | 1,683 | 3,463,543 |
| Rents & Leases | 510,488 | 55,521 | 80,099 | 232,155 | 56,140 | 33,613 | 197,405 | 2,066,192 | 5,378,422 | 322,737 | 65,645 | 14,330 | 9,012,747 |
| Office | 344,519 | 581,372 | 114,225 | 292,574 | 413,872 | 74,272 | 622,542 | 4,041,610 | 3,662,105 | 206,119 | 101,210 | 71,630 | 10,526,050 |
| Supplies | 686,885 | 674,880 | 167,146 | 310,594 | 1,159,118 | 109,018 | 497,979 | 7,908,984 | 7,604,410 | 263,338 | 119,319 | 10,295 | 19,511,966 |
| Instructional | 697,957 | 625,737 | 132,656 | 165,514 | 941,486 | 84,449 | 1,408,982 | 5,111,382 | 7,122,438 | 295,087 | 323,733 | 7,029 | 16,916,450 |
| Noncap Equipment | 176,622 | 347,664 | 91,623 | 158,249 | 104,865 | 30,018 | 517,170 | 1,996,508 | 2,782,179 | 203,460 | 25,443 | 6,869 | 6,440,670 |
| Merch for Resale | 1,505,877 | 622,937 | 425,528 | 667,788 | 1,474,247 | 226,278 | 2,666,128 | 14,787,258 | 14,291,952 | 551,023 | 638,863 | | 37,857,879 |
| Repairs | 407,827 | 638,785 | 229,680 | 208,912 | 809,064 | 76,724 | 1,392,399 | 4,409,358 | 12,801,122 | 347,552 | 58,579 | 2,362 | 21,382,364 |
| Scholarships etc. | 3,299,547 | 4,981,850 | 1,253,694 | 1,661,422 | 5,444,005 | 800,748 | 3,213,748 | 22,034,371 | 20,324,703 | 1,714,453 | 1,563,518 | 3,686,961 | 69,979,020 |
| General | 2,052,786 | 2,599,468 | 674,201 | 880,007 | 2,510,736 | 265,469 | 2,167,311 | 14,576,239 | 20,924,196 | 1,266,311 | 747,955 | 339,143 | 49,003,822 |
| Capital Equipment | 297,850 | 261,965 | 29,594 | 102,673 | 350,453 | 8,400 | 314,219 | 455,388 | 233,671 | 183,251 | 62,633 | | 2,300,097 |
| Capital Improvement | 844,104 | 1,577,255 | 549,536 | 175,907 | 4,422,269 | 476,567 | 739,416 | 14,411,188 | 15,804,556 | 295,367 | 192,463 | | 39,488,628 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 29,626,866 | 28,871,180 | 10,158,165 | 13,739,334 | 46,287,021 | 5,953,042 | 35,620,926 | 284,680,865 | 341,477,886 | 16,373,516 | 9,203,263 | 6,111,778 | 828,103,842 |
| | | | | | | | | | | | | | |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 844,104 | 1,577,255 | 549,536 | 175,907 | 4,422,269 | 476,567 | 739,416 | 14,411,188 | 15,804,556 | 295,367 | 192,463 | | 39,488,628 |
| (6) Com & Pub Util | 654,507 | 880,156 | 293,630 | 738,996 | 1,223,211 | 216,153 | 1,693,296 | 9,965,962 | 9,566,042 | 699,130 | 276,755 | 22,474 | 26,230,312 |
| (8) Retail | 3,709,710 | 3,114,555 | 960,772 | 1,697,392 | 4,444,041 | 532,435 | 6,027,020 | 34,301,130 | 35,696,755 | 1,702,278 | 1,271,201 | 95,823 | 93,553,112 |
| (9) FIRE | 4,273,705 | 3,110,267 | 1,318,971 | 2,140,521 | 5,890,855 | 797,911 | 4,622,551 | 36,488,549 | 47,814,818 | 2,531,379 | 1,253,141 | 356,189 | 110,598,857 |
| (10) Bus & Pers Ser | 4,200,984 | 5,373,425 | 1,596,906 | 1,615,662 | 5,361,211 | 845,042 | 5,175,759 | 45,494,374 | 61,087,156 | 2,848,774 | 1,225,038 | 652,023 | 135,476,354 |
| (12) Households | 15,943,856 | 14,815,522 | 5,438,350 | 7,370,856 | 24,945,434 | 3,084,934 | 17,362,884 | 144,019,662 | 171,508,559 | 8,296,588 | 4,984,665 | 4,985,269 | 422,756,579 |
| TOTAL | 29,626,866 | 28,871,180 | 10,158,165 | 13,739,334 | 46,287,021 | 5,953,042 | 35,620,926 | 284,680,865 | 341,477,886 | 16,373,516 | 9,203,263 | 6,111,778 | 828,103,842 |

Appendix Table 4. Total Direct Economic Impacts (Expenditures) for North Dakota University Systems and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sector, Fiscal Year 2008 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|-------------------|------------------|--------------------|
| Wages & Salaries | 13,703,590 | 11,286,146 | 4,952,288 | 5,643,638 | 20,320,073 | 2,608,923 | 14,991,907 | 130,082,496 | 157,668,622 | 7,289,965 | 3,825,886 | 1,679,156 | 374,052,690 |
| Fringe Benefits | 4,307,608 | 3,526,620 | 1,478,733 | 2,034,101 | 6,464,563 | 875,153 | 4,920,186 | 38,934,598 | 44,878,689 | 2,464,252 | 1,279,187 | 486,380 | 111,650,070 |
| Travel | 588,673 | 1,061,370 | 251,952 | 405,847 | 1,059,127 | 197,645 | 979,330 | 11,965,470 | 9,324,937 | 438,929 | 272,617 | 138,562 | 26,684,459 |
| Data Processing | 511,701 | 424,540 | 292,426 | 127,432 | 204,974 | 83,403 | 658,173 | 7,240,407 | 6,591,131 | 297,698 | 62,616 | 15,056 | 16,509,557 |
| Fees | 1,007,145 | 1,161,040 | 462,696 | 117,499 | 1,165,169 | 57,829 | 138,827 | 14,465,742 | 17,338,976 | 219,525 | 290,457 | 61,640 | 36,486,545 |
| Utilities | 630,152 | 785,124 | 266,416 | 807,715 | 1,213,832 | 192,883 | 1,152,232 | 8,631,293 | 8,206,289 | 437,848 | 238,259 | 0 | 22,562,043 |
| Communications | 91,423 | 165,421 | 40,930 | 56,044 | 124,488 | 56,587 | 442,230 | 3,361,364 | 3,739,743 | 180,389 | 61,336 | 19,712 | 8,339,667 |
| Insurance | 43,013 | 371,374 | 20,414 | 46,850 | 87,039 | 20,012 | 76,267 | 737,453 | 1,760,526 | 52,204 | 7,473 | 1,609 | 3,224,234 |
| Rents & Leases | 532,841 | 37,762 | 69,407 | 54,090 | 79,957 | 28,991 | 196,592 | 4,058,554 | 5,003,937 | 454,126 | 102,274 | 23,805 | 10,642,336 |
| Office | 395,539 | 571,106 | 135,498 | 259,999 | 623,326 | 87,002 | 684,386 | 4,177,768 | 3,558,767 | 234,466 | 86,508 | 69,344 | 10,883,709 |
| Supplies | 951,415 | 620,178 | 215,381 | 326,147 | 1,383,572 | 160,456 | 574,168 | 7,883,828 | 9,164,445 | 308,340 | 137,546 | 5,724 | 21,731,200 |
| Instructional | 978,633 | 503,125 | 138,790 | 185,021 | 931,054 | 149,831 | 1,426,165 | 7,531,445 | 8,532,985 | 255,376 | 188,925 | 46,573 | 20,867,923 |
| Noncap Equipment | 127,203 | 249,040 | 45,003 | 85,268 | 84,184 | 73,425 | 649,530 | 2,047,058 | 3,514,740 | 168,426 | 63,181 | 6,448 | 7,113,506 |
| Merch for Resale | 1,833,354 | 835,247 | 539,407 | 645,252 | 0 | 248,369 | 2,364,568 | 16,913,148 | 17,413,103 | 424,315 | 644,504 | | 41,861,267 |
| Repairs | 614,844 | 638,539 | 115,309 | 244,655 | 716,989 | 63,239 | 3,894,641 | 5,419,518 | 12,936,757 | 570,115 | 90,722 | 19,245 | 25,324,573 |
| Scholarships etc. | 3,979,302 | 5,920,393 | 1,372,192 | 1,316,110 | 6,132,277 | 996,483 | 3,217,429 | 26,613,374 | 20,700,457 | 2,084,452 | 1,489,101 | 6,343,835 | 80,165,405 |
| General | 2,547,068 | 2,420,899 | 755,348 | 680,917 | 2,922,151 | 564,162 | 2,548,962 | 20,577,444 | 21,839,822 | 1,354,115 | 525,577 | 462,048 | 57,198,513 |
| Capital Equipment | 186,223 | 278,301 | 143,207 | 135,070 | 116,766 | 0 | 470,734 | 10,257,527 | 6,675,116 | 133,741 | 1,357,386 | | 19,754,071 |
| Capital Improvement | 4,620,975 | 268,154 | 63,663 | 871,102 | 1,031,081 | 199,757 | 293,844 | 24,765,090 | 11,637,564 | 1,290,730 | 204,057 | | 45,246,017 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 37,650,702 | 31,124,379 | 11,359,060 | 14,042,757 | 44,660,622 | 6,664,150 | 39,680,171 | 345,663,577 | 370,486,606 | 18,659,012 | 10,927,612 | 9,379,137 | 940,297,785 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 4,620,975 | 268,154 | 63,663 | 871,102 | 1,031,081 | 199,757 | 293,844 | 24,765,090 | 11,637,564 | 1,290,730 | 204,057 | | 45,246,017 |
| (6) Com & Pub Util | 721,575 | 950,545 | 307,346 | 863,759 | 1,338,320 | 249,470 | 1,594,462 | 11,992,657 | 11,946,032 | 618,237 | 299,595 | 19,712 | 30,901,710 |
| (8) Retail | 4,472,367 | 3,056,997 | 1,217,286 | 1,636,757 | 3,138,902 | 719,083 | 6,169,551 | 48,810,774 | 48,859,156 | 1,524,664 | 2,478,050 | 128,089 | 122,211,676 |
| (9) FIRE | 4,883,462 | 3,935,756 | 1,568,554 | 2,135,041 | 6,631,559 | 924,156 | 5,193,045 | 43,730,605 | 51,643,152 | 2,970,582 | 1,388,934 | 511,794 | 125,516,640 |
| (10) Bus & Pers Ser | 5,269,431 | 5,706,388 | 1,877,731 | 1,576,350 | 6,068,410 | 966,278 | 8,219,933 | 59,668,581 | 68,031,623 | 2,880,382 | 1,241,989 | 696,551 | 162,203,647 |
| (12) Households | 17,682,892 | 17,206,539 | 6,324,480 | 6,959,748 | 26,452,350 | 3,605,406 | 18,209,336 | 156,695,870 | 178,369,079 | 9,374,417 | 5,314,987 | 8,022,991 | 454,218,095 |
| TOTAL | 37,650,702 | 31,124,379 | 11,359,060 | 14,042,757 | 44,660,622 | 6,664,150 | 39,680,171 | 345,663,577 | 370,486,606 | 18,659,012 | 10,927,612 | 9,379,137 | 940,297,785 |

Appendix Table 5. Non-General Fund Direct Economic Impacts (Expenditures) for the North Dakota University System and Member Institutions, by Budget Category and Allocations to the Input-Output Model Industrial Sectors, Fiscal Year 1999 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU-BC | MiSU | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|--------------------|------------------|------------------|------------------|--------------------|
| Wages & Salaries | 3,804,427 | 2,240,486 | 1,455,042 | 1,670,610 | 335,157 | 3,082,874 | 2,548,174 | 39,410,288 | 58,883,241 | 2,142,142 | 855,470 | 26,400 | 116,454,311 |
| Fringe Benefits | 919,611 | 649,940 | 338,747 | 443,389 | 71,772 | 638,149 | 653,715 | 9,240,405 | 14,498,166 | 509,919 | 189,413 | 7,872 | 28,161,098 |
| Travel | 212,725 | 302,902 | 105,080 | 141,343 | 67,564 | 408,832 | 342,451 | 4,660,871 | 4,268,740 | 218,010 | 107,916 | 2,409 | 10,838,843 |
| Data Processing | 55,994 | 44,687 | 22,571 | 44,442 | 4,419 | 67,696 | 34,376 | 909,052 | 985,222 | 355,516 | 22,204 | | 2,546,179 |
| Fees | 349,307 | 940,758 | 150,103 | 522,342 | 299,441 | 891,001 | 337,026 | 4,816,300 | 7,863,862 | 703,911 | 138,463 | 219 | 17,012,733 |
| Utilities | 201,911 | 195,337 | 42,987 | 76,765 | | 1,114 | 2,888 | 1,778,251 | 1,768,934 | 90,037 | 36,515 | | 4,194,739 |
| Communications | 151,457 | 165,088 | 25,772 | 87,476 | 44,458 | 125,625 | 532,309 | 2,405,184 | 3,769,119 | 359,611 | 17,046 | 299 | 7,683,444 |
| Insurance | 10,875 | 16,720 | 3,854 | 7,614 | 1,137 | 5,690 | 14,984 | 210,814 | 780,386 | 8,543 | 2,244 | | 1,062,861 |
| Rents & Leases | 141,423 | 5,861 | 7,434 | 677,650 | 8,877 | 66,732 | 188,495 | 2,034,118 | 4,082,062 | 358,187 | 23,297 | 900 | 7,595,036 |
| Office | 209,678 | 129,562 | 63,507 | 73,828 | 35,624 | 247,765 | 125,862 | 5,864,043 | 2,233,312 | 95,729 | 25,292 | 62 | 9,104,264 |
| Supplies | 563,683 | 250,685 | 48,502 | 130,692 | 31,572 | 220,534 | 255,968 | | 6,273,164 | 156,129 | 123,956 | 433 | 8,055,318 |
| Instructional | 276,205 | 91,413 | 75,457 | 69,524 | 15,858 | 32,902 | 493,696 | | 1,282,403 | 99,647 | 36,303 | 180,809 | 2,654,217 |
| Noncap Equipment | | | 26,319 | 62,657 | 3,503 | 137,768 | 34,885 | 687,278 | | 167,900 | 1,225 | | 1,121,535 |
| Merch for Resale | 906,895 | 400,876 | 335,963 | 292,487 | 101,176 | | 2,007,713 | 8,540,584 | 18,428,685 | 282,908 | 406,173 | | 31,703,460 |
| Repairs | 171,402 | 417,096 | 31,312 | 154,989 | 8,482 | 157,438 | 491,550 | 2,686,110 | 12,367,987 | 124,181 | 49,688 | 59 | 16,660,294 |
| Scholarships etc. | 1,938,131 | 1,965,302 | 940,073 | 838,810 | 707,881 | 2,959,876 | 2,572,791 | 9,854,315 | 12,622,231 | 1,299,853 | 1,096,413 | 1,699,042 | 38,494,718 |
| General | 387,887 | 196,413 | 120,394 | 109,135 | 137,917 | 370,590 | 1,369,734 | 1,916,375 | 1,968,000 | 178,721 | 148,458 | | 6,903,624 |
| Capital Equipment | 439,107 | 291,677 | 86,673 | 77,569 | 3,064 | 332,483 | 295,250 | 0 | 0 | 212,909 | 107,958 | | 1,846,690 |
| Capital Improvement | 366,346 | 667,346 | 598,734 | 57,894 | 241,840 | 2,897,712 | 3,066,092 | 3,561,184 | 8,734,203 | 252,656 | 363,440 | | 20,807,447 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 11,107,064 | 8,972,149 | 4,478,524 | 5,539,216 | 2,119,742 | 12,644,781 | 15,367,959 | 98,575,172 | 160,809,717 | 7,616,509 | 3,751,474 | 1,918,504 | 332,900,811 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU-BC | MiSU | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 366,346 | 667,346 | 598,734 | 57,894 | 241,840 | 2,897,712 | 3,066,092 | 3,561,184 | 8,734,203 | 252,656 | 363,440 | 0 | 20,807,447 |
| (6) Comm & Pub Util | 353,368 | 360,425 | 68,759 | 164,241 | 44,458 | 126,739 | 535,197 | 4,183,435 | 5,538,053 | 449,648 | 53,561 | 299 | 11,878,183 |
| (8) Retail Trade | 2,395,568 | 1,164,213 | 636,421 | 706,757 | 190,797 | 971,452 | 3,213,374 | 15,091,905 | 28,217,564 | 1,015,222 | 700,907 | 181,304 | 54,485,484 |
| (9) FIRE | 1,071,909 | 672,521 | 350,035 | 1,128,653 | 81,786 | 710,571 | 857,194 | 11,485,337 | 19,360,614 | 876,649 | 214,954 | 8,772 | 36,818,995 |
| (10) Bus & Pers Ser | 1,177,315 | 1,901,856 | 429,460 | 972,251 | 517,823 | 1,895,557 | 2,575,137 | 14,988,708 | 27,453,811 | 1,580,339 | 466,729 | 2,687 | 53,961,673 |
| (12) Households | 5,742,558 | 4,205,788 | 2,395,115 | 2,509,420 | 1,043,038 | 6,042,750 | 5,120,965 | 49,264,603 | 71,505,472 | 3,441,995 | 1,951,883 | 1,725,442 | 154,949,029 |
| TOTAL | 11,107,064 | 8,972,149 | 4,478,524 | 5,539,216 | 2,119,742 | 12,644,781 | 15,367,959 | 98,575,172 | 160,809,717 | 7,616,509 | 3,751,474 | 1,918,504 | 332,900,811 |

Appendix Table 6. Non-General Fund Direct Economic Impacts (Expenditures) for the North Dakota University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, Fiscal Year 2004 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|-------------------|--------------------|--------------------|------------------|------------------|------------------|--------------------|
| Wages & Salaries | 6,364,671 | 4,443,905 | 2,489,869 | 1,504,697 | 5,362,350 | 446,964 | 3,487,324 | 66,507,549 | 100,687,465 | 1,257,302 | 1,677,651 | 169,305 | 194,399,052 |
| Fringe Benefits | 1,781,001 | 1,185,765 | 715,333 | 527,644 | 1,153,826 | 144,781 | 1,005,277 | 16,718,436 | 26,120,233 | 343,109 | 497,616 | 49,524 | 50,242,545 |
| Travel | 408,944 | 715,461 | 165,564 | 219,887 | 726,920 | 75,611 | 452,949 | 6,971,750 | 7,098,557 | 153,376 | 168,927 | 12,260 | 17,170,206 |
| Data Processing | 110,505 | 128,083 | 41,110 | 47,969 | 193,860 | 17,283 | 108,302 | 2,912,197 | 1,824,798 | 268,258 | 23,252 | | 5,675,617 |
| Fees | 1,661,053 | 1,435,510 | 448,749 | 12,317 | 1,559,557 | 360,238 | 799,934 | 13,607,720 | 13,981,976 | 35,263 | 360,392 | 4,126 | 34,266,835 |
| Utilities | 231,076 | 348,503 | 87,872 | 142 | 2,166 | | 101,073 | 2,832,981 | 3,280,356 | 1,730 | 88,701 | | 6,974,600 |
| Communications | 121,565 | 143,359 | 36,742 | 23,701 | 189,902 | 51,873 | 487,917 | 3,273,912 | 3,401,578 | 219,770 | 39,471 | 1,057 | 7,990,847 |
| Insurance | 46,451 | 52,269 | 17,951 | 6,853 | 16,434 | 4,104 | 8,727 | 341,653 | 1,626,037 | 11,487 | 11,769 | 26 | 2,143,761 |
| Rents & Leases | 343,883 | 174,550 | 19,851 | 36,414 | (56,785) | 13,797 | 119,457 | 2,906,747 | 8,942,143 | 509,421 | 49,103 | 3,406 | 13,061,987 |
| Office | 347,370 | 346,280 | 69,802 | 120,789 | 340,409 | 71,840 | 277,970 | 10,495,009 | 3,032,221 | 105,700 | 61,173 | 689 | 15,269,252 |
| Supplies | 298,483 | 384,941 | 53,378 | 162,783 | 299,197 | 51,787 | 370,202 | | 12,831,617 | 148,814 | 202,977 | 848 | 14,805,027 |
| Instructional | 381,616 | 126,168 | 82,119 | 36,575 | 131,696 | 12,882 | 907,725 | | 2,149,986 | 67,406 | 63,671 | 389,487 | 4,349,331 |
| Noncap Equipment | 141,942 | 219,112 | 19,400 | 80,220 | 194,317 | 27,569 | 240,805 | 1,132,908 | | 54,534 | 47,259 | 812 | 2,158,668 |
| Merch for Resale | 1,556,688 | 730,626 | 400,252 | 416,502 | | 160,204 | 2,308,280 | 15,020,855 | 11,157,239 | 439,195 | 594,473 | | 32,784,314 |
| Repairs | 246,155 | 200,780 | 55,902 | 99,241 | 174,327 | 14,197 | 732,875 | 4,465,498 | 8,708,491 | 99,682 | 63,550 | 719 | 14,861,417 |
| Scholarships etc. | 3,469,368 | 3,478,904 | 1,099,405 | 1,089,883 | 4,416,501 | 836,697 | 3,529,367 | 18,963,063 | 18,795,125 | 1,307,606 | 1,720,918 | 80,318 | 58,787,155 |
| General | 1,574,955 | 341,653 | 190,666 | 1,053,627 | 2,675,505 | 116,119 | 2,640,802 | 2,695,014 | 3,934,770 | 984,177 | 648,495 | 1,456,074 | 18,311,857 |
| Capital Equipment | 488,295 | 157,063 | 83,133 | 62,004 | 638,819 | 14,649 | 197,588 | 0 | 0 | 102,773 | 45,196 | | 1,789,520 |
| Capital Improvement | 207,447 | 1,579,467 | 674,616 | 2,122,789 | 176,038 | 35,465 | 757,340 | 18,913,032 | 23,839,538 | 2,423,340 | 1,117,152 | | 51,846,224 |
| Recovery of Exp | | | | | | | | (11,945,324) | | | | | (11,945,324) |
| TOTAL | 19,781,468 | 16,192,399 | 6,751,714 | 7,624,037 | 18,195,039 | 2,456,060 | 18,533,914 | 175,813,000 | 251,412,130 | 8,532,733 | 7,481,746 | 2,168,651 | 534,942,891 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 207,447 | 1,579,467 | 674,616 | 2,122,789 | 176,038 | 35,465 | 757,340 | 18,913,032 | 23,839,538 | 2,423,340 | 1,117,152 | 0 | 51,846,224 |
| (6) Comm & Pub Util | 352,641 | 491,862 | 124,614 | 23,843 | 192,068 | 51,873 | 588,990 | 6,106,893 | 6,681,934 | 221,500 | 128,172 | 1,057 | 14,965,447 |
| (8) Retail Trade | 3,214,394 | 1,964,190 | 708,084 | 878,873 | 1,604,438 | 338,931 | 4,302,570 | 14,703,448 | 29,171,063 | 918,212 | 1,014,749 | 391,836 | 59,210,788 |
| (9) FIRE | 2,171,335 | 1,412,584 | 753,135 | 570,911 | 1,113,475 | 162,682 | 1,133,461 | 19,966,836 | 36,688,413 | 864,017 | 558,488 | 52,956 | 65,448,293 |
| (10) Bus & Pers Ser | 4,001,612 | 2,821,487 | 901,991 | 1,433,041 | 5,330,169 | 583,448 | 4,734,862 | 30,652,179 | 35,548,592 | 1,540,756 | 1,264,616 | 1,473,179 | 90,285,932 |
| (12) Households | 9,834,039 | 7,922,809 | 3,589,274 | 2,594,580 | 9,778,851 | 1,283,661 | 7,016,691 | 85,470,612 | 119,482,590 | 2,564,908 | 3,398,569 | 249,623 | 253,186,207 |
| TOTAL | 19,781,468 | 16,192,399 | 6,751,714 | 7,624,037 | 18,195,039 | 2,456,060 | 18,533,914 | 175,813,000 | 251,412,130 | 8,532,733 | 7,481,746 | 2,168,651 | 534,942,891 |

Appendix Table 7. Non General Fund Direct Economic Imports (Expenditures) for North Dakota University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sectors, Fiscal Year 2006 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|------------------|----------------|--------------------|
| Wages & Salaries | 7,645,037 | 6,131,568 | 2,716,752 | 3,417,833 | 11,387,305 | 979,014 | 7,418,136 | 79,124,365 | 112,293,373 | 3,337,342 | 1,741,451 | 73,062 | 236,265,238 |
| Fringe Benefits | 2,226,793 | 1,766,796 | 764,778 | 1,114,789 | 3,134,799 | 310,225 | 2,204,742 | 21,189,984 | 30,044,254 | 1,056,505 | 607,253 | 24,577 | 64,445,495 |
| Travel | 391,070 | 748,895 | 142,012 | 352,012 | 695,915 | 87,527 | 660,032 | 8,333,516 | 7,453,659 | 220,129 | 229,278 | 9,261 | 19,323,306 |
| Data Processing | 247,290 | 419,486 | 94,446 | 38,135 | 327,381 | 30,588 | 401,692 | 4,225,914 | 4,750,305 | 509,034 | 51,878 | 60 | 11,096,209 |
| Fees | 752,053 | 653,218 | 194,233 | 33,336 | 696,577 | 305,358 | 118,222 | 10,898,543 | 12,994,931 | 187,709 | 58,081 | 244 | 26,892,505 |
| Utilities | 259,696 | 408,887 | 100,838 | 266,231 | 469,525 | 42,597 | 408,346 | 3,982,746 | 3,699,024 | 152,147 | 103,003 | | 9,893,040 |
| Communications | 43,150 | 132,462 | 16,913 | 31,108 | 63,208 | 38,787 | 353,936 | 2,267,388 | 3,017,224 | 230,884 | 30,585 | 1,189 | 6,226,834 |
| Insurance | 10,014 | 152,940 | 16,626 | 38,180 | 56,810 | 7,514 | 46,537 | 438,467 | 1,511,394 | 31,929 | 9,814 | 51 | 2,320,276 |
| Rents & Leases | 282,619 | 50,611 | 41,153 | 194,978 | 50,434 | 26,882 | 90,833 | 1,289,921 | 5,320,978 | 272,747 | 57,324 | 5,600 | 7,684,080 |
| Office | 254,624 | 404,074 | 61,786 | 221,224 | 267,349 | 36,746 | 406,975 | 3,062,557 | 2,967,639 | 134,050 | 64,589 | 1,641 | 7,883,254 |
| Supplies | 478,043 | 549,041 | 121,073 | 267,537 | 864,242 | 50,939 | 398,817 | 5,898,165 | 7,202,235 | 215,272 | 83,824 | 6,550 | 16,135,738 |
| Instructional | 479,449 | 481,856 | 80,575 | 112,869 | 633,274 | 49,468 | 1,153,418 | 3,738,829 | 5,447,549 | 196,434 | 271,772 | | 12,645,493 |
| Noncap Equipment | 109,098 | 311,292 | 78,840 | 139,650 | 88,603 | 11,457 | 323,333 | 1,676,659 | 2,463,490 | 171,919 | 21,311 | 4,939 | 5,400,591 |
| Merch for Resale | 1,505,863 | 622,937 | 425,505 | 667,788 | 1,474,247 | 226,273 | 2,666,128 | 14,786,025 | 14,291,952 | 551,023 | 638,863 | | 37,856,604 |
| Repairs | 241,043 | 521,421 | 139,019 | 156,015 | 501,856 | 39,722 | 998,592 | 3,285,771 | 10,851,250 | 229,256 | 34,557 | 365 | 16,998,867 |
| Scholarships etc. | 3,215,779 | 4,200,006 | 1,193,512 | 1,388,587 | 4,886,078 | 774,416 | 2,803,078 | 17,160,537 | 16,474,162 | 1,471,134 | 1,520,276 | 45,635 | 55,133,200 |
| General | 1,694,847 | 2,199,493 | 572,125 | 709,486 | 2,179,604 | 208,349 | 1,797,496 | 12,397,623 | 18,582,122 | 1,129,871 | 618,906 | 5,205 | 42,095,127 |
| Capital Equipment | 219,103 | 240,476 | 21,022 | 70,761 | 265,991 | 2,124 | 227,262 | | | 130,969 | 60,340 | | 1,238,048 |
| Capital Improvement | 523,603 | 1,514,712 | 307,108 | 92,351 | 4,193,220 | 55,987 | 159,665 | 12,297,767 | 15,058,401 | | 63,558 | | 34,266,372 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 20,579,174 | 21,510,171 | 7,088,316 | 9,312,870 | 32,236,418 | 3,283,973 | 22,637,240 | 206,054,777 | 274,423,942 | 10,228,354 | 6,266,663 | 178,379 | 613,800,277 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 523,603 | 1,514,712 | 307,108 | 92,351 | 4,193,220 | 55,987 | 159,665 | 12,297,767 | 15,058,401 | | 63,558 | | 34,266,372 |
| (6) Com & Pub Util | 302,846 | 541,349 | 117,751 | 297,339 | 532,733 | 81,384 | 762,282 | 6,250,134 | 6,716,248 | 383,031 | 133,588 | 1,189 | 16,119,874 |
| (8) Retail | 3,046,180 | 2,609,676 | 788,801 | 1,479,829 | 3,593,706 | 377,007 | 5,175,933 | 29,162,235 | 32,372,865 | 1,399,667 | 1,140,699 | 13,130 | 81,159,728 |
| (9) FIRE | 2,519,426 | 1,970,347 | 822,557 | 1,347,947 | 3,242,043 | 344,621 | 2,342,112 | 22,918,372 | 36,876,626 | 1,361,181 | 674,391 | 30,228 | 74,449,851 |
| (10) Bus & Pers Ser | 3,326,303 | 4,542,513 | 1,141,835 | 1,288,984 | 4,401,333 | 671,544 | 3,976,034 | 39,141,367 | 54,632,267 | 2,275,999 | 992,700 | 15,135 | 116,406,014 |
| (12) Households | 10,860,816 | 10,331,574 | 3,910,264 | 4,806,420 | 16,273,383 | 1,753,430 | 10,221,214 | 96,284,902 | 128,767,535 | 4,808,476 | 3,261,727 | 118,697 | 291,398,438 |
| TOTAL | 20,579,174 | 21,510,171 | 7,088,316 | 9,312,870 | 32,236,418 | 3,283,973 | 22,637,240 | 206,054,777 | 274,423,942 | 10,228,354 | 6,266,663 | 178,379 | 613,800,277 |

Appendix Table 8. Non-General Fund. Direct Economic Impacts (Expenditures) for North Dakota University System and Member Institutions, by Budget Category and Allocation to the Input-Output Model Industrial Sector, Fiscal Year 2008 (Current Year Dollars)

| | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
|---------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------|------------------|----------------|--------------------|
| Wages & Salaries | 8,526,511 | 7,172,902 | 3,152,599 | 3,133,457 | 11,770,259 | 1,210,317 | 7,739,524 | 83,684,874 | 114,548,568 | 3,578,666 | 1,886,101 | 77,350 | 246,481,128 |
| Fringe Benefits | 2,626,113 | 2,226,703 | 953,991 | 1,185,835 | 3,542,813 | 400,799 | 2,476,405 | 24,629,341 | 32,364,487 | 1,133,497 | 569,739 | 57,974 | 72,167,697 |
| Travel | 431,118 | 895,352 | 197,019 | 223,710 | 832,542 | 143,493 | 733,358 | 10,012,236 | 8,202,122 | 275,480 | 220,355 | 10,695 | 22,177,480 |
| Data Processing | 279,805 | 347,858 | 248,645 | 105,462 | 158,546 | 41,502 | 521,505 | 5,002,804 | 4,885,889 | 236,431 | 54,131 | 893 | 11,883,471 |
| Fees | 873,611 | 892,502 | 345,897 | 74,804 | 1,071,971 | 48,606 | 131,624 | 13,165,500 | 16,315,139 | 139,584 | 266,698 | 3,096 | 33,329,032 |
| Utilities | 296,669 | 480,782 | 142,784 | 287,010 | 512,728 | 66,296 | 412,017 | 4,893,050 | 5,214,651 | 164,527 | 109,637 | | 12,580,151 |
| Communications | 52,233 | 120,302 | 23,972 | 25,735 | 68,040 | 45,886 | 289,467 | 2,589,354 | 2,945,664 | 127,644 | 36,645 | 828 | 6,325,770 |
| Insurance | 21,711 | 359,602 | 12,067 | 19,318 | 46,366 | 11,404 | 28,994 | 397,113 | 1,397,654 | 29,512 | 2,529 | 11 | 2,326,281 |
| Rents & Leases | 296,057 | 30,937 | 47,033 | 29,691 | 68,376 | 24,291 | 114,300 | 3,578,393 | 4,914,770 | 413,005 | 94,668 | 18,532 | 9,630,053 |
| Office | 273,848 | 399,606 | 86,260 | 197,406 | 496,051 | 48,446 | 500,906 | 3,197,515 | 2,851,281 | 157,611 | 57,792 | 4,687 | 8,271,409 |
| Supplies | 809,145 | 511,509 | 163,235 | 279,261 | 1,071,527 | 99,123 | 438,667 | 5,912,597 | 8,678,293 | 249,085 | 104,699 | 2,797 | 18,319,938 |
| Instructional | 734,166 | 369,432 | 99,856 | 128,374 | 630,267 | 110,999 | 1,166,974 | 6,086,292 | 6,489,998 | 160,370 | 126,057 | 572 | 16,103,357 |
| Noncap Equipment | 104,654 | 172,580 | 34,616 | 52,761 | 57,371 | 36,902 | 511,910 | 1,700,551 | 3,037,982 | 138,996 | 45,614 | 599 | 5,894,536 |
| Merch for Resale | 1,833,354 | 835,247 | 539,407 | 645,252 | 0 | 248,369 | 2,364,361 | 16,912,798 | 17,412,693 | 424,292 | 644,221 | | 41,859,994 |
| Repairs | 395,171 | 475,337 | 71,015 | 140,133 | 489,916 | 28,475 | 2,531,371 | 3,951,845 | 10,676,390 | 312,358 | 50,122 | 1,398 | 19,123,531 |
| Scholarships etc. | 3,914,872 | 4,685,699 | 1,271,048 | 1,174,376 | 5,476,979 | 965,161 | 2,828,167 | 20,458,368 | 17,099,712 | 1,838,491 | 1,434,642 | 522,814 | 61,670,329 |
| General | 1,954,064 | 2,106,482 | 545,160 | 521,800 | 2,549,634 | 494,966 | 2,097,827 | 17,810,224 | 18,138,849 | 1,149,578 | 381,509 | 12,857 | 47,762,950 |
| Capital Equipment | 97,357 | 211,177 | 140,259 | 112,810 | 76,109 | 0 | 223,125 | 8,765,428 | 6,295,659 | 85,502 | 1,344,018 | | 17,351,444 |
| Capital Improvement | 4,016,973 | 207,065 | 0 | 171,777 | 187,964 | 78,559 | 59,479 | 20,205,813 | 11,199,582 | | 73,690 | | 36,200,902 |
| Recovery of Exp | | | | | | | | | | | | | |
| TOTAL | 27,537,432 | 22,501,074 | 8,074,863 | 8,508,972 | 29,107,459 | 4,103,594 | 25,169,981 | 252,954,096 | 292,669,383 | 10,614,629 | 7,502,867 | 715,103 | 689,459,453 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| (4) Construction | 4,016,973 | 207,065 | 0 | 171,777 | 187,964 | 78,559 | 59,479 | 20,205,813 | 11,199,582 | | 73,690 | | 36,200,902 |
| (6) Com & Pub Util | 348,902 | 601,084 | 166,756 | 312,745 | 580,768 | 112,182 | 701,484 | 7,482,404 | 8,160,315 | 292,171 | 146,282 | 828 | 18,905,921 |
| (8) Retail | 3,852,524 | 2,499,551 | 1,063,633 | 1,415,864 | 2,331,325 | 543,839 | 5,205,943 | 42,575,181 | 44,765,906 | 1,215,856 | 2,322,401 | 8,655 | 107,800,678 |
| (9) FIRE | 2,943,881 | 2,617,242 | 1,013,091 | 1,234,844 | 3,657,555 | 436,494 | 2,619,699 | 28,604,847 | 38,676,911 | 1,576,014 | 666,936 | 76,517 | 84,124,031 |
| (10) Bus & Pers Ser | 3,933,769 | 4,717,531 | 1,407,736 | 1,065,909 | 5,102,609 | 757,042 | 6,015,685 | 49,942,609 | 58,218,389 | 2,113,431 | 972,815 | 28,939 | 134,276,464 |
| (12) Households | 12,441,383 | 11,858,601 | 4,423,647 | 4,307,833 | 17,247,238 | 2,175,478 | 10,567,691 | 104,143,242 | 131,648,280 | 5,417,157 | 3,320,743 | 600,164 | 308,151,457 |
| TOTAL | 27,537,432 | 22,501,074 | 8,074,863 | 8,508,972 | 29,107,459 | 4,103,594 | 25,169,981 | 252,954,096 | 292,669,383 | 10,614,629 | 7,502,867 | 715,103 | 689,459,453 |

| Appendix Table 9. North Dakota University System Fall Enrollment, 1999, 2004, and 2006, and 2007 | | | | | | | | | | | | | | |
|--|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------------------------|-------------|
| Institution | 1999 | | | 2004 | | | 2006 | | | 2007 | | | Percentage Change in FTE Students | |
| | HC ¹ | FT ² | FTE ³ | HC ¹ | FT ² | FTE ³ | HC ¹ | FT ² | FTE ³ | HC ¹ | FT ² | FTE ³ | 1999-2008 | 2006-2008 |
| Bismarck State College | 2,743 | 1,975 | 2,326 | 3,546 | 2,330 | 2,800 | 3,477 | 2,192 | 2,651 | 3,591 | 2,345 | 2,792 | 20.0 | 5.3 |
| Dickinson State University | 1,867 | 1,485 | 1,638 | 2,479 | 1,749 | 2,034 | 2,572 | 1,729 | 2,059 | 2,670 | 1,778 | 2,158 | 31.7 | 4.8 |
| Lake Region State College | 805 | 355 | 506 | 1,464 | 416 | 738 | 1,508 | 391 | 750 | 1,520 | 414 | 764 | 51.0 | 1.9 |
| Mayville State University | 851 | 592 | 692 | 897 | 665 | 761 | 832 | 554 | 652 | 769 | 478 | 586 | -15.3 | -10.1 |
| Minot State University | 3,155 | 2,466 | 2,753 | 3,851 | 2,521 | 3,022 | 3,712 | 2,540 | 2,928 | 3,424 | 2,358 | 2,730 | -0.8 | -6.8 |
| MiSU - Bottineau | 508 | 441 | 498 | 602 | 356 | 447 | 605 | 306 | 399 | 637 | 303 | 402 | -19.3 | 0.8 |
| ND State College of Science | 2,345 | 2,162 | 2,503 | 2,481 | 1,920 | 2,271 | 2,490 | 1,799 | 2,171 | 2,417 | 1,746 | 2,097 | -16.2 | -3.4 |
| North Dakota State University | 9,638 | 7,813 | 8,775 | 12,026 | 9,536 | 10,692 | 12,258 | 10,053 | 10,890 | 12,527 | 10,342 | 11,221 | 27.9 | 3.0 |
| University of North Dakota | 10,590 | 8,544 | 9,417 | 13,187 | 10,601 | 11,815 | 12,834 | 10,460 | 11,381 | 12,559 | 9,976 | 10,967 | 16.5 | -3.6 |
| Valley City State University | 1,077 | 796 | 956 | 1,033 | 833 | 956 ⁴ | 1,037 | 717 | 844 | 982 | 682 | 807 | -15.6 | -4.4 |
| Williston State College | 714 | 582 | 656 | 937 | 568 | 709 | 912 | 505 | 648 | 731 | 428 | 551 | -16.0 | -15.0 |
| TOTAL | 34,293 | 27,211 | 30,720 | 42,503 | 31,495 | 36,245 | 42,237 | 31,246 | 35,373 | 41,827 | 30,850 | 35,075 | 14.2 | -0.8 |

¹ Headcount is all students enrolled regardless of number of credit hours.
² Full-time is students enrolled in 12 credit hours or more.
³ In August 2006, the SBHE changed the definition of undergraduate FTE to 15 credit hours from 16. This new definition is compatible with National Integrated Post-Secondary Education Data System (IPEDS) reporting requirements.
⁴ Includes 89 VCSU elementary education students located on the NDSU campus

Appendix Table 10. Direct Economic Impacts (Expenditures) for Student Living Expenses, for Students Attending North Dakota University System Institutions, FY2008

| Institution | Fall 2007 FTE Enrollment | Living Expenses Per Student ¹ | Total Expenditures |
|-------------------------------------|--------------------------------|--|-----------------------|
| | | -----\$----- | |
| Bismarck State College | 2,792 | 7,786 | 21,738,512 |
| Dickinson State University | 2,158 | 7,976 | 17,212,208 |
| Lake Region State College | 764 | 8,337 | 6,369,468 |
| Mayville State University | 586 | 7,872 | 4,612,992 |
| Minot State University ² | 2,730 | 8,373 | 22,858,290 |
| MiSU-Bottineau | 402 | 7,880 | 3,167,760 |
| ND State College of Science | 2,097 | 7,528 | 15,786,216 |
| North Dakota State University | 11,221 | 9,254 | 103,839,134 |
| University of North Dakota | 11,967 | 8,940 | 98,044,980 |
| Valley City State University | 807 | 8,010 | 6,464,070 |
| Williston State College | 551 | 8,000 | 4,408,000 |
| Total | 35,075 | | 304,501,630 |

Source: North Dakota Career Resource Network. 2008. 2007-2008 Estimated On-Campus Budgets for Resident Dependent Students to Attend North Dakota Schools. Career Resource Network Career Outlook. North Dakota Career Resource Network Internet Web Site.

¹ Included room and board, books and supplies, and \$3,000.00 for personal and recreational spending.

² Minot State University reported room and board as the average of on-campus and off-campus. The other ten campuses reported room and board for on-campus only, so Minot State University room and board was reduced to on-campus only, to be consistent with the other campuses.

| Appendix Table 11. Direct and Total Economic Impacts for Expenditures by Students Attending Institutions in the North Dakota University System, by Individual Institution, Fiscal Year 2008 | | | | | | | | | | | |
|--|------------|------------|-------------|-------------|-------------|----------------|--------------|-------------|------------|-------------|------------|
| Item | BSC | DSU | LRSC | MaSU | MiSU | MiSU-BC | NDSCS | NDSU | UND | VCSU | WSC |
| Direct Impacts: (\$000) | | | | | | | | | | | |
| Student Expenditures | 21,739 | 17,212 | 6,369 | 4,613 | 22,858 | 3,168 | 15,786 | 103,839 | 98,045 | 6,464 | 4,408 |
| Direct Impacts by I-O Sector: (\$000) | | | | | | | | | | | |
| Retail Trade | 16,304 | 12,909 | 4,777 | 3,460 | 17,144 | 2,376 | 11,840 | 77,879 | 73,534 | 4,848 | 3,306 |
| Fin, Ins, Real Estate | 5,435 | 4,303 | 1,592 | 1,153 | 7,714 | 792 | 3,946 | 25,960 | 24,511 | 1,616 | 1,102 |
| Total | 21,739 | 17,212 | 6,369 | 4,613 | 22,858 | 3,168 | 15,786 | 103,839 | 98,045 | 6,464 | 4,408 |
| Total Impacts: (\$000) | | | | | | | | | | | |
| Construction | 968 | 766 | 284 | 205 | 1,018 | 141 | 703 | 4,623 | 4,365 | 288 | 196 |
| Comm & Pub Util | 1,580 | 1,251 | 463 | 335 | 1,662 | 230 | 1,148 | 7,549 | 7,128 | 470 | 320 |
| Retail Trade | 24,438 | 19,349 | 7,160 | 5,186 | 25,696 | 3,561 | 17,746 | 116,730 | 110,217 | 7,267 | 4,955 |
| FIRE | 7,150 | 5,661 | 2,094 | 1,517 | 7,517 | 1,042 | 5,191 | 34,150 | 32,244 | 2,126 | 1,450 |
| Bus & Per Serv | 733 | 580 | 215 | 155 | 770 | 107 | 532 | 3,499 | 3,304 | 218 | 149 |
| Prof & Soc Serv | 893 | 707 | 262 | 190 | 939 | 130 | 649 | 4,268 | 4,030 | 266 | 181 |
| Households | 13,109 | 10,379 | 3,840 | 2,781 | 13,783 | 1,910 | 9,519 | 62,615 | 59,121 | 3,898 | 2,658 |
| Other ¹ | 5,147 | 4,074 | 1,508 | 1,093 | 5,411 | 749 | 3,737 | 24,581 | 23,216 | 1,531 | 1,043 |
| Total | 54,018 | 42,767 | 15,826 | 11,462 | 56,796 | 7,870 | 39,225 | 258,015 | 243,619 | 16,064 | 10,952 |
| Tax Revenues: (\$000) | | | | | | | | | | | |
| Sales & Use Tax | 1,131 | 896 | 332 | 240 | 1,189 | 165 | 822 | 5,405 | 5,103 | 336 | 229 |
| Pers Income Tax | 197 | 156 | 58 | 42 | 207 | 29 | 143 | 939 | 887 | 58 | 40 |
| Secondary Employment (jobs) | 390 | 309 | 112 | 79 | 411 | 54 | 283 | 1,882 | 1,776 | 113 | 74 |
| ¹ Includes agriculture, mining, manufacturing, transportation, and government. | | | | | | | | | | | |

APPENDIX B

Bismarck State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Bismarck State College in the Bismarck area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Bismarck State College comprise the direct impacts, or "first round effects". Expenditures by Bismarck State College were \$17.9 million in FY1999, \$27.7 million in FY2004, \$29.6 million in FY2006, and \$37.7 million in FY2008. The increase during the 9-year period was \$19.7 million, a 110.2 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Bismarck State College were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$52.1 million in FY1999, \$81.2 million in FY2004, \$87.8 million in 2006, and \$109.3 million in FY2008. The economic impact has increased by 109.8 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$20.9 million in FY1999 to \$42.3 million in FY2008, a 102.3 percent (\$21.4 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$13.7 million in FY1999, \$20.8 million in FY2004, \$22.0 million in FY2006, and \$26.8 million in FY2008. This represents a \$13.0 million (94.9 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$1,239,000 in sales and use tax collections for FY2008, compared to \$636,000 in FY1999, \$963,000 in FY2004, and \$1,019,000 in FY2006. Personal income tax collections were estimated to be \$314,000 in FY1999, \$483,000 in FY2004, \$531,000 in FY2006, and \$634,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Bismarck State College expenditures would support almost 500 secondary (indirect and induced) jobs in 1999, nearly 850 in 2004, 875 in 2006, and 990 in 2008. These jobs are in addition to the 506 persons employed by Bismarck State College in 2008. In the Fall of 2007, 2,792 full-time equivalent students were enrolled at Bismarck State College.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Bismarck area was \$21.7 million in FY2008. Total economic impact was \$54.0 million, highlighted by increased retail trade activity of \$24.4 million and personal income increased \$13.1 million. These levels of business activity would generate an additional \$1,131,000 sales and use tax revenue, and \$197,000 more personal income tax collections. This level of student spending would create enough business activity to support 390 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

**Direct and Total Economic Impacts for Bismarck State College, Fiscal Years 1999, 2004, 2006, and 2008
(Current Year Dollars)**

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|---------------|---------------|-----------------|-----------------|-----------------|
| | | | | | FY1999- 2008 | FY2006- 2008 |
| | | | | -----\$000----- | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 6,256 | 7,745 | 8,727 | 9,509 | 52.0 | 9.0 |
| Nongeneral Fund | 10,741 | 19,574 | 20,056 | 23,521 | 119.0 | 17.3 |
| Capital Improvements | <u>916</u> | <u>366</u> | <u>844</u> | <u>4,621</u> | 404.5 | 447.5 |
| TOTAL | 17,913 | 27,685 | 29,627 | 37,651 | 110.2 | 27.1 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 916 | 366 | 844 | 4,621 | 404.5 | 447.5 |
| Communication and Public Util | 737 | 709 | 654 | 722 | -2.0 | 10.4 |
| Retail Trade | 2,928 | 4,063 | 3,710 | 4,472 | 52.7 | 20.5 |
| Finance, Insurance, Real Estate | 2,128 | 3,684 | 4,274 | 4,884 | 129.5 | 14.3 |
| Business and Personal Services | 1,641 | 4,716 | 4,201 | 5,269 | 221.1 | 25.4 |
| Households | <u>9,563</u> | <u>14,147</u> | <u>15,944</u> | <u>17,683</u> | 84.9 | 10.9 |
| TOTAL | 17,913 | 27,685 | 29,627 | 37,651 | 110.2 | 27.1 |
| Total Impacts: | | | | | | |
| Construction | 2,221 | 2,378 | 3,042 | 7,299 | 228.6 | 139.9 |
| Communications and Public Util | 2,493 | 3,517 | 3,678 | 4,403 | 76.6 | 19.7 |
| Retail Trade | 13,726 | 20,791 | 22,018 | 26,757 | 94.9 | 21.5 |
| Finance, Insurance, Real Estate | 4,545 | 7,443 | 8,377 | 9,849 | 116.7 | 17.6 |
| Business and Personal Services | 2,575 | 6,208 | 5,826 | 7,226 | 180.6 | 24.3 |
| Professional Social Services | 1,351 | 2,088 | 2,294 | 2,744 | 103.1 | 19.6 |
| Households | 20,903 | 32,191 | 35,426 | 42,285 | 102.3 | 19.4 |
| Other ¹ | <u>4,306</u> | <u>6,628</u> | <u>7,165</u> | <u>8,764</u> | 103.5 | 22.3 |
| TOTAL | 52,120 | 81,244 | 87,826 | 109,327 | 109.8 | 24.5 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Dickinson State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Dickinson State University in the Dickinson area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Dickinson State University comprise the direct impacts, or "first round effects". Expenditures by Dickinson State University were \$14.9 million in FY1999, \$23.0 million in FY2004, \$28.9 million in FY2006, and \$31.1 million in FY2008. The increase during the 9-year period was \$16.2 million, a 108.4 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Dickinson State University were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$43.6 million in FY1999, \$67.2 million in FY2004, \$84.4 million in 2006, and 92.6 million in FY2008. The economic impact has increased by 112.2 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$17.3 million in FY1999 to \$37.7 million in FY2008, a 118.1 percent (\$20.4 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$10.7 million in FY1999, \$16.5 million in FY2004, \$20.6 million in FY2006, and \$22.5 million. This represents a \$11.8 million (111.0 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$1,040,000 in sales and use tax collections for FY2008, compared to \$493,000 in FY1999, \$764,000 in FY2004, and \$952,000 in FY2008. Personal income tax collections were estimated to be \$259,000 in FY1999, \$402,000 in FY2004, \$503,000 in FY2006, and \$565,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Dickinson State University expenditures would support over 450 secondary (indirect and induced) jobs in 1999, nearly 680 in 2004, almost 900 in 2006 and 2008. These jobs are in addition to the 276 persons employed by Dickinson State University in 2008. In the Fall of 2007, 2,158 full-time equivalent students were enrolled at Dickinson State University.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Dickinson area was \$17.2 million in FY2008. Total economic impact was \$42.8 million, highlighted by increased retail trade activity of \$19.3 million and personal income increased \$10.4 million. These levels of business activity would generate an additional \$896,000 sales and use tax revenue, and \$156,000 more personal income tax collections. This level of student spending would create enough business activity to support 309 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Dickinson State University, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|---------------|---------------|-----------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| | | | | -----\$000----- | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 5,764 | 6,702 | 7,299 | 8,562 | 48.5 | 17.3 |
| Nongeneral Fund | 8,305 | 14,613 | 19,995 | 22,294 | 168.4 | 11.5 |
| Capital Improvements | <u>869</u> | <u>1,696</u> | <u>1,577</u> | <u>268</u> | -69.2 | -83.0 |
| TOTAL | 14,938 | 23,011 | 28,871 | 31,124 | 108.4 | 7.8 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 869 | 1,696 | 1,577 | 268 | -69.2 | -83.0 |
| Communication and Public Util | 821 | 969 | 880 | 951 | 15.8 | 8.1 |
| Retail Trade | 1,663 | 2,587 | 3,115 | 3,057 | 83.8 | -1.9 |
| Finance, Insurance, Real Estate | 1,604 | 2,551 | 3,110 | 3,936 | 145.4 | 26.6 |
| Business and Personal Services | 2,382 | 3,278 | 5,373 | 5,706 | 139.6 | 6.2 |
| Households | <u>7,599</u> | <u>11,930</u> | <u>14,816</u> | <u>17,206</u> | 126.4 | 16.1 |
| TOTAL | 14,938 | 23,011 | 28,871 | 31,124 | 108.4 | 7.8 |
| Total Impacts: | | | | | | |
| Construction | 1,958 | 3,378 | 3,681 | 2,604 | 33.0 | -29.3 |
| Communications and Public Util | 2,321 | 3,263 | 3,796 | 4,190 | 80.5 | 10.4 |
| Retail Trade | 10,650 | 16,501 | 20,561 | 22,471 | 111.0 | 9.3 |
| Finance, Insurance, Real Estate | 3,629 | 5,676 | 7,037 | 8,313 | 129.1 | 18.1 |
| Business and Personal Services | 3,172 | 4,495 | 6,917 | 7,439 | 134.5 | 7.6 |
| Professional Social Services | 1,120 | 1,733 | 2,171 | 2,440 | 117.9 | 12.4 |
| Households | 17,283 | 26,780 | 33,502 | 37,679 | 118.1 | 12.5 |
| Other ¹ | <u>3,504</u> | <u>5,418</u> | <u>6,766</u> | <u>7,473</u> | 113.3 | 10.5 |
| TOTAL | 43,637 | 67,244 | 84,431 | 92,609 | 112.2 | 9.7 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Lake Region State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Lake Region State College in the Devils Lake area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and 2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Lake Region State College comprise the direct impacts, or "first round effects". Expenditures by Lake Region State College were \$6.7 million in FY1999, \$9.2 million in FY2004, \$10.2 million in FY2006, and \$11.4 million in FY2008. The increase during the 9-year period was \$4.6 million, a 68.3 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Lake Region State College were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$19.6 million in FY1999, \$27.3 million in FY2004, \$30.1 million in 2006, and \$33.9 million in FY2008. The economic impact has increased by 73.0 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$7.9 million in FY1999 to \$13.8 million in FY2008, a 75.4 percent (\$5.9 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$4.9 million in FY1999, \$6.6 million in FY2004, \$7.2 million in FY2006, and \$8.3 million in FY2008. This represents a \$3.4 million (68.8 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$386,000 in sales and use tax collections for FY2008, compared to \$228,000 in FY1999, \$305,000 in FY2004, and \$335,000 in FY2006. Personal income tax collections were estimated to be \$118,000 in FY1999, \$165,000 in FY2004, \$182,000 in FY2006, and \$207,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Lake Region State College expenditures would support almost 185 secondary (indirect and induced) jobs in 1999, nearly 270 in 2004, and over 300 in 2008. These jobs are in addition to the 257 persons employed by Lake Region State College in 2008. In the Fall of 2007, 764 full-time equivalent students were enrolled at Lake Region State College.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Devils Lake area was \$6.4 million in FY2008. Total economic impact was \$15.8 million, highlighted by increased retail trade activity of \$7.2 million and personal income increase of \$3.8 million. These levels of business activity would generate an additional \$332,000 sales and use tax revenue, and \$58,000 more personal income tax collections. This level of student spending would create enough business activity to support 112 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Lake Region State College, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | -----%----- | | |
| Direct Impacts: | | | | | | |
| General Fund | 2,145 | 2,471 | 2,828 | 3,220 | 50.1 | 13.9 |
| Nongeneral Fund | 3,880 | 6,077 | 6,781 | 8,075 | 108.1 | 19.1 |
| Capital Improvements | <u>723</u> | <u>696</u> | <u>549</u> | <u>64</u> | -91.2 | -88.3 |
| TOTAL | 6,748 | 9,244 | 10,158 | 11,359 | 68.3 | 11.8 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 723 | 696 | 549 | 64 | -91.2 | -88.3 |
| Communication and Public Util | 225 | 333 | 294 | 307 | 36.4 | 4.4 |
| Retail Trade | 853 | 874 | 961 | 1,217 | 42.7 | 26.6 |
| Finance, Insurance, Real Estate | 694 | 1,177 | 1,319 | 1,569 | 126.1 | 19.0 |
| Business and Personal Services | 620 | 1,189 | 1,597 | 1,878 | 202.9 | 17.6 |
| Households | <u>3,633</u> | <u>4,975</u> | <u>5,438</u> | <u>6,324</u> | 74.1 | 16.3 |
| TOTAL | 6,748 | 9,244 | 10,158 | 11,359 | 68.3 | 11.8 |
| Total Impacts: | | | | | | |
| Construction | 1,216 | 1,384 | 1,304 | 919 | -24.4 | -29.5 |
| Communications and Public Util | 880 | 1,266 | 1,332 | 1,488 | 69.1 | 11.7 |
| Retail Trade | 4,935 | 6,581 | 7,240 | 8,329 | 68.8 | 15.0 |
| Finance, Insurance, Real Estate | 1,606 | 2,456 | 2,729 | 3,169 | 97.3 | 16.1 |
| Business and Personal Services | 970 | 1,689 | 2,153 | 2,512 | 159.0 | 16.7 |
| Professional Social Services | 509 | 713 | 785 | 895 | 75.8 | 14.0 |
| Households | 7,881 | 11,030 | 12,126 | 13,822 | 75.4 | 14.0 |
| Other ¹ | <u>1,595</u> | <u>2,203</u> | <u>2,421</u> | <u>2,751</u> | 72.5 | 13.6 |
| TOTAL | 19,592 | 27,322 | 30,090 | 33,885 | 73.0 | 12.6 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Mayville State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Mayville State University in the Mayville area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Mayville State University comprise the direct impacts, or "first round effects". Expenditures by Mayville State University were \$9.4 million in FY1999, \$15.8 million in FY2004, \$13.7 million in FY2006, and \$14.0 million in FY2008. The increase during the 9-year period was \$4.6 million, a 49.0 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Mayville State University were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$28.4 million in FY1999, \$45.2 million in FY2004, \$41.0 million in 2006, and \$41.5 million in FY2008. The economic impact has increased by 46.1 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income has grown from \$11.3 million in FY1999 to \$16.4 million in FY2008, a 44.7 percent (\$5.1 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$6.8 million in FY1999, \$10.3 million in FY2004, \$10.2 million in FY2006, and \$10.2 million in FY2008. This represents a \$3.3 million (48.3 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$470,000 in sales and use tax collections for FY2008, compared to \$317,000 in FY1999 and \$477,000 in FY2004, and \$473,000 in FY2006. Personal income tax collections were estimated to be \$170,000 in FY1999, \$251,000 in FY2004, \$248,000 in FY2006, and \$246,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Mayville State University expenditures would support almost 280 secondary (indirect and induced) jobs in 1999, nearly 460 in 2004, almost 400 in 2006 and 2008. These jobs are in addition to the 207 persons employed by Mayville State University in 2008. In the Fall of 2007, 586 full-time equivalent students were enrolled at Mayville State University.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Mayville area was \$4.6 million in FY2008. Total economic impact was \$11.5 million, highlighted by increased retail trade activity of \$5.2 million and personal income growth of \$2.8 million. These levels of business activity would generate an additional \$240,000 sales and use tax revenue, and \$42,000 more personal income tax collections. This level of student spending would create enough business activity to support 79 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Mayville State University, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|-----------------|--------------|--------------|--------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| | -----\$000----- | | | | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 3,735 | 4,420 | 4,343 | 4,835 | 29.5 | 11.3 |
| Nongeneral Fund | 5,481 | 7,582 | 9,220 | 8,337 | 52.1 | -9.6 |
| Capital Improvements | <u>210</u> | <u>3,778</u> | <u>176</u> | <u>871</u> | 314.7 | 394.9 |
| TOTAL | 9,426 | 15,780 | 13,739 | 14,043 | 49.0 | 2.2 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 210 | 3,778 | 176 | 871 | 314.7 | 394.9 |
| Communication and Public Util | 458 | 428 | 739 | 864 | 88.7 | 16.9 |
| Retail Trade | 980 | 1,285 | 1,697 | 1,637 | 67.0 | -3.5 |
| Finance, Insurance, Real Estate | 1,799 | 1,858 | 2,140 | 2,135 | 18.7 | -0.2 |
| Business and Personal Services | 1,207 | 2,031 | 1,616 | 1,576 | 30.6 | -2.5 |
| Households | <u>4,772</u> | <u>6,400</u> | <u>7,371</u> | <u>6,960</u> | 45.9 | -5.6 |
| TOTAL | 9,426 | 15,780 | 13,739 | 14,043 | 49.0 | 2.2 |
| Total Impacts: | | | | | | |
| Construction | 914 | 4,865 | 1,203 | 1,900 | 107.9 | 57.9 |
| Communications and Public Util | 1,443 | 1,912 | 2,152 | 2,280 | 58.0 | 6.0 |
| Retail Trade | 6,848 | 10,312 | 10,220 | 10,155 | 48.3 | -0.6 |
| Finance, Insurance, Real Estate | 3,114 | 3,857 | 4,055 | 4,045 | 29.9 | -0.3 |
| Business and Personal Services | 1,736 | 2,812 | 2,372 | 2,328 | 34.1 | -1.9 |
| Professional Social Services | 735 | 1,091 | 1,072 | 1,062 | 44.5 | -0.9 |
| Households | 11,322 | 16,782 | 16,551 | 16,377 | 44.7 | -1.1 |
| Other ¹ | <u>2,304</u> | <u>3,519</u> | <u>3,352</u> | <u>3,359</u> | 45.8 | 0.2 |
| TOTAL | 28,416 | 45,150 | 40,977 | 41,506 | 46.1 | 1.3 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Minot State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Minot State University in the Minot area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Minot State University comprise the direct impacts, or "first round effects". Expenditures by Minot State University were \$30.1 million in FY1999, to \$39.4 million in FY2004, \$46.3 million in FY2006, and \$44.7 million in FY2008. The increase during the 9-year period was \$14.6 million, a 48.4 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Minot State University were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$89.0 million in FY1999, \$119.8 million in FY2004, \$136.5 million in 2006, and \$135.1 million in FY2008. The economic impact has increased by 51.8 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income has grown from \$36.3 million in FY1999 to \$56.3 million in FY2008, a 55.2 percent (\$20.0 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$21.2 million in FY1999, \$28.2 million in FY2004, \$33.0 million in FY2006, and \$31.9 million in FY2008. This represents a \$10.7 million (56.7 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$1,478,000 in sales and use tax collections for FY2008, compared to \$981,000 in FY1999, \$1,306,000 in FY2004, and \$1,527,000 in FY2006. Personal income tax collections were estimated to be \$545,000 in FY1999, \$744,000 in FY2004, \$827,000 in FY2006, and \$845,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Minot State University expenditures would support almost 850 secondary (indirect and induced) jobs in 1999, over 1,180 in 2004, 1,327 in 2006, and 1,190 in 2008. These jobs are in addition to the 579 persons employed by Minot State University in 2008. In the Fall of 2007, 2,730 full-time equivalent students were enrolled at Minot State University.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Minot area was \$22.9 million in FY2008. Total economic impact was \$56.8 million, highlighted by increased retail trade activity of \$25.7 million and personal income growth of \$13.8 million. These levels of business activity would generate an additional \$1.2 million sales and use tax revenue, and \$207,000 more personal income tax collections. This level of student spending would create enough business activity to support 411 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Minot State University, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY20008 | Change | |
|--------------------------------------|-----------------|---------------|---------------|---------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| | -----\$000----- | | | | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 16,966 | 20,712 | 13,822 | 14,710 | -13.3 | 6.4 |
| Nongeneral Fund | 9,747 | 18,019 | 28,043 | 28,920 | 196.7 | 3.1 |
| Capital Improvements | <u>3,375</u> | <u>671</u> | <u>4,422</u> | <u>1,031</u> | -69.5 | -76.7 |
| TOTAL | 30,088 | 39,402 | 46,287 | 44,661 | 48.4 | -3.5 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 3,375 | 671 | 4,422 | 1,031 | -69.5 | -76.7 |
| Communication and Public Util | 1,063 | 1,266 | 1,223 | 1,338 | 25.8 | 9.4 |
| Retail Trade | 2,450 | 2,789 | 4,444 | 3,139 | 28.1 | -29.4 |
| Finance, Insurance, Real Estate | 3,718 | 6,701 | 5,891 | 6,632 | -18.4 | 12.6 |
| Business and Personal Services | 2,741 | 5,269 | 5,361 | 6,069 | 121.4 | 13.2 |
| Households | <u>16,741</u> | <u>22,706</u> | <u>24,946</u> | <u>26,452</u> | 58.0 | 6.0 |
| TOTAL | 30,088 | 39,402 | 46,287 | 44,661 | 48.4 | -3.5 |
| Total Impacts: | | | | | | |
| Construction | 5,633 | 3,716 | 7,856 | 4,487 | -20.3 | -42.9 |
| Communications and Public Util | 4,063 | 5,444 | 5,850 | 6,038 | 48.6 | 3.2 |
| Retail Trade | 21,185 | 28,199 | 32,988 | 31,928 | 50.7 | -3.2 |
| Finance, Insurance, Real Estate | 7,902 | 12,403 | 12,269 | 13,099 | 65.8 | 6.8 |
| Business and Personal Services | 4,359 | 7,541 | 7,850 | 8,623 | 97.8 | 9.9 |
| Professional Social Services | 2,343 | 3,209 | 3,562 | 3,639 | 55.3 | 2.2 |
| Households | 36,308 | 49,615 | 55,102 | 56,338 | 55.2 | 2.2 |
| Other ¹ | <u>7,174</u> | <u>9,699</u> | <u>11,013</u> | <u>10,933</u> | 52.4 | -0.7 |
| TOTAL | 88,967 | 119,826 | 136,490 | 135,085 | 51.8 | -1.0 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Minot State University - Bottineau

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Minot State University-Bottineau in the Bottineau area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Minot State University-Bottineau comprise the direct impacts, or "first round effects". Expenditures by Minot State University-Bottineau were \$4.6 million in FY1999, \$5.4 million in FY2004, \$6.0 million in FY2006, and \$6.7 million in FY2008. The increase during the 9-year period was \$2.1 million, a 45.6 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Minot State University-Bottineau were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$13.5 million in FY1999, \$15.9 million in FY2004, \$17.6 million in 2006, and \$19.8 million in FY2008. The economic impact has increased by 47.1 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$5.4 million in FY1999 to \$8.0 million in FY2008, a 47.4 percent (\$2.6 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$3.3 million in FY1999, \$3.9 million in FY2004, \$4.2 million in FY2006, and \$4.9 million in FY2008. This represents a \$1.6 million (47.3 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$225,000 in sales and use tax collections for FY2008, compared to \$153,000 in FY1999, \$182,000 in FY2004, and \$194,000 in FY2006. Personal income tax collections were estimated to be \$81,000 in FY1999, \$97,000 in FY2004, \$105,000 in FY2006, and \$120,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Minot State University-Bottineau expenditures would support over 130 secondary (indirect and induced) jobs in 1999, over 155 in 2004, and over 170 in 2006 and 2008. These jobs are in addition to the 125 persons employed by Minot State University-Bottineau in 2008. In the Fall of 2007, 402 full-time equivalent students were enrolled at Minot State University-Bottineau.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Bottineau area was \$3.2 million in FY2008. Total economic impact was \$7.9 million, highlighted by increased retail trade activity of \$3.6 million and personal income growth of \$1.9 million. These levels of business activity would generate an additional \$165,000 sales and use tax revenue, and \$29,000 more personal income tax collections. This level of student spending would create enough business activity to support 54 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Minot State University - Bottineau, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 2,456 | 2,813 | 2,248 | 2,439 | -0.7 | 8.5 |
| Nongeneral Fund | 1,878 | 2,420 | 3,228 | 4,025 | 114.3 | 24.7 |
| Capital Improvements | <u>242</u> | <u>117</u> | <u>477</u> | <u>200</u> | -17.4 | -58.1 |
| TOTAL | 4,576 | 5,350 | 5,953 | 6,664 | 45.6 | 11.9 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 242 | 117 | 477 | 200 | -17.4 | -58.1 |
| Communication and Public Util | 212 | 241 | 216 | 250 | 17.9 | 15.7 |
| Retail Trade | 489 | 601 | 532 | 719 | 47.0 | 35.2 |
| Finance, Insurance, Real Estate | 515 | 756 | 798 | 924 | 79.4 | 15.8 |
| Business and Personal Services | 646 | 727 | 845 | 966 | 49.5 | 14.3 |
| Households | <u>2,472</u> | <u>2,908</u> | <u>3,085</u> | <u>3,605</u> | 45.8 | 16.9 |
| TOTAL | 4,576 | 5,350 | 5,953 | 6,664 | 45.6 | 11.9 |
| Total Impacts: | | | | | | |
| Construction | 581 | 517 | 917 | 698 | 20.1 | -23.9 |
| Communications and Public Util | 674 | 791 | 819 | 934 | 38.6 | 14.0 |
| Retail Trade | 3,295 | 3,923 | 4,186 | 4,852 | 47.3 | 15.9 |
| Finance, Insurance, Real Estate | 1,146 | 1,503 | 1,617 | 1,853 | 61.7 | 14.6 |
| Business and Personal Services | 892 | 1,021 | 1,167 | 1,332 | 49.3 | 14.1 |
| Professional Social Services | 351 | 417 | 455 | 518 | 47.6 | 13.9 |
| Households | 5,432 | 6,449 | 7,030 | 8,009 | 47.4 | 13.9 |
| Other ¹ | <u>1,088</u> | <u>1,296</u> | <u>1,411</u> | <u>1,607</u> | 47.7 | 13.9 |
| TOTAL | 13,459 | 15,917 | 17,602 | 19,803 | 47.1 | 12.5 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

North Dakota State College of Science

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of North Dakota State College of Science in the Wahpeton area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by North Dakota State College of Science comprise the direct impacts, or "first round effects". Expenditures by North Dakota State College of Science were \$30.6 million in FY1999, increased to \$34.7 million by FY2004, \$35.6 million in FY2006, and \$39.7 million in FY2008. The increase during the 9-year period was \$9.1 million, a 29.8 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with North Dakota State College of Science were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$87.5 million in FY1999, \$100.8 million in FY2004, \$103.6 million in 2006, and \$115.5 million in FY2008. The economic impact has increased by 31.9 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$33.5 million in FY1999 to \$44.3 million in FY2008, a 32.4 percent (\$10.8 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$22.6 million in FY1999, \$26.0 million in FY2004, \$27.1 million in FY2006, and \$29.5 million in FY2008. This represents a \$6.9 million (30.5 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$1,363,000 in sales and use tax collections for FY2008, compared to \$1,045,000 in FY1999, \$1,204,000 in FY2004, and \$1,255,000 in FY2006. Personal income tax collections were estimated to be \$503,000 in FY1999, \$588,000 in FY2004, \$607,000 in FY2006, and \$665,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from North Dakota State College of Science expenditures would support over 880 secondary (indirect and induced) jobs in 1999, nearly 1,050 in 2004, over 1,050 in 2006 and over 1,100 in FY2008. These jobs are in addition to the 529 persons employed by North Dakota State College of Science in 2008. In the Fall of 2007, 2,097 full-time equivalent students were enrolled at North Dakota State College of Science.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Wahpeton area was \$15.8 million in FY2008. Total economic impact was \$39.2 million, highlighted by increased retail trade activity of \$17.7 million and personal income increase of \$9.5 million. These levels of business activity would generate an additional \$822,000 sales and use tax revenue, and \$143,000 more personal income tax collections. This level of student spending would create enough business activity to support 283 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for North Dakota State College of Science, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|---------------|---------------|---------------|---------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | -----%----- | | |
| Direct Impacts: | | | | | | |
| General Fund | 15,199 | 16,116 | 12,404 | 14,276 | -6.1 | 15.1 |
| Nongeneral Fund | 12,302 | 17,777 | 22,478 | 25,110 | 104.1 | 11.7 |
| Capital Improvements | <u>3,066</u> | <u>757</u> | <u>739</u> | <u>294</u> | -90.4 | -60.2 |
| TOTAL | 30,567 | 34,650 | 35,621 | 39,680 | 29.8 | 11.4 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 3,066 | 757 | 739 | 294 | -90.4 | -60.2 |
| Communication and Public Util | 1,662 | 1,838 | 1,693 | 1,594 | -4.1 | -5.9 |
| Retail Trade | 4,945 | 5,543 | 6,027 | 6,170 | 24.8 | 2.4 |
| Finance, Insurance, Real Estate | 3,416 | 4,377 | 4,623 | 5,193 | 52.0 | 12.3 |
| Business and Personal Services | 3,499 | 5,503 | 5,176 | 8,220 | 134.9 | 58.8 |
| Households | <u>13,979</u> | <u>16,632</u> | <u>17,363</u> | <u>18,209</u> | 30.3 | 4.9 |
| TOTAL | 30,567 | 34,650 | 35,621 | 39,680 | 29.8 | 11.4 |
| Total Impacts: | | | | | | |
| Construction | 5,204 | 3,232 | 3,287 | 3,102 | -40.4 | -5.6 |
| Communications and Public Util | 4,588 | 5,302 | 5,241 | 5,613 | 22.3 | 7.1 |
| Retail Trade | 22,576 | 25,999 | 27,108 | 29,458 | 30.5 | 8.7 |
| Finance, Insurance, Real Estate | 7,361 | 8,983 | 9,362 | 10,445 | 41.9 | 11.6 |
| Business and Personal Services | 5,026 | 7,318 | 7,041 | 10,321 | 105.4 | 46.6 |
| Professional Social Services | 2,173 | 2,544 | 2,625 | 2,886 | 32.8 | 9.9 |
| Households | 33,495 | 39,178 | 40,444 | 44,330 | 32.4 | 9.6 |
| Other ¹ | <u>7,109</u> | <u>8,213</u> | <u>8,490</u> | <u>9,339</u> | 31.4 | 10.0 |
| TOTAL | 87,532 | 100,769 | 103,598 | 115,494 | 31.9 | 11.5 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

North Dakota State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of North Dakota State University in the Fargo area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by North Dakota State University comprise the direct impacts, or "first round effects". Expenditures by North Dakota State University were \$167.6 million in FY1999, \$246.8 million in FY2004, \$284.7 million in FY2006, and \$346.0 million in FY2008. The increase during the 9-year period was \$178.0 million, a 106.2 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with North Dakota State University were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$490.8 million in FY1999, \$730.6 million in FY2004, \$835.6 million in 2006, and \$1,000.9 million in FY2008. The economic impact has increased by 103.9 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$194.2 million in FY1999 to \$382.8 million in FY2008, a 97.1 percent (\$188.6 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$125.3 million in FY1999, \$171.7 million in FY2004, \$206.4 million in FY2006 and \$250.8 million in FY2008. This represents a \$125.5 million (100.2 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$11,610,000 in sales and use tax collections for FY2008, compared to \$5,800,000 in FY1999, \$7,949,000 in FY2004, and \$9,557,000 in FY2006. Personal income tax collections were estimated to be \$2,917,000 in FY1999, \$4,378,000 in FY2004, \$4,958,000 in FY2006, and \$5,743,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from North Dakota State University expenditures would support almost 5,000 secondary (indirect and induced) jobs in 1999, over 7,500 in 2004, over 8,600 in 2006, and over 9,000 in FY2008. These jobs are in addition to the 3,664 persons employed by North Dakota State University in 2008. In the Fall of 2007, 11,221 full-time equivalent students were enrolled at North Dakota State University.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Fargo area was \$103.8 million in FY2008. Total economic impact was \$258.0 million, highlighted by increased retail trade activity of \$116.7 million and personal income increase of \$62.6 million. These levels of business activity would generate an additional \$5.4 million sales and use tax revenue, and \$939,000 more personal income tax collections. This level of student spending would create enough business activity to support 1,882 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for North Dakota State University, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|---------------|----------------|----------------|----------------|-------------|-------------|
| | | | | | FY1999-2006 | FY2004-2006 |
| -----\$000----- | | | | -----%----- | | |
| Direct Impacts: | | | | | | |
| General Fund | 67,041 | 70,715 | 76,513 | 88,150 | 31.5 | 15.2 |
| Nongeneral Fund | 95,014 | 155,899 | 193,757 | 232,749 | 145.0 | 20.1 |
| Capital Improvements | <u>5,581</u> | <u>20,139</u> | <u>14,411</u> | <u>24,765</u> | 343.7 | 71.9 |
| TOTAL | 167,636 | 246,753 | 284,681 | 345,664 | 106.2 | 21.4 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 5,581 | 20,139 | 14,411 | 24,765 | 343.7 | 71.9 |
| Communication and Public Util | 8,168 | 10,185 | 9,966 | 11,993 | 46.8 | 20.3 |
| Retail Trade | 24,448 | 20,002 | 34,301 | 48,811 | 99.7 | 42.3 |
| Finance, Insurance, Real Estate | 21,879 | 32,862 | 36,489 | 43,731 | 99.9 | 19.9 |
| Business and Personal Services | 22,510 | 35,840 | 45,494 | 59,668 | 165.1 | 31.2 |
| Households | <u>85,050</u> | <u>127,725</u> | <u>144,020</u> | <u>156,696</u> | 84.2 | 8.8 |
| TOTAL | 167,636 | 246,753 | 284,681 | 345,664 | 106.2 | 21.4 |
| Total Impacts: | | | | | | |
| Construction | 17,762 | 38,417 | 35,149 | 49,111 | 176.5 | 39.7 |
| Communications and Public Util | 24,968 | 35,257 | 38,690 | 46,173 | 84.9 | 19.3 |
| Retail Trade | 125,268 | 171,687 | 206,409 | 250,758 | 100.2 | 21.5 |
| Finance, Insurance, Real Estate | 44,531 | 66,886 | 75,136 | 89,009 | 99.9 | 18.5 |
| Business and Personal Services | 31,395 | 49,228 | 60,743 | 77,609 | 147.2 | 27.8 |
| Professional Social Services | 12,585 | 18,903 | 21,432 | 24,895 | 97.8 | 16.2 |
| Households | 194,198 | 291,865 | 330,539 | 382,838 | 97.1 | 15.8 |
| Other ¹ | <u>40,073</u> | <u>58,373</u> | <u>67,452</u> | <u>80,499</u> | 100.9 | 19.3 |
| TOTAL | 490,780 | 730,616 | 835,550 | 1,000,892 | 103.9 | 19.8 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

University of North Dakota

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of University of North Dakota in the Grand Forks area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by University of North Dakota comprise the direct impacts, or "first round effects". Expenditures by University of North Dakota were \$225.4 million in FY1999, \$315.1 million in FY2004, \$341.5 million in FY2006, and \$370.5 million in FY2008. The increase during the 9-year period was \$145.1 million, a 64.4 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with University of North Dakota were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$657.4 million in FY1999, \$931.1 million in FY2004, \$1,009.3 million in 2006, and \$1,087.3 million in FY2008. The economic impact has increased by 65.4 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$255.7 million in FY1999 to \$424.0 million in FY2008, a 65.8 percent (\$168.2 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$166.0 million in FY1999, \$225.1 million in FY2004, \$243.8 million in FY2006, and \$270.7 million in FY2008. This represents a \$104.7 million (63.1 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$12,533,000 in sales and use tax collections for FY2008, compared to \$7,686,000 in FY1999, \$10,422,000 in FY2004, and \$11,287,000 in FY 2006. Personal income tax collections were estimated to be \$3,836,000 in FY1999, \$5,517,000 in FY2004, \$5,986,000 in FY2006, and \$6,360,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from University of North Dakota expenditures would support almost 6,950 secondary (indirect and induced) jobs in 1999, nearly 9,650 in 2004, and almost 10,600 in 2006 and 2008. These jobs are in addition to the 4,183 persons employed by University of North Dakota in 2008. In the Fall of 2007, 10,967 full-time equivalent students were enrolled at University of North Dakota.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Grand Forks area was \$98.0 million in FY2008. Total economic impact was \$243.6 million, highlighted by increased retail trade activity of \$110.2 million and personal income increase of \$59.1 million. These levels of business activity would generate an additional \$5.1 million sales and use tax revenue, and 881,000 more personal income tax collections. This level of student spending would create enough business activity to support 1,776 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for University of North Dakota, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|---------------------------------|----------------|----------------|------------------|------------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 62,990 | 62,320 | 66,308 | 77,379 | 22.8 | 16.7 |
| Nongeneral Fund | 152,076 | 227,572 | 259,366 | 281,470 | 85.1 | 8.5 |
| Capital Improvements | <u>10,342</u> | <u>25,178</u> | <u>15,804</u> | <u>11,638</u> | 12.5 | -26.4 |
| TOTAL | <u>225,408</u> | <u>315,070</u> | <u>341,478</u> | <u>370,487</u> | 64.4 | 8.5 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 10,342 | 25,178 | 15,804 | 11,638 | 12.5 | -26.4 |
| Communication and Public Util | 9,024 | 9,914 | 9,566 | 11,946 | 32.3 | 24.9 |
| Retail Trade | 32,174 | 33,193 | 35,697 | 48,859 | 51.9 | 36.9 |
| Finance, Insurance, Real Estate | 29,732 | 47,425 | 47,815 | 51,643 | 73.7 | 8.0 |
| Business and Personal Services | 36,108 | 42,150 | 61,087 | 68,032 | 88.4 | 11.4 |
| Households | <u>108,028</u> | <u>157,210</u> | <u>171,509</u> | <u>178,369</u> | 65.1 | 4.0 |
| TOTAL | <u>225,408</u> | <u>315,070</u> | <u>341,478</u> | <u>370,487</u> | 64.4 | 8.5 |
| Total Impacts: | | | | | | |
| Construction | 26,482 | 48,230 | 40,803 | 38,322 | 44.7 | -6.1 |
| Communications and Public Util | 31,569 | 41,692 | 44,526 | 49,586 | 57.1 | 11.4 |
| Retail Trade | 166,004 | 225,096 | 243,773 | 270,693 | 63.1 | 11.0 |
| Finance, Insurance, Real Estate | 59,779 | 90,315 | 94,538 | 101,496 | 69.8 | 7.4 |
| Business and Personal Services | 47,993 | 59,150 | 79,713 | 87,938 | 83.2 | 10.3 |
| Professional Social Services | 16,607 | 23,853 | 25,904 | 27,556 | 65.9 | 6.4 |
| Households | 255,739 | 367,831 | 399,082 | 423,970 | 65.8 | 6.2 |
| Other ¹ | <u>53,259</u> | <u>74,979</u> | <u>80,995</u> | <u>87,740</u> | 64.7 | 8.3 |
| TOTAL | <u>657,432</u> | <u>931,146</u> | <u>1,009,334</u> | <u>1,087,301</u> | 65.4 | 7.7 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Valley City State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Valley City State University in the Valley City area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. impact for higher education in North Dakota, which was presented in the main body of this report. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Valley City State University comprise the direct impacts, or "first round effects". Expenditures by Valley City State University were \$13.4 million in FY1999, \$17.0 million in FY2004, 16.4 million in FY2006, and \$18.7 million in FY2008. The increase during the 9-year period was \$5.3 million, a 39.7 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Valley City State University were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$39.3 million in FY1999, \$50.1 million in FY2004, \$48.8 million in 2006, and \$55.7 million in FY2008. The economic impact has increased by 41.7 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$15.5 million in FY1999 to \$22.1 million in FY2008, a 42.6 percent (\$6.6 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$9.5 million in FY1999, \$11.5 million in FY2004, \$11.8 million in FY2006, and \$13.0 million in FY2008. This represents a \$3.6 million (37.5 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$603,000 in sales and use tax collections for FY2008, compared to \$439,000 in FY1999, \$533,000 in FY2004, and \$603,000 in FY2008. Personal income tax collections were estimated to be \$232,000 in FY1999, \$289,000 in FY2004, \$291,000 in FY2006, and \$331,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Valley City State University expenditures would support almost 400 secondary (indirect and induced) jobs in 1999, nearly 500 in 2004, and over 500 in 2006 and 2008. These jobs are in addition to the 163 persons employed by Valley City State University in 2008. In the Fall of 2007, 807 full-time equivalent students were enrolled at Valley City State University.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Valley City area was \$6.5 million in FY2008. Total economic impact was \$16.1 million, highlighted by increased retail trade activity of \$7.2 million and personal income increase of \$3.9 million. These levels of business activity would generate an additional \$336,00 sales and use tax revenue, and \$58,000 more personal income tax collections. This level of student spending would create enough business activity to support 113 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

Direct and Total Economic Impacts for Valley City State University, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | -----%----- | | |
| Direct Impacts: | | | | | | |
| General Fund | 5,152 | 5,943 | 5,850 | 6,754 | 31.1 | 15.5 |
| Nongeneral Fund | 7,364 | 8,657 | 10,229 | 10,614 | 44.1 | 3.8 |
| Capital Improvements | <u>841</u> | <u>2,423</u> | <u>295</u> | <u>1,291</u> | 53.5 | 337.6 |
| TOTAL | 13,357 | 17,023 | 16,374 | 18,659 | 39.7 | 14.0 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 841 | 2,423 | 295 | 1,291 | 53.5 | 337.6 |
| Communication and Public Util | 794 | 672 | 699 | 618 | -22.2 | -11.6 |
| Retail Trade | 1,413 | 1,330 | 1,702 | 1,525 | 7.9 | -10.4 |
| Finance, Insurance, Real Estate | 1,744 | 2,636 | 2,532 | 2,971 | 70.4 | 17.3 |
| Business and Personal Services | 1,938 | 2,253 | 2,849 | 2,880 | 48.6 | 1.1 |
| Households | <u>6,627</u> | <u>7,709</u> | <u>8,297</u> | <u>9,374</u> | 41.5 | 13.0 |
| TOTAL | 13,357 | 17,023 | 16,374 | 18,659 | 39.7 | 14.0 |
| Total Impacts: | | | | | | |
| Construction | 1,817 | 3,648 | 1,506 | 2,672 | 47.1 | 77.4 |
| Communications and Public Util | 2,143 | 2,367 | 2,402 | 2,538 | 18.4 | 5.7 |
| Retail Trade | 9,479 | 11,521 | 11,771 | 13,032 | 37.5 | 10.7 |
| Finance, Insurance, Real Estate | 3,558 | 4,907 | 4,798 | 5,548 | 55.9 | 15.6 |
| Business and Personal Services | 2,650 | 3,155 | 3,756 | 3,909 | 47.5 | 4.1 |
| Professional Social Services | 1,004 | 1,254 | 1,259 | 1,433 | 42.7 | 13.8 |
| Households | 15,485 | 19,295 | 19,385 | 22,077 | 42.6 | 13.9 |
| Other ¹ | <u>3,153</u> | <u>3,960</u> | <u>3,927</u> | <u>4,447</u> | 41.0 | 13.2 |
| TOTAL | 39,289 | 50,107 | 48,804 | 55,656 | 41.7 | 14.0 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

Williston State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of Williston State College in the Williston area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent.

Expenditures by Williston State College comprise the direct impacts, or "first round effects". Expenditures by Williston State College were \$6.1 million in FY1999, \$10.1 million in FY2004, \$9.2 million in FY2006, and 10.9 million in FY2008. The increase during the 9-year period was \$4.8 million, a 77.8 percent increase. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector.

Total impacts associated with Williston State College were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$17.8 million in FY1999, \$29.1 million in FY2004, \$27.2 million in 2006, and \$31.3 million in FY2008. The economic impact has increased by 76.1 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income increased from \$7.2 million in FY1999 to \$12.2 million in FY2008, a 69.9 percent (\$5.0 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$4.7 million in FY1999, \$7.3 million in FY2004, \$6.9 million in FY2006, and \$8.8 million in FY2008. This represents a \$4.1 million (87.7 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$408,000 in sales and use tax collections for FY2008, compared to \$218,000 in FY1999, \$336,000 in FY2004, and \$321,000 in FY2006. Personal income tax collections were estimated to be \$107,000 in FY1999, \$170,000 in FY2004, \$165,000 in FY2006, and \$183,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from Williston State College expenditures would support almost 170 secondary (indirect and induced) jobs in 1999, nearly 300 in 2004, and over 264 in 2006 and 2008. These jobs are in addition to the 138 persons employed by Williston State College in 2008. In the Fall of 2007, 551 full-time equivalent students were enrolled at Williston State College.

In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Williston area was \$4.4 million in FY2008. Total economic impact was \$11.0 million, highlighted by increased retail trade activity of \$5.0 million and personal income increase of \$2.7 million. These levels of business activity would generate an additional \$229,000 sales and use tax revenue, and \$40,000 more personal income tax collections. This level of student spending would create enough business activity to support 74 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix A, Table 9.

**Direct and Total Economic Impacts for Williston State College, Fiscal Years 1999, 2004, 2006, and 2008
(Current Year Dollars)**

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | |
|--------------------------------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | | | | | FY1999-2008 | FY2006-2008 |
| -----\$000----- | | | | | -----%----- | |
| Direct Impacts: | | | | | | |
| General Fund | 2,394 | 2,606 | 2,808 | 3,295 | 37.6 | 17.3 |
| Nongeneral Fund | 3,388 | 6,365 | 6,203 | 7,429 | 119.3 | 19.8 |
| Capital Improvements | <u>363</u> | <u>1,117</u> | <u>192</u> | <u>204</u> | -43.8 | 6.3 |
| TOTAL | 6,145 | 10,088 | 9,203 | 10,928 | 77.8 | 18.7 |
| Direct Impacts by I-O Sector: | | | | | | |
| Construction | 363 | 1,117 | 192 | 204 | -43.8 | 6.3 |
| Communication and Public Util | 157 | 256 | 277 | 300 | 91.1 | 8.3 |
| Retail Trade | 1,001 | 1,318 | 1,271 | 2,478 | 147.6 | 95.0 |
| Finance, Insurance, Real Estate | 640 | 1,046 | 1,253 | 1,389 | 117.0 | 10.9 |
| Business and Personal Services | 645 | 1,449 | 1,225 | 1,242 | 92.6 | 1.4 |
| Households | <u>3,339</u> | <u>4,902</u> | <u>4,985</u> | <u>5,315</u> | 59.2 | 6.6 |
| TOTAL | 6,145 | 10,088 | 9,203 | 10,928 | 77.8 | 18.7 |
| Total Impacts: | | | | | | |
| Construction | 810 | 1,834 | 873 | 970 | 19.8 | 11.1 |
| Communications and Public Util | 756 | 1,234 | 1,210 | 1,355 | 79.2 | 12.0 |
| Retail Trade | 4,703 | 7,261 | 6,931 | 8,828 | 87.7 | 27.4 |
| Finance, Insurance, Real Estate | 1,468 | 2,374 | 2,523 | 2,809 | 91.4 | 11.3 |
| Business and Personal Services | 964 | 1,966 | 1,725 | 1,798 | 86.5 | 4.2 |
| Professional Social Services | 463 | 733 | 710 | 789 | 70.4 | 11.1 |
| Households | 7,164 | 11,320 | 10,972 | 12,172 | 69.9 | 10.9 |
| Other ¹ | <u>1,468</u> | <u>2,340</u> | <u>2,227</u> | <u>2,625</u> | 78.8 | 17.9 |
| TOTAL | 17,796 | 29,062 | 27,171 | 31,346 | 76.1 | 15.4 |

¹ Includes agriculture, mining, manufacturing, transportation, and government.

North Dakota University System Office

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic impact analysis of North Dakota University System Office in the Bismarck area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. The summation of the economic impacts for the eleven college campuses and the North Dakota University System office would give the total economic impact for higher education in North Dakota, which was presented in the main body of this report. All dollar values for FY1999, FY2004, FY2006, and FY2008 are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 9-year period 1999-2008 was 30 percent, as noted in the main body of this report. Also, the economic impacts resulting from student expenditures were not included in the analysis.

Expenditures by North Dakota University System Office comprise the direct impacts, or "first round effects". Expenditures by North Dakota University System Office were \$6.1 million in FY1999, \$17.3 million in FY2004, \$6.1 million in FY2006, and \$9.4 million in FY2008. Spending during the 9-year period was virtually unchanged from FY1999 to FY2004, but increased to \$9.4 million in FY2008. These expenditures were allocated to corresponding sectors of the North Dakota Input-Output Model. The North Dakota Input-Output Model consists of interdependence coefficients, or multipliers, that measure the level of business activity generated in each economic sector for an additional dollar of expenditures in a given sector. Applying the expenditures to the multipliers provides an estimate of the total economic impact.

Total impacts associated with North Dakota University System Office were estimated by applying the Input-Output Model coefficients to total expenditures. Total economic impacts were estimated to be \$18.3 million in FY1999, \$53.6 million in FY2004, \$18.7 million in 2006, and \$28.8 million in FY2008. The economic impact has increased by 59.7 percent during the 9-year period. The sector that had the largest impact was households (i.e., personal income of area residents) for each year presented. Personal income has grown from \$7.6 million in FY1999 to \$13.6 million in FY2008, a 78.8 percent (\$6.0 million) increase. Other sectors receiving major contributions included retail trade, construction, finance, insurance, and real estate, and business and personal services. Increased retail trade activity was estimated to be \$4.2 million in FY1999, \$10.7 million in FY2004, \$4.4 million in FY2006, and \$6.8 million in FY2008. This represents a \$2.6 million (63.4 percent) increase for the 9-year period. Increased levels of retail trade activity would generate \$315,000 in sales and use tax collections for FY2008, compared to \$193,000 in FY1999, \$497,000 in FY2004, and \$203,000 in FY2008. Personal income tax collections were estimated to be \$114,000 in FY1999, \$279,000 in FY2004, \$130,000 in FY2006, and \$205,000 in FY2008 as the result of increased economic activity in the household sector.

Levels of business activity resulting from North Dakota University System Office expenditures would support almost 200 secondary (indirect and induced) jobs in 1999, nearly 700 in 2004, 170 in 2006, and 223 in FY2008. These jobs are in addition to the 24 persons employed by North Dakota University System Office in 2008. In addition to the economic impact resulting from the institution's expenditures, spending by students also contributes to the local economy. These key economic variables provide an indication of the economic impact of North Dakota University System Office on the local economy in terms of business activity, retail trade, personal income, and jobs.

Direct and Total Economic Impacts for the North Dakota University System Office, Fiscal Years 1999, 2004, 2006, and 2008 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | Change | | |
|--------------------------------------|--------|--------|--------|-----------------|-------------|-------------|--|
| | | | | | FY1999-2008 | FY2006-2008 | |
| | | | | -----\$000----- | | -----%----- | |
| Direct Impacts: | | | | | | | |
| General Fund | 4,202 | 15,096 | 5,934 | 8,664 | 106.2 | 46.0 | |
| Nongeneral Fund | 1,918 | 2,169 | 178 | 715 | -62.7 | 301.7 | |
| Capital Improvements | -- | -- | -- | -- | -- | -- | |
| TOTAL | 6,120 | 17,265 | 6,112 | 9,379 | 53.3 | 53.5 | |
| Direct Impacts by I-O Sector: | | | | | | | |
| Construction | -- | -- | -- | -- | -- | -- | |
| Communication and Public Util | 16 | 20 | 23 | 20 | 25.0 | -13.0 | |
| Retail Trade | 273 | 482 | 96 | 128 | -53.1 | 33.3 | |
| Finance, Insurance, Real Estate | 189 | 5,617 | 356 | 512 | 170.9 | 43.8 | |
| Business and Personal Services | 1,773 | 6,777 | 652 | 696 | -60.7 | 6.8 | |
| Households | 3,869 | 4,369 | 4,985 | 8,023 | 107.4 | 60.9 | |
| TOTAL | 6,120 | 17,265 | 6,112 | 9,379 | 53.3 | 53.5 | |
| Total Impacts: | | | | | | | |
| Construction | 470 | 1,198 | 516 | 805 | 71.3 | 56.0 | |
| Communications and Public Util | 661 | 1,999 | 675 | 1,020 | 54.3 | 51.1 | |
| Retail Trade | 4,166 | 10,742 | 4,380 | 6,808 | 63.4 | 55.4 | |
| Finance, Insurance, Real Estate | 1,076 | 7,916 | 1,323 | 2,019 | 87.6 | 52.6 | |
| Business and Personal Services | 2,118 | 7,827 | 1,017 | 1,259 | -40.6 | 23.8 | |
| Professional Social Services | 492 | 1,239 | 555 | 869 | 76.6 | 56.6 | |
| Households | 7,626 | 18,596 | 8,690 | 13,636 | 78.8 | 56.9 | |
| Other ¹ | 1,421 | 4,040 | 1,532 | 2,376 | 67.2 | 55.1 | |
| TOTAL | 18,030 | 53,557 | 18,688 | 28,792 | 59.7 | 54.1 | |

¹ Includes agriculture, mining, manufacturing, transportation, and government.