# Economic Contribution of the North Dakota University System in 2019 

Dean A. Bangsund and Nancy M. Hodur


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## Executive Summary

The North Dakota University System (NDUS) consists of the NDUS Office and 11 college campuses located throughout the state. In addition to the 11 main campuses, numerous other university facilities, centers, and offices are located throughout the state. Institutions of higher education have an economic effect across the state as those institutions acquire inputs, purchase services, and provide for payroll and employment at both the local and state level. NDUS expenditures include general fund sources (e.g., state appropriated monies) and nongeneral fund sources (i.e., grants, contracts, donations). NDUS in-state expenditures comprise the direct economic impact or 'first round effects.' NDUS expenditure data were available for selected fiscal years from 1999 to 2019, with the FY2019 data the most recent available for this study. All dollar values in this analysis are expressed in terms of current year dollars (i.e., the effects of inflation have not been removed).

The North Dakota Input-Output Model was used to estimate the secondary economic effects as those direct effects (i.e., expenditures) are circulated and re-spent in the economy. The model estimates the changes in gross business volume (gross receipts) for all sectors of an economy and is used to provide key economic indicators such as retail trade activity, economywide personal income, and total business activity. Historic relationships were used to estimate secondary employment and state-level tax receipts.

Salient observations include:

- Direct economic effects (expenditures) by the NDUS have increased from $\$ 533$ million in FY1999 to $\$ 980$ million in 2009 and $\$ 1.5$ billion in FY2019.
- Direct economic effects decreased from a high of $\$ 1.6$ billion in FY2015 to $\$ 1.5$ billion in FY2019.
- Direct impact increased slightly from FY2018 increasing from $\$ 1.3$ billion in 2018 to $\$ 1.5$ billion in FY2019.
- Wages and salaries represent the largest itemized expense for the NDUS, generally accounting for 35 percent of the total expenditures in FY2019.
- Employee benefits are the second largest expenditure category, representing 14 percent of total expenditures in FY2019.
- Non-general fund revenues are an important source of funding for the NDUS, providing 71 percent of the total expenditures in FY2018 and 74 percent in FY2019.
- Total NDUS economic effects (direct and secondary) were $\$ 1.6$ billion in FY1999, $\$ 2.9$ billion in FY2009, and $\$ 4.3$ billion in FY2019.
- Direct expenditures created total business activity (direct and secondary effects) of $\$ 4.3$ billion including $\$ 1.1$ billion in retail trade activity, and $\$ 1.6$ billion in economy-wide personal income.
- Total business activity of $\$ 4.3$ billion in FY2019 is roughly equal to total business activity of $\$ 4.1$ billion in FY2017 and represents a slight increase over total business activity of $\$ 4$ billion in FY2018.
- University System in-state expenditures, student expenditures and subsequent secondary business activity was estimated to generate $\$ 48.4$ million in state tax collections. Of that total, $\$ 19.9$ million were sales and use taxes, $\$ 12.5$ million from property taxes, $\$ 7.3$ million from personal income taxes, $\$ 2.6$ million from corporate income taxes, and $\$ 6.1$ million in other miscellaneous taxes.
- Direct employment by the NDUS was 10,489 in FY2019 FTE jobs were down slightly from FY2017 and FY2018 employment of 10,741 and 10,857, respectively.
- Enrollment at the NDUS's 11 colleges and universities was 34,954 FTE students for Fall Semester 2019, down 1,649 from 2018. Enrollment has been declining since a high of 39,089 in 2011.
- NDUS student living expenses were estimated to be $\$ 453$ million for FY2019.
- Economic effects of student living expenses resulted in $\$ 453$ million in direct effects and $\$ 1.1$ billion in total business activity, highlighted by $\$ 510$ million in retail trade activity and $\$ 273$ million in economy-wide personal income.
- Combined NDUS and student expenditures (direct effects) in FY 2019 was $\$ 4.7$ billion. Total economic contribution (direct plus secondary) from NDUS and student expenditures was nearly $\$ 5.5$ billion.
- The state's colleges and universities leverage $\$ 2.82$ from external sources for every dollar of state appropriated funds.


# Economic Contribution of the North Dakota University System 

Dean A. Bangsund and Nancy M. Hodur*

## Introduction

The North Dakota University System (NDUS) is comprised of the NDUS Office, 11 college campuses, and their related entities located throughout the state. These institutions contribute to the state and local economies through expenditures for inputs and services and through personal spending by employees and students. Previous studies have estimated the economic contribution of the NDUS back to fiscal year (FY) 1999. This study represents a biennial update to those assessments.

The NDUS's financial presence in the state and overall student enrollment grew substantially from 1999 to 2011. Student enrollment over that period increased from 30,720 to 39,089. Mirroring national trends, enrollment has been declining since 2011, and was measured at 34,954 in 2019. Employment at the 11 universities has also increased since 1999, however the system has seen slight declines in the last two years. Consistent with the increases in enrollment and employment, expenditures to operate the NDUS increased steadily from 1999 to 2015. Since 2015, NDUS in-state expenditures have declined from their peak and remained relatively constant the last two fiscal years.

The economic contribution of the NDUS was estimated with consideration given to the source of revenue for the system colleges and universities. General fund revenues are primarily received from state government appropriations. Non-general fund revenues come from sources other than the state appropriated funds. Examples of non-general fund revenues are federal grants, private grants, private/public research contracts, and donations. The main body of the report focuses on the NDUS and the economic effects of general and non-general fund expenditures by colleges and universities. An abbreviated economic contribution analysis for each of the 11 campuses and the NDUS Office are contained in Appendix B.

## Methods

The initial task in any impact or contribution assessment is estimating the direct effects or first round of spending associated with an activity, project, or program. The NDUS Office provided expenditure data through FY2019 for each of the 11 institutions and the NDUS Office. Also provided were fall semester 2018, 2019, and 2020 student enrollment and university employment for each of the state's 11 public colleges and universities. The expenditure data were provided for the same budget categories as used in previous studies (Appendix A contains previous studies' expenditure data). Financial data were provided for general and non-general fund expenditures. Capital improvements (building) and capital equipment expenditures for each of the institutions have historically been included in the financial data.

Actual expenditure made in North Dakota were used for this analysis, not budgeted expenses, and costs. Expenditure data were obtained from the ConnectND system, which provides

[^0]consistency in identifying expense categories across the studies. Expenditures for each individual institution may not correspond exactly with that institution's financial statement, but instead correspond with the data provided by the NDUS computer network. The following colleges and universities, along with their respective centers and stations, were included in the ConnectND data system:

NDUS Office (including Core Technology Services)<br>Bismarck State College<br>Dickinson State University<br>Lake Region State College<br>Mayville State University<br>Minot State University<br>Dakota College Bottineau<br>North Dakota State College of Science<br>North Dakota State University<br>Agricultural Experiment Station:<br>NDSU Main Research Center<br>Dickinson Research Extension Center<br>Central Grasslands Research Extension Center<br>Hettinger Research Extension Center<br>Langdon Research Extension Center<br>North Central Research Extension Center<br>Williston Research Extension Center<br>Carrington Research Extension Center<br>Agronomy Seed Farm<br>Northern Crops Institute<br>Upper Great Plains Transportation Institute<br>NDSU Cooperative Extension Service<br>North Dakota Forest Service<br>University of North Dakota<br>School of Medicine and Health Sciences<br>Valley City State University<br>Williston State College

Data for organizations such as development foundations and university/private partnerships (e.g., NDSU Research \& Technology Park) are not included in the ConnectND database. Therefore, the financial activity of those entities is not reflected in this analysis. The absence of those expenditure data, in some cases, understates the economic effects of the NDUS.

Spending on capital improvements came from both general fund and non-general fund sources. Non-general fund construction was funded by external sources such as grants, contracts, and donations. All expenditure data are reported in current year dollar values (also called nominal dollars), meaning dollar values have not been adjusted for inflation. Some of the growth reported in expenditures would be accounted for with inflation. In other words, some growth in expenditures would be required to keep spending steady on a real basis (i.e., account for inflationary changes in the purchasing power of the dollar). The Consumer Price Index suggests inflation during the 1999-2019 period was 53.5 percent (Bureau of Labor Statistics 2020). Therefore, a 53.5 percent increase in expenditures from 1999 to 2019 would be required to represent a zero change in expenditures if corrected for inflation (i.e., dollars expressed in real terms).

The North Dakota Input-Output Model was used to estimate the secondary economic effects based on NDUS 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 Leistritz (1989). The model estimates the changes in total business activity (gross receipts) for all sectors of the area economy resulting from the direct expenditures associated with the NDUS. The increased 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 in North Dakota (Leistritz 1995; Bangsund and Leistritz 2004). Empirical testing has confirmed the model's accuracy in estimating changes in levels of economic activity in North Dakota; over the period 1958-2012, estimates of statewide personal income derived from the model averaged within 7 percent of comparable values reported by the U.S. Department of Commerce (Leistritz et al. 1990; Coon et al. 2014).

This analysis also includes the economic impact of student spending. Student spending has an economic impact beyond that of the NDUS. Estimated costs of education for the 2018-2019 academic year was obtained from the North Dakota Career Resource Network (2020). Those expenditures provide an indication of the economic contribution of student spending in the state.

## North Dakota University System Economic Contribution

The NDUS operating expenditures represent direct economic effects for this assessment. Total operating expenditures are comprised of both general and non-general funds. Total expenditures in 2019 were similar to total expenditures in 2017 ( $\$ 1.5$ billion and $\$ 1.4$ billion, respectively). Wages and salaries represented the largest itemized expense at $\$ 523$ million in FY2019 (35 percent of total) (Table 1). Employee benefits represented the second largest itemized expenditure at 14 percent of all expenditures (\$208 million in FY2019). System-wide expenditures for wages, salaries and benefits declined in the last two fiscal years from their FY2017 peak. Wages, salaries, and benefits have historically represented around 50 percent of total NDUS expenditures over the past 20 years (FY1999 to FY2019). The rate has varied from a low of 47 percent in FY2015 to a high of 55 percent in 2017 and 2018. (Appendix A has expenditure data for selected years going back to FY1999).

| Table 1. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 2009 to 2019 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY2009 | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 | Change |  |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FY2009- } \\ 2019 \end{gathered}$ | $\begin{gathered} \text { FY2017- } \\ 2019 \end{gathered}$ |
| Operating Expenditures: |  |  |  |  |  |  |  |  |  |  |  |
| Wages and Salaries Fringe Benefits Travel | $\begin{gathered} 404,743 \\ 119,436 \\ 26,731 \end{gathered}$ | $\begin{gathered} 483,270 \\ 146,814 \\ 28,957 \\ \hline \end{gathered}$ | $\begin{array}{r} 499,693 \\ 157,203 \\ 31,280 \end{array}$ | $\begin{array}{r} 511,633 \\ 163,843 \\ 32,555 \end{array}$ | $\begin{array}{r} 532,797 \\ 191,782 \\ 34,082 \end{array}$ | $\begin{array}{r} 553,376 \\ 202,322 \\ 34,904 \end{array}$ | $\begin{array}{r} 562,541 \\ 212,086 \\ 27,999 \end{array}$ | $\begin{array}{r} 529,238 \\ 210,462 \\ 29,194 \end{array}$ | $\begin{array}{r} 523,710 \\ 208,883 \\ 31,299 \end{array}$ | $\begin{aligned} & 29.4 \% \\ & 74.9 \% \\ & 17.1 \% \end{aligned}$ | $\begin{aligned} & -6.9 \% \\ & -1.5 \% \\ & 11.8 \% \end{aligned}$ |
| Data Processing <br> Fees <br> Utilities | $\begin{aligned} & 14,633 \\ & 33,956 \\ & 23,606 \end{aligned}$ | $\begin{aligned} & 15,712 \\ & 37,685 \\ & 25,091 \end{aligned}$ | $\begin{aligned} & 17,260 \\ & 52,452 \\ & 25,522 \end{aligned}$ | $\begin{aligned} & 19,233 \\ & 42,461 \\ & 27,552 \end{aligned}$ | $\begin{aligned} & 18,754 \\ & 45,676 \\ & 30,625 \end{aligned}$ | $\begin{aligned} & 19,935 \\ & 47,252 \\ & 29,097 \end{aligned}$ | $\begin{aligned} & 18,037 \\ & 39,451 \\ & 29,151 \end{aligned}$ | $\begin{aligned} & 17,055 \\ & 49,040 \\ & 30,124 \end{aligned}$ | $\begin{aligned} & 18,264 \\ & 49,517 \\ & 30,849 \end{aligned}$ | $\begin{aligned} & 24.8 \% \\ & 45.8 \% \\ & 30.7 \% \end{aligned}$ | $\begin{gathered} 1.3 \% \\ 25.5 \% \\ 5.8 \% \end{gathered}$ |
| Communications <br> Insurance <br> Rents and Fees | $\begin{array}{r} 8,494 \\ 4,704 \\ 14,127 \end{array}$ | $\begin{array}{r} 8,735 \\ 3,342 \\ 13,980 \end{array}$ | $\begin{array}{r} 9,052 \\ 4,279 \\ 14,765 \end{array}$ | $\begin{array}{r} 7,586 \\ 4,438 \\ 14,505 \end{array}$ | $\begin{array}{r} 8,758 \\ 4,287 \\ 15,447 \end{array}$ | $\begin{array}{r} 9,077 \\ 3,264 \\ 16,380 \end{array}$ | $\begin{array}{r} 8,671 \\ 3,732 \\ 13,498 \end{array}$ | $\begin{array}{r} 8,979 \\ 3,664 \\ 13,240 \end{array}$ | $\begin{array}{r} 8,774 \\ 3,825 \\ 15,476 \end{array}$ | $3.3 \%$ $-18.7 \%$ $9.5 \%$ | $1.2 \%$ 2.5\% $14.7 \%$ |
| Office <br> Supplies <br> Instructional | $\begin{aligned} & 10,564 \\ & 23,132 \\ & 21,567 \end{aligned}$ | $\begin{array}{r} 9,862 \\ 21,723 \\ 25,673 \end{array}$ | $\begin{array}{r} 9,628 \\ 24,767 \\ 21,848 \end{array}$ | $\begin{array}{r} 9,371 \\ 25,602 \\ 23,840 \end{array}$ | $\begin{array}{r} 9,185 \\ 26,592 \\ 24,195 \end{array}$ | $\begin{array}{r} 9,317 \\ 26,102 \\ 26,077 \end{array}$ | $\begin{array}{r} 7,589 \\ 19,511 \\ 25,640 \end{array}$ | $\begin{array}{r} 6,867 \\ 22,713 \\ 25,012 \end{array}$ | $\begin{array}{r} 6,825 \\ 46,488 \\ 25,075 \end{array}$ | $\begin{gathered} -35.4 \% \\ 101 \% \\ 16.3 \% \end{gathered}$ | $\begin{array}{r} -10.1 \% \\ 138.3 \% \\ -2.2 \% \end{array}$ |
| Noncapital <br> Equipment <br> Merchandise for <br> Resale <br> Repairs | $\begin{array}{r} 7,345 \\ 47,752 \\ 27,999 \end{array}$ | $\begin{array}{r} 7,125 \\ 45,080 \\ 26,978 \end{array}$ | $\begin{aligned} & 11,689 \\ & 49,293 \\ & 29,684 \end{aligned}$ | $\begin{aligned} & 11,169 \\ & 56,343 \\ & 29,298 \end{aligned}$ | $\begin{array}{r} 8,353 \\ 85,226 \\ 29,712 \end{array}$ | $\begin{array}{r} 9,965 \\ 189,837 \\ 32,339 \end{array}$ | $\begin{array}{r} 9,846 \\ 95,285 \\ 28,530 \end{array}$ | 6,821 88,270 29,811 | 6,043 108,937 30,123 | $-17.7 \%$ $128.1 \%$ $7.6 \%$ | $-38.6 \%$ $14.3 \%$ $5.6 \%$ |
| Scholarships, <br> etc. <br> General | $\begin{aligned} & 86,654 \\ & 64,444 \end{aligned}$ | $\begin{array}{r} 122,884 \\ 65,754 \end{array}$ | $\begin{array}{r} 121,088 \\ 73,386 \end{array}$ | $\begin{array}{r} 119,143 \\ 76,828 \end{array}$ | $\begin{array}{r} 105,426 \\ 82,358 \end{array}$ | $\begin{aligned} & 99,679 \\ & 82,205 \end{aligned}$ | $\begin{gathered} 107,687 \\ 82,665 \end{gathered}$ | $\begin{array}{r} 104,825 \\ 92,960 \end{array}$ | $\begin{aligned} & 108,099 \\ & 109,177 \end{aligned}$ | $\begin{aligned} & 24.7 \% \\ & 69.4 \% \end{aligned}$ | $\begin{gathered} 0.4 \% \\ 32.1 \% \end{gathered}$ |
| Capital Equipment Recovery of Expenses | 6,396 | 5,579 | 14,287 | 22,378 | 20,552 | 21,750 | 18,561 | 15,573 | 13,917 | 117.6\% | -25.0\% |
| Capital Improvements | 34,084 | 71,095 | 76,797 | 83,832 | 77,621 | 198,948 | 91,316 | 60,870 | 131,813 | 286.7\% | 44.3\% |
| Total | 980,365 | 1,165,339 | 1,243,974 | 1,281,610 | 1,351,428 | 1,611,826 | 1,401,795 | 1,344,717 | 1,477,094 | 50.7\% | 5.4\% |



Figure 1. North Dakota University System, General and Non-general Fund Expenditures by Major Expense Types, Selected Years 1999 through 2019.

In FY1999, $\$ 333$ million of non-general fund expenditures comprised 62 percent of the total expenditures by the University System in North Dakota (Appendix A). Since the late 1990s, non-general fund outlays averaged around 70 percent of the total outlays for the University System but declined to 67 percent in FY2015. In FY2019, total non-general fund expenditures were $\$ 1.1$ billion and represented 74 percent of all system-wide expenditures.

Non-general fund expenditures in FY2019 have increased by over $\$ 384$ million since FY2009, a 54 percent increase. Non-general fund expenditures increased by $\$ 148$ million or 15.8 percent in nominal dollars from FY2017 to FY2019. Wages and salaries were the largest single source of expenditures for each of the study years. In FY2019, salaries and wages accounted for 31 percent of all expenditures for non-general fund sources. Thus, almost two-thirds of NDUS wages and salaries come from sources other than state government appropriations (general funding).

Non-general funds are also an important source of revenue for capital expenditures. Non-general fund expenditures accounted for over 75 percent of the capital improvement expenditures for FY1999, FY2004, FY2006, and FY2008 (Appendix A). In FY2009, those outlays had declined to 56 percent of the total, and were 48 percent in FY2011 and 51 percent in FY2012 (Table 1, Table 2). Non-general fund capital investment expenditures share of the total has continued to decline, dropping to 36 percent in FY2015 and 39 percent in FY2017. However, the use of non-general funds for capital improvements increased to 77 percent of total expenditure in FY2018 and 88 percent in FY2019. Non-general fund revenue also provided $\$ 85$ million in scholarships in FY2019.

Table 2. Direct Economic Effects from Non-General Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 2009 to 2019 (Current Year Dollars)




Figure 2. North Dakota University System, Total General and Non-general Fund Expenditures, Selected Years 2004 through 2019.

Expenditures made by the NDUS comprise the direct effects or first-round effects for this analysis. These expenditures were reported for the NDUS in Tables 1 and 2. Total direct effects were $\$ 980$ million in FY2009 and $\$ 1.5$ billion in FY2019 (Table 3). Expenditures were allocated to six economic sectors of the North Dakota Input-Output Model: Construction; Communications and Public Utilities; Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Households. Reflective of the percentage of total expenditures made for wages, the direct or first round effects were greatest in the Households sector, $\$ 631$ million or 43 percent of total NDUS expenditures. Direct expenditures in the other economic sectors were fairly evenly split, ranging from 14 to 16 percent for Retail Trade, Finance, Insurance and Real Estate and Business and Personal Services. Communications and Public Utilities and Construction comprised 3 percent and 9 percent of direct economic effects, respectively.

Similarly, the non-general fund expenditures were allocated to the same six economic sectors. Non-general fund direct effects were $\$ 706$ million in FY2009 and $\$ 1.1$ billion in FY2019 (Table 3). Distribution of non-general funds among the economic sectors was similar to the distribution of total (general and non-general) fund expenditures with a slightly lower percentage of direct effects in the Households sector, 39 percent compared to 43 percent for total
expenditures. Distribution of non-general funds to the Retail Sector was also slightly lower than for total (general and non-general funds), 18 percent compared to 14 percent for total (general and non-general funds)

Applying these expenditures to the ND Input-output Model interdependence coefficients (i.e., multipliers) provides estimates of total (direct and secondary) economic effects for general fund and non-general fund outlays. Business volumes were estimated for combined general and non-general funds sources and separately for non-general fund expenditures (Table 4).

Table 3. Direct Economic Effects from Total (General Fund and Non-General Fund) and Non-General Fund Expenditures, Allocated to the North Dakota Input-Output Model Industrial Sectors, Selected Fiscal Years 2009 to 2019 (Current Year Dollars)

| Item | FY2009 | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 | Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FY2009- } \\ 2019 \end{gathered}$ | $\begin{gathered} \text { FY2017- } \\ 2019 \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  | ---------\%--------- |  |
| Total (General Fund and Non-General Fund) Direct Effects |  |  |  |  |  |  |  |  |  |  |  |
| Input-Output Model Sectors: |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 34,084 | 71,095 | 76,797 | 83,832 | 77,621 | 198,948 | 91,316 | 60,870 | 131,813 | 286.7\% | 44.3\% |
| Communication \& Public Utilities | 32,100 | 33,826 | 34,574 | 35,138 | 39,383 | 38,173 | 37,822 | 39,113 | 39,623 | 23.4\% | 4.8\% |
| Retail Trade | 116,755 | 115,042 | 131,513 | 148,703 | 174,103 | 283,049 | 176,432 | 165,256 | 207,285 | 77.5\% | 17.5\% |
| Finance, Ins., Real Estate | 124,140 | 164,136 | 176,246 | 182,785 | 211,516 | 221,966 | 229,315 | 227,369 | 228,188 | 83.8\% | -0.5\% |
| Business and Personal Services | 181,890 | 175,086 | 204,063 | 200,376 | 210,582 | 216,635 | 196,682 | 218,060 | 238,380 | 31.1\% | 21.2\% |
| Households | 491,396 | 606,154 | 620,781 | 630,776 | 638,223 | 653,055 | 670,228 | 634,064 | 631,810 | 28.6\% | -5.7\% |
| Total | 980,365 | 1,165,339 | 1,243,974 | 1,281,610 | 1,351,428 | 1,611,826 | 1,401,795 | 1,344,732 | 1,477,099 | 50.7\% | 5.4\% |

Non-General Fund Direct Effects
Input-Output Sectors:

| Construction | 19,124 | 33,881 | 39,295 | 35,487 | 31,080 | 71,977 | 35,287 | 46,904 | 116,580 | 509.6\% | 230.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication \& Public Utilities | 19,725 | 19,762 | 19,749 | 20,813 | 22,765 | 21,030 | 22,347 | 23,321 | 24,321 | 23.3\% | 8.8\% |
| Retail Trade | 101,487 | 99,738 | 116,023 | 128,987 | 155,664 | 262,463 | 160,907 | 150,312 | 192,650 | 89.8\% | 19.7\% |
| Finance, Ins., R. Estate | 80,847 | 109,736 | 113,994 | 118,601 | 130,012 | 136,869 | 142,127 | 145,143 | 144,448 | 78.7\% | 1.6\% |
| Business and Personal Services | 150,621 | 140,999 | 163,554 | 157,142 | 164,520 | 161,560 | 151,378 | 171,693 | 191,566 | 27.2\% | 26.5\% |
| Households | 334,026 | 412,805 | 403,753 | 411,821 | 404,630 | 410,956 | 429,550 | 422,973 | 420,398 | 25.9\% | -2.1\% |
| Total | 705,830 | 816,921 | 856,368 | 872,851 | 908,671 | 1,064,855 | 941,598 | 960,346 | 1,089,963 | 54.4\% | 15.8\% |

Total business activity (direct plus secondary effects) associated with general and nongeneral fund expenditures in the state were estimated at $\$ 2.9$ billion in FY2009 and $\$ 4.3$ billion in FY2019. The total business activity for the NDUS has increased by $\$ 1.4$ billion or by 49 percent from FY2009 to FY2019. Total business activity declined slightly from FY2017 to FY2018, from $\$ 4.1$ billion in FY2017 to $\$ 4$ billion in FY2018, but increased slightly to $\$ 4.3$ billion in FY2019 (Table 4).

Economic sectors of the ND economy that received major contributions include Households (i.e., economy-wide personal income), Retail Trade, Finance, Construction and Insurance and Real Estate, $\$ 1.6$ billion, 1.1 billion and $\$ 420$ million and $\$ 235$ million, respectively. Economic activity in the Retail Trade Sector increased by $\$ 360$ million or by 51 percent from FY2009 to FY2019, Construction by 123 percent, and Finance, Insurance and Real Estate by 63 percent. Personal income supported by the economic output from NDUS increased from $\$ 1.1$ billion in FY2009 to $\$ 1.6$ billion in FY2019 (Table 4).

A similar analysis was conducted for non-general fund expenditures (Table 4). Nongeneral fund outlays in FY2009 generated total business activity of $\$ 2.0$ billion in 2009 and $\$ 3.1$ billion in FY2019. Business activity in the state resulting from non-general fund expenditures of the NDUS increased by $\$ 1.1$ billion ( 52 percent) from FY2009 to FY2019.

The economic effects associated with non-general fund expenditures comprise a substantial share of the total NDUS economic contribution. Of the total economic effects (direct plus secondary) from both general and non-general funds the majority was associated with nongeneral funds, $\$ 3.1$ billion were associated with non-general funds, compared to $\$ 4.3$ billion from general and non-general funds. Both the relative share of NDUS spending that comes from non-general funds sources and that the share also has been increasing over the 16-year period highlight the importance that outside financial support plays in the economic effects of the NDUS on the North Dakota economy.

Table 4. Direct and Secondary Economic Effects, General and Non-General Funds, NDUS, Selected Fiscal Years 2009 to 2019 (Current Year Dollars)

| Item | FY2009 | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 | Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FY2009- } \\ 2019 \end{gathered}$ | $\begin{aligned} & \text { FY2017- } \\ & 2019 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  | ---------\%--------- |  |

Direct and Secondary Economic Effects, General and Non-General Funds, by Economic Sector:

| Construction | 105,381 | 157,239 | 167,644 | 176,849 | 174,841 | 308,389 | 192,643 | 157,949 | 235,087 | 123.1\% | 22.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication \& Public Utilities | 131,886 | 152,570 | 160,951 | 164,417 | 175,765 | 191,138 | 179,187 | 173,683 | 185,652 | 40.8\% | 3.6\% |
| Retail Trade | 708,724 | 831,897 | 887,728 | 922,943 | 984,171 | 1,192,978 | 1,021,647 | 975,637 | 1,068,760 | 50.8\% | 4.6\% |
| Finance, Ins., R. Estate | 257,349 | 324,787 | 345,733 | 356,128 | 392,733 | 424,126 | 418,020 | 408,570 | 420,182 | 63.3\% | 0.5\% |
| Business and Personal Services | 234,744 | 238,689 | 271,463 | 269,249 | 283,087 | 296,700 | 272,161 | 291,010 | 315,393 | 34.4\% | 15.9\% |
| Professional and Social Services | 73,706 | 89,432 | 94,020 | 96,139 | 100,396 | 110,827 | 104,833 | 116,579 | 105,615 | 43.3\% | 0.7\% |
| Households | 1,135,643 | 1,380,206 | 1,448,926 | 1,481,327 | 1,544,564 | 1,701,345 | 1,613,698 | 1,540,496 | 1,621,107 | 42.7\% | 0.5\% |
| Other ${ }^{1}$ | $\underline{231,738}$ | $\underline{277,900}$ | $\underline{294,834}$ | 303,696 | 321,145 | 372,223 | 334,666 | 320,689 | 345,115 | $\underline{48.9 \%}$ | 3.1\% |
| Total | 2,879,171 | 3,452,720 | 3,671,299 | 3,770,748 | 3,976,702 | 4,597,626 | 4,136,855 | 3,984,613 | 4,296,911 | 49.2\% | 3.9\% |

Direct and Secondary Economic Effects, Non-General Funds, by Economic Sector:

| Construction | 69,227 | 93,384 | 100,363 | 97,603 | 94,627 | 142,081 | 101,626 | 114,259 | 189,834 | $174.2 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Communications <br> $\&$ Public Utilities | 90,781 | 102,686 | 105,958 | 108,336 | 113,193 | 120,650 | 116,043 | 119,204 | 128,690 | $41.8 \%$ |
| Retail Trade | 517,180 | 594,872 | 624,169 | 645,798 | 684,506 | 844,533 | 713,538 | 711,558 | 803,624 | $55.4 \%$ |
| Finance, Ins., R. <br> Estate | 174,518 | 220,859 | 228,038 | 234,512 | 248,529 | 266,495 | 265,744 | 270,754 | 280,186 | $60.5 \%$ |
| Business and <br> Personal Services | 187,891 | 185,149 | 209,102 | 203,384 | 212,035 | 213,018 | 200,866 | 222,211 | 245,803 | $30.8 \%$ |
| Professional and <br> Social Services | 51,492 | 61,654 | 62,900 | 64,010 | 65,263 | 70,798 | 68,340 | 69,173 | 73,930 | $43.6 \%$ |
| Households | 791,816 | 950,252 | 967,322 | 984,549 | $1,002,012$ | $1,084,560$ | $1,050,196$ | $1,389,324$ | $1,132,187$ | $43.0 \%$ |
| Other ${ }^{1}$ | $\underline{164,860}$ | $\underline{194,060}$ | $\underline{201,237}$ | $\underline{205,998}$ | $\underline{214,228}$ | $\underline{246,894}$ | $\underline{223,719}$ | $\underline{226,119}$ | $\underline{249,723}$ | $\underline{51.5 \%}$ |
| Total | $2,047,765$ | $2,402,916$ | $2,499,089$ | $2,544,190$ | $2,634,393$ | $2,989,029$ | $2,740,072$ | $3,122,602$ | $3,103,977$ | $51.6 \%$ |

[^1]

Figure 3. North Dakota University System, Direct and Secondary Economic
Effects, Selected Years 1999 through 2019.

Direct employment in the NDUS grew from FY1999 through FY2011 from 30,720 jobs to 39,089 jobs. Employment stabilized to roughly 38,000 from 2012 to 2015. Employment has generally declined since 2016. Employment dropped by 738 jobs from FY2016 to FY2017, with a slight increase of 116 jobs in FY2018. The NDUS reported direct employment of 10,489 jobs in FY2019 (Table 5). In 2020, employment declined slightly from 2019 levels to 10,375 jobs. In addition to direct employment, secondary business activity supports indirect and induced (secondary) employment and was estimated at 10,712 jobs in FY2019 (Figure 4). Payroll and benefits show a consistent increase from 2004 through 2015 but have declined since 2015. Consistent with the change in employment compensation, direct employment generally increased over the 2004 to 2015 period and has declined since 2015 (Figure 5).

Table 5. Direct Employment in the NDUS, Secondary Employment Attributed to University System Expenditures, and Student Enrollment, Selected Years 1999 to 2020

| Year | Direct Employment ${ }^{1}$ | Secondary Employment ${ }^{2}$ | Student Enrollement ${ }^{3}$ |
| :---: | :---: | :---: | :---: |
| 1999 | 8,120 | 12,138 | 30,720 |
| 2004 | 9,608 | 12,749 | 36,245 |
| 2006 | 10,260 | 12,483 | 35,373 |
| 2008 | 10,651 | 10,799 | 36,095 |
| 2009 | 11,079 | 10,279 | 37,564 |
| 2011 | 11,438 | 11,459 | 39,089 |
| 2012 | 11,393 | 10,478 | 38,703 |
| 2013 | 11,534 | 10,760 | 38,326 |
| 2014 | 11,393 | 10,901 | 38,174 |
| 2015 | 11,592 | 11,393 | 38,151 |
| 2016 | 11,479 | N/A | 37,872 |
| 2017 | 10,741 | 9,917 | 37,397 |
| 2018 | 10,857 | 9,948 | 36,603 |
| 2019 | 10,489 | 10,712 | 34,954 |
| 2020 | 10,375 | N/A | N/A |
| Change 1999-2019: |  |  |  |
| Number | 2,369 | -1,426 | 4,234 |
| Percent | 29.2\% | -11.7\% | 13.8\% |
| Change 2017-2019: |  |  |  |
| Number | -252 | 795 | -2443 |
| Percent | -2.3\% | 8.0\% | -6.5\% |
| ${ }^{1}$ NDUS employment is a June $30^{\text {th }}$ employee head count consisting of faculty, classified, other non-classified and temporary positions. Student workers were not included in this total. |  |  |  |
| ${ }^{2}$ Estimates include both indirect and induced employment, and are based on business activity from university expenditures, spending of household income by employees, and student living expenses. |  |  |  |
| ${ }^{3}$ Full-time equivalent students. |  |  |  |



Figure 4. North Dakota University System, Direct and Secondary Statewide Employment in North Dakota, Selected Years 1999 through 2019.


Figure 5. North Dakota University System, Payroll and Total Direct Employment, Selected Years 2004 through 2019.

In FY2019, business activity associated with NDUS was estimated to result in about $\$ 37.4$ million in revenue to state and local government jurisdictions (Table 6). Of that total, 60 percent or $\$ 28$ million was generated from non-general revenue funds. The greatest revenues were from sales and use taxes ( $\$ 15.2$ million), property taxes ( $\$ 9.6$ million), personal income taxes ( $\$ 6.0$ million), and miscellaneous revenues ( $\$ 4.3$ million).

## Table 6. Estimated State Tax Collections derived from Total Business Activity, Total and

 Non-General Funds, North Dakota University System, and from Student Spending, Fiscal Year 2019| Funding | Tax | North Dakota University System | Student Spending | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | --------------------------- \$ 000s --------------------------- |  |  |
| General and Non-general Funds |  |  |  |  |
|  | Sales and Use Tax ${ }^{1}$ | 15,212 | 4,715 | 19,926 |
|  | Personal Income Tax | 5,940 | 1,384 | 7,324 |
|  | Corporate Income Tax | 2,297 | 299 | 2,596 |
|  | Property Tax ${ }^{1}$ | 9,564 | 2,941 | 12,504 |
|  | Other ${ }^{2}$ | 4,323 | 1,798 | 6,121 |
|  | Total | 37,336 | 11,136 | 48,427 |
|  |  |  |  |  |
| Non-General Funds |  |  |  |  |
|  | Sales and Use Tax ${ }^{1}$ | 11,281 | na | 11,281 |
|  | Personal Income Tax | 4,624 | na | 4,624 |
|  | Corporate Income Tax | 1,761 | na | 1,761 |
|  | Property Tax ${ }^{1}$ | 7,104 | na | 7,104 |
|  | Other ${ }^{2}$ | 3,360 | na | 3,360 |
|  | Total | 28,130 | na | 28,130 |
|  |  |  |  |  |

na=not considered based on breakdown in funding.
${ }^{1}$ For tax revenue from NDUS, due to exemptions on property taxes and for sales and use taxes, only indirect and induced economic activity was used for tax estimates.
${ }^{2}$ Includes miscellaneous revenues from motor vehicle registrations, licenses, fees, permits, fines, and other revenues.

## Student Economic Contribution

Student spending also adds to the economic contribution of the NDUS. Student spending included outlays for personal items, recreation, books, supplies, and room and board. Excluded from student expenditures were outlays for tuition and fees. Estimates of student expenditures were available for each of the 11 institutions in the NDUS for the 2018-2019 school year (North Dakota Career Resource Network 2020). The North Dakota Career Resource Network estimated room and board and books and supplies for students at each of the 11 respective institutions in the NDUS (Appendix B contains living expense estimates per college). Per student living expenses averaged \$11,990 and ranged from \$10,758 at ND State College of Science to \$14,222 at University of North Dakota.

Multiplying the Fall Semester 2019 FTE student enrollment for each school by their respective per-student living expenditures provided an estimate of direct effects or first-round effects associated with student spending. However, the use of ND Career Resource Network estimates of room and board expenses may overstate the economic effects of student expenditures. Although a large number of students live on-campus or live independently offcampus, some students live at home. Students living at home would likely incur less expense for room and board compared to those living on-campus or independently off-campus. Another factor that complicates the estimate of the effects of student spending is that some of the revenues for room and board for students living in university dormitories could be considered double counting with expenditures by the universities. The revenues received by universities and colleges for on-campus room and board would likely be dispersed by the universities for inputs and services associated with student housing. As such, expenditures for providing student housing are probably partially captured by the analyses of university spending. Therefore, including room and board expenses for all students might result in some double counting of University System expenditures. Data were unavailable to adjust the economic contribution of student spending to account for those students living at home or to adjust for the percentage of room and board expenses already captured by University System expenditures.

Another area of potential double counting could occur in how expenses are handled for books and other educational materials. Books and educational materials purchased by students through campus-sponsored bookstores or at on-campus varsity marts also are likely to be fully or partially captured by university expenditures. Since those facilities are part of the university or college, expenses for staff, facilities, and materials/inventory would necessarily be included in the university analysis. Further, it is highly likely that a large percentage of college textbooks would be acquired from entities outside of North Dakota and would not represent in-state expenditures by universities and colleges. However, to the extent that educational materials are purchased by students from off-campus sources, those expenditures would not represent double counting. The degree of overlap between student spending for books and educational supplies and university expenditures associated with bookstores and varsity marts is unknown, as is the degree of those supplies purchased by universities from out-of-state entities. Despite these potential problems, the cost of books was included in the student spending analysis for consistency with previous analyses.

In Fall Semester 2019, NDUS indicated that 34,954 FTE students were enrolled and attended the 11 state universities and colleges. Based on expenditures per FTE student, students were estimated to have spent $\$ 453$ million in North Dakota on books, room and board, personal items, and recreation during the 2019-2020 school year (see Table 5, Figure 6). Students also incur expenses for fees, tuition, and other items not covered in this analysis. Expenditures for fees and tuition are not included in the assessment of economic effects associated with student expenditures, rather those expenditures were captured by the analysis of university expenditures.

A large share of the student spending would occur in the communities where the 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 will occur in cities and trade areas other than those where the university or college is located. However, for this analysis, all student spending will be assumed to remain in close proximity to the community where the college or university is located (data presented for each university in Appendix B).

Student spending was allocated to the Retail Trade ( 75 percent) and Finance, Insurance, and Real Estate ( 25 percent) sectors of the North Dakota Input-Output Model. The total economic contribution associated with student spending was estimated at $\$ 1.1$ billion in FY2019 (Table 7). Total effects (direct and secondary) were greatest in Retail Trade, which represented nearly half of the total economic contribution associated with student spending. About onefourth of total effects accrued in the Households sector.

In FY2019, the gross business volume generated by student spending was estimated to result in $\$ 11.1$ million in state tax collections (Table 6 ). Of that total, $\$ 4.7$ million would be from sales and use taxes and about $\$ 3$ million from property taxes. The remaining tax revenues would be from individual and corporate income taxes and miscellaneous government revenues.


Figure 6. North Dakota University System, Student Living Expense and Student Enrollment, Selected Years 2008 through 2019.

Table 7. Direct and Total Economic Effects, Student Living Expenditures, Students Enrolled in the NDUS, Selected Fiscal Years 2009 to 2019

| Item | FY2009 | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |  |  |
| Student Expenditures for Living Expenses | 327,360 | 392,045 | 409,408 | 415,421 | 425,533 | 427,299 | 455,305 | 457,803 | 453,357 |
| Direct Effects by I-O Model Sector: |  |  |  |  |  |  |  |  |  |
| Retail Trade | 245,519 | 294,034 | 307,056 | 311,566 | 319,150 | 320,474 | 341,479 | 343,353 | 340,019 |
| Finance, Insurance, Real Estate | 81,841 | 98,011 | 102,352 | 103,855 | 106,383 | 106,825 | 113,826 | 114,450 | 113,338 |
| Total | 327,360 | 392,045 | 409,408 | 415,421 | 425,333 | 427,299 | 455,305 | 457,803 | 453,357 |

## Direct and Secondary Effects

| Construction | 14,575 | 17,456 | 18,229 | 18,497 | 18,974 | 19,025 | 20,273 | 20,568 | 20,196 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communications and Public Utilities | 23,798 | 28,502 | 29,764 | 30,201 | 30,936 | 31,065 | 33,102 | 33,554 | 32,977 |
| Retail Trade | 368,001 | 440,716 | 460,236 | 466,996 | 478,363 | 480,348 | 511,832 | 521,283 | 509,975 |
| Finance, Insurance, Real Estate | 107,662 | 128,933 | 134,644 | 136,621 | 139,947 | 140,528 | 149,737 | 150,866 | 149,119 |
| Business and Personal Services | 11,032 | 13,212 | 13,797 | 14,000 | 14,340 | 14,400 | 15,344 | 15,531 | 15,281 |
| Professional and Social Services | 13,454 | 16,113 | 16,827 | 17,074 | 17,489 | 17,562 | 18,714 | 18,958 | 18,636 |
| Households | 197,398 | 236,403 | 246,873 | 250,499 | 256,596 | 257,661 | 274,550 | 278,160 | 273,485 |
| Other ${ }^{1}$ | 77,391 | 92,806 | 96,917 | 98,339 | 100,735 | 101,153 | 107,782 | 109,501 | 107,382 |
| Total | 813,311 | 974,141 | 1,017,287 | 1,032,227 | 1,057,353 | 1,061,742 | 1,131,334 | 1,148,421 | 1,127,051 |

${ }^{1}$ Agriculture, mining, manufacturing, transportation, and government.

## Key Findings

The NDUS consists of 11 colleges and universities located throughout the state. Those universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. The universities and colleges have positive effects on the state economy and local economies as those revenues are used to purchase inputs and services and pay wages and salaries.

The NDUS made $\$ 980$ million in direct expenditures within North Dakota in FY2009. In FY 2019, direct expenditures within ND had increased by 31 percent in nominal terms to $\$ 1.5$ billion. Much of the growth during this period has come from non-general fund sources, such as grants, contracts, and donations, which increased by 54 percent over the period. Non-general fund expenditures represented 74 percent of the total direct spending by the NDUS in FY2019.

Direct expenditures declined from FY2017 to FY2018 before increasing slightly from FY 2018 to FY 2019. Direct expenditures increased from $\$ 1.3$ billion in FY 2018 to $\$ 1.5$ billion in FY 2018, a 5 percent increase. While total direct impacts increase slightly from FY2018 to FY2018, expenditures in the Households Sector declined by 6 percent. The decreases are reflective of system-wide declines in direct employment.

The gross business volume associated with the NDUS was estimated at $\$ 1.6$ billion in FY1999, $\$ 2.0$ billion in 2009 and $\$ 4.3$ billion in FY2019. Other key measures of economic impact include retail trade activity and economy-wide personal income. Retail sales attributed to the NDUS expenditures were estimated to be $\$ 1.1$ billion in FY2019. Economy-wide personal income was estimated to be $\$ 1.6$ billion in FY2019.

In addition to NDUS expenditures, student expenditures also generate economic effects. Student spending, excluding tuition and fees, was estimated at $\$ 453$ million in FY2019. The business activity associated with spending from the 34,954 FTE students enrolled in the NDUS during the 2019-2020 academic year was estimated at $\$ 1.1$ billion.

Overall, student spending and NDUS expenditures approached $\$ 1.9$ billion in FY2019. Including secondary economic effects raises the total economic impact to $\$ 5.4$ billion. State-level effects included $\$ 1.6$ billion in retail trade activity and $\$ 1.9$ billion of economy-wide personal income. In FY2019, the gross business volume generated by the NDUS, combined with total economic effects from student spending, was estimated to generate $\$ 73$ million in state tax collections. Of that total, $\$ 20$ million would be from sales and use taxes, about $\$ 10$ million from individual and corporate income taxes, and $\$ 12.5$ million from property taxes.


Figure 7. Composition of the North Dakota University System's Total Economic Contribution, \$5.4 Billion, Fiscal Year 2019.

## Conclusions

Institutions of higher education in North Dakota are influential in many perspectives. They help provide the state with an educated workforce ready to meet the challenges of an everchanging work environment. They provide outreach and continuing education programs for the state's residents and businesses. In addition to providing education, the state's universities and colleges create and support jobs and employment opportunities through research, extension, and teaching activities. All these important services and products provide economic benefits which enhance local and state economies.

The state's 11 University System colleges, universities, and supporting centers and facilities act as centers for local and regional economic development. The state's colleges and universities are able to leverage $\$ 2.82$ from external sources for every dollar of state appropriated funds ( $\$ 1.477$ billion combined funds less $\$ 1.09$ billion non-general funds $=\$ 387$ million in appropriated funds which yields $\$ 1.099 \mathrm{~b} / \$ 0.387 \mathrm{~b}=\$ 2.82$ ). Much of those non-appropriated funds come from sources outside of the state and separate from North Dakota governments, and therefore, could be considered new money to the state of North Dakota. Those dollars, along with appropriated funds, are dispersed within the state through purchases of services, inputs, and payroll that support university programs, events, and activities. In FY2019, these institutions employed nearly 10,500 workers, were educating 44,938 headcount students (34,954 full-time equivalents), and their expenditures supported over $10,700 \mathrm{FTE}$ secondary jobs.

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## APPENDIX A

Expenditure and Student Enrollment Data, NDUS Member Institutions,
Fiscal Years 1999, 2004, 2006, 2008 and 2019

| Appendix Table A1. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 1999 to 2019 (Current Year Dollars) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY1999 | FY2004 | FY2006 | FY2008 | FY2019 |  |
| Operating Expenditures: |  |  |  |  |  |  |
| Wages and Salaries Fringe Benefits Travel | $\begin{array}{r} 225,512 \\ 55,809 \\ 14,102 \end{array}$ | $\begin{array}{r} 318,838 \\ 85,718 \\ 21,194 \end{array}$ | $\begin{array}{r} 352,778 \\ 98,123 \\ 23,136 \end{array}$ | $\begin{array}{r} 374,053 \\ 111,650 \\ 26,684 \end{array}$ | $\begin{array}{r} 523,710,373 \\ 208,883,124 \\ 31,299,499 \end{array}$ |  |
| Data Processing Fees Utilities | $\begin{array}{r} 4,324 \\ 22,565 \\ 12,054 \end{array}$ | $\begin{array}{r} 7,625 \\ 38,891 \\ 15,780 \end{array}$ | $\begin{aligned} & 13,297 \\ & 28,657 \\ & 18,173 \end{aligned}$ | $\begin{aligned} & 16,510 \\ & 36,487 \\ & 22,562 \end{aligned}$ | $\begin{aligned} & 18,264,057 \\ & 49,516,925 \\ & 30,848,873 \end{aligned}$ |  |
| Communications <br> Insurance <br> Rents and Fees | $\begin{array}{r} 11,284 \\ 1,832 \\ 10,416 \end{array}$ | $\begin{array}{r} 11,050 \\ 3,426 \\ 14,809 \end{array}$ | $\begin{aligned} & 8,057 \\ & 3,464 \\ & 9,013 \end{aligned}$ | $\begin{array}{r} 8,340 \\ 3,224 \\ 10,642 \end{array}$ | $\begin{array}{r} 8,774,304 \\ 3,824,803 \\ 15,476,114 \end{array}$ |  |
| Office Supplies Instructional | $\begin{array}{r} 15,372 \\ 9,626 \\ 5,677 \end{array}$ | $\begin{array}{r} 20,968 \\ 17,330 \\ 7,155 \end{array}$ | $\begin{aligned} & 10,526 \\ & 19,512 \\ & 16,916 \end{aligned}$ | $\begin{aligned} & 10,884 \\ & 21,731 \\ & 20,868 \end{aligned}$ | $\begin{array}{r} 6,824,844 \\ 46,487,541 \\ 25,075,229 \end{array}$ |  |
| Noncapital Equipment Merchandise for Resale Repairs | $\begin{array}{r} 1,777 \\ 34,696 \\ 24,631 \end{array}$ | $\begin{array}{r} 2,981 \\ 32,785 \\ 20,064 \end{array}$ | $\begin{array}{r} 6,441 \\ 37,858 \\ 21,382 \end{array}$ | $\begin{array}{r} 7,114 \\ 41,861 \\ 25,325 \end{array}$ | $\begin{array}{r} 6,042,893 \\ 108,936,664 \\ 30,122,743 \end{array}$ |  |
| Scholarships, etc. General | $\begin{aligned} & 40,160 \\ & 10,088 \end{aligned}$ | $\begin{aligned} & 62,774 \\ & 24,841 \end{aligned}$ | $\begin{aligned} & 69,979 \\ & 49,004 \end{aligned}$ | $\begin{aligned} & 80,165 \\ & 57,199 \end{aligned}$ | $\begin{aligned} & 108,098,668 \\ & 109,177,209 \end{aligned}$ |  |
| Capital Equipment Recovery of Expenses | $6,468$ | $\begin{array}{r} 4,793 \\ -11,945 \end{array}$ | 2,300 | 19,754 | 13,917,361 |  |
| Capital Improvements | 26,529 | 62,243 | 39,488 | 45,246 | 131,813,072 |  |
| Total | 532,922 | 761,320 | 828,104 | 940,299 | 1,477,094,295 |  |

## Appendix Table A2. Direct Economic Effects from Non-General Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)



## Appendix Table A3. Direct Economic Effects from Total (General Fund and Non-General Fund) and Non-General Fund Expenditures, Allocated to the North Dakota Input-Output Model Industrial Sectors, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)



## Non-General Fund Direct Effects

Input-Output Sectors:

| Construction | 20,807 | 51,846 | 34,266 | 36,201 | 116,580 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication \& Public Utilities | 11,878 | 14,966 | 16,120 | 18,906 | 24,321 |  |
| Retail Trade | 54,486 | 59,211 | 81,160 | 107,801 | 192,650 |  |
| Finance, Ins., R. Estate | 36,819 | 65,448 | 74,450 | 84,124 | 144,448 |  |
| Business and Personal Services | 53,962 | 90,286 | 116,406 | 134,276 | 191,566 |  |
| Households | 154,949 | 253,186 | 291,398 | 308,151 | 420,398 |  |
| Total | 332,901 | 534,943 | 613,800 | 689,459 | 1,089,963 |  |

Appendix Table A4. Direct and Secondary Economic Effects, General and Non-General Funds, NDUS, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)


Direct and Secondary Economic Effects, General and Non-General Funds, by Economic Sector:

| Construction | 65,070 | 117,946 | 100,140 | 112,887 | 235,087 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication \& Public Utilities | 76,560 | 103,633 | 110,370 | 125,617 | 185,652 |  |
| Retail Trade | 392,833 | 536,877 | 597,584 | 684,069 | 1,068,760 |  |
| Finance, Ins., R. Estate | 139,715 | 207,621 | 223,761 | 251,652 | 420,182 |  |
| Business and Personal Services | 103,849 | 153,552 | 180,280 | 212,297 | 315,393 |  |
| Professional and Social Services | 39,731 | 57,512 | 62,822 | 69,725 | 105,615 |  |
| Households | 612,835 | 887,089 | 968,846 | 1,073,533 | 1,621,107 |  |
| Other ${ }^{1}$ | 126,456 | 179,794 | 196,758 | 221,915 | 345,115 |  |
| Total | 1,557,049 | 2,244,024 | 2,440,561 | 2,751,695 | 4,296,911 |  |

Direct and Secondary Economic Effects, Non-General Funds, by Economic Sector:

| Construction | 44,163 | 90,086 | 78,001 | 84,342 | 189,834 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communications \& Public Utilities | 44,380 | 68,060 | 77,533 | 87,144 | 128,690 |  |
| Retail Trade | 247,754 | 376,788 | 444,393 | 507,419 | 803,624 |  |
| Finance, Ins., R. Estate | 80,184 | 136,560 | 156,023 | 173,842 | 280,186 |  |
| Business and Personal Services | 70,970 | 118,369 | 148,781 | 169,984 | 245,803 |  |
| Professional and Social Services | 23,867 | 39,196 | 44,941 | 49,224 | 73,930 |  |
| Households | 367,522 | 603,700 | 691,608 | 756,177 | 1,132,187 |  |
| Other ${ }^{1}$ | 77,625 | 124,256 | 143,421 | 160,301 | 249,723 |  |
| Total | 956,465 | 1,557,015 | 1,784,701 | 1,988,433 | 3,103,977 |  |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government. |  |  |  |  |  |  |


| Appendix Table A5. Direct and Total Economic Effects, Student Living Expenditures, Students Enrolled in the NDUS, 2008 |  |
| :---: | :---: |
|  | FY2008 |
| Item | ----------------------- \$ 000 ------------------------ |
| Direct Effects: |  |
| Student Expenditures for Living Expenses | 304,502 |
| Direct Effects by I-O Model Sector: |  |
| Retail Trade | 228,377 |
| Finance, Insurance, Real Estate | 76,125 |
| Total | 304,502 |
| Direct and Secondary Effects |  |
| Construction | 13,558 |
| Communications 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 ${ }^{1}$ | 72,084 |
| Total | 756,619 |
| ${ }^{1}$ Agriculture, mining, manufacturing, transportation, and government. |  |

## APPENDIX B

Expenditure and Student Enrollment Data, NDUS Member Institutions,
Fiscal Years 1999, 2004, 2006, 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2017, 2018, and 2019

| Appendix Table B1. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 1999 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | $\mathbf{M i S U}$ | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 B2. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2004 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | NDSCS | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 B3. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2006 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| Retail Trade | 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 |
| 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 |
| 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 |
| 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 B4. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output ModeI Sectors, Fiscal Year 2008 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| Retail Trade | 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 |
| 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 |
| 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 |
| 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 B5. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2009 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 15,054,282 | 12,014,091 | 5,320,075 | 6,004,869 | 21,197,308 | 2,882,493 | 16,419,452 | 143,001,091 | 169,301,631 | 7,733,058 | 4,046,988 | 1,767,250 | 404,742,588 |
| Fringe Benefits | 4,627,734 | 3,711,683 | 1,574,148 | 2,191,816 | 6,728,224 | 946,358 | 5,164,347 | 42,400,778 | 47,858,893 | 2,521,319 | 1,240,477 | 470,330 | 119,436,107 |
| Travel | 630,382 | 1,089,229 | 294,444 | 410,610 | 982,348 | 218,282 | 979,256 | 11,701,807 | 9,548,451 | 464,610 | 305,348 | 116,142 | 26,730,909 |
| Data Processing | 540,507 | 490,988 | 193,591 | 100,902 | 246,848 | 68,713 | 646,458 | 4,173,874 | 7,615,922 | 339,410 | 189,866 | 26,126 | 14,633,205 |
| Fees | 1,028,818 | 1,245,178 | 440,564 | 62,852 | 1,045,135 | 115,232 | 231,177 | 11,777,872 | 16,927,469 | 276,785 | 591,548 | 212,916 | 33,955,546 |
| Utilities | 822,018 | 764,462 | 264,407 | 783,242 | 1,172,667 | 203,974 | 1,059,928 | 9,089,812 | 8,755,933 | 442,642 | 247,300 | 0 | 23,606,385 |
| Communications | 87,495 | 166,872 | 43,881 | 89,694 | 119,836 | 51,653 | 433,938 | 3,606,243 | 3,638,872 | 166,526 | 68,602 | 20,445 | 8,493,958 |
| Insurance | 59,661 | 449,955 | 26,526 | 51,846 | 129,697 | 19,190 | 94,112 | 1,637,687 | 2,153,612 | 64,578 | 15,124 | 1,640 | 4,703,628 |
| Rents \& Leases | 605,012 | 125,465 | 68,843 | 104,922 | 145,225 | 33,470 | 307,338 | 6,173,732 | 6,015,217 | 449,928 | 67,591 | 29,946 | 14,126,689 |
| Office | 489,421 | 597,973 | 113,711 | 253,788 | 588,980 | 137,214 | 636,573 | 4,005,427 | 3,341,182 | 204,272 | 102,960 | 92,099 | 10,563,600 |
| Supplies | 1,311,163 | 749,583 | 197,650 | 272,909 | 1,741,264 | 192,084 | 524,073 | 8,245,678 | 9,339,097 | 350,330 | 202,021 | 5,835 | 23,131,687 |
| Instructional | 921,076 | 517,302 | 135,288 | 182,919 | 941,451 | 155,317 | 1,618,303 | 7,387,626 | 9,062,343 | 250,088 | 336,377 | 58,417 | 21,566,507 |
| Noncap Equipment | 355,463 | 264,224 | 99,881 | 101,560 | 46,890 | 24,839 | 730,175 | 2,529,044 | 2,846,551 | 130,422 | 212,275 | 3,894 | 7,345,218 |
| Merch for Resale | 1,893,867 | 844,849 | 439,836 | 588,631 | 0 | 250,888 | 2,354,770 | 19,469,632 | 20,802,151 | 577,206 | 529,939 | 0 | 47,751,769 |
| Repairs | 1,036,508 | 659,572 | 161,488 | 206,704 | 748,512 | 95,055 | 1,941,570 | 7,716,730 | 14,733,524 | 620,405 | 76,151 | 3,106 | 27,999,325 |
| Scholarships etc. | 4,540,498 | 6,615,567 | 1,451,071 | 1,400,626 | 6,490,942 | 1,079,432 | 3,211,836 | 30,395,558 | 21,911,322 | 2,178,374 | 1,539,686 | 5,868,692 | 86,653,604 |
| General | 2,853,928 | 2,698,851 | 722,156 | 1,219,758 | 2,991,503 | 652,400 | 2,553,738 | 22,614,535 | 25,686,710 | 1,337,160 | 745,747 | 367,660 | 64,444,146 |
| Capital Equipment | 2,179,350 | 182,484 | 93,697 | 59,777 | 75,514 | 22,633 | 1,210,854 | 1,405,468 | 402,052 | 146,794 | 617,727 | 0 | 6,396,350 |
| Capital Improvement | 1,178,460 | 4,340,205 | 109,139 | 521,248 | 3,145,658 | 248,560 | 378,189 | 18,050,934 | 4,194,388 | 983,573 | 933,303 | 0 | 34,083,657 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 40,205,643 | 37,528,833 | 11,750,396 | 14,608,673 | 48,508,002 | 7,397,787 | 40,495,988 | 355,383,528 | 384,135,320 | 19,237,480 | 12,069,030 | 9,044,498 | 980,364,878 |
| Sector | BSC | DSU | LRSC | MaSU | MiSU | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| Construction | 1,178,460 | 4,340,205 | 109,139 | 521,248 | 3,145,658 | 248,560 | 378,189 | 18,050,934 | 4,194,388 | 983,573 | 933,303 | 0 | 34,083,657 |
| Com \& Pub Util | 909,513 | 931,334 | 308,288 | 872,936 | 1,292,503 | 255,627 | 1,493,767 | 12,696,055 | 12,394,805 | 609,168 | 315,902 | 20,445 | 32,100,343 |
| Retail Trade | 7,150,340 | 3,156,415 | 1,080,063 | 1,459,584 | 3,394,099 | 782,975 | 7,074,748 | 43,042,875 | 45,793,376 | 1,659,112 | 2,001,299 | 160,245 | 116,755,131 |
| FIRE | 4,687,395 | 4,161,638 | 1,600,674 | 2,243,662 | 6,857,921 | 965,548 | 5,258,459 | 44,038,465 | 50,012,505 | 2,585,897 | 1,255,601 | 471,970 | 124,139,735 |
| Bus \& Pers Ser | 6,685,155 | 6,309,283 | 1,881,086 | 2,105,748 | 6,159,571 | 1,183,152 | 6,659,537 | 64,158,550 | 80,527,293 | 3,488,298 | 1,976,251 | 755,896 | 181,889,820 |
| Households | 19,594,780 | 18,629,658 | 6,771,146 | 7,405,495 | 27,658,250 | 3,961,925 | 19,631,288 | 173,396,649 | 191,212,953 | 9,911,432 | 5,586,674 | 7,635,942 | 491,396,192 |
| TOTAL | 40,206,643 | 37,528,533 | 11,750,396 | 14,608,673 | 48,508,002 | 7,397,787 | 40,495,988 | 355,383,528 | 384,135,320 | 19,237,480 | 12,069,030 | 9,044,498 | 980,364,878 |

Appendix Table B6. Direct Economic Effects from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2011 (Current Year Dollars)

|  | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 18,214,025 | 3,336,480 | 13,579,199 | 6,707,076 | 7,552,545 | 25,015,728 | 17,522,892 | 169,094,301 | 5,393,156 | 202,471,943 | 9,288,010 | 5,094,235 | 483,269,590 |
| Fringe Benefits | 5,935,346 | 1,190,706 | 4,566,391 | 2,164,779 | 2,936,082 | 8,301,702 | 6,003,691 | 50,855,352 | 1,631,752 | 58,127,831 | 3,270,274 | 1,830,365 | 146,814,271 |
| Travel | 755,598 | 232,857 | 1,204,735 | 315,831 | 553,677 | 1,549,018 | 1,045,320 | 11,234,187 | 333,971 | 10,736,917 | 564,279 | 430,962 | 28,957,352 |
| Data Processing | 914,515 | 156,032 | 538,795 | 247,329 | 123,819 | 472,352 | 836,954 | 4,745,873 | 2,622,451 | 4,193,684 | 546,620 | 313,360 | 15,711,784 |
| Fees | 1,852,750 | 69,659 | 1,458,132 | 369,214 | 437,288 | 1,637,192 | 307,176 | 16,047,282 | 3,065,861 | 11,657,272 | 367,438 | 415,912 | 37,685,176 |
| Utilities | 849,447 | 283,560 | 794,853 | 244,054 | 455,096 | 1,327,829 | 1,214,066 | 9,898,152 |  | 9,165,289 | 556,572 | 302,171 | 25,091,089 |
| Communications | 106,694 | 74,874 | 149,293 | 45,398 | 76,822 | 105,689 | 617,543 | 3,347,630 | 1,820,536 | 2,197,015 | 129,204 | 63,807 | 8,734,505 |
| Insurance | 92,892 | 13,811 | 330,821 | 23,763 | 45,282 | 47,100 | 95,164 | 765,442 | 493 | 1,847,416 | 55,475 | 24,617 | 3,342,276 |
| Rents \& Leases | 715,701 | 25,140 | 116,651 | 97,003 | 144,895 | 241,990 | 193,652 | 5,513,031 | 102,706 | 6,240,502 | 440,953 | 147,241 | 13,979,465 |
| Office | 445,629 | 128,078 | 523,130 | 132,290 | 269,644 | 600,580 | 599,121 | 3,435,166 | 133,955 | 3,119,998 | 313,610 | 160,999 | 9,862,200 |
| Supplies | 1,073,481 | 182,918 | 742,703 | 284,770 | 495,648 | 1,762,964 | 696,037 | 7,430,090 | 89,671 | 8,143,606 | 445,152 | 375,628 | 21,722,668 |
| Instructional | 1,109,938 | 159,537 | 541,234 | 143,906 | 342,972 | 1,096,124 | 1,572,707 | 7,914,174 | 267,878 | 11,881,811 | 291,751 | 350,872 | 25,672,904 |
| Noncap Equipment | 92,503 | 27,993 | 156,192 | 208,424 | 140,061 | 78,213 | 1,351,778 | 2,352,333 | 84,660 | 2,182,855 | 335,831 | 114,544 | 7,125,387 |
| Merch for Resale | 2,190,117 | 264,106 | 770,111 | 629,503 | 762,214 |  | 732,773 | 16,633,030 |  | 21,926,324 | 495,792 | 676,388 | 45,080,358 |
| Repairs | 901,992 | 156,645 | 782,277 | 147,972 | 182,674 | 889,984 | 2,120,777 | 6,190,031 | 19,653 | 14,605,549 | 932,834 | 47,172 | 26,977,560 |
| Scholarships etc. | 7,514,652 | 1,601,310 | 6,721,319 | 1,997,290 | 2,293,677 | 8,042,461 | 4,970,727 | 40,328,355 | 15,241,632 | 28,942,181 | 3,009,089 | 2,221,258 | 122,883,951 |
| General | 3,625,992 | 727,232 | 2,750,687 | 1,136,052 | 1,711,605 | 4,468,465 | 2,470,786 | 20,451,397 | 1,291,923 | 24,613,363 | 1,737,232 | 769,546 | 65,754,280 |
| Capital Equipment | 1,412,210 | 23,897 | 435,036 | 141,209 | 116,494 | 335,715 | 1,088,854 | 930,080 | 5,065 | 8,618,835 | 139,059 | 630,295 | 5,578,833 |
| Capital Improvement | 3,122,202 | 870,921 | 1,184,800 | 107,012 | 5,875,024 | 5,618,461 | 1,168,712 | 27,153,374 |  | 12,859,386 | 3,370,457 | 9,764,991 | 71,095,340 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 50,925,684 | 9,525,756 | 37,346,359 | 15,142,875 | 24,515,519 | 61,591,567 | 44,608,730 | 404,319,280 | 32,105,363 | 443,531,777 | 26,289,632 | 23,734,363 | 1,165,338,989 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | TOTAL |
| Construction | 3,122,202 | 870,921 | 1,184,800 | 107,012 | 5,875,024 | 5,618,461 | 1,168,712 | 27,153,374 | 0 | 12,859,386 | 3,370,457 | 9,764,991 | 71,095,340 |
| Com \& Pub Util | 956,141 | 358,434 | 944,146 | 289,452 | 531,918 | 1,433,518 | 1,831,609 | 13,245,782 | 1,820,536 | 11,362,304 | 685,776 | 365,978 | 33,825,594 |
| Retail | 6,323,878 | 786,529 | 3,168,406 | 1,540,102 | 2,127,033 | 3,873,596 | 6,041,270 | 38,694,873 | 581,229 | 55,873,429 | 2,021,195 | 2,308,726 | 115,042,350 |
| FIRE | 6,743,939 | 1,229,657 | 5,013,863 | 2,285,545 | 3,126,259 | 8,590,792 | 6,292,507 | 57,133,825 | 1,734,951 | 66,215,749 | 3,766,702 | 2,002,223 | 164,136,012 |
| Bus \& Pers Ser | 8,050,847 | 1,342,425 | 6,734,626 | 2,216,398 | 3,009,063 | 9,017,011 | 6,781,013 | 58,668,770 | 7,333,859 | 65,806,785 | 4,148,403 | 1,976,952 | 175,086,152 |
| Households | 25,728,677 | 4,937,790 | 20,300,518 | 8,704,366 | 9,846,222 | 33,058,189 | 22,493,619 | 209,422,656 | 20,634,788 | 231,414,124 | 12,297,099 | 7,315,493 | 606,153,541 |
| TOTAL | 50,925,684 | 9,525,756 | 37,346,359 | 15,142,875 | 24,515,519 | 61,591,567 | 44,608,730 | 404,319,280 | 32,105,363 | 443,531,777 | 26,289,632 | 23,734,363 | 1,165,338,989 |
|   |  |  |  |  |  |  |  |  |  |  |  |  |  |

Appendix Table B7. Direct Economic Effects from General and Non-General Fund Expenditures, NDUSs and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors, fiscal Year 2012 (Current Year Dollars)

| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 18,583,304 | 3,589,932 | 13,377,228 | 7,006,999 | 8,036,349 | 26,693,950 | 18,534,582 | 175,027,698 | 2,241,566 | 207,255,253 | 9,833,555 | 6,000,096 | 3,512,072 | 499,692,584 |
| Fringe Benefits | 6,380,067 | 1,352,470 | 4,846,051 | 2,397,381 | 3,222,648 | 9,277,841 | 6,412,884 | 54,238,054 | 659,273 | 61,654,975 | 3,612,022 | 2,013,773 | 1,135,199 | 157,202,638 |
| Travel | 717,226 | 287,764 | 1,123,746 | 373,523 | 603,869 | 1,758,715 | 1,105,093 | 12,576,106 | 188,480 | 11,165,819 | 728,278 | 518,020 | 133,229 | 31,279,868 |
| Data Processing | 609,753 | 112,284 | 402,141 | 375,918 | 151,462 | 476,682 | 504,451 | 6,277,852 | 1,694 | 5,392,370 | 459,746 | 373,661 | 2,122,229 | 17,260,243 |
| Fees | 1,906,273 | 85,974 | 1,289,465 | 684,087 | 228,949 | 1,485,662 | 437,476 | 21,770,526 | 155,681 | 21,060,071 | 363,647 | 463,406 | 2,521,277 | 52,452,494 |
| Utilities | 827,125 | 216,565 | 775,073 | 216,598 | 469,086 | 1,340,346 | 1,091,918 | 10,117,205 |  | 9,698,842 | 485,758 | 283,445 |  | 25,521,961 |
| Communications | 93,264 | 49,187 | 152,475 | 46,093 | 75,897 | 86,505 | 632,657 | 4,163,874 | 16,899 | 2,177,163 | 135,950 | 69,113 | 1,352,920 | 9,051,997 |
| Insurance | 99,723 | 16,369 | 372,028 | 28,199 | 54,688 | 98,919 | 87,173 | 964,726 | 84 | 2,454,074 | 60,965 | 39,061 | 2,615 | 4,278,624 |
| Rents \& Leases | 691,716 | 23,185 | 139,598 | 119,484 | 150,871 | 262,024 | 216,074 | 5,840,538 | 51,294 | 6,559,286 | 500,194 | 134,648 | 75,815 | 14,764,727 |
| Office | 406,393 | 127,863 | 403,119 | 119,663 | 273,178 | 518,854 | 603,801 | 3,215,272 | 42,050 | 3,441,891 | 323,878 | 119,120 | 32,625 | 9,627,707 |
| Supplies | 954,181 | 303,840 | 829,088 | 278,561 | 402,837 | 1,846,378 | 697,951 | 7,955,112 | 90,503 | 10,356,031 | 413,365 | 631,745 | 7,289 | 24,766,881 |
| Instructional | 1,021,772 | 151,770 | 568,341 | 128,326 | 427,034 | 977,454 | 1,553,113 | 7,285,176 | 116,926 | 8,439,406 | 314,374 | 704,755 | 159,840 | 21,848,287 |
| Noncap Equipment | 121,063 | 79,047 | 109,663 | 184,068 | 150,596 | 231,544 | 461,244 | 1,963,782 | 1,811 | 7,591,587 | 527,706 | 261,310 | 5,814 | 11,689,235 |
| Merch for Resale | 2,391,741 | 204,790 | 668,057 | 693,433 | 811,271 | 670 | 753,987 | 18,548,063 |  | 23,820,984 | 561,942 | 838,206 | 342 | 49,293,486 |
| Repairs | 505,870 | 47,910 | 628,609 | 1,552,676 | 357,654 | 264,242 | 2,903,298 | 8,546,449 | 1,515 | 13,485,961 | 1,251,157 | 53,420 | 85,519 | 29,684,280 |
| Scholarships etc. | 7,504,071 | 1,457,110 | 6,035,594 | 2,006,699 | 2,218,519 | 6,939,920 | 5,296,241 | 38,821,973 | 17,464,596 | 28,343,424 | 2,848,715 | 2,146,600 | 5,062 | 121,088,524 |
| General | 3,482,281 | 814,815 | 3,055,620 | 1,076,046 | 2,058,562 | 4,289,563 | 2,846,048 | 22,557,283 | 675,397 | 28,339,882 | 2,060,859 | 833,873 | 1,296,039 | 73,386,268 |
| Capital Equipment | 394,388 | 49,613 | 224,434 | 519,550 | 78,980 | 756,205 | 378,417 | 7,529,873 |  | 3,147,601 | 314,806 | 770,140 | 122,857 | 14,286,864 |
| Capital Improvement | 2,947,791 | 58,406 | 782,176 | 2,681,492 | 1,189,950 | 19,739,351 | 1,819,667 | 24,714,987 |  | 12,791,257 | 3,485,480 | 6,586,557 |  | 76,797,114 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 49,638,002 | 9,028,894 | 35,782,506 | 20,488,796 | 20,962,400 | 77,044,825 | 46,336,075 | 432,114,549 | 21,707,769 | 467,175,877 | 28,282,397 | 22,840,949 | 12,570,743 | 1,243,973,782 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC |  | TOTAL |
| Construction | 2,947,791 | 58,406 | 782,176 | 2,681,492 | 1,189,950 | 19,739,351 | 1,819,667 | 24,714,987 | 0 | 12,791,257 | 3,485,480 | 6,586,557 |  | 76,797,114 |
| Com \& Pub Util | 920,389 | 265,752 | 927,548 | 262,691 | 544,983 | 1,426,851 | 1,724,575 | 14,281,079 | 16,899 | 11,876,005 | 621,708 | 352,558 | 1,352,920 | 34,573,958 |
| Retail | 5,289,538 | 916,923 | 2,802,702 | 1,923,601 | 2,143,896 | 4,331,105 | 4,448,513 | 46,497,278 | 251,290 | 56,797,500 | 2,456,071 | 3,325,276 | 328,767 | 131,512,460 |
| FIRE | 7,171,506 | 1,392,024 | 5,357,677 | 2,545,064 | 3,428,207 | 9,638,784 | 6,716,131 | 61,043,318 | 710,651 | 70,668,335 | 4,173,181 | 2,187,482 | 1,213,629 | 176,245,989 |
| Bus \& Pers Ser | 7,221,403 | 1,348,747 | 6,499,581 | 4,062,250 | 3,400,496 | 8,274,864 | 7,796,366 | 71,728,216 | 1,022,767 | 79,444,103 | 4,863,687 | 2,242,380 | 6,158,293 | 204,063,153 |
| Households | 26,087,375 | 5,047,042 | 19,412,822 | 9,013,698 | 10,254,868 | 33,633,870 | 23,830,823 | 213,849,671 | 19,706,162 | 235,598,677 | 12,682,270 | 8,146,696 | 3,517,134 | 620,781,108 |
| TOTAL | 49,638,002 | 9,028,894 | 35,782,506 | 20,488,796 | 20,962,400 | 77,044,825 | 46,336,075 | 432,114,549 | 21,707,769 | 467,175,877 | 28,282,397 | 22,840,949 | 12,570,743 | 1,243,973,782 |

## Appendix Table B8. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors. Fiscal Year 2013 (Current Year Dollars)

| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 18,930,437 | 3,666,112 | 12,990,824 | 7,111,615 | 8,316,760 | 26,300,861 | 19,036,700 | 175,274,182 | 2,488,525 | 212,850,835 | 10,190,838 | 6,907,697 | 7,567,773 | 511,633,159 |
| Fringe Benefits | 6,668,195 | 1,415,627 | 4,691,082 | 2,491,130 | 3,339,883 | 9,504,578 | 6,810,372 | 55,981,025 | 728,666 | 63,602,689 | 3,809,596 | 2,255,415 | 2,544,613 | 163,842,871 |
| Travel | 673,824 | 268,823 | 1,023,240 | 362,423 | 585,880 | 1,741,115 | 1,146,744 | 13,398,644 | 164,292 | 11,660,170 | 727,487 | 568,705 | 233,981 | 32,555,328 |
| Data Processing | 531,541 | 107,479 | 346,504 | 358,200 | 194,648 | 408,683 | 910,116 | 5,124,433 | 488 | 5,173,978 | 368,603 | 242,710 | 5,465,886 | 19,233,269 |
| Fees | 1,829,744 | 141,953 | 801,815 | 649,234 | 255,045 | 1,167,125 | 507,397 | 15,117,771 | 342,383 | 19,841,427 | 303,631 | 357,291 | 1,146,491 | 42,461,307 |
| Utilities | 883,088 | 254,977 | 703,021 | 208,906 | 535,019 | 1,622,247 | 1,226,348 | 10,598,191 |  | 10,719,141 | 497,152 | 303,729 |  | 27,551,819 |
| Communications | 99,282 | 39,077 | 146,174 | 41,504 | 84,503 | 81,015 | 577,402 | 2,735,073 | 15,311 | 2,206,431 | 126,462 | 49,441 | 1,383,957 | 7,585,632 |
| Insurance | 104,988 | 16,729 | 68,757 | 52,274 | 58,150 | 102,241 | 86,786 | 1,031,855 | 89 | 2,829,778 | 62,702 | 23,652 |  | 4,438,001 |
| Rents \& Leases | 779,716 | 24,746 | 98,691 | 166,260 | 194,137 | 217,664 | 217,384 | 6,117,936 | 40,911 | 5,925,073 | 500,211 | 101,743 | 120,099 | 14,504,571 |
| Office | 365,210 | 102,909 | 328,262 | 117,050 | 259,556 | 563,956 | 571,337 | 3,331,612 | 66,230 | 3,210,346 | 288,098 | 134,575 | 31,545 | 9,370,686 |
| Supplies | 1,239,090 | 210,615 | 593,256 | 306,120 | 464,910 | 1,636,000 | 454,073 | 7,971,588 | 15,761 | 11,621,168 | 460,123 | 625,456 | 3,727 | 25,601,887 |
| Instructional | 1,061,015 | 153,694 | 576,251 | 194,975 | 366,851 | 903,640 | 1,528,602 | 8,833,554 | 41,630 | 8,956,746 | 321,075 | 504,035 | 398,317 | 23,840,385 |
| Noncap Equipment | 199,488 | 52,898 | 138,246 | 344,987 | 119,171 | 77,192 | 623,771 | 2,548,715 | 6,469 | 6,750,623 | 194,461 | 111,328 | 1,744 | 11,169,093 |
| Merch for Resale | 2,226,421 | 198,132 | 639,686 | 581,782 | 826,069 | 2,152 | 746,196 | 24,179,467 |  | 25,675,834 | 465,749 | 801,166 |  | 56,342,654 |
| Repairs | 443,316 | 68,158 | 666,224 | 226,111 | 229,873 | 307,265 | 2,020,544 | 9,722,861 | 761 | 14,383,535 | 643,170 | 131,998 | 454,654 | 29,298,470 |
| Scholarships etc. | 6,605,645 | 1,351,601 | 3,403,829 | 1,928,471 | 2,333,792 | 6,828,685 | 4,879,009 | 37,548,194 | 20,066,499 | 29,093,999 | 3,053,932 | 2,049,052 |  | 119,142,708 |
| General | 3,533,716 | 738,551 | 2,478,205 | 1,049,588 | 1,845,367 | 4,723,997 | 2,739,440 | 21,228,702 | 764,998 | 31,158,455 | 1,475,559 | 1,873,869 | 3,217,116 | 76,827,563 |
| Capital Equipment | 1,514,835 | 94,110 | 141,956 | 268,569 | 71,781 | 485,826 | 1,523,632 | 11,035,747 |  | 6,321,201 | 252,730 | 250,578 | 417,533 | 22,378,498 |
| Capital Improvement | 3,853,867 | 712,530 | 155,219 | 4,651,848 | 503,973 | 5,432,629 | 14,069,540 | 27,357,317 |  | 17,135,067 | 6,553,271 | 3,406,578 |  | 8,383 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 51,543,418 | 9,618,721 | 29,991,242 | 21,111,047 | 20,585,368 | 62,106,871 | 59,675,393 | 439,136,867 | 24,743,013 | 489,116,496 | 30,294,850 | 20,699,018 | 22,987,436 | 1,281,609,740 |


| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 3,853,867 | 712,530 | 155,219 | 4,651,848 | 503,973 | 5,432,629 | 14,069,540 | 27,357,317 |  | 17,135,067 | 6,553,271 | 3,406,578 |  | 83,831,839 |
| Com \& Pub Util | 982,370 | 294,054 | 849,195 | 250,410 | 619,522 | 1,703,262 | 1,803,750 | 13,333,264 | 15,311 | 12,925,572 | 623,614 | 353,170 | 1,383,957 | 35,137,451 |
| Retail | 6,606,059 | 812,358 | 2,417,657 | 1,813,483 | 2,108,338 | 3,668,766 | 5,447,611 | 57,900,683 | 130,090 | 62,535,918 | 1,982,236 | 2,427,138 | 852,866 | 148,703,203 |
| FIRE | 7,552,899 | 1,457,102 | 4,858,530 | 2,709,664 | 3,592,170 | 9,824,483 | 7,114,542 | 63,130,816 | 769,666 | 72,357,540 | 4,372,509 | 2,380,810 | 2,664,712 | 182,785,443 |
| Bus \& Pers Ser | 7,012,141 | 1,324,964 | 5,315,988 | 2,645,556 | 3,110,813 | 8,348,185 | 7,324,241 | 64,592,411 | 1,272,922 | 82,217,565 | 3,518,450 | 3,174,573 | 10,518,128 | 200,375,937 |
| Households | 25,536,082 | 5,017,713 | 16,394,653 | 9,040,086 | 10,650,552 | 33,129,546 | 23,915,709 | 212,822,376 | 22,555,024 | 241,944,834 | 13,244,770 | 8,956,749 | 7,567,773 | 630,775,867 |
| TOTAL | 51,543,418 | 9,618,721 | 29,991,242 | 21,111,047 | 20,585,368 | 62,106,871 | 59,675,393 | 439,136,867 | 24,743,013 | 489,116,496 | 30,294,850 | 20,699,018 | 22,987,436 | 1,281,609,740 |

Appendix Table B9. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors. Fiscal Year 2014 (Current Year Dollars)

| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 19,769,106 | 3,967,350 | 13,035,554 | 7,765,035 | 8,708,713 | 26,871,443 | 19,262,971 | 184,292,536 | 3,822,119 | 217,722,116 | 10,608,562 | 7,460,810 | 9,510,900 | 532,797,215 |
| Fringe Benefits | 7,443,596 | 1,642,432 | 5,172,661 | 2,882,364 | 3,737,032 | 9,856,245 | 7,359,965 | 71,235,602 | 1,161,700 | 70,900,265 | 4,250,704 | 2,700,000 | 3,439,378 | 191,781,894 |
| Travel | 735,039 | 325,735 | 1,053,379 | 445,811 | 643,551 | 1,735,382 | 1,151,578 | 14,442,160 | 195,343 | 11,671,682 | 832,991 | 564,169 | 284,944 | 34,081,764 |
| Data Processing | 855,096 | 144,523 | 383,854 | 448,130 | 152,341 | 453,745 | 798,258 | 4,695,669 | 7,800 | 4,495,311 | 711,785 | 212,848 | 5,394,329 | 18,753,689 |
| Fees | 4,722,081 | 196,154 | 807,837 | 593,566 | 254,753 | 1,839,072 | 584,573 | 14,443,273 | 124,461 | 19,768,019 | 458,112 | 654,887 | 1,229,507 | 45,676,295 |
| Utilities | 959,621 | 290,552 | 827,208 | 199,253 | 521,825 | 1,876,119 | 1,452,782 | 11,811,989 |  | 11,801,464 | 591,726 | 291,895 | 70 | 30,624,504 |
| Communications | 97,072 | 34,320 | 127,607 | 49,285 | 85,407 | 64,248 | 617,035 | 2,776,471 | 14,734 | 2,163,196 | 127,127 | 71,046 | 2,530,758 | 8,758,306 |
| Insurance | 112,338 | 14,741 | 152,964 | 44,836 | 53,226 | 89,654 | 95,397 | 929,643 | 93 | 2,704,161 | 59,168 | 31,081 |  | 4,287,302 |
| Rents \& Leases | 784,781 | 21,870 | 111,448 | 235,244 | 168,211 | 171,874 | 325,879 | 6,007,660 | 121,525 | 6,648,480 | 447,019 | 263,179 | 140,022 | 15,447,192 |
| Office | 390,419 | 151,777 | 395,740 | 137,979 | 268,818 | 441,339 | 473,415 | 3,262,541 | 53,420 | 3,078,548 | 299,516 | 196,920 | 34,531 | 9,184,963 |
| Supplies | 1,075,833 | 258,705 | 589,122 | 409,153 | 463,884 | 1,971,822 | 428,768 | 8,516,821 | 11,428 | 11,768,426 | 480,913 | 609,099 | 7,959 | 26,591,933 |
| Instructional | 1,122874 | 143,296 | 520,658 | 253,965 | 259,773 | 729,800 | 1,428,188 | 9,265,659 | 37,709 | 9,075,424 | 304,404 | 631,508 | 422,221 | 24,195,479 |
| Noncap Equipment | 71,682 | 126,292 | 170,124 | 191,356 | 118,105 | 53,143 | 557,720 | 2,864,691 | 3,720 | 3,752,968 | 242,597 | 156,406 | 44,049 | 8,352,853 |
| Merch for Resale | 2,237,218 | 412,311 | 544,040 | 634,704 | 869,511 | 620 | 854,514 | 30,662,463 |  | 47,703,847 | 534,532 | 771,824 |  | 85,225,584 |
| Repairs | 600,204 | 34,946 | 493,042 | 307,352 | 208,934 | 293,045 | 1,697,851 | 11,206,429 | 917 | 13,382,524 | 733,428 | 196,935 | 556,370 | 29,711,977 |
| Scholarships etc. | 6,224,342 | 1,614636 | 3,026,955 | 1,768,647 | 2,242,631 | 6,250,427 | 4,291,942 | 28,617,548 | 20,248,778 | 26,909,736 | 1,951,242 | 2,278,670 |  | 105,425,554 |
| General | 4,145,317 | 863,913 | 2,349,762 | 1,073,538 | 2,017,418 | 6,503,492 | 2,169,757 | 21,454,600 | 1.868,238 | 33,652,385 | 1,967,274 | 2,142,106 | 2,150,166 | 82,357,966 |
| Capital Equipment | 1,137,723 | 147,227 | 155,679 | 476,370 | 23,160 | 1,505,944 | 888,141 | 8,978,784 |  | 5,648,520 | 192,215 | 429,229 | 969,199 | 20,552,191 |
| Capital Improvement | 5,952,772 | 651,171 | 210,196 | 3,885,548 | 1,817,818 | 3,505,540 | 5,454,736 | 17,395,751 |  | 29,000,632 | 1,278,370 | 8,468,584 |  | 77,621,118 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 58,437,114 | 11,041,651 | 30,127,780 | 21,802,136 | 22,615,111 | 64,515,954 | 49,893,470 | 452,860,290 | 247,671,985 | 531,847,704 | 26,071,685 | 28,131,196 | 26,714,403 | 1,351,427,779 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 5,952,772 | 651,171 | 210,196 | 3,885,548 | 1,817,818 | 3,505,540 | 5,454,736 | 17,395,751 |  | 29,000,632 | 1,278,370 | 8,468,584 |  | 77,621,118 |
| Com \& Pub Util | 1,056,693 | 324,872 | 954,815 | 248,538 | 607,232 | 1,940,367 | 2,069,817 | 14,588,460 | 14,734 | 13,964,660 | 718,853 | 362,941 | 2,530,828 | 39,382,810 |
| Retail | 6,035,749 | 1,239,608 | 2,375,363 | 2,103,527 | 2,003,251 | 4,702,668 | 4,630,746 | 63,550,959 | 106,277 | 81,027,733 | 2,0545,177 | 2,794,986 | 1,477,959 | 174,103,003 |
| FIRE | 8,340,715 | 1,679,043 | 5,437,023 | 3,162,444 | 3,958,469 | 10,117,773 | 7,781,241 | 78,172,905 | 1,283,318 | 80,252,906 | 4,756,891 | 2,994,260 | 3,579,400 | 211,516,388 |
| Bus \& Pers Ser | 11,057,737 | 1,565,271 | 5,087,874 | 2,868,397 | 3,276,997 | 10,824,736 | 6,402,017 | 66,242,131 | 2,196,759 | 82,969,921 | 4,703,590 | 3,770,945 | 9,615,316 | 210,581,691 |
| Households | 25,993,448 | 5,581,986 | 16,062,509 | 9,533,682 | 10,951,344 | 33,121,870 | 23,554,913 | 212,910,084 | 24,070,897 | 244,631,852 | 12,559,804 | 9,739,480 | 9,510,900 | 638,222,769 |
| TOTAL | 58,437,114 | 11,041,951 | 30,127,780 | 21,802,136 | 22,615,111 | 64,212,954 | 49,893,470 | 452,860,290 | 247,671,985 | 531,847,704 | 26,071,685 | 28,131,196 | 26,714,403 | 1,351,427,779 |


| Appendix Table B10. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and |
| :--- |
| Allocation to Input-Output Model Sectors. Fiscal Year 2015 (Current Year Dollars) | Allocation to Input-Output Model Sectors. Fiscal Year 2015 (Current Year Dollars)


| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 20,672,511 | 4,174,822 | 13,304,895 | 8,181,081 | 9,629,246 | 27,799,822 | 20,662,945 | 193,911,654 | 4,231,194 | 221,915,472 | 11,075,309 | 7,904,647 | 9,912,286 | 553,375,884 |
| Fringe Benefits | 7,857,097 | 1,732,062 | 5,089,232 | 3,042,069 | 4,007,170 | 10,169,686 | 7,902,853 | 75,162,204 | 1,323,360 | 75,447,350 | 4,476,350 | 2,720,830 | 3,550,181 | 202,322,026 |
| Travel | 683,895 | 326,363 | 1,074,319 | 536,754 | 730,627 | 1,745,373 | 1,2021,513 | 14,460,265 | 162,484 | 12,376,569 | 759,605 | 500,364 | 326,018 | 34,904,149 |
| Data Processing | 978,965 | 115,821 | 476,899 | 474,030 | 168,506 | 521,663 | 726,004 | 4,820,198 | 61,079 | 5,068,338 | 385,109 | 304,642 | 5,833,844 | 19,935,098 |
| Fees | 5,008,840 | 133,682 | 725,604 | 468,902 | 228,630 | 1,468,704 | 485,534 | 15,098,269 | 144,126 | 20,891,257 | 624,900 | 600,937 | 1,327,351 | 47,251,736 |
| Utilities | 1,025,957 | 335,316 | 748,108 | 220,593 | 551,115 | 1,727,998 | 1,312,451 | 11,935,693 |  | 10,343,522 | 621,779 | 274,144 |  | 29,096,676 |
| Communications | 91,506 | 33,434 | 134,282 | 44,108 | 68,458 | 64,371 | 558,755 | 2798,632 | 16,799 | 2,131,526 | 131,526 | 44,313 | 2,959,336 | 9,076,555 |
| Insurance | 90,035 | 6,736 |  | 43,801 | 27,063 | 38,964 | 32,895 | 611,838 |  | 2,361,686 | 29,353 | 21,659 |  | 3,264,030 |
| Rents \& Leases | 788,242 | 27,482 | 121,707 | 247,140 | 164,331 | 166,770 | 254,172 | 6,319,006 | 115,426 | 7,318,928 | 446,341 | 173,744 | 236,400 | 16,379,689 |
| Office | 536,527 | 124,528 | 310,759 | 105,722 | 257,088 | 443,924 | 458,265 | 3,352,078 | 50,977 | 3,202,514 | 315,316 | 133,394 | 26,331 | 9,317,423 |
| Supplies | 2,042,990 | 338,917 | 647,093 | 369,437 | 495,835 | 1,644,447 | 747,390 | 8,788,524 | 12,062 | 10,125,549 | 440,179 | 443,427 | 5,831 | 26,101,681 |
| Instructional | 1,4041,239 | 178,199 | 648,662 | 230,893 | 326,294 | 931,511 | 1,583,656 | 10,290,530 | 67,038 | 9,074,968 | 307,945 | 559,957 | 473,602 | 26,077,494 |
| Noncap Equipment | 97,719 | 83,925 | 272,946 | 461,406 | 157,320 | 59,689 | 972,917 | 3,271,907 | 4,523 | 4,134,381 | 181,207 | 499,569 | 68,010 | 9,965,519 |
| Merch for Resale | 2,356,024 | 234,153 | 467,563 | 698,717 | 888,405 |  | 920,849 | 64,507,471 |  | 118,481,040 | 456,106 | 826,6116 |  | 189,836,939 |
| Repairs | 618,701 | 46,606 | 501,986 | 258,587 | 268,931 | 240,898 | 1,312,164 | 13,957,196 | 1,362 | 13,431,333 | 585,836 | 343,784 | 771,429 | 32,338,813 |
| Scholarships etc. | 5,257,117 | 1,064,426 | 2,987,750 | 1,864,148 | 2,228,578 | 6,129,718 | 4,287,440 | 25,379,751 | 19,920,735 | 26,288,567 | 1,994,123 | 2,277,078 |  | 99,679,430 |
| General | 4,284,837 | 1,036,179 | 2,309,782 | 1,105,609 | 1,947,207 | 5,398,436 | 2,451,275 | 21,795,387 | 965,646 | 31,083,467 | 5,157,222 | 1,670,914 | 2,999,247 | 82,205,208 |
| Capital Equipment | 1,347,307 | 70,761 | 279,693 | 450,337 | 37,863 | 950,618 | 1,602,106 | 8,472,377 | 26,166 | 7,011,107 | 287,050 | 1,133,619 | 81,077 | 21,750,081 |
| Capital Improvement | 13,180,692 | 1,376,343 | 142,884 | 1,702,832 | 3,353,286 | 6,175,701 | 7,256,149 | 55,458,383 |  | 96,251,4041 | 2,665,331 | 11,384,860 |  | 198,947,865 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 68,323,201 | 11,439,755 | 30,244,164 | 20,506,166 | 25,535,953 | 65,678,293 | 54,449,333 | 540,391,363 | 27,102,976 | 676,780,069 | 30,940,587 | 31,818,493 | 28,615,943 | 1,611,826,296 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 13,180,692 | 1,376,343 | 142,884 | 1,702,832 | 3,353,286 | 6,175,701 | 7,256,149 | 55,458,383 |  | 96,251,404 | 2,665,331 | 11,384,860 |  | 198,947,865 |
| Com \& Pub Util | 1,117,463 | 368,750 | 882,390 | 264,701 | 619,573 | 1,792,369 | 1,871,206 | 14,734,325 | 16,799 | 12,474,557 | 753,305 | 318,457 | 2,959,336 | 38,173,231 |
| Retail | 7,784,806 | 1,030,483 | 2,626,716 | 2,316,512 | 2,162,805 | 4,0320,189 | 5,985,183 | 98,682,887 | 160,766 | 152,029,599 | 1,987,803 | 3,596,577 | 654,851 | 283,049,137 |
| FIRE | 8,735,374 | 1,766,280 | 5,210,939 | 3,333,010 | 4,198,564 | 10,375,420 | 8,189,920 | 82,093,048 | 1,438,786 | 84,969,546 | 4,952,044 | 2,916,233 | 3,786,581 | 221,965,745 |
| Bus \& Pers Ser | 11,575,238 | 1,658,651 | 5,088,590 | 2,843,882 | 3,343,901 | 9,375,074 | 6,196,490 | 70,131,315 | 1,334,697 | 82,850,964 | 7,512,672 | 3,420,641 | 11,302,889 | 216,635,004 |
| Households | 25,929,628 | 5,239,248 | 16,292,645 | 10,045,229 | 11,857,824 | 33,929,540 | 24,950,385 | 219,291,405 | 24,151,928 | 248,204,039 | 13,069,432 | 10,181,725 | 9,912,286 | 653,055,314 |
| TOTAL | 68,323,201 | 11,439,755 | 30,244,164 | 20,506,166 | 25,535,953 | 65,678,293 | 54,449,333 | 540,391,363 | 27,102,976 | 676,780,069 | 30,940,587 | 31,818,493 | 28,615,943 | 1,611,826,296 |

## Appendix Table B11. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors. Fiscal Year 2017 (Current Year Dollars)

| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 20,459,988 | 3,924,653 | 13,485,462 | 7,821,195 | 10,032,795 | 27,304,672 | 20,718,518 | 199,268,886 | 2,442,878 | 228,750,288 | 11,351,927 | 7,411,324 | 9,568,356 | 562,540,942 |
| Fringe Benefits | 8,334,597 | 1,707,630 | 5,464,236 | 3,059,530 | 4,373,780 | 10,549,750 | 8,515,523 | 80,212,980 | 745,125 | 77,896,852 | 4,888,772 | 2,755,485 | 3,581,546 | 212,085,807 |
| Travel | 434,609 | 294,982 | 812,043 | 297,272 | 522,717 | 1,334,053 | 840,073 | 11,852,019 | 65,052 | 10,218,773 | 765,152 | 389,107 | 173,553 | 27,999,405 |
| Data Processing | 530,846 | 150,376 | 271,782 | 253,423 | 96,807 | 515,396 | 563,197 | 4,586,359 | 5,354 | 6,012,566 | 475,666 | 289,230 | 4,285,713 | 18,036,715 |
| Fees | 3,668,320 | 209,758 | 1,227,454 | 635,714 | 482,530 | 1,330,866 | 623,421 | 14,555,686 | 145,140 | 14,323,465 | 349,293 | 273,095 | 1,626,552 | 39,451,294 |
| Utilities | 1,074,127 | 281,064 | 733,914 | 190,775 | 554,971 | 1,713,941 | 1,176,816 | 11,803,353 | - | 10,833,117 | 512,719 | 276,361 | - | 29,151,158 |
| Communications | 170,764 | 21,011 | 89,019 | 54,544 | 59,894 | 59,141 | 537,131 | 2,763,969 | 52,607 | 2,106,860 | 121,254 | 50,405 | 2,584,001 | 8,670,600 |
| Insurance | 146,652 | 14,902 | 74,790 | 36,726 | 64,650 | 91,390 | 111,901 | 1,068,133 | 80 | 2,010,828 | 64,983 | 46,858 | 42 | 3,731,893 |
| Rents \& Leases | 1,011,157 | 25,312 | 107,234 | 189,506 | 111,546 | 141,258 | 250,717 | 4,031,982 | - | 6,854,267 | 475,705 | 110,849 | 188,171 | 13,497,707 |
| Office | 341,597 | 70,112 | 212,574 | 129,407 | 167,648 | 392,687 | 415,917 | 2,952,334 | 24,084 | 2,539,513 | 220,177 | 89,290 | 33,839 | 7,589,178 |
| Supplies | 992,318 | 299,508 | 525,721 | 286,125 | 398,868 | 1,371,605 | 335,974 | 7,166,731 | 14,334 | 7,275,093 | 409,624 | 427,841 | 7,662 | 19,511,404 |
| Instructional | 1,324,660 | 164,175 | 417,558 | 122,305 | 294,505 | 659,831 | 1,167,129 | 10,026,234 | 20,624 | 10,249,461 | 402,476 | 371,183 | 419,707 | 25,639,847 |
| Noncap Equipment | 66,620 | 34,409 | 95,191 | 94,300 | 84,576 | 37,259 | 762,130 | 3,333,765 | 7,807 | 5,114,189 | 183,191 | 31,091 | 1,005 | 9,845,533 |
| Merch for Resale | 1,993,266 | 255,424 | 537,933 | 699,853 | 721,189 | 263 | 3,283,476 | 49,484,409 | - | 36,970,492 | 466,100 | 872,777 | - | 95,285,183 |
| Repairs | 764,171 | 271,569 | 468,260 | 139,686 | 173,367 | 224,604 | 1,171,026 | 12,239,796 | - | 11,141,088 | 492,959 | 138,225 | 1,305,230 | 28,529,981 |
| Scholarships etc. | 4,187,885 | 1,449,358 | 2,687,118 | 1,670,841 | 2,467,797 | 5,869,361 | 4,104,580 | 27,608,754 | 22,542,451 | 29,170,213 | 2,325,474 | 3,602,890 | - | 107,686,723 |
| General | 3,882,402 | 975,094 | 2,404,233 | 979,497 | 1,767,959 | 4,896,310 | 2,663,352 | 21,997,106 | 949,796 | 35,004,029 | 2,333,094 | 1,479,864 | 3,331,842 | 82,664,579 |
| Capital Equipment | 545,481 | 114,830 | 133,524 | 311,912 | 22,578 | 1,419,822 | 914,741 | 7,694,193 | - | 6,828,727 | 66,380 | 7,348 | 501,175 | 18,560,710 |
| Capital Improvement | 1,316,944 | 926,582 | 266,953 | 881,752 | 403,411 | 1,130,228 | 8,816,340 | 47,660,748 | - | 19,551,767 | 10,315,404 | 46,243 | - | 91,316,372 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| TOTAL | 51,246,406 | 11,190,747 | 30,015,000 | 17,854,361 | 22,801,589 | 59,042,439 | 56,971,961 | 520,307,439 | 27,015,333 | 522,851,589 | 36,220,350 | 18,669,466 | 27,608,392 | 1,401,795,030 |


| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 1,316,944 | 926,582 | 266,953 | 881,752 | 403,411 | 1,130,228 | 8,816,340 | 47,660,748 | - | 19,551,767 | 10,315,404 | 46,243 |  | 91,316,372 |
| Com \& Pub Util | 1,244,891 | 302,075 | 822,934 | 245,319 | 614,865 | 1,773,083 | 1,713,948 | 14,567,322 | 52,607 | 12,939,977 | 633,973 | 326,766 | 2,584,001 | 37,821,758 |
| Retail | 5,263,944 | 938,457 | 1,922,501 | 1,643,901 | 1,689,365 | 3,881,467 | 6,879,367 | 80,657,666 | 66,850 | 68,977,475 | 1,747,947 | 1,799,530 | 963,387 | 176,431,856 |
| FIRE | 9,492,407 | 1,747,843 | 5,646,260 | 3,285,762 | 4,549,977 | 10,782,398 | 8,878,141 | 85,313,095 | 745,204 | 86,761,948 | 5,429,460 | 2,913,193 | 3,769,759 | 229,315,448 |
| Bus \& Pers Ser | 9,280,348 | 1,901,779 | 5,183,772 | 2,305,591 | 3,043,380 | 8,301,229 | 5,861,068 | 65,230,967 | 1,165,343 | 76,699,922 | 4,416,164 | 2,569,520 | 10,722,889 | 196,681,974 |
| Households | 24,647,873 | 5,374,011 | 16,172,580 | 9,492,036 | 12,500,592 | 33,174,034 | 24,823,098 | 226,877,640 | 24,985,329 | 257,920,502 | 13,677,401 | 11,014,214 | 9,568,356 | 670,227,664 |
| TOTAL | 51,246,406 | 11,190,747 | 30,015,000 | 17,854,361 | 22,801,589 | 59,042,439 | 56,971,961 | 520,307,439 | 27,015,333 | 522,851,589 | 36,220,350 | 18,669,466 | 27,608,392 | 1,401,795,071 |


| Appendix Table B12. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors. Fiscal Year 2018 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Wages \& Salaries | 19,214,295 | 4,001,213 | 12,850,258 | 7,403,066 | 10,083,376 | 25,650,412 | 18,568,831 | 190,487,905 | 2,470,903 | 212,076,218 | 10,640,325 | 6,953,260 | 8,838,060 | 529,238,123 |
| Fringe Benefits | 8,076,127 | 1,678,143 | 5,434,209 | 3,065,059 | 4,856,168 | 10,477,414 | 8,352,752 | 80,273,426 | 805,266 | 76,227,244 | 4,915,434 | 2,824,500 | 3,475,807 | 210,461,551 |
| Travel | 404,931 | 261,568 | 968,779 | 294,918 | 597,015 | 1,304,202 | 819,390 | 12,178,152 | 80,858 | 11,092,746 | 605,066 | 417,122 | 169,558 | 29,194,305 |
| Data Processing | 377,123 | 131,766 | 356,042 | 238,136 | 126,995 | 399,726 | 679,859 | 3,872,843 | 3,445 | 4,568,564 | 391,579 | 267,519 | 5,641,285 | 17,054,884 |
| Fees | 2,744,953 | 281,276 | 1,479,202 | 354,583 | 862,964 | 1,282,579 | 692,702 | 14,856,660 | 106,921 | 24,384,519 | 449,968 | 274,277 | 1,269,345 | 49,039,949 |
| Utilities | 1,140,140 | 315,378 | 760,226 | 214,892 | 573,622 | 1,735,843 | 1,162,139 | 12,337,446 | - | 11,024,895 | 548,354 | 310,813 | 9,874 | 30,123,748 |
| Communications | 157,054 | 20,494 | 56,415 | 50,428 | 59,258 | 56,553 | 568,231 | 2,601,730 | 63,454 | 1,808,932 | 127,080 | 47,357 | 3,362,221 | 8,979,208 |
| Insurance | 142,059 | 18,013 | 73,769 | 42,280 | 63,035 | 99,274 | 118,515 | 1,024,420 | 82 | 1,963,019 | 70,010 | 49,775 | 4,179 | 3,664,250 |
| Rents \& Leases | 967,324 | 24,116 | 101,811 | 204,248 | 117,768 | 182,982 | 201,065 | 3,817,419 | 190 | 6,947,059 | 450,856 | 48,037 | 176,637 | 13,239,512 |
| Office | 334,718 | 79,508 | 157,304 | 87,020 | 163,967 | 334,638 | 351,061 | 2,777,327 | 19,300 | 2,285,654 | 193,655 | 58,304 | 24,742 | 6,867,199 |
| Supplies | 986,809 | 352,627 | 514,918 | 316,140 | 673,296 | 1,331,682 | 387,844 | 7,161,562 | 11,659 | 9,877,903 | 384,119 | 487,129 | 227,586 | 22,713,273 |
| Instructional | 833,270 | 145,227 | 450,948 | 159,775 | 207,559 | 644,220 | 1,133,218 | 9,588,670 | 9,493 | 10,879,966 | 309,435 | 357,272 | 292,478 | 25,011,532 |
| Noncap Equipment | 44,941 | 49,112 | 221,653 | 230,713 | 153,289 | 44,742 | 442,656 | 2,567,943 | 4,430 | 2,739,892 | 200,742 | 120,078 | 659 | 6,820,850 |
| Merch for Resale | 2,140,722 | 284,923 | 487,453 | 749,025 | 693,931 | - | 2,836,112 | 49,305,189 | - | 30,846,401 | 407,011 | 519,339 | - | 88,270,105 |
| Repairs | 426,573 | 128,195 | 266,940 | 192,813 | 247,561 | 688,369 | 1,378,388 | 12,725,782 | - | 12,934,103 | 327,606 | 135,998 | 358,947 | 29,811,274 |
| Scholarships etc. | 4,092,298 | 1,541,768 | 2,937,156 | 1,934,458 | 2,522,555 | 6,222,925 | 4,917,582 | 29,712,483 | 16,038,744 | 29,114,189 | 2,547,077 | 3,243,791 | 500 | 104,825,026 |
| General | 3,067,796 | 901,389 | 2,974,176 | 932,152 | 1,905,139 | 4,751,240 | 2,914,177 | 25,014,040 | 724,014 | 41,983,780 | 2,421,762 | 2,028,401 | 3,341,592 | 92,959,657 |
| Capital Equipment | 116,689 | 194,046 | 44,164 | 234,180 | 226,340 | 385,771 | 387,997 | 6,101,650 | - | 6,379,898 | 87,689 | 364,850 | 1,049,800 | 15,573,074 |
| Capital Improvement | 128,810 | 72,400 | 6,738,486 | 903,910 | 1,326,213 | 1,273,774 | 783,663 | 37,165,429 | - | 9,810,178 | 2,635,029 | 31,867 | - | 60,869,757 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TOTAL | 45,396,633 | 10,481,163 | 36,873,910 | 17,607,798 | 25,460,049 | 56,866,345 | 46,696,181 | 503,570,076 | 20,338,760 | 506,945,161 | 27,712,795 | 18,539,687 | 28,243,270 | 1,344,717,275 |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 128,810 | 72,400 | 6,738,486 | 903,910 | 1,326,213 | 1,273,774 | 783,663 | 37,165,429 | - | 9,810,178 | 2,635,029 | 31,867 | - | 60,869,757 |
| Com \& Pub Util | 1,297,194 | 335,872 | 816,641 | 265,320 | 632,880 | 1,792,396 | 1,730,370 | 14,939,176 | 63,454 | 12,833,827 | 675,435 | 358,170 | 3,372,096 | 39,112,830 |
| Retail | 4,457,148 | 1,105,444 | 1,876,441 | 1,776,854 | 2,118,382 | 2,741,054 | 5,538,887 | 77,502,341 | 44,882 | 63,009,713 | 1,582,650 | 1,906,971 | 1,595,265 | 165,256,033 |
| FIRE | 9,185,510 | 1,720,272 | 5,609,789 | 3,311,587 | 5,036,971 | 10,759,670 | 8,672,333 | 85,115,265 | 805,538 | 85,137,322 | 5,436,299 | 2,922,312 | 3,656,623 | 227,369,492 |
| Bus \& Pers Ser | 7,021,376 | 1,704,194 | 6,045,140 | 2,012,603 | 3,739,674 | 8,426,115 | 6,484,516 | 68,647,477 | 915,239 | 94,963,712 | 4,195,981 | 3,123,316 | 10,780,726 | 218,060,068 |
| Households | 23,306,594 | 5,542,981 | 15,787,414 | 9,337,525 | 12,605,931 | 31,873,337 | 23,486,413 | 220,200,388 | 18,509,647 | 241,190,408 | 13,187,402 | 10,197,051 | 8,838,560 | 634,063,649 |
|  | 45,396,633 | 10,481,163 | 36,873,910 | 17,607,798 | 25,460,049 | 56,866,345 | 46,696,181 | 503,570,076 | 20,338,760 | 506,945,161 | 27,712,795 | 18,539,687 | 28,243,270 | 1,344,731,829 |


| Appendix Table B13. Direct Economic Effects from General and Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to Input-Output Model Sectors. Fiscal Year 2019 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Wages \& Salaries | 19,511,491 | 4,342,535 | 12,976,763 | 7,881,176 | 10,552,610 | 24,843,760 | 18,757,595 | 190,294,186 | 2,368,693 | 205,864,274 | 10,722,995 | 6,824,621 | 8,769,674 | 523,710,373 |
| Fringe Benefits | 8,394,331 | 1,752,082 | 5,606,748 | 3,207,985 | 5,061,756 | 10,268,595 | 7,888,122 | 78,410,542 | 771,857 | 76,464,625 | 4,870,476 | 2,682,213 | 3,503,792 | 208,883,124 |
| Travel | 445,619 | 307,951 | 896,874 | 363,690 | 678,990 | 1,665,455 | 883,832 | 12,303,641 | 58,656 | 12,274,088 | 805,249 | 397,181 | 218,272 | 31,299,499 |
| Data Processing | 949,390 | 179,723 | 392,340 | 187,979 | 202,833 | 434,123 | 798,588 | 4,861,067 | 1,906 | 6,128,592 | 470,768 | 154,379 | 3,502,368 | 18,264,057 |
| Fees | 1,144,901 | 312,724 | 404,644 | 366,962 | 888,358 | 1,402,816 | 679,201 | 16,099,443 | 185,159 | 26,032,961 | 364,600 | 304,232 | 1,330,924 | 49,516,925 |
| Utilities | 1,110,374 | 368,365 | 575,242 | 228,708 | 623,453 | 1,654,982 | 1,252,833 | 11,803,704 | - | 12,405,685 | 504,001 | 321,529 | - | 30,848,873 |
| Communications | 147,240 | 19,918 | 58,327 | 53,969 | 54,606 | 63,289 | 536,010 | 2,578,349 | 52,922 | 1,624,393 | 113,148 | 30,453 | 3,441,679 | 8,774,304 |
| Insurance | 143,132 | 18,291 | 70,458 | 44,018 | 74,746 | 103,912 | 156,670 | 1,072,706 | 109 | 2,014,651 | 69,124 | 56,986 | 4,179 | 3,824,803 |
| Rents \& Leases | 1,320,583 | 23,579 | 111,827 | 241,940 | 114,630 | 188,145 | 236,295 | 3,976,537 | - | 8,533,771 | 450,967 | 59,373 | 218,468 | 15,476,114 |
| Office | 323,187 | 93,494 | 166,517 | 124,894 | 169,587 | 363,337 | 328,115 | 2,750,776 | 21,789 | 2,225,744 | 162,345 | 63,361 | 31,699 | 6,824,844 |
| Supplies | 1,202,801 | 390,568 | 571,232 | 367,660 | 704,127 | 1,615,962 | 404,959 | 6,763,174 | 11,640 | 33,483,163 | 466,718 | 499,380 | 6,158 | 46,487,541 |
| Instructional | 973,118 | 147,931 | 423,092 | 107,800 | 226,432 | 726,944 | 1,360,092 | 9,907,616 | 20,171 | 10,391,141 | 242,575 | 254,219 | 294,099 | 25,075,229 |
| Noncap Equipment | 2,024 | 119,322 | 92,261 | 191,665 | 84,566 | 72,618 | 323,464 | 2,719,073 | 58,004 | 1,981,633 | 212,911 | 118,654 | 66,696 | 6,042,893 |
| Merch for Resale | 2,126,640 | 347,050 | (525) | 732,924 | 732,138 | 753 | 2,613,949 | 63,616,876 | - | 37,916,733 | 300,234 | 549,892 | - | 108,936,664 |
| Repairs | 599,473 | 326,460 | 213,845 | 453,584 | 299,412 | 202,701 | 1,408,194 | 13,703,845 | 2,801 | 11,912,964 | 418,727 | 111,896 | 468,839 | 30,122,743 |
| Scholarships etc. | 4,157,437 | 1,703,911 | 2,890,997 | 1,938,477 | 2,628,846 | 6,156,158 | 4,665,166 | 29,163,154 | 16,224,714 | 31,653,706 | 3,042,280 | 3,873,823 | 500 | 108,098,668 |
| General | 2,857,778 | 1,196,521 | 2,909,782 | 1,046,205 | 2,161,345 | 9,436,823 | 5,452,444 | 25,737,192 | 426,827 | 48,077,757 | 2,335,136 | 2,036,718 | 5,502,682 | 109,177,209 |
| Capital <br> Equipment | 364,303 | 47,449 | 49,810 | 170,185 | 33,229 | 279,933 | 373,158 | 7,234,103 | 30,503 | 4,906,870 | 193,963 | 200,108 | 33,748 | 13,917,361 |
| Capital <br> Improvement | 8,326,519 | 12,685 | 5,235,980 | 86,620 | 932,289 | 3,529,744 | 231,385 | 49,373,816 | - | 62,093,622 | 1,591,227 | 399,186 | - | 131,813,072 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TOTAL | 54,100,340 | 11,710,559 | 33,646,213 | 17,796,439 | 26,223,952 | 63,010,050 | 48,350,072 | 532,369,801 | 20,235,751 | 595,986,372 | 27,337,444 | 18,938,205 | 27,393,778 | 1,477,094,295 |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 8,326,519 | 12,685 | 5,235,980 | 86,620 | 932,289 | 3,529,744 | 231,385 | 49,373,816 | - | 62,093,622 | 1,591,227 | 399,186 | - | 131,813,072 |
| Com \& Pub Util | 1,257,614 | 388,283 | 633,569 | 282,677 | 678,058 | 1,718,271 | 1,788,843 | 14,382,053 | 52,922 | 14,030,078 | 617,148 | 351,981 | 3,441,679 | 39,623,177 |
| Retail | 4,992,073 | 1,145,814 | 1,302,387 | 1,695,127 | 1,950,079 | 3,059,546 | 5,403,737 | 92,991,619 | 142,106 | 90,905,283 | 1,578,746 | 1,685,614 | 432,401 | 207,284,532 |
| FIRE | 9,858,045 | 1,793,952 | 5,789,032 | 3,493,942 | 5,251,132 | 10,560,653 | 8,281,087 | 83,459,786 | 771,965 | 87,013,047 | 5,390,567 | 2,798,573 | 3,726,439 | 228,188,220 |
| Bus \& Pers Ser | 5,997,161 | 2,323,379 | 4,817,485 | 2,418,419 | 4,230,938 | 13,141,918 | 9,222,259 | 72,705,188 | 675,350 | 104,426,363 | 4,394,481 | 3,004,406 | 11,023,085 | 238,380,433 |
| Households | 23,668,928 | 6,046,446 | 15,867,760 | 9,819,653 | 13,181,456 | 30,999,918 | 23,422,761 | 219,457,339 | 18,593,407 | 237,517,979 | 13,765,275 | 10,698,444 | 8,770,174 | 631,809,541 |
| TOTAL | 54,100,340 | 11,710,559 | 33,646,213 | 17,796,439 | 26,223,952 | 63,010,050 | 48,350,072 | 532,369,801 | 20,235,751 | 595,986,372 | 27,337,444 | 18,938,205 | 27,393,778 | 1,477,098,975 |


| Appendix Table B14. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 1999 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DSU | LRSC | MaSU | DCB | 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 | DCB | MiSU | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 B15. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2004 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 B16. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2006 (Current Year Dollars)

| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| Retail Trade | 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 |
| 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 |
| 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 |
| 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 B17. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2008 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DSU | LRSC | MaSU | MiSU | DCB | 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 | DCB | NDSCS | NDSU | UND | VCSU | WSC | SYSTEM | TOTAL |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 B18. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Input-Output Model Sectors, Fiscal Year 2009 (Current Year Dollars)



## Appendix Table B20. Direct Economic Effects from Non-General Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocations to

 Input-Output Model Sectors, Fiscal Year 2012 (Current Year Dollars)| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,165,304 | 1,722,259 | 6,824,126 | 4,425,425 | 4,822,239 | 11,834,318 | 8,725,258 | 113,978,360 | 224,958 | 145,923,044 | 4,526,616 | 3,341,857 | NA | 317,513,764 |
| Fringe Benefits | 3,854,530 | 661,482 | 2,447,573 | 1,532,262 | 2,036,335 | 3,984,716 | 2,988,377 | 34,593,991 | 70,780 | 43,127,924 | 1,538,152 | 1,097,522 | NA | 97,933,644 |
| Travel | 508,897 | 230,347 | 832,851 | 310,025 | 346,627 | 1,463,251 | 803,299 | 10,703,544 | 23,649 | 9,917,591 | 455,692 | 423,226 | NA | 26,018,999 |
| Data Processing | 387,496 | 70,035 | 328,721 | 277,831 | 118,385 | 397,263 | 320,637 | 4,580,734 |  | 4,093,916 | 359,083 | 289,583 | NA | 11,223,684 |
| Fees | 1,566,497 | 73,965 | 789,586 | 547,464 | 149,542 | 1,363,042 | 272,052 | 19,195,273 | 4,679 | 19,499,546 | 225,608 | 322,057 | NA | 44,009,311 |
| Utilities | 428,395 | 75,077 | 376,537 | 111,698 | 183,460 | 379,124 | 385,247 | 6,368,796 |  | 5,741,007 | 167,030 | 121,388 | NA | 14,337,759 |
| Communications | 52,685 | 38,849 | 88,728 | 28,685 | 33,848 | 49,687 | 469,616 | 2,856,406 | 36 | 1,673,520 | 71,818 | 47,243 | NA | 5,411,121 |
| Insurance | 55,492 | 8,482 | 353,807 | 18,963 | 32,489 | 57,350 | 28,812 | 561,330 | 10 | 1,992,426 | 33,751 | 20,311 | NA | 3,163,223 |
| Rents \& Leases | 405,338 | 19,306 | 104,019 | 87,509 | 107,284 | 187,802 | 153,348 | 4,881,131 | 19,109 | 6,359,925 | 449,316 | 123,239 | NA | 12,897,326 |
| Office | 281,110 | 87,420 | 247,655 | 80,312 | 195,662 | 367,073 | 409,372 | 2,475,600 | 1,267 | 2,688,152 | 190,955 | 80,152 | NA | 7,104,730 |
| Supplies | 754,878 | 226,044 | 660,747 | 214,287 | 337,576 | 1,492,616 | 561,140 | 5,635,108 | 82,510 | 9,707,461 | 328,178 | 489,779 | NA | 20,490,324 |
| Instructional | 801,689 | 114,926 | 362,570 | 108,145 | 295,755 | 660,108 | 1,313,760 | 5,800,152 | 95,485 | 6,673,742 | 189,452 | 653,956 | NA | 17,069,740 |
| Noncap Equipment | 113,393 | 51,531 | 82,117 | 149,147 | 125,095 | 222,970 | 307,501 | 1,666,152 | 235 | 7,024,539 | 450,107 | 221,308 | NA | 10,414,095 |
| Merch for Resale | 2,391,727 | 204,790 | 668,057 | 693,433 | 811,271 | 670 | 753,987 | 18,547,464 |  | 23,820,984 | 561,915 | 838,206 | NA | 49,292,504 |
| Repairs | 363,086 | 22,610 | 433,950 | 1,105,218 | 203,596 | 161,231 | 2,178,850 | 6,223,536 | 279 | 11,572,316 | 925,068 | 31,837 | NA | 23,221,577 |
| Scholarships etc. | 7,352,813 | 1,415,277 | 4,434,191 | 1,903,667 | 2,047,500 | 6,051,979 | 4,855,338 | 29,511,130 |  | 24,088,090 | 2,492,368 | 2,087,138 | NA | 86,239,491 |
| General | 2,445,876 | 737,286 | 2,661,070 | 870,681 | 1,644,388 | 3,602,363 | 2,176,086 | 19,385,342 | 11,662 | 23,096,563 | 1,821,951 | 626,660 | NA | 59,079,928 |
| Capital Equipment | 312,019 | 17,196 | 185,682 | 517,001 | 56,732 | 734,568 | 257,707 | 6,007,781 |  | 2,767,170 | 226,091 | 569,859 | NA | 11,651,806 |
| Capital Improvement | 774,839 | 44,389 |  | 11,717 | 246,551 | 14,961,924 | 586,720 | 12,659,056 |  | 7,016,304 | 243,010 | 2,750,340 | NA | 39,294,850 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 34,016,064 | 5,821,271 | 21,881,987 | 12,993,470 | 13,794,335 | 47,972,055 | 27,547,107 | 305,630,886 | 534,659 | 356,784,220 | 15,256,161 | 14,135,661 | NA | 856,367,876 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC |  | TOTAL |
| Construction | 774,839 | 44,389 | 0 | 11,717 | 246,551 | 14,961,924 | 586,720 | 12,659,056 | 0 | 7,016,304 | 243,010 | 2,750,340 | NA | 39,294,850 |
| Com \& Pub Util | 481,080 | 113,926 | 465,265 | 140,383 | 217,308 | 428,811 | 854,863 | 9,225,202 | 36 | 7,414,527 | 238,848 | 168,631 | NA | 19,748,880 |
| Retail | 4,654,816 | 701,907 | 2,206,828 | 1,762,325 | 1,822,091 | 3,478,005 | 3,603,467 | 40,132,257 | 179,497 | 52,682,048 | 1,946,698 | 2,853,260 | NA | 116,023,199 |
| FIRE | 4,315,360 | 689,270 | 2,905,399 | 1,638,734 | 2,176,108 | 4,229,868 | 3,170,537 | 40,036,452 | 89,899 | 51,480,275 | 2,021,219 | 1,241,072 | NA | 113,994,193 |
| Bus \& Pers Ser | 5,271,852 | 1,134,243 | 5,046,178 | 3,111,219 | 2,462,538 | 6,987,150 | 5,750,924 | 60,088,429 | 40,269 | 68,179,932 | 3,787,402 | 1,693,363 | NA | 163,553,499 |
| Households | 18,518,117 | 3,137,536 | 11,258,317 | 6,329,092 | 6,869,739 | 17,886,297 | 13,580,596 | 143,489,490 | 224,958 | 170,011,134 | 7,018,984 | 5,428,995 | NA | 403,753,255 |
| TOTAL | 34,016,064 | 5,821,271 | 21,881,987 | 12,993,470 | 13,794,335 | 47,972,055 | 27,547,107 | 305,630,886 | 534,659 | 356,784,220 | 15,256,161 | 14,135,661 | NA | 856,367,876 |

## Appendix Table B21. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to

 Input-Output Model Sectors, Fiscal Year 2013 (Current Year Dollars)| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,161,564 | 1,755,726 | 6,071,756 | 4,344,949 | 4,906,265 | 14,247,207 | 8,848,583 | 103,923,132 | 423,148 | 161,595,094 | 4,920,579 | 4,037,438 | 2,575,791 | 328,811,232 |
| Fringe Benefits | 3,977,828 | 688,277 | 2,145,720 | 1,527,759 | 2,052,552 | 5,158,148 | 3,140,269 | 32,227,002 | 129,498 | 48,012,551 | 1,764,068 | 1,272,797 | 906,347 | 103,002,816 |
| Travel | 471,842 | 222,739 | 783,761 | 297,953 | 322,050 | 1,467,535 | 814,597 | 10,943,028 | 14,069 | 10,209,684 | 471,555 | 465,079 | 95,021 | 26,578,913 |
| Data Processing | 371,366 | 85,833 | 252,221 | 285,882 | 135,200 | 317,180 | 620,609 | 3,414,870 |  | 4,283,521 | 229,182 | 189,796 | 1,807,917 | 11,993,577 |
| Fees | 1,470,385 | 68,465 | 596,784 | 461,968 | 210,180 | 998,041 | 220,417 | 13,812,333 | 13,357 | 17,688,283 | 208,689 | 243,078 | 123,818 | 36,115,798 |
| Utilities | 444,184 | 87,275 | 310,789 | 101,917 | 204,202 | 682,440 | 404,689 | 6,348,451 |  | 7,266,408 | 183,870 | 110,318 |  | 16,144,543 |
| Communications | 53,759 | 30,014 | 79,764 | 23,773 | 36,987 | 51,747 | 430,120 | 2,066,565 | 460 | 1,783,818 | 70,277 | 31,106 | 10,175 | 4,668,565 |
| Insurance | 56,606 | 8,557 | 46,518 | 29,180 | 33,758 | 66,743 | 27,170 | 542,620 | 10 | 2,440,630 | 35,006 | 13,356 |  | 3,300,154 |
| Rents \& Leases | 449,838 | 22,904 | 80,588 | 120,360 | 152,727 | 164,602 | 107,337 | 4,970,003 | 11,506 | 5,623,807 | 459,470 | 95,126 | 39,272 | 12,297,540 |
| Office | 252,820 | 54,455 | 199,634 | 72,715 | 182,361 | 457,813 | 394,851 | 2,369,507 | 10,739 | 2,664,739 | 187,062 | 75,384 | 5,008 | 6,927,088 |
| Supplies | 879,625 | 123,446 | 432,371 | 227,545 | 390,971 | 1,212,682 | 332,117 | 5,214,260 | 10,582 | 11,069,422 | 364,995 | 465,383 | 1,458 | 20,724,857 |
| Instructional | 864,263 | 119,798 | 354,251 | 167,426 | 241,105 | 647,036 | 1,318,687 | 6,892,345 | 19,084 | 7,270,258 | 200,860 | 394,312 | 232,126 | 18,721,551 |
| Noncap Equipment | 170,627 | 41,939 | 110,104 | 328,359 | 103,375 | 61,380 | 415,846 | 1,897,644 |  | 5,922,803 | 142,376 | 101,647 | 29 | 9,296,129 |
| Merch for Resale | 2,226,421 | 194,296 | 639,686 | 581,782 | 826,069 | 2,152 | 746,118 | 24,179,257 |  | 25,675,834 | 465,740 | 801,166 |  | 56,338,521 |
| Repairs | 273,519 | 26,295 | 473,670 | 156,330 | 158,112 | 222,375 | 1,026,411 | 6,291,172 | 452 | 13,043,842 | 345,294 | 76,315 | 260,677 | 22,354,464 |
| Scholarships etc. | 6,469,773 | 1,291,472 | 3,025,735 | 1,825,945 | 2,140,570 | 5,987,988 | 4,490,991 | 27,642,745 |  | 25,588,895 | 2,615,195 | 1,930,400 |  | 83,009,709 |
| General | 2,505,713 | 670,296 | 2,090,182 | 717,381 | 1,478,258 | 4,050,245 | 2,237,471 | 16,733,226 | 6,935 | 26,365,728 | 1,305,628 | 1,533,118 | 405,467 | 60,099,648 |
| Capital Equipment | 1,391,057 | 41,980 | 129,654 | 256,941 | 68,922 | 451,951 | 1,315,808 | 6,626,949 |  | 5,896,728 | 180,060 | 201,613 | 417,533 | 16,979,196 |
| Capital Improvement | 977,209 | 18,594 |  | 4,620,877 | 510,082 | 399,746 | 6,141,718 | 19,001,523 |  | 2,946,362 | 530,373 | 340,426 |  | 35,486,910 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 34,468,399 | 5,552,361 | 17,823,188 | 16,149,042 | 14,153,746 | 36,647,011 | 33,033,809 | 295,096,632 | 639,840 | 385,348,407 | 14,680,279 | 12,377,858 | 6,880,639 | 872,851,211 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 977,209 | 18,594 |  | 4,620,877 | 510,082 | 399,746 | 6,141,718 | 19,001,523 |  | 2,946,362 | 530,373 | 340,426 |  | 35,486,910 |
| Com \& Pub Util | 497,943 | 117,289 | 390,553 | 125,690 | 241,189 | 734,187 | 834,809 | 8,415,016 | 460 | 9,050,226 | 254,147 | 141,424 | 10,175 | 20,813,108 |
| Retail | 5,784,813 | 575,914 | 1,865,700 | 1,634,768 | 1,812,803 | 2,833,014 | 4,523,427 | 47,179,962 | 40,405 | 58,499,784 | 1,541,093 | 2,039,505 | 656,154 | 128,987,342 |
| FIRE | 4,484,272 | 719,738 | 2,272,826 | 1,677,299 | 2,239,037 | 5,389,493 | 3,274,776 | 37,739,625 | 141,014 | 56,076,988 | 2,258,544 | 1,381,279 | 945,619 | 118,600,510 |
| Bus \& Pers Ser | 5,092,825 | 1,073,628 | 4,196,618 | 1,919,514 | 2,303,800 | 7,055,376 | 4,919,505 | 51,194,629 | 34,813 | 71,591,058 | 2,560,348 | 2,507,386 | 2,692,900 | 157,142,400 |
| Households | 17,631,337 | 3,047,198 | 9,097,491 | 6,170,894 | 7,046,835 | 20,235,195 | 13,339,574 | 131,565,877 | 423,148 | 187,183,989 | 7,535,774 | 5,967,838 | 2,575,791 | 411,820,941 |
| TOTAL | 34,468,399 | 5,552,361 | 17,823,188 | 16,149,042 | 14,153,746 | 36,647,011 | 33,033,809 | 295,096,632 | 639,840 | 385,348,407 | 14,680,279 | 12,377,858 | 6,880,639 | 872,851,211 |

## Appendix Table B22. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to

 Input-Output Model Sectors, Fiscal Year 2014 (Current Year Dollars)| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,400,823 | 1,662,931 | 5,352,309 | 4,339,670 | 4,976,872 | 13,976,143 | 8,428,707 | 110,729,936 | 397,774 | 155,431,676 | 5,045,528 | 4,086,638 | 3,719,710 | 329,549,717 |
| Fringe Benefits | 4,342,703 | 696,362 | 2,115,986 | 1,625,888 | 2,220,069 | 5,079,912 | 3,091,676 | 39,975,268 | 135,551 | 49,826,364 | 1,957,914 | 1,483,009 | 1,397,699 | 113,948,401 |
| Travel | 498,334 | 260,044 | 798,861 | 363,292 | 372,257 | 1,349,835 | 799,910 | 11,881,734 | 32,264 | 10,113,731 | 532,104 | 422,942 | 126,699 | 27,552,007 |
| Data Processing | 692,095 | 80,693 | 269,389 | 305,166 | 109,061 | 326,964 | 506,957 | 3,191,176 |  | 3,611,633 | 495,772 | 183,291 | 2,419,723 | 12,191,920 |
| Fees | 4,374,000 | 92,632 | 540,645 | 377,703 | 184,218 | 1,503,452 | 258,197 | 12,817,968 | 10,791 | 17,207,731 | 307,694 | 518,401 | 494,128 | 36,687,560 |
| Utilities | 466,892 | 90,519 | 322,531 | 82,553 | 193,033 | 748,891 | 442,617 | 7,346,139 | - | 7,395,802 | 230,306 | 105,838 |  | 17,425,121 |
| Communications | 50,717 | 23,496 | 68,002 | 22,911 | 37,085 | 33,545 | 440,882 | 2,122,656 | 16 | 1,673,743 | 73,078 | 50,837 | 742,650 | 5,339,618 |
| Insurance | 73,307 | 6,838 | 131,550 | 29,601 | 29,645 | 53,923 | 27,233 | 482,602 | 15 | 2,104,459 | 32,798 | 19,176 |  | 2,991,147 |
| Rents \& Leases | 565,804 | 21,445 | 97,262 | 191,855 | 120,077 | 104,331 | 176,400 | 4,729,269 | 28,381 | 6,375,240 | 403,475 | 241,807 | 16,775 | 13,072,121 |
| Office | 260,706 | 96,581 | 226,252 | 78,416 | 188,725 | 331,893 | 327,230 | 2,319,352 | 2,158 | 2,457,073 | 186,568 | 98,989 | 4,248 | 6,578,181 |
| Supplies | 810,797 | 151,184 | 407,071 | 304,068 | 383,497 | 1,514,684 | 297,375 | 5,759,079 | 7,142 | 11,171,571 | 393,840 | 444,520 | 2,704 | 21,647,532 |
| Instructional | 891,618 | 98,783 | 298,527 | 216,776 | 147,483 | 475,881 | 1,194,501 | 7,230,960 | 2,121 | 7,361,850 | 183,069 | 574,929 | 181,849 | 18,858,347 |
| Noncap Equipment | 45,142 | 57,631 | 115,280 | 168,234 | 79,821 | 45,019 | 380,042 | 2,043,647 | 1,330 | 3,227,714 | 138,657 | 118,773 | 4,300 | 6,425,590 |
| Merch for Resale | 2,237,164 | 412,087 | 544,040 | 634,704 | 869,511 | 620 | 854,514 | 30,661,757 | - | 47,703,764 | 534,525 | 771,824 |  | 85,224,510 |
| Repairs | 334,762 | 19,039 | 350,816 | 158,476 | 129,324 | 216,493 | 830,802 | 7,479,181 | 507 | 11,842,105 | 379,624 | 99,243 | 376,859 | 22,217,231 |
| Scholarships etc. | 6,041,703 | 1,535,947 | 2,779,185 | 1,595,567 | 2,070,299 | 5,355,034 | 3,877,124 | 24,468,834 | - | 23,620,154 | 1,896,061 | 2,140,650 |  | 75,080,558 |
| General | 3,035,405 | 781,669 | 1,887,752 | 708,289 | 1,582,773 | 5,637,839 | 1,627,063 | 17,539,549 | 15,699 | 27,128,221 | 1,715,977 | 1,768,760 | 442,717 | 63,871,713 |
| Capital Equipment | 1,027,975 | 73,356 | 105,493 | 446,995 | 23,160 | 1,387,340 | 697,047 | 6,650,444 | - | 5,344,343 | 101,750 | 388,204 | 683,276 | 16,929,383 |
| Capital Improvement | 3,972,160 | 89,180 |  |  | 584,997 | 2,303765 | 2,124,107 | 9,439,577 | - | 11,092,662 |  | 1,473,698 |  | 31,080,146 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 41,122,107 | 6,250,417 | 16,410,951 | 11,650,164 | 14,301,907 | 40,445,564 | 26,382,384 | 306,869,128 | 634,739 | 404,689,836 | 14,308,740 | 14,991,529 | 10,613,337 | 908,670,803 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 3,972,160 | 89,180 |  |  | 584,997 | 2,303,765 | 2,124,107 | 9,439,577 | - | 11,092,662 |  | 1,473,698 |  | 31,080,146 |
| Com \& Pub Util | 517,609 | 114,015 | 390,533 | 105,464 | 230,118 | 782,436 | 883,499 | 9,468,795 | 16 | 9,069,545 | 303,384 | 156,675 | 742,650 | 22,764,739 |
| Retail | 5,273,402 | 889,622 | 1,696,663 | 1,849,193 | 1,692,197 | 3,755,437 | 3,750,709 | 54,665,239 | 12,741 | 77,266,315 | 1,538,409 | 2,397,239 | 876,377 | 155,663,543 |
| FIRE | 4,981,814 | 724,645 | 2,344,798 | 1,847,344 | 2,369,791 | 5,238,166 | 3,295,309 | 45,187,139 | 163,947 | 58,306,063 | 2,394,187 | 1,743,992 | 1,414,474 | 130,011,669 |
| Bus \& Pers Ser | 8,934,596 | 1,234,077 | 3,847,463 | 1,912,926 | 2,377,633 | 9,034,583 | 4,022,929 | 52,909,608 | 59,261 | 69,903,421 | 3,431,171 | 2,992,637 | 3,860,126 | 164,520,431 |
| Households | 17,441,526 | 3,198,878 | 8,131,494 | 5,935,237 | 7,047,171 | 19,331,177 | 12,305,831 | 135,198,770 | 398,774 | 179,051,830 | 6,641,589 | 6,227,288 | 3,719,710 | 404,630,275 |
| TOTAL | 41,122,107 | 6,250,417 | 16,410,951 | 11,650,164 | 14,301,907 | 40,445,564 | 26,382,384 | 306,869,128 | 634,739 | 404,689,836 | 14,308,740 | 14,991,529 | 10,613,337 | 908,670,803 |

## Appendix Table B23. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to Input-

 Output Model Sectors, Fiscal Year 2015 (Current Year Dollars)| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,419,097 | 1,925,168 | 5,335,072 | 4,592,928 | 5,504,730 | 14,094,285 | 9,231,487 | 117,353,827 | 351,206 | 156,639,855 | 4,837,417 | 4,645,865 | 3,847,775 | 339,778,712 |
| Fringe Benefits | 4,441,543 | 787,616 | 1,997,451 | 1,728,320 | 2,409,098 | 4,994,662 | 3,533,052 | 42,908,441 | 126,539 | 52,441,370 | 1,804,307 | 1,523,389 | 1,449,718 | 120,145,506 |
| Travel | 437,471 | 267,289 | 802,288 | 425,439 | 405,222 | 1,382,591 | 900,043 | 11,765,599 | 10,904 | 9,854,670 | 427,174 | 440,160 | 124,643 | 27,243,493 |
| Data Processing | 787,420 | 83,085 | 321,913 | 335,167 | 114,900 | 408,284 | 565,570 | 3,406,618 | 1,428 | 4,158,003 | 222,752 | 200,500 | 1,874,283 | 12,479,923 |
| Fees | 4,589,504 | 65,041 | 536,559 | 292,704 | 157,768 | 1,163,100 | 282,093 | 13,226,833 | 29,325 | 16,842,365 | 288,134 | 426,459 | 172,490 | 38,072,375 |
| Utilities | 475,856 | 107,877 | 280,744 | 88,766 | 208,865 | 659,693 | 393,789 | 7,577,895 | - | 5,780,032 | 199,938 | 95,462 |  | 15,868,917 |
| Communications | 48,550 | 22,368 | 77,700 | 19,758 | 30,891 | 32,414 | 414,684 | 2,125,775 | - | 1,625,519 | 66,775 | 16,054 | 680,274 | 5,160,762 |
| Insurance | 57,803 | 5,093 |  | 33,824 | 22,252 | 26,321 | 15,051 | 372,557 | - | 1,886,014 | 21,443 | 18,824 |  | 2,459,182 |
| Rents \& Leases | 565,052 | 24,827 | 109,679 | 201,016 | 117,028 | 115,475 | 201,704 | 5,346,904 | 30,944 | 6,983,502 | 397,374 | 170,515 | 400 | 14,264,420 |
| Office | 330,590 | 78,723 | 164,906 | 66,436 | 176,780 | 320,120 | 332,118 | 2,450,323 | 1,467 | 2,530,426 | 163,245 | 88,010 | 3,214 | 6,706,358 |
| Supplies | 1,734,896 | 211,471 | 479,467 | 241,759 | 392,195 | 1,246,966 | 421,056 | 5,878,495 | 3,086 | 9,500,453 | 352,390 | 345,591 | 1,799 | 20,809,624 |
| Instructional | 1,154,818 | 123,117 | 388,675 | 199,293 | 186,124 | 674,166 | 1,362,828 | 7,998,352 | 3,689 | 7,175,259 | 171,834 | 516,118 | 285,940 | 20,240,213 |
| Noncap Equipment | 89,585 | 68,388 | 224,789 | 334,516 | 116,360 | 49,880 | 520,312 | 2,153,544 | - | 3,451,476 | 108,822 | 174,651 | 1,108 | 7,290,431 |
| Merch for Resale | 2,355,858 | 233,990 | 467,563 | 698,717 | 888,405 |  | 920,796 | 64,507,786 | - | 118,481,040 | 455,205 | 825,769 |  | 189,835,129 |
| Repairs | 371,758 | 19,844 | 286,106 | 148,448 | 162,751 | 165,434 | 807,656 | 8,831,736 | 528 | 11,965,407 | 346,502 | 151,138 | 397,686 | 23,654,994 |
| Scholarships etc. | 5,167,077 | 999,259 | 2,722,656 | 1,730,028 | 2,053,728 | 5,319,027 | 4,151,554 | 21,499,486 | - | 23,603,732 | 1,703,714 | 2,226,968 |  | 71,177,229 |
| General | 3,074,224 | 895,074 | 1,880,647 | 697,578 | 1,500625 | 4,148,155 | 1,809,347 | 17,976,231 | 36,304 | 23,664,380 | 2,768,007 | 14,433,937 | 224,790 | 60,109,299 |
| Capital Equipment | 1,257,471 | 50,007 | 257,772 | 389,969 | 37,863 | 891,526 | 1,521,363 | 5,410,177 | - | 6,699,794 | 132,742 | 880,014 | 52,904 | 17,581,602 |
| Capital Improvement | 2,923,562 | 370,484 | 31,379 |  | 74,591 | 3,177,580 | 1,650,657 | 27,465,317 | - | 29,940,144 | 188,689 | 6,154,441 |  | 71,976,844 |
| Recovery of Exp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL | 41,282,135 | 6,338,721 | 16,365,366 | 12,224,666 | 14,560,176 | 38,866,679 | 29,035,160 | 368,255,896 | 595,420 | 493,223,4411 | 14,656,464 | 20,333,865 | 9,117,024 | 1,064,855,013 |


| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 2,923,562 | 370,484 | 31,379 |  | 74,591 | 3,177,580 | 1,650,657 | 27,465,317 | - | 29,940,144 | 188,689 | 6,154,441 |  | 71,976,844 |
| Com \& Pub Util | 524,406 | 130,245 | 358,444 | 108,524 | 239,756 | 692,107 | 808,473 | 9,703,670 | - | 7,405,551 | 1,384,238 | 111,516 | 680,274 | 21,029,679 |
| Retail | 6,923,218 | 765,696 | 1,983,172 | 1,930,690 | 1,797,727 | 3,179,658 | 5,078,473 | 88,398,677 | 8,242 | 147,838,448 | 266,713 | 2,830,153 | 344,965 | 262,463,357 |
| FIRE | 5,064,398 | 817,536 | 2,107,130 | 1,963,160 | 2,548,378 | 5,136,458 | 3,749,807 | 48,627,902 | 157,483 | 61,310,886 | 2,223,124 | 1,712,728 | 1,450,118 | 136,869,108 |
| Bus \& Pers Ser | 9,260,377 | 1,330,333 | 3,827,513 | 1,899,336 | 2,341,266 | 7,267,564 | 4,364,709 | 55,207,017 | 78,489 | 66,484,825 | 4,052,569 | 2,652,194 | 2,793,892 | 161,560,084 |
| Households | 16,586,174 | 2,924,427 | 8,057,728 | 6,322,956 | 7,558,458 | 19,413,312 | 13,383,041 | 138,853,313 | 351,206 | 180,243,587 | 6,541,131 | 6,872,833 | 3,847,775 | 410,955,941 |
| TOTAL | 41,282,135 | 6,338,721 | 16,365,366 | 12,224,666 | 14,560,176 | 38,866,679 | 29,035,160 | 368,255,896 | 595,420 | 493,223,4411 | 14,656,464 | 20,333,865 | 9,117,024 | 1,064,855,013 |

## Appendix Table B24. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to Input-

 Output Model Sectors, Fiscal Year 2017 (Current Year Dollars)| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,460,338 | 1,931,416 | 5,374,795 | 3,941,506 | 5,898,219 | 14,194,019 | 9,443,377 | 122,892,880 | 186,439 | 164,285,328 | 5,190,710 | 4,355,715 | 3,313,841 | 352,468,583 |
| Fringe Benefits | 4,780,448 | 799,577 | 2,103,522 | 1,558,316 | 2,783,627 | 5,408,484 | 3,895,994 | 46,685,205 | 51,655 | 55,416,228 | 2,157,131 | 1,616,990 | 1,226,794 | 128,483,971 |
| Travel | 289,096 | 249,525 | 630,594 | 229,420 | 289,230 | 1,106,339 | 629,759 | 10,067,409 | 2,872 | 9,326,685 | 465,882 | 339,546 | 61,394 | 23,687,748 |
| Data Processing | 451,998 | 89,651 | 163,068 | 157,129 | 56,031 | 424,835 | 389,800 | 3,523,620 | - | 5,118,359 | 313,482 | 248,861 | 1,127,804 | 12,064,639 |
| Fees | 3,332,746 | 86,991 | 614,328 | 463,984 | 415,464 | 1,169,178 | 462,178 | 13,071,225 | 14,042 | 12,946,534 | 213,229 | 195,421 | 131,525 | 33,116,844 |
| Utilities | 526,773 | 96,798 | 291,092 | 70,899 | 219,511 | 678,741 | 362,081 | 7,703,816 | - | 7,063,863 | 188,788 | 125,165 | - | 17,327,526 |
| Communications | 81,716 | 12,697 | 47,556 | 22,237 | 29,068 | 29,962 | 372,269 | 2,092,389 | - | 1,660,347 | 65,430 | 26,944 | 579,281 | 5,019,898 |
| Insurance | 83,246 | 6,976 | 53,277 | 17,123 | 28,821 | 54,148 | 45,438 | 609,436 | - | 1,335,011 | 27,000 | 33,678 | - | 2,294,154 |
| Rents \& Leases | 793,448 | 20,686 | 100,867 | 85,810 | 106,387 | 98,879 | 137,393 | 2,971,007 | - | 6,508,264 | 417,798 | 108,371 | 400 | 11,349,309 |
| Office | 234,794 | 43,576 | 101,181 | 67,917 | 114,408 | 293,282 | 312,065 | 2,235,604 | 1,502 | 2,036,181 | 125,996 | 56,396 | 3,475 | 5,626,378 |
| Supplies | 750,858 | 175,689 | 359,082 | 193,895 | 326,251 | 1,083,037 | 225,352 | 5,101,527 | 5,040 | 6,671,376 | 299,811 | 362,830 | 3,829 | 15,558,577 |
| Instructional | 1,160,818 | 123,186 | 237,783 | 104,593 | 195,499 | 411,653 | 1,021,771 | 7,832,210 | - | 8,501,469 | 258,925 | 339,977 | 300,680 | 20,488,562 |
| Noncap Equipment | 60,952 | 29,471 | 76,844 | 89,076 | 54,016 | 26,798 | 531,221 | 3,042,342 | - | 3,701,683 | 107,837 | 25,718 | - | 7,745,957 |
| Merch for Resale | 1,993,258 | 255,424 | 537,933 | 699,853 | 720,970 | 263 | 3,283,476 | 49,484,278 | - | 36,970,492 | 465,344 | 872,777 |  | 95,284,067 |
| Repairs | 541,681 | 120,313 | 315,433 | 66,851 | 109,230 | 161,360 | 818,738 | 8,334,779 | - | 8,986,702 | 322,841 | 90,584 | 893,830 | 20,762,342 |
| Scholarships etc. | 4,099,440 | 1,393,513 | 2,415,029 | 1,516,924 | 2,264,632 | 5,036,779 | 4,041,622 | 23,768,430 | 10,097 | 26,884,583 | 2,115,826 | 3,534,900 |  | 77,081,773 |
| General | 2,824,958 | 831,738 | 1,861,633 | 552,564 | 1,324,524 | 4,027,738 | 1,999,496 | 18,225,116 | 44,184 | 26,668,297 | 1,892,359 | 1,284,510 | 209,723 | 61,746,841 |
| Capital Equipment | 511,214 | 95,614 | 92,270 | 266,248 | 22,578 | 1,396,129 | 829,218 | 6,280,742 | - | 6,603,527 | 30,970 | 7,348 | 67,684 | 16,203,543 |
| Capital Improvement | 14,172 | - | 244,897 | - | 65,179 | 1,046,035 | 730,810 | 28,053,697 | - | 4,871,443 | 214,608 | 46,243 | - | 35,287,085 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| TOTAL | 33,991,953 | 6,362,841 | 15,621,184 | 10,104,345 | 15,023,646 | 36,647,660 | 29,532,058 | 361,975,711 | 315,831 | 395,556,370 | 14,873,965 | 13,671,974 | 7,920,260 | 941,597,797 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 14,172 | - | 244,897 | - | 65,179 | 1,046,035 | 730,810 | 28,053,697 | - | 4,871,443 | 214,608 | 46,243 |  | 35,287,085 |
| Com \& Pub Util | 608,489 | 109,496 | 338,648 | 93,136 | 248,580 | 708,704 | 734,350 | 9,796,205 | - | 8,724,210 | 254,218 | 152,108 | 579,281 | 22,347,424 |
| Retail | 4,711,894 | 722,960 | 1,405,094 | 1,421,582 | 1,433,721 | 3,211,162 | 6,203,104 | 73,976,703 | 6,542 | 64,484,727 | 1,288,883 | 1,665,046 | 375,668 | 160,907,084 |
| FIRE | 5,657,142 | 827,238 | 2,257,665 | 1,661,249 | 2,918,836 | 5,561,512 | 4,078,825 | 50,265,648 | 51,655 | 63,259,503 | 2,601,929 | 1,759,038 | 1,227,194 | 142,127,434 |
| Bus \& Pers Ser | 7,440,479 | 1,378,219 | 3,585,056 | 1,469,948 | 2,194,479 | 6,889,449 | 4,299,971 | 53,222,149 | 61,098 | 63,046,576 | 3,207,792 | 2,158,922 | 2,424,276 | 151,378,414 |
| Households | 15,559,777 | 3,324,929 | 7,789,824 | 5,458,429 | 8,162,851 | 19,230,798 | 13,484,999 | 146,661,309 | 196,535 | 191,169,910 | 7,306,536 | 7,890,616 | 3,313,841 | 429,550,356 |
| TOTAL | 33,991,953 | 6,362,841 | 15,621,184 | 10,104,345 | 15,023,646 | 36,647,660 | 29,532,058 | 361,975,711 | 315,831 | 395,556,370 | 14,873,965 | 13,671,974 | 7,920,260 | 941,597,797 |


| Appendix Table B25. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to InputOutput Model Sectors, Fiscal Year 2018 (Current Year Dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Wages \& Salaries | 11,175,028 | 2,018,034 | 5,257,648 | 4,035,255 | 6,232,157 | 14,179,620 | 9,292,323 | 122,605,515 | 95,275 | 154,166,305 | 5,166,220 | 4,127,805 | 3,617,784 | 341,968,968 |
| Fringe Benefits | 4,755,314 | 826,234 | 2,195,523 | 1,693,053 | 3,188,768 | 5,666,130 | 4,277,367 | 49,093,175 | 34,194 | 54,372,922 | 2,333,068 | 1,652,442 | 1,462,138 | 131,550,329 |
| Travel | 250,936 | 220,618 | 786,568 | 203,364 | 365,912 | 931,885 | 633,237 | 10,695,728 | 4,851 | 10,212,123 | 319,147 | 357,597 | 35,832 | 25,017,797 |
| Data Processing | 282,682 | 104,227 | 229,552 | 173,184 | 93,037 | 303,906 | 517,186 | 2,947,355 | - | 3,638,127 | 263,947 | 201,111 | 1,682,312 | 10,436,626 |
| Fees | 2,483,024 | 137,283 | 556,114 | 263,748 | 787,387 | 1,048,730 | 530,980 | 13,399,598 | 37,946 | 22,386,970 | 291,519 | 194,404 | 24,599 | 42,142,302 |
| Utilities | 580,194 | 117,139 | 288,332 | 91,595 | 252,086 | 776,139 | 407,255 | 8,362,409 | - | 6,665,772 | 224,405 | 157,024 | - | 17,922,351 |
| Communications | 77,763 | 11,109 | 20,191 | 22,421 | 31,791 | 29,613 | 435,394 | 2,038,495 | - | 1,411,605 | 69,734 | 27,695 | 1,223,006 | 5,398,816 |
| Insurance | 86,520 | 9,294 | 51,677 | 22,062 | 31,276 | 62,686 | 46,078 | 611,108 | - | 1,311,439 | 40,314 | 36,409 | - | 2,308,863 |
| Rents \& Leases | 763,214 | 19,866 | 92,701 | 111,847 | 114,181 | 141,395 | 104,859 | 2,812,525 | 190 | 6,665,173 | 411,380 | 45,961 | 600 | 11,283,892 |
| Office | 227,085 | 50,034 | 74,760 | 52,063 | 113,862 | 242,781 | 265,893 | 2,149,099 | 525 | 1,851,055 | 113,552 | 45,085 | 292 | 5,186,087 |
| Supplies | 764,459 | 251,836 | 360,199 | 223,342 | 531,623 | 1,099,383 | 277,217 | 5,185,403 | 3,353 | 9,246,064 | 274,713 | 422,625 | 14,937 | 18,655,154 |
| Instructional | 681,846 | 119,992 | 275,075 | 137,638 | 143,462 | 493,288 | 1,027,337 | 7,718,266 | - | 8,726,496 | 186,430 | 329,099 | 180,152 | 20,019,081 |
| Noncap Equipment | 38,606 | 38,793 | 206,985 | 224,376 | 141,053 | 43,160 | 347,009 | 2,117,703 | 100 | 2,318,581 | 139,726 | 95,356 | 73 | 5,711,521 |
| Merch for Resale | 2,140,715 | 284,771 | 487,453 | 749,025 | 694,377 | - | 2,835,526 | 49,304,952 | - | 30,846,401 | 406,991 | 519,209 | - | 88,269,421 |
| Repairs | 259,761 | 71,967 | 183,592 | 129,628 | 147,536 | 345,990 | 1,115,557 | 9,054,522 | - | 11,220,071 | 223,726 | 95,029 | 166,250 | 23,013,629 |
| Scholarships etc. | 4,011,130 | 1,491,946 | 2,608,082 | 1,769,645 | 2,336,266 | 5,367,661 | 4,547,169 | 26,375,258 | 207,500 | 26,789,236 | 2,315,655 | 3,183,669 | 500 | 81,003,217 |
| General | 2,261,576 | 807,759 | 1,978,839 | 573,362 | 1,545,615 | 4,033,934 | 2,264,447 | 21,358,387 | 66,037 | 31,966,867 | 1,983,148 | 1,840,906 | 401,632 | 71,082,509 |
| Capital Equipment | 116,689 | 189,811 | 38,984 | 160,383 | 175,601 | 275,554 | 332,643 | 4,680,052 | - | 5,938,014 | 53,408 | 342,672 | 166,521 | 12,470,332 |
| Capital Improvement | - | - | 5,755,077 | 120,444 | 1,135,373 | 1,216,085 | 188,263 | 32,953,201 | - | 5,125,971 | 401,507 | 8,372 | - | 46,904,292 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| TOTAL | 30,956,543 | 6,770,713 | 21,447,352 | 10,756,436 | 18,061,362 | 36,257,939 | 29,445,740 | 373,462,750 | 449,971 | 394,859,192 | 15,218,591 | 13,682,469 | 8,976,629 | 960,345,186 |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | - | - | 5,755,077 | 120,444 | 1,135,373 | 1,216,085 | 188,263 | 32,953,201 | - | 5,125,971 | 401,507 | 8,372 | - | 46,904,292 |
| Com \& Pub Util | 657,958 | 128,248 | 308,523 | 114,016 | 283,877 | 805,752 | 842,649 | 10,400,904 | - | 8,077,377 | 294,139 | 184,719 | 1,223,006 | 23,321,168 |
| Retail | 3,969,400 | 935,237 | 1,443,456 | 1,546,828 | 1,799,978 | 2,154,166 | 5,085,625 | 71,155,474 | 3,978 | 58,926,611 | 1,174,821 | 1,754,045 | 361,976 | 150,311,596 |
| FIRE | 5,605,048 | 855,394 | 2,339,902 | 1,826,961 | 3,334,224 | 5,870,211 | 4,428,304 | 52,516,808 | 34,384 | 62,349,534 | 2,784,762 | 1,734,813 | 1,462,738 | 145,143,083 |
| Bus \& Pers Ser | 5,537,979 | 1,341,854 | 3,734,665 | 1,343,286 | 2,939,487 | 6,664,445 | 5,061,407 | 57,455,590 | 108,834 | 79,424,157 | 3,081,487 | 2,689,047 | 2,310,625 | 171,692,862 |
| Households | 15,186,158 | 3,509,980 | 7,865,730 | 5,804,900 | 8,568,424 | 19,547,281 | 13,839,491 | 148,980,773 | 302,775 | 180,955,541 | 7,481,874 | 7,311,474 | 3,618,284 | 422,972,685 |
| TOTAL | 30,956,543 | 6,770,713 | 21,447,352 | 10,756,436 | 18,061,362 | 36,257,939 | 29,445,740 | 373,462,750 | 449,971 | 394,859,192 | 15,218,591 | 13,682,469 | 8,976,629 | 960,345,686 |

Appendix Table B26. Direct Economic Effects from Non-General Fund Expenditure, NDUS and Member Institutions, by Budget Category, and Allocation to InputOutput Model Sectors, Fiscal Year 2019 (Current Year Dollars)

| Category | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wages \& Salaries | 11,143,034 | 2,192,601 | 6,105,451 | 4,338,188 | 6,518,688 | 13,789,097 | 9,138,934 | 121,026,167 | 178,757 | 148,670,962 | 5,414,837 | 3,831,585 | 3,379,200 | 335,727,501 |
| Fringe Benefits | 4,937,835 | 880,916 | 2,596,557 | 1,766,352 | 3,352,822 | 5,639,039 | 3,813,256 | 47,661,700 | 51,831 | 53,966,284 | 2,397,751 | 1,500,145 | 1,365,257 | 129,929,745 |
| Travel | 298,635 | 251,184 | 704,481 | 280,320 | 385,386 | 1,401,054 | 671,963 | 10,700,610 | 3,643 | 11,348,562 | 529,922 | 341,519 | 87,991 | 27,005,269 |
| Data Processing | 668,309 | 137,207 | 298,305 | 137,410 | 132,522 | 348,784 | 622,303 | 3,668,384 | - | 4,971,868 | 325,507 | 110,517 | 1,682,500 | 13,103,617 |
| Fees | 861,528 | 192,892 | 327,156 | 274,449 | 827,164 | 1,214,808 | 401,354 | 14,474,397 | 71,643 | 22,943,509 | 249,296 | 167,785 | 99,791 | 42,105,771 |
| Utilities | 556,494 | 138,279 | 255,732 | 96,944 | 283,133 | 756,709 | 431,497 | 8,027,940 | - | 8,363,853 | 216,939 | 166,128 | - | 19,293,649 |
| Communications | 71,583 | 10,328 | 25,080 | 23,797 | 30,358 | 37,786 | 393,208 | 1,995,606 | - | 1,258,519 | 58,145 | 18,918 | 1,103,898 | 5,027,227 |
| Insurance | 83,622 | 9,492 | 51,946 | 23,578 | 34,338 | 67,993 | 56,789 | 638,211 | - | 1,444,865 | 41,013 | 42,667 | - | 2,494,514 |
| Rents \& Leases | 909,107 | 21,199 | 95,098 | 132,834 | 109,930 | 154,558 | 137,305 | 2,913,361 | - | 7,080,436 | 412,686 | 55,059 | 1,995 | 12,023,568 |
| Office | 229,374 | 56,474 | 84,956 | 66,803 | 118,336 | 253,311 | 238,538 | 2,158,928 | - | 1,760,112 | 101,072 | 45,959 | 1,304 | 5,115,168 |
| Supplies | 957,090 | 232,564 | 421,486 | 269,047 | 547,333 | 1,351,592 | 295,944 | 4,877,800 | 1,335 | 32,810,356 | 333,933 | 391,946 | 3,903 | 42,494,330 |
| Instructional | 720,067 | 105,393 | 273,101 | 92,444 | 142,938 | 488,139 | 1,235,084 | 7,905,234 | 419 | 8,187,701 | 147,395 | 222,041 | 182,078 | 19,702,034 |
| Noncap Equipment | 1,750 | 93,033 | 65,622 | 125,195 | 60,375 | 69,521 | 215,583 | 2,256,260 | 30 | 1,659,092 | 125,277 | 102,404 | 15,357 | 4,789,499 |
| Merch for Resale | 2,126,099 | 347,050 | (525) | 732,924 | 732,970 | 753 | 2,601,371 | 63,616,845 | - | 37,916,733 | 300,067 | 549,892 | - | 108,924,178 |
| Repairs | 366,302 | 252,179 | 156,864 | 272,780 | 199,645 | 161,704 | 1,070,351 | 9,907,174 | - | 10,665,193 | 271,217 | 67,993 | 282,495 | 23,673,896 |
| Scholarships etc. | 4,089,766 | 1,650,186 | 2,660,650 | 1,797,427 | 2,399,627 | 5,341,063 | 4,319,744 | 26,196,550 | 715,101 | 28,853,899 | 2,847,783 | 3,797,951 | 500 | 84,669,749 |
| General | 2,015,261 | 950,538 | 2,279,890 | 638,901 | 1,681,020 | 8,572,852 | 4,697,027 | 21,854,246 | 1,783 | 38,447,328 | 1,895,286 | 1,842,701 | 801,058 | 85,677,891 |
| Capital Equipment | 287,038 | 47,449 | 40,957 | 136,866 | 33,229 | 257,039 | 315,662 | 5,740,997 | - | 4,447,079 | 119,317 | 190,645 | 8,382 | 11,624,660 |
| Capital Improvement | 9,500 | 12,685 | 4,832,248 | 70,191 | 815,900 | 3,436,837 | 17,574 | 45,765,320 | - | 60,716,677 | 845,928 | 57,471 | - | 116,580,332 |
| Recovery of Exp | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| TOTAL | 30,332,395 | 7,581,649 | 21,275,055 | 11,276,451 | 18,405,716 | 43,342,638 | 30,673,487 | 401,385,730 | 1,024,543 | 485,513,025 | 16,633,373 | 13,503,328 | 9,015,709 | 1,089,962,597 |
| Sector | BSC | DCB | DSU | LRSC | MaSU | MiSU | NDSCS | NDSU | NDUS | UND | VCSU | WSC | SITS | TOTAL |
| Construction | 9,500 | 12,685 | 4,832,248 | 70,191 | 815,900 | 3,436,837 | 17,574 | 45,765,320 | - | 60,716,677 | 845,928 | 57,471 | - | 116,580,332 |
| Com \& Pub Util | 628,077 | 148,607 | 280,812 | 120,741 | 313,491 | 794,495 | 824,705 | 10,023,547 | - | 9,622,372 | 275,084 | 185,046 | 1,103,898 | 24,320,876 |
| Retail | 4,321,417 | 881,963 | 885,596 | 1,423,279 | 1,635,182 | 2,420,353 | 4,902,182 | 86,556,065 | 1,784 | 86,781,072 | 1,127,062 | 1,502,889 | 211,024 | 192,649,868 |
| FIRE | 5,930,564 | 911,607 | 2,743,601 | 1,922,764 | 3,497,090 | 5,861,590 | 4,007,351 | 51,213,272 | 51,831 | 62,491,585 | 2,851,451 | 1,597,871 | 1,367,252 | 144,447,826 |
| Bus \& Pers Ser | 4,210,035 | 1,784,000 | 3,766,697 | 1,603,860 | 3,225,737 | 11,699,203 | 7,462,998 | 60,604,809 | 77,069 | 88,376,458 | 3,271,228 | 2,530,515 | 2,953,835 | 191,566,445 |
| Households | 15,232,800 | 3,842,788 | 8,766,101 | 6,135,615 | 8,918,315 | 19,130,160 | 13,458,677 | 147,222,717 | 893,859 | 177,524,861 | 8,262,620 | 7,629,536 | 3,379,700 | 420,397,750 |
| TOTAL | 30,332,395 | 7,581,649 | 21,275,055 | 11,276,451 | 18,405,716 | 43,342,638 | 30,673,487 | 401,385,730 | 1,024,543 | 485,513,025 | 16,633,373 | 13,503,328 | 9,015,709 | 1,089,963,097 |


| Appendix Table B27. NDUS Fall Student Enrollment, Selected Years 1999-2019 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1999 |  |  | 2004 |  |  | 2006 |  |  | 2007 |  |  |
| Institution | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | FTE ${ }^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | FTE ${ }^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ |
| 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 |
| 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 |
| Lake Region State College | 805 | 355 | 506 | 1,464 | 416 | 738 | 1,508 | 391 | 750 | 1,520 | 414 | 764 |
| Mayville State University | 851 | 592 | 692 | 897 | 665 | 761 | 832 | 554 | 652 | 769 | 478 | 586 |
| 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 |
| Dakota College Bottineau | 508 | 441 | 498 | 602 | 356 | 447 | 605 | 306 | 399 | 637 | 303 | 402 |
| 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 |
| 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 |
| 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 |
| Valley City State University | 1,077 | 796 | 956 | 1,033 | 833 | $956{ }^{4}$ | 1,037 | 717 | 844 | 982 | 682 | 807 |
| Williston State College | 714 | 582 | 656 | 937 | 568 | 709 | 912 | 505 | 648 | 731 | 428 | 551 |
| 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 |

${ }^{1}$ Headcount is all students enrolled regardless of number of credit hours.
${ }^{2}$ Full-time is students enrolled in 12 credit hours or more.


${ }^{4}$ Includes 89 VCSU elementary education students located on the NDSU campus.

| Appendix Table B27. Continued |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  |  | 2009 |  |  | 2010 |  |  |
| Institution | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ |
| Bismarck State College | 3,788 | 2,492 | 2,937 | 4,020 | 2,708 | 3,160 | 4,177 | 2,743 | 3,208 |
| Dickinson State University | 2,730 | 1,891 | 2,294 | 2,767 | 1797 | 2,187 | 2,485 | 1,684 | 2,054 |
| Lake Region State College | 1,657 | 419 | 784 | 1,702 | 490 | 868 | 1,913 | 524 | 921 |
| Mayville State University | 789 | 449 | 563 | 887 | 544 | 662 | 982 | 552 | 704 |
| Minot State University | 3,432 | 2,350 | 2,720 | 3,649 | 2416 | 2,832 | 3,866 | 2,557 | 3,002 |
| Dakota College Bottineau | 655 | 345 | 440 | 748 | 348 | 490 | 863 | 399 | 540 |
| ND State College of Science | 2,545 | 1,595 | 2,041 | 2,651 | 1,590 | 2,076 | 2,833 | 1,703 | 2,217 |
| North Dakota State University | 13,229 | 11,004 | 11,794 | 14,189 | 11,679 | 12,577 | 14,407 | 11,857 | 12,708 |
| University of North Dakota | 12,748 | 10,192 | 11,137 | 13,172 | 10,215 | 11,306 | 14,194 | 10,845 | 12,018 |
| Valley City State University | 1,019 | 682 | 823 | 1,083 | 695 | 833 | 1,285 | 785 | 957 |
| Williston State College | 850 | 399 | 562 | 949 | 419 | 573 | 932 | 391 | 570 |
| TOTAL | 43,442 | 31,818 | 36,095 | 45,817 | 32,901 | 37,564 | 47,937 | 34,041 | 38,899 |
| ${ }^{1}$ Headcount is all students enrolled regardless of number of credit hours. <br> ${ }^{2}$ Full-time is students enrolled in 12 credit hours or more. <br> ${ }^{3}$ 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. FTE students is calculated by dividing accumulated undergraduate student credit hours by 15 credit hours plus total graduate credit hours by 12. A professional student is counted as one FTE. <br> ${ }^{4}$ Includes 89 VCSU elementary education students located on the NDSU campus. |  |  |  |  |  |  |  |  |  |


| Appendix Table B27. Continued |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 |  |  | 2012 |  |  | 2013 |  |  |
| Institution | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ |
| Bismarck State College | 4,392 | 2,631 | 3,209 | 4,109 | 2,416 | 2,990 | 4,062 | 2,365 | 2,955 |
| Dickinson State University | 2,346 | 1,629 | 1,959 | 1,837 | 1,218 | 1,454 | 1,449 | 1,018 | 1,201 |
| Lake Region State College | 2,056 | 518 | 988 | 1,974 | 524 | 973 | 1,898 | 486 | 943 |
| Mayville State University | 970 | 568 | 704 | 1,020 | 614 | 759 | 1,065 | 587 | 749 |
| Minot State University | 3,657 | 2,356 | 2,795 | 3,560 | 2,279 | 2,731 | 3,533 | 2,273 | 2,710 |
| Dakota College Bottineau | 812 | 414 | 524 | 774 | 348 | 474 | 793 | 367 | 502 |
| ND State College of Science | 3,127 | 1,791 | 2,366 | 3,066 | 1,807 | 2,354 | 3,168 | 1,712 | 2,295 |
| North Dakota State University | 14,399 | 11,675 | 12,606 | 14,443 | 11,733 | 12,707 | 14,269 | 11,798 | 12,797 |
| University of North Dakota | 14,697 | 10,992 | 12,319 | 15,250 | 11,382 | 12,729 | 15,143 | 11,160 | 12,606 |
| Valley City State University | 1,384 | 829 | 1,011 | 1,362 | 799 | 995 | 1,366 | 761 | 975 |
| Williston State College | 993 | 415 | 608 | 808 | 418 | 537 | 909 | 430 | 593 |
| TOTAL | 48,833 | 33,818 | 39,089 | 48,203 | 33,583 | 38,703 | 48,015 | 32,957 | 38,326 |

## ${ }^{1}$ 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. FTE students is calculated by dividing accumulated undergraduate student credit hours by 15 credit hours plus total graduate credit hours by 12 . A professional student is counted as one FTE.
${ }^{4}$ Includes 89 VCSU elementary education students located on the NDSU campus.

| Appendix Table B27. Continued |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2014 |  |  | 2015 |  |  | 2016 |  |  |
| Institution | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ | $\mathrm{HC}^{1}$ | $\mathrm{FT}^{2}$ | $\mathrm{FTE}^{3}$ |
| Bismarck State College | 4,002 | 2,303 | 2,909 | 4,078 | 2,2811 | 2,912 | 3,976 | 2,241 | 2,860 |
| Dickinson State University | 1,479 | 980 | 1,176 | 1,317 | 896 | 1,070 | 1,386 | 912 | 1,114 |
| Lake Region State College | 1,988 | 530 | 978 | 1,918 | 535 | 981 | 1,947 | 501 | 971 |
| Mayville State University | 1,081 | 635 | 798 | 1,110 | 638 | 796 | 1,130 | 613 | 782 |
| Minot State University | 3,410 | 2,191 | 2,600 | 3,348 | 2,128 | 2,570 | 3,412 | 2,132 | 2,592 |
| Dakota College Bottineau | 753 | 398 | 518 | 692 | 341 | 459 | 811 | 344 | 490 |
| ND State College of Science | 3,033 | 1,706 | 2,272 | 3,123 | 1,694 | 2,305 | 3,003 | 1,753 | 2,298 |
| North Dakota State University | 14,747 | 11,917 | 12,934 | 14,516 | 10,867 | 12,834 | 14,432 | 11,680 | 12,783 |
| University of North Dakota | 14,906 | 10,786 | 12,420 | 14,951 | 11,382 | 12,455 | 14,648 | 10,576 | 12,182 |
| Valley City State University | 1,378 | 783 | 990 | 1,422 | 789 | 1031 | 1,452 | 802 | 1,044 |
| Williston State College | 883 | 421 | 579 | 1,038 | 603 | 738 | 1,039 | 620 | 756 |
| TOTAL | 47,660 | 32,650 | 38,174 | 47,513 | 32,456 | 38,151 | 47,236 | 32,174 | 37,872 |

${ }^{1}$ 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. FTE students is calculated by dividing accumulated undergraduate student credit hours by 15 credit hours plus total graduate credit hours by 12 . A professional student
is counted as one FTE.
${ }^{4}$ Includes 89 VCSU elementary education students located on the NDSU campus.

## Appendix Table B27. Continued


${ }^{1}$ 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)
 ${ }^{4}$ Includes 89 VCSU elementary education students located on the NDSU campus.

## Appendix Table B28. Direct Economic Effects (Expenditures) for Student Living Expenses,

 Students Attending NDUS Institutions, 2013-2014 Academic Year| Institution | Fall 2013 FTE Enrollment | Living Expenses Per Student ${ }^{1}$ | Total Expenditures |
| :---: | :---: | :---: | :---: |
|  |  | --------------- \$ ------------------- |  |
| Bismarck State College | 2,955 | 10,390 | 30,702,450 |
| Dickinson State University | 1,201 | 10,082 | 12,108,482 |
| Lake Region State College | 943 | 9,670 | 9,118,810 |
| Mayville State University | 749 | 10,422 | 7,806,078 |
| Minot State University | 2,710 | 10,050 | 27,235,500 |
| Dakota College Bottineau | 502 | 9,887 | 4,963,274 |
| ND State College of Science | 2,295 | 9,784 | 22,454,280 |
| North Dakota State University | 12,797 | 12,040 | 154,075,880 |
| University of North Dakota | 12,606 | 10,986 | 138,489,516 |
| Valley City State University | 975 | 10,370 | 10,110,750 |
| Williston State College | 593 | 14,280 | 8,468,040 |
| Total | 38,326 |  | 425,533,060 |

Source: North Dakota Career Resource Network (2014).
${ }^{1}$ Annual expenses included room and board, books and supplies, and $\$ 3,400$ for personal and recreational spending.

| Appendix Table B29. Direct Economic Effects (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2014-2015 Academic Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Institution | Fall 2014 FTE Enrollment | Living <br> Expenses Per Student ${ }^{1}$ | Total <br> Expenditures |
|  |  | ---------------- \$ ------------------ |  |
| Bismarck State College | 2,909 | 10,556 | 30,707,404 |
| Dickinson State University | 1,176 | 10,450 | 12,289,200 |
| Lake Region State College | 978 | 9,937 | 9,718,386 |
| Mayville State University | 798 | 10,852 | 8,659,896 |
| Minot State University | 2,600 | 10,120 | 26,312,000 |
| Dakota College Bottineau | 518 | 10,169 | 5,267,542 |
| ND State College of Science | 2,272 | 9,926 | 22,551,872 |
| North Dakota State University | 12,934 | 11,984 | 155,001,056 |
| University of North Dakota | 12,420 | 11,210 | 139,228,200 |
| Valley City State University | 990 | 10,538 | 10,432,620 |
| Williston State College | 579 | 12,316 | 7,130,964 |
| Total | 38,174 |  | 427,299,140 |

Source: North Dakota Career Resource Network (2015).
${ }^{1}$ Annual expenses included room and board, books and supplies, and $\$ 3,400$ for personal and recreational spending.

| Appendix Table B30. Direct Economic Effects (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2017-2018 Academic Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Institution | Fall 2017 FTE Enrollment | Living Expenses <br> Per Student ${ }^{1}$ | Total <br> Expenditures |
|  |  | --------------- \$ --------------------1-1 |  |
| Bismarck State College Dickinson State University Lake Region State College Mayville State University Minot State University | $\begin{array}{r} \hline 2,646 \\ 1,128 \\ 995 \\ 784 \\ 2,467 \end{array}$ | $\begin{aligned} & 11,892 \\ & 11,244 \\ & 10,950 \\ & 10,270 \\ & 11,339 \end{aligned}$ | $\begin{array}{r} \begin{array}{r} 31,466,232 \\ 12,683,232 \\ 10,895,250 \\ 8,051,680 \\ 27,973,313 \end{array} \end{array}$ |
| Dakota College Bottineau ND State College of Science North Dakota State University University of North Dakota Valley City State University Williston State College | $\begin{array}{r} \hline 527 \\ 2,253 \\ 12,784 \\ 11,964 \\ 1,086 \\ 763 \end{array}$ | $\begin{aligned} & 10,830 \\ & 10,561 \\ & 12,626 \\ & 12,648 \\ & 10,902 \\ & 13,320 \end{aligned}$ | $5,707,410$ $23,793,933$ $161,410,784$ $151,320,672$ $11,839,572$ $10,163,160$ |
| Total | 37,397 |  | 455,305,238 |
| Source: North Dakota Career Resource Network (2018). <br> ${ }^{1}$ Annual expenses included room and board, books and supplies, and personal and recreational spending. Personal and recreational spending, when averaged across all 11 universities, was about $\$ 3,450$. |  |  |  |

Appendix Table B31. Direct Economic Effects (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2018-2019 Academic Year

| Institution | Fall 2018 FTE Enrollment | Living <br> Expenses Per Student ${ }^{1}$ | Total Expenditures |
| :---: | :---: | :---: | :---: |
|  |  | ---------------- \$ ------------------- |  |
| Bismarck State College Dickinson State University Lake Region State College Mayville State University Minot State University | 2,611 | 12,00011,66411,41010,81011,336 | 31,332,000 |
|  | 1,090 |  | 12,713,760 |
|  | 1,005 |  | 11,467,050 |
|  | 817 |  | 8,831,770 |
|  | 2,483 |  | 28,147,288 |
| Dakota College Bottineau | 590 | 11,080 | 6,537,200 |
| ND State College of Science | 2,126 | 10,623 | 22,584,498 |
| North Dakota State University | 12,394 | 12,835 | 159,076,990 |
| University of North Dakota | 11,585 | 13,396 | 155,192,660 |
| Valley City State University | 1,096 | 11,017 | 12,074,632 |
| Wiliston State | 806 | 12,218 | 9,847,708 |
| Total | 36,603 |  | 457,805,556 |

Source: North Dakota Career Resource Network (2018).
${ }^{1}$ Annual expenses included room and board, books and supplies, and personal and recreational spending. Personal and recreational spending, when averaged across all 11 universities, was about \$3,450.

Appendix Table B32. Direct Economic Effects (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2019-2020 Academic Year

| Institution | Fall 2019 FTE Enrollment | Living Expenses Per Student ${ }^{1}$ | Total Expenditures |
| :---: | :---: | :---: | :---: |
|  |  | ---------------- \$ ----------------------1-200 |  |
| Bismarck State College | 2,500 | 12,408 | 31,020,000 |
| Dickinson State University | 1,093 | 12,140 | 13,269,020 |
| Lake Region State College | 974 | 11,620 | 11,317,880 |
| Mayville State University | 801 | 10,975 | 8,790,975 |
| Minot State University | 2,399 | 11,794 | 28,293,806 |
| Dakota College Bottineau | 596 | 11,265 | 6,713,940 |
| ND State College of Science | 2,076 | 10,758 | 22,333,608 |
| North Dakota State University | 11,704 | 13,142 | 153,813,968 |
| University of North Dakota | 11,164 | 14,222 | 158,774,408 |
| Valley City State University | 1,164 | 11,236 | 13,078,704 |
| Williston State College | 483 | 12,328 | 5,954,424 |
| Total | 34,954 |  | 453,360,733 |

Source: North Dakota Career Resource Network (2020).
${ }^{1}$ Annual expenses included room and board, books and supplies, and personal and recreational spending. Personal and recreational spending, when averaged across all 11 universities, was about \$3,466




## Appendix Table B36. Direct and Total Economic Effects from Student Expenditures within the NDUS, by Individual

 Institution, Fiscal Year 2019| Item | BSC | DSU | LRSC | MaSU | MiSU | DCB | NDSCS | NDSU | UND | VCSU | wSC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Effects: $(\$ 000)$ |  |  |  |  |  |  |  |  |  |  |  |
| Student Expenditures | 31,020 | 13,269 | 11,317 | 8,791 | 28,293 | 6,713 | 22,333 | 153,813 | 158,775 | 13,079 | 5,955 |
| Direct Effects by I-O Sector: (\$000) |  |  |  |  |  |  |  |  |  |  |  |
| Retail Trade <br> Fin, Ins, Real Estate Total | $\begin{array}{r} 23,265 \\ 7,755 \\ 31,020 \\ \hline \end{array}$ | $\begin{array}{r} 9,952 \\ 3,317 \\ 13,269 \\ \hline \end{array}$ | $\begin{array}{r} 8,488 \\ 2,829 \\ 11,317 \\ \hline \end{array}$ | $\begin{aligned} & 6,593 \\ & 2,198 \\ & 8,791 \\ & \hline \end{aligned}$ | $\begin{array}{r} 21,220 \\ 7,073 \\ 28,293 \\ \hline \end{array}$ | $\begin{array}{r} 5,035 \\ 1,678 \\ 6,713 \\ \hline \end{array}$ | $\begin{array}{r} 16,750 \\ 5,583 \\ 22,333 \end{array}$ | $\begin{array}{r} 115,360 \\ 38,453 \\ 153,813 \\ \hline \end{array}$ | $\begin{array}{r} 119,081 \\ 39,694 \\ 158,775 \\ \hline \end{array}$ | $\begin{array}{r} 9,809 \\ 3,270 \\ 13,079 \end{array}$ | $\begin{array}{r} 4,466 \\ 1,489 \\ 5,955 \\ \hline \end{array}$ |
| Total ( Direct plus Secondary) Effects: (\$000) |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 1,381 | 591 | 504 | 391 | 1,262 | 299 | 1,003 | 6,850 | 7,069 | 582 | 265 |
| Comm \& Pub Util | 2,255 | 965 | 823 | 639 | 2,056 | 488 | 1,638 | 11,182 | 11,548 | 951 | 433 |
| Retail Trade | 34,871 | 14,917 | 12,722 | 9,882 | 31,803 | 7,547 | 25,436 | 172,911 | 178,490 | 14,702 | 6,694 |
| FIRE | 10,202 | 4,365 | 3,722 | 2,891 | 9,303 | 2,208 | 7,358 | 50,587 | 52,223 | 4,301 | 1,958 |
| Bus \& Per Serv | 1,045 | 447 | 381 | 296 | 954 | 226 | 757 | 5,181 | 5,352 | 441 | 201 |
| Prof \& Soc Serv | 1,275 | 545 | 465 | 361 | 1,162 | 276 | 925 | 6,323 | 6,522 | 538 | 245 |
| Households | 18,705 | 8,001 | 6,824 | 5,301 | 17,061 | 4,048 | 13,570 | 92,749 | 95,748 | 7,887 | 3,590 |
| Other1 | 7,344 | 3,143 | 2,678 | 2,081 | 6,700 | 1,589 | 5,339 | 36,415 | 37,587 | 3,096 | 1,409 |
| Total | 77,078 | 32,973 | 28,119 | 21,843 | 70,301 | 16,681 | 56,026 | 382,197 | 394,538 | 32,498 | 14,795 |
| Tax Revenues: (\$000) |  |  |  |  |  |  |  |  |  |  |  |
| Sales and Use Tax | 322.6 | 138.0 | 117.7 | 91.4 | 294.3 | 69.8 | 232.3 | 1,599.6 | 1,651.2 | 136.0 | 61.9 |
| Property Tax | 201.2 | 86.1 | 73.4 | 57.0 | 183.5 | 43.5 | 144.9 | 997.7 | 1,029.8 | 84.8 | 38.6 |
| Personal Income Tax | 94.7 | 40.5 | 34.5 | 26.8 | 86.4 | 20.5 | 68.2 | 469.5 | 484.6 | 39.9 | 18.2 |
| Corporate Income Tax | 20.5 | 8.7 | 7.5 | 5.8 | 18.7 | 4.4 | 14.7 | 101.4 | 104.7 | 8.6 | 3.9 |
| Other ${ }^{1}$ | 123.0 | 52.6 | 44.9 | 34.9 | 112.2 | 26.6 | 88.6 | 609.9 | 629.5 | 51.9 | 23.6 |
| Total | 761.9 | 325.9 | 278.0 | 215.9 | 695.1 | 164.8 | 548.7 | 3,778.1 | 3,899.8 | 321.2 | 146.2 |
| Secondary Employment (jobs) | 97 | 42 | 36 | 28 | 89 | 21 | 70 | 483 | 499 | 41 | 19 |

## APPENDIX C

Economic Contribution to North Dakota, NDUS Member Universities and Colleges, Fiscal Years 1999, 2004, 2006, 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2017, 2018, and 2019

## Bismarck State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Bismarck State College. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by Bismarck State College comprise the direct effects, or "first round effects". Expenditures by Bismarck State College were $\$ 54.1$ million. Total effects (gross business volume) associated with Bismarck State College operations were estimated by applying the North Dakota InputOutput Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 159.7$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Construction; and Business and Personal Services. Economic effects are detailed in Appendix Table C1.

Tax collections generated by Bismarck State College operations in FY2019 included \$799,000 in sales taxes, $\$ 503,000$ in property taxes, $\$ 327,000$ in personal income taxes, $\$ 141,000$ in corporate profit taxes and $\$ 233,000$ in other taxes. Total tax collections generated by Bismarck State College was $\$ 2$ million. Levels of business activity resulting from Bismarck State College expenditures would support 470 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 569 positions (excluding student jobs) at Bismarck State College in FY2019. Tax collections and secondary employment are summarized in Appendix Table C2.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contribute to the local economy. In the Fall Semester of 2019, 2,500 full-time equivalent students were enrolled at Bismarck State College (Appendix Tables B27 and B32). Direct effects of student spending in the Bismarck area were $\$ 31.0$ million in FY2019. The total economic contribution of student spending was $\$ 77.1$ million. Student spending was estimated to generate an additional $\$ 762,000$ in tax revenue. This level of student spending would create enough business activity to support 97 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

Appendix Table C1. Direct and Total Economic Effects for Bismarck State College, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government


| Appendix Table C2. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Bismarck State College, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 39.9 | 101.3 | 141.1 | 20.5 | 161.6 |
| Personal Income Tax | 112.3 | 214.3 | 326.7 | 94.7 | 421.3 |
| Sales Tax | 274.1 | 524.4 | 798.5 | 322.6 | 1,121.1 |
| Property Tax | 172.6 | 330.2 | 502.8 | 201.2 | 704.0 |
| Other | 79.4 | 153.3 | 232.7 | 123.0 | 355.6 |
| Total | 678.3 | 1,323.4 | 2,001.7 | 761.9 | 2,763.7 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and <br> Induced <br> Employment <br> Student <br> Spending | All Jobs | -- |
| Number of Jobs | 569 | 470 | 97 | 1,137 |  |

## Dickinson State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Dickinson State University. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by Dickinson State University comprise the direct effects, or "first round effects". Expenditures by Dickinson State University were $\$ 33.6$ million. Total effects (gross business volume) associated with Dickinson State University operations were estimated by applying the North Dakota InputOutput Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 100$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Construction; and Business and Personal Services. Economic effects are detailed in Appendix Table C3.

Tax collections generated by Dickinson State University operations in FY2019 included \$664,000 in sales taxes, $\$ 418,000$ in property taxes, $\$ 275,000$ in personal income taxes, $\$ 128,000$ in corporate profits taxes and $\$ 196,000$ in other taxes. Total tax collections generated by Dickinson State University was $\$ 1.7$ million. Levels of business activity resulting from Dickinson State University expenditures would support 385 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 224 positions (excluding student jobs) at Dickinson State University in FY2019. Tax collections and secondary employment are summarized in Appendix Table C4.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 1,093 full-time equivalent students were enrolled at Dickinson State University (Appendix Table B27 and B32). Direct effects of student spending in the Dickinson area were $\$ 13.3$ million in FY 2019. The total economic contribution of student spending was $\$ 33$ million. Student spending was estimated to generate an additional $\$ 326,000$ in tax revenue. This level of student spending would create enough business activity to support about 42 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

| Appendix Table C3. Direct and Total Economic Effects for Dickinson State University, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| ------------------------------\$ 000s --------------------------------- |  |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund Nongeneral Fund Capital Improvements | $\begin{array}{r} 5,764 \\ 8,305 \\ 869 \\ \hline \end{array}$ | $\begin{array}{r} 6,702 \\ 14,613 \\ 1,696 \\ \hline \end{array}$ | $\begin{array}{r} 7,299 \\ 19,995 \\ 1,577 \\ \hline \end{array}$ | $\begin{array}{r} 8,562 \\ 22,294 \\ \hline 268 \\ \hline \end{array}$ | $\begin{array}{r} 8,589 \\ 24,599 \\ 4,340 \\ \hline \end{array}$ | $\begin{array}{r} 12,620 \\ 23,541 \\ 1,185 \\ \hline \end{array}$ | $\begin{array}{r} 13,119 \\ 21,882 \\ \quad 782 \\ \hline \end{array}$ |
| TOTAL | 14,938 | 23,011 | 28,871 | 31,124 | 37,528 | 37,346 | 35,783 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction <br> Communication and Public Util Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Households | $\begin{array}{r} 869 \\ 821 \\ 1,663 \\ 1,604 \\ 2,382 \\ 7,599 \\ \hline \end{array}$ | $\begin{array}{r} 1,696 \\ 969 \\ 2,587 \\ 2,551 \\ 3,278 \\ 11,930 \\ \hline \end{array}$ | $\begin{array}{r} 1,577 \\ 880 \\ 3,115 \\ 3,110 \\ 5,373 \\ 14,816 \\ \hline \end{array}$ | $\begin{array}{r} 268 \\ 951 \\ 3,057 \\ 3,936 \\ 5,706 \\ 17,206 \\ \hline \end{array}$ | $\begin{array}{r} 4,340 \\ 931 \\ 3,156 \\ 4,162 \\ 6,309 \\ 18,630 \\ \hline \end{array}$ | $\begin{array}{r} 1,185 \\ 944 \\ 3,168 \\ 5,014 \\ 6,735 \\ 20,300 \\ \hline \end{array}$ | $\begin{array}{r} 782 \\ 927 \\ 2,803 \\ 5,358 \\ 6,500 \\ 19,413 \\ \hline \end{array}$ |
| TOTAL | 14,938 | 23,011 | 28,871 | 31,124 | 37,528 | 37,346 | 35,783 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction <br> Communications and Public Util <br> Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Professional Social Services Households Other ${ }^{1}$ | $\begin{array}{r} 1,958 \\ 2,321 \\ 10,650 \\ 3,629 \\ 3,172 \\ 1,120 \\ 17,283 \\ 3,504 \\ \hline \end{array}$ | $\begin{array}{r} 3,378 \\ 3,263 \\ 16,501 \\ 5,676 \\ 4,495 \\ 1,733 \\ 26,780 \\ 5,418 \\ \hline \end{array}$ | $\begin{array}{r} 3,681 \\ 3,796 \\ 20,561 \\ 7,037 \\ 6,917 \\ 2,171 \\ 33,502 \\ 6,766 \\ \hline \end{array}$ | $\begin{array}{r} 2,604 \\ 4,190 \\ 22,471 \\ 8,313 \\ 7,439 \\ 2,440 \\ 37,679 \\ 7,473 \\ \hline \end{array}$ | $\begin{array}{r} 7,061 \\ 4,666 \\ 25,744 \\ 9,221 \\ 8,294 \\ 2,793 \\ 43,096 \\ 8,684 \end{array}$ | $\begin{array}{r} 3,986 \\ 4,826 \\ 26,484 \\ 10,259 \\ 8,818 \\ 2,922 \\ 45,112 \\ 8,935 \\ \hline \end{array}$ | $\begin{array}{r} 3,481 \\ 4,689 \\ 25,312 \\ 10,421 \\ 8,525 \\ 2,824 \\ 43,574 \\ 8,620 \\ \hline \end{array}$ |
| TOTAL | 43,637 | 67,244 | 84,431 | 92,609 | 109,559 | 111,342 | 107,446 |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |

Appendix Table C3. Continued. Direct and Total Economic Effects for Dickinson State University, General and Nongeneral Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | ------------------------- \$ 000s -------------------------------- |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund | 12,013 | 13,507 | 13,774 | 14,127 | 8,688 | 7,135 |  |
| Nongeneral Fund | 17,823 | 16,411 | 16,327 | 15,376 | 15,692 | 16,443 |  |
| Capital Improvements | 155 | 210 | 143 | 512 | 12,494 | 10,068 |  |
| TOTAL | 29,991 | 30,128 | 30,244 | 30,015 | 36,874 | 33,646 |  |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction | 155 | 210 | 143 | 267 | 6,738 | 5,236 |  |
| Communication and Public Util | 849 | 955 | 882 | 823 | 817 | 634 |  |
| Retail Trade | 2,418 | 2,375 | 2,627 | 1,923 | 1,876 | 1,302 |  |
| Finance, Insurance, Real Estate | 4,858 | 5,437 | 5,211 | 5,646 | 5,610 | 5,789 |  |
| Business and Personal Services | 5,316 | 5,088 | 5,088 | 5,184 | 6,045 | 4,817 |  |
| Households | 16,395 | $\underline{16,063}$ | 16,293 | $\underline{16,173}$ | 15,787 | $\underline{15,868}$ |  |
| TOTAL | 29,991 | 30,128 | 30,244 | 30,015 | 36,874 | 33,646 |  |
| Total Effects: |  |  |  |  |  |  |  |
| Construction | 2,431 | 2,494 | 2,432 | 2,561 | 9,182 | 7,708 |  |
| Communications and Public Util | 4,030 | 4,164 | 4,087 | 4,048 | 4,696 | 4,054 |  |
| Retail Trade | 21,410 | 21,465 | 21,745 | 21,122 | 22,501 | 21,991 |  |
| Finance, Insurance, Real Estate | 9,130 | 9,725 | 9,506 | 9,957 | 10,040 | 10,388 |  |
| Business and Personal Services | 7,031 | 6,821 | 6,818 | 6,932 | 7,759 | 6,663 |  |
| Professional Social Services | 2,388 | 2,398 | 2,403 | 2,414 | 18,531 | 2,550 |  |
| Households | $36,841$ | $36,959$ | $37,047$ | $37,197$ | $33,056$ | $39,257$ |  |
| Other ${ }^{1}$ | $\underline{7,290}$ | $\underline{7,354}$ | 7,378 | $\underline{7,345}$ | $\underline{7,791}$ |  |  |
| TOTAL | 91,380 | 90,551 | 91,416 | 91,576 | 113,556 | 100,485 |  |
| ${ }^{1}$ 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 highlights the economic contribution of Lake Region State College. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20-year period 1999-2019 was 53.5 percent.

Expenditures by Lake Region State College comprise the direct effects, or "first round effects". Expenditures by Lake Region State College were $\$ 17.8$ million. Total effects (gross business volume) associated with Lake Region State College operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 54.2$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services, and Communications and Public Utilities. . Economic effects are detailed in Appendix Table C5.

Tax collections generated by Lake Region State College operations in FY2019 included $\$ 554,000$ in sales taxes, $\$ 349,000$ in property taxes, $\$ 233,000$ in personal income taxes, $\$ 118,000$ in corporate profit taxes and $\$ 165,000$ in other taxes. Total tax collections generated by Lake Region State College was $\$ 1.4$ million. Levels of business activity resulting from Lake Region State College expenditures would support 322 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 272 positions (excluding student jobs) at Lake Region State College in FY2019. Tax collections and secondary employment are summarized in Appendix Table C6.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 974 full-time equivalent students were enrolled at Lake Region State College (Appendix Table B27 and B32). Direct effects of student spending in the Devils Lake area were $\$ 11.3$ million in FY2019. The total economic contribution of student spending was $\$ 28.1$ million. Student spending was estimated to generate an additional $\$ 278,000$ in tax revenue. This level of student spending would create enough business activity to support about 36 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

Appendix Table C5. Direct and Total Economic Effects for Lake Region State College, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | ----------------------------\$ 000s ------------------------------------ |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund | 2,145 | 2,471 | 2,828 | 3,220 | 3,243 | 4,127 | 4,826 |
| Nongeneral Fund | 3,880 | 6,077 | 6,781 | 8,075 | 8,398 | 10,909 | 12,982 |
| Capital Improvements | 723 | 696 | 549 | 64 | 109 | 107 | 2,681 |
| TOTAL | 6,748 | 9,244 | 10,158 | 11,359 | 11,750 | 15,143 | 20,489 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction | 723 | 696 | 549 | 64 | 109 | 107 | 2,681 |
| Communication and Public Util | 225 | 333 | 294 | 307 | 308 | 290 | 263 |
| Retail Trade | 853 | 874 | 961 | 1,217 | 1,080 | 1,540 | 1,924 |
| Finance, Insurance, Real Estate | 694 | 1,177 | 1,319 | 1,569 | 1,601 | 2,286 | 2,545 |
| Business and Personal Services | 620 | 1,189 | 1,597 | 1,878 | 1,881 | 2,216 | 4,062 |
| Households | 3,633 | 4,975 | 5,438 | 6,324 | 6,771 | 8,704 | 9,014 |
| TOTAL | 6,748 | 9,244 | 10,158 | 11,359 | 11,750 | 15,143 | 20,489 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction | 1,216 | 1,384 | 1,304 | 919 | 1,004 | 1,260 | 4,122 |
| Communications and Public Util | 880 | 1,266 | 1,332 | 1,488 | 1,536 | 1,872 | 2,289 |
| Retail Trade | 4,935 | 6,581 | 7,240 | 8,329 | 8,529 | 11,161 | 13,935 |
| Finance, Insurance, Real Estate | 1,606 | 2,456 | 2,729 | 3,169 | 3,277 | 4,445 | 5,228 |
| Business and Personal Services | 970 | 1,689 | 2,153 | 2,512 | 2,544 | 3,074 | 5,132 |
| Professional Social Services | 509 | 713 | 785 | 895 | 939 | 1,213 | 1,469 |
| Households | 7,881 | 11,030 | 12,126 | 13,822 | 14,529 | 18,763 | 22,578 |
| Other ${ }^{1}$ | 1,595 | 2,203 | 2,421 | 2,751 | 2,855 | 3,710 | 4,675 |
| TOTAL | 19,592 | 27,322 | 30,090 | 33,885 | 35,213 | 45,498 | 59,428 |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |

Appendix Table C5. Continued. Direct and Total Economic Effects for Lake Region State College, General and Nongeneral Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)


| Appendix Table C6. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Lake Region State College, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 28.8 | 89.2 | 118.1 | 7.5 | 125.5 |
| Personal Income Tax | 58.2 | 174.5 | 232.7 | 34.5 | 267.2 |
| Sales Tax | 149.7 | 403.9 | 553.6 | 117.7 | 671.3 |
| Property Tax | 94.1 | 254.8 | 348.9 | 73.4 | 422.3 |
| Other | 41.4 | 123.4 | 164.8 | 44.9 | 209.7 |
| Total | 372.1 | 1,045.9 | 1,418.0 | 278.0 | 1,696.0 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 272 | 322 | 36 | 629 |  |

## Mayville State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Mayville State University. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by Mayville State University comprise the direct effects, or "first round effects". Expenditures by Mayville State University were $\$ 26.2$ million. Total effects (gross business volume) associated with Mayville State University operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 79.6$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Communications and Public Utilities.. Economic effects are detailed in Appendix Table C7.

Tax collections generated by Mayville State University operations in FY2019 included $\$ 613,000$ in sales taxes, $\$ 386,000$ in property taxes, $\$ 252,000$ in personal income taxes, $\$ 123,000$ in corporate profit taxes and $\$ 180,000$ in other taxes. Total tax collections generated by Mayville State University was $\$ 1.6$ million. Levels of business activity resulting from Mayville State University expenditures would support 357 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 287 positions (excluding student jobs) at Mayville State University in FY2019. Tax collections and secondary employment are summarized in Appendix Table C8.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 801 fulltime equivalent students were enrolled at Mayville State University (Appendix Table B27 and B32). Direct effects of student spending in the Mayville area were $\$ 8.8$ million in FY2019. The total economic contribution of student spending was $\$ 21.8$ million. Student spending was estimated to generate an additional $\$ 216,000$ in tax revenue. This level of student spending would create enough business activity to support about 28 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

Appendix Table C7. Direct and Total Economic Effects for Mayville State University, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | ----------------------------\$ 000s --------------------------------- |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund | 3,735 | 4,420 | 4,343 | 4,835 | 5,108 | 5,901 | 6,224 |
| Nongeneral Fund | 5,481 | 7,582 | 9,220 | 8,337 | 8,980 | 12,740 | 13,548 |
| Capital Improvements | 210 | 3,778 | 176 | 871 | 521 | 5,875 | 1,190 |
| TOTAL | 9,426 | 15,780 | 13,739 | 14,043 | 14,609 | 24,516 | 20,962 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction | 210 | 3,778 | 176 | 871 | 521 | 5,875 | 1,190 |
| Communication and Public Util | 458 | 428 | 739 | 864 | 873 | 532 | 545 |
| Retail Trade | 980 | 1,285 | 1,697 | 1,637 | 1,460 | 2,127 | 2,144 |
| Finance, Insurance, Real Estate | 1,799 | 1,858 | 2,140 | 2,135 | 2,244 | 3,127 | 3,428 |
| Business and Personal Services | 1,207 | 2,031 | 1,616 | 1,576 | 2,106 | 3,009 | 3,400 |
| Households | 4,772 | 6,400 | 7,371 | 6,960 | 7,405 | 9,846 | 10,255 |
| TOTAL | 9,426 | 15,780 | 13,739 | 14,043 | 14,609 | 24,516 | 20,962 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction | 914 | 4,865 | 1,203 | 1,900 | 1,604 | 7,562 | 2,724 |
| Communications and Public Util | 1,443 | 1,912 | 2,152 | 2,280 | 2,380 | 2,837 | 2,695 |
| Retail Trade | 6,848 | 10,312 | 10,220 | 10,155 | 10,435 | 16,156 | 14,947 |
| Finance, Insurance, Real Estate | 3,114 | 3,857 | 4,055 | 4,045 | 4,263 | 6,228 | 6,293 |
| Business and Personal Services | 1,736 | 2,812 | 2,372 | 2,328 | 2,907 | 4,226 | 4,551 |
| Professional Social Services | 735 | 1,091 | 1,072 | 1,062 | 1,122 | 1,694 | 1,591 |
| Households | 11,322 | 16,782 | 16,551 | 16,377 | 17,301 | 26,056 | 24,497 |
| Other ${ }^{1}$ | $\underline{\text { 2,304 }}$ | 3,519 | 3,352 | 3,359 | 3,504 | 5,490 | 5,004 |
| TOTAL | 28,416 | 45,150 | 40,977 | 41,506 | 43,516 | 70,249 | 62,302 |

[^2]Appendix Table C7. Continued. Direct and Total Economic Effects for Mayville State University, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)


| Appendix Table C8. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Mayville State University, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 29.8 | 93.5 | 123.3 | 5.8 | 129.1 |
| Personal Income Tax | 61.3 | 191.0 | 252.3 | 26.8 | 279.1 |
| Sales Tax | 160.4 | 452.2 | 612.6 | 91.4 | 704.0 |
| Property Tax | 100.8 | 285.0 | 385.8 | 57.0 | 442.8 |
| Other | 44.2 | 135.6 | 179.7 | 34.9 | 214.6 |
| Total | 396.5 | 1,157.3 | 1,553.7 | 215.9 | 1,769.6 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 287 | 357 | 28 | 671 |  |

## Minot State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Minot State University. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20-year period 1999-2019 was 53.5 percent.

Expenditures by Minot State University comprise the direct effects, or "first round effects". Expenditures by Minot State University were $\$ 63.0$ million. Total effects (gross business volume) associated with Minot State University operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 189.7$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate, and Business and Personal Services; Communications and Public Utilities; Construction. Economic effects are detailed in Appendix Table C9.

Tax collections generated by Minot State University operations in FY2019 included $\$ 862,000$ in sales taxes, $\$ 542,000$ in property taxes, $\$ 330,000$ in personal income taxes, $\$ 145,000$ in corporate profit taxes and $\$ 239,000$ in other taxes. Total tax collections generated by Minot State University was $\$ 2.1$ million. Levels of business activity resulting from Minot State University expenditures would support 505 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 705 positions (excluding student jobs) at Minot State University in FY2019. Tax collections and secondary employment are summarized in Appendix Table C10.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 2,399 full-time equivalent students were enrolled at Minot State University (Appendix Table B27 and B32). Direct effects of student spending in the Minot area were $\$ 28.3$ million in FY2019. The total economic contribution of student spending was $\$ 70.3$ million. Student spending was estimated to generate an additional $\$ 695,000$ in tax revenue. This level of student spending would create enough business activity to support about 89 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

| Appendix Table C9. Direct and Total Economic Effects for Minot State University, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| ------------------------------\$ 000-s -------------------------------- |  |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund <br> Nongeneral Fund Capital Improvements | $\begin{array}{r} 16,966 \\ 9,747 \\ 3,375 \\ \hline \end{array}$ | $\begin{array}{r} 20,712 \\ 18,019 \\ 671 \\ \hline \end{array}$ | $\begin{array}{r} 13,822 \\ 28,043 \\ 4,422 \\ \hline \end{array}$ | $\begin{array}{r} 14,710 \\ 28,920 \\ 1,031 \\ \hline \end{array}$ | 15,159 30,204 3,146 | $\begin{array}{r} 18,756 \\ 37,218 \\ 5,618 \\ \hline \end{array}$ | $\begin{array}{r} 24,296 \\ 33,010 \\ 19,739 \\ \hline \end{array}$ |
| TOTAL | 30,088 | 39,402 | 46,287 | 44,661 | 48,509 | 61,592 | 77,045 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction <br> Communication and Public Util Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Households | $\begin{array}{r} 3,375 \\ 1,063 \\ 2,450 \\ 3,718 \\ 2,741 \\ 16,741 \\ \hline \end{array}$ | $\begin{array}{r} 671 \\ 1,266 \\ 2,789 \\ 6,701 \\ 5,269 \\ \underline{22,706} \\ \hline \end{array}$ | $\begin{array}{r} 4,422 \\ 1,223 \\ 4,444 \\ 5,891 \\ 5,361 \\ \underline{24,946} \\ \hline \end{array}$ | $\begin{array}{r} 1,031 \\ 1,338 \\ 3,139 \\ 6,632 \\ 6,069 \\ \underline{26,452} \\ \hline \end{array}$ | $\begin{array}{r} 3,146 \\ 1,293 \\ 3,394 \\ 6,858 \\ 6,160 \\ \mathbf{2 7 , 6 5 8} \\ \hline \end{array}$ | $\begin{array}{r} 5,618 \\ 1,434 \\ 3,874 \\ 8,591 \\ 9,017 \\ 33,058 \\ \hline \end{array}$ | $\begin{array}{r} 19,739 \\ 1,427 \\ 4,331 \\ 9,639 \\ 8,275 \\ 33,634 \\ \hline \end{array}$ |
| TOTAL | 30,088 | 39,402 | 46,287 | 44,661 | 48,509 | 61,592 | 77,045 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction <br> Communications and Public Util <br> Retail Trade <br> Finance, Insurance, Real Estate <br> Business and Personal Services <br> Professional Social Services <br> Households <br> Other ${ }^{1}$ | $\begin{array}{r} 5,633 \\ 4,063 \\ 21,185 \\ 7,902 \\ 4,359 \\ 2,343 \\ 36,308 \\ 7,174 \\ \hline \end{array}$ | $\begin{array}{r} 3,716 \\ 5,444 \\ 28,199 \\ 12,403 \\ 7,541 \\ 3,209 \\ 49,615 \\ \hline 9,699 \\ \hline \end{array}$ | $\begin{array}{r} 7,856 \\ 5,850 \\ 32,988 \\ 12,269 \\ 7,850 \\ 3,562 \\ 55,102 \\ \underline{11,013} \\ \hline \end{array}$ | $\begin{array}{r} \hline 4,487 \\ 6,038 \\ 31,928 \\ 13,099 \\ 8,623 \\ 3,639 \\ 56,338 \\ \hline 10,933 \\ \hline \end{array}$ | $\begin{array}{r} \hline 6,844 \\ 6,297 \\ 34,193 \\ 13,757 \\ 8,873 \\ 3,870 \\ 59,902 \\ 11,714 \\ \hline \end{array}$ | $\begin{array}{r} 10,237 \\ 7,740 \\ 42,365 \\ 17,204 \\ 12,420 \\ 4,804 \\ 74,224 \\ 14,638 \\ \hline \end{array}$ | $\begin{array}{r} \hline 25,170 \\ 8,727 \\ 49,536 \\ 19,625 \\ 12,169 \\ 5,489 \\ 84,623 \\ \hline 17,339 \\ \hline \end{array}$ |
| TOTAL | 88,967 | 119,826 | 136,490 | 135,085 | 145,450 | 183,632 | 222,678 |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |



| Appendix Table C10. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Minot State University, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax |  | 109.0 | 145.3 | 18.7 | 164.0 |
| Personal Income Tax | 81.6 | 247.9 | 329.5 | 86.4 | 415.9 |
| Sales Tax | 248.6 | 613.8 | 862.4 | 294.3 | 1,156.7 |
| Property Tax | 155.5 | 386.3 | 541.8 | 183.5 | 725.4 |
| Other | 59.7 | 179.1 | 238.8 | 112.2 | 351.0 |
| Total | 581.8 | 1,536.1 | 2,117.9 | 695.0 | 2,812.9 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 705 | 505 | 89 | 1299 |  |

## Dakota College at Bottineau

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Dakota College at Bottineau. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by Dakota College at Bottineau comprise the direct effects, or "first round effects". Expenditures by Dakota College at Bottineau were $\$ 11.7$ million. Total effects (gross business volume) associated with Dakota College at Bottineau operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 36.0$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Communication and Public Utilities. Economic effects are detailed in Appendix Table C11.

Tax collections generated by Dakota College at Bottineau operations in FY2019 included $\$ 513,000$ in sales taxes, $\$ 324,000$ in property taxes, $\$ 222,000$ in personal income taxes, $\$ 115,000$ in corporate profits taxes and $\$ 157,000$ in other taxes. Total tax collections generated by Dakota College at Bottineau was $\$ 1.3$ million. Levels of business activity resulting from Dakota College at Bottineau expenditures would support 295 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 181 positions (excluding student jobs) at Dakota College at Bottineau in FY2019. Tax collections and secondary employment are summarized in Appendix Table C12.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 596 fulltime equivalent students were enrolled at Dakota College at Bottineau (Appendix Table B27 and B32). Direct effects of student spending in the Bottineau area were $\$ 6.7$ million in FY2019. The total economic contribution of student spending was $\$ 16.7$ million. Student spending was estimated to generate an additional $\$ 165,000$ in tax revenue. This level of student spending would create enough business activity to support about 21 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

Appendix Table C11. Direct and Total Economic Effects for Dakota College at Bottineau, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | -----------------------------\$ 000s ---------------------------------- |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund | 2,456 | 2,813 | 2,248 | 2,439 | 2,535 | 1,875 | 3,194 |
| Nongeneral Fund | 1,878 | 2,420 | 3,228 | 4,025 | 4,614 | 6,780 | 5,777 |
| Capital Improvements | 242 | 117 | 477 | 200 | 249 | 871 | 58 |
| TOTAL | 4,576 | 5,350 | 5,953 | 6,664 | 7,399 | 9,526 | 9,029 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction | 242 | 117 | 477 | 200 | 249 | 871 | 58 |
| Communication and Public Util | 212 | 241 | 216 | 250 | 256 | 358 | 266 |
| Retail Trade | 489 | 601 | 532 | 719 | 783 | 787 | 917 |
| Finance, Insurance, Real Estate | 515 | 756 | 798 | 924 | 966 | 1,230 | 1,392 |
| Business and Personal Services | 646 | 727 | 845 | 966 | 1,183 | 1,342 | 1,349 |
| Households | 2,472 | 2,908 | 3,085 | 3,605 | 3,962 | 4,938 | 5,047 |
| TOTAL | 4,576 | 5,350 | 5,953 | 6,664 | 7,399 | 9,526 | 9,029 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction | 581 | 517 | 917 | 698 | 799 | 1,575 | 742 |
| Communications and Public Util | 674 | 791 | 819 | 934 | 1,014 | 1,320 | 1,210 |
| Retail Trade | 3,295 | 3,923 | 4,186 | 4,852 | 5,349 | 6,630 | 6,617 |
| Finance, Insurance, Real Estate | 1,146 | 1,503 | 1,617 | 1,853 | 1,993 | 2,539 | 2,673 |
| Business and Personal Services | 892 | 1,021 | 1,167 | 1,332 | 1,588 | 1,856 | 1,858 |
| Professional Social Services | 351 | 417 | 455 | 518 | 572 | 728 | 718 |
| Households | 5,432 | 6,449 | 7,030 | 8,009 | 8,830 | 11,237 | 11,090 |
| Other ${ }^{1}$ | 1,088 | 1,296 | 1,411 | 1,607 | 1,771 | 2,249 | 2,205 |
| TOTAL | 13,459 | 15,917 | 17,602 | 19,803 | 21,916 | 28,134 | 27,113 |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |

Appendix Table C11. Continued. Direct and Total Economic Effects for Dakota College at Bottineau, General and Nongeneral Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)


| Appendix Table C12. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Dakota College at Bottineau, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 27.6 | 87.4 | 115.0 | 4.4 | 119.5 |
| Personal Income Tax | 54.1 | 168.2 | 222.3 | 20.5 | 242.8 |
| Sales Tax | 133.0 | 380.2 | 513.1 | 69.8 | 583.0 |
| Property Tax | 83.7 | 240.0 | 323.8 | 43.5 | 367.3 |
| Other | 38.3 | 118.6 | 156.8 | 26.6 | 183.5 |
| Total | 336.7 | 994.4 | 1,331.1 | 164.9 | 1,496.0 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 181 | 295 | 21 | 497 |  |

## 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 highlights the economic contribution of North Dakota State College of Science. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by North Dakota State College of Science comprise the direct effects, or "first round effects". Expenditures by North Dakota State College of Science were $\$ 48.4$ million. Total effects (gross business volume) associated with North Dakota State college of Science operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 144.4$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Communication and Public Utilities. Economic effects are detailed in Appendix Table C13.

Tax collections generated by North Dakota State College of Science operations in FY2019 included $\$ 755,000$ in sales taxes, $\$ 475,000$ in property taxes, $\$ 297,000$ in personal income taxes, $\$ 138,000$ in corporate profits taxes and $\$ 214,000$ in other taxes. Total tax collections generated by North Dakota State College of Science was $\$ 1.9$ million. Levels of business activity resulting from North Dakota State College of Science expenditures would support 446 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 623 positions (excluding student jobs) at North Dakota State College of Science in FY2019. Tax collections and secondary employment are summarized in Appendix Table C14.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 2,076 fulltime equivalent students were enrolled at North Dakota State College of Science (Appendix Table B27 and B32). Direct effects of student spending in the Wahpeton area were $\$ 22.3$ million in FY2019. The total economic contribution of student spending was $\$ 56.0$ million. Student spending was estimated to generate an additional $\$ 549,000$ in tax revenue. This level of student spending would create enough business activity to support about 70 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.


## Appendix Table C13. Continued. Direct and Total Economic Effects for North Dakota State College of Science, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)



| Appendix Table C14. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, North Dakota State College of Science, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 35.2 | 102.4 | 137.6 | 14.7 | 152.3 |
| Personal Income Tax | 78.6 | 218.4 | 297.1 | 68.2 | 365.2 |
| Sales Tax | 232.5 | 522.0 | 754.5 | 232.3 | 986.8 |
| Property Tax | 145.6 | 328.9 | 474.5 | 144.9 | 619.4 |
| Other | 57.1 | 156.9 | 214.0 | 88.6 | 302.5 |
| Total | 549.1 | 1,328.6 | 1,877.6 | 548.6 | 2,426.2 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 623 | 446 | 70 | 1139 |  |

## North Dakota State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of North Dakota State University. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20-year period 1999-2019 was 53.5 percent.

Expenditures by North Dakota State University comprise the direct effects, or "first round effects". Expenditures by North Dakota State University were $\$ 532.4$ million. Total effects (gross business volume) associated with North Dakota State University operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 1.5$ billion in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Construction. Economic effects are detailed in Appendix Table C15.

Tax collections generated by North Dakota State University operations in FY2019 included $\$ 3.8$ million in sales taxes, $\$ 2.4$ million in property taxes, $\$ 1.4$ million in personal income taxes, $\$ 427,000$ in corporate income taxes and $\$ 1.1$ million in other taxes. Total tax collections generated by North Dakota State University was $\$ 9.2$ million. Levels of business activity resulting from North Dakota State University expenditures would support 2,444 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 3,490 positions (excluding student jobs) at North Dakota State University in FY2019. Tax collections and secondary employment are summarized in Appendix Table C16.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 11,704 full-time equivalent students were enrolled at North Dakota State University (Appendix Table B27 and B32). Direct effects of student spending in the Fargo area were $\$ 153.8$ million in FY2019. The total economic contribution of student spending was $\$ 382.2$ million in FY 2019. Student spending was estimated to generate an additional $\$ 3.8$ million in tax revenue. This level of student spending would create enough business activity to support about 483 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.


Appendix Table C15. Continued. Direct and Total Economic Effects for North Dakota State University, General and Nongeneral Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)


[^3]| Appendix Table C16. Estimated State Tax Collections, Institutions Spending and Student Spending and |
| :--- | :--- |
| Direct and Secondary Employment, North Dakota State University, Fiscal Year 2019 |


| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 89.2 | 337.8 | 427.0 | 101.4 | 528.5 |
| Personal Income Tax | 265.5 | 1,155.8 | 1,421.3 | 469.5 | 1,890.8 |
| Sales Tax | 979.7 | 2,859.6 | 3,839.3 | 1,599.6 | 5,439.0 |
| Property Tax | 609.9 | 1,799.9 | 2,409.8 | 997.7 | 3,407.5 |
| Other | 200.3 | 857.7 | 1,058.1 | 609.9 | 1,667.9 |
| Total | 2,144.6 | 7,010.9 | 9,155.5 | 3,778.1 | 12,933.6 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced <br> Employment, Institutions Spending | Indirect and Induced <br> Employment Student Spending | All Jobs | -- |
| Number of Jobs | 3,490 | 2,444 | 483 | 6,417 |  |

## University of North Dakota

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of University of North Dakota. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by University of North Dakota comprise the direct effects, or "first round effects". Expenditures by University of North Dakota were $\$ 596$ million. Total effects (gross business volume) associated with University of North Dakota operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 1.7$ billion in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Construction. Economic effects are detailed in Appendix Table C17.

Tax collections generated by University of North Dakota operations in FY2019 included $\$ 4.3$ million in sales taxes, $\$ 2.7$ million in property taxes, $\$ 1.5$ in personal income taxes, $\$ 467,000$ in corporate profit taxes and $\$ 1.2$ million in other taxes. Total tax collections generated by University of North Dakota was $\$ 10.2$ million. Levels of business activity resulting from University of North Dakota expenditures would support 2,688 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 3,607 positions (excluding student jobs) at University of North Dakota in FY2019. Tax collections and secondary employment are summarized in Appendix Table C18.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 11,164 full-time equivalent students were enrolled at University of North Dakota (Appendix Table B27 and B32). Direct effects of student spending in the Grand Forks area were $\$ 158.8$ million in FY2019. The total economic contribution of student spending was $\$ 394.5$ million. Student spending was estimated to generate an additional $\$ 3.9$ million in tax revenue. This level of student spending would create enough business activity to support about 499 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

Appendix Table C17. Direct and Total Economic Effects for University of North Dakota, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | -------------------------------\$ 000s ------------------------------------- |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund | 62,990 | 62,320 | 66,308 | 77,379 | 81,708 | 91,230 | 104,617 |
| Nongeneral Fund | 152,076 | 227,572 | 259,366 | 281,470 | 298,233 | 331,144 | 349,768 |
| Capital Improvements | 10,342 | 25,178 | 15,804 | 11,638 | 4,194 | $\underline{12,860}$ | $\underline{12,791}$ |
| TOTAL | 225,408 | 315,070 | 341,478 | 370,487 | 384,135 | 435,234 | 467,176 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction | 10,342 | 25,178 | 15,804 | 11,638 | 4,194 | 12,860 | 12,791 |
| Communication and Public Util | 9,024 | 9,914 | 9,566 | 11,946 | 12,395 | 11,362 | 11,876 |
| Retail Trade | 32,174 | 33,193 | 35,697 | 48,859 | 45,793 | 47,576 | 56,798 |
| Finance, Insurance, Real Estate | 29,732 | 47,425 | 47,815 | 51,643 | 50,013 | 66,216 | 70,668 |
| Business and Personal Services | 36,108 | 42,150 | 61,087 | 68,032 | 80,527 | 65,807 | 79,444 |
| Households | 108,028 | 157,210 | 171,509 | 178,369 | 191,213 | 231,414 | 235,599 |
| TOTAL | 225,408 | 315,070 | 341,478 | 370,487 | 384,135 | 435,234 | 467,176 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction | 26,482 | 48,230 | 40,803 | 38,322 | 32,148 | 45,263 | 46,996 |
| Communications and Public Util | 31,569 | 41,692 | 44,526 | 49,586 | 51,988 | 56,225 | 59,809 |
| Retail Trade | 166,004 | 225,096 | 243,773 | 270,693 | 278,047 | 317,661 | 341,897 |
| Finance, Insurance, Real Estate | 59,779 | 90,315 | 94,538 | 101,496 | 102,398 | 126,782 | 134,635 |
| Business and Personal Services | 47,993 | 59,150 | 79,713 | 87,938 | 101,464 | 89,916 | 105,036 |
| Professional Social Services | 16,607 | 23,853 | 25,904 | 27,556 | 28,945 | 33,826 | 35,557 |
| Households | 255,739 | 367,831 | 399,082 | 423,970 | 445,484 | 521,999 | 547,698 |
| Other ${ }^{1}$ | 53,259 | $\underline{\underline{74,979}}$ | 80,995 | $\underline{87,740}$ | 90,939 | 105,154 | $\underline{111,969}$ |
| TOTAL | 657,432 | 931,146 | 1,009,334 | 1,087,301 | 1,131,413 | 1,296,826 | 1,383,597 |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |



| Appendix Table C18. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, University of North Dakota, Fiscal Year 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 81.3 | 385.5 | 466.8 | 104.7 | 571.5 |
| Personal Income Tax | 236.2 | 1,350.5 | 1,586.7 | 484.6 | 2,071.3 |
| Sales Tax | 844.3 | 3,465.0 | 4,309.3 | 1,651.2 | 5,960.6 |
| Property Tax | 526.0 | 2,178.4 | 2,704.4 | 1,029.8 | 3,734.2 |
| Other | 176.7 | 996.0 | 1,172.7 | 629.5 | 1,802.3 |
| Total | 1,864.6 | 8,375.3 | 10,239.9 | 3,900.0 | 14,139.9 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and <br> Induced <br> Employment <br> Student <br> Spending | All Jobs | -- |
| Number of Jobs | 3,607 | 2,688 | 499 | 6,793 |  |

## Valley City State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Valley City State University. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by Valley City State University comprise the direct effects, or "first round effects". Expenditures by Valley City State University were $\$ 27.3$ million. Total effects (gross business volume) associated with Valley City State University operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 83.0$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Construction. Economic effects are detailed in Appendix Table C19.

Tax collections generated by Valley City State University operations in FY2019 included $\$ 614,000$ in sales taxes, $\$ 387,000$ in property taxes, $\$ 254,000$ in personal income taxes, $\$ 124,000$ in corporate profit taxes and $\$ 181,000$ in other taxes. Total tax collections generated by Valley City State University was $\$ 1.6$ million. Levels of business activity resulting from Valley City State University expenditures would support 360 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 217 positions (excluding student jobs) at Valley City State University in FY2019. Tax collections and secondary employment are summarized in Appendix Table C20.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 1,164 full-time equivalent students were enrolled at Valley City State University (Appendix Table B27 and B32). Direct effects of student spending in the Valley City area was $\$ 13.1$ million in FY2019. The total economic contribution of student spending was $\$ 32.5$ million. Student spending was estimated to generate an additional $\$ 321,000$ in tax revenue. This level of student spending would create enough business activity to support about 41 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.



| Appendix Table C20. Estimated State Tax Collections, Institutions Spending and Student Spending and |
| :--- | :--- |
| Direct and Secondary Employment, Valley City State University, Fiscal Year 2019 | Direct and Secondary Employment, Valley City State University, Fiscal Year 2019


| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 31.5 | 92.4 | 123.9 | 8.6 | 132.5 |
| Personal Income Tax | 70.1 | 183.8 | 253.9 | 39.9 | 293.8 |
| Sales Tax | 181.6 | 432.2 | 613.9 | 136.0 | 749.9 |
| Property Tax | 114.2 | 272.5 | 386.7 | 84.8 | 471.5 |
| Other | 50.2 | 130.9 | 181.1 | 51.9 | 233.0 |
| Total | 447.6 | 1,111.9 | 1,559.5 | 321.3 | 1,880.8 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 217 | 360 | 41 | 618 |  |

## Williston State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis highlights the economic contribution of Williston State College. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20-year period 1999-2019 was 53.5 percent.

Expenditures by Williston State College comprise the direct effects, or "first round effects". Expenditures by Williston State College were $\$ 18.9$ million. Total effects (gross business volume) associated with Williston State College operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 58.9$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Business and Personal Services; and Communications and Public Utilities. Economic effects are detailed in Appendix Table C21.

Tax collections generated by Williston State College operations in FY2019 included $\$ 544,000$ in sales taxes, $\$ 343,000$ in property taxes, $\$ 232,000$ in personal income taxes, $\$ 117,000$ in corporate profits taxes and $\$ 165,000$ in other taxes. Total tax collections generated by Williston State College was $\$ 1.4$ million. Levels of business activity resulting from Williston State College expenditures would support 324 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 166 positions (excluding student jobs) at Williston State College in FY2019. Tax collections and secondary employment are summarized in Appendix Table C22.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. In the Fall Semester of 2019, 483 full-time equivalent students were enrolled at Williston State College (Appendix Table B27 and B32). Direct effects of student spending in the Williston area was $\$ 6$ million in FY2019. The total economic contribution of student spending was $\$ 14.8$ million. Student spending was estimated to generate an additional $\$ 146,000$ in tax revenue. This level of student spending would create enough business activity to support about 19 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table B36.

| Appendix Table C21. Direct and Total Economic Effects for Williston State College, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | FY1999 | FY2004 | FY2006 | FY2008 | FY2009 | FY2011 | FY2012 |
|  | -------------------------------\$ 000s ------------------------------------ |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund Nongeneral Fund Capital Improvements | $\begin{array}{r} 2,394 \\ 3,388 \\ 363 \\ \hline \end{array}$ | $\begin{aligned} & 2,606 \\ & 6,365 \\ & 1,117 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2,808 \\ 6,203 \\ 192 \\ \hline \end{array}$ | $\begin{array}{r} 3,295 \\ 7,429 \\ 204 \\ \hline \end{array}$ | $\begin{array}{r} 3,287 \\ 7,849 \\ 933 \\ \hline \end{array}$ | $\begin{aligned} & 4,129 \\ & 9,840 \\ & \mathbf{9 , 7 6 5} \\ & \hline \end{aligned}$ | $\begin{array}{r} 4,869 \\ 11,385 \\ 6,587 \\ \hline \end{array}$ |
| TOTAL | 6,145 | 10,088 | 9,203 | 10,928 | 12,069 | 23,734 | 22,841 |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction <br> Communication and Public Util Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Households | $\begin{array}{r} 363 \\ 157 \\ 1,001 \\ 640 \\ 645 \\ 3,339 \\ \hline \end{array}$ | $\begin{array}{r} 1,117 \\ 256 \\ 1,318 \\ 1,046 \\ 1,449 \\ 4,902 \end{array}$ | $\begin{array}{r} 192 \\ 277 \\ 1,271 \\ 1,253 \\ 1,225 \\ 4,985 \\ \hline \end{array}$ | $\begin{array}{r} 204 \\ 300 \\ 2,478 \\ 1,389 \\ 1,242 \\ 5,315 \\ \hline \end{array}$ | $\begin{array}{r} 933 \\ 316 \\ 2,001 \\ 1,256 \\ 1,976 \\ 5,587 \\ \hline \end{array}$ | 9,765 <br> 366 <br> 2,309 <br> 2,002 <br> 1,977 <br> 7,315 | $\begin{array}{r} 6,587 \\ 353 \\ 3,325 \\ 2,187 \\ 2,242 \\ 8,147 \\ \hline \end{array}$ |
| TOTAL | 6,145 | 10,088 | 9,203 | 10,928 | 12,069 | 23,734 | 22,841 |
| Total Effects: |  |  |  |  |  |  |  |
| Construction <br> Communications and Public Util <br> Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Professional Social Services Households Other ${ }^{1}$ | $\begin{array}{r} 810 \\ 756 \\ 4,703 \\ 1,468 \\ 964 \\ 463 \\ 7,164 \\ 1,468 \\ \hline \end{array}$ | $\begin{array}{r} 1,834 \\ 1,234 \\ 7,261 \\ 2,374 \\ 1,966 \\ 733 \\ 11,320 \\ 2,340 \\ \hline \end{array}$ | $\begin{array}{r} 873 \\ 1,210 \\ 6,931 \\ 2,523 \\ 1,725 \\ 710 \\ 10,972 \\ 2,227 \\ \hline \end{array}$ | $\begin{array}{r} 970 \\ 1,355 \\ 8,828 \\ 2,809 \\ 1,798 \\ 789 \\ 12,172 \\ \hline \underline{2,625} \\ \hline \end{array}$ | $\begin{array}{r} 1,775 \\ 1,483 \\ 8,971 \\ 2,817 \\ 2,587 \\ 859 \\ 13,224 \\ 2,800 \\ \hline \end{array}$ | $\begin{array}{r} 11,274 \\ 2,369 \\ 14,798 \\ 4,723 \\ 3,011 \\ 1,455 \\ 22,346 \\ 4,964 \\ \hline \end{array}$ | $\begin{array}{r} 8,075 \\ 2,358 \\ 15,648 \\ 4,894 \\ 3,282 \\ 1,465 \\ 22,514 \\ 4,985 \\ \hline \end{array}$ |
| TOTAL | 17,796 | 29,062 | 27,171 | 31,346 | 34,516 | 64,940 | 63,221 |
| ${ }^{1}$ Includes agriculture, mining, manufa | , transport | and gove |  |  |  |  |  |

Appendix Table C21. Continued. Direct and Total Economic Effects for Williston State College, General and Non-general Funds, Selected Fiscal Years 1999 to 2019 (Current Year Dollars)

| Item | FY2013 | FY2014 | FY2015 | FY2017 | FY2018 | FY2019 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | ----------------------- \$ 000s ------------------------------- |  |  |  |  |  |  |
| Direct Effects: |  |  |  |  |  |  |  |
| General Fund <br> Nongeneral Fund Capital Improvements | $\begin{array}{r} 5,255 \\ 12,037 \\ 3,407 \end{array}$ | $\begin{array}{r} 6,145 \\ 13,518 \\ \underline{8,468} \\ \hline \end{array}$ | $\begin{array}{r} 6,254 \\ 14,179 \\ 11,385 \\ \hline \end{array}$ | $\begin{array}{r} 4,951 \\ 13,626 \\ \quad 92 \\ \hline \end{array}$ | $\begin{array}{r} 4,826 \\ 13,674 \\ \quad 40 \\ \hline \end{array}$ | $\begin{array}{r} 5,035 \\ 13,446 \\ \underline{457} \\ \hline \end{array}$ |  |
| TOTAL | 20,699 | 28,131 | 31,818 | 18,669 | 18,540 | 18,938 |  |
| Direct Effects by I-O Sector: |  |  |  |  |  |  |  |
| Construction <br> Communication and Public Util Retail Trade <br> Finance, Insurance, Real Estate Business and Personal Services Households | $\begin{array}{r} 3,407 \\ 353 \\ 2,427 \\ 2,381 \\ 3,174 \\ 8,957 \\ \hline \end{array}$ | $\begin{array}{r} 8,468 \\ 363 \\ 2,795 \\ 2,994 \\ 3,771 \\ 9,740 \\ \hline \end{array}$ | $\begin{array}{r} 11,385 \\ 318 \\ 3,596 \\ 2,916 \\ 3,421 \\ 10,182 \\ \hline \end{array}$ | $\begin{array}{r} 46 \\ 327 \\ 1,800 \\ 2,913 \\ 2,570 \\ 11,014 \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ 358 \\ 1,907 \\ 2,922 \\ 3,123 \\ 10,197 \\ \hline \end{array}$ | $\begin{array}{r} 399 \\ 352 \\ 1,686 \\ 2,799 \\ 3,004 \\ 10,698 \\ \hline \end{array}$ |  |
| TOTAL | 20,699 | 28,131 | 31,818 | 18,669 | 18,540 | 18,938 |  |
| Total Effects: |  |  |  |  |  |  |  |
| Construction <br> Communications and Public Util <br> Retail Trade <br> Finance, Insurance, Real Estate <br> Business and Personal Services <br> Professional Social Services <br> Households <br> Other ${ }^{1}$ | $\begin{array}{r} 4,842 \\ 2,333 \\ 14,357 \\ 5,035 \\ 4,217 \\ 1,454 \\ 22,373 \\ 4,703 \\ \hline \end{array}$ | $\begin{array}{r} 10,319 \\ 2,898 \\ 18,173 \\ 6,377 \\ 5,091 \\ 1,825 \\ 27,991 \\ \underline{6,084} \end{array}$ | $\begin{array}{r} 13,367 \\ 2,655 \\ 20,035 \\ 6,502 \\ 3,791 \\ 1,932 \\ 29,680 \\ 6,580 \\ \hline \end{array}$ | $\begin{array}{r} 1,481 \\ 2,288 \\ 13,788 \\ 5,602 \\ 3,638 \\ 1,516 \\ 23,453 \\ 4,604 \\ \hline \end{array}$ | $\begin{array}{r} 1,430 \\ 2,303 \\ 13,579 \\ 5,544 \\ 4,173 \\ 1,468 \\ 22,651 \\ 4,519 \\ \hline \end{array}$ | $\begin{array}{r} 1,837 \\ 2,331 \\ 13,682 \\ 5,492 \\ 4,075 \\ 1,509 \\ 23,325 \\ 4,600 \\ \hline \end{array}$ |  |
| TOTAL | 59,314 | 78,758 | 84,842 | 56,370 | 55,667 | 58,851 |  |
| ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government |  |  |  |  |  |  |  |

## Appendix Table C22. Estimated State Tax Collections, Institutions Spending and Student Spending and Direct and Secondary Employment, Williston State College, Fiscal Year 2019

| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 25.3 | 91.6 | 116.9 | 3.9 | 120.8 |
| Personal Income Tax | 51.2 | 181.1 | 232.2 | 18.2 | 250.4 |
| Sales Tax | 128.9 | 414.7 | 543.6 | 61.9 | 605.5 |
| Property Tax | 81.1 | 261.7 | 342.8 | 38.6 | 381.4 |
| Other | 36.2 | 128.6 | 164.8 | 23.6 | 188.4 |
| Total | 322.7 | 1,077.6 | 1,400.3 | 146.3 | 1,546.6 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 166 | 324 | 19 | 508 |  |

## North Dakota University System Office

This brief analysis highlights the economic contribution of North Dakota University System Office. Key economic indicators include direct effects, gross business volume, personal income, retail trade, selected tax revenues, and employment. All dollar values are presented in current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 20 -year period 1999-2019 was 53.5 percent.

Expenditures by North Dakota University System Office comprise the direct effects, or "first round effects". Expenditures by North Dakota University System were $\$ 20.2$ million. Total effects (gross business volume) associated with North Dakota University System Office operations were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at $\$ 62.3$ million in FY2019. The sector that had the largest impact was the Households Sector (i.e., personal income of area residents) followed by Retail Trade; Finance, Insurance, and Real Estate; Communication and Public Utilities; and Professional Social Services. Economic effects are detailed in Appendix Table C23.

Tax collections generated by North Dakota University System Office operations in FY2019 included $\$ 542,000$ in sales taxes, $\$ 343,000$ in property taxes, $\$ 254,000$ in personal income taxes, $\$ 127,000$ in corporate profits taxes and $\$ 182,000$ in other taxes. Total tax collections generated by North Dakota University System Office was $\$ 1.4$ million. Levels of business activity resulting from North Dakota University System Office expenditures would support 324 secondary (indirect and induced) jobs in FY2019. These jobs are in addition to direct employment of 30 positions (no students are employed through the office) at North Dakota University System Office in 2019. Tax collections and secondary employment are summarized in Appendix Table C24.




## Appendix Table C24. Estimated State Tax Collections, Institutions Spending and Student Spending and

 Direct and Secondary Employment, North Dakota University System Office, Fiscal Year 2019| Item | General Funds | Non-general Funds | All Funds | Student Spending | Total Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxes Type |  |  |  |  |  |
| Corporate Profits Tax | 43.8 | 83.2 | 126.9 | 0.0 | 126.9 |
| Personal Income Tax | 100.0 | 153.9 | 254.0 | 0.0 | 254.0 |
| Sales Tax | 202.6 | 339.0 | 541.6 | 0.0 | 541.6 |
| Property Tax | 128.5 | 214.2 | 342.7 | 0.0 | 342.7 |
| Other | 74.1 | 107.4 | 181.5 | 0.0 | 181.5 |
| Total | 549.0 | 897.7 | 1,446.7 | 0.0 | 1,446.7 |
|  |  |  |  |  |  |
| Employment | Direct Jobs | Indirect and Induced Employment, Institutions Spending | Indirect and Induced Employment Student Spending | All Jobs | -- |
| Number of Jobs | 30 | 324 | 0 | 354 |  |


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[^1]:    ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government.

[^2]:    ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government

[^3]:    ${ }^{1}$ Includes agriculture, mining, manufacturing, transportation, and government

