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Economic Contribution of the North Dakota University System in 2017

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 in their respective areas and 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 non-general 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 2017, with the FY2017 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, economy-wide personal income, and total business activity. Historic relationships were used to estimate secondary employment and state-level tax receipts.

Salient observations include:

- Direct economic impacts (expenditures) by the NDUS have grown from \$533 million in FY1999 to \$1.4 billion in FY2017, an increase of 163 percent
- Direct economic impacts have increased by \$421 million from FY2009 to FY2017 (43 percent), and decreased by \$210 million from FY2015 to FY2017 (13 percent)
- Growth in NDUS expenditures has been facilitated by the strong North Dakota economy
- Wages and salaries represent the largest itemized expense for the NDUS, generally accounting for 40 percent of the total expenditures
- Benefits are the second largest expenditure category, representing over 10 percent of total expenditures
- Non-general fund revenues are an important source of funding for the NDUS, providing about 70 percent of the total until recently, when the ratio dropped to 66 percent in FY2015 and 67 percent in FY2017
- Total NDUS economic impacts (direct and secondary) were \$1.6 billion in FY1999, \$2.9 billion in FY2009, and \$4.1 billion in FY2017
- Direct expenditures created total business activity of \$4.1 billion including \$1 billion in retail trade activity, and \$1.6 billion in economy-wide personal income

- University system in-state expenditures and subsequent secondary business activity was estimated to generate \$132 million in state tax collections. Of that total, \$83 million would be from sales and use taxes and about \$38 million were for individual and corporate income taxes.
- Direct employment by the NDUS was 10,741 FTE jobs on FY2017
- Enrollment at the NDUS's 11 colleges and universities was 37,397 FTE students for Fall Semester 2017
- NDUS student living expenses were estimated to be \$455 million for FY2017
- Economic impact of student living expenses resulted in \$1.1 billion in total business activity, highlighted by \$511 million in additional retail trade activity and \$275 million in economy-wide personal income
- Combined NDUS and student spending was nearly \$1.9 billion in FY2017, creating a total economic impact of \$5.3 billion

Economic Contribution of the North Dakota University System

Dean A. Bangsund and Nancy M. Hodur*

The North Dakota University System (NDUS) is comprised of the NDUS Office and 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 staff, faculty, and students. Previous studies have estimated the economic contribution of the NDUS for fiscal years (FY) 1999 and 2004 (Leistriz and Coon 2005), FY2006 (Leistriz and Coon 2007), FY2008 (Leistriz and Coon 2009), FY2009 (Bangsund et al. 2010), FY2011 (Coon et al. 2012), FY2012 and FY2013 (Coon et al. 2014), and FY2014 and FY2015 (Bangsund and Hodur, 2016). This study will provide a similar analysis for FY2017.

The NDUS experienced substantial growth during the 1999-2017 period. The number of students attending schools in the NDUS has increased since 1999. Employment at the 11 universities has also increased since 1999. Consistent with the increases in enrollment and employment, expenditures to operate the NDUS have also increased. From the FY1999 to FY2017 period, a substantial amount of the funding has come from the federal government and/or other out-of-state sources, primarily for research.

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 appropriated state tax revenue. 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 impact analysis for each of the 11 campuses in the state and the NDUS Office are appended to the end of this report.

Methods

The initial task in any impact assessment is estimating the direct effects or first round of spending associated with an activity, project, or program. The NDUS Office has provided expenditure data through FY2017 for each of the 11 institutions and the NDUS Office. Also provided were Fall Semester 2016 and 2017 student enrollment data and university employment numbers for each of the state's 11 public colleges and universities. The expenditure data were provided for the same budget categories as previous studies (i.e., FY1999, FY2004, FY2006, FY2008, FY2009, FY2011, FY2012, FY2013, FY2014, and FY2015 analyses) giving a long-term consistent data base (see Appendix A). Data were provided for general and non-general fund expenditures. As part of the budget expense categories, capital improvement (building) and capital equipment expenditures for each of the institutions were also included.

Actual expenditures data were used for this analysis, not amounts presented in budgets. Expenditure data were obtained from the ConnectND system. This system provided a database that was reported annually for consistent line item categories for each year of the analysis. 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

*The authors are, respectively, Research Scientist, Department of Agribusiness and Applied Economics, and Director, Center for Social Research, North Dakota State University.

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)
- Bismarck State College
- Dickinson State University
- Lake Region State College
- Mayville State University
- Minot State University
- Dakota College Bottineau
- North Dakota State College of Science
- North Dakota State University
 - Agricultural Experiment Station:
 - NDSU Main Research Center
 - Dickinson Research Extension Center
 - Central Grasslands Research Extension Center
 - Hettinger Research Extension Center
 - Langdon Research Extension Center
 - North Central Research Extension Center
 - Williston Research Extension Center
 - Carrington Research Extension Center
 - Agronomy Seed Farm
 - Northern Crops Institute
 - Upper Great Plains Transportation Institute
 - NDSU Cooperative Extension Service
 - North Dakota Forest Service
- University of North Dakota
 - School of Medicine and Health Sciences
- Valley City State University
- 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. However, despite those omissions, the ConnectND data set provides a consistent, accurate, and annual database for an economic contribution analysis.

Spending on capital improvements came from both general fund and non-general fund sources. Non-general fund construction would have been funded by external sources such as grants, contracts, and donations. All expenditure data were 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 1999-2017 period was 47 percent (Bureau of Labor Statistics 2018). Therefore, a 47 percent increase in expenditures from 1999 to 2017 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 impacts 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 Leistriz (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 (Leistriz 1995; Bangsund and Leistriz 2004). Empirical testing has confirmed the model's accuracy in estimating changes in levels of economic activity in North Dakota; over the period 1958-2012, estimates of statewide personal income derived from the model averaged within 7 percent of comparable values reported by the U.S. Department of Commerce (Leistriz 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 2017-2018 academic year was obtained from the North Dakota Career Resource Network (2018). Those expenditures provide an indication of the economic contribution of student spending in the state.

North Dakota University System Economic Contribution

The NDUS operating budget increased 163 percent from \$533 million in FY1999 to \$1.4 billion in FY2017, a decrease from its peak of \$1.6 billion in FY2015 (Table 1). Wages and salaries represented the largest itemized expense for that period. Wages and salaries were \$226 million in FY1999 (42 percent of total) and grew to \$562 million in FY2017 (40 percent of total). The percentage of total general and non-general fund expenditures for wages and salaries remained in the 40th percentile range over the 1999 to 2017 period (Table 1). Fringe benefits represented the second largest itemized expenditure, increasing from \$56 million in FY1999 (10.5 percent of total) to \$212 million in FY2017 (15.1 percent of total). A large component of benefits is health insurance, which has been experiencing significant annual cost increases. Benefits increased by \$10 million from FY2015 to FY2017, a 4.8 percent increase. Wages and salaries plus benefits equaled \$281 million in FY1999 and \$775 million in FY2017 (Table 1). Education tends to be a labor-intensive activity, with salaries and wages along with benefits, averaging over 50 percent of total expenditures during the FY1999 to FY2014 period, but declined to 46.9 percent in FY2015 and again increased to 55 percent in FY2017 (Table 1).

Table 1. Direct Economic Impacts from General and Non-general Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
----- \$ 000s -----												----- % -----	
Operating Expenditures:													
Wages and Salaries	225,512	318,838	352,778	374,053	404,743	483,270	499,693	511,633	532,797	553,376	562,541	149.5%	1.7%
Fringe Benefits	55,809	85,718	98,123	111,650	119,436	146,814	157,203	163,843	191,782	202,322	212,086	280.0%	4.8%
Travel	14,102	21,194	23,136	26,684	26,731	28,957	31,280	32,555	34,082	34,904	27,999	98.5%	-19.8%
Data Processing	4,324	7,625	13,297	16,510	14,633	15,712	17,260	19,233	18,754	19,935	18,037	317.1%	-9.5%
Fees	22,565	38,891	28,657	36,487	33,956	37,685	52,452	42,461	45,676	47,252	39,451	74.8%	-16.5%
Utilities	12,054	15,780	18,173	22,562	23,606	25,091	25,522	27,552	30,625	29,097	29,151	141.8%	0.2%
Communications	11,284	11,050	8,057	8,340	8,494	8,735	9,052	7,586	8,758	9,077	8,671	-23.2%	-4.5%
Insurance	1,832	3,426	3,464	3,224	4,704	3,342	4,279	4,438	4,287	3,264	3,732	103.7%	14.3%
Rents and Fees	10,416	14,809	9,013	10,642	14,127	13,980	14,765	14,505	15,447	16,380	13,498	29.6%	-17.6%
Office	15,372	20,968	10,526	10,884	10,564	9,862	9,628	9,371	9,185	9,317	7,589	-50.6%	-18.5%
Supplies	9,626	17,330	19,512	21,731	23,132	21,723	24,767	25,602	26,592	26,102	19,511	102.7%	-25.2%
Instructional	5,677	7,155	16,916	20,868	21,567	25,673	21,848	23,840	24,195	26,077	25,640	351.6%	-1.7%
Noncapital Equipment	1,777	2,981	6,441	7,114	7,345	7,125	11,689	11,169	8,353	9,965	9,846	454.1%	-1.2%
Merchandise for Resale	34,696	32,785	37,858	41,861	47,752	45,080	49,293	56,343	85,226	189,837	95,285	174.6%	-49.8%
Repairs	24,631	20,064	21,382	25,325	27,999	26,978	29,684	29,298	29,712	32,339	28,530	15.8%	-11.8%
Scholarships, etc.	40,160	62,774	69,979	80,165	86,654	122,884	121,088	119,143	105,426	99,679	107,687	168.1%	8.0%
General	10,088	24,841	49,004	57,199	64,444	65,754	73,386	76,828	82,358	82,205	82,665	719.4%	0.6%
Capital Equipment	6,468	4,793	2,300	19,754	6,396	5,579	14,287	22,378	20,552	21,750	18,561	187.0%	-14.7%
Recovery of Expenses	- -	-11,945	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Capital Improvements	<u>26,529</u>	<u>62,243</u>	<u>39,488</u>	<u>45,246</u>	<u>34,084</u>	<u>71,095</u>	<u>76,797</u>	<u>83,832</u>	<u>77,621</u>	<u>198,948</u>	<u>91,316</u>	244.2%	-54.1%
Total	532,922	761,320	828,104	940,299	980,365	1,165,339	1,243,974	1,281,610	1,351,428	1,611,826	1,401,795	163.0%	-13.0%

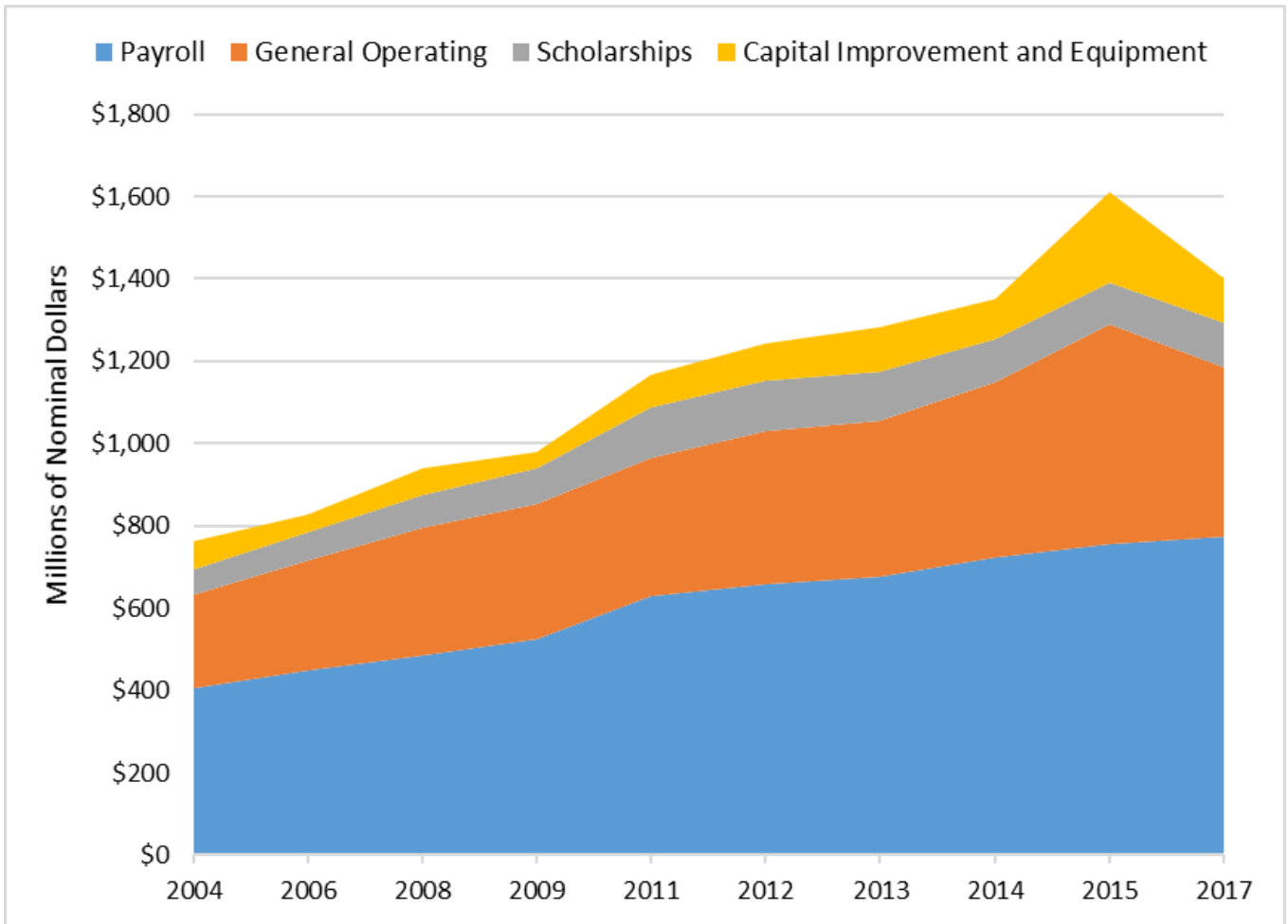


Figure 1. North Dakota University System, General and Non-general Fund Expenditures by Major Expense Types, Selected Years 2004 through 2017.

Capital improvements were \$27 million in FY1999 and \$91 million in FY2017. Expenditures for construction are often based on availability of funds from a variety of sources. General fund monies allocated to capital improvements come from tax revenues. Non-general fund expenditures accounted for over 75 percent of the capital improvement expenditures for FY1999, FY2004, FY2006, and FY2008 (Table1, Table2). In FY2009, these 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. A larger share of the funding for capital improvements since FY2012 has come from general fund sources.

As the state’s higher education institutions have expanded their roles in research, economic development, outreach, and developed community and industrial partnerships, sources of funding for many of the universities’ activities also have changed. Non-general fund revenue (grants, contracts, donations) has become an important source of growth in the higher education system in North Dakota. In FY1999, \$333 million of non-general fund expenditures comprised 62 percent of the total expenditures by the University System in North Dakota. 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

FY2017, total non-general fund expenditures were \$942 million and represented 67 percent of the all system-wide expenditures.

Non-general fund expenditures in FY2017 have increased by over \$600 million since FY1999 (183 percent), but decreased by \$123 million or 12 percent from FY2015 to FY2017. Wages and salaries were the largest single source of expenditures for each of the study years. In FY2017, salaries and wages from non-general fund sources accounted for 62 percent of all expenditures for wages and salaries. Thus, almost two-thirds of NDUS wages and salaries for staff and faculty come from sources other than state government appropriations. It is likely that in the absence of external funding for wages and salaries, overall employment in the NDUS could be expected to be much lower than current levels. Non-general fund revenue not only provides funding for wages and salaries and capital improvement projects, but also provided \$77 million in scholarships in FY2017.

Table 2. Direct Economic Impacts from Non-General Fund Expenditures, NDUS, by Budget Category, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
	----- \$000s -----												----- % -----
Operating Expenditures:													
Wages and Salaries	116,454	194,399	236,265	246,481	266,414	320,013	317,514	328,811	329,550	339,779	352,469	202.7%	3.7%
Fringe Benefits	28,161	50,243	64,446	72,168	77,229	95,084	97,934	103,003	113,948	120,146	128,484	356.2%	6.9%
Travel	10,839	17,170	19,323	22,177	22,202	24,278	26,019	26,579	27,552	27,244	23,688	118.5%	-13.1%
Data Processing	2,546	5,676	11,096	11,884	11,215	10,674	11,224	11,994	12,192	12,480	12,065	373.9%	-3.3%
Fees	17,013	34,267	26,893	33,329	30,741	31,528	44,009	36,116	38,688	38,072	33,117	94.7%	-13.0%
Utilities	4,195	6,975	9,893	12,580	13,359	14,366	14,338	16,145	17,425	15,869	17,328	313.1%	9.2%
Communications	7,683	7,991	6,227	6,326	6,366	5,396	5,411	4,669	5,340	5,161	5,020	-34.7%	-2.7%
Insurance	1,063	2,144	2,320	2,326	3,618	2,477	3,163	3,300	2,991	2,459	2,294	115.8%	-6.7%
Rents and Fees	7,595	13,062	7,684	9,630	12,944	12,174	12,897	12,297	13,072	14,264	11,349	49.4%	-20.4%
Office	9,104	15,269	7,883	8,271	7,848	7,393	7,105	6,927	6,578	6,706	5,626	-38.2%	-16.1%
Supplies	8,055	14,805	16,136	18,320	18,936	17,773	20,490	20,725	21,648	20,810	15,559	93.2%	-25.2%
Instructional	2,654	4,349	12,645	16,103	16,612	20,244	17,070	18,721	18,858	20,240	20,489	672.0%	1.2%
Noncapital Equipment	1,122	2,159	5,401	5,895	6,039	5,699	10,414	9,296	6,426	7,290	7,746	590.4%	6.3%
Merchandise for Resale	31,704	32,784	37,857	41,860	47,750	45,080	49,292	56,338	85,224	189,835	95,284	200.5%	-49.8%
Repairs	16,660	14,861	16,999	19,124	20,381	20,587	23,222	22,354	22,217	23,655	20,762	24.6%	-12.2%
Scholarships, etc.	38,495	58,787	55,133	61,670	67,613	92,792	86,239	83,010	75,081	71,177	77,082	100.2%	8.3%
General	6,904	18,312	42,095	47,763	53,137	53,932	59,080	60,100	63,872	60,109	61,747	794.4%	2.7%
Capital Equipment	1,847	1,789	1,238	17,351	4,302	3,550	11,652	16,979	16,929	17,582	16,204	777.3%	-7.8%
Recovery of Expenses	--	-11,945	--	--	--	--	--	--	--	--	--	--	--
Capital Improvements	20,807	51,846	34,266	36,201	19,124	33,881	39,295	35,487	31,080	71,977	35,287	69.6%	-51.0%
Total	332,901	534,943	613,800	689,459	705,830	816,921	856,368	872,851	908,671	1,064,855	941,598	182.8%	-11.6%

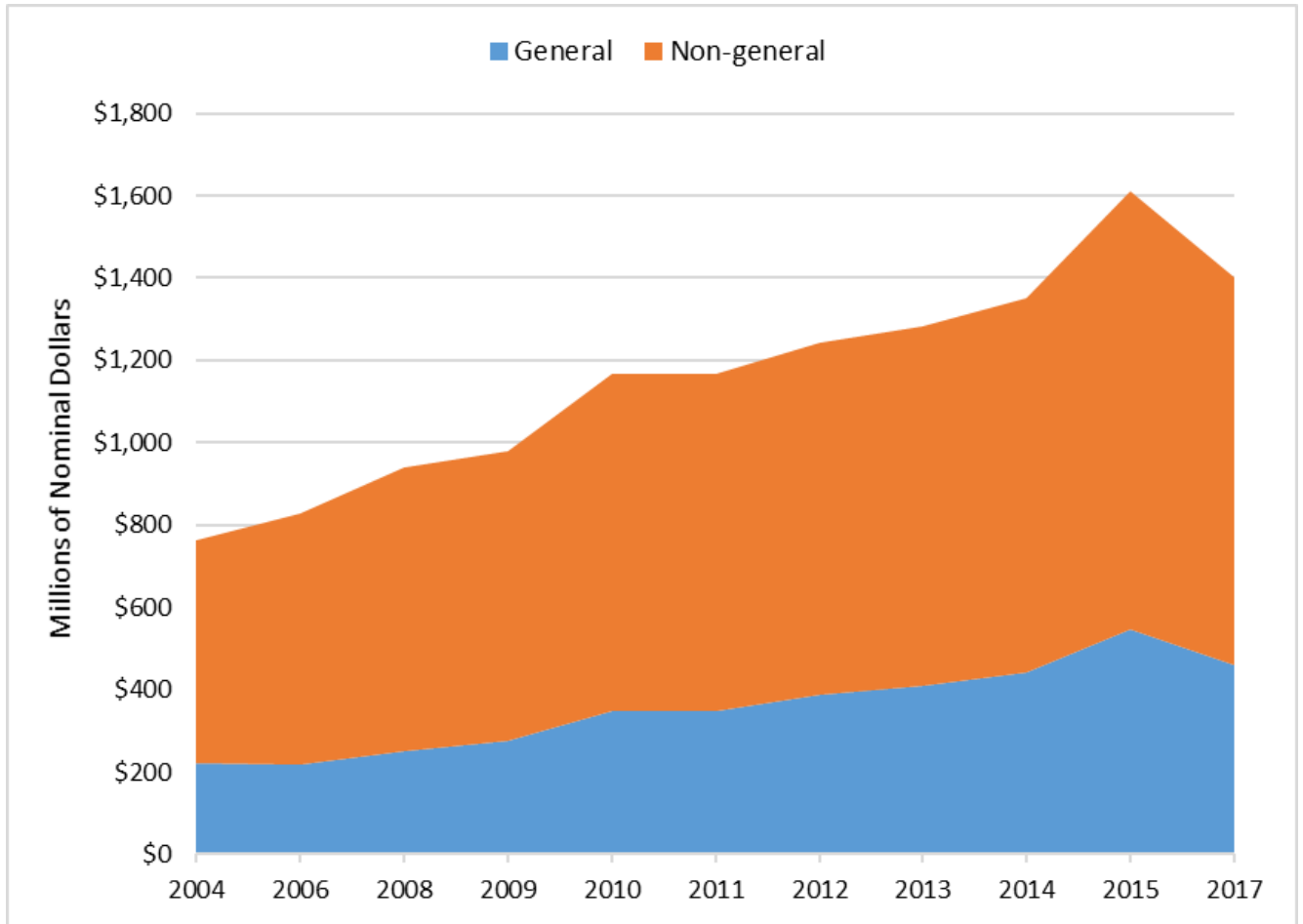


Figure 2. North Dakota University System, Total General and Non-general Fund Expenditures, Selected Years 2004 through 2017.

Expenditures made by the NDUS comprise the direct impacts or first-round effects on the state’s economy. These expenditures were reported for the NDUS total (General Fund and Non-General Fund) in Table 1 and for Non-General fund in Table 2. The economic effects of those first-round expenditures are distributed in numerous locations throughout the state. Total direct impacts were \$533 million in FY1999 and \$1.4 billion in FY2017 (Table 3). These 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*. Applying these expenditures to the North Dakota Input-Output Model interdependence coefficients (i.e., multipliers) provides total (direct and secondary) economic impacts for General Fund and Non-General Fund outlays.

Similarly, the Non-General Fund expenditures were allocated to the same six economic sectors. Non-General Fund direct impacts were \$333 million in FY1999 and \$942 million in FY2017 (Table 3). Business volumes were estimated for both total expenditures (general and non-general fund) and for only non-general fund expenditures (Table 4).

Table 3. Direct Economic Impacts 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 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
-----\$ 000s-----												-----%-----	
Total (General Fund and Non-General Fund) Direct Impacts													
Input-Output Model Sectors:													
Construction	26,529	62,243	39,488	45,246	34,084	71,095	76,797	83,832	77,621	198,948	91,316	244.2%	-54.1%
Communication & Public Utilities	23,338	26,831	26,230	30,902	32,100	33,826	34,574	35,138	39,383	38,173	37,822	62.1%	-0.9%
Retail Trade	73,616	74,066	93,553	122,212	116,755	115,042	131,513	148,703	174,103	283,049	176,432	139.7%	-37.7%
Finance, Ins., Real Estate	68,057	103,952	110,559	125,517	124,140	164,136	176,246	182,785	211,516	221,966	229,315	236.9%	3.3%
Business and Personal Services	75,710	112,615	135,477	162,204	181,890	175,086	204,063	200,376	210,582	216,635	196,682	159.8%	-9.2%
Households	265,672	381,613	422,757	454,218	491,396	606,154	620,781	630,776	638,223	653,055	670,228	152.3%	2.6%
Total	532,922	761,320	828,104	940,299	980,365	1,165,339	1,243,974	1,281,610	1,351,428	1,611,826	1,401,795	163.0%	-13.0%
Non-General Fund Direct Impacts													
Input-Output Sectors:													
Construction	20,807	51,846	34,266	36,201	19,124	33,881	39,295	35,487	31,080	71,977	35,287	69.6%	-51.0%
Communication & Public Utilities	11,878	14,966	16,120	18,906	19,725	19,762	19,749	20,813	22,765	21,030	22,347	88.1%	6.3%
Retail Trade	54,486	59,211	81,160	107,801	101,487	99,738	116,023	128,987	155,664	262,463	160,907	195.3%	-38.7%
Finance, Ins., R. Estate	36,819	65,448	74,450	84,124	80,847	109,736	113,994	118,601	130,012	136,869	142,127	286.0%	3.8%
Business and Personal Services	53,962	90,286	116,406	134,276	150,621	140,999	163,554	157,142	164,520	161,560	151,378	180.5%	-6.3%
Households	154,949	253,186	291,398	308,151	334,026	412,805	403,753	411,821	404,630	410,956	429,550	177.2%	4.5%
Total	332,901	534,943	613,800	689,459	705,830	816,921	856,368	872,851	908,671	1,064,855	941,598	182.8%	-11.6%

Levels of business activity associated with general and non-general fund expenditures in the state were estimated at \$1.6 billion in FY1999 and \$4.1 billion in FY2017 (Table 4). The total business activity for the NDUS has increased by \$2.6 billion or by 166 percent from FY1999 to FY2017. Economic sectors of the ND economy that received major contributions include *Households* (i.e., economy-wide personal income of state residents), *Retail Trade*, *Construction*, and *Finance, Insurance and Real Estate*. Retail trade activity amounted to \$393 million in FY1999 and \$1 billion in FY2017. Economic activity in the *Retail Trade* Sector increased by \$629 million or by 160 percent over the period. The University System was estimated to increase economy-wide personal income (i.e., *Households* Sector) in North Dakota from \$613 million in FY1999 to \$1.6 billion in FY2017. Levels of business activity resulting from the NDUS including student living expenditures would support 12,138 secondary (indirect and induced) full-time equivalent (FTE) jobs in 1999 and 9,917 FTE secondary jobs in 2017 (Table 5). These jobs represent employment in addition to the 8,120 persons employed by the NDUS in 1999 and the 10,741 positions (excluding student jobs) in 2017 (Table 5).

In FY2017, the gross business volume generated by the NDUS for all funding was estimated to result in \$132 million in state tax collections (Table 6). Of that total, \$83 million would be from sales and use taxes and about \$38 million were for individual and corporate income taxes.

A similar analysis was conducted for non-general fund expenditures (Table 4). Non-general fund outlays in FY1999 generated total business activity of nearly \$1.0 billion and \$2.7 billion in FY2017. Business activity in the state resulting from non-general fund expenditures in the NDUS increased by \$1.8 billion (187 percent) from FY1999 to FY2017. Overall activity in the *Retail Trade* Sector was estimated at \$248 million in FY1999 and \$714 million in FY2017.

In FY2017, the gross business volume generated by the NDUS from non-general funds was estimated to result in \$104 million in state tax collections (Table 6). Of that total, \$66 million would be from sales and use taxes and about \$29 million were for individual and corporate income taxes.

The economic effects associated with non-general fund expenditures comprise a substantial share of the total NDUS economic contribution. Both the relative share of NDUS spending that comes from non-general funds sources and that the share has been increasing over the 16-year period highlight the importance that outside financial support plays in the economic effects on the North Dakota economy.

Table 4. Direct and Secondary Economic Effects, General and Non-General Funds, NDUS, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
	-----\$ 000s-----											FY1999-2017	FY2015-2017
-----%-----													
Direct and Secondary Economic Effects, General and Non-General Funds, by Economic Sector:													
Construction	65,070	117,946	100,140	112,887	105,381	157,239	167,644	176,849	174,841	308,389	192,643	196.1%	-37.5%
Communication & Public Utilities	76,560	103,633	110,370	125,617	131,886	152,570	160,951	164,417	175,765	191,138	179,187	134.0%	-6.3%
Retail Trade	392,833	536,877	597,584	684,069	708,724	831,897	887,728	922,943	984,171	1,192,978	1,021,647	160.1%	-14.4%
Finance, Ins., R. Estate	139,715	207,621	223,761	251,652	257,349	324,787	345,733	356,128	392,733	424,126	418,020	199.2%	-1.4%
Business and Personal Services	103,849	153,552	180,280	212,297	234,744	238,689	271,463	269,249	283,087	296,700	272,161	162.1%	-8.3%
Professional and Social Services	39,731	57,512	62,822	69,725	73,706	89,432	94,020	96,139	100,396	110,827	104,833	163.9%	-5.4%
Households	612,835	887,089	968,846	1,073,533	1,135,643	1,380,206	1,448,926	1,481,327	1,544,564	1,701,345	1,613,698	163.3%	-5.2%
Other ¹	<u>126,456</u>	<u>179,794</u>	<u>196,758</u>	<u>221,915</u>	<u>231,738</u>	<u>277,900</u>	<u>294,834</u>	<u>303,696</u>	<u>321,145</u>	<u>372,223</u>	<u>334,666</u>	164.7%	-10.1%
Total	1,557,049	2,244,024	2,440,561	2,751,695	2,879,171	3,452,720	3,671,299	3,770,748	3,976,702	4,597,626	4,136,855	165.7%	-10.0%
Direct and Secondary Economic Effects, Non-General Funds, by Economic Sector:													
Construction	44,163	90,086	78,001	84,342	69,227	93,384	100,363	97,603	94,627	142,081	101,626	130.1%	-28.5%
Communications & Public Utilities	44,380	68,060	77,533	87,144	90,781	102,686	105,958	108,336	113,193	120,650	116,043	161.5%	-3.8%
Retail Trade	247,754	376,788	444,393	507,419	517,180	594,872	624,169	645,798	684,506	844,533	713,538	188.0%	-15.5%
Finance, Ins., R. Estate	80,184	136,560	156,023	173,842	174,518	220,859	228,038	234,512	248,529	266,495	265,744	231.4%	-0.3%
Business and Personal Services	70,970	118,369	148,781	169,984	187,891	185,149	209,102	203,384	212,035	213,018	200,866	183.0%	-5.7%
Professional and Social Services	23,867	39,196	44,941	49,224	51,492	61,654	62,900	64,010	65,263	70,798	68,340	186.3%	-3.5%
Households	367,522	603,700	691,608	756,177	791,816	950,252	967,322	984,549	1,002,012	1,084,560	1,050,196	185.8%	-3.2%
Other ¹	<u>77,625</u>	<u>124,256</u>	<u>143,421</u>	<u>160,301</u>	<u>164,860</u>	<u>194,060</u>	<u>201,237</u>	<u>205,998</u>	<u>214,228</u>	<u>246,894</u>	<u>223,719</u>	188.2%	-9.4%
Total	956,465	1,557,015	1,784,701	1,988,433	2,047,765	2,402,916	2,499,089	2,544,190	2,634,393	2,989,029	2,740,072	186.5%	-8.3%
¹ Includes agriculture, mining, manufacturing, transportation and government.													

Table 5. Direct Employment in the NDUS, Secondary Employment Attributed to University System Expenditures, and Student Enrollment, Selected Years 1999 to 2017

Year	Direct Employment ¹	Secondary Employment ²	Student Enrollment 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	N/A	N/A
Change 1999-2017:			
Number	2,621	-2,221	6,677
Percent	32.3%	-18.3%	21.7%
Change 2015-2017:			
Number	-851	-1,476	-754
Percent	-7.0%	-12.6%	-2.0%

¹ NDUS employment is a June 30th employee head count consisting of faculty, classified, other non-classified and temporary positions. Student workers were not included in this total.

² Secondary employment is full-time equivalent workers. Estimates are based on business activity from university expenditures and student living expenses. A new methodology for estimating secondary employment was developed in 2011 and has been used for all subsequent analyses. This methodology will eliminate possible overestimation of secondary workers due to economic factors such as technological changes, excess capacity, and constrained economic variables. Secondary employment for each year the analysis has been completed (1999-2017) and was calculated using the new methodology to provide a consistent time-series database. Reductions in secondary employment are a reflection of the new methodology and not a result of university system expenditures having a smaller role in secondary job creation.

³ Student enrollment is full-time equivalent students.

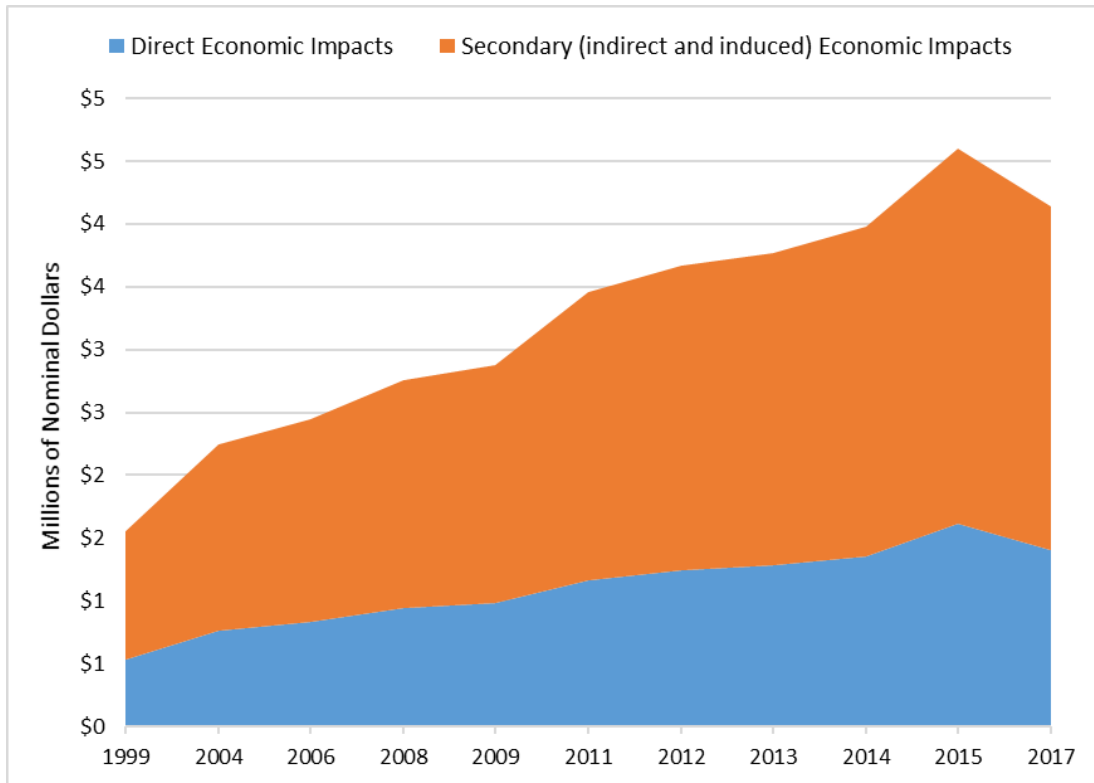


Figure 3. North Dakota University System, Direct and Secondary Economic Impacts, Selected Years 1999 through 2017.

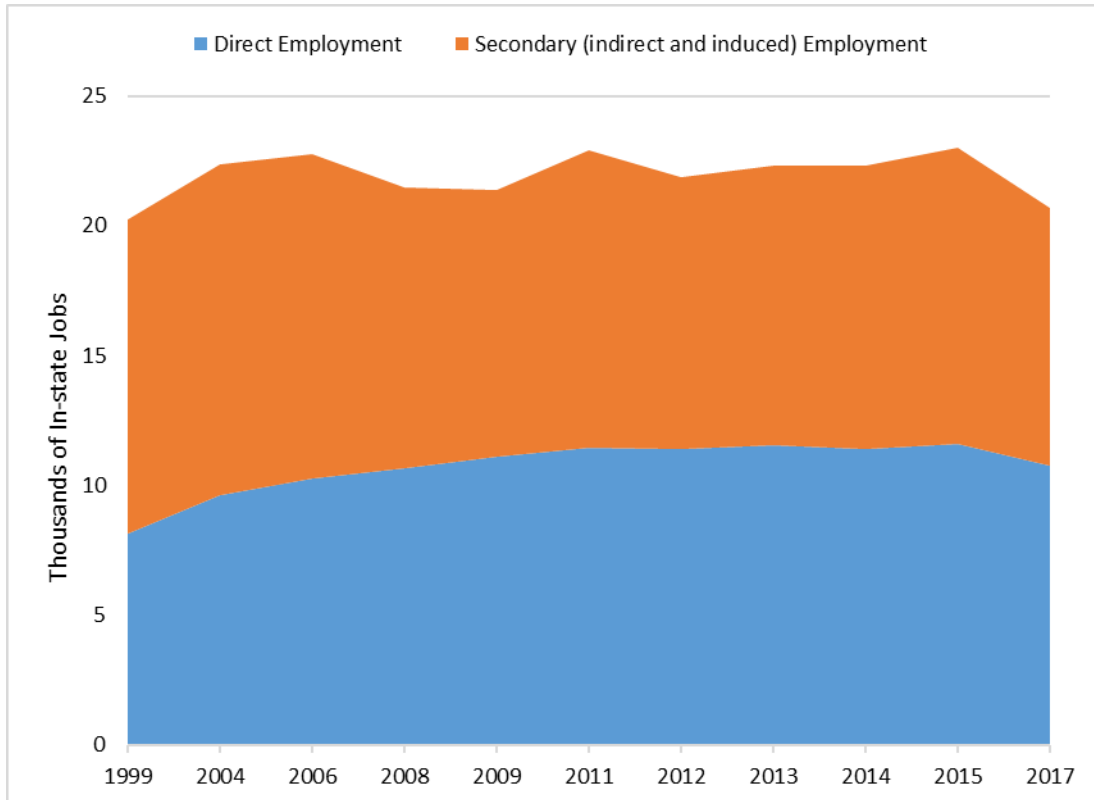


Figure 4. North Dakota University System, Direct and Secondary Statewide Employment in North Dakota, Selected Years 1999 through 2017.

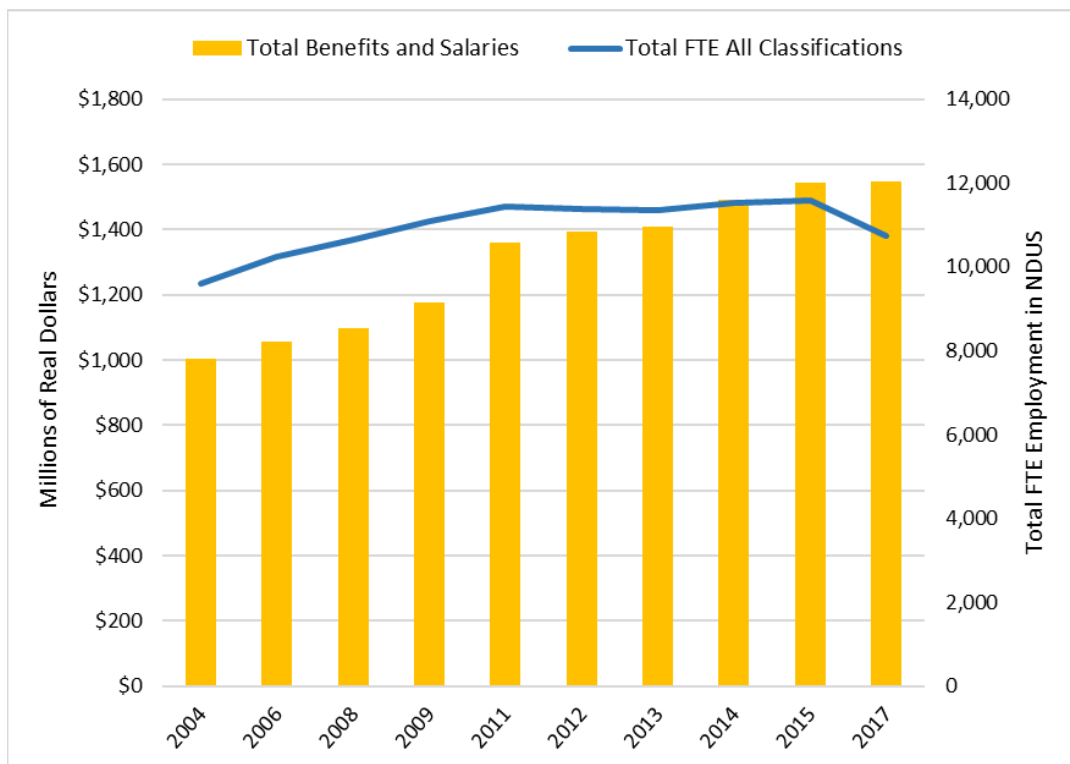


Figure 5. North Dakota University System, Payroll and Total Direct Employment, Selected Years 2004 through 2017.

Table 6. Estimated State Tax Collections derived from Total Business Activity, General and Non-General Funds, North Dakota University System, and from Student Spending, Fiscal Year 2017

Funding	Tax	North Dakota University System	Student Spending	Total
----- 000s \$ -----				
General and Non-general Funds				
	Sales and Use Tax	83,419	8,035	91,455
	Personal Income Tax	23,380	1,980	25,360
	Corporate Income Tax	14,954	1,629	16,582
	Other ¹	10,789	935	11,724
	Total	132,542	12,579	145,121
Non-General Funds				
	Sales and Use Tax	66,261	na	66,261
	Personal Income Tax	17,891	na	17,891
	Corporate Income Tax	11,404	na	11,404
	Other ¹	8,309	na	8,309
	Total	103,865	na	103,895

na=not considered based on breakdown in funding.

¹ 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 2017-2018 school year (North Dakota Career Resource Network 2018). 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. Also, personal, recreation, and miscellaneous costs were estimated to be \$3,450 for the 2017-2018 school year. Student living expenditures were estimated to range from \$9,670 per student per academic year at Lake Region State College to \$14,280 per student per academic year at Williston State College for the 2013-2014 school year (Appendix Table A24). In the 2017-2018 academic year Mayville State University had the lowest student living expenses (\$10,270), and Williston State College had the highest at \$13,320 per student. University of North Dakota and North Dakota State University had the second and third highest student living expenses (\$12,648 and \$12,626 respectively).

Multiplying the Fall Semester 2017 FTE student enrollment for each school by their respective per-student living expenditures provided an estimate of direct impacts or first-round effects associated with student spending for each school year. 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 off-campus, 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 estimation 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 book stores 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 text books 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 book stores 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 2017, NDUS indicated that 37,397 FTE students were enrolled and attended the 11 state universities and colleges. Based on expenditures per FTE student, students were estimated to have spent \$455.3 million in North Dakota on books, room and board, personal items, and recreation during the 2017-2018 school year (Table 7). Students also incur expenses for fees, tuition, and other items not covered in this analysis. Those expenditures were not included in this study and would be 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 estimated at \$455.3 million for FY2017 (Table 7). The \$455.3 million in student expenditures would be in addition to expenditures made by the NDUS universities and colleges, considering the potential problems identified earlier in this section. In 2017-2018, student direct expenditures were 32.5 percent of the general and non-general fund expenditures made by the NDUS.

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 FY2017. The sector that received the largest impact was the *Retail Trade* Sector, with \$512 million in retail trade activity. The *Household* Sector (economy-wide personal income) was estimated at \$275 million in FY2017.

In FY2017, the gross business volume generated by student spending was estimated to result in \$12.6 million in state tax collections (Table 6). Of that total, \$8 million would be from sales and use taxes and about \$2.5 million were for individual and corporate income taxes.

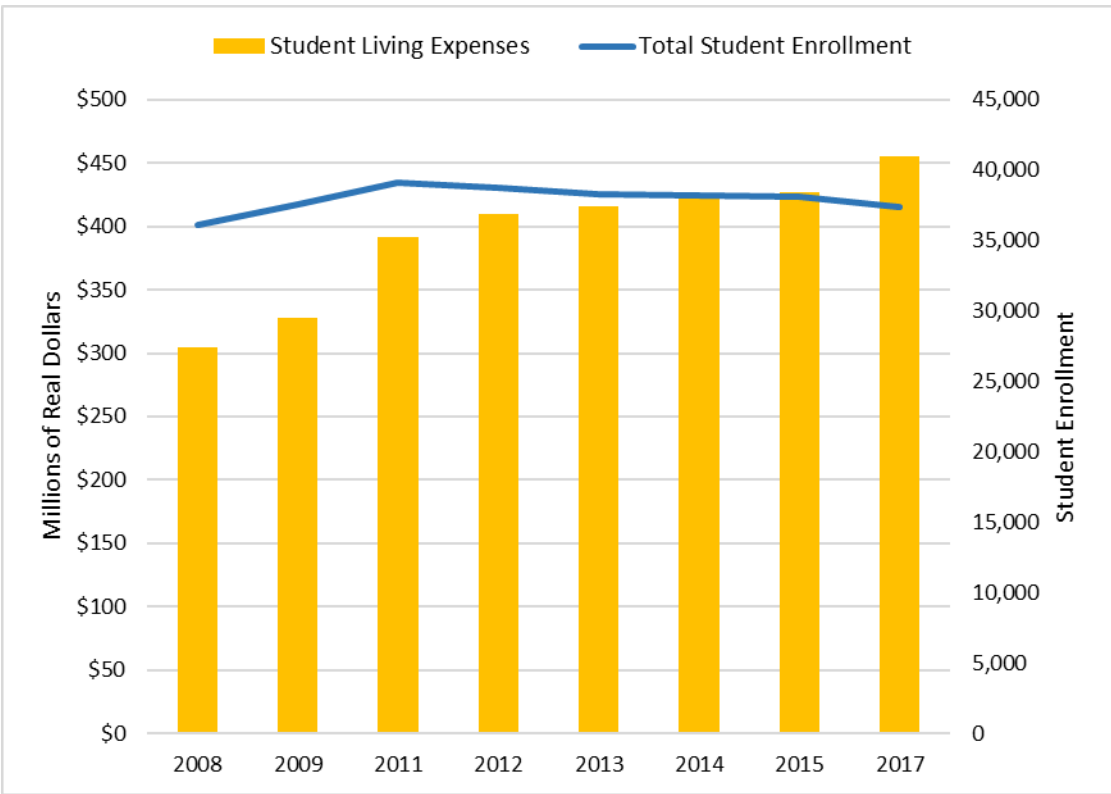


Figure 6. North Dakota University System, Student Living Expense and Student Enrollment, Selected Years 2008 through 2017.

Table 7. Direct and Total Economic Effects, Student Living Expenditures, Students Enrolled in the NDUS, Selected Fiscal Years 2008 to 2017

Item	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017
	----- \$ 000 -----							
Direct Impacts:								
Student Expenditures for Living Expenses	304,502	327,360	392,045	409,408	415,421	425,533	427,299	455,305
Direct Impacts by I-O Model Sector:								
Retail Trade	228,377	245,519	294,034	307,056	311,566	319,150	320,474	341,479
Finance, Insurance, Real Estate	76,125	81,841	98,011	102,352	103,855	106,383	106,825	113,826
Total	304,502	327,360	392,045	409,408	415,421	425,333	427,299	455,305
Direct and Secondary Impacts								
Construction	13,558	14,575	17,456	18,229	18,497	18,974	19,025	20,273
Communications and Public Utilities	22,137	23,798	28,502	29,764	30,201	30,936	31,065	33,102
Retail Trade	342,306	368,001	440,716	460,236	466,996	478,363	480,348	511,832
Finance, Insurance, Real Estate	100,143	107,662	128,933	134,644	136,621	139,947	140,528	149,737
Business and Personal Services	10,262	11,032	13,212	13,797	14,000	14,340	14,400	15,344
Professional and Social Services	12,515	13,454	16,113	16,827	17,074	17,489	17,562	18,714
Households	183,614	197,398	236,403	246,873	250,499	256,596	257,661	274,550
Other ¹	<u>72,084</u>	<u>77,391</u>	<u>92,806</u>	<u>96,917</u>	<u>98,339</u>	<u>100,735</u>	<u>101,153</u>	<u>107,782</u>
Total	756,619	813,311	974,141	1,017,287	1,032,227	1,057,353	1,061,742	1,131,334
¹ Agriculture, mining, manufacturing, transportation, and government.								

Conclusions

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. Expenditure data for the NDUS came from the ConnectND system.

The NDUS was responsible for \$533 million in direct expenditures within North Dakota in FY1999. By FY2017, direct expenditures within ND had increased by 163 percent to \$1.4 billion. Much of the growth during this 18-year period has come from non-general fund sources, such as grants, contracts, and donations, which increased by 183 percent over the period. Non-general fund expenditures represented over 67 percent of the total direct spending by the NDUS in FY2017.

The North Dakota Input-Output Model was used to estimate the amount of business activity generated from expenditures by the NDUS. The total direct effects, \$1.4 billion in NDUS expenditures, were allocated to various sectors of the ND I/O Model. Interdependence coefficients within the model were then used to estimate the secondary economic effects. Combining direct and secondary economic effects provides an estimate of the gross business volume. The gross business volume associated with the NDUS was estimated at \$1.6 billion in FY1999 and \$4.1 billion in FY2017. Other key measures of economic impact include retail trade activity and economy-wide personal income. Retail trade sales attributed to the NDUS expenditures were estimated at \$393 million in FY1999 and \$1 billion in FY2017. Economy-wide personal income was estimated to be \$613 million in FY1999 and \$1.61 billion in FY2017.

Student expenditures create an economic impact that is in addition to that of the NDUS. Student spending, excluding tuition and fees, was estimated at \$455 million in FY2017. The business activity associated with spending from the 37,397 FTE students enrolled in the NDUS during the 2017-2018 academic year was estimated at \$1.1 billion.

Overall, student spending and NDUS expenditures approached \$1.9 billion in FY2017. Including secondary economic impacts raises the total economic impact to nearly \$5.3 billion. State-level effects included \$1.5 billion in additional retail trade activity and \$1.9 billion of economy-wide personal income. In FY2017, the gross business volume generated by the NDUS, combined with total economic effects from student spending, was estimated to generate \$145 million in state tax collections. Of that total, \$91 million would be from sales and use taxes and nearly \$42 million from individual and corporate income taxes.

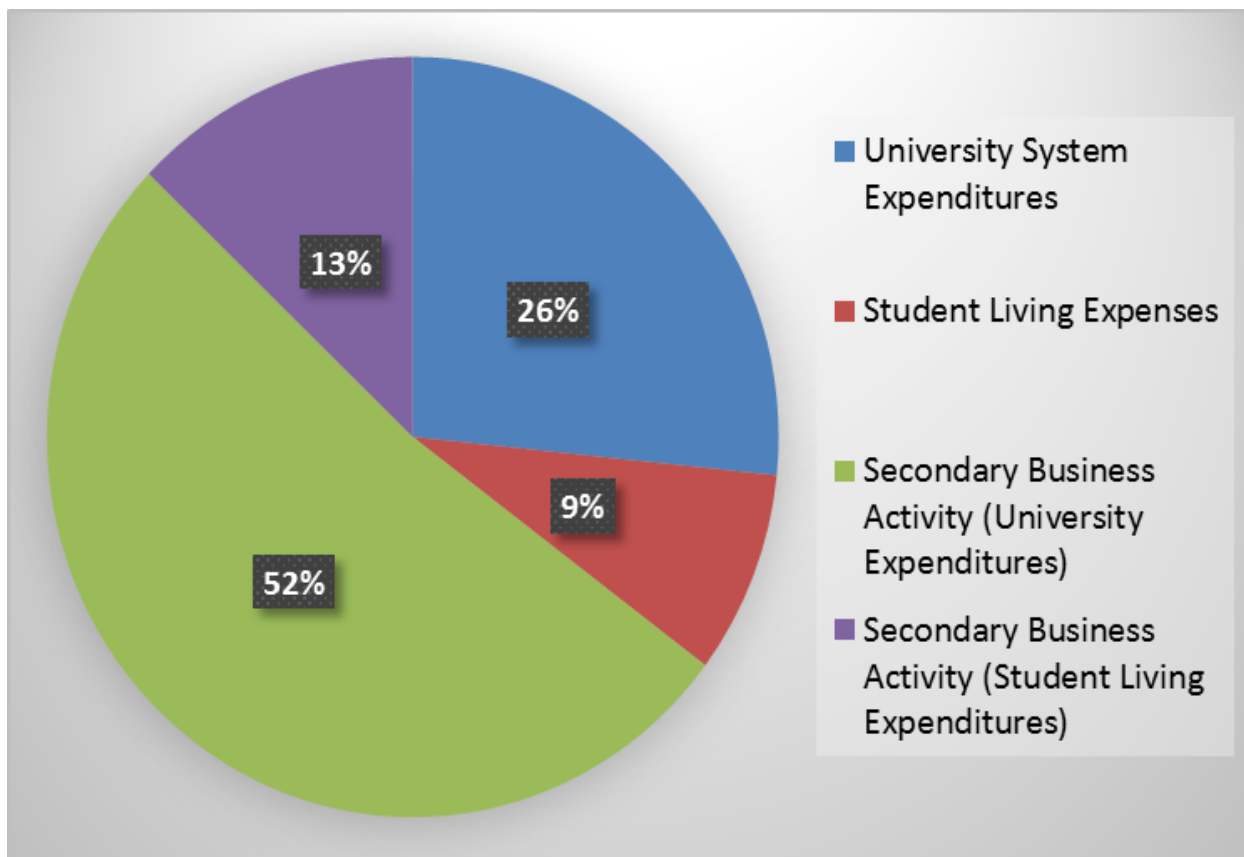


Figure 7. Composition of the North Dakota University System’s Total Economic Contribution, \$5.2 Billion, Fiscal Year 2017.

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 ever changing 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.

Essentially, 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 \$2.05 from external sources for every dollar of state appropriated funds. Much of those non-appropriated funds come from outside sources, and could be considered new money to the state of North Dakota. Those dollars, along with appropriated funds, are dispersed within the state through purchase of services, inputs, and payroll that support university programs, events, and activities. In FY2017, these institutions employed over 10,000 workers, were educating 46,787 headcount students (37,397 full-time equivalents), and their expenditures supported over 9,900 FTE secondary jobs.

The NDUS has a strong economic presence in the state. The universities and colleges in the state continue to serve as example of the importance of higher education and the benefits that a strong University System can have on the quality of life in North Dakota.

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APPENDIX A

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

Appendix Table A1. Direct Economic Impacts 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	MiSU	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 A2. Direct Economic Impacts 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 A3. Direct Economic Impacts 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 A4. Direct Economic Impacts from General and 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	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 A5. Direct Economic Impacts from General and Non-general Fund Expenditures, NDUS and Member Institutions, by Budget Category, and Allocation to the Innut-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 A6. Direct Economic Impacts 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 A7. Direct Economic Impacts 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 A8. Direct Economic Impacts 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 A9. Direct Economic Impacts 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	1,122,874	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	1,614,636	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	2,054,177	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 A10. Direct Economic Impacts 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)														
Category	BSC	DCB	DSU	LRSC	MaSU	MiSU	NDCSCS	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	1,202,1513	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	1,404,1239	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	NDCSCS	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 A11. Direct Economic Impacts 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	NDCSCS	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	NDCSCS	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 A12. Direct Economic Impacts 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 A13. Direct Economic Impacts 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 A14. Direct Economic Impacts 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	NDSUS	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	NDSUS	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 A15. Direct Economic Impacts 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 A16. Direct Economic Impacts 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)

Category	BSC	DSU	LRSC	MaSU	MiSU	DCB	NDSCS	NDSU	UND	VCSU	WSC	SYSTEM	TOTAL
Wages & Salaries	8,786,629	7,954,999	3,457,865	3,383,641	12,426,344	1,390,641	8,157,608	90,563,543	124,369,870	3,781,968	2,038,093	102,433	266,413,634
Fringe Benefits	2,710,192	2,432,127	1,040,482	1,300,808	3,751,804	460,401	2,503,835	26,558,171	34,712,933	1,149,400	578,365	30,129	77,228,647
Travel	418,701	928,695	230,987	219,490	790,409	167,879	698,292	9,716,651	8,464,286	304,194	247,985	14,614	22,202,183
Data Processing	345,149	408,809	137,620	71,338	183,625	33,348	418,145	3,394,126	5,766,845	272,550	171,250	12,572	11,215,377
Fees	782,378	950,089	343,365	33,946	954,182	87,707	184,554	10,379,109	16,262,937	189,173	567,551	5,615	30,740,606
Utilities	408,610	485,189	145,283	279,738	502,615	74,261	392,428	5,153,331	5,630,001	163,616	124,370	0	13,359,442
Communications	47,861	114,512	26,251	44,095	69,083	40,380	281,408	2,735,972	2,846,107	114,904	45,154	0	6,365,727
Insurance	30,764	437,371	16,367	22,819	73,908	10,679	32,489	1,231,998	1,724,130	31,200	6,290	17	3,618,032
Rents & Leases	343,598	105,373	45,377	69,422	124,207	27,396	224,142	5,651,141	5,869,018	412,184	55,955	16,583	12,944,396
Office	320,440	432,069	75,825	170,340	470,933	88,681	472,033	2,971,409	2,646,537	136,180	58,377	5,390	7,848,214
Supplies	1,059,778	633,526	155,080	196,294	1,400,098	125,932	408,670	5,742,524	8,790,190	268,818	152,479	2,284	18,935,673
Instructional	718,105	379,719	101,815	94,058	676,331	119,511	1,348,469	5,729,824	7,010,736	155,742	277,342	34	16,611,686
Noncap Equipment	318,990	226,293	79,597	78,619	31,582	15,737	547,996	2,071,558	2,348,430	107,563	210,980	2,028	6,039,373
Merch for Resale	1,893,867	844,849	439,836	588,631	0	250,928	2,354,204	19,469,215	20,801,633	577,206	529,939	0	47,750,308
Repairs	803,125	508,835	124,245	120,298	413,571	41,623	1,117,355	5,127,786	11,734,730	340,082	47,228	1,631	20,380,509
Scholarships etc.	4,453,704	5,192,813	1,351,953	1,255,676	5,781,059	1,048,224	2,988,631	23,103,363	18,489,533	1,931,595	1,493,470	522,577	67,612,598
General	1,850,884	2,407,641	537,092	1,001,962	2,512,784	617,250	2,142,061	19,461,322	20,765,093	1,161,874	630,594	48,887	53,137,444
Capital Equipment	2,147,054	156,431	89,283	48,548	41,166	13,785	1,109,502	na	na	82,812	613,105	0	4,301,686
Capital Improvement	694,833	4,319,956	50,323	64,550	530,624	248,560	0	11,225,692	1,131,522	0	857,815	0	19,123,875
Recovery of Exp													
TOTAL	28,134,662	28,919,296	8,448,646	9,044,273	30,734,325	4,862,923	25,381,822	250,286,735	299,364,531	11,181,061	8,706,342	764,794	705,829,410
Sector	BSC	DSU	LRSC	MaSU	MiSU	DCB	NDSCS	NDSU	UND	VCSU	WSC	SYSTEM	TOTAL
Construction	694,833	4,319,956	50,323	64,550	530,624	248,560	0	11,225,692	1,131,522	0	857,815	0	19,123,875
Com & Pub Util	456,471	599,701	171,534	323,833	571,698	114,641	673,836	7,889,303	8,476,108	278,520	169,524	0	19,725,169
Retail Trade	6,458,234	2,672,887	941,436	1,176,490	2,620,110	614,574	6,240,874	35,984,530	41,597,526	1,328,321	1,842,222	9,736	101,486,940
FIRE	2,740,956	2,869,498	1,056,849	1,323,627	3,825,712	471,080	2,536,324	27,790,169	36,437,063	1,180,600	584,655	30,146	80,846,679
Bus & Pers Ser	4,543,835	5,309,442	1,418,686	1,516,456	4,978,778	975,203	4,784,549	53,730,135	68,862,909	2,680,057	1,720,563	99,902	150,620,515
Households	13,240,333	13,147,812	4,809,818	4,639,317	18,207,403	2,438,865	11,146,239	113,666,906	142,859,403	5,713,563	3,531,563	625,010	334,026,232
TOTAL	28,134,662	28,919,296	8,448,646	9,044,273	30,734,325	4,862,923	25,381,822	250,286,735	299,364,531	11,181,061	8,706,342	764,794	705,829,410

Appendix Table A17. Direct Economic Impacts from 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)

Category	BSC	DCB	DSU	LRSC	MaSU	MiSU	NDSCS	NDSU	NDUS	UND	VCSU	WSC	TOTAL
Wages & Salaries	11,312,485	2,265,074	7,380,336	4,300,275	4,406,961	13,873,644	8,364,066	112,073,751	139,699	148,692,491	4,562,873	2,641,067	320,012,722
Fringe Benefits	3,699,386	815,881	2,459,419	1,400,724	1,814,160	4,394,714	2,833,515	32,787,351	52,063	42,325,510	1,521,257	980,357	95,084,337
Travel	546,467	206,454	893,592	252,935	326,326	1,298,405	738,776	9,623,777	26,147	9,671,846	334,088	358,682	24,277,495
Data Processing	530,925	114,142	407,454	190,417	100,815	381,675	565,109	4,130,308	1,785	3,547,442	425,468	278,140	10,673,680
Prof Fees & Services	1,556,876	56,478	1,064,960	243,236	394,005	1,482,579	156,501	14,850,191	24,054	11,072,122	267,640	359,287	31,527,929
Utilities	461,996	180,201	399,587	129,379	164,486	507,829	416,798	5,892,364		5,841,859	235,915	135,061	14,365,475
Communications	64,056	68,330	89,866	27,817	33,251	62,012	463,177	2,739,813	456	1,731,332	75,761	40,525	5,396,396
Insurance	52,965	9,490	315,072	16,028	25,194	36,339	32,398	420,396	15	1,521,838	30,385	17,212	2,477,332
Rents & Leases	436,614	24,085	85,396	72,169	98,574	206,381	1321,652	4,552,881	10,698	6,035,871	407,289	112,678	12,174,288
Office	314,774	98,160	309,877	90,209	191,799	474,609	420,565	2,645,726	12,480	2,514,627	204,359	115,697	7,392,882
Supplies	809,062	136,424	561,942	216,009	438,739	1,438,985	558,256	5,215,652	69,975	7,679,503	344,270	304,186	17,773,003
Instructional	894,435	132,071	337,490	117,135	199,792	799,874	1,298,631	6,514,429	49,901	9,385,234	202,748	312,502	20,244,242
Noncap Equipment	83,057	22,748	127,812	197,253	104,906	62,273	798,294	2,025,881	2,516	1,954,027	220,637	99,106	5,698,510
Merch for Resale	2,190,117	264,106	770,111	629,503	762,214		732,773	16,632,507		21,926,324	495,777	676,301	45,079,733
Repairs	566,293	104,650	502,850	94,861	110,333	580,684	1,427,919	4,891,941	959	11,761,971	517,762	27,144	20,587,367
Scholarships etc.	7,428,846	1,568,844	5,132,544	1,192,039	2,130,605	7,359,400	4,641,054	32,215,843	533,346	24,956,853	2,764,725	2,148,069	92,792,168
General	2,559,179	688,961	2,310,639	887,485	1,334,495	3,968,111	1,731,027	17,703,722	17,894	20,525,478	1,553,942	651,372	53,932,305
Capital Equipment	1,263,667	23,897	392,730	131,340	102,963	289,978	667,354				94,431	583,245	3,549,605
Capital Improvement	612,435		256,472	98,662	1,976,100	4,500,579	10,571	6,400,735		10,547,764	2,730,409	6,747,222	33,880,949
Recovery of Exp													
TOTAL	35,383,635	6,779,996	23,798,149	11,007,476	14,715,718	41,718,071	25,988,436	281,317,268	941,988	341,692,092	16,989,736	16,587,853	816,920,418
Sector	BSC	DCB	DSU	LRSC	MaSU	MiSU	NDSCS	NDSU	NDUS	UND	VCSU	WSC	TOTAL
Construction	612,435		256,472	98,662	1,976,100	4,500,579	10,571	6,400,735		10,547,764	2,730,409	6,747,222	33,880,949
Com & Pub Util	526,052	248,531	489,453	157,196	197,737	569,841	879,975	8,632,177	465	7,573,191	311,676	175,586	19,761,871
Retail	5,555,112	677,406	2,499,962	1,381,449	1,800,413	3,065,719	4,475,873	33,034,195	134,872	43,459,715	1,562,222	2,091,037	99,737,975
FIRE	4,188,965	849,456	2,859,887	1,488,921	1,937,938	4,637,434	2,997,565	37,760,628	62,776	49,883,219	1,958,931	1,110,247	109,735,957
Bus & Pers Ser	5,759,740	1,170,685	5,179,495	1,668,934	2,265,974	7,711,454	4,619,332	51,199,939	70,839	56,578,859	3,098,900	1,674,625	140,998,776
Households	18,741,331	3,833,918	12,512,880	6,212,314	6,537,566	21,233,044	13,005,120	144,289,594	673,045	173,649,344	7,327,598	4,789,136	412,804,890
TOTAL	35,383,635	6,779,996	23,798,149	11,007,476	14,715,718	41,718,071	25,988,436	281,317,268	941,988	341,692,092	16,989,736	16,587,853	816,920,418

Appendix Table A18. Direct Economic Impacts 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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		856,367,876
Sector	BSC	DCB	DSU	LRSC	MaSU	MiSU	NDSCS	NDSU	NDUS	UND	VCSU	WSC	SITS	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		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		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		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		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		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		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		856,367,876

Appendix Table A19. Direct Economic Impacts 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 A20. Direct Economic Impacts 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	2,303,765	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 A21. Direct Economic Impacts 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	NDSCLS	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	1,500,625	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	493,223,441	14,656,464	20,333,865	9,117,024	1,064,855,013
Sector	BSC	DCB	DSU	LRSC	MaSU	MiSU	NDSCLS	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	493,223,441	14,656,464	20,333,865	9,117,024	1,064,855,013

Appendix Table A22. Direct Economic Impacts 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	NDSCLS	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	NDSCLS	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 A23. NDUS Fall Student Enrollment, Selected Years 1999-2017

Institution	1999			2004			2006			2007		
	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³	HC ¹	FT ²	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.

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 A23. Continued									
	2008			2009			2010		
Institution	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³	HC ¹	FT ²	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	1,797	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	2,416	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
<p>¹ Headcount is all students enrolled regardless of number of credit hours.</p> <p>² Full-time is students enrolled in 12 credit hours or more.</p> <p>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.</p> <p>⁴ Includes 89 VCSU elementary education students located on the NDSU campus.</p>									

Appendix Table A23. Continued

Institution	2011			2012			2013		
	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³	HC ¹	FT ²	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 A23. Continued									
	2014			2015			2016		
Institution	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³	HC ¹	FT ²	FTE ³
Bismarck State College	4,002	2,303	2,909	4,078	2,281	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	1,031	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 A23. Continued					
Institution	2017			Percentage Change in FTE Students	
	HC ¹	FT ²	FTE ³	1999-2017	2015-2017
Bismarck State College	3,756	2,076	2,646	13.8%	-9.1%
Dickinson State University	1,425	922	1,128	-31.1%	5.4%
Lake Region State College	1,972	527	995	96.6%	1.4%
Mayville State University	1,140	602	784	13.3%	-1.5%
Minot State University	3,216	2,062	2,467	-10.4%	-4.0%
Dakota College Bottineau	909	346	527	5.8%	14.8%
ND State College of Science	2,985	1,707	2,253	-10.0%	-2.3%
North Dakota State University	14,358	11,768	12,784	45.7%	-0.4%
University of North Dakota	14,406	10,275	11,964	27.0%	-3.9%
Valley City State University	1,522	846	1,086	13.6%	5.3%
Williston State College	1,098	615	763	16.3%	3.4%
TOTAL	46,787	31,737	37,397	21.7%	-2.0%

Appendix Table A24. Direct Economic Impacts (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 A25. Direct Economic Impacts (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2014-2015 Academic Year

Institution	Fall 2014 FTE Enrollment	Living Expenses Per Student ¹	Total 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 A26. Direct Economic Impacts (Expenditures) for Student Living Expenses, Students Attending NDUS Institutions, 2017-2018 Academic Year

Institution	Fall 2017 FTE Enrollment	Living Expenses Per Student ¹	Total Expenditures
		----- \$ -----	
Bismarck State College	2,646	11,892	31,466,232
Dickinson State University	1,128	11,244	12,683,232
Lake Region State College	995	10,950	10,895,250
Mayville State University	784	10,270	8,051,680
Minot State University	2,467	11,339	27,973,313
Dakota College Bottineau	527	10,830	5,707,410
ND State College of Science	2,253	10,561	23,793,933
North Dakota State University	12,784	12,626	161,410,784
University of North Dakota	11,964	12,648	151,320,672
Valley City State University	1,086	10,902	11,839,572
Williston State College	763	13,320	10,163,160
Total	37,397		455,305,238

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 A27. Direct and Total Economic Impacts from Student Expenditures within the NDUS, by Individual Institution, Fiscal Year 2015

Item	BSC	DSU	LRSC	MaSU	MiSU	DCB	NDSCS	NDSU	UND	VCSU	WSC
Direct Impacts: (\$000)											
Student Expenditures	30,707	12,289	9,718	8,660	26,312	5,268	22,552	155,001	139,228	10,433	7,131
Direct Impacts by I-O Sector: (\$000)											
Retail Trade	23,030	9,217	7,289	6,495	19,734	3,951	16,914	116,251	104,421	7,825	5,348
Fin, Ins, Real Estate	7,677	3,072	2,429	2,165	6,578	1,317	5,638	38,750	34,807	2,608	1,783
Total	30,707	12,289	9,718	8,660	26,312	5,268	22,552	155,001	139,228	10,433	7,131
Total Impacts: (\$000)											
Construction	1,367	547	433	386	1,172	235	1,004	6,901	6,199	465	318
Comm & Pub Util	2,232	893	706	630	1,913	383	1,640	11,269	10,122	758	518
Retail Trade	34,519	13,815	10,925	9,735	29,579	5,922	25,352	174,245	156,513	11,728	8,016
FIRE	10,099	4,041	3,195	2,848	8,653	1,733	7,417	50,976	45,789	3,431	2,345
Bus & Per Serv	1,035	414	327	292	887	178	760	5,224	4,692	352	240
Prof & Soc Serv	1,262	505	399	356	1,081	217	927	6,371	5,722	429	293
Households	18,517	7,410	5,860	5,222	15,866	3,177	13,599	93,465	83,954	6,291	4,300
Other ¹	7,269	2,910	2,301	2,049	6,228	1,245	5,338	36,691	32,959	2,469	1,689
Total	76,300	30,535	24,146	21,518	65,379	13,090	56,037	385,142	345,950	25,923	17,719
Tax Revenues: (\$000)											
Sales & Use Tax	1,598	639	506	451	1,370	274	1,174	8,068	7,247	543	371
Pers Income Tax	2785	111	88	78	238	48	204	1,402	1,259	94	65
Secondary Employment (jobs)	134	51	41	38	115	24	99	677	627	45	34
¹ Includes agriculture, mining, manufacturing, transportation, and government.											

Appendix Table A28. Direct and Total Economic Impacts from Student Expenditures within the NDUS, by Individual Institution, Fiscal Year 2017

Item	BSC	DSU	LRSC	MaSU	MiSU	DCB	NDSUS	NDSU	UND	VCSU	WSC
Direct Impacts: (\$000)											
Student Expenditures	31,467	12,683	10,895	8,052	27,973	5,708	23,793	161,411	151,321	11,840	10,163
Direct Impacts by I-O Sector: (\$000)											
Retail Trade	23,600	9,512	8,171	6,039	20,980	4,281	17,845	121,058	113,491	8,880	7,622
Fin, Ins, Real Estate	7,867	3,171	2,724	2,013	6,993	1,427	5,948	40,353	37,830	2,960	2,541
Total	31,467	12,683	10,895	8,052	27,973	5,708	23,793	161,411	151,321	11,840	10,163
Total Impacts: (\$000)											
Construction	1,401	565	485	359	1,245	254	1,059	7,187	6,738	527	453
Comm & Pub Util	2,288	922	792	585	2,034	415	1,730	11,735	11,001	861	739
Retail Trade	35,373	14,257	12,247	9,052	31,446	6,417	26,747	181,450	170,108	13,310	11,425
FIRE	10,349	4,171	3,583	2,647	9,199	1,877	7,825	53,084	49,765	3,894	3,343
Bus & Per Serv	1,060	427	367	271	943	192	802	5,440	5,100	399	343
Prof & Soc Serv	1,293	521	448	331	1,150	235	978	6,634	6,219	487	418
Households	18,975	7,648	6,570	4,855	16,868	3,442	14,347	97,331	91,246	7,140	6,128
Other ¹	7,449	3,001	2,579	1,907	6,623	1,352	5,632	38,210	35,821	2,803	2,405
Total	78,188	31,512	27,071	20,007	69,508	14,184	59,120	401,071	375,998	29,421	25,254
Tax Revenues: (\$000)											
Sales & Use Tax	1,638	297	660	567	419	1,456	1,238	8,401	7,876	616	529
Pers Income Tax	285	52	115	99	73	253	215	1,460	1,369	107	92
Secondary Employment (jobs)	109	20	44	38	28	97	83	562	527	41	35

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

APPENDIX B

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

Bismarck State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Bismarck State College in the Bismarck area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period 1999-2017 was 47 percent.

Expenditures by Bismarck State College comprise the direct impacts, or "first round effects". Expenditures by Bismarck State College were \$17.9 million in FY1999, \$27.7 million in FY2004, \$29.6 million in FY2006, \$37.7 million in FY2008, \$40.2 million in FY2009, and \$50.9 million in FY 2011, \$49.6 million in FY2012, \$51.5 million in FY2013, \$58.4 million in FY2014, \$68.3 million in FY2015, and \$51.2 in FY2017 (Appendix Table B1). Expenditures increased over the 18-year period by \$50.4 million or by 281 percent.

Total impacts associated with Bismarck State College were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$52.1 million in FY1999, \$81.2 million in FY2004, \$87.8 million in FY2006, \$109.3 million in FY2008, \$116.0 million in FY2009, \$149.3 million in FY2011, \$147.1 million in FY2012, \$151.4 million in FY2013, \$170.8 million in FY2014, \$194.9 million in FY2015, and \$153.6 million in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$20.9 million in FY1999 to \$60.2 million in FY2017 or by 194.8 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated at \$13.7 million in FY1999, \$20.8 million in FY2004, \$22.0 million in FY2006, \$26.8 million in FY2008, \$30.8 million in FY2009, \$37.1 million in FY2011, \$35.9 million in FY2012, \$37.7 million in FY2013, \$40.6 in FY20014, \$46.3 in FY2015, and \$36.8 million in FY2017. This represents a \$23.0 million (167.8 percent) increase for the 18-year period.

Tax collections generated by Bismarck State College in FY2017 included \$3.1 million in retail sales, \$881,000 in personal income, \$555,000 in corporate income, and \$404,000 in miscellaneous revenues.

Levels of business activity resulting from Bismarck State College expenditures would support 312 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 571 positions (excluding student jobs) at Bismarck State College in 2017. In the Fall Semester of 2017, 2,646 full-time equivalent students were enrolled at Bismarck State College.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Bismarck area were \$31.5 million in FY2017. The total economic contribution of student spending was \$78.2 million. Student spending was estimated to generate an additional \$1.6 million in sales and use tax revenue and \$285,000 in personal income tax collections. This level of student spending would create enough business activity to support about 109 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B1. Direct and Total Economic Impacts for Bismarck State College, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
	----- \$ 000 -----											FY1999-2017	FY2015-2017
												----- % -----	
Direct Impacts:													
General Fund	6,256	7,745	8,727	9,509	11,587	13,032	13,449	14,198	15,334	16,784	15,937	154.7%	-5.0%
Nongeneral Fund	10,741	19,574	20,056	23,521	27,440	34,771	33,241	33,491	37,150	38,358	33,978	216.3%	-11.4%
Capital Improvements	<u>916</u>	<u>366</u>	<u>844</u>	<u>4621</u>	<u>1,178</u>	<u>3,122</u>	<u>2,948</u>	<u>3,854</u>	<u>5,953</u>	<u>13,181</u>	<u>1,331</u>	45.3%	-89.9%
TOTAL	17,913	27,685	29,627	37,651	40,205	50,925	49,638	51,543	58,437	68,323	51,246	186.1%	-25.0%
Direct Impacts by I-O Sector:													
Construction	916	366	844	4621	1,178	3,122	2948	3854	5953	13181	1316.944	43.8%	-90.0%
Communication and Public Util	737	709	654	722	910	956	920	982	1056	1117	1244.891	68.9%	11.4%
Retail Trade	2,928	4,063	3,710	4,472	7,150	6,324	5,290	6,606	6,036	7,785	5,264	79.8%	-32.4%
Finance, Insurance, Real Estate	2,128	3,684	4,274	4,884	4,687	6,744	7,172	7,553	8,341	8,735	9,492	346.1%	8.7%
Business and Personal Services	1,641	4,716	4,201	5,269	6,685	8,051	7,221	7,012	11,058	11,575	9,280	465.5%	-19.8%
Households	<u>9,563</u>	<u>14,147</u>	<u>15,944</u>	<u>17,683</u>	<u>19,595</u>	<u>25,728</u>	<u>26,087</u>	<u>25,536</u>	<u>25,993</u>	<u>25,930</u>	<u>24,648</u>	157.7%	-4.9%
TOTAL	17,913	27,685	29,627	37,651	40,205	50,925	49,638	51,543	58,437	68,323	51,246	186.1%	-25.0%
Total Impacts:													
Construction	2,221	2,378	3,042	7,299	4,024	6,820	6,617	7,586	10,095	17,802	5,079	128.7%	-71.5%
Communications and Public Util	2,493	3,517	3,678	4,403	4,875	6,069	5,967	6,129	6,906	7,605	6,607	165.0%	-13.1%
Retail Trade	13,726	20,791	22,018	26,757	30,768	37,110	35,888	37,715	40,585	46,256	36,756	167.8%	-20.5%
Finance, Insurance, Real Estate	4,545	7,443	8,377	9,849	9,987	13,636	14,017	14,496	16,063	17,271	16,547	264.1%	-4.2%
Business and Personal Services	2,575	6,208	5,826	7,226	8,774	10,779	9,935	9,765	14,157	14,970	12,154	372.0%	-18.8%
Professional Social Services	1,351	2,088	2,294	2,744	2,931	3,827	3,819	3,861	4,244	4,638	3,920	190.2%	-15.5%
Households	20,903	32,191	35,426	42,285	45,164	59,022	58,948	59,532	65,193	71,094	60,231	188.1%	-15.3%
Other ¹	<u>4,306</u>	<u>6,628</u>	<u>7,165</u>	<u>8,764</u>	<u>9,509</u>	<u>12,074</u>	<u>11,890</u>	<u>12,267</u>	<u>13,536</u>	<u>15,279</u>	<u>12,344</u>	186.7%	-19.2%
TOTAL	52,120	81,244	87,826	109,327	116,032	149,337	147,081	151,351	170,779	194,915	153,638	194.8%	-21.2%

Dickinson State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Dickinson State University in the Dickinson area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Dickinson State University comprise the direct impacts, or "first round effects". Expenditures by Dickinson State University were \$14.9 million in FY1999, \$23.0 million in FY2004, \$28.9 million in FY2006, \$31.1 million in FY2008, \$37.5 million in FY2009, \$37.3 million in FY2011, \$35.8 million in FY2012, \$30.0 million in FY2013, \$30.1 million in FY2014, \$30.2 million in FY2015, and \$30.0 in FY2017 (Appendix Table B2). Expenditures increased over the 18-year period by \$15.1 million or by 101 percent.

Total impacts associated with Dickinson State University were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$43.6 million in FY1999, \$67.2 million in FY2004, \$84.4 million in FY2006, \$92.6 million in FY2008, \$109.6 million in FY2009, \$111.3 million in FY2011, \$107.4 million in FY2012, \$91.4 million in FY2013, \$90.5 million in FY2014, \$91.4 million in FY2015, and \$91.6 million in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$17.3 million in FY1999 to \$37.2 million in FY2017 or by 115.2 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate*, and *Business and Personal Services*. Increased retail trade activity was estimated at \$10.7 million in FY1999, \$16.5 million in FY2004, \$20.6 million in FY2006, \$22.5 million in FY2008, \$25.7 million in FY2009, \$26.5 million in FY2011, \$25.3 million in FY2012, \$21.4 million in FY2013, \$21.5 million in FY2014, \$21.7 million in FY2015, and \$21.1 million in FY2017. This represents a \$10.5 million (98.3 percent) increase for the 18-year period.

Tax collections generated by Dickinson State College in FY2017 included \$1.9 million in retail sales, \$521,000 in personal income, \$305,000 in corporate income, and \$242,000 in miscellaneous revenues.

Levels of business activity resulting from Dickinson State University expenditures would support 188 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 231 positions (excluding student jobs) at Dickinson State University in 2017. In the Fall Semester of 2017, 1,128 full-time equivalent students were enrolled at Dickinson State University.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Dickinson area were \$12.7 million in FY2017. The total economic contribution of student spending was \$31.5 million. Student spending was estimated to generate an additional \$660,000 in sales and use tax revenue and \$115,000 in personal income tax collections. This level of student spending would create enough business activity to support 44 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B2. Direct and Total Economic Impacts for Dickinson State University, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
												----- \$ 000 -----	
Direct Impacts:													
General Fund	5,764	6,702	7,299	8,562	8,589	12,620	13,119	12,013	13,507	13,774	14,127	145.1%	2.6%
Nongeneral Fund	8,305	14,613	19,995	22,294	24,599	23,541	21,882	17,823	16,411	16,327	15,376	85.1%	-5.8%
Capital Improvements	<u>869</u>	<u>1,696</u>	<u>1,577</u>	<u>268</u>	<u>4,340</u>	<u>1,185</u>	<u>782</u>	<u>155</u>	<u>210</u>	<u>143</u>	<u>512</u>	-41.1%	258.0%
TOTAL	14,938	23,011	28,871	31,124	37,528	37,346	35,783	29,991	30,128	30,244	30,015	100.9%	-0.8%
Direct Impacts by I-O Sector:													
Construction	869	1,696	1,577	268	4,340	1,185	782	155	210	143	267	-69.3%	86.7%
Communication and Public Util	821	969	880	951	931	944	927	849	955	882	823	0.2%	-6.7%
Retail Trade	1,663	2,587	3,115	3,057	3,156	3,168	2,803	2,418	2,375	2,627	1,923	15.6%	-26.8%
Finance, Insurance, Real Estate	1,604	2,551	3,110	3,936	4,162	5,014	5,358	4,858	5,437	5,211	5,646	252.0%	8.4%
Business and Personal Services	2,382	3,278	5,373	5,706	6,309	6,735	6,500	5,316	5,088	5,088	5,184	117.6%	1.9%
Households	<u>7,599</u>	<u>11,930</u>	<u>14,816</u>	<u>17,206</u>	<u>18,630</u>	<u>20,300</u>	<u>19,413</u>	<u>16,395</u>	<u>16,063</u>	<u>16,293</u>	<u>16,173</u>	112.8%	-0.7%
TOTAL	14,938	23,011	28,871	31,124	37,528	37,346	35,783	29,991	30,128	30,244	30,015	100.9%	-0.8%
Total Impacts:													
Construction	1,958	3,378	3,681	2,604	7,061	3,986	3,481	2,431	2,494	2,432	2,561	30.8%	5.3%
Communications and Public Util	2,321	3,263	3,796	4,190	4,666	4,826	4,689	4,030	4,164	4,087	4,048	74.4%	-1.0%
Retail Trade	10,650	16,501	20,561	22,471	25,744	26,484	25,312	21,410	21,465	21,745	21,122	98.3%	-2.9%
Finance, Insurance, Real Estate	3,629	5,676	7,037	8,313	9,221	10,259	10,421	9,130	9,725	9,506	9,957	174.4%	4.7%
Business and Personal Services	3,172	4,495	6,917	7,439	8,294	8,818	8,525	7,031	6,821	6,818	6,932	118.5%	1.7%
Professional Social Services	1,120	1,733	2,171	2,440	2,793	2,922	2,824	2,388	2,398	2,403	2,414	115.5%	0.5%
Households	17,283	26,780	33,502	37,679	43,096	45,112	43,574	36,841	36,959	37,047	37,197	115.2%	0.4%
Other ¹	<u>3,504</u>	<u>5,418</u>	<u>6,766</u>	<u>7,473</u>	<u>8,684</u>	<u>8,935</u>	<u>8,620</u>	<u>7,290</u>	<u>7,354</u>	<u>7,378</u>	<u>7,345</u>	109.6%	-0.4%
TOTAL	43,637	67,244	84,431	92,609	109,559	111,342	107,446	91,380	90,551	91,416	91,576	109.9%	0.2%

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

Lake Region State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Lake Region State College in the Devils Lake area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Lake Region State College comprise the direct impacts, or "first round effects". Expenditures by Lake Region State College were \$6.7 million in FY1999, \$9.2 million in FY2004, \$10.2 million in FY2006, \$11.4 million in FY2008, \$11.8 million in FY2009, \$15.1 million in FY2011, \$20.5 million in FY2012, \$21.1 million in FY2013, \$21.8 million in FY2014, \$20.5 million in FY2015, and \$17.9 million in FY2017 (Appendix Table B3). Expenditures increased over the 18-year period by \$11.1 million or by 165 percent.

Total impacts associated with Lake Region State College were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$19.6 million in FY1999, \$27.3 million in FY2004, \$30.1 million in FY2006, \$33.9 million in FY2008, \$35.2 million in FY2009, \$45.5 million in FY2011, \$59.4 million in FY2012, \$60.8 million in FY2013, \$63.3 million in FY2014, \$60.6 million in FY2015, and \$53.8 million in FY2017. The sector with the largest impact was the *Households Sector* (i.e., personal income of area residents) for each year presented. Personal income increased from \$7.9 million in FY1999 to \$21.7 million in FY2017 or by 175.7 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$4.9 million in FY1999, \$6.6 million in FY2004, \$7.2 million in FY2006, \$8.3 million in FY2008, \$8.5 million in FY2009, \$11.2 million in FY2011, \$13.9 million in FY2012, \$14.1 million in FY2013, \$14.9 million in FY2014, \$14.8 million in FY2015, and \$12.9 million in FY2017. This represents an \$8 million (161.3 percent) increase for the 18-year period.

Tax collections generated by Lake Region State College in FY2017 included \$1.1 million in retail sales, \$303,000 in personal income, \$180,000 in corporate income, and \$142,000 in miscellaneous revenues.

Levels of business activity resulting from Lake Region State College expenditures would support 110 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 271 positions (excluding student jobs) at Lake Region State College in 2017. In the Fall Semester of 2017, 995 full-time equivalent students were enrolled at Lake Region State College.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Devils Lake area were \$10.9 million in FY2017. The total economic contribution was \$27.1 million. Student spending was estimated to generate an additional \$567,000 in sales and use tax revenue, and \$99,000 in personal income tax collections. This level of student spending would create enough business activity to support 38 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B3. Direct and Total Economic Impacts for Lake Region State College, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change		
	----- \$ 000 -----											FY1999-2017	FY2015-2017	
												----- % -----		
Direct Impacts:														
General Fund	2,145	2,471	2,828	3,220	3,243	4,127	4,826	4,931	6,266	6,579	6,868	220.2%	4.4%	
Nongeneral Fund	3,880	6,077	6,781	8,075	8,398	10,909	12,982	11,528	11,650	12,224	10,104	160.4%	-17.3%	
Capital Improvements	<u>723</u>	<u>696</u>	<u>549</u>	<u>64</u>	<u>109</u>	<u>107</u>	<u>2,681</u>	<u>4,652</u>	<u>3,886</u>	<u>1,703</u>	<u>882</u>	22.0%	-48.2%	
TOTAL	6,748	9,244	10,158	11,359	11,750	15,143	20,489	21,111	21,802	20,506	17,854	164.6%	-12.9%	
Direct Impacts by I-O Sector:														
Construction	723	696	549	64	109	107	2,681	4,652	3,886	1,703	882	22.0%	-48.2%	
Communication and Public Util	225	333	294	307	308	290	263	250	249	265	245	9.0%	-7.4%	
Retail Trade	853	874	961	1,217	1,080	1,540	1,924	1,813	2,103	2,316	1,644	92.7%	-29.0%	
Finance, Insurance, Real Estate	694	1,177	1,319	1,569	1,601	2,286	2,545	2,710	3,162	3,333	3,286	373.5%	-1.4%	
Business and Personal Services	620	1,189	1,597	1,878	1,881	2,216	4,062	2,646	2,868	2,844	2,306	271.9%	-18.9%	
Households	<u>3,633</u>	<u>4,975</u>	<u>5,438</u>	<u>6,324</u>	<u>6,771</u>	<u>8,704</u>	<u>9,014</u>	<u>9,040</u>	<u>9,534</u>	<u>10,045</u>	<u>9,492</u>	161.3%	-5.5%	
TOTAL	6,748	9,244	10,158	11,359	11,750	15,143	20,489	21,111	21,111	20,506	17,854	164.6%	-12.9%	
Total Impacts:														
Construction	1,216	1,384	1,304	919	1,004	1,260	4,122	6,125	5,399	3,194	2,224	82.9%	-30.4%	
Communications and Public Util	880	1,266	1,332	1,488	1,536	1,872	2,289	2,256	2,359	2,331	2,100	138.6%	-9.9%	
Retail Trade	4,935	6,581	7,240	8,329	8,529	11,161	13,935	14,086	14,907	14,784	12,896	161.3%	-12.8%	
Finance, Insurance, Real Estate	1,606	2,456	2,729	3,169	3,277	4,445	5,228	5,425	5,999	6,111	5,796	260.9%	-5.2%	
Business and Personal Services	970	1,689	2,153	2,512	2,544	3,074	5,132	3,713	3,993	3,955	3,315	241.8%	-16.2%	
Professional Social Services	509	713	785	895	939	1,213	1,469	1,491	1,563	1,546	1,409	176.8%	-8.9%	
Households	7,881	11,030	12,126	13,822	14,529	18,763	22,578	22,948	24,054	23,818	21,731	175.7%	-8.8%	
Other ¹	<u>1,595</u>	<u>2,203</u>	<u>2,421</u>	<u>2,751</u>	<u>2,855</u>	<u>3,710</u>	<u>4,675</u>	<u>4,776</u>	<u>5,013</u>	<u>4,890</u>	<u>4,361</u>	173.4%	-10.8%	
TOTAL	19,592	27,322	30,090	33,885	35,213	45,498	59,428	60,820	63,287	60,629	53,832	174.8%	-11.2%	
¹ Includes agriculture, mining, manufacturing, transportation, and government.														

Mayville State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Mayville State University in the Mayville area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Mayville State University comprise the direct impacts, or "first round effects". Expenditures by Mayville State University were \$9.4 million in FY1999, \$15.8 million in FY2004, \$13.7 million in FY2006, \$14.0 million in FY2008, \$14.6 million in FY2009, \$24.5 million in FY2011, \$21.0 million in FY2012, \$20.6 million in FY2013, \$22.6 million in FY2014, \$25.5 million in FY2015, and \$22.8 million in FY2017 (Appendix Table B4). Expenditures increased over the 18-year period by \$13.4 million or by 141.9 percent.

Total impacts associated with Mayville State University were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$28.4 million in FY1999, \$45.2 million in FY2004, \$41.0 million in FY2006, \$41.5 million in FY2008, \$43.5 million in FY2009, \$70.2 million in FY2011, \$62.3 million in FY2012, \$61.8 million in FY2013, \$67.5 million in FY2014, \$75.4 million in FY2015, and \$69.7 million in FY2017. The sector with the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$11.3 million in FY1999 to \$28.5 million in FY2017 or by 151.4 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$6.8 million in FY1999, \$10.3 million in FY2004, \$10.2 million in FY2006, \$10.2 million in FY2008, \$10.4 million in FY2009, \$16.2 million in FY2011, \$14.9 million in FY2012, \$14.9 million in FY2013, \$15.9 million in FY2014, \$17.6 million in FY2015, and \$16.3 million in FY2017.

Tax collections generated by Mayville State University in FY2017 included \$1.4 million in retail sales, \$395,000 in personal income, \$228,000 in corporate income, and \$185,000 in miscellaneous revenues.

Levels of business activity resulting from Mayville State University expenditures would support 143 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 290 positions (excluding student jobs) at Mayville State University in 2017. In the Fall Semester of 2017, 784 full-time equivalent students were enrolled at Mayville State University.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Mayville area were \$8.1 million in FY2017. The total economic contribution was \$20.0 million. Student spending was estimated to generate an additional \$419,000 in sales and use tax revenue and \$73,000 in personal income tax collections. This level of student spending would create enough business activity to support nearly 28 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B4. Direct and Total Economic Impacts for Mayville State University, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
	----- \$000-----											FY1999-2017	FY2015-2017
												----- % -----	
Direct Impacts:													
General Fund	3,735	4,420	4,343	4,835	5,108	5,901	6,224	6,437	7,080	7,697	7,375	97.5%	-4.2%
Nongeneral Fund	5,481	7,582	9,220	8,337	8,980	12,740	13,548	13,644	13,717	14,486	14,958	172.9%	3.3%
Capital Improvements	<u>210</u>	<u>3,778</u>	<u>176</u>	<u>871</u>	<u>521</u>	<u>5,875</u>	<u>1,190</u>	<u>504</u>	<u>1,818</u>	<u>3,353</u>	<u>469</u>	123.3%	-86.0%
TOTAL	9,426	15,780	13,739	14,043	14,609	24,516	20,962	20,585	22,615	25,536	22,802	141.9%	-10.7%
Direct Impacts by I-O Sector:													
Construction	210	3,778	176	871	521	5,875	1,190	504	1,818	3,353	403	92.1%	-88.0%
Communication and Public Util	458	428	739	864	873	532	545	619	607	620	615	34.2%	-0.8%
Retail Trade	980	1,285	1,697	1,637	1,460	2,127	2,144	2,108	2,003	2,163	1,689	72.4%	-21.9%
Finance, Insurance, Real Estate	1,799	1,858	2,140	2,135	2,244	3,127	3,428	3,592	3,959	4,198	4,550	152.9%	8.4%
Business and Personal Services	1,207	2,031	1,616	1,576	2,106	3,009	3,400	3,111	3,277	3,344	3,043	152.1%	-9.0%
Households	<u>4,772</u>	<u>6,400</u>	<u>7,371</u>	<u>6,960</u>	<u>7,405</u>	<u>9,846</u>	<u>10,255</u>	<u>10,651</u>	<u>10,951</u>	<u>11,858</u>	<u>12,501</u>	162.0%	5.4%
TOTAL	9,426	15,780	13,739	14,043	14,609	24,516	20,962	20,585	22,615	25,536	22,802	141.9%	-10.7%
Total Impacts:													
Construction	914	4,865	1,203	1,900	1,604	7,562	2,724	2,039	3,478	5,199	2,152	135.4%	-58.6%
Communications and Public Util	1,443	1,912	2,152	2,280	2,380	2,837	2,695	2,765	2,924	3,174	3,046	111.1%	-4.0%
Retail Trade	6,848	10,312	10,220	10,155	10,435	16,156	14,947	14,927	15,874	17,580	16,346	138.7%	-7.0%
Finance, Insurance, Real Estate	3,114	3,857	4,055	4,045	4,263	6,228	6,293	6,465	7,055	7,627	7,830	151.4%	2.7%
Business and Personal Services	1,736	2,812	2,372	2,328	2,907	4,226	4,551	4,266	4,522	4,713	4,368	151.6%	-7.3%
Professional Social Services	735	1,091	1,072	1,062	1,122	1,694	1,591	1,605	1,722	1,900	1,845	151.0%	-2.9%
Households	11,322	16,782	16,551	16,377	17,301	26,056	24,497	24,728	26,502	29,255	28,469	151.4%	-2.7%
Other ¹	<u>2,304</u>	<u>3,519</u>	<u>3,352</u>	<u>3,359</u>	<u>3,504</u>	<u>5,490</u>	<u>5,004</u>	<u>5,000</u>	<u>5,399</u>	<u>6,001</u>	<u>5,639</u>	144.7%	-6.0%
TOTAL	28,416	45,150	40,977	41,506	43,516	70,249	62,302	61,795	67,476	75,449	69,695	145.3%	-7.6%
¹ Includes agriculture, mining, manufacturing, transportation, and government.													

Minot State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Minot State University in the Minot area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Minot State University comprise the direct impacts, or "first round effects". Expenditures by Minot State University were \$30.1 million in FY1999, \$39.4 million in FY2004, \$46.3 million in FY2006, \$44.7 million in FY2008, \$48.5 million in FY2009, \$61.6 million in FY2011, \$77.0 million in FY2012, \$62.1 million in FY2013, \$64.2 million in FY2014, \$65.7 million in FY2015, and \$59.0 million in FY2017 (Appendix Table B5). Expenditures increased over the 18-year period by \$29 million or by 96.2 percent.

Total impacts associated with Minot State University were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$89.0 million in FY1999, \$119.8 million in FY2004, \$136.5 million in FY2006, \$135.1 million in FY2008, \$145.5 million in FY2009, \$183.6 million in FY2011, \$222.7 million in FY2012, \$186.4 million in FY2013, \$192.3 million in FY2014, \$196.5 million in FY2015, and \$180.0 million in FY2017. The sector with the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$36.3 million in FY1999 to \$74.0 million in FY2017 or by 103.9 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$21.2 million in FY1999, \$28.2 million in FY2004, \$33.0 million in FY2006, \$31.9 million in FY2008, \$34.2 million in FY2009, \$42.4 million in FY2011, \$49.5 million in FY2012, \$42.7 million in FY2013, \$44.7 million in FY2014, \$45.0 million in FY2015, and \$41.9 million in FY2017. This represents a \$20.7 million (97.8 percent) increase for the 18-year period.

Tax collections generated by Minot State University in FY2017 included \$3.7 million in retail sales, \$1 million in personal income, \$577,000 in corporate income, and \$477,000 in miscellaneous revenues.

Levels of business activity resulting from Minot State University expenditures would support 369 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 727 positions (excluding student jobs) at Minot State University in 2017. In the Fall Semester of 2017, 2,467 full-time equivalent students were enrolled at Minot State University.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Minot area were \$28 million in FY2017. The total economic contribution of student spending was \$69.5 million. Student spending was estimated to generate an additional \$1.5 million in sales and use tax revenue and \$253,000 in personal income tax collections. This level of student spending would create enough business activity to support about 97 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B5. Direct and Total Economic Impacts for Minot State University, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
----- \$ 000 -----												----- % -----	
Direct Impacts:													
General Fund	16,966	20,712	13,822	14,710	15,159	18,756	24,296	20,427	22,566	23,813	21,264	25.3%	-10.7%
Nongeneral Fund	9,747	18,019	28,043	28,920	30,204	37,218	33,010	36,247	38,142	35,689	35,602	265.3%	-0.2%
Capital Improvements	<u>3,375</u>	<u>671</u>	<u>4,422</u>	<u>1,031</u>	<u>3,146</u>	<u>5,618</u>	<u>19,739</u>	<u>5,433</u>	<u>3,505</u>	<u>6,176</u>	<u>2,176</u>	-35.5%	-64.8%
TOTAL	30,088	39,402	46,287	44,661	48,509	61,592	77,045	62,107	64,213	65,678	59,042	96.2%	-10.1%
Direct Impacts by I-O Sector:													
Construction	3,375	671	4,422	1,031	3,146	5,618	19,739	5,433	3,505	6,176	1,130	-66.5%	-81.7%
Communication and Public Util	1,063	1,266	1,223	1,338	1,293	1,434	1,427	1,703	1,940	1,792	1,773	66.8%	-1.1%
Retail Trade	2,450	2,789	4,444	3,139	3,394	3,874	4,331	3,669	4,703	4,030	3,881	58.4%	-3.7%
Finance, Insurance, Real Estate	3,718	6,701	5,891	6,632	6,858	8,591	9,639	9,824	10,118	10,375	10,782	190.0%	3.9%
Business and Personal Services	2,741	5,269	5,361	6,069	6,160	9,017	8,275	8,348	10,825	9,375	8,301	202.9%	-11.5%
Households	<u>16,741</u>	<u>22,706</u>	<u>24,946</u>	<u>26,452</u>	<u>27,658</u>	<u>33,058</u>	<u>33,634</u>	<u>33,130</u>	<u>33,122</u>	<u>33,930</u>	<u>33,174</u>	<u>98.2%</u>	<u>-2.2%</u>
TOTAL	30,088	39,402	46,287	44,661	48,509	61,592	77,045	62,107	64,213	65,678	59,042	96.2%	-10.1%
Total Impacts:													
Construction	5,633	3,716	7,856	4,487	6,844	10,237	25,170	10,115	8,298	11,082	5,679	0.8%	-48.8%
Communications and Public Util	4,063	5,444	5,850	6,038	6,297	7,740	8,727	8,111	8,622	8,544	8,063	98.4%	-5.6%
Retail Trade	21,185	28,199	32,988	31,928	34,193	42,365	49,536	42,729	44,671	44,965	41,911	97.8%	-6.8%
Finance, Insurance, Real Estate	7,902	12,403	12,269	13,099	13,757	17,204	19,625	18,556	19,084	19,524	19,289	144.1%	-1.2%
Business and Personal Services	4,359	7,541	7,850	8,623	8,873	12,420	12,169	11,816	14,414	13,017	11,724	169.0%	-9.9%
Professional Social Services	2,343	3,209	3,562	3,639	3,870	4,804	5,489	4,879	4,989	5,098	4,794	104.6%	-6.0%
Households	36,308	49,615	55,102	56,338	59,902	74,224	84,623	75,357	76,903	78,665	74,040	103.9%	-5.9%
Other ¹	<u>7,174</u>	<u>9,699</u>	<u>11,013</u>	<u>10,933</u>	<u>11,714</u>	<u>14,638</u>	<u>17,339</u>	<u>14,880</u>	<u>15,348</u>	<u>15,640</u>	<u>14,527</u>	<u>102.5%</u>	<u>-7.1%</u>
TOTAL	88,967	119,826	136,490	135,085	145,450	183,632	222,678	186,443	192,329	196,535	180,027	102.4%	-8.4%

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

Dakota College at Bottineau

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Dakota College at Bottineau in the Bottineau area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Dakota College at Bottineau comprise the direct impacts, or "first round effects". Expenditures by Dakota College at Bottineau were \$4.6 million in FY1999, \$5.4 million in FY2004, \$6.0 million in FY2006, \$6.7 million in FY2008, \$7.4 million in FY2009, \$9.5 million in FY2011, \$9.0 million in FY2012, \$9.6 million in FY2013, \$11.0 million in FY2014, \$11.4 million in FY2015, and \$11.2 million in FY2017 (Appendix Table B6). Expenditures increased over the 18-year period by \$6.6 million or by 144.6 percent.

Total impacts associated with Dakota College at Bottineau were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$13.5 million in FY1999, \$15.9 million in FY2004, \$17.6 million in FY2006, \$19.8 million in FY2008, \$21.9 million in FY2009, \$28.1 million in FY2011, \$27.1 million in FY2012, \$28.7 million in FY2013, \$32.7 million in FY2014, \$33.7 million in FY2015, and \$33.2 million in FY2017. The sector with the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$5.4 million in FY1999 to \$13.0 million in FY2017 or by 139.1 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$3.3 million in FY1999, \$3.9 million in FY2004, \$4.2 million in FY2006, \$4.9 million in FY2008, \$5.3 million in FY2009, \$6.6 million in FY2011, \$6.6 million in FY2012, \$6.8 million in FY2013, \$8.0 million in FY2014, \$7.9 million in FY2015, and \$7.8 million in FY2017. This represents a \$4.5 million (135.2 percent) increase for the 18-year period.

Tax collections generated by Dakota College Bottineau in FY2017 included \$672,000 in retail sales, \$188,000 in personal income, \$120,000 in corporate income, and \$87,000 in miscellaneous revenues.

Levels of business activity resulting from Dakota College at Bottineau expenditures would support 67 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 160 positions (excluding student jobs) at Dakota College at Bottineau in 2017. In the Fall Semester of 2017, 527 full-time equivalent students were enrolled at Dakota College at Bottineau.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Bottineau area were \$5.7 million in FY2017. The total economic contribution was \$14.2 million. Student spending was estimated to generate an additional \$297,000 in sales and use tax collections and \$52,000 in personal income tax collections. This level of student spending would create enough business activity to support 20 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B6. Direct and Total Economic Impacts for Dakota College at Bottineau, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
	----- \$ 000 -----											----- % -----	
Direct Impacts:													
General Fund	2,456	2,813	2,248	2,439	2,535	1,875	3,194	3,372	4,230	4,095	3,901	58.8%	-4.7%
Nongeneral Fund	1,878	2,420	3,228	4,025	4,614	6,780	5,777	5,534	6,161	5,968	6,363	238.8%	6.6%
Capital Improvements	<u>242</u>	<u>117</u>	<u>477</u>	<u>200</u>	<u>249</u>	<u>871</u>	<u>58</u>	<u>713</u>	<u>651</u>	<u>1,377</u>	<u>927</u>	283.1%	-32.7%
TOTAL	4,576	5,350	5,953	6,664	7,399	9,526	9,029	9,619	11,042	11,440	11,191	144.6%	-2.2%
Direct Impacts by I-O Sector:													
Construction	242	117	477	200	249	871	58	713	651	1,377	927	282.9%	-32.7%
Communication and Public Util	212	241	216	250	256	358	266	294	325	369	302	42.5%	-18.1%
Retail Trade	489	601	532	719	783	787	917	812	1,240	1,030	938	91.9%	-8.9%
Finance, Insurance, Real Estate	515	756	798	924	966	1,230	1,392	1,457	1,679	1,766	1,748	239.4%	-1.0%
Business and Personal Services	646	727	845	966	1,183	1,342	1,349	1,325	1,565	1,659	1,902	194.4%	14.6%
Households	<u>2,472</u>	<u>2,908</u>	<u>3,085</u>	<u>3,605</u>	<u>3,962</u>	<u>4,938</u>	<u>5,047</u>	<u>5,018</u>	<u>5,582</u>	<u>5,239</u>	<u>5,374</u>	117.4%	2.6%
TOTAL	4,576	5,350	5,953	6,664	7,399	9,526	9,029	9,619	11,042	11,440	11,191	144.6%	-2.2%
Total Impacts:													
Construction	581	517	917	698	799	1,575	742	1,429	1,461	2,200	1,744	200.2%	-20.7%
Communications and Public Util	674	791	819	934	1,014	1,320	1,210	1,278	1,446	1,513	1,446	114.5%	-4.4%
Retail Trade	3,295	3,923	4,186	4,852	5,349	6,630	6,617	6,775	7,987	7,882	7,750	135.2%	-1.7%
Finance, Insurance, Real Estate	1,146	1,503	1,617	1,853	1,993	2,539	2,673	2,791	3,189	3,294	3,272	185.5%	-0.7%
Business and Personal Services	892	1,021	1,167	1,332	1,588	1,856	1,858	1,854	2,165	2,268	2,513	181.7%	10.8%
Professional Social Services	351	417	455	518	572	728	718	744	840	844	844	140.5%	0.0%
Households	5,432	6,449	7,030	8,009	8,830	11,237	11,090	11,485	12,959	12,991	12,988	139.1%	0.0%
Other ¹	<u>1,088</u>	<u>1,296</u>	<u>1,411</u>	<u>1,607</u>	<u>1,771</u>	<u>2,249</u>	<u>2,205</u>	<u>2,301</u>	<u>2,642</u>	<u>2,674</u>	<u>2,640</u>	142.6%	-1.3%
TOTAL	13,459	15,917	17,602	19,803	21,916	28,134	27,113	28,657	32,689	33,666	33,197	146.7%	-1.4%

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

North Dakota State College of Science

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of North Dakota State College of Science in the Wahpeton area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by North Dakota State College of Science comprise the direct impacts, or "first round effects." Expenditures by North Dakota State College of Science were \$30.6 million in FY1999, \$34.7 million by FY2004, \$35.6 million in FY2006, \$39.7 million in FY2008, \$40.5 million in FY2009, \$44.6 million in FY2011, \$46.3 million in FY2012, \$59.7 million in FY2013, \$49.9 million in FY2014, \$54.4 million in FY2015, and \$57.0 million in FY2017 (Appendix Table B7). Expenditures increased over the 18-year period by \$26.4 million or by 86.4 percent.

Total impacts associated with North Dakota State College of Science were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$87.5 million in FY1999, \$100.8 million in FY2004, \$103.6 million in FY2006, \$115.5 million in FY2008, \$117.7 million in FY2009, \$131.4 million in FY2011, \$137.8 million in FY2012, \$170.4 million in FY2013, \$147.3 million in FY2014, \$159.2 million in FY2015, and \$165.6 million in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$33.5 million in FY1999 to \$62.9 million in FY2017 or by 87.8 percent. Other sectors receiving major contributions included *Retail Trade*, *Construction*, *Finance*, *Insurance*, and *Real Estate*, and *Business and Personal Services*. Increased retail trade activity was estimated to be \$22.6 million in FY1999, \$26.0 million in FY2004, \$27.1 million in FY2006, \$29.5 million in FY2008, \$31.0 million in FY2009, \$33.0 million in FY2011, \$33.0 million in FY2012, \$39.4 million in FY2013, \$34.7 million in FY2014, \$38.3 million in FY2015, and \$40.3 million in FY2017. This represents a \$17.7 million (78.3 percent) increase for the 18-year period.

Tax collections generated by North Dakota State College of Science in FY2017 included \$3.3 million in retail sales, \$943,000 in personal income, \$635,000 in corporate income, and \$428,000 in miscellaneous revenues.

Levels of business activity resulting from North Dakota State College of Science expenditures would support 331 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 572 positions (excluding student jobs) at North Dakota State College of Science in 2017. In the Fall Semester of 2017, 2,253 full-time equivalent students were enrolled at North Dakota State College of Science.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Wahpeton area were \$23.8 million in FY2017. The total economic contribution was \$59.1 million. Student spending was estimated to generate an additional \$1.2 million sales and use tax revenue and \$215,000 in personal income tax collections. This level of student spending would create enough business activity to support 83 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B7. Direct and Total Economic Impacts for North Dakota State College of Science, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
	----- \$ 000 -----											FY1999-2017	FY2015-2017
----- % -----													
Direct Impacts:													
General Fund	15,199	16,116	12,404	14,276	14,736	17,462	17,556	18,714	20,188	19,809	18,624	22.5%	-6.0%
Nongeneral Fund	12,302	17,777	22,478	25,110	25,382	25,978	26,960	26,892	24,258	27,384	28,801	134.1%	5.2%
Capital Improvements	<u>3,066</u>	<u>757</u>	<u>739</u>	<u>294</u>	<u>378</u>	<u>1,169</u>	<u>1,820</u>	<u>14,069</u>	<u>5,455</u>	<u>7,256</u>	<u>9,547</u>	211.4%	31.6%
TOTAL	30,567	34,650	35,621	39,680	40,496	44,609	46,336	59,675	49,894	54,449	56,972	86.4%	4.6%
Direct Impacts by I-O Sector:													
Construction	3,066	757	739	294	378	1,169	1,820	14,069	5,455	7,256	8,816	187.6%	21.5%
Communication and Public Util	1,662	1,838	1,693	1,594	1,494	1,832	1,725	1,804	2,070	1,871	1,714	3.1%	-8.4%
Retail Trade	4,945	5,543	6,027	6,170	7,075	6,041	4,448	5,448	4,631	5,985	6,879	39.1%	14.9%
Finance, Insurance, Real Estate	3,416	4,377	4,623	5,193	5,258	6,292	6,716	7,114	7,781	8,190	8,878	159.9%	8.4%
Business and Personal Services	3,499	5,503	5,176	8,220	6,660	6,781	7,796	7,324	6,402	6,197	5,861	67.5%	-5.4%
Households	<u>13,979</u>	<u>16,632</u>	<u>17,363</u>	<u>18,209</u>	<u>19,631</u>	<u>22,494</u>	<u>23,831</u>	<u>23,916</u>	<u>23,555</u>	<u>24,950</u>	<u>24,823</u>	77.6%	-0.5%
TOTAL	30,567	34,650	35,621	39,680	40,496	44,609	46,336	59,675	49,894	54,449	56,972	86.4%	4.6%
Total Impacts:													
Construction	5,204	3,232	3,287	3,102	3,263	4,422	5,250	18,164	9,074	11,144	12,824	146.4%	15.1%
Communications and Public Util	4,588	5,302	5,241	5,613	5,542	6,359	6,506	7,395	7,072	7,212	7,221	57.4%	0.1%
Retail Trade	22,576	25,999	27,108	29,458	30,999	33,038	32,972	39,421	34,729	38,328	40,257	78.3%	5.0%
Finance, Insurance, Real Estate	7,361	8,983	9,362	10,445	10,637	12,357	13,127	14,637	14,500	15,386	16,278	121.1%	5.8%
Business and Personal Services	5,026	7,318	7,041	10,321	8,789	9,183	10,347	10,261	9,067	9,039	8,787	74.8%	-2.8%
Professional Social Services	2,173	2,544	2,625	2,886	2,977	3,369	3,562	4,104	3,722	3,982	4,088	88.1%	2.7%
Households	33,495	39,178	40,444	44,330	45,835	51,942	54,923	63,119	57,337	61,332	62,907	87.8%	2.6%
Other ¹	<u>7,109</u>	<u>8,213</u>	<u>8,490</u>	<u>9,339</u>	<u>9,650</u>	<u>10,683</u>	<u>11,063</u>	<u>13,325</u>	<u>11,758</u>	<u>12,749</u>	<u>13,275</u>	86.7%	4.1%
TOTAL	87,532	100,769	103,598	115,494	117,692	131,353	137,750	170,426	147,259	159,172	165,637	89.2%	4.1%

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

North Dakota State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of North Dakota State University in the Fargo area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by North Dakota State University comprise the direct impacts, or "first round effects." Expenditures by North Dakota State University were \$167.6 million in FY1999, \$246.8 million in FY2004, \$284.7 million in FY2006, \$346.0 million in FY2008, \$355.4 million in FY2009, \$404.3 million in FY2011, \$432.1 million in FY2012, \$439.1 million in FY2013, \$452.9 million in FY2014, 540.4 million in FY2015, and \$520.3 million in FY2017 (Appendix Table B8). Expenditures increased over the 18-year period by \$352.7 million or by 210.4 percent.

Total impacts associated with North Dakota State University were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated to be \$490.8 million in FY1999, \$730.6 million in FY2004, \$835.6 million in FY2006, \$1.0 billion in FY2008, \$1.0 billion in FY2009, \$1.2 billion in FY2011, \$1.3 billion in FY2012, \$1.3 billion in FY2013, \$1.3 billion in FY2014, \$1.5 billion in FY2015, and \$1.5 billion in FY2017. The sector with the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$194.2 million in FY1999 to \$574.6 million in FY2017 or by 195.9 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$125.3 million in FY1999, \$171.7 million in FY2004, \$206.4 million in FY2006, \$250.8 million in FY2008, \$255.6 million in FY2009, \$287.3 million in FY2011, \$308.5 million in FY2012, \$321.1 million in FY2013, \$335.8 million in FY2014, \$405.3 million in FY2015, and \$384.7 million in FY2017. This represents a \$259.5 million (207.1 percent) increase for the 18-year period.

Tax collections generated by North Dakota State University in FY2017 included \$30 million in retail sales, \$8.6 million in personal income, \$5.8 million in corporate income, and \$3.9 million in miscellaneous revenues.

Levels of business activity resulting from North Dakota State University expenditures would support 3,029 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 3,619 positions (excluding student jobs) employed at North Dakota State University in 2017. In the Fall Semester of 2017, 12,784 full-time equivalent students were enrolled at North Dakota State University.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Fargo area were \$161.4 million in FY2017. The total economic contribution of student spending was \$401.1 million. Student spending was estimated to generate an additional \$8.4 million in sales and use tax revenue and \$1.5 million in personal income tax collections. This level of student spending would create enough business activity to support 562 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B8. Direct and Total Economic Impacts for North Dakota State University, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999 -2017	FY201 5- 2017
	----- \$ 000 -----												----- % -----
Direct Impacts:													
General Fund	67,041	70,715	76,513	88,150	98,272	102,250	114,428	135,685	135,035	144,142	110,671	65.1%	-23.2%
Nongeneral Fund	95,014	155,899	193,757	232,749	239,061	274,916	292,972	276,095	297,429	340,791	333,922	251.4%	-2.0%
Capital Improvements	<u>5,581</u>	<u>20,139</u>	<u>14,411</u>	<u>24,765</u>	<u>18,051</u>	<u>27,153</u>	<u>24,715</u>	<u>27,357</u>	<u>17,396</u>	<u>55,458</u>	<u>75,714</u>	1256.6%	36.5%
TOTAL	167,636	246,753	284,681	345,664	355,384	404,319	432,115	439,137	452,860	540,391	520,307	210.4%	-3.7%
Direct Impacts by I-O Sector:													
Construction	5,581	20,139	14,411	24,765	18,051	27,153	24,715	27,357	17,396	55,458	47,661	754.0%	-14.1%
Communication and Public Util	8,168	10,185	9,966	11,993	12,696	13,246	14,281	13,333	14,588	14,734	14,567	78.3%	-1.1%
Retail Trade	24,448	20,002	34,301	48,811	43,043	38,694	46,497	57,901	63,551	98,683	80,658	229.9%	-18.3%
Finance, Insurance, Real Estate	21,879	32,862	36,489	43,731	44,038	57,134	61,044	63,131	78,173	82,093	85,313	289.9%	3.9%
Business and Personal Services	22,510	35,840	45,494	59,668	64,159	58,669	71,728	64,593	66,242	70,131	65,231	189.8%	-7.0%
Households	<u>85,050</u>	<u>127,725</u>	<u>144,020</u>	<u>156,696</u>	<u>173,397</u>	<u>209,423</u>	<u>213,850</u>	<u>212,822</u>	<u>212,910</u>	<u>219,292</u>	<u>226,878</u>	166.8%	3.5%
TOTAL	167,636	246,753	284,681	345,664	355,384	404,319	432,115	439,137	452,860	540,391	520,307	210.4%	-3.7%
Total Impacts:													
Construction	17,762	38,417	35,149	49,111	43,680	57,042	56,222	59,002	50,031	92,307	84,138	373.7%	-8.8%
Communications and Public Util	24,968	35,257	38,690	46,173	48,534	54,384	58,214	57,313	60,570	66,508	65,585	162.7%	-1.4%
Retail Trade	125,268	171,687	206,409	250,758	255,641	287,276	308,509	321,122	335,761	405,330	384,718	207.1%	-5.1%
Finance, Insurance, Real Estate	44,531	66,886	75,136	89,009	91,838	112,833	119,823	122,033	139,044	150,246	152,957	243.5%	1.8%
Business and Personal Services	31,395	49,228	60,743	77,609	83,082	80,691	95,100	87,963	90,721	97,274	92,250	193.8%	-5.2%
Professional Social Services	12,585	18,903	21,432	24,895	26,391	31,000	32,574	32,660	33,800	37,447	37,391	197.1%	-0.1%
Households	194,198	291,865	330,539	382,838	406,494	478,454	501,861	503,120	519,727	574,594	574,580	195.9%	0.0%
Other ¹	<u>40,073</u>	<u>58,373</u>	<u>67,452</u>	<u>80,499</u>	<u>83,475</u>	<u>96,318</u>	<u>102,348</u>	<u>104,203</u>	<u>108,784</u>	<u>126,063</u>	<u>122,914</u>	206.7%	-2.5%
TOTAL	490,780	730,616	835,550	1,000,892	1,039,135	1,197,998	1,274,651	1,287,416	1,338,438	1,549,769	1,514,533	208.6%	-2.3%

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

University of North Dakota

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of University of North Dakota in the Grand Forks area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by University of North Dakota comprise the direct impacts, or "first round effects". Expenditures by University of North Dakota were \$225.4 million in FY1999, \$315.1 million in FY2004, \$341.5 million in FY2006, \$370.5 million in FY2008, \$384.1 million in FY2009, \$435.2 million in FY2011, \$467.2 million in FY2012, \$489.1 million in FY2013, \$531.8 million in FY2014, \$676.8 million in FY2015, and \$522.9 million in FY2017 (Appendix Table B9). Expenditures increased over the 18-year period by \$297.4 million or by 132.0 percent.

Total impacts associated with University of North Dakota were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$657.4 million in FY1999, \$931.1 million in FY2004, \$1.0 billion in FY2006, \$1.09 billion in FY2008, \$1.13 billion in FY2009, \$1.3 billion in FY2011, \$1.4 billion in FY2012, \$1.4 billion in FY2013, \$1.6 billion in FY2014, \$1.9 billion in FY2015, and \$1.5 billion in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$255.7 million in FY1999 to \$609.6 million in FY2017 or by 138.4 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$166.0 million in FY1999, \$225.1 million in FY2004, \$243.8 million in FY2006, \$270.7 million in FY2008, \$278.0 million in FY2009, \$317.7 million in FY2011, \$341.9 million in FY2012, \$358.6 million in FY2013, \$395.1 million in FY2014, \$518.2 million in FY2015, and \$386.9 million in FY2017. This represents a \$220.9 million (133.1 percent) increase for the 18-year period.

Tax collections generated by University of North Dakota in FY2017 included \$31.4 million in retail sales, \$8.7 million in personal income, \$5. million in corporate income, and \$4 million in miscellaneous revenues.

Levels of business activity resulting from University of North Dakota expenditures would support 3,126 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 3,765 positions (excluding student jobs) at University of North Dakota in 2017. In the Fall Semester of 2017, 11,964 full-time equivalent students were enrolled at University of North Dakota.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Grand Forks area were \$151.3 million in FY2017. The total economic contribution of student spending was \$376.0 million. Student spending was estimated to generate an additional \$7.9 million in sales and use tax revenue and \$1.4 million in personal income tax collections. This level of student spending would create enough business activity to support about 5527 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B9. Direct and Total Economic Impacts for University of North Dakota, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
	----- \$ 000 -----											FY1999-2017	FY2015-2017
----- % -----													
Direct Impacts:													
General Fund	62,990	62,320	66,308	77,379	81,708	91,230	104,617	89,579	109,250	117,245	107,744	71.0%	-8.1%
Nongeneral Fund	152,076	227,572	259,366	281,470	298,233	331,144	349,768	382,402	393,597	463,283	390,685	156.9%	-15.7%
Capital Improvements	<u>10,342</u>	<u>25,178</u>	<u>15,804</u>	<u>11,638</u>	<u>4,194</u>	<u>12,860</u>	<u>12,791</u>	<u>17,135</u>	<u>29,001</u>	<u>96,252</u>	<u>24,423</u>	136.2%	-74.6%
TOTAL	225,408	315,070	341,478	370,487	384,135	435,234	467,176	489,116	531,848	676,780	522,852	132.0%	-22.7%
Direct Impacts by I-O Sector:													
Construction	10,342	25,178	15,804	11,638	4,194	12,860	12,791	17,135	29,001	96,252	19,552	89.1%	-79.7%
Communication and Public Util	9,024	9,914	9,566	11,946	12,395	11,362	11,876	12,926	13,964	12,474	12,940	43.4%	3.7%
Retail Trade	32,174	33,193	35,697	48,859	45,793	47,576	56,798	62,536	81,028	152,030	68,977	114.4%	-54.6%
Finance, Insurance, Real Estate	29,732	47,425	47,815	51,643	50,013	66,216	70,668	72,357	80,253	84,969	86,762	191.8%	2.1%
Business and Personal Services	36,108	42,150	61,087	68,032	80,527	65,807	79,444	82,217	82,970	82,851	76,700	112.4%	-7.4%
Households	<u>108,028</u>	<u>157,210</u>	<u>171,509</u>	<u>178,369</u>	<u>191,213</u>	<u>231,414</u>	<u>235,599</u>	<u>241,945</u>	<u>244,632</u>	<u>248,204</u>	<u>257,921</u>	138.8%	3.9%
TOTAL	225,408	315,070	341,478	370,487	384,135	435,234	467,176	489,116	531,848	676,780	522,852	132.0%	-22.7%
Total Impacts:													
Construction	26,482	48,230	40,803	38,322	32,148	45,263	46,996	52,674	66,712	140,364	57,643	117.7%	-58.9%
Communications and Public Util	31,569	41,692	44,526	49,586	51,988	56,225	59,809	62,730	66,977	74,142	66,211	109.7%	-10.7%
Retail Trade	166,004	225,096	243,773	270,693	278,047	317,661	341,897	358,561	395,104	518,244	386,904	133.1%	-25.3%
Finance, Insurance, Real Estate	59,779	90,315	94,538	101,496	102,398	126,782	134,635	138,744	150,475	166,008	157,864	164.1%	-4.9%
Business and Personal Services	47,993	59,150	79,713	87,938	101,464	89,916	105,036	108,736	111,030	114,738	105,203	119.2%	-8.3%
Professional Social Services	16,607	23,853	25,904	27,556	28,945	33,826	35,557	36,844	38,832	44,146	39,590	138.4%	-10.3%
Households	255,739	367,831	399,082	423,970	445,484	521,999	547,698	567,359	597,069	676,604	609,603	138.4%	-9.9%
Other ¹	<u>53,259</u>	<u>74,979</u>	<u>80,995</u>	<u>87,740</u>	<u>90,939</u>	<u>105,154</u>	<u>111,969</u>	<u>116,735</u>	<u>126,015</u>	<u>154,314</u>	<u>125,939</u>	136.5%	-18.4%
TOTAL	657,432	931,146	1,009,334	1,087,301	1,131,413	1,296,826	1,383,597	1,442,383	1,552,214	1,888,560	1,548,957	135.6%	-18.0%
¹ Includes agriculture, mining, manufacturing, transportation, and government.													

Valley City State University

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Valley City State University in the Valley City area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Valley City State University comprise the direct impacts, or "first round effects". Expenditures by Valley City State University were \$13.4 million in FY1999, \$17.0 million in FY2004, \$16.4 million in FY2006, \$18.7 million in FY2008, \$19.2 million in FY2009, \$26.3 million in FY2011, \$28.3 million in FY2012, \$30.3 million in FY2013, \$26.1 million in FY2014, 30.9 million in FY2015, and \$36.2 million in FY2017 (Appendix Table B10). Expenditures increased over the 18-year period by \$22.9 million or by 171.2 percent.

Total impacts associated with Valley City State University were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$39.3 million in FY1999, \$50.1 million in FY2004, \$48.8 million in FY2006, \$55.7 million in FY2008, \$57.0 million in FY2009, \$77.3 million in FY2011, \$83.0 million in FY2012, \$88.3 million in FY2013, \$78.3 million in FY2014, \$91.6 million in FY2015, and \$104.7 million in FY2017. The sector that had the largest impact was the *Households Sector* (i.e., personal income of area residents) for each year presented. Personal income increased from \$15.5 million in FY1999 to \$38.4 million in FY2017 or by 148.0 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated to be \$9.5 million in FY1999, \$11.5 million in FY2004, \$11.8 million in FY2006, \$13.0 million in FY2008, \$13.5 million in FY2009, \$17.8 million in FY2011, \$19.3 million in FY2012, \$19.9 million in FY2013, \$18.2 million in FY2014, \$20.4 million in FY2015, and \$22.6 million in FY2017. This represents a \$13.1 million (138.3 percent) increase for the 18-year period.

Tax collections generated by Valley City State University in FY2017 included \$2 million in retail sales, \$613,000 in personal income, \$436,000 in corporate income, and \$270,000 in miscellaneous revenues..

Levels of business activity resulting from Valley City State University expenditures would support 209 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 226 positions (excluding student jobs) at Valley City State University in 2017. In the Fall Semester of 2017, 1,086 full-time equivalent students were enrolled at Valley City State University.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Valley City area were \$10.2 million in FY2017. The total economic contribution of student spending was \$29.4 million. These levels of business activity would generate an additional \$616,000 in sales and use tax revenue and \$107,000 in personal income tax collections. This level of student spending would create enough business activity to support 41 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B10. Direct and Total Economic Impacts for Valley City State University, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)														
Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change		
												FY1999-2017	FY2015-2017	
	----- \$ 000 -----												----- % -----	
Direct Impacts:														
General Fund	5,152	5,943	5,850	6,754	7,073	8,660	9,784	9,592	10,485	13,808	11,031	114.1%	-20.1%	
Nongeneral Fund	7,364	8,657	10,229	10,614	11,181	14,259	15,013	14,150	14,309	14,468	14,659	99.1%	1.3%	
Capital Improvements	<u>841</u>	<u>2,423</u>	<u>295</u>	<u>1,291</u>	<u>984</u>	<u>3,371</u>	<u>3,485</u>	<u>6,553</u>	<u>1,278</u>	<u>2,665</u>	<u>10,530</u>	1152.1%	295.1%	
TOTAL	13,357	17,023	16,374	18,659	19,237	26,290	28,282	30,295	26,072	30,941	36,220	171.2%	17.1%	
Direct Impacts by I-O Sector:														
Construction	841	2,423	295	1,291	984	3,371	3,485	6,553	1,278	2,665	10,315	1126.6%	287.1%	
Communication and Public Util	794	672	699	618	609	686	622	624	719	753	634	-20.2%	-15.8%	
Retail Trade	1,413	1,330	1,702	1,525	1,659	2,021	2,456	1,982	2,054	1,988	1,748	23.7%	-12.1%	
Finance, Insurance, Real Estate	1,744	2,636	2,532	2,971	2,586	3,767	4,173	4,373	4,757	4,952	5,429	211.3%	9.6%	
Business and Personal Services	1,938	2,253	2,849	2,880	3,488	4,148	4,864	3,518	4,704	7,513	4,416	127.9%	-41.2%	
Households	<u>6,627</u>	<u>7,709</u>	<u>8,297</u>	<u>9,374</u>	<u>9,911</u>	<u>12,297</u>	<u>12,682</u>	<u>13,245</u>	<u>12,560</u>	<u>13,070</u>	<u>13,677</u>	106.4%	4.6%	
TOTAL	13,357	17,023	16,374	18,659	19,237	26,290	28,282	30,295	26,072	30,941	36,220	171.2%	17.1%	
Total Impacts:														
Construction	1,817	3,648	1,506	2,672	2,406	5,269	5,504	8,701	3,202	4,872	12,810	605.0%	162.9%	
Communications and Public Util	2,143	2,367	2,402	2,538	2,590	3,318	3,451	3,551	3,450	3,957	4,061	89.5%	2.6%	
Retail Trade	9,479	11,521	11,771	13,032	13,487	17,834	19,293	19,893	18,150	20,432	22,584	138.3%	10.5%	
Finance, Insurance, Real Estate	3,558	4,907	4,798	5,548	5,245	7,296	7,930	8,337	8,362	9,091	10,016	181.5%	10.2%	
Business and Personal Services	2,650	3,155	3,756	3,909	4,545	5,551	6,368	5,082	6,169	9,207	6,236	135.3%	-32.3%	
Professional Social Services	1,004	1,254	1,259	1,433	1,475	1,948	2,068	2,183	2,001	2,263	2,502	149.2%	10.6%	
Households	15,485	19,295	19,385	22,077	22,744	30,000	31,793	33,622	30,762	34,644	38,409	148.0%	10.9%	
Other ¹	<u>3,153</u>	<u>3,960</u>	<u>3,927</u>	<u>4,447</u>	<u>4,556</u>	<u>6,112</u>	<u>6,550</u>	<u>6,916</u>	<u>6,239</u>	<u>7,124</u>	<u>8,048</u>	155.2%	13.0%	
TOTAL	39,289	50,107	48,804	55,656	57,048	77,328	82,957	88,285	78,335	91,590	104,666	166.4%	14.3%	
¹ Includes agriculture, mining, manufacturing, transportation, and government.														

Williston State College

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of Williston State College in the Williston area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by Williston State College comprise the direct impacts, or "first round effects." Expenditures by Williston State College were \$6.1 million in FY1999, \$10.1 million in FY2004, \$9.2 million in FY2006, \$10.9 million in FY2008, \$12.1 million in FY2009, \$23.7 million in FY2011, \$22.8 million in FY2012, \$20.7 million in FY2013, \$28.1 million in FY2014, \$31.8 million in FY2015, and \$18.7 million in FY2017 (Appendix Table B11). Expenditures increased over the 18-year period by \$12.5 million or by 203.8 percent.

Total impacts associated with Williston State College were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$17.8 million in FY1999, \$29.1 million in FY2004, \$27.2 million in FY2006, \$31.3 million in FY2008, \$34.5 million in FY2009, \$64.9 million in FY2011, \$63.2 million in FY2012, \$59.3 million in FY2013, \$78.8 million in FY2004, \$84.8 million in FY2015, and \$56.4 million in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income increased from \$7.2 million in FY1999 to \$23.5 million in FY2017 or by 227.4 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate, and Business and Personal Services*. Increased retail trade activity was estimated at \$4.7 million in FY1999, \$7.3 million in FY2004, \$6.9 million in FY2006, \$8.8 million in FY2008, \$9.0 million in FY2009, \$14.8 million in FY2011, \$15.6 million in FY2012, \$14.4 million in FY2013, \$18.2 million in FY2014, \$20.0 million in FY2015, and \$13.8 million in FY2017. This represents a \$9.1 million (193.2 percent) increase for the 18-year period.

Tax collections generated by Williston State College in FY2017 included \$1.2 million in retail sales, \$308,000 in personal income, \$172,000 in corporate income, and \$149,000 in miscellaneous revenues..

Levels of business activity resulting from Williston State College expenditures would support 115 secondary (indirect and induced) jobs in 2017. These jobs are in addition to the 158 positions (excluding student jobs) at Williston State College in 2017. In the Fall Semester of 2017, 763 full-time equivalent students were enrolled at Williston State College.

In addition to the economic contribution resulting from the institution's expenditures, spending by students also contributes to the local economy. Direct impacts of student spending in the Williston area were \$10.2 million in FY2017. The total economic contribution of student spending was \$25.3 million. Student spending was estimated to generate an additional \$529,000 in sales and use tax revenue and \$92,000 in personal income tax collections. This level of student spending would create enough business activity to support 35 secondary (indirect and induced) jobs. A detailed analysis of the economic impact resulting from student expenditures is presented in Appendix Table A28.

Appendix Table B11. Direct and Total Economic Impacts for Williston State College, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
	----- \$ 000 -----												----- % -----
Direct Impacts:													
General Fund	2,394	2,606	2,808	3,295	3,287	4,129	4,869	5,255	6,145	6,254	4,951	106.8%	-20.8%
Nongeneral Fund	3,388	6,365	6,203	7,429	7,849	9,840	11,385	12,037	13,518	14,179	13,626	302.2%	-3.9%
Capital Improvements	<u>363</u>	<u>1,117</u>	<u>192</u>	<u>204</u>	<u>933</u>	<u>9,765</u>	<u>6,587</u>	<u>3,407</u>	<u>8,468</u>	<u>11,385</u>	<u>92</u>	<u>-74.7%</u>	<u>-99.2%</u>
TOTAL	6,145	10,088	9,203	10,928	12,069	23,734	22,841	20,699	28,131	31,818	18,669	203.8%	-41.3%
Direct Impacts by I-O Sector:													
Construction	363	1,117	192	204	933	9,765	6,587	3,407	8,468	11,385	46	-87.3%	-99.6%
Communication and Public Util	157	256	277	300	316	366	353	353	363	318	327	108.1%	2.8%
Retail Trade	1,001	1,318	1,271	2,478	2,001	2,309	3,325	2,427	2,795	3,596	1,800	79.8%	-50.0%
Finance, Insurance, Real Estate	640	1,046	1,253	1,389	1,256	2,002	2,187	2,381	2,994	2,916	2,913	355.2%	-0.1%
Business and Personal Services	645	1,449	1,225	1,242	1,976	1,977	2,242	3,174	3,771	3,421	2,570	298.4%	-24.9%
Households	<u>3,339</u>	<u>4,902</u>	<u>4,985</u>	<u>5,315</u>	<u>5,587</u>	<u>7,315</u>	<u>8,147</u>	<u>8,957</u>	<u>9,740</u>	<u>10,182</u>	<u>11,014</u>	<u>229.9%</u>	<u>8.2%</u>
TOTAL	6,145	10,088	9,203	10,928	12,069	23,734	22,841	20,699	28,131	31,818	18,669	203.8%	-41.3%
Total Impacts:													
Construction	810	1,834	873	970	1,775	11,274	8,075	4,842	10,319	13,367	1,481	82.8%	-88.9%
Communications and Public Util	756	1,234	1,210	1,355	1,483	2,369	2,358	2,333	2,898	2,655	2,288	202.6%	-13.8%
Retail Trade	4,703	7,261	6,931	8,828	8,971	14,798	15,648	14,357	18,173	20,035	13,788	193.2%	-31.2%
Finance, Insurance, Real Estate	1,468	2,374	2,523	2,809	2,817	4,723	4,894	5,035	6,377	6,502	5,602	281.6%	-13.8%
Business and Personal Services	964	1,966	1,725	1,798	2,587	3,011	3,282	4,217	5,091	3,791	3,638	277.4%	-4.0%
Professional Social Services	463	733	710	789	859	1,455	1,465	1,454	1,825	1,932	1,516	227.4%	-21.5%
Households	7,164	11,320	10,972	12,172	13,224	22,346	22,514	22,373	27,991	29,680	23,453	227.4%	-21.0%
Other ¹	<u>1,468</u>	<u>2,340</u>	<u>2,227</u>	<u>2,625</u>	<u>2,800</u>	<u>4,964</u>	<u>4,985</u>	<u>4,703</u>	<u>6,084</u>	<u>6,580</u>	<u>4,604</u>	<u>213.6%</u>	<u>-30.0%</u>
TOTAL	17,796	29,062	27,171	31,346	34,516	64,940	63,221	59,314	78,758	84,842	56,370	216.8%	-33.6%

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

North Dakota University System Office

Each of the state's college campuses is an important component of that area's local economy. This brief analysis will provide highlights of an economic contribution analysis of NDUS Office in the Bismarck area. Key economic indicators estimated in the analysis include direct impacts, total level of economic activity, personal income, retail trade, tax revenues, and employment. All dollar values are presented in terms of current year dollars, i.e., the effects of inflation have not been removed. The Consumer Price Index indicates that inflation during the 18-year period from 1999-2017 was 47 percent.

Expenditures by NDUS Office comprise the direct impacts, or "first round effects". Expenditures by NDUS Office were \$6.1 million in FY1999, \$17.3 million in FY2004, \$6.1 million in FY2006, \$9.4 million in FY2008, \$9.0 million in FY2009, \$32.1 million in FY2011, \$34.3 million in FY2012, \$47.7 million in FY2013, \$54.4 million in FY2014, \$55.7 million in FY2015, and \$27.0 million in FY2017 (Appendix Table B12). Expenditures increased over the 18-year period by \$20.9 million or by 341.4 percent.

However, it should be noted that the growth in the NDUS office budget since 2009 is the result of changes in accounting practices rather than higher levels of expenditures. Core Technology Services (CTS) serves all campuses in the state with computer hardware and personnel housed primarily at North Dakota State University. Prior to 2010, financial support for CTS was included in the respective host campus budget (NDSU), but transferred to the University System office for FY2010. These accounting changes were made to satisfy auditor's requests.

Total impacts associated with NDUS Office were estimated by applying the North Dakota Input-Output Model coefficients to total direct expenditures. Total economic contribution was estimated at \$18.0 million in FY1999, \$53.6 million in FY2004, \$18.7 million in FY2006, \$28.8 million in FY2008, \$27.7 million in FY2009, \$96.1 million in FY2011, and \$103.1 million in FY2012, \$143.3 million in FY2013, \$163.7 million in FY2014, \$168.4 million in FY2015, and \$83.1 million in FY2017. The sector that had the largest impact was the *Households* Sector (i.e., personal income of area residents) for each year presented. Personal income has grown from \$7.6 million in FY1999 to \$40.6 million in FY2017 or by 432.2 percent. Other sectors receiving major contributions included *Retail Trade, Construction, Finance, Insurance, and Real Estate*, and *Business and Personal Services*. Increased retail trade activity was estimated to be \$4.2 million in FY1999, \$10.7 million in FY2004, \$4.4 million in FY2006, \$6.8 million in FY2008, \$6.6 million in FY2009, \$21.4 million in FY2011, \$23.2 million in FY2012, \$31.9 million in FY2013, \$36.8 million in FY2014, \$36.9 million in FY2015, and \$19.7 million in FY2017. This represents a \$15.6 million (374.0 percent) increase for the 18-year period.

Tax collections generated by the North Dakota University System office in FY2017 included \$1.9 million in retail sales, \$386,000 in personal income, \$113,000 in corporate income, and \$221,000 in miscellaneous revenues..

Levels of business activity resulting from NDUS Office expenditures would support 171 secondary (indirect and induced) jobs in 2015. These jobs are in addition to the 27 positions at the NDUS Office and the 136 CTS positions attached to the NDUS Office in 2015.

Appendix Table B12. Direct and Total Economic Impacts for the NDUS Office, Selected Fiscal Years 1999 to 2017 (Current Year Dollars)

Item	FY1999	FY2004	FY2006	FY2008	FY2009	FY2011	FY2012	FY2013	FY2014	FY2015	FY2017	Change	
												FY1999-2017	FY2015-2017
----- \$ 000 -----												----- % -----	
Direct Impacts:													
General Fund	4,202	15,096	5,934	8,664	8,280	31,163	33,748	40,210	43,138	46,007	26,699	535.4%	-42.0%
Nongeneral Fund	1,918	2,169	178	715	765	942	531	7,520	11,248	9,712	316	-83.5%	-96.7%
Capital Improvements	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	<u>6,120</u>	<u>17,265</u>	<u>6,112</u>	<u>9,379</u>	<u>9,044</u>	<u>32,105</u>	<u>34,279</u>	<u>47,730</u>	<u>54,386</u>	<u>55,719</u>	<u>27,015</u>	<u>341.4%</u>	<u>-51.5%</u>
Direct Impacts by I-O Sector:													
Construction	--	--	--	--	--	--	--	--	--	--	--	--	--
Communication and Public Util	16	20	23	20	20	1,820	1,370	1,399	2,546	2,976	53	228.8%	-98.2%
Retail Trade	273	482	96	128	160	581	580	983	1,584	816	67	-75.5%	-91.8%
Finance, Insurance, Real Estate	189	5,617	356	512	472	1,735	1,925	3,434	4,862	5,226	745	294.3%	-85.7%
Business and Personal Services	1,773	6,777	652	696	756	7,334	7,181	11,791	11,812	12,637	1,165	-34.3%	-90.8%
Households	<u>3,869</u>	<u>4,369</u>	<u>4,985</u>	<u>8,023</u>	<u>7,363</u>	<u>20,635</u>	<u>23,223</u>	<u>30,123</u>	<u>33,582</u>	<u>34,064</u>	<u>24,985</u>	<u>545.8%</u>	<u>-26.7%</u>
TOTAL	<u>6,120</u>	<u>17,265</u>	<u>6,112</u>	<u>9,379</u>	<u>9,044</u>	<u>32,105</u>	<u>34,279</u>	<u>47,730</u>	<u>54,386</u>	<u>55,719</u>	<u>27,015</u>	<u>341.4%</u>	<u>-51.5%</u>
Total Impacts:													
Construction	470	1,198	516	805	772	2,529	2,739	3,740	4,255	4,372	2,378	406.0%	-45.6%
Communications and Public Util	661	1,999	675	1,020	982	5,250	5,036	6,525	8,375	8,998	2,925	342.5%	-67.5%
Retail Trade	4,166	10,742	4,380	6,808	6,560	21,385	23,176	31,946	36,758	36,944	19,746	374.0%	-46.6%
Finance, Insurance, Real Estate	1,076	7,916	1,323	2,019	1,916	6,485	7,069	10,479	12,858	13,449	5,187	382.1%	-61.4%
Business and Personal Services	2,118	7,827	1,017	1,259	1,296	9,163	9,158	14,544	14,936	15,861	2,796	32.0%	-82.4%
Professional Social Services	492	1,239	555	869	831	2,644	2,883	3,925	4,459	4,579	2,577	423.8%	-43.7%
Households	7,626	18,596	8,690	13,636	13,043	41,051	44,830	60,841	69,097	70,905	40,585	432.2%	-42.8%
Other ¹	<u>1,421</u>	<u>4,040</u>	<u>1,532</u>	<u>2,376</u>	<u>2,282</u>	<u>7,580</u>	<u>8,190</u>	<u>11,301</u>	<u>12,971</u>	<u>13,258</u>	<u>6,905</u>	<u>385.9%</u>	<u>-47.9%</u>
TOTAL	<u>18,030</u>	<u>53,557</u>	<u>18,688</u>	<u>28,792</u>	<u>27,682</u>	<u>96,087</u>	<u>103,081</u>	<u>143,301</u>	<u>163,709</u>	<u>168,366</u>	<u>83,099</u>	<u>360.9%</u>	<u>-50.6%</u>

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