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Economic Contribution of the North Dakota University System in 2020 and 2021

Nancy M. Hodur and Dean A. Bangsund

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Executive Summary

The North Dakota University System (NDUS) consists of the NDUS Office and 11 college campuses located throughout the state. In addition to the 11 main campuses, numerous other university facilities, centers, and offices are located throughout the state. Institutions of higher education have an economic effect across the state as those institutions acquire inputs, purchase services, and provide for payroll and employment at both the local and state level. NDUS expenditures include General Funds which are North Dakota state appropriated monies and Non-general Fund sources such as grants, contracts, sponsored programs, donations, etc. NDUS in-state expenditures from General and Non-general Funds comprise the direct economic impact or ‘first round effects.’ NDUS expenditure data were available for selected fiscal years from 1999 to 2021, with the FY2021 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 IMPLAN modeling platform 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 is a representation of the production and consumption of goods and services in the North Dakota economy. The consumption of goods and services by the University System was modeled to examine how those acquisitions generated secondary business volume. The model also examines secondary employment effects and selected tax revenues. Payroll expenditures also were modeled to examine consumption of goods and services by households.

Salient observations include:

- North Dakota University System had expenditures of \$1.58 billion for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expense for the NDUS, accounting for 49 percent of total expenditures.
- Spending patterns vary between General and Non-general Funds. Payroll as a percentage of total expenditures was 64 percent for General Funds compared to 44 percent for Non-general Funds. General operating expenditures, as a percentage of total expenditures for Non-general Funds, was 37 percent for Non-general Funds compared to 17 percent for general funds.
- Non-general Funds accounted for 74 percent of total NDUS expenditures in FY2021. Non-general Funds, as a percentage of total NDUS expenditures, have been steadily increasing. Since 2015, Non-general Funds, as a percentage of total expenditures, have increased from 66 percent to 74 percent. General Fund expenditures have declined as a percentage of total expenditures since 2015 decreasing from 33 to 26 percent.
- The state’s colleges and universities leveraged \$2.88 from external sources for every dollar of state appropriated funds in FY2021.

- Total NDUS economic effects (direct and secondary) were \$2.68 billion in FY2021.
- A substantial portion of total (direct and secondary) economic effects was a result of Non-general Fund expenditures. Of the total economic effects (direct plus secondary) of \$2.68 billion from both General and Non-general Funds, the majority was associated with Non-general Funds, \$2.0 billion or 75 percent of total economic effects.
- University System in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$31.3 million in state and local tax collections. Of that total, \$13.8 million were sales taxes, \$10.0 million were from property taxes, \$3.9 million were from personal income taxes.
- Direct employment by the NDUS was 10,579 in FY2021. Business activity from NDUS expenditures and spending by students supported secondary employment of 10,966 jobs. Total direct and secondary employment supported by NDUS was 21,545 jobs in FY2021.
- Enrollment at the NDUS's 11 colleges and universities was 33,497 FTE students for Fall Semester 2021. Enrollment has declined by 14.3 percent from an all-time high of 39,089 FTE student in 2011.
- NDUS student expenditures in 2021 were estimated to be approximately \$13,139 per student. Total student expenditures system wide were estimated to be \$440.1 million in FY2021.
- In FY2021, economic effects of student living expenses resulted in \$440.1 million in direct effects and \$467.4 million in secondary effects, for total direct and secondary effects of \$907.5 million.
- Combined, NDUS operations and student expenditures (direct effects) in FY2021 was \$1.9 billion. Total economic contribution (direct plus secondary) from NDUS operations and student expenditures was \$3.6 billion.

Economic Contribution of the North Dakota University System in 2020 and 2021

Nancy M. Hodur and Dean A. Bangsund*

Introduction

The North Dakota University System (NDUS) is comprised of the NDUS Office, 11 college campuses, the NDUS system office, and Core Technology Service (CTS), which provides secure information management and technology services to North Dakota University System students, faculty, staff, and state residents. These institutions contribute to the state and local economies through expenditures for goods and services and through personal spending by employees and students. Previous studies have estimated the economic contribution of the NDUS back to fiscal year (FY) 1999. This study represents a biennial update to those assessments with a 10-year lookback to 2011. Refer to Bangsund and Hodur (2020) for findings prior to 2011.

Scope and Methods

The NDUS Office provided expenditure data for FY2020 and FY2021 for each of the 11 institutions and the NDUS Office. Expenditure data were obtained from the ConnectND system. 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
- Dakota College at Bottineau
- Dickinson State University
- Lake Region State College
- Mayville State University
- Minot State University
- 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

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Upper Great Plains Transportation Institute
NDSU Cooperative Extension Service
North Dakota Forest Service
University of North Dakota
School of Medicine and Health Sciences
Energy and Environmental Research Center
Valley City State University
Williston State College

Data for 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.

The expenditure data were reported in the same budget categories as used in previous studies and represent actual expenditures made in North Dakota; not budgeted expenses. Expenditures were reported for Total General and Non-general Funds, Non-General Funds and General Funds. General Funds are North Dakota state appropriated monies. Non-general Fund are from all other sources such as grants, contracts, sponsored programs, donations, etc. Total General and Non-general Funds are the sum of General and Non-General Funds.

The main body of the report focuses on the NDUS and the economic effects of General and Non-general Fund expenditures by colleges and universities. An abbreviated economic contribution analysis for each of the 11 campuses are contained in Appendix A.

All expenditure data are reported in current year dollar values (nominal dollars), meaning dollar values have not been adjusted for inflation. Some of the growth reported in nominal expenditures would be removed if the data were corrected for inflation. 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 NDUS office also provided fall semester 2020 and 2021 student enrollment. The North Dakota Career Resource Network estimated costs for room and board, books, and supplies for students at each of the 11 institutions in the NDUS.

Data provided by the NDUS system office were used to estimate the economic contribution of the North Dakota University System and its 11 colleges. Economic contribution assessments measure the economic output (effects) from the production and consumption of goods and services. Economic outputs typically include jobs or employment, labor and proprietor income, and the sales and purchases of inputs (business volume). This study examines the economic contribution from the sale and purchase of inputs (NDUS system expenditures and student expenditures), employment, and state and local tax revenue.

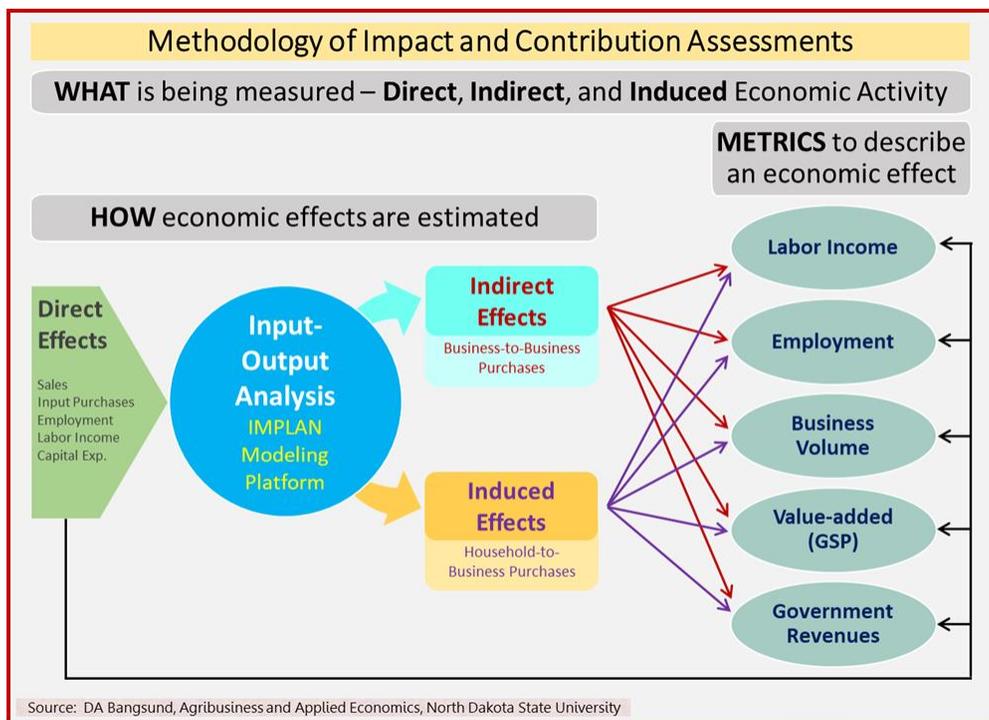
One the most commonly accepted methods for measuring the magnitude and causality of economic effects is Input-Output (I-O) Analysis. Input-output models are mathematical representations of both consuming and producing components of an economy, and trace the flow of dollars originating from transactions involving businesses, households, and governments.

The IMPLAN modeling platform 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 is a representation of the production and consumption of goods and services in the North Dakota economy. The consumption of goods and services by the University System was modeled to examine how those acquisitions generated secondary business volume. The model also examines secondary employment effects and selected tax revenues. Payroll expenditures also were modeled to examine consumption of goods and services by households (IMPLAN, 2021).

Economic output is categorized into direct and secondary effects. Direct effects are those changes in output, employment, or income that represent the initial or first-round effects. The NDUS operating expenditures represent direct economic effects for this assessment. Secondary effects are measured by the turnover and flow of dollars originating from a direct effect. Secondary effects are composed of *indirect* effects which represent business-to-business transactions, and *induced* effects which represent households-to-business transactions.

Labor income, employment, business volume, value-added, and fiscal revenues are common economic measures used frequently to show *magnitude*, or overall size of an economic effect. This study will examine economic effects in terms of employment, business volume, and government revenues. The terms *direct*, *indirect*, and *induced* describe the *causality* of an economic effect (see illustration below).

Figure 1. Economic Impact and Contribution Assessment Flow Chart



North Dakota University System Expenditures

General and Non-general Fund expenditures are reported for FY2021 and compared to previous years' expenditures in the following section.

General and Non-general Fund Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$1.40 billion and \$1.58 billion, respectively (Table 1). General and Non-general Fund expenditures increased by 6.9 percent from FY2019 to FY2021. Total General and Non-general Fund expenditures peaked at \$1.61 billion in FY2015. Since the peak in FY2015, total General and Non-general Fund expenditures have ranged from \$1.40 billion in FY2013 to \$1.58 billion in FY2021.

Wages and salaries and benefits were the two largest expenditure categories in FY2021, \$552.7 million and \$227.0 million, respectively (Table 1, Figure 1). Combined, wages and salaries and benefits totaled \$779.7 million in FY2021, 49 percent of total expenditures. Historically (2011-2020), wages and salaries and benefits averaged approximately 52 percent of total General and Non-general expenditures with year-to-year variability of 47 to 55 percent (data not shown).

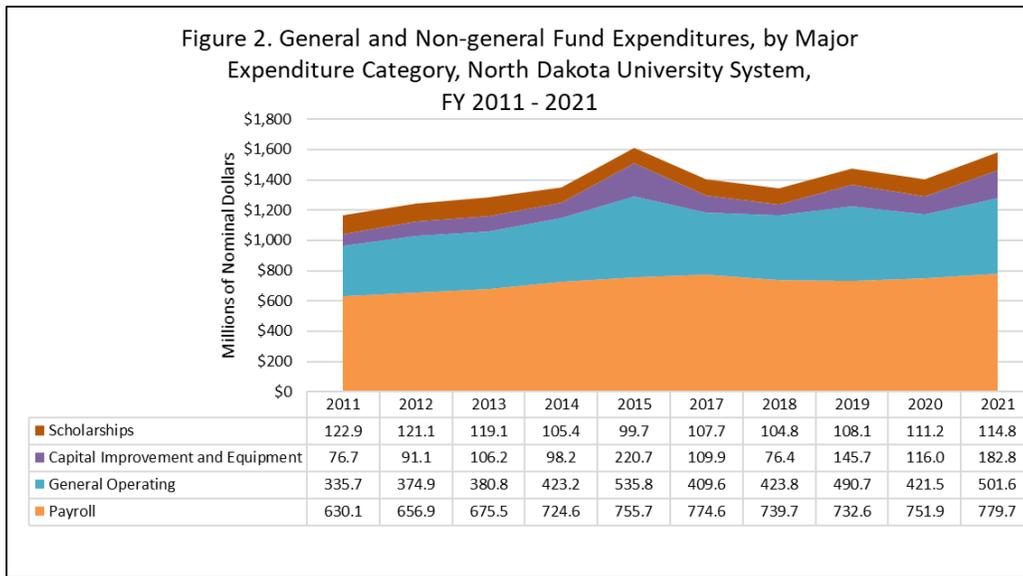
General operating expenditures, which are the sum of all expenditure categories except wages and salaries, benefits, capital equipment and capital expenditures were the next largest expenditure category, totaling \$501.6 million in FY2021, 32 percent of total expenditures (Table 1, Figure 1). Historically (2011-2020), operating expenditures averaged approximately 31 percent of total General and Non-general Fund expenditures (data not shown).

Capital Improvement and Equipment totaled \$182.8 million in FY2021, 12 percent of total General and Non-general Fund expenditures (Table 1, Figure 1). Historical averages (2011-2021) for expenditures for Capital Improvements and Equipment averaged 8 percent, but ranged from 6 to 14 percent over the past 10 years (data not shown).

Scholarships totaled \$114.8 million in FY2021, 7 percent of total General and Non-general Fund expenditures (Table 1, Figure 1). FY2021 expenditures for scholarships, as a percentage of total spending, is consistent with the historical (2011-2021) average of 8 percent of total General and Non-general Fund expenditures (data not shown).

Table 1. University System Expenditures, General and Non-general Fund, North Dakota University System, by Budget Category, Selected Fiscal Years 2011 to 2021 (Current Year Dollars).

| Operating Expenditures | Fiscal Years | | | | | | | Percentage Change | |
|-------------------------------|-------------------------|---------|---------|---------|---------|---------|---------|-------------------|-----------|
| | 2011 | 2013 | 2015 | 2017 | 2019 | 2020 | 2021 | 2011-2021 | 2019-2021 |
| | ----- millions \$ ----- | | | | | | | ----- % ----- | |
| Wages and Salaries | 483.3 | 511.6 | 553.4 | 562.5 | 523.7 | 532.0 | 552.7 | 14.4 | 5.5 |
| Payroll Benefits | 146.8 | 163.8 | 202.3 | 212.1 | 208.9 | 219.9 | 227.0 | 54.6 | 8.7 |
| Travel | 29.0 | 32.6 | 34.9 | 28.0 | 31.3 | 24.0 | 15.3 | -47.3 | -51.2 |
| Data Processing | 15.7 | 19.2 | 19.9 | 18.0 | 18.3 | 19.1 | 33.4 | 112.7 | 83.0 |
| Fees | 37.7 | 42.5 | 47.3 | 39.5 | 49.5 | 45.6 | 77.3 | 105.2 | 56.2 |
| Utilities | 25.1 | 27.6 | 29.1 | 29.2 | 30.8 | 28.0 | 29.2 | 16.4 | -5.4 |
| Communications | 8.7 | 7.6 | 9.1 | 8.7 | 8.8 | 8.7 | 8.6 | -1.1 | -1.5 |
| Insurance | 3.3 | 4.4 | 3.3 | 3.7 | 3.8 | 3.9 | 5.0 | 50.4 | 31.4 |
| Rents and Fees | 14.0 | 14.5 | 16.4 | 13.5 | 15.5 | 12.7 | 11.9 | -14.6 | -22.9 |
| Office | 9.9 | 9.4 | 9.3 | 7.6 | 6.8 | 6.3 | 5.5 | -44.7 | -20.0 |
| Supplies | 21.7 | 25.6 | 26.1 | 19.5 | 46.5 | 21.0 | 29.4 | 35.5 | -36.7 |
| Instructional | 25.7 | 23.8 | 26.1 | 25.6 | 25.1 | 25.0 | 26.3 | 2.4 | 4.9 |
| Noncapital Equipment | 7.1 | 11.2 | 10.0 | 9.8 | 6.0 | 6.0 | 13.0 | 82.8 | 115.5 |
| Merchandise for Resale | 45.1 | 56.3 | 189.8 | 95.3 | 108.9 | 81.9 | 96.5 | 114.0 | -11.5 |
| Repairs | 27.0 | 29.3 | 32.3 | 28.5 | 30.1 | 32.5 | 35.6 | 32.0 | 18.2 |
| Scholarships | 122.9 | 119.1 | 99.7 | 107.7 | 108.1 | 111.2 | 114.8 | -6.6 | 6.2 |
| General | 65.8 | 76.8 | 82.2 | 82.7 | 109.2 | 106.7 | 114.5 | 74.1 | 4.9 |
| Capital Equipment | 5.6 | 22.4 | 21.8 | 18.6 | 13.9 | 15.0 | 30.1 | 439.5 | 116.3 |
| Capital Improvements | 71.1 | 83.8 | 198.9 | 91.3 | 131.8 | 101.0 | 152.7 | 114.8 | 15.8 |
| Total | 1,165.3 | 1,281.6 | 1,611.8 | 1,401.8 | 1,477.1 | 1,400.5 | 1,578.9 | 35.5 | 6.9 |



Non-general Fund Expenditures

Total Non-general Fund expenditures in FY2020 and FY2021 were \$1.02 billion and \$1.17 billion, respectively (Table 2). Total expenditures increased steadily from 2011 to 2015, but declined in 2017. Since 2017, Non-general Fund expenditures have increased steadily increasing from \$941.6 million to \$1.17 billion in FY2021. Since FY2019, Non-general Funds increased from \$1.09 billion to \$1.17 billion in FY2021, a 7.5 percent increase.

Wages and salaries and benefits were the largest expenditure categories in FY2021, \$371.1 million and \$146.3 million, respectively (Table 2, Figure 2). Wages and salaries and benefits for Non-general Funds totaled \$517.4 million in FY2021, 44 percent of total expenditures, which is slightly lower than the historical average (2011-2020) of 48 percent of total Non-general Funds (data not shown).

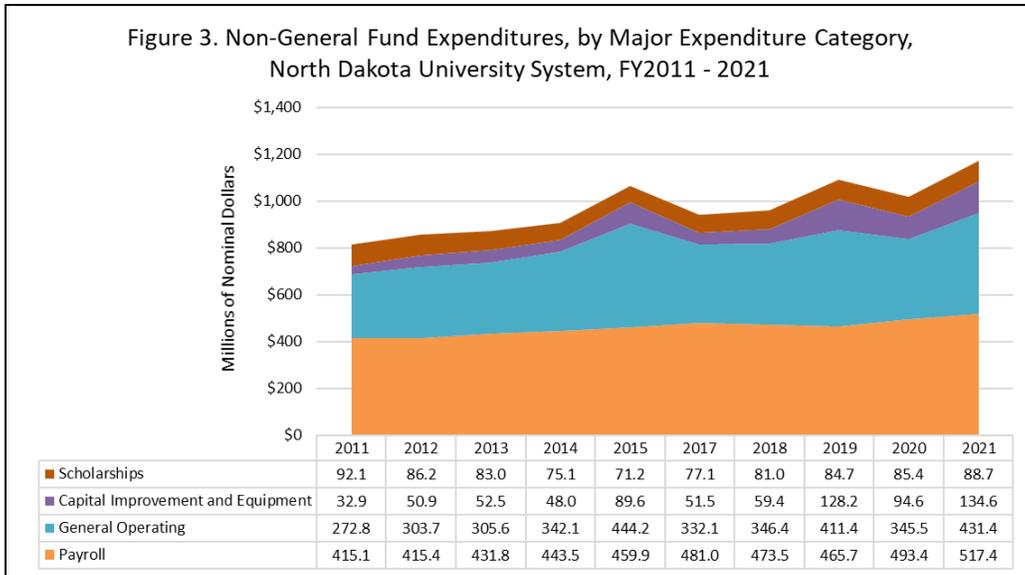
General operating expenditures which are the sum of all expenditure categories except wages and salaries, benefits, capital equipment and capital expenditures were the next largest expenditure category, totaling \$431.4 million or 37 percent of total Non-general Funds (Table 2, Figure 2). Non-general operating expenditures as a percentage of total Non-general Funds in FY2021, is consistent with the ten-year historical average of 36 percent (data not shown).

Capital Improvement and Capital Equipment expenditures for FY2021 were \$134.6 million, 11 percent of total Non-general operating expenditures (Table 2, Figure 2). Capital Improvements and Equipment expenditures have varied considerably, ranging from \$32.9 million in FY2011 to \$134.6 million in FY2021. Capital Improvement expenditures as a percentage of total Non-general operating expenditures have ranged from 4 to 12 percent (2011-2021, data not shown).

Scholarships totaled \$88.7 million in FY2021, 8 percent of total Non-general operating expenditures (Table 2, Figure 2). Scholarships as a percentage of total Non-general Fund expenditures have historically averaged about 9 percent (2011-2020, data not shown).

Table 2. University System Expenditures, Non-General Funds, North Dakota University System, by Budget Category, Selected Fiscal Years 2011 to 2021 (Current Year Dollars).

| Operating Expenditures | Fiscal Years | | | | | | | Percentage Change | |
|-------------------------------|-------------------------|-------|---------|-------|---------|---------|---------|-------------------|-----------|
| | 2011 | 2013 | 2015 | 2017 | 2019 | 2020 | 2021 | 2011-2021 | 2019-2021 |
| | ----- millions \$ ----- | | | | | | | ----- % ----- | |
| Wages and Salaries | 320.0 | 328.8 | 339.8 | 352.5 | 335.7 | 351.3 | 371.1 | 16.0 | 10.5 |
| Payroll Benefits | 95.1 | 103.0 | 120.1 | 128.5 | 129.9 | 142.1 | 146.3 | 53.8 | 12.6 |
| Travel | 24.3 | 26.6 | 27.2 | 23.7 | 27.0 | 20.6 | 13.8 | -43.1 | -48.9 |
| Data Processing | 10.7 | 12.0 | 12.5 | 12.1 | 13.1 | 13.6 | 27.7 | 159.2 | 111.1 |
| Fees | 31.5 | 36.1 | 38.1 | 33.1 | 42.1 | 37.4 | 69.7 | 121.1 | 65.6 |
| Utilities | 14.4 | 16.1 | 15.9 | 17.3 | 19.3 | 18.5 | 19.5 | 35.6 | 1.0 |
| Communications | 5.4 | 4.7 | 5.2 | 5.0 | 5.0 | 4.7 | 4.7 | -13.7 | -7.4 |
| Insurance | 2.5 | 3.3 | 2.5 | 2.3 | 2.5 | 2.6 | 3.6 | 47.0 | 45.9 |
| Rents and Fees | 12.2 | 12.3 | 14.3 | 11.3 | 12.0 | 10.4 | 10.0 | -17.5 | -16.5 |
| Office | 7.4 | 6.9 | 6.7 | 5.6 | 5.1 | 4.7 | 4.1 | -44.1 | -19.2 |
| Supplies | 17.8 | 20.7 | 20.8 | 15.6 | 42.5 | 17.1 | 25.8 | 45.1 | -39.3 |
| Instructional | 20.2 | 18.7 | 20.2 | 20.5 | 19.7 | 19.7 | 20.9 | 3.3 | 6.1 |
| Noncapital Equipment | 5.7 | 9.3 | 7.3 | 7.7 | 4.8 | 4.8 | 12.0 | 111.1 | 151.2 |
| Merchandise for Resale | 45.1 | 56.3 | 189.8 | 95.3 | 108.9 | 81.6 | 96.5 | 114.0 | -11.4 |
| Repairs | 20.6 | 22.4 | 23.7 | 20.8 | 23.7 | 25.4 | 29.5 | 43.2 | 24.6 |
| Scholarships | 92.8 | 83.0 | 71.2 | 77.1 | 84.7 | 85.4 | 88.7 | -4.4 | 4.7 |
| General | 53.9 | 60.1 | 60.1 | 61.7 | 85.7 | 84.2 | 93.6 | 73.6 | 9.3 |
| Capital Equipment | 3.6 | 17.0 | 17.6 | 16.2 | 11.6 | 12.5 | 26.9 | 658.2 | 131.5 |
| Capital Improvements | 33.9 | 35.5 | 72.0 | 35.3 | 116.6 | 82.2 | 107.7 | 217.8 | -7.6 |
| Total | 816.9 | 872.9 | 1,064.9 | 941.6 | 1,090.0 | 1,018.9 | 1,172.1 | 43.5 | 7.5 |



General Fund Expenditures

General Fund expenditures in FY2020 and FY2021 were \$381.6 million and \$406.8 million, respectively (Table 3). General Fund expenditures peaked in FY2015 at \$547.0 million, steadily declining to \$381.6 million in FY2020 before increasing to \$406.8 million in FY2021.

Wages and salaries and benefits were the two largest expenditure categories in FY2021, \$181.6 million and \$80.7 million, respectively (Table 3, Figure 3). Combined wages and salaries and benefits General Fund expenditures totaled \$262.3 million in FY2021, 64 percent of total expenditures which is consistent with the 10-year average of 63 percent. Since 2011, wages and salaries and benefits as a percentage of total General Fund expenditures, typically ranged from 61 to 69 percent. The exception was FY2015 where General Fund expenditures for wages and salaries was 54 percent (data not shown).

General operating expenditures, which are the sum of all expenditure categories except wages and salaries, benefits, capital equipment and capital expenditures were the next largest General Fund expenditure category, totaling \$70.2 million or 17 percent of total General Fund expenditures (Table 3, Figure 3). Operating expenditures, as a percentage of total General Fund expenditures in FY2021 is consistent with the 10-year historical average of 18 percent (data not shown).

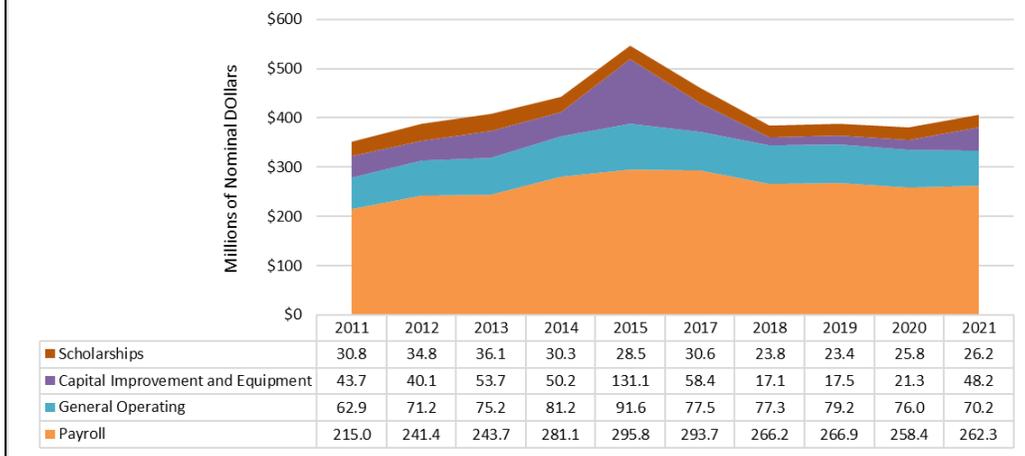
General Fund expenditures for Capital Improvement and Capital Equipment for FY2021 were \$48.2 million, 12 percent of total expenditures (Table 3, Figure 3). Since FY2011, General Fund Capital Improvement and Equipment Expenditures have ranged from \$17.1 million in FY2018 to \$131.2 million in FY2015. Capital Improvement and Equipment expenditures as a percentage of total General operating expenditures have historically averaged 11 percent and ranged from 4 to 24 percent since 2011 (2011-2021) data not shown).

Scholarships totaled \$26.2 million in FY2021, 6 percent of total General Fund operating expenditures (Table 3, Figure 3). Scholarships as a percentage of total General Fund expenditures have historically averaged about 7 percent, with little year to year variability (2011-2021, data not shown).

Table 3. University System Operations Expenditures, General Funds, North Dakota University System, by Budget Category, Selected Fiscal Years 2011 to 2019 (Current Year Dollars).

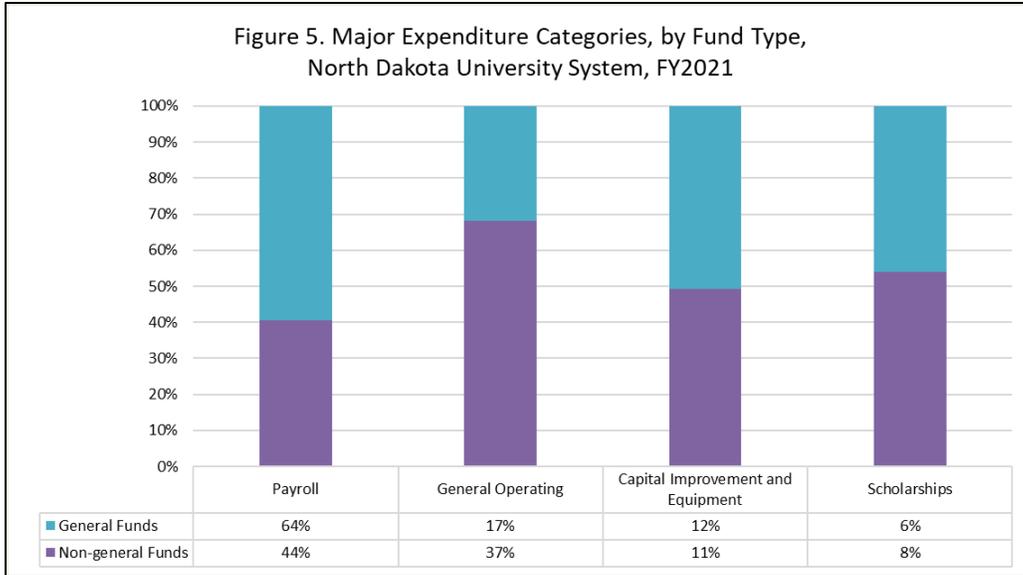
| Operating Expenditures | Fiscal Years | | | | | | | Percentage Change | |
|-------------------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------------------|-----------|
| | 2011 | 2013 | 2015 | 2017 | 2019 | 2020 | 2021 | 2011-2021 | 2019-2021 |
| | ----- millions \$ ----- | | | | | | | ----- % ----- | |
| Wages and Salaries | 163.3 | 182.8 | 213.6 | 210.1 | 188.0 | 180.7 | 181.6 | 11.2 | -3.4 |
| Payroll Benefits | 51.7 | 60.8 | 82.2 | 83.6 | 79.0 | 77.8 | 80.7 | 56.0 | 2.2 |
| Travel | 4.7 | 6.0 | 7.7 | 4.3 | 4.3 | 3.4 | 1.5 | -68.9 | -66.1 |
| Data Processing | 5.0 | 7.2 | 7.5 | 6.0 | 5.2 | 5.5 | 5.8 | 14.2 | 11.5 |
| Fees | 6.2 | 6.3 | 9.2 | 6.3 | 7.4 | 8.2 | 7.6 | 23.8 | 2.8 |
| Utilities | 10.7 | 11.4 | 13.2 | 11.8 | 11.6 | 9.6 | 9.7 | -9.4 | -15.9 |
| Communications | 3.3 | 2.9 | 3.9 | 3.7 | 3.7 | 4.0 | 4.0 | 19.3 | 6.3 |
| Insurance | 0.9 | 1.1 | 0.8 | 1.4 | 1.3 | 1.3 | 1.4 | 60.4 | 4.3 |
| Rents and Fees | 1.8 | 2.2 | 2.1 | 2.1 | 3.5 | 2.3 | 1.9 | 4.7 | -45.2 |
| Office | 2.5 | 2.4 | 2.6 | 2.0 | 1.7 | 1.6 | 1.3 | -46.4 | -22.6 |
| Supplies | 4.0 | 4.9 | 5.3 | 4.0 | 4.0 | 3.9 | 3.7 | -7.5 | -8.5 |
| Instructional | 5.4 | 5.1 | 5.8 | 5.2 | 5.4 | 5.3 | 5.4 | -0.7 | 0.3 |
| Noncapital Equipment | 1.4 | 1.9 | 2.7 | 2.1 | 1.3 | 1.2 | 1.0 | -30.4 | -20.9 |
| Merchandise for Resale | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | | -72.7 |
| Repairs | 6.4 | 6.9 | 8.7 | 7.8 | 6.4 | 7.1 | 6.1 | -4.4 | -5.2 |
| Scholarships | 30.1 | 36.1 | 28.5 | 30.6 | 23.4 | 25.8 | 26.2 | -13.1 | 11.6 |
| General | 11.8 | 16.7 | 22.1 | 20.9 | 23.5 | 22.4 | 20.9 | 76.7 | -11.1 |
| Capital Equipment | 2.0 | 5.4 | 4.2 | 2.4 | 2.3 | 2.5 | 3.2 | 57.0 | 39.0 |
| Capital Improvements | 37.2 | 48.3 | 127.0 | 56.0 | 15.2 | 18.8 | 45.0 | 21.0 | 195.5 |
| Total | 348.4 | 408.8 | 547.0 | 460.2 | 387.1 | 381.6 | 406.8 | 16.8 | 5.1 |

Figure 4. General Fund Expenditures, by Major Expenditure Category, North Dakota University System, FY 2011 - 2021



Comparison of General and Non-general Fund Expenditures

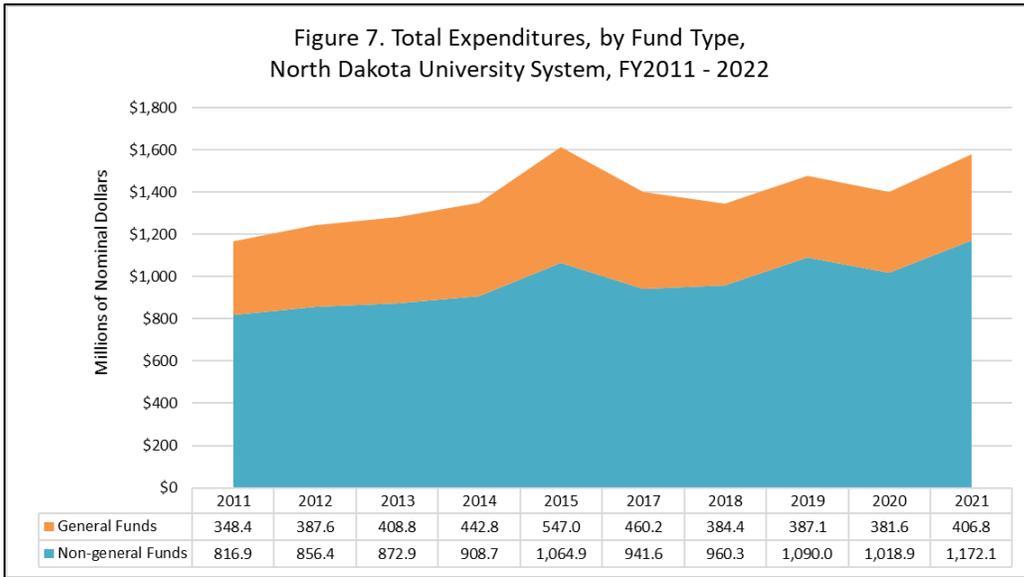
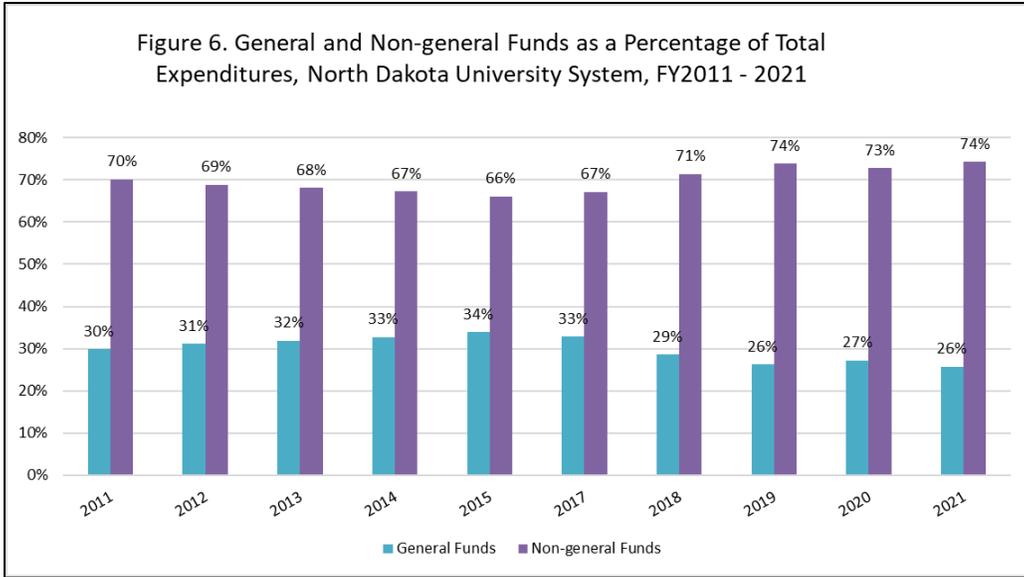
Spending in major expenditure categories as a percentage of total spending varies between General and Non-general Funds. Wages and Salaries and Benefits were 64 percent of total General Fund expenditures compared to 44 percent of Non-general Fund expenditures (Figure 4). Non-general Fund Expenditures for Operations made up a larger percentage of total spending than General Fund Expenditures for Operations, 37 percent compared to 17 percent, respectively. Expenditures for Capital Improvements and Equipment were similar for General and Non-general Funds, 12 percent and 11 percent, respectively. Scholarships, as a percentage of total spending, were slightly higher for Non-general Funds compared to General Funds, 8 percent compared to 6 percent, respectively.



In FY2021, Non-general Funds made up 74 percent of total North Dakota University System expenditures for operations while General Fund expenditures made up 26 percent of total North Dakota University System expenditures for operations (Figure 5). From 2011 to 2015, Non-general Funds as a percentage of total expenditures declined slightly from 70 percent to 66 percent, while General Funds as a percentage of total funds increased slightly from 30 to 34 percent. Since FY2017 Non-general Funds as a percentage of total expenditures has trended slightly higher, increasing from 67 percent in FY2017 to 74 percent in FY2021 and General Funds as a percentage of total funds had declined from 33 percent in FY 2017 to 26 percent in FY2021.

Total Non-general Fund expenditures in FY2021 were \$1.17 billion and total General Fund expenditures were \$406.8 million (Figure 6). Total General and Non-general Funds increased steadily from FY2011 to FY2015 before declining to \$460.2 million and \$941.6 million, respectively in FY2017. From FY2017 to FY2020 General Fund expenditures generally trended lower while Non-general Fund Expenditures trended slightly higher. Both General and Non-general Fund expenditures increased slightly from FY2020 to FY2021.

For every dollar of General Funds, the North Dakota University System generated an additional \$2.88 in Non-general Funds in FY2021. In FY2019 and FY2020, the North Dakota University System leverage \$2.67 and \$2.82 from external sources for every dollar of appropriated funds, respectively. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Effects

Direct or first round economic effects are from North Dakota University System expenditures for wages and salaries, operations, and capital expenditures. While the University System also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Accordingly, economic effects from scholarships are captured in the analysis of the economic effects associated with student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than University System total expenditures.

Total direct effects from General and Non-general Fund expenditures were \$1.46 billion in FY2021 (Table 4). Secondary effects equal the sum of indirect and induced effects, \$563.4 million and \$650.4 million, respectively, for total secondary effects in FY2021 of \$1.21 billion. Total direct and secondary effects from NDUS expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$2.68 billion in FY2021.

Total direct effects from Non-general expenditures were \$1.08 billion in FY2021 (Table 4). Secondary effects equal the sum of indirect and induced effects, \$461.0 million and \$453.3 million, respectively for total secondary effects in FY2021 of \$914.3 million. Total direct and secondary effects from NDUS expenditures for wages and salaries, operations, and capital expenditures from Non-general Fund expenditures were \$2.0 billion in FY2021.

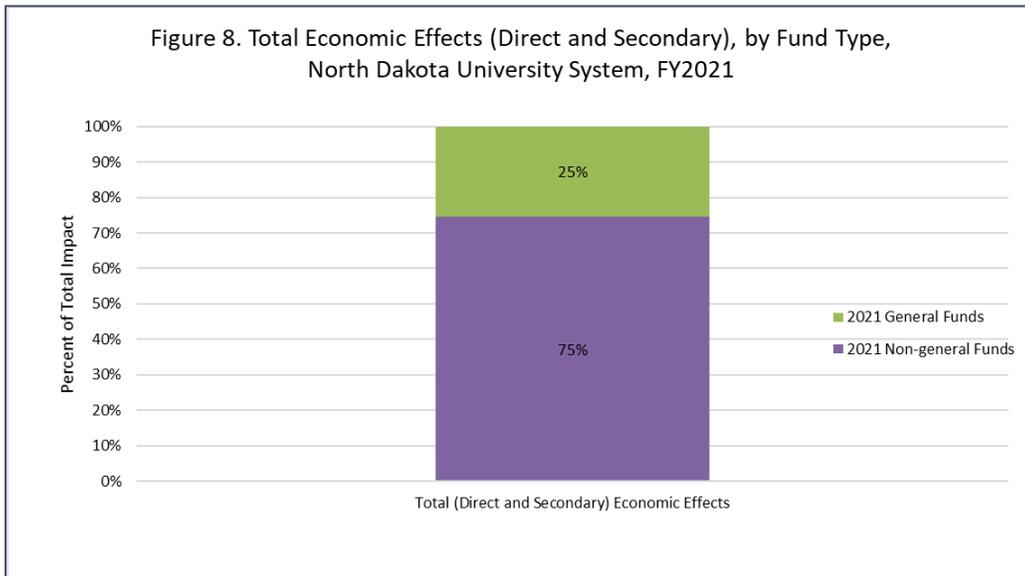
A substantial portion of total (direct and secondary) economic effects was a result of Non-general Fund expenditures. Of the \$1.46 billion in direct economic effects in FY2021, \$1.08 billion, were from Non-general expenditures. Of the total economic effects (direct plus secondary) of \$2.68 billion from both General and Non-general Funds, \$2.0 billion was associated with Non-general Funds. Economic effects from Non-general expenditures in FY2021 comprised 75 percent of North Dakota University System total (direct plus secondary) economic effects.

| Table 4. North Dakota University System, Direct and Secondary Effects, By Funding Source, FY2020 and FY2021. | | |
|---|------------------------|---------------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Funds | | |
| <i>Expenditure Category¹</i> | | |
| Wages, Salaries, and Benefits | 751.9 | 779.7 |
| Operation Expenditures | 436.5 | 531.7 |
| Capital Expenditures | 101.0 | 152.7 |
| Total Direct Effects | 1,289.4 | 1,464.1 |
| <i>Direct and Secondary Economic Effects</i> | | |
| Direct Effects | 1,289.4 | 1,464.1 |
| Indirect Effects | 442.3 | 563.4 |
| Induced Effects | 592.4 | 650.4 |
| Total Direct and Secondary Effects | 2,324.0 | 2,677.8 |
| Non-General Funds (only) | | |
| <i>Expenditure Category¹</i> | | |
| Wages, Salaries, and Benefits | 493.4 | 517.3 |
| Operation Expenditures | 358.0 | 485.4 |
| Capital Expenditures | 82.2 | 107.7 |
| Total Direct Effects | 933.6 | 1,083.4 |
| <i>Direct and Secondary Effects</i> | | |
| Direct Effects | 933.6 | 1,083.4 |
| Indirect Effects | 368.9 | 461.0 |
| Induced Effects | 408.2 | 453.3 |
| Total Direct and Secondary Effects | 1,710.7 | 1,997.7 |

Table 4 (cont.). North Dakota University System, Direct and Secondary Effects, By Funding Source, FY2020 and FY2021

| General Funds (only) | | |
|---|-------|-------|
| <i>Expenditure Category¹</i> | | |
| Wages, Salaries, and Benefits | 258.4 | 262.3 |
| Operation Expenditures | 78.5 | 73.4 |
| Capital Expenditures | 18.8 | 45.0 |
| Total Direct Effects | 355.8 | 380.7 |
| <i>Direct and Secondary Effects</i> | | |
| Direct Effects | 355.8 | 380.7 |
| Indirect Effects | 73.4 | 102.4 |
| Induced Effects | 184.2 | 197.2 |
| Total Direct and Secondary Effects | 613.4 | 680.3 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.

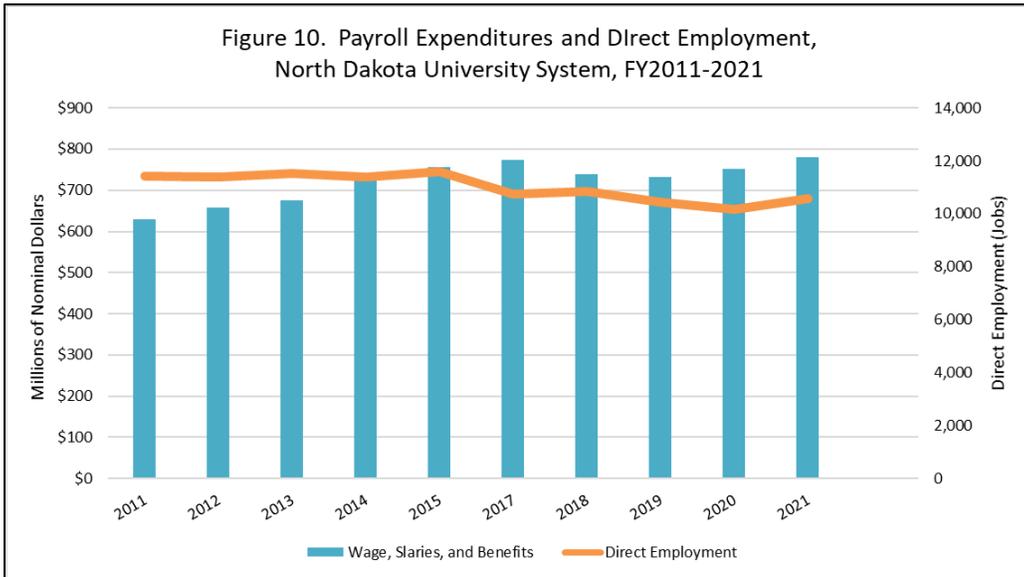
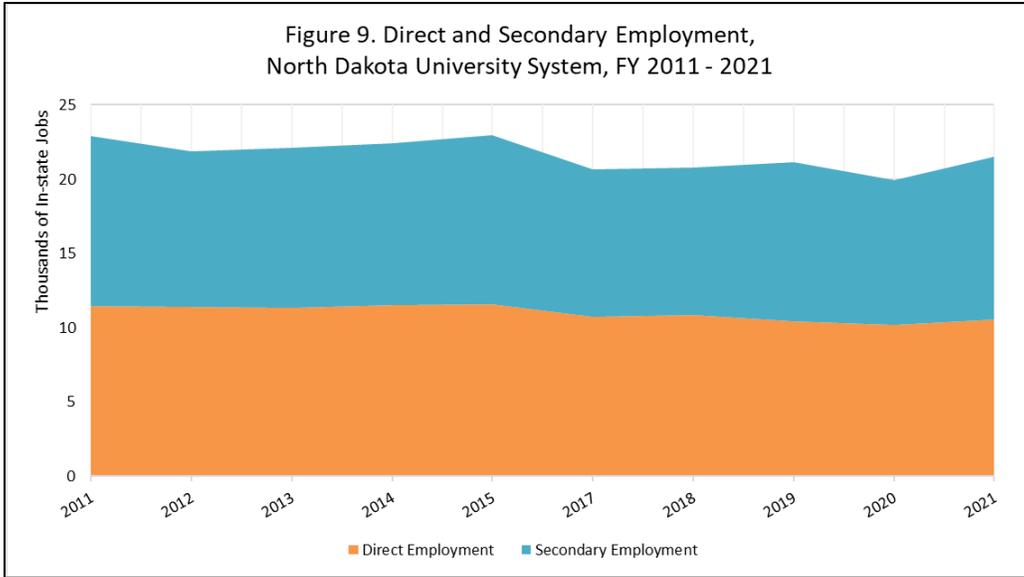


Employment

Total direct employment in the NDUS system in FY2021 was 10,579 (Table 5, Figure 8). Since FY2015 direct employment has steadily declined from 11,592 in FY2015 to 10,164 in FY2020, before increasing slightly to 10,579 in FY2021 and 10,845 in FY2022. Business activity associated with North Dakota University System expenditures supported secondary employment of 9,785 jobs in FY2020 and 10,966 jobs in FY2021. Total direct and secondary employment associated with NDUS expenditures in FY2021 supported 19,949 jobs in FY2020 and 21,545 jobs in FY2021. Direct employment has declined by 7.5 percent since 2011. (Secondary employment and other expenditure data were not available for FY2022.) Expenditures for Wages, salaries and benefits have trended in a manner consistent with the change in employment (Figure 9).

Table 5. Direct and Secondary Employment, University System Expenditures and Student Expenditures, North Dakota University System Selected Years 1999 to 2022

| Year | Direct Employment¹ | Indirect (secondary) | Induced (secondary) | Total (secondary)² | Direct and Secondary | |
|---|--------------------------------------|-----------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------|
| 1999 | 8,120 | | | 12,138 | 20,258 | |
| 2004 | 9,608 | | | 12,749 | 22,357 | |
| 2006 | 10,280 | | | 12,483 | 22,743 | |
| 2008 | 10,651 | | | 10,799 | 21,450 | |
| 2009 | 11,079 | | | 10,279 | 21,358 | |
| 2011 | 11,438 | | | 11,459 | 22,897 | |
| 2012 | 11,393 | | | 10,478 | 21,871 | |
| 2013 | 11,369 | | | 10,760 | 22,294 | |
| 2014 | 11,534 | | | 10,901 | 22,294 | |
| 2015 | 11,592 | | | 11,393 | 22,985 | |
| 2016 | 11,479 | | | N/A | N/A | |
| 2017 | 10,741 | | | 9,917 | 20,658 | |
| 2018 | 10,857 | | | 9,948 | 20,805 | |
| 2019 | 10,426 | | | 10,712 | 21,138 | |
| 2020 | 10,164 | 2,735 | 7,050 | 9,785 | 19,949 | |
| 2021 | 10,579 | 3,592 | 7,375 | 10,966 | 21,545 | |
| 2022 | 10,845 | | | N/A | N/A | |
| Period | Direct Employment | | Secondary Employment | | All Employment | |
| | Numeric Change | Percentage Change | Numeric Change | Percentage Change | Numeric Change | Percentage Change |
| 2011 - 2021 | -859 | -7.5 | -493 | -4.3 | -1,352 | -5.9 |
| 2019 - 2021 | 153 | 1.5 | 255 | 2.4 | 407 | 1.9 |
| ¹ NDUS direct employment is a June 30 th employee head count consisting of faculty, classified, other non-classified and temporary positions. Student workers were not included in this total. Prior to 2019, there was some duplication in the employee head count. Beginning in 2019 the employee head count is unduplicated. | | | | | | |
| ² Estimates include both indirect and induced employment, and are based on business activity from university expenditures for salaries, wages and benefits, operations and capital expenditures, and student living expenses. | | | | | | |



Tax Revenue

In FY2021, business activity from General and Non-general Fund expenditures was estimated to result in about \$19.6 million in revenue to state and local government jurisdictions (Table 6). The greatest revenues were from sales taxes (\$8.4 million), property taxes (\$6.0 million), and personal income taxes (\$2.8 million). Student expenditures supported an additional \$11.6 million in induced (secondary) state and local tax revenue. Combined, North Dakota University System operations and student expenditures generated \$31.3 million dollars in state and local tax revenue.

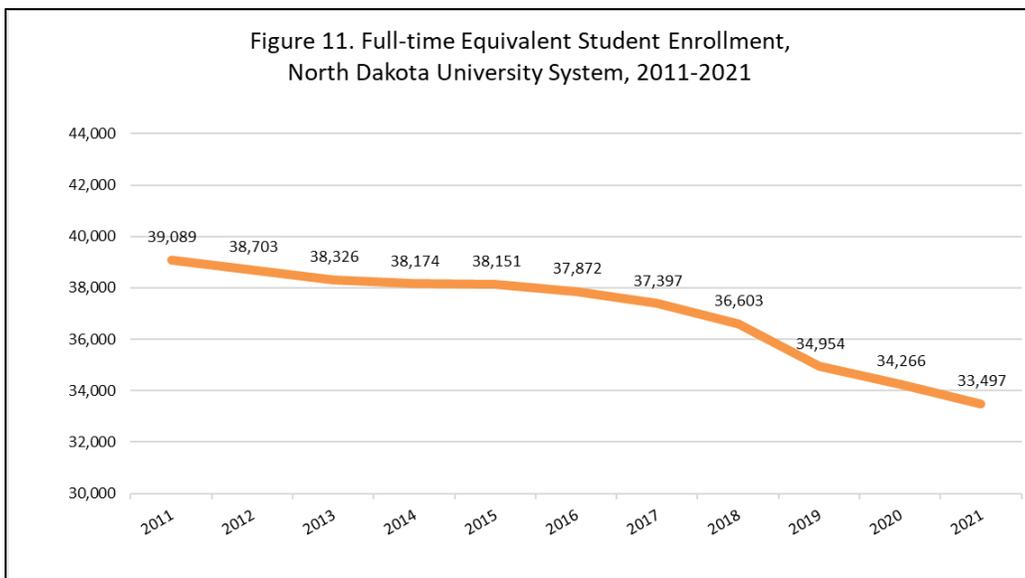
Table 6. Estimated State Tax Collections derived from Business Activity, North Dakota University System Expenditures and Student Spending, by Funding Source, FY2021

| Government Revenue | North Dakota University System | Student Spending | Total Tax Collections |
|--|---------------------------------------|-------------------------|------------------------------|
| ----- millions \$ ----- | | | |
| General and Non-general Funds | | | |
| Sales Tax | 8.4 | 5.4 | 13.8 |
| Property Tax | 6.0 | 3.9 | 10.0 |
| Personal Income Tax | 2.8 | 1.1 | 3.9 |
| Corporate Tax | 1.3 | 0.7 | 2.0 |
| Other Revenues | 1.1 | 0.5 | 1.6 |
| Total | 19.6 | 11.6 | 31.3 |
| Non-general Funds (only) | | | |
| Sales Tax | 6.3 | n/a | 6.3 |
| Property Tax | 4.5 | n/a | 4.5 |
| Personal Income Tax | 2.1 | n/a | 2.1 |
| Corporate Tax | 1.0 | n/a | 1.0 |
| Other Revenues | 0.9 | n/a | 0.9 |
| Total | 14.8 | n/a | 14.8 |
| ¹ For tax revenue from NDUS, due to exemptions on property taxes and for sales and use taxes, only indirect and induced economic activity was used for tax estimates. | | | |
| ² Includes miscellaneous revenues from motor vehicle registrations, licenses, fees, permits, fines, and other revenues. | | | |

Student Assessment

Enrollment for the North Dakota University System was 33,497 FTE students during the 2020-2021 school year, down slightly from 34,266 in from the 2019-2020 school year (Table 7, Figure 10). Student enrollment has been steadily declining since 2011 when enrollment peaked at 39,089. From 2011 to 2021 enrollment declined by 5,592 students, a 14.3 percent reduction in FTE student enrollment. Since 2019 enrollment declined by 1,457 students, a 4.2 percent reduction in FTE student enrollment.

| Table 7. Full Time Equivalent, Student Enrollment, NDUS, 1999 - 2021 | | | |
|---|---------------------------|----------------------|--------------------------|
| | Student Enrollment | Number Change | Percentage Change |
| 1999 | 30,720 | | |
| 2004 | 36,245 | 5,525 | 18.0 |
| 2006 | 35,373 | -872 | -2.4 |
| 2007 | 35,075 | -298 | -0.8 |
| 2008 | 36,095 | 1,020 | 2.9 |
| 2009 | 37,564 | 1,469 | 4.1 |
| 2010 | 38,899 | 1,335 | 3.6 |
| 2011 | 39,089 | 190 | 0.5 |
| 2012 | 38,703 | -386 | -1.0 |
| 2013 | 38,326 | -377 | -1.0 |
| 2014 | 38,174 | -152 | -0.4 |
| 2015 | 38,151 | -23 | -0.1 |
| 2016 | 37,872 | -279 | -0.7 |
| 2017 | 37,397 | -475 | -1.3 |
| 2018 | 36,603 | -794 | -2.1 |
| 2019 | 34,954 | -1,649 | -4.5 |
| 2020 | 34,266 | -688 | -2.0 |
| 2021 | 33,497 | -769 | -2.2 |
| Change 2011-2021 | | -5,592 | -14.3 |
| Change 2019-2021 | | -1,457 | -4.2 |



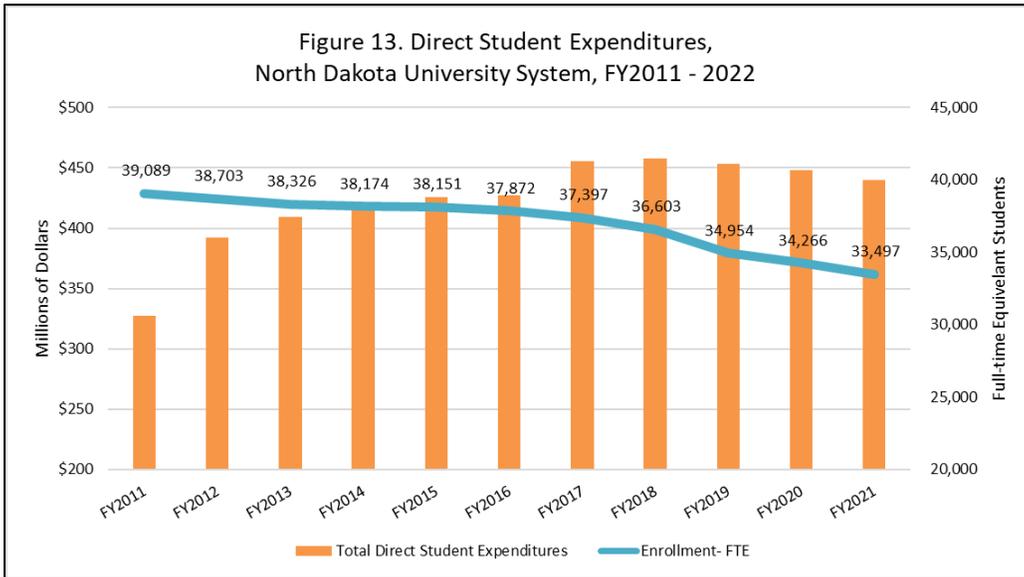
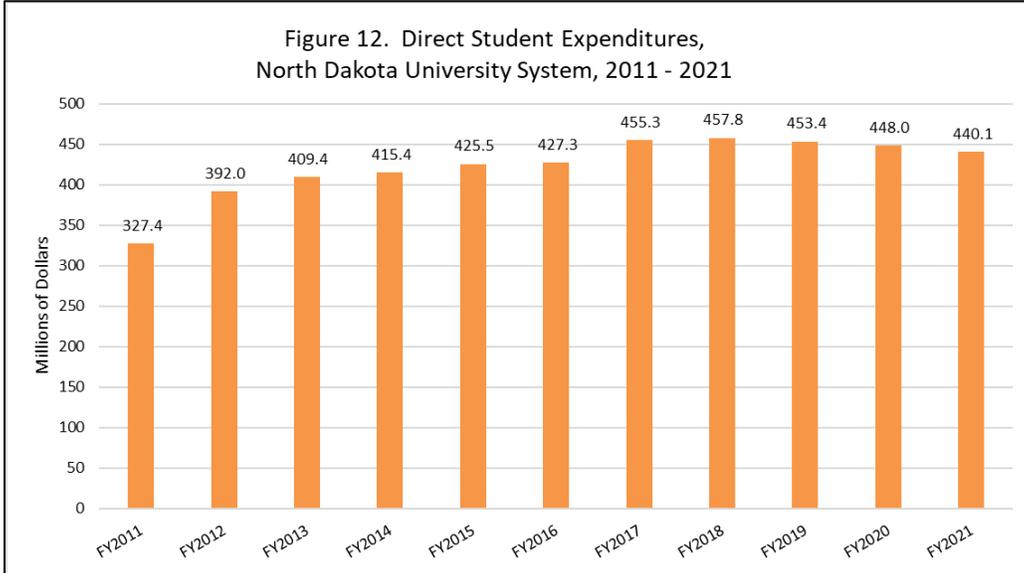
Student spending also adds to the economic contribution of the NDUS. Student spending included outlays for personal items, recreation, books, supplies, and room and board. Students also incur expenses for fees, tuition, and other items not covered in this analysis. Expenditures for fees and tuition are not included in the assessment of economic effects associated with student expenditures, rather those expenditures were captured by the analysis of university expenditures.

Multiplying the Fall Semester FTE student enrollment for each school by their respective per-student living expenditures provided an estimate of direct effects or first-round effects associated with student spending.

In Fall Semester 2021, 33,497 FTE students were enrolled and attended the state’s 11 universities and colleges. Per-student living expenses averaged \$13,076 for the 2019-2020 school year and \$13,139 for the 2020-2021 school year (Table 8, Figure 11). Based on expenditures per FTE student, students were estimated to have spent \$440.1 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year (see Table 8, Figure 11). Business activity associated with student expenditures supported additional induced (secondary) effect of \$467.4 million, for total effects (direct and secondary) of \$907.5 million in FY2021.

From 2011 to 2018, student expenditures trended slightly and consistently higher. Since 2018, student expenditures have dropped from \$453.4 million in FY2019 to \$440 million in FY2021. Declines in student expenditures parallel declining enrollment (Figure 12).

| Table 8. Student Expenditures, by Expenditure Category, North Dakota University System, FY2020 and FY2021 | | |
|--|---------------|---------------|
| Item | FY2020 | FY2021 |
| Students (FTE) | 34,266 | 33,497 |
| Spending per Student | \$13,076 | \$13,139 |
| Spending by Category (all students) ----- millions \$ ----- | | |
| Room and Board | 298.6 | 293.9 |
| Books | 30.5 | 29.8 |
| Personal Expenses | 118.9 | 116.8 |
| Total Student Spending | 448.1 | 440.1 |
| Direct and Secondary Effects | | |
| Direct Effects | 448.1 | 440.1 |
| Indirect Effects | n/a | n/a |
| Induced Effects | 475.7 | 467.4 |
| Total | 923.8 | 907.5 |



Assumptions and Data Limitations: Student Effects

A large share of student spending will likely 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.

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 estimate of the effects of student spending is that some of the revenues for room and board for students living in university dormitories could be considered double counting with expenditures by the universities. The revenues received by universities and colleges for on-campus room and board would likely be dispersed by the universities for inputs and services associated with student housing. As such, expenditures for providing student housing are probably partially captured by the analyses of university spending. Therefore, including room and board expenses for all students might result in some double counting of University System expenditures. Data were unavailable to adjust the economic contribution of student spending to account for those students living at home or to adjust for the percentage of room and board expenses already captured by University System expenditures.

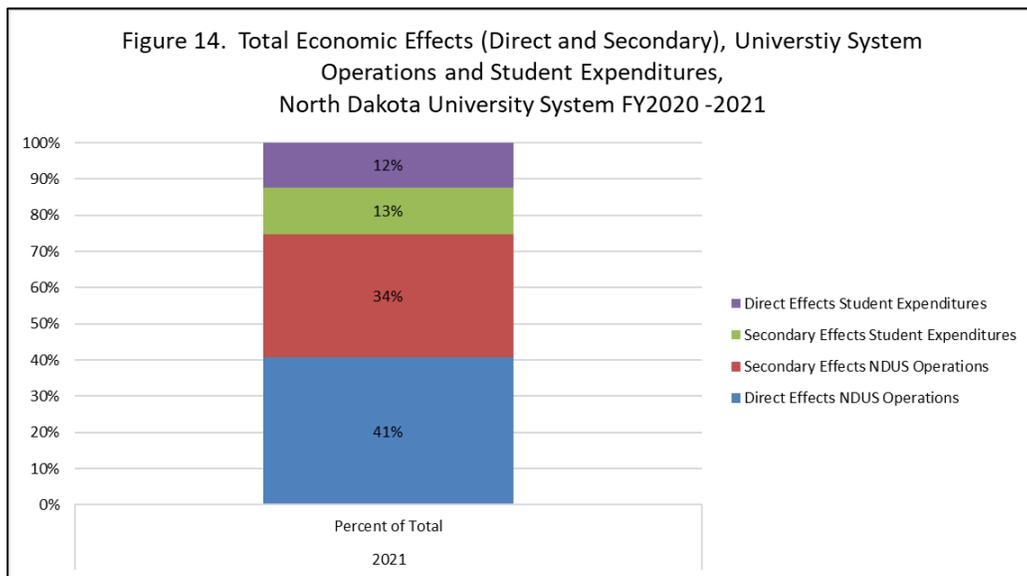
Another area of potential double counting could occur in how expenses are handled for books and other educational materials. Books and educational materials purchased by students through campus-sponsored bookstores or at on-campus varsity marts also are likely to be fully or partially captured by university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

Total Economic Effects

In FY2021, combined direct effects from North Dakota University System expenditures and North Dakota University System students totaled \$1.90 billion with an additional \$1.68 billion in secondary economic effects. Total economic effects (direct plus secondary) totaled \$3.59 billion in FY2021 (Table 9). North Dakota University System direct expenditures made up 41 percent of total economic effects. Direct and secondary effects from North Dakota University System operations accounted for 75 percent of total (NDUS operations and student expenditures) effects (Figure 13).

Table 9. Total Economic Effects, North Dakota University System Expenditures and North Dakota University System Student Expenditures, FY2020 and FY2021.

| FY2020 | | | |
|---|---------------------------|-----------------------------|----------------|
| | NDUS Operations | Student Expenditures | Total |
| | ---millions of dollars--- | | |
| Direct Effects | 1,289.4 | 448.1 | 1,737.5 |
| Secondary Effects (Indirect and Induced) | 1,034.7 | 475.8 | 1,510.5 |
| Total Effects (Direct and Secondary) | 2,324.1 | 923.9 | 3,248.0 |
| FY2021 | | | |
| | NDUS Operations | Student Expenditures | Total |
| | ---millions of dollars--- | | |
| Direct Effects | 1,464.1 | 440.1 | 1,904.2 |
| Secondary Effects (Indirect and Induced) | 1,213.9 | 467.3 | 1,681.2 |
| Total Effects (Direct and Secondary) | 2,678.0 | 907.4 | 3,585.4 |



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. North Dakota's universities and colleges have positive

effects on the state economy and local economies as those revenues are used to purchase inputs and services and pay wages and salaries.

The state's 11 University System colleges, universities, and supporting centers and facilities act as centers for local and regional economic development. In FY2021, the North Dakota University System had direct economic effects of \$1.46 billion and total economic (direct and secondary effects) of \$2.68 billion. A substantial portion of total (direct and secondary) economic effects was a result of Non-general Fund expenditures. Of the total economic effects (direct plus secondary) of \$2.68 billion from both General and Non-general Funds, \$2.0 billion was associated with Non-general Funds. Economic effects from Non-general expenditures in FY2021 comprised 75 percent of North Dakota University System total (direct plus secondary) economic effects. The relative share of NDUS spending that comes from Non-general Fund sources highlights the importance that outside financial support plays in the economic effects of the NDUS on the North Dakota economy.

Student expenditures also contribute to the University System's economic effects. In 2021, the university system's 34,497 FTE students spent on average, approximately \$13,000 each totaling \$440 million in direct expenditures and \$907 million in total economic effects (direct plus secondary).

The North Dakota University System also supports employment throughout the state. In FY2021, the North Dakota University System directly employed 10,579 individuals. Business activity associated with University System expenditures supported an additional 10,966 secondary jobs in FY2021.

Institutions of higher education in North Dakota 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. The activities and services of the North Dakota University system provide economic benefits which enhance local and state economies.

References

Bangsund, Dean A. and Nancy M. Hodur. 2020. *Economic Contribution of the North Dakota University System in 2019*. AAE Report No. 806. Fargo: North Dakota State University, Department of Agribusiness and Applied Economics. Available at <https://ageconsearch.umn.edu/record/308735>

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APPENDIX A
College Summaries

Bismarck State College, North Dakota Poly Tech

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Bismarck State College using key economic indicators; gross business volume, selected tax revenues, and employment.

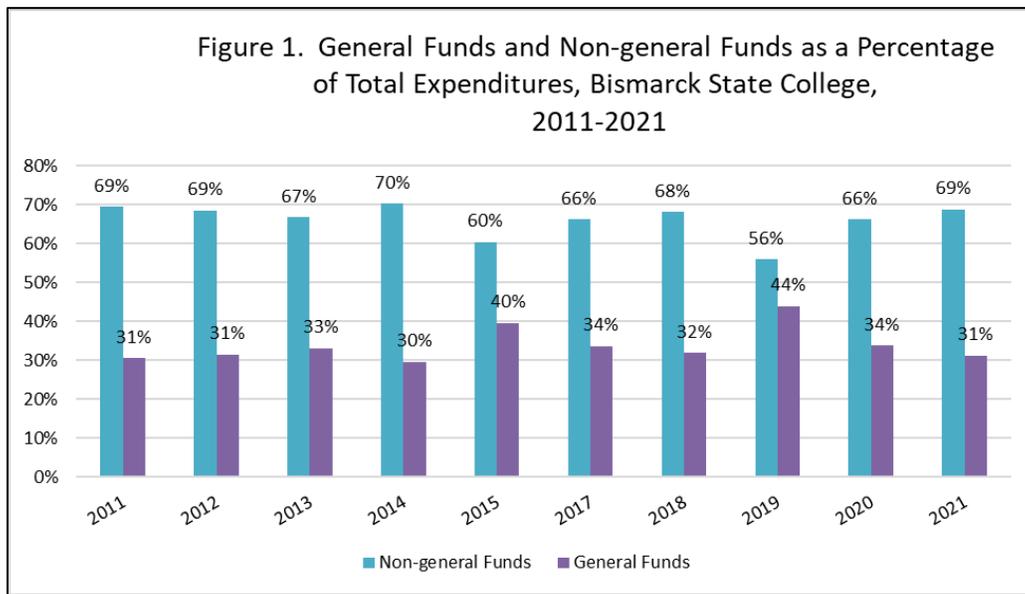
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$48.2 and \$54.1 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$30.1 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$15.5 million in FY2021. Scholarships totaled \$6.3 million and Capital Improvements and Equipment totaled \$2.2 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Bismarck State College, FY2020 and FY2021 | | |
|--|------------------------|--------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 29.3 | 30.1 |
| Operations | 12.9 | 15.5 |
| Scholarships | 4.5 | 6.3 |
| Capital Expenditures | 1.4 | 2.2 |
| Total | 48.2 | 54.1 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 16.9 | 17.2 |
| Operations | 9.7 | 12.4 |
| Scholarships | 4.4 | 6.2 |
| Capital Expenditures | 0.9 | 1.5 |
| Total | 31.9 | 37.2 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 12.4 | 12.9 |
| Operations | 3.2 | 3.2 |
| Scholarships | 0.1 | 0.1 |
| Capital Expenditures | 0.5 | 0.7 |
| Total | 16.3 | 16.9 |

In FY2021 Non-general Funds made up 69 percent of total Bismarck State College expenditures for operations while General Fund expenditures made up 31 percent. Since 2011, the share of Non-general and General Funds measured as a percentage of total expenditures have been fairly consistent with approximately a 70 percent/30 percent split, respectively with the exception of FY2015 and FY2019 where General Fund Expenditures made up 40 and 44 percent, respectively of total expenditures (Figure 1).

In FY2021, for every dollar of General Funds, Bismarck State College obtained an additional \$2.20 in Non-general Funds. In FY2020, leveraged \$1.96 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Bismarck State College expenditures for wages and salaries, operations, and capital expenditures. While Bismarck State College also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Bismarck State College total expenditures.

Direct effects from General and Non-general Fund expenditures were \$47.8 million in FY2021. Secondary effects (indirect and induced) totaled \$33.4 million. Total direct and secondary effects from Bismarck State College expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$81.2 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$28.7 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$30.5 million, for total economic effects (direct and secondary) of \$59.2 million (Table 2). Average per student expenditures were \$12,022 (data not shown).

Direct employment at Bismarck State College in FY2021 was 635 jobs. Business activity associated with Bismarck State College expenditures supported secondary employment of 208 jobs in FY2021. Student expenditures supported secondary employment of 203 jobs. Total direct and secondary employment associated with Bismarck State College supported 1,046 jobs in FY2021 (Table 2).

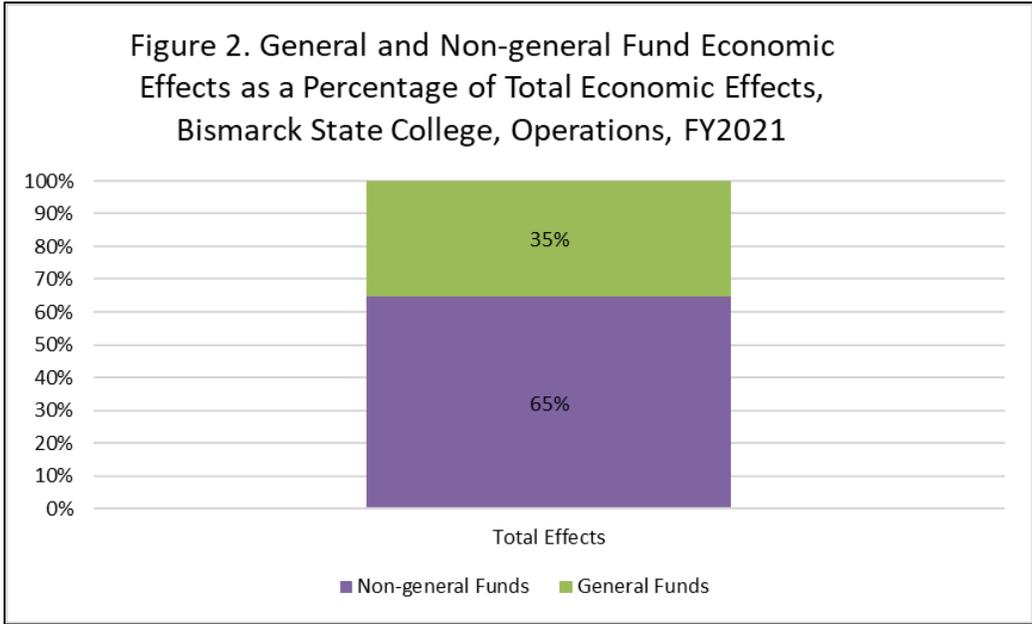
In FY2021, business activity from Bismarck State College General and Non-general Fund expenditures was estimated to generate about \$651,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$758,000 in state and local tax revenue. Combined, Bismarck State College operations and student expenditures generated \$1.4 million in state and local tax revenue (Table 2).

A substantial portion of total (direct and secondary) economic effects from Bismarck State College operations in FY2021 was a result of Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 comprised 65 percent of Bismarck State College (direct plus secondary) economic effects (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Bismarck State College, FY2020 and FY2021. | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 43.6 | 29.6 | 73.2 |
| Secondary Effects | 31.5 | 31.4 | 62.9 |
| Total (direct and secondary) Effects | 75.1 | 61.0 | 136.1 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 618 | n/a | 618 |
| Secondary Effects | 194 | 209 | 403 |
| Total Employment Supported | 812 | 209 | 1,021 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 646.9 | 770.0 | 1,416.9 |

Table 2 (cont.) Economic Effects, Bismarck State College, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|----------------------|-------|
| | FY2021 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 47.8 | 28.7 | 76.5 |
| Secondary Effects | 33.4 | 30.5 | 63.9 |
| Total (direct and secondary) Effects | 81.2 | 59.2 | 140.4 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 635 | n/a | 635 |
| Secondary Effects | 208 | 203 | 411 |
| Total Employment Supported | 843 | 203 | 1,046 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 651 | 758 | 1,409 |
| ¹ Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations. | | | |



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Bismarck State College had expenditures of \$54.1 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$30.1 million, 56 percent of total expenditures.
- Non-general Funds accounted for 69 percent of Bismarck State College expenditures in FY2021.
- Bismarck State College leveraged \$2.20 from external sources for every dollar of state appropriated funds in FY2021.
- FY2021 direct economic effects from Bismarck State College operations were \$47.8 million. Total (direct and secondary) economic effects were 81.2 million.
- In FY2021, economic effects of student living expenses resulted in \$28.7 million in direct effects and \$30.5 million in secondary effects, for total direct and secondary effects of \$59.2 million.
- Bismarck State College student expenditures in FY2021 were estimated to be approximately \$12,022 per student.
- Combined, Bismarck State College operations and student expenditures (direct effects) in FY2021 was \$76.5 million. Total economic contribution (direct plus secondary) from Bismarck State College operations and student expenditures was \$140.4 million.
- A substantial portion of total (direct and secondary) economic effects from Bismarck State College operations was a result of Non-general Fund expenditures. Sixty-five percent of total economic effects were attributable to Non-general Funds.
- Bismarck State College in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$1.4 million in state tax collections in FY2021.
- Direct employment at Bismarck State College was 635 jobs in FY2021. Business activity from Bismarck State College expenditures and spending by students supported secondary employment of 411 jobs. Total direct and secondary employment was 1,046 in FY2021.

Dakota College at Bottineau

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Dakota College at Bottineau using key economic indicators; gross business volume, selected tax revenues, and employment.

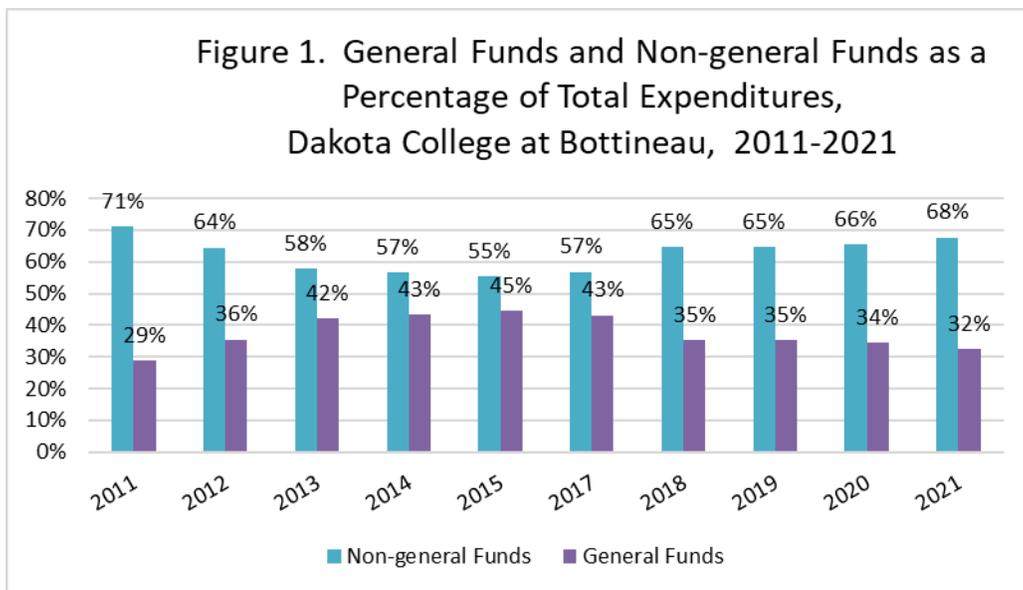
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$13.4 million and \$14.4 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$6.8 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$4.4 million in FY2021. Scholarships totaled \$1.7 million and Capital Improvements and Equipment totaled \$1.5 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Dakota College at Bottineau, FY2020 and FY2021. | | |
|--|------------------------|--------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 6.5 | 6.8 |
| Operations | 4.7 | 4.4 |
| Scholarships | 1.8 | 1.7 |
| Capital Expenditures | 0.4 | 1.5 |
| Total | 13.4 | 14.4 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 3.2 | 3.5 |
| Operations | 3.8 | 3.7 |
| Scholarships | 1.8 | 1.6 |
| Capital Expenditures | 0.1 | 0.9 |
| Total | 8.8 | 9.7 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 3.3 | 3.2 |
| Operations | 1.0 | 0.7 |
| Scholarships | 0.1 | 0.1 |
| Capital Expenditures | 0.3 | 0.6 |
| Total | 4.6 | 4.6 |

In FY2021, Non-general Funds made up 68 percent of total Dakota College at Bottineau expenditures for operations while General Fund expenditures made up 32 percent. From 2011 to 2015, the share of Non-general Funds as a percentage of total expenditures declined before increasing in 2018. Since 2018, the share of Non-general and General Funds as a percentage of total expenditures has been fairly consistent with approximately a two-thirds and one-third split, respectively (Figure 1).

In FY2021, for every dollar of General Funds, Dakota College at Bottineau obtained an additional \$2.09 in Non-general Funds. In FY2020, Dakota College at Bottineau leveraged \$1.91 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Dakota College at Bottineau expenditures for wages and salaries, operations, and capital expenditures. While the Dakota College at Bottineau also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Dakota College at Bottineau total expenditures.

Direct effects from General and Non-general Fund expenditures were \$12.7 million in FY2021. Secondary effects (indirect and induced) totaled \$9.7 million. Total direct and secondary effects from Dakota College at Bottineau expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$22.4 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$7.4 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$7.9 million, for total economic effects (direct and secondary) of \$15.2 million (Table 2). Average per student expenditures were \$12,022 (data not shown).

Direct employment at Dakota College at Bottineau in FY2021 was 175 jobs. Business activity associated with Dakota College at Bottineau expenditures supported secondary employment of 65 jobs in FY2021. Student expenditures supported secondary employment of 52 jobs. Total direct and secondary employment associated with Dakota College at Bottineau supported 292 jobs in FY2021 (Table 2).

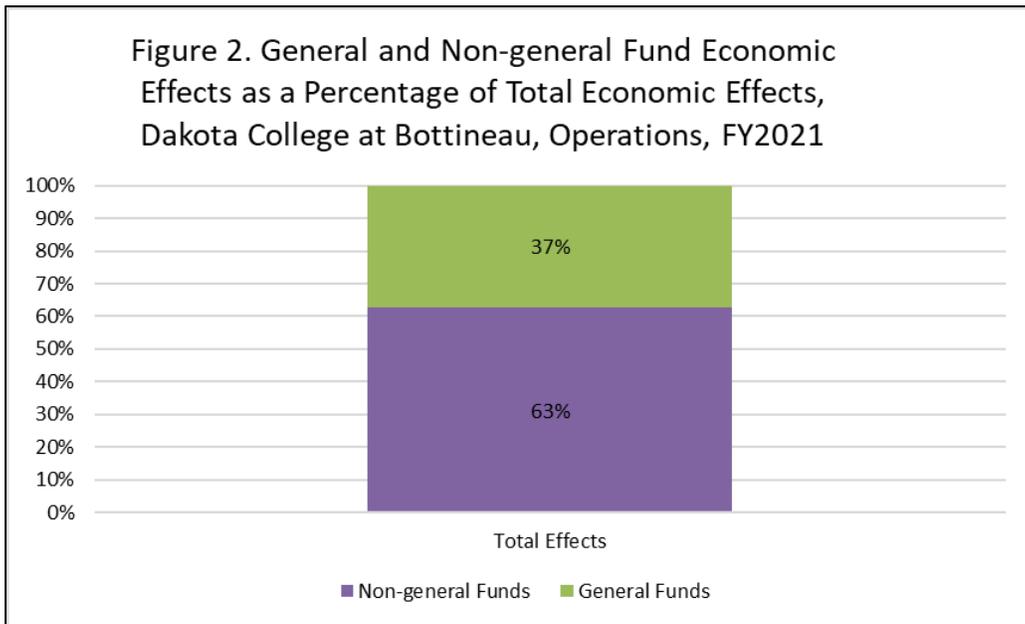
In FY2021, business activity from Dakota College at Bottineau General and Non-general Fund expenditures was estimated to generate about \$146,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$195,000 in state and local tax revenue. Combined, Dakota College at Bottineau operations and student expenditures generated \$341,000 in state and local tax revenue (Table 2).

A substantial portion of total (direct and secondary) economic effects from Dakota College at Bottineau operations in FY2021 was a result of Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 comprised 63 percent of Dakota College at Bottineau (direct plus secondary) economic effects (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Dakota College at Bottineau, FY2020 and FY2021 | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 11.6 | 6.4 | 18.0 |
| Secondary Effects | 7.9 | 6.8 | 14.7 |
| Total (direct and secondary) Effects | 19.4 | 13.3 | 32.7 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 167 | n/a | 167 |
| Secondary Effects | 51 | 45 | 96 |
| Total Employment Supported | 218 | 45 | 263 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 149.7 | 167.6 | 317.3 |

Table 2 (cont.) Economic Effects, Dakota College at Bottineau, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 12.7 | 7.4 | 20.1 |
| Secondary Effects | 9.7 | 7.9 | 17.5 |
| Total (direct and secondary) Effects | 22.4 | 15.2 | 37.6 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 175 | n/a | 175 |
| Secondary Effects | 65 | 52 | 117 |
| Total Employment Supported | 240 | 52 | 292 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 146.3 | 195.1 | 341.4 |
| ¹ Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations. | | | |



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Dakota College at Bottineau had expenditures of \$14.4 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$6.8 million, 47 percent of total expenditures.
- Non-general Funds accounted for 68 percent of Dakota College at Bottineau expenditures in FY2021.
- Dakota College at Bottineau leveraged \$2.09 from external sources for every dollar of state appropriated funds in FY2021.
- FY2021 direct economic effects from Dakota College at Bottineau operations were \$12.7 million. Total (direct and secondary) economic effects were \$22.4 million.
- In FY2021, student living expenses resulted in \$7.4 million in direct effects and \$7.9 million in secondary effects, for total direct and secondary effects of \$15.2 million.
- Dakota College at Bottineau student expenditures in FY2021 were estimated to be approximately \$12,022 per student in FY2021.
- Combined Dakota College at Bottineau operations and student expenditures (direct effects) in FY2021 were \$20.1 million. Total economic contribution (direct plus secondary) was \$37.6 million.
- A substantial portion of total (direct and secondary) economic effects from Dakota College at Bottineau operations was a result of Non-general Fund expenditures. Of the total economic effects (direct plus secondary), 63 percent were attributable to Non-general Funds in FY2021.
- Dakota College at Bottineau in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$341,000 in state tax collections.
- Direct employment at Dakota College at Bottineau was 175 jobs in FY2021. Business activity from Dakota College at Bottineau expenditures and spending by students supported secondary employment of 117 jobs. Total direct and secondary employment was 292 jobs in FY2021.

Dickinson State University

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Dickinson State University using key economic indicators; gross business volume, selected tax revenues, and employment.

General and Non-general Expenditures

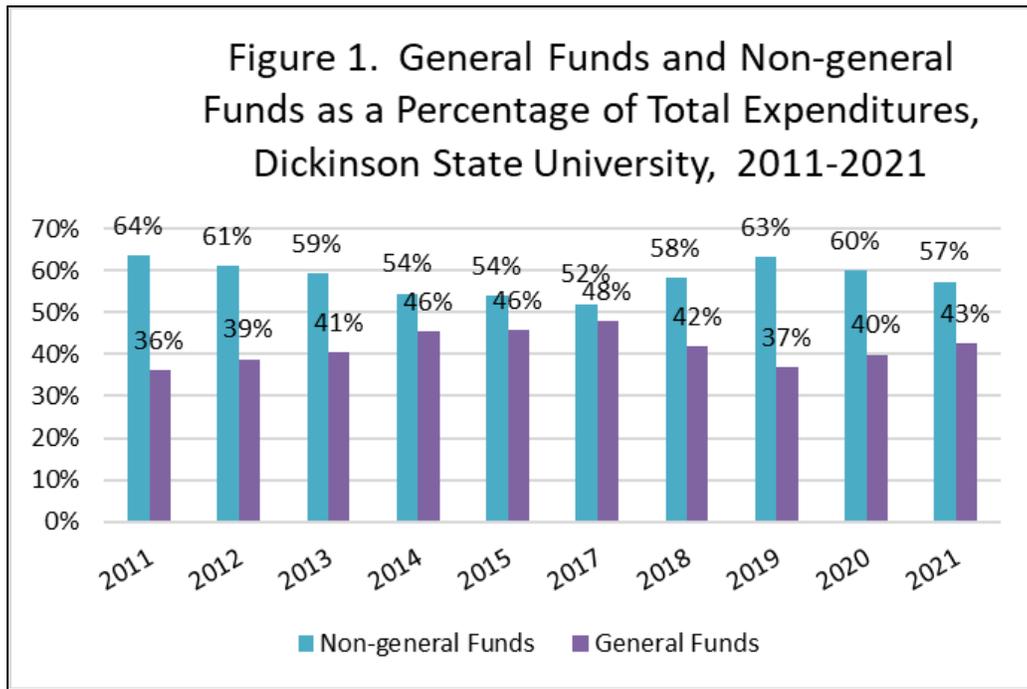
Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$27.4 million and \$32.6 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$16.1 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$8.1 million in FY2021. Scholarships totaled \$3.7 million and Capital Improvements and Equipment totaled \$4.7 million in FY2021 (Table 1).

Table 1. General and Non-general Expenditures, Dickinson State University, FY2020 and FY2021.

| | FY2020 | FY2021 |
|--|------------------------|--------|
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 17.6 | 16.1 |
| Operations | 6.0 | 8.1 |
| Scholarships | 3.0 | 3.7 |
| Capital Expenditures | 0.7 | 4.7 |
| Total | 27.4 | 32.6 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 8.7 | 7.8 |
| Operations | 4.5 | 6.6 |
| Scholarships | 2.8 | 3.2 |
| Capital Expenditures | 0.4 | 1.1 |
| Total | 16.5 | 18.7 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 8.9 | 8.3 |
| Operations | 1.5 | 1.6 |
| Scholarships | 0.2 | 0.5 |
| Capital Expenditures | 0.3 | 3.5 |
| Total | 10.9 | 13.9 |

In FY2021, Non-general Funds made up 57 percent of total Dickinson State University expenditures for operations while General Fund expenditures made up 43 percent. Since 2017 the percentage of Non-general Funds as a percentage of total expenditures has increased from 10-year low of 52 percent (Figure 1).

In FY2021, for every dollar of General Funds, Dickinson State University obtained an additional \$1.34 in Non-general Funds. In FY2020, Dickinson State University leveraged \$1.50 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Dickinson State University expenditures for wages and salaries, operations, and capital expenditures. While Dickinson State University also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Dickinson State University total expenditures.

Direct effects from General and Non-general Fund expenditures were \$28.9 million in FY2021. Secondary effects (indirect and induced) totaled \$22.2 million. Total direct and secondary effects from Dickinson State University expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$51.1 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$14.5 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$15.4 million, for total economic effects (direct and secondary) of \$29.8 million (Table 2). Average per student expenditures were \$12,535 (data not shown).

Direct employment at Dickinson State University in FY2021 was 297 jobs. Business activity associated with Dickinson State University expenditures supported secondary employment of 148 jobs in FY2021. Student expenditures supported secondary employment of 102 jobs. Total direct and secondary employment associated with Dickinson State University supported 547 jobs in FY2021 (Table 2).

In FY2021, business activity from Dickinson State University General and Non-general Fund expenditures was estimated to generate about \$414,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$382,000 in state and local tax revenue. Combined, Dickinson State University operations and student expenditures generated \$796,000 in state and local tax revenue (Table 2).

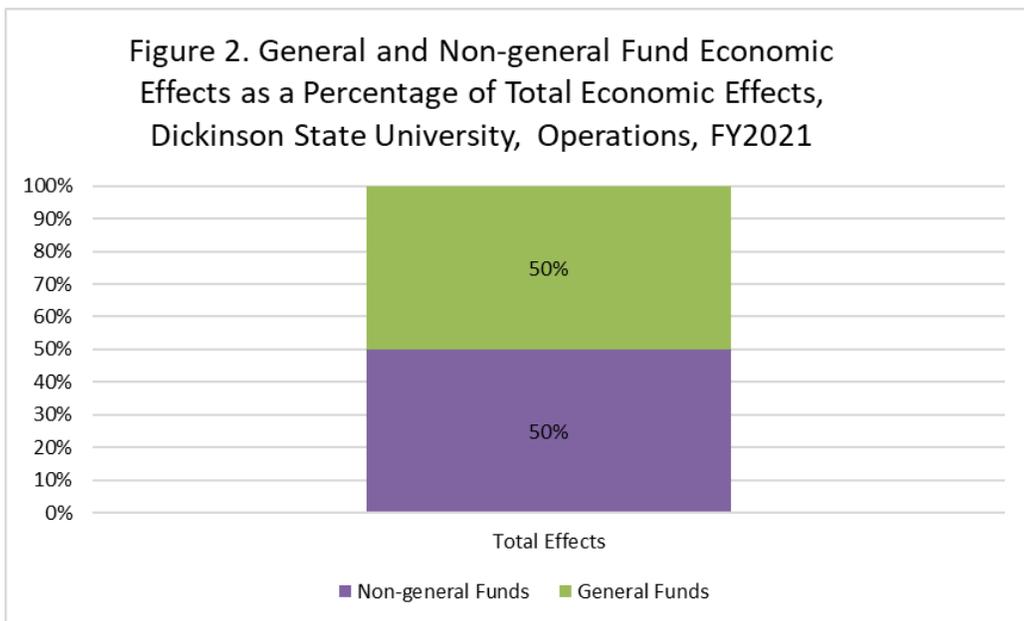
Total (direct and secondary) economic effects from Dickinson State University operations in FY2021 were split evenly between General and Non-General Fund expenditures, 50 percent each. (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Dickinson State University, FY2020 and FY2021. | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 24.4 | 13.9 | 38.2 |
| Secondary Effects | 19.7 | 14.7 | 34.5 |
| Total (direct and secondary) Effects | 44.1 | 28.6 | 72.7 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 208 | n/a | 208 |
| Secondary Effects | 51 | 98 | 149 |
| Total Employment Supported | 259 | 98 | 357 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 386.8 | 366.1 | 752.9 |

Table 2 (cont.) Economic Effects, Dickinson State University, FY2020 and FY2021

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 28.9 | 14.5 | 43.4 |
| Secondary Effects | 22.2 | 15.4 | 42.4 |
| Total (direct and secondary) Effects | 51.1 | 29.8 | 85.8 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 297 | n/a | 297 |
| Secondary Effects | 148 | 102 | 250 |
| Total Employment Supported | 445 | 250 | 547 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 414.3 | 381.7 | 796.0 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Dickinson State University had expenditures of \$32.6 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$16.1 million, 49 percent of total expenditures.
- Non-general Funds accounted for 57 percent of Dickinson State University expenditures in FY2021.
- Dickinson State University leveraged \$1.34 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Dickinson State University operations were \$28.9 million. Total (direct and secondary) economic effects were \$56.0 million.
- In FY2021, student living expenses resulted in \$14.5 million in direct effects and \$15.4 million in secondary effects, for total direct and secondary effects of \$29.8 million.
- Dickinson State University student expenditures in FY2021 were estimated to be approximately \$12,535 per student.
- Combined, Dickinson State University operations and student expenditures (direct effects) in FY2021 was \$43.4 million. Total economic contribution (direct plus secondary) from Dickinson State University operations and student expenditures was \$85.8 million.
- Fifty percent of total (direct and secondary) economic effects from Dickinson State University operations were a result of General Fund expenditures in FY2021.
- Dickinson State University in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$796,000 in state and local tax collections in FY2021.
- Direct employment at Dickinson State University was 297 jobs in FY2021. Business activity from Dickinson State University expenditures and spending by students supported secondary employment of 250 jobs. Total direct and secondary employment was 547 jobs in FY2021.

Lake Region State College

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Lake Region State College using key economic indicators; gross business volume, selected tax revenues, and employment.

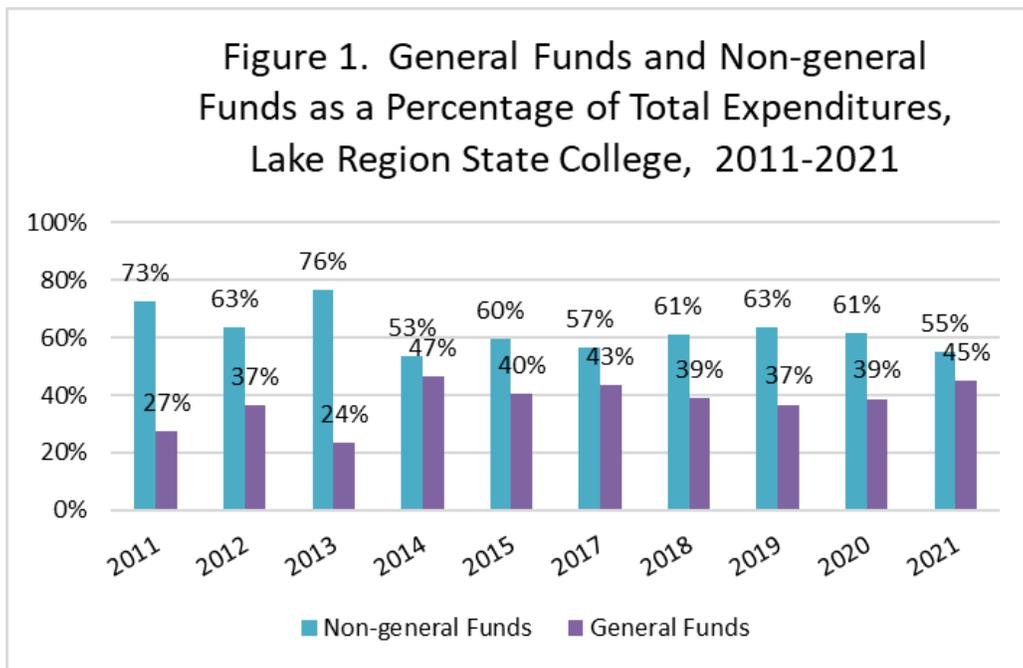
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$18.1 million and \$20.1 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$11.3 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$4.2 million in FY2021. Scholarships totaled \$1.9 million and Capital Improvements and Equipment totaled \$2.7 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Lake Region State College, FY2020 and FY2021. | | |
|--|-----------------------|--------|
| | FY2020 | FY2021 |
| | ----- million \$----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 11.4 | 11.3 |
| Operations | 4.0 | 4.2 |
| Scholarships | 2.1 | 1.9 |
| Capital Expenditures | 0.6 | 2.7 |
| Total | 18.1 | 20.1 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 6.2 | 5.9 |
| Operations | 3.0 | 3.2 |
| Scholarships | 1.9 | 1.7 |
| Capital Expenditures | 0.1 | 0.2 |
| Total | 11.1 | 11.0 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 5.2 | 5.4 |
| Operations | 1.0 | 1.0 |
| Scholarships | 0.2 | 0.2 |
| Capital Expenditures | 0.6 | 2.5 |
| Total | 7.0 | 9.1 |

In FY2021, Non-general Funds made up 55 percent of total Lake Region State College expenditures for operations while General Fund expenditures made up 45 percent. From FY2011 to FY2015, the share of Non-general Funds as a percentage of total expenditures declined before increasing in 2018. From 2018 to 2020, the share of Non-general and General Funds as a percentage of total expenditures was fairly consistent with approximately a two-thirds and one-third split, respectively (Figure 1).

In FY2021, for every dollar of General Funds, Lake Region State College obtained an additional \$1.22 in Non-general Funds. In FY2020, Lake Region State College leveraged \$1.59 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Lake Region State College expenditures for wages and salaries, operations, and capital expenditures. While Lake Region State College also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Lake Region State College total expenditures.

Direct effects from General and Non-general Fund expenditures were \$18.2 million in FY2021. Secondary effects (indirect and induced) totaled \$14.8 million. Total direct and secondary effects from Lake Region State College expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$33.0 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$9.5 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$10.1 million, for total economic effects (direct and secondary) of \$19.6 million (Table 2). Average per student expenditures were \$12,022 (data not shown).

Direct employment at Lake Region State College in FY2021 was 316 jobs. Business activity associated with Lake Region State College expenditures supported secondary employment of 96 jobs in FY2021. Student expenditures supported secondary employment of 67 jobs. Total direct and secondary employment associated with Lake Region State College supported 479 jobs in FY2021 (Table 2).

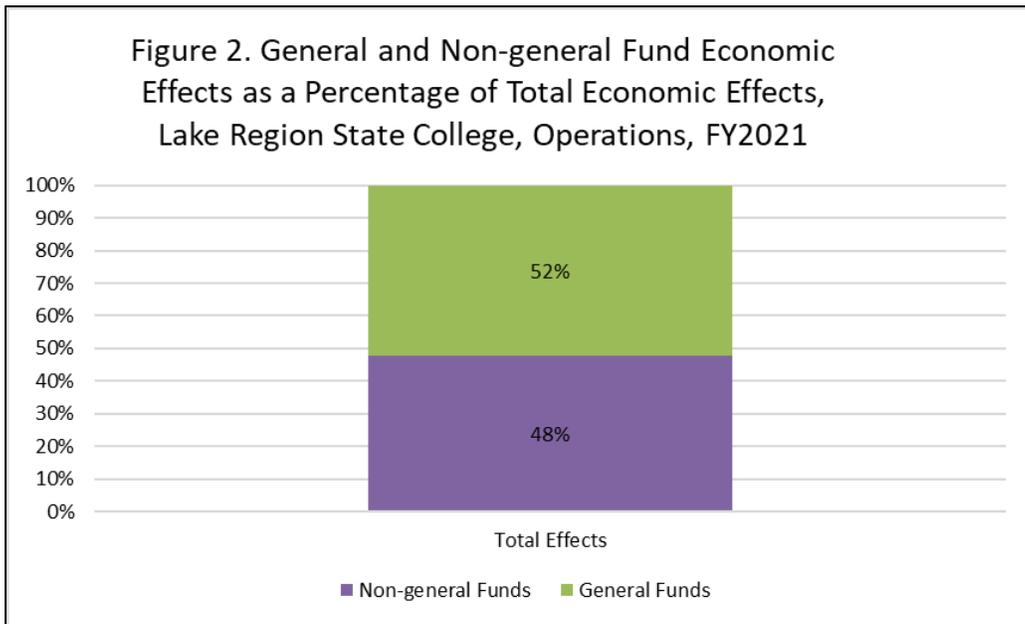
In FY2021, business activity from Lake Region State College General and Non-general Fund expenditures was estimated to generate about \$279,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$251,000 in state and local tax revenue. Combined, Lake Region State College operations and student expenditures generated \$530,000 in state and local tax revenue (Table 2).

Total (direct and secondary) economic effects from Lake Region State College operations in FY2021 were fairly evenly split between Non-general and General Fund expenditures. Economic effects from Non-general expenditures in FY2021 comprised 48 percent of Lake Region State College (direct plus secondary) economic effects compared to 52 percent from General Funds (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Lake Region State College, FY2020 and FY2021. | | | |
|--|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 16.0 | 10.1 | 26.1 |
| Secondary Effects | 11.6 | 10.6 | 22.3 |
| Total (direct and secondary) Effects | 27.6 | 20.7 | 48.3 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 329 | n/a | 380 |
| Secondary Effects | 51 | 71 | 122 |
| Total Employment Supported | 380 | 71 | 451 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 238.3 | 264.4 | 502.7 |

Table 2 (cont.) Economic Effects, Lake Region State College, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 18.2 | 9.5 | 27.7 |
| Secondary Effects | 14.8 | 10.1 | 24.9 |
| Total (direct and secondary) Effects | 33.0 | 19.6 | 52.6 |
| Employment | | | |
| ----- jobs ----- | | | |
| Direct Effect (college employees) | 316 | n/a | 316 |
| Secondary Effects | 96 | 67 | 163 |
| Total Employment Supported | 412 | 67 | 479 |
| Tax Revenues | | | |
| ----- thousand \$ ----- | | | |
| Sales, Property, Personal Income, Other | 278.9 | 250.9 | 529.8 |
| ¹ Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations. | | | |



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Lake Region State College had total expenditures of \$20.1 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$11.3 million, 56 percent of total expenditures.
- Non-general Funds accounted for 55 percent of Lake Region State College expenditures in FY2021.
- Lake Region State College leveraged \$1.22 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Lake Region State College operations were \$18.2 million. Total (direct and secondary) economic effects were \$33.0 million.
- In FY2021, student living expenses resulted in \$9.5 million in direct effects and \$10.1 million in secondary effects, for total direct and secondary effects of \$19.6 million.
- Lake Region State College student expenditures in FY2021 were estimated to be approximately \$12,022 per student.
- Combined, Lake Region State College operations and student expenditures (direct effects) in FY2021 were \$27.7 million. Total economic contribution (direct plus secondary) from Lake Region State College operations and student expenditures was \$52.6 million.
- Of the total economic effects (direct plus secondary) 48 percent of total economic effects were attributable to Non-general Funds.
- Lake Region State College in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$530,000 in state and local tax collections.
- Direct employment at Lake Region State College was 316 jobs in FY2021. Business activity from Lake Region State College expenditures and spending by students supported secondary employment of 163 jobs. Total direct and secondary employment was 479 jobs in FY2021.

Mayville State University

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Mayville State University using key economic indicators; gross business volume, selected tax revenues, and employment.

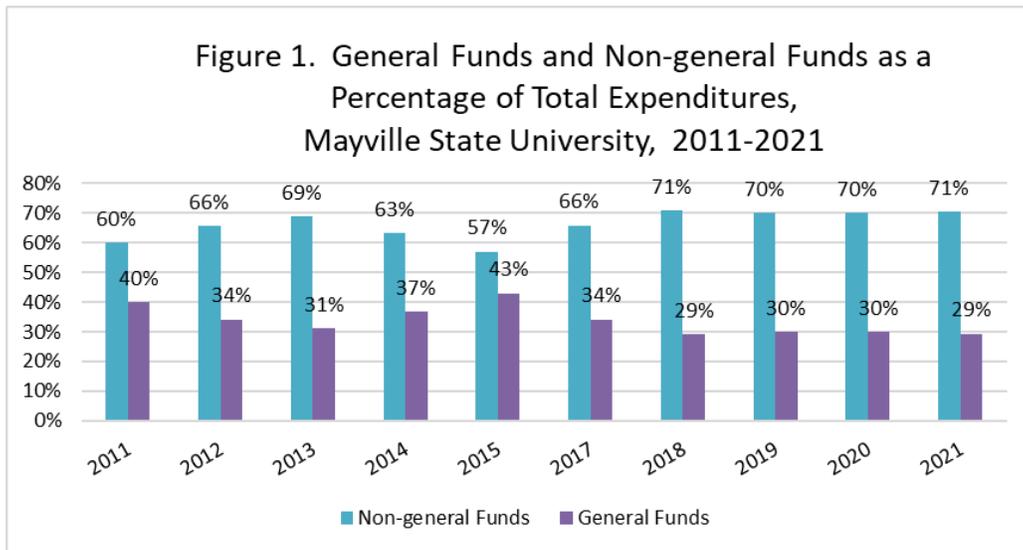
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$25.7 million and \$27.1 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$17.2 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$7.0 million in FY2021. Scholarships totaled \$2.4 million and Capital Improvements and Equipment totaled \$0.6 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Mayville State University, FY2020 and FY2021. | | |
|--|-----------------------|-------------|
| | FY2020 | FY2021 |
| | ----- million \$----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 16.6 | 17.2 |
| Operations | 6.4 | 7.0 |
| Scholarships | 2.5 | 2.4 |
| Capital Expenditures | 0.2 | 0.6 |
| Total | 25.7 | 27.1 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 10.7 | 10.9 |
| Operations | 4.9 | 5.5 |
| Scholarships | 2.3 | 2.2 |
| Capital Expenditures | 0.1 | 0.6 |
| Total | 18.0 | 19.2 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 5.9 | 6.3 |
| Operations | 1.5 | 1.5 |
| Scholarships | 0.2 | 0.2 |
| Capital Expenditures | 0.1 | > 0.1 |
| Total | 7.7 | 8.0 |

In FY2021, Non-general Funds made up 71 percent of total Mayville State University expenditures for operations while General Fund expenditures made up 29 percent. Since FY2018, the share of Non-general Funds as a percentage of total expenditures has been relatively consistent. (Figure 1).

In FY2021, for every dollar of General Funds, Mayville State University obtained an additional \$2.41 in Non-general Funds. In FY2020, Mayville State University leveraged \$2.34 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Mayville State University expenditures for wages and salaries, operations, and capital expenditures. While Mayville State University also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Mayville State University total expenditures.

Direct effects from General and Non-general Fund expenditures were \$24.7 million in FY2021. Secondary effects (indirect and induced) totaled \$16.9 million. Total direct and secondary effects from Mayville State University expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$41.7 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$10.0 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported

additional induced (secondary) effects of \$10.7 million, for total economic effects (direct and secondary) of \$20.7 million (Table 2). Average per student expenditures were \$12,335 (data not shown).

Direct employment at Mayville State University in FY2021 was 356 jobs. Business activity associated with Mayville State University expenditures supported secondary employment of 110 jobs in FY2021. Student expenditures supported secondary employment of 71 jobs. Total direct and secondary employment associated with Mayville State University supported 537 jobs in FY2021 (Table 2).

In FY2021, business activity from Mayville State University General and Non-general Fund expenditures was estimated to generate about \$316,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$265,000 in state and local tax revenue. Combined, Mayville State University operations and student expenditures generated \$582,000 in state and local tax revenue in FY2021 (Table 2).

Total (direct and secondary) economic effects from Mayville State University operations in FY2021 were fairly evenly split between Non-general and General Fund expenditures. Economic effects from Non-general expenditures in FY2021 comprised 69 percent of Mayville State University (direct plus secondary) economic effects compared to 31 percent from General Funds (Figure 2).

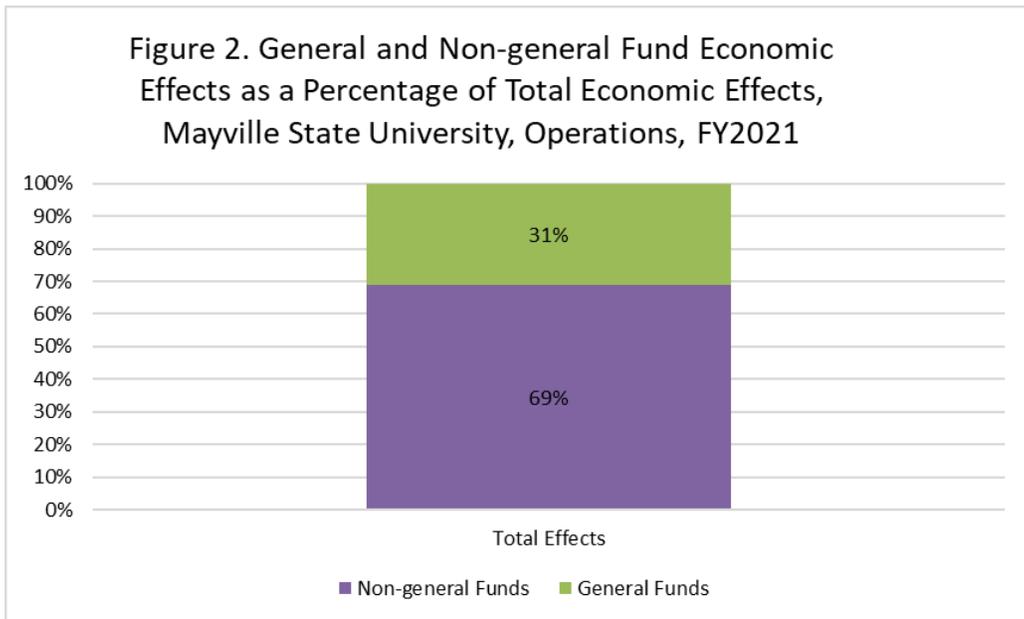
| Table 2. Economic Effects, Operations and Student Expenditures, Mayville State University, FY2020 and FY2021. | | | |
|--|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 23.2 | 9.5 | 32.8 |
| Secondary Effects | 15.7 | 10.1 | 25.8 |
| Total (direct and secondary) Effects | 38.9 | 19.6 | 58.6 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 395 | n/a | 395 |
| Secondary Effects | 101 | 67 | 168 |
| Total Employment Supported | 466 | 67 | 563 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 319.0 | 248.3 | 567.3 |

Table 2 (cont.) Economic Effects, Mayville State University, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 24.7 | 10.0 | 34.8 |
| Secondary Effects | 16.9 | 10.7 | 27.6 |
| Total (direct and secondary) Effects | 41.7 | 20.7 | 62.4 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 356 | n/a | 356 |
| Secondary Effects | 110 | 71 | 181 |
| Total Employment Supported | 466 | 71 | 537 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 316.3 | 265.3 | 581.6 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.

Figure 2. General and Non-general Fund Economic Effects as a Percentage of Total Economic Effects, Mayville State University, Operations, FY2021



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Mayville State University had expenditures of \$27.1 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$17.2 million, 63 percent of total expenditures.
- Non-general Funds accounted for 71 percent of Mayville State University expenditures in FY2021.
- Mayville State University leveraged \$2.41 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Mayville State University operations were \$24.7 million. Total (direct and secondary) economic effects were \$41.7 million.
- In FY2021, economic effects of student living expenses resulted in \$10.0 million in direct effects and \$10.7 million in secondary effects, for total direct and secondary effects of \$20.7 million.
- Mayville State University student expenditures in FY2021 were estimated to be approximately \$12,335 per student.
- Combined, Mayville State University operations and student expenditures (direct effects) in FY2021 were \$34.8 million. Total economic contribution (direct plus secondary) was \$62.4 million.
- Of the total economic effects (direct plus secondary), 51 percent of total economic effects were attributable to Non-general Funds.
- Mayville State University in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$582,000 in state and local tax collections.
- Direct employment at Mayville State University was 356 jobs in FY2021. Business activity from Mayville State University expenditures and spending by students supported secondary employment of 181 jobs. Total direct and secondary employment was 537 jobs in FY2021.

Minot State University

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Minot State University using key economic indicators; gross business volume, selected tax revenues, and employment.

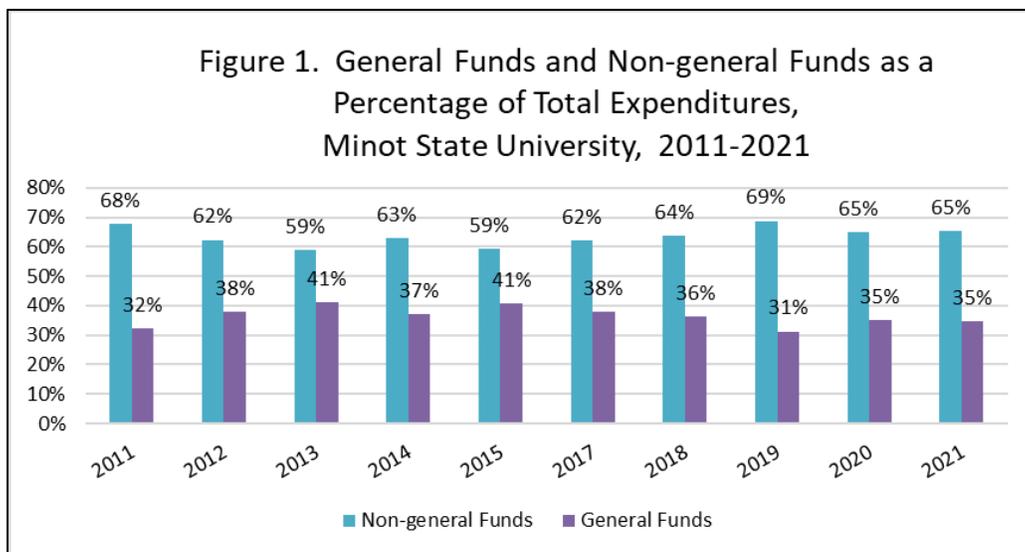
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$57.0 million and \$58.0 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$36.1 million. Operating expenditures were the next largest expenditure category, totaling \$14.3 million in FY2021. Scholarships totaled \$6.8 million and Capital Improvements and Equipment totaled \$0.7 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Minot State University, FY2020 and FY2021. | | |
|--|-----------------------|---------------|
| | FY2020 | FY2021 |
| | ----- million \$----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 36.0 | 36.1 |
| Operations | 12.9 | 14.3 |
| Scholarships | 6.6 | 6.8 |
| Capital Expenditures | 1.5 | 0.7 |
| Total | 57.0 | 58.0 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 20.7 | 20.1 |
| Operations | 9.8 | 11.3 |
| Scholarships | 5.7 | 5.8 |
| Capital Expenditures | 0.8 | 0.6 |
| Total | 36.9 | 37.8 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 15.3 | 16.0 |
| Operations | 3.1 | 3.0 |
| Scholarships | 0.9 | 1.1 |
| Capital Expenditures | 0.7 | 0.1 |
| Total | 20.0 | 20.2 |

In FY2021, Non-general Funds made up 65 percent of total Minot State University expenditures while General Fund expenditures made up 35 percent. Since 2011, the share of Non-general Funds as a percentage of total expenditures has been relatively consistent (Figure 1).

In FY2021, for every dollar of General Funds, Minot State University obtained an additional \$1.88 in Non-general Funds. In FY2020, Minot State University leveraged \$1.84 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Minot State University expenditures for wages and salaries, operations, and capital expenditures. While Minot State University also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Minot State University total expenditures.

Direct effects from General and Non-general Fund expenditures were \$51.1 million in FY2021. Secondary effects (indirect and induced) totaled \$31.9 million. Total direct and secondary effects from Minot State University expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$83.1 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$26.1 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported

additional induced (secondary) effects of \$27.7 million, for total economic effects (direct and secondary) of \$53.8 million (Table 2). Average per student expenditures were \$11,642 (data not shown).

Direct employment at Minot State University in FY2021 was 914 jobs. Business activity associated with Minot State University expenditures supported secondary employment of 202 jobs in FY2021. Student expenditures supported secondary employment of 184 jobs. Total direct and secondary employment associated with Minot State University supported 1,301 jobs in FY2021 (Table 2).

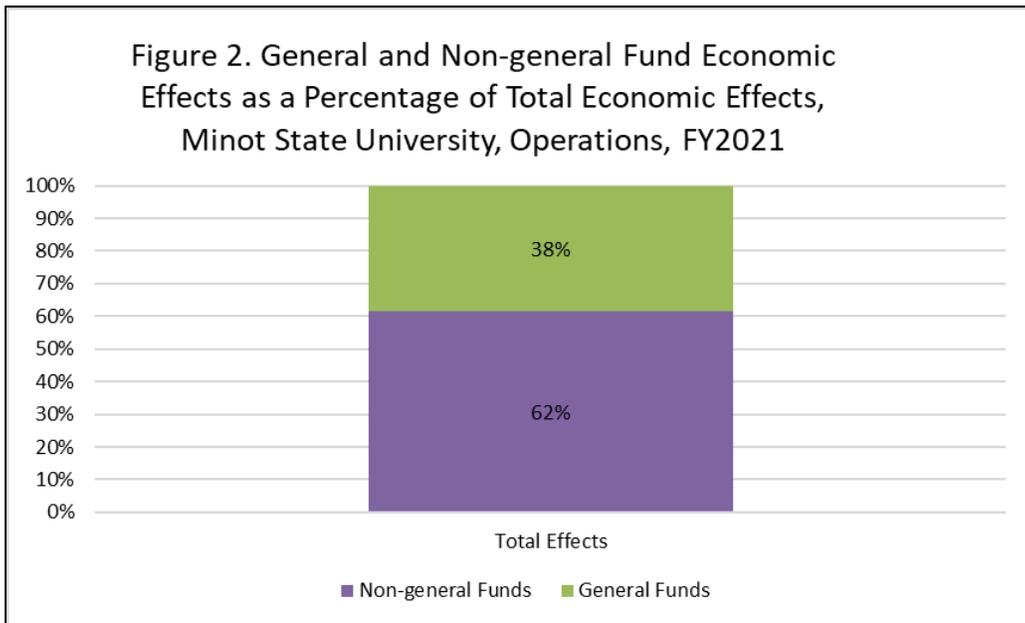
In FY2021, business activity from Minot State University General and Non-general Fund expenditures was estimated to generate about \$666,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$689,000 in state and local tax revenue. Combined, Minot State University operations and student expenditures generated \$1.4 million in state and local tax revenue (Table 2).

A substantial portion of total (direct and secondary) economic effects from Minot State University operations in FY2021 was a result of Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 comprised 62 percent of Minot State University (direct plus secondary) economic effects (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Minot State University, FY2020 and FY2021. | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 50.4 | 27.5 | 77.9 |
| Secondary Effects | 33.3 | 29.2 | 62.4 |
| Total (direct and secondary) Effects | 83.7 | 56.6 | 140.3 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 773 | n/a | 773 |
| Secondary Effects | 216 | 194 | 410 |
| Total Employment Supported | 989 | 194 | 1,183 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 671.8 | 715.7 | 1,387.5 |

Table 2 (cont.) Economic Effects, Minot State University, FY2020 and FY2021

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|----------------------|---------|
| | FY2021 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 51.1 | 26.1 | 77.2 |
| Secondary Effects | 31.9 | 27.7 | 59.7 |
| Total (direct and secondary) Effects | 83.1 | 53.8 | 136.9 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 914 | n/a | 914 |
| Secondary Effects | 202 | 184 | 387 |
| Total Employment Supported | 1,116 | 184 | 1,301 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 666.0 | 688.8 | 1,354.8 |
| ¹ Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations. | | | |



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Minot State University had expenditures of \$58.0 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$36.1 million, 62 percent of total expenditures.
- Non-general Funds accounted for 65 percent of Minot State University expenditures in FY2021.
- Minot State University leveraged \$1.88 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Minot State University operations were \$51.1 million. Total (direct and secondary) economic effects were \$83.1 million.
- In FY2021, economic effects of student living expenses resulted in \$26.1 million in direct effects and \$27.7 million in secondary effects, for total direct and secondary effects of \$53.8 million.
- Minot State University student expenditures in FY2021 were estimated to be approximately \$11,642 per student.
- Combined, Minot State University operations and student expenditures (direct effects) in FY2021 were \$77.2 million. Total economic contributions (direct plus secondary) from Minot State operations and student expenditures was \$136.9 million.
- Sixty-two percent of total (direct and secondary) economic effects from Minot State University Operations were a result of Non-general Fund expenditures in FY2021.
- Minot State University in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$1.4 million in state and local tax collections in FY2021.
- Direct employment at Minot State University was 914 jobs in FY2021. Business activity from Minot State University expenditures and spending by students supported secondary employment of 387 jobs. Total direct and secondary employment was 1,301 jobs in FY2021.

North Dakota State College of Science

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of North Dakota State College of Science using key economic indicators; gross business volume, selected tax revenues, and employment.

General and Non-general Expenditures

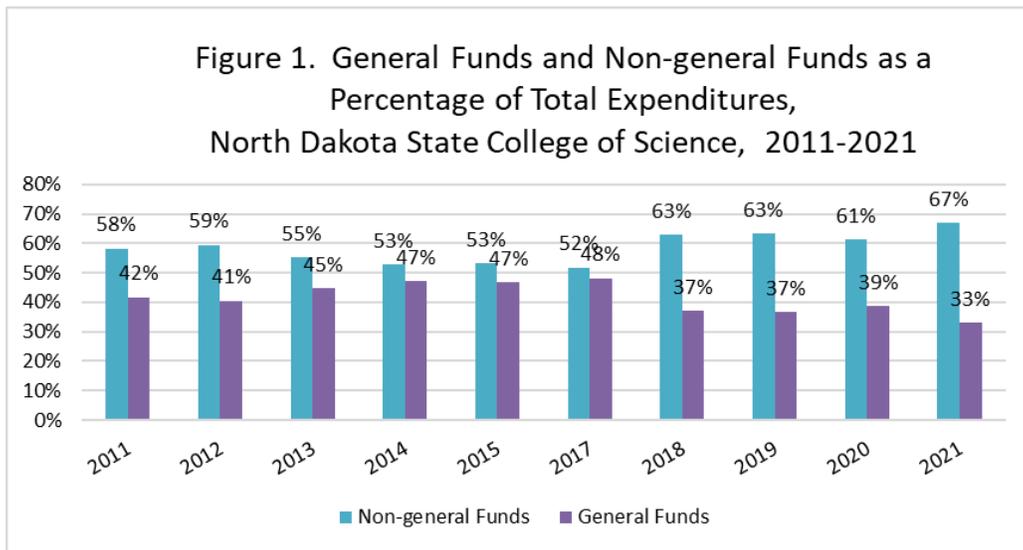
Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$44.9 million and \$53.6 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$27.7 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$19.2 million in FY2021. Scholarships totaled \$4.4 million and Capital Improvements and Equipment totaled \$2.4 million in FY2021 (Table 1).

Table 1. General and Non-general Expenditures, North Dakota State College of Science, FY2020 and FY2021.

| | FY2020 | FY2021 |
|--|-----------------------|-------------|
| | ----- million \$----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 27.4 | 27.7 |
| Operations | 12.0 | 19.2 |
| Scholarships | 4.6 | 4.4 |
| Capital Expenditures | 0.9 | 2.4 |
| Total | 44.9 | 53.6 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 13.2 | 13.0 |
| Operations | 9.3 | 16.5 |
| Scholarships | 4.3 | 4.1 |
| Capital Expenditures | 0.8 | 2.3 |
| Total | 27.6 | 35.9 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 14.3 | 14.7 |
| Operations | 2.7 | 2.7 |
| Scholarships | 0.3 | 0.2 |
| Capital Expenditures | 0.1 | 0.1 |
| Total | 17.3 | 17.7 |

In FY2021, Non-general Funds made up 67 percent of total North Dakota State College of Science expenditures for operations while General Fund expenditures made up 33 percent. Since FY2018, the share of Non-general Funds as a percentage of total expenditures has been relatively consistent. Prior to 2018, the share of Non-general Funds was lower, ranging from 52 to 59 percent (Figure 1).

In FY2021, for every dollar of General Funds, North Dakota State College of Science obtained an additional \$2.03 in Non-general Funds. In FY2020, North Dakota State College of Science leveraged \$1.59 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from North Dakota State College of Science expenditures for wages and salaries, operations, and capital expenditures. While North Dakota State College of Science also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than North Dakota State College of Science total expenditures.

Direct effects from General and Non-general Fund expenditures were \$49.3 million in FY2021. Secondary effects (indirect and induced) totaled \$35.6 million. Total direct and secondary effects from North Dakota State College of Science expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$84.9 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$24.4 million in

North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$25.9 million, for total economic effects (direct and secondary) of \$50.3 million (Table 2). Average per student expenditures were \$12,022 (data not shown).

Direct employment at North Dakota State College of Science in FY2021 was 619 jobs. Business activity associated with North Dakota State College of Science expenditures supported secondary employment of 226 jobs in FY2021. Student expenditures supported secondary employment of 172 jobs. Total direct and secondary employment associated with North Dakota State College of Science supported 1,017 jobs in FY2021 (Table 2).

In FY2021, business activity from North Dakota State College of Science General and Non-general Fund expenditures was estimated to generate about \$651,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$644,000 in state and local tax revenue. Combined North Dakota State College of Science operations and student expenditures generated \$1.3 million in state and local tax revenue (Table 2).

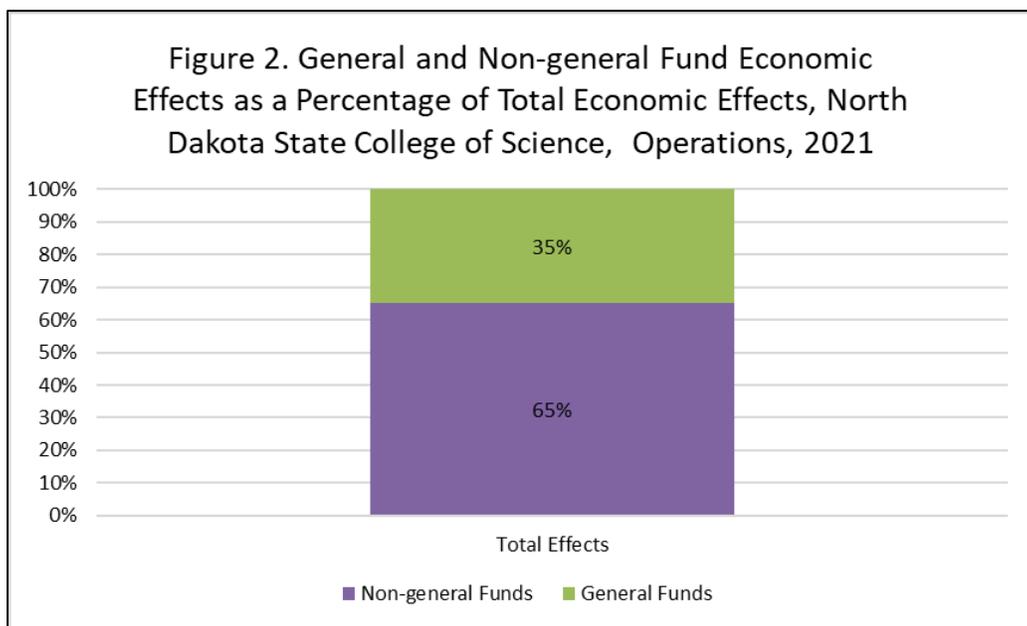
A substantial portion of total (direct and secondary) economic effects from North Dakota State College of Science operations in FY2021 was from Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 were 65 percent of North Dakota State College of Science (direct plus secondary) economic effects and 35 percent were from General Funds (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, North Dakota State College of Science, FY2020 and FY2021. | | | |
|--|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 40.3 | 23.3 | 63.7 |
| Secondary Effects | 30.3 | 24.8 | 55.0 |
| Total (direct and secondary) Effects | 70.6 | 48.1 | 118.7 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 612 | n/a | 612 |
| Secondary Effects | 190 | 165 | 354 |
| Total Employment Supported | 802 | 165 | 966 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 598.7 | 608.2 | 1,206.9 |

Table 2 (cont.) Economic Effects, North Dakota State College of Science, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|--|-------------------------|-----------------------------|--------------|
| | FY2021 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 49.3 | 24.4 | 73.7 |
| Secondary Effects | 35.6 | 25.9 | 61.5 |
| Total (direct and secondary) Effects | 84.9 | 50.3 | 135.2 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 619 | n/a | 619 |
| Secondary Effects | 226 | 172 | 398 |
| Total Employment Supported | 845 | 172 | 1,017 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 651.1 | 643.7 | 1,294.8 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- North Dakota State College of Science had expenditures of \$53.6 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$27.7 million, 52 percent of total expenditures.
- Non-general Funds accounted for 67 percent of North Dakota State College of Science expenditures in FY2021.
- North Dakota State College of Science leveraged \$2.03 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from North Dakota State College of Science operations were \$49.3 million. Total (direct and secondary) economic effects were \$84.9 million.
- In FY2021, student living expenses resulted in \$24.4 million in direct effects and \$25.9 million in secondary effects, for total direct and secondary effects of \$50.3 million.
- North Dakota State College of Science student expenditures in FY2021 were estimated to be \$12,022 per student.
- Combined, North Dakota State College of Science operations and student expenditures (direct effects) in FY2021 were \$73.7 million. Total economic contribution (direct plus secondary) from operations and student expenditures was \$135.2 million.
- Sixty-five percent of total (direct and secondary) economic effects from North Dakota State College of Science operations were a result of Non-general Fund expenditures in FY2021.
- North Dakota State College of Science in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$1.3 million in state and local tax collections in FY2021.
- Direct employment at North Dakota State College of Science was 619 jobs in FY2021. Business activity from operations and spending by students supported secondary employment of 398 jobs. Total direct and secondary employment was 1,017 in FY2021.

North Dakota State University

Each of the state's college campuses is an important component of that area's local economy. This summary highlights the economic contribution of North Dakota State University using key economic indicators; gross business volume, selected tax revenues, and employment.

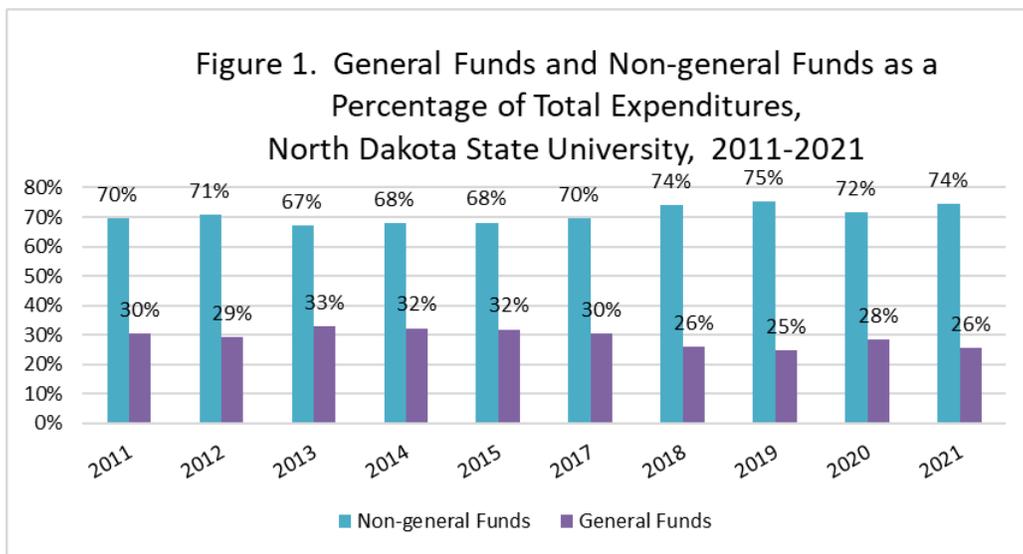
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$470.6 million and \$538.4 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$284.7 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$170.9 million in FY2021. Scholarships totaled \$29.2 million and Capital Improvements and Equipment totaled \$53.5 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, North Dakota State University, FY2020 and FY2021. | | |
|--|------------------------|--------------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 275.8 | 284.7 |
| Operations | 142.0 | 170.9 |
| Scholarships | 30.7 | 29.2 |
| Capital Expenditures | 22.2 | 53.5 |
| Total | 470.6 | 538.4 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 174.4 | 181.1 |
| Operations | 119.5 | 148.1 |
| Scholarships | 26.8 | 25.7 |
| Capital Expenditures | 16.5 | 46.0 |
| Total | 337.3 | 400.8 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 101.4 | 103.7 |
| Operations | 22.4 | 22.9 |
| Scholarships | 3.8 | 3.5 |
| Capital Expenditures | 5.6 | 7.6 |
| Total | 133.3 | 137.6 |

In FY2021, Non-general Funds made up 74 percent of total North Dakota State University expenditures for operations while General Fund expenditures made up 26 percent. Since FY2018, the share of Non-general Funds as a percentage of total expenditures has been relatively consistent (Figure 1). Prior to 2018, General Fund expenditures made up a slightly higher percentage of total expenditures ranging from 29 to 33 percent.

In FY2021, for every dollar of General Funds, North Dakota State University obtained an additional \$2.91 in Non-general Funds. In FY2020, North Dakota State University leveraged \$2.53 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from North Dakota State University expenditures for wages and salaries, operations, and capital expenditures. While North Dakota State University also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than North Dakota State University total expenditures.

Direct effects from General and Non-general Fund expenditures were \$509.2 million in FY2021. Secondary effects (indirect and induced) totaled \$426 million. Total direct and secondary effects from North Dakota State University expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$935.2 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$149.0 million in

North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$158.3 million, for total economic effects (direct and secondary) of \$307.3 million (Table 2). Average per student expenditures were \$13,723 (data not shown).

Direct employment at North Dakota State University in FY2021 was 4,819 jobs. Business activity associated with North Dakota State University expenditures supported secondary employment of 2,649 jobs in FY2021. Student expenditures supported secondary employment of 1,053 jobs. Total direct and secondary employment associated with North Dakota State University supported 8,521 jobs in FY2021 (Table 2).

In FY2021, business activity from North Dakota State University General and Non-general Fund expenditures was estimated to generate about \$7.1 million in revenue to state and local government jurisdictions. Student spending generated an additional \$3.9 million in state and local tax revenue. Combined, North Dakota State University operations and student expenditures generated \$11.0 million in state and local tax revenue (Table 2).

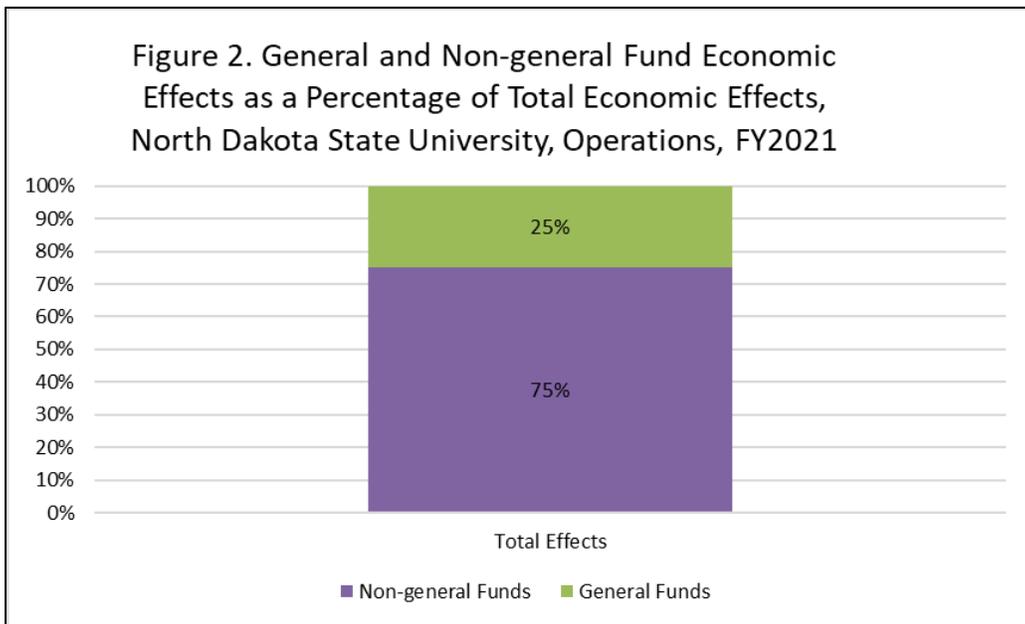
A substantial portion of total (direct and secondary) economic effects from North Dakota State University operations in FY2021 was from Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 were 75 percent of North Dakota State University (direct plus secondary) economic effects and 25 percent were from General Funds (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, North Dakota State University, FY2020 and FY2021. | | | |
|--|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 440.0 | 155.1 | 595.0 |
| Secondary Effects | 344.3 | 164.7 | 509.0 |
| Total (direct and secondary) Effects | 784.3 | 319.7 | 1,104.0 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 4,495 | n/a | 4,495 |
| Secondary Effects | 2,160 | 1,095 | 3,255 |
| Total Employment Supported | 7,155 | 1,095 | 8,250 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 6,700.5 | 4,040.5 | 10,741.0 |

Table 2 (cont.) Economic Effects, North Dakota State University, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 509.2 | 149.0 | 658.2 |
| Secondary Effects | 426.0 | 158.3 | 584.3 |
| Total (direct and secondary) Effects | 935.2 | 307.3 | 1,242.5 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 4,819 | n/a | 4,819 |
| Secondary Effects | 2,649 | 1,053 | 3,702 |
| Total Employment Supported | 7,468 | 1,053 | 8,521 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 7,107.5 | 3,933.0 | 11,040.5 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- North Dakota State University had expenditures of \$538.4 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$284.7 million, 53 percent of total expenditures.
- Non-general Funds accounted for 74 percent of North Dakota State University expenditures in FY2021.
- North Dakota State University leveraged \$2.91 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from North Dakota State University operations were \$509.2 million. Total (direct and secondary) economic effects were \$935.2 million.
- In FY2021, economic effects of student living expenses resulted in \$149.0 million in direct effects and \$158.3 million in secondary effects, for total direct and secondary effects of \$307.3 million.
- North Dakota State University student expenditures in FY2021 were estimated to be approximately \$13,723 per student.
- Combined, North Dakota State University operations and student expenditures (direct effects) in FY2021 was \$658.2 million. Total economic contribution (direct plus secondary) from NDSU operations and student expenditures was \$1.24 billion.
- Seventy-five percent of total (direct and secondary) economic effects from North Dakota State University operations were a result of Non-general Fund expenditures.
- North Dakota State University in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$11.0 million in state and local tax collections.
- Direct employment at North Dakota State University was 4,819 jobs in FY2021. Business activity from North Dakota State University expenditures and spending by students supported secondary employment of 3,702 jobs. Total direct and secondary employment was 8,521 jobs in FY2021.

University of North Dakota

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of University of North Dakota using key economic indicators; gross business volume, selected tax revenues, and employment.

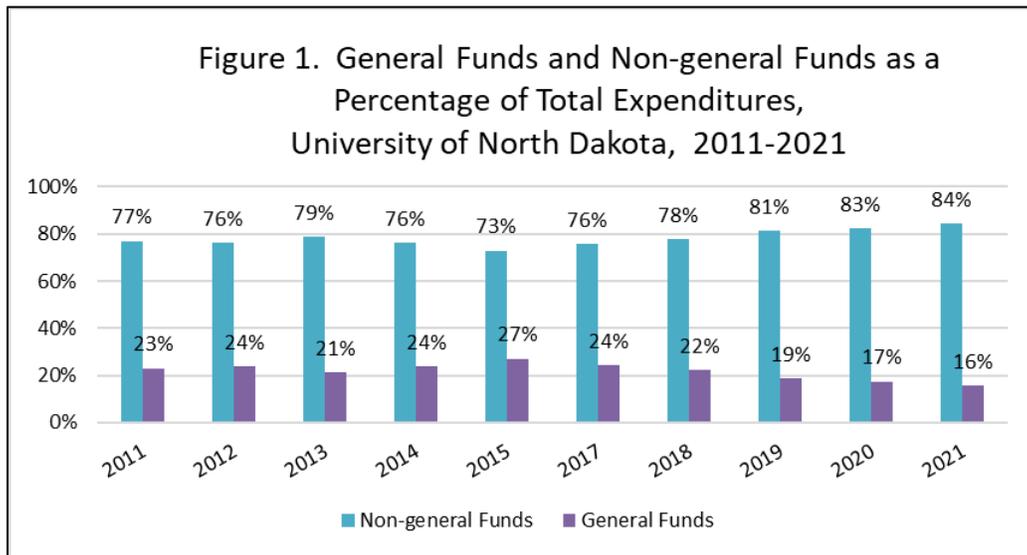
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$595.8 million and \$659.6 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$306.6 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$227.2 million in FY2021. Scholarships totaled \$33.9 million and Capital Improvements and Equipment totaled \$91.9 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, University of North Dakota, FY2020 and FY2021. | | |
|---|------------------------|--------------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 293.4 | 306.6 |
| Operations | 188.6 | 227.2 |
| Scholarships | 33.1 | 33.9 |
| Capital Expenditures | 80.7 | 91.9 |
| Total | 595.8 | 659.6 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 224.3 | 239.9 |
| Operations | 165.8 | 209.2 |
| Scholarships | 30.6 | 31.0 |
| Capital Expenditures | 71.1 | 76.5 |
| Total | 491.7 | 556.7 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 69.1 | 66.7 |
| Operations | 22.8 | 18.0 |
| Scholarships | 2.5 | 2.9 |
| Capital Expenditures | 9.6 | 15.4 |
| Total | 104.1 | 102.9 |

In FY2021, Non-general Funds made up 84 percent of total University of North Dakota expenditures for operations while General Fund expenditures made up 16 percent. Since FY2015, the share of Non-general Funds as a percentage of total expenditures has increased from 73 to 84 percent in FY2021 (Figure 1).

In FY2021, for every dollar of General Funds, University of North Dakota obtained an additional \$5.41 in Non-general Funds. In FY2020, University of North Dakota leveraged \$4.73 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from University of North Dakota expenditures for wages and salaries, operations, and capital expenditures. While the University of North Dakota also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than University of North Dakota total expenditures.

Direct effects from General and Non-general Fund expenditures were \$625.8 million in FY2021. Secondary effects (indirect and induced) totaled \$542.8 million. Total direct and secondary effects from University of North Dakota expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$1.17 billion in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$148.8 million in

North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$158.0 million, for total economic effects (direct and secondary) of \$306.8 million (Table 2). Average per student expenditures were \$13,723 (data not shown).

Direct employment at University of North Dakota in FY2021 was 4,993 jobs. Business activity associated with University of North Dakota expenditures supported secondary employment of 3,612 jobs in FY2021. Student expenditures supported secondary employment of 1,051 jobs. Total direct and secondary employment associated with University of North Dakota supported 9,656 jobs in FY2021 (Table 2).

In FY2021, business activity from University of North Dakota General and Non-general Fund expenditures was estimated to generate about \$9.1 million in revenue to state and local government jurisdictions. Student spending generated an additional \$3.9 million in state and local tax revenue. Combined, University of North Dakota operations and student expenditures generated \$13.0 million in state and local tax revenue (Table 2).

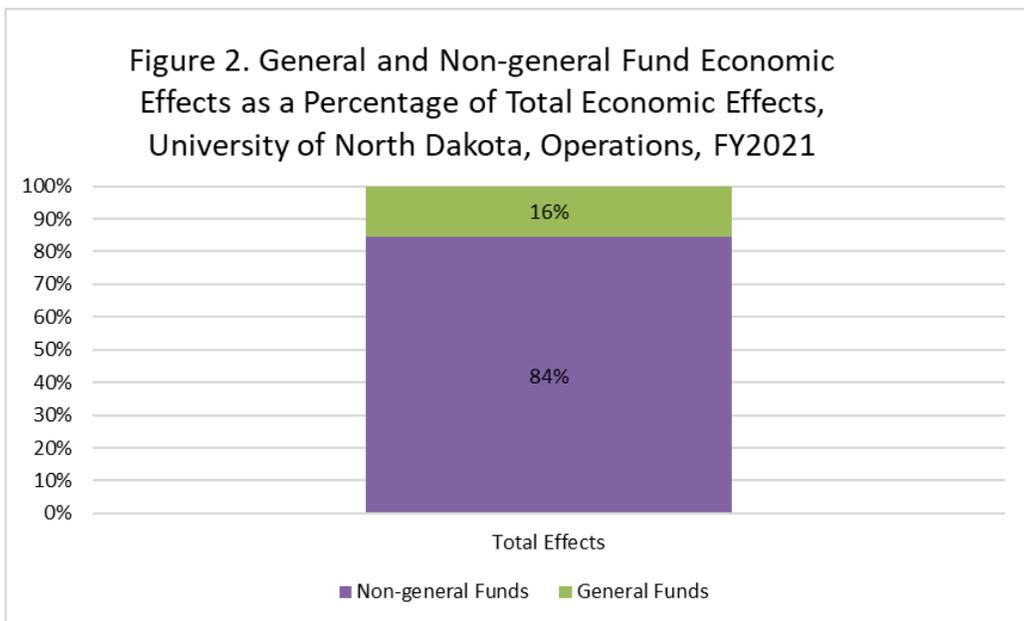
A substantial portion of total (direct and secondary) economic effects from University of North Dakota operations in FY2021 was from Non-general Fund expenditures. Economic effects from Non-general expenditures in FY2021 were 84 percent of University of North Dakota (direct plus secondary) economic effects and 16 percent were from General Funds (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, University of North Dakota, FY2020 and FY2021. | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 562.7 | 150.7 | 713.4 |
| Secondary Effects | 485.7 | 160.0 | 645.7 |
| Total (direct and secondary) Effects | 1,048.4 | 310.7 | 1,359.0 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 4,947 | n/a | 4,947 |
| Secondary Effects | 3,155 | 1,064 | 4,219 |
| Total Employment Supported | 8,102 | 1,064 | 9,166 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 8,831.5 | 3,926.0 | 12,757.5 |

Table 2 (cont.) Economic Effects, University of North Dakota, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 625.8 | 148.8 | 774.5 |
| Secondary Effects | 542.8 | 158.0 | 700.8 |
| Total (direct and secondary) Effects | 1,168.6 | 306.8 | 1,475.4 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 4,993 | n/a | 4,993 |
| Secondary Effects | 3,612 | 1,051 | 4,663 |
| Total Employment Supported | 8,605 | 1,051 | 9,656 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 9,093.1 | 3,926.1 | 13,019.2 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- University of North Dakota had expenditures of \$659.6 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$306.6 million, 46 percent of total expenditures.
- Non-general Funds accounted for 84 percent of University of North Dakota expenditures in FY2021.
- University of North Dakota leveraged \$5.41 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from University of North Dakota operations were \$625.8 million. Total (direct and secondary) economic effects were \$1.17 billion.
- In FY2021, economic effects of student living expenses resulted in \$148.8 million in direct effects and \$158.0 million in secondary effects, for total direct and secondary effects of \$306.8 million.
- University of North Dakota student expenditures in FY2021 were estimated to be approximately \$13,723 per student.
- Combined, University of North Dakota operations and student expenditures (direct effects) in FY2021 was \$774.5 million. Total economic contribution (direct plus secondary) from UND operations and student expenditures was \$1.48 billion.
- Eight-four percent total (direct and secondary) economic effects from University of North Dakota Operations were a result of Non-general Fund expenditures.
- University of North Dakota in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$13.0 million in state and local tax collections.
- Direct employment at University of North Dakota was 4,993 jobs in FY2021. Business activity from University of North Dakota expenditures and spending by students supported secondary employment of 4,663 jobs. Total direct and secondary employment was 9,656 jobs in FY2021.

Valley City State University

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Valley City State University using key economic indicators; gross business volume, selected tax revenues, and employment.

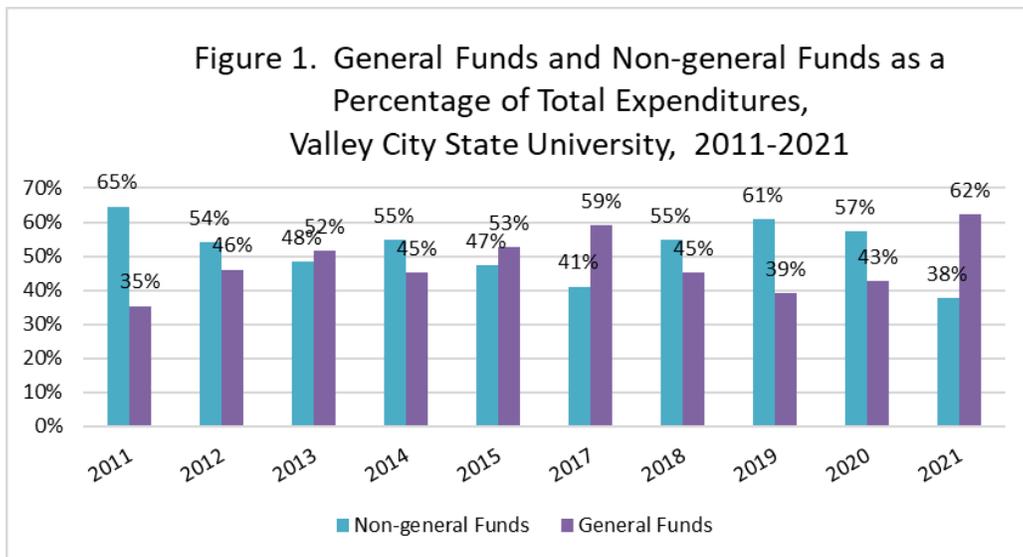
General and Non-general Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$31.5 million and \$44.8 million, respectively (Table 1). Capital Improvements and Equipment expenditures were the largest expenditure category in FY2021, totaling \$17.5 million in FY2021. Wages, salaries, and benefits were the next largest expenditure category, totaling \$17.2 million in FY2021. Operating expenditures totaled \$6.8 million and Scholarships totaled \$3.2 million in FY2021 (Table 1).

| Table 1. General and Non-general Expenditures, Valley City State University, FY2020 and FY2021. | | |
|---|------------------------|-------------|
| | FY2020 | FY2021 |
| | ----- million \$ ----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 16.8 | 17.2 |
| Operations | 9.1 | 6.8 |
| Scholarships | 3.3 | 3.2 |
| Capital Expenditures | 2.3 | 17.5 |
| Total | 31.5 | 44.8 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 8.3 | 8.6 |
| Operations | 5.9 | 4.9 |
| Scholarships | 3.2 | 3.1 |
| Capital Expenditures | 0.7 | 0.3 |
| Total | 18.0 | 16.9 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 8.5 | 8.7 |
| Operations | 3.2 | 1.9 |
| Scholarships | 0.1 | 0.1 |
| Capital Expenditures | 1.6 | 17.2 |
| Total | 13.5 | 27.8 |

In FY2021, General Funds made up 62 percent of total Valley City State University expenditures for operations while Non-general Fund expenditures made up 38 percent. Historically, Non-general Funds as a percentage of total expenditures are generally greater than General Funds expenditures. This shift in distribution was a result of substantial General Fund Expenditures for capital improvements. Occasional appropriated expenditures for capital improvements can influence that distribution from year to year (Figure 1).

In FY2021, for every dollar of General Funds, Valley City State University obtained an additional \$0.61 in Non-general Funds. In FY2020, Valley City State University leveraged \$1.34 from external sources for every dollar of appropriated funds. In FY2021, Valley City State University had substantial General Fund dollars for Capital Improvement reducing the ratio. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund Expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Valley City State University expenditures for wages and salaries, operations, and capital expenditures. While Valley City State University also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Valley City State University total expenditures.

Direct effects from General and Non-general Fund expenditures were \$41.5 million in FY2021. Secondary effects (indirect and induced) totaled \$44.5 million. Total direct and secondary effects from Valley City State University expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$86.1 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$13.6 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported additional induced (secondary) effects of \$14.4 million, for total economic effects (direct and secondary) of \$28.0 million (Table 2). Average per student expenditures were \$12,435 (data not shown).

Direct employment at Valley City State University in FY2021 was 364 jobs. Business activity associated with Valley City State University expenditures supported secondary employment of 311 jobs in FY2021. Student expenditures supported secondary employment of 96 jobs. Total direct and secondary employment associated with Valley City State University supported 770 jobs in FY2021 (Table 2).

In FY2021, business activity from Valley City State University General and Non-general Fund expenditures was estimated to generate about \$756,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$358,000 in state and local tax revenue. Combined, Valley City State University operations and student expenditures generated \$1.11 million in state and local tax revenue (Table 2).

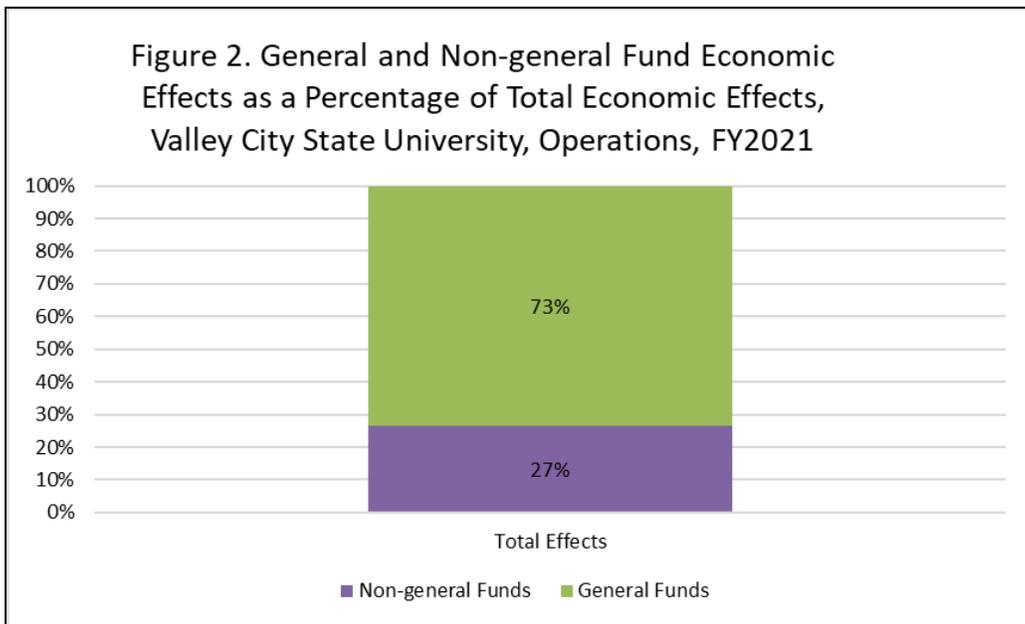
A substantial portion of total (direct and secondary) economic effects from Valley City State University operations in FY2021 was from General Fund expenditures. Economic effects from General expenditures in FY2021 were 73 percent of Valley City State University (direct plus secondary) economic effects and 27 percent were from Non-general Funds (Figure 2).

| Table 2. Economic Effects, Operations and Student Expenditures, Valley City State University, FY2020 and FY2021. | | | |
|---|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 28.2 | 13.9 | 42.0 |
| Secondary Effects | 21.9 | 14.8 | 36.7 |
| Total (direct and secondary) Effects | 50.1 | 28.7 | 78.7 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 254 | n/a | 254 |
| Secondary Effects | 147 | 98 | 245 |
| Total Employment Supported | 401 | 98 | 499 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 428.2 | 367.2 | 795.4 |

Table 2 (cont.) Economic Effects, Valley City State University, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 41.5 | 13.6 | 55.1 |
| Secondary Effects | 44.5 | 14.4 | 58.9 |
| Total (direct and secondary) Effects | 86.1 | 28.0 | 114.0 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 364 | n/a | 364 |
| Secondary Effects | 311 | 96 | 406 |
| Total Employment Supported | 675 | 96 | 770 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 756.2 | 357.7 | 1,113.9 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wage and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Valley City State University had expenditures of \$44.8 million for operational goods and services in North Dakota in FY2021.
- Capital Expenditures represent the largest itemized expenditure in FY2021, \$17.5 million, 39 percent of total expenditures.
- General Funds accounted for 62 percent of Valley City State University expenditures in FY2021.
- Valley City State University leveraged \$0.61 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Valley City State University operations were \$41.5 million. Total (direct and secondary) economic effects were \$86.1 million.
- In FY2021, student living expenses resulted in \$13.6 million in direct effects and \$14.4 million in secondary effects, for total direct and secondary effects of \$28.0 million.
- Valley City State University student expenditures in FY2021 were estimated to be approximately \$12,435 per student.
- Combined, Valley City State University operations and student expenditures (direct effects) in FY2021 was \$55.1 million. Total economic contribution (direct plus secondary) from Valley City University operations and student expenditures was \$114.0 million.
- Seventy-three percent total (direct and secondary) economic effects from Valley City State University operations were a result of General Fund expenditures in FY2021.
- Valley City State University in-state expenditures, student expenditures, and subsequent secondary business activity was estimated to generate \$1.1 million in state tax collections.
- Direct employment at Valley City State University was 364 jobs in FY2021. Business activity from Valley City State University expenditures and spending by students supported secondary employment of 406 jobs. Total direct and secondary employment was 770 jobs in FY2021.

Williston State College

Each of the state’s college campuses is an important component of that area’s local economy. This summary highlights the economic contribution of Williston State College using key economic indicators; gross business volume, selected tax revenues, and employment.

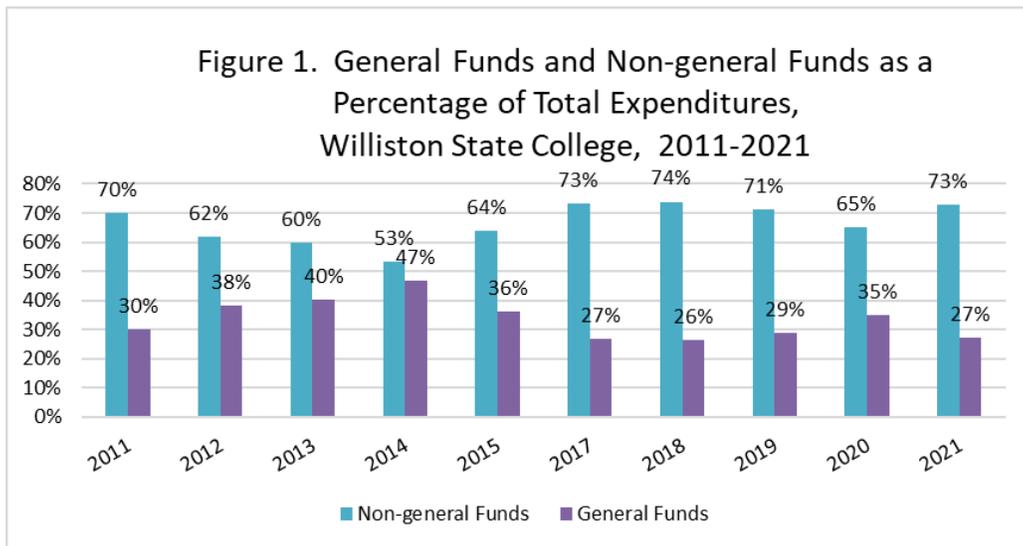
General and Non-general Operations Expenditures

Combined expenditures for General and Non-general Funds in FY2020 and FY2021 were \$24.9 million and \$23.8 million, respectively (Table 1). Wages, salaries, and benefits were the largest expenditure category in FY2021, totaling \$9.4 million in FY2021. Operating expenditures were the next largest expenditure category, totaling \$6.0 million in FY2021. Scholarships totaled \$3.8 million and Capital Improvements and Equipment totaled \$4.6 million in FY2021 (Table 1).

| Table 1. General and Non-General Expenditures, Williston State College, FY2020 and FY2021. | | |
|---|-----------------------|---------------|
| | FY2020 | FY2021 |
| | ----- million \$----- | |
| General and Non-general Fund Expenditures | | |
| Wages and Salaries and Benefits | 9.9 | 9.4 |
| Operations | 5.6 | 6.0 |
| Scholarships | 4.1 | 3.8 |
| Capital Expenditures | 5.3 | 4.6 |
| Total | 24.9 | 23.8 |
| Non-General Fund Expenditures | | |
| Wages and Salaries and Benefits | 4.3 | 4.2 |
| Operations | 4.4 | 4.9 |
| Scholarships | 4.0 | 3.7 |
| Capital Expenditures | 3.6 | 4.5 |
| Total | 16.2 | 17.3 |
| General Fund Expenditures | | |
| Wages and Salaries and Benefits | 5.6 | 5.2 |
| Operations | 1.3 | 1.1 |
| Scholarships | 0.1 | 0.1 |
| Capital Expenditures | 1.7 | 0.1 |
| Total | 8.7 | 6.5 |

In FY2021, Non-general Funds made up 73 percent of total Williston State College expenditures for operations while General Fund expenditures made up 27 percent. Since 2011, the share of Non-general Funds as a percentage of total expenditures has varied from 53 to 74 percent (Figure 1).

In FY2021, for every dollar of General Funds, Williston State College obtained an additional \$2.67 in Non-general Funds. In FY2020 Williston State College leveraged \$1.85 from external sources for every dollar of appropriated funds. (The ratio of Non-general Funds generated for every dollar of General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund expenditures).



Direct and Secondary Economic Effects

Direct or first round economic effects are from Williston State College expenditures for wages and salaries, operations, and capital expenditures. While Williston State College also had expenditures for scholarships, scholarships are excluded from the assessment of NDUS economic effects in order to avoid double counting. Scholarships are included as part of the estimate of student expenditures. Because of the exclusion of scholarships, direct or first round economic effects are slightly less than Williston State College total expenditures.

Direct effects from General and Non-general Fund expenditures were \$19.9 million in FY2021. Secondary effects (indirect and induced) totaled \$16.3 million. Total direct and secondary effects from Williston State College expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were \$36.2 million in FY2021 (Table 2).

Based on expenditures per FTE student, students were estimated to have spent \$8.1 million in North Dakota on books, room and board, personal items, and recreation during the 2020-2021 school year. Business activity associated with student expenditures in FY2021 supported

additional induced (secondary) effects of \$8.6 million, for total economic effects (direct and secondary) of \$16.7 million (Table 2). Average per student expenditures were \$12,122 (data not shown).

Direct employment at Williston State College in FY2021 was 148 jobs. Business activity associated with Williston State College expenditures supported secondary employment of 109 jobs in FY2021. Student expenditures supported secondary employment of 57 jobs. Total direct and secondary employment associated with Williston State College supported 314 jobs in FY2021 (Table 2).

In FY2021, business activity from Williston State College General and Non-general Fund expenditures was estimated to generate about \$307,000 in revenue to state and local government jurisdictions. Student spending generated an additional \$214,000 in state and local tax revenue. Combined, Williston State College operations and student expenditures generated \$520,000 in state and local tax revenue (Table 2).

A substantial portion of total (direct and secondary) economic effects from Williston State College operations in FY2021 was from Non-general Fund expenditures. Economic effects from Non-general Fund expenditures in FY2021 were 59 percent of Williston State College (direct plus secondary) economic effects and 41 percent were from General Funds (Figure 2).

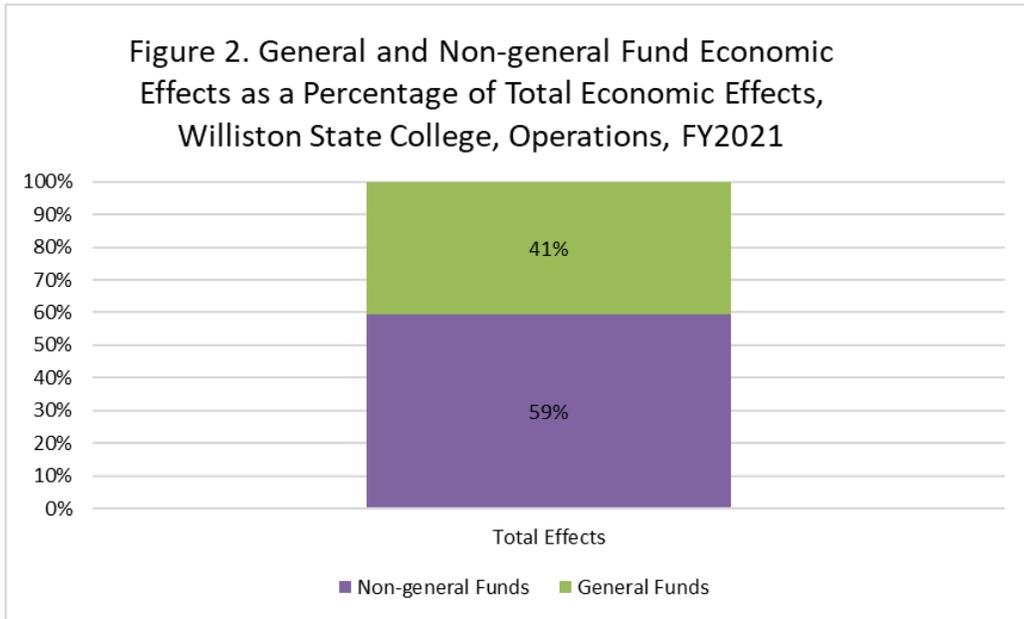
| Table 2. Economic Effects, Operations and Student Expenditures, Williston State College, FY2020 and FY2021. | | | |
|--|-------------------------|-----------------------------|--------------|
| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
| | FY2020 | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 20.8 | 8.2 | 29.0 |
| Secondary Effects | 18.5 | 8.7 | 27.2 |
| Total (direct and secondary) Effects | 39.3 | 16.9 | 56.2 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 158 | n/a | 158 |
| Secondary Effects | 125 | 58 | 183 |
| Total Employment Supported | 283 | 58 | 341 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 314.8 | 213.5 | 528.3 |

Table 2 (cont.) Economic Effects, Williston State College, FY2020 and FY2021.

| Economic Metric and Type of Effect | Operations | Student Expenditures | Total |
|---|-------------------------|-----------------------------|--------------|
| FY2021 | | | |
| Business Volume (output) | ----- million \$ ----- | | |
| Direct Effect | 19.9 | 8.1 | 28.0 |
| Secondary Effects | 16.3 | 8.6 | 24.9 |
| Total (direct and secondary) Effects | 36.2 | 16.7 | 52.9 |
| | | | |
| Employment | ----- jobs ----- | | |
| Direct Effect (college employees) | 148 | n/a | 148 |
| Secondary Effects | 109 | 57 | 166 |
| Total Employment Supported | 257 | 57 | 314 |
| | | | |
| Tax Revenues | ----- thousand \$ ----- | | |
| Sales, Property, Personal Income, Other | 306.7 | 213.7 | 520.4 |

¹Total expenditures reported in Table 1 do not sum to direct economic effects. Expenditures for scholarships are excluded from direct effects from operations and expenditures for capital equipment are included in operations expenditures. Effects for scholarships are captured in the assessment of student expenditures. Most capital equipment expenditures are for computers and other equipment needed for operations.

Figure 2. General and Non-general Fund Economic Effects as a Percentage of Total Economic Effects, Williston State College, Operations, FY2021



Summary Findings

The NDUS colleges and universities receive revenues from state appropriated funds, state grants, federal grants, and from private grants, contracts, and donations. These revenues support expenditures for wages and salaries, operating expenditures, scholarships, and capital improvements. University expenditures and student spending support economic activity that enhance local and state economies. North Dakota's universities and colleges and their students have positive effects on the state economy and local economies.

- Williston State College had expenditures of \$23.8 million for operational goods and services in North Dakota in FY2021.
- Wages, salaries, and benefits represent the largest itemized expenditure in FY2021, \$9.4 million, 39 percent of total expenditures.
- Non-general Funds accounted for 73 percent of Williston State College expenditures in FY2021.
- Williston State College leveraged \$2.67 from external sources for every dollar of state appropriated funds in FY2021.
- In FY2021, direct economic effects from Williston State College operations were \$19.9 million. Total (direct and secondary) economic effects were \$36.2 million.
- In FY2021, economic effects of student living expenses resulted in \$8.1 million in direct effects and \$8.6 million in secondary effects, for total direct and secondary effects of \$16.7 million.
- Williston State College student expenditures in FY2021 were estimated to be approximately \$12,122 per student.
- Combined, Williston State College operations and student expenditures (direct effects) in FY2021 were \$28.0 million. Total economic contribution (direct plus secondary) from Williston State College operations and student expenditures was \$52.9 million.
- Fifty-nine percent total (direct and secondary) economic effects from Williston State College operations were a result of Non-general Fund expenditures in FY2021.
- Williston State College in-state expenditures, student expenditures, and secondary business activity was estimated to generate \$520,000 in state and local tax collections in FY2021.
- Direct employment at Williston State College was 148 jobs in FY2021. Business activity from Williston State College expenditures and spending by students supported secondary employment of 166 jobs. Total direct and secondary employment was 314 jobs in FY2021.⁷