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Economic Contribution of the North Dakota University System in 2022 and 2023

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Agribusiness and Applied Economics Report No. 826-S

February 2025

NDSU | CENTER FOR SOCIAL RESEARCH NDSU | AGRIBUSINESS AND APPLIED ECONOMICS

Acknowledgments

Special thanks are extended to several individuals from the North Dakota University System Office.

Mark Gorenflo for his administrative oversight of the project and for editorial suggestions during preparation of the document. Robin Putnam, Brenda Zastoupil, Jane Grinde, and Jen Weber for providing financial, enrollment, and employment data, along with other information.

Financial support was provided by the North Dakota University System.

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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 consist of General Funds and Non-general Funds. General Funds are dollars provided by the state of North Dakota. Non-general Funds are from a wide variety of other sources such as grants, contracts, sponsored programs, student tuition and fees, and donations. Expenditures related to operations, capital investment, and wages and salaries from General and Non-general Funds as well as student expenditures represent direct economic effects or 'first round effects.' The IMPLAN modeling platform, which is an economic impact analysis software, was used to estimate the secondary economic effects as those direct effects (i.e., expenditures) are circulated and re-spent in the economy. IMPLAN models the production and consumption of goods and services to model how those first round effects generate secondary business activity and household expenditures. The model also examines secondary employment effects and selected tax revenues. All dollar values in this analysis are expressed in terms of current year dollars (i.e., the effects of inflation have not been removed).

NDUS expenditure, employment, and enrollment data for FY2022 and FY2023 were provided by the NDUS. Data were used to calculate direct and secondary effects from General and Non-General Fund expenditures, student expenditures, employment, and taxes generated by the NDUS. The economic effects of the NDUS have been estimated regularly since 1999. Findings from FY2022 and FY2023 are detailed in the full report with historical data available in appendices. Key findings are summarized below.

- Total economic effects (direct and secondary) from NDUS operations (payroll, operations, and capital expenditures) and student expenditures were **$3.71 billion** in FY2023 compared to total economic effects of **$3.71 billion** in FY2022.

- Total economic effects (direct and secondary) from NDUS operations (payroll, operations, and capital expenditures) *excluding* student expenditures were **$2.83 billion** in FY2023 and **$2.82 billion** in FY2022, an increase of $3.5 million.

- Total economic effects (direct and secondary) from student expenditures (living expenses, books, and personal expenditures) were **$885.6 million** in FY2023 and **$884.1 million** in FY2022.

- A substantial portion of total economic effects (direct and secondary) from NDUS operations was a result of Non-general Fund expenditures. Of the total economic effects (direct and secondary) from operations of $2.83 billion from both General and Non-general Funds, the majority was associated with Non-general Funds, $2.20 billion or 78 percent in FY2023.

- Non-general Funds as a percentage of total NDUS expenditures have been trending upwards since 2015, from 66 percent to 76 percent in FY2023. In contrast, General Fund expenditures as a percentage of total expenditures decreased, from 34 percent in FY2015 to 24 percent in FY2023.

- The state's colleges and universities leveraged **$3.17 from external sources** (Non-general Funds) for every dollar of state provided (General) Funds in FY2023 compared to $2.88 in FY2021 and $2.96 in FY2022.

- Direct effects from NDUS operations and student expenditures were **$1.99 billion** in FY2023 and **$1.95 billion** in FY2022.
  - NDUS expenditures (direct effects) for all operations, payroll, and capital improvements totaled **$1.57 billion** in FY2023.
    - $378.2 million were from General (state provided) Funds (24 percent)
    - $1.19 billion were from Non-general (external) Funds (76 percent)
  - Direct effects from student expenditures totaled **$430.8 million** in FY2023.

- Wages, salaries, and benefits represent the largest itemized expense, totaling $**825 million** in FY2023; accounting for 49 percent of total expenditures. Spending patterns vary between General and Non-general Funds.
  - 68 percent of General Fund expenditures were for wages, salaries, and fringe benefits compared to 42 percent for Non-general Funds.
  - 38 percent of Non-general Funds were for operations compared to 20 percent for General Funds.
  - 12 percent of Non-general Funds were for capital improvements and equipment compared to 5 percent of General Funds.

- University System in-state expenditures, student expenditures, and subsequent secondary business activity generated **$24.7 million** in state and local tax collections in FY2023. Of that total, $9.6 million were sales taxes, $6.7 million were from property taxes, and $4.2 million were from personal income taxes.

- Direct employment by the NDUS was **11,094** in FY2023. Business activity from NDUS expenditures and spending by students supported secondary employment of **9,710** jobs. Total direct and secondary employment supported by NDUS was **20,804** jobs in FY2023.

- NDUS student expenditures for living expenses, books, and personal expenses in FY2023 were estimated to be approximately **$12,892 per student**.
  - Total student expenditures systemwide were estimated to be **$430.8 million**.
  - Student expenditures generated **$454.7 million** in secondary effects for combined direct and secondary effects of **$885.6 million**.
  - Estimates of student expenditures excludes the cost of tuition.

- Enrollment for fall semester 2023 at the NDUS's 11 colleges and universities was **33,421** full time equivalent (FTE) students compared with 33,163 in fall semester 2022. Enrollment decreased has by 14.5 percent from an all-time high of 39,089 FTE in 2011.

Economic Contribution of the North Dakota University System in 2022 and 2023

Nancy M. Hodur and Dean A. Bangsund*

Introduction

The North Dakota University System (NDUS) is comprised of 11 college campuses, the NDUS system office, and Core Technology Services (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 retrospective to 2013. Refer to Bangsund and Hodur (2020) and Bangsund and Hodur (2023) for findings prior to 2013.

Scope and Methods

The NDUS Office provided expenditure data for FY2022 and FY2023 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

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Northern Crops Institute
Upper Great Plains Transportation Institute
NDSU Cooperative Extension Service
North Dakota Forest Service
University of North Dakota
School of Medicine and Health Sciences
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 provided monies. Non-general Funds are from all other sources such as grants, contracts, sponsored programs, tuition and fees, and donations. Total General and Non-general Funds is 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 is 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 2022, 2023, and 2024 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 NDUS 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.

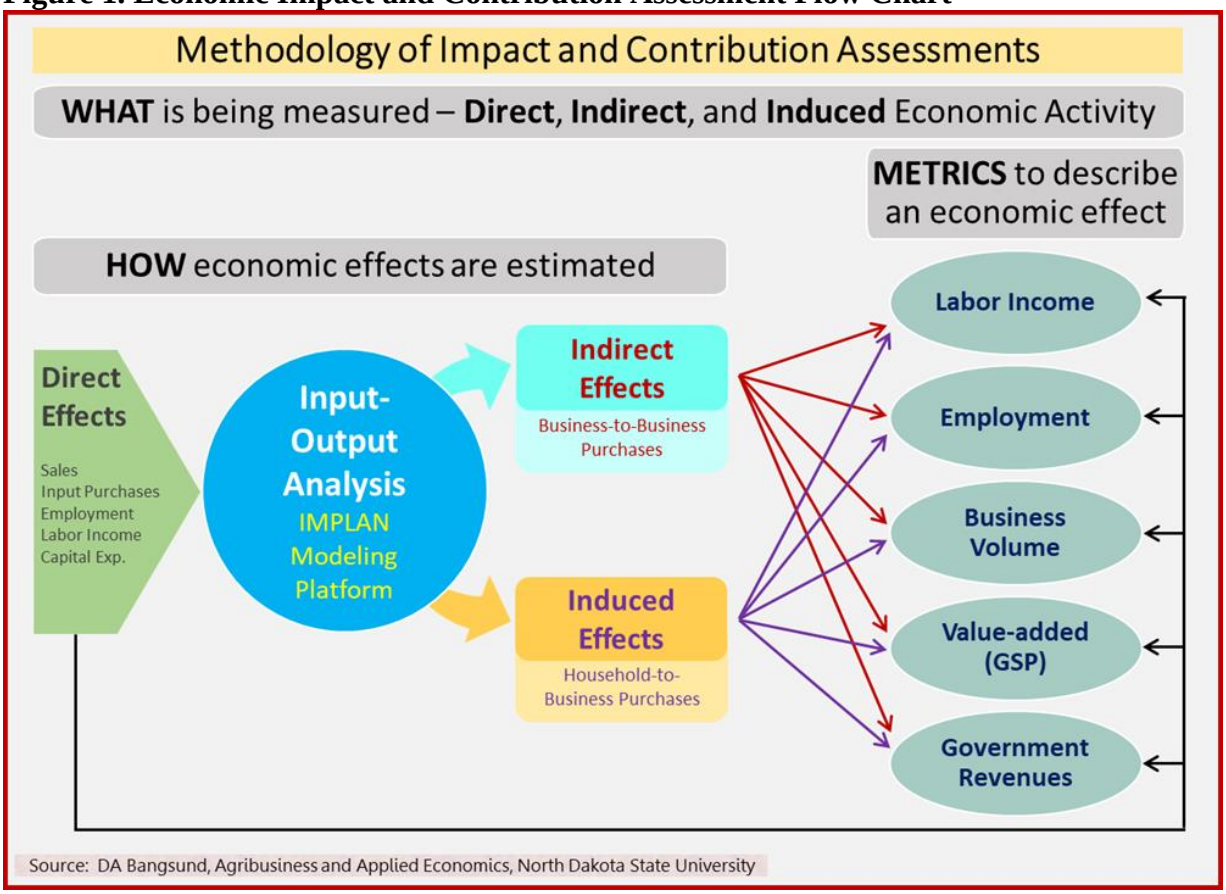
One the most commonly accepted methods for measuring the magnitude and causality of economic effects is Input-Output (I-O) Analysis. Input-output models are mathematical representations of both consuming and producing components of an economy, and trace the flow

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 (Figure 1).

Figure 1. Economic Impact and Contribution Assessment Flow Chart



Change in Modeling Systems

Estimates prior to the FY2020 and FY2021 analysis of the economic contribution of the NDUS used the North Dakota Input-Output Model (ND IO). The FY2020 and FY2021 analysis was the first time IMPLAN was used to estimate secondary economic effects for the NDUS. Results from previous studies that used the ND IO model are not directly comparable to results generated by IMPLAN. These differences are sufficient to warrant explanation.

Differences in Modeling

The ND IO model was based on economic base theory premised on the fundamental assumption that only dollars received from the export of goods and services from North Dakota drives economic activity within the state. The economic base concept is no longer accepted as an appropriate premise for modeling economic effects. The IMPLAN modeling system is a nationally recognized and widely accepted platform for input-output modeling in the field of impact assessment and regional science. Accordingly, the research team now uses the IMPLAN modeling platform to estimate secondary economic effects for impact and contribution assessments. More information on IMPLAN can be found at https://www.implan.com.

By assuming all output in the state is driven by exports, economic base methodologies produce quite large multipliers. Current models no longer estimate multipliers based on that economic relationship. One of the first noticeable differences from previous assessments is the level of secondary economic effects relative to the size of direct effects. IMPLAN's gross output multipliers very rarely will be over $1 of secondary economic effects per $1 of direct effects —in most cases, those values are less than $1 of secondary per $1 of direct. By contrast, the ND IO model has gross output multipliers that are closer to $2 of secondary output to $1 of direct output. The IMPLAN modeling system results in smaller secondary economic effect. In many cases, secondary effects are 50 percent of previous estimates generated by the ND IO model.

Another difference between the previous model and the IMPLAN modeling platform is the treatment of retail trade and wholesale trade sectors. Those sectors are margined which means only a portion of economic activity in the retail and wholesale sectors generates economic effects. Only the difference between producer cost and purchase price is used to calculate secondary effects. The purpose of margining is to control for the difference between purchaser prices and producer prices within the IO matrix. While that may seem like a minor nuance, that adjustment can create some unintuitive results. The result of margining adjustments is that only a fraction (usually 20 to 30 percent) of the original dollar spent in those sectors is used to generate estimates of secondary economic effects. The process of margining also reduces the volume of secondary economic effects. The ND IO model did not make similar adjustments.

Differences in Study Scope

Previous NDUS studies included scholarship expenditures as part of operating expenditures when modeling economic effects. However, tuition, room and board, stipends, and other personal spending are all expenditures covered by scholarships and those expenditures are captured in the assessment of student spending. Therefore, including university scholarships as

part of the assessment of secondary effects double counts those dollars. Scholarship spending was included in the previous economic contribution analysis. Removing scholarship expenditures from the assessment reduces the overall business volume modeled. A $1 reduction in scholarship spending results in an approximately $2 reduction in secondary effects (scholarship spending was previously run through the ND IO model).

Implications

Because of the differences in modeling platforms and changes in study scope, estimated secondary effects from previous studies are not directly comparable to the secondary effects from the current assessment. Direct impacts are not affected by the modeling platform, however because previous assessments included expenditures for scholarship, a direct comparison with previous estimates is also not appropriate. Previous studies included historic data in order to provide year to year comparisons of economic effects. Because previous studies are not comparable with the current assessment, the economic effects from FY2017, FY2018, and FY2019 were reexamined using IMPLAN. This enables a time series comparison of direct and secondary effects from FY2017 to FY2023. Direct and secondary effects from FY2017-FY2023 are presented in the results section of the report.

Changes in Modeling for the FY2022 and FY2023 Assessment

A refinement in estimates of the number of FTE students was incorporated for the current study. Previous studies did not control for the number of high school students that take classes for college credit. The rationale for the refinement is that high school students likely live at home and living expenses while still attending high school should not be attributable to the NDUS.

Additional data on the number of credit hours taken by high school students was provided by the NDUS office that allowed for the refinement. The refinement allows for a more accurate estimate of FTE students for purposes of estimating student living expenses. The number of FTE students is multiplied by the estimated per-student expenditures to estimate total student expenditures for room and board, books, and personal expenses. Further refinements to control for students enrolled remotely that may be living in another state were considered, but there was inadequate data to control for students enrolled remotely.

North Dakota University System Expenditures

General and Non-general Fund expenditures are reported for FY2023 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 FY2022 and FY2023 were $1.63 billion and $1.69 billion, respectively (Table 1). General and Non-general Fund expenditures increased by 7.3 percent from FY2021 to FY2023. Total General and Non-general Fund expenditures have steadily increased since FY2017 when expenditures declined substantially from FY2015, $1.61 billion to $1.4 billion, respectively. Current expenditures are comparable to FY2015 spending, in nominal dollars (i.e., not corrected for inflation).

Wages and salaries and payroll benefits were the two largest expenditure categories in FY2023, $585.4 million and $239.1 million, respectively (Table 1, Figure 2). Combined, wages and salaries and payroll benefits totaled $824.5 million in FY2023, 49 percent of total expenditures. Historically (FY2013-2023), wages and salaries and payroll benefits averaged approximately 51 percent of total General and Non-general expenditures with year-to-year variability of 47 to 55 percent (data not shown).

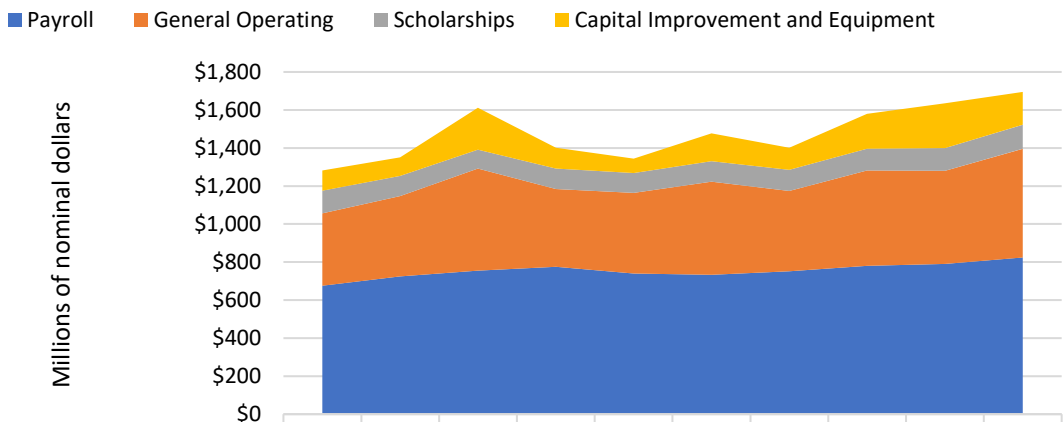
General operating expenditures, which are the sum of all expenditure categories except wages and salaries, payroll benefits, capital improvements, capital equipment, and scholarships, were the next largest expenditure category, totaling $571.1 million in FY2023, 34 percent of total expenditures (Table 1, Figure 2). Historically (FY2013-2023), operating expenditures averaged approximately 31 percent of total General and Non-general Fund expenditures with year-to-year variability of 29 to 34 percent (data not shown).

Capital Improvements and Capital Equipment totaled $172.9 million in FY2023, 10 percent of total General and Non-general Fund expenditures (Table 1, Figure 2). Historical averages (FY2013-2023) for expenditures for Capital Improvements and Equipment averaged 10 percent, but ranged from 6 to 14 percent over the past 10 years (data not shown).

Scholarships totaled $126.5 million in FY2023, 7 percent of total General and Non-general Fund expenditures (Table 1, Figure 2). Scholarships as a percentage of total spending increased by 10 percent from FY2021, but remained consistent as a percentage of total spending (7 percent) and historically (FY2013-FY2023) (data not shown).

Table 1. University System Expenditures, General and Non-general Funds, North Dakota University System, by Budget Category, Selected Fiscal Years 2013 to 2023 (Current Year Dollars)									
Operating Expenditures	**Fiscal Years**							**Percentage Change**	
	2013	**2015**	**2017**	**2019**	**2021**	**2022**	**2023**	**2013-2023**	**2021-2023**
	----------millions $----------							-------- % -------	
Wages and Salaries	511.6	553.4	562.5	523.7	552.7	558.8	585.4	14.4	5.9
Payroll Benefits	163.8	202.3	212.1	208.9	227.0	232.0	239.1	45.9	5.4
Travel	32.6	34.9	28.0	31.3	15.3	26.1	35.2	8.2	130.8
Data Processing	19.2	19.9	18.0	18.3	33.4	24.0	26.4	37.1	-21.1
Fees	42.5	47.3	39.5	49.5	77.3	66.2	90.9	114.1	17.6
Utilities	27.6	29.1	29.2	30.8	29.2	44.4	47.9	74.0	64.2
Communications	7.6	9.1	8.7	8.8	8.6	7.9	6.9	-9.0	-20.2
Insurance	4.4	3.3	3.7	3.8	5.0	5.4	6.3	41.0	24.5
Rents and Fees	14.5	16.4	13.5	15.5	11.9	14.0	10.2	-29.9	-14.8
Office	9.4	9.3	7.6	6.8	5.5	5.9	6.5	-30.7	19.0
Supplies	25.6	26.1	19.5	46.5	29.4	27.1	30.0	17.3	2.0
Instructional	23.8	26.1	25.6	25.1	26.3	26.9	29.1	22.2	10.8
Noncapital Equipment	11.2	10.0	9.8	6.0	13.0	9.5	9.1	-18.2	-29.9
Merchandise for Resale	56.3	189.8	95.3	108.9	96.5	91.8	107.2	90.2	11.1
Repairs	29.3	32.3	28.5	30.1	35.6	39.8	41.5	41.7	16.7
Scholarships	119.1	99.7	107.7	108.1	114.8	118.1	126.5	6.2	10.2
General	76.8	82.2	82.7	109.2	114.5	101.2	123.8	61.1	8.1
Capital Equipment	22.4	21.8	18.6	13.9	30.1	23.7	35.6	59.0	18.2
Capital Improvements	83.8	198.9	91.3	131.8	152.7	212.3	137.3	63.8	-10.1
Total	1,281.6	1,611.8	1,401.8	1,477.1	1,578.9	1,634.9	1,695.0	32.3	7.3

Figure 2. General and Non-general Fund Expenditures, by Major Expenditure Category, North Dakota University System, FY2013 - FY2023



	2013	2014	2015	2017	2018	2019	2020	2021	2022	2023
Capital Improvement and Equipment	106.2	98.2	220.7	109.9	76.4	145.7	116.0	182.8	236.0	172.9
Scholarships	119.1	105.4	99.7	107.7	104.8	108.1	111.2	114.8	118.1	126.5
General Operating	380.8	423.2	535.8	409.6	423.8	490.7	421.5	501.6	490.1	571.1
Payroll	675.5	724.6	755.7	774.6	739.7	732.6	751.9	779.7	790.8	824.5

Non-general Fund Expenditures

Total Non-general Fund expenditures in FY2022 and FY2023 were $1.22 billion and $1.29 billion, respectively (Table 2). Since a decline in Non-general expenditures from FY2015 to FY2017, Non-general Fund expenditures have increased steadily, from $941.6 million in FY2017 to $1.29 billion in FY2023. Since FY2021, Non-general Funds increased from $1.17 billion to $1.29 million in FY2023, a 10 percent increase.

Wages and salaries and benefits were the two largest Non-general Fund expenditure categories in FY2023, $393.3 million and $154.0 million, respectively (Table 2, Figure 3). Combined, wages and salaries and benefits for Non-general Funds totaled $547.3 million in FY2023, 42.5 percent of total Non-general expenditures, which is slightly lower than the historical average (FY2013-2023) of 46 percent of total Non-general Funds (data not shown).

Non-general operating expenditures which are the sum of all expenditure categories except wages and salaries, payroll benefits, capital improvements, capital equipment, and scholarships were the next largest expenditure category, totaling $489.4 million or 38 percent of total Non-general Funds (Table 2, Figure 3). Non-general operating expenditures as a percentage of total Non-general Funds in FY2023 is consistent with the ten-year historical average of 37 percent (data not shown). Non-general operating expenditures as a percent of total Non-general expenditures has ranged from 34 to 42 percent since FY2013 (data not shown).

Capital Improvements and Capital Equipment expenditures from Non-general funds for FY2023 were $153.6 million, 12 percent of total Non-general Fund expenditures (Table 2, Figure 3). Non-general Capital Improvements and Capital Equipment expenditures have varied considerably, ranging from $48.0 million in FY2014 to $200.4 million in FY2022. Non-general

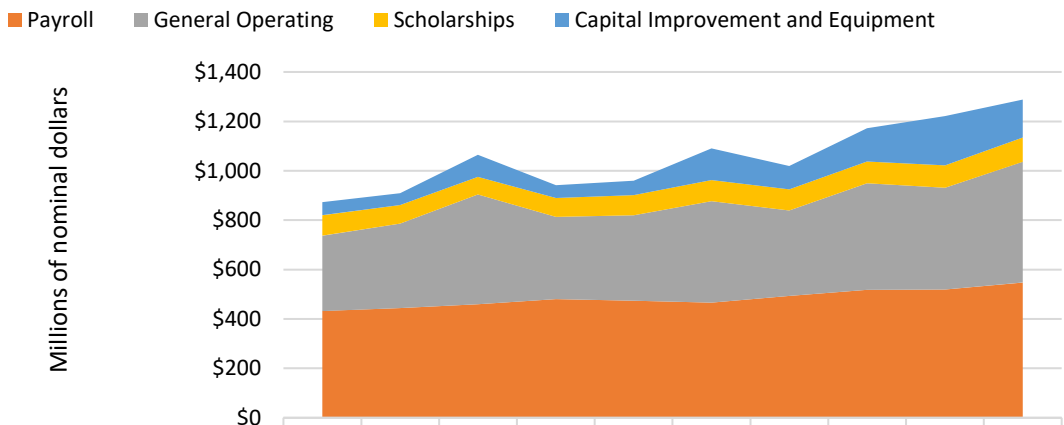
Capital Improvements and Capital Equipment expenditures as a percentage of total Non-general expenditures have ranged from 5 to 16 percent since FY2013 (data not shown).

Scholarships from Non-general funds totaled $97.9 million in FY2023, 8 percent of total Non-general Fund expenditures (Table 2, Figure 2). Scholarships as a percentage of total Non-general Fund expenditures have historically averaged about 8 percent (FY2013-2023, data not shown).

Table 2. University System Expenditures, Non-General Funds, North Dakota University System, by Budget Category, Selected Fiscal Years 2013 to 2023 (Current Year Dollars)

Operating Expenditures	Fiscal Years							Percentage Change	
	2013	2015	2017	2019	2021	2022	2023	2013-2023	2021-2023
	---------- millions $ ----------							--------- % --------	
Wages and Salaries	328.8	339.8	352.5	335.7	371.1	371.3	393.3	19.6	6.0
Payroll Benefits	103.0	120.1	128.5	129.9	146.3	148.0	154.0	49.5	5.3
Travel	26.6	27.2	23.7	27.0	13.8	23.1	31.2	17.3	125.8
Data Processing	12.0	12.5	12.1	13.1	27.7	18.1	20.3	69.0	-26.7
Fees	36.1	38.1	33.1	42.1	69.7	59.2	81.9	126.9	17.5
Utilities	16.1	15.9	17.3	19.3	19.5	32.1	34.9	116.3	79.2
Communications	4.7	5.2	5.0	5.0	4.7	4.1	3.6	-22.5	-22.3
Insurance	3.3	2.5	2.3	2.5	3.6	3.8	4.4	34.0	21.5
Rents and Fees	12.3	14.3	11.3	12.0	10.0	11.4	7.9	-35.8	-21.4
Office	6.9	6.7	5.6	5.1	4.1	4.4	5.0	-27.8	21.0
Supplies	20.7	20.8	15.6	42.5	25.8	22.8	24.9	20.4	-3.2
Instructional	18.7	20.2	20.5	19.7	20.9	20.8	23.4	25.1	12.0
Noncapital Equipment	9.3	7.3	7.7	4.8	12.0	8.3	7.7	-17.3	-36.1
Merchandise for Resale	56.3	189.8	95.3	108.9	96.5	91.8	107.2	90.2	11.1
Repairs	22.4	23.7	20.8	23.7	29.5	31.9	33.6	50.4	14.0
Scholarships	83.0	71.2	77.1	84.7	88.7	90.7	97.9	18.0	10.4
General	60.1	60.1	61.7	85.7	93.6	79.7	103.3	71.8	10.3
Capital Equipment	17.0	17.6	16.2	11.6	26.9	20.9	32.0	88.7	19.1
Capital Improvements	35.5	72.0	35.3	116.6	107.7	179.4	121.6	242.5	12.9
Total	872.9	1,064.9	941.6	1,090.0	1,172.1	1,221.8	1,288.2	47.6	9.9

FIgure 3. Non-general Fund Expenditures, by Major Expenditure Category, North Dakota University System, FY2013 - FY2023



	2013	2014	2015	2017	2018	2019	2020	2021	2022	2023
Capital Improvement and Equipment	52.5	48.0	89.6	51.5	59.4	128.2	94.6	134.6	200.4	153.6
Scholarships	83.0	75.1	71.2	77.1	81.0	84.7	85.4	88.7	90.7	97.9
General Operating	305.6	342.1	444.2	332.1	346.4	411.4	345.5	431.4	411.5	489.4
Payroll	431.8	443.5	459.9	481.0	473.5	465.7	493.4	517.4	519.3	547.3

General Fund Expenditures

General Fund expenditures in FY2022 and FY2023 were $413.1 million and $406.8 million, respectively (Table 3). General Fund expenditures peaked in FY2015 at $547.0 million and steadily declined to $381.6 million in FY2020 before increasing to current levels.

Wages and salaries and benefits were the two largest General Fund expenditure categories in FY2023, $192.1 million and $85.1 million, respectively (Table 3, Figure 4). Combined, wages and salaries and benefits for General Fund expenditures totaled $277.2 million in FY2023, which is 68 percent of total General Fund expenditures. Since 2013, wages and salaries and benefits as a percentage of total General Fund expenditures typically ranged from 60 to 69 percent. The exception was FY2015 where General Fund expenditures for wages and salaries was 54 percent (data not shown).

General Fund operating expenditures, which are the sum of all expenditure categories except wages and salaries, payroll benefits, capital improvements, capital equipment, and scholarships were the next largest General Fund expenditure category, totaling $81.7 million or 20 percent of total General Fund expenditures (Table 3, Figure 4). Operating expenditures as a percentage of total General Fund expenditures in FY2023 are approximately the same as the 10-year historical average of 19 percent (data not shown).

General Fund expenditures for Capital Improvements and Capital Equipment for FY2023 were $19.3 million, 5 percent of total General Fund expenditures (Table 3, Figure 4). Capital Improvements and Capital Equipment expenditures from General Funds were down considerably from FY2021 and FY2022, $48.2 and $35.6 million, respectively. Since FY2013, General Fund

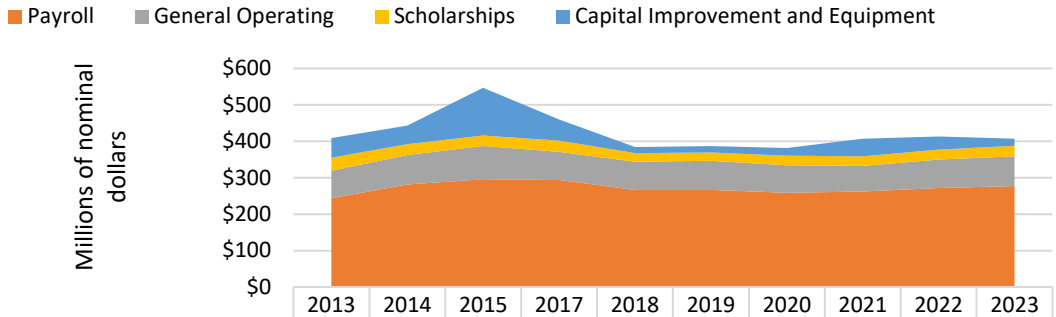
Capital Improvements and Capital Equipment expenditures have ranged from $17.1 million in FY2018 to $131.1 million in FY2015. Capital Improvements and Capital Equipment expenditures as a percentage of total General Fund expenditures have historically averaged 11 percent and ranged from 4 to 24 percent since FY2013 (data not shown).

Scholarships from General Funds totaled $28.6 million in FY2023, 7 percent of total General Fund expenditures (Table 3, Figure 3). Scholarships as a percentage of total General Fund expenditures have historically averaged about 7 percent, ranging from 5 to 9 percent since FY2013 (data not shown).

Table 3. University System Operations Expenditures, General Funds, North Dakota University System, by Budget Category, Selected Fiscal Years 2013 to 2023 (Current Year Dollars)

Operating Expenditures	Fiscal Years							Percentage Change	
	2013	2015	2017	2019	2021	2022	2023	2013-2023	2021-2023
	millions $							%	
Wages and Salaries	182.8	213.6	210.1	188.0	181.6	187.5	192.1	5.1	5.8
Payroll Benefits	60.8	82.2	83.6	79.0	80.7	84.0	85.1	39.9	5.5
Travel	6.0	7.7	4.3	4.3	1.5	2.9	4.1	-32.1	178.6
Data Processing	7.2	7.5	6.0	5.2	5.8	5.9	6.1	-15.6	6.2
Fees	6.3	9.2	6.3	7.4	7.6	7.0	9.0	41.4	17.8
Utilities	11.4	13.2	11.8	11.6	9.7	12.3	13.0	14.1	33.9
Communications	2.9	3.9	3.7	3.7	4.0	3.8	3.3	12.5	-17.7
Insurance	1.1	0.8	1.4	1.3	1.4	1.6	1.8	61.6	32.5
Rents and Fees	2.2	2.1	2.1	3.5	1.9	2.7	2.3	3.0	20.3
Office	2.4	2.6	2.0	1.7	1.3	1.5	1.5	-38.9	12.7
Supplies	4.9	5.3	4.0	4.0	3.7	4.3	5.1	4.2	39.1
Instructional	5.1	5.8	5.2	5.4	5.4	6.1	5.7	11.5	5.9
Noncapital Equipment	1.9	2.7	2.1	1.3	1.0	1.2	1.4	-23.0	45.4
Merchandise for Resale	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-85.3	-82.9
Repairs	6.9	8.7	7.8	6.4	6.1	7.9	7.9	13.9	29.4
Scholarships	36.1	28.5	30.6	23.4	26.2	27.4	28.6	-20.8	9.4
General	16.7	22.1	20.9	23.5	20.9	21.5	20.5	22.7	-1.7
Capital Equipment	5.4	4.2	2.4	2.3	3.2	2.8	3.5	-34.6	10.8
Capital Improvements	48.3	127.0	56.0	15.2	45.0	32.8	15.7	-67.5	-65.0
Total	408.8	547.0	460.2	387.1	406.8	413.1	406.8	-0.5	0.0

Figure 4. General Fund Expenditures, by Major Expenditure Category, North Dakota University System, FY2013 - FY2023

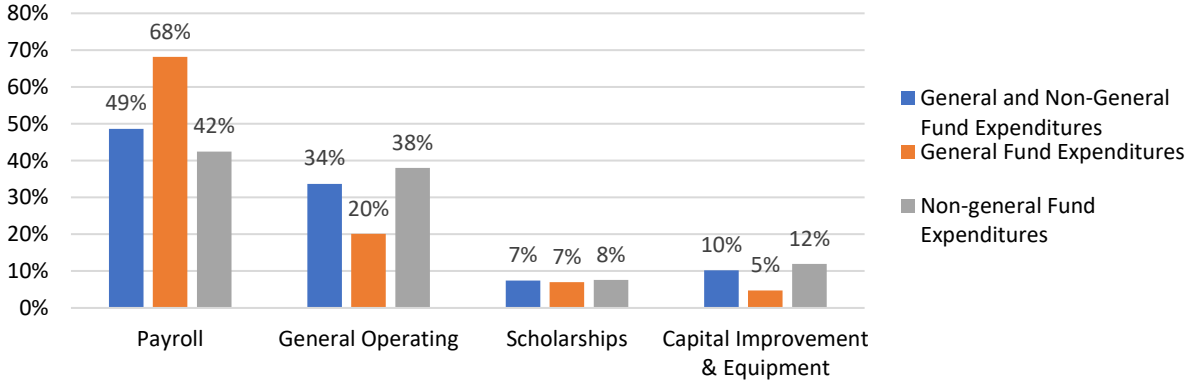


	2013	2014	2015	2017	2018	2019	2020	2021	2022	2023
Capital Improvement and Equipment	53.7	50.2	131.1	58.4	17.1	17.5	21.3	48.2	35.6	19.3
Scholarships	36.1	30.3	28.5	30.6	23.8	23.4	25.8	26.2	27.4	28.6
General Operating	75.2	81.2	91.6	77.5	77.3	79.2	76.0	70.2	78.6	81.7
Payroll	243.7	281.1	295.8	293.7	266.2	266.9	258.4	262.3	271.5	277.2

Comparison of General and Non-general Fund Expenditures

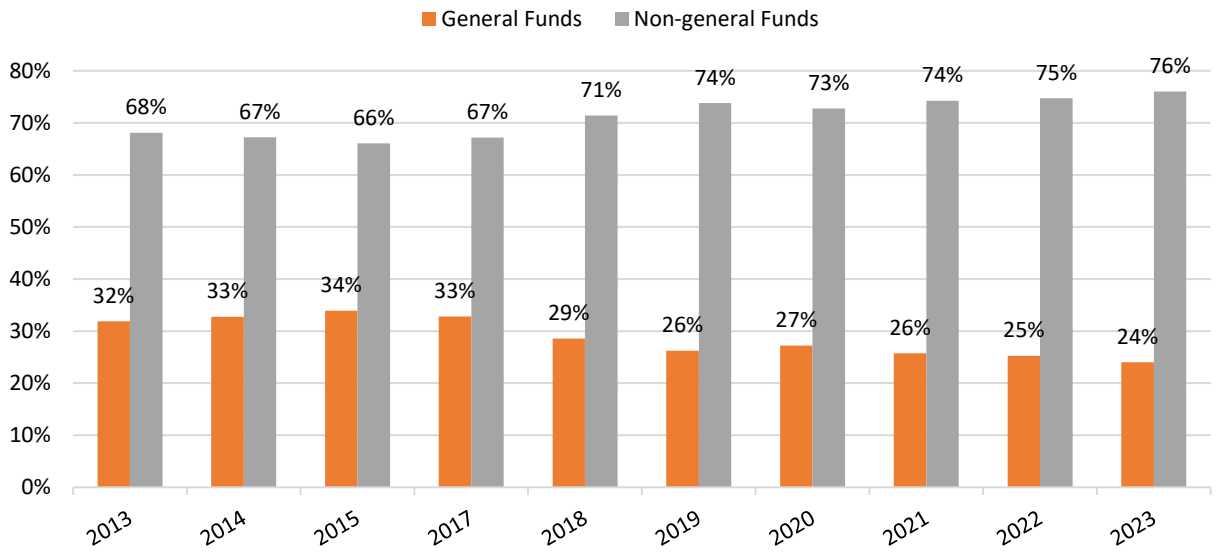
Spending in major expenditure categories as a percentage of total spending by fund type varies between General and Non-general Funds. Wages and Salaries and Benefits comprised 68 percent of total General Fund expenditures compared to 42 percent of Non-general Fund expenditures (Figure 5). Expenditures for Operations made up a larger percentage of total Non-general Fund spending than General Fund spending for Operations, 38 percent compared to 20 percent, respectively. Capital Improvements and Capital Equipment expenditures also made up a larger percentage of total Non-general Fund spending than General Fund spending, 12 percent compared to 5 percent, respectively. Scholarships as a percentage of total spending by fund type were similar for Non-general Funds and General Funds, 8 percent compared to 7 percent, respectively.

Figure 5. Major Expenditure Categories as a Percentage of Total Spending, by Fund Type, North Dakota University System, FY2023



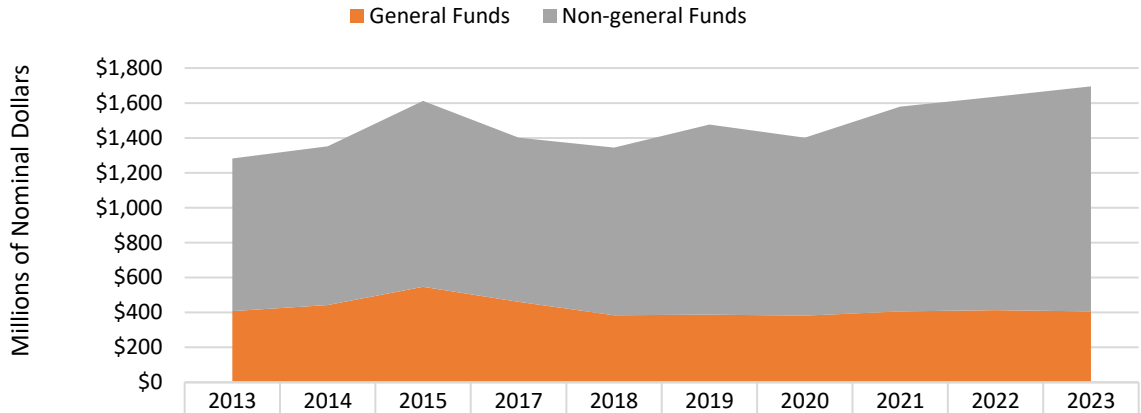
In FY2023, Non-general Funds made up 76 percent of total NDUS expenditures while General Fund expenditures made up 24 percent of total NDUS expenditures (Figure 6). From FY2013 to FY2017, Non-general Funds as a percentage of total expenditures ranged from 66 to 68 percent. In FY2018 Non-general Fund expenditures as a percentage of total expenditures increased to 71 percent and has since trended higher, increasing to 76 percent in FY2023. General Funds as a percentage of total funds averaged 33 percent from FY2013 to FY2017 and has since trended lower to 24 percent in FY2023.

Figure 6. General and Non-general Funds as a Percentage of Total Expenditures, North Dakota University System, FY2013 - FY2023



Total Non-general Fund expenditures in FY2023 were $1.29 billion and total General Fund expenditures were $406.8 million (Figure 7). Total General and total Non-general Funds both increased from FY2013 to FY2015 before declining to $384.4 million and $960.3 million, respectively in FY2018. Since FY2018 Non-general Fund expenditures fairly consistently trended higher. General Fund expenditures trended lower to $381.6 million in FY2020 before increasing to $406.8 million in FY2023.

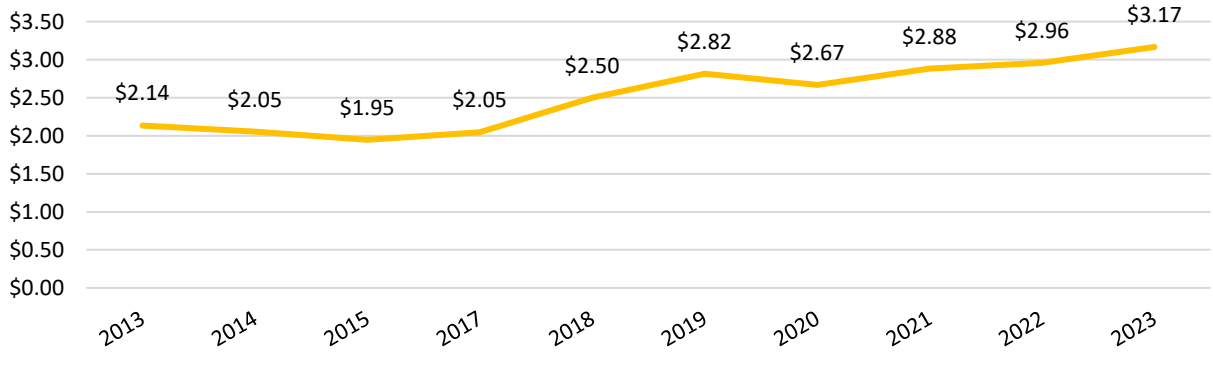
Figure 7. Total Expenditures, by Fund Type, North Dakota University System, FY2013 - FY2023



	2013	2014	2015	2017	2018	2019	2020	2021	2022	2023
Non-general Funds	872.9	908.7	1,064.9	941.6	960.3	1,090.0	1,018.9	1,172.1	1,221.8	1,288.2
General Funds	408.8	442.8	547.0	460.2	384.4	387.1	381.6	406.8	413.1	406.8

For every dollar of General Funds, the NDUS generated an additional $3.17 in Non-general Funds in FY2023. Since 2015 the ratio of Non-general Funds generated for every dollar of General Funds has trended higher every year except for FY2020 (Figure 8). The ratio of Non-general to General Funds is calculated by dividing total Non-general Fund expenditures by total General Fund expenditures.

Figure 8. Ratio of Non-general to General Funds, North Dakota University System, FY2013 - FY2023



Direct and Secondary Effects

Direct or first round economic effects are from NDUS 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. (See section on changes in modeling for FY2022 and FY2023 for additional details.) Expenditures for Capital Equipment were included as part of university operations. Capital Equipment expenditures represent spending for items with a shorter useable life span. Capital Improvement expenditures represent spending for long term investments such as construction or renovation of buildings and facilities.

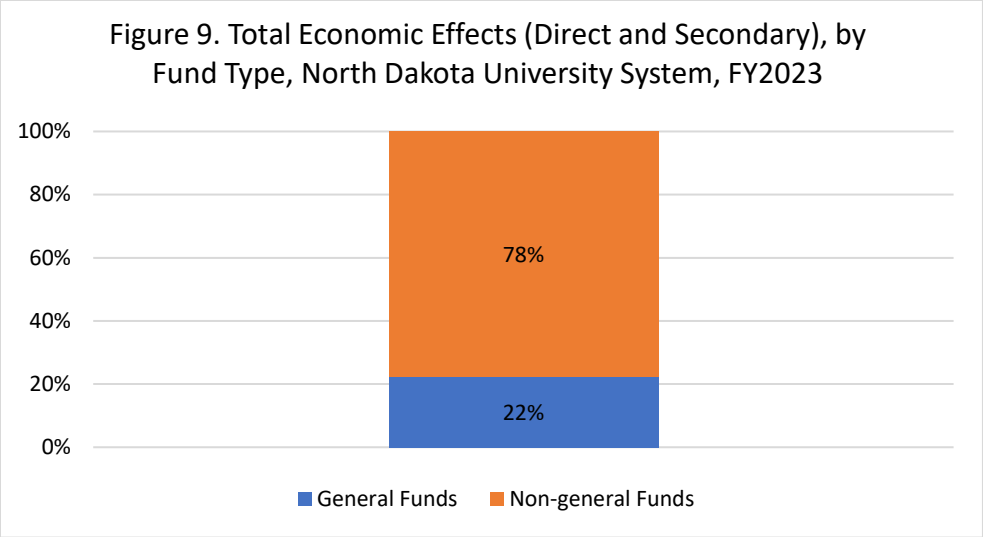
Total direct effects from General and Non-general Fund expenditures were $1.57 billion in FY2023 (Table 4). Secondary effects equal the sum of indirect and induced effects, $607.2 million and $651.9 million, respectively, for total secondary effects in FY2023 of $1.26 billion. Total direct and secondary effects from NDUS expenditures for wages and salaries, operations, and capital expenditures from General and Non-general Fund expenditures were $2.83 billion in FY2023.

Total direct effects from Non-general expenditures were $1.19 billion in FY2023 (Table 4). Secondary effects equal the sum of indirect and induced effects, $540.8 million and $467.8 million, respectively for total secondary effects in FY2023 of $1.01 billion. Total direct and secondary effects from NDUS expenditures for wages and salaries, operations, and capital expenditures from Non-general Fund expenditures were $2.20 billion in FY2023.

A substantial portion of total (direct and secondary) economic effects was a result of Non-general Fund expenditures. Of the $1.57 billion in direct economic effects in FY2023, $1.19 billion were from Non-general expenditures. Of the total economic effects (direct plus secondary) of $2.83 billion from both General and Non-general Funds, $2.20 billion was associated with Non-general Funds. Economic effects from Non-general expenditures in FY2023 comprised 78 percent of North Dakota University System total (direct plus secondary) economic effects (Figure 9).

Table 4. North Dakota University System, Direct and Secondary Effects, By Funding Source, FY2022 and FY2023		
	FY2022	**FY2023**
	---------- million $ ----------	
General and Non-general Funds		
Expenditure Category[1]		
Wages, Salaries, and Benefits	790.8	824.5
Operation Expenditures	513.8	606.6
Capital Expenditures	212.3	137.3
Total Direct Effects	1,516.8	1,568.5
Direct and Secondary Effects		
Direct Effects	1,516.8	1,568.5
Indirect Effects	657.6	607.2
Induced Effects	649.7	651.9
Total Direct and Secondary Effects	2,824.1	2,827.6
Non-General Funds (only)		
	FY2022	**FY2023**
Expenditure Category[1]	---------- million $ ----------	
Wages, Salaries, and Benefits	519.3	547.3
Operation Expenditures	432.4	521.4
Capital Expenditures	179.4	121.6
Total Direct Effects	1,131.1	1,190.3
Direct and Secondary Effects		
Direct Effects	1,131.1	1,190.3
Indirect Effects	559.3	540.8
Induced Effects	458.9	467.8
Total Direct and Secondary Effects	2,149.3	2,198.9
General Funds (only)		
	FY2022	**FY2023**
Expenditure Category[1]	---------- million $ ----------	
Wages, Salaries, and Benefits	271.5	277.2
Operation Expenditures	81.4	85.2
Capital Expenditures	32.8	15.7
Total Direct Effects	385.7	378.2
Direct and Secondary Effects		
Direct Effects	385.7	378.2
Indirect Effects	98.3	66.4
Induced Effects	190.8	184.1
Total Direct and Secondary Effects	674.8	628.7

[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.



Employment

Total direct employment in the NDUS system in FY2024 was 11,566 (Table 5). Since FY2015 direct employment has steady declined from 11,592 in FY2015 to a low of 10,164 in FY2020. Direct employment declined by 12 percent between FY2015 and FY2020. Since FY2020 employment has been increasing slightly and in FY2024 increased to FY2015 levels.

Total direct employment in FY2023 was 11,094. Business activity associated with NDUS expenditures supported secondary employment of 9,710 jobs in FY2023. Total direct and secondary employment associated with NDUS expenditures in FY2023 supported 20,804 jobs (Table 5, Figure 10).

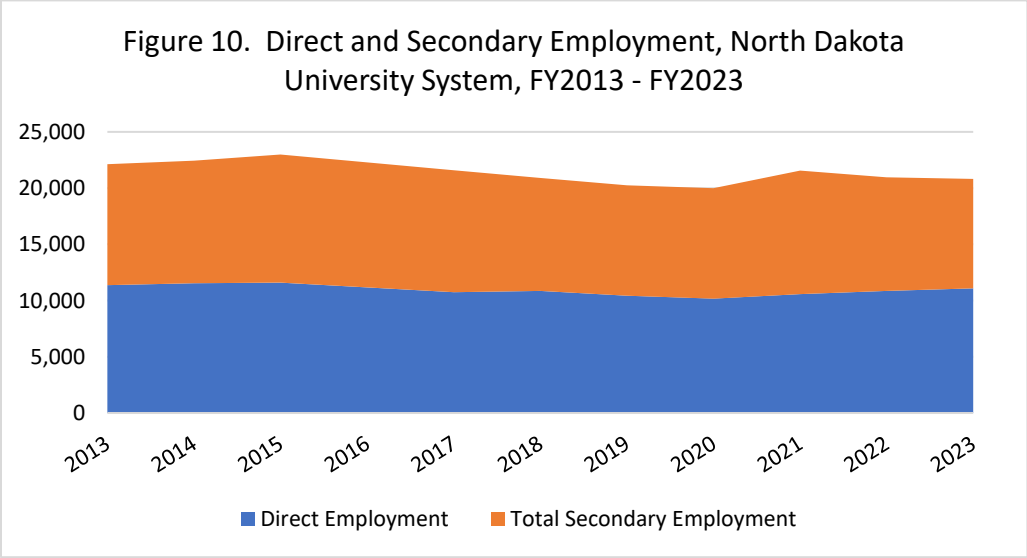


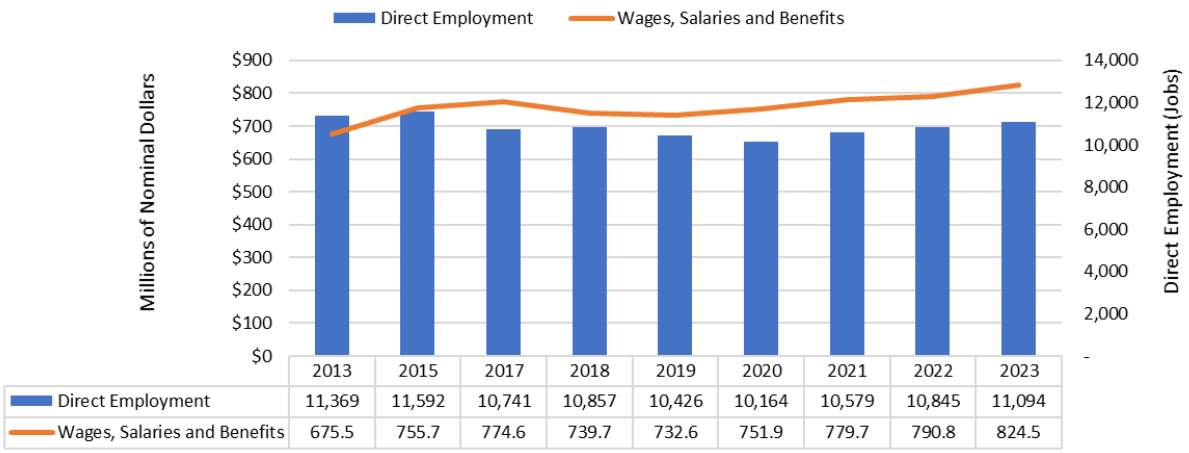
Table 5. Direct and Secondary Employment, North Dakota University System, Selected Years FY1999 to FY2024

Year[3]	Direct Employment[1]	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	10,260			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	22,129
2014	11,534			10,901	22,435
2015	11,592			11,393	22,985
2016	11,479			N/A	N/A
2017	10,741			10,840	21,581
2018	10,857			10,038	20,895
2019	10,426			9,831	20,257
2020	10,164	2,744	7,074	9,818	19,982
2021	10,579	3,592	7,375	10,966	21,545
2022	10,845	3,795	6,344	10,140	20,985
2023	11,094	3,351	6,359	9,710	20,804
2024	11,566	N/A	N/A	N/A	N/A

Period of Change	Direct Employment		Secondary Employment		All Employment	
	Numeric Change	Percentage Change	Numeric Change	Percentage Change	Numeric Change	Percentage Change
2013 – 2023	-275	-2.4%	-1,050	-9.8%	8,385	37.9%
2021 – 2023	515	4.9%	-1,256	-11.5%	-1,998	-6.1%

[1] NDUS direct employment is a June 30th employee head count consisting of faculty, classified, other non-classified and temporary positions. Student workers were not included in this total. 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.
[3]Secondary employment from 1999-2016 was modeled using the North Dakota Input-Output Model. Starting with 2017, secondary employment is modeled with IMPLAN. Secondary employment estimates generated with the North Dakota Input-Output Model and IMPLAN are not directly comparable due to differences in underlying theory, model assumptions, and study scope.

Figure 11. Payroll Expenditures and Direct Employment, North Dakota University System, FY2013 - FY2023



	2013	2015	2017	2018	2019	2020	2021	2022	2023
Direct Employment	11,369	11,592	10,741	10,857	10,426	10,164	10,579	10,845	11,094
Wages, Salaries and Benefits	675.5	755.7	774.6	739.7	732.6	751.9	779.7	790.8	824.5

Tax Revenue

In FY2023, business activity from NDUS General and Non-general Fund expenditures was estimated to result in about $16.50 million in revenue to state and local government jurisdictions (Table 6). The greatest revenues were from sales taxes ($6.11 million), property taxes ($4.25 million), and personal income taxes ($3.22 million). Student expenditures supported an additional $8.21 million in induced (secondary) state and local tax revenue. Combined, NDUS operations and student expenditures generated $24.71 million dollars in state and local tax revenue.

Table 6. Estimated State Tax Collections Derived from North Dakota University System Expenditures and Student Spending, by Funding Source, FY2022 and FY2023

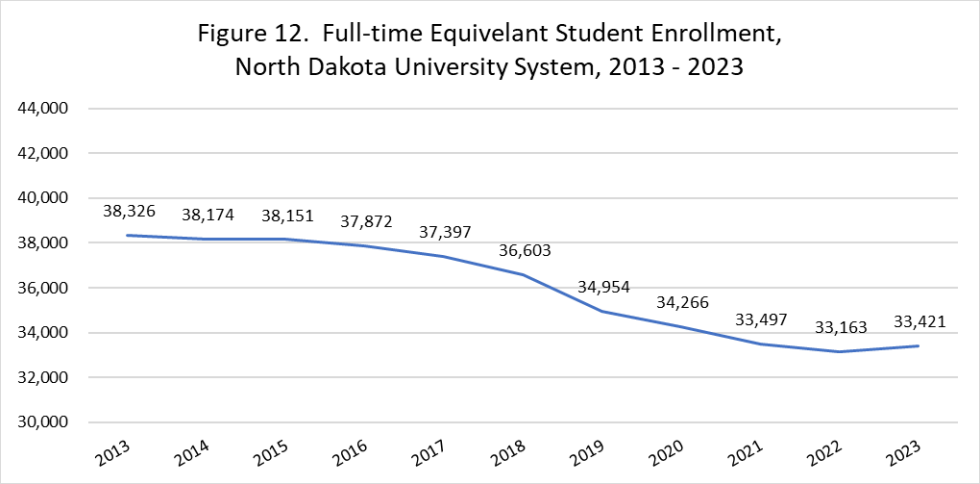
Government Revenue	North Dakota University System	Student Spending	Total Tax Collections
	----------million $ ----------		
	FY2022		
General and Non-General Funds			
Sales Tax	6.31	3.52	9.80
Property Tax	4.39	2.45	6.81
Personal Income Tax	3.44	0.98	4.40
Corporate Income Tax	1.68	0.84	2.52
Other Taxes	1.29	0.41	1.70
Total Taxes	17.11	8.20	25.23
Non-General Funds (only)			
Sales Tax	4.79	-	4.79
Property Tax	3.33	-	3.33
Personal Income Tax	2.71	-	2.71
Corporate Income Tax	1.27	-	1.27
Other Taxes	1.02	-	1.02
Total Taxes	13.12	-	13.12
	FY2023		
General and Non-General Funds			
Sales Tax	6.11	3.53	9.64
Property Tax	4.25	2.45	6.70
Personal Income Tax	3.22	0.98	4.20
Corporate Income Tax	1.70	0.84	2.55
Other Taxes	1.22	0.41	1.62
Total Taxes	16.50	8.21	24.71
Non-General Funds (only)			
Sales Tax	4.74	-	4.74
Property Tax	3.29	-	3.29
Personal Income Tax	2.63	-	2.63
Corporate Income Tax	1.31	-	1.31
Other Taxes	0.99	-	0.99
Total Taxes	12.95	-	12.95

Student Assessment

NDUS 2023 fall enrollment was 33,421 FTE students, which is up slightly from 33,163 students enrolled in the fall of 2022 (Table 7, Figure 12). After a peak in 2011, when fall enrollment was 39,089 FTE students, student enrollment steadily declined through 2022. The slight increase in FTE enrollment in the fall of 2023 was the first increase in enrollment since 2010.

Table 7. Full Time Equivalent, Student Enrollment, North Dakota University System, Selected Years, 1999 to 2023

	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
2022	33,163	-334	-1.0
2023	33,421	258	0.8
Change 2013-2023		-4,905	-14.7
Change 2021-2023		76	-0.2



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. However, expenditures for fees and tuition are not included in the assessment of economic effects associated with student expenditures. Those expenditures were captured in the analysis of university expenditures in the form of university expenditures for operations. For example, a student pays tuition and the revenue from tuition is used to pay for operations and wages.

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.

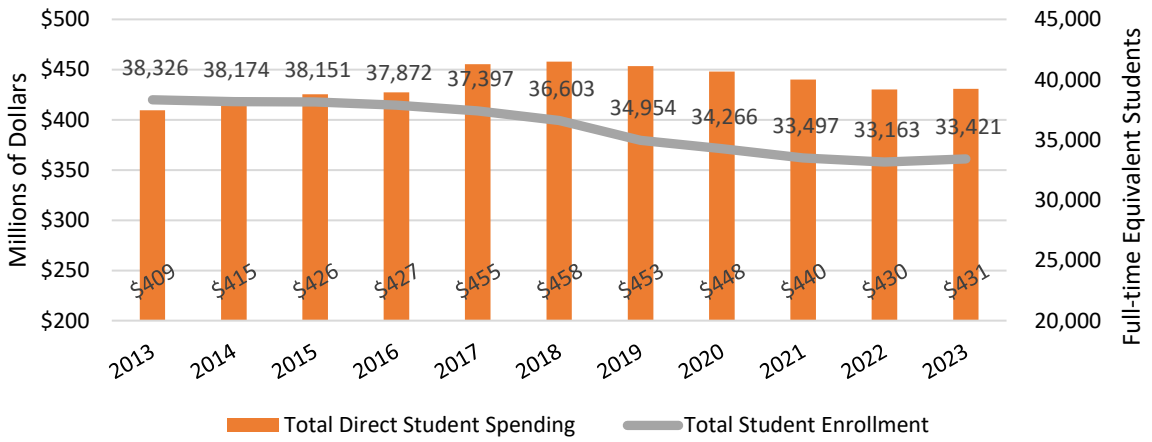
In fall semester 2023, 33,163 FTE students were enrolled and attended the state's 11 universities and colleges. Per-student living expenses averaged $12,892 for the 2023-2024 school year and $12,968 for the 2022-2023 school year (Table 8). Based on expenditures per FTE student, students were estimated to have spent $430.8 million in North Dakota on books, room and board, personal items, and recreation during the 2023-2024 school year (Table 8, Figure 13). Business activity associated with student expenditures supported additional induced (secondary) effects of $454.7 million, for total effects (direct and secondary) of $885.6 million in FY2023.

In the past 10 years student expenditures trended slightly and consistently higher with slight declines in the recent six years. Student economic effects have remained relatively stable despite declining enrollments. Since 2018, student expenditures have dropped from $457.8 to $430.8 million in FY2023, a 6.0 percent decline (Figure 13). During the same time period enrollment dropped from 37,397 in 2019 to 33,163 in FY2023, an 11 percent decline.

Some declines in overall spending in the FY2022 and FY2023 assessment are likely in part due to further refinements in estimates of FTE students. This current assessment uses NDUS enrollment data to control for high school students taking classes for college credit. High school students taking a college class would likely live at home with their family and would not have the same expenditure patterns as a traditional full-time student.

Table 8. Student Expenditures, by Expenditure Category, North Dakota University System, FY2022 and FY2023		
Item	**FY2022**	**FY2023**
Students (FTE)	33,163	33,421
Spending per Student	12,968	12,892
Spending by Category (all students)	---------- millions $ ----------	
Room and Board	288.7	289.3
Books	28.1	28.1
Personal Expenses	113.2	113.4
Total Student Spending	430.0	430.8
Direct and Secondary Effects		
Direct Effects	430.0	430.8
Indirect Effects	n\a	n\a
Induced Effects	454.0	454.7
Total	884.1	885.6

Figure 13. Direct Student Expenditures and Full-time Equivalent Student Enrollment, North Dakota Universitsy System, FY2013 - FY2023



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.

An additional data limitation relates to accounting for 100% online, remotely enrolled students. Currently, data are not available to estimate the number of students that are 100 percent online remote students. As remote learning has expanded in recent years, not controlling for online remote students likely overestimates the number of FTE students for student expenditure purposes. The rationale for controlling for 100% online remote students is that those students may not be living in the community where they are enrolled and accordingly are not expending funds in the community for living expenses.

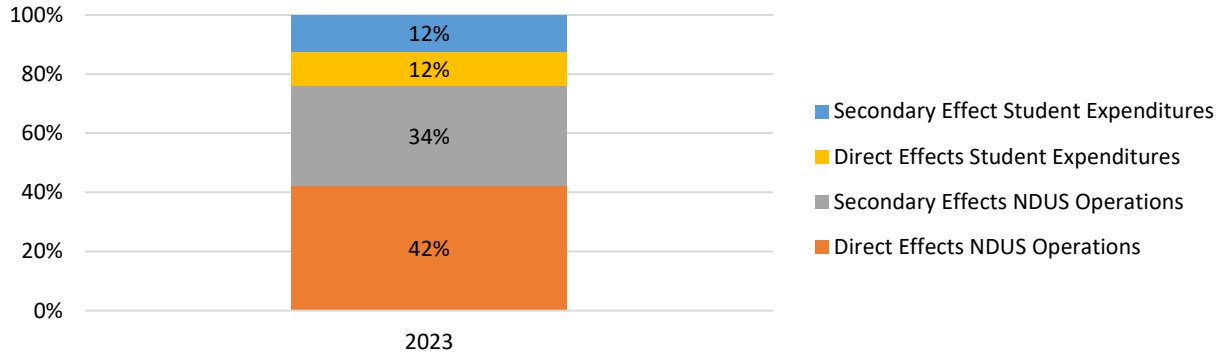
Total Economic Effects

In FY2023, combined direct effects from NDUS expenditures and NDUS students totaled $2.00 billion with an additional $1.71 billion in secondary economic effects. Total economic effects (direct plus secondary) totaled $3.71 billion in FY2023 (Table 9). NDUS direct expenditures from operations made up 42 percent of total economic effects. Direct and secondary effects from NDUS operations accounted for 76 percent of total (NDUS operations and student expenditures) effects (Figure 14).

Table 9. Total Economic Effects, North Dakota University System Expenditures and North Dakota University System Student Expenditures, FY2022 and FY2023

FY2022			
	NDUS Operations	**Student Expenditures**	**Total**
	---millions of dollars---		
Direct Effects	1,516.8	430.0	1,946.9
Secondary Effects (Indirect and Induced)	1,307.3	454.0	1,761.3
Total Effects (Direct and Secondary)	2,824.1	884.1	3,708.2
FY2023			
	NDUS Operations	**Student Expenditures**	**Total**
	---millions of dollars---		
Direct Effects	1,568.5	430.8	1,999.3
Secondary Effects (Indirect and Induced)	1,259.2	454.7	1,713.9
Total Effects (Direct and Secondary)	2,827.6	885.6	3,713.1

Figure 14. Total Economic Effects (Direct and Secondary), University System Operations and Student Expenditures, North Dakota University System, FY2023



Conclusions

The NDUS consists of 11 colleges and universities located throughout the state. Those universities receive revenues from state appropriated funds, state grants and federal grants, and other grants, contracts, sponsored programs 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 drivers of local and regional economic activity. In FY2023, the NDUS had direct economic effects of $1.57 billion and total economic effects (direct and secondary effects) of $2.83 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 $2.83 billion from both General and Non-general Funds, $2.20 billion was associated with Non-general Funds. Economic effects from Non-general Fund expenditures in FY2023 comprised 78 percent of NDUS 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. The NDUS system generated $3.17 in Non-general Funds (external funding) for every dollar of General Funds provided by the state of North Dakota.

Student expenditures also contribute to the University System's economic effects. In 2023, the university system's 33,421 FTE students spent on average approximately $13,000 each, totaling $430.8 million in direct expenditures and $885.6 million in total economic effects (direct plus secondary).

The NDUS also supports employment throughout the state. In FY2023, the NDUS directly employed 11,094 individuals. Business activity associated with University System expenditures supported an additional 9,710 secondary jobs in FY2023.

Institutions of higher education in North Dakota provide the state with an educated workforce ready to meet the challenges of North Dakota's dynamic state economy. 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, teaching, athletic, and cultural activities. The activities and services of the North Dakota University System provide economic benefits which enhance local and state economies.

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