

FACT SHEET

The Economic Value of North Dakota State University | January 2017

North Dakota State University (NDSU) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, this study calculates the benefits to each of these groups. Results of the analysis reflect Fiscal Year (FY) 2015-16.

IMPACT ON BUSINESS COMMUNITY

During the analysis year, NDSU and its entrepreneurial activities, students, and visitors added **\$927.3 million** in income to the NDSU Service Area economy, approximately equal to **1.3%** of the region's total gross regional product. By comparison, this impact from the university is more than half the size of the entire Accommodation & Food Services industry in the region. The economic impacts of NDSU break down as follows:

Operations spending impact

- NDSU employed 1,899 full-time and part-time employees in FY 2015-16 (less research employees). Payroll amounted to **\$195 million** (less payroll that went towards research employees), much of which was spent in the NDSU Service Area to purchase groceries, clothing, and other household goods and services. The university spent another **\$63 million** to support its day-to-day operations (less research activities).
- After adjusting NDSU's gross impact downward by \$88 million to account for the impact that would have occurred regardless of NDSU, the net impact of university payroll and expenses in the NDSU Service Area during the analysis year was approximately **\$210.2 million** in added income.

Research spending impact

- Research activities at NDSU impact the regional economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in the NDSU Service Area through inventions, patent applications, and licenses. In FY 2015-16, NDSU spent **\$83.9 million** on payroll to support research activities.
- NDSU's research spending generated **\$103.1 million** in added income for the NDSU Service Area economy.

Start-up and spin-off company impact

- NDSU creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up and spin-off companies created by the university.
- In FY 2015-16, NDSU's start-up and spin-off companies generated **\$9.3 million** in added income for the NDSU Service Area economy.

**IMPACTS CREATED BY NDSU IN
FY 2015-16**

ADDED INCOME	JOBS
\$210.2 million	2,139
Operations spending impact	
\$103.1 million	1,206
Research spending impact	
\$9.3 million	121
Start-up and spin-off company impact	
\$39.9 million	533
Student spending impact	
\$4.4 million	114
Visitor spending impact	
\$560.4 million	7,773
Alumni impact	
\$927.3 million	11,886
Total impact	

**TOP INDUSTRIES IMPACTED BY
NDSU**

TOTAL INCOME (MILLIONS)	JOBS
\$155.9	1,814
Professional & Technical Services	
\$88.5	1,135
Government, Non-Education	
\$60.8	1,041
Health Care & Social Assistance	
\$48.3	406
Manufacturing	
\$39.1	483
Construction	
\$534.6	7,009
All other industries	
\$927.3	11,886
Total impact	

Impact of student spending

- Around **38%** of students attending NDSU originated from outside the region. Some of these students relocated to the NDSU Service Area in order to attend NDSU. In addition, a number of students would have left the region if not for NDSU. These relocators and retained students spent \$63.8 million on groceries, transportation, rent, and so on. A significant portion of these expenditures occurred in the region.
- The expenditures of relocators and retained students during the analysis year added approximately **\$39.9 million** in added income to the NDSU Service Area economy.

Visitor spending impact

- Thousands of out-of-region visitors are attracted to the NDSU Service Area for activities at NDSU, including commencement and sports events. These visitors brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other regional businesses.
- Off-campus visitor spending added approximately **\$4.4 million** in added income for the NDSU Service Area economy.

Alumni impact

- Over the years, students have studied at NDSU and entered or re-entered the workforce with newly-acquired skills. Today, thousands of these former students are employed in the NDSU Service Area. NDSU former students' higher earnings along with the increased output of businesses that employed them during FY 2015-16 has the largest impact on the regional economy.
- The accumulated contribution of former students currently employed in the regional workforce amounted to **\$560.4 million** in added income during the analysis year.

Total impact

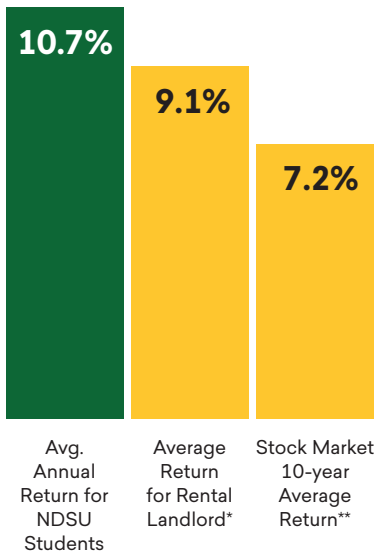
- The overall impact of NDSU on the local business community during the analysis year amounted to **\$927.3 million** in added income, equal to the sum of operations spending impact, research spending impact, start-up and spin-off company impact, student spending impact, visitor spending impact, and alumni impact.

**RETURN ON INVESTMENT TO STUDENTS,
TAXPAYERS, AND SOCIETY**

Student perspective

- NDSU's 2015-16 students paid a total of **\$127.8 million** to cover the cost of tuition, fees, books, and supplies. They also forfeit **\$247 million** in money that they would have earned had they been working instead of learning.

FIGURE 3: Student rate of return



*RealityTrac's Q3 2014 study of 586 counties nationwide.

**Forbes' S&P 500 (compounded annualized) avg. return, 1994-2014.

- In return for the monies invested in the university, students will receive a present value of **\$898.7 million** in increased earnings over their working lives. This translates to a return of **\$2.40** in higher future earnings for every \$1 that students invest in their education. The average annual return for students is **10.7%**.

Taxpayer perspective

- In FY 2015-16, state taxpayers in North Dakota paid **\$165.3 million** to support the operations of NDSU. The net present value of the added tax revenue stemming from the students' higher lifetime earnings and the increased output of businesses amounts to **\$133.4 million** in benefits to taxpayers. Savings to the public sector add another **\$67.1 million** in benefits due to a reduced demand for government-funded services in North Dakota.
- Dividing benefits to taxpayers by the associated costs yields a **1.2** benefit-cost ratio, i.e., every \$1 in costs returns \$1.20 in benefits. The average annual return on investment for taxpayers is **2.6%**.

Social perspective

- Society as a whole in North Dakota will receive a present value of **\$1.8 billion** in added state revenue over the course of the students' working lives. Society will also benefit from **\$436 million** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on NDSU educations during the analysis year, society will receive a cumulative value of **\$3.30** in benefits, for as long as the FY 2015-16 student population at NDSU remains active in the state workforce.

For every **\$1** spent by...

<p>STUDENTS</p> <p>\$2.40</p> <p>Gained in lifetime earnings for STUDENTS</p>
<p>TAXPAYERS</p> <p>\$1.20</p> <p>Gained in added state revenue and social savings for TAXPAYERS</p>
<p>SOCIETY</p> <p>\$3.30</p> <p>Gained in added taxes and public sector savings for SOCIETY</p>

CONCLUSION

NDSU's impact of \$927.3 million in added income was equal to approximately 1.3% of the GRP of the NDSU Service Area. By comparison, this contribution that the university provides on its own is more than half the size of the entire Accommodation & Food Services industry in the region. These are impacts that would not have been generated without the university's presence.

The results of this study demonstrate that NDSU creates value from multiple perspectives. The university benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, it benefits society as a whole in North Dakota by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.