

The economic impact of Minnesota State University Moorhead

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Contents

Executive summary.....	1
Introduction.....	2
Minnesota State University Moorhead impact on the West Central region	4
Regional profile	4
Economic impact of Minnesota State University Moorhead on the West Central region	4
Impact on jobs.....	5
Impact on taxes	7
Benefits beyond operations: enhanced productivity	7

Figures

1. West Central profile 2011	4
2. Economic impact of Minnesota State University Moorhead in the West Central region in 2011 (\$ millions).....	5
3. Top ten industries impacted by Minnesota State University Moorhead in the West Central region in 2011 (\$ millions).....	5
4. Impact on employment of Minnesota State University Moorhead in the West Central region in 2011 (jobs).....	6
5. Impact on employment of Minnesota State University Moorhead in the West Central region by source (jobs)	6
6. Top ten industries impacted by employment in 2011 (jobs).....	6

Executive summary

Minnesota State University Moorhead generates an annual economic impact of \$215 million from its operations in the West Central region. Based on the West Central region economy of \$8 billion, this means that for every \$100 produced in the region, \$3 are directly or indirectly related to Minnesota State University Moorhead. The direct impact of the university in 2011 was \$156 million, while the indirect impact in other industries was \$59 million.

Similarly, during 2011 the university and its students generated an estimated 2,862 jobs in the West Central region. These jobs included an estimated 2,325 direct jobs, and 537 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the university and its students.

Additionally, by educating its students, Minnesota State University Moorhead enhances the productivity of both public and private organizations in Minnesota. Only considering the 1,397 degrees awarded by Minnesota State University Moorhead in 2011, this is equivalent to \$256.5 million of future value created in the state.

Introduction

Minnesota State University Moorhead is located in Moorhead, Minnesota, just across the Red River from Fargo, North Dakota. The university has 76 majors, with 172 emphases and options. The largest majors are Elementary Inclusive Education, Mass Communications, Biology, Business Administration, Art, Accounting, and Psychology.

Minnesota State Moorhead has approximately 8,500 students registered each year and more than 400 faculty. In 2011 the university awarded 11 associate degrees, 1,262 bachelor's degrees, and 122 master's and post-master's degrees. During the same year, Minnesota State Mankato University had operational expenses of \$95 million.

Minnesota State University Moorhead is one of the 31 institutions in the Minnesota State Colleges and Universities (MnSCU) system; the largest single provider of higher education in the state of Minnesota. The colleges and universities operate 54 campuses in 47 Minnesota communities, serving 430,000 students in credit and non-credit courses, with about 34,700 graduates each year.

This report estimates the economic impact of Minnesota State University Moorhead on the West Central region. Through its daily activities, the university generates economic value for the region in several ways. First, spending by the university and its students directly impacts the personal income, employment, and tax revenues of the state. Secondly, these expenditures generate an indirect effect; all Minnesota State University Moorhead activities induce other organizations and businesses to spend more, creating what is known as a "multiplier effect." Finally, by educating its students, the university enhances the productivity of both public and private organizations in Minnesota.

Data used in the analysis include:

- Minnesota State University Moorhead operational expenditures, salaries and benefits from its 2011 financial statements
- Capital expenditures from the state's bond projects that financed investments for Minnesota State University Moorhead during 2010 to 2012 from the Minnesota Management & Budget office¹
- Estimates of Minnesota State University Moorhead students' spending. A survey of 249 students and their spending patterns was used in the IMPLAN model to estimate the direct and indirect effect of this spending for a given year²

¹ Minnesota Management and Budget (2012). Bond's Proceeds Report. Retrieve at <http://www.mmb.state.mn.us/doc/bonds/proceeds/mnscu-bonds-fund-4020-FY10.pdf>

² The method used in the calculations of these impacts is the Input-Output model developed by IMPLAN. This method measures the direct impact of an organization's spending in a particular region (a country, state or county) by estimating the inputs used by the organization and the multiplier effects in other industries in the region. For purposes of this study, the university expenditures and its indirect effects come from its operational activities, its capital investments, and its students' spending.

Minnesota State University Moorhead impact on the West Central region

Regional profile

During 2011, the West Central region had around 222 thousand residents (4 percent of the state's population), with 132 thousand employees and a gross regional product of \$8 billion (3 percent of the state's total regional product). The main industries in the region, by employment levels, were education, food services and drinking places, grain farming, and government.

1. West Central profile 2011

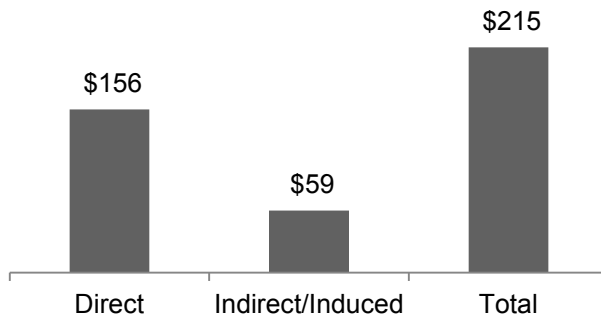
Population	222,688
Total employment	132,751
Gross regional product	\$8 billion
Average household income	\$88,715
Per capita gross regional product	\$36,125

Counties in the region: Becker County, Clay County, Douglas County, Grant County, Otter Tail County, Pope County, Stevens County, Traverse County, Wilkin County.

Economic impact of Minnesota State University Moorhead on the West Central region

The annual economic impact of the Minnesota State University Moorhead in the West Central region reaches \$215 million (Figure 2). Based on the West Central region economy of \$8 billion, this means that for every \$100 produced in the West Central region, \$3 are directly or indirectly related to Minnesota State University Moorhead. The sources of these direct and indirect impacts are the institution's operations (\$121 million), students' expenditures (\$93 million), and investments (\$1 million).

2. Economic impact of Minnesota State University Moorhead in the West Central region in 2011 (\$ millions)



Real estate is the main industry sector impacted by Minnesota State University Moorhead, with \$78 million supported by the university. Other industries impacted by Minnesota State University Moorhead are state and local government education (e.g. public universities), and food services and drinking places (e.g. restaurants, bars, etc.). Figure 3 below shows the top ten industries affected by Minnesota State University Moorhead in 2011.

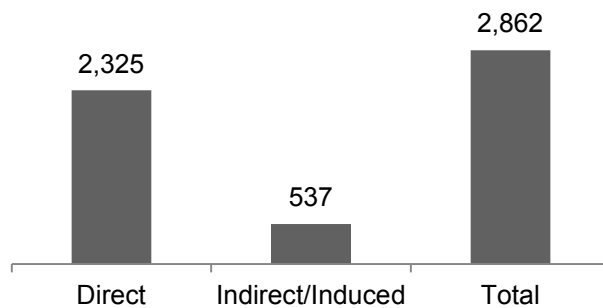
3. Top ten industries impacted by Minnesota State University Moorhead in the West Central region in 2011 (\$ millions)

Real estate establishments	78.3
State and local government education	27.9
Food services and drinking places	17.4
Child day care services	9.7
Telecommunications	8.8
Imputed rental activity for owner-occupied dwellings	7.7
Medical and diagnostic labs and outpatient and other ambulatory care services	3.8
Wholesale trade businesses	3.4
Personal and household goods repair and maintenance	2.6
Retail Stores - Food and beverage	2.2

Impact on jobs

During 2011, Minnesota State University Moorhead generated an estimated 2,862 jobs in the West Central region. These jobs include 2,325 direct jobs generated by the university and its students, and 537 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the university and its students (Figure 4).

4. Impact on employment of Minnesota State University Moorhead in the West Central region in 2011 (jobs)



The sources of these direct and indirect impacts are the institution’s operations (1,696 jobs), students’ expenditures (1,155 jobs), and investments (11 jobs). A total of 1,358 jobs are created directly by the university’s operational activities (Figure 5).

5. Impact on employment of Minnesota State University Moorhead in the West Central region by source (jobs)

	Direct	Indirect	Total
Operational expenditures	1,358	338	1,696
Students' spending	958	197	1,155
Investments	8	3	11
Total	2,325	537	2,862

The same three industries mentioned before are also the most impacted by the university in its employment, directly or indirectly (Figure 6).

6. Top ten industries impacted by employment in 2011 (jobs)

State and local government education	1,292
Food services and drinking places	347
Real estate establishments	297
Child day care services	173
Retail Stores - Food and beverage	61
Retail Stores - Clothing and clothing accessories	47
Personal and household goods repair and maintenance	34
Medical and diagnostic labs and outpatient and other ambulatory care services	29
Employment services	27
Retail Stores - General merchandise	20

Impact on taxes

Minnesota State University Moorhead generates about \$12 million in tax revenues for state and local governments each year. Through its operational activities, its employees' and students' spending, Minnesota State University Moorhead supports the activities of the West Central region by paying sales, property, and income taxes. Similarly, the university and its employees' social insurance contributions add to the state tax revenues. Since Minnesota State University Moorhead operational activities and spending creates demand for other businesses and industry sectors, additional tax revenues come from businesses that serve the university. These taxes include sales, income, and property taxes, along with others, such as corporate taxes.

Benefits beyond operations: enhanced productivity

By educating its students, Minnesota State University Moorhead enhances the productivity of both public and private organizations in Minnesota. Its alumni provide the skills and knowledge needed to improve the functioning of many organizations in the state.

Since performing a direct measurement of the contribution of graduates to Minnesota businesses and governments is not feasible, we estimate the additional earnings of graduates as a result of their training. This measure of additional earnings is equivalent to estimating the increase in productivity due to students' education; the students are able to earn more as they better fit the needs of businesses and government.

Only considering the 1,397 associate, bachelor's, master's, post master's, and doctorate degrees awarded by Minnesota State University Moorhead in 2011, this is equivalent to \$256.5 million of future value created in the state. Unlike previous estimations in this report, this is an additional value to the state, not just the region, since we cannot know where the students live after graduation.³

Some studies present the enhanced productivity without discounting the future income received by students (for example, the Tripp Umbach study for the University of Minnesota). If we calculate the additional future earnings in this way, the economic benefit from enhanced productivity reaches \$444 million.⁴

³ This estimation assumes 40 years of work life, a discount rate of 3 percent and two important parameters. The first one is that the total is adjusted by 30 percent (similar to Tripp Umbach's 2011 report for the University of Minnesota), to allow for the forgone income while attending the college or university, future periods of unemployment, time out of the labor force, and other events. The second parameter included in the estimation is that 80 percent of students stay in the state after graduation (MnSCU Amazing Facts, 2010). The economic value created by the enhanced productivity of students should consider only those students staying in the state; if they leave there is not economic impact for Minnesota in the years following their graduation.

⁴ Tripp Umbach (2011). The Economic and Societal Impact of the University of Minnesota.