

The economic impact of Winona State University

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Executive summary

Winona State University generates an annual economic impact of \$307 million from its operations in the South East region. Based on the South East region economy of \$22.6 billion, this means that for every \$100 produced in the region, \$1 are directly or indirectly related to Winona State University. The direct impact of the university in 2011 was \$210 million, while the indirect impact in other industries was \$97 million.

Similarly, during 2011 the university and its students generated an estimated 3,875 jobs in the South East region. These jobs included an estimated 3,040 direct jobs, and 835 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the university and its students.

Additionally, by educating its students, Winona State University enhances the productivity of both public and private organizations in Minnesota. Only considering the 1,669 degrees awarded by Winona State University in 2011, this is equivalent to \$301.2 million of future value created in the state.

Introduction

Winona State University is located in Winona, Minnesota, part of the South East development region. Three campuses make up Winona State: the Original and West Campuses in Winona, and the WSU-Rochester campus in Rochester, Minnesota. Winona State University offers 65 undergraduate programs, 12 graduate programs of study, and one doctoral program in nursing practice.

Winona State University has more than 8,800 students registered each year, coming from every part of the state, the country, and more than 47 nations. In 2011 the university awarded 24 associate degrees, 1,514 bachelor's degrees, 137 master's and post-master's degrees, and 1 doctorate degree. During the same year, Winona State University had operational expenses of \$126 million.

Winona State University 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 Winona State University on the South East 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 Winona State University 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:

- Winona State University operational expenditures, salaries and benefits from its 2011 financial statements
- Capital expenditures from the state's bond projects that financed investments for Winona State University during 2010 to 2012 from the Minnesota Management & Budget office¹
- Estimates of Winona State University students' spending. A survey of 220 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

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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

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's expenditures and its indirect effects come from its operational activities, its capital investments, and its students' spending.

Winona State University impact on the South East region

Regional profile

During 2011, the South East region had around 496 thousand residents (close to 10 percent of the state's population), with 300 thousand employees and a gross regional product of \$22.6 billion (8.5 percent of the state's total regional product). The main industries in the region, by employment levels, were offices of physicians, dentists, and other health practitioners, food services and drinking places, education, and private hospitals.

1. South East regional profile 2011

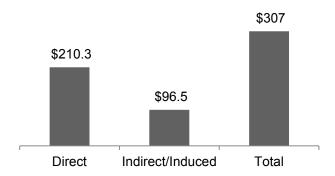
Population	496,463
Total employment	309,520
Gross regional product	\$22.6 billion
Average household income	\$99,451
Per capita gross regional product	\$45,590

Counties in the region: Dodge County, Fillmore County, Freeborn County, Goodhue County, Houston County, Mower County, Olmsted County, Rice County, Steele County, Wabasha County, Winona County.

Economic impact of Winona State University on the South East region

The annual economic impact of the Winona State University in the South East region reaches \$307 million (Figure 2). Based on the South East region economy of \$22.6 billion, this means that for every \$100 produced in the South East region, \$1 is directly or indirectly related to Winona State University. The sources of these direct and indirect impacts are the institution's operations (\$168 million), students' expenditures (\$137 million), and investments (\$2 million).

2. Economic impact of Winona State University in the South East region in 2011 (\$ millions)



Real estate is the main industry sector impacted by Winona State, with \$102 million supported by the university. Other industries impacted by Winona State University 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 Winona State University in 2011.

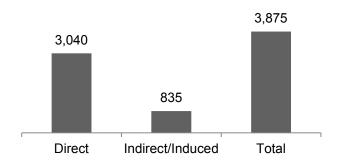
3. Top ten industries impacted by Winona State University in the South East region in 2011 (\$ millions)

Real estate establishments	101.9
State and local government education	44.6
Food services and drinking places	22.7
Child day care services	16.5
Telecommunications	11.9
Imputed rental activity for owner-occupied dwellings	6.7
Medical and diagnostic labs and outpatient and other ambulatory care services	5.4
Wholesale trade businesses	4.8
Personal and household goods repair and maintenance	4.1
Retail Stores - Food and beverage	3.9

Impact on jobs

During 2011, Winona State University generated an estimated 3,875 jobs in the South East region. These jobs include 3,040 direct jobs generated by the university and its students, and 835 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the university and its students (Figure 4).

4. Impact on employment of Winona State University in the South East region in 2011 (jobs)



The sources of these direct and indirect impacts are the institution's operations (2,240 jobs), students' expenditures (1,615 jobs), and investments (20 jobs). A total of 1,732 jobs are created directly by the university's operational activities (Figure 5).

5. Impact on employment of Winona State University in the South East region by source (jobs)

	Direct	Indirect	Total
Operational expenditures	1,732	508	2,240
Students' spending	1,294	321	1,615
Investments	14	6	20
Total	3,040	835	3,875

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	1,644
Food services and drinking places	437
Real estate establishments	435
Child day care services	280
Retail Stores - Food and beverage	91
Retail Stores - Clothing and clothing accessories	59
Personal and household goods repair and maintenance	42
Medical and diagnostic labs and outpatient and other ambulatory care services	39
Employment services	34
Retail Stores - General merchandise	34

Impact on taxes

Winona State University generates about \$17 million in tax revenues for state and local governments each year. Through its operational activities, its employees' and students' spending, Winona State University supports the activities of the South East region by paying sales, property, and income taxes. Similarly, the university and its employees' social insurance contributions add to the state tax revenues. Since Winona State University's operational activities and spending create 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, Winona State University 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 1,669 associate, bachelor's, master's, post-master's, and doctorate degrees awarded by Winona State University in 2011, this is equivalent to \$301.2 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 \$521 million.⁴

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 Umback'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.