

# The economic impact of Minnesota West Community and Technical College

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# Executive summary

Minnesota West Community and Technical College generates an annual economic impact of \$120 million from its operations in the Upper Minnesota Valley and South West regions. Based on the Upper Minnesota Valley and South West regions' economy of \$7.6 billion, this means that for every \$100 produced in the region, approximately \$1.6 is directly or indirectly related to Minnesota West Community and Technical College. The direct impact of the college in 2011 was \$91 million, while the indirect impact in other industries was \$29 million.

Similarly, during 2011 the college and its students generated an estimated 1,571 jobs in the Upper Minnesota Valley and South West regions. These jobs included an estimated 1,322 direct jobs, and 249 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the college and its students.

Additionally, by educating its students, Minnesota West Community and Technical College enhances the productivity of both public and private organizations in Minnesota. Only considering the 355 degrees awarded by Minnesota West Community and Technical College in 2011, this is equivalent to \$23 million of future value created in the state.

# Introduction

Minnesota West Community and Technical College serves more than 5,000 students with its five campuses located in the South West and Upper Minnesota Valley regions (Canby, Granite Falls, Jackson, Pipestone and Worthington.) The college offers unique programs in agriculture, biofuels technology, energy technical specialist, nursing, power sports, wind energy technology, powerline technology, and telecommunications.

In 2011, Minnesota West Community and Technical College awarded 355 associate degrees and 774 diplomas and certificates. During the same year, the college had operational expenses of \$29 million.

Minnesota West Community and Technical College is one of the 31 colleges and universities in the Minnesota State Colleges and Universities (MnSCU) system, the largest single provider of higher education in Minnesota. The system operates 54 campuses in 47 Minnesota communities, serving 430,000 students in credit and non-credit courses, with about 41,000 graduates each year.

This report estimates the economic impact of Minnesota West Community and Technical College on the Upper Minnesota valley and South West regions. Through its daily activities, the college generates economic value for these regions in several ways. First, spending by the college and its students directly impacts the personal income, employment, and tax revenues of the state. Second, these expenditures generate an indirect effect; all Minnesota West Community and Technical College activities induce other organizations and businesses to spend more, creating what is known as a “multiplier effect.” Finally, by educating its students, the college enhances the productivity of both public and private organizations in Minnesota.

Data used in the analysis include:

- Minnesota West Community and Technical College operational expenditures, salaries, and benefits from its 2011 financial statements.
- Capital expenditures from the state’s bond projects that financed investments for Minnesota West Community and Technical College during 2010 to 2012 from the Minnesota Management & Budget office<sup>1</sup>.
- The economic development regions of reference are the Upper Minnesota Valley and South West.
- Estimates of Minnesota West Community and Technical College student spending. This was obtained by surveying 409 students who live and study in the Upper Minnesota Valley and South West economic development regions, projected to the actual number of students served by Minnesota West Community and Technical College. These estimates were included in the IMPLAN model to estimate the direct and indirect effect of student spending for a given year<sup>2</sup>.

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<sup>1</sup> 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>

<sup>2</sup> 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 college’s expenditures and its indirect effects come from its operational activities, its capital investments, and its students’ spending.

# Minnesota West Community and Technical College impact on the Upper Minnesota Valley and South West regions

## *Regional profile*

During 2011, the Upper Minnesota Valley and South West regions had approximately 163,000 residents, with 112,000 employees and a gross regional product of \$7.6 billion. The main industries in the region, by employment levels, were grain industry and local government.

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### **1. Upper Minnesota River Valley and South West regional profile 2011**

Population	163,410
Total employment	112,962
Gross regional product	\$7.6 billion
Average household income	\$101,851
Per capita gross regional product	\$46,720

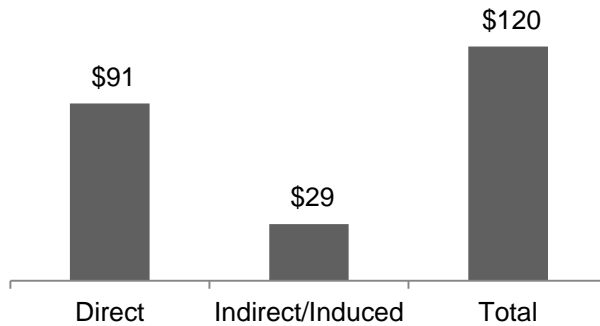
*Counties in the region: Cottonwood, Jackson, Lincoln, Lyon, Murray, Nobles, Pipestone, Redwood, Rock County, Big Stone, Chippewa, Lac qui Parle, Swift County, Yellow Medicine.*

## ***Economic impact of Minnesota West Community and Technical College on the Upper Minnesota Valley and South West regions***

The annual economic impact of the Minnesota West Community and Technical College in the Upper Minnesota Valley and South West regions reaches \$120 million (Figure 2). Based on the Upper Minnesota Valley and South West regions' economy of \$7.6 billion, this means that for every \$100 produced in the Upper Minnesota Valley and South West regions, \$1.6 are directly or indirectly related to Minnesota West Community and Technical College. The sources of these direct and indirect impacts are the institution's operations (\$36.9 million), students' expenditures (\$82.6 million).

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**2. Economic impact of Minnesota West Community and Technical College in the Upper Minnesota Valley and South West regions in 2011 (\$ millions)**



State and local government education (e.g. public universities) is the main industry sector impacted by Minnesota West Community and Technical College, with \$24.6 million supported by the college. Other industries impacted by Minnesota West Community and Technical College are real estate and food services and drinking places (e.g. restaurants, bars, etc.). Figure 3 below shows the top ten industries affected by Minnesota West Community and Technical College in 2011.

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**3. Top ten industries impacted by Minnesota West Community and Technical College in the Upper Minnesota Valley and South West regions in 2011 (\$ millions)**

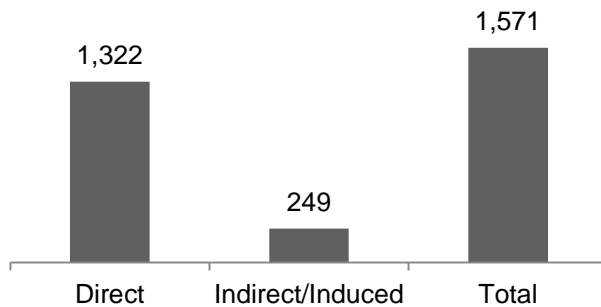
State and local government education	\$24.6
Real estate establishments	\$23.7
Food services and drinking places	\$12.7
Child day care services	\$9.6
Medical and diagnostic labs and outpatient and other ambulatory care services	\$5.9
Imputed rental activity for owner-occupied dwellings	\$3.7
Telecommunications	\$3.5
Personal and household goods repair and maintenance	\$3.4
Retail Stores - Clothing and clothing accessories	\$2.8
Wholesale trade businesses	\$2.6

### ***Impact on jobs***

During 2011, Minnesota West Community and Technical College generated an estimated 1571 jobs in the Upper Minnesota Valley and South West regions. These jobs include 1,322 direct jobs generated by the college and its students, and 249 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the college and its students (Figure 4).



**4. Impact on employment of Minnesota West Community and Technical College in the Upper Minnesota Valley and South West regions in 2011 (jobs)**



The sources of these direct and indirect impacts are the institution’s operations (564 jobs), student expenditures (1,003 jobs), and capital investment (4 jobs). A total of 474 jobs are created directly by the college’s operational activities (Figure 5).

**5. Impact on employment of Minnesota West Community and Technical College in the Upper Minnesota Valley and South West regions by source (jobs)**

	Direct	Indirect	Total
Operational expenditures	474	90	564
Student spending	845	158	1,003
Capital investment	3	1	4
Total	1,322	249	1,571

State and local government education, food services and drinking places, and child day care services are the top three industries most impacted by the college in its employment, directly or indirectly (Figure 6).

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

State and local government education	451
Food services and drinking places	264
Child day care services	244
Real estate establishments	147
Retail Stores - Food and beverage	54
Retail Stores - Clothing and clothing accessories	52
Medical and diagnostic labs and outpatient and other ambulatory care services	46
Personal and household goods repair and maintenance	32
Motion picture and video industries	17
Wholesale trade businesses	16

## ***Impact on taxes***

Minnesota West Community and Technical College generates about \$7.8 million in tax revenues for state and local governments each year. Through its operational activities and the spending of its employees and students, Minnesota West Community and Technical College supports the activities of the Upper Minnesota Valley and South West regions by generating sales, property, and income taxes. Similarly, the social insurance contributions of the college and its employees add to the state tax revenues. Since Minnesota West Community and Technical College's operational activities and spending create demand for other businesses and industry sectors, additional tax revenues come from businesses that serve the college. 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 West Community and Technical College 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.

To estimate the value of their enhanced productivity, this analysis calculated the future value of the additional earnings graduates would realize as a result of their training throughout their career (adjusted to account for such factors as the time required to obtain the training and outmigration of graduates).

Only considering the 355 associate degrees awarded by Minnesota West Community and Technical College in FY2011, this is equivalent to \$23 million of future value created in the state. Note that this estimate of enhanced productivity is measured statewide (unlike other estimates in this report which apply to the region within the state) because students frequently move to other regions of the state after graduation.<sup>3</sup>

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 \$39.8 million.<sup>4</sup>

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<sup>3</sup> This estimate assumes 40 years of work life, a discount rate of 3 percent and two other important parameters. The first 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 other 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.

<sup>4</sup> Tripp Umbach (2011). *The Economic and Societal Impact of the University of Minnesota*.