

# The economic impact of Alexandria Technical and Community College

FEBRUARY 2013

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February 2013

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#### **Executive summary**

Alexandria Technical and Community College generates an annual economic impact of \$71 million from its operations in the West Central region. Based on the West Central economy of \$8 billion, this means that for every \$1,000 produced in the region, \$3 are directly or indirectly related to Alexandria Technical and Community College. The direct impact of the college in 2011 was \$52 million, while the indirect impact in other industries was \$19 million.

Similarly, during 2011 the college and its students generated an estimated 954 jobs in the West Central region. These jobs included an estimated 778 direct jobs, and 176 additional indirect jobs, created by vendors, contractors, and businesses supplying inputs to the college and its students.

Additionally, by educating its students, Alexandria Technical and Community College enhances the productivity of both public and private organizations in Minnesota. Only considering the 387 degrees awarded by Alexandria Technical and Community College in 2011, this is equivalent to \$23.1 million of future value created in the state.

#### Introduction

Alexandria Technical and Community College is located in Alexandria, Minnesota, part of the West Central economic region. The college offers over 50 programs, including degrees that seamlessly transfer into bachelor's degrees. The areas of study are Administrative and Office Management, Art, Design and Media, Business Management and Finance Professionals, Computer Sciences, General Education, Health and Professional Services, Law Enforcement, Manufacturing, Construction, and Industrial Technology, Sales and Marketing, and Transportation and Mechanics. Alexandria Technical and Community College has been affiliated with the Higher Learning Commission since 1974 and accredited since 1980.

In 2011 the college awarded 387 associate degrees and 414 diploma and certificates. During the same year, the college had operational expenses of \$26 million.

Alexandria Technical and Community College 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 Alexandria Technical and Community College on the West Central region. Through its daily activities, the college generates economic value for the region in several ways. First, spending by the college and its students directly impacts the personal income, employment, and tax revenues of the state. Secondly, these expenditures generate an indirect effect; all Alexandria Technical and Community 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:

- Alexandria Technical and Community College operational expenditures, salaries, and benefits from its 2011 financial statements
- Capital expenditures from the state's bond projects that financed investments for Alexandria Technical and Community College during 2010 to 2012. Information came from the Minnesota Management & Budget office <sup>1</sup>
- Estimates of Alexandria Technical and Community College students' spending. A survey of 108 students and their spending patterns was used in the IMPLAN model to estimate the direct and indirect effect of this spending for a given year <sup>2</sup>

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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 country) 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.

### Alexandria Technical and Community College 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

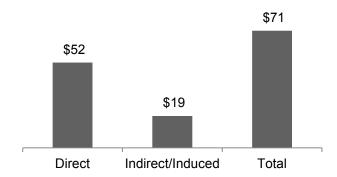
Population	222,688		
Total employment	132,751		
Gross regional product	\$8 billion		
Average household income	\$88,715		
Per capita gross regional product	\$36,125		

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 Alexandria Technical and Community College on the West Central region

The annual economic impact of the Alexandria Technical and Community College in the West Central region reaches \$71 million (Figure 2). Based on the West Central economy of \$8 billion, this means that for every \$1,000 produced in the West Central region, \$3 are directly or indirectly related to Alexandria Technical and Community College. The sources of these direct and indirect impacts are the institution's operations (\$32 million), students' expenditures (\$39 million), and investments (\$37,081).

#### 2. Economic impact of Alexandria Technical and Community College in the West Central region in 2011 (\$ millions)



Real estate is the main industry sector impacted by Alexandria Technical and Community College, with \$21.2 million supported by the college. Other industries impacted by Alexandria Technical and Community College 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 Alexandria Technical and Community College in 2011.

#### 3. Top ten industries impacted by Alexandria Technical and Community College in the West Central region in 2011 (\$ millions)

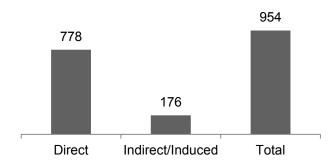
Real estate establishments	
State and local government education	10.6
Food services and drinking places	5.9
Child day care services	4.8
Telecommunications	2.9
Imputed rental activity for owner-occupied dwellings	2.7
Medical and diagnostic labs and outpatient and other ambulatory care services	2.4
Wholesale trade businesses	1.3
Personal and household goods repair and maintenance	1.3
Retail Stores - Food and beverage	1.3

#### Impact on jobs

During 2011, Alexandria Technical and Community College generated an estimated 954 jobs in the West Central region. These jobs include 778 direct jobs generated by the college and its students, and 176 additional indirect jobs, created by vendors, contractors,

and businesses supplying inputs to the college and its students (Figure 4). The sources of these direct and indirect impacts are the institution's operations 461 jobs), students' expenditures (493 jobs).

#### 4. Impact on employment of Alexandria Technical and Community College in the West Central region in 2011 (jobs)



The sources of these direct and indirect impacts are the institution's operations (461 jobs), students' expenditures (493 jobs). A total of 369 jobs are created directly by the college's operational activities (Figure 5).

#### 5. Impact on employment of Alexandria Technical and Community College in the West Central region by source (jobs)

	Direct	Indirect	Total
Operational expenditures	369	92	461
Students' spending	409	84	493
Investments	0	0	0
Total	778	176	954

The same three industries mentioned before are also the 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	794
Food services and drinking places	
Real estate establishments	311
Child day care services	294
Retail Stores - Food and beverage	142
Retail Stores - Clothing and clothing accessories	66
Personal and household goods repair and maintenance	46
Medical and diagnostic labs and outpatient and other ambulatory care services	26
Employment services	19
Retail Stores - General merchandise	18

#### Impact on taxes

Alexandria Technical and Community College generates about \$4.1 million in tax revenues for state and local governments each year. Through its operational activities, its employees' and students' spending, Alexandria Technical and Community College supports the activities of the West Central region by paying sales, property, and income taxes. Similarly, the college and its employees' social insurance contributions add to the state tax revenues. Since Alexandria Technical and Community 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, Alexandria Technical and Community 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.

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 387 associate degrees awarded by Alexandria Technical and Community College in 2011, this is equivalent to \$23.1 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.<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 \$40 million.<sup>4</sup>

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.

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