

# **The Economic Impact of Lake Superior Community and Technical College**

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Prepared for the  
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## The local economic impact of Lake Superior Community and Technical College

- Lake Superior CTC adds an estimated \$73,311,410 in activity to the local economy; and
- Lake Superior CTC adds an estimated 1,088 jobs to the local economy.

Spending, either by the college or by its students, is not a one-time event. A portion of initial spending by one party becomes income to someone else in the local economy, who then also spends a portion of that income, so that the total spending is a multiple of the initial spending. Multipliers vary by location and by the initial source of the spending. The best estimate of multipliers is prepared by RIMS II (Regional Impact Multipliers). The appropriate multiplier for spending by colleges, universities and professional schools in Duluth is 1.825. Thus, the economic impact of the college on Duluth is the sum of the college's direct spending and spending by students in Duluth times the multiplier. The total impact of Lake Superior CTC on Duluth is \$73,311,410. Spending is summarized in table 1 below, and explained in some detail in the next few pages.

The operation of the college and spending by its students also help to create jobs in the community. These jobs include direct jobs of people working for the college and additional jobs generated by the overall increase in economic activity. The total jobs impact of Lake Superior CTC is 1,017.

Table 1. Estimated local economic impact of Lake Superior CTC.

College direct spending	\$11,452,668
Plus Student spending	\$28,717,968
Equals total direct spending	\$40,170,636
Times multiplier	1.825
Equals	<b>\$73,311,410</b>
Jobs impact of spending	<b>1,088 jobs</b>

A college has economic impact on the community in which it is located in several ways:

- First, there is the direct spending of the college itself, including funds spent for wages and salaries, contracted services, supplies, repairs, and the like;
  - Second, there is spending by students, some of whom are residents of Duluth or other cities in the area, and others of whom have come to Duluth in order to attend Lake Superior CTC; and
  - Third, the students have an important additional impact on the local economic scene because many of them are employed in the area. Students attend Lake
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Superior CTC, at least in part, because they can obtain part-time employment, and employers locate in or near Duluth, at least in part, because they have easy access to a capable labor force.

**College direct spending.** While salaries account for Lake Superior CTC’s largest single expense, not all of that amount is spent locally and so cannot be included as part of college direct spending. The amount the college reported spending on salaries and benefits, \$16,086,692, has been reduced by 60 percent in order to account for income taxes, benefits, and personal savings and spending outside the area. The portion of college spending on salaries that has local impact is estimated to be \$6,434,677.

Other spending by the school injects additional dollars into the local economy. Additional spending categories that have an impact on local spending include purchases of services, repairs and maintenance, and miscellaneous other expenses. These totaled \$3,670,079 in 2002. Spending on supplies is a third category of spending that has significant local impact. These were \$1,347,912 in 2002. Table 2 below shows total direct local spending by Lake Superior CTC was \$11,452,668.

Table 2. Direct spending in Duluth by Lake Superior CTC in 2002.

Salaries (adjusted)	\$6,434,677
Services, repairs, maintenance, misc. expenses	\$3,670,079
Supplies	\$1,347,912
Total direct spending	<b><u>\$11,452,668</u></b>

**Student spending.** To obtain information on student spending, Anton, Lubov & Associates surveyed students at each of the participating colleges. The spending reported below is the spending reported by full- and part- time Lake Superior CTC students.

Students were surveyed in May, 2003. They were asked questions about their spending on meals away from home, their shopping in Duluth, and their rent and living arrangements. In addition, we included questions about their jobs, cars, education and career objectives and whether or not they planned to stay in the area once their studies were completed. The surveys were conducted online and by paper. There was no way to verify that the students responding to the survey mirrored the entire college, but the number of responses (140) was large enough that the sample could be considered to be representative of the student body.

Students were separated into two groups: full-time students and part-time students<sup>1</sup>. Average spending by students in each of these groups was multiplied by by the actual number of students in each of these groups during 2001-2002 school year.

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<sup>1</sup> Unfortunately, PSEO students were not asked to identify themselves explicitly, but all students who reported no spending on books and supplies and lived with their parents were considered to be PSEO students. Those students who identified themselves as PSEO students on hand written survey forms appeared to spend much less than other students, so it seemed appropriate to note their spending patterns separately from others. Since PSEO students live with their parents, they have no choice about where they live, and their reported spending was adjusted downward to include only the spending by PSEO students who said they lived outside Duluth.

Three types of student spending were considered: spending on books and supplies, weekly spending on food away from home, and other shopping per month. To obtain annual spending, reported spending on books and supplies per term was multiplied by two, weekly spending on food away from home was multiplied by 34, and monthly shopping was multiplied by 8 (the number of terms, weeks and months in a school year, respectively). Estimates of spending by each of these groups is reported in table 3. Spending on rent or mortgage payments has been excluded from the table since neither has any substantive impact on local spending.

Table 3. Estimated local spending by students at Lake Superior CTC.

	Full-time Students	Part-time Students <sup>2</sup>
Average annual \$ per student		
Books and supplies	\$956.60	\$902.52
Food away from home	\$693.26	\$636.48
Other shopping	\$3,285.76	\$4,257.12
Total	\$4,935.62	\$5,796.12
Times:		
Number of students	2,718	2,636
Equals:		
Average annual spending	\$13,439,950	\$15,278,018
<b>Total student spending (all groups)</b>		<b>\$28,717,968</b>

The pattern of student spending at Lake Superior CTC was like the pattern at most of the colleges surveyed; namely, part-time students had higher average spending than full-time student. They also tended to work longer hours and a larger share of them lived with their spouse and/or children.. Understandably, their spending was relatively high.

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<sup>2</sup> It is legitimate to question just how much of the spending by part-time students should be included in the impact estimates. All of the spending reported on student surveys has been included here. The local impact estimates do not include an estimate of the factor that was found to be most important in the statewide impact of the Minnesota State College and University system, the enhanced productivity of the labor force. It is quite likely that if this factor could be adequately estimated for the local communities, it would be a good deal larger than the portion of part-time student that could be excluded. Therefore, even after including all spending by part-time students, these impact numbers understate the true contribution of the school. Moreover, since non-school spending by part-time students averaged in a range of between \$1,400 and \$4,000 per year for different communities, it is clear that these estimates are not counting the full spending of families who would live and work in the community with or without the presence of the college.

Automobile expenses were a large share of student spending in all groups. Nearly 60 percent of the full-time student and nearly 40 percent of the part-time students bought their automobiles outside of Duluth.

Table 4. Estimated automobile-related spending by students.

	Full-time Students	Part-time Students
Own a car	92.7%	93.5%
Average monthly spending on auto operation	\$91.42	\$114.00
Share of average monthly spending (excludes books, supplies, and rent)	18.4%	18.6%
Auto purchased outside of Duluth	57.5%	37.9%

**Labor market impact.** The presence of Lake Superior CTC in Duluth has a number of important impacts on the local labor market. The first of these, of course, is that the school brings jobs to the community. It does so both directly, through its employment of faculty and staff, and indirectly, as its spending and the spending of its students support additional jobs in the community. Based on standard multiplier analysis, we estimate that Lake Superior CTC brings a total of 1,017 to the community, jobs that would not be there if the school were not a part of the community.

The second way in which the school affects the local labor market is by adding to the local workforce because many students work part-time while in school. A high percent of the student body works in addition to attending classes, most of them in part-time jobs. The economic effect of these part-time student workers is easy to overlook. However, student workers can be a reliable and flexible source of labor for local companies. Taken together, the students from Lake Superior CTC make a significant contribution to the local labor force as the survey results in the table 5 show.

Table 5. Students in the Duluth workforce.

	Full-time Students	Part-time Students
Number of students	2,718	2,636
Percent employed	70.6	87.1
Average weekly hours	20.0	35.3
Total number of student workers in local labor force		4,216
Full-time equivalent student workers		2,986

Based on survey results, 70.6 percent of full-time and 87.1 percent of part-time students work at jobs in the community. The full-time students work an average of 20.0 hours while the part-time students work an average of 35.3 hours per week. Thus, there are 4,216 student workers in the Duluth. Given the average hours worked, this student workforce is the equivalent of 2,986 full-time workers.

The third and most important way that the Minnesota state colleges and universities contribute to the labor market is through providing a pool of trained graduates whose higher skill level enhances the productivity of the local workforce and the profitability of local companies. The companion study of the statewide economic impact of the system, reports that the ongoing economic contribution of the graduates of its schools is approximately \$2 billion per year. That figure represents the added wages graduates who work in Minnesota earn as a result of the training they received.

It is not possible to calculate a corresponding figure to estimate to the enhancement to the productivity of the Duluth labor force generated by Lake Superior CTC graduates. Sufficient data for such an estimate are not available. Moreover, since workers are highly mobile, many Lake Superior CTC graduates will end up working in other Minnesota cities just as some graduates of other institutions in the system will fill jobs in Duluth.

Nevertheless, it is reasonable to expect that having a Minnesota state college or university located in a community adds to the skill level of the workforce for two reasons. Workers who have already settled in the community can seek additional training while working and some of the students who come to the community for school will choose to stay and take jobs in the area. The results of the student survey support this idea. When students were asked whether or not they intended to stay in this area after their studies were completed, 62.9 percent indicated they planned to stay in Duluth. Clearly the local economy will benefit from their doing so.

In addition, data from surveys of recent graduates of Lake Superior College confirm that the college has a strong impact on the regional labor force. It is impossible to track the movement of graduates who go on for further college training, but a majority of the grads who go directly into the labor force take their first jobs in the region surrounding the college. When graduates from the years 1998 through 2001 were surveyed, almost 89 percent of the graduates who were working had found jobs in Minnesota while roughly 10 percent had jobs in Wisconsin, the majority of them in or near Superior. Of those grads with jobs in Minnesota, over two-thirds were working in Saint Louis County with the rest spread over 37 other counties.

Table 6. Percent of recent Lake Superior Community and Technical College graduates working in Minnesota and Wisconsin, and percent of those in Minnesota who work in selected counties

<b>State</b>	<b>County</b>	<b>% of Graduates</b>	<b>% working in Minnesota</b>
Minnesota		88.9%	
	St. Louis		68.2%
	Hennepin		8.6%
	Carlton		6.1%
Wisconsin		10.4%	

A map showing the complete distribution of recent graduates in the Minnesota workforce is included on the next page.

In a recent year, Lake Superior Community and Technical College contracted with 41 different companies to offer a total of 129 customized courses for employees in a number of industries, the largest numbers being in public administration, healthcare, manufacturing and construction. These contracts resulted in over 1,000 employees receiving training in those special courses. When that number is added to the more than 2,300 people who took one or more of 214 open enrollment training classes offered by Lake Superior Community and Technical College, it is clear that the area's work force is more qualified and more productive because of the training received at the college.

Figure 1. Minnesota employment of Lake Superior Community and Technical College graduates, by county (1,138 responses).



