The local economic impact of Bemidji State University

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Summary

- Bemidji State University adds an estimated \$150,394,412 per year in activity to the local economy; and
- Bemidji State University adds an estimated 2,105 jobs to the local economy.

These estimates are based on data from the 2005-2006 fiscal year and reflect the contribution the college makes to the local economy.

Overview

A four-year 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, many of whom may come from outside the local area;
- Third, visitors who come to attend events or visit their children or friends spend money in the local economy; and
- Finally, the college has a multi-faceted impact on the local labor market. The college employs local residents; college, visitor, and student spending creates jobs; many students work part-time while going to school; and some students stay in the local area after completing their studies.

Spending, either by the college, its students, or its visitors, 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 impact 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 Bemidji is 1.825. Thus, the economic impact of the college on Bemidji is the sum of the college's direct spending and spending by students and visitors in Bemidji times the multiplier. The total annual impact of Bemidji State University on Bemidji is \$150,394,412. Spending is summarized in Figure 1 below, and explained in some detail in the next few pages.

The additional impact on the local labor market includes direct jobs of people working for the college and additional jobs generated by the overall increase in economic activity. The total jobs impact of Bemidji State University is 2,105 full-time equivalent jobs in the local economy.

1. Estimated annual local econom	nic impact of Bemidji State University
College direct spending	\$38,751,200
Plus student spending	\$39,580,786
Plus visitor spending	\$ 4,075,911
Equals total direct spending	\$82,407,897
Times multiplier	<u>1.825</u>
Equals total spending impact	\$150,394,412
Jobs impact of spending	2,105 jobs

Direct spending by Bemidji State University

While salaries account for Bemidji State University'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, \$44,358,000, has been reduced 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 \$17,743,200.

Other spending by the school injects additional dollars into the local economy. Additional spending categories that have local impact include purchases of services, repairs and maintenance, and miscellaneous other expenses. These totaled \$17,155,000 in 2006. Spending on supplies is another category of spending that has significant local impact. This was \$3,853,000 in 2006. Figure 2 below shows total direct local spending by Bemidji State University was \$38,751,200.

2. Direct spending in Bemidji by Bemidji State University in 2006			
Salaries (adjusted)	\$17,743,200		
Services, repairs, maintenance, misc. expenses	\$17,155,000		
Supplies	\$3,853,000		
Total direct spending	\$38,751,200		

Spending by students

The local spending by college students consists of their spending for goods and services in the area economy and their spending on off-campus housing. On-campus housing expenses are already included in the college's spending numbers.

In a previous economic impact study, Wilder Research used estimates of student housing costs and incidental expenses provided by the websites or financial aid offices of the respective colleges.¹ In this report we use the same method to estimate housing expenses but our estimates of student spending are based on surveys of students in which they were asked to estimate their actual spending in certain categories.

Estimating student non-housing spending

To obtain information on student non-housing spending, Wilder Research surveyed students at each of the participating colleges. The spending reported below is the spending reported by full- and part- time Bemidji State University students.

Students were surveyed in May, 2007. They were asked questions about their spending on meals away from home, their shopping in the local area, 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. There was no way to verify that the students responding to the survey mirrored the entire college, but the number of responses (497) 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. Average spending by students in each of these groups was multiplied by the actual number of students in each of these groups during the 2005-2006 school year.

Three types of student spending were considered: spending on books and supplies, weekly spending on food away from home, and other spending per month. To obtain annual spending, reported spending on books and supplies per term was multiplied by two (the number of school terms), weekly spending on food away from home was multiplied by 34 (the number of weeks in the school year), and monthly spending was multiplied by 8 (the number of months in the school year). Estimates of spending by each of these groups is reported in Figure 3 below.

See "'The Economic Impact of Minnesota State Colleges and Universities: Updated statewide estimates and local estimates for universities," July, 2006, Wilder Research.

Estimating student off-campus housing spending

Student spending on off-campus housing was estimated using the same method as in Wilder's 2006 report cited earlier. As mentioned above, a separate estimate of spending on dormitory housing is not included here because that spending is already captured in the college financial numbers.

Our estimates use the information on expected off-campus room and board expenses provided to prospective students for planning purposes. The total number of students living off-campus was derived from college data on total enrollment and on-campus residents. The breakdown of those living with parents and in other off-campus locations was estimated using assumptions documented in Wilder's 2006 report.

Total off-campus room and board spending was estimated by mutiplying the assumed off-campus costs times the number of students in each group (living with parents or in other rental housing) and then adding the products. This total was then added to estimated non-housing spending. The results are shown in Figure 3.

3. Estimated local spending by students at Bemidji State University

	Full-time students	Part-time students	Totals
Average annual \$ per student			
Books and supplies	\$923	\$705	
Food away from home	\$1,022	\$681	
Other spending	<u>\$2,621</u>	<u>\$2,367</u>	
Total	\$4,566	\$3,753	
Times:			
Number of students	3,582	1,309	
Equals:			
Average annual non-housing spending	\$16,355,269	\$4,912,834	\$21,268,103
Plus:			
Off-campus housing spending			\$18,312,684
Total student spending			\$39,580,786

Automobile expenses

Automobile expenses were a large share of "other spending" for both student groups. A significant share of students bought their automobiles outside of Bemidji. However, their spending on auto operations occurred largely in the local economy.

4. Estimated automobile-related spending by students

	Full-time students	Part-time students ¹
Own a car	89.5%	97.6%
Average monthly spending on auto operation	\$91.00	\$90.73
Auto purchased in Bemidji	21.6%	24.4%

Visitor spending

Visitor spending was calculated separately for parents visiting students at each campus and for friends of students visiting each campus. First, the total amount of visitors was calculated by multiplying the estimated number of people visiting each student during the school year by the number of enrolled students at each campus. This total was then multiplied by the estimated average dollar amount spent by each visitor to determine the total dollar amount spent annually by visitors.

We estimated the average number of parent and friend visits per year and their average spending after inspecting a number of college economic impact studies where some amount of data had been collected on visitor frequency and visitor expenditures.² This analysis resulted in an average number of parent visits per student per year at 1.7 and friend visits at 6. Average spending per visit was placed at \$206 per parent visit and \$88 per student visit. A more complete description of the details behind the visitor spending estimates is contained in the Wilder 2006 report.

Labor market impact

The presence of Bemidji State University 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 Bemidji State

² The most directly relevant study was "University of Wisconsin System's Economic Contribution to Wisconsin," September, 2002 by Dennis K. Winters and William A. Strang.

University brings a total of 2,105 jobs to Bemidji 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. The economic effect of these parttime 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 make a significant contribution to the local labor force as the survey results in the Figure 5 show.

5. Bemidji State University Students in Bemidji workforce **Full-time** Part-time students students1 3.582 Number of students 1.309 75% Percent employed 88% 34.7 Average weekly hours 21.1 Total number of student workers in local labor force

Based on survey results, 75 percent of full-time and 88 percent of part-time students hold jobs in the community. The full-time students work an average of 21.1 hours while the part-time students work an average of 34.7 hours per week. Thus, there are 3,853 student workers in Bemidji. Given the average hours worked, this student workforce is the equivalent of 2,428 full-time workers.

The third and most important way that the Minnesota state colleges and universities contribute to the labor market is by providing a pool of graduates whose higher skill level enhances the productivity of the local workforce and the profitability of local companies. A recent study by Wilder Research of the statewide economic impact of the system reports that the ongoing economic contribution of the graduates of its schools is approximately \$2.4 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 local labor force generated by Bemidji State University graduates. Sufficient data for such an estimate are not available. Moreover, since workers are highly mobile, Bemidji State University graduates may end up working in other Minnesota cities just as some graduates of other institutions in the system may fill jobs in Bemidji.

Full-time equivalent student workers

3,853

2,428

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 area 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, 46 percent indicated they planned to stay in Bemidji. Clearly the local economy will benefit from their doing so.