

marketing

profile

update

2006



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UNIVERSITY OF WISCONSIN OSHKOSH
MARKET PROFILE
UPDATE

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Introduction

We would like to thank the University of Wisconsin Oshkosh for commissioning this market profile study update. It is always interesting to see how things change over time. UW Oshkosh has grown with time, despite cutbacks in public funding. We find it noteworthy to see the degree to which the economic contribution of UW Oshkosh has increased given the budget and staff constraints.

Increasingly, colleges and universities are considered more as economic partners with the local and regional community. This can be of particular importance during periods of slow economic growth and through periods of changing economic structure as demand for a highly trained workforce expands in the New Economy. This newly recognized role for colleges and universities is described by the HUD Office of University Partnerships:

Few institutions can contribute more to rebuilding America's communities than its colleges and universities. They are not only creators, preservers and transmitters of knowledge and culture—they are also economic engines, applied technology centers, major employers, investors, real estate developers and reservoirs of creative and energetic people.¹

It is critical for colleges and universities to embrace this role. While the institution provides a ready marketplace for the community in which it resides, the community

in turn supplies many support services and infrastructure for the university. By working together, town and gown can achieve increased economic stability and develop the synergy that will help each prosper.

The role of the university as an economic development tool of the region should be recognized as being as important as other economic development entities. UW Oshkosh also serves as a stable economic “anchor.” That is to say, colleges and universities seldom shut down or move offshore. UW Oshkosh is a prime example of stability, having been established in 1871.

For local businesses, the university provides a stable economic anchor that draws resources into the community, both product demand and labor supply. For local government, the university attracts federal and state funds and receives expertise imbedded within the institution. For the university, the quality of the goods and services provided by the business community improves the university's competitive position in attracting quality students, faculty and staff.

This study updates the 2003 estimates of the economic contribution UW Oshkosh makes to the region. UW Oshkosh is the third largest university in the state with almost 12,500 (head-count) students in 2006.² This figure is up from 12,000 in 2003. We use full-time equivalent numbers for students and staff. There were 9,815 FTE students in 2006. This is a 4.6-percent increase from the counts, 9,388 FTE students, in the 2003 analysis.

¹ “An Alliance for Community Building,” Office of University Partnerships, U.S. Department of Housing and Urban Development.

² This figure represents the total number of students enrolled including part-time students. A full-time equivalent (FTE) student count, including summer school students and off-campus program students, is used in most 2006 calculations. A congruent FTE student figure for 2003 enrollments is used for period-to-period comparisons. See Note in Introduction.

Note on comparing 2003 study results to those of this 2006 update. The full-time equivalent student counts used in the 2003 study were an average of on-campus students for the nine-month academic year, 8,763. This figure did not include full-time summer school students or students who attended off-campus programs in the community. Including those student full-time equivalents would increase the total UW Oshkosh FTE student numbers in 2001-2002 to 9,388.

This 2006 analysis does include FTE students from the nine-month academic year, summer school and off-campus programs. Neither the 2003 nor the 2006 student number includes students studying abroad, as their spending does not occur in the region.

Therefore, in our analysis for growth comparison purposes of the 2006 economic impact with that of the 2003 study, we will compare apples to apples. That is to say, we will use the 2003 FTE student figure of 9,388 against the 2006 figure of 9,815. The growth in FTE students from 2003 to 2006 was 427 students, a 4.6-percent increase.

In addition, price escalation (inflation) plays a role in comparing the numbers. The change in the Gross Price Deflator from 2003 to 2006 was about 9.4 percent. Most 2003-to-2006-dollar comparisons are reported in nominal and real (inflation adjusted) dollars.

UW Oshkosh faculty and staff headcounts also have increased over the three years. FTE staff counts for 2006 are 1,250, which includes faculty, academic staff and classified staff. This is a 53-FTE-position increase from 2003 or 4.4 percent.

The study is confined to the economic contribution of UW Oshkosh, which comes from institutional expenditures and payroll, student expenditures and visitor expenditures. It does not measure the economic impact of faculty and staff earnings from private consulting, book and patent royalties, the economic impact of faculty and staff expertise used by state businesses and organizations and a host of other collateral economic activities. With this in mind, the economic impact of UW Oshkosh reported in this study understates the overall economic impact of UW Oshkosh by the factors mentioned above. There is a ripple effect of the expenditures made for goods and services supplied to UW Oshkosh. This multiplier effect enlarges the economic impact of the initial UW Oshkosh expenditures.³

In summary, the purpose of this report is to demonstrate that UW Oshkosh serves

as a community economic partner in many ways. UW Oshkosh is without question a vital economic anchor for the local community, the region and the state. It serves as a substantial marketplace for local goods and services and it is a major employer in the area.

Only by collaborating can UW Oshkosh and the community realize the full potential of both. Each needs to partner with the other in order to maximize the offerings needed to attract the human, capital creative resources required for the region to prosper in the future economic construct. Indeed, without such collaboration, economic prosperity in the region is more risky and certainly compromised.

This was conducted in autumn 2006, about three years after the original study, undertaken in spring 2003.

The author accepts full responsibility for any errors of omission or commission.

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³ The "multiplier effect" refers to the recurrent economic activity generated by an initial expenditure. For example, \$100 spent directly on construction will cycle through the local economy again as wages to the tradesman, purchases of construction materials, such as lumber, tools and nails, gasoline for machinery and worker transportation. The initial wave of spending generates a second and third wave of spending, as wages paid and profits made on the direct UW spending spins through the economy in several cycles. Some money leaks out of the local economy at each level as some spending is done outside the region; the lumber may originate in Georgia or Canada, for example. Thus, the original direct expenditure yields a greater economic impact than just the \$100 initially spent.

CHAPTER 1

Executive Summary

This report is an update to the analysis of the economic contribution UW Oshkosh makes to the community, region and the state that was done in 2003 using 2002 data. The 2002 input data was updated with 2006 data and current estimates were made. The increase in UW Oshkosh's economic contribution, now more than a half a billion dollars, is summarized below, along with comparisons to the 2003 calculations. Detail of the analysis is presented in the report chapters.

The total economic contribution due to the presence of UW Oshkosh in the region was:

- More than \$500 million dollars in 2006.
- Responsible for creating more than 9,000 jobs in the state.
- The source for generating more than \$37 million in state and local tax revenue.

UW Oshkosh institutional non-payroll spending:

- Was more than \$31 million directly on goods and services.
- Flowed directly into the private sector, creating more than 1,900 jobs.

UW Oshkosh employees play a major role in the community, contributing:

- More than \$51 million dollars in direct regional spending, most of which goes to private businesses, but more than \$1 million goes to local charities and not-for-profits.
- More than \$7 million in state and local taxes.
- Advice, assistance and participation to many local area boards, organizations and initiatives, including business, social and cultural entities.

UW Oshkosh students:

- Purchased nearly \$94 million dollars from private local businesses in 2006.
- Contributed almost \$2.5 million to local not-for-profit organizations.
- Donated \$3 million in time at minimum wage rates, equivalent to 226 full-time positions.
- Are responsible for more than \$18 million in state and local tax revenue.

Visitors to the UW Oshkosh campus:

- Contributed more than \$24 million in direct economic activity in 2006.
- Created almost 1,200 jobs.
- Generated more than \$5.2 million in tax revenue.

The economic contribution UW Oshkosh makes to the region and the state has grown over the four years since the last measurement was taken, based upon 2002 data. Despite relatively small growth in budget and staff increases (and decreases in state funding), UW Oshkosh has increased its economic impact significantly.

UW Oshkosh has seen an increase in:

- Total revenue of \$24 million dollars, while state funding decreased about \$6 million.
- Tuition and program revenue, gifts, grants and donations and federal funding.
- FTE faculty and staff of 53 positions or 4.4 percent.
- FTE student enrollments from 9,388 in 2002 to 9,815 in 2006, a 4.6-percent increase.
- Total economic contribution from \$431 million to \$500 million, an increase of 16 percent.

executive summary

UW Oshkosh's contribution to regional economic sectors has grown with the increase in faculty/staff and student enrollments. Direct spending has increased from \$173 million in 2002 to almost \$200 million in 2006, a 16-percent increase.

The vast majority of the spending of UW Oshkosh, its faculty and staff, students and visitors flows into the private sector, with lesser amounts going to the household, not-for-profit and government sectors. Of the \$200 million of direct spending in the region:

- \$188 million went to the private sector.
- \$4.2 million to the household and not-for-profit sectors.
- \$8.8 million went into the government sector.

The fiscal impact and the job generation that UW Oshkosh creates for the local economy in this study is understated as all the tangential economic offshoots of the institution, its personnel and activities cannot be captured in the scope of this analysis. Even if all the fiscal flows could be accounted for and assigned a monetary value, it would only constitute a subset of the total value of the institution to the local populace.

Comparison to 2003 numbers

On a student equivalent basis from the 2003 study to 2006, the 2003 study results are compared with the 2006 results below. See note in "Introduction" on student count comparisons.

Item	2003*	2006*	% Change
UW Oshkosh Total Revenue	\$120	\$144	20.0
Tuition	\$28.9	\$46.1	59.5
State Funding	\$45.3	\$39.2	- 13.5
Total Direct Spending ¹	\$185	\$233	25.9
Total Economic Contribution ²	\$432	\$501	15.9
Faculty & Staff	1,197	1,250	4.4
Students	9,388	9,815	4.5
Jobs Created	7,866	9,064	15.2
Tax Revenue Generated	\$32.0	\$37.5	17.2

* In millions of dollars unless otherwise stated.

¹ The increase in real dollar terms is 16.5% deflating by the Gross Price Deflator.

² The increase in real dollar terms is 6.5% deflating by the Gross Price Deflator.

CHAPTER 2

UW Oshkosh's Economic Contribution

The total economic contribution that is attributable to UW Oshkosh is the sum of the economic activity generated by four entities: the institution, employees, students and visitors. The institutional component encompasses non-payroll spending, such as everything from desks to computers to food service to research lab equipment to building construction. The employee contribution is analyzed in terms of UW Oshkosh payroll and full-time equivalent positions. The student component also consists of full-time equivalents. Visitors are broken out into four subcomponents of athletic events, business representatives, academic visitors and visitors to students.

UW Oshkosh Revenues

In fiscal year 2005-2006, UW Oshkosh revenue totaled \$144 million. In a monumental change from when the last study was conducted in 2003, tuition has replaced state funding as the largest revenue component. Tuition revenue in 2006 was \$46 million or 32 percent of total revenue. State funding dropped by \$6 million to \$39 million and 27 percent of revenue. Program Revenue, Gifts and Donations and Federal Grants made up the remaining revenue sources, totaling \$59 million.

Figure 2.1

UW Oshkosh Revenues

FY 2005-2006

Revenue Source	Amount	Percent of Total
Tuition	\$46,112,360	31.9
State Taxes	39,233,813	27.2
Program Revenue	33,655,957	23.3
Federal Grants	20,262,458	14.0
Private Gifts, Donations & Grants	5,142,677	3.6
Total Revenue	\$144,407,265	100.0

Source: UW Oshkosh 2006 estimates.

UW Oshkosh Expenditures

UW Oshkosh spent more than \$120 million dollars in fiscal year 2005-2006 on payroll and other goods and services. This is a reduction from the \$144 million in revenues due to deductions for sales tax credits, student loans, internal transfers and other items. Total UW Oshkosh payroll, including wages, salaries and benefits, amounted to nearly \$69 million. Expenditures on non-payroll goods and services totaled about \$52 million. About 82 percent of non-payroll institutional expenditures were spent in Wisconsin, almost \$43 million.

UW Oshkosh Economic Contribution

UW Oshkosh spending contributes to Wisconsin's economy through direct UW Oshkosh spending on goods and services, payroll, UW Oshkosh student spending and UW Oshkosh visitor spending. This direct spending then multiplies through the state economy as UW Oshkosh dollars finance business expenditures and payrolls, resulting in many rounds of indirect spending, the re-spending of UW Oshkosh direct expenditures.

Direct Spending

Direct UW Oshkosh-related spending amounts to more than \$200 million dollars per year for the local economy. The primary components of that spending are students and employees, although UW Oshkosh non-payroll expenditures and visitor spending contributions are large shares also.

economic contribution

The direct contribution UW Oshkosh makes to the local economy in just fiscal terms includes more than \$188 million to private businesses, almost \$9 million in government revenue and more than \$4 million to local charities.

Figure 2.2
UW Oshkosh Economic Contribution Balance Sheet

Contributor		
Institution	\$31,487,067	
Employees	51,260,531	
Students	93,971,308	
Visitors	<u>24,257,337</u>	
Total	\$200,976,245	
Recipient		
Private Business		\$187,893,730
Households		432,275
Not-for-Profits		3,775,903
Local Government		<u>8,874,337</u>
Total		\$200,976,245

Total Contribution

The economic contribution that UW Oshkosh makes to the state and local area is much greater than the direct fiscal spending made by the institution. All the dollars spent by UW Oshkosh on goods and services recycle through the state economy to be spent again on goods and services by the businesses and citizens that serve UW Oshkosh. This rippling effect of spending is captured in multipliers that are applied to the direct UW Oshkosh spending.

The total economic contribution made by UW Oshkosh to the local economy is almost \$470 million, and to the state is more than \$500 million. The institutional non-payroll expenditures account for about 20 percent or \$101 million of the total state contribution. UW Oshkosh employees contribute 24 percent of the total, \$119 million. The UW Oshkosh student population accounts for the largest share, 45 percent of the total contribution, nearly \$224 million. Visitor spending accounts for another 11 percent of the total contribution, approximately \$57 million.

Total Contribution

Figure 2.3
UW Oshkosh Total Contribution FY 2005-2006

Contributor	State Economy	% of Total
Institution	\$101,151,249	20.2
Employees	119,077,636	23.8
Students	223,641,717	44.7
Visitors	<u>56,683,820</u>	<u>11.3</u>
Total Contribution	\$500,554,422	100.0

From a business model point of view, UW Oshkosh is a successful economic development construct. Direct UW Oshkosh outlays of \$144 million generate a \$500-million contribution to the Wisconsin economy.

UW Oshkosh Job Generation

The money UW Oshkosh spends on goods and services generates jobs for Wisconsin citizens. Jobs attributable to UW Oshkosh occur in four ways. The first is the direct faculty and staff jobs for people working for UW Oshkosh. The second job creator is the jobs generated by non-payroll, in-state UW Oshkosh expenditures. The third job creator is for the people that serve the UW Oshkosh workforce in their professional and private lives. The fourth job creator is the jobs generated by student and visitor spending.

UW Oshkosh non-payroll, in-state spending creates between 39 and 48 jobs for every \$1 million spent.⁴ As a result, 1,944 Wisconsin jobs are generated by UW Oshkosh non-payroll, in-state institutional spending of \$43 million.

UW Oshkosh directly employs 1,250 full-time faculty and staff. (This figure does not include LTEs.) The presence of the UW Oshkosh workforce creates other jobs for workers that supply the goods and services to the UW Oshkosh workforce in their professional duties and in their private lives. Every UW Oshkosh full-time equivalent position creates another 0.14 jobs, generating another 180 jobs.

Student spending also creates jobs. UW Oshkosh students' spending of \$94 million is responsible for another 4,500 jobs in Wisconsin.

Visitors to UW Oshkosh spend a significant amount of money in the state. Visitor spending is responsible for the creation of about 1,160 jobs in Wisconsin. Resident visitor spending is not a factor in Wisconsin job creation, as that money would be spent in the state anyway. However, without UW Oshkosh, state resident visitors would spend some of this money out-of-state. Non-resident visitor spending wouldn't occur at all without UW Oshkosh.

Figure 2.4
UW Oshkosh Job Creation

Job Generator	No. of Jobs
UW Oshkosh Non-Payroll, In-State Spending	1,944
UW Oshkosh Faculty and Staff	1,250
UW Oshkosh Employee Presence	180
Student Spending	4,531
Visitor Spending	<u>1,159</u>
Total Jobs Created	9,064

Total jobs created in Wisconsin due to the presence of UW Oshkosh are 9,064.

UW Oshkosh State Tax Revenue Generation

Not only do UW Oshkosh employees pay state income taxes and sales taxes on their purchases, but UW Oshkosh's presence in the state establishes an expanded tax base. As seen above, the money UW Oshkosh spends generates jobs. Those jobs, in turn, generate income and spending. That subsequent income and spending are taxed through personal income and sales taxes. A state sales tax rate of 5 percent is also applied to student and visitor spending. The total Wisconsin income, sales and property tax revenue generated due to UW Oshkosh's presence in the state totaled more than \$37 million.

economic contribution

⁴ Employment multipliers from IMPLAN for Wisconsin.

Figure 2.5
UW Oshkosh Tax Revenue Generation

Tax Revenue Generator	Tax Revenue
UW Oshkosh Non-Payroll Spending	\$6,776,813
UW Oshkosh Employee	6,377,747
UW Oshkosh Employee Presence	627,399
UW Oshkosh Student Spending	18,460,771
UW Oshkosh Visitor Spending	5,254,507
Total State Tax Revenue Generated	\$37,497,177

Summary

UW Oshkosh's fiscal year 2005-2006 budget was about \$144 million. For the first time, tuition accounted for the largest share of the UW Oshkosh budget, \$46 million, almost one-third of total revenues. State funding fell to 27 percent of revenues, \$39 million. Program revenue, federal grants and private giving supplied the rest. UW Oshkosh employs a workforce of some 1,250 full-time-equivalent, non-LTE faculty members.

Total in-state spending attributable to UW Oshkosh was more than \$200 million in fiscal year 2005-2006. About \$186 million of the total was spent in private businesses. Total direct spending cycles through the economy by means of the multiplier effect. As a result, the total UW Oshkosh economic contribution to the state was more than \$500 million.

The presence of UW Oshkosh employees, UW Oshkosh non-payroll expenditures and student and visitor spending are responsible for an additional 9,064 Wisconsin jobs and state income, sales and property tax and revenue generation of more than \$37 million.

The total economic output of UW Oshkosh has grown about 16 percent in nominal terms from 2003 to 2006 or about 6.8 percent in real terms. This increase was accomplished with a 4.4-percent increase in faculty and staff.

Noteworthy since the 2003 analysis is the change in the relative contribution of state funding to the university. State funding is now second to tuition in funding amounts to UW Oshkosh. Also, state and local tax revenue generated by the presence of UW Oshkosh is almost equal to the state funding component of UW Oshkosh revenue.

CHAPTER 3

UW Oshkosh's Institutional Contribution

In order to depict the economic contribution attributable to UW Oshkosh, expenditures must be delineated and analyzed separately to determine which components contribute to the local and state economies and which do not. For example, a UW Oshkosh purchase of equipment from an out-of-state vendor does not flow through Wisconsin's economy and that "leakage" must be deducted from the impact that UW Oshkosh institutional, non-payroll expenditures contribute to the county and the state. Similar adjustments need to be made to employee wages and spending and student spending. Each will be taken up in the corresponding chapters.

This chapter focuses on UW Oshkosh institutional spending and its impacts on the local and state economy. A brief description of the main spending categories is outlined and then detailed analysis of institutional, non-payroll spending impacts is presented.

UW Oshkosh Institutional Expenditures

UW Oshkosh spends more than \$120 million on payroll and supplies. UW Oshkosh spending consists primarily of wages and salaries, employee benefits, payroll taxes and the purchases of goods and services from private businesses. Student loans and grants

also contribute to the funds flowing from UW Oshkosh, but they are subtracted from total payroll as student pay dollars are considered in the student section. LTE earnings are also subtracted as it is assumed LTEs would live in the area even if UW Oshkosh was not present.

Figure 3.1
UW Oshkosh Expenditures 2005-2006 (\$ in millions)

	UW Oshkosh
Gross Expenditures	\$120.8
Payroll	68.9
Non-Payroll Institutional Spending	\$51.9

The largest share of UW Oshkosh expenditures is for faculty and staff payroll. UW Oshkosh paid out about \$68.9 million in faculty and staff salaries and wages in 2005-2006. UW Oshkosh employees' economic contribution is discussed in detail in Chapter 4. UW Oshkosh also employs more than 600 students on part-time and work/study basis. These cash flows are not considered in this section, but rather are imbedded within the student spending profiles discussed in Chapter 5.

The remaining \$51.9 million is spent on everything from library materials to research lab equipment to construction to food. These expenditures feed directly into local and distant economies.

Figure 3.2
UW Oshkosh Institutional Expenditures (\$ in millions)

Gross Payroll			\$68.9
Non-Payroll Expenditures			51.9
	In-County	\$31.5	
	In-State, Out-County	11.2	
	Out-State	9.2	
Total UW Oshkosh Expenditures			\$120.8

institutional contribution

The purpose of this study is to determine UW Oshkosh's total contribution to the local and the state economy. The focus of this chapter is to analyze the economic contribution the university's spending on non-payroll goods and services makes to the local and state economies. Using the methodology described in Chapter 9 for Institutional Expenditures, UW Oshkosh's purchases of industry goods and services were divided between purchases made from businesses within the district and those made outside the district but within the state. Spending was separated into 23 industry categories. Some of the categories used in the model did not have institutional expenditures associated with them, Clothing Stores, for example.

Student grants of \$6.7 million were deducted from total expenditures because that money is assumed to flow back into UW Oshkosh for tuition, fees and room and board. Construction spending

of \$11.9 million, set by taking the three-year average of total construction expenditures for the years 2003-2006, is included in total UW Oshkosh in-state spending. This changes the total contributory in-district expenditure figure to \$31.5 million. These changes and other irreconcilable accounting entries revised the total UW Oshkosh institutional, non-payroll direct spending figure to \$51.9 million.

Direct Spending

Figure 3.3 shows the amount of money directly spent on goods and services by UW Oshkosh within the district and outside the district but within the state by industry category. More than 60 percent of institutional expenditures are spent in the district, some \$31.5 million. An additional \$11.2 million is spent within Wisconsin. The remaining spending, \$9.2 million, is spent on goods and services from outside the state. Only those categories that registered spending are included in the table.

Expenditures by Industry

Figure 3.3

UW Oshkosh Institutional Expenditures by Industry Category

Industry Category	In-District Expenditures	In-State, But Out-District Expenditures	Industry Totals
Food Service	\$4,776,994	0	\$4,776,994
Eating & Drinking Establishments	110,172	220,345	330,517
Construction	11,867,073	0	11,867,073
Personal & Business Services	3,569,484	3,597,871	7,167,355
Utilities	2,700,566	1,563,051	4,263,607
Hotels & Motels	220,675	441,350	662,025
Wholesale	5,031,531	3,258,991	8,290,522
Miscellaneous	3,220,582	2,132,831	5,353,413
Totals	\$31,847,067	\$11,214,439	\$42,701,506

Figure 3.4

Total Economic Contribution of UW Oshkosh Institutional Spending

Industry Category	Sales Multiplier ⁵	Total In-District Contribution	Additional In-State Contribution	Total Economic Contribution
Food Service	1.4743	\$7,027,979	\$0	\$7,027,979
Eating & Drinking Establishments	2.2705	250,146	500,292	750,438
Construction	2.8656	34,006,283	0	34,006,283
Personal & Business Services	2.8102	10,030,965	10,110,736	20,141,701
Utilities	2.3287	6,288,785	3,639,876	9,928,661
Hotels & Motels	2.3699	522,978	1,045,956	1,568,934
Wholesale	1.8624	9,370,723	6,069,546	15,440,269
Miscellaneous	2.2952	7,391,777	4,895,206	12,286,983
Totals	2.3910	\$74,889,636	\$26,261,612	\$101,151,248

Total Economic Contribution

The focus of this study is to determine UW Oshkosh's total contribution to the local and state economy. Economic multipliers that mathematically represent the subsequent turnover of money spent in an economic region, in this case within 30 miles from campus and the state of Wisconsin, are applied to the direct UW Oshkosh in-district and in-state, non-payroll expenditures to calculate the total economic contribution this spending makes to the region and the state.

Only in-district and in-state institutional expenditures are considered attributable to UW Oshkosh's economic contribution to the regional and state economies. Out-of-state spending is leakage that does not contribute to the economic well-being of the local or state economy.

As industry expenditures are passed through their corresponding sales multipliers, the total economic contribution of UW Oshkosh institutional spending increases by more than two times on average. UW Oshkosh institutional in-district spending adds more than \$31 million directly to the local economy

and an additional \$9 million to the state economy. Through the sales multipliers associated with each industry category, this direct UW Oshkosh institutional spending swells the total economic contribution of the university to almost \$75 million for the local economy and more than \$100 million to state. Figure 3.4 portrays the total in-district, in-state and total economic contribution attributable to UW Oshkosh institutional spending.

Job Creation

Not only does this institutional spending flow through the state economy generating further economic activity as demonstrated above, but it also creates jobs with the suppliers of goods and services to UW Oshkosh. As is the case for economic multipliers that expand direct spending to greater economic activity, there are also employment multipliers that translate spending into job creation. UW Oshkosh non-payroll, in-state spending during fiscal year 2005-2006 totaled \$42.7 million. Applying the corresponding employment multiplier to this figure yields a calculation of the jobs created due to UW Oshkosh non-payroll, institutional spending.

institutional contribution

⁵ Sales multipliers are taken from Professor William Strang's Door County study, to be consistent with UW System analyses.

The employment multipliers are applied to the direct spending figures at a specific rate per million dollars spent. The employment multiplier for Winnebago County is 47.79794.⁶ That is to say, 47.8 jobs will be created in Winnebago County for every \$1 million dollars spent by UW Oshkosh. The corresponding

employment multipliers were applied to UW Oshkosh campus non-payroll spending to yield a figure of 1,505 jobs. Taken further to include the incremental out-district, in-state spending and applying the corresponding employment multipliers, total jobs created due to UW Oshkosh non-payroll spending in Wisconsin is 1,944.

Figure 3.5
Institutional Spending Job Creation

In-District Spending	Winnebago County Employment Multiplier	Added In-District Jobs	Out-District In-State Spending	State Employment Multiplier	Added In-State Jobs	Total Added Jobs
\$ 31,487,067	47.79794	1,505	11,214,436	39.10901	439	1,944

Tax Revenue Generation

The presence of UW Oshkosh contributes to economic activity and job creation. It is also the pump prime for state and local tax revenue. While UW Oshkosh is tax exempt, the economic activity it generates is taxable. Those tax revenues are generated through the jobs created by the UW Oshkosh non-payroll institutional spending.

Income Tax Revenue

State income tax revenues are calculated as the product of the number of jobs UW Oshkosh spending creates multiplied by their average income multiplied by the Wisconsin income tax rate. UW Oshkosh spending generates 1,944 Wisconsin jobs, 1,505 are in the local area, 439 across the rest of the state. The

average 2005 annual Winnebago County wage was \$38,844. The average annual Wisconsin wage was \$35,660.⁷ The average income tax rate paid by Wisconsin taxpayers is 3.2 percent.⁸ Annual income tax payments made by holders of these indirectly created jobs averaged \$1,243 for Winnebago County residents and \$1,141 for average Wisconsin residents. Applying the mathematics yields state income tax revenue of \$1.9 million for jobs created in the district and \$500,324 for other jobs across the state. In total, the state of Wisconsin collects an additional \$2.4 million in annual income tax revenue just as a result of the additional jobs created by UW Oshkosh non-payroll, in-state spending.

Figure 3.6
State Income Tax Revenue Generation

	Locally	Wisconsin	Total
Additional Jobs	1,505	439	1,944
Average Annual Wage	\$38,844	\$35,660	
Average Wisconsin Income Tax Rate	3.199%	3.199%	
Average Annual Income Tax Payments	\$1,243	\$1,141	
Additional Annual Income Tax Revenue	\$1,870,163	\$500,324	\$2,370,487

⁶ Source: 2000 IMPLAN Multiplier Reports for Winnebago County and Wisconsin.

⁷ Source: Bureau of Labor Statistics.

⁸ Source: Wisconsin Department of Revenue, Wisconsin Taxpayers Alliance, Bureau of Economic Analysis.

Sales Tax Revenue

Personal income of these additional jobs amounts to about \$74.1 million. The average Wisconsin sales tax generated is 2.23 percent of disposable personal income.⁹ Wisconsin collects an additional

\$1.3 million in annual sales tax revenue as a result of the additional jobs created locally and another \$348,553 from Wisconsin jobs outside the district. Total additional tax revenue generated from UW Oshkosh non-payroll, in-state spending amounts to almost \$1.7 million.

Figure 3.7
State Sales Tax Revenue Generation

	In-District	Wisconsin	Total
Additional Jobs	1,505	439	1,944
Average Annual Wage	\$38,844	\$35,660	
Annual Personal Income	\$58,460,878	\$15,639,998	\$74,100,875
Average Wisconsin Sales Tax Rate	2.229%	2.229%	
Additional Annual Sales Tax Revenue	\$1,302,859	\$348,553	\$1,651,412

Property Tax Revenue

The third tax revenue component generated by UW Oshkosh's presence in the region is property taxes. Property tax revenue attributable to UW Oshkosh non-payroll institutional spending is calculated using the average property tax rate determined from primary survey information collected from UW Oshkosh faculty and staff against average annual local income and number of households in the county due to UW Oshkosh spending. The average property tax rate

per personal disposable income dollars (64 percent of personal income) was 6.8 percent across all faculty and staff based upon survey results. Average annual district income is \$38,844, disposable income is \$24,791. District household ownership attributable to UW Oshkosh spending was determined with the same ratios as home ownership for UW Oshkosh employees. Property taxes were only calculated for the district as property tax rates vary considerably across the state.

Figure 3.8
District Property Tax Revenue Generation

	In-District	Wisconsin	Total
Additional Jobs	1,505	439	1,944
Average District Property Tax Rate	6.8%	6.8%	
Additional Annual Property Tax Revenue	\$ 2,073,201	681,713	\$2,754,914

⁹ Source: Wisconsin Department of Revenue, Bureau of Economic Analysis.

institutional contribution

Combined tax revenue generation due to UW Oshkosh's non-payroll institutional spending in the state amounts to almost \$6.8 million.

Total Tax Revenue Generation

Figure 3.9

	Locally	Wisconsin	Total
Income Tax Revenue	\$1,870,163	\$500,324	\$2,370,487
Sales Tax Revenue	1,302,859	348,553	1,651,412
Property Tax Revenue	2,073,201	681,713	2,754,914
Total Tax Revenue	\$5,246,223	\$1,530,590	\$6,776,813

Summary

UW Oshkosh employed 1,250 people (not counting LTEs) and spent more than \$120 million on payroll and other goods and services in fiscal year 2005-2006. The primary costs to UW Oshkosh are wages and benefits. UW Oshkosh spends almost \$68.9 million on payroll to faculty and staff. UW Oshkosh spends another \$51.9 million on goods and services. Eighty-two percent of total UW Oshkosh non-payroll expenditures occur in Wisconsin. Of the UW Oshkosh non-payroll institutional spending, \$31.5 million occurs

locally, more than 60 percent of the total. Another \$11.2 million is spent outside the area but in Wisconsin.

That spending multiplies through the Wisconsin economy, creating jobs and generating tax revenue. The total economic contribution of UW Oshkosh institutional non-payroll expenditures in Wisconsin amounts to more than \$101 million. That spending is responsible for more than 1,944 jobs and almost \$6.8 million in state income, sales and property tax revenue.

CHAPTER 4

UW Oshkosh's Employees' Contribution

UW Oshkosh employees contribute a substantial amount of spending to the regional economy. In this chapter, we analyze and estimate the size of that contribution. UW Oshkosh employees' incomes turn into direct spending in the district through their expenditures across industry categories. Direct purchases by UW Oshkosh employees, in turn, ripple through the economy via the purchases of goods and services by the local businesses.

Faculty and Staff

UW Oshkosh employees are a mix of faculty and staff. There were 325 equivalent full-time faculty members in 2005-2006. Academic staff employees totaled 527. Classified staff numbered 398.

Figure 4.1

UW Oshkosh Staff Employment 2005-2006

Employee Class	Numbers
Faculty	325
Academic Staff	527
Classified Staff	398
Total	1,250

Figure 4.2

UW Oshkosh Faculty and Staff Income FY 2005-2006

Faculty and Staff Payroll		\$60,859,085
Taxes*		14,972,394
Federal Income	\$7,809,905	
State Income	3,072,484	
Other Withholding	4,090,005	
Benefits		7,045,824
Total Deductions		22,018,218
Net Disposable Income		\$38,840,867
Out-District, In-State Spending		1,904,034
Out-State Spending		1,651,566
In-District Spending		\$35,074,367

* Assumes taxes withheld equal taxes paid.

The economic contribution made by UW Oshkosh employees is constrained by their disposable income consisting of gross pay minus tax withholding and other benefits payments. Gross payroll amounts to almost \$69 million. Employee benefits totaled more than \$7 million. Federal and state withholdings from employee payrolls totaled \$15 million.

UW Oshkosh Payroll

In order to determine spending impacts by UW Oshkosh employees, differentiation had to be made between gross income and disposable income. Disposable income is the money over which UW Oshkosh employees have discretionary control and is the money that feeds directly into the state and local economy. Faculty and staff disposable income is a fraction of total payroll, amounting to \$38.8 million. In-district and in-state disposable income is further reduced due to faculty and staff spending that occurs outside the region for things such as vacations. In-district disposable income is \$35.1, with incremental in-state spending of \$1.9 million.

employees contribution

Economic Contribution

The total economic contribution of UW Oshkosh employee spending is the sum of direct, indirect and induced spending. Direct employee spending is constrained to total disposable income spent in the district. Indirect spending is calculated using the sales multiplier that represents the flow of dollars through the industry channels of the local economy. Each industry has its own particular sales multiplier. The industry category expenditures are then summed to determine the direct economic contribution made by UW Oshkosh employees. Indirect and total contributions are discussed later in this chapter. Here, the focus is on the direct spending category detail.

Figure 4.3

UW Oshkosh Employee Expenditures by Industry Category

Industry Category	Category Factors	Direct In-District Spending
General Merchandise	.077	\$2,696,677
Clothing & Apparel	.035	1,228,114
Food	.119	4,164,199
Furniture and Appliances	.031	1,082,659
Other Retail	.046	1,612,978
Eating & Drinking Establishments	.042	1,472,232
Amusement	.009	312,075
Vehicle Repair & Service	.038	1,338,827
Construction	.053	1,868,963
Personal & Business Service	.036	1,268,852
Transportation	.037	1,301,943
Dependent Care	.027	932,738
Insurance	.06	2,100,113
Government Fees/Fines	.004	3,223,750
Churches & Charities	.037	1,288,853
Utilities	.076	2,676,492
Hotels & Motels	.002	79,762
Services from Households	.007	240,937
Rentals	.022	764,773
Mortgage	.166	5,833,681
Property Taxes	.068	1,948,957
Vehicle Financing	.007	262,758
Totals*	1.00	\$37,700,335
Vehicle Sales		13,560,196
Grand Total		\$51,260,531

* Totals don't sum due to rounding.

Direct Economic Contribution

Breaking out the data in a more detailed manner shows the economic contribution to each of the industry categories. The survey sample category factors were applied to generate total direct spending by UW Oshkosh employees in the district by industry category. Note: Data in Figure 4.3 includes state income tax payments that were withheld from gross income (\$3 million) and motor vehicle sales (\$13.6 million) that are considered non-regular spending.

Vehicle sales are handled differently than are vehicle financing and the other industry spending categories. It is assumed that the down payments laid out for vehicle purchases are not a monthly budget item, but rather are accumulated over time through non-demarcated savings.

Total Economic Contribution

The economic contribution to the area does not end with the \$51.3 million in direct UW Oshkosh employee spending. The \$51.3

million, in turn, is spent by the recipient businesses, charities and government on wages and other goods and services. The money feeds through the local economy to generate further business income, employment and additional tax revenue. Figure 4.4 shows the corresponding industry multipliers and the resultant total in-district economic contribution of UW Oshkosh employee spending.

Figure 4.4

UW Oshkosh Employee Economic Contribution by Category

Industry Category	Sales Multiplier	Total In-District Contribution
General Merchandise	1.7250	\$4,651,767
Clothing & Apparel	1.8215	2,237,010
Food	1.4743	6,139,279
Furniture and Appliances	1.7543	1,899,308
Other Retail	1.6262	2,623,025
Eating & Drinking Establishments	2.2705	3,342,704
Amusement	2.4027	749,822
Vehicle Repair & Service	1.8870	2,526,366
Construction	2.8656	5,355,700
Personal & Business Service	2.8102	3,565,727
Transportation	2.3287	3,031,835
Dependent Care	2.4700	2,303,863
Insurance	2.9453	6,185,464
Government Fees/Fines	2.8334	9,134,174
Churches & Charities	2.4700	3,183,468
Utilities	2.3287	6,232,746
Hotels & Motels	2.3699	189,028
Services from Households	2.4704	595,212
Rentals	2.9453	2,252,486
Mortgage	2.9453	17,181,940
Property Taxes	2.8334	5,522,176
Vehicle Financing	1.8870	773,902
Totals*	2.5568**	\$89,677,003
Vehicle Sales	1.8870	25,588,091
Grand Total	2.2486**	\$115,265,094

* Totals don't sum due to rounding.

** Weighted average multiplier.

employees contribution

The total economic contribution to the local economy by UW Oshkosh's faculty and staff spending amounts to more than \$115 million dollars. The expansion of direct spending through the sales multiplier increases the magnitude of the UW Oshkosh employee economic contribution to the local economy by a weighted average factor of 2.25.

Figure 4.5

Incremental In-State Spending Expansion

Geography	Direct Spending	Average Weighted Multiplier	Expanded Economic Contribution
In-District	\$51,260,531	2.2486	\$115,265,094
In-State, Out-District	1,904,034	2.0024	3,812,543
Total	\$53,164,565	2.2398	\$119,077,637

Adding in the in-state, out-district incremental, UW Oshkosh employee spending increases the direct in-state spending by some \$1.9 million dollars. This incremental spending is also expanded through the spending cycles using the corresponding industry multipliers. The total in-state contribution attributable to UW Oshkosh employees amounts to more than \$119 million.

Job Creation

Obviously, UW Oshkosh creates jobs directly by the number of employees on staff. More jobs are created in the region to service UW Oshkosh employees in their professional and personal lives. There are employment multipliers that translate full-time positions into support job creation. UW Oshkosh full-time employment during fiscal year 2005-2006 totaled 1,250 employees, excluding limited-term employees and student hourly help.

Figure 4.6

UW Oshkosh Employment

Employment Class	Employees
Faculty	325
Academic Staff	527
Classified Staff	398
Total UW Oshkosh Campus	1,250

The employment multipliers are applied directly to the UW Oshkosh employment numbers. The employment multiplier for Winnebago County is 0.144037.¹⁰ That is to say, 14.4 jobs will be created in Winnebago County for every 100 UW Oshkosh full-time equivalent positions.

Applying the corresponding employment multiplier to UW Oshkosh employment levels yields the number of additional jobs created in the district due to UW Oshkosh employees. The 1,250 sitting positions are responsible for creating another 180 jobs in Winnebago County.

Tax Revenue Generation

The presence of UW Oshkosh contributes to economic activity and jobs creation. It is also the pump prime for state and local tax revenue. While UW Oshkosh is tax exempt, its employees' income is taxable as are the purchases those employees make and the property they own. Those tax levies are not restricted to UW Oshkosh employees, but

Figure 4.7

UW Oshkosh Jobs Creation

Employer	Employees	Employment Multiplier	Jobs Created	Total Jobs
UW Oshkosh Campus	1,250	0.144037	180	1,430

¹⁰ Source: 2000 IMPLAN Multiplier Reports for Winnebago County and Wisconsin.

expand to the income, purchases and property of the jobs those UW Oshkosh employees create.

Income Tax Revenue

State income tax withheld from UW Oshkosh employees flows directly to the state, \$3 million. Additional state income taxes arise from the income of the jobs generated by UW Oshkosh employee positions. The added job state income tax revenues are calculated as the product of the number of jobs UW Oshkosh employees create, their average income and the Wisconsin income tax rate.

UW Oshkosh employees create another 180 Wisconsin jobs. The average 2005 annual local wage was \$38,844.¹¹ The average income tax rate paid by Wisconsin taxpayers is 3.2 percent.¹² Annual income tax payments made by holders of these indirectly created jobs averaged \$1,243 for local residents. Applying the mathematics yields state income tax revenue of \$223,654 for jobs created by UW Oshkosh employees. In total, the state of Wisconsin collects \$3.3 million in annual income tax revenue from the jobs generated by UW Oshkosh employment.

Figure 4.7

UW Oshkosh Employee State Income Tax Revenue Generation

	Total
State Income Tax Withheld	\$3,072,484
Additional Jobs	180
Average Annual Winnebago County Wage	\$38,844
Average Wisconsin Income Tax Rate*	3.199%
Average Annual Income Tax Payments	\$1,243
Additional Annual Income Tax Revenue	\$223,654
Total Income Tax Revenue	\$3,296,138

*As a percent of personal income.

Sales Tax Revenue

Personal income of UW Oshkosh employees and the jobs they create amounts to more than \$67 million. The average Wisconsin sales tax generated is 2.30 percent of personal

income.¹³ Wisconsin collects more than \$1.5 million in annual sales tax revenue as a result of UW Oshkosh employees and the additional jobs created.

Figure 4.8

UW Oshkosh Employee State Sales Tax Revenue Generation

	Total
UW Oshkosh Employee Personal Income	\$60,859,085
Additional Jobs	180
Average Annual Local Wage	\$38,844
Personal Income of Additional Jobs	\$6,991,367
Total Personal Income	\$67,850,452
Average Wisconsin Sales Tax Rate*	2.229%
Total Sales Tax Revenue	\$1,512,115

*As a percent of personal income.

¹¹ Source: Bureau of Labor Statistics.

¹² Source: Wisconsin Department of Revenue, Wisconsin Taxpayers Alliance, Bureau of Economic Analysis.

¹³ Source: Wisconsin Department of Revenue, Bureau of Economic Analysis.

employees contribution

Property Tax Revenue

The third tax revenue component generated by UW Oshkosh's presence in the region is property taxes. Property tax revenue attributable to UW Oshkosh employee spending is taken from the primary survey information collected from UW Oshkosh faculty and staff. The average property tax paid by survey respondents was expanded by the ratio of homeowners across the entire faculty and staff and constrained by their total UW Oshkosh earnings. The property tax allotted to the induced jobs was calculated from the average property tax rate multiplied by average annual local disposable income multiplied by homeownership of those people. District household ownership attributable to UW Oshkosh employee induced workers was determined using the same ratios as homeownership for UW Oshkosh employees.

The average property tax rate per personal disposable income dollars was 6.8 percent across all faculty and staff based upon survey results. Average annual district disposable income is \$24,791. Property taxes were only calculated for employees in the district as property tax rates vary considerably across the state.

Figure 4.9
**UW Oshkosh Employee
Property Tax Revenue Generation**

	Total
In-District Property Tax	\$1,948,957
Additional Jobs	180
Average Annual Disposable Income	\$24,791
Number of Households	146
Average Wisconsin Income Tax Rate*	6.8%
Additional Annual Property Tax Revenue	\$247,935
Total Property Tax Revenue	\$2,196,893

*As percent of personal disposable income.

Property tax revenue generation due to UW Oshkosh's employment in the region amounts to almost \$2.2 million.

Total tax revenue generated by the presence of UW Oshkosh employees, including state income tax, state sales tax and local property tax, equals more than \$7.0 million.

Figure 4.10
**UW Oshkosh Employee
Tax Revenue Generation**

	Local
Income Tax Revenue	\$3,296,138
Sales Tax Revenue	1,512,115
Property Tax Revenue	2,196,893
Total Tax Revenue	\$7,005,146

Summary

Of the \$61 million in gross wages and salaries paid to UW Oshkosh employees, about \$35 million is spent within the district. The difference is attributed mostly to withholding taxes, benefits and out-district spending. Almost 87 percent of UW Oshkosh employees' disposable income is spent with private businesses inside the district. More than \$1.5 million flows through private households and not-for-profit organizations.

The total economic contribution of UW Oshkosh employee spending is multiplied as their expenditures ripple through the local economy. UW Oshkosh employee spending contributes about \$115 million to the local economy and more than \$119 million across the state.

UW Oshkosh employs 1,250 people (excluding students and LTEs) and those positions create another 180 jobs in the district. Those jobs pay income, sales and property taxes in the district amounting to more than \$7.0 million.

CHAPTER 5

**UW Oshkosh's
Students' Contribution**

The economic contribution that UW Oshkosh makes to the state in fiscal terms from institutional expenditures, as shown in Chapter 3, and that attributable to the faculty and staff spending, Chapter 4, is large. There is a third major economic component to the UW Oshkosh economic enterprise, the UW Oshkosh student.

The UW Oshkosh student is both a contributor and benefactor of the UW Oshkosh economic mix. In the short-run, the UW Oshkosh student contributes to Wisconsin's economy with spending on goods and services through UW Oshkosh and in the private sector. In the long run, the UW Oshkosh graduate benefits from higher income associated with the acquired training and knowledge. The state and its citizenry also benefit from UW Oshkosh graduates' increased purchasing power in the private sector and through higher taxes for the public sector.

Economic Contribution

The UW Oshkosh campus has a diverse student body. The total head count of students enrolled at UW Oshkosh in 2005-2006 was 12,500. This includes all undergraduate, graduate and summer school students. This amounts to a full-time equivalent student body of 9,815. This figure includes local off-campus programs but not students who study abroad, as their spending does not occur locally.

Student spending permeates Wisconsin's economy much the same way as does UW Oshkosh institutional and employee spending. While students generally spend less per year on living expenses than do faculty and staff, their greater numbers magnify their economic impact on the state.

Students paid \$46 million in tuition and fees, or 32 percent of all UW Oshkosh revenues in the fiscal year ending June 2006. This is now the largest funding source for the campus. In comparison, state appropriations were \$39 million, 27 percent of total UW Oshkosh revenues.

Student spending flows into the UW Oshkosh campus and into private businesses in the district. Student spending is broken down into specific categories in this analysis to separate what is already accounted for in UW Oshkosh institutional spending and to show their specific economic contribution.

The methodology applied to the students was somewhat different than that applied to UW Oshkosh employees. There are no income figures for the students and, hence, no figure by which to weight the expenditures. Instead, it is assumed that survey response averages are indicative of the spending patterns of the entire student population. The average expenditure in each industry category was multiplied by the number of FTE students (9,815) to obtain a total monthly expenditure by category. The monthly figure was then multiplied by nine months to signify the academic year. This analysis is based upon the student survey data collected through mailed questionnaires from the 2003 study and inflated to equivalent 2006 dollars.

Direct Economic Contribution

UW Oshkosh students spent almost \$94 million in the district in 2006. This figure is based upon survey data expanded to the 9,815 FTE students registered at UW Oshkosh. The figure is also based upon a nine-month academic year. UW Oshkosh student spending throughout Wisconsin adds another \$1 million to total student expenditures.

Students' Contribution

UW Oshkosh students spending patterns are somewhat different than those of UW Oshkosh employees. Individual student item spending is generally lower than that of the faculty and staff. However, the size of the student population overwhelms their relatively small budgets.

Housing rental is the largest student spending category. Food expenses ranked a distant second for student expenses, although the figure is large in relative and absolute terms.

Figure 5.1

UW Oshkosh Students' Expenditures by Industry Category

Industry Category	Average Monthly Expenditure	Total Academic Year Spending
General Merchandise	\$99.50	\$8,788,823
Clothing & Apparel	56.33	4,975,484
Food	110.39	9,751,244
Furniture and Appliances	12.92	1,141,173
Other Retail	33.02	2,916,387
Eating & Drinking Establishments	59.94	5,294,240
Amusement	14.39	1,270,819
Vehicle Repair & Service	49.36	4,360,079
Construction	9.41	831,600
Personal & Business Service	38.16	3,370,506
Transportation	55.48	4,901,016
Dependent Care	18.79	1,660,090
Insurance	83.35	7,362,109
Government Fees/Fines	21.90	1,934,395
Churches & Charities	28.16	2,487,050
Utilities	78.94	6,972,743
Hotels & Motels	1.65	146,021
Services from Households	2.17	191,338
Housing Rentals	150.01	13,250,388
Mortgage	118.26	10,445,822
Property Tax	20.01	1,767,234
Vehicle Financing	1.73	152,748
In-District Total	\$1,063.85	\$93,971,308
Out-District, In-State Spending		<u>1,005,966</u>
Total		\$94,977,274

Total Economic Contribution

Expanding the UW Oshkosh student expenditures through the industry category sales multipliers yields the total economic contribution UW Oshkosh students make to the district. The total economic contribution of UW Oshkosh student spending locally swells to more than

\$222 million. Including out-district, in-state student spending raises the total economic contribution of UW Oshkosh students another \$2.0 million. Figure 5.2 details the total affect of UW Oshkosh student spending by industry category. The multipliers are identical to those in the previous expansions as they are matched with the industry categories.

Figure 5.2

UW Oshkosh Student Total Economic Contribution by Industry Category

Industry Category	Sales Multiplier	Total In-District Contribution
General Merchandise	1.7250	\$15,160,720
Clothing & Apparel	1.8215	9,062,844
Food	1.4743	14,376,258
Furniture and Appliances	1.7543	2,001,960
Other Retail	1.6262	4,742,629
Eating & Drinking Establishments	2.2705	12,020,573
Amusement	2.4027	3,053,397
Vehicle Repair & Service	1.8870	8,227,470
Construction	2.8656	2,383,032
Personal & Business Service	2.8102	9,471,795
Transportation	2.3287	11,412,995
Dependent Care	2.4700	4,100,422
Insurance	2.9453	21,683,621
Government Fees/Fines	2.8334	5,480,915
Churches & Charities	2.4700	6,143,012
Utilities	2.3287	16,237,427
Hotels & Motels	2.3699	346,055
Services from Households	2.4704	472,680
Rentals	2.9453	39,026,367
Mortgage	2.9453	30,766,080
Property Tax	2.8334	5,007,281
Vehicle Financing	2.9453	449,888
Total	2.3537*	\$221,627,422
Out-District, In-State Increment		<u>2,014,295</u>
In-state Total		\$223,641,717

* Weighted average multiplier.

students' total economic contribution

Student Volunteer Contributions

UW Oshkosh students contribute not only their dollars to the local and state economy but also their time. UW Oshkosh students indicated that they spent 5.3 hours on average per month on volunteer work. Expanding that time commitment across 9,815 full-time equivalent students yields more than 52,000 volunteer hours per month. That is equal to 226 full-time volunteer positions for the academic year.

Figure 5.3

UW Oshkosh Student Community Service Contribution

Average Hours per Month	5.32
FTE Students	9,815
Total Volunteer Hours per Month	52,214
Number of FTE Positions*	226
Total Income Contribution**	\$3,054,500

* Based on a 40-hour work week and 39-week academic year.
 ** Based on the minimum wage rate of \$6.50 per hour.

Figure 5.4

Student Job Creation

	Student Spending	Employment Multiplier	Indirect and Induced Job Additions
In-District	\$93,971,308	47.797940	4,492
Increment In-State	1,005,966	39.109098	39
Total	\$94,977,274	47.705913*	4,531

* Weighted average multiplier.

Tax Revenue Generation

Income Tax Revenue

The 4,500 additional Wisconsin jobs created by UW Oshkosh student spending means additional state income, sales and property tax revenue for the state and local governments. The income tax rate is 3.2 percent of personal income, the state average. The average annual local wage is \$38,844. Annual income tax payments made by holders of these indirectly created

At the conservative minimum wage rate of \$6.50 per hour, the UW Oshkosh student body voluntarily contributes almost \$3.1 million worth of time to local community services.

Job Creation

UW Oshkosh student spending flows through the state economy also creating new jobs. UW Oshkosh student spending during fiscal year 2006 totaled almost \$95 million. Applying the local employment multiplier to UW Oshkosh student in-district spending, yields 4,492 new jobs.¹⁴ Adding in the incremental out-district, in-state student spending against the employment multiplier for the state yields another 39 jobs, for a total of 4,531 jobs created by the presence of UW Oshkosh students.

jobs were \$1,243. State income tax generated by local area workers resulting from UW Oshkosh student spending is more than \$5.5 million. Adding in the incremental jobs created across the state due to UW Oshkosh student spending, at an average state income of \$35,660, generated another \$45,000 in state income tax revenue. In total, Wisconsin collects an additional \$5.6 million in annual income tax revenue as a result of the additional jobs created by UW Oshkosh student spending.

Figure 5.5

Student State Income Tax Revenue Generation

	In-District	In-State	Total
Additional Jobs	4,492	39	4,531
Wisconsin Income Tax Rate	3.199%	3.199%	
Ave. Annual Wage	\$38,844	\$35,660	
Annual Income Tax Payments	\$1,243	\$1,411	
Annual Income Tax Revenue	\$5,581,393	\$44,880	\$5,626,273

Sales Tax Revenue

Personal income of these additional local area jobs amounts to \$174 million. The average Wisconsin sales tax is 2.2 percent of personal income. Additionally, a state sales tax rate of 5 percent is applied to UW Oshkosh student spending on everything

but room and board, tuition and fees, food and other non-taxable items. Totaling up the components of the sales taxes attributable to UW Oshkosh students' spending locally and across the state amounts to more than \$6.5 million in annual sales tax revenue.

Figure 5.6

Student State Sales Tax Revenue Generation

	In-District	In-State	Total
Created Jobs Personal Income	\$174,473,069	\$1,402,950	\$175,876,019
WI Average Sales Tax Rate*	2.229%	2.229%	
Jobs Sales Tax Revenue Generated	\$3,888,307	\$31,266	\$3,919,573
Student Taxable Spending	\$52,675,087	\$880,220	\$53,555,307
Sales Tax Rate	5.0	5.0	
Student Spending Sales Tax Revenue	\$2,633,754	\$44,011	\$2,677,765
Total Sales Tax Revenue Generated	\$6,522,061	\$75,277	\$6,597,338

* Wisconsin average sales tax rate against personal income.

Property Tax Revenue

UW Oshkosh students also indirectly generate property taxes to local tax districts through property ownership of the workers employed as a result of student spending. Property tax revenue attributable to UW Oshkosh student-generated workers is taken from the primary survey information collected from UW Oshkosh faculty and staff. The property tax rate to the student spending induced jobs was taken

from the average property tax rate paid by UW Oshkosh faculty and staff. This rate was multiplied by average annual local area worker disposable income and the homeownership rate of those people. District household ownership attributable to UW Oshkosh student induced workers was determined using the same ratios as home ownership for UW Oshkosh employees.

Students contribute

The average property tax rate per personal disposable income dollars was 6.8 percent across all faculty and staff based upon survey results. Average annual district disposable income is \$24,791. Property taxes were only calculated for workers in the district as property tax rates vary considerably across the state. Total property tax paid by households of workers generated by UW Oshkosh student spending is more than \$6.2 million.

Figure 5.7

Student Property Tax Revenue Generation

	Total
Additional Homeowners	3,686
Average Annual Disposable Income	\$24,791
Average Wisconsin Property Tax Rate*	6.8%
Total Property Tax Revenue	\$6,237,099

* Percent of personal disposable income based on UW Oshkosh employee survey.

Total Tax Revenue

Combined tax revenue generation due to UW Oshkosh students' presence amounts to more than \$18 million.

Student Total Tax Revenue Generation

Figure 5.8

UW Oshkosh Student Total Tax Revenue Generation

Income Tax Revenue	\$5,626,273
Sales Tax Revenue	6,597,338
Property Tax Revenue	6,237,099
Total Tax Revenue	\$18,460,710

Summary

There are approximately 12,500 students attending the UW Oshkosh campus, equivalent to 9,815 full-time students. UW Oshkosh students spend almost \$94 million annually on food, clothing, shelter and other living expenses over and above tuition and fees and books and supplies. Applying appropriate sales multipliers to this amount expands the total economic contribution from UW Oshkosh students of almost \$224 million per year to the local and Wisconsin's economy.

UW Oshkosh student spending was responsible for the creation of almost 4,500 new jobs in Wisconsin and more than \$18 million in state income, sales and property tax revenue. They also contribute more than 52,000 volunteer hours per month, equivalent to more than \$3 million at minimum wage.

CHAPTER 6

UW Oshkosh's Visitors' Contribution

Visitors to the UW Oshkosh campus also comprise a significant, if not substantial, portion of the economic activity generated by the university. Visitors come to the campus for a variety of reasons. Some come on business to the university and its employees. Others are drawn to the myriad of research and academic events held each year. Still others come to participate in the social and cultural activities held in and around the university's environs, including athletic events. Students' parents and friends also come to the campus. This study estimates the monetary contribution visitors to UW Oshkosh make to the local economy.

This study seeks to estimate the number of visitors to the UW Oshkosh campus and their spending in four categories: university business, employees, athletics and students.

Estimating the economic impact of visitors is the most difficult piece of this study. Data collection is dispersed and the spectrum of visitors across university activities is wide. Therefore, the focus was to try to capture the largest components of UW Oshkosh visitors and make reasonable estimates of visitor frequency and spending. Data for student visits of friends and family were gathered through surveys. Data for athletic event attendees was compiled through interviews with related personnel. Estimates for other visitor categories were based on previous work done.¹⁵

University Business Visitors

Each year, numerous people visit the UW Oshkosh campus to conduct business with the university. Business visitors come to the campus to sell goods and services to the administration, departments, labs, professors and even students. Business visitors can also come to purchase university wares, such as programs, research, technology and other items.

UW Oshkosh visitors on business are the most difficult visitor component to pinpoint due to the discrete nature of the visits. Unable to gather specific business visitor data, the results used in the 1985 Strang study were relied upon to give reasonable estimates. The methodology used in the Strang report sets a solid base upon which to derive the figures for this component. While this particular subcomponent of the study is the weakest, the error inherent in this estimate is slight when compared to the total economic impact of the university and, in fact, the business visitor numbers may be underestimated.

The number of business visitors to the UW Oshkosh campus is based upon the amount of UW Oshkosh revenues. For each million dollars of UW Oshkosh revenues, it is assumed that 331 business visitors come to the UW Oshkosh campus. Taking UW Oshkosh revenues of \$144 million against the 331 visitors per million dollars of revenues yields a total number of business-related visitors of almost 48,000. Inflating the average visitor spending from the 2003 study to 2006 dollars, \$165, gives a total business visitor spending figure of almost \$8 million.

Figure 6.1

UW Oshkosh Business Visitor Spending

Revenues	\$144,407,266
Visitors per \$1 million	331
Number of Visitors	47,799
Average Spending per Visit	\$65
Total Business Visitor Spending	\$7,899,448

¹⁵ Source: The University of Wisconsin-Madison and the Local and State Economies: A Second Look, Rosen, Mark I, William A. Strang and Jorgene Kramer, Monograph No. 20, March 1985.

visitors' contribution

Employee Visitors

Employee visitors are also captured in this segment to keep it consistent with the layout of the study. Based upon the 1985 Strang study, employees hosted 26.2 visitors over the course of a 12 month year, 2.2 visitors per month. There were 1,250 full-time, non-student UW Oshkosh campus employees in 2006. Expenditures per visitor were inflated from the 2003 study to \$190. As a result, visitors to UW Oshkosh employees spent more than \$6 million in 2006.

Figure 6.2
UW Oshkosh Employee Visitor Spending

Number of Employees	1,250
Visitors per Employee	26.2
Number of Visitors	32,739
Average Spending per Visit	\$190
Total Employee Visitor Spending	\$6,217,365

Athletic Event Visitors

Athletic events draw many people to the UW Oshkosh campus. Men's and women's sports through all seasons add to the UW Oshkosh experience for athletes and fans alike. UW Oshkosh athletic event attendance for 2005-2006 was estimated at 50,000, half of which are assumed to come from outside the district.¹⁶ The estimated expenditure per visitor is \$52.¹⁷ To maintain a conservative approach to spending estimates,

Figure 6.4
Student Visitor Spending

Visitor	Average Number of Visits	Average Amount Spent per Visit	Total Spending
Parent	6.18	\$76.37	\$4,632,280
Friends	9.93	43.28	4,217,560
Totals	16.11	\$55.97*	\$8,849,840

* Weighted average spending per visit.

¹⁶ UW Oshkosh Athletic Department.

¹⁷ Visitor expenditures were inflated from those in the 2003 UW Oshkosh study. The original visitor spending data came from visitor data based on the 1985 Strang UW-Madison study.

it is assumed that half of the athletic visits are from outside the area. As a result, visitors to UW Oshkosh athletic events from outside the area still spent almost \$1.3 million locally.

Figure 6.3
Total Spending Attributable to UW Oshkosh Athletic Events

Estimated Attendance	50,000
Expenditure per Attendee	\$52
Visitors from Outside Area	50%
Total Athletic Visitor Spending	\$1,290,685

Source: UW Oshkosh Athletic Department.

Student Visitors

Student visitors consist of two components: parents and friends. The student visitor data was collected from survey questionnaires received from students. Students were asked how many times their parents visited them during the academic year, how many friend visits they had during the academic year and how much their parents and friends spent on each visit.

Students reported that their parents visited them 6.2 times on average during the year and spent \$76 per visit. Students' friends, on the other hand, spent \$43 dollars per visit on average on 9.9 visits. Expanding the survey numbers across the 9,815 student body yields a total spending by students' visitors of almost \$9 million.

Total UW Oshkosh visitor spending amounts to more than \$24 million in direct spending locally. Assuming that visitors share their spending in two industries, one-third in eating and drinking establishments and two-thirds in hotels and motels, the weighted-average sales multiplier used for visitor spending is 2.3368. Expanding the direct spending figure through with the multiplier yields a total economic contribution to the local economy by UW Oshkosh visitors of almost \$57 million.

Figure 6.5
UW Oshkosh Visitor Expenditures FY 2005-2006

Visitors	Total Expenditures
Business Visitors	\$7,899,448
Employee Visitors	6,217,365
Athletic Events Visitors	1,290,685
Students Visitors	8,849,840
Total Direct Visitor Expenditures	\$24,257,338
Sales Multiplier	2.33677
Total Visitor Contribution	\$56,683,820

Job Creation

UW Oshkosh visitor spending during fiscal year 2005-2006 totaled more than \$24 million. UW Oshkosh visitor spending flows through the state economy leading to the creation of new jobs. Visitor spending creates 1,159 jobs.¹⁸

Figure 6.6
Indirect Job Creation

UW Oshkosh Visitor Spending	Employment Multiplier	Indirect & Induced Additional Jobs
\$ 24,257,338	47.7979	1,159

¹⁸ Source: 200 IMPLAN Multiplier Reports, employment multiplier equals 47.7979 for each \$1,000,000 in direct spending.

Tax Revenue Generation

The 1,159 additional Wisconsin jobs, created as a result of visitors to UW Oshkosh activity, generate additional state income and sales tax revenue for the state. Assuming the state average income tax rate, annual income tax payments made by holders of these indirectly created jobs were \$1,243. In total, Wisconsin collects an additional \$1.4 million in annual income tax revenue as a result of the additional jobs created by visitors to UW Oshkosh.

Figure 6.7
UW Oshkosh Visitor State Income Tax Revenue Generation

Additional Jobs	1,159
Ave. Wisconsin Income Tax Rate	3.199%
Ave. Annual Winnebago County Wage	\$38,844
Annual Income Tax Payments	\$1,243
Additional Annual Income Tax Revenue	\$1,440,756

visitors contribution

The additional jobs created and visitor spending generate state sales tax revenue. Total sales tax revenue generated by these two sources amounts to more than \$2.2 million.

Figure 6.8

UW Oshkosh Visitor State Sales Tax Revenue Generation

		WI Average Sales Tax Rate	State Tax Revenue
New Jobs Personal Income	\$45,037,707	2.229%	\$1,003,710
Direct Visitor Spending	24,257,338	5.00%	1,212,577
Total Sales Tax Revenue			\$2,216,577

The jobs UW Oshkosh visitors create also generate property taxes. Using homeownership rates comparable to those of UW Oshkosh employees, the 1,159

jobs created by UW Oshkosh visitors generate 943 households. Applying the same property tax payment factors to those households' incomes yields nearly \$1.6 million in property taxes.

Figure 6.9

UW Oshkosh Visitor Property Tax Revenue Generation

	Total
Additional Homeowners	943
Average Annual Disposable Income	\$24,791
Average Wisconsin Property Tax Rate*	6.8%
Visitor Induced Property Tax Revenue	\$1,597,174

* Percent of personal disposable income based on UW Oshkosh employee survey.

Total state tax revenue generated by visitor spending is more than \$5.2 million.

Figure 6.10

UW Oshkosh Visitor Total Tax Revenue Generation

Income Tax Revenue	\$1,440,756
Sales Tax Revenue	2,216,577
Property Tax Revenue	1,597,174
Total Tax Revenue	\$5,254,507

Summary

UW Oshkosh attracts visitors from all over Wisconsin. Students, employees, athletic events and business endeavors all draw visitors to UW Oshkosh. UW Oshkosh visitors spent \$24 million locally during fiscal year 2005-2006. Visitors made a total contribution of almost \$57 million to the local economy.

Visitor spending creates jobs and generates tax revenues. UW Oshkosh visitor spending led to the creation of more than 1,159 new jobs in the area and generated more than \$5.2 million in additional state income, sales and property tax revenue.

CHAPTER 7

Market Analysis

This economic contribution study breaks out the spending of the UW Oshkosh components—institution, staff and students—by industry category. Twenty-three market categories are displayed below. The purpose

of this breakout is to delineate the economic contribution the presence of UW Oshkosh has on specific industry segments in the region. In this manner, it can be observed how the university and the community are intertwined.

Figure 7.1

Industry Segment Data

Industry Category	Institution	Employees	Students	Visitors	Total
General Merchandise	-	\$2,696,677	\$8,788,823		\$11,485,500
Clothing & Apparel	-	1,228,114	4,975,484		6,203,598
Food	\$4,766,994	4,164,199	9,751,244		18,682,437
Furniture & Appliances	-		1,141,173		2,223,832
Other Retail	-	1,612,978	2,916,387		4,529,365
Eating & Drinking Places	110,172	1,472,232	5,294,240	\$8,084,971	14,961,616
Amusement	-	312,075	1,270,819		1,582,894
Vehicle Repair & Service	-	1,338,827	4,360,079		5,698,906
Construction	11,867,073	1,868,963	831,600		14,567,635
Personal & Business Service	3,569,484	1,268,852	3,370,506		8,208,842
Transportation	-	1,301,943	4,901,016		6,202,959
Dependent Care	-	932,738	1,660,090		2,592,828
Insurance	-	2,100,113	7,362,109		9,462,223
Government Fees/Fines	-	3,223,750	1,934,395		5,158,146
Churches & Charities	-	1,288,853	2,487,050		3,775,903
Utilities	2,700,556	2,676,492	6,972,743		12,349,791
Hotels & Motels	220,675	79,762	146,021	16,172,367	16,618,825
Services from Households	-	240,937	191,338		432,275
Rentals	-	764,773	13,250,388		14,015,161
Mortgage		5,833,681	10,445,822		16,279,503
Property Tax	-	1,948,957	1,767,234		3,716,191
Vehicle Financing		262,758	152,748		415,506
Vehicle Sales		13,560,196			13,560,196
Wholesale	5,031,531				5,031,531
Miscellaneous	3,220,582	-	-		3,220,582
Total	\$31,487,067	\$51,260,532	\$93,971,308	\$24,257,338	\$200,976,245

Above, are the aggregate in-district industry segment data. There is some difference between the industry categories of institution spending and employee and student spending. See methodology chapter.

market analysis

Note: *The institutional spending comes from UW System data and is mapped consistent with methods used in other UW System studies.¹⁹ Wholesale and miscellaneous categories are not retail delineated and institutional food industry data pertains to food services.*

UW Oshkosh is obviously a major contributor to the regional economy. On the other hand, local businesses supply many products and services to the university, its staff and students. The integration of the “town and gown” economy is beneficial to both parties. In fact, the cooperation between the community and the university enhances the contribution of each.

¹⁹ See studies done for UW System, UW-Madison, UW Oshkosh 2003, UW-Platteville, UW-Stevens Point and UW-Stout based upon input from UW System finance staff.

CHAPTER 8

Conclusions

A study such as this yields many facts and insights into the value of any particular business entity. More specific to this project, it shows the economic nature of an institution of higher learning. The project’s goal of estimating the fiscal contribution the university makes was accomplished and the results are impressive.

The original purpose of this project was to estimate the economic scope of UW Oshkosh. The analysis quickly demonstrated that UW Oshkosh was more than just a valuable economic contributor to the regional economy, but an economic, social and cultural anchor as well. Moreover, the included market analysis piece showed substantial local business activity due to the UW Oshkosh’s presence in the area.

As a regional anchor institution, UW Oshkosh has served the primary role of education and, to a large extent, community service through the application of the experience and expertise of its faculty and students for more

than 130 years. Its economic contribution to the community has grown to more than \$500 million as of 2006. It is expected that this longevity and contribution will only grow. Few other entities can make a similar claim.

State funding is no longer the primary source of operating revenue for the university. Tuition has taken over as the primary funding mechanism for this state university. Tuition is more than \$46 million or 32 percent of UW Oshkosh revenue. In contrast, state funding is 27 percent of total funding at \$39 million. Moreover, the state and local tax revenue generated by UW Oshkosh’s economic activity is now nearly equivalent to state funding.

It is the author’s opinion, after conducting this analysis, that UW Oshkosh is in fact an economic engine and economic, social and cultural anchor for the region. It is also a growth entity for the region. While this report illustrates the value of UW Oshkosh as an economic contributor to the region, it is also hoped that the report will guide and facilitate increased collaboration between the university and the community. The whole is definitely more than the sum of the parts.

CHAPTER 9

Methodology

Data on direct UW Oshkosh expenditures for faculty and staff wages and benefits and other operating expenses were obtained from UW System Administration. Data for expenditures by UW Oshkosh employees were obtained through a survey of UW Oshkosh faculty and staff. Data for student expenditures were also obtained through a survey of UW Oshkosh students.

The basic logic assumes that direct UW Oshkosh expenditures have a direct and indirect or multiplied affect on the regional economy. Those expenditures would not occur if UW Oshkosh was not present in the area. It was also assumed that UW Oshkosh students would leave the area to pursue their degrees at some other institute of higher learning if UW Oshkosh was not present. If such was the case, student

expenditures would occur outside the area. Demarcation was made for students not pursuing a degree full-time. Student inputs were figured on a full-time equivalent basis (FTE).

Direct UW Oshkosh expenditures were summed and multiplier coefficients were applied to UW Oshkosh institutional, employee, student and visitor expenditure categories to estimate the total economic contributions to the district.

The multipliers used were those derived from the Strang input/output model, a comprehensive input/output model of Wisconsin's Door County and subregional economic product and service flows to maintain consistency with previous studies.²⁰ Each industry category must be handled individually because each has a specified indirect contribution multiplier associated with it. Below are the industry categories that were used in the analysis.

Amusement Places—includes purchases at theaters, video stores, arcades, sporting events, museums and art galleries.

Auto Repair Shops, Service Stations—refers to vehicle parts and service expenditures.

Construction Repairs—refers to home or apartment repairs or maintenance, such as furnace service or house painting.

Personal and Business Services—includes spending on doctors, lawyers, beauty shops and dry cleaners, etc.

Transportation Expenses—includes gasoline, bus and taxi fares, parking, etc.

Dependent Care Expenses—refers to money paid for child or other dependent care.

Insurance—refers to spending on life, health, disability, automobile, accident and property insurance.

Payments to Local Governments—includes items, such as property tax payments, traffic tickets, user fees and licenses.

Charities and Churches—refers to money given to not-for-profit entities, such as the United Way, civic organizations, religious entities, etc.

Utilities—refers to spending on electricity, natural gas, telephone and water services.

Lodging—includes spending on lodging away from home, such as hotels and motels.

Services to Other Households—includes items, such as yard work, cleaning, tailoring, babysitting performed by people not in that business.

Housing Rental—refers to rent payments and finders fees.

Mortgages—includes spending paid on home loans not including property taxes.

Vehicle Financing—pertains to the monthly payment on a automobile loan.

Vehicle Purchase—refers to spending on the purchase of personal vehicles.

Wholesale—includes expenditures made to wholesale suppliers.

Figure 9.1

Industry Categories

General Merchandising	Clothing Stores	Food Stores
Furniture & Appliances	Other Retail	Lodging
Amusement Places	Eating & Drinking Establishments	Utilities
Construction Repairs	Personal & Business Services	Dependent Care
Services of Local Households	Transportation Expenses	Mortgage
Housing Rental	Automobile Repair & Service	Insurance
Vehicle Financing	Vehicle Purchase	Wholesale
Payments to Local Governments	Charities & Churches	

Definitions for Industry Categories

General Merchandise—purchases include items bought at merchandising stores, such as department stores, discount stores and variety stores.

Clothing Stores—purchases include items bought at men's, women's and children's clothing stores, such as shirts, skirts, dresses, pants, suits and shoes.

Food Stores—purchases from grocery stores and specialty food stores.

Furniture and Appliance Store—includes home furnishings, such as beds, chairs, sofas, TVs, computers, washers, dryers, stoves and business furniture, such as desks, tables and file-cabinets.

Other Retail Stores—refers to purchases made at a variety of retail stores, such as hardware, book, florists and gift stores.

Eating and Drinking Establishments—refers to spending in restaurants and bars.

Institutional Expenditures

Expenditures by UW Oshkosh for goods and services represent a significant contribution to businesses, persons and local government. UW Oshkosh purchases of goods and services from companies located within the district constitute direct payments to area businesses. UW Oshkosh's payroll constitutes the income of faculty and staff, which in turn is spent in the local economy, and taxes paid to the state. UW Oshkosh employee income is considered separately in the section on Employee Expenditures below.

UW Oshkosh institutional spending on goods and services is readily accounted for by the financial office of the university. Data was obtained from the administration department along expenditure categories. The categories maintained by the UW Oshkosh finance department do not exactly match those used in our model. However, the expenditures were carefully mapped into our classifications based upon the detailed knowledge of the finance department's personnel.

²⁰ Many of the previous Strang studies for the UW-Madison, UW System, etc., dating back to the 1970s.

Figure 9.2 represents the mapping of UW Oshkosh institutional expenditures by industry. Institutional spending did not cut across all categories, particularly the retail items, such as General Merchandizing,

Apparel Stores, etc. On the other hand, some institutional spending classes mapped to more than one model category. No funds were double counted, but rather split into categories based upon expenditure knowledge.

Figure 9.2
UW Oshkosh Institutional Expenditure Mapping to Model Categories

UW Oshkosh Classification		Model Industry Category
Travel	↔	Services from Households, Various
Memberships & Subscriptions	↔	Various
Supplies	↔	Wholesale
Equipment	↔	Furniture & Appliances
Advertising	↔	Personal & Business Services
Repairs	↔	Wholesale
Contract	↔	Wholesale, Services from Households, Government Fees, Construction
Credit Fees	↔	Personal & Business Services
Insurance	↔	Insurance
Utilities	↔	Utilities
Food Service	↔	Food
Lease	↔	Government Fees
Charitable Contributions	↔	Churches & Charities
Asset Purchases	↔	Wholesale

Only in-district and in-state expenditures were registered for this analysis. Therefore, spending on travel, fuel and parking for example, went to Services from Households as no overnight stays at hotels or motels occurred within the district.

The sum of each category's expenditure gives an estimate of the total expenditures UW Oshkosh spends on goods and services from in-district business. However, this would yield only the direct expenditure impacts of the institutional expenditures and would not include the indirect or multiplied affects of that spending in the district.

Also, as we are about to discuss, wages paid to UW Oshkosh employees and money spent by UW Oshkosh students also have a direct and indirect affect on the area's economic

profile. Spending in each industry category from these contributors will be estimated separately and brought into the mix. In the end, total contributions to each industry category are summed across all contributors and a grand total of the economic contribution UW Oshkosh makes to the area is measured.

Proceeding toward that end, we present the methodology associated with spending by UW Oshkosh staff and students.

Employee Expenditures

The basic assumption about UW Oshkosh employees is that their income would not be generated without the presence of UW Oshkosh. UW Oshkosh employees earn income from the institution and, in turn, spend their income on

goods and services. Employee expenditures create a direct and indirect effect on the region's economic well-being.

To obtain data on UW Oshkosh employee expenditures, a questionnaire was mailed to 750 randomly selected UW Oshkosh faculty and staff requesting their input on money they spent monthly in the 23 categories listed in the Industry Category table above. They were also asked to supply an estimate of money they spent outside the district. We received 219 usable responses. Useable means that the surveys were completed correctly and the dollars estimates to the category items were deemed reasonable.

Two problems arise when analyzing UW Oshkosh employee expenditures: an employee's income may be more than the wages paid by UW Oshkosh due to other income, such as investment returns, rents, royalties, etc.; and an employee's income may understate the employee's total household income. The former would understate the employee's UW Oshkosh income contribution to district expenditures, the latter would overstate the contribution of UW Oshkosh's payroll in the district.

In order to reconcile these discrepancies, the employee survey results were used to determine the percentage allocations of income to the 23 expenditure categories and then applied those percentages to the total institutional payroll available to the district. District available income is gross wages paid by UW Oshkosh minus payroll taxes and other deductions. Fringe benefits are paid by UW Oshkosh but are not represented in wages paid. Other payroll deductions, such as union dues, and 403b retirement savings, were subtracted from gross wages to determine net discretionary income. An income adjustment was made to recognize out-district spending as reported in the questionnaire.

Once the direct individual category expenditures were calculated, they were multiplied by the corresponding industry indirect factor and added to the same industry category figures determined

by institutional expenditures discussed in the section above.

UW Oshkosh Student Expenditures

UW Oshkosh students are those students who are pursuing a degree at UW Oshkosh. The assumption was made that without the presence of UW Oshkosh in the area, these students would attend an institution outside the region. As such, their expenditures in the district are the result of the existence of UW Oshkosh. It could be argued that UW Oshkosh students have other ties to the region that would secure their residence in the district, regardless of UW Oshkosh's presence, such as family or jobs. However, the ability to attend UW Oshkosh greatly contributes to the appeal of the region and offers the desired educational quality and subsequent economic opportunities to the UW Oshkosh student that keeps them and their families in the area.

The approach to data collection from UW Oshkosh students was much the same as that for UW Oshkosh employees. Questionnaires about spending habits were mailed to 1,000 randomly selected UW Oshkosh students. Responses were gathered from 160 students and the data was tallied across expenditure categories.

The respondent sample expenditure data were tallied for the 22 industry categories. Individual category expenditures were averaged across the sample and then multiplied by the total number of UW Oshkosh FTE students. The monthly industry category spending figures were then multiplied by nine for the nine-month academic year.

The estimated industry category totals were then multiplied by the corresponding industry indirect factor and added to the same industry category figures determined by institutional and staff expenditures discussed in the sections above.

UW Oshkosh Visitor Expenditures

Estimating the economic impact of visitors is the least precise piece of this study. Data is dispersed, and the spectrum of visitors' attractions across university activities is wide.

Therefore, the focus was to try to capture the largest components of UW Oshkosh visitors and make reasonable estimates of visitor frequency and spending. Data from student visits of friends and family were gathered from the surveys. Data from other visitor categories were estimated based on previous work done.²¹

University Business Visitors

Business visitors come to the campus to sell goods and services to the administration, departments, labs, professors and even students. Business visitors also come to purchase university wares, such as programs, research, technology and other items.

UW Oshkosh visitors on business are the most difficult visitor component to pinpoint due to the discrete nature of the visits. Unable to gather specific business visitor data, the results used in the 1985 Strang study were relied upon to give reasonable estimates. The methodology used in the Strang report sets a solid base upon which to derive the figures for this component. While this particular subcomponent of the study is the weakest, the error inherent in this estimate is slight when compared to the total economic impact of the university and, in fact, the business visitor numbers may be underestimated.

The number of business visitors to the UW Oshkosh campus is based upon the survey work done in the 1985 study and expanded with current UW Oshkosh budget figures. Visitors on business to UW Oshkosh were broken down into four visitor types: UW Oshkosh business, UW Oshkosh employees, UW Oshkosh athletic events and UW Oshkosh students. Business visitors include academic and cultural event visitors. The business visitor figure is based upon a weighted average of per diem spending of overnight and day-only visitors from the Strang work. The per diem spending levels were inflated to 2006 dollars.

Employee Visitors

UW Oshkosh employees have visitors that would not come to the area if their hosts did not reside here. Based upon the 1997 Strang study, employees hosted 2.2 visitors per month or 26.4 visitors over the course of a 12-month year. Expenditures per visitor were inflated from the Strang study.

Athletic Event Visitors

Athletic events draw many people to the UW Oshkosh campus. Multiplying the average spending per ticket holder by total number of ticket sales yields a total spending figure. It is assumed that half of game attendees would spend associated money in the district, regardless of the athletic events.

Student Visitors

Student visitors consist of two components: parents and friends. The student visitor data was collected from survey questionnaires sent to students. Students were asked how many times their parents visited them during the academic year, how many friends visits they had during the academic year and how much their parents and friends spent on each visit.

Total UW Oshkosh District Expenditures

The total dollar flows to the UW Oshkosh district is calculated as a sum of the direct and indirect expenditures of each of the four components we analyzed: UW Oshkosh institutional expenditures, UW Oshkosh staff expenditures, UW Oshkosh student spending, and UW Oshkosh visitor spending.

Each industry category was summed across the four contributory components for an estimate of the total for each segment. The segments were then summed to determine the grand total of the direct and indirect economic contributions accrued to the region by UW Oshkosh's presence in the area.

²¹ Visitor expenditures were inflated from those in the 1997 Strang study. The Strang study was conducted in such a way that eliminated double counting. The Strang study visitor data was based on the 1985 UW-Madison study. Source: The University of Wisconsin-Madison and the Local and State Economies: A Second Look, Rosen, Mark I, William A. Strang and Jorgene Kramer, Monograph No. 20, March 1985.

