

**A STUDY OF THE ECONOMIC IMPACT OF  
SHAWNEE STATE UNIVERSITY**

**FISCAL YEAR 2004-2005**

**PREPARED FOR**

**THE OFFICE OF THE PRESIDENT  
SHAWNEE STATE UNIVERSITY**

**PREPARED BY**

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## **Introduction**

As an institution of higher education with over **3,800** students and **916** employees, Shawnee State University (SSU) enriches the local economy through its educational, employment, and business activities. This study seeks to analyze the impact of these activities on the local and regional economy.

SSU purchases goods and services from local businesses, which will spend a portion of their revenues in the local economy. SSU pays wages and salaries to employees, who will spend a portion of their income in the local economy. Additionally, SSU attracts students to the region, both commuters and on-campus dwellers, who spend money and hold jobs in the local economy. In many cases, the employees and students would not be active in the local economy if not for the presence of the university.

All these expenditures have a direct impact on the local economy. Initial expenditures are magnified, however, as each dollar cycles through the economy from one consumer or business to the next. Thus, the indirect effect of this spending can be immense. Further, direct and indirect spending support existing jobs and aid in the creation of new employment positions.

The purpose of this study is to analyze the quantitative impact of SSU in the city of Portsmouth, Scioto County, and the region (Appendix A). Direct spending will be analyzed using monetary data. The data includes actual SSU institutional spending, as well as estimates of student and employee spending. A basic money multiplier will be used to measure the indirect effect of this initial spending. The components are combined to yield the total economic impact of SSU on the local economy.

## **Highlights**

- ❖ Shawnee State University contributes \$6.1 million in direct and indirect spending to the local economy annually.<sup>1</sup>
  
- ❖ The total economic impact of SSU student spending is over \$31.4 million.
  
- ❖ The total economic impact of SSU employee spending is approximately \$23 million.
  
- ❖ Total spending by SSU, students, and employees support approximately 2,500 jobs in the local economy.

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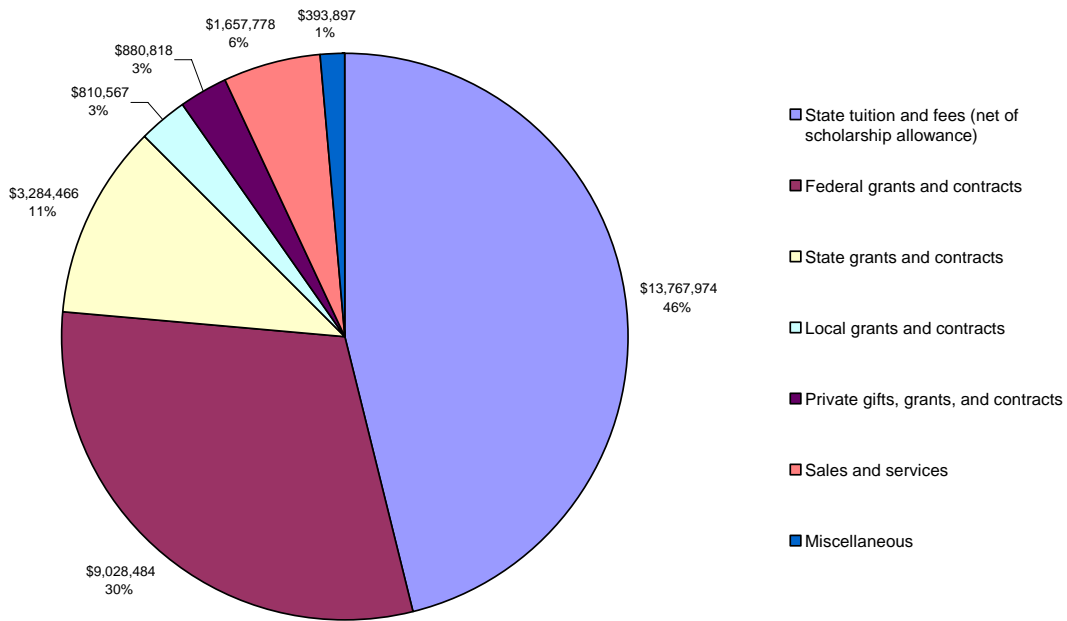
<sup>1</sup> This figure does not include wages and salaries.

# Revenue Sources

The amount of revenues collected serves as an initial measure of the economic impact of Shawnee State University. Using revenue funds, the university finances the purchase of goods and services within the city and region. The more revenue SSU collects from outside sources, the greater potential impact for the local economy.

SSU reports several major sources of current operating revenues. Current operating revenues are those funds associated with the primary activities of the university. Total operating revenues in FY 2004-2005 were **\$29.8 million**, an increase of **8%** from FY 2003-2004.<sup>2</sup> **Figure 1** displays the sources and amounts of operating revenues available to the university.

**Figure 1. Operating Revenues, FY 2004-2005**



\*Operating Revenue Sources, Fiscal Year 2004-2005 provided by the Office of the Controller.

<sup>2</sup> Traditionally, non-operating revenues are not included in economic impact analysis. Total non-operating revenues of SSU for FY 2004-2005 were more than \$15 million.

## Multiplier Effects

SSU injects money directly into the local economy by purchasing goods and services to meet the university's needs. Further, employees and students purchase goods and services in the local economy. These initial expenditures are considered direct spending related to the university.

While the reported direct spending data provide excellent insight into the economic impact of SSU, it does not reflect the ultimate impact of university-related activities on the local economy. In addition to direct spending, the indirect effects of university spending has a substantial impact on the local economy. Employees spend their wages and salaries with local businesses. Local businesses, receiving payment from the university and its employees, in turn, spend that money with other local businesses. A basic money multiplier can be employed to analyze these potential effects.

The basic money multiplier employs expenditure data to examine the eventual effects of an initial expenditure of \$1 in the local economy. The multiplier represents the number of times the dollar will cycle through the economy, as it is passed from one consumer or business to the next. Each cycle generates increased additional revenues, income, and jobs until that dollar eventually exits the local economy through investment, taxation, or other spending outside of the region.

The multiplier employed in this report was generated using available data on the marginal propensity to consume and the percentage of total consumer and business expenditures made in the local economy. A conservative money multiplier of **1.27** was calculated. This means that every \$1 of new spending in the local economy will eventually generate an additional 27 cents as it cycles through the economy. This effect can be quite large, given the spending patterns of the university.

# University Spending

## **Purchasing**

In FY 2004-2005, SSU spent over **\$9 million** on goods and services, excluding capital expenditures. These purchases consisted of a variety of items including pest control services, sporting goods, automobile rentals, food, and media services, among thousands of others. Partnerships with local businesses were sought when opportunities were available. **Table 1** lists several examples of local suppliers of goods and services with whom the University made several of its major purchases.

**Table 1. Local Suppliers of Goods and Services**

BB&E Inc.	Estep Sporting Goods	Southern Ohio Medical Center
Central Industrial Supply	Ohio Pest Control	T&S Sales
Cleaning Supplies Co.	Pittsburgh Paint	Tanner Stone Co.
Community Common	Portsmouth Daily Times	TL Blackburn Co.
Enterprise Rent-A-Car	Ramada Inn	Tom Russell Glass & Mirror

\*Data provided by the Purchasing Department.

**Table 2** shows a complete list of university purchasing, by area. Of total expenditures, approximately **\$2 million** was spent with local businesses, with a total of \$2.5 million in expenditures in the region. Approximately **88%** of these expenditures were spent with firms based in Portsmouth, New Boston, and Sciotoville.

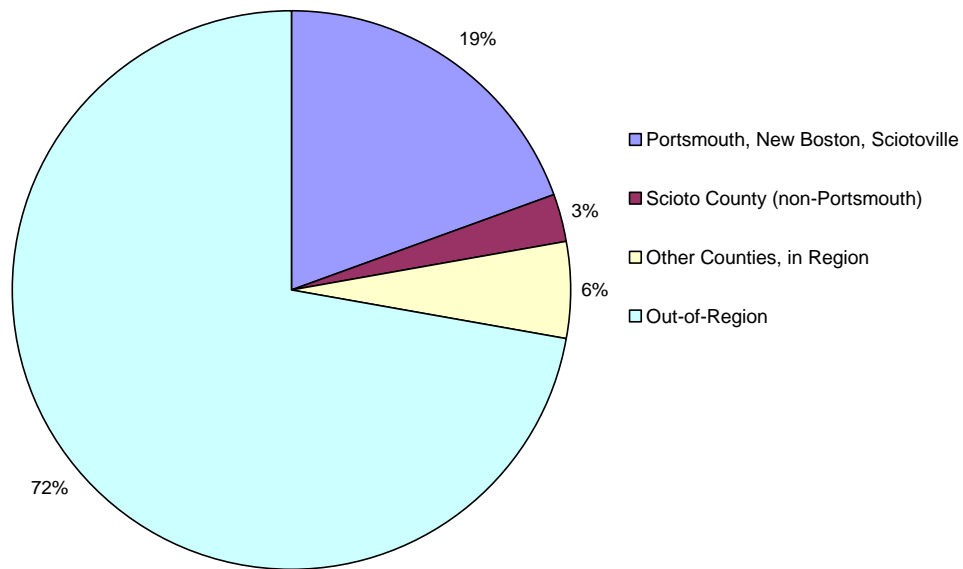
**Table 2. Total University Purchasing, by Area, FY 2004-2005**

<b>Location</b>	<b>Expenditure</b>
Portsmouth (including New Boston and Sciotoville)	\$1,763,676
Scioto County (Non-Portsmouth)	\$235,123
Other counties, in Region	\$515,364
Out-of-Region	\$6,535,283
<b>TOTAL</b>	<b>\$9,049,446</b>

\*Data provided by the Purchasing Department.

SSU directs approximately **22%** of total in-region expenditures on goods and services to Scioto County, with an additional **6%** going to other counties in the region. **Figure 2** shows the outlay of total expenditures of the university, by area.

**Figure 2. Outlay of University Purchasing, by Area, FY 2004-2005**



\*Data provided by the Purchasing Department.

Using the estimated money multiplier and direct spending figures, the indirect effects of university purchasing was calculated. Given total in-region expenditures of approximately **\$2.5 million**, it is expected that this initial spending will generate an additional **\$675,000** in the regional economy, of which **\$540,000** is expected to remain in Scioto County. Therefore, direct and indirect spending contributes approximately **\$3.2 million** to the local economy.

## Employment and Payroll

As a major employer in the area, SSU paid approximately **\$20.7 million**<sup>3</sup> in salaries and wages to **916** full-time, part-time, student<sup>4</sup> and miscellaneous employees in FY 2004-2005. This figure does not include benefits, which were approximately **\$6.9 million**. Additionally, salaries and wages are reported at pre-tax amounts. It should be noted that a portion of these salaries enter the local economy through payroll taxes.

Full-time and part-time categories include faculty, staff, and support positions. Miscellaneous positions include coaches, student workers, among others. **Table 3** lists the distribution of employees by job type and by region.

**Table 3. Number of SSU Jobs, by Type and Area, FY 2004-2005**

Employment Type	Portsmouth	Rest of Scioto County	Rest of Region	Out of Region	Total
<b>Full-time:</b>					
Administration	41	43	16	4	104
Faculty	68	35	22	13	138
Support	42	52	21	0	115
<b>TOTAL</b>	<b>151</b>	<b>130</b>	<b>59</b>	<b>17</b>	<b>357</b>
<b>Part-time:</b>					
Administration	2	1	5	6	14
Faculty	53	43	46	6	148
Support	7	1	1	1	10
<b>TOTAL</b>	<b>62</b>	<b>45</b>	<b>52</b>	<b>13</b>	<b>172</b>
<b>Other:</b>					
Coaches	8	3	1	1	13
Student	62	70	47	68	247
Miscellaneous	38	66	16	7	127
<b>TOTAL</b>	<b>108</b>	<b>139</b>	<b>64</b>	<b>76</b>	<b>387</b>
<b>GRAND TOTAL</b>	<b>321</b>	<b>314</b>	<b>175</b>	<b>106</b>	<b>916</b>

\*Data provided by the Human Resources Department.

<sup>3</sup> The figures reported are a combination of payroll and accounts payable data. While some adjustments were made to remove non-employment related expenditures, it was not possible to remove all bias related to these expenditures.

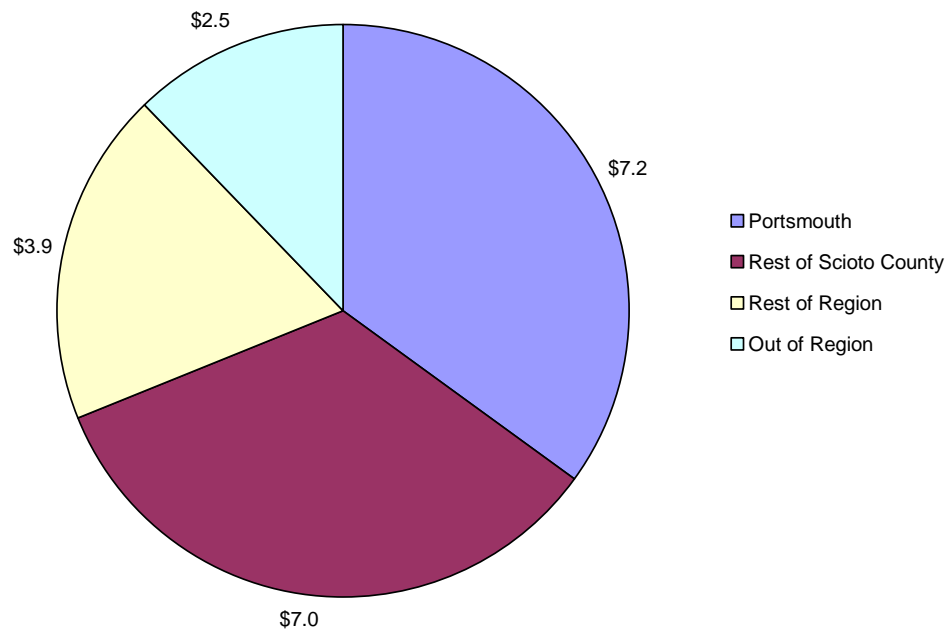
<sup>4</sup> Note that student employees are not categorized by local or permanent addresses.

Only 12% of employees lived outside of the region. This means that 88% of employees live and spend money within the region. Specifically, 35% of this potential spending comes from employees residing in the city of Portsmouth.

Using the geographic distribution of employees, we can estimate potential spending of university employees, by area. Given total compensation of \$20.7 million, we can estimate that **\$18.1 million** stays within the region.<sup>5</sup> **Figure 3** illustrates the estimated allocation of employee compensation.

The economic impact of salaries and wages will be analyzed in the Employee Spending section of this report.

**Figure 3. Allocation of Employee Compensation by Area (in millions), FY 2004-2005**



\*Data provided by the Human Resources Department.

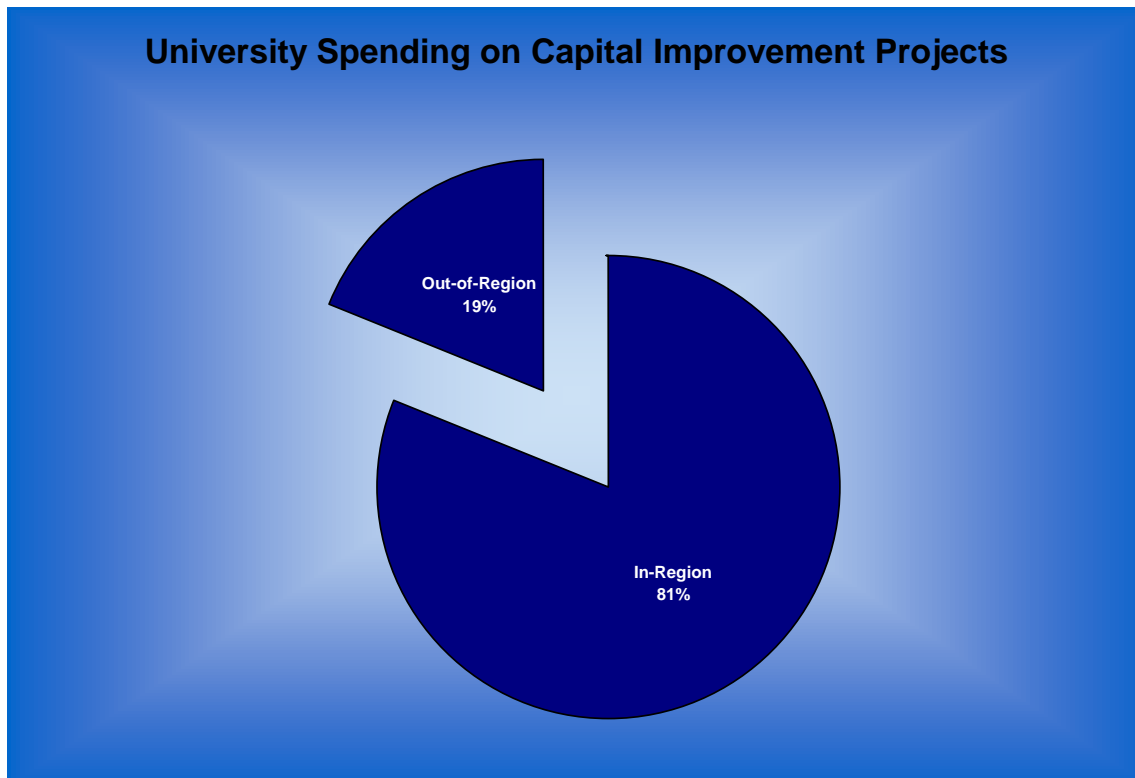
<sup>5</sup> This estimate is based on the percentage of employees who live within the region as applied to total compensation.

## Capital Improvements

Shawnee State University spent approximately **\$1.5 million** on a total of **7** capital improvement projects in FY 2004-2005. These projects include dormitory renovations and parking lot upgrades, among others. Of total expenditures, **81%** was spent with firms based in the region. Notably, **75%** of In-Region spending was designated to firms located in Portsmouth. Of the 7 projects, only one project was contracted with a firm located outside the region, in cooperation with 2 local firms.

Direct expenditures made in the region were approximately **\$1.2 million**. This initial spending will contribute an additional **\$324,000** in the local economy due to indirect expenditures. Therefore, spending on capital improvements will contribute approximately **\$1.5 million** to the local economy.

Figure 4



\*Data provided by Facilities.

## Other University Spending

SSU contracts with local institutions to provide on-campus housing. In FY 2004-2005, SSU spent approximately **\$1.1 million** with local institutions to provide such services. Applying the money multiplier, this initial spending generates an additional **\$297,000** of indirect spending. Therefore, the total impact of this spending is approximately **\$1.4 million**.

## Student Spending

Student enrollment continued its record climb, reaching **3,820** students in Fall 2005. Of this total, **2,062** students came from outside Scioto County. This statistic represents those students who may not regularly be in the area, if not for affiliation with the university. These students represent commuters and those students temporarily living in Portsmouth while attending school. Accordingly, these students bring dollars to Portsmouth and Scioto County that may not otherwise exist.

Based on student budget estimates compiled by the Financial Aid Office, it is possible to estimate the impact of student spending on the local economy. The student budget estimates are categorized by On-Campus and Off-Campus characteristics. **Table 4** displays a complete description of total estimated student budgets.

**Table 4. Estimated Student Budgets**

	<b>With Parent</b>	<b>Off-Campus</b>	<b>On-Campus</b>
<b>Tuition/Fees</b>	5,514	5,514	5,514
<b>Room/Board</b>	2,619	5,805	6,759
<b>Books/Supplies</b>	1,350	1,350	1,350
<b>Transportation</b>	1,950	1,950	1,350
<b>Personal</b>	1,554	1,554	1,554
<b>TOTAL</b>	<b>\$12,987</b>	<b>\$16,173</b>	<b>\$16,527</b>

\*Budget estimates are based on three quarters.

As of Fall 2005, **3,287** students lived off-campus, contributing an estimated **\$24.7 million** of direct spending to the local economy. **533** students lived on campus, contributing an estimated **\$1.6 million** of direct spending to the local economy. These figures do not include spending directly related to the university such as tuition, fees, room, board, books, and supplies. Instead, emphasis is placed on spending potentially made with local firms, such as transportation and personal expenditures. Therefore, total student spending is estimated to contribute **\$26.3 million** in direct expenditures.<sup>6</sup>

Applying the money multiplier, it is expected that this initial spending will lead to **\$5.1 million** of indirect expenditures as the dollars turn over in the local economy. The total impact of student spending, therefore, is approximately **\$31.4 million**.

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<sup>6</sup> The 'With Parent' and 'Off-campus' budgets are used to estimate an average expenditure for room and board, as this is a service the off-campus students may seek in the local economy. An average is taken for the room and board expenditure because a reliable count of students living with parents or on their own is not available.

## Employee Spending

Those employees living within the city, county, and region are consumers of goods and services. Based on the estimated allocation of employee compensation presented earlier, the potential impact of employee spending may have on the local economy was estimated.

Employees living in the city of Portsmouth received **\$7.2 million** in compensation, while those workers living elsewhere in Scioto County received **\$7 million**. Other workers in the region and out-of-region received **\$3.9 million** and **\$2.5 million**, respectively. This combines to represent approximately **\$18.1 million** in potential expenditures within the region. Applying the money multiplier, the initial expenditure of **\$18.1 million** could eventually generate an additional **\$4.9 million**, for a total contribution of **\$23 million**.

## Induced Employment

SSU directly contributes **916 jobs** to members of the local economy. Additionally, the expenditures made by the university, students, and employees help create additional jobs in the local and regional economy. This is known as induced employment.

A conservative estimate of the induced employment multiplier of **40** external jobs created for every \$1 million spent in the local economy is used to analyze the induced employment effect of university spending.<sup>7</sup>

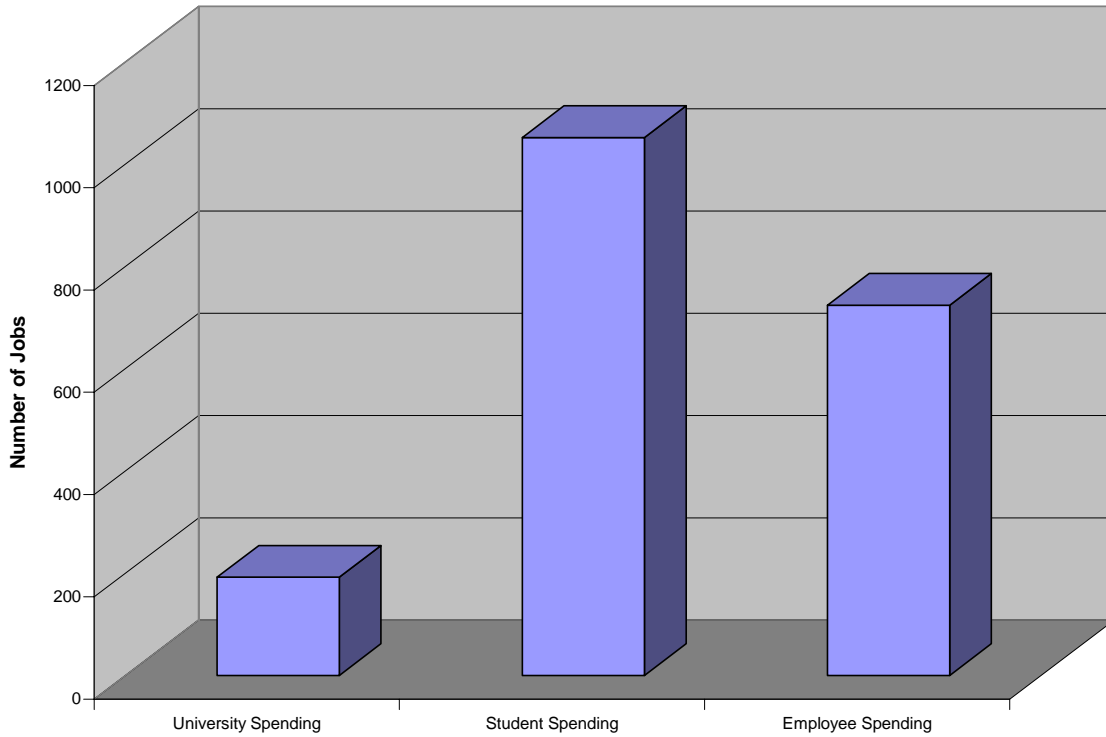
To calculate induced employment, three categories will be used: University Spending, Student Spending and Employee Spending. As such, University Spending will consist of direct expenditures by Purchasing and Capital Improvements, Employee Spending will reflect employee compensation, and Student Spending will use the estimated total student budget expenditures calculated above.

University Spending accounts for approximately \$4.8 million in expenditures, which supports approximately **192 jobs** in the regional economy. Student Spending accounts for approximately \$26.3 million, which supports approximately **1,052 jobs** in the regional economy. Finally, Employee Spending accounts for approximately \$18.1 million, which supports approximately **724 jobs** in the regional economy. Overall, spending related to the university creates approximately **1,968 jobs**. **Figure 5** displays induced employment related to university expenditures and the expenditures of employees and students.

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<sup>7</sup> The Public Universities of Ohio Economic Contribution Profile 2000-2001 Data; Inter-University Council of Ohio, 2003.

**Figure 5. Induced Employment**



Further, when indirect spending is considered, potential induced employment increases. Together, University Spending, Student Spending, and Employee Spending will eventually lead to **\$13.3 million** in indirect spending. Therefore, indirect spending supports approximately **532 jobs** in the regional economy. In total, SSU supports approximately **2,500 jobs** in the local and regional economy.

APPENDIX A  
COUNTIES INCLUDED IN REGION

The counties included in the region are:

**Ohio**

Adams  
Brown  
Gallia  
Highland  
Jackson  
Lawrence  
Pike  
Ross  
Scioto  
Vinton

**Kentucky**

Boyd  
Carter  
Greenup  
Lewis

**West Virginia**

Cabell  
Mason Wayne