# **Economic Impact Analysis Illinois State University**

### Prepared by

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April 4, 2016

## **Economic Impact Analysis Illinois State University**

#### **EXECUTIVE SUMMARY**

This study estimates the economic impact of Illinois State University on the economy of McLean County. Specifically, the study analyzes the economic impact of three categories of expenditures associated with ISU: payroll expenditures for faculty, staff, and student employees; operating and capital expenditures; and student spending beyond tuition and fees. The analysis is undertaken using data for fiscal year 2015. We have excluded visitor expenditures associated with campus events such as athletic events, concerts, speakers, etc. The inclusion of such events would increase the economic impact. The IMPLAN regional input-output model is constructed for McLean County and used in the estimation of the economic impact. As the following summary table reveals, ISU plays an important economic role in Mclean County, and its economic impact is quite sizable. For fiscal year 2015, it generated 8,920 jobs, \$362,415,338 labor income, and \$832,753,367 output (expenditures). The resulting regional multiplier of 1.5 implies \$1.50 return to the economy for each \$1 expended by Illinois State University and its students.

**Estimated Overall Economic Impact** 

Impact	Primary	Secondary	Total
Employment	6,682	2,238	8,920
Labor Income	\$279,284,041	\$83,131,297	\$362,415,338
Expenditures (Output)	\$554,061,088	\$278,692,279	\$832,753,367

In addition to the economic impacts of Illinois State University, the analysis also estimates the tax impacts associated with such expenditures. Property tax revenue to local jurisdictions is estimated to be \$16,409,975. The share of sales tax revenue returned to the local economy is estimated to be \$2,668,992.

### **Economic Impact Analysis Illinois State University**

#### I. Introduction

Illinois State University was founded in 1857 as the first public university in Illinois. Enrollment in Fall 2015 stood at 20,615, with 18,155 as undergraduate and 2,460 as graduate students. Related to fiscal year 2015, Illinois State University employed the FTE of 1,125.6 faculty and 2,127.2 staff. Thus, the University is the second largest employer in McLean County. In terms of budget, the State of Illinois appropriated \$72.2 million. \$19.5 million in external grants and contracts were awarded to the University in that year, and \$36.8 million in gifts were received. In short, Illinois State brings resources and people to McLean County.

### **II. Background Information for Economic Impact Analysis**

The University's operating budget for fiscal year 2015, including payroll expenditures associated with faculty, staff, and student employees, standard operating expenses, and capital expenditures was \$367,045,647. Of this amount faculty, staff and student payroll constituted \$223,884,647; operating and capital expenditures excluding payroll expenditures were \$143,161,000.

In addition to the on-going operational expenditures, the economic impact analysis also includes the impact of student spending beyond tuition and fees or living on campus.

Specifically, expenses on such items as room and board in the community, transportation, books and supplies, and other personal expenses are included in the economic impact of student spending (i.e., tuition and fees are already included in the education and general funds of the operating budget of the university). Of the 20,615 students enrolled at ISU, 1,391 were from

<sup>&</sup>lt;sup>1</sup> Data on ISU budget were provided by Greg Alt, Illinois State University Vice President for Finance and Planning.

McLean County, and the remaining 19,224 originated from outside the County. 6,243 students lived on campus, and the remaining 12,981 lived off campus.<sup>2</sup> Based on the assumption that local students would presumably live and spend their money in McLean County anyway, the economic impact analysis incorporates the spending by non-local students. The College Board provides estimates of other personal expenses for students at public 4-year colleges in the Midwest. For the typical 9-month academic year, the average student spends \$14,651 beyond tuition and fees.<sup>3</sup> Similarly, an on-campus student spends an additional \$4,513 per year on books and supplies, transportation and other expenses. Based on these figures, the estimated student spending impact is \$328,012,611. Visitor expenditures associated with campus events such as athletic events, concerts, speakers, etc. are omitted from the analysis; the inclusion of visitor expenditures would increase the overall economic impact of Illinois State University.

The local economy in this study is defined as McLean County. The economic impacts considered here include employment, labor income, and output, as well as various tax impacts. The total economic impact encompasses both primary and secondary effects. The primary economic impact represents the initial expenditures related to the University's payroll expenditures, operation and capital expenditures, and spending by non-local students (from outside of the local economy) beyond tuition and fees. The secondary effects include indirect and induced effects. The indirect economic impact captures the subsequent purchases of the local businesses from their suppliers. The induced economic impact pertains to the household

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<sup>&</sup>lt;sup>2</sup> The enrollment data was provided by the ISU registrar.

<sup>&</sup>lt;sup>3</sup> See the following link, <a href="http://professionals.collegeboard.com/data-reports-research/trends/living-expense/9-month">http://professionals.collegeboard.com/data-reports-research/trends/living-expense/9-month</a>. The 9-month low budget estimate is used from the St. Louis, MO-IL area of the Midwest. This estimate includes room and board, books and supplies, transportation, and personal expenditures.

spending by employees and owners of firms. As a further clarification, though ISU's payroll expenditures total \$223,884,647 only a portion translates to consumer expenditures. Combining information obtained from the Bureau of Economic Analysis with ISU payroll data provides an estimate of the amount of spending by ISU employees out of wages and salaries.<sup>4</sup> Overall, based on a disposable income factor, consumer expenditures associated with ISU (gross) payroll are estimated to be approximately \$192,540,803. These are the expenditures used in the following analysis.

The economic impacts were estimated using the IMPLAN model. IMPLAN is a microcomputer based program that allows construction of regional input-output models for counties.<sup>5</sup>

The basis of the model is the spending patterns of individuals and businesses within a defined region. The IMPLAN model provides the necessary information to estimate a complete set of regional economic accounts for a local area or areas. The economic accounts are then converted to the industry-by-industry formulation of input-output accounts and ultimately a set of multipliers. The initial set of data is the "use" of commodities by industry, and the "make" of commodities by industry. These flows are derived for the local area in question from the national input-output accounts. For each data set, final demands, value added, output, and employment are derived. Employment numbers are also derived for each industry in the local area. In general, the greater the quantity of goods and services purchased locally, the more local economic activity will be generated resulting in a larger multiplier.

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<sup>4</sup> According to Bureau of Economic Analysis, on the average, households spend 86 percent of their disposable income.

<sup>&</sup>lt;sup>5</sup> IMPLAN was originally developed for the U.S. Department of Agriculture and is maintained and supported by the Minnesota IMPLAN Group, Inc. in Stillwater, Minnesota. Doug Olson and Scott Lindall, "IMPLAN Professional Software, Analysis, and Data Guide", Minnesota IMPLAN Group, Inc., IMPLAN system (data and software), 1725 Tower Drive West, Suite 140, Stillwater, MN 55082 (<a href="https://www.implan.com">www.implan.com</a>).

### III. Economic Impact Analysis

The analysis consists of the total impact in McLean County on employment, labor income, and expenditures (output) along with a summary of the state and local tax impacts associated with the direct expenditure. Employment includes total wage and salary of employees as well as self-employed jobs within McLean County encompassing both full-time and part-time workers. Labor income includes employee compensation and proprietor's income. Employee compensation represents all income, including benefits, paid to workers by employers. Proprietor income is the income of self-employed individuals. Expenditures represent sales which includes inventory and can be considered a measure of output produced.

Table 1 summarizes the economic impact associated with employee expenditures of \$192,540,803. These consumer expenditures generate a direct employment impact of 3,560 jobs and labor income of \$97,288,374. The secondary effects are an additional 785 jobs, labor income of \$28,958,718, and output of \$96,951,805. The total economic impact on the McLean County economy associated with consumer expenditures generated from ISU employment is 4,345 jobs, \$126,247,092 labor income, and \$289,492,608 output.

Table 1. Estimated Economic Impact of ISU Employee Expenditures

Impact	Primary	Secondary	Total
Employment	3,560	785	4,345
Labor Income	\$97,288,374	\$28,958,718	\$126,247,092
Expenditures (Output)	\$192,540,803	\$96,951,805	\$289,492,608

Table 2 summarizes the economic impact associated with ISU operating (\$119,792,646) and capital (\$23,368,354) expenditures totaling \$143,161,000. ISU's operating and capital expenditures generate a direct employment impact of 1,255 jobs and labor income of \$72,337,399. The secondary effects are an additional 584 jobs, labor income of \$21,531,847 and

output of \$72,087,148. The total economic impact on the McLean County economy associated with ISU operating and capital expenditures is 1,839 jobs, labor income of \$93,869,246 and output of \$215,248,148.

Table 2. Estimated Economic Impact of Operating and Capital Expenditures (Net of Employee Benefits)

Impact	Primary	Secondary	Total
Employment	1,255	584	1,839
Labor Income	\$72,337,399	\$21,531,847	\$93,869,246
Expenditures (Output)	\$143,161,000	\$72,087,148	\$215,248,148

Table 3 reports the economic impact of student spending. In an attempt to adequately capture the industrial sectors impacted, the economic impact associated with this spending was classified via categories (room and board, books and supplies, transportation, and personal expenses). Student spending yielded a primary (or direct) impact of 1,867 jobs, labor income of \$109,658,268 and output of \$218,359,285. The secondary effects are an additional 869 jobs, labor income of \$32,640,732 and output of \$109,653,326. The total economic impact on the McLean County economy associated with student spending is 2,736 jobs, labor income of \$142,299,000 and output of \$328,012,611.

**Table 3. Estimated Economic Impact of ISU Students Expenditures** 

Impact	Primary	Secondary	Total
Employment	1,867	869	2,736
Labor Income	\$109,658,268	\$32,640,732	\$142,299,000
Expenditures (Output)	\$218,359,285	\$109,653,326	\$328,012,611

Table 4 combines the information in Tables 1-3 to arrive at the overall economic impact of the presence of ISU within McLean County. The primary (or direct) economic impact is 6,682 jobs, labor income of \$279,284,041 and output of \$554,061,088. The secondary effects are an additional 2,238 jobs, labor income of \$83,131,297 and output of \$278,692,279. The

total economic impact on the McLean County economy is 8,920 jobs, labor income of \$362,415,338 and output of \$832,753,367. The evaluation of total expenditures relative to direct expenditures provides a realistic regional expenditure multiplier of 1.50.

**Table 4. Estimated Overall Economic Impact** 

Impact	Primary	Secondary	Total
Employment	6,682	2,238	8,920
Labor Income	\$279,284,041	\$83,131,297	\$362,415,338
Expenditures (Output)	\$554,061,088	\$278,692,279	\$832,753,367

Table 5 provides information on job creation, labor income and output for the top ten sectors which are impacted by ISU's presence in McLean County. Higher education is the primary beneficiary, followed by real estate, restaurants, retail and community care facilities.

**Table 5. Ten Highest Impacted Sectors** 

Description	Employment	Labor Income	Output
Colleges and Universities	6,697	\$280,103,060	\$555,683,718
Real estate	264	\$2,204,590	\$39,339,083
Full-service restaurants	161	\$3,332,364	\$7,053,987
Limited-service restaurants	118	\$2,035,875	\$9,375,859
Other educational services	91	\$1,156,725	\$2,569,173
Services to buildings	83	\$1,549,936	\$2,799,281
Hospitals	78	\$4,569,095	\$10,651,804
Retail - General merchandise stores	57	\$1,447,807	\$3,799,893
All other food and drinking places	51	\$1,499,498	\$2,014,493
Nursing and community care facilities	es 49	\$1,853,006	\$3,422,883
Total	7,646	\$299,751,956	\$636,710,174

### **IV.** Estimated Tax Impacts

Though ISU has tax exempt status, its payroll expenditures, operating and capital expenditures, and student spending generates additional tax revenue. Table 6 provides the estimated state and local tax impacts associated with each of the expenditures outlined in the previous section.

Referring to totals in Table 6, business property tax revenues are estimated to amount to \$16,409,975. Another \$12,709,488 is generated through the sales tax. Note that 16 percent of the state collections from the 6.25 percent state rate for retail sales of general merchandise and 100 percent of the collections from the 1 percent state rate for sales of qualifying food, drugs, and medical appliances are returned to the municipal or county government where the sale took place. 4 percent of the tax collected from general merchandise sales is disbursed to county governments (except Cook County) for sales that occurred anywhere within their county. Applying these percentages to the data created by the IMPLAN model, approximately \$2,668,992 (out of \$12,709,488) in sales taxes is returned to the local economy.

Personal income tax receipts amount to \$7,145,458. Local governments receive one-tenth of the net collections of all income tax received. The amount that each municipality or county receives is based on its population in proportion to the total state population. McLean County accounts for 1.3 percent of the state's total population. Thus, approximately \$92,891 is returned to local government.

**Table 6. Estimated State and Local Tax Impact** 

Expenditures	Indirect Business	Indirect Business	Personal tax:
Expenditures	Tax: Property tax	Tax: Sales Tax	Income Tax
Payroll Expenditures	\$5,702,887	\$4,416,886	\$2,483,230
Operating/Capital Expenditures	\$4,240,301	\$3,284,098	\$1,846,370
Student Expenditures	\$6,466,787	\$5,008,504	\$2,815,858
	\$16,409,975	\$12,709,488	\$7,145,458