

2017

Eastern Illinois University Economic Impact Study 2017

Eastern Illinois University

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Eastern Illinois University



2017 Economic Impact Study

Contents

- Foreword 2
- Term Definitions 2
- Introduction 3
- Eastern Illinois University Impacts 4
- Multiplier Effect 6
- GDP and Real Disposable Personal Income in Coles County 8
- Additional Economic Activity 10
- Employment Impact 11
- Findings 13
- Conclusion 13
- Software and Methodology 14



Foreword

Eastern Illinois University makes a substantial economic contribution to the City of Charleston, Illinois, Coles County, the East Central Illinois region, and the entire State of Illinois. This study measures that impact using current student enrollment levels, conservative future enrollment scenarios, University expenditures and operations, tuition and fees, University employment, employee salaries, and student spending.

Term Definitions

Direct Effects: Impacts associated with operations and employment at the University.

East Central Illinois Region: The Illinois counties of Coles, Douglas, Moultrie, Edgar, Cumberland, and Champaign.

Employment: Total combined full and part-time employment.

Gross Domestic Product (GDP): The monetary value of goods and services within the target area.

Indirect Effects: Impacts to additional industries and sectors stem from the direct economic activity of the University.

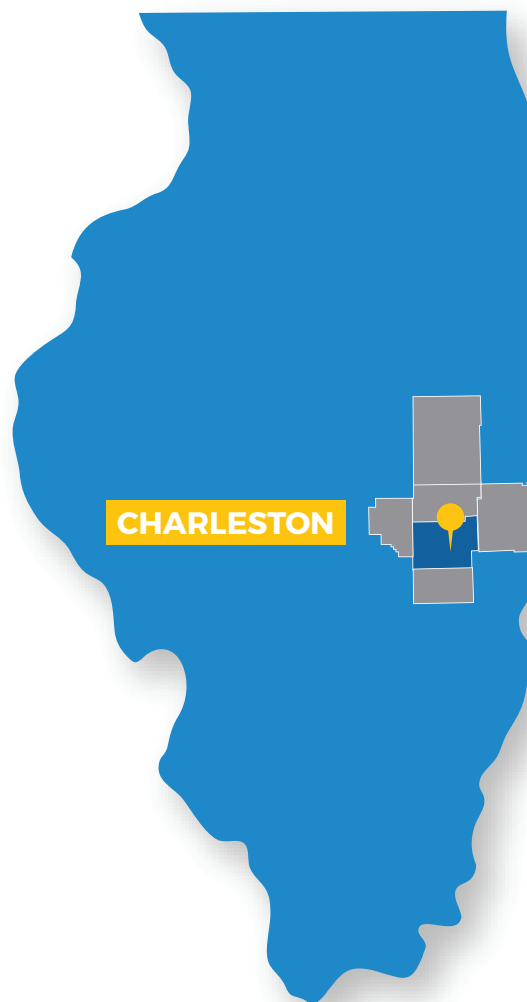
Induced Effects: Impacts and changes in household spending stem from direct and indirect demand.

Labor Income: Employee compensation (wages, salaries, bonuses, benefits, social insurance contributions) and income of sole-proprietors.

Output: Total value of production or revenues through the sale of goods and services.

Public Revenues: Annual increase in revenues for local, state, and federal entities from activities within the study area (not including property tax revenue).

Real Disposable Personal Income: The money households have available for spending after taxes.



Introduction

Eastern Illinois University has added considerable economic value to the State of Illinois for 126 years. The expenditures and activities of students, faculty, staff, alumni, visitors, and the University contribute overwhelmingly to the city and region in which EIU resides, but also contribute to the state economy. Moreover, the University creates value through its mission to increase the employability and income of its graduates and develop an educated and engaged workforce for the community.

Founded in 1895 as a teacher's college offering two year degrees, Eastern Illinois University (EIU) has expanded into a 320-acre campus with a full range of Baccalaureate and Master's degrees offered in Education, Business, Arts, Sciences and Humanities. EIU consistently ranks in the top third of Midwest universities in its class by U.S. News and World Report and has earned a strong reputation by offering a wide variety of programs taught by experienced faculty. Student graduation and retention rates are well above state and national averages and students achieve above average success after graduation.

EIU's enrollment peaked in 2006 with 12,349 graduate and undergraduate students. Unfortunately, state funding issues have affected the University and enrollment numbers. Enrollment in 2014 was 9,775 and declined to 7,415 students in 2016.

The State of Illinois entered a budget and funding crisis in 2015 which has continued through 2016 and into 2017. State appropriations to the University in 2016 totaled only 30 percent of anticipated funding. The state's budgetary crisis was a major factor in the University eliminating 363 positions, accounting for 22.6 percent of the University's workforce. It also contributed to a significant decline in enrollment. Prior to the state's budgetary impasse and drop in state funding, an enrollment plan for growth was in place and had yielded a two percent increase in the 2015 freshman class.

By the date of this Economic Impact Study, the state's budget impasse has yet to be resolved and funding for Eastern Illinois University continues to be at risk. The University launched a Vitalization Project to analyze University programs and services on viability, efficiency, sustainability and marketability. Multiple workgroups were created for this objective and the groups are making recommendations to the administration on strategic changes and targeted investments. That effort has begun to help guide the University as it adapts to external forces influencing University enrollment.

Ranked No. 5 among the Midwest's top public regional universities (2015) and consistently ranked in the top third by U.S. News and World Report.



Eastern Illinois University Impacts

STATEWIDE ECONOMIC IMPACT:

- \$503.5 million in annualized economic output
- 4,198 full and part-time employment positions
- \$244.2 million in labor income
- \$72.1 million in local state, and federal tax revenues

REGIONAL ECONOMIC IMPACT:

- \$461.8 million in annualized economic output
- 4,000 full and part-time employment positions
- \$230.6 million in labor income

COLES COUNTY ECONOMIC IMPACT:

- Student spending in Coles County is \$8.6 million for every 1,000 students enrolled at Eastern Illinois University.
- Eastern Illinois University contributes over 10% of the jobs in Coles County.
- Eastern Illinois University's average annual contribution to Real Disposable Personal Income in Coles County is 7.27%.
- Operations and activities at Eastern Illinois University contribute 7.4% annually to the Coles County Gross Domestic Product.

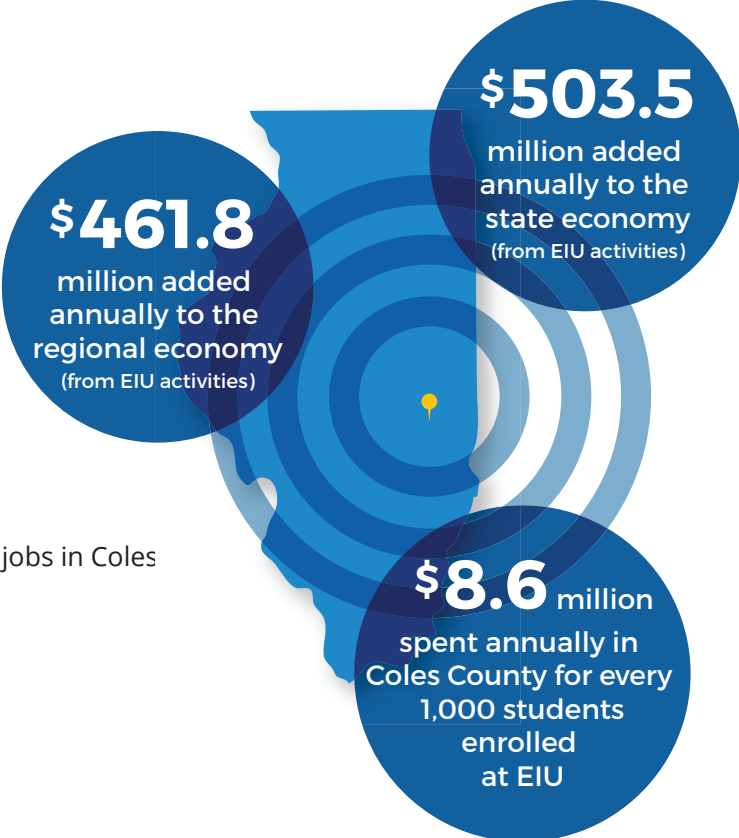


TABLE 1

Annual economic impacts in the six-county region associated with operational expenditures, employment compensation, and student spending at Eastern Illinois University in 2015.

Impact Type	Employment	Labor Income	Output
Direct Effect	2,788.9 positions	\$186.1 million	\$303.2 million
Indirect Effect	342.8 positions	\$14.1 million	\$52.6 million
Induced Effect	867.9 positions	\$30.5 million	\$105.9 million
Total Effect	3,999.7 positions	\$230.6 million	\$461.8 million

Public Revenues	
State and Local	\$22.1 million
Federal	\$44.6 million
Total	\$66.6 million

TABLE 2

Annual economic impacts on balance of Illinois associated with operational expenditures, employment compensation, and student spending within the six-county region of Eastern Illinois University in 2015.

Impact Type	Employment	Labor Income	Output
Direct Effect	0 positions	\$0 million	\$0 million
Indirect Effect	66.5 positions	\$5.1 million	\$17.4 million
Induced Effect	131.6 positions	\$8.4 million	\$24.3 million
Total Effect	198.1 positions	\$13.5 million	\$41.7 million

Public Revenues	
State and Local	\$2.2 million
Federal	\$3.3 million
Total	\$5.5 million

TABLE 3

Total annual economic impacts in the State of Illinois associated with operational expenditures, employment compensation, and student spending within a six-county region of Eastern Illinois University in 2015.

Impact Type	Employment	Labor Income	Output
Direct Effect	2,788.9 positions	\$186.1 million	\$303.2 million
Indirect Effect	409.3 positions	\$19.2 million	\$70.0 million
Induced Effect	999.5 positions	\$38.9 million	\$130.2 million
Total Effect	4,197.8 positions	\$244.2 million	\$503.5 million

Public Revenues	
State and Local	\$24.3 million
Federal	\$47.8 million
Total	\$72.1 million

Multiplier Effect

The economic impact of Eastern Illinois University is also expressed through the use of multipliers. In economics, a multiplier is a factor by which gains in total output are greater than the change in spending that caused it. More specifically for institutions such as Eastern Illinois University, a multiplier is a ratio of effect that describes the degree of change in employment, compensation, or output as influenced by institution. This measure is determined by dividing the total impacts by the number of employees, annual employment compensation, or annual operational expenditures (combined operating and employment) of the institution. EIU's regional and statewide impact multipliers for these characteristics are as follows:

- Employment multipliers: 1.71 (regional) and 1.79 (statewide)
- Employment compensation: \$1.31 (regional) and \$1.39 (statewide)
- Output multiplier: \$1.83 (regional) and \$1.99 (statewide)

Accordingly, within the six-county region, for every position generated or supported, another .71 positions is created. For every \$1 of employment compensation paid, an additional \$.31 in compensation is generated, and for every \$1 in combined operating costs expended by Eastern Illinois University, an additional \$.83 in economic output is generated or supported within the region.

Within the entire state, for every one position generated or supported, .79 additional positions are created. For every \$1 of employment compensation paid, another, \$.39 in compensation is generated, and for every \$1 in combined operating costs expended by Eastern Illinois University, an additional \$.99 in economic output is generated within the Illinois economy.

This translates as follows:

- **For every 100 persons employed by Eastern Illinois University, an additional 71 jobs are added to the region and a total of 79 are added in Illinois.**
- **For every \$10,000 Eastern Illinois University pays in labor income, an additional \$3,100 is added to the regional economy and a total of \$3,900 is added to the state's economy.**
- **For every \$100 in operating costs expended by Eastern Illinois University, an additional \$83 in economic output is generated in the region and a total of \$99 is generated within the Illinois economy.**



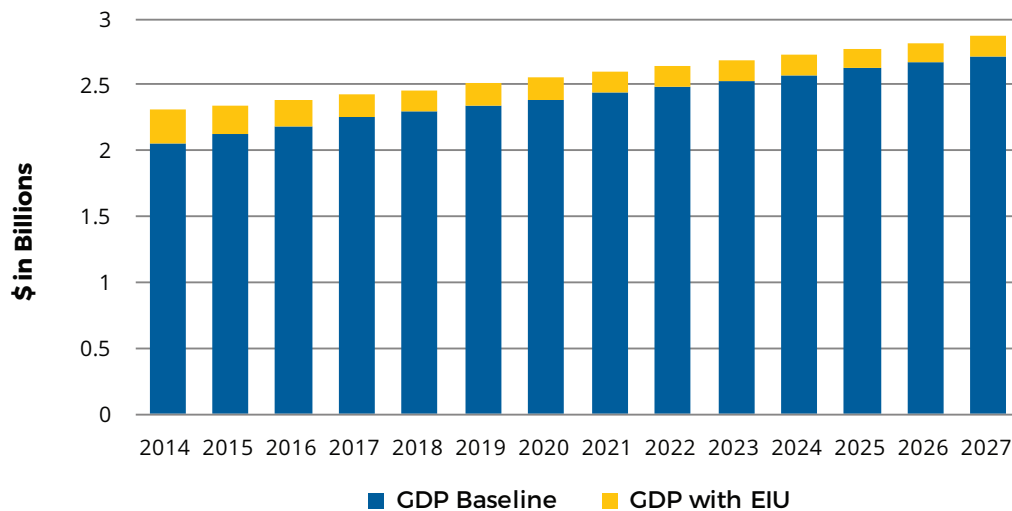
For every 100 persons employed by EIU 71 jobs are added to the region.

For every \$10,000 EIU pays in labor income, an additional \$3,100 is added to the regional economy.

Gross Domestic Product Impact in Coles County

Eastern Illinois University contributes an average of 7.4% annually to the Coles County Gross Domestic Product (GDP). Variables affecting GDP include student spending, tuition, rental income, EIU events, as well as employee salaries.

EIU GDP Contribution



Student spending in Coles County is

\$8.6 million

for every 1,000 students enrolled at EIU.

Student spending is a major component of county GDP. The Planning and Institutional Research Department at EIU estimates all students spend \$2,242 a year on miscellaneous items, including entertainment, personal items, motor fuel, and restaurant purchases. Students living off-campus spend **an additional** \$10,214 a year on rent, food, and other living expenses. Given the average annual amount spent for rent is \$5,000, \$5,214 is spent by off-campus students for living expenses. EIU estimates 38% of students live on-campus and 62% live off-campus. With this information, local economic impacts as a result of annual student spending were calculated in the following table.

Year	2014	2015	2016	2017
Student Misc. Spending	\$21,915,550	\$19,982,946	\$19,101,840	\$16,624,430
Off-Campus Addtl Spending	\$31,602,054	\$28,812,564	\$27,540,348	\$23,968,758
Off-Campus Housing	\$30,305,000	\$27,630,000	\$26,410,000	\$22,985,000

Year	2014	2015	2016	2017
Student Misc. Spending	\$17,729,094	\$17,936,000	\$18,496,500	\$19,057,000
Off-Campus Addtl Spending	\$24,912,492	\$25,861,440	\$26,669,610	\$27,639,414
Off-Campus Housing	\$23,890,000	\$24,800,000	\$25,575,000	\$26,505,000

Year	2014	2015	2016	2017
Student Misc. Spending	\$19,617,500	\$20,178,000	\$20,738,500	\$21,299,000
Off-Campus Addtl Spending	\$28,285,950	\$29,094,120	\$29,902,290	\$30,170,460
Off-Campus Housing	\$27,125,000	\$27,900,000	\$28,675,000	\$29,450,000

Year	2026	2027
Student Misc. Spending	\$21,859,500	\$22,420,000
Off-Campus Addtl Spending	\$31,518,630	\$32,326,800
Off-Campus Housing	\$30,225,000	\$31,000,000

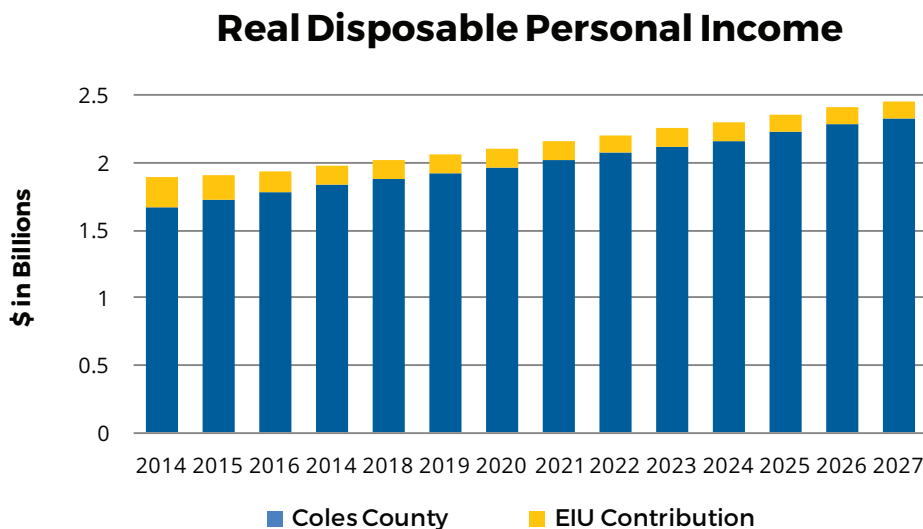


\$20 million

flows back into the Coles County economy from EIU attributed spending. (for every 1,000 students)

Real Disposable Personal Income Impact in Coles County

Real Disposable Personal Income is income transferred back into the economy through miscellaneous purchases. EIU's average annual contribution to Real Disposable Personal Income in Coles County is 7.27%.



EIU's impact on Real Disposable Personal Income in Coles County is shown below in real dollars. In 2017, EIU's contribution will be \$134.4 million.

Year	2014	2015	2016	2017
EIU Contribution	\$220,208,103	\$174,575,700	\$153,091,134	\$134,451,127

Additional Economic Activity

With the increase in disposable income, additional dollars are spent for restaurant and food services, recreation, living expenses, housing expenditures (which has a positive impact on residential real estate taxes—see box below), and motor fuel purchases. For example, EIU generates an additional \$6 million spent on healthcare, an additional \$1.5 million spent on new motor vehicles, and restaurants and bars see an increase of \$4.8 million. The increase in economic activity is captured in these sectors due to student spending and EIU operations and activities.

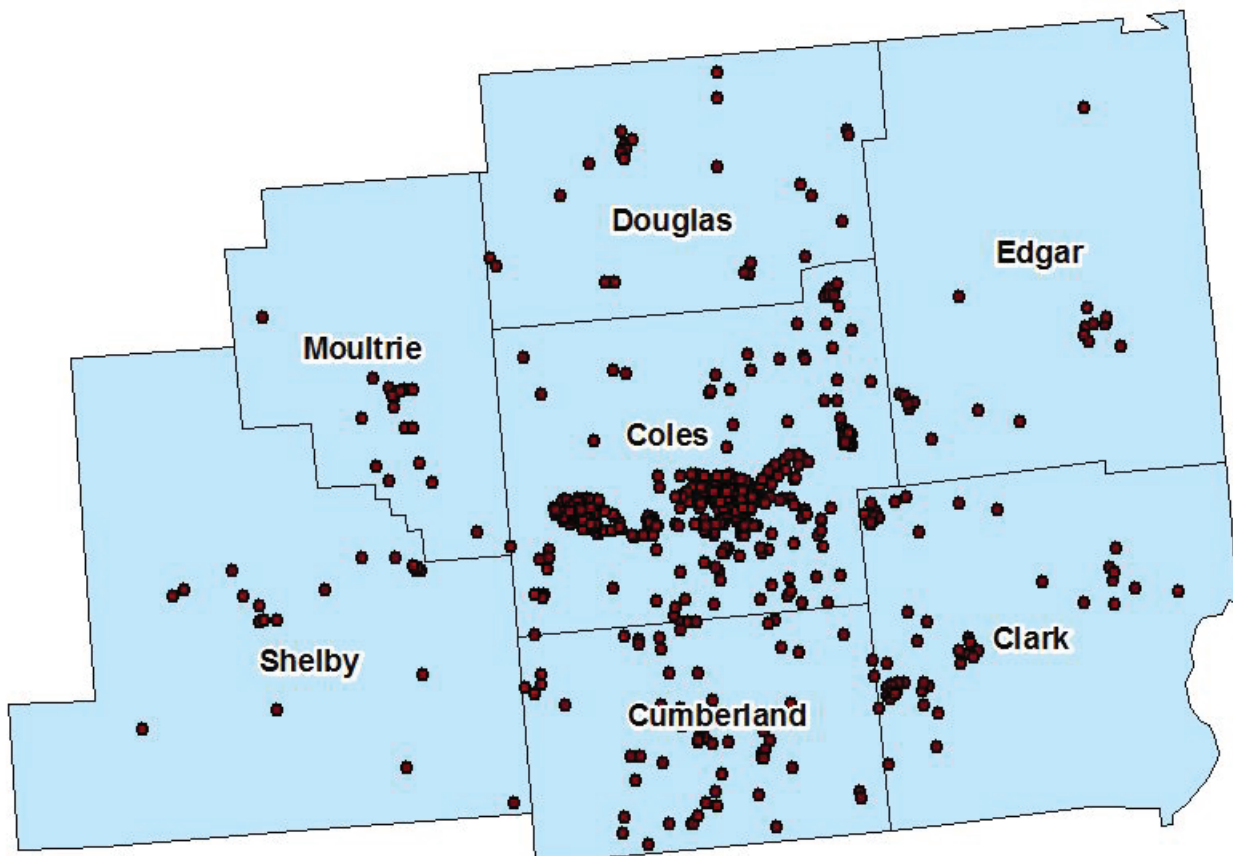
Nearly **\$3 million** is generated annually in residential property tax revenue from 1,175 EIU employees residing in Coles County

Employment Impact

During fiscal year 2015 Eastern Illinois University directly employed 2,341 full-time and part-time individuals, 1,175 of whom reside in Coles County. The multiplier effect resulted in 4,198 positions statewide, 4,000 positions in the region, and 3,523 in Coles County. The following chart identifies the University's impact on jobs in Coles County from 2014-2017.

Year	2014	2015	2016	2017
Coles County Workforce	31,926	32,443	32,906	33,343
Jobs Contributed by EIU	4,516	4,007	3,523	3,434
Contribution Percentage	14.15%	12.35%	10.71%	10.30%

1,457 individuals employed directly by Eastern Illinois University live within the seven-county region depicted below. (Each dot represents one employee).



Coles County is an employment hub for the six surrounding counties as evidenced by commuting patterns which show more of the six counties’ residents work in Coles County than Coles County residents work in the six counties.

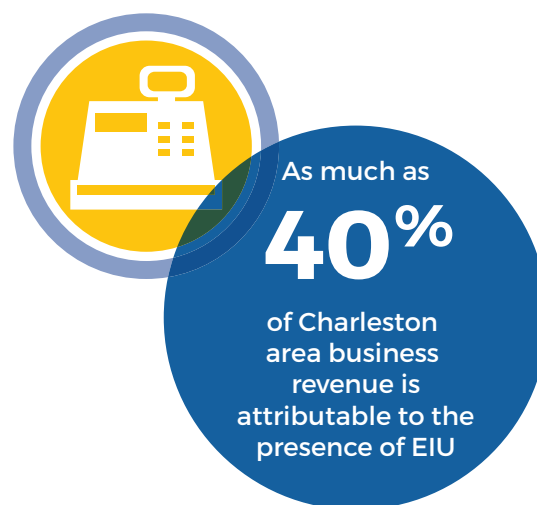
County	% of Workers Employed in the County Where They Reside
Clark	59.1%
Coles	83.5%
Cumberland	36.7%
Douglas	58.3%
Edgar	64.9%
Moultrie	58.7%
Shelby	49.8%

As EIU’s enrollment increases, so does the effect on the labor market. As mentioned, EIU’s presence consistently contributes over 10% percent of the jobs in Coles County. Sectors impacted include construction, professional and technical positions, administrative positions, healthcare, waste management services, arts, entertainment and recreation, food services, real estate, rental and leasing, and retail trade, among others.

The Charleston Area Chamber of Commerce surveyed members to analyze EIU’s impact on local businesses. Results indicate University students, faculty, and staff, and visitors are frequent customers and loyal patrons, driving business and investment decisions. Many local businesses also employ a number of current University students, as well as alumni.

The table below represents the percentage of revenue businesses attribute to the University’s presence in the community.

Percentage of Sales	Number of Responses	Response Ratio
Less than 10%	10	15.87%
10-20%	10	15.87%
21-30%	11	17.46%
31-40%	12	19.05%
41-50%	4	6.35%
51-60%	2	3.17%
61-70%	1	1.59%
71-80%	2	3.17%
81-90%	0	0.00%
91-100%	3	4.76%
*	8	12.70%
Total	63	100%



* Eight survey takers chose not to respond to this question.

Findings

- Eastern Illinois University adds \$503.5 million in economic output to the State of Illinois and \$461.8 million in economic output to the region on an annual basis.
- Eastern Illinois University contributes \$244.2 million in labor income to the State of Illinois and \$230.6 million in labor income to the region.
- Eastern Illinois University adds 4,198 jobs to the State of Illinois and 4,000 jobs to the region.
- Eastern Illinois University supports more than 10.3% of the jobs in Coles County.
- Eastern Illinois University adds \$72.1 million in local, state, and federal tax revenue, excluding property tax.
- Property tax revenue generated by direct employment at Eastern Illinois University (no indirect or multiplier effects included) is nearly \$3 million in Coles County alone.
- Every 1,000 students who attend EIU add an additional \$8.6 million to the Coles County economy.
- Real Disposable Personal Income in Coles County grows by more than \$20 million for every 1,000 students enrolled at EIU.
- EIU students who live off campus each spend an average of \$12,456 annually in Coles County. On campus students spend \$2,242 annually in Coles County in addition to tuition and fees.
- Charleston area businesses attribute up to 40% of revenue to EIU's presence.
- 1,457 EIU employees live in the seven Illinois counties of Coles, Clark, Cumberland, Douglas, Edgar, Moultrie, and Shelby.

Conclusion

The economic impact of Eastern Illinois University on the local economy is remarkable in its breadth and depth. The institution outperforms the economic impact of most industries in Coles County. For every dollar spent by the University, additional employment, revenue, and wealth are created in the county. The institution is a direct and indirect job creator and business anchor for the county and the region. The presence of the University provides opportunities for increased economic growth in the region and is also the focal point for an enhanced quality of life for the residents of the region.

Software and Methodology

IMPLAN 3.1

This report uses IMPLAN 3.1, a nationally recognized input output economic impact modeling software to examine the manner in which various economic activities associated with Eastern Illinois University impact the State of Illinois and a sub-state region. This report uses two approaches in examining the University's contributions. The first approach estimates EIU's economic impacts relative to the economy for the entire State of Illinois. The second approach utilizes a multi-region analysis that estimates the impacts of the economic activities within a six-county region in eastern Illinois surrounding EIU's Charleston campus.

The six-county region analysis examined the following economic activities associated with Eastern Illinois University:

IMPLAN Economic Impact Modeling Process

IMPLAN 3.1 generates estimates of annualized impacts on a specified geography relative to a change to an institution or industry sector within that region. The changes are introduced to an econometric matrix of trade flows, supply/demand, and purchasing coefficients that represent the regional economy.

For this study, the changes modeled are those related to various EIU-related economic and financial activities including:

- University-related employment and employment compensation;
- Annual university non-employment operating costs;
- Annual student expenditures for off-campus living expenses; and
- Annual rental and leasing for off-campus students.

Regions of Analysis

The IMPLAN 3.1 study focused on economic impacts for two regions of analysis. One region is the State of Illinois. The second region of analysis is the six-county area representing the primary area of operations and University labor shed. This region consists of Coles, Champaign, Cumberland, Douglas, Edgar, and Moultrie Counties. The results reported in this study reflect the annual economic impacts occurring within the six-county area as well as the downstream impacts on Illinois' remaining 96 counties relative to expenditures and employment within the smaller region.

Regional Economic Modeling, Inc., (REMI PI+)

The study also utilized REMI software to run simulations of Eastern Illinois University operations and expenditures against a baseline model of Coles County. The impacts discussed in the report related to Coles County were obtained from the REMI modeling.

REMI modeling began as a technology transfer company at the University of Massachusetts-Amherst and is full-service software for economic and demographic analysis at the county and state level. The REMI software has been used nationwide by state and local governments, federal agencies, consulting firms, nonprofit organizations, and academic institutions. Universities such as New Mexico State University and Montana State University have used the REMI software to measure economic impact. The REMI PI+ (Policy Insight Plus) model is a dynamic regional economic simulation model used to forecast and measure the impact of public policy changes on economic activity and demographics. The model utilizes different economic modeling methods, input-output analysis, computable general equilibrium, region-to-region trade flows, and estimation of statistical parameters from observed historical data.

Commuting Pattern Data

A third region of analysis represented the seven counties of Coles, Clark, Cumberland, Douglas, Edgar, Moultrie, and Shelby for purposes of analyzing commuting patterns and demonstrating the importance of Coles County as an employment center. Data was derived from the Bureau of the Census IL "County to County Worker Flow Files" compiled for the period 2010-2013 and made available to the Illinois Department of Employment Security in August, 2015.