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# High-Impact Higher Education

*Understanding the Costs of the  
Recent Budget Impasse in Illinois*

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## Executive Summary

Investing in higher education is a smart economic development policy that boosts incomes, supports employment, and grows the economy. Illinois has world-class public universities and community colleges that serve as economic engines in local communities. The recent budget crisis in Illinois, however, had negative impacts on public universities and community colleges in the state. This report assesses the positive economic impacts of public universities and colleges in Illinois and measures the costs of the two-year budget impasse.

### **Public universities and community colleges in Illinois provide significant contributions to the economy.**

- In 2016, there were more than 792,000 students enrolled at these institutions, including 620,000 students at community colleges and 172,000 undergraduate and graduate students at universities.
- This public investment supports more than 123,900 total jobs annually for Illinois residents, including 79,600 direct jobs at university and college positions that annually pay \$64,000 per worker.
  - 61,500 total jobs are supported in the Chicago area.
  - 31,000 total jobs are supported in the East Central Region, which comprises the University of Illinois at Urbana-Champaign.
  - 19,900 total jobs are supported in southern Illinois.
- Public universities and community colleges boost the Illinois economy by \$16.1 billion every year.
  - \$9.3 billion in net economic activity is supported in the Chicago area, in part because a disproportionate share of college students comes from the region.
  - \$3.4 billion in net economic activity is supported in the East Central Region.
  - \$829 million in net economic activity is supported in the Bloomington and Peoria area.
- Illinois' twelve state universities alone contribute \$12.7 billion to the state's economy every year.
  - The University of Illinois at Urbana-Champaign generates 30,500 total jobs.
  - The University of Illinois at Chicago saves or creates 18,500 total jobs.
  - Illinois State University supports 13,400 total jobs.

### **The two-year budget impasse was a failure of leadership that had disproportionate and lasting consequences for public universities and community colleges.**

- The budget impasse caused students to question whether they should attend college in Illinois.
  - The cost of tuition and fees at public universities increased by over \$900 per year (6.7 percent).
  - 42,800 fewer students were enrolled at public universities and colleges in the Chicago area.
  - 18,900 fewer students were enrolled at public universities and colleges across southern Illinois.
- The impasse resulted in 7,500 higher education-related jobs lost in Illinois, including 4,900 direct jobs.
  - Chicago State University laid off 40 percent of its employees in 2016.
  - 78 percent of all job losses occurred in either the Chicago area or the East Central Region.
  - 2,300 professors and instructors (with annual salaries averaging \$87,700) lost their jobs.
- The fiscal strain on universities and colleges cost the Illinois economy nearly \$1 billion each year.
  - Annual gross regional product declined by \$487 million in the Chicago area.
  - Annual gross regional product declined by \$289 million in the East Central Region.
  - Annual gross regional product declined by more than \$78 million in the West Central Region.

Illinois must get back on the right track in the wake of the significant damage caused by the two-year budget impasse— with university reserves exhausted, programs cut, workers laid off, and credit ratings downgraded. Illinois can correct past mistakes by evolving into a national leader on making college affordable for its citizens or by expanding tuition grants to residents. College-educated workers accept better jobs, contribute more in taxes, and rely less on government assistance programs over the long run. Investments in higher education are thus good for both the Illinois economy and the state's budget.

## Table of Contents

Executive Summary	i
Introduction	1
A Brief Summary of Economic Research on Public Investments in Higher Education	1
Economic Impact Analyses Explained	2
The Regional Economic Impact of Public Universities and Colleges in Illinois	3
The Effect of State Universities on the Entire Illinois Economy	6
Assessing the Costs of the Budget Impasse on Public Universities and Colleges	7
Conclusion	11
Sources	12
Cover Photo Credits	13

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## **Introduction**

Investing in higher education is the key to a vibrant state economy. Individuals who are better-educated tend to be more productive and more innovative. To attract these individuals, businesses and organizations compensate skilled workers with higher wages and salaries. Furthermore, an increase in the supply of skilled workers itself stimulates additional demand because employers from other areas are attracted to the market and highly-educated individuals are more likely to engage in entrepreneurial activity by starting their own companies. Thus, as more people attain higher levels of education, businesses open, wages rise, and economic growth ensues.

Illinois has world-class public universities and community colleges. For years, these public institutions have educated hundreds of thousands of students, preparing them to become productive members of the workforce and scholarly members of society. Illinois' public universities and colleges serve as economic engines in local communities— directly employing thousands of workers every year— and provide advancements in research that drive output growth on a global scale.

The recent two-year budget impasse in Illinois, however, had negative impacts on public universities and community colleges. Faced with funding uncertainties, institutions exhausted their financial reserves, cut programs, and laid off workers. Many saw their credit ratings downgraded. Enrollment declined, as thousands of Illinois-born students left the state to attend college elsewhere. While the new state budget restores most funding for higher education and is an improvement over the alternative of no funding, the consequences of the fiscal crisis that occurred during the first two years of the Rauner Administration will have lasting impacts on the finances and reputations of state universities and colleges.

In an effort to understand the annual impact that public institutions of higher education have in Illinois and to measure the economic costs of the two-year budget impasse on public universities and community colleges, the Illinois Economic Policy Institute (ILEPI) and the Project for Middle Class Renewal in the School of Labor and Employment Relations at the University of Illinois at Urbana-Champaign have prepared this policy brief. The report begins with a short review of relevant economic research and an explanation of economic impact analyses. Then, the effects of public universities and community colleges on jobs and market activity in regional economies are evaluated and discussed. The effects of Illinois' public universities on the entire state economy are subsequently presented. A following section assesses the costs of the two-year budget crisis— on enrollment, jobs, and economic activity across Illinois— before a concluding section recaps key findings.

## **A Brief Summary of Economic Research on Public Investments in Higher Education**

The preponderance of policy research concludes that public investments in education have positive impacts on the economy. An additional year of education for an individual boosts his or her earnings by 7 to 10 percent ([Stevens & Weale, 2003](#)). On a macro level, a country whose average educational attainment increases by one year experiences a 1.2 percentage-point increase in economic growth and a higher employment-to-population ratio ([Barro, 1997](#); [Blomquist et al., 2009](#)). Other research has found that a 10 percent increase in spending on public education statistically leads America's youth to complete more schooling, improves their future wages in the labor market by 7.3 percent, and reduces their chances of living in poverty once they hit adulthood by 3.7 percentage points ([Jackson et al., 2015](#)). These impacts— which include elementary, secondary, and postsecondary education— echo previous economic studies ([Fisher, 1997](#); [Bensi et al., 2004](#); [Bauer et al., 2007](#)).

Additionally, a well-educated workforce in a state builds the foundation for shared economic prosperity. Median wages are substantially higher in states with better-educated workers. The statistical correlation between the share of a state's workforce with a bachelor's degree or more and the median hourly wage in that state is 0.78, indicating a strong positive relationship ([Berger & Fisher, 2013](#)). In the 22 states where less than

30 percent of the workforce had at least a bachelor's degree, the typical median wage was \$15 per hour in 2012. By contrast, "in the three states where more than 40 percent of the population has a bachelor's or more education, median wages [were] \$19 to \$20 an hour, nearly a third higher" in 2012 ([Berger & Fisher, 2013](#)).

Two recent reports by Bruno and Manzo corroborate the conclusion that areas with more college graduates tend to have better economic outcomes. In an analysis of 24 different policies and economic phenomena at the state-level, raising the share of the population with a bachelor's degree was one of only four public policies found to directly support employment.<sup>1</sup> A one percentage-point increase in the share of the population with a bachelor's degree is statistically associated with a 0.80 percentage-point increase in the employment rate in a state ([Manzo & Bruno, 2015](#)). Similarly, in urban counties across the United States, a one percentage-point increase in the share of African Americans with at least a bachelor's degree is statistically associated with as much as a 0.5 percentage-point decline in the local African-American unemployment rate ([Manzo et al., 2017](#)).<sup>2</sup>

Finally, economists and corporate executives respond in surveys that investments in higher education are favorable to economic growth. In a 2016 survey of 110 economics professors and public policy professors at accredited university programs in Illinois, a majority (55 percent) said that raising the share of the workforce with a bachelor's degree or higher would improve the state's employment rate and grow the economy ([Manzo, 2016](#)). Moreover, *Area Development* annually surveys approximately 200 corporate executives about the most important factors in their firm location decisions. Over the five most recent surveys, the availability of skilled labor has consistently been among the top two site selection factors, with about 90 percent of respondents saying that it is important ([Area Development, 2017](#)). Consistently, whether in academic policy research or surveys of experts, investment in higher education has been understood to be an effective economic development tool.

## **Economic Impact Analyses Explained**

In this report, economic impact analyses are utilized to estimate the effect of public universities and community colleges on regional markets in Illinois. Economic impact analyses are used by policy experts and economic development professionals to assess impacts on everyone who benefits or loses as a result of a new public policy or change in program spending, parsing out the impact from what would have otherwise occurred in the absence of the policy. The analysis accounts for the interrelationship between industries and households in a regional market, following a dollar as it cycles through the local economy. This report utilizes IMPLAN, an industry-standard software which uses U.S. Census Bureau data to capture all transactions in Illinois while also accounting for business and household taxes ([IMPLAN, 2017](#)).

The IMPLAN software uses multipliers to estimate how much an extra dollar spent in an industry or on a program will add to the local economy. The estimates in IMPLAN are itemized by direct, indirect, and induced impacts. For example, in estimating the impact of university expenditures, these impacts would respectively provide the effects on professors, teaching assistants, and dormitory staff who are directly employed, companies that indirectly benefit by providing services and materials to support educational activities, and consumer demand induced by the public expenditures. The models also include a "local purchase percentage," which is the share of education spending that is expected to remain in the economy, with the rest "leaking" to other areas. This local purchase percentage thus represents the value of available supply to meet the local demand and is based on market transactions data provided by IMPLAN.

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<sup>1</sup> Access to early childhood education programs, highway and bridge improvements and expansions, and investments that reduce commute times are the three other policies that were found to directly support employment at the state-level ([Manzo & Bruno, 2015](#)).

<sup>2</sup> Other policies that reduce African-American unemployment in urban counties include boosting public sector employment, investing in public transportation, reducing the costs of homeownership, and enforcing prohibitions against racial discrimination in employment practices ([Manzo et al., 2017](#)).



The Illinois Department of Commerce and Economic Opportunity (DCEO) divides the state into ten economic development regions. Each region includes counties that share a single labor market, have similar commuting patterns, and are integrated economically by their industrial composition. In general, each region also has a core urban area with anchor educational institutions to develop skillsets and innovative capacities. DCEO's ten economic development regions, shown in Figure 1, are used in this report ([Illinois DCEO, 2017](#)).

**FIGURE 1: DEFINITIONS OF ECONOMIC DEVELOPMENT REGIONS IN ILLINOIS**

Economic Development Region	Counties Covered
Region 1: Central	Cass, Christian, Greene, Logan, Macon, Macoupin, Menard, Montgomery, Morgan, Sangamon, Scott, Shelby
Region 2: East Central	Champaign, Douglas, Ford, Iroquois, Piatt, Vermilion
Region 3: North Central	DeWitt, Fulton, Livingston, McLean, Marshall, Mason, Peoria, Stark, Tazewell, Woodford
Region 4: Northeast	Cook, DeKalb, Du Page, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Will
Region 5: Northern Stateline	Boone, Ogle, Stephenson, Winnebago
Region 6: Northwest	Bureau, Carroll, Henry, Jo Daviess, LaSalle, Lee, Mercer, Putnam, Rock Island, Whiteside
Region 7: South East	Clark, Clay, Coles, Crawford, Cumberland, Edgar, Effingham, Fayette, Jasper, Lawrence, Marion, Moultrie, Richland
Region 8: Southern	Alexander, Edwards, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Massac, Perry, Pope, Pulaski, Saline, Union, Wabash, Wayne, White, Williamson
Region 9: South West	Bond, Calhoun, Clinton, Jersey, Madison, Monroe, Randolph, St. Clair, Washington
Region 10: West Central	Adams, Brown, Hancock, Henderson, Knox, McDonough, Pike, Schuyler, Warren

Source(s): *Illinois DCEO, 2017– "Region Specific Assistance."*

## The Regional Economic Impact of Public Universities and Colleges in Illinois

Public universities and community colleges educate and train hundreds of thousands of students every year. In 2016, there were more than 792,000 students enrolled at these institutions in the state, including approximately 620,000 students at two-year community colleges and 172,000 undergraduate and graduate students at universities. Illinois' public universities and colleges – which are funded by state, local, and federal tax dollars, private donations and activities, and student tuition fees – spent \$11.8 billion in total in 2016 (Figure 2).

The majority of college students in Illinois are located in two economic regions: the Northeast Region and the East Central Region (Figure 2). The Northeast Region includes the University of Illinois at Chicago, Northern Illinois University, the City Colleges of Chicago, and numerous suburban colleges– the largest of which is the College of DuPage. The East Central Region comprises the University of Illinois at Urbana-Champaign, Parkland College, and the Danville Area Community College. These two regions cumulatively account for more than 503,000 students and \$8.2 billion invested in higher education, respectively 63.5 percent and 69.8 percent of the state totals.

Accordingly, about one-third of all students are enrolled in the rest of the state (Figure 2). The Southern and South West Regions, anchored by the Southern Illinois University System, spend about \$1.5 billion to teach nearly 103,000 full-time students. Higher education spending amounts to \$719.5 million in the North Central Region, where almost 74,000 students attend Illinois State University, Illinois Central College, Heartland Community College, and Spoon River College. Another 25,000 students are enrolled in the Central Region of Illinois, home to the University of Illinois at Springfield.

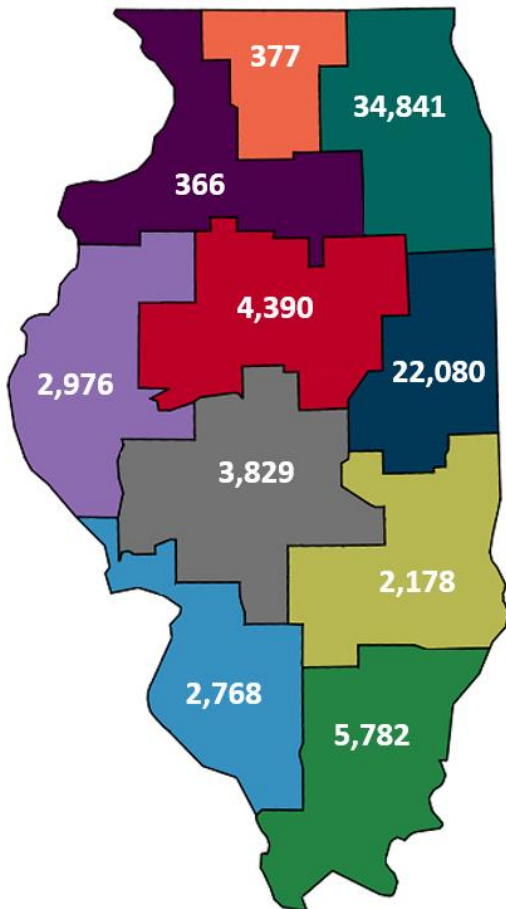
**FIGURE 2: TOTAL ENROLLMENT AND TOTAL PUBLIC HIGHER EDUCATION EXPENDITURES BY REGION, 2016**

Economic Development Region	Total 2016 Enrollment	Total 2016 Expenditures	Largest Public Institution (By Total Expenditures)
<b>State Totals</b>	<b>792,345</b>	<b>\$11,808.8 million</b>	--
Region 1: Central	25,209	\$489.8 million	University of Illinois at Springfield
Region 2: East Central	73,745	\$3,336.2 million	University of Illinois at Urbana-Champaign
Region 3: North Central	48,512	\$719.5 million	Illinois State University
Region 4: Northeast	429,174	\$4,910.8 million	University of Illinois at Chicago
Region 5: Northern Stateline	17,205	\$88.8 million	Rock Valley College
Region 6: Northwest	20,002	\$96.1 million	Black Hawk College
Region 7: South East	61,888	\$329.1 million	Eastern Illinois University
Region 8: Southern	50,097	\$927.7 million	Southern Illinois University-Carbondale
Region 9: South West	52,737	\$560.0 million	Southern Illinois University-Edwardsville
Region 10: West Central	13,776	\$350.8 million	Western Illinois University

Source(s): *Illinois DCEO, 2017*– “Region Specific Assistance;” *Illinois Auditor General, 2017*– “Audit Reports;” *IBHE, 2017a*– “Data & Statistics;” *IBHE, 2016*– “Fall 2016 Enrollment Snapshot for Public Universities;” *ICCB, 2017*– “Data & Reports.”

**FIGURE 3: DIRECT JOBS SUPPORTED BY INVESTMENT IN PUBLIC UNIVERSITIES AND COMMUNITY COLLEGES, 2016**

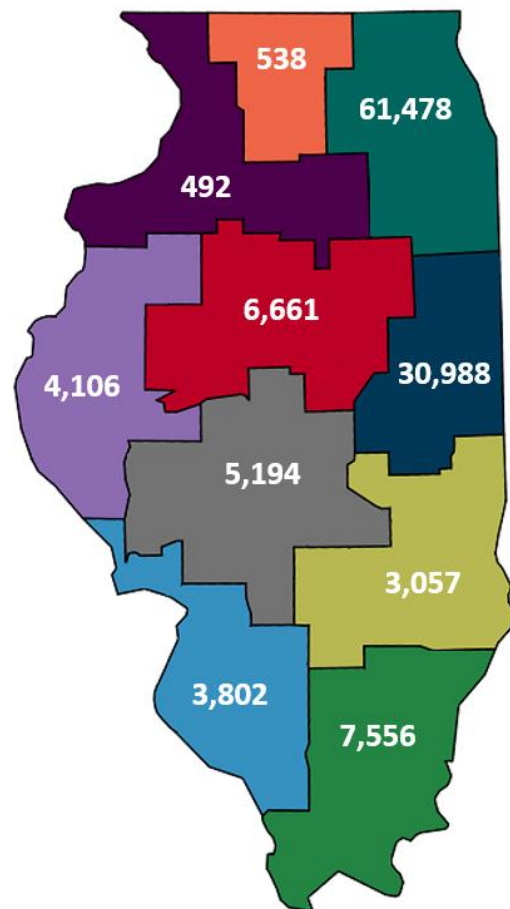
*State: 79,588 Direct Jobs*



Source(s): *IMPLAN, 2017* software; *Illinois Auditor General, 2017*– “Audit Reports;” *IBHE, 2017a*– “Data & Statistics;” *ICCB, 2017*– “Data & Reports.”

**FIGURE 4: TOTAL JOBS SUPPORTED BY INVESTMENT IN PUBLIC UNIVERSITIES AND COMMUNITY COLLEGES, 2016**

*State: 123,872 Total Jobs*



Source(s): *IMPLAN, 2017* software; *Illinois Auditor General, 2017*– “Audit Reports;” *IBHE, 2017a*– “Data & Statistics;” *ICCB, 2017*– “Data & Reports.”

This information is used to assess the annual economic impact of public universities and community colleges in Illinois. Public universities and community colleges in Illinois provide significant contributions to the state, national, and global economies. While the bulk of the benefits accrue in Illinois, it is important to recognize that economic impacts spill over into other states and countries. A portion of workers directly employed by public universities and colleges in Illinois live and shop in neighboring states. Many international students attend Illinois' four-year public universities. Textbooks purchased by Illinois students may have been written by authors from the University of Oregon and published by a firm in New York City, while laptops and tablets used by students are manufactured in Asian countries. Thus, while this analysis reports effects on Illinois only, it is worth noting that Illinois' public universities and colleges actually have larger impacts on jobs and economic activity at the national and global levels.

It is estimated that public universities and community colleges in Illinois employ about 79,600 workers (Figure 3). These direct positions, which range from building custodians and dormitory chefs to teaching assistants and tenured professors, pay an average annual compensation of \$64,000 per worker.<sup>3</sup> Including direct jobs, the public investment in Illinois' institutions of higher education saves or creates nearly 123,900 total jobs annually for Illinois residents (Figure 4).

Figures 3 and 4 present the jobs impacts by economic development region. In the Chicago area, public universities and colleges support almost 61,500 total jobs, including more than 34,800 direct jobs. Another 31,000 jobs are created or saved annually in the East Central Region, with about 22,100 of those at the University of Illinois at Urbana-Champaign and nearby community colleges. Each year, public universities and colleges are responsible for creating about 1,000 total jobs in the rest of northern Illinois; 16,000 total jobs in the Central, North Central, and West Central Regions; and another 19,900 direct, indirect, and induced jobs in the three southern-most economic areas of the state.

Public institutions of higher education boost the Illinois economy by an estimated \$16.1 billion every year (Figure 5).<sup>4</sup> Over half of the economic activity spurred by the state's public universities and community colleges occurs in the Northeast Region (58.0 percent). In total, the public institutions stimulate the Chicago area's gross regional product by \$9.3 billion every year. The East Central Region experiences the second-largest economic development, with \$3.4 billion in economic activity per year. Public universities and colleges add another \$829.1 million to the Bloomington and Peoria area, \$681.7 million in the Southern Region, and \$542.7 million in and around Springfield.

In some economic zones, the estimated impact reported in Figure 5 is lower than the total expenditures presented previously in Figure 2. For example, total expenditures in the Northern Stateline Region amounted to \$88.8 million in 2016, but the annual effect on economic output is projected at \$57.0 million in that region. This does not mean that the costs exceed the benefits, however; the economic impacts simply extend to other areas. For instance, Rock Valley College— which is located near Interstate 90 in the Northern Stateline Region—is fewer than 20 miles from the Wisconsin border and about 30 miles from the edge of Illinois' Northeast Region. While most of the economic impact of Rock Valley College occurs in the Rockford area, the college spurs significant economic activity elsewhere, from Peoria to Naperville in Illinois and from Davenport to Janesville in other jurisdictions.

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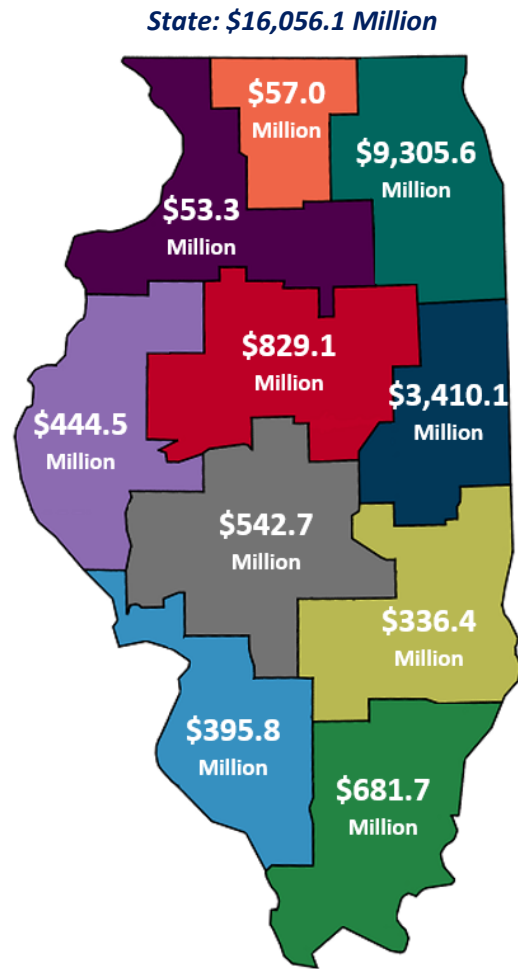
<sup>3</sup> While \$64,000 is the average, there is a sizeable pay difference among university employees. Campus administrators can receive high six-figure salaries, while office support staff can earn so little that they are eligible for public assistance. Universities have also become heavily dependent on part-time adjunct faculty who are typically paid a modest flat rate on a per-course basis.

<sup>4</sup> Note again that this estimate is for Illinois *only*. Illinois' public universities and community colleges have positive impacts that spill over into other states and countries as well. Thus, their total economic contribution is even larger than \$16.6 billion per year.



The ripple effect is largest for the Chicago area. While the Northeast Region cumulatively invests \$4.9 billion in public universities and colleges, the regional market experiences \$9.3 billion in net economic benefits annually (an economic multiplier of 1.89). There are a number of reasons why public universities and community colleges add greater value to the Chicago area. First, a considerable share of students who attend state universities in other parts of Illinois come from the City of Chicago and its surrounding suburbs. A student from Cicero who attends Western Illinois University and works at the bookstore in Macomb may spend a portion of her earnings back in Cicero over the summer, which stimulates consumer demand and increases economic activity in the Northeast Region. Second, the Chicago area is home to a disproportionate share of industries and firms that attract young, skilled individuals. The City of Chicago has a large financial industry, for example, that demands highly-educated workers and numerous corporate headquarters and startups are also located in Chicagoland. Finally, many of the goods and services needed to support educational activities originate in the Chicago area, the economic capital of the Midwest.

**FIGURE 5: NET ECONOMIC OUTPUT STIMULATED BY INVESTMENT IN PUBLIC UNIVERSITIES AND COMMUNITY COLLEGES, 2016**



Source(s): IMPLAN, 2017 software; Illinois Auditor General, 2017–“Audit Reports;” IBHE, 2017a– “Data & Statistics;” ICCB, 2017–“Data & Reports.”

## The Effect of State Universities on the Entire Illinois Economy

Figure 6 presents the annual economic impact of public expenditures by state universities in Illinois. The reported effects are estimates on the entire state. Thus, effects are broader than the analysis of economic development regions in the previous section but do not include spillover impacts in other states or other countries.

Every year, the twelve state universities in Illinois save or create 99,000 jobs in Illinois and contribute \$12.7 billion to the gross state product. The University of Illinois at Urbana-Champaign generates more than 30,500 total jobs and \$3.6 billion in economic activity every year for the State of Illinois. The University of Illinois at Chicago has the second-most economic development impact among the state universities, supporting 18,500 direct, indirect, and induced jobs and boosting the state’s economy by almost \$2.4 billion. Illinois State University is next, with nearly 13,400 jobs created and \$1.7 billion in economic activity produced, followed by Northern Illinois University, which is responsible for about 8,100 jobs and \$1.2 billion in output in Illinois. The

eight remaining state universities each save or create between 1,800 and 7,300 jobs and stimulate between \$269.9 million and \$831.5 million in economic activity (Figure 6).

**FIGURE 6: DIRECT JOBS AND NET ECONOMIC OUTPUT BY PUBLIC UNIVERSITIES, IMPACTS ON ENTIRE STATE, 2016**

Public University	Total Jobs Created or Saved in Entire State of Illinois	Annual Net Economic Output Supported in Entire State of Illinois
<b>State Totals</b>	<b>99,002</b>	<b>\$12,662.3 million</b>
University of Illinois at Urbana-Champaign	30,553	\$3,646.9 million
University of Illinois – Chicago	18,526	\$2,366.3 million
Illinois State University	13,385	\$1,709.6 million
Northern Illinois University	8,125	\$1,181.3 million
Southern Illinois University – Carbondale	7,303	\$831.5 million
University of Illinois – Springfield	4,118	\$436.6 million
Western Illinois University	3,957	\$488.9 million
Southern Illinois University – Edwardsville	3,654	\$576.4 million
Northeastern Illinois University	2,780	\$420.4 million
Eastern Illinois University	2,705	\$396.3 million
Governors State University	2,038	\$338.1 million
Chicago State University	1,858	\$269.9 million

Source(s): *IMPLAN, 2017* software; *Illinois Auditor General, 2017*– “Audit Reports;” *IBHE, 2017a*– “Data & Statistics.”

The economic impacts reported in Figure 6 generally align with studies by other organizations. A 2015 report by Economic Modeling Specialists International, for instance, estimated that the University of Illinois System adds \$6.7 billion in value to the state’s economy and saves or creates about 72,600 jobs through its “operation spending impact” (*EMSI, 2015*). By comparison, Figure 6 finds that the operations of the three University of Illinois campuses cumulatively contribute \$6.4 billion to the state’s economy and nearly 53,200 jobs. Similarly, a 2016 study by the Rural Economic Technical Assistance Center at Western Illinois University found that WIU boosts the economy by \$473 million and supports 3,900 jobs, almost equivalent to the \$488.9 million in economic output and roughly 4,000 jobs reported in Figure 6 (*RETAC, 2016*).

## Assessing the Costs of the Budget Impasse on Public Universities and Colleges

Illinois experienced cuts to essential public programs and services, economic stagnation, and \$15 billion in unpaid bills due to a two-year state budget impasse. Approximately 1 million people in Illinois lost services during the budget crisis, as the state failed to pay for public health, education, and wellness programs (*Responsible Budget Coalition, 2016*). Public universities and colleges in Illinois were disproportionately impacted, with some institutions of higher education exhausting their financial reserves, cutting programs, laying off workers, and even facing the possibility of closure. Additionally, the financial stress caused by the lack of a budget resulted in credit rating downgrades, leading the Higher Learning Commission to conclude that some public universities in the state could lose accreditation (*Civic Federation, 2017*).

This financial distress can be attributed entirely to the lack of state funding (Figure 7). During the two-year budget impasse, total expenditures at all public universities and colleges increased by \$369.5 million, a 3.2 percent increase over two years. At a national scale, the cost of college education increased by at least 6.3 percent during this time (*BLS, 2016*). This means that the increase in expenditures in Illinois was due almost exclusively to higher education cost inflation and not, as some might contend, to “overspending” by profligate government institutions. Despite rising costs, public universities and colleges received \$275.1 million less from all revenue sources during the budget crisis, resulting in a total annual funding gap of \$644.6 million.

At the same time, annual state funding for higher education declined by \$659.5 million in inflation-adjusted terms (Figure 7). Note that while annual state funding dropped by \$659.5 million, total revenue only decreased by \$275.1 million. This means that public universities and colleges brought in more money from other revenue sources— primarily from increased tuition costs paid by students but also from charitable alumni donations and private activities— to help close the deficit. Put plainly, other revenue sources kept up with inflation. Meanwhile, state funding fell, and the decrease in annual revenue from the state (\$659.5 million in inflation-adjusted terms) is essentially a dollar-for-dollar accounting of the total funding gap among all public universities and community colleges across Illinois last year (\$644.6 million). Public institutions in Illinois did not have a spending problem; they had a *revenue* problem caused by a lack of funding.

**FIGURE 7: RELATIONSHIP BETWEEN THE HIGHER EDUCATION DEFICIT AND STATE FUNDING DECREASES, FY2015-FY2017**

Annual Higher Education Deficit vs. Change in Annual State Funding	Dollar Value
Change in Total Public University and College Revenues from FY2015 to FY2017	-\$275.1 million
Change in Total Public University and College Expenditures from FY2015 to FY2017	\$369.5 million
<b>Net Change in Annual Higher Education Funding Surplus (Deficit) in FY2017</b>	<b>-\$644.6 million</b>
Average State Funding for Higher Education During Impasse FY2016 and FY2017	\$1,401.7 million
State Funding for Higher Education in FY2015 (Adjusted for 2017 Tuition and Fee Inflation)	\$2,061.3 million
<b>Real Change in Annual State Funding for Higher Education (FY2016 and FY2017 Average)</b>	<b>-\$659.5 million</b>

Source(s): *Illinois Auditor General, 2017*— “Audit Reports;” *Civic Federation, 2017*— “Higher Education Funding Shortfall Persists Despite New Budget;” *BLS, 2016*— “College Tuition and Fees Increase 63 Percent since January 2006.”

Students and their families were asked to pay more for college during the two-year budget impasse (Figure 8). The annual cost of tuition and fees increased by \$1,711 at Northeastern Illinois University (14.1 percent) and \$1,130 at Governors State University (12.1 percent). The Southern Illinois University System hiked tuition and fees by 9.5 percent and the University of Illinois System increased tuition and fees by between 2.0 percent and 5.2 percent. On average, tuition and fees at Illinois’ public universities rose by \$904 per year for in-state undergraduate students— a 6.7 percent increase— during the two-year budget impasse.

**FIGURE 8: IN-STATE TUITION COSTS AT PUBLIC UNIVERSITIES, SORTED BY PERCENT CHANGE, FY2015-FY2017**

Public University	Tuition and Fees Increase During Budget Impasse	Tuition and Fees Increase as a Percent Change
<b>Weighted State Average</b>	<b>+\$904</b>	<b>+6.7%</b>
Northeastern Illinois University	+\$1,711	+14.1%
Governors State University	+\$1,130	+12.1%
Southern Illinois University – Carbondale	+\$1,146	+9.5%
Southern Illinois University – Edwardsville	+\$905	+9.5%
Chicago State University	+\$920	+8.4%
Northern Illinois University	+\$969	+7.3%
Western Illinois University	+\$761	+6.5%
Illinois State University	+\$724	+5.6%
University of Illinois – Springfield	+\$626	+5.2%
Eastern Illinois University	+\$489	+4.5%
University of Illinois – Chicago	+\$596	+3.9%
University of Illinois at Urbana-Champaign	+\$343	+2.0%

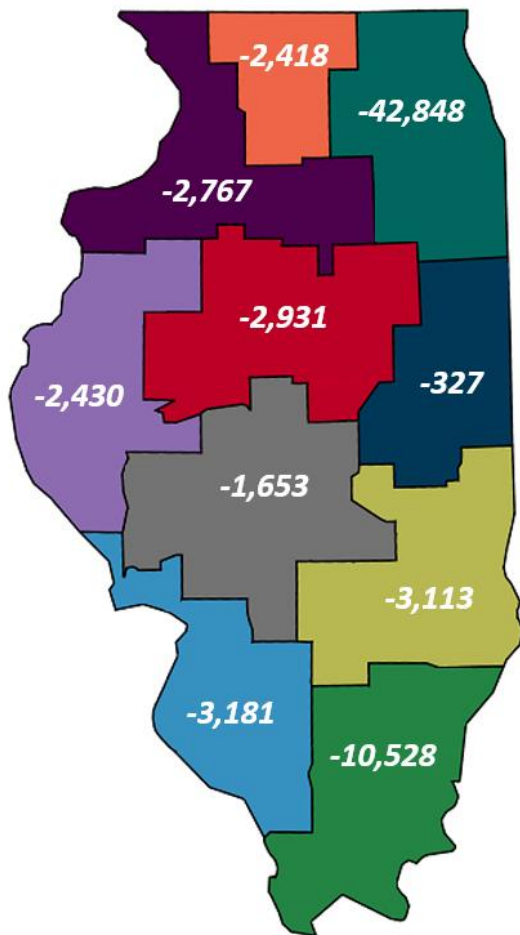
Source(s): *IBHE, 2017b*— “Student Tuition and Fees: Weighted Summary FY13-FY 17.”

Rising tuition costs caused many students to question whether they should attend college in Illinois. With the notable exception of the University of Illinois at Urbana-Champaign, which saw its largest freshman class in history (*UIUC, 2017*), most public universities experienced declining freshman enrollment (*Civic Federation,*

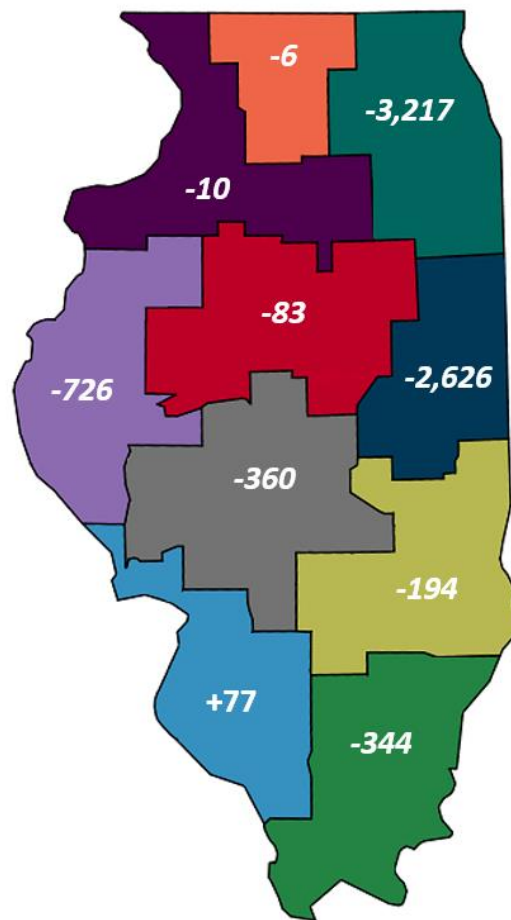
2017). Eastern Illinois University saw a 13 percent decline in enrollment from 2015 to 2016 among all students. Southern Illinois University at Carbondale (-7.6 percent), Western Illinois University (-6.5 percent), and Northern Illinois University (-5.5 percent) also experienced decreases in the number of students attending (Rhodes and Thayer, 2016).

Figure 9 presents the change in total enrollment at all public universities and community colleges in each region from 2014 to 2016. The Northeast Region saw 42,800 fewer students enrolled at public universities and colleges in 2016 than two years before. Public institutions saw a 10,500-student decline in attendance in the Southern Region, a 3,200-student drop in the South West Region, and a 3,100-student fall in the South East Region. The Northwest and Northern Stateline Regions enrolled 5,200 fewer students while the four integrated markets in Central Illinois saw a combined public enrollment decrease of more than 7,300 students. Note that while the University of Illinois at Urbana-Champaign's enrollment increased by approximately 1,300 total students, Parkland College and Danville Area Community College lost about 1,000 students and 600 students, respectively. In sum, public universities and community colleges across Illinois experienced a decline of nearly 72,200 students during the two-year budget impasse (Figure 9).

**FIGURE 9: CHANGE IN ENROLLMENT AT PUBLIC UNIVERSITIES AND COMMUNITY COLLEGES, 2014-2016**  
State: -72,196 Students Enrolled



**FIGURE 10: TOTAL HIGHER EDUCATION-RELATED JOBS LOST DUE TO BUDGET IMPASSE, 2014-2016**  
State: -7,490 Total Jobs



Source(s): IBHE, 2017a– “Data & Statistics;” ICCB, 2017– “Data & Reports.”

Source(s): IMPLAN, 2017 software; Illinois Auditor General, 2017– “Audit Reports;” IBHE, 2017a– “Data & Statistics;” ICCB, 2017– “Data & Reports.”

Professors and instructors were hit hard by the two-year budget crisis (Figure 11). According to occupational data from the Bureau of Labor Statistics at the U.S. Department of Labor, the number of postsecondary educators employed in Illinois declined by about 2,300 from May 2014 to May 2016, accounting for an estimated 47.2 percent of all direct jobs lost at universities and colleges during the budget impasse (BLS, 2017). While certain college-level occupations experienced growth over the two-year period, job losses overwhelmed job gains in the aggregate. More than 500 professorial and instructional positions were cut from the following fields: computer science; English language and literature; art, drama, and music; and education. Notably, the number of graduate teaching assistants employed at universities and colleges fell by almost 6,000. These jobs lost during the budget impasse were good-paying careers for Illinois residents, with an average annual salary of \$87,700.

**FIGURE 11: CHANGE IN THE EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS IN ILLINOIS, 2014-2016**

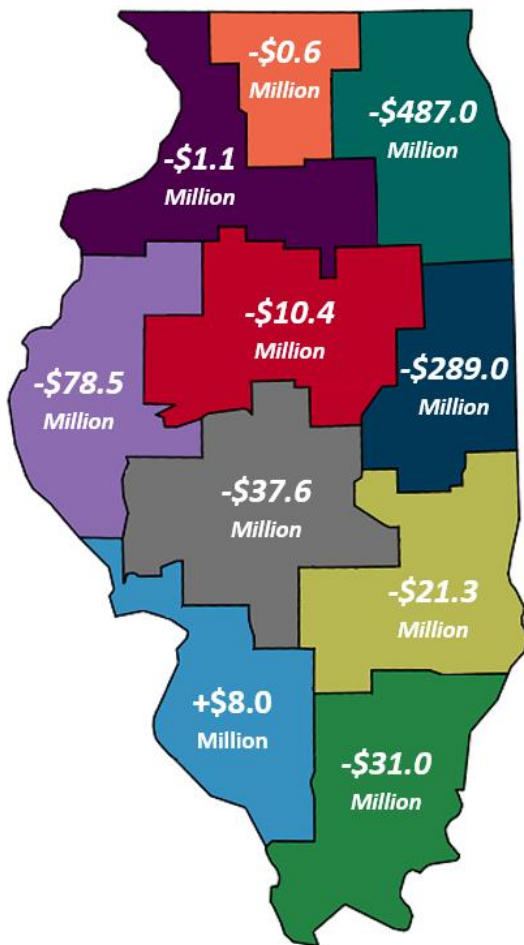
<i>Occupational Employment Statistics: Postsecondary Professors and Instructors in Illinois</i>	<b>May 2014</b>	<b>May 2016</b>	<b>Job Change</b>	<b>Average Salary (2016)</b>
<b>Total Employment in These Occupations</b>	<b>49,860</b>	<b>47,550</b>	<b>-2,310</b>	<b>\$87,700</b>
Graduate Teaching Assistants	12,720	6,770	-5,950	\$42,890
Computer Science	1,930	1,080	-850	\$92,210
English Language and Literature	3,290	2,440	-850	\$87,480
Art, Drama, and Music	3,100	2,450	-650	\$84,190
Education	2,880	2,350	-530	\$69,090
Philosophy and Religion	860	560	-300	\$76,540
Foreign Language and Literature	960	700	-260	\$76,470
Nursing	1,710	1,510	-200	\$74,930
Agricultural Sciences	250	60	-190	\$78,310
Geography	280	120	-160	\$80,550
Criminal Justice and Law Enforcement	430	290	-140	\$84,590
Sociology	490	370	-120	\$91,790
Business	2,770	2,660	-110	\$126,030
Mathematical Science	2,020	1,920	-100	\$83,170
Atmospheric, Earth, Marine, and Space Sciences	260	160	-100	\$87,480
Environmental Science	160	60	-100	\$83,970
Home Economics	110	60	-50	\$78,470
Political Science	460	450	-10	\$87,390
Architecture	70	70	0	\$66,830
Physics	450	450	0	\$85,030
Psychology	1,000	1,000	0	\$95,780
Economics	420	430	10	\$142,350
Recreation and Fitness Studies	330	360	30	\$60,510
Anthropology and Archeology	120	170	50	\$91,950
Engineering	490	570	80	\$114,650
Chemistry	760	850	90	\$99,560
Social Sciences, All Other	620	760	140	\$59,110
Area, Ethnic, and Cultural Studies	40	230	190	\$69,620
Library Science	210	460	250	\$80,780
History	500	820	320	\$89,330
Social Work	110	460	350	\$55,720
Communications	860	1,270	410	\$87,880
Law	320	830	510	\$156,800
Biological Science	1,550	2,170	620	\$85,080
Vocational Education	4,170	4,860	690	\$55,120
Health Specialties	3,160	7,780	4,620	\$138,710

Source(s): BLS, 2017– “May 2016 State Occupational Employment and Wage Estimates: Illinois” and “May 2014 State Occupational Employment and Wage Estimates: Illinois.”



Figure 12 displays the total economic costs of the budget crisis on higher education *alone* in Illinois. The fiscal strain on public universities and colleges brought on by the lack of a state budget caused a \$948.7 million drop in Illinois' economic output. About half of this economic slump occurred in the Northeast Region, where the funding gap resulted in a \$487.0 million decline in gross regional product (51.3 percent). The East Central Region lost \$289.0 million in economic activity and the economy of the West Central Region was \$78.5 million weaker due to the consequences of the budget impasse on public universities and colleges. Financial stresses at public universities and colleges shrank gross regional product by \$37.6 million in and around Springfield, \$10.4 million in the Bloomington and Peoria area, and \$1.7 million in northern Illinois west of Chicagoland. Finally, despite a small increase in the St. Louis area economy, the budget impasse caused a \$44.4 million cumulative drop in market transactions in southern Illinois.

**FIGURE 12: NET ECONOMIC OUTPUT LOST FROM THE BUDGET IMPASSE'S IMPACT ON HIGHER EDUCATION, 2014-2016**  
State: **-\$948.7 Million**



Source(s): IMPLAN, 2017 software; Illinois Auditor General, 2017–“Audit Reports;” IBHE, 2017a–“Data & Statistics;” ICCB, 2017–“Data & Reports.”

## Conclusion

Investing in higher education is a smart economic development policy that boosts incomes, supports employment, and grows the economy. Illinois has world-class public universities and community colleges that serve as economic engines in local communities. These public institutions educate hundreds of thousands of students, support 123,900 total jobs for Illinois residents, and boost the economy by \$16.1 billion every year – including \$12.7 billion in economic activity generated by the twelve state universities.

The two-year budget impasse, however, had disproportionate and lasting consequences for public universities and community colleges. Enrollment at public universities and community colleges in Illinois declined by more than 72,000 students. Tuition at public universities increased by 6.7 percent. Fully 7,500 higher education-related jobs were lost in Illinois, including cuts to 2,300 professorial and instructional positions. The cumulative impact was almost \$1 billion lost in annual economic output.

Illinois must get back on the right track in the wake of the significant damage caused by the two-year budget impasse– with some university reserves exhausted, programs cut, workers laid off, and credit ratings downgraded. Illinois can correct past mistakes by evolving into a national leader on making college affordable for all citizens or by expanding tuition grants to residents. College-educated workers accept better jobs, contribute more in taxes, and rely less on government assistance programs over the long run. Investments in higher education are thus good for both the Illinois economy and the state's budget.

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