



CALU



CLARION
UNIVERSITY



ESU
EDINBORO
UNIVERSITY



MANSFIELD
UNIVERSITY

Millersville
University



Slippery Rock
University

WCU
WEST CHESTER
UNIVERSITY



The State System's Economic and Employment Impact

on the Commonwealth of Pennsylvania

Released April 15, 2015

TABLE OF CONTENTS

I. INTRODUCTION	2
II. EXECUTIVE SUMMARY	3
III. ECONOMIC AND EMPLOYMENT IMPACT OF PENNSYLVANIA’S STATE SYSTEM OF HIGHER EDUCATION ON THE COMMONWEALTH OF PENNSYLVANIA	9
IV. CONCLUSION	30
V. APPENDICES	
A. ECONOMIC IMPACT BACKGROUND	
B. ECONOMIC OVERVIEW OF PENNSYLVANIA AND STATE SYSTEM COUNTIES	
C. INDIVIDUAL UNIVERSITY ECONOMIC AND EMPLOYMENT IMPACT ANALYSIS	
D. ECONOMIC IMPACT OF VISITOR SPENDING	
E. DATA ANALYSIS METHODOLOGIES	
F. INFORMATION RELIED ON	
G. SUPPORTING GEOGRAPHIC DATA	
H. ABOUT BAKER TILLY AND THE PREPARERS OF THE REPORT	

I. INTRODUCTION

Pennsylvania's State System of Higher Education ("State System") contracted with Baker Tilly Virchow Krause, LLP ("Baker Tilly") to determine the economic and employment impact of the State System and its universities on the Commonwealth of Pennsylvania ("Commonwealth"). Therefore, the purpose of this report is to quantify and describe the impact the State System has on the Commonwealth's economy.

The State System includes 14 universities, four branch campuses, several regional centers, and the McKeever Environmental Learning Center.¹ The universities are all located in rural, suburban and small-town settings around Pennsylvania. The Center offers academic programs through a consortium of public and private colleges and universities. Per Act 188 of 1982, the State System's mission "is the provision of instruction for undergraduate and graduate students to and beyond the master's degree in the liberal arts and sciences, and in the applied fields, including the teaching profession." In doing so, the State System's purpose is "to provide high quality education at the lowest possible cost to students."

Economic growth can, in part, be traced back to investments in higher education. University, faculty and staff, and student spending stem from investments which in turn, creates economic development in the form of jobs, income, and increased economic activity within the university's region. Economic impact studies help to quantify this impact which is generated by higher education institutions.

The intention of this report is to measure the economic impact of the 14 universities and the related entities of the State System on the Commonwealth. The State System receives funding from various sources such as: state appropriations, revenues from tuition and fees, federal and research grants, private donations and revenues provided by services that each university offers. From this funding, an impact, attributable to the purchasing of goods and services during the

¹ One of the State System's entities, System-wide Functions and Services, is primarily located at the Dixon University Center in Harrisburg and include: System-wide shared administrative services; System leadership functions of the Chancellor and Board of Governors; some System-wide initiatives and grants managed on behalf of the universities; and the academic, student, and facilities support for the multi-university sites in Harrisburg and Philadelphia.

fiscal year 2013-2014, can be determined. In aggregate, the universities within the State System expend and consume billions of dollars during operations each year which greatly impact the counties in which each campus is located. Additionally, the impact resulting from the expenditures made by the State System's faculty and staff, and students can be measured.

Methodology Applied to the State System Economic Impact Study:

Common to many economic impact studies, the basis of methodology was rooted in the utilization of multipliers which were then applied to produce total impact numbers for each campus. This particular methodology was selected and utilized because it is considered by numerous economists to provide highly accurate and valid results.² The multipliers used were formulated from the Regional Input-Output Modeling System ("RIMS II") of the Bureau of Economic Analysis ("BEA").

The BEA established a method of estimating regional multipliers (RIMS II) which is a valuable tool for estimating the total economic impact of a project, or in this case, institution, on a region. This Input-Output Modeling System provides multipliers that are intended to capture both the direct and indirect effects on the defined region. Specific to this study, the multiplier is used to calculate direct and indirect economic impacts and employment impacts of each institution, as well as the impacts of faculty and staff, student, and capital expenditures. The analysis is focused on the counties in which a State System university has a presence, whether that is a main campus or satellite, and on an overall state-level.

II. EXECUTIVE SUMMARY

Pennsylvania's State System of Higher Education is the 18th largest employer in Pennsylvania and as of fall 2014, enrolled 109,606 students across the 14 universities.³ In the 67 counties of Pennsylvania, the State System has a direct presence in 20 of them, varying from urban to rural locations. As a result of a large geographic reach across the state, the State System plays a key

² Similar economic studies include visitor spending, alumni spending, and activities associated with athletics, affiliates, student governments and other 501-C3 organizations as a factors of the total economic impact. These were excluded from the State System's analysis based on our discretion.

³ Employer ranking for the State System obtained from Pennsylvania's Department of Labor and Industry Center for Workforce Information and Analysis.

role in stimulating the economies of the counties that each university resides in. The State System directly impacts the regional economies by injecting millions of dollars into Pennsylvania's economy on local, county, and state levels. Additionally, the presence of the State System universities enhances workforce development and therefore impacts employment opportunities, not only for the students, but also for those who reside in the surrounding communities.

Pennsylvania's State System commissioned an economic and employment impact study in order to determine an estimate of their economic contribution to the Commonwealth. Baker Tilly has completed the study utilizing data from the 2013-2014 fiscal year and, as a result, found the estimated combined economic and employment contribution of the State System on the Commonwealth was approximately \$6.7 billion.

Key features of the State System's Economic and Employment Impact Study include:

- Computation of the direct, indirect, induced, and total economic impact of the State System's universities upon the Commonwealth, shown in **Table 1**. The \$4.4 billion total economic impact can be broken down into four categories:
 - Institutional spending which constitutes 35 percent of the total economic impact;
 - Faculty and staff spending which constitutes 23.4 percent of the total economic impact;
 - Student spending which constitutes 32.6 percent of the total economic impact; and
 - Capital expenditures which constitutes 9 percent of the total economic impact.
- Computation of the employment impact of the State System's universities upon the Commonwealth:
 - The State System is one of the top 10 employers in seven of the 20 counties in which a State System university is located;
 - Approximately 61,853 jobs were supported by Pennsylvania's State System of Higher Education;
 - It is estimated that jobs supported by the State System produced an additional \$2.3 billion in economic benefits to the Commonwealth of Pennsylvania; and

- The combined economic and employment impact is \$6.7 billion, as shown in **Table 2**.
- Computation of the return on appropriations:
 - As shown in **Table 3** below, the State System received a total of \$412.8 million in state appropriations during the 2013-2014 fiscal year;
 - Also shown in **Table 3**, on average, the Commonwealth received a 14.8 percent return through taxes paid by employees.⁴
 - Each dollar invested by the Commonwealth to one of the universities produced an average return of \$10.61 in economic impact, as shown in **Table 4**; and
- An analysis of the economic development impacts stemming from State System universities; and
- Geographic Information System (“GIS”) analysis of State System employees, students, and alumni.

⁴ Taxes paid by students employed by a State System university included.

Table 1 shows the total economic impact of the State System on the Commonwealth, segregated by the direct, indirect, and induced impact of each university.

Table 1: Total Economic Impact of Pennsylvania’s State System of Higher Education⁵

University	Total Direct	Total Indirect	Total Induced	Total Economic Impact
Bloomsburg	\$ 263,295,561	\$ 113,097,080	\$ 16,551,649	\$ 392,944,290
California	233,781,165	96,192,279	11,002,854	340,976,298
Cheyney	58,476,432	45,032,828	11,896,900	115,406,159
Clarion	160,875,776	87,233,991	16,521,500	264,631,268
East Stroudsburg	182,748,242	106,191,804	20,928,458	309,868,504
Edinboro	141,889,684	61,165,672	9,771,993	212,827,350
Indiana	427,774,334	184,817,150	24,347,480	636,938,964
Kutztown	254,408,286	92,971,052	10,610,510	357,989,848
Lock Haven	108,859,639	36,043,481	3,806,174	148,709,294
Mansfield	70,189,054	34,628,703	6,984,585	111,802,341
Millersville	227,086,357	81,651,929	8,929,350	317,667,636
Shippensburg	214,878,981	81,002,373	8,811,998	304,693,352
Slippery Rock	227,279,453	94,196,153	11,809,316	333,284,922
West Chester	336,774,500	139,131,845	19,546,212	495,452,557
System-wide Functions and Services	16,050,363	16,786,884	4,249,567	37,086,814
Total	\$ 2,924,367,827	\$ 1,270,143,223	\$ 185,768,546	\$ 4,380,279,597

The direct impact is the actual expenditures of each institution, including capital expenditures, and the estimated expenditures of university faculty, staff, and students. The indirect impact is defined as the changes in sales, income, or jobs in sectors within the region that supply goods and services to a specific sector. The induced impact is defined as the increased sales within the region from household spending of the income earned in a specific supporting sector.⁶

The total combined economic and employment impact of the State System of \$6.7 billion is presented in **Table 2**, below. Further, **Tables 3** and **4** show the State System’s return on taxes paid by employees and return on state appropriations, respectively.

⁵ Calculations are subject to rounding.

⁶ “Economic Impact Concepts,” msu.edu, visited March 2, 2015.

Table 2: Combined Economic and Employment Impact of Pennsylvania’s State System of Higher Education on the Commonwealth⁷

University	Economic Impact	Employment Impact	Combined Impact on the Commonwealth
Bloomsburg	\$ 392,944,290	\$ 205,900,105	\$ 598,844,395
California	340,976,298	183,655,639	\$ 524,631,937
Cheyney	115,406,159	45,118,143	\$ 160,524,302
Clarion	264,631,268	124,879,913	\$ 389,511,180
East Stroudsburg	309,868,504	142,386,788	\$ 452,255,292
Edinboro	212,827,350	111,148,304	\$ 323,975,653
Indiana	636,938,964	335,184,495	\$ 972,123,459
Kutztown	357,989,848	199,904,092	\$ 557,893,941
Lock Haven	148,709,294	85,461,683	\$ 234,170,977
Mansfield	111,802,341	54,889,422	\$ 166,691,763
Millersville	317,667,636	177,807,676	\$ 495,475,312
Shippensburg	304,693,352	168,443,533	\$ 473,136,885
Slippery Rock	333,284,922	178,103,776	\$ 511,388,697
West Chester	495,452,557	263,787,533	\$ 759,240,090
System-wide Functions and Services	37,086,814	12,621,236	\$ 49,708,050
Total	\$ 4,380,279,597	\$ 2,289,292,338	\$ 6,669,571,935

⁷ The economic impact on the Commonwealth is comprised of the direct, indirect, and induced effects of institutional, faculty and staff, student, and capital expenditures, as will be discussed. The employment impact on the Commonwealth, which is based on the spending impact of the job opportunities generated, is derived solely from the total economic impact, as further explained on page 26.

Table 3: The State System's Return on Appropriations⁸

University	State Tax Withholdings	Sales Tax Revenue	Total Tax Revenues	State Appropriations	Return on Appropriations
Bloomsburg	\$ 2,292,524	\$ 3,110,977	\$ 5,403,501	\$ 32,994,559	16.38%
California	1,787,436	3,149,730	4,937,166	29,751,310	16.59%
Cheyney	488,093	444,381	932,473	13,098,158	7.12%
Clarion	1,420,794	1,802,653	3,223,447	22,261,739	14.48%
East Stroudsburg	1,482,286	2,127,487	3,609,773	21,160,935	17.06%
Edinboro	1,542,094	1,579,519	3,121,613	24,963,085	12.50%
Indiana	3,455,150	5,524,239	8,979,390	52,382,984	17.14%
Kutztown	2,022,440	3,047,576	5,070,017	33,105,442	15.31%
Lock Haven	1,200,846	1,218,457	2,419,303	19,963,187	12.12%
Mansfield	833,113	678,459	1,511,573	16,702,905	9.05%
Millersville	2,018,212	2,686,387	4,704,599	30,872,019	15.24%
Shippensburg	1,787,469	2,690,257	4,477,727	28,164,791	15.90%
Slippery Rock	1,897,186	2,901,430	4,798,616	32,576,803	14.73%
West Chester	3,349,207	3,973,093	7,322,299	49,914,169	14.67%
System-wide Functions and Services	390,398	216,509	606,906	4,838,914	12.54%
Total	\$ 25,967,248	\$ 35,151,153	\$ 61,118,401	\$ 412,751,000	14.81%

Table 4: Economic Impact to State Appropriations Ratio

University	Total Economic Impact	State Appropriations	Ratio
Bloomsburg	\$ 392,944,290	\$ 32,994,559	11.91
California	340,976,298	29,751,310	11.46
Cheyney	115,406,159	13,098,158	8.81
Clarion	264,631,268	22,261,739	11.89
East Stroudsburg	309,868,504	21,160,935	14.64
Edinboro	212,827,350	24,963,085	8.53
Indiana	636,938,964	52,382,984	12.16
Kutztown	357,989,848	33,105,442	10.81
Lock Haven	148,709,294	19,963,187	7.45
Mansfield	111,802,341	16,702,905	6.69
Millersville	317,667,636	30,872,019	10.29
Shippensburg	304,693,352	28,164,791	10.82
Slippery Rock	333,284,922	32,576,803	10.23
West Chester	495,452,557	49,914,169	9.93
System-wide Functions and Services	37,086,814	4,838,914	7.66
Total	\$ 4,380,279,597	\$ 412,751,000	10.61

⁸ Sales tax revenue is calculated by applying the percentage of state gross domestic product that is taxable by the total faculty and staff and student spending.

III. ECONOMIC AND EMPLOYMENT IMPACT OF PENNSYLVANIA’S STATE SYSTEM OF HIGHER EDUCATION ON THE COMMONWEALTH OF PENNSYLVANIA

Background and Location

State System universities span the state in both rural and urban counties, as illustrated below in **Map 1**, and reflected in **Table 5**. In addition to each university’s main campus, State System universities have a presence in five additional counties via satellite campuses, as seen in **Map 2**. As a result, the impact that State System universities have on the Commonwealth is substantial. An overall background on the State System is provided with the economic and employment impact analysis.

Map 1: Location of State System Universities: Urban and Rural Counties⁹



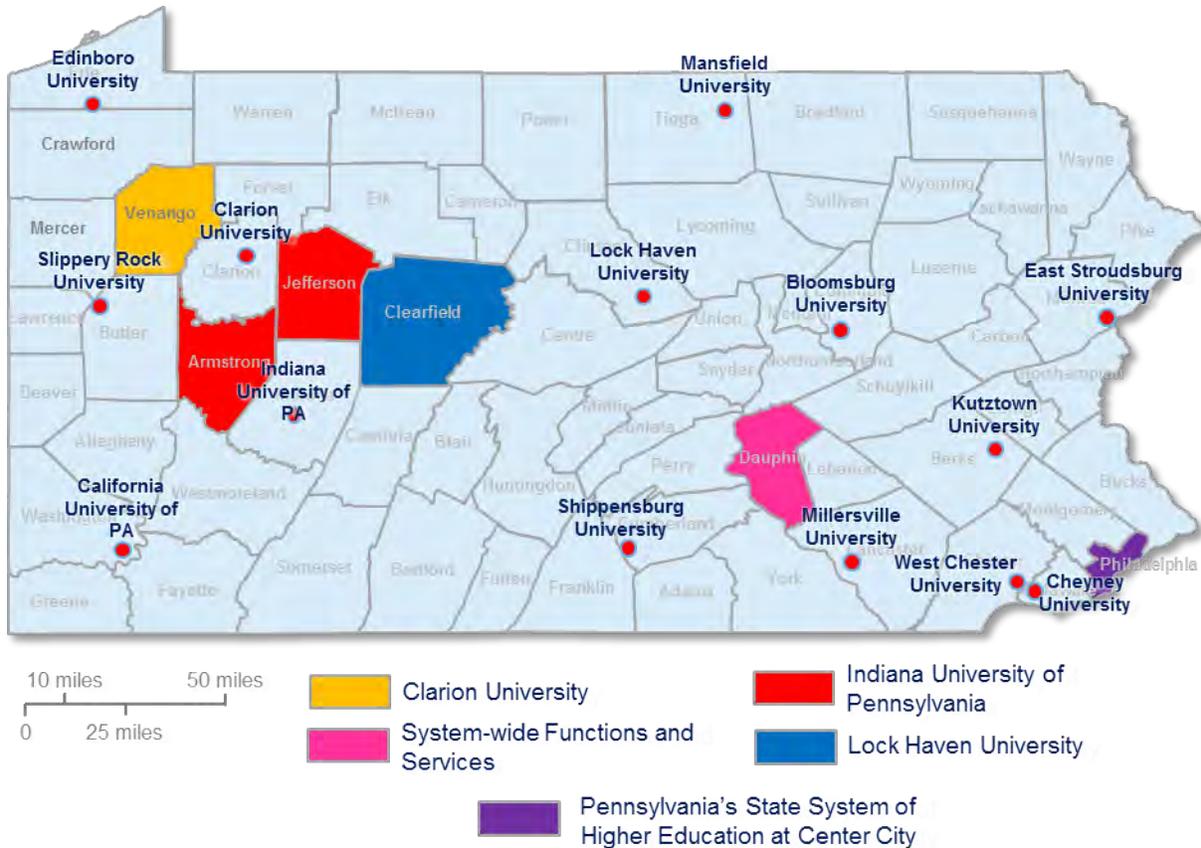
⁹ According to The Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly, a rural county is defined as one in which the number of persons per square mile within the county or school district is less than the population density for the state overall. In Pennsylvania, counties and school districts that have 284 persons or more per square mile are considered urban.

Table 5: Locations of State System University Campuses

University	County	Rural	University	County	Rural
Bloomsburg	Columbia	YES	Kutztown	Berks	
California	Washington	YES	Lock Haven	Clinton	YES
Cheyney*	Delaware		Lock Haven	Clearfield	YES
Clarion	Clarion	YES	Mansfield	Tioga	YES
Clarion	Venango	YES	Millersville	Lancaster	
East Stroudsburg	Monroe	YES	Shippensburg	Cumberland	
Edinboro	Erie		Slippery Rock	Butler	YES
Indiana	Indiana	YES	West Chester	Chester	
Indiana	Armstrong	YES	System-wide Site	Dauphin	
Indiana	Jefferson	YES	System-wide Site	Philadelphia	

*A portion of the Cheyney campus lies within Chester County.

Map 2: The State System’s Presence in Additional Counties¹⁰

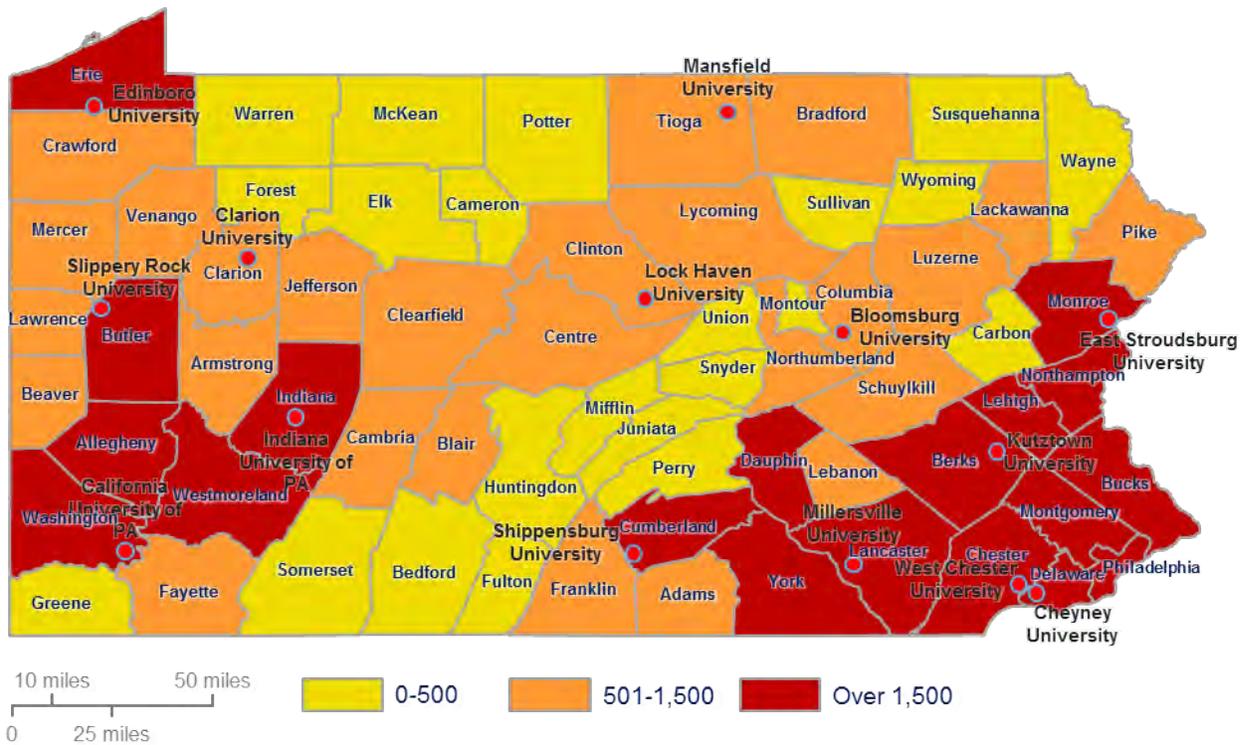


¹⁰ Cheyney University, East Stroudsburg University, Millersville University, and West Chester University offer classes at Pennsylvania’s State System of Higher Education at Center City in Philadelphia County. System-wide Functions and Services is located at the Dixon University Center and offers courses for Bloomsburg University, Indiana University of Pennsylvania, Lock Haven University, Millersville University, and Shippensburg University.

As of the 2014 fall semester, 109,606 students enrolled in undergraduate and graduate programs at one of the 14 State System universities, a 2.2 percent decrease from the 2013 fall semester (112,028 enrollments). Of the students enrolled, 87.7 percent are residents of Pennsylvania, as shown in **Map 3**.¹¹ **Map 4** shows the locations of the State System alumni who still reside in Pennsylvania.

Map 3: State System Student Locations

State System
Students by County



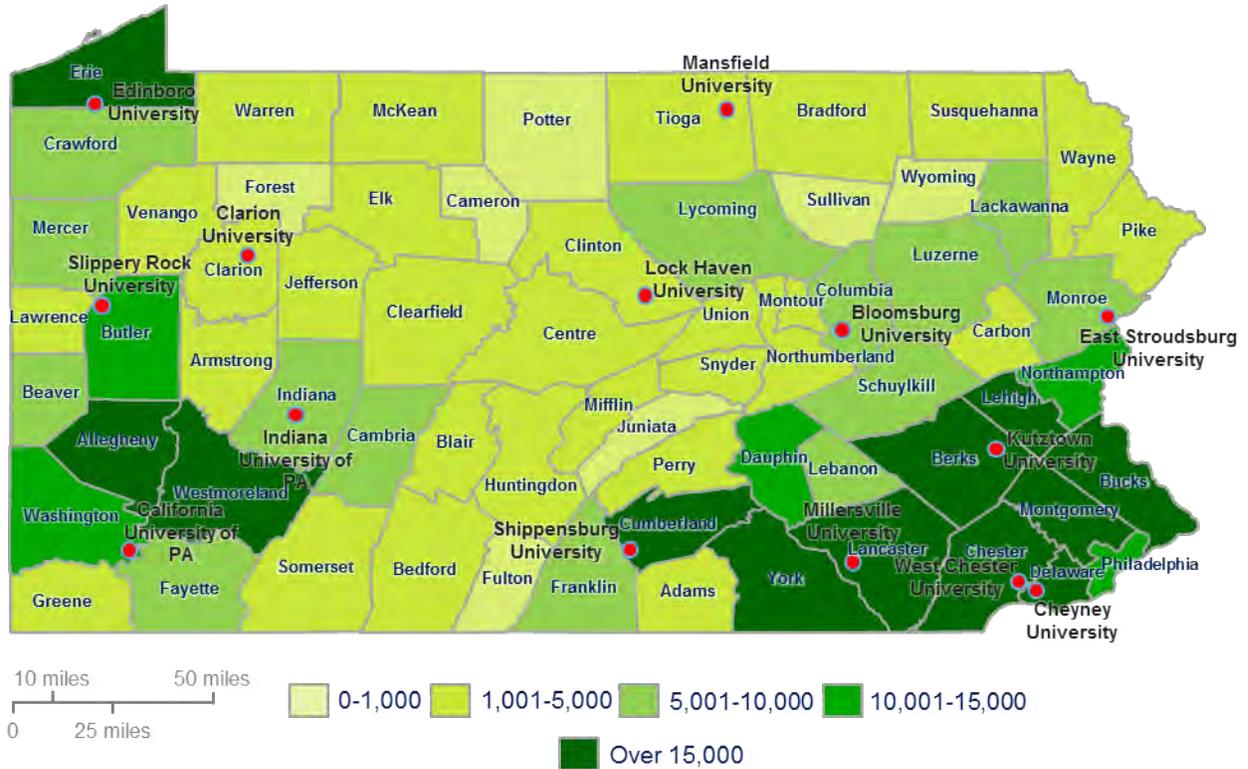
Total State System Students Living in Pennsylvania: 96,074¹²

¹¹ Student locations are based on student permanent addresses.

¹² Refer to Appendix G for county totals.

Map 4: State System Alumni Locations

State System
Alumni by County



Total State System Alumni Living in Pennsylvania: 517,724¹³

The 14 universities have a presence in a total of 20 of the 67 counties that comprise Pennsylvania. These counties include: Armstrong, Berks, Butler, Chester, Clarion, Clearfield, Clinton, Columbia, Cumberland, Dauphin, Delaware, Erie, Indiana, Jefferson, Lancaster, Monroe, Philadelphia, Tioga, Venango, and Washington.

State System universities offer a wide array of programs leading to associate’s, bachelor’s, master’s and doctoral degrees as well as undergraduate and graduate certificates. These academic programs are designed to meet student demands as well as the current and emerging workforce needs of Pennsylvania and beyond. State System universities continue to expand opportunities for undergraduate and graduate research, international study, service-learning, and internships, all of which are critical to academic excellence and are designed to connect the

¹³ Refer to Appendix G for county totals.

classroom to the community. Collectively, more than 2,300 degree and certificate programs are offered in more than 530 academic areas. Over 110 of these academic programs are available online. The top three program areas of study by enrollment include Business, STEM (Science, Technology, Engineering and Mathematics), and Health Professions.

While graduate instruction at the Ph.D. level is available at Indiana University of Pennsylvania, any State System university can offer an applied/professional doctoral program. Currently, nine State System universities offer applied/professional doctoral degree programs. The universities are fully accredited by the Middle States Association of Colleges and Schools. In addition, many specific academic programs have also received specialized national discipline specific accreditation.

The total of all university campuses comprises more than 4,698 acres and a total of 862 buildings (24,999,533 square feet) that house classrooms, residences, administrative offices, and student support services. The libraries on each campus provide resource support for academic programs and are connected electronically by the Keystone Library Network (“KLN”). The KLN provides students and staff access to the combined holdings of the 14 universities’ libraries, which number in the millions, and allows them to use the Internet to conduct research day or night from any location. It also gives them access to library assistance late into the evening through e-mail and a toll-free number.¹⁴

Base tuition at State System universities is \$6,820 per year for Pennsylvania resident undergraduate students and from \$10,230 to \$17,050 per year for nonresident students for the 2014-2015 fiscal year.¹⁵ The regular graduate student tuition is \$454 per credit hour, for Pennsylvania residents, and \$681 per credit for out-of-state students. Both resident and non-residents have to pay an annual instructional technology fee. Room and board charges vary, as do local fees. Students may apply for a variety of state and federal financial assistance programs, university and private scholarships, grants, and loans.

¹⁴ Data obtained from Pennsylvania’s State System of Higher Education Fact Sheet.

¹⁵ Several State System universities are testing various new pricing models through a Board of Governors’ pricing flexibility pilot program, which began January 2014. For example, Millersville University implemented a per-credit tuition pilot beginning fiscal year 2014-2015. Tuition rates listed above are regular tuition rates, excluding alternative rates used in pilots.

In 2014, Pennsylvania’s State System of Higher Education employed approximately 0.6 percent of Pennsylvania’s total labor force of 6.4 million people and approximately 0.6 percent of all persons employed by the state, as shown in **Table 6**.

Table 6: Labor Force Data, Pennsylvania: Annual Averages and Statewide Employment Impact¹⁶

Statewide						
	Employer Ranking	Employment Impact	Labor Force (2013)	Impact as a % of Labor Force	Employed (2014)	Impact as a % of Employed
State System	18	37,905	6,460,354	0.59%	6,058,000	0.63%

Table 7 is a summary of the labor force and employment impact for each of the State System universities and its respective county. Pennsylvania’s State System of Higher Education was the top employer in two counties: Clarion and Indiana. Aside from System-wide Functions and Services, Indiana University of Pennsylvania (“IUP”) facilitated the most in-county percentage of employment impact, 4 percent, by employing 1,914 people of the 47,699 person labor force. Moreover, IUP’s countywide employment impact was 4.3 percent of the employed labor force of 44,800. Clarion University had the next highest in-county employment impact of 3.2 percent by employing 630 people of the 19,510 people in Clarion County’s labor force. Furthermore, Clarion’s countywide employment impact was 3.5 percent of the employed labor force of 17,900 people in Clarion County.

¹⁶ Data obtained from the Pennsylvania Department of Labor and Industry and the Indiana Business Research Center.

Table 7: Labor Force Data by County, Pennsylvania Counties: Annual Averages and Countywide Employment Impact¹⁷

University	County	Countywide Impact					
		Employer Ranking (2014)	Employee Count	Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Bloomsburg	Columbia	2	525	37,648	1.39%	36,200	1.45%
California	Washington	7	663	108,858	0.61%	103,200	0.64%
Cheyney	Delaware	N/A	105	282,071	0.04%	263,600	0.04%
Clarion	Clarion	1	630	19,510	3.23%	17,900	3.52%
East Stroudsburg	Monroe	11	854	80,185	1.07%	74,400	1.15%
Edinboro	Erie	22	795	139,619	0.57%	130,500	0.61%
Indiana	Indiana	1	1,914	47,699	4.01%	44,800	4.27%
Kutztown	Berks	18	935	204,705	0.46%	189,500	0.49%
Lock Haven	Clinton	3	465	19,944	2.33%	19,200	2.42%
Mansfield	Tioga	4	415	21,875	1.90%	20,300	2.04%
Millersville	Lancaster	26	1,481	268,570	0.55%	254,300	0.58%
Shippensburg	Cumberland	22	935	124,890	0.75%	119,200	0.78%
Slippery Rock	Butler	9	774	101,382	0.76%	96,800	0.80%
West Chester	Chester	14	1,635	271,793	0.60%	258,800	0.63%
System-wide Site	Dauphin	N/A	69	139,052	5.00%	131,800	0.05%

Total Economic Impact of State System Universities upon the Commonwealth

The total economic impact of the State System is comprised of the following:

Direct Impact

- Actual expenditures of each institution;
- Estimated expenditures of university faculty, staff, and students;¹⁸ and
- Capital expenditures of each university.

Indirect Impact

- Economic benefit within the industry, as a result of the goods and services provided by the State System universities;¹⁹ and
- Comprised of institutional, faculty, staff, student, and capital expenditures.

Induced Impact

- The additional economic benefit to the Commonwealth, as a result of the State System universities' presence; and
- Comprised of institutional and capital expenditures.

¹⁷ Data obtained from the Pennsylvania Department of Labor and Industry and the Indiana Business Research Center.

¹⁸ Institutional spending is exclusive of salary and wages paid to faculty and staff to avoid double-counting. However, institutional spending does include employee benefits.

¹⁹ Specifically the economic benefit within the junior college, colleges, universities, and professional schools industry. The industry is classified per the North American Industry Classification System (NAICS).

Both the indirect and induced effects were calculated using the direct effect and applying the RIMS II multipliers. Refer to **Appendix E** for further detail regarding the methodology used to attain this value. The State System universities had a combined total economic impact of \$4.4 billion on the Commonwealth in the fiscal year 2013-2014, as shown in **Table 8**.

Table 8: Direct, Indirect, Induced, and Total Economic Impact upon the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Economic Impact
Bloomsburg	\$ 263,295,561	\$ 113,097,080	\$ 16,551,649	\$ 392,944,290
California	233,781,165	96,192,279	11,002,854	340,976,298
Cheyney	58,476,432	45,032,828	11,896,900	115,406,159
Clarion	160,875,776	87,233,991	16,521,500	264,631,268
East Stroudsburg	182,748,242	106,191,804	20,928,458	309,868,504
Edinboro	141,889,684	61,165,672	9,771,993	212,827,350
Indiana	427,774,334	184,817,150	24,347,480	636,938,964
Kutztown	254,408,286	92,971,052	10,610,510	357,989,848
Lock Haven	108,859,639	36,043,481	3,806,174	148,709,294
Mansfield	70,189,054	34,628,703	6,984,585	111,802,341
Millersville	227,086,357	81,651,929	8,929,350	317,667,636
Shippensburg	214,878,981	81,002,373	8,811,998	304,693,352
Slippery Rock	227,279,453	94,196,153	11,809,316	333,284,922
West Chester	336,774,500	139,131,845	19,546,212	495,452,557
System-wide Functions and Services	16,050,363	16,786,884	4,249,567	37,086,814
Total	\$ 2,924,367,827	\$ 1,270,143,223	\$ 185,768,546	\$ 4,380,279,597

Indiana University of Pennsylvania and West Chester University had the largest statewide economic impacts, \$636.9 million and \$495.5 million, respectively. System-wide Functions and Services had a total statewide economic impact of \$37.1 million.²⁰ The average statewide economic impact of each State System university was approximately \$310.2 million, as shown below.²¹

²⁰ System-wide Functions and Services are primarily located at the Dixon University Center in Harrisburg and include: System-wide shared administrative services; System leadership functions of the Chancellor and Board of Governors; some System-wide initiatives and grants managed on behalf of the universities; and the academic, student, and facilities support for the multi-university sites in Harrisburg and Philadelphia.

²¹ To find the average of just the 14 universities, the System-wide Functions and Services impact was removed from the calculation.

State System Total Economic Impact / Number of Universities (\$4,343,192,783/14) = \$310,228,056

The total economic impact can be used to determine the return on state appropriations. For the fiscal year 2013-2014, the state appropriation to the State System totaled \$412.8 million, as shown in **Table 9**.²²

Table 9: Economic Impact to State Appropriations Ratio

University	Total Economic Impact	State Appropriations	Ratio
Bloomsburg	\$ 392,944,290	\$ 32,994,559	11.91
California	340,976,298	29,751,310	11.46
Cheyney	115,406,159	13,098,158	8.81
Clarion	264,631,268	22,261,739	11.89
East Stroudsburg	309,868,504	21,160,935	14.64
Edinboro	212,827,350	24,963,085	8.53
Indiana	636,938,964	52,382,984	12.16
Kutztown	357,989,848	33,105,442	10.81
Lock Haven	148,709,294	19,963,187	7.45
Mansfield	111,802,341	16,702,905	6.69
Millersville	317,667,636	30,872,019	10.29
Shippensburg	304,693,352	28,164,791	10.82
Slippery Rock	333,284,922	32,576,803	10.23
West Chester	495,452,557	49,914,169	9.93
System-wide Functions and Services	37,086,814	4,838,914	7.66
Total	\$ 4,380,279,597	\$ 412,751,000	10.61

Therefore, for every dollar invested by the Commonwealth to the State System, an average return of approximately \$10.61 in economic impact was produced. The highest return to the Commonwealth was \$14.64, generated by East Stroudsburg University. Overall, nine of the State System universities produced at least a return of \$10 for every \$1 of state appropriations.

²² It is noted that state appropriations have decreased since the last study.

Employment Impact of State System upon the Commonwealth

In addition to the economic impact of \$4.4 billion, there is also a substantial direct employment impact that arises from the State System’s economic activity. The direct employment impact consist of the job opportunities that are created from the direct spending of each institution, faculty and staff, students, or direct composite spending. A direct employment impact also arises from capital expenditures. By applying a multiplier to the total amount spent on the direct composite spending and the direct capital expenditures, the employment impact can be calculated, as shown in **Table 10**.

Table 10: Pennsylvania’s State System of Higher Education Total Jobs Supported

University	Composite Direct Spending	Jobs Output	Composite Jobs Supported	Direct Capital Expenditures	Capital Expenditures		Total Jobs Supported
					Jobs Output	Jobs Supported	
Bloomsburg	\$ 253,092,889	21.26	5,380	\$ 10,202,671	17.94	183	5,563
California	231,632,596	21.26	4,924	2,148,569	17.94	39	4,962
Cheyney	51,381,828	21.26	1,092	7,094,604	17.94	127	1,219
Clarion	147,038,947	21.26	3,126	13,836,830	17.94	248	3,374
East Stroudsburg	171,508,729	21.26	3,646	11,239,513	17.94	202	3,847
Edinboro	138,081,494	21.26	2,935	3,808,190	17.94	68	3,003
Indiana	416,620,691	21.26	8,856	11,153,643	17.94	200	9,056
Kutztown	252,317,521	21.26	5,363	2,090,765	17.94	38	5,401
Lock Haven	107,230,841	21.26	2,279	1,628,798	17.94	29	2,309
Mansfield	67,380,028	21.26	1,432	2,809,026	17.94	50	1,483
Millersville	220,155,852	21.26	4,680	6,930,505	17.94	124	4,804
Shippensburg	210,039,779	21.26	4,465	4,839,202	17.94	87	4,551
Slippery Rock	221,506,534	21.26	4,708	5,772,919	17.94	104	4,812
West Chester	327,310,802	21.26	6,957	9,463,698	17.94	170	7,127
System-wide Functions and Services	16,050,363	21.26	341	-	-	-	341
Total	\$ 2,831,348,894		60,184	\$ 93,018,933		1,669	61,853

The multiplier indicated that for each additional million dollars of direct composite spending by a State System university, approximately 21.3 jobs were supported. Therefore, the total employment impact resulting from the composite direct spending of the State System is 60,184 jobs. A separate multiplier was used to calculate the employment impact resulting from direct capital expenditures; for each additional million dollars of capital spending by a State System university, approximately 17.9 jobs were supported.²³ Thus, a total of 1,669 jobs were supported by capital expenditures alone. In total, approximately 61,853 jobs were supported by

²³ Refer to Appendix E regarding the use of RIMS II multipliers.

Pennsylvania's State System of Higher Education, over and in addition to the State System's actual workforce.

More than half of the universities supported more than 4,000 jobs from both composite and capital expenditures. Indiana University of Pennsylvania had the largest employment impact of 9,056 jobs. The average state employment impact of each State System university was 4,394 jobs, as shown below.²⁴

State System Total Employment Impact/Number of State System Universities (61,512/14) = 4,394

Total Economic Impacts of Institutional Spending

The following provides summary tables for each type of spending by university. Further detail for all of the universities can be found in **Appendix C**. The methodology of how each input was calculated and the usage of RIMS II multipliers for the types of spending can be found in **Appendix E**.

Table 11 displays the institutional total economic impact of all State System universities, which, including System-wide Functions and Services, was \$1.5 billion. This amounts to 35 percent of the State System's \$4.4 billion total economic impact on the Commonwealth.

²⁴ To find the average of just the 14 universities, the System-wide Functions and Services impact was removed from the calculation.

Table 11: Direct, Indirect, Induced, and Total Economic Impact of Institutional Spending

University	Economic Impact of Institutional Spending			
	Direct	Indirect	Induced	Total
Bloomsburg	\$ 98,937,876	\$ 25,061,544	\$ 8,581,322	\$ 132,580,742
California	75,557,322	27,231,662	9,324,392	112,113,376
Cheyney	29,361,898	18,558,443	6,354,596	54,274,937
Clarion	57,713,979	16,682,250	5,712,168	80,108,397
East Stroudsburg	66,087,600	35,478,382	12,148,151	113,714,133
Edinboro	59,813,241	19,850,577	6,797,035	86,460,853
Indiana	142,883,831	45,659,463	15,634,255	204,177,549
Kutztown	101,304,151	26,217,708	8,977,204	136,499,063
Lock Haven	46,853,937	7,399,777	2,533,757	56,787,472
Mansfield	33,761,049	13,989,587	4,790,174	52,540,810
Millersville	87,040,126	10,266,170	3,515,239	100,821,535
Shippensburg	76,732,275	14,694,705	5,031,613	96,458,594
Slippery Rock	77,735,028	21,318,047	7,299,511	106,352,586
West Chester	130,436,302	35,493,043	12,153,171	178,082,516
System-wide Functions and Services	5,321,938	12,410,759	4,249,567	21,982,265
Total	\$ 1,089,540,553	\$ 330,312,119	\$ 113,102,156	\$ 1,532,954,828

The two State System universities with the largest institutional impact on the Commonwealth were Indiana University of Pennsylvania and West Chester University, with institutional impacts of \$204.2 and \$178.1 million, respectively. The average institutional total impact of each State System university was approximately \$107.9 million, as shown below.²⁵

State System Total Institutional Spending Economic Impact/Number of Universities (\$1,510,972,563/14= \$107,926,612)

Total Economic Impact of Faculty and Staff Spending

The majority of the State System’s faculty and staff live and spend their disposable income in Pennsylvania, thus creating an economic impact on the Commonwealth.

²⁵ To find the average of just the 14 universities, the System-wide Functions and Services impact was removed from the calculation.

An analysis of personal consumption was conducted to determine the effect of the spending done by faculty and staff. Data obtained from the Bureau of Labor Statistics was taken into consideration and the analysis was broken down in to the following categories:

Type of Expenditure	Definition
Food	Groceries, convenience store purchases, restaurants
Apparel and Services	Buying clothes, dry cleaning, laundromat services
Transportation	Fuel, public transportation
Healthcare	Money spent on healthcare
Entertainment	Movies, special events, sports equipment and activities
Cash Contributions	Churches, local communities, and organizations
Personal Insurance and Pensions	Auto insurance, personal pension plans

Table 12 shows that Pennsylvania’s State System of Higher Education had a total faculty and staff economic impact of \$1 billion during the 2013-2014 fiscal year.

Table 12: Direct, Indirect, and Total Economic Impact of Faculty and Staff Spending

University	Economic Impact of Faculty and Staff Spending		
	Direct	Indirect	Total
Bloomsburg	\$ 63,882,803	\$ 26,057,796	\$ 89,940,599
California	49,281,008	20,101,723	69,382,731
Cheyney	14,857,838	6,060,512	20,918,350
Clarion	40,236,304	16,412,388	56,648,692
East Stroudsburg	44,487,540	18,146,468	62,634,008
Edinboro	43,084,313	17,574,091	60,658,404
Indiana	92,656,902	37,794,750	130,451,652
Kutztown	57,311,502	23,377,362	80,688,864
Lock Haven	33,051,326	13,481,636	46,532,962
Mansfield	24,177,795	9,862,123	34,039,918
Millersville	54,725,709	22,322,617	77,048,326
Shippensburg	50,567,912	20,626,651	71,194,563
Slippery Rock	52,359,620	21,357,489	73,717,109
West Chester	95,434,848	38,927,874	134,362,722
System-wide Functions and Services	10,728,425	4,376,125	15,104,550
Total	\$ 726,843,845	\$ 296,479,604	\$ 1,023,323,449

Out of the State System’s total economic impact of \$4.5 billion on the Commonwealth, the faculty and staff spending constitutes 23.4 percent of it. West Chester University and Indiana University of Pennsylvania were the two State System universities with the largest employee total impact of \$134.4 and \$130.5 million, respectively. These two universities alone account for approximately one-quarter of the total faculty and staff spending economic impact. The average faculty and staff spending per university was \$72 million, as shown below.²⁶

State System Total Faculty and Staff Spending Economic Impact/Number of Universities (\$1,008,218,899/14= \$72,015,636).

Total Economic Impact of Student Expenditures

As previously noted, 109,606 students enrolled in undergraduate and graduate programs at one of the 14 State System universities during the 2014 fall semester. The enrollment trends by university from fall 2005 to fall 2014 are presented in **Table 13**.

Table 13: Fall Headcount Enrollment by University, 2005-2014

University	Fall									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bloomsburg	8,570	8,723	8,745	8,855	9,512	10,091	10,159	9,950	10,127	9,998
California	7,184	7,720	8,206	8,519	9,017	9,400	9,483	8,608	8,243	7,978
Cheyney	1,560	1,667	1,436	1,488	1,488	1,586	1,200	1,284	1,212	1,022
Clarion	6,338	6,591	6,795	7,100	7,346	7,315	6,991	6,520	6,080	5,712
East Stroudsburg	6,793	7,013	7,053	7,234	7,576	7,387	7,353	6,943	6,778	6,820
Edinboro	7,691	7,579	7,686	7,671	8,287	8,642	8,262	7,462	7,098	6,837
Indiana	14,081	14,248	14,018	14,310	14,638	15,126	15,132	15,379	14,728	14,369
Kutztown	9,864	10,193	10,295	10,393	10,634	10,707	10,283	9,804	9,513	9,218
Lock Haven	5,283	5,175	5,241	5,266	5,329	5,451	5,366	5,328	5,260	4,917
Mansfield	3,390	3,360	3,338	3,422	3,569	3,411	3,275	3,131	2,970	2,752
Millersville	7,919	8,194	8,306	8,320	8,427	8,729	8,725	8,368	8,279	8,047
Shippensburg	7,485	7,516	7,765	7,942	8,253	8,326	8,183	7,724	7,548	7,355
Slippery Rock	8,105	8,230	8,325	8,458	8,648	8,852	8,712	8,559	8,347	8,495
West Chester	12,988	12,879	13,219	13,619	14,211	14,490	15,100	15,411	15,845	16,086
Total	107,251	109,088	110,428	112,597	116,935	119,513	118,224	114,471	112,028	109,606

The student expenditures analysis was based on the segregation of the fall 2014 enrollment data for each university into three broad categories, as follows:

²⁶ To find the average of just the 14 universities, the System-wide Functions and Services impact was removed from the calculation.

- Students living on campus in university housing or university affiliated private housing;
- Students living off campus in private, non-affiliated housing; and
- Students living off campus with parents.

In order to capture the amount of student spending resulting from students who live in affiliated university housing, an aggregate of privatized replacement housing fees for each university was obtained. A percent was then calculated to determine the amount of room and board fees that were collected by affiliates, rather than the universities, and subsequently applied to the total number of students living in affiliated university housing. Average cost estimates for room, board, books and supplies, and other expenses were then applied to the students who live off-campus and pay for room and board to parties other than the university directly.²⁷ In the other instances in which students lived in on-campus housing or with a parent, only books and supplies and other expenses were included in the aggregated total. This was done in order to avoid double counting room and board expenditures that have already been accounted for in other aspects of the analysis.

The estimated spending of these students contributed to the economic impact of the State System, as shown in table in **Table 14**.

²⁷ Average cost estimates were supplied on a university by university basis by the State System.

Table 14: Direct, Indirect, and Total Economic Impact of Student Spending

Economic Impact of Student Spending			
University	Direct Impact	Indirect Impact	Total Impact
Bloomsburg	\$ 90,272,210	\$ 36,822,034	\$ 127,094,244
California	106,794,266	43,561,381	150,355,647
Cheyney	7,162,092	2,921,417	10,083,509
Clarion	49,088,664	20,023,266	69,111,930
East Stroudsburg	60,933,589	24,854,811	85,788,400
Edinboro	35,183,940	14,351,529	49,535,469
Indiana	181,079,958	73,862,515	254,942,473
Kutztown	93,701,868	38,220,992	131,922,860
Lock Haven	27,325,578	11,146,103	38,471,681
Mansfield	9,441,184	3,851,059	13,292,243
Millersville	78,390,017	31,975,288	110,365,305
Shippensburg	82,739,592	33,749,480	116,489,072
Slippery Rock	91,411,886	37,286,908	128,698,794
West Chester	101,439,652	41,377,234	142,816,886
Total	\$ 1,014,964,496	\$ 414,004,018	\$ 1,428,968,514

During the fiscal year 2013-2014, the State System had a total student economic impact on the Commonwealth of \$1.4 billion, 32.6 percent of the total economic impact.²⁸ The two State System universities with the largest student total economic impact on the Commonwealth were Indiana University of Pennsylvania and California University of Pennsylvania, contributing \$254.9 and \$150.4 million, respectively. Of the 14 universities, eight had a student expenditure impact greater than \$100 million. The average student total economic impact of each State System university on the Commonwealth was \$102.1 million, as displayed below.

State System Total Student Economic Impact/Number of Universities (\$1,428,968,514/14=\$102,069,180)

Capital Expenditures

Pennsylvania’s State System of Higher Education receives funding appropriated by the Governor and Governor’s Budget Office for capital investments; the State System capital projects are then

²⁸ Student spending as a result of living in affiliated university housing was captured in the impact. For more details regarding this methodology, refer to Appendix E.

executed by the Department of General Services.²⁹ In the 2013-2014 fiscal year, the State System received \$65.2 million in capital investment appropriations. Additionally, the State System receives funding through the Annual Key '93 Deferred Maintenance Appropriation authorized by the Keystone Recreation, Parks, and Conservation Fund Act of 1993 and funded through the realty transfer tax. In the 2013-2014 fiscal year, the State System received \$13.6 million in Key '93 Deferred Maintenance appropriations. The total economic impact these funds created in the 2013-2014 fiscal year is approximately \$395 million, as shown in **Table 15** below.³⁰

Table 15: Direct, Indirect, and Induced Economic Impact of Capital Expenditures

University	Economic Impact of Capital Expenditures			
	Direct	Indirect	Induced	Total
Bloomsburg	\$ 10,202,671	\$ 25,155,706	\$ 7,970,327	\$ 43,328,705
California	2,148,569	5,297,513	1,678,462	\$ 9,124,544
Cheyney	7,094,604	17,492,455	5,542,304	\$ 30,129,363
Clarion	13,836,830	34,116,087	10,809,331	\$ 58,762,248
East Stroudsburg	11,239,513	27,712,143	8,780,308	\$ 47,731,964
Edinboro	3,808,190	9,389,474	2,974,958	\$ 16,172,623
Indiana	11,153,643	27,500,421	8,713,226	\$ 47,367,290
Kutztown	2,090,765	5,154,991	1,633,306	\$ 8,879,062
Lock Haven	1,628,798	4,015,964	1,272,417	\$ 6,917,179
Mansfield	2,809,026	6,925,934	2,194,411	\$ 11,929,370
Millersville	6,930,505	17,087,854	5,414,111	\$ 29,432,470
Shippensburg	4,839,202	11,931,536	3,780,385	\$ 20,551,123
Slippery Rock	5,772,919	14,233,709	4,509,804	\$ 24,516,432
West Chester	9,463,698	23,333,694	7,393,041	\$ 40,190,433
Total	\$ 93,018,933	\$ 229,347,482	\$ 72,666,391	\$ 395,032,806

Of the \$4.4 billion total economic impact, the total capital expenditures impact constitutes approximately nine percent. Clarion University had the largest impact, contributing a total of approximately \$58.8 million to the total capital expenditures impact. Furthermore, six of the universities contributed more than \$30 million to the total impact. The average capital expenditure impact of each State System university on the Commonwealth was approximately \$28.2 million, as displayed below.

²⁹ These funds are independent of any capital expenditures from the university operating funds, which are included in the institutional spending impact and therefore a separate analysis was warranted.

³⁰ For further detail on how the capital expenditures impact was calculated, refer to Appendix E.

State System Total Capital Expenditure Impact/Number of Universities (\$395,032,806/14=\$28,216,629)

Visitor Spending

The applicable data for visitor spending analysis was limited and therefore subjective inputs had to be utilized. For this reason, visitor spending has been excluded from the final economic impact of the State System in light of possible significant over or understatement. Refer to **Appendix D** for an alternative analysis regarding the effects of visitor spending.

Employment Impact of Jobs Supported as a Result of State System Spending

Additional economic benefit, resulting from the total direct spending attributed to the State System universities to the Commonwealth, can be quantified. As shown in **Table 10** of this report, the total direct spending attributed to each university generates an employment impact. The aggregate result of total direct spending supports approximately 61,853 jobs within the Commonwealth, in addition to the State System employees.

The additional jobs supported by the existence of the State System universities results in increased consumption of good and services within Pennsylvania. Further, these jobs and corresponding consumption of good and services provide an additional source of revenues to the Commonwealth in the form of increased sales and taxes, as demonstrated in **Tables 16 and 17**.

Table 16: Consumption Attributable to the Employment Impact of Pennsylvania’s State System of Higher Education ^{31,32}

University	Total Jobs Supported	Per Capita Income	Estimated Wages	Consumption Factor	Estimated Consumption
Bloomsburg	5,563	\$ 46,202	\$ 257,021,726	80.11%	\$ 205,900,105
California	4,962	46,202	229,254,324	80.11%	183,655,639
Cheyney	1,219	46,202	56,320,238	80.11%	45,118,143
Clarion	3,374	46,202	155,885,548	80.11%	124,879,913
East Stroudsburg	3,847	46,202	177,739,094	80.11%	142,386,788
Edinboro	3,003	46,202	138,744,606	80.11%	111,148,304
Indiana	9,056	46,202	418,405,312	80.11%	335,184,495
Kutztown	5,401	46,202	249,537,002	80.11%	199,904,092
Lock Haven	2,309	46,202	106,680,418	80.11%	85,461,683
Mansfield	1,483	46,202	68,517,566	80.11%	54,889,422
Millersville	4,804	46,202	221,954,408	80.11%	177,807,676
Shippensburg	4,551	46,202	210,265,302	80.11%	168,443,533
Slippery Rock	4,812	46,202	222,324,024	80.11%	178,103,776
West Chester	7,127	46,202	329,281,654	80.11%	263,787,533
System-wide Functions and Services	341	46,202	15,754,882	80.11%	12,621,236
Total	61,853		\$ 2,857,686,104		\$2,289,292,338

All but three universities, and System-wide Functions and Services, contributed over \$100 million additional impact by way of estimated consumption. An aggregation of the total economic impact resulting from the State System supported jobs is an estimated \$2.3 billion in additional consumption.

In addition to the revenue generated by State System employees, total income tax revenue and sales tax revenue attributed to jobs supported by State System universities is shown in **Table 17**. For the purposes of this analysis, local earned income taxes, local services tax, and payments to the unemployment trust fund were not considered.

³¹ 2013 annual per capita income for Pennsylvania was obtained from the Bureau of Economic Analysis.

³² The consumption factor is the average total consumption as a percentage of revenue for all income ranges obtained from Bureau of Labor Statistics.

Table 17: Sales, Income, and Total State Tax Revenue of Jobs Supported Attributable to Pennsylvania’s State System of Higher Education ^{33,34}

University	Estimated Wages	Estimated Income Tax Revenue	Estimated Consumption	Estimated Taxable Spending	Estimated Sales Tax Revenue	Total Tax Payments
Bloomsburg	\$257,021,726	\$7,890,567	\$205,900,105	\$49,189,535	\$2,951,372	\$10,841,939
California	229,254,324	\$7,038,108	183,655,639	43,875,332	2,632,520	9,670,628
Cheyney	56,320,238	\$1,729,031	45,118,143	10,778,724	646,723	2,375,755
Clarion	155,885,548	\$4,785,686	124,879,913	29,833,811	1,790,029	6,575,715
East Stroudsburg	177,739,094	\$5,456,590	142,386,788	34,016,204	2,040,972	7,497,562
Edinboro	138,744,606	\$4,259,459	111,148,304	26,553,330	1,593,200	5,852,659
Indiana	418,405,312	\$12,845,043	335,184,495	80,075,576	4,804,535	17,649,578
Kutztown	249,537,002	\$7,660,786	199,904,092	47,757,088	2,865,425	10,526,211
Lock Haven	106,680,418	\$3,275,089	85,461,683	20,416,796	1,225,008	4,500,097
Mansfield	68,517,566	\$2,103,489	54,889,422	13,113,083	786,785	2,890,274
Millersville	221,954,408	\$6,814,000	177,807,676	42,478,254	2,548,695	9,362,696
Shippensburg	210,265,302	\$6,455,145	168,443,533	40,241,160	2,414,470	8,869,614
Slippery Rock	222,324,024	\$6,825,348	178,103,776	42,548,992	2,552,940	9,378,287
West Chester	329,281,654	\$10,108,947	263,787,533	63,018,842	3,781,130	13,890,077
System-wide Functions and Services	15,754,882	\$483,675	12,621,236	3,015,213	180,913	664,588
Total	\$2,857,686,104	\$87,730,963	\$2,289,292,338	\$546,911,940	\$32,814,716	\$120,545,680

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for the jobs supported by the State System were approximately \$120.5 million or approximately 29.2 percent of the Commonwealth’s appropriations for the State System for fiscal year 2013-2014.

Tax Revenues Allocable to State System Universities

Income tax payments made to the Commonwealth, in the form of payroll withholdings from employees of State System universities, represent a significant revenue stream flowing to the Commonwealth on a year-over-year basis. The total state income tax revenue, on a university by university basis, is presented in **Table 18**.

³³ Pennsylvania’s sales tax rate is six percent and income taxes are based on Pennsylvania’s 3.07 percent flat tax rate.

³⁴ Taxable consumption calculated at 23.89 percent of total consumption; refer to Appendix E for additional detail.

Table 18: Income Tax Revenue Attributable to Employees of the State System

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Bloomsburg	\$ 2,292,524	\$ 1,158,465	\$ 77,722	\$ 50,794	\$ 3,579,505
California	1,787,436	663,336	92,342	39,812	2,582,926
Cheyney	488,093	250,803	55	11,401	750,352
Clarion	1,420,794	479,413	57,192	32,025	1,989,425
East Stroudsburg	1,482,286	566,449	46,416	34,538	2,129,689
Edinboro	1,542,094	572,167	61,702	34,775	2,210,738
Indiana	3,455,150	1,415,326	120,124	76,292	5,066,892
Kutztown	2,022,440	753,672	88,707	45,600	2,910,419
Lock Haven	1,200,846	602,999	38,157	26,821	1,868,823
Mansfield	833,113	408,587	34,338	18,729	1,294,767
Millersville	2,018,212	698,065	81,976	44,270	2,842,524
Shippensburg	1,787,469	888,275	65,008	41,300	2,782,053
Slippery Rock	1,897,186	689,468	58,764	42,715	2,688,133
West Chester	3,349,207	1,348,667	126,464	76,982	4,901,319
System-wide Functions and Services	390,398	200,864	7,946	8,396	607,604
Total	\$ 25,967,248	\$ 10,696,556	\$ 956,914	\$ 584,451	\$ 38,205,169

The State System provides an added benefit to the local municipalities in the form of local earned income taxes and local services taxes. State System employees also help to fund the unemployment trust fund through payroll withholdings, helping to strengthen the Commonwealth’s social safety net available to displaced workers.

In addition to the payroll tax withholdings to the Commonwealth and to local municipalities, the State System, through the spending of its employees and students, generates sales tax revenue for the Commonwealth through the consumption of taxable goods and services. The total state sales tax revenue, attributed to State System universities, is presented in **Table 19**.

Table 19: Sales, Income, and Total State Tax Revenue Attributed to Employees of the State System³⁵

University	Total Faculty, Staff, and Student Spending	Spending subject to tax	Sales Tax Revenue
Bloomsburg	\$ 217,034,843	\$ 51,849,624	\$ 3,110,977
California	219,738,378	52,495,499	3,149,730
Cheyney	31,001,859	7,406,344	444,381
Clarion	125,760,622	30,044,213	1,802,653
East Stroudsburg	148,422,408	35,458,113	2,127,487
Edinboro	110,193,873	26,325,316	1,579,519
Indiana	385,394,125	92,070,657	5,524,239
Kutztown	212,611,724	50,792,941	3,047,576
Lock Haven	85,004,643	20,307,609	1,218,457
Mansfield	47,332,161	11,307,653	678,459
Millersville	187,413,631	44,773,116	2,686,387
Shippensburg	187,683,635	44,837,620	2,690,257
Slippery Rock	202,415,903	48,357,159	2,901,430
West Chester	277,179,609	66,218,208	3,973,093
System-wide Functions and Services	15,104,550	3,608,477	216,509
Total	\$ 2,452,291,963	\$ 585,852,550	\$ 35,151,153

Total payments made to the Commonwealth as sales taxes were approximately \$35.2 million. Refer to **Appendix E** for additional discussion related to the methodology used to estimate sales tax revenue attributed to the State System.

IV. CONCLUSION

Overall, the State System universities play an important role in the current and future economic vitality of their specific regions, as well as the Commonwealth of Pennsylvania as a whole. For instance, in the 2013-2014 fiscal year alone, the State System had a combined economic and employment impact of \$6.7 billion on the Commonwealth. Furthermore, each dollar invested by the Commonwealth to one of the universities provided an average return of \$10.61 in economic impact. The institutional and capital expenditures of the universities, as well as the ancillary

³⁵ Pennsylvania's sales tax rate is six percent.

spending by the university's faculty, staff, and students, provided a significant direct economic impact totaling \$4.4 billion. The institutional spending of each university also produced an employment impact; in aggregate, 61,853 jobs were supported by Pennsylvania's State System of Higher Education. As a result of these jobs, there was an additional estimated \$2.3 billion in economic benefit to the Commonwealth. The State System also acts as a source of tax revenues; total payments made to the Commonwealth via income and sales taxes were an estimated \$120.5 million in the 2013-2014 fiscal year. Lastly, as institutions of higher education, the State System universities supply the demand of highly skilled workers to ensure that the Commonwealth of Pennsylvania remains a competitive contributor to the national and international economy.

Appendix A: Economic Impact Background

Economic growth can, in part, be traced back to investments in higher education. University, faculty and staff, and student spending stem from investments which in turn, creates economic development in the form of jobs, income, and increased economic activity within the university's region. Economic impact studies help to quantify this impact which is generated by higher education institutions.

The intention of this report is to measure the economic impact of the 14 universities and the related entities of the State System on the Commonwealth. The State System receives funding from various sources such as: state appropriations, revenues from tuition and fees, federal and research grants, private donations and revenues provided by services that each university offers. From this funding, an impact, attributable to the purchasing of goods and services during the fiscal year 2013-2014, can be determined. All of the universities within the State System spend billions of dollars on an annual basis, which greatly impacts the counties in which each campus is located. Additionally, the impact resulting from the expenditures made by the State System's faculty and staff, and students can be measured.

Not only do State System universities impact economic growth, but the universities also improve economic development within their respective regions; each university has taken on initiatives in the form of human capital and workforce development programs or entrepreneurial assistance programs to do so. An Economic Development Report was furnished for the 2013-2014 year assessing all economic, workforce, and community involvement activities for the State System universities to assist with this aspect of the study.¹

¹ Millersville University did not provide an Economic Development Report for 2013-2014.

The State System as an Employer

Table A.1 provides a summary of how Pennsylvania’s State System of Higher Education acts as a major employer in many of the counties in which a State System university is present.²

Important findings to note:

- The State System was the 18th largest employer in the Commonwealth;
- The State System was ranked as one of the top 10 employers in seven counties in which a university is located; and
- Clarion University and Indiana University of Pennsylvania are the top employer in Clarion and Indiana County, respectively.

Table A.1: State System Employer Rankings, 2nd quarter, 2014

University	County	Employer Ranking
Bloomsburg	Columbia	2
California	Washington	7
Cheyney*	Delaware	N/A
Clarion	Clarion	1
East Stroudsburg	Monroe	11
Edinboro	Erie	22
Indiana	Indiana	1
Kutztown	Berks	18
Lock Haven	Clinton	3
Mansfield	Tioga	4
Millersville	Lancaster	26
Shippensburg	Cumberland	22
Slippery Rock	Butler	9
West Chester	Chester	14
System-wide Site	Dauphin	N/A
System-wide Site	Philadelphia	N/A
State System Totals	Pennsylvania	18

*A portion of the Cheyney campus lies within Chester County.

² Employer ranking for the State System obtained from Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis. Only the top 50 employers in each county were ranked.

Human Capital and Workforce Development Training

An overall objective of any university is to provide the necessary education and training to students in order for them to have the tools to become productive and tax-paying members of their communities; the State System schools are no exception. The universities within the State System are engaged in various programs to help increase workforce knowledge and skills, as well as job productivity. To do so, the universities pair up with local businesses. As a result, the businesses have the potential to experience economic growth and may consider operating within the vicinity of a State System university.

The State System universities currently partner with the Workforce and Economic Development Network of Pennsylvania (“WEDnetPA”) and Customized Job Training (“CJT”) grants to help provide workforce training in their communities, as shown in **Tables A.2 and A.3**.

Table A.2: Participation in State-Sponsored Workforce Development Programs, 2014³

University	WEDnetPA and CJT Grants Awarded	Companies Participating
Bloomsburg	\$ 288,648	37
California	207,286,773	
Cheyney	184,072	11
Clarion	367,451	33
East Stroudsburg	366,491	45
Edinboro	206,776	21
Indiana	352,916	46
Kutztown	200,749	24
Lock Haven	257,510	23
Mansfield	-	
Millersville	-	
Shippensburg	532,129	60
Slippery Rock	-	
West Chester	248,850	42
Total	\$ 210,292,365	342

³ California University of Pennsylvania’s Government Agency Coordination Office reported 6,084 CJT contracts with a total value of \$207,286,773 in the 2014.

Table A.3: State System Participation in Economic Development Initiatives by University

University	WEDnetPA and CJT	SBDC	Business Incubators
Bloomsburg	X		
California	X		
Cheyney	X		
Clarion	X	X	X
East Stroudsburg	X		X
Edinboro	X		X
Indiana	X	X	X
Kutztown	X	X	X
Lock Haven	X	X	
Mansfield			
Millersville			
Shippensburg	X	X	
Slippery Rock			X
West Chester	X		
State System	11	5	6

By having these affiliates, the State System received a total of \$210 million in funds to direct towards workforce development. Additionally, the universities were able to establish relationships with a total of 342 local businesses.

For students who take advantage of these opportunities and improve their workforce skills, higher income is likely to result, as shown in **Table A.4**.

Table A.4: Pennsylvania Educational Attainment and Median Earnings, 2013⁴

Description	United States	Pennsylvania	Difference between PA and US	Difference between PA HS Graduate and Post-Secondary Education (%)
Population 25 years and over with earnings				
Less than high school graduate	20,149	21,014	865	
High school graduate (includes equivalency)	27,350	29,018	1,668	
Some college or associate's degree	32,387	34,605	2,218	19.25%
Bachelor degree	50,050	49,661	(389)	71.14%
Graduate or professional degree	65,565	66,359	794	128.68%

⁴ Data obtained from the 2013 American Community Survey conducted by the US Census Bureau.

In 2013, a Pennsylvania resident who obtained a bachelor's degree earned on average \$49,661. On average, by obtaining a bachelor's degree, a Pennsylvania resident earned approximately 71percent more than a high school graduate.

Entrepreneurial Business Assistance

The State System universities also support economic development in their regions through Entrepreneurial Business programs and Small Business Development Centers ("SBDC"). These programs educate students through curricular offerings but also extend services to the citizens of the Commonwealth who are looking for assistance. By doing so, a vast amount of networking occurs resulting in research and business opportunities for those involved. As demonstrated by **Table A.3**, State System universities are involved in wide array of these programs.

Intellectual Property Creation and Commercialization of Innovation

Universities provide an important source of innovation, and thus are key factors of economic development. Furthermore the commercialization of ideas that result from the research conducted at these universities increases economic productivity. As shown in **Table A.3**, six of the State System universities are collaborating to commercialize ideas by partnering with businesses through the use of business incubators.

For more detail regarding economic development, refer to the individual narratives for each university in **Appendix C**.

Appendix B: Economic Overview of Pennsylvania and State System Counties

The following is an overall economic profile of the United States, Pennsylvania, and the 20 Pennsylvania counties in which a State System university has a presence. Included are comparative tables of key demographics which also provide an overview at the county level. Thus, the purpose of the economic data analysis is to provide fundamental facts that the existence of the State System contributes positively to each county.

Table B.1 includes population projections for the United States, Pennsylvania, and counties with a State System university presence.¹ Some important projections for 2010 to 2030 are:

- Pennsylvania's growth is projected to be 8.3 percent;
- Lancaster County (Millersville University) is projected to have the largest population increase of 15.9 percent; and
- Armstrong County (Indiana University of Pennsylvania's satellite campus) is projected to decrease the most in population by 5.7 percent.

¹ According to 2010 Census Data, StatsAmerica data provided by the Indiana Business Research Center and Pennsylvania Abstract: A Statistical Fact Book.

Table B.1: Population Projections for Pennsylvania Counties with a State System University Presence: 2010 to 2030

University	County	2010	2013	2030	% Change from 2010-2030
Bloomsburg	Columbia	67,295	66,797	67,922	0.93%
California	Washington	207,820	208,206	207,065	-0.36%
Cheyney*	Delaware	558,979	561,973	622,307	11.33%
Clarion	Clarion	39,988	39,155	41,453	3.66%
Clarion	Venango	54,984	53,907	55,516	0.97%
East Stroudsburg	Monroe	169,842	167,148	179,312	5.58%
Edinboro	Erie	280,566	280,294	305,877	9.02%
Indiana	Indiana	88,880	87,745	99,756	12.24%
Indiana	Armstrong	68,941	68,107	64,982	-5.74%
Indiana	Jefferson	45,200	44,966	45,220	0.04%
Kutztown	Berks	411,442	413,521	471,457	14.59%
Lock Haven	Clinton	39,238	39,954	44,973	14.62%
Lock Haven	Clearfield	81,642	81,174	83,423	2.18%
Mansfield	Tioga	41,981	42,463	44,136	5.13%
Millersville	Lancaster	519,445	529,600	602,153	15.92%
Shippensburg	Cumberland	235,406	241,212	268,063	13.87%
Slippery Rock	Mercer	116,638	115,195	121,313	4.01%
West Chester	Chester	498,886	509,468	573,576	14.97%
System-wide Site	Dauphin	268,100	270,937	289,132	7.84%
System-wide Site	Philadelphia	1,526,006	1,553,165	1,753,054	14.88%

*A portion of the Cheyney campus lies within Chester County.

It is likely that counties with higher projected population growth will have future expanded economic development activity. The counties that have a State System university presence and projected population growth over 10 percent include: Delaware, Indiana, Berks, Clinton, Lancaster, Cumberland, Chester, and Philadelphia. Therefore these counties are most likely to continue to have a positive economic impact on the Commonwealth.

Table B.2 presents per capita income data for the state and counties with a State System university presence for 2010 to 2013:²

- Pennsylvania's per capita income for 2013 was \$46,202;
- For 2013, Chester County (West Chester University) had the highest per capita income of \$66,136;

² Data obtained from the Bureau of Economic Analysis.

- Butler County (Slippery Rock University) and Tioga County (Mansfield University) had the highest per capita income growth rates of 16.6 percent and 15.9 percent respectively, from 2010 to 2013;
- The two counties with the lowest per capita income growth rates were Monroe County (East Stroudsburg University) and Venango (Clarion University) with rates of 6.9 percent and 7.4 percent respectively; and
- The weighted average of per capita income growth rate for the counties in which a State System university resides from 2010 to 2013 was 11.38 percent.

Table B.2: Per Capita Personal Income for Pennsylvania and Pennsylvania Counties with a State System University Presence: 2010 to 2013

University	County	2010	2013	% change 2010-2013
Bloomsburg	Columbia	\$30,964	\$33,815	9.21%
California	Washington	42,682	49,399	15.74%
Cheyney *	Delaware	48,504	53,966	11.26%
Clarion	Clarion	33,535	36,987	10.29%
Clarion	Venango	33,468	35,940	7.39%
East Stroudsburg	Monroe	31,730	33,930	6.93%
Edinboro	Erie	33,989	37,729	11.00%
Indiana	Indiana	34,920	39,018	11.74%
Indiana	Armstrong	33,001	37,391	13.30%
Indiana	Jefferson	32,250	34,939	8.34%
Kutztown	Berks	37,398	41,403	10.71%
Lock Haven	Clinton	31,652	35,491	12.13%
Lock Haven	Clearfield	31,988	34,999	9.41%
Mansfield	Tioga	29,297	33,942	15.85%
Millersville	Lancaster	37,315	41,116	10.19%
Shippensburg	Cumberland	42,814	47,258	10.38%
Slippery Rock	Butler	42,454	49,496	16.59%
West Chester	Chester	58,118	66,136	13.80%
System-wide Site	Dauphin	41,095	45,396	10.47%
System-wide Site	Philadelphia	38,824	42,155	8.58%
State System Weighted Average				11.39
Pennsylvania		\$41,635	\$46,202	10.97%

*A portion of the Cheyney campus lies within Chester County.

It is clear to see that the universities have an impact on per capita income in their respective counties. On a comparative basis, the weighted average change in per capita income for the State System is greater than that of the Commonwealth's per capita income growth by nearly

half a percent.³ Furthermore, counties with higher per capita income growth rates, such as these, are likely to have increased economic development activities. Therefore, the State System is favorably impacting the counties in which they have a direct physical presence.

Various demographics were selected from the economic profiles for each county with a State System university presence, provided in **Table B.3**.⁴ Some important facts to note:

- Philadelphia (Pennsylvania's State System of Higher Education at Center City) had the highest population, number of households, and also the highest unemployment rate in 2013;
- Clarion (Clarion University) had the smallest population and therefore the smallest labor force;
- Cumberland (Shippensburg University) had the most growth in population since 2010;
- Chester County (West Chester University) had the lowest unemployment rate during 2013 of 5.8 percent; and
- Tioga County (Mansfield University) had the largest growth in labor force since 2010.

³ Per capita income for the Commonwealth grew approximately 11 percent from 2010 to 2013.

⁴ Population, population growth, labor force and the 2013 unemployment rate obtained from StatsAmerica provided by the Indiana Business Research Center. The change in labor force from 2010 to 2013 was calculated using an average of historical data from the Federal Reserve Bank of St. Louis. The change in unemployment rate since 2010 was calculated using historical data obtained from the Bureau of Labor Statistics.

Table B.3: Overview of Population by Pennsylvania Counties with a State System University Presence

University	County	Population (2013)	Pop. growth (%) since 2010	Labor force (persons) (2013)	Labor force growth (%) since 2010	Unemployment Rate (2013)	Unemployment Rate (%) since 2010
Bloomsburg	Columbia	66,797	-0.75%	37,648	2.58%	7.10%	-1.10%
California	Washington	208,206	0.19%	108,858	2.35%	6.90%	-0.50%
Cheyney	Delaware	561,973	0.60%	282,071	0.91%	7.50%	-0.10%
Clarion	Clarion	39,155	-2.13%	19,510	-4.52%	8.00%	-2.20%
Clarion	Venango	53,907	-2.00%	25,657	-3.20%	7.90%	0.10%
East Stroudsburg	Monroe	167,148	-1.61%	80,185	-2.53%	9.40%	0.10%
Edinboro	Erie	280,294	-0.10%	139,619	0.18%	7.30%	-1.10%
Edinboro	Crawford	87,376	-1.60%	42,948	-0.29%	7.10%	-1.10%
Indiana	Indiana	87,745	-1.29%	47,699	-0.26%	7.30%	-0.10%
Indiana	Allegheny	1,231,527	0.70%	657,757	2.37%	6.50%	-0.30%
Indiana	Armstrong	68,107	-1.20%	33,724	0.92%	8.00%	-1.20%
Indiana	Jefferson	44,966	-0.50%	22,524	-2.63%	7.70%	-1.50%
Kutztown	Berks	413,521	0.50%	204,705	0.20%	7.40%	-0.60%
Lock Haven	Clinton	39,954	1.79%	19,944	2.72%	8.60%	0.20%
Lock Haven	Clearfield	81,174	-0.60%	40,924	-0.45%	8.40%	-1.40%
Mansfield	Tioga	42,463	1.14%	21,875	4.75%	8.30%	1.20%
Millersville	Lancaster	529,600	2.00%	268,570	-0.30%	6.10%	-0.50%
Shippensburg	Cumberland	241,212	2.50%	124,890	1.71%	6.10%	-0.20%
Slippery Rock	Butler	185,476	0.87%	101,382	2.56%	6.30%	-0.50%
Slippery Rock	Mercer	115,195	-1.20%	54,245	0.63%	8.00%	-1.20%
West Chester	Chester	509,468	2.08%	271,793	2.23%	5.80%	0.10%
System-wide Site	Dauphin	270,937	1.10%	139,052	0.56%	6.90%	-0.70%
System-wide Site	Philadelphia	1,553,165	1.80%	656,484	1.92%	10.00%	-0.30%

It is important to note the instances in which population was decreasing but the labor force increased and therefore the unemployment rate decreased. This trend is seen in Columbia County (Bloomsburg University) and Erie County (Edinboro University). In some measure, this can be attributed to employment impact of the State System universities in these counties.

Appendix C: Individual University Economic and Employment Impact Analysis

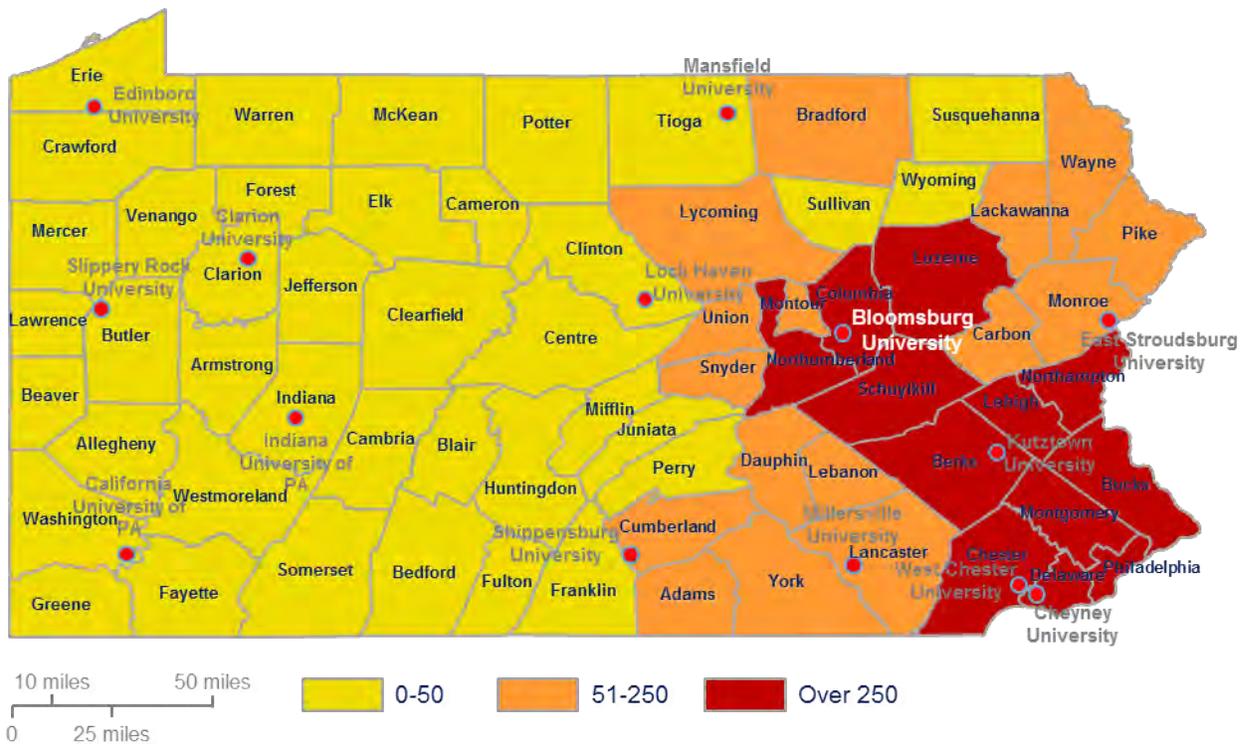
The following provides a detailed analysis of each university. Refer to **Appendix E** for the methodology utilized to calculate each university's economic and employment impact.

Bloomsburg University of Pennsylvania
Columbia County, PA

Founded in 1839, Bloomsburg University is built on a rich history of academic excellence as one of 14 public universities in Pennsylvania’s State System of Higher Education (“State System”). As the largest comprehensive university in Northeastern and North central Pennsylvania, Bloomsburg University offers 54 undergraduate majors, 44 undergraduate minors, and 20 graduate programs. Bloomsburg has an alumni base of more than 60,000 which enables students to network throughout the eastern US and beyond. Bloomsburg University prepares and inspires students to become dynamic and confident leaders. In fall 2014, the University enrolled 9,319 undergraduate students and 679 graduate students.

Map 1.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

Bloomsburg University
 Students by County

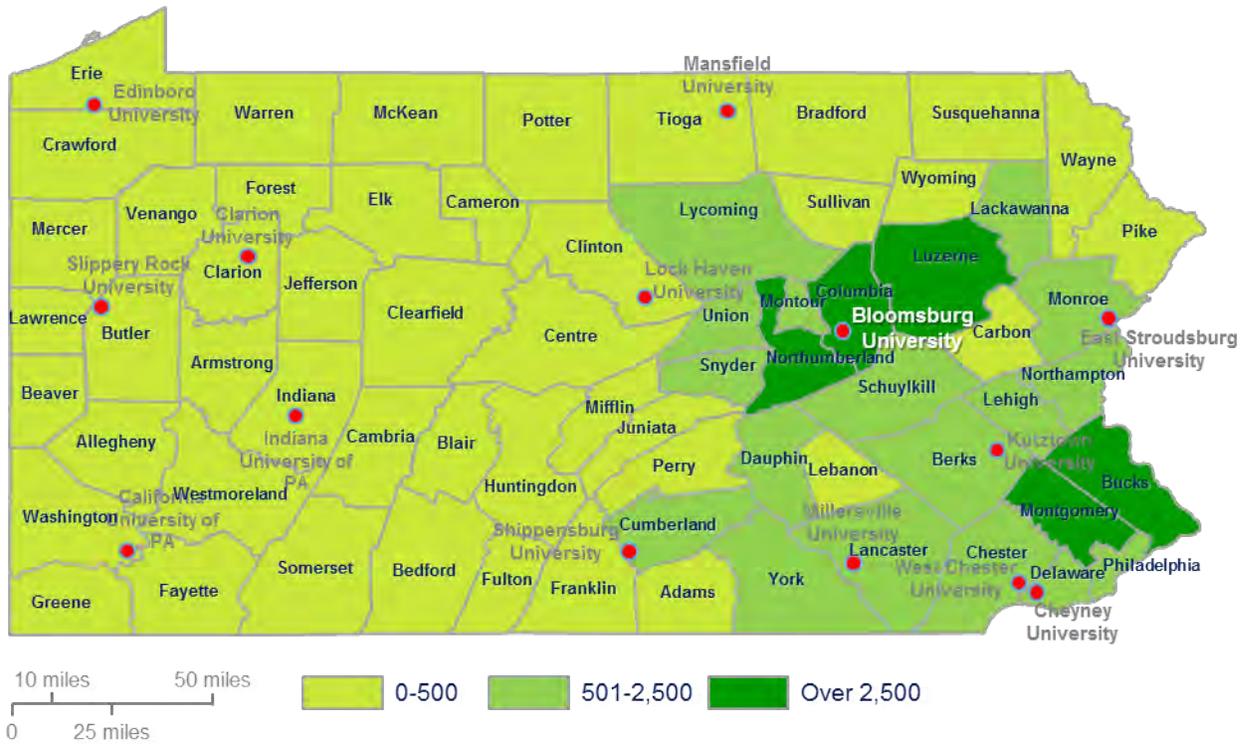


Bloomsburg University has more than 250 student clubs and organizations, ranging from community service to the arts and business to entertainment. Students are also actively involved

within the community with more than 62,000 hours dedicated to volunteerism each year. David L. Soltz, Ph.D., became Bloomsburg University's president in January 2008.¹

Map 1.2 demonstrates Bloomsburg's alumni that still reside in the Commonwealth.

Bloomsburg University
Alumni by County



Bloomsburg University is in Columbia County, PA. In 2013, the county had a population of 66,797 people which is a 0.7 percent decrease since 2010. The county is made up of 483.1 sq. miles in land area and a population density of 138.3 per square mile. As of 2010, 98.9 percent of the population reported only one race, with 1.9 percent of these reporting African-American. The population of this county is two percent Hispanic (of any race). The average household size is 2.4 persons compared to an average family size of 2.9 persons. Columbia County had a labor force of 37,648 people in 2013 along with an unemployment rate of 7.1 percent.

¹ Excerpts obtained from Bloomsburg University's website, www.bloomu.edu.

Below are some of Columbia County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	66,797	39
Growth (percent) since 2010 Census	-0.7%	39
Households (2012)	26,012	40
Labor Force (persons) (2013)	37,648	38
Unemployment Rate (2013)	7.1	42
Per Capita Personal Income (2012)	\$33,185	61
Median Household Income (2012)	\$45,038	34
Poverty Rate (2012)	13.9	30
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	86.9	41
Bachelor's Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	20.0	27

Countywide labor force data and countywide employment impact as result from Bloomsburg University is shown in **Table 1.1**. Out of the 37,648 people in the county’s available labor force, Bloomsburg University had 525 in-county jobs and therefore had an in-county percentage employment impact on the available labor force of approximately 1.4 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Columbia County can also be calculated. With 36,200 total people employed in Columbia County, 525 were employed by Bloomsburg University and live in-county; therefore the university’s countywide employment impact is approximately 1.5 percent.³

Table 1.1: Labor Force Data, Columbia County: Averages and Countywide Employment Impact

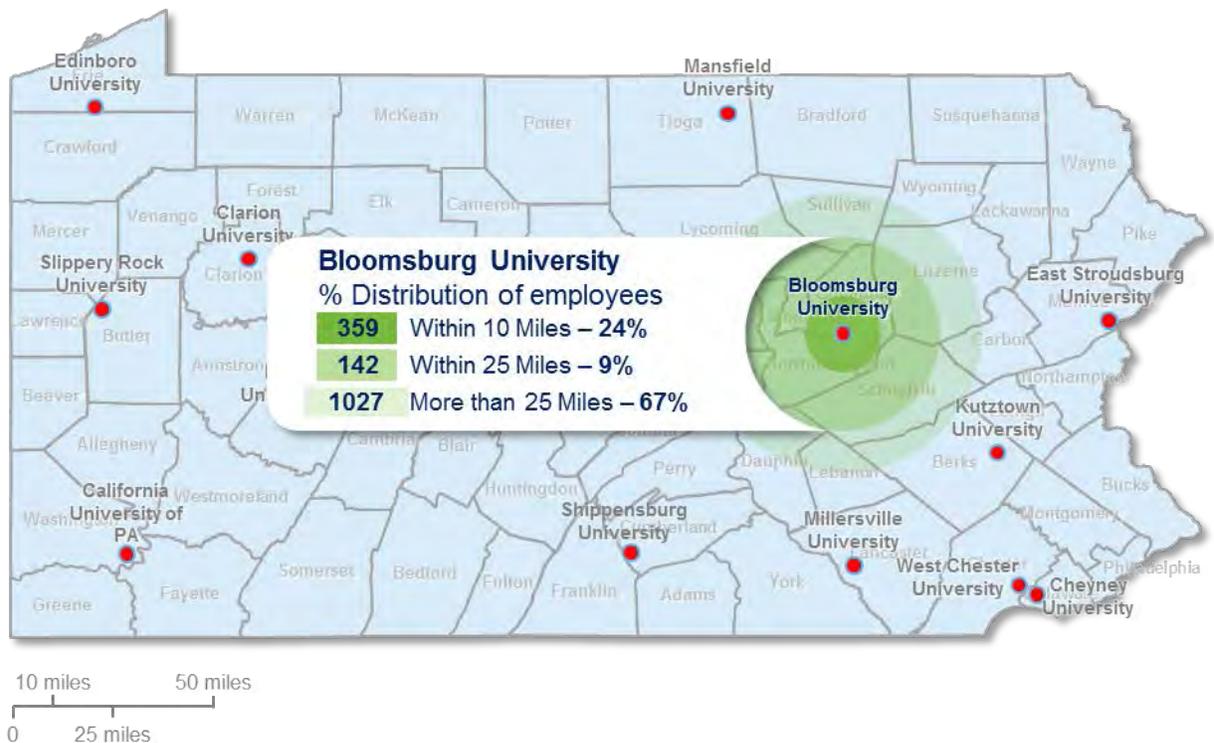
University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Bloomsburg	Columbia	2	525	37,648	1.39%	36,200	1.45%

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

The geographic distribution of Bloomsburg University employees is shown on **Map 1.3**.⁴ 359 employees, or 23 percent, live within 10 miles of the university, 142 employees, which constitutes nine percent of the employees, live within 25 miles, leaving 67 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 1.3: Bloomsburg Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 1.1** provides a general overview of Bloomsburg University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional

⁴ For the purpose of this illustration, student employees were excluded.

detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Bloomsburg University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Bloomsburg University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Bloomsburg University on the Commonwealth was \$263,295,561. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Bloomsburg University’s Direct Economic Impact on the Commonwealth

(1) Institutional spending: \$64,107,887

Benefits: \$34,829,989

(2) Faculty/Staff spending: \$63,882,803

(3) Student spending: \$90,272,210

(4) Capital Expenditures: \$10,202,671

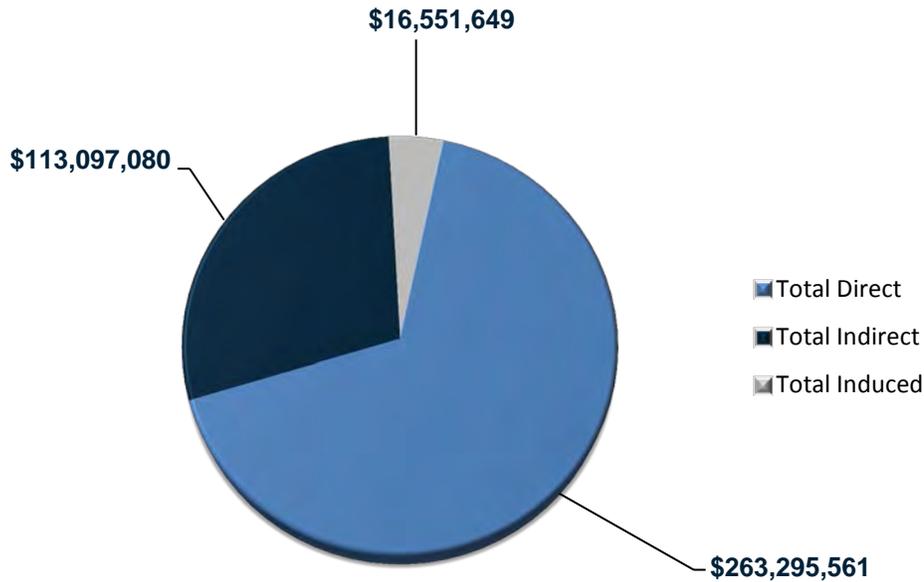
Total Direct Impact: \$263,295,561

As presented in **Table 1.2**, the direct impact, \$263,295,561, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Bloomsburg University on the Commonwealth of \$392,944,290. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$129,648,729. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 1.2: Total Economic Impact of Bloomsburg University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Bloomsburg	\$ 263,295,561	\$ 113,097,080	\$ 16,551,649	\$ 392,944,290

Chart 1.1: Total Economic Impact (Direct + Indirect + Induced): \$392,944,290



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Bloomsburg University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$32,994,559. Therefore, each dollar invested in Bloomsburg University by the Commonwealth via appropriations yielded a return of approximately \$11.91 in total economic impact, as is shown on **Table 1.3**.

Table 1.3: Statewide Economic Impact of Bloomsburg University Appropriations

University	Total Impact	State Appropriations	Ratio
Bloomsburg	\$392,944,289	\$ 32,994,559	11.91

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state

unemployment trust fund. **Table 1.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 1.4: Statewide Economic Impact of Bloomsburg Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Bloomsburg	\$ 2,292,524	\$ 1,158,465	\$ 77,722	\$ 50,794	\$ 3,579,505

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 1.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 1.5: Statewide Economic Impact of Bloomsburg Sales Tax Revenue Collections

University	Total Faculty and Student Spending	% of State GDP taxable	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Bloomsburg	\$ 217,034,843	23.89%	\$ 51,849,624	6.00%	\$ 3,110,977

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Bloomsburg University were \$5,403,501 or 16.4 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

this manner, the employment impact of Bloomsburg University on the Commonwealth approximated 5,380 jobs, as is shown in **Table 1.6**.

Table 1.6: Statewide Employment Impact of Bloomsburg University on the Commonwealth as a Result of Direct Composite Spending: 5,380 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Bloomsburg	253,092,889	21.26	5,380

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Bloomsburg University on the Commonwealth approximated 183 more jobs, as shown in **Table 1.7**. Therefore, the total employment impact of Bloomsburg University is 5,563 jobs.

Table 1.7: Statewide Employment Impact of Bloomsburg University on the Commonwealth as a Result of Direct Capital Expenditures: 183 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Bloomsburg	\$ 10,202,671	17.94	183

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. While faculty and staff hours were not tracked by the university, students did devote their time to helping the community. Bloomsburg students spent a total of 64,500 and 82,000 hours by volunteering, in 2013 and 2014 respectively. It is likely that the students' participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation.

The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its fourteen universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Bloomsburg University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Bloomsburg University's participation in WEDnetPA program has over 2,700 participants and had a total of \$288,648 funds awarded in 2014. Additionally, Bloomsburg University maintains an Entrepreneurial Leadership Center in which 67 members worked with 6 local businesses. The

center fosters a positive entrepreneurial climate by enhancing the engagement of students and faculty in innovation activities with regional entrepreneurs and other stakeholders in the Greater Susquehanna Keystone Innovation Zone. As a result, the university and its students promote economic development in northeastern and central Pennsylvania.

Exhibit 1.1

Bloomsburg University Information			
	Location: County		Columbia
	Faculty and Staff Headcount Paid in 2014		1,528
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	9,416	9,319
	Graduate	711	679
	Total	10,127	9,998
	Full-time	9,155	8,962
	Part-time	972	1036
	Total	10,127	9,998
	PA residents	8,946	8912
	Non-residents	1,181	1,086
	Total	10,127	9,998
	Traditional undergraduate (students under 25)	8,992	8,882
	Non-traditional undergraduate (students over 25)	424	437
	Total (undergraduate only)	9,416	9,319
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 7,874
	Tuition		6,820
	Fees		2,094
	Total		\$ 16,788
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 7,874
	Tuition		17,050
	Fees		2,314
	Total		\$ 27,238
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)		\$ 454
	Fees ¹		183
	Total (per credit)		\$ 637
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)		\$ 681
	Fees ¹		195
	Total (per credit)		\$ 876
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		54,608,086
	Tuition from undergraduate out-of-state students		18,093,763
	Tuition from graduate in-state students		5,259,069
	Tuition from graduate out-of-state students		1,402,602
	Total		\$ 79,363,520

Financial Characteristics			
	Fees		
	Mandatory Fees		
	Technology, Academic/Instruction, and Other Mandatory Fees		\$ 17,412,690
	Non-Mandatory Fees		
	Non-Mandatory Fees		861,956
	Total		\$ 18,274,646
	Total from Tuition & Fees		\$ 97,638,166
	Sales and Services		\$ 2,650,786
	Education and General Appropriations		\$ 32,994,559
	Grants and Contracts		
	Federal		\$ 14,955,597
	State		9,359,104
	Local/Other/Private		1,010,571
	System Transfer Awards		10,324
	Total grants and contracts		\$ 25,335,596
	Other Revenues (net of scholarship discounts and allowances)		\$ 35,924,648
	Total Revenues (from sources above)		\$ 194,543,755
	Funds Raised by University (private giving)		\$ 690,081
	Market Value of Endowment		\$ 31,349,919
	Total Replacement Value of Physical Plant		\$ 933,300,000
The Institution as a Consumer in the State			
	Institutional Expenditures		
	Institutional spending (excluding payroll)		\$ 61,695,020
	Capital Improvements		2,412,867
	Employee Benefits		34,829,989
	Total Direct Institutional Spending		98,937,876
	Institutional spending prorated by 10.86% of out of state students		10,746,803
	Type 1 Multiplier		1.53
	Type 1 Effect (total indirect - induced)		16,480,222
	Type 2 Multiplier		2.33
	Type 2 Effect (total indirect)		25,061,544
	Induced Effect (type 2 effect - type 1 effect)		8,581,322
	Total Impact of Institutional Spending		\$ 132,580,742
	Faculty and Staff Expenditures		
	Faculty and staff spending (direct)		\$ 63,882,803
	Household multiplier		1.41
	Total Impact of Faculty and Staff Spending		\$ 89,940,599

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 90,272,210
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 127,094,244
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 9,165,333
	Deferred Maintenance		1,037,338
	Total Direct Capital Expenditures		10,202,671
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		17,185,380
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		25,155,706
	Induced Effect (type 2 effect - type 1 effect)		7,970,327
	Total Impact of Capital Expenditures		\$ 43,328,705
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 253,092,889
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		5,380
	Direct capital expenditures for the Commonwealth		\$ 10,202,671
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		183
	Total Employment Impact		5,563
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff		N/A
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		82,000
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		No
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 217,034,843
	Imputed % of taxable spending		23.89%
	Spending subject to tax		51,849,624
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 3,110,977

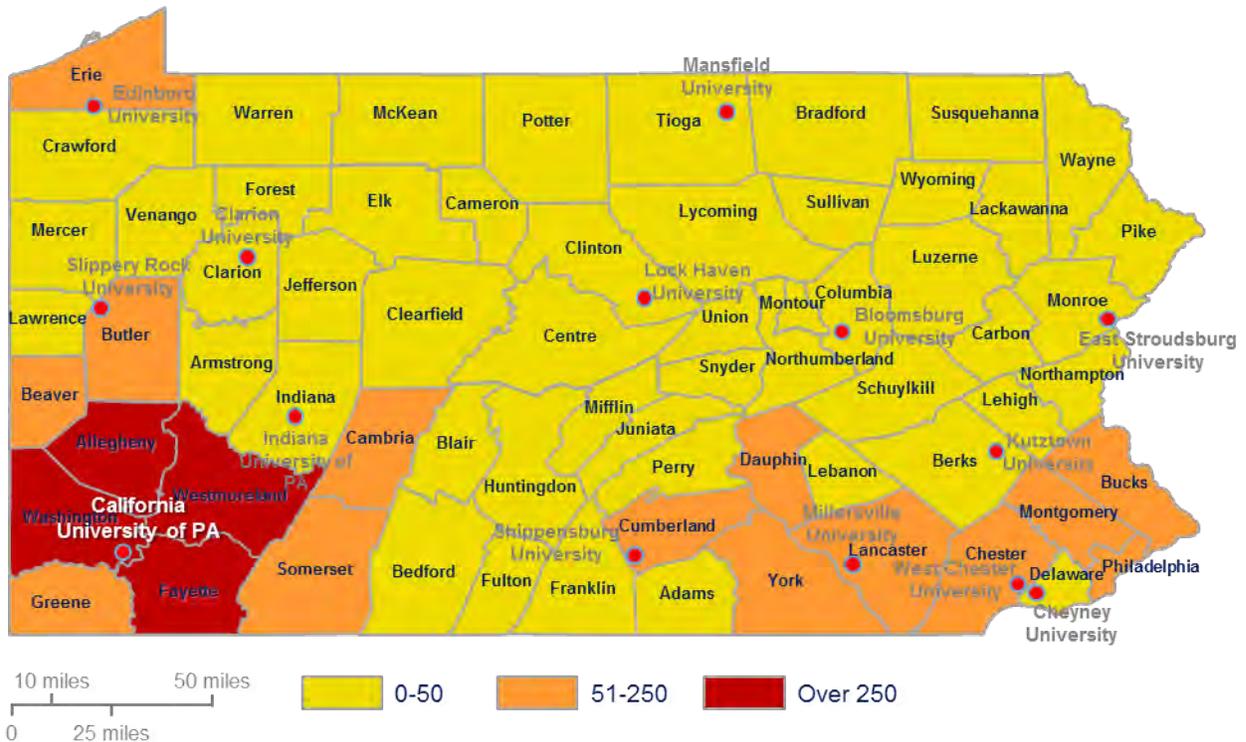
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 76,735,175
	State tax withholdings		2,292,524
	Local EIT		1,158,465
	Local Services Tax		77,722
	Unemployment tax		50,794
	Total Payroll Tax Payments		\$ 3,579,505
¹ Fees prorated on a per credit basis; all fees included.			

California University of Pennsylvania
 Washington County, PA

California University of Pennsylvania (“CAL U”) was founded in 1852 and is located on 294 acres in the borough of California, Pa., just 35 miles south of Pittsburgh on the banks of the Monongahela River. Here, highly trained faculty members, caring staff, and state-of-the-art facilities combine to help every student develop a degree of character while preparing for a meaningful career. A proud member of Pennsylvania’s State System of Higher Education, California University of Pennsylvania serves more than 6,000 undergraduate and 1,900 graduate students. It offers 130 undergraduate majors and 35 graduate programs.

Map 2.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

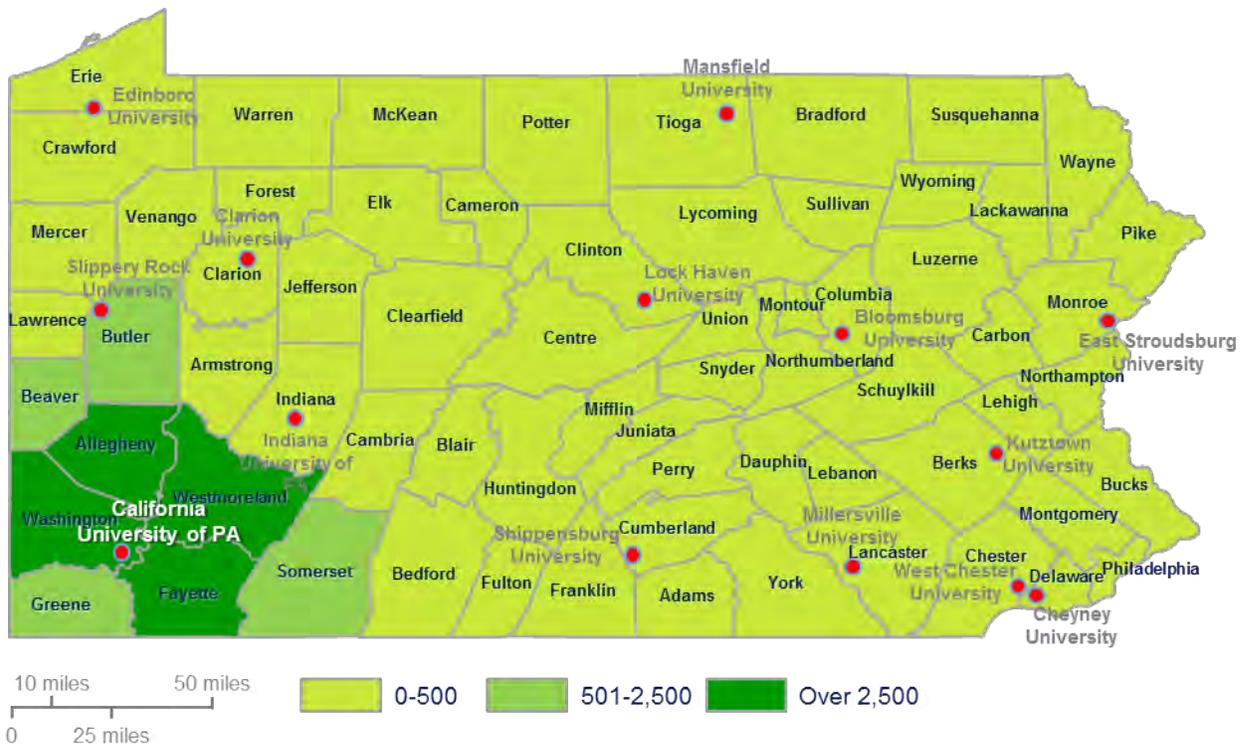
California University of PA
 Students by County



The university employs about 420 faculty members, of whom 81 percent have a doctorate or other post-graduate degree. It is a part of the Pennsylvania State Athletic Conference and is a NCAA Division II school offering 16 varsity sports. Additionally, the university has more than 100 clubs and organizations for students to join. Geraldine M. Jones was named the acting president of California University of Pennsylvania in May 2012.¹

Map 2.2 demonstrates California University of Pennsylvania’s alumni that still reside in the Commonwealth.

California University of PA
Alumni by County



California University of Pennsylvania is located in Washington County, PA. This county has a population of 208,206 people, 857.0 sq. miles in land area and a population density of 242.9 per square mile. The population has grown 0.2 percent since the last census in 2010. The average household size is 2.4 persons compared to an average family size of 2.9 persons. On the most recent census form, 98.5 percent of the population reported only one race, with 3.3 percent of these reporting African-American. The population of this county is 1.1 percent Hispanic (of any

¹ Excerpts obtained from California University of Pennsylvania’s website, www.calu.edu.

race). In 2013 health care and social assistance was the largest of 20 major sectors. There was a labor force of 108,858 people and an unemployment rate of 6.9 percent as of 2013.

Below are some of Washington County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	208,206	18
Growth (percent) since 2010 Census	0.2%	24
Households (2013)	84,098	18
Labor Force (persons) (2013)	108,858	17
Unemployment Rate (2013)	6.9	47
Per Capita Personal Income (2013)	\$49,399	7
Median Household Income (2013)	\$54,919	16
Poverty Rate (2013)	10.9	52
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	90.4	14
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	25.6	14

Countywide labor force data and countywide employment impact as a result of California University of Pennsylvania is shown in **Table 2.1**. Out of the 108,858 people in the available county’s labor force, CAL U employed 663 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of 0.6 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Washington County can also be calculated. Of the 103,200 total people employed in Washington County, 663 were employed by California University of Pennsylvania and live in-county; therefore the university’s countywide employment impact is 0.6 percent.³

Table 2.1: Labor Force Data, Washington County: Averages and Countywide Employment Impact

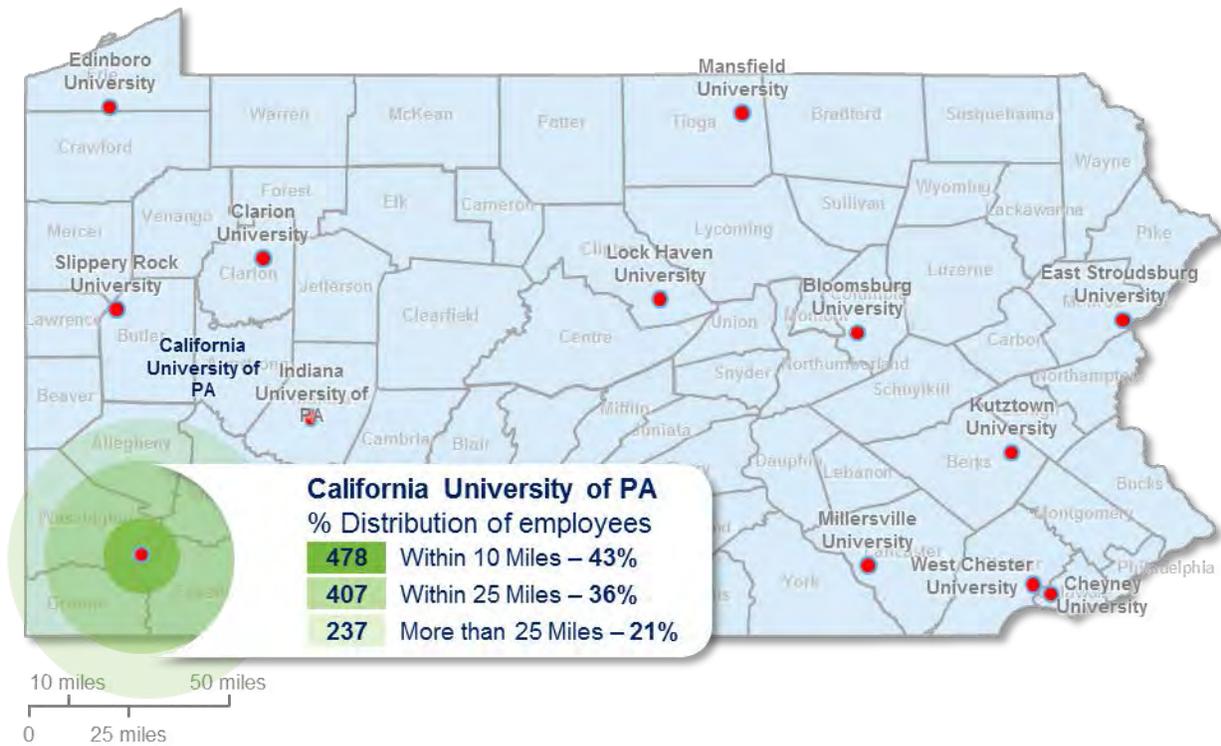
University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
California	Washington	7	663	108,858	0.61%	103,200	0.64%

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

The geographic distribution of California University of Pennsylvania employees is shown on **Map 2.3**.⁴ 478 employees, or 43 percent, live within 10 miles of the university, 407 employees, which constitutes 36 percent of the total employees, live within 25 miles, leaving 21 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 2.3: California University of Pennsylvania’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 2.1** provides a general overview of California University of Pennsylvania, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional

⁴ For the purpose of this illustration, student employees were excluded.

detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of California University of Pennsylvania. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that California University of Pennsylvania has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of California University of Pennsylvania on the Commonwealth was \$233,781,165. This value is represented by four main spending sources: institutional spending, faculty/staff spending student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

California University of Pennsylvania’s Direct Economic Impact on the Commonwealth

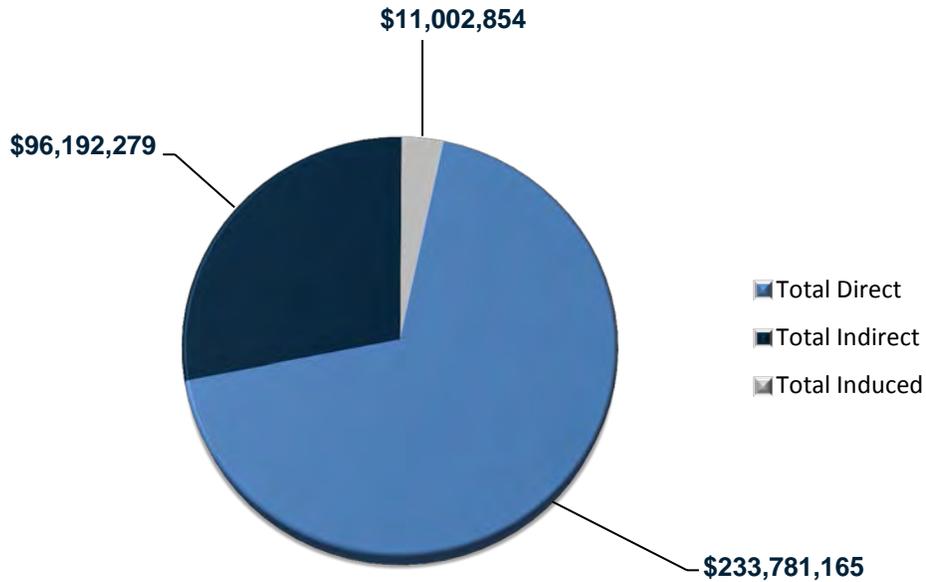
<i>(1) Institutional spending:</i>	<i>\$49,803,443</i>
<i>Benefits:</i>	<i>\$25,753,879</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$49,281,008</i>
<i>(3) Student spending:</i>	<i>\$106,794,266</i>
<i>(4) Capital Expenditures</i>	<i><u>\$2,148,569</u></i>
<i>Total Direct Impact:</i>	<i><u>\$233,781,165</u></i>

As presented in **Table 2.2**, the direct impact, \$233,781,165, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of California University of Pennsylvania on the Commonwealth of \$340,976,298. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$107,195,133. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 2.2: Total Economic Impact of California University of Pennsylvania on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
California	\$ 233,781,165	\$ 96,192,279	\$ 11,002,854	\$ 340,976,298

Chart 2.1: Total Economic Impact (Direct + Indirect + Induced): \$340,976,298



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to California University of Pennsylvania made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2015 was \$29,751,310. Therefore, each dollar invested in California University of Pennsylvania by the Commonwealth via appropriations yielded a return of approximately \$11.46 in total economic impact, as is shown on **Table 2.3**.

Table 2.3: Statewide Economic Impact of California University of Pennsylvania Appropriations

University	Total Impact	State Appropriations	Ratio
California	\$340,976,298	\$ 29,751,310	11.46

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 2.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 2.4: Statewide Economic Impact of California University of Pennsylvania Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
California	\$ 1,787,436	\$ 663,336	\$ 92,342	\$ 39,812	\$ 2,582,926

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 2.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 2.5: Statewide Economic Impact of California University of Pennsylvania Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
California	\$ 219,738,378	\$ 52,495,499	6.00%	\$ 3,149,730

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for California University of Pennsylvania were \$4,937,166 or 16.6 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which

⁵ Composite spending activity includes institutional, faculty and staff, and student spending.

estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of California University of Pennsylvania on the Commonwealth approximated 4,924 jobs, as is shown in **Table 2.6**.

Table 2.6: Statewide Employment Impact of California University of Pennsylvania on the Commonwealth as a Result of Direct Composite Spending: 4,924 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
California	231,632,596	21.26	4,924

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, 17.94 jobs were created or supported. In this manner, the employment impact of California University of Pennsylvania on the Commonwealth approximated 39 more jobs, as shown in **Table 2.7**. Therefore, the total employment impact of California University of Pennsylvania is 4,962 jobs.

Table 2.7: Statewide Employment Impact of California University of Pennsylvania on the Commonwealth as a Result of Direct Capital Expenditures: 39 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
California	2,148,569	17.94	39

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. While the university did not track the volunteer hours conducted by faculty and staff, students did devote their time to helping the community. California University of Pennsylvania students spent a total of 23,000 hours volunteering in 2013. It is likely that the

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.
Appendix C

students' participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, California University of Pennsylvania successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

California University of Pennsylvania's participation in its Customized Job Training program has over 6,000 contracts with a total value of \$207,286,773. Additionally, California University of Pennsylvania offers several other workforce development programs such as GACO Workshops and Counseling Sessions, Social Work Certificate Workshops and Career and Internship Services. In 2014, these programs had a total of 5,147 participants and partnered up with 1,951 businesses in efforts to improve workforce development.

Exhibit 2.1

California University of Pennsylvania Information			
	Location: County		Washington
	Faculty and Staff Headcount Paid in 2014		1,122
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	6,450	6,076
	Graduate	1,793	1,902
	Total	8,243	7,978
	Full-time	6,527	6,191
	Part-time	1,716	1,787
	Total	8,243	7,978
	PA residents	6,982	6,745
	Non-residents	1,261	1,233
	Total	8,243	7,978
	Traditional undergraduate (students under 25)	5,266	4950
	Non-traditional undergraduate (students over 25)	1,184	1125
	Total (undergraduate only)¹	6,450	6,075
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board	\$	10,086
	Tuition		6,820
	Fees		2,737
	Total	\$	19,643
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board	\$	10,086
	Tuition		10,230
	Fees		3,319
	Total	\$	23,635
	Graduate, In-State, FY 2014-2015		
	Tuition (full-time)	\$	10,782
	Fees		150
	Total	\$	10,932
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (full-time)	\$	15,474
	Fees		150
	Total	\$	15,624
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students	\$	36,821,770
	Tuition from undergraduate out-of-state students		6,943,793
	Tuition from graduate in-state students		12,772,719
	Tuition from graduate out-of-state students		9,161,073
	Total	\$	65,699,355

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	11,822,108
	Non-Mandatory Fees	
	Non-Mandatory Fees	401,974
	Total	\$ 12,224,082
	Total from Tuition and Fees	\$ 77,923,437
	Sales and Services	\$ 2,518,563
	Education and General Appropriations	\$ 29,751,310
	Grants and Contracts	
	Federal	\$ 13,312,444
	State	6,846,345
	Local/Other/Private	382,115
	System Transfer Awards	37,142
	Total grants and contracts	\$ 20,578,046
	Other Revenues (net of scholarship discounts and allowances)	\$ 16,277,823
	Total Revenues (from sources above)	\$ 147,049,179
	Funds Raised by University (private giving)	\$ 1,191,138
	Market Value of Endowment	\$ 29,577,549
	Total Replacement Value of Physical Plant	\$ 710,700,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 49,646,866
	Capital Improvements	156,577
	Employee Benefits	25,753,879
	Total Direct Institutional Spending	75,557,322
	Institutional spending prorated by 15.46% of out of state students	11,677,385
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	17,907,270
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	27,231,662
	Induced Effect (type 2 effect - type 1 effect)	9,324,392
	Total Impact of Institutional Spending	\$ 112,113,376
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 49,281,008
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 69,382,731

Financial Characteristics			
Student Expenditures			
	Student spending (direct)		\$ 106,794,266
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 150,355,647
Capital Expenditures			
	Capital Improvements - 5 year weighted average		\$ 1,273,333
	Deferred Maintenance		875,236
	Total Direct Capital Expenditures		2,148,569
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		3,619,050
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		5,297,513
	Induced Effect (type 2 effect - type 1 effect)		1,678,462
	Total Impact of Capital Expenditures		\$ 9,124,544
The Institution as an Employer			
Employment impact for the Commonwealth			
	Direct composite expenditures for the Commonwealth		\$ 231,632,596
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		4,924
	Direct capital expenditures for the Commonwealth		\$ 2,148,569
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		39
	Total Employment Impact		4,962
The University as a Center for Volunteerism			
In-Kind (Volunteer) Contributions to Regional Economy			
	Annual volunteer hours of faculty and staff		N/A
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		N/A
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		No
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
Sales Tax			
	Total Faculty and Staff and Student Spending		\$ 219,738,378
	Imputed % of taxable spending		23.89%
	Spending subject to tax		52,495,499
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 3,149,730

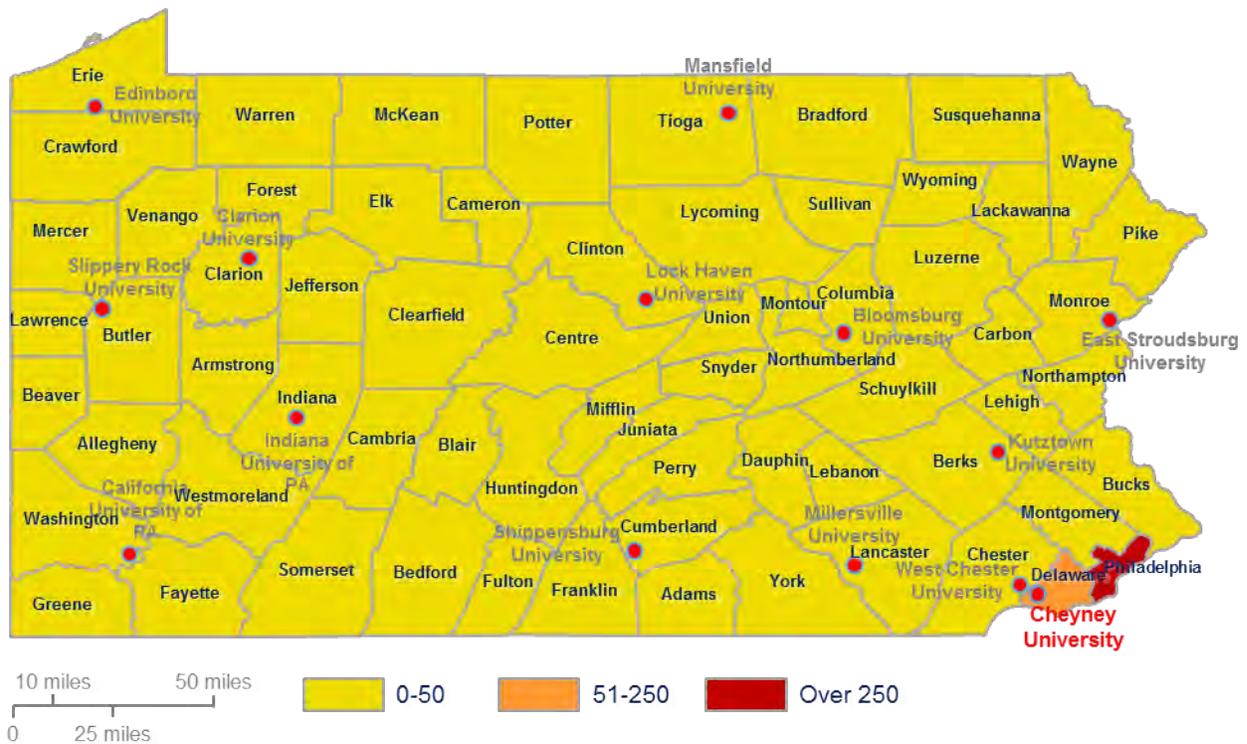
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 61,314,052
	State tax withholdings		1,787,436
	Local EIT		663,336
	Local Services Tax		92,342
	Unemployment tax		39,812
	Total Payroll Tax Payments		\$ 2,582,926
<small>¹In Fall 2014, there was a variance of one undergraduate student. The variance results from an unknown classification regarding traditional vs. non-traditional.</small>			

Cheyney University of Pennsylvania
Delaware County, PA

Founded in 1837 as the Institute for Colored Youth, Cheyney University of Pennsylvania is known as the first institution of higher learning for African Americans. The school began in Philadelphia as the Institute for Colored Youth and successfully provided free classical education for qualified young people. In 1902, the Institute moved to George Cheyney’s farm, 25 miles west of Philadelphia. It was finally named Cheyney State College in 1959 and joined Pennsylvania’s State System of Higher Education (“State System”) in 1983 as Cheyney University of Pennsylvania. In fall 2014, the University enrolled 997 undergraduate students and 25 graduate students.

Map 3.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

Cheyney University
 Students by County

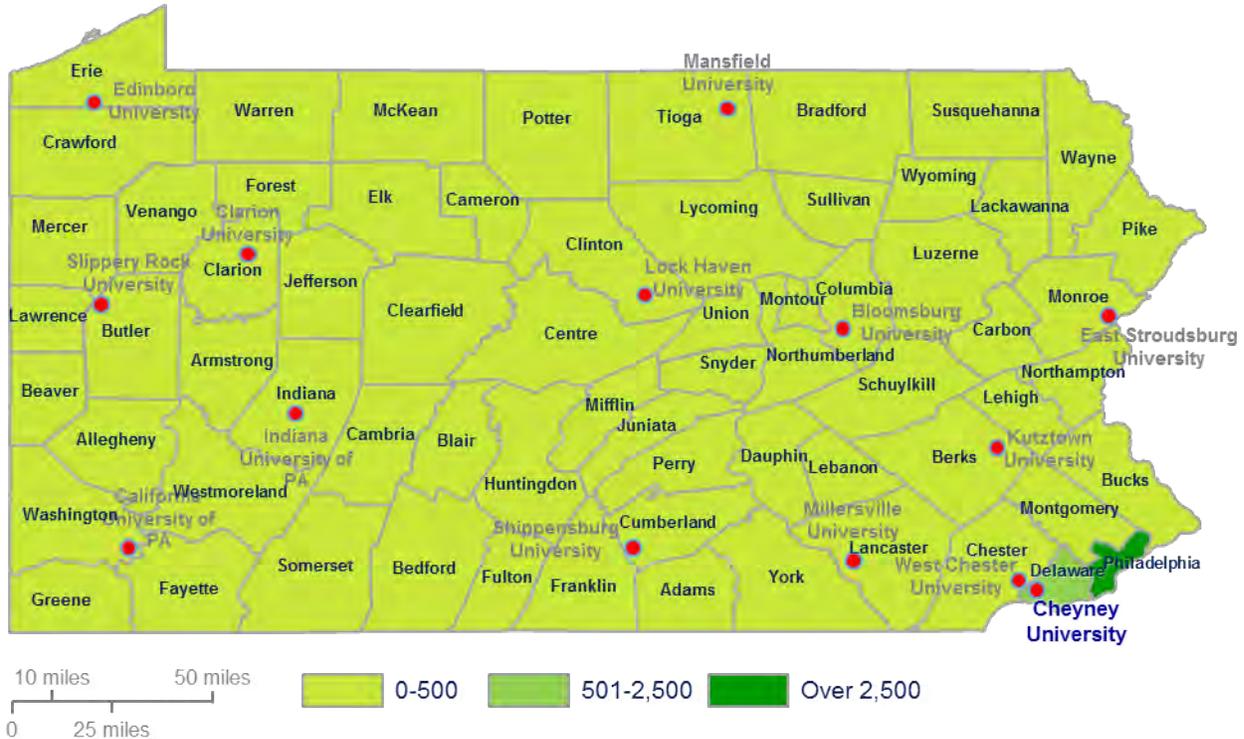


Cheyney University is proud of its more than 30,000 graduates. Well known alumni include journalist Ed Bradley of the CBS program “60 Minutes” and Robert W. Bogle, publisher and

CEO of the Philadelphia Tribune, among others. Currently, Dr. Frank G. Pogue, former President of Edinboro University of Pennsylvania, is Cheyney University's interim president, selected by the Board of Governors of the State System on October 9, 2014.¹

Map 3.2 demonstrates Cheyney University's alumni that still reside in the Commonwealth.

Cheyney University
Alumni by County



Cheyney University is established in Delaware County, PA. Delaware County has 183.8 sq. miles in land area and a population density of 3,057.5 per square mile. As of 2010, 98.1 percent of the population reported only one race, with 19.7 percent of these reporting African-American. The population of this county is three percent Hispanic (of any race). The average household size is 2.6 persons compared to an average family size of 3.2 persons. During 2013, Delaware County had a 0.6 percent increase in population since the last census in 2010. Additionally, the labor force was 282,071 people with an unemployment rate of 7.5 percent in 2013. Health care and social assistance was the largest of 20 major sectors in this county during that time frame.

¹ Excerpts obtained from Cheyney University's website, www.cheyney.edu.

Below are some of Delaware County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	561,973	5
Growth (percent) since 2010 Census	0.6%	18
Households (2012)	206,021	5
Labor Force (persons) (2013)	282,071	5
Unemployment Rate (2013)	7.5	34
Per Capita Personal Income (2012)	\$52,823	4
Median Household Income (2012)	\$60,900	4
Poverty Rate (2012)	11.7	51
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	91.5	9
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	34.9	6

Countywide labor force data and countywide employment impact as a result of Cheyney University is shown in **Table 3.1**. Out of the 282,071 people in the available labor force, Cheyney University employed 105 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately one half of a percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Delaware County can also be calculated. Of the 263,600 total people employed in Delaware County, 105 were employed by Cheyney University and live in-county; therefore the university’s countywide employment impact is approximately one half of a percent.³

Table 3.1: Labor Force Data, Delaware County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Cheyney	Delaware	N/A	105	282,071	0.04%	263,600	0.04%

The geographic distribution of Cheyney University employees is shown on **Map 3.3**.⁴ 84 employees, or 23 percent, live within 10 miles of the university, 168 employees, which

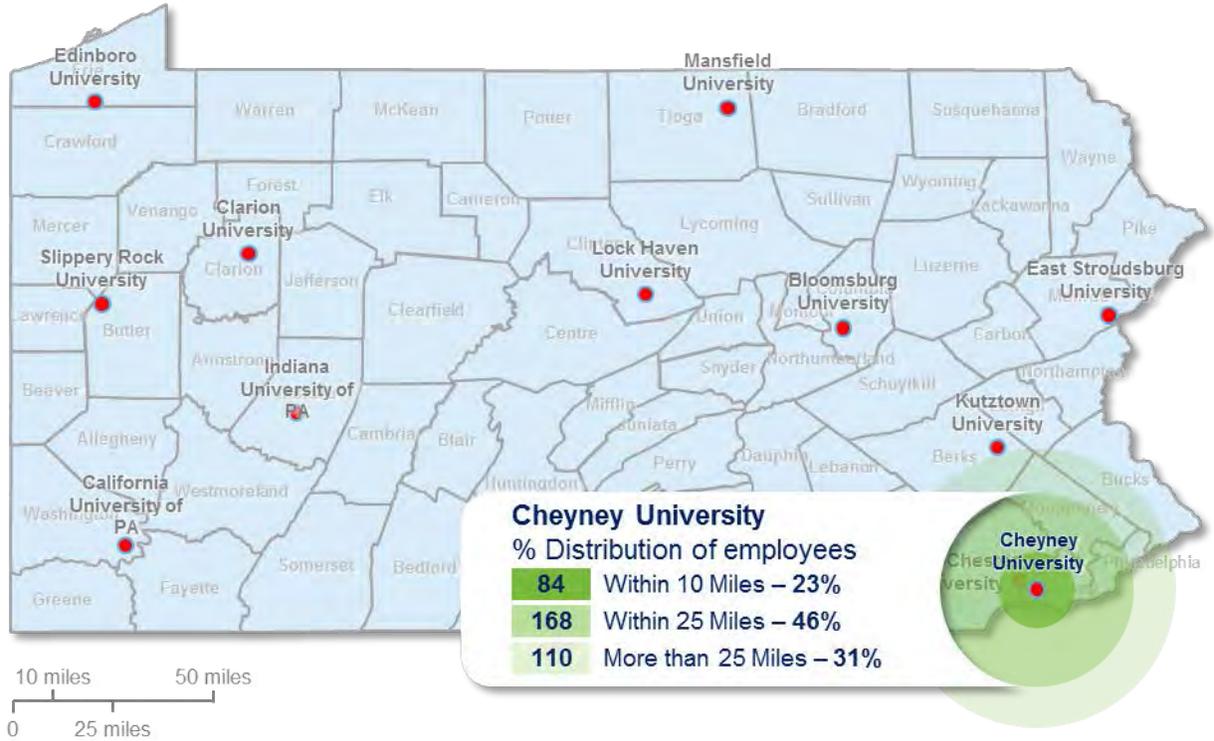
² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

⁴ For the purpose of this illustration, student employees were excluded.

constitutes 46 percent of the total employees, live within 25 miles, leaving 31 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 3.3: Cheyney University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 3.1** provides a general overview of Cheyney University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Cheyney University. The multipliers were obtained through the Bureau of Economic Analysis

Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Cheyney University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Cheyney University on the Commonwealth was \$58,476,432. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Cheyney University’s Direct Economic Impact on the Commonwealth

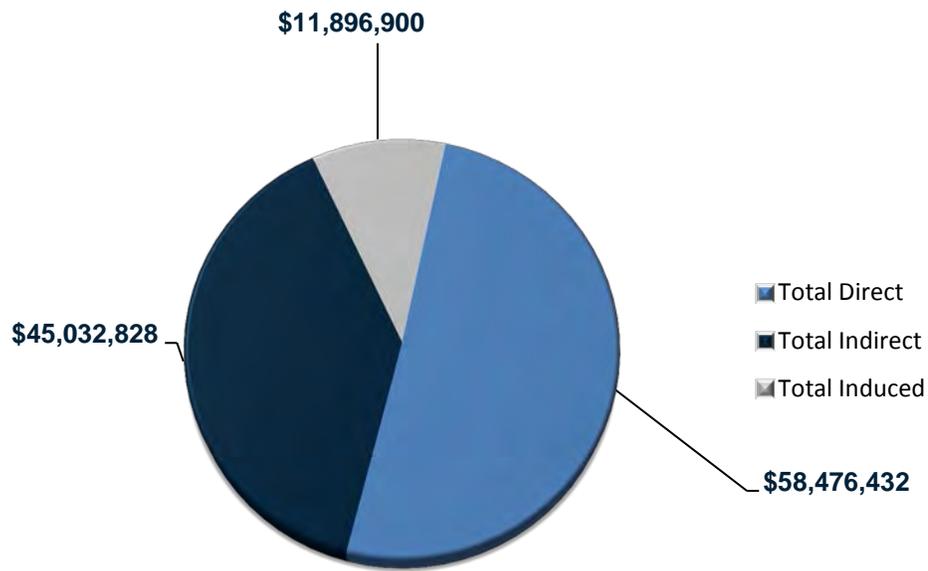
<i>(1) Institutional spending:</i>	<i>\$21,706,150</i>
<i>Benefits:</i>	<i>\$7,655,748</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$14,857,838</i>
<i>(3) Student spending:</i>	<i>\$7,162,092</i>
<i>(4) Capital Expenditures:</i>	<i><u>\$7,094,604</u></i>
 <i>Total Direct Impact:</i>	 <i><u>\$58,476,432</u></i>

As presented in **Table 3.2**, the direct impact, \$58,476,432, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Cheyney University on the Commonwealth of \$115,406,159. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$56,929,728. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 3.2: Total Economic Impact of Cheyney University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Cheyney	\$ 58,476,432	\$ 45,032,828	\$ 11,896,900	\$ 115,406,159

Chart 3.1: Total Economic Impact (Direct + Indirect + Induced): \$115,406,159



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Cheyney University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$13,098,158. Therefore, each dollar invested in Cheyney University by the Commonwealth via appropriations yielded a return of \$8.81 in total economic impact, as is shown on **Table 3.3**.

Table 3.3: Statewide Economic Impact of Cheyney University Appropriations

University	Total Impact	State Appropriations	Ratio
Cheyney	\$115,406,159	\$ 13,098,158	8.81

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 3.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 3.4: Statewide Economic Impact of Cheyney University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Cheyney	\$ 488,093	\$ 250,803	\$ 55	\$ 11,401	\$ 750,352

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 3.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 3.5: Statewide Economic Impact of Cheyney University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Cheyney	\$ 31,001,859	\$ 7,406,344	6.00%	\$ 444,381

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Cheyney University were \$932,473 or 7.1 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Cheyney University on the Commonwealth approximated 1,092 jobs, as is shown in **Table 3.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 3.6: Statewide Employment Impact of Cheyney University on the Commonwealth as Result of Direct Composite Spending: 1,092 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Cheyney	51,381,828	21.26	1,092

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Cheyney University on the Commonwealth approximated 127 more jobs, as shown in **Table 3.7**. Therefore, the total employment impact of Cheyney University is 1,219 jobs.

Table 3.7: Statewide Employment Impact of Cheyney University on the Commonwealth as a Result of Direct Capital Expenditures: 127 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Cheyney	7,094,604	17.84	127

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. However, Cheyney University does not formally track the amount of volunteerism conducted by students, faculty, or staff. It is important to note that it is likely that the student participation is required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as

partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Cheyney University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Cheyney University's participation in WEDnetPA program has over 900 participants and had a total of \$184,072 funds awarded in 2014. Additionally, Cheyney University has a Small Business Enterprise Supportive Services Center, as well as a Disadvantaged Business Enterprise Supportive Services Center that counseled over 475 individuals and over 500 businesses in 2014. In other words, Cheyney University contributed over 4,700 hours to the institution's economic development efforts.

Exhibit 3.1

Cheyney University Information			
	Location: County	Delaware	
	Faculty and Staff Headcount Paid in 2014	362	
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	1,179	997
	Graduate	33	25
	Total	1,212	1,022
	Full-time	1,123	942
	Part-time	89	80
	Total	1,212	1,022
	PA residents	947	745
	Non-residents	265	277
	Total	1,212	1,022
	Traditional undergraduate (students under 25)	1,049	882
	Non-traditional undergraduate (students over 25)	128	114
	Total (undergraduate only)¹	1,177	996
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 11,252
	Tuition		6,820
	Fees		2,270
	Total		\$ 20,342
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 11,252
	Tuition		11,254
	Fees		2,490
	Total		\$ 24,996
	Graduate, In-State, FY 2014-2015		
	Tuition (15 credits)		\$ 6,135
	Fees		819
	Total		\$ 6,954
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (15 credits)		\$ 9,195
	Fees		999
	Total		\$ 10,194
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 5,942,864
	Tuition from undergraduate out-of-state students		2,670,767
	Tuition from graduate in-state students		204,936
	Tuition from graduate out-of-state students		51,600
	Total		\$ 8,870,167

*A portion of the Cheyney campus lies within Chester County.

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 2,346,954
	Non-Mandatory Fees	
	Non-Mandatory Fees	27,017
	Total	\$ 2,373,971
	Total from Tuition and Fees	\$ 11,244,138
	Sales and Services	\$78,790
	Education and General Appropriations	\$ 13,098,158
	Grants and Contracts	
	Federal	8,028,360
	State	4,076,440
	Local/Other/Private	407,854
	System Transfer Awards	306,834
	Total grants and contracts	\$ 12,819,488
	Other Revenues (net of scholarship discounts and allowances)	\$ 9,663,031
	Total Revenues (from sources above)	\$ 46,903,605
	Funds Raised by University (private giving)	\$ 1,027,792
	Market Value of Endowment	\$ 2,917,152
	Total Replacement Value of Physical Plant	\$504,800,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 20,766,533
	Capital Improvements	939,617
	Employee Benefits	7,655,748
	Total Direct Institutional Spending	29,361,898
	Institutional spending prorated by 27.10% of out of state students	7,958,166
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	12,203,848
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	18,558,443
	Induced Effect (type 2 effect - type 1 effect)	6,354,596
	Total Impact of Institutional Spending	\$ 54,274,937
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 14,857,838
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 20,918,350

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 7,162,092
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 10,083,509
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 6,606,667
	Deferred Maintenance		487,937
	Total Direct Capital Expenditures		7,094,604
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		11,950,150
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		17,492,455
	Induced Effect (type 2 effect - type 1 effect)		5,542,304
	Total Impact of Capital Expenditures		\$ 30,129,363
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 51,381,828
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		1,092
	Direct capital expenditures for the Commonwealth		\$ 7,094,604
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		127
	Total Employment Impact		1,219
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff		N/A
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		N/A
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		Yes
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 31,001,859
	Imputed % of taxable spending		23.89%
	Spending subject to tax		7,406,344
	Sales tax rate		6%
	Total State Tax Revenue Generation		\$ 444,381

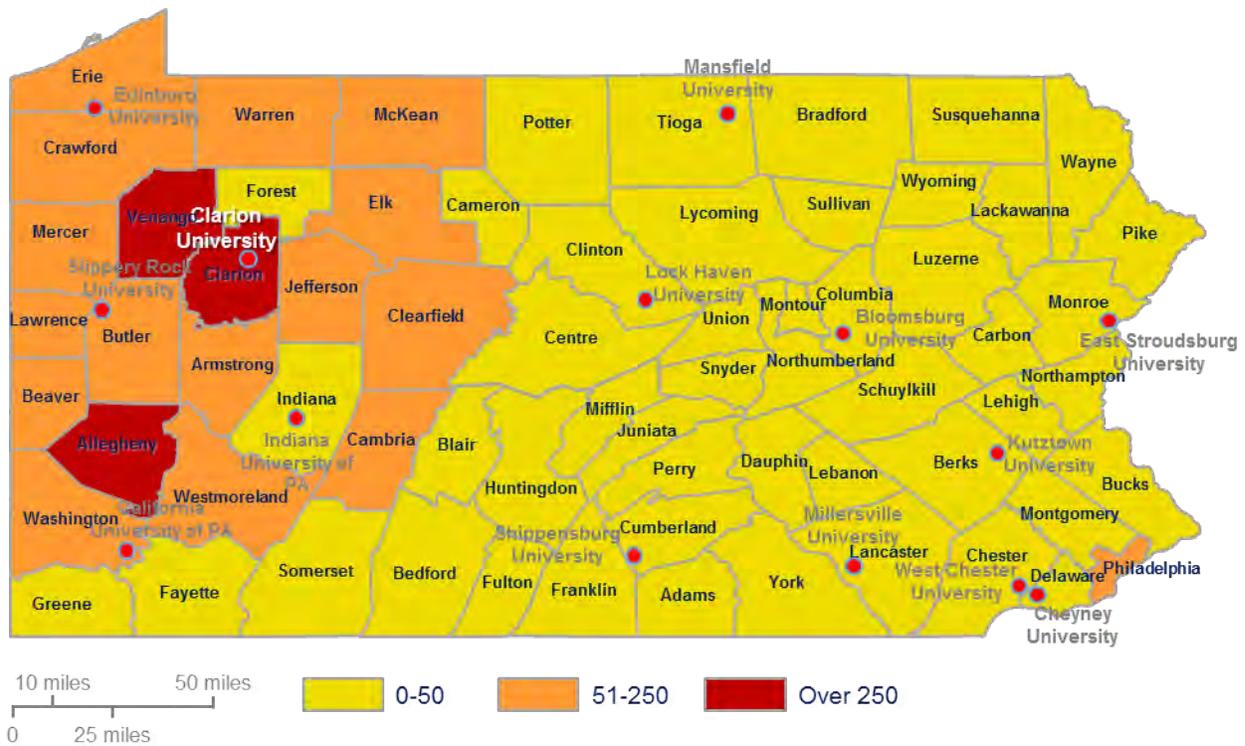
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 16,537,354
	State tax withholdings		488,093
	Local EIT		250,803
	Local Services Tax		55
	Unemployment tax		11,401
	Total Payroll Tax Payments		\$ 750,352
¹ For Fall 2013 and Fall 2014, there were variances of 2 and 1 students, respectively. The variance results from unknown classifications regarding traditional vs. non-traditional undergraduate students.			

Clarion University of Pennsylvania
Clarion County, PA

Founded in 1867, Clarion University began as the Carrier Seminary of western Pennsylvania. It became Clarion State Normal School in 1887 and was purchased by the Commonwealth in December 1915. It wasn't until 1929, however, that Clarion officially became a college. Clarion University's vision is to be a leader in high-impact educational practices that benefit students, employers, and community partners. To do so, Clarion offers students over 100 academic programs and more than 140 student organizations, which have attracted students from 48 states and 22 countries around the world. In the fall 2014 semester, Clarion University enrolled 4,906 undergraduate students and 806 graduate students.

Map 4.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

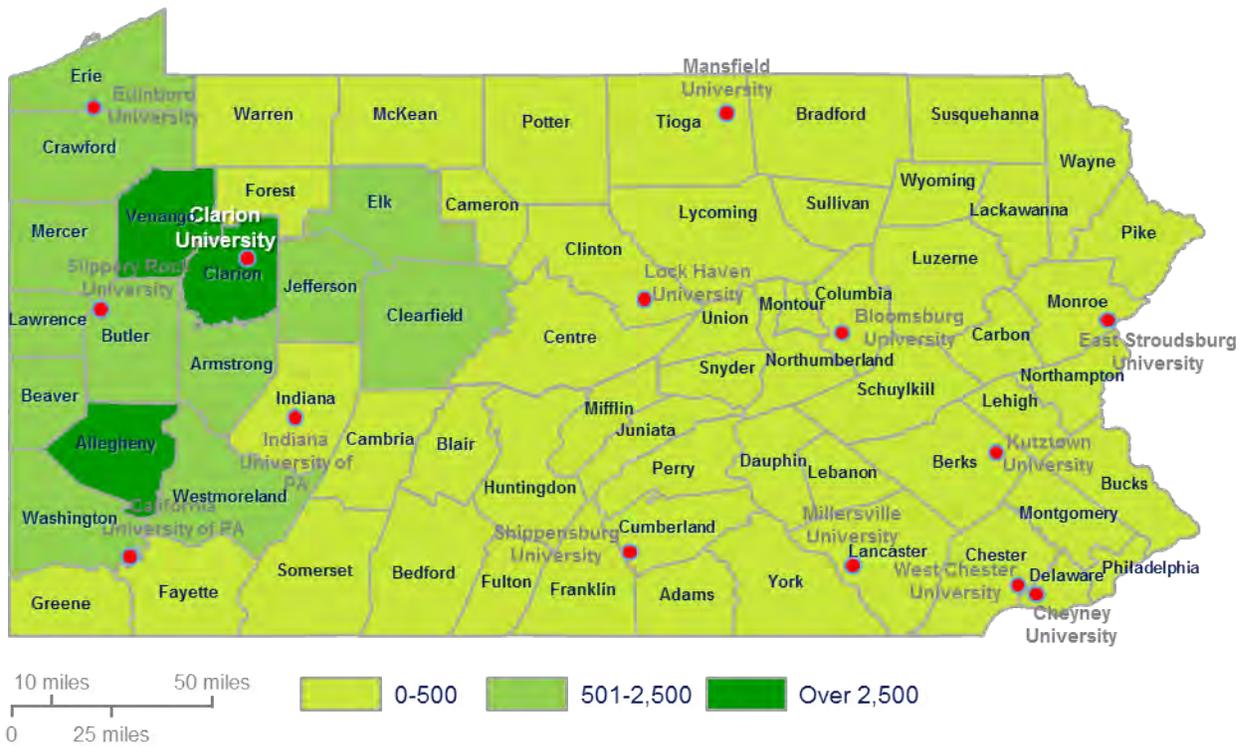
Clarion University
 Students by County



The University also partners with the University of Pittsburgh Medical Center, National Fuel Company, and the Biotech Business Development Center. Clarion has a second campus in the historic Oil Valley region, Venango College, which grants two-year, stand-alone and associate degrees in 11 academic disciplines. Additionally Venango also offers select baccalaureate and master degrees and provides students an opportunity to begin any of Clarion University’s 90-plus bachelor degree programs. In July 2010, Clarion University welcomed Dr. Karen M. Whitney as its 16th president.¹

Map 4.2 demonstrates Clarion University’s alumni that still reside in the Commonwealth.

Clarion University
Alumni by County



Clarion’s main campus is in Clarion County, PA. It has 600.8 sq. miles in land area and a population density of 65.2 per square mile. Population in Clarion County has decreased 2.1 percent since in the last census in 2010 to 39,155. In this county, 99.2 percent of the population reported only one race, with 1.2 percent of these reporting African-American in 2010. Additionally, the population in Clarion is 0.6 percent Hispanic (of any race). The average

¹ Excerpts obtained from Clarion University’s website, www.clarion.edu.

household size is 2.4 persons compared to an average family size of 2.9 persons. In 2013, the labor force was 19,510 people, the unemployment rate was eight percent, and health care and social assistance was the largest of 20 major sectors.

Below are some of Clarion County's population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	39,155	57
Growth (percent) since 2010 Census	-2.1%	61
Households (2012)	15,638	54
Labor Force (persons) (2013)	19,510	56
Unemployment Rate (2013)	8.0	22
Per Capita Personal Income (2012)	\$35,509	43
Median Household Income (2012)	\$41,538	54
Poverty Rate (2012)	18.5	4
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	87.9	31
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	18.3	36

Venango County, PA

Clarion University also has a second campus in Oil City, PA. Oil City is a part of Venango County which, as of 2013, has 53,907 people. The population decreased by two percent since 2010. It is comprised of 674.3 sq. miles in land area and has a population density of 79.9 per square mile. The average household size in 2010 was 2.4 persons compared to an average family size of 2.8 persons. 98.9 percent of the population in 2010 reported only one race, with 1.0% of these reporting African-American. The population of this county is 0.9 percent Hispanic (of any race). Additionally, this county had a labor force of 25,657 people and an unemployment rate of 7.9 percent. In 2013 manufacturing was the largest of 20 major sectors.

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania's Department of Labor and Industry Center for Workforce Information and Analysis.

Below are some of Venango County’s population demographics.

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	53,907	43
Growth (%) since 2010 Census	-2.0%	60
Households (2012)	22,525	42
Labor Force (persons) (2013)	25,657	43
Unemployment Rate (2013)	7.9	25
Per Capita Personal Income (2012)	\$35,548	42
Median Household Income (2012)	\$38,351	64
Poverty Rate (2012)	17.5	5
H.S. Diploma or More - % of Adults 25+ (2012 ACS 5yr)	88.5	23
Bachelor Deg. or More - % of Adults 25+ (2012 ACS 5yr)	14.7	51

Countywide labor force data and countywide employment impact as a result of Clarion University in Clarion County is shown in **Table 4.1**.³ Out of the 19,510 people in the available labor force, Clarion University employed 630 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of 3.2 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Clarion County can also be calculated. Of the 17,900 total people employed in Clarion County, 630 were employed by Clarion University and live in-county; therefore the university’s countywide employment impact is 3.5 percent.⁴

Table 4.1: Labor Force Data, Clarion County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Clarion	Clarion	1	630	19,510	3.23%	17,900	3.52%

The geographic distribution of Clarion University’s employees is shown on **Map 4.3**.⁵ 366 employees, or 41 percent, live within 10 miles of the university, 251 employees, which

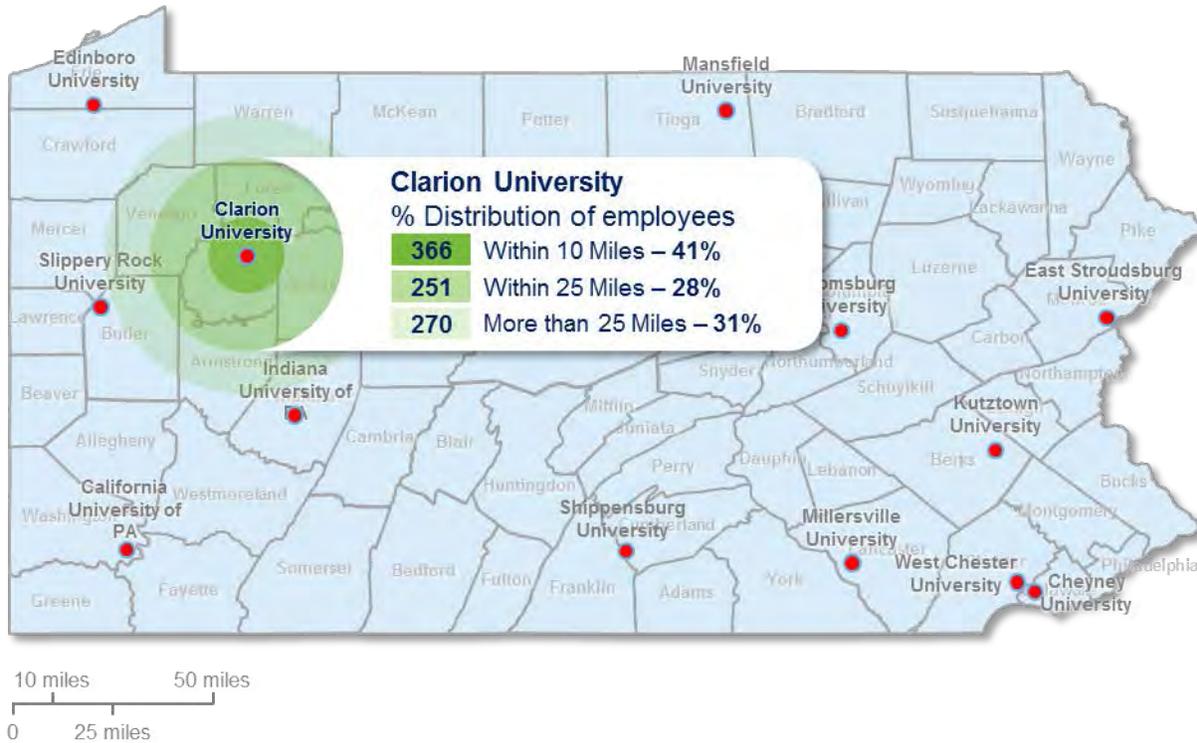
³ For the purpose of our analysis, the focus was on the amount of in-county jobs at Clarion University’s main campus in Clarion County. It is noted that Clarion University has a branch, Venango College, in Venango County where there is also an employment impact.

⁴ The in-county employee count includes students who are employed by the university.

⁵ For the purpose of this illustration, student employees were excluded.

constitutes 28 percent of the total employees, live within 25 miles, leaving 31 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 4.3: Clarion University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 4.1** provides a general overview of Clarion University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Clarion University. The multipliers were obtained through the Bureau of Economic Analysis Regional

Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Clarion University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Clarion University on the Commonwealth was \$160,875,776. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Clarion University’s Direct Economic Impact on the Commonwealth

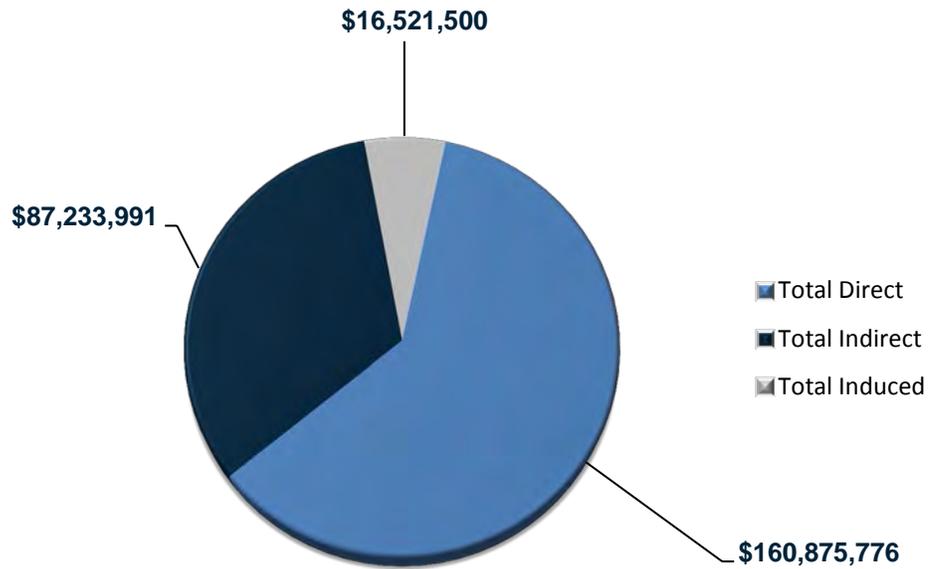
<i>(1) Institutional spending:</i>	<i>\$36,781,618</i>
<i>Benefits:</i>	<i>\$20,932,361</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$40,236,304</i>
<i>(3) Student spending:</i>	<i>\$49,088,664</i>
<i>(4) Capital Expenditures</i>	<i><u>\$13,836,830</u></i>
 <i>Total Direct Impact:</i>	 <i><u>\$160,875,776</u></i>

As presented in **Table 4.2**, the direct impact, \$160,875,776, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Clarion University on the Commonwealth of \$264,631,268. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$103,755,491. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 4.2: Total Economic Impact of Clarion University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Clarion	\$ 160,875,776	\$ 87,233,991	\$ 16,521,500	\$ 264,631,268

Chart 4.1: Total Economic Impact (Direct + Indirect + Induced): \$264,631,268



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Clarion University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$22,261,739. Therefore, each dollar invested in Clarion University by the Commonwealth via appropriations yielded a return of approximately \$11.89 in total economic impact, as is shown on **Table 4.3**.

Table 4.3: State Economic Impact of Clarion University Appropriations

University	Total Impact	State Appropriations	Ratio
Clarion	\$264,631,268	\$ 22,261,739	11.89

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 4.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 4.4: State Economic Impact of Clarion University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Clarion	\$ 1,420,794	\$ 479,413	\$ 57,192	\$ 32,025	\$ 1,989,425

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university's faculty and staff as well as students. **Table 4.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 4.5: State Economic Impact of Clarion University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Clarion	\$ 125,760,622	\$ 30,044,213	6.00%	\$ 1,802,653

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Clarion University were \$3,223,447 or 14.5 percent of the Commonwealth's appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁶ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁷ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Clarion University on the Commonwealth approximately 3,126 jobs, as is shown in **Table 4.6**.

⁶ Composite spending activity includes institutional, faculty and staff and student spending.

⁷ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 4.6: Statewide Impact Employment of Clarion University on the Commonwealth as a Result of Direct Composite Spending: 3,126 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Clarion	147,038,947	21.26	3,126

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Clarion University on the Commonwealth approximated 248 more jobs, as shown in **Table 4.7**. Therefore, the total employment impact of Clarion University is 3,374 jobs.

Table 4.7: Statewide Employment Impact of Clarion University on the Commonwealth as a Result of Direct Capital Expenditures: 248 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Clarion	\$ 13,836,830	17.94	248

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2013 and 2014, Clarion University’s faculty and staff spent 1,400 and 1,450 hours volunteering, respectively. With an average value of approximately \$22.55 per hour, their total contribution amounts to \$31,570 and \$32,698 in 2013 and 2014. Students also devoted their time to helping the community. Clarion students spent a total of 4,400 and 4,550 hours volunteering in 2013 and 2014, respectively.⁸ It is likely that the students’ participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁸ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Clarion University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Clarion University's participation in WEDnetPA program has over 950 participants and had a total of \$367,451 funds awarded in 2014. Additionally, Clarion University has a Small Business Development Center ("SBDC") which helps in the growth of its ten-county region in western

Pennsylvania by providing entrepreneurs with the education, information and tools necessary to build successful businesses. During 2013, Clarion’s SBDC provided approximately 7,522 hours of consulting to about 524 entrepreneurs, mostly regarding start-up assistance. Furthermore in total, \$11,927,503 was approved in client financing. As a result, the SBDC is positively affecting the 10 counties it reaches, especially Venango County, where most of the resources in 2013 were directed.⁹ Lastly, Clarion University has established the Gregory Barnes Center for Biotechnical Business Development. The Gregory Barnes Center is home to the Center for Applied Research & Intellectual Property Development (“CARIPD”) and the SBDC. Inside are the Innovation Laboratories which are designed to be a versatile one-stop shop. They include a centralized, shared laboratory, 200-, 500- and 2,500-square-foot, private, wet laboratories. Since its inauguration, CARIPD has conducted contract research and grant-supported research with 11 companies and six individual entrepreneurs, and provided initial consultations for an additional eight potential entrepreneurs. More than \$300,000 has been brought in through grants to support applied research for them. All of the equipment in the Innovation Laboratories is research or industry caliber.¹⁰ By way of these efforts, it is clear that Clarion University has successfully impacted the economic development of Clarion County.

⁹ “Clarion University SBDC Services Summary,” Clarion.edu, visited January 26, 2015.

¹⁰ “Innovation Incubation”, Clarion.edu, visited February 24, 2015.

Exhibit 4.1

Clarion University Information			
	Location: County		Clarion
	Faculty and Staff Headcount Paid in 2014		887
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	5,199	4,906
	Graduate	881	806
	Total	6,080	5,712
	Full-time	4,580	4,194
	Part-time	1,500	1,518
	Total	6,080	5,712
	PA residents	5,411	4,996
	Non-residents	669	716
	Total	6,080	5,712
	Traditional undergraduate (students under 25)	4,336	4,051
	Non-traditional undergraduate (students over 25)	859	846
	Total (undergraduate only)¹	5,195	4,897
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 8,152
	Tuition		6,820
	Fees		2,968
	Total		\$ 17,940
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 8,152
	Tuition		10,230
	Fees		3,530
	Total		\$ 21,912
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)		\$ 454
	Fees		197
	Total		\$ 651
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)		\$ 681
	Fees		236
	Total		\$ 917
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 30,214,524
	Tuition from undergraduate out-of-state students		3,077,715
	Tuition from graduate in-state students		3,997,566
	Tuition from graduate out-of-state students		2,048,860
	Total		\$ 39,338,665

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 14,247,090
	Non-Mandatory Fees	
	Non-Mandatory Fees	489,053
	Total	\$ 14,736,143
	Total from Tuition and Fees	\$ 54,074,808
	Sales and Services	\$ 3,639,638
	Education and General Appropriations	\$ 22,261,739
	Grants and Contracts	
	Federal	\$ 12,457,084
	State	7,322,322
	Local/Other/Private	708,613
	System Transfer Awards	251,389
	Total grants and contracts	\$ 20,739,408
	Other Revenues (net of scholarship discounts and allowances)	\$ 11,567,064
	Total Revenues (from sources above)	\$ 112,282,657
	Funds Raised by University (private giving)	\$ 940,630
	Market Value of Endowment	\$ 30,712,875
	Total Replacement Value of Physical Plant (main campus)	\$ 546,700,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 35,689,156
	Capital Improvements	1,092,462
	Employee Benefits	20,932,361
	Total Direct Institutional Spending	57,713,979
	Institutional spending prorated by 12.39% of out of state students	7,153,623
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	10,970,082
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	16,682,250
	Induced Effect (type 2 effect - type 1 effect)	5,712,168
	Total Impact of Institutional Spending	\$ 80,108,397
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	40,236,304
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 56,648,692

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 49,088,664
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 69,111,930
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 13,046,667
	Deferred Maintenance		790,163
	Total Direct Capital Expenditures		13,836,830
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		23,306,756
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		34,116,088
	Induced Effect (type 2 effect - type 1 effect)		10,809,332
	Total Impact of Capital Expenditures		\$ 58,762,248
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 147,038,947
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		3,126
	Direct capital expenditures for the Commonwealth		\$ 13,836,830
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		248
	Total Employment Impact		3,374
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		1,450
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 32,698
	Annual volunteer hours of students (2014)		4,550
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		Yes
	Patents filed since January 1, 2010		1
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 125,760,622
	Imputed % of taxable spending		23.89%
	Spending subject to tax		30,044,213
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 1,802,653

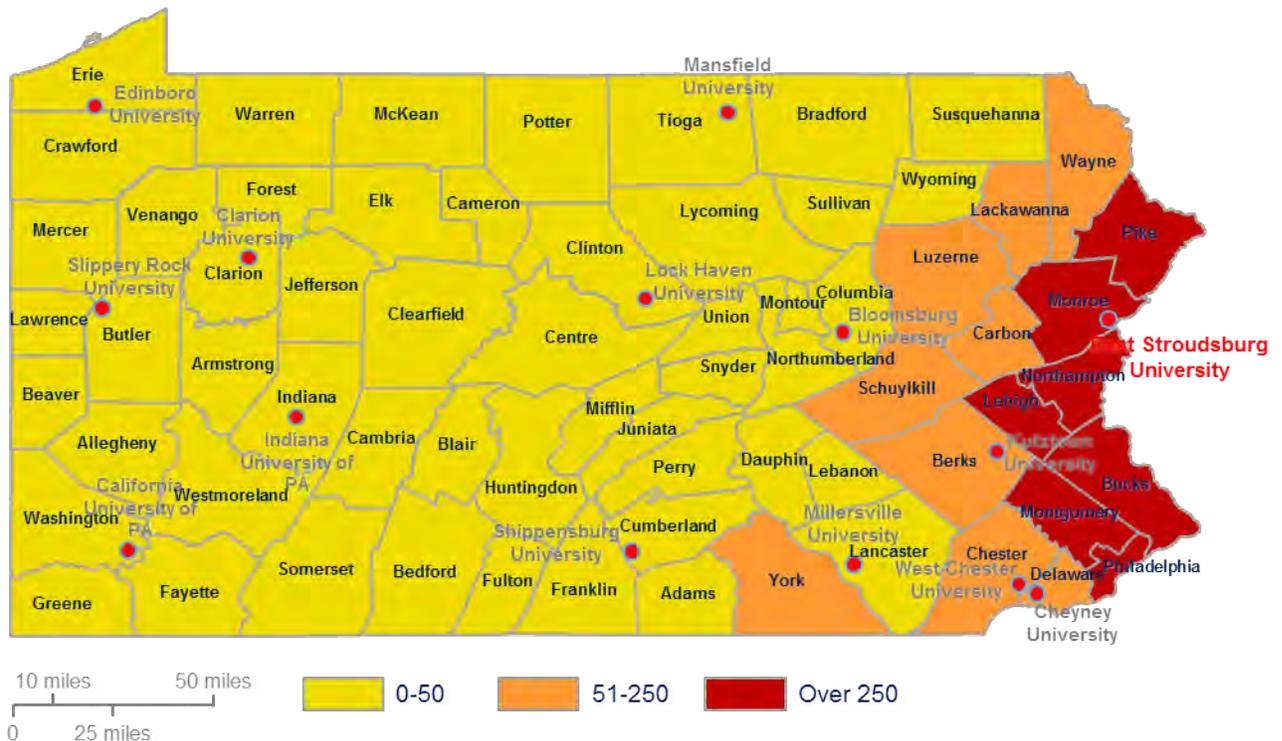
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 47,353,736
	State tax withholdings		1,420,794
	Local EIT		479,413
	Local Services Tax		57,192
	Unemployment tax		32,025
	Total Payroll Tax Payments		\$ 1,989,425
¹ For Fall 2013 and Fall 2014, there were variances of 4 and 9 students, respectively. The variance results from unknown classifications regarding traditional vs. non-traditional undergraduate students.			

East Stroudsburg University of Pennsylvania
Monroe County, PA

East Stroudsburg Normal School opened its doors on September 4, 1893. Although the Normal School was originally privately owned, ownership was transferred to the Commonwealth of Pennsylvania in 1920, and the name was changed to East Stroudsburg State Normal School. In November 1982, Pennsylvania’s State System of Higher Education was authorized by Senate Bill 506. The College officially became East Stroudsburg University on July 1, 1983. Today the University offers 59 degree programs and has a 24:1 student-faculty ratio. For the fall 2014 semester, 6,204 undergraduates and 616 graduate students were enrolled at East Stroudsburg.

Map 5.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

East Stroudsburg University
 Students by County

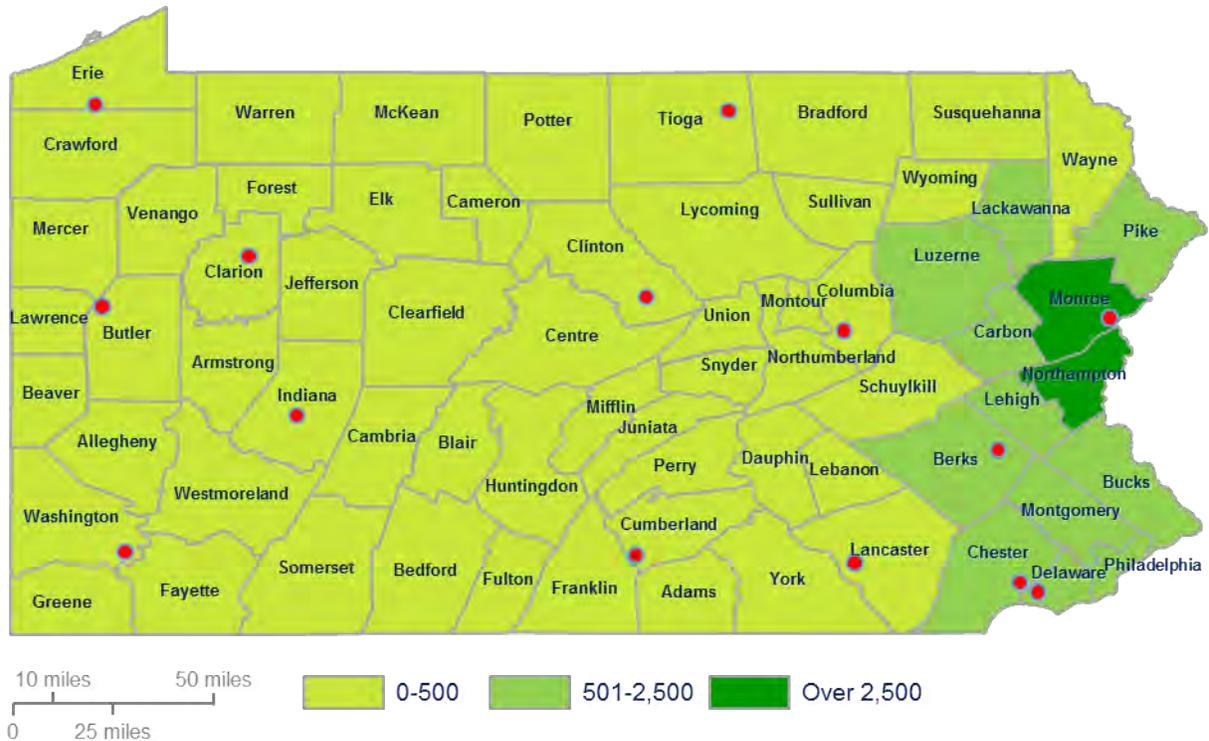


As a part of the NCAA Division II, East Stroudsburg University offers 20 intercollegiate varsity sports. Marcia G. Welsh, Ph.D. was appointed as the 13th president of East Stroudsburg in April

2012 by the Board of Governors for the State System and assumed her role as first female president in July 2012.¹

Map 5.2 demonstrates East Stroudsburg University’s alumni that still reside in the Commonwealth.

East Stroudsburg University
Alumni by County



East Stroudsburg lies in Monroe County, PA. Monroe County has a population of 167,148 people, 608.3 sq. miles in land area and a population density of 274.8 per square mile. The population has decreased since the last census (2010) by 1.6 percent. The average household size is 2.7 persons compared to an average family size of 3.2 persons. In 2010, when the most recent census was taken, 97.1 percent of the population reported only one race, with 13.2 percent of these reporting African-American. The population of this county is 13.1 percent Hispanic (of any race). In 2013 retail trade was the largest of 20 major sectors. The labor force consisted of 80,185 people and there was a 9.4 percent unemployment rate.

¹ Excerpts obtained from East Stroudsburg University’s website, www.esu.edu.

Below are some of Monroe County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	167,148	21
Growth (percent) since 2010 Census	-1.6%	56
Households (2013)	58,875	22
Labor Force (persons) (2013)	80,185	22
Unemployment Rate (2013)	9.4	4
Per Capita Personal Income (2013)	\$33,930	61
Median Household Income (2013)	\$55,273	14
Poverty Rate (2013)	12.0	44
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	89.6	16
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	23.8	19

Countywide labor force data and countywide employment impact as a result of East Stroudsburg University is shown in **Table 5.1**. Out of the 80,185 people in the available labor force, East Stroudsburg University employed 854 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately one percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Monroe County can also be calculated. Of the 74,400 total people employed in Monroe County, 854 were employed by East Stroudsburg University and live in-county; therefore the university’s countywide employment impact is approximately 1.2 percent.³

Table 5.1: Labor Force Data, Monroe County: Averages and Countywide Employment Impact

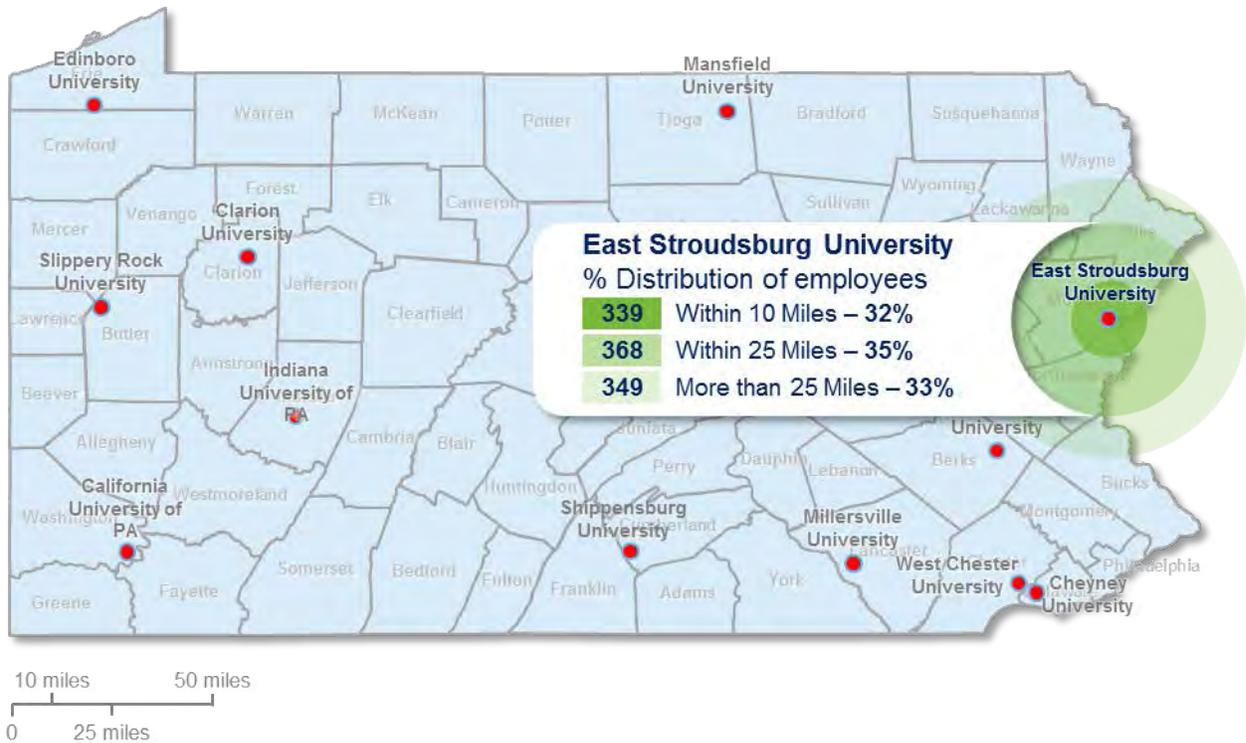
University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
East Stroudsburg	Monroe	11	854	80,185	1.07%	74,400	1.15%

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

The geographic distribution of East Stroudsburg University’s employees is shown on **Map 5.3**.⁴ 339 employees, or 32 percent, live within 10 miles of the university, 368 employees, which constitutes 35 percent of the total employees, live within 25 miles, leaving 33 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 5.3: East Stroudsburg University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 5.1** provides a general overview of East Stroudsburg University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional

⁴ For the purpose of this illustration, student employees were excluded.

detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of East Stroudsburg University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that East Stroudsburg University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of East Stroudsburg University on the Commonwealth was \$182,748,242. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

East Stroudsburg University’s Direct Economic Impact on the Commonwealth

(1) Institutional spending: \$44,154,348

Benefits: \$21,933,252

(2) Faculty/Staff spending: \$44,487,540

(3) Student spending: \$60,933,589

(4) Capital Expenditures \$11,239,513

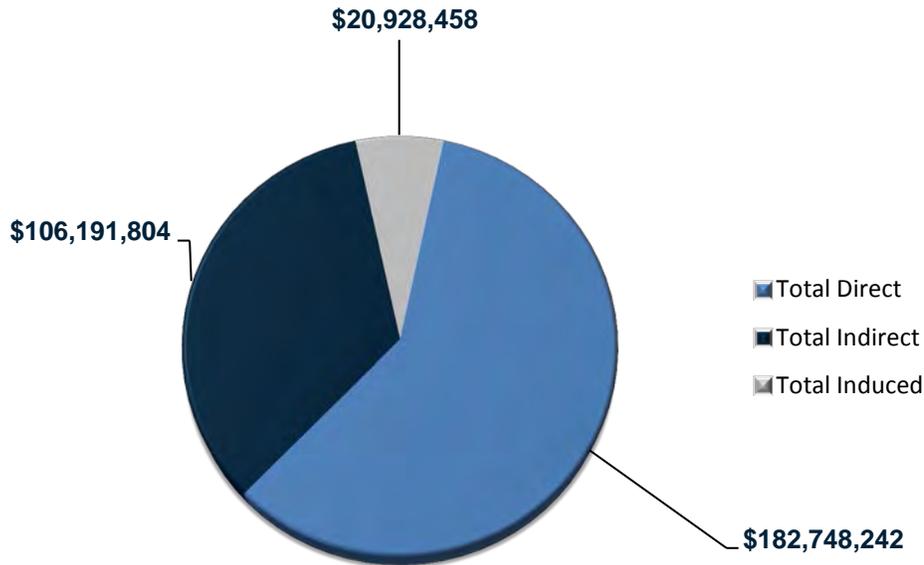
Total Direct Impact: \$182,748,242

As presented in **Table 5.2**, the direct impact, \$182,748,242, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of East Stroudsburg University on the Commonwealth of \$309,868,504. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$127,120,262. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 5.2: Total Economic Impact of East Stroudsburg University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
East Stroudsburg	\$ 182,748,242	\$ 106,191,804	\$ 20,928,458	\$ 309,868,504

Chart 5.1: Total Economic Impact (Direct + Indirect + Induced): \$309,868,504



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to East Stroudsburg University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$21,160,935. Therefore, each dollar invested in East Stroudsburg University by the Commonwealth via appropriations yielded a return of \$14.64 in total economic impact, as is shown on **Table 5.3**.

Table 5.3: Statewide Economic Impact of East Stroudsburg University Appropriations

University	Total Impact	State Appropriations	Ratio
East Stroudsburg	\$308,868,504	\$ 21,160,935	14.64

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state

unemployment trust fund. **Table 5.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 5.4: Statewide Economic Impact of East Stroudsburg University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
East Stroudsburg	\$ 1,482,286	\$ 566,449	\$ 46,416	\$ 34,538	\$ 2,129,689

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 5.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 5.5: Statewide Economic Impact of East Stroudsburg University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
East Stroudsburg	\$ 148,422,408	\$ 35,458,113	6.00%	\$ 2,127,487

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for East Stroudsburg University were \$3,609,773 or 17.1 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of East Stroudsburg University on the Commonwealth approximated 3,646 jobs, as is shown in **Table 5.6**.

Table 5.6: Statewide Employment Impact of East Stroudsburg University on the Commonwealth as a Result of Direct Composite Spending: 3,646 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
East Stroudsburg	171,508,729	21.26	3,646

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of East Stroudsburg University on the Commonwealth approximated 202 more jobs, as shown in **Table 5.7**. Therefore, the total employment impact of East Stroudsburg University is 3,847 jobs.

Table 5.7: Statewide Employment Impact of East Stroudsburg University on the Commonwealth as a Result of Direct Capital Expenditures: 202 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
East Stroudsburg	\$ 11,239,513	17.94	202

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2014, East Stroudsburg University’s faculty and staff spent 130 hours volunteering. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$2,932. Students also devoted their time to helping the community. East Stroudsburg students spent a total of 10,586 hours in 2014 volunteering.⁷ It is likely that

⁷ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

the students' participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, East Stroudsburg University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

East Stroudsburg's participation in WEDnetPA program has over 1,400 participants, 45 participating businesses, and had a total of \$366,491 funds awarded in 2014. Additionally, East Stroudsburg has a business incubator and holds workforce training sessions. The incubator has 19 businesses and 25 employees in the facility. Furthermore, the incubator captures the involvement of eight undergraduate students and nine East Stroudsburg University staff members. The workforce training sessions are aimed at training industry personnel through three workshops: training within the industry, balance scorecard, and technology boot camp. During 2014, these three workshops had a total of 38 participants and paired up with 16 businesses in effort to improve workforce development.

Exhibit 5.1

East Stroudsburg University Information			
	Location: County	Monroe	
	Faculty and Staff Headcount Paid in 2014	1,056	
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	6,186	6,204
	Graduate	592	616
	Total	6,778	6,820
	Full-time	5794	5,943
	Part-time	984	877
	Total	6,778	6,820
	PA residents	5,096	5,250
	Non-residents	1,682	1,570
	Total	6,778	6,820
	Traditional undergraduate (students under 25)	5,652	5,631
	Non-traditional undergraduate (students over 25)	534	573
	Total (undergraduate only)	6,186	6,204
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 7,980
	Tuition		6,820
	Fees		2,556
	Total		\$ 17,356
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 7,980
	Tuition		17,050
	Fees		2,776
	Total		\$ 27,806
	Graduate, In-State, FY 2014-2015		
	Tuition (15 credits)		\$ 6,810
	Fees		931
	Total		\$ 7,741
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (15 credits)		\$ 10,215
	Fees		931
	Total		\$ 11,146
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 30,001,668
	Tuition from undergraduate out-of-state students		24,195,262
	Tuition from graduate in-state students		3,777,930
	Tuition from graduate out-of-state students		1,995,608
	Total		\$ 59,970,468

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 11,260,113
	Non-Mandatory Fees	
	Non-Mandatory Fees	1,035,592
	Total	\$ 12,295,705
	Total from Tuition, Fees, Room & Board	\$ 72,266,173
	Sales and Services	\$ 1,698,997
	Education and General Appropriations	\$ 21,160,935
	Grants and Contracts	
	Federal	\$ 10,110,821
	State	5,383,046
	Local/Other/Private	109,237
	System Transfer Awards	39,653
	Total grants and contracts	\$ 15,642,757
	Other Revenues (net of scholarship discounts and allowances)	\$ 21,101,053
	Total Revenues (from sources above)	\$ 131,869,915
	Funds Raised by University (private giving)	\$ 2,869,061
	Market Value of Endowment	\$ 16,835,716
	Total Replacement Value of Physical Plant	\$ 693,700,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	43,648,066
	Capital Improvements	506,282
	Employee Benefits	21,933,252
	Total Direct Institutional spending	66,087,600
	Institutional spending prorated by 23.02% of out of state students	15,213,714
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	23,330,231
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	35,478,382
	Induced Effect (type 2 effect - type 1 effect)	12,148,151
	Total Impact of Institutional Spending	\$ 113,714,133
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 44,487,540
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 62,634,008

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 60,933,589
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 85,788,400
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 10,410,400
	Deferred Maintenance		829,113
	Total Direct Capital Expenditures		11,239,513
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		18,931,836
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		27,712,143
	Induced Effect (type 2 effect - type 1 effect)		8,780,308
	Total Impact of Capital Expenditures		\$ 47,731,964
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 171,508,729
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		3,646
	Direct capital expenditures for the Commonwealth		\$ 11,239,513
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		202
	Total Employment Impact		3,847
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		130
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 2,932
	Annual volunteer hours of students (2014)		10,586
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		No
	Patents filed since January 1, 2010		1
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 148,422,408
	Imputed % of taxable spending		23.89%
	Spending subject to tax		35,458,113
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 2,127,487

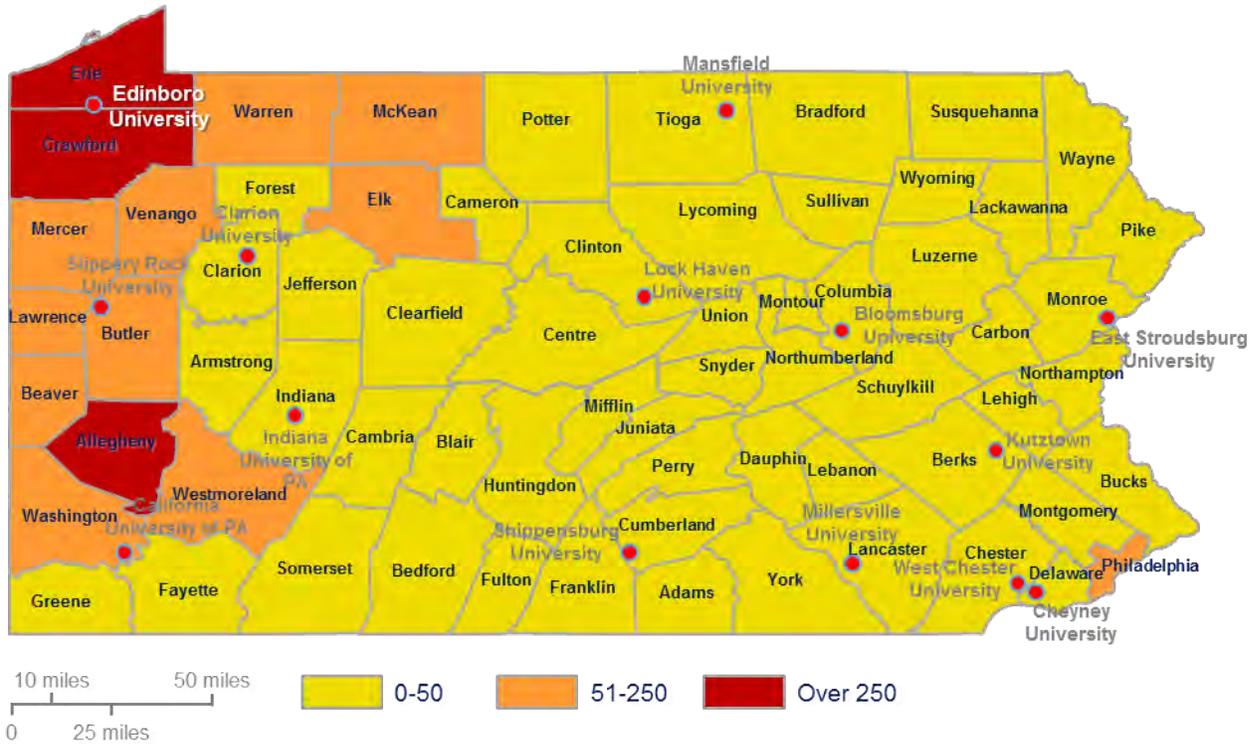
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 52,150,380
	State tax withholdings		1,482,286
	Local EIT		566,449
	Local Services Tax		46,416
	Unemployment tax		34,538
	Total Payroll Tax Payments		\$ 2,129,689

Edinboro University of Pennsylvania
Erie County, PA

With 585 acres, including a five acre lake, and 43 buildings, Edinboro University’s main campus was founded in 1857 in Edinboro, PA. Corporations, government agencies, healthcare organizations, and nonprofit groups all can benefit from contracted training solutions offered by Edinboro University’s Department of Continuing Education. Edinboro works with employers and organizations in the community to provide high-quality, affordable training that is custom-designed to fit employers’ needs, schedule and choice of location.

Map 6.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

Edinboro University
 Students by County

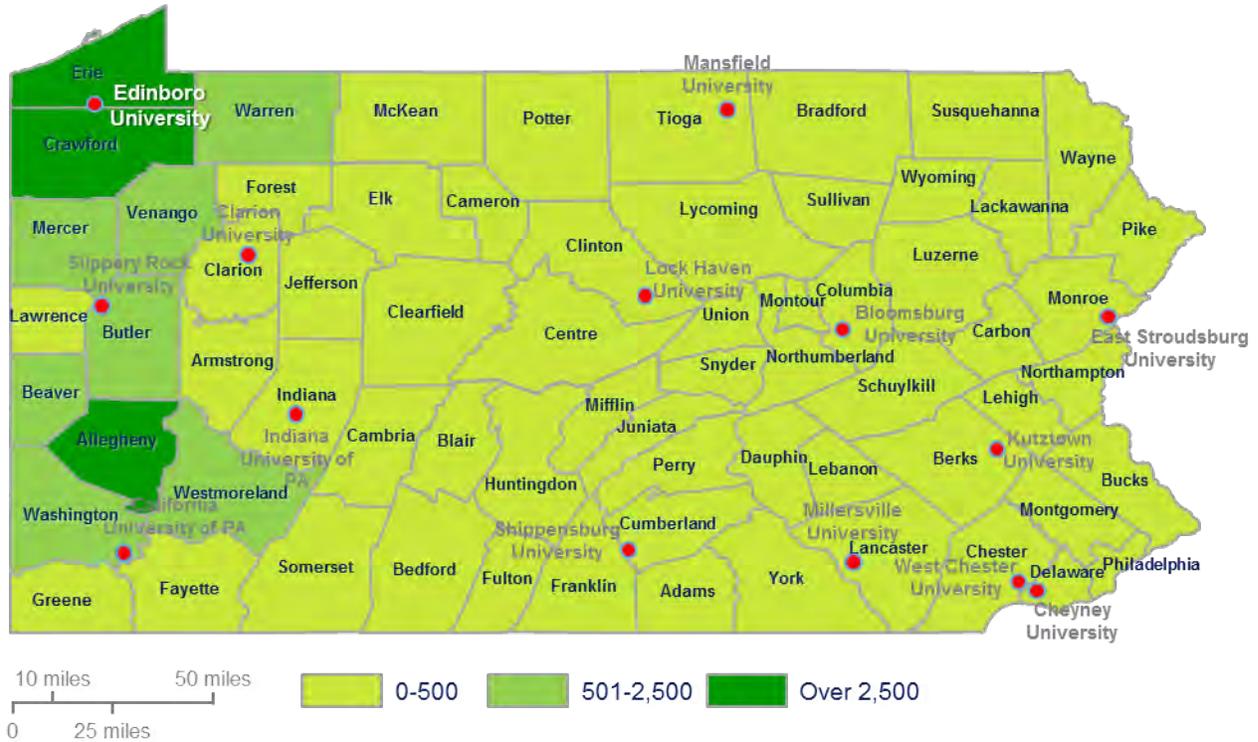


Classes can be offered in the workplace, online, or at additional locations in the community. In the fall 2014 semester, the University enrolled 5,595 undergraduate students and 1,242 graduate

students. Edinboro University is currently under the leadership of the first woman President, Dr. Julie E. Wollman.¹

Map 6.2 demonstrates Edinboro University’s alumni that still reside in the Commonwealth.

Edinboro University
Alumni by County



Erie County, where Edinboro University is located, has 799.2 sq. miles in land area and a population density of 350.7 per square mile. The average household size is 2.4 persons compared to an average family size of three persons. As of the most recent census in 2010, approximately 98 percent of the population reported only one race, with 7.2 percent of these reporting African-American. Since the last census, the population of Erie County has decreased by 0.1 percent, to 280,294. The population of this county is 3.4 percent Hispanic (of any race). In 2013 the labor force was 139,619 people and the unemployment rate was 7.3 percent. Also, in 2013 health care and social assistance was the largest of 20 major sectors.

¹ Excerpts obtained from Edinboro University’s website, www.edinboro.edu.

Below are some of Erie County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	280,294	14
Growth (percent) since 2010 Census	-0.1%	27
Households (2013)	109,675	14
Labor Force (persons) (2013)	139,619	14
Unemployment Rate (2013)	7.3	38
Per Capita Personal Income (2013)	\$37,729	34
Median Household Income (2013)	\$44,223	44
Poverty Rate (2013)	17.9	7
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	89.9	15
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	24.8	16

Countywide labor force data and countywide employment impact as a result of Edinboro University in Erie County is shown in **Table 6.1**. Out of the 139,619 people in the available labor force, Edinboro University employed 795 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately 0.6 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Erie County can also be calculated. Of the 130,500 total people employed in Erie County, 795 were employed by Edinboro University and live in-county; therefore the university’s countywide employment impact is 0.6 percent.³

Table 6.1: Labor Force Data, Erie County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Edinboro	Erie	22	795	139,619	0.57%	130,500	0.61%

The geographic distribution of Edinboro University’s employees is shown on **Map 6.3**.⁴ 372 employees, or 42 percent, live within 10 miles of the university, 329 employees, which constitutes 37 percent of the total employees, live within 25 miles, leaving 21 percent of

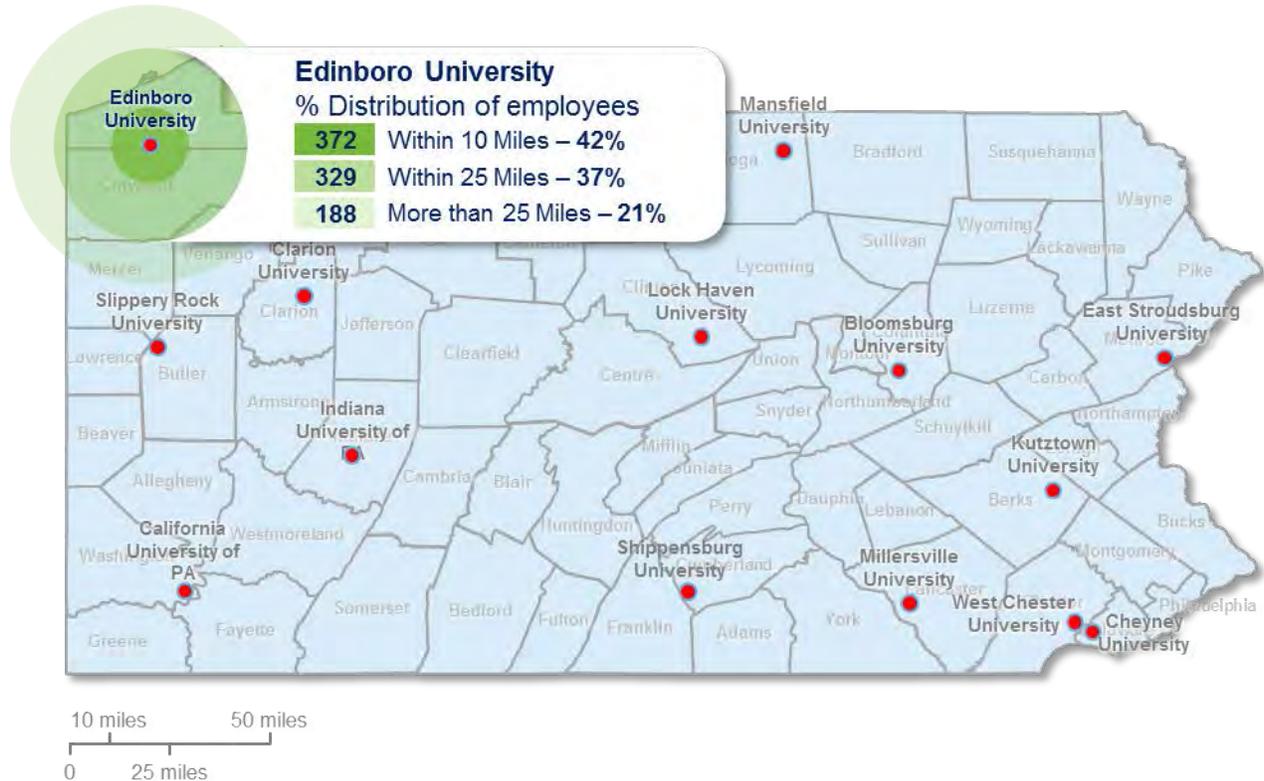
² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

⁴ For the purpose of this illustration, student employees were excluded.

employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 6.3: Edinboro University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 6.1** provides a general overview of Edinboro University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Edinboro University. The multipliers were obtained through the Bureau of Economic Analysis

Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Edinboro University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Edinboro University on the Commonwealth was \$141,889,684. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Edinboro University’s Direct Economic Impact on the Commonwealth

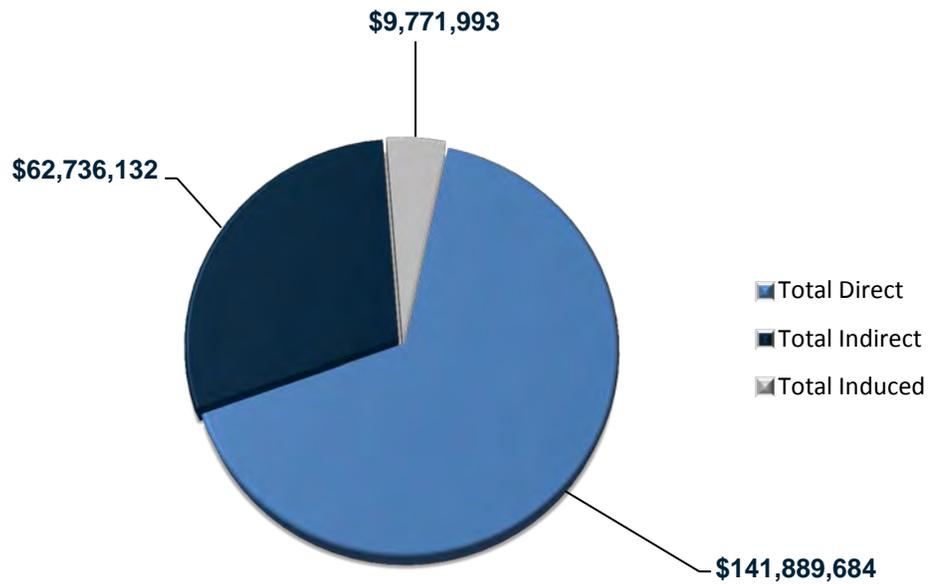
<i>(1) Institutional spending:</i>	<i>\$34,841,996</i>
<i>Benefits:</i>	<i>\$24,971,245</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$43,084,313</i>
<i>(3) Student spending:</i>	<i>\$35,183,940</i>
<i>(4) Capital Expenditures:</i>	<i><u>\$3,808,190</u></i>
 <i>Total Direct Impact:</i>	 <i><u>\$141,889,684</u></i>

As presented in **Table 6.2**, the direct impact, \$141,889,684, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Edinboro University on the Commonwealth of \$212,827,350. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$70,937,665. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 6.2: Total Economic Impact of Edinboro University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Edinboro	\$ 141,889,684	\$ 61,165,672	\$ 9,771,993	\$ 212,827,350

Chart 6.1: Total Economic Impact (Direct + Indirect + Induced): \$212,827,350



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Edinboro University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$24,963,085. Therefore, each dollar invested in Edinboro University by the Commonwealth via appropriations yielded a return of \$8.53 in total economic impact, as is shown on **Table 6.3**.

Table 6.3: State Economic Impact of Edinboro University Appropriations

University	Total Impact	State Appropriations	Ratio
Edinboro	\$212,827,350	\$ 24,963,085	8.53

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 6.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 6.4: State Economic Impact of Edinboro University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Edinboro	\$ 1,542,094	\$ 572,167	\$ 61,702	\$ 34,775	\$ 2,210,738

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university's faculty and staff as well as students. **Table 6.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 6.5: State Economic Impact of Edinboro University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Edinboro	\$ 110,193,873	\$ 26,325,316	6.00%	\$ 1,579,519

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Edinboro University were \$3,121,613 or 12.5 percent of the Commonwealth's appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Edinboro University on the Commonwealth approximated 2,935 jobs, as is shown in **Table 6.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 6.6: Statewide Employment Impact of Edinboro University on the Commonwealth as a Result of Direct Composite Spending: 2,935 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Edinboro	138,081,494	21.26	2,935

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Edinboro University on the Commonwealth approximated 68 more jobs, as shown in **Table 6.7**. Therefore, the total employment impact of Edinboro University is 3,003 jobs.

Table 6.7: Statewide Employment Impact of Edinboro University on the Commonwealth as a Result of Direct Capital Expenditures: 68 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Edinboro	\$ 3,808,190	17.94	68

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. Edinboro University’s faculty and staff spent 732 and 2,281 hours volunteering in 2013 and 2014, respectively. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$67,943. Students also devoted their time to helping the community. Edinboro students spent a total of 27,200 and 26,665 hours in 2013 and 2014 volunteering.⁷ It is likely that the students’ participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁷ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Edinboro University successfully provides an economic competitive advantage for county and the Commonwealth as a whole.

Edinboro University's participation in WEDnetPA program had over 450 participants and had a total of \$206,776 funds awarded in 2014. Additionally, Edinboro University's Tax Assistance Center spent 5,168 hours counseling individuals during 2014. Edinboro also has an

Entrepreneurial Learning Center that provides mini-grants for students for a paid 1-year membership to their Startup Incubator program. Through these efforts, Edinboro University is contributing to Erie County's overall economic development.

Exhibit 6.1

Edinboro University Information			
	Location: County		Erie
	Faculty and Staff Headcount Paid in 2014		889
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	5,864	5,595
	Graduate	1,234	1,242
	Total	7,098	6,837
	Full-time	5,770	5,604
	Part-time	1,328	1,233
	Total	7,098	6,837
	PA residents	6,097	5,864
	Non-residents	1,001	973
	Total	7,098	6,837
	Traditional undergraduate (students under 25)	5,084	4,864
	Non-traditional undergraduate (students over 25)	780	731
	Total (undergraduate only)	5,864	5,595
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 8,612
	Tuition		6,820
	Fees		2,436
	Total		\$ 17,868
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 8,612
	Tuition		10,230
	Fees		3,019
	Total		\$ 21,861
	Graduate, In-State, FY 2014-2015		
	Tuition (full-time) and fees		10,644
	Total		\$ 10,644
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (full-time) and fees		16,848
	Total		\$ 16,848
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 32,107,862
	Tuition from undergraduate out-of-state students		7,777,353
	Tuition from graduate in-state students		7,720,594
	Tuition from graduate out-of-state students		2,198,749
	Total		\$ 49,804,558

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 10,568,178
	Non-Mandatory Fees	
	Non-Mandatory Fees	794,530
	Total	\$ 11,362,708
	Total from Tuition and Fees	\$ 61,167,266
	Sales and Services	\$ 1,136,814
	Education and General Appropriations	\$ 24,963,085
	Grants and Contracts	
	Federal	\$ 11,959,361
	State	9,674,399
	Local/Other/Private	240,121
	System Transfer Awards	16,740
	Total grants and contracts	\$ 21,890,621
	Other Revenues (net of scholarship discounts and allowances)	\$ 18,896,980
	Total Revenues (from sources above)	\$ 128,054,766
	Funds Raised by University (private giving)	\$ 3,218,948
	Market Value of Endowment	\$ 22,107,386
	Total Replacement Value of Physical Plant	\$ 804,600,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 34,459,196
	Capital Improvements	382,800
	Employee Benefits	24,971,245
	Total Direct Institutional Spending	59,813,241
	Institutional spending prorated by 14.23% of out of state students	8,512,254
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	13,053,542
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	19,850,577
	Induced Effect (type 2 effect - type 1 effect)	6,797,035
	Total Impact of Institutional Spending	\$ 86,460,853
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 43,084,313
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 60,658,404

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 35,183,940
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 49,535,469
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 2,923,333
	Deferred Maintenance		884,857
	Total Direct Capital Expenditures		3,808,190
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		6,414,515
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		9,389,473
	Induced Effect (type 2 effect - type 1 effect)		2,974,958
	Total Impact of Capital Expenditures		\$ 16,172,621
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 138,081,494
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		2,935
	Direct capital expenditures for the Commonwealth		\$ 3,808,190
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		68
	Total Employment Impact		3,003
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		2,281
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 51,437
	Annual volunteer hours of students (2014)		26,665
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		No
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 110,193,873
	Imputed % of taxable spending		23.89%
	Spending subject to tax		26,325,316
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 1,579,519

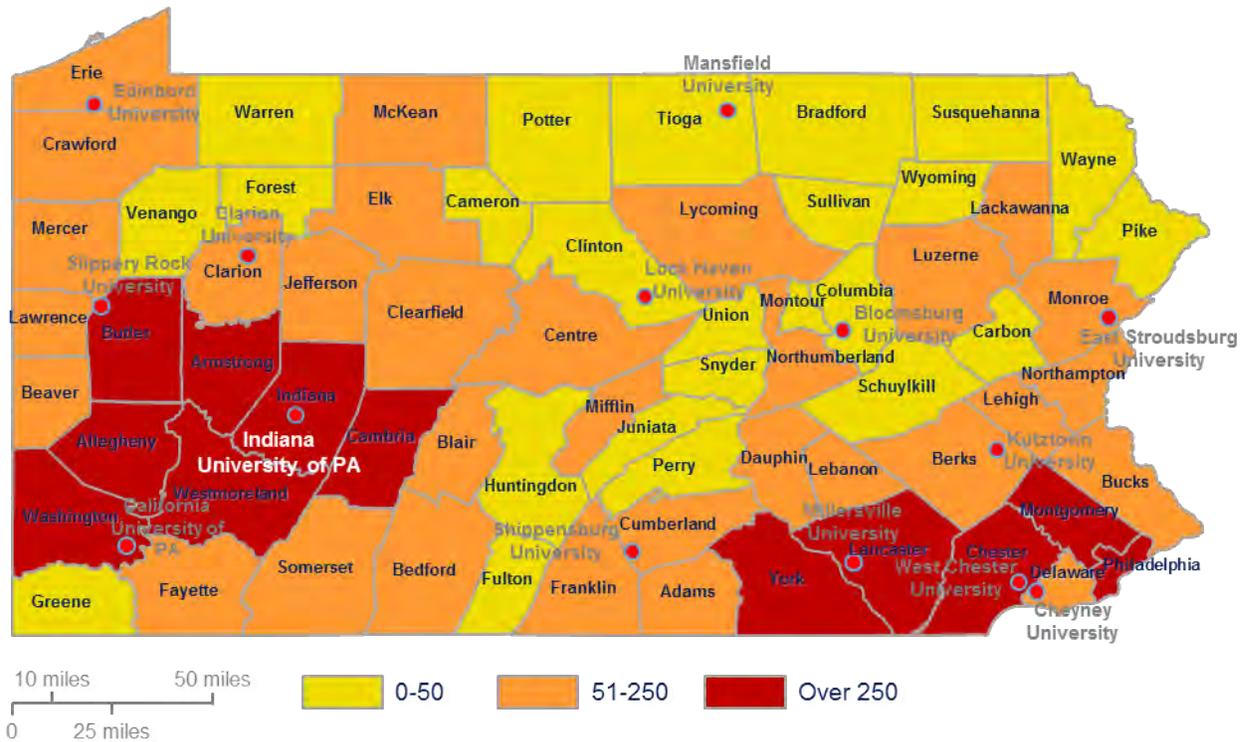
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 51,719,978
	State tax withholdings		1,542,094
	Local EIT		572,167
	Local Services Tax		61,702
	Unemployment tax		34,775
	Total Payroll Tax Payments		\$ 2,210,738

Indiana University of Pennsylvania Indiana County, PA

Founded in 1875, Indiana University of Pennsylvania (“IUP”) is a vibrant, comprehensive, research-based, teaching-focused, student-centered learning community. IUP’s main campus is located in Indiana, Pa., and spans 374 acres. A combination of historical charm and state-of-the-art facilities, it includes 59 major buildings and 11 athletic fields. Indiana University of Pennsylvania has affiliate campuses which are located in Freeport and Punxsutawney, PA. Additionally, nine master programs and one doctoral program are offered at IUP’s Monroeville Graduate and Professional Center located near Monroeville. IUP also offers courses through the State System’s Dixon Center in Harrisburg and through distance education. In fall 2014, the University enrolled 12,130 undergraduate students and 2,239 graduate students. The student body represented 44 states and 66 countries. Students at IUP enjoy an 18:1 student to faculty ratio.

Map 7.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

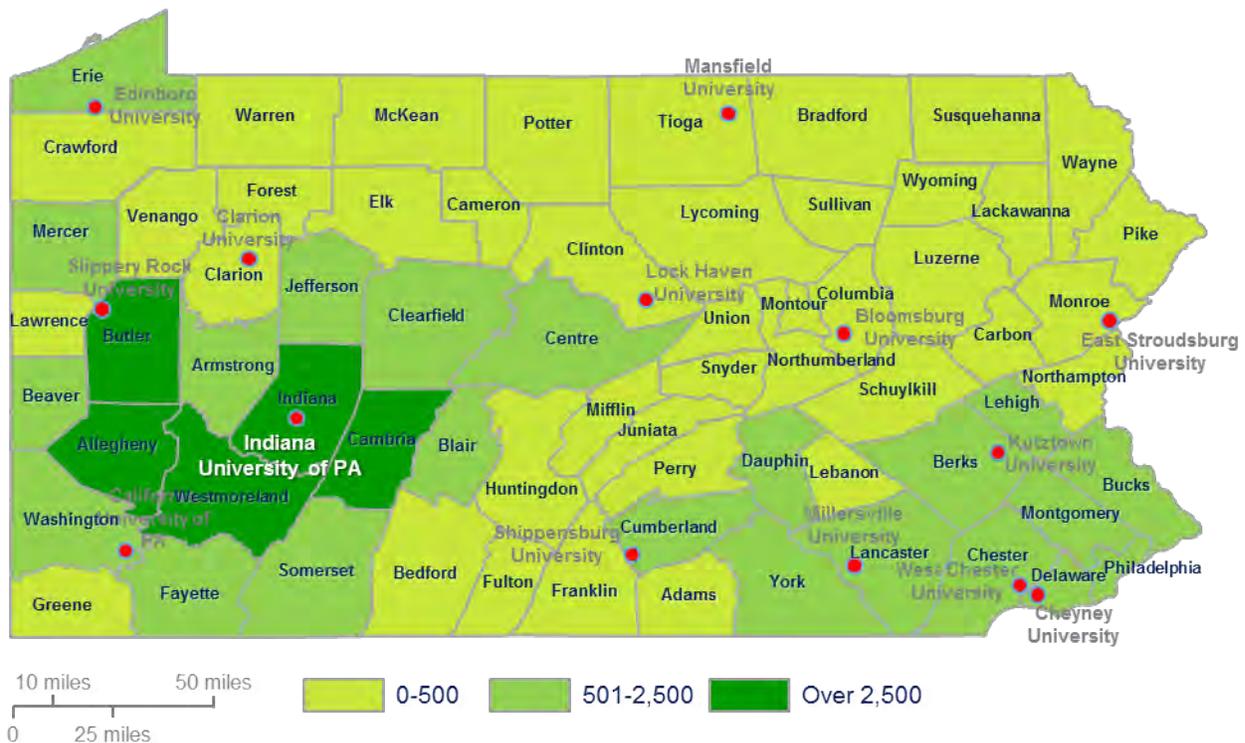
Indiana University of PA
Students by County



As of 2012, Indiana University of Pennsylvania professors have won more than 60 Fulbright scholarships since the program's inception in 1946, the most of any university in the Pennsylvania's State System of Higher Education. IUP is known for having the number one ROTC cadet program in the nation and also offers eight Varsity NCAA sports for men and 11 for women. Alumni of IUP live in every state and in roughly 90 countries around the world. They have included university presidents and state system chancellors, chief executives of leading companies and industries, playwrights and authors, and luminaries of the sports world. President Michael Driscoll took office on July 1, 2012, selected by the Board of Governors of the State System.¹

Map 7.2 demonstrates Indiana University of Pennsylvania's alumni that still reside in the Commonwealth.

Indiana University of PA
Alumni by County



IUP's main campus is located in Indiana County of Pennsylvania. It has 827.0 sq. miles in land area and a population density of 106.1 per square mile. The average household size is 2.40

¹ Excerpts obtained from Indiana University of Pennsylvania's website, www.iup.edu.

persons compared to an average family size of 2.9 persons. As of the 2010 census, 99 percent of the population reported only one race, with 2.7 percent of these reporting African-American. The population of this county is 1.1 percent Hispanic (of any race). The population in Indiana County is 87,745 people, which decreased since the most recent census by 1.3 percent. The labor force in 2013 was 47,699 people and there was a 7.3 percent rate of unemployment. In 2013 retail trade was the largest of 20 major sectors.

Below are some of Indiana County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	87,745	34
Growth (percent) since 2010 Census	-1.3%	52
Households (2013)	34,310	35
Labor Force (persons) (2013)	47,699	32
Unemployment Rate (2013)	7.3	38
Per Capita Personal Income (2013)	\$39,018	26
Median Household Income (2013)	\$44,504	42
Poverty Rate (2013)	14.7	19
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	87.8	36
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	21.9	23

Jefferson County, PA

IUP’s Punxsutawney’s campus is located in Jefferson County, PA. In 2013, there were 44,966 people in Jefferson County, a 0.5 percent decrease in population since 2010. This county has 652.4 sq. miles in land area and a population density of 68.9 per square mile. The average household size is 2.4 persons compared to an average family size of 2.9 persons. In 2010, 99.2 percent of the population reported only one race, with 0.3 percent of these reporting African-American. The population of this county is 0.6 percent Hispanic (of any race). The labor force in 2013 was 22,524 and the unemployment rate was 7.7 percent. In 2013, manufacturing was the largest of 20 major sectors.

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

Below are some of Jefferson County’s population demographics.

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	44,966	49
Growth (%) since 2010 Census	-0.5%	33
Households (2013)	18,503	47
Labor Force (persons) (2013)	22,524	49
Unemployment Rate (2013)	7.7	29
Per Capita Personal Income (2013)	\$34,939	57
Median Household Income (2013)	\$41,637	57
Poverty Rate (2013)	15.5	15
H.S. Diploma or More - % of Adults 25+ (2013 ACS 5yr)	87.6	39
Bachelor Deg. or More - % of Adults 25+ (2013 ACS 5yr)	13.2	62

Armstrong County, PA

IUP’s Freeport campus is located in Armstrong County, PA. Armstrong County has 653.2 sq. miles in land area and a population density of 104.3 per square mile. The average household size is 2.4 persons compared to an average family size of 2.9 persons. As of the last census in 2010, 99.2 percent of the population reported only one race, with 0.8 percent of these reporting African-American. The population of this county is 0.5 percent Hispanic (of any race). Since 2010, the population has decreased 1.2 percent; there are now 68,107 people in Armstrong County. In 2013 the labor force was 33,724 and there was an unemployment rate of 8 percent. Also in 2013, health care and social assistance was the largest of 20 major sectors.

Below are some of Armstrong County’s population demographics.

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	68,107	38
Growth (%) since 2010 Census	-1.2%	47
Households (2013)	28,525	38
Labor Force (persons) (2013)	33,724	40
Unemployment Rate (2013)	8.0	22
Per Capita Personal Income (2013)	\$37,391	37
Median Household Income (2013)	\$42,927	48
Poverty Rate (2013)	14.7	19
H.S. Diploma or More - % of Adults 25+ (2013 ACS 5yr)	88.9	23
Bachelor Deg. or More - % of Adults 25+ (2013 ACS 5yr)	14.6	52

Countywide labor force data and countywide employment impact as result of Indiana University of Pennsylvania in Indiana County is shown in **Table 7.1**.³ Out of the 47,699 people in the available labor force, Indiana University of Pennsylvania employed 1,914 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of four percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Indiana County can also be calculated. Of the 44,800 total people employed in Indiana County, 1,914 were employed by IUP and live in-county; therefore the university’s countywide employment impact is approximately 4.3 percent.⁴

Table 7.1: Labor Force Data, Indiana County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Indiana	Indiana	1	1,914	47,699	4.01%	44,800	4.27%

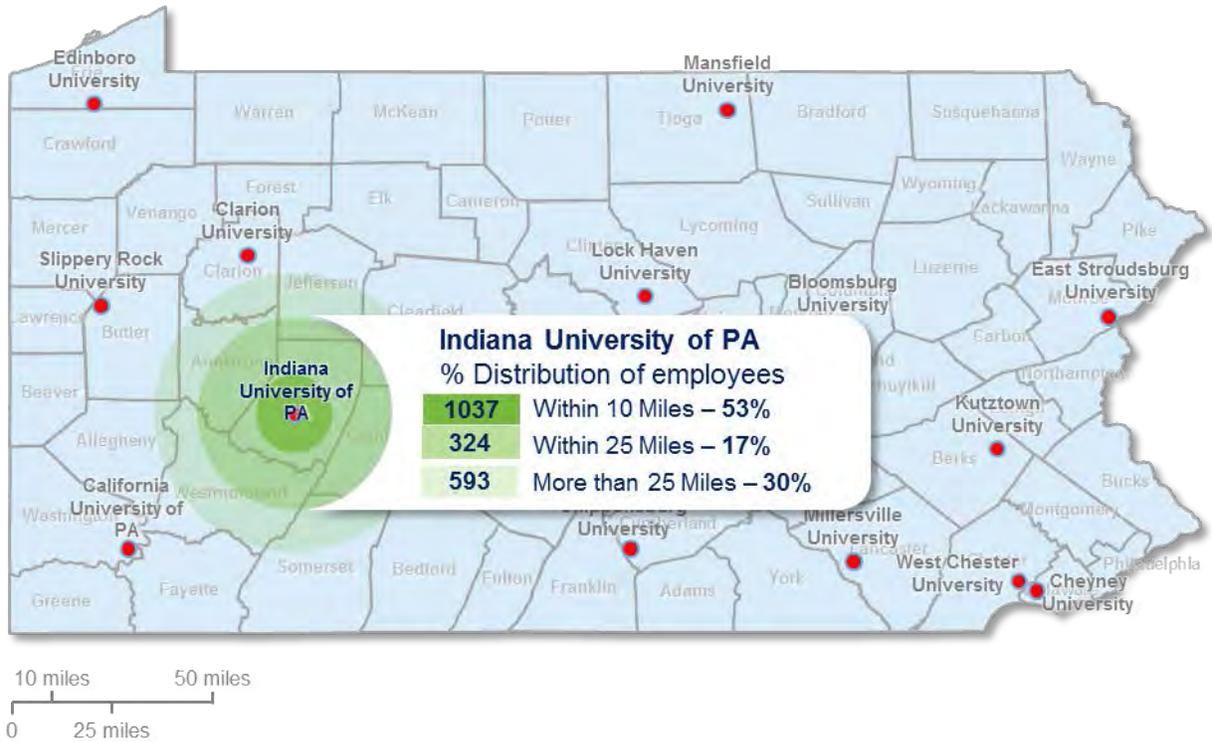
The geographic distribution of Indiana University of Pennsylvania employees is shown on **Map 7.3**.⁵ 1,037 employees, or 53 percent, live within 10 miles of the university, 324 employees, which constitutes 17 percent of the total employees, live within 25 miles, leaving 30 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

³ For the purpose of this analysis, the focus was the amount of in-county jobs at Indiana University’s main campus in Indiana County. It is noted that Indiana has two other campuses in Armstrong County and Jefferson County.

⁴ The in-county employee count includes students who are employed by the university.

⁵ For the purpose of this illustration, student employees were excluded.

Map 7.3: Indiana University of Pennsylvania’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 7.1** provides a general overview of Indiana University of Pennsylvania, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Indiana University of Pennsylvania. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that IUP has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of IUP on the Commonwealth was \$427,774,334. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Indiana University of Pennsylvania’s Direct Economic Impact on the Commonwealth

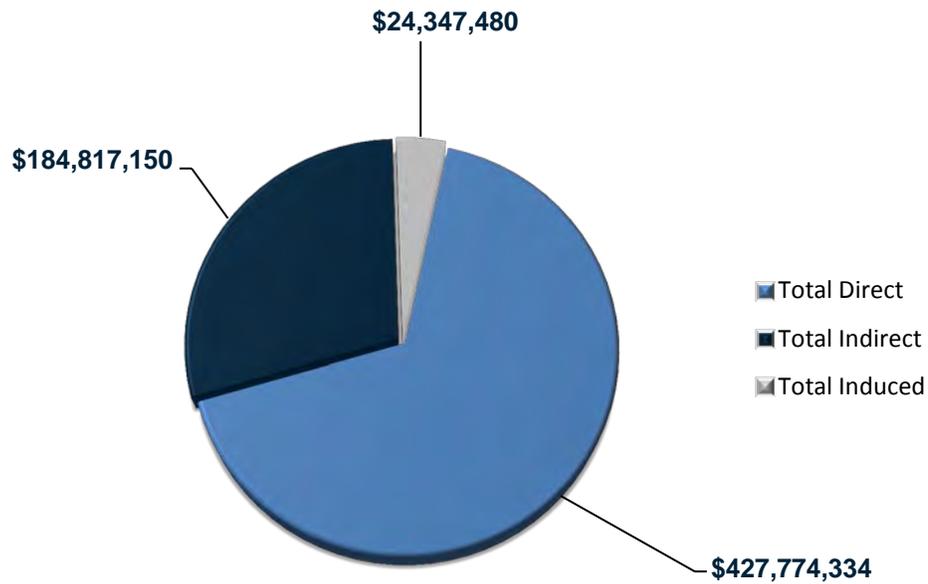
(1) Institutional spending:	\$90,980,132
Benefits:	\$51,903,699
(2) Faculty/Staff spending:	\$92,656,902
(3) Student spending:	\$181,079,958
(4) Capital Expenditures:	<u>\$11,153,643</u>
 Total Direct Impact:	 <u>\$427,774,334</u>

As presented in **Table 7.2**, the direct impact, \$427,774,334, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of IUP on the Commonwealth of \$636,938,964. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$209,164,630. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 7.2: Total Economic Impact of Indiana University of Pennsylvania on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Indiana	\$ 427,774,334	\$ 184,817,150	\$ 24,347,480	\$ 636,938,964

Chart 7.1: Total Economic Impact (Direct + Indirect + Induced): \$636,938,964



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Indiana University of Pennsylvania made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$52,382,984. Therefore, each dollar invested in Indiana University by the Commonwealth via appropriations yielded a return of \$12.16 in total economic impact, as is shown on **Table 7.3**.

Table 7.3: Statewide Economic Impact of Indiana University of Pennsylvania Appropriations

University	Total Impact	State	
		Appropriations	Ratio
Indiana	\$636,938,964	\$ 52,382,984	12.16

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 7.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 7.4: Statewide Economic Impact of Indiana University of Pennsylvania Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Indiana	\$ 3,455,150	\$ 1,415,326	\$ 120,124	\$ 76,292	\$ 5,066,892

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 7.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 7.5: Statewide Economic Impact of Indiana University of Pennsylvania Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Indiana	\$ 385,394,125	\$ 92,070,657	6.00%	\$ 5,524,239

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for IUP were \$8,979,390 or 17.1 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁶ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁷ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created

⁶ Composite spending activity includes institutional, faculty and staff and student spending.

⁷ Please refer to Appendix E for additional information related to the RIMS II multipliers.

or supported. In this manner, the employment impact of IUP on the Commonwealth approximated 8,856 jobs, as is shown in **Table 7.6**.

Table 7.6: Statewide Employment Impact of Indiana University of Pennsylvania on the Commonwealth as a Result of Direct Composite Spending: 8,856 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Indiana	416,620,691	21.26	8,856

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Indiana University of Pennsylvania on the Commonwealth approximated 200 more jobs, as shown in **Table 7.7**. Therefore, the total employment impact of IUP is 9,056 jobs.

Table 7.7: Statewide Employment Impact of Indiana University of Pennsylvania on the Commonwealth as a Result of Direct Capital Expenditures: 200 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Indiana	\$ 11,153,643	17.94	200

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2013 and 2014, Indiana University’s faculty and staff spent 6,120 and 6,600 hours volunteering, respectively. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$138,000 and \$148,830 in 2013 and 2014. Students also devoted their time to helping the community. IUP students spent a total of 115,962 and 142,366 hours volunteering in 2013 and 2014, respectively.⁸ It is likely that the students participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁸ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Indiana University of Pennsylvania successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Indiana University of Pennsylvania's participation in WEDnetPA program had over 2,900 participants and had a total of \$352,916 funds awarded in 2014. Additionally, Indiana University of Pennsylvania also has several other workforce development programs such as: the

Culinary Academy, the IUP Highway Safety Project, Physical Fitness for IUP Policy Academy, amongst many others. These programs drew in over 6,000 participants in 2014. IUP also has an affiliated business incubator and a Small Business Development Center (“SBDC”). The SBDC provides entrepreneurs and small business with the tools they require to build and grow a successful business. In 2014, more than 166 clients received 4,305 hours of counseling from experienced faculty, professional staff, and students. With these efforts, Indiana University of Pennsylvania is positively impacting the economic development in all of the counties it reaches and beyond.

Exhibit 7.1

Indiana University of Pennsylvania Information			
	Location: County		Indiana
	Faculty and Staff Headcount Paid in 2014		2,129
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	12,668	12,130
	Graduate	2,257	2,239
	Total	14,925	14,369
	Full-time	12,965	12,165
	Part-time	1,960	2,204
	Total	14,925	14,369
	PA residents	12,828	12,400
	Non-residents	2,097	1,969
	Total	14,925	14,369
	Traditional undergraduate (students under 25)	11,853	11,346
	Non-traditional undergraduate (students over 25)	811	782
	Total (undergraduate only)¹	12,664	12,128
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board	\$	11,346
	Tuition		6,820
	Fees		2,650
	Total	\$	20,816
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board	\$	11,346
	Tuition		17,050
	Fees		3,915
	Total	\$	32,311
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)	\$	454
	Fees (per credit)		223
	Total	\$	677
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)	\$	681
	Fees (per credit)		271
	Total (per credit)	\$	952
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students	\$	74,795,940
	Tuition from undergraduate out-of-state students		14,215,214
	Tuition from graduate in-state students		10,948,905
	Tuition from graduate out-of-state students		8,079,279
	Total	\$	108,039,338

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 31,103,460
	Non-Mandatory Fees	
	Non-Mandatory Fees	2,292,880
	Total	\$ 33,396,340
	Total from Tuition and Fees	\$ 141,435,678
	Sales and Services	\$ 6,072,897
	Education and General Appropriations	\$ 52,382,984
	Grants and Contracts	
	Federal	\$ 26,627,284
	State	15,384,618
	Local/Other/Private	4,449,815
	System Transfer Awards	985,226
	Total grants and contracts	\$ 47,446,943
	Other Revenues (net of scholarship discounts and allowances)	\$ 38,286,964
	Total Revenues (from sources above)	\$ 285,625,466
	Funds Raised by University (private giving)	\$ 2,098,427
	Market Value of Endowment	\$ 61,172,865
	Total Replacement Value of Physical Plant (main campus)	\$1,356,100,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 82,011,382
	Capital Improvements	8,968,750
	Employee Benefits	51,903,699
	Total Direct Institutional Spending	142,883,831
	Institutional spending prorated by 13.70% of out of state students	19,579,530
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	29,956,681
	Type 2 Multiplier	2.330
	Type 2 Effect (total indirect)	45,659,463
	Induced Effect (type 2 effect - type 1 effect)	15,634,255
	Total Impact of Institutional Spending	\$ 204,177,549
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 92,656,902
	Household multiplier	1.4100
	Total Impact of Faculty and Staff Spending	\$ 130,451,652

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 181,079,958
	Household multiplier		1.4100
	Total Impact of Student Spending		\$ 254,942,473
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 9,386,667
	Deferred Maintenance		1,766,976
	Total Direct Capital Expenditures		11,153,643
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		18,787,196
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		27,500,421
	Induced Effect (type 2 effect - type 1 effect)		8,713,225
	Total Impact of Capital Expenditures		\$ 47,367,290
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 416,620,691
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		8,856
	Direct capital expenditures for the Commonwealth		\$ 11,153,643
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		200
	Total Employment Impact		9,056
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		6,600
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 148,830
	Annual volunteer hours of students (2014)		142,366
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		Yes
	Patents filed since January 1, 2010 ²		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 385,394,125
	Imputed % of taxable spending		23.89%
	Spending subject to tax		92,070,657
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 5,524,239

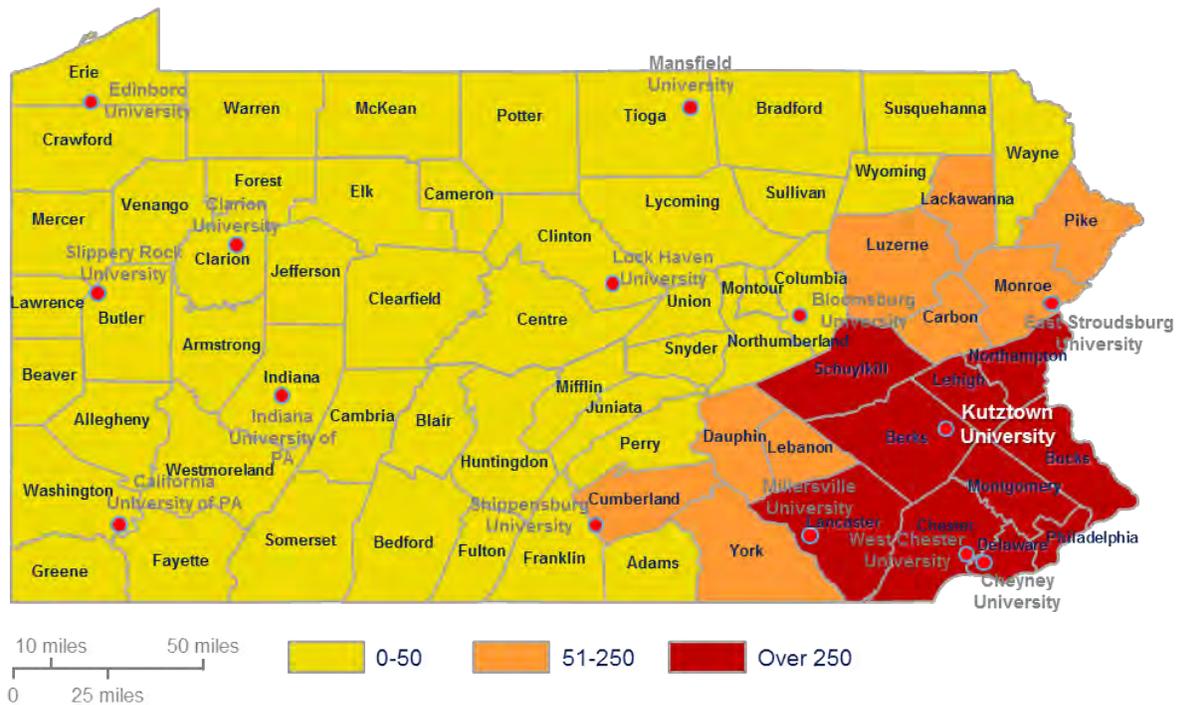
The University as a Generator of State Government Revenue		
	Payroll Tax	
	Total payroll	\$ 115,655,768
	State tax withholdings	3,455,150
	Local EIT	1,415,326
	Local Services Tax	120,124
	Unemployment tax	76,292
	Total Payroll Tax Payments	\$ 5,066,892
<p>¹For Fall 2013 and Fall 2014, there were variances of 4 and 2 students, respectively. The variance results from unknown classifications regarding traditional vs. non-traditional undergraduate students.</p> <p>²As of November 2010, Indiana University has one patent in process.</p>		

Kutztown University of Pennsylvania
Berks County, PA

Kutztown University was originally founded in 1866 as Kutztown State Normal School; it became known as Kutztown University in 1983. In July of 1983, Kutztown then became one of the 14 state-owned universities within Pennsylvania’s State System of Higher Education (“State System”). The University’s mission is to provide a high quality education at the undergraduate and graduate levels in order to prepare students to meet lifelong intellectual, ethical, social, and career challenges. At Kutztown University, 87 percent tenured or tenured-track instructional faculty has doctorates or terminal degrees. Additionally, the student to faculty ratio is 20:1. Kutztown also has an alumni network of about 72,500 graduates that can be found across the US and beyond. As of fall 2014 semester, there were 8562 undergraduate and 656 graduate students enrolled within the institution. As of July 1, 2015, Dr. Kenneth Hawkinson will take over as 12th president of the university.¹

Map 8.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

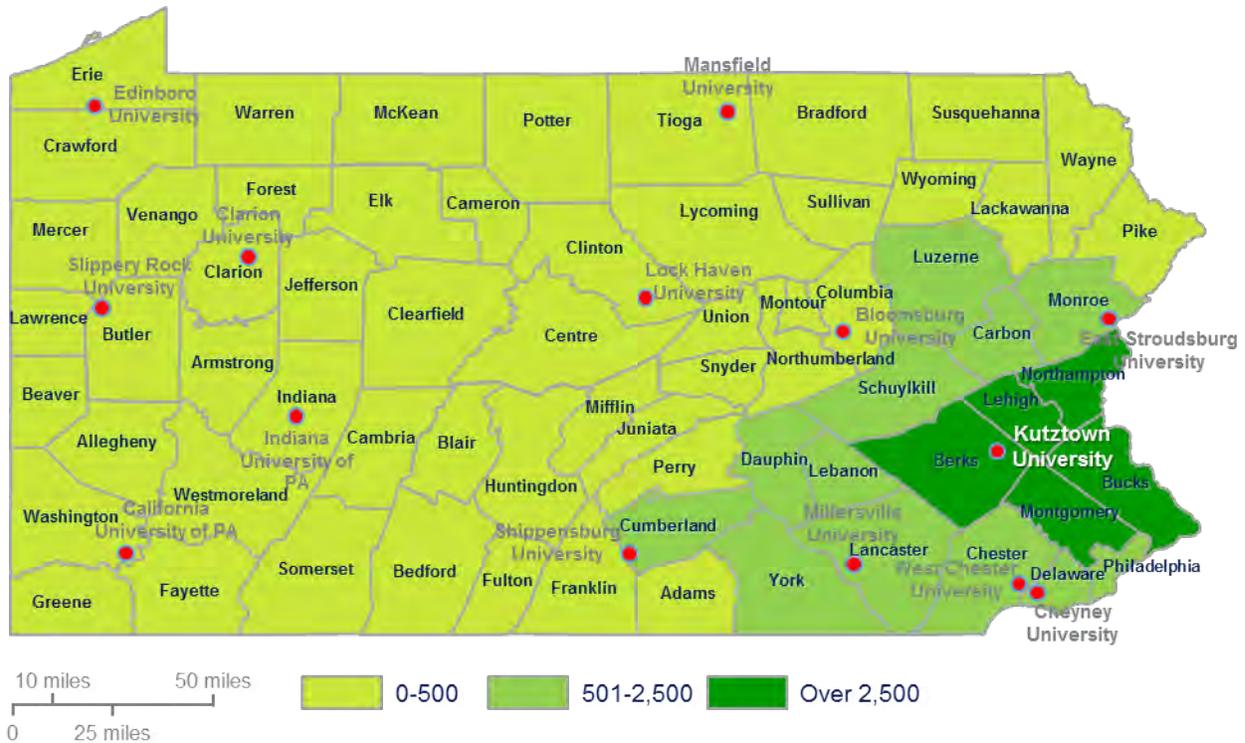
Kutztown University
 Students by County



¹ Excerpts obtained from Kutztown University’s website, www2.kutztown.edu.
Appendix C

Map 8.2 demonstrates Kutztown University's alumni that still reside in the Commonwealth.

Kutztown University
Alumni by County



Berks County is comprised of approximately 857 sq. miles in land with a population density of 482.8 per square mile. Given the most recent data available from the last census in 2010, population growth from 2010 was 0.5 percent to 413,531. According to the Pennsylvania State Data Center (PaSDC), Berks County is projected to continue to grow 20 percent throughout 2040. The 2010 census revealed that 97.5 percent of the population reported only one race, with 4.9 percent of these reporting African-American. The population of this county is 16.4 percent Hispanic (of any race). Additionally, the average household size was 2.6 persons compared to an average family size of 3.1 persons. In 2013, manufacturing was the largest of 20 major sectors. Berks County had a labor force of 204,705 people with an unemployment rate of 7.4 percent.

Below are some of Berks County's population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	413,521	9
Growth (percent) since 2010 Census	0.5%	20
Households (2012)	153,977	9
Labor Force (persons) (2013)	204,705	9
Unemployment Rate (2013)	7.4	36
Per Capita Personal Income (2012)	\$40,453	17
Median Household Income (2012)	\$52,058	18
Poverty Rate (2012)	14.2	27
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	84.1	60
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	22.3	21

Countywide labor force data and countywide employment impact as a result of Kutztown University is shown in **Table 8.1**. Out of the 204,705 people in the available labor force, Kutztown University had 933 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately 0.5 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Berks County can also be calculated. Of the 189,500 total people employed in Berks County, 933 were employed by Kutztown University and live in-county; therefore the university's countywide employment impact is approximately 0.5 percent.³

Table 8.1: Labor Force Data, Berks County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Kutztown	Berks	18	935	204,705	0.46%	189,500	0.49%

The geographic distribution of Kutztown University employees is shown on **Map 8.3**.⁴ 468 employees, or 42 percent, live within 10 miles of the university, 414 employees, which constitutes 37 percent of the employees, live within 25 miles, leaving 21 percent of employees

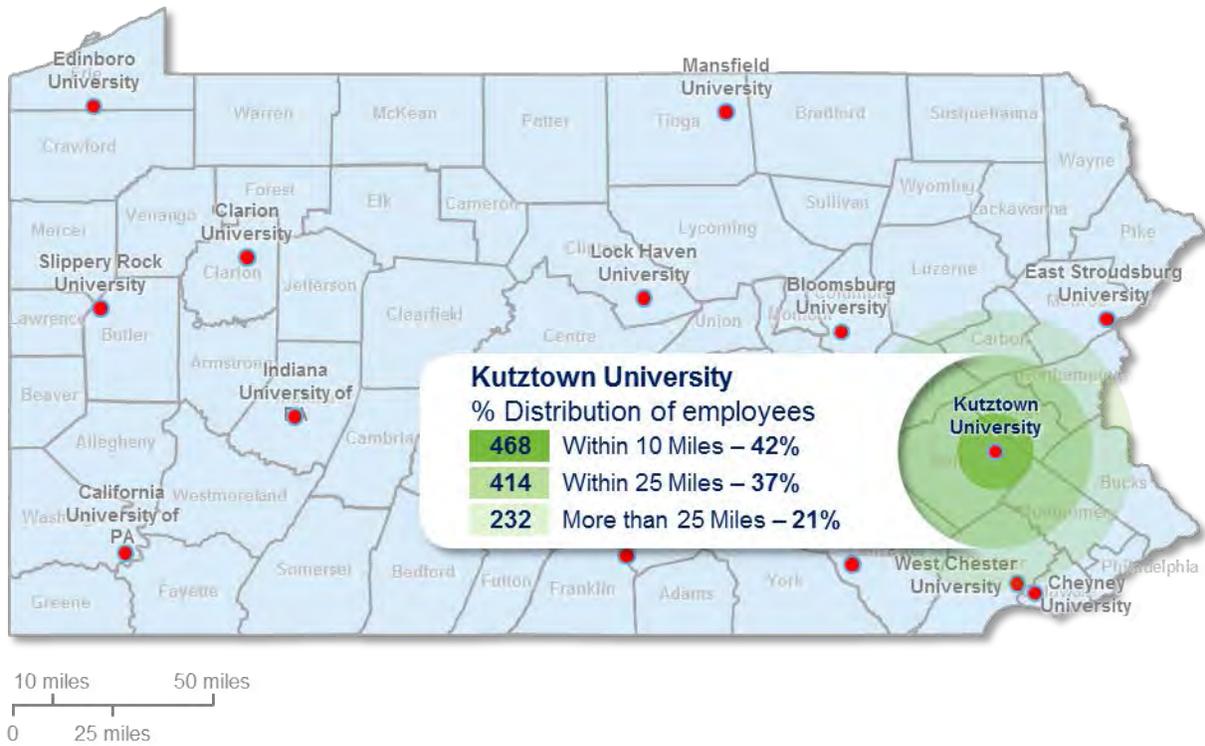
² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania's Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

⁴ For the purpose of this illustration, student employees were excluded.

living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 8.3: Kutztown University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 8.1** provides a general overview of Kutztown University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Kutztown University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Kutztown University has an important role in the Commonwealth in terms of the higher educational

opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Kutztown University on the Commonwealth was \$254,408,286. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Kutztown University’s Direct Economic Impact on the Commonwealth

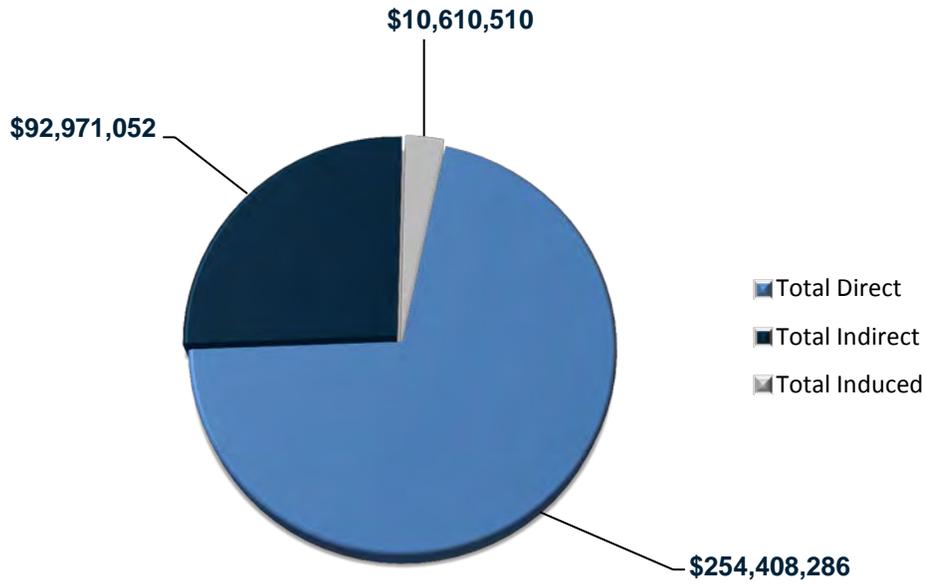
<i>(1) Institutional spending:</i>	<i>\$70,455,902</i>
<i>Benefits:</i>	<i>\$30,848,249</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$57,311,502</i>
<i>(3) Student spending:</i>	<i>\$93,701,868</i>
<i>(4) Capital Expenditures</i>	<i><u>\$2,090,765</u></i>
 <i>Total Direct Impact:</i>	 <i><u><u>\$254,408,286</u></u></i>

As presented in **Table 8.2**, the direct impact, \$254,408,286, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Kutztown University on the Commonwealth of \$357,989,848. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$103,581,562. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 8.2: Total Economic Impact of Kutztown University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Kutztown	\$ 254,408,286	\$ 92,971,052	\$ 10,610,510	\$ 357,989,848

Chart 8.1: Total Economic Impact (Direct + Indirect + Induced): \$357,989,848



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Kutztown University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$33,105,442. Therefore, each dollar invested in Kutztown University by the Commonwealth via appropriations yielded a return of approximately \$10.81 in total economic impact, as is shown on **Table 8.3**.

Table 8.3: Statewide Economic Impact of Kutztown University Appropriations

University	Total Impact	State Appropriations	Ratio
Kutztown	\$357,989,848	\$ 33,105,442	10.81

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 8.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 8.4: Statewide Economic Impact of Kutztown University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Kutztown	\$ 2,022,440	\$ 753,672	\$ 88,707	\$ 45,600	\$ 2,910,419

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 8.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 8.5: Statewide Economic Impact of Kutztown University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Kutztown	\$ 212,611,724	\$ 50,792,941	6.00%	\$ 3,047,576

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Kutztown University were \$5,070,017 or 15.3 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Kutztown University on the Commonwealth approximated 5,363 jobs, as is shown in **Table 8.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 8.6: Statewide Employment Impact of Kutztown University on the Commonwealth as a Result of Direct Composite Spending: 5,363 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Kutztown	252,317,521	21.26	5,363

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, 17.9 jobs were created or supported. In this manner, the employment impact of Kutztown University on the Commonwealth approximated 38 more jobs, as shown in **Table 8.7**. Therefore, the total employment impact of Kutztown University is 5,401 jobs.

Table 8.7: Statewide Employment Impact of Kutztown University on the Commonwealth as a Result of Direct Capital Expenditures: 38 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Kutztown	\$ 2,090,765	17.94	38

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. Kutztown University’s faculty and staff spent 3,400 hours volunteering in both 2013 and 2014. With an average value of approximately \$22.55 per hour, their total contribution amounts to \$153,340 in 2013 and 2014 combined.⁷ Students also devoted their time to helping the community. Kutztown students spent a total of 46,400 and 21,954 hours volunteering in 2013 and 2014, respectively. It is likely that the students participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁷ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Kutztown University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Kutztown University's participation in WEDnetPA program had over 990 participants and had a total of \$200,749 funds awarded in 2014. Additionally, Kutztown University also has an affiliated business incubator and offers entrepreneurial programs. The entrepreneurial programs allow students to interact with local businesses and give them the opportunity to have a "real

world experience,” if selected. Through these programs, about 116 participants got the chance to interact with and learn from approximately eight local businesses. Kutztown also has a Small Business Development Center (“SBDC”). The mission of the SBDC, as one of 18 in Pennsylvania, is to grow the economy of South Eastern and South Central Pennsylvania. The consultants there can offer assistance in various areas including, but not limited to: evaluating or refining business plans, incorporating new technology to a business, conducting market research, identifying funding resources, and weighing sales opportunities or franchise options.⁸ By way of the WEDnetPA and entrepreneurial programs, along with the SBDC, Kutztown University certainly helps the economic development of Berks County, as well as many others.

⁸ “Kutztown SBDC: About the KU SBDC”, kutztownsbdc.org, visited February 25, 2015.

Exhibit 8.1

Kutztown University Information			
	Location: County		Berks
	Faculty and Staff Headcount Paid in 2014		1,114
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	8,815	8,562
	Graduate	698	656
	Total	9,513	9,218
	Full-time	8,548	8,319
	Part-time	965	899
	Total	9,513	9,218
	PA residents	8,451	8,195
	Non-residents	1,062	1,023
	Total	9,513	9,218
	Traditional undergraduate (students under 25)	8,284	8,061
	Non-traditional undergraduate (students over 25)	531	500
	Total (undergraduate only)¹	8,815	8,561
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 8,430
	Tuition		6,820
	Fees		2,279
	Total		\$ 17,529
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 8,430
	Tuition		17,050
	Fees		2,499
	Total		\$ 27,979
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)		\$ 454
	Fees (per credit)		85
	Total (per credit)		\$ 539
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)		\$ 681
	Fees (per credit)		120
	Total (per credit)		\$ 801
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 50,421,791
	Tuition from undergraduate out-of-state students		15,819,406
	Tuition from graduate in-state students		4,853,693
	Tuition from graduate out-of-state students		302,299
	Total		\$ 71,397,189

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 17,563,072
	Non-Mandatory Fees	
	Non-Mandatory Fees	1,000,751
	Total	\$ 18,563,823
	Total from Tuition, Fees, Room & Board	\$ 89,961,012
	Sales and Services	\$ 2,894,771
	Education and General Appropriations	\$ 33,105,442
	Grants and Contracts	
	Federal	\$ 13,495,600
	State	9,703,591
	Local/Other/Private	158,112
	System Transfer Awards	70,575
	Total grants and contracts	\$ 23,427,878
	Other Revenues (net of scholarship discounts and allowances)	\$ 33,087,644
	Total Revenues (from sources above)	\$ 182,476,747
	Funds Raised by University (private giving)	\$ 9,100
	Market Value of Endowment	\$ 20,504,000
	Total Replacement Value of Physical Plant	\$ 881,000,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 68,974,688
	Capital Improvements	1,481,214
	Employee Benefits	30,848,249
	Total Direct Institutional Spending	101,304,151
	Institutional spending prorated by 11.10% of out of state students	11,242,585
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	17,240,504
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	26,217,708
	Induced Effect (type 2 effect - type 1 effect)	8,977,204
	Total Impact of Institutional Spending	\$ 136,499,063
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 57,311,502
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 80,688,864

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 93,701,868
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 131,922,860
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 1,013,333
	Deferred Maintenance		1,077,432
	Total Direct Capital Expenditures		2,090,765
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		3,521,685
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		5,154,991
	Induced Effect (type 2 effect - type 1 effect)		1,633,306
	Total Impact of Capital Expenditures		\$ 8,879,062
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 252,317,521
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		5,363
	Direct capital expenditures for the Commonwealth		\$ 2,090,765
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		38
	Total Employment Impact		5,401
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		3,400
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 76,670
	Annual volunteer hours of students (2014)		21,954
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		Yes
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 212,611,724
	Imputed % of taxable spending		23.89%
	Spending subject to tax		50,792,941
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 3,047,576

The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 68,718,141
	State tax withholdings		2,022,440
	Local EIT		753,672
	Local Services Tax		88,707
	Unemployment tax		45,600
	Total Payroll Tax Payments		\$ 2,910,419

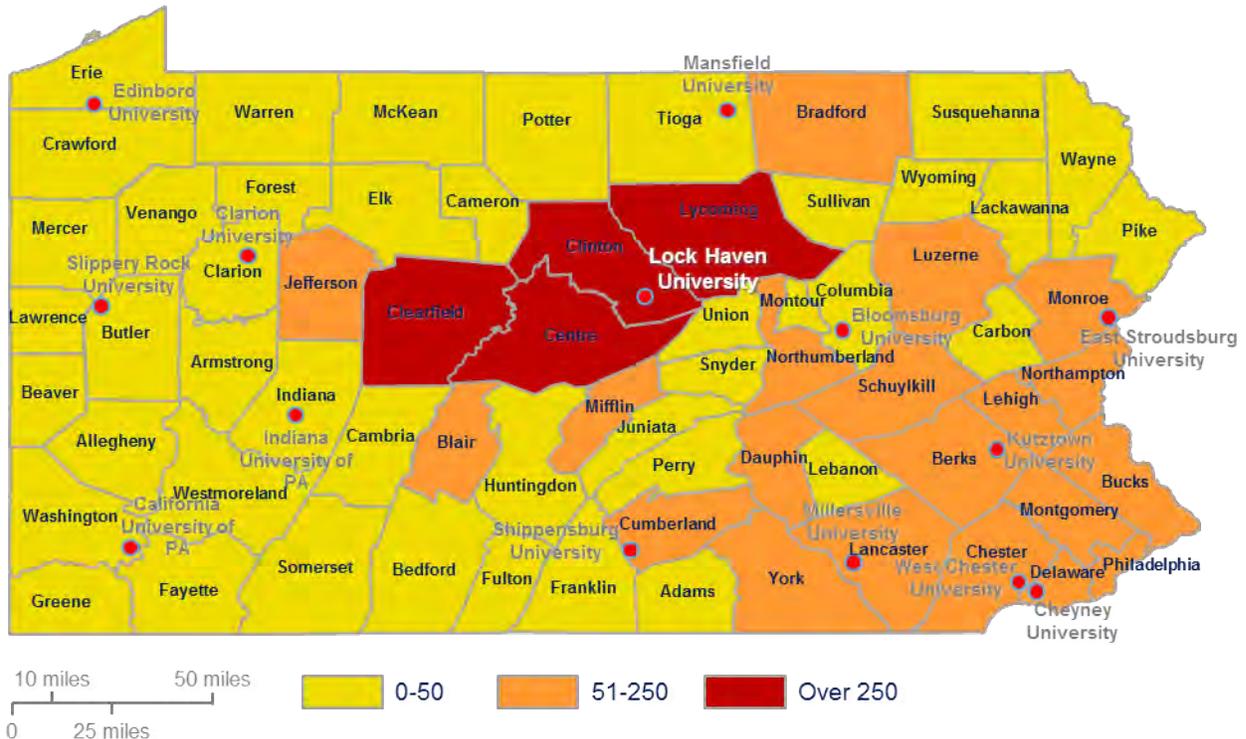
¹In Fall 2014, there was a variance of one undergraduate student. The variance results from an unknown classification regarding traditional vs. non-traditional.

Lock Haven University of Pennsylvania
Clinton County, PA

Sitting on the banks of the Susquehanna River, Lock Haven University was founded in 1870 as the Central State Normal School and became Lock Haven University of Pennsylvania after joining Pennsylvania’s State System of Higher Education in 1983. Lock Haven University offers 60 undergraduate and certificate programs, along with 40 minors, and has an average class size of 29 students. Classes are taught by 254 full-time faculty members of which 78 percent hold earned doctorates and 14 percent represent ethnic minorities. In 2014, 4,521 undergraduate students and 396 graduate students were enrolled at Lock Haven University.

Map 9.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

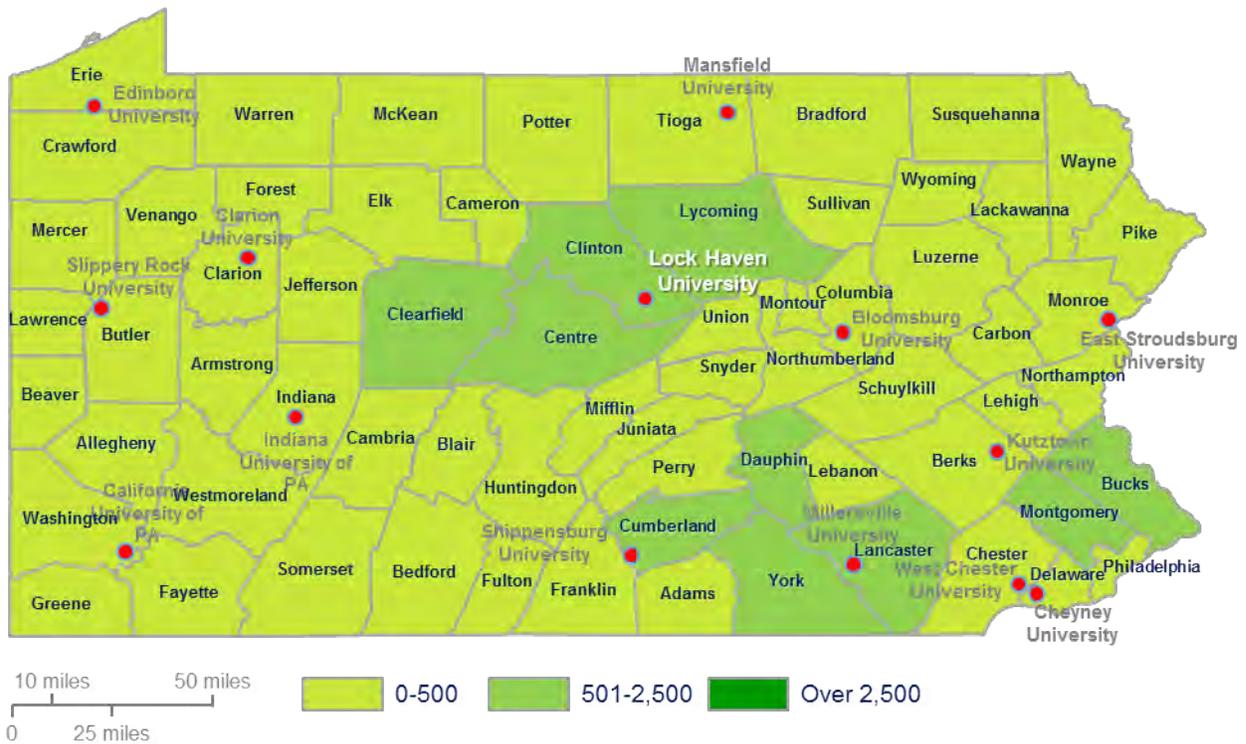
Lock Haven University
 Students by County



According to the most recent data, 96 percent of 2011-2012 graduates were employed, in the military or pursuing further education six months after graduation; 58 percent of those employed were working in their chosen fields. Dr. Michael Fiorentino has been serving as the university's president since July 2011.¹

Map 9.2 demonstrates Lock Haven University's alumni that still reside in the Commonwealth.

Lock Haven University
Alumni by County



Lock Haven University is in Clinton County, PA. Clinton County has a population of approximately 39,954 people, which is a 1.8 percent increase from 2010 to 2013. It has 888 sq. miles in land area and a population density of 45 per square mile. In 2013, Clinton County had a labor force of 19,944 people and an unemployment rate of 8.6 percent, with manufacturing as the largest of 20 major sectors in 2013.

¹ Excerpts obtained from Lock Haven University's website, www.lhup.edu.
Appendix C

Below are some of Clinton County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	39,954	55
Growth (percent) since 2010 Census	1.8%	4
Households (2012)	15,286	56
Labor Force (persons) (2013)	19,944	55
Unemployment Rate (2013)	8.6	14
Per Capita Personal Income (2012)	\$34,819	49
Median Household Income (2012)	\$41,949	50
Poverty Rate (2012)	15.7	14
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	86.4	46
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	17.1	42

Clearfield County, PA

Lock Haven’s second campus is located in Clearfield County, PA. Clearfield has 1,444.7 sq. miles in land area and a population density of 70.9 persons per square mile. There was a population of 81,174 people in 2013, which was a 0.6% decrease in population since 2010. In 2013, Clearfield County had a labor force of 40,924 people and an unemployment rate of 8.4%. During this time, health care and social assistance was the largest of 20 major sectors.

Below are some of Clearfield County’s population demographics.

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	81,174	36
Growth (%) since 2010 Census	-0.6%	37
Households (2012)	32,435	36
Labor Force (persons) (2013)	40,924	36
Unemployment Rate (2013)	8.4	20
Per Capita Personal Income (2012)	\$34,718	51
Median Household Income (2012)	\$41,519	55
Poverty Rate (2012)	14.6	22
H.S. Diploma or More - % of Adults 25+ (2012 ACS 5yr)	86.6	44
Bachelor Deg. or More - % of Adults 25+ (2012 ACS 5yr)	12.9	61

Countywide labor force data and countywide employment impact as a result of Lock Haven University in Clinton County is shown in **Table 9.1**.³ Out of the 19,944 people in the available

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

labor force, Lock Haven University had 465 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately 2.3 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Clinton County can also be calculated. Of the 19,200 total people employed in Clinton County, 465 were employed by Lock Haven University and live in-county; therefore the university’s countywide employment impact is approximately 2.4 percent.⁴

Table 9.1: Labor Force Data, Clinton County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Lock Haven	Clinton	3	465	19,944	2.33%	19,200	2.42%

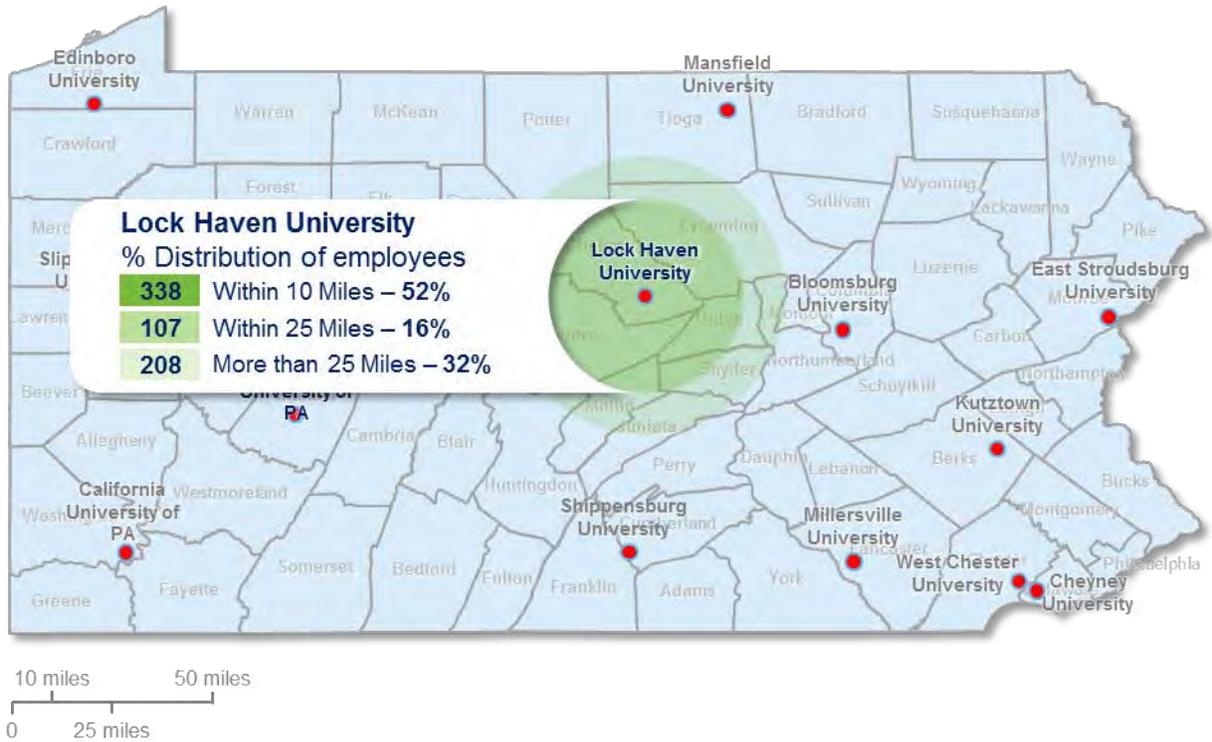
The geographic distribution of Lock Haven University employees is shown on **Map 9.3**.⁵ 338 employees, or 52 percent, live within 10 miles of the university, 107 employees, which constitutes 16 percent of the employees, live within 25 miles, leaving 32 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map

³ For the purpose of this analysis, the focus was on the amount of in-county jobs at Lock Haven University’s main campus in Clinton County. It is noted that Lock Haven has a branch campus in Clearfield County where there is also an employment impact.

⁴ The in-county employee count includes students who are employed by the university.

⁵ For the purpose of this illustration, student employees were excluded.

Map 9.3: Lock Haven University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 9.1** provides a general overview of Lock Haven University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Lock Haven University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Lock Haven University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Lock Haven University on the Commonwealth was \$108,859,639. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Lock Haven University’s Direct Economic Impact on the Commonwealth

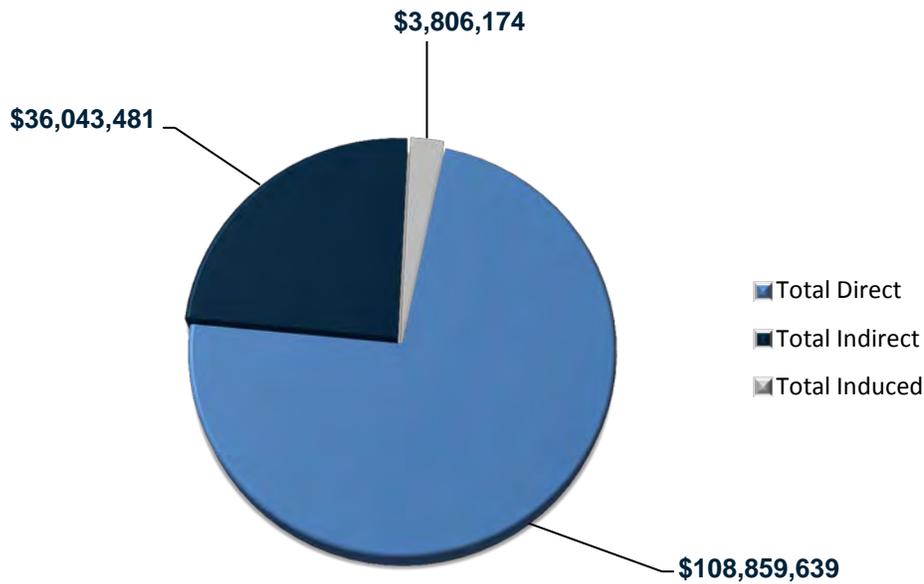
(1) Institutional spending:	\$29,036,485
Benefits:	\$17,817,452
(2) Faculty/Staff spending:	\$33,051,326
(3) Student spending:	\$27,325,578
(4) Capital Expenditures:	<u>\$1,628,798</u>
 Total Direct Impact:	 <u>\$108,859,639</u>

As presented in **Table 9.2**, the direct impact, \$108,859,639, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Lock Haven University on the Commonwealth of \$148,709,294. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$39,849,655. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 9.2: Total Economic Impact of Lock Haven University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Lock Haven	\$ 108,859,639	\$ 36,043,481	\$ 3,806,174	\$ 148,709,294

Chart 9.1: Total Economic Impact (Direct + Indirect + Induced): \$148,709,294



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Lock Haven University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$19,963,187. Therefore, each dollar invested in Lock Haven University by the Commonwealth via appropriations yielded a return of approximately \$7.45 in total economic impact, as is shown on **Table 9.3**.

Table 9.3: Statewide Economic Impact of Lock Haven University Appropriations

University	Total Impact	State Appropriations	Ratio
Lock Haven	\$148,709,294	\$ 19,963,187	7.45

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 9.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 9.4: Statewide Economic Impact of Lock Haven University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Lock Haven	\$ 1,200,846	\$ 602,999	\$ 38,157	\$ 26,821	\$ 1,868,823

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 9.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 9.5: Statewide Economic Impact of Lock Haven University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Lock Haven	\$ 85,004,643	\$ 20,307,609	6.00%	\$ 1,218,457

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Lock Haven University were \$2,419,303 or 12.1 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁶ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁷ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Lock Haven University on the Commonwealth was approximately 2,279 jobs, as is shown in **Table 9.6**.

⁶ Composite spending activity includes institutional, faculty and staff and student spending.

⁷ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 9.6: Statewide Employment Impact of Lock Haven University on the Commonwealth as a Result of Direct Composite Spending: 2,279 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Lock Haven	107,230,841	21.26	2,279

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Lock Haven University on the Commonwealth approximated 29 more jobs, as shown in **Table 9.7**. Therefore, the total employment impact of Lock Haven University is 2,309 jobs.

Table 9.7: Statewide Employment Impact of Lock Haven University on the Commonwealth as a Result of Direct Capital Expenditures: 29 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Lock Haven	\$ 1,628,798	17.94	29

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. While faculty and staff hours were not tracked, students did devote their time to helping the community. Lock Haven students spent a total of 59,189 and 58,065 hours volunteering, in 2013 and 2014, respectively. It is likely that the students' participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic

activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Lock Haven University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Lock Haven University's participation in WEDnetPA program had over 5,300 participants and had a total of \$257,510 funds awarded in 2014. Additionally, Lock Haven University has a Small Business Development Center (SBDC). It was established to promote growth, expansion, innovation, increased productivity and management improvement in existing small businesses in Clinton and Lycoming Counties. Along with consulting services, Lock Haven's SBDC offers training seminars, which aim to teach small businesses owners and their employees about topics they would use daily to strengthen their ability to compete in today's highly competitive business

world.⁸ Through these efforts, Lock Haven University is positively impacting the economic development in its home county, Clinton County, and many other surrounding counties.

⁸ “Small Business Development Center: Lock Haven University”, ihup.edu, visited February 25, 2015.

Exhibit 9.1

Lock Haven University Information			
	Location: County		Clinton
	Faculty and Staff Headcount Paid in 2014		653
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	4,855	4,521
	Graduate	405	396
	Total	5,260	4,917
	Full-time	4,723	4,381
	Part-time	537	536
	Total	5,260	4,917
	PA residents	4,890	4,584
	Non-residents	370	333
	Total	5,260	4,917
	Traditional undergraduate (students under 25)	4,430	4,124
	Non-traditional undergraduate (students over 25)	425	397
	Total (undergraduate only)	4,855	4,521
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 8,752
	Tuition		6,820
	Fees		2,457
	Total		\$ 18,029
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 8,752
	Tuition		15,050
	Fees		2,677
	Total		\$ 26,479
	Graduate, In-State, FY 2014-2015		
	Tuition (per 3 credits)		\$ 1,362
	Fees (per 3 credits) ¹		437
	Total		\$ 1,799
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per 3 credits)		\$ 2,043
	Fees (per 3 credits)		604
	Total		\$ 2,647
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 29,772,250
	Tuition from undergraduate out-of-state students		4,549,406
	Tuition from graduate in-state students		3,730,198
	Tuition from graduate out-of-state students		1,355,322
	Total		\$ 39,407,176

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 8,576,200
	Non-Mandatory Fees	
	Non-Mandatory Fees	375,877
	Total	\$ 8,952,077
	Total from Tuition, Fees, Room & Board	\$ 48,359,253
	Sales and Services	\$ 416,155
	Education and General Appropriations	\$ 19,963,187
	Grants and Contracts	
	Federal	\$ 9,963,752
	State	6,117,431
	Local/Other/Private	31,112
	System Transfer Awards	19,369
	Total grants and contracts	\$ 16,131,664
	Other Revenues (net of scholarship discounts and allowances)	\$ 16,564,749
	Total Revenues (from sources above)	\$ 101,435,008
	Funds Raised by University (private giving)	\$ 30,400
	Market Value of Endowment	\$ 10,707,434
	Total Replacement Value of Physical Plant (main campus)	\$ 526,400,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 28,738,974
	Capital Improvements	297,511
	Employee Benefits	17,817,452
	Total Direct Institutional Spending	46,853,937
	Institutional spending prorated by 6.77% of out of state students	3,173,146
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	4,866,020
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	7,399,777
	Induced Effect (type 2 effect - type 1 effect)	2,533,757
	Total Impact of Institutional Spending	\$ 56,787,472
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 33,051,326
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 46,532,962

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 27,325,578
	Household multiplier		1.41
	Total Impact of Student Spending		38,471,681
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 900,000
	Deferred Maintenance		728,798
	Total Direct Capital Expenditures		1,628,798
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		2,743,547
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		4,015,964
	Induced Effect (type 2 effect - type 1 effect)		1,272,417
	Total Impact of Capital Expenditures		\$ 6,917,179
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 107,230,841
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		2,279
	Direct capital expenditures for the Commonwealth		\$ 1,628,798
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		29
	Total Employment Impact		2,309
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff		N/A
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		58,065
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		Yes
	Patents filed since January 1, 2010 ¹		1
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 85,004,643
	Imputed % of taxable spending		23.89%
	Spending subject to tax		20,307,609
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 1,218,457

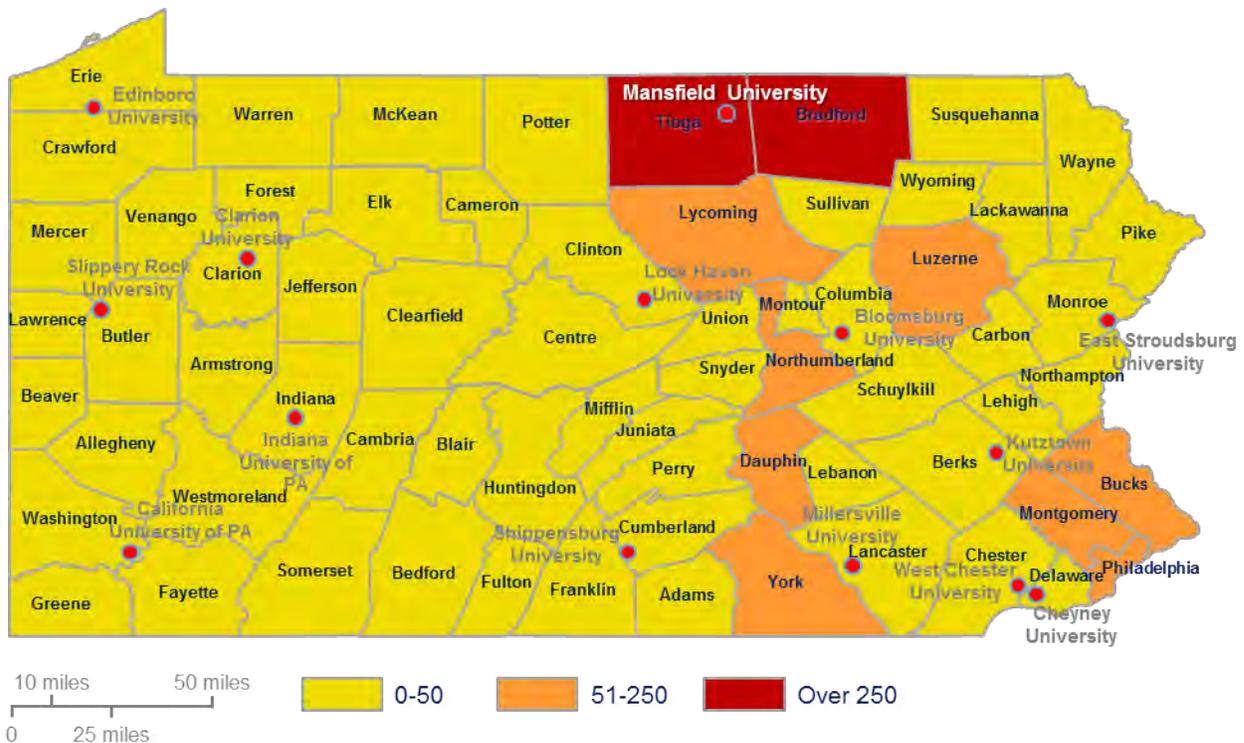
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 40,061,321
	State tax withholdings		1,200,846
	Local EIT		602,999
	Local Services Tax		38,157
	Unemployment tax		26,821
	Total Payroll Tax Payments		\$ 1,868,823
¹ As of March 2013, Lock Haven University has an additional patent in process.			

Mansfield University of Pennsylvania
Tioga County, PA

Mansfield University is a small, rural, public, liberal arts institution located in the beautiful mountains of North Central Pennsylvania. Mansfield Classical Seminary opened its doors in January, 1857, four years before the beginning of the Civil War. Over the next 157 years, the institution has thrived, experiencing five name changes in three centuries. Mansfield University prides itself on developing leaders by focusing on four core values: Character, Scholarship, Culture, and Service by incorporating them into the institution’s creed, which reads: “Character as the essential, Scholarship as the means, Culture as the enrichment, and Service as the end of all worthy endeavors.” For the 2014-2015 academic year, the university has 2,752 total students enrolled, of which 2,587 are undergraduates.

Map 10.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

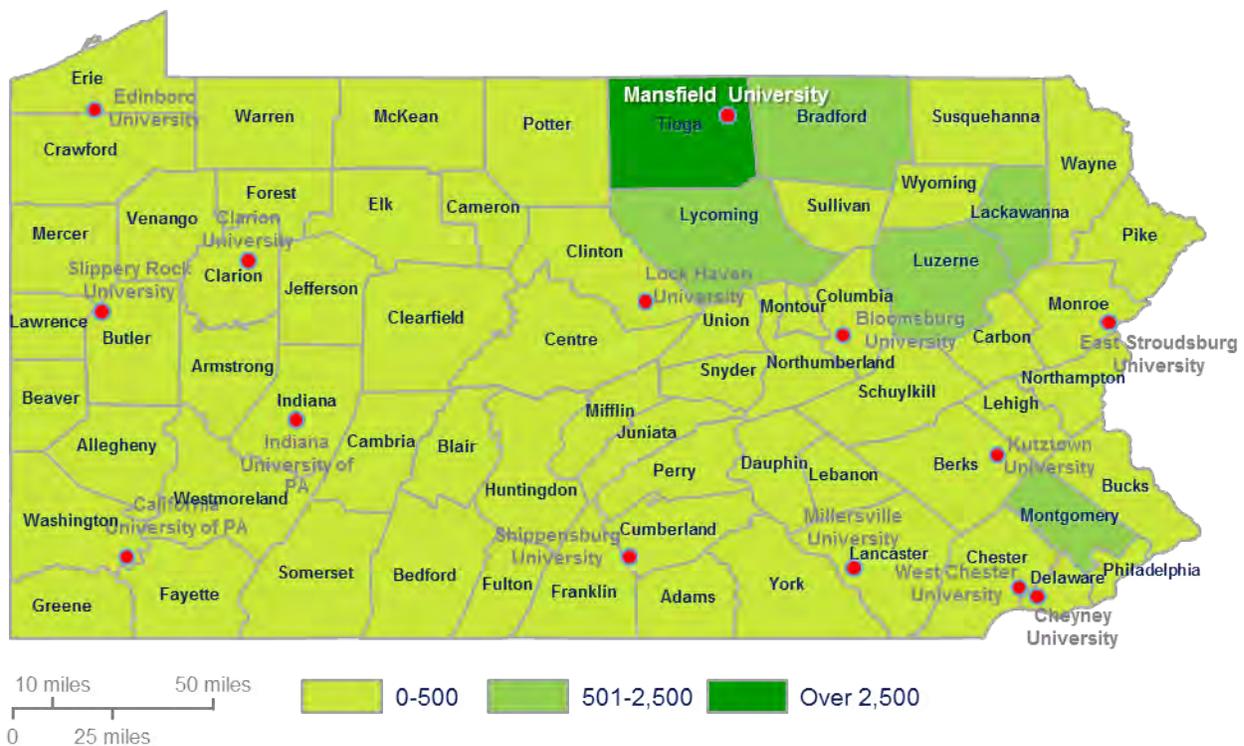
Mansfield University
 Students by County



Mansfield University is renowned for playing the first-ever college football game at night in 1892. Today, it is the only public university to compete in the Collegiate Sprint Football League. Brigadier General Francis L. Hendricks, who served for five years as commander and deputy commander of the Army and Air Force Exchange Service in Dallas, TX, was selected by the Board of Governors of Pennsylvania’s State System of Higher Education to be the president of Mansfield University in October 2012.¹

Map 10.2 demonstrates Mansfield University’s alumni that still reside in the Commonwealth.

Mansfield University
Alumni by County



Mansfield University is located in Tioga County, PA which has 1,133.8 sq. miles in land area and a population density of 37.5 per square mile. In 2013, 42,463 lived in Tioga, which was a 1.1 percent increase in population since the last census in 2010. The average household size is 2.4 persons compared to an average family size of 2.8 persons. In 2010, 99 percent of the population reported only one race on the census, with 0.8 percent of these reporting African-American. The population of this county is one percent Hispanic (of any race). In 2013,

¹ Excerpts obtained from Mansfield University’s website, www.mansfield.edu.

manufacturing was the largest of 20 major sectors. The labor force was 21,875 people and there was an unemployment rate of 8.3 percent.

Below are some of Tioga County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	42,463	52
Growth (percent) since 2010 Census	1.1%	11
Households (2013)	17,058	53
Labor Force (persons) (2013)	21,875	50
Unemployment Rate (2013)	8.3	21
Per Capita Personal Income (2013)	\$33,942	60
Median Household Income (2013)	\$45,052	38
Poverty Rate (2013)	13.2	41
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	88.4	29
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	19.1	34

Countywide labor force data and countywide employment impact as a result of Mansfield University is shown in **Table 10.1**. Out of the 21,875 people in the available labor force, Mansfield University had 415 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of 1.9 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Tioga County can also be calculated. Of the 20,300 total people employed in Tioga County, 415 were employed by Mansfield University and live in-county; therefore the university’s countywide employment impact is approximately two percent.³

Table 10.1: Labor Force Data, Tioga County: Averages and Countywide Employment Impact

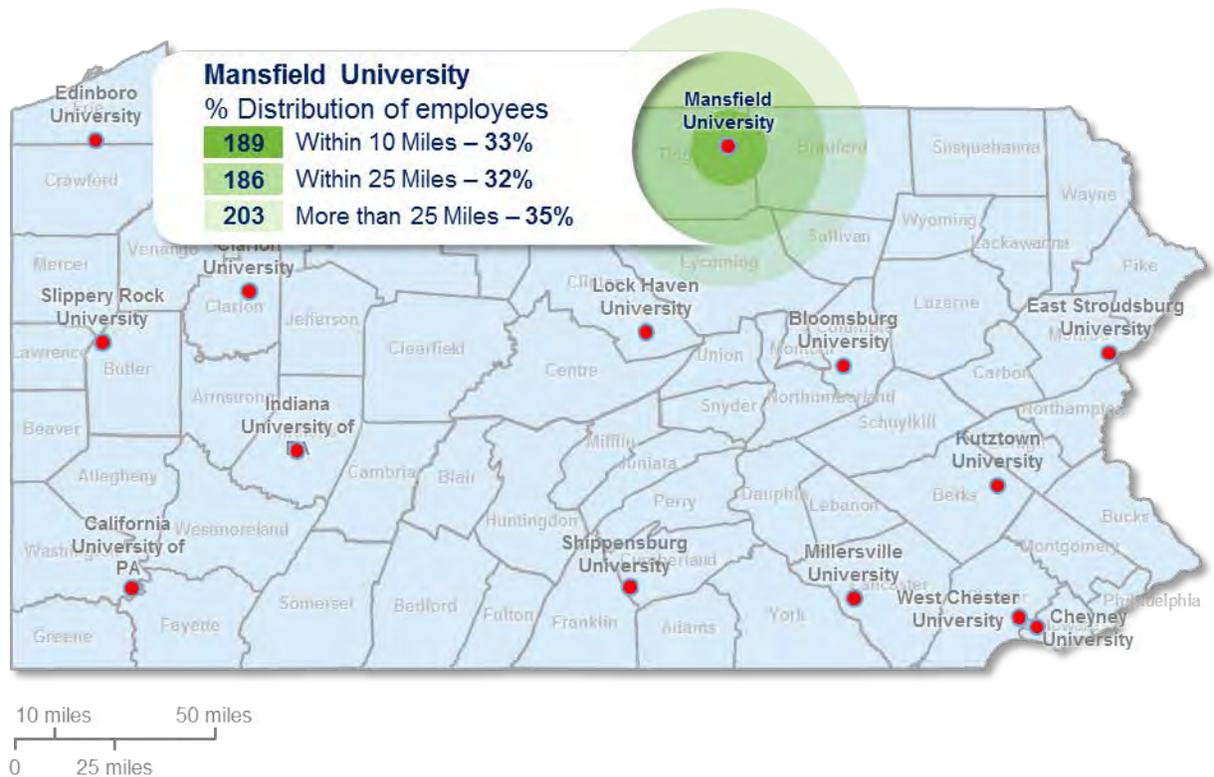
University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Mansfield	Tioga	4	415	21,875	1.90%	20,300	2.04%

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

The geographic distribution of Mansfield University employees is shown on **Map 10.3**.⁴ 189 employees, or 33 percent, live within 10 miles of the university, 186 employees, which constitutes 32 percent of the employees, live within 25 miles, leaving 35 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 10.3: Mansfield University’s Distribution of Employees.



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 10.1** provides a general overview of Mansfield University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional

⁴ For the purpose of this illustration, student employees were excluded.
Appendix C

detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Mansfield University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Mansfield University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Mansfield University on the Commonwealth was \$70,189,054. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Mansfield University’s Direct Economic Impact on the Commonwealth

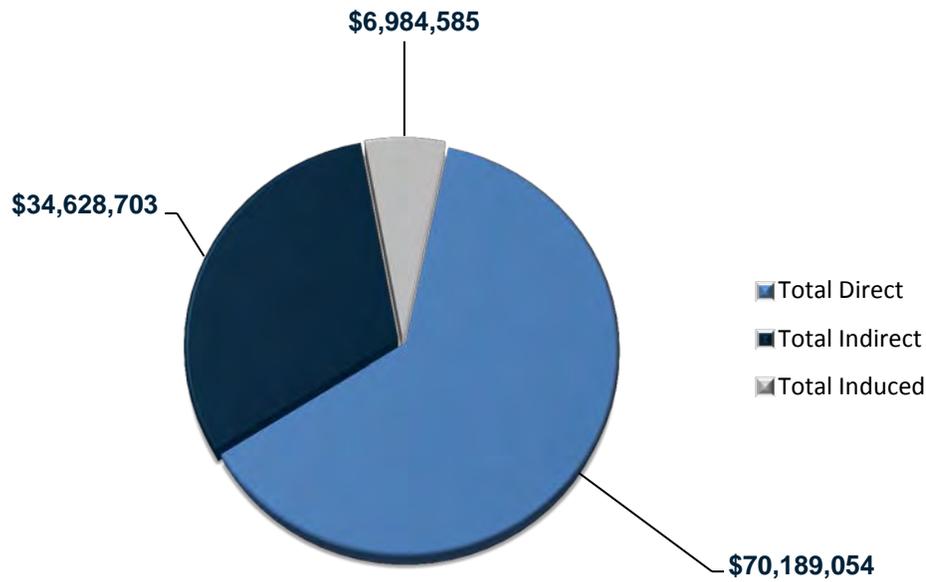
<i>(1) Institutional spending:</i>	<i>\$20,281,855</i>
<i>Benefits:</i>	<i>\$13,479,194</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$24,177,795</i>
<i>(3) Student spending:</i>	<i>\$9,441,184</i>
<i>(4) Capital Expenditures:</i>	<i><u>\$2,809,026</u></i>
<i>Total Direct Impact:</i>	<i><u>\$70,189,054</u></i>

As presented in **Table 10.2**, the direct impact, \$70,189,054, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Mansfield University on the Commonwealth of \$111,802,341. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$41,613,287. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 10.2: Total Economic Impact of Mansfield University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Mansfield	\$ 70,189,054	\$ 34,628,703	\$ 6,984,585	\$ 111,802,341

Chart 10.1: Total Economic Impact (Direct + Indirect + Induced): \$111,802,341



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriations to Mansfield University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$16,702,905. Therefore, each dollar invested in Mansfield University by the Commonwealth via appropriations yielded a return of approximately \$6.69 in total economic impact, as is shown on **Table 10.3**.

Table 10.3: Statewide Economic Impact of Mansfield University Appropriations

University	Total Impact	State Appropriations	Ratio
Mansfield	\$111,802,341	\$ 16,702,905	6.69

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 10.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 10.4: Statewide Economic Impact of Mansfield University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Mansfield	\$ 833,113	\$ 408,587	\$ 34,338	\$ 18,729	\$ 1,294,767

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff, as well as students. **Table 10.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 10.5: Statewide Economic Impact of Mansfield University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Mansfield	\$ 41,332,161	\$ 11,307,653	6.00%	\$ 678,459

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Mansfield University were \$1,511,573 or nine percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Mansfield University on the Commonwealth approximated 1,432 jobs, as is shown in **Table 10.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 10.6: Statewide Employment Impact of Mansfield University on the Commonwealth as a Result of Direct Composite Spending: 1,432 Jobs

University	Total Direct Composite Spending	Jobs Output	Employment Impact
Mansfield	67,380,028	21.26	1,432

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Mansfield University on the Commonwealth approximated 50 more jobs, as shown in **Table 10.7**. Therefore, the total employment impact of Mansfield University is 1,482 jobs.

Table 10.7: Statewide Employment Impact of Mansfield University on the Commonwealth as a Result of Direct Capital Expenditures: 50 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Mansfield	\$ 2,809,026	17.94	50

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. Although Mansfield University does not track the hours that its faculty, staff, or students spend volunteering, it does participate in many events and activities that require volunteers from campus. For instance, during 2014, Mansfield collaborated with the Northern Tioga School District to implement a Summer Leadership program, Mansfield’s Public Relations department partnered with Blue Ridge Communication to create a monthly half hour news television show that airs to over 170,000 homes, the North Hall Library faculty and staff were involved with numerous local organizations including the local growers’ market, and the faculty in the Department of Health Sciences held numerous leadership roles in local organizations, among many other activities.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its fourteen universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Mansfield University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

While Mansfield University does not participate in the WEDnetPA program, the university offers other workforce development programs to help stimulate economic development. Mansfield partakes in job fairs, holds a business expo, and has a camp aimed at teaching students about shale gas development and the job opportunities available. By way of these efforts,

Mansfield University is contributing to the economic development of Tioga County, as well as the counties that surround it.

Exhibit 10.1

Mansfield University Information			
	Location: County		Tioga
	Faculty and Staff Headcount Paid in 2014		578
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	2,717	2,587
	Graduate	253	165
	Total	2,970	2,752
	Full-time	2,477	2,354
	Part-time	493	398
	Total	2,970	2,752
	PA residents	2,309	2,263
	Non-residents	661	489
	Total	2,970	2,752
	Traditional undergraduate (students under 25)	2,388	2,274
	Non-traditional undergraduate (students over 25)	329	312
	Total (undergraduate only)¹	2,717	2,586
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 10,582
	Tuition		6,820
	Fees		2,706
	Total		\$ 20,108
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 10,582
	Tuition		17,050
	Fees		2,926
	Total		\$ 30,558
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)		\$ 454
	Fees (per credit) ²		411
	Total		\$ 865
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)		\$ 681
	Fees (per credit) ²		423
	Total		\$ 1,104
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 13,928,151
	Tuition from undergraduate out-of-state students		6,275,994
	Tuition from graduate in-state students		785,936
	Tuition from graduate out-of-state students		704,727
	Total		\$ 21,694,808

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 4,809,100
	Non-Mandatory Fees	
	Non-Mandatory Fees	395,605
	Total	\$ 5,204,705
	Total from Tuition, Fees, Room & Board	\$ 26,899,513
	Sales and Services	\$ 479,995
	Education and General Appropriations	\$ 16,702,905
	Grants and Contracts	
	Federal	\$ 6,109,690
	State	3,211,539
	Local/Other/Private	73,338
	System Transfer Awards	5,250
	Total grants and contracts	\$ 9,399,817
	Other Revenues (net of scholarship discounts and allowances)	\$ 12,855,747
	Total Revenues (from sources above)	\$ 66,337,977
	Funds Raised by University (private giving)	\$ 1,005,340
	Market Value of Endowment	\$ 17,135,900
	Total Replacement Value of Physical Plant	\$ 573,000,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 20,019,063
	Capital Improvements	262,792
	Employee Benefits	13,479,194
	Total Direct Institutional Spending	33,761,049
	Institutional spending prorated by 17.77% of out of state students	5,998,965
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	9,199,414
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	13,989,587
	Induced Effect (type 2 effect - type 1 effect)	4,790,174
	Total Impact of Institutional Spending	\$ 52,540,810
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 24,177,795
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 34,039,918

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 9,441,184
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 13,292,243
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 2,265,467
	Deferred Maintenance		543,559
	Total Direct Capital Expenditures		2,809,026
	Type 1 Multiplier		1.6800
	Type 1 Effect (total indirect - induced)		4,731,523
	Type 2 Multiplier		2.4700
	Type 2 Effect (total indirect)		6,925,934
	Induced Effect (type 2 effect - type 1 effect)		2,194,411
	Total Impact of Capital Expenditures		\$ 11,929,371
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 67,380,028
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		1,432
	Direct capital expenditures for the Commonwealth		\$ 2,809,026
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		50
	Total Employment Impact		1,483
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		N/A
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		No
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 47,332,161
	Imputed % of taxable spending		23.89%
	Spending subject to tax		11,307,653
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 678,459

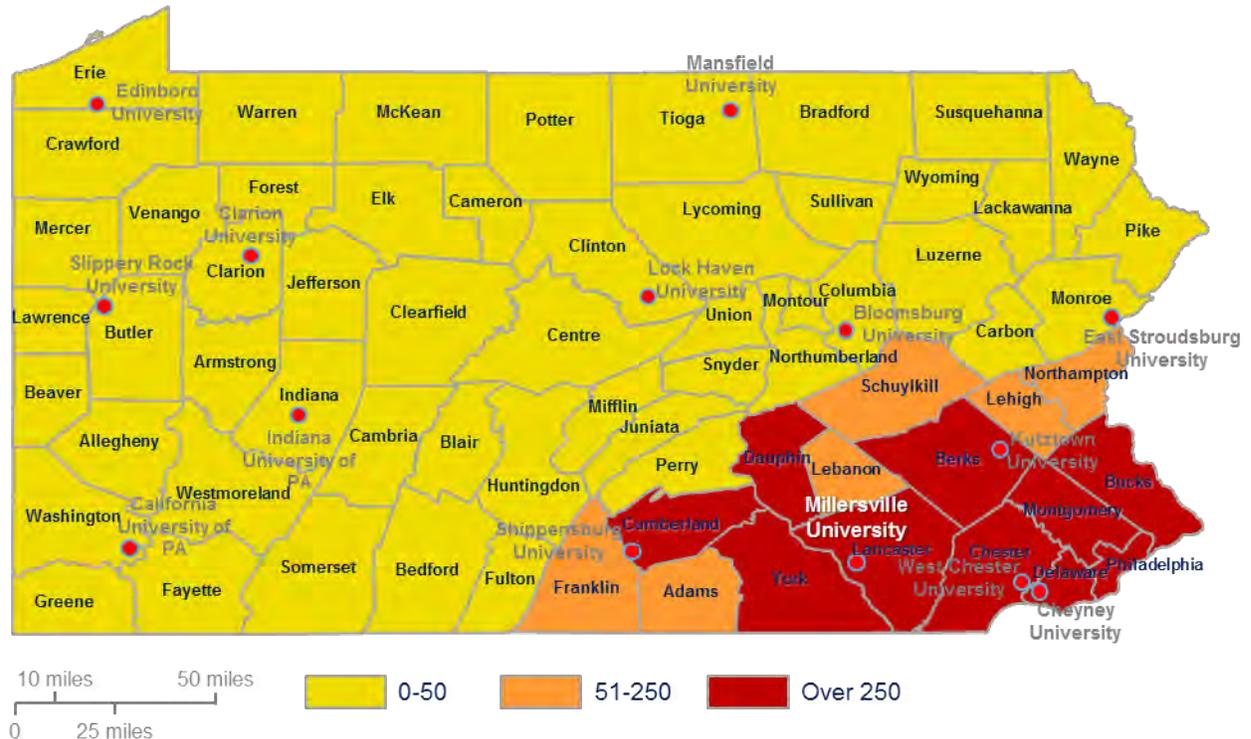
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 27,889,494
	State tax withholdings		833,113
	Local EIT		408,587
	Local Services Tax		34,338
	Unemployment tax		18,729
	Total Payroll Tax Payments		\$ 1,294,767
¹All fees included.			
²In Fall 2014, there was a variance of one undergraduate student. The variance results from an unknown classification regarding traditional vs. non-traditional.			

Millersville University of Pennsylvania
Lancaster, PA

Millersville University was founded in 1855 as Lancaster County Normal School; it was not for another 100 years that it would receive university status in 1983 as Millersville University. As of the fall 2014 semester there were 7,171 students enrolled in an undergraduate program and 876 enrolled in graduate studies. Of those students, approximately 95 percent were Pennsylvania residents. Furthermore, of the 64,000 alumni Millersville has, 79 percent of them continue to live in Pennsylvania. Of the full-time instructional faculty, 98 percent hold a Ph.D. or terminal degree.

Map 11.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

Millersville University
 Students by County

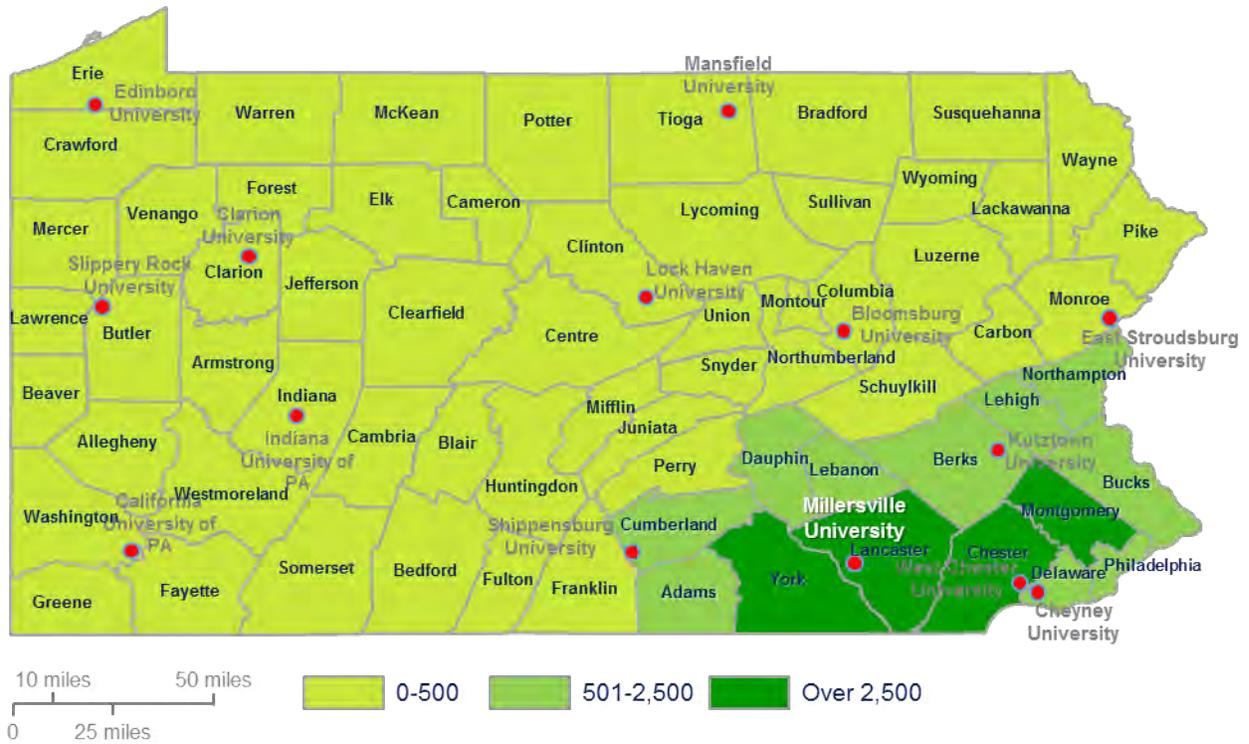


The university offers 19 intercollegiate varsity sports plus a wide array of intramural and club programs. Millersville’s mission is to provide diverse, dynamic, meaningful experiences to inspire learners to grow both intellectually and personally to enable them to contribute positively

to local and global communities. In November 2012, Dr. John M. Anderson was chosen as the 14th president of Millersville University.¹

Map 11.2 demonstrates Millersville University’s alumni that still reside in the Commonwealth.

Millersville University
Alumni by County



Lancaster County contains 943.8 sq. miles in land area and has a population density of 561.1 per square mile. As of 2013, there are 529,600 people living in Lancaster, which is a two percent increase since 2010. The average household size is 2.6 persons compared to an average family size of 3.1 persons. On the most recent census form, 98 percent of the population reported only one race, with 3.7 percent of these reporting African-American. The population of this county is 8.6 percent Hispanic (of any race). The labor force in 2013 was 268,570 people and Lancaster had an unemployment rate of 6.1 percent. Also in 2013, manufacturing was the largest of 20 major sectors.

¹ Excerpts obtained from Millersville University’s website, www.millersville.edu.

Below are some of Lancaster County's population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	529,600	6
Growth (percent) since 2010 Census	2.0%	3
Households (2013)	194,082	6
Labor Force (persons) (2013)	268,570	7
Unemployment Rate (2013)	6.1	61
Per Capita Personal Income (2013)	\$41,116	21
Median Household Income (2013)	\$56,766	11
Poverty Rate (2013)	10.5	56
H.S. Diploma or More - percent of Adults 25+ (2013 ACS 5yr)	83.9	62
Bachelor Deg. or More - percent of Adults 25+ (2013 ACS 5yr)	24.2	17

Countywide labor force data and countywide employment impact as a result of Millersville University is shown in **Table 11.1**. Out of the 268,570 people in the available labor force, Millersville University had 1,481 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately 0.6 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Lancaster County can also be calculated. Of the 254,300 total people employed in Lancaster County, 1,481 were employed by Millersville University and live in-county; therefore the university's countywide employment impact is approximately 0.7 percent.³

Table 11.1: Labor Force Data, Lancaster County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Millersville	Lancaster	26	1,481	268,570	0.55%	254,300	0.58%

The geographic distribution of Millersville University employees is shown on **Map 11.3**.⁴ 832 employees, or 67 percent, live within 10 miles of the university, 218 employees, which constitutes 18 percent of the employees, live within 25 miles, leaving 15 percent of employees

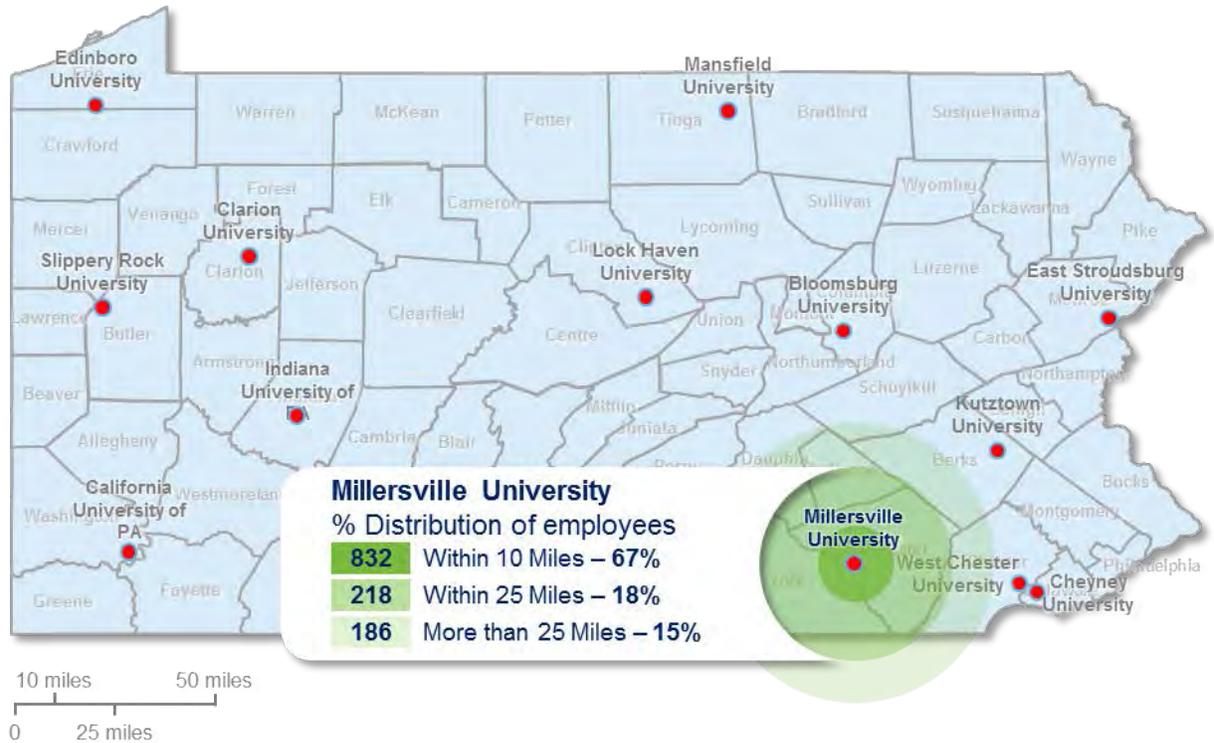
² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania's Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

⁴ For the purpose of this illustration, student employees were excluded.

living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 11.3: Millersville University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 11.1** provides a general overview of Millersville University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Millersville University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that

Millersville University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Millersville University on the Commonwealth was \$227,086,357. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending, and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Millersville University’s Direct Economic Impact on the Commonwealth

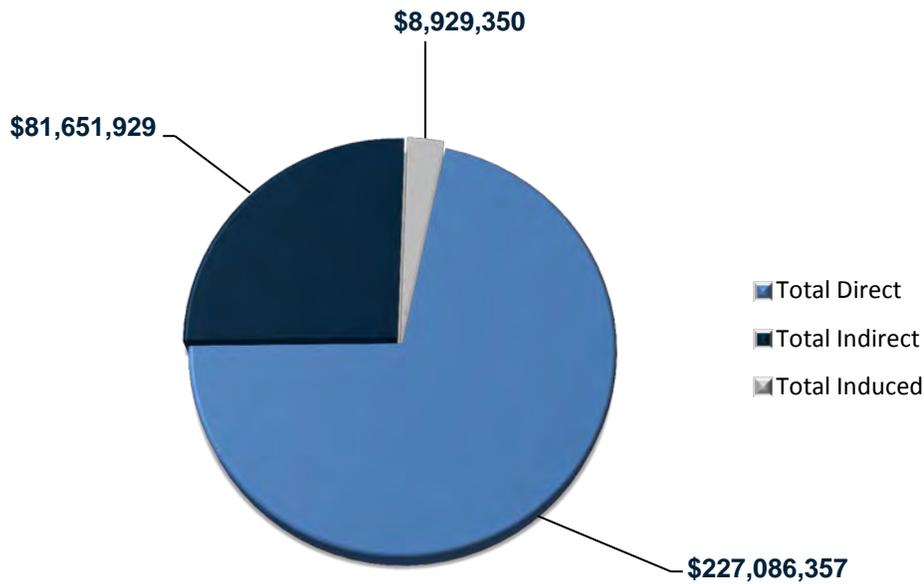
<i>(1) Institutional spending:</i>	<i>\$57,203,902</i>
<i>Benefits:</i>	<i>\$29,836,224</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$54,725,710</i>
<i>(3) Student spending:</i>	<i>\$78,390,017</i>
<i>(4) Capital Expenditures:</i>	<i><u>\$6,930,505</u></i>
 <i>Total Direct Impact:</i>	 <i><u>\$227,086,357</u></i>

As presented in **Table 11.2**, the direct impact, \$227,086,357, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Millersville University on the Commonwealth of \$317,667,636. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$90,581,279. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 11.2: Total Economic Impact of Millersville University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Millersville	\$ 227,086,357	\$ 81,651,929	\$ 8,929,350	\$ 317,667,636

Chart 11.1: Total Economic Impact (Direct + Indirect + Induced): \$317,667,636



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Millersville University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$30,872,019. Therefore, each dollar invested in Millersville University by the Commonwealth via appropriations yielded a return of approximately \$10.29 in total economic impact, as is shown on **Table 11.3**.

Table 11.3: Statewide Economic Impact of Millersville University Appropriations

University	Total Impact	State Appropriations	Ratio
Millersville	\$317,667,636	\$ 30,872,019	10.29

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 11.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 11.4: Statewide Economic Impact of Millersville University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Millersville	\$ 2,018,212	\$ 698,065	\$ 81,976	\$ 44,270	\$ 2,842,524

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 11.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 11.5: Statewide Economic Impact of Millersville University Sales Tax Revenue Collections

University	Total Student and Faculty Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Millersville	\$ 187,413,631	\$ 44,773,116	6.00%	\$ 2,686,387

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Millersville University were \$4,704,599 or 15.2 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Millersville University on the Commonwealth approximated 4,680 jobs, as is shown in **Table 11.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 11.6: Statewide Employment Impact of Millersville University on the Commonwealth as a Result of Direct Composite Spending: 4,680 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Millersville	220,155,852	21.26	4,680

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Millersville University on the Commonwealth approximated 124 more jobs, as shown in **Table 11.7**. Therefore, the total employment impact of Millersville University is 4,804 jobs.

Table 11.7: Statewide Employment Impact of Millersville University on the Commonwealth as a Result of Direct Capital Expenditures: 124 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Millersville	\$ 6,930,505	17.94	124

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2014, Millersville University’s faculty and staff spent 120,935 hours volunteering. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$2,727,084. Students also devoted their time to helping the community. Millersville students spent a total of 190,237 hours in 2014 volunteering.⁷ It is likely that the students’ participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁷ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Millersville University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

While Millersville University does not track participation in the WEDnetPA program, the university offers entrepreneurial programs. These programs include a software productization center where multi-disciplinary groups of students work in teams to create websites to support local businesses and organizations and several panel discussions throughout 2014. These

university programs drew over 200 participants, as well as participation from eight businesses. As a result, Millersville University contributes to the economic development in Lancaster, as well as the surrounding counties.

Exhibit 11.1

Millersville University Information			
	Location: County	Lancaster	
	Faculty and Staff Headcount Paid in 2014	1,236	
Enrollment Characteristics			
Enrollment		Fall 2013	Fall 2014
	Undergraduate	7,388	7,171
	Graduate	891	876
	Total	8,279	8,047
	Full-time	6,832	6,604
	Part-time	1,447	1,443
	Total	8,279	8,047
	PA residents	7,856	7,640
	Non-residents	423	407
	Total	8,279	8,047
	Traditional undergraduate (students under 25)	6,600	6,426
	Non-traditional undergraduate (students over 25)	788	745
	Total (undergraduate only)	7,388	7,171
Cost of Attendance			
Undergraduate, In-State, FY 2014-2015			
	Room & Board	\$	11,380
	Tuition		7,920
	Fees		2,348
	Total	\$	21,648
Undergraduate, Out-of-State, FY 2014-2015			
	Room & Board	\$	11,380
	Tuition		17,050
	Fees		2,568
	Total	\$	30,998
Graduate, In-State, FY 2014-2015			
	Tuition (per credit)	\$	454
	Fees (per credit)		128
	Total	\$	582
Graduate, Out-of-State, FY 2014-2015			
	Tuition (per credit)	\$	681
	Fees (per credit)		140
	Total	\$	821
Financial Characteristics			
Revenues, FY 2013-2014			
Tuition			
	Tuition from undergraduate in-state students	\$	45,905,632
	Tuition from undergraduate out-of-state students		5,527,546
	Tuition from graduate in-state students		6,339,762
	Tuition from graduate out-of-state students		579,287
	Total	\$	58,352,227

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 17,086,383
	Non-Mandatory Fees	
	Non-Mandatory Fees	1,118,981
	Total	\$ 18,205,364
	Total from Tuition, Fees, Room & Board	\$ 76,557,591
	Sales and Services	\$ 3,128,584
	Education and General Appropriations	\$ 30,872,019
	Grants and Contracts	
	Federal	\$ 13,539,718
	State	7,621,828
	Local/Other/Private	315,378
	System Transfer Awards	418,528
	Total grants and contracts	\$ 21,895,452
	Other Revenues (net of scholarship discounts and allowances)	\$ 33,203,352
	Total Revenues (from sources above)	\$ 165,656,998
	Funds Raised by University (private giving)	\$ 2,696,916
	Market Value of Endowment	\$ 32,171,525
	Total Replacement Value of Physical Plant	\$814,000,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 56,653,470
	Capital Improvements	550,432
	Employee Benefits	29,836,224
	Total Direct Institutional Spending	87,040,126
	Institutional spending prorated by 5.06% of out of state students	4,402,303
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	6,750,931
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	10,266,170
	Induced Effect (type 2 effect - type 1 effect)	3,515,239
	Total Impact of Institutional Spending	\$100,821,535
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 54,725,709
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 77,048,327

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 78,390,017
	Household multiplier		1.41
	Total Impact of Student Spending		\$110,365,305
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 5,933,333
	Deferred Maintenance		997,172
	Total Direct Capital Expenditures		6,930,505
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		11,673,743
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		17,087,854
	Induced Effect (type 2 effect - type 1 effect)		5,414,111
	Total Impact of Capital Expenditures		\$ 29,432,470
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$220,155,852
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		4,680
	Direct capital expenditures for the Commonwealth		6,930,505
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		124
	Total Employment Impact		4,804
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		120,935
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 2,727,084
	Annual volunteer hours of students (2014)		190,237
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		No
	Patents filed since January 1, 2010 ¹		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$187,413,631
	Imputed % of taxable spending		23.89%
	Spending subject to tax		44,773,116
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 2,686,387

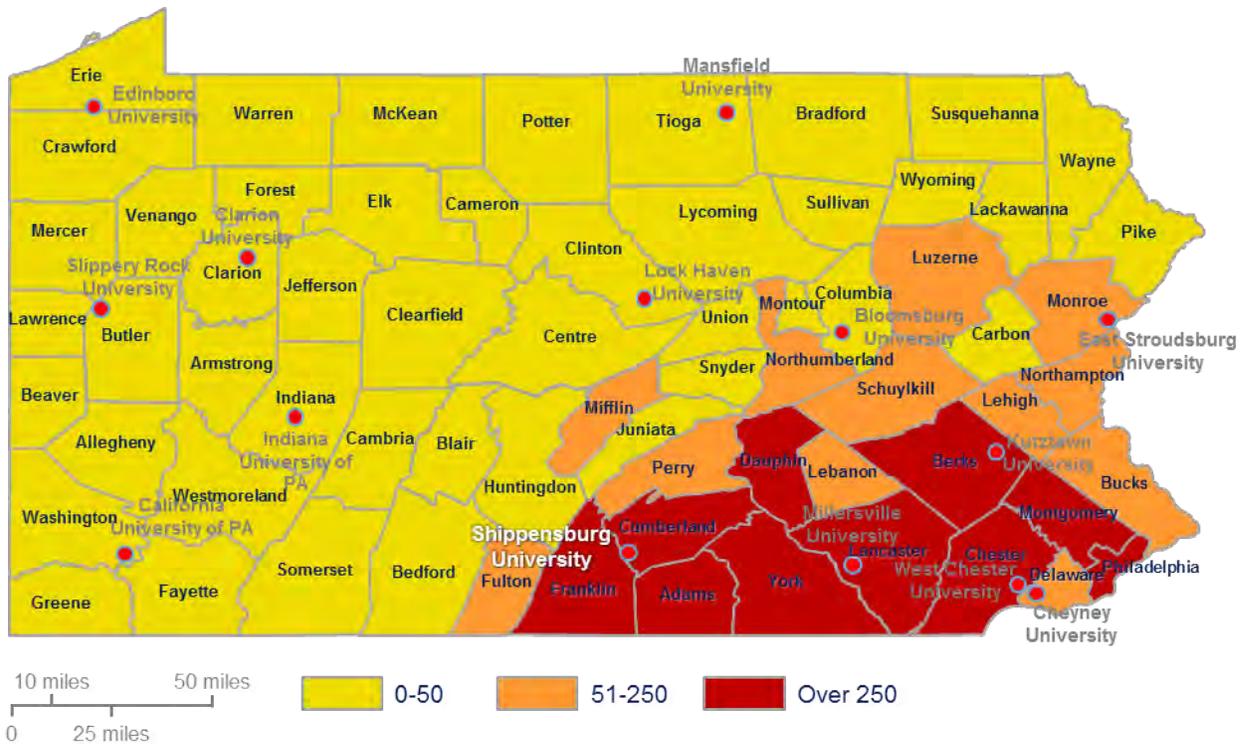
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 67,582,829
	State tax withholdings		2,018,212
	Local EIT		698,065
	Local Services Tax		81,976
	Unemployment tax		44,270
	Total Payroll Tax Payments		\$ 2,842,524
¹ As of July 2013, Millersville University has one patent in process.			

Shippensburg University of Pennsylvania
Cumberland County, PA

Shippensburg University was established in 1871 as the Cumberland Valley State Normal School. The school received official approval by the state on February 21, 1873, and admitted its first class of 217 students on April 15, 1873. In 1917 the school was purchased by the Commonwealth of Pennsylvania. In the fall 2014 semester, the university had 6,305 undergraduates and 1,050 graduate students enrolled. The university offers 100 undergraduate programs and 57 graduate programs.

Map 12.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

Shippensburg University
 Students by County

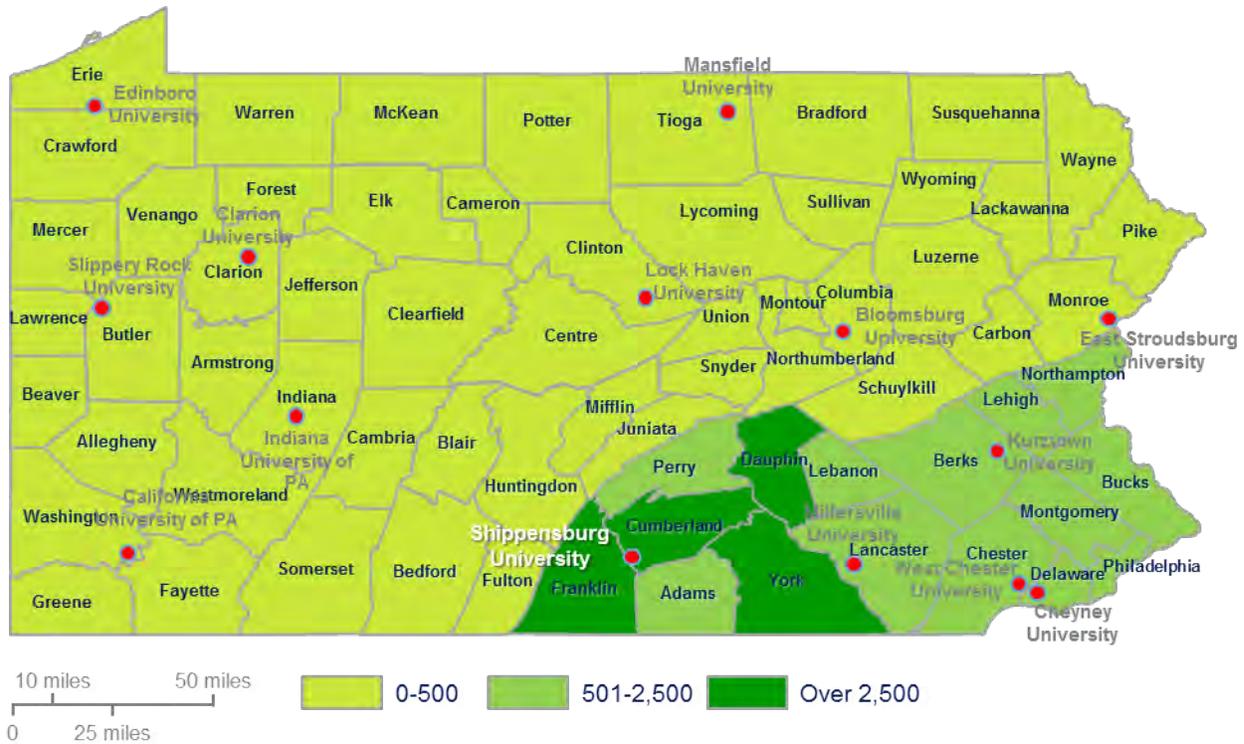


Shippensburg employs about 325 full-time instructional faculty members, of which 95 percent have terminal degrees. Students have the choice to join any of the 150+ clubs and organizations, as well as any of the 20 NCAA Division II intercollegiate athletic teams, or become a part of one

of the 23 intramural club sports. Currently Dr. George F. “Jody” Harpster Jr. is serving as president after previously serving for two terms as interim president.¹

Map 12.2 demonstrates Shippensburg University’s alumni that still reside in the Commonwealth.

Shippensburg University
Alumni by County



Shippensburg University is located in Cumberland County, which has a population of 241,212 people as of 2013; this is a 2.5 percent increase in population since the last census in 2010. This growth is consistent with the Pennsylvania State Data Center’s projection of 5.1-20 percent population increase between 2010 and 2040. It has 545.5 sq. miles in land area and a population density of 442.2 per square mile. During 2010, 98.2 percent of the population reported only one race, with 3.2 percent of these reporting African-American. The population of this county is 2.7 percent Hispanic (of any race). The average household size is 2.4 persons compared to an average family size of 2.9 persons. In 2013, the labor force was 124,890 people and the unemployment rate was 6.1 percent. Retail trade was the largest sector of 20 major sectors in the fourth quarter of 2013.

¹ Excerpts obtained from Shippensburg University’s website, www.ship.edu.

Below are some of Cumberland County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	241,212	16
Growth (%) since 2010 Census	2.5%	1
Households (2012)	94,776	16
Labor Force (persons) (2013)	124,890	16
Unemployment Rate (2013)	6.1	61
Per Capita Personal Income (2012)	\$46,206	8
Median Household Income (2012)	\$57,982	5
Poverty Rate (2012)	10.3	60
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	91.2	10
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	32.4	7

Countywide labor force data and countywide employment impact as a result of Shippensburg University is shown in **Table 12.1**. Out of the 124,890 people in the available labor force, Shippensburg University had 935 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of approximately 0.8 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Cumberland County can also be calculated. Of the 119,200 total people employed in Cumberland County, 935 were currently employed by Shippensburg University and live in the county; therefore the university’s countywide employment impact is approximately 0.8 percent.³

Table 12.1: Labor Force Data, Cumberland County: Averages and Countywide Employment Impact

University	County	Countywide Impact					
		Employer Ranking (2014)	Employee Count	Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Shippensburg	Cumberland	22	935	124,890	0.75%	119,200	0.78%

The geographic distribution of Shippensburg University employees is shown on **Map 12.3**.⁴ 437 employees, or 37 percent, live within 10 miles of the university, 448 employees, which

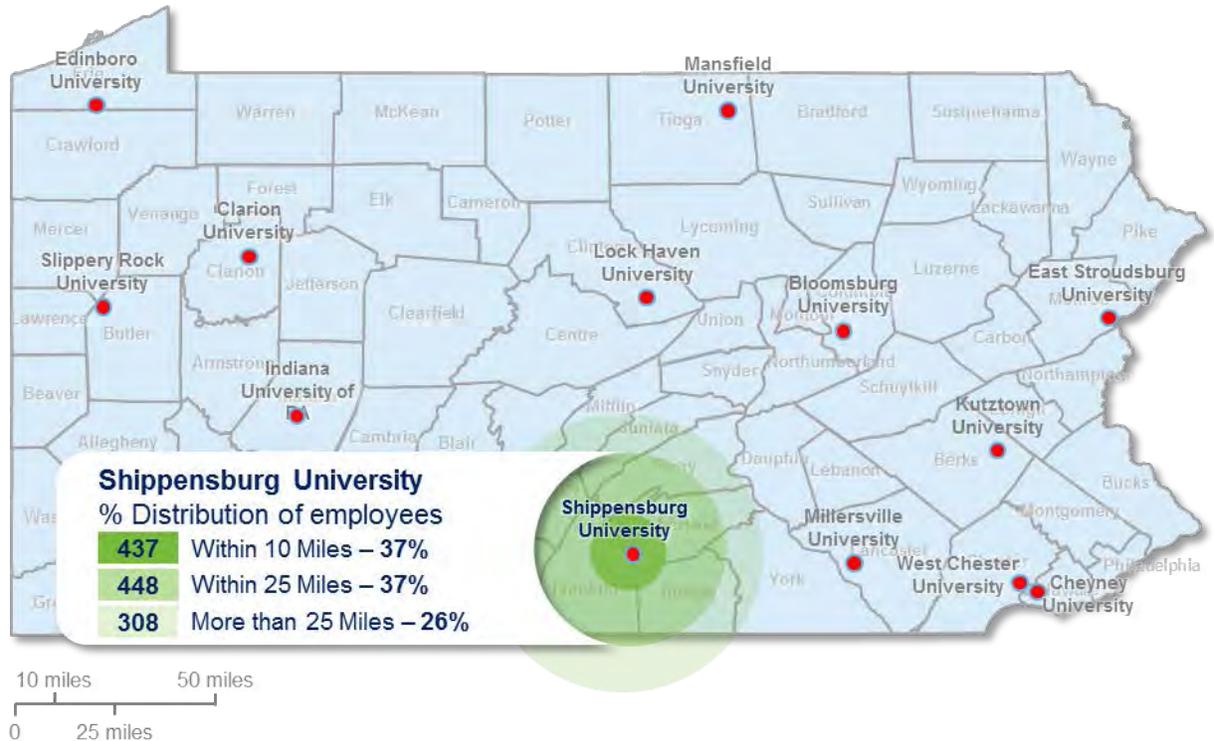
² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

³ The in-county employee count includes students who are employed by the university.

⁴ For the purpose of this illustration, student employees were excluded.

constitutes 37 percent of the employees, live within 25 miles, leaving 26 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 12.3: Shippensburg University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 12.1** provides a general overview of Shippensburg University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Shippensburg University. The multipliers were obtained through the Bureau of Economic

Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Shippensburg University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Shippensburg University on the Commonwealth was \$214,878,981. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Shippensburg University’s Direct Economic Impact on the Commonwealth

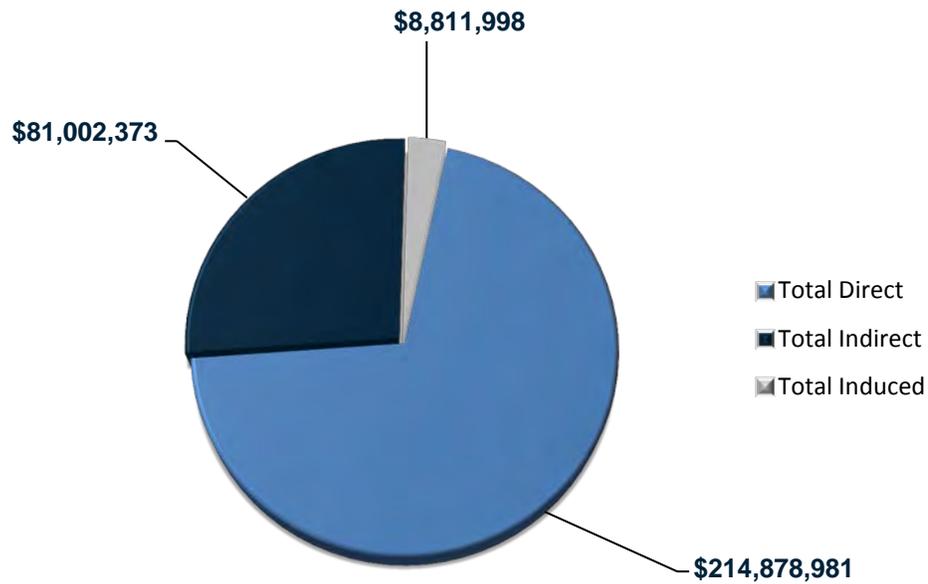
<i>(1) Institutional spending:</i>	<i>\$48,592,821</i>
<i>Benefits:</i>	<i>\$28,139,454</i>
<i>(2) Faculty/Staff spending:</i>	<i>\$50,567,912</i>
<i>(3) Student spending:</i>	<i>\$82,739,592</i>
<i>(4) Capital Expenditures:</i>	<i><u>\$4,839,202</u></i>
<i>Total Direct Impact:</i>	<i><u>\$214,878,981</u></i>

As presented in **Table 12.2**, the direct impact, \$214,878,981, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Shippensburg University on the Commonwealth of \$304,693,352. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$89,814,371. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 12.2: Total Economic Impact of Shippensburg University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Shippensburg	\$ 214,878,981	\$ 81,002,373	\$ 8,811,998	\$ 304,693,352

Chart 12.1: Total Economic Impact (Direct + Indirect + Induced): \$304,693,352



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Shippensburg University made by the Commonwealth of Pennsylvania, allocated by the State System, for fiscal year 2013-2014 was \$28,164,791. Therefore, each dollar invested in Shippensburg University by the Commonwealth via appropriations yielded a return of approximately \$10.82 in total economic impact, as is shown on **Table 12.3**.

Table 12.3: Statewide Economic Impact of Shippensburg University Appropriations

University	Total Impact	State Appropriations	Ratio
Shippensburg	\$304,693,352	\$ 28,164,791	10.82

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 12.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 12.4: Statewide Economic Impact of Shippensburg University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Shippensburg	\$ 1,787,469	\$ 888,275	\$ 65,008	\$ 41,300	\$ 2,782,053

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 12.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 12.5: Statewide Economic Impact of Shippensburg University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Shippensburg	\$ 187,683,635	\$ 44,837,620	6.00%	\$ 2,690,257

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Shippensburg University were \$4,477,727 or 15.9 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Shippensburg University on the Commonwealth approximated 4,465 jobs, as is shown in **Table 12.6**.

⁵ Composite spending activity includes institutional, faculty and staff and student spending.

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.

Table 12.6: Statewide Employment Impact of Shippensburg University on the Commonwealth as a Result of Direct Composite Spending: 4,465 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Shippensburg	210,039,779	21.26	4,465

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Shippensburg University on the Commonwealth approximated 87 more jobs, as shown in **Table 12.7**. Therefore, the total employment impact of Shippensburg University is 4,551 jobs.

Table 12.7: Statewide Employment Impact of Shippensburg University on the Commonwealth as a Result of Direct Capital Expenditures: 87 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Shippensburg	\$ 4,839,202	17.94	87

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2013 and 2014, Shippensburg University’s faculty and staff spent 10 and 500 hours volunteering, respectively. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$225 in 2013 and \$11,275 in 2014. Students also devoted their time to helping the community. Shippensburg students spent a total of 17,126 and 8,585 hours volunteering in 2013 and 2014, respectively.⁷ It is likely that the students’ participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

⁷ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector’s Value of Volunteer Time.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, Shippensburg University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

Shippensburg University's participation in WEDnetPA program had over 2,500 participants and had a total of \$532,129 funds awarded in 2014. Additionally, Shippensburg University offers an array of other workforce development programs and has its own Small Business Development Center (SBDC). In 2014, 316 clients and 101 companies received over 2,000 hours of

counseling from the SBDC. The SBDC also held 39 workshops and assists 41 businesses with secure financing. By way of these efforts, Shippensburg University helps improve the economic development in Cumberland County, as well as other counties surrounding it.

Exhibit 12.1

Shippensburg University Information				
	Location: County		Cumberland	
	Faculty and Staff Headcount Paid in 2014		1,193	
Enrollment Characteristics				
	Enrollment	Fall 2013	Fall 2014	
	Undergraduate	6,550	6,305	
	Graduate	998	1,050	
	Total	7,548	7,355	
	Full-time	6,535	6,255	
	Part-time	1,013	1,100	
	Total	7,548	7,355	
	PA residents	6,957	6,755	
	Non-residents	591	600	
	Total	7,548	7,355	
	Traditional undergraduate (students under 25)	6,174	5,938	
	Non-traditional undergraduate (students over 25)	376	367	
	Total (undergraduate only)	6,550	6,305	
Cost of Attendance				
	Undergraduate, In-State, FY 2014-2015			
	Room & Board		\$	10,694
	Tuition			6,820
	Fees			2,954
	Total		\$	20,468
	Undergraduate, Out-of-State, FY 2014-2015			
	Room & Board		\$	10,694
	Tuition			15,346
	Fees			3,174
	Total		\$	29,214
	Graduate, In-State, FY 2014-2015			
	Tuition (per credit)		\$	454
	Fees (per credit)			133
	Total (per credit)		\$	587
	Graduate, Out-of-State, FY 2014-2015			
	Tuition (per credit)		\$	681
	Fees (per credit)			145
	Total (per credit)		\$	826
Financial Characteristics				
	Revenues, FY 2013-2014			
	Tuition			
	Tuition from undergraduate in-state students		\$	40,017,925
	Tuition from undergraduate out-of-state students			6,137,311
	Tuition from graduate in-state students			5,905,957
	Tuition from graduate out-of-state students			1,134,981
	Total		\$	53,196,174

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 16,474,681
	Non-Mandatory Fees	
	Non-Mandatory Fees	905,405
	Total	\$ 17,380,086
	Total from Tuition, Fees, Room & Board	\$ 70,576,260
	Sales and Services	\$ 1,995,158
	Education and General Appropriations	\$ 28,164,791
	Grants and Contracts	
	Federal	\$ 11,211,594
	State	8,475,144
	Local/Other/Private	1,018,693
	System Transfer Awards	559,664
	Total grants and contracts	\$ 21,265,095
	Other Revenues (net of scholarship discounts and allowances)	\$ 23,639,971
	Total Revenues (from sources above)	\$ 145,641,275
	Funds Raised by University (private giving)	-
	Market Value of Endowment	\$ 36,459,123
	Total Replacement Value of Physical Plant	\$ 943,500,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 47,331,925
	Capital Improvements	1,260,896
	Employee Benefits	28,139,454
	Total Direct Institutional Spending	76,732,275
	Institutional spending prorated by 8.21% of out of state students	6,301,332
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	9,663,092
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	14,694,705
	Induced Effect (type 2 effect - type 1 effect)	5,031,613
	Total Impact of Institutional Spending	\$ 96,458,594
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 50,567,912
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 71,194,563

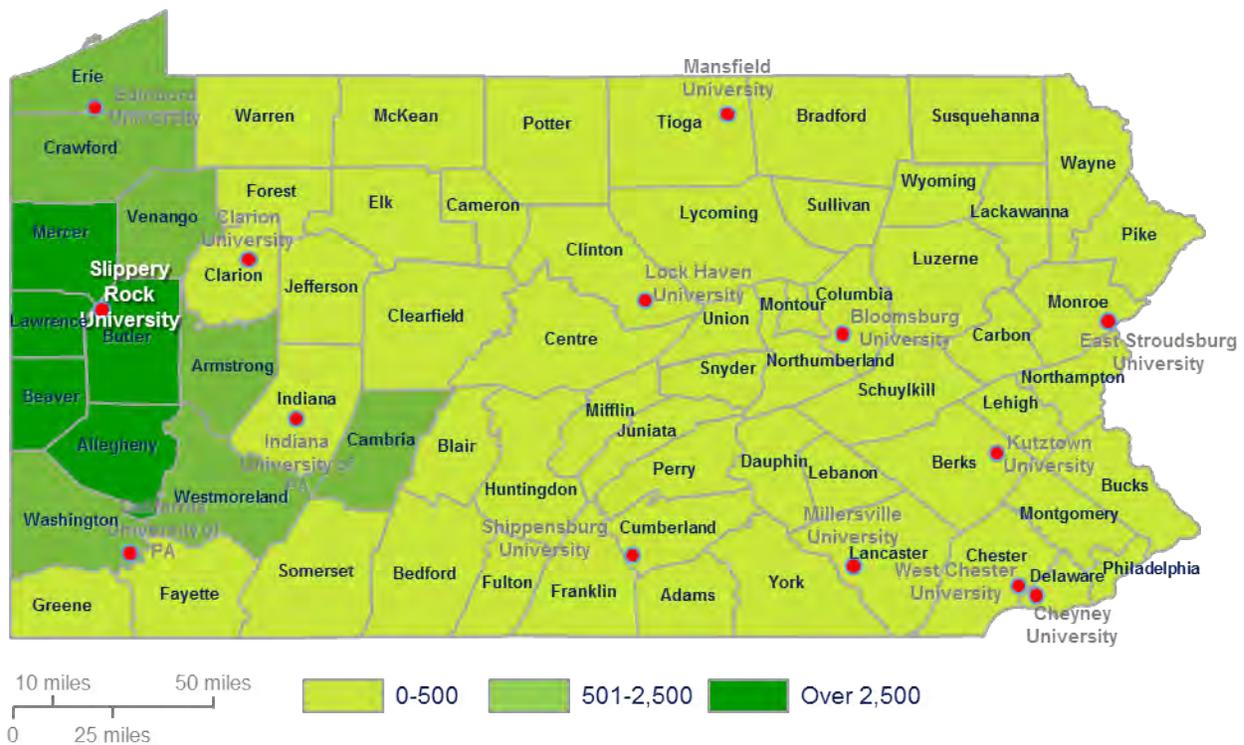
The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 82,739,592
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 116,489,072
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 3,840,000
	Deferred Maintenance		999,202
	Total Direct Capital Expenditures		4,839,202
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		8,151,152
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		11,931,536
	Induced Effect (type 2 effect - type 1 effect)		3,780,385
	Total Impact of Capital Expenditures		\$ 20,551,123
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 210,039,779
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		4,465
	Direct capital expenditures for the Commonwealth		\$ 4,839,202
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		87
	Total Employment Impact		4,551
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		500
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 11,275
	Annual volunteer hours of students (2014)		8,585
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		Yes
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 187,683,635
	Imputed % of taxable spending		23.89%
	Spending subject to tax		44,837,620
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 2,690,257

The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 61,704,299
	State tax withholdings		1,787,469
	Local EIT		888,275
	Local Services Tax		65,008
	Unemployment tax		41,300
	Total Payroll Tax Payments		\$ 2,782,053

The University offers over 200 organizations for students to be a part of, including 17 Division II NCAA sport teams. Located in Slippery Rock, a part of Butler County, it is the western-most institution of 14 State System universities. There are 7,587 undergrad and 908 graduate students enrolled as of the fall 2014 semester. Cheryl J. Norton was the first woman to be named president of Slippery Rock University in April 2012.¹

Map 13.2 demonstrates Slippery Rock’s alumni that still reside in the Commonwealth.

Slippery Rock University
Alumni by County



As of 2013, Butler County has a population of approximately 185,476 people. From the last census in 2010, population has grown 0.9 percent and is projected to grow a total of 5.1-20 percent throughout 2040.² It has 788.6 sq. miles in land area and a population density of 235.2 per square mile. On the most recent census form, 99.1 percent of the population reported only one race, with 1.1 percent of these reporting African-American. The population of this county is 1.1 percent Hispanic (of any race). The average household size is 2.4 persons compared to an average family size of three persons. In 2013 the labor force in Butler County was 101,382

¹ Excerpts obtained from Slippery Rock University’s website, www.sru.edu.

² Population projection obtained from the Pennsylvania State Data Center.

people and the unemployment rate was 6.3 percent. During 2013, manufacturing was the largest sector of 20 major sectors in Butler County.

Below are some of Butler County’s population demographics.³

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	185,476	19
Growth (percent) since 2010 Census	0.9%	13
Households (2012)	72,867	19
Labor Force (persons) (2013)	101,382	19
Unemployment Rate (2013)	6.3	57
Per Capita Personal Income (2012)	\$47,076	7
Median Household Income (2012)	\$57,346	7
Poverty Rate (2012)	9.6	63
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	92.4	6
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	29.7	8

Countywide labor force data and countywide employment impact as a result of Slippery Rock University is shown in **Table 13.1**. Out of the 101,382 labor force, Slippery Rock University had 774 in-county jobs and therefore, had an in-county percentage employment impact of approximately 0.8 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Butler County can be calculated. Of the 96,800 total people employed in Butler County, 774 were employed by Slippery Rock University and live in the county; therefore the university’s countywide employment impact is 0.8 percent.⁴

³ Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

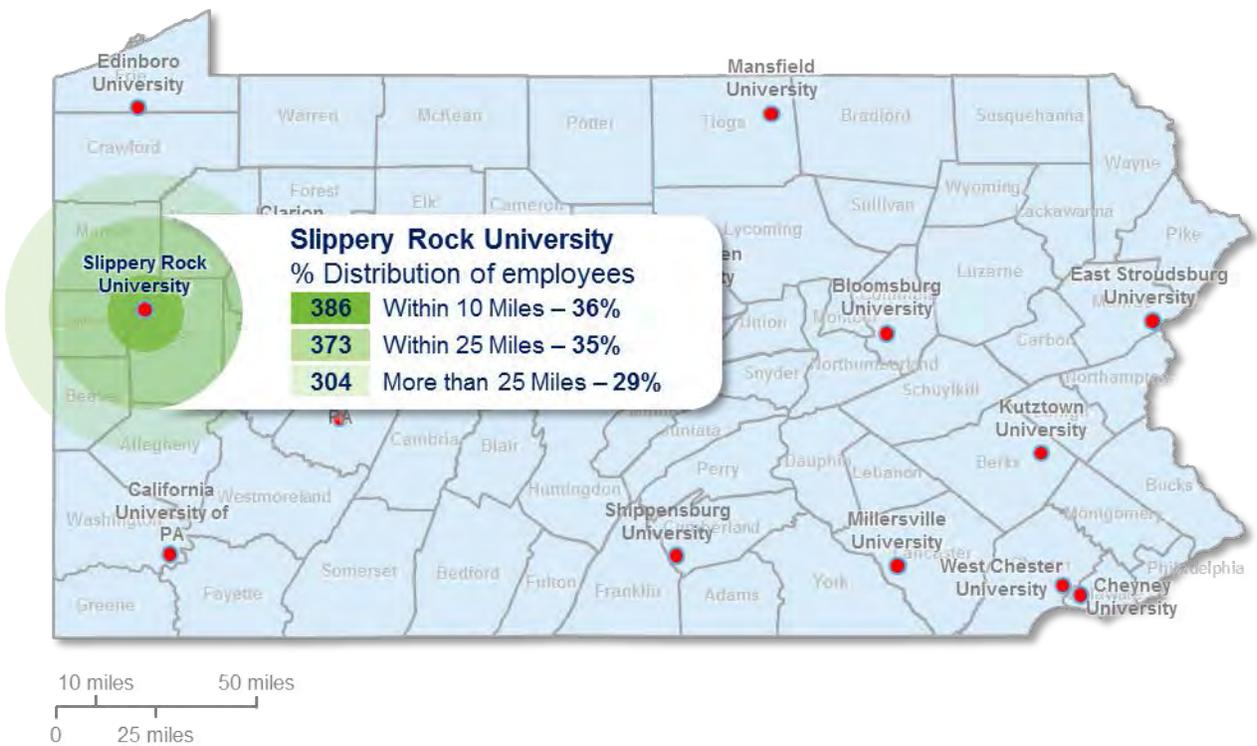
⁴ The in-county employee count includes students who are employed by the university.

Table 13.1: Labor Force Data, Butler County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
Slippery Rock	Butler	9	774	101,382	0.76%	96,800	0.80%

The geographic distribution of Slippery Rock University employees is shown on **Map 13.3**.⁵ 386 employees, or 36 percent, live within 10 miles of the university, 373 employees, which constitutes 35 percent of the employees, live within 25 miles, leaving 29 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 13.3: Slippery Rock University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 13.1** provides a

⁵ For the purpose of this illustration, student employees were excluded.

general overview of Slippery Rock University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of Slippery Rock University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that Slippery Rock University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of Slippery Rock University on the Commonwealth was \$227,279,453. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

Slippery Rock University’s Direct Economic Impact on the Commonwealth

(1) Institutional spending: \$48,178,716

Benefits: \$29,556,312

(2) Faculty/Staff spending: \$52,359,620

(3) Student spending: \$91,411,886

(4) Capital Expenditures: \$5,772,919

Total Direct Impact: \$227,279,453

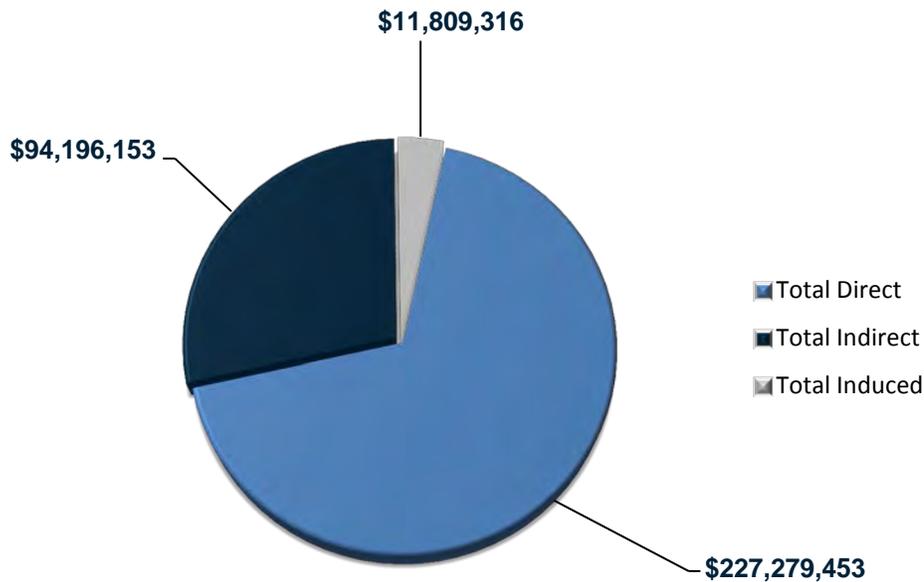
As presented in **Table 13.2**, the direct impact, \$227,279,453, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of Slippery Rock University on the Commonwealth of \$333,284,922. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be

\$106,005,469. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 13.2: Total Economic Impact of Slippery Rock University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
Slippery Rock	\$ 227,279,453	\$ 94,196,153	\$ 11,809,316	\$ 333,284,922

Chart 13.1: Total Economic Impact (Direct + Indirect + Induced): \$333,284,922



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to Slippery Rock University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$32,576,803. Therefore, each dollar invested in Slippery Rock University by the Commonwealth via appropriations yielded a return of approximately \$10.23 in total economic impact, as is shown on **Table 13.3**.

Table 13.3: Statewide Economic Impact of Slippery Rock University Appropriations

University	Total Impact	State Appropriations	Ratio
Slippery Rock	\$333,284,922	\$ 32,576,803	10.23

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 13.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 13.4: Statewide Economic Impact of Slippery Rock University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
Slippery Rock	\$ 1,897,186	\$ 689,468	\$ 58,764	\$ 42,715	\$ 2,688,133

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 13.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 13.5: Statewide Economic Impact of Slippery Rock University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
Slippery Rock	\$ 202,415,903	\$ 48,357,159	6.00%	\$ 2,901,430

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for Slippery Rock University were \$4,798,616 or 14.7 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁶ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which

⁶ Composite spending activity includes institutional, faculty and staff and student spending.

estimates the number of jobs created per every additional million in spending.⁷ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of Slippery Rock University on the Commonwealth approximated 4,708 jobs, as is shown in **Table 13.6**.

Table 13.6: Statewide Employment Impact of Slippery Rock University on the Commonwealth as a Result of Direct Composite Spending: 4,708 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
Slippery Rock	221,506,534	21.26	4,708

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, approximately 17.9 jobs were created or supported. In this manner, the employment impact of Slippery Rock University on the Commonwealth approximated 104 more jobs, as shown in **Table 13.7**. Therefore, the total employment impact of Slippery Rock University is 4,812 jobs.

Table 13.7: Statewide Employment Impact of Slippery Rock University on the Commonwealth as a Result of Direct Capital Expenditures: 104 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
Slippery Rock	\$ 5,772,919	17.94	104

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. In 2013 and 2014, Slippery Rock University’s faculty and staff spent 27,834 and 28,000 hours volunteering, respectively. With an average value of approximately \$22.55 per hour, their total contribution amounts to approximately \$627,657 and \$631,400 in

⁷ Please refer to Appendix E for additional information related to the RIMS II multipliers.

2013 and 2014. Students also devoted their time to helping the community. Slippery Rock students spent a total of 14,896 and 23,736 hours volunteering in 2013 and 2014, respectively.⁸ It is likely that the students' participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its fourteen universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate

⁸ The most recent data available for the market value of volunteer time is \$22.55 for 2013 according to the Independent Sector's Value of Volunteer Time.

employees. Through its various economic development activities, Slippery Rock University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

While Slippery Rock University does not participate in the WEDnetPA program, this university is taking initiatives toward economic development in other ways. For instance, Slippery Rock University has a Sustainable Enterprise Accelerator. The mission of this program is simple, to help entrepreneurs start business and help to maintain growth as the business develops. The incubator is funded by state grants and run by students who receive college credit for their time.⁹ By helping local businesses, as well as giving student the chance to interact and learn from the entrepreneurs, Slippery Rock University is positively impacting the economic development in its county.

⁹ “Slippery Rock University program helps businesses go green, make more green”, triblive.com, visited February 25, 2015.

Exhibit 13.1

Slippery Rock University Information				
	Location: County			Butler
	Faculty and Staff Headcount Paid in 2014			1,063
Enrollment Characteristics				
	Enrollment	Fall 2013	Fall 2014	
	Undergraduate	7,595	7,587	
	Graduate	752	908	
	Total	8,347	8,495	
	Full-time	7,411	7,471	
	Part-time	936	1,024	
	Total	8,347	8,495	
	PA residents	7,367	7,496	
	Non-residents	980	999	
	Total	8,347	8,495	
	Traditional undergraduate (students under 25)	6,974	7,000	
	Non-traditional undergraduate (students over 25)	621	587	
	Total (undergraduate only)	7,595	7,587	
Cost of Attendance				
	Undergraduate, In-State, FY 2014-2015			
	Room & Board		\$	9,794
	Tuition			6,820
	Fees			2,489
	Total		\$	19,103
	Undergraduate, Out-of-State, FY 2014-2015			
	Room & Board		\$	9,794
	Tuition			10,230
	Fees			2,739
	Total		\$	22,763
	Graduate, In-State, FY 2014-2015			
	Tuition		\$	454
	Fees (per credit)			154
	Total (per credit)		\$	608
	Graduate, Out-of-State, FY 2014-2015			
	Tuition (per credit)		\$	681
	Fees (per credit)			200
	Total (per credit)		\$	881
Financial Characteristics				
	Revenues, FY 2013-2014			
	Tuition			
	Tuition from undergraduate in-state students		\$	46,040,747
	Tuition from undergraduate out-of-state students			9,176,969
	Tuition from graduate in-state students			7,427,362
	Tuition from graduate out-of-state students			1,714,340
	Total		\$	64,359,418

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 17,757,542
	Non-Mandatory Fees	
	Non-Mandatory Fees	690,365
	Total	\$ 18,447,907
	Total from Tuition, Fees, Room & Board	\$ 82,807,325
	Sales and Services	\$ 2,323,742
	Education and General Appropriations	\$ 32,576,803
	Grants and Contracts	
	Federal	\$ 10,933,522
	State	7,649,036
	Local/Other/Private	4,055,802
	System Transfer Awards	89,279
	Total grants and contracts	\$ 22,727,639
	Other Revenues (net of scholarship discounts and allowances)	\$ 18,679,135
	Total Revenues (from sources above)	\$ 159,114,644
	Funds Raised by University (private giving)	\$ 208,046
	Market Value of Endowment	\$ 25,063,303
	Total Replacement Value of Physical Plant	\$ 926,100,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 47,793,607
	Capital Improvements	385,109
	Employee Benefits	29,556,312
	Total Direct Institutional Spending	77,735,028
	Institutional spending prorated by 11.76% of out of state students	9,141,529
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	14,018,535
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	21,318,047
	Induced Effect (type 2 effect - type 1 effect)	7,299,511
	Total Impact of Institutional Spending	\$ 106,352,586
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	\$ 52,359,620
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 73,717,109

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 91,411,886
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 128,698,794
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 4,718,000
	Deferred Maintenance		1,054,919
	Total Direct Capital Expenditures		5,772,919
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		9,723,905
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		14,233,709
	Induced Effect (type 2 effect - type 1 effect)		4,509,804
	Total Impact of Capital Expenditures		\$ 24,516,432
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct composite expenditures for the Commonwealth		\$ 221,506,534
	State multiplier		21.26
	Statewide Employment Impact based on Composite Spending (jobs)		4,708
	Direct capital expenditures for the Commonwealth		5,772,919
	State multiplier		17.94
	Statewide Employment Impact based on Direct Expenditures (jobs)		104
	Total Employment Impact		4,812
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff (2014)		28,000
	Average market value of volunteer hours (per hour)		\$ 22.55
	Estimated total contribution of faculty and staff		\$ 631,400
	Annual volunteer hours of students (2014)		23,736
Business and Economic Development Services			
	Small Business Incubator		Yes
	Small Business Development Center		No
	Patents filed since January 1, 2010		0
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 202,415,903
	Imputed % of taxable spending		23.89%
	Spending subject to tax		48,357,159
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		2,901,430

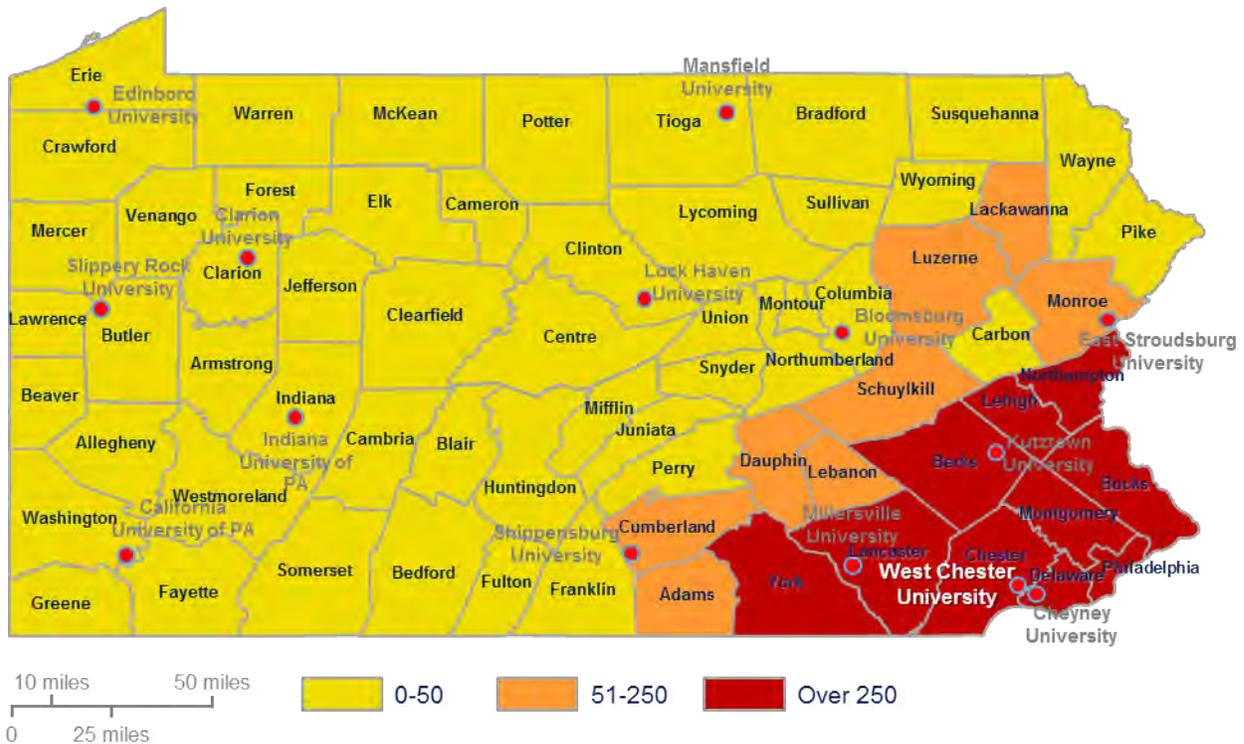
The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 64,238,493
	State tax withholdings		1,897,186
	Local EIT		689,468
	Local Services Tax		58,764
	Unemployment tax		42,715
	Total Payroll Tax Payments		2,688,133

West Chester University of Pennsylvania
Chester County, PA

West Chester University was founded in 1871 and is the largest university of the fourteen that make up Pennsylvania’s State System of Higher Education. West Chester University offers more than 116 undergraduate and 86 master degree programs taught by a full-time staff of 685 professors. As of fall 2014, there was approximately 16,086 degree seeking students, with the majority pursuing an undergraduate degree. Students who attend West Chester University are primarily from Pennsylvania, Delaware, New Jersey and Maryland.

Map 14.1 demonstrates these students come from all across the state, thus contributing to the economic impact of the State System.

West Chester University
 Students by County

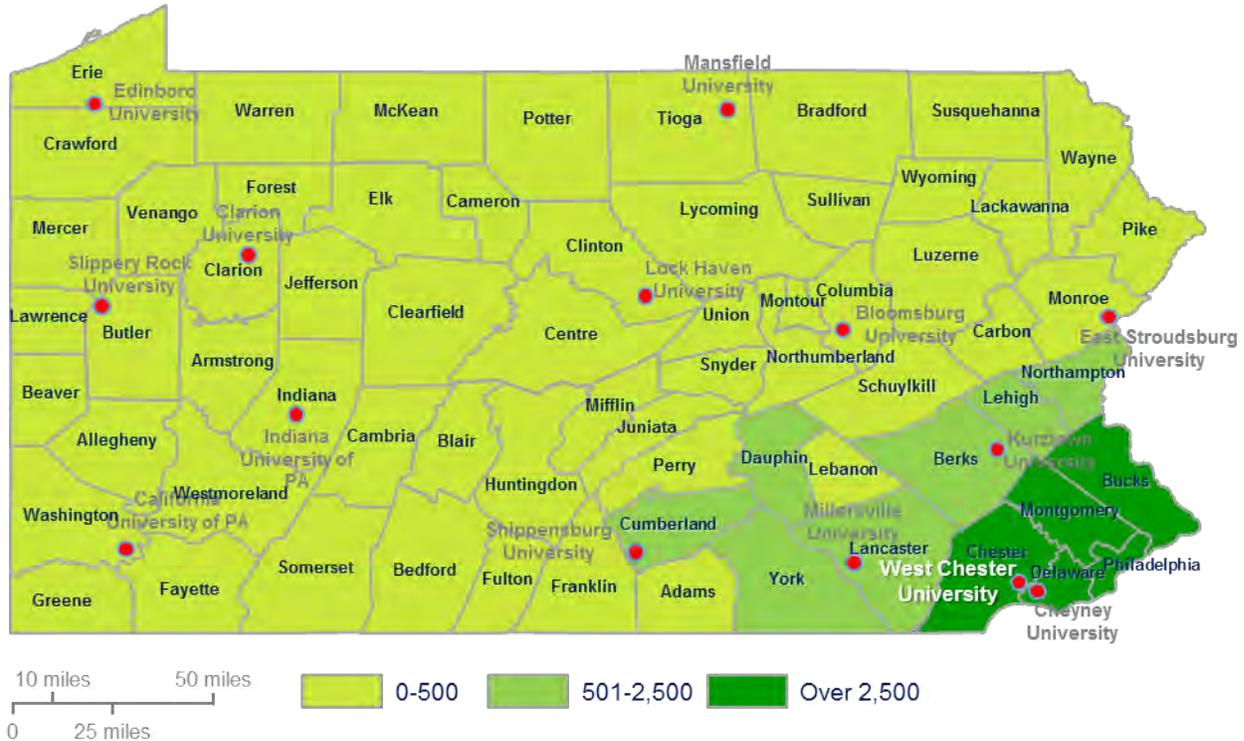


The institution offers the largest varsity program in the NCAA Division II with 24 intercollegiate men’s and women’s sports along with maintaining over 225 student clubs and organizations.

The university has been under the leadership of President Greg R. Weisenstein since March 2009.¹

Map 14.2 demonstrates West Chester University's alumni that still reside in the Commonwealth.

West Chester University
Alumni by County



West Chester University's main campus is located in Chester County, PA. As of 2013, Chester had 509,468 people, a 2.1 percent increase in population since the last census in 2010. According to the Pennsylvania State Data Center, this increase is in line with the projected growth of the county; it is expected that the population will grow more than 20 percent between 2010 and 2040. Also reported in the last census, 98.1 percent of the population reported only one race, with 6.1 percent of these reporting African-American. The population of this county is 6.5 percent Hispanic (of any race). The average household size is 2.6 persons compared to an average family size of 3.2 persons. Chester County has 750.5 sq. miles in land area and a population density of 678.8 per square mile. In 2013, this county had a labor force of 271,793 people and unemployment rate of 5.8 percent.

¹ Excerpts obtained from West Chester University's website, www.wcupa.edu.

Below are Chester County's population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	509,468	7
Growth (percent) since 2010 Census	2.1%	2
Households (2012)	183,793	7
Labor Force (persons) (2013)	271,793	6
Unemployment Rate (2013)	5.8	65
Per Capita Personal Income (2012)	\$63,741	2
Median Household Income (2012)	\$82,456	1
Poverty Rate (2012)	7.4	65
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	92.7	4
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	48.3	1

Countywide labor force data and countywide employment impact as a result of West Chester University is shown in **Table 14.1**. Out of the 271,793 people in the available labor force, West Chester University had 1,635 in-county jobs and therefore, had an in-county percentage employment impact on the available labor force of 0.6 percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Chester County can also be calculated. Of the 258,800 total people employed in Chester County, 1,635 were employed by West Chester University and live in the county; therefore the university's countywide employment impact is approximately 0.6 percent.³

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania's Department of Labor and Industry Center for Workforce Information and Analysis.

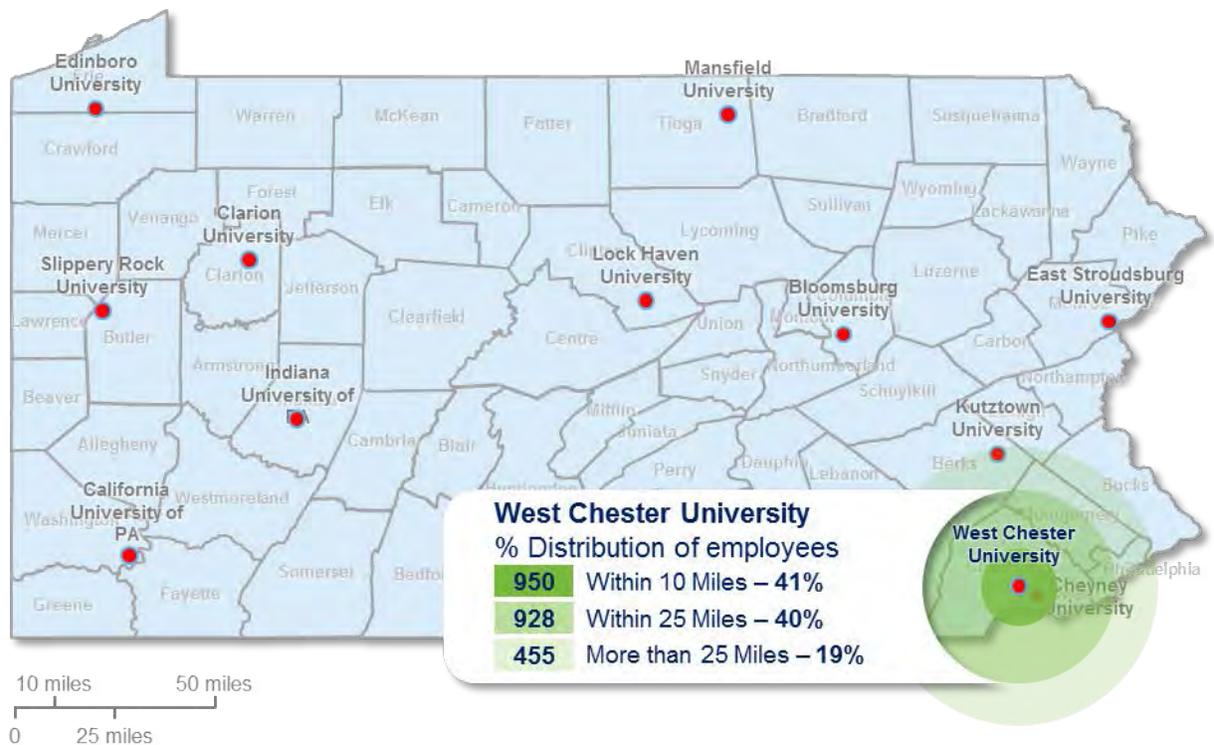
³ The in-county employee count includes students who are employed by the university.

Table 14.1: Labor Force Data, Chester County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
West Chester	Chester	14	1,635	271,793	0.60%	258,800	0.63%

The geographic distribution of West Chester University employees is shown on **Map 14.3**.⁴ 950 employees, or 41 percent, live within 10 miles of the university, 928 employees, which constitutes 40 percent of the employees, live within 25 miles, leaving 19 percent of employees living beyond 25 miles from the university. Refer to **Appendix E** for the methodology regarding the composition of this map.

Map 14.3: West Chester University’s Distribution of Employees



Economic Impact

The direct and indirect economic impact of each university was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 14.1** provides a

⁴ For the purpose of this illustration, student employees were excluded.
 Appendix C

general overview of West Chester University, as well as the direct and indirect economic and employment impacts of the university on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of West Chester University. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that West Chester University has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits the university provides to the Commonwealth.

The total direct economic impact of West Chester University on the Commonwealth was \$336,774,500. This value is represented by four main spending sources: institutional spending, faculty/staff spending, student spending and capital expenditures. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

West Chester University’s Direct Economic Impact on the Commonwealth

(1) Institutional spending: \$82,899,732

Benefits: \$47,536,570

(2) Faculty/Staff spending: \$95,434,848

(3) Student spending: \$101,439,652

(4) Capital Expenditures: \$9,463,698

Total Direct Impact: \$336,774,500

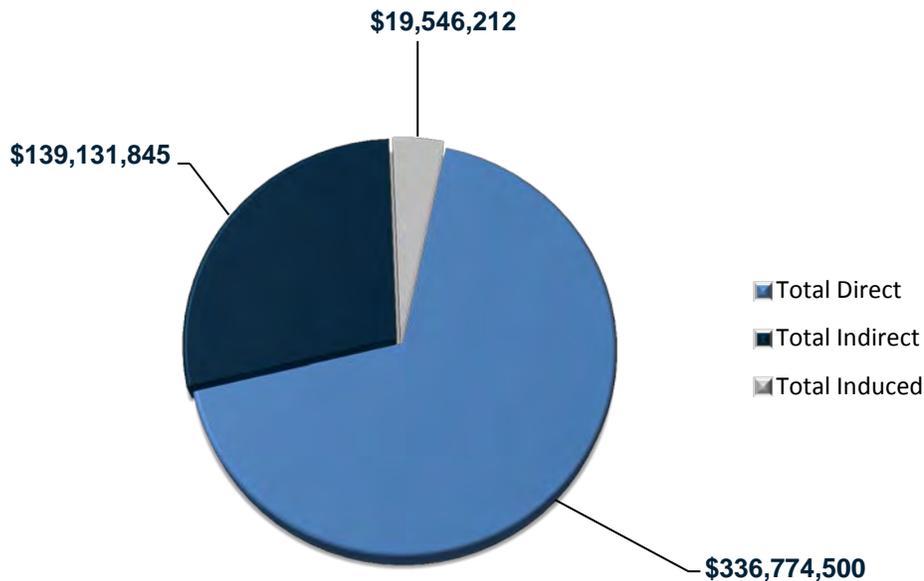
As presented in **Table 14.2**, the direct impact, \$336,774,500, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of West Chester University on the Commonwealth of \$495,452,557. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to

be \$158,678,057. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 14.2: Total Economic Impact of West Chester University on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
West Chester	\$ 336,774,500	\$ 139,131,845	\$ 19,546,212	\$ 495,452,557

Chart 14.1: Total Economic Impact (Direct + Indirect + Induced): \$495,452,557



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Specifically, the appropriation to West Chester University made by the Commonwealth of Pennsylvania, and allocated by the State System, for fiscal year 2013-2014 was \$49,914,169. Therefore, each dollar invested in West Chester University by the Commonwealth via appropriations yielded a return of approximately \$9.93 in total economic impact, as is shown on **Table 14.3**.

Table 14.3: Statewide Economic Impact of West Chester University Appropriations

University	Total Impact	State Appropriations	Ratio
West Chester	\$495,452,557	\$ 49,914,169	9.93

University spending in addition to the ancillary spending (faculty and students) yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 14.4** illustrates the benefits provided by the university’s payroll expenditures.

Table 14.4: Statewide Economic Impact of West Chester University Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
West Chester	\$ 3,349,207	\$ 1,348,667	\$ 126,464	\$ 76,982	\$ 4,901,319

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by the university’s faculty and staff as well as students. **Table 14.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 14.5: Statewide Economic Impact of West Chester University Sales Tax Revenue Collections

University	Total Faculty and Student Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
West Chester	\$ 277,179,609	\$ 66,218,208	6.00%	\$ 3,973,093

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for West Chester University were \$7,322,299 or 14.7 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity of the university also has a measureable effect on employment in the Commonwealth.⁵ Specifically the direct spending of three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the university and the ancillary spending of the faculty/staff and students is measured by the RIMS II multiplier which

⁵ Composite spending activity includes institutional, faculty and staff and student spending.
Appendix C

estimates the number of jobs created per every additional million in spending.⁶ Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by the State System universities, approximately 21.3 jobs were created or supported. In this manner, the employment impact of West Chester University on the Commonwealth approximated 6,957 jobs, as is shown in **Table 14.6**.

Table 14.6: Statewide Employment Impact of West Chester University on the Commonwealth as a Result of Direct Composite Spending: 6,957 Jobs

University	Direct Composite Spending	Jobs Output	Employment Impact
West Chester	327,310,802	21.26	6,957

The capital expenditures of the university also help to support jobs in the region. This employment impact is again measured using RIMS II multipliers by estimating the number of jobs created for every additional million spent on capital expenditures. Specifically, the RIMS II construction multiplier for Pennsylvania indicated that per each additional million dollars of output, 17.9 jobs were created or supported. In this manner, the employment impact of West Chester University on the Commonwealth approximated 170 more jobs, as shown in **Table 12.7**. Therefore, the total employment impact of West Chester University is 7,127 jobs.

Table 12.7: Statewide Employment Impact of West Chester University on the Commonwealth as a Result of Direct Capital Expenditures: 170 Jobs

University	Direct Capital Expenditures	Jobs Output	Employment Impact
West Chester	\$ 9,463,698	17.94	170

The final quantified measure of economic impact would be that of volunteer hours contributed by faculty and staff. While the faculty and staff hours were not tracked, students did devote their time to helping the community. West Chester University students spent a total of 408,665 and 605,532 hours volunteering in 2013 and 2014, respectively. It is likely that the students'

⁶ Please refer to Appendix E for additional information related to the RIMS II multipliers.
Appendix C

participation was required by university curricular and co-curricular programs, some of which either required supervision or a faculty team leader.

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community's region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. Through its various economic development activities, West Chester University successfully provides an economic competitive advantage for the county and the Commonwealth as a whole.

West Chester University's participation in the WEDnetPA program had over 600 participants and had a total of \$248,850 funds awarded in 2014. Additionally, West Chester University has an Entrepreneurial Leadership Center which serves as a catalyst for regional economic development by promoting entrepreneurship across West Chester University, in Chester County, and throughout Southeastern Pennsylvania. The center's mission is to enhance entrepreneurship literacy, to inspire students to engage in entrepreneurial ventures by exposing them first hand to entrepreneurs and entrepreneurial environments, and to foster economic development in the region by assisting startup firms as they move toward economic viability. The center offers a wide array of programs including: an internship program, consulting project, an entrepreneurship speaker series, seminars and workshops, an entrepreneurial fellowship program, and many more.⁷ By establishing the center, and West Chester's participation in the WEDnetPA program, the university is effectively contributing to the economic development in Chester County.

⁷ Excerpt obtained from West Chester University's website, www.wcupa.edu.
Appendix C

Exhibit 14.1

West Chester University Information			
	Location: County		Chester
	Faculty and Staff Headcount Paid in 2014		2,333
Enrollment Characteristics			
	Enrollment	Fall 2013	Fall 2014
	Undergraduate	13,711	13,844
	Graduate	2,134	2,242
	Total	15,845	16,086
	Full-time	13,250	13,403
	Part-time	2,595	2,683
	Total	15,845	16,086
	PA residents	13,790	14,209
	Non-residents	2,055	1,877
	Total	15,845	16,086
	Traditional undergraduate (students under 25)	12,464	12,537
	Non-traditional undergraduate (students over 25)	1,244	1,306
	Total (undergraduate only)¹	13,708	13,843
Cost of Attendance			
	Undergraduate, In-State, FY 2014-2015		
	Room & Board		\$ 7,376
	Tuition		6,820
	Fees ³		2,324
	Total		\$ 16,520
	Undergraduate, Out-of-State, FY 2014-2015		
	Room & Board		\$ 7,376
	Tuition		17,050
	Fees		2,544
	Total		\$ 26,970
	Graduate, In-State, FY 2014-2015		
	Tuition (per credit)		\$ 454
	Fees (per credit)		111
	Total (per credit)		\$ 565
	Graduate, Out-of-State, FY 2014-2015		
	Tuition (per credit)		\$ 681
	Fees (per credit)		123
	Total (per credit)		\$ 804
Financial Characteristics			
	Revenues, FY 2013-2014		
	Tuition		
	Tuition from undergraduate in-state students		\$ 79,118,426
	Tuition from undergraduate out-of-state students		29,401,392
	Tuition from graduate in-state students		13,913,495
	Tuition from graduate out-of-state students		3,046,238
	Total		\$ 125,479,551

Financial Characteristics		
	Fees	
	Mandatory Fees	
	Technology, Academic/Instruction, and Other Mandatory Fees	\$ 27,984,181
	Non-Mandatory Fees	
	Non-Mandatory Fees	2,103,185
	Total	\$ 30,087,366
	Total from Tuition, Fees, Room & Board	\$ 155,566,917
	Sales and Services	\$ 3,811,371
	Education and General Appropriations	\$ 49,914,169
	Grants and Contracts	
	Federal	\$ 15,507,658
	State	10,542,854
	Local/Other/Private	184,927
	System Transfer Awards	652,345
	Total grants and contracts	\$ 26,887,784
	Other Revenues (net of scholarship discounts and allowances)	\$ 41,237,379
	Total Revenues (from sources above)	\$ 277,417,620
	Funds Raised by University (private giving)	\$ 2,105,855
	Market Value of Endowment	\$ 31,659,193
	Total Replacement Value of Physical Plant	\$ 1,367,000,000
The Institution as a Consumer in the State		
	Institutional Expenditures	
	Institutional spending (excluding payroll)	\$ 80,439,820
	Capital Improvements	2,459,912
	Employee Benefits	47,536,570
	Total Direct Institutional Spending	130,436,302
	Institutional spending prorated by 11.67% of out of state students	15,220,001
	Type 1 Multiplier	1.53
	Type 1 Effect (total indirect - induced)	23,339,872
	Type 2 Multiplier	2.33
	Type 2 Effect (total indirect)	35,493,043
	Induced Effect (type 2 effect - type 1 effect)	12,153,171
	Total Impact of Institutional Spending	\$ 178,082,516
	Faculty and Staff Expenditures	
	Faculty and staff spending (direct)	95,434,848
	Household multiplier	1.41
	Total Impact of Faculty and Staff Spending	\$ 134,362,722

The Institution as a Consumer in the State			
	Student Expenditures		
	Student spending (direct)		\$ 101,439,652
	Household multiplier		1.41
	Total Impact of Student Spending		\$ 142,816,886
	Capital Expenditures		
	Capital Improvements - 5 year weighted average		\$ 7,946,400
	Deferred Maintenance		1,517,298
	Total Direct Capital Expenditures		9,463,698
	Type 1 Multiplier		1.68
	Type 1 Effect (total indirect - induced)		15,940,653
	Type 2 Multiplier		2.47
	Type 2 Effect (total indirect)		23,333,694
	Induced Effect (type 2 effect - type 1 effect)		7,393,041
	Total Impact of Capital Expenditures		\$ 40,190,433
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct expenditures for the Commonwealth		\$ 327,310,802
	State multiplier		21.26
	Statewide Employment Impact based on Direct Expenditures (jobs)		6,957
	Direct capital expenditures for the Commonwealth		\$ 9,463,698
	State multiplier		17.91
	Statewide Employment Impact based on Direct Expenditures (jobs)		170
	Total Employment Impact		7,127
The University as a Center for Volunteerism			
	In-Kind (Volunteer) Contributions to Regional Economy		
	Annual volunteer hours of faculty and staff		N/A
	Average market value of volunteer hours (per hour)		N/A
	Estimated total contribution of faculty and staff		N/A
	Annual volunteer hours of students (2014)		605,532
Business and Economic Development Services			
	Small Business Incubator		No
	Small Business Development Center		No
	Patents filed since January 1, 2010 ²		1
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Faculty and Staff and Student Spending		\$ 277,179,609
	Imputed % of taxable spending		23.89%
	Spending subject to tax		66,218,208
	Sales tax rate		6%
	Total State Sales Tax Revenue Generation		\$ 3,973,093

The University as a Generator of State Government Revenue			
	Payroll Tax		
	Total payroll		\$ 113,545,055
	State tax withholdings		3,349,207
	Local EIT		1,348,667
	Local Services Tax		126,464
	Unemployment tax		76,982
	Total Payroll Tax Payments		\$ 4,901,319
¹ In Fall 2014, there was a variance of one undergraduate student. The variance results from an unknown classification regarding traditional vs. non-traditional.			
² As of September 2010, West Chester University had one patent in process.			

System-wide Functions and Services

Dauphin County, PA

System-wide Functions and Services are primarily located at the Dixon University Center in Harrisburg and include: System-wide shared administrative services; System leadership functions of the Chancellor and Board of Governors; some System-wide initiatives and grants managed on behalf of the universities; and the academic, student, and facilities support for the multi-university sites in Harrisburg and Philadelphia. Of the 14 state-owned universities within Pennsylvania's State System of Higher Education, Bloomsburg, Indiana University of Pennsylvania, Lock Haven, Millersville, and Shippensburg offer one or more programs at the Dixon University Center. The State System began operating the six-and-one-half-acre site under a lease/purchase agreement in 1988, and purchased the site in 1991. In 1993, the State System Board of Governors acknowledged the leadership and generosity of its founding chairman, F. Eugene Dixon, Jr., by renaming the center in his honor.

The State System's acquisition of the early twentieth century facility demonstrates a commitment to bring educational programs and opportunities to the Harrisburg area that the 14 universities have provided throughout the Commonwealth for over 150 years. Under the State System's stewardship, the five original structures were renovated and an Administration Building constructed to make the facility adequate for classroom instruction and business purposes. The programs offered through the center range from undergraduate and graduate programs; continuing education and professional development; and customized training solutions for adult learners looking for a part-time and flexible education. The Dixon University Center is also paired with four private institutions: Elizabethtown College, Immaculata University, Lebanon Valley College, and Rochester Institute of Technology.¹

Dauphin County had a population of 270,937 people in 2013. The population in this county has grown 1.1 percent since the last census in 2010. The average household size is 2.4 persons compared to an average family size of three persons. It has 525.0 sq. miles in land area and a population density of 516.1 per square mile. On the most recent census form, 96.9 percent of the population reported only one race, with 18 percent of these reporting African-American. The

¹ Excerpts obtained from The Dixon University Center's website, www.dixonuniversitycenter.org.

population of this county is seven percent Hispanic (of any race). The labor force in 2013 consisted of 139,052 people and the rate of unemployment was 6.9 percent. In 2013, health care and social assistance was the largest of 20 major sectors.

Below are some of Dauphin County’s population demographics.²

People & Income Overview (By Place of Residence)	Value	Rank in State
Population (2013)	270,937	15
Growth (percent) since 2010 Census	1.1%	11
Households (2012)	108,831	15
Labor Force (persons) (2013)	139,052	15
Unemployment Rate (2013)	6.9	47
Per Capita Personal Income (2012)	\$45,396	10
Median Household Income (2012)	\$53,480	19
Poverty Rate (2012)	13.8	34
H.S. Diploma or More - percent of Adults 25+ (2012 ACS 5yr)	89.0	21
Bachelor Deg. or More - percent of Adults 25+ (2012 ACS 5yr)	28.5	9

Countywide labor force data and countywide employment impact as a result of System-wide Functions and Services is shown in **Table 15.6**. Out of the 139,052 in the labor force, System-wide Functions and Services employed 69 in-county jobs and therefore had an in-county percentage employment impact of half of one percent. Furthermore, the countywide employment impact as a percent of the number of people employed in Dauphin County can be calculated. Of the 131,800 total people employed in Dauphin County, 69 were employed by System-wide Functions and Services and live in the county; therefore the countywide employment impact is half of one percent.³

² Population demographics obtained from StatsAmerica provided by the Indiana Business Research Center Pennsylvania’s Department of Labor and Industry Center for Workforce Information and Analysis.

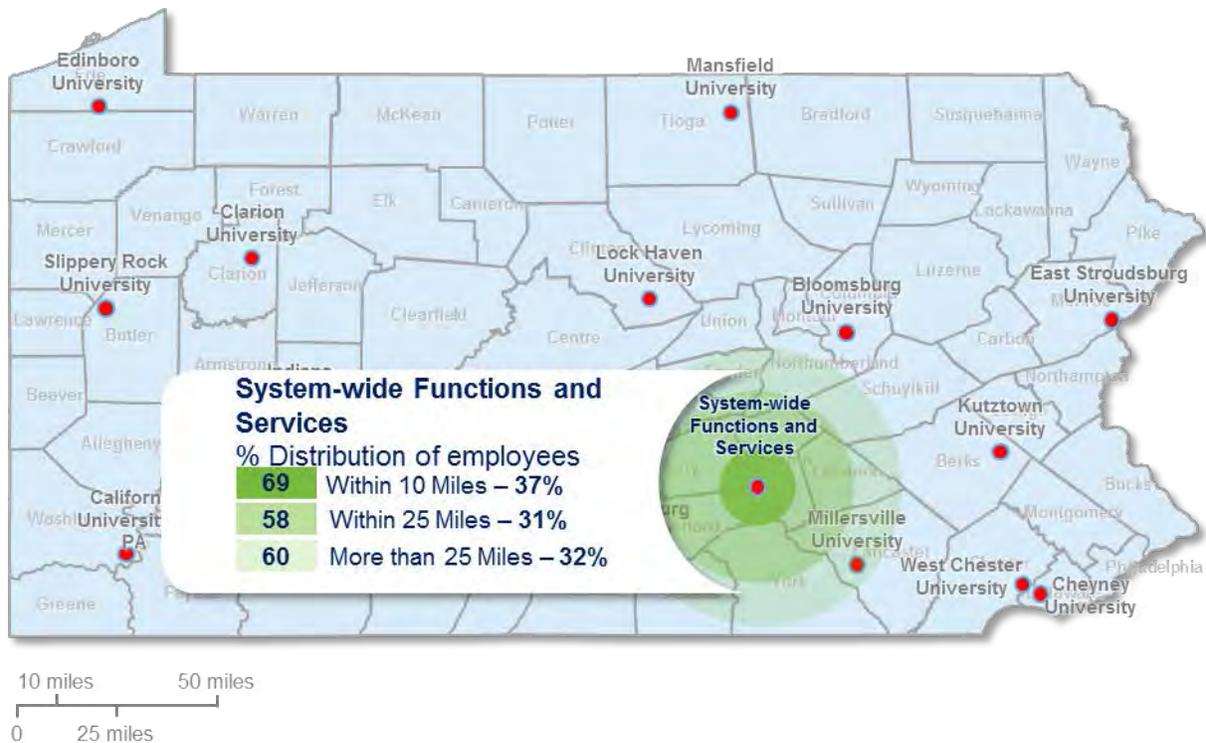
³ The in-county employee county includes students who are employed by the entity.

Table 15.1: Labor Force Data, Dauphin County: Averages and Countywide Employment Impact

University	County	Employer Ranking (2014)	Employee Count	Countywide Impact			
				Labor Force (2013)	% of Labor Force	Employed (2014)	% of Employed
System-wide Functions and Services	Dauphin	N/A	69	139,052	0.05%	131,800	0.05%

The geographic distribution of System-wide Functions and Services employees is shown on **Map 15.1**.⁴ 69 employees, or 37 percent, live within 10 miles of the entity, 58 employees, which constitutes 31 percent of the employees, live within 25 miles, leaving 32 percent of employees living beyond 25 miles from the entity. Refer to **Appendix E** for the methodology regarding the composition of this map

Map 15.1: System-wide Functions and Services Distribution of Employees



⁴ For the purpose of this illustration, student employees were excluded.

Economic Impact

The direct and indirect economic impact of each university, and System-wide Functions and Services, was calculated in order to arrive at the total economic impact that each has on the Commonwealth overall. **Exhibit 15.1** provides a general overview of System-wide Functions and Services, as well as the direct and indirect economic and employment impacts of the entity on the Commonwealth.

A variety of data sources were used in order to calculate and analyze the spending of each institution and its employees, students, and visitors. Please refer to **Appendix E** for additional detail regarding the data sources utilized for this study. After collecting the necessary data, multipliers were utilized to achieve the total economic impact and employment impact of System-wide Functions and Services. The multipliers were obtained through the Bureau of Economic Analysis Regional Industrial Multiplier Systems (“RIMS II”). As a whole, it is noted that System-wide Functions and Services has an important role in the Commonwealth in terms of the higher educational opportunities it provides to residents of the Commonwealth as well as the direct, indirect, and induced economic benefits System-wide Functions and Services provides to the Commonwealth.

The total direct economic impact of System-wide Functions and Services on the Commonwealth was \$16,050,363. This value is represented by two main spending sources: institutional spending and staff spending. Note that the institutional spending includes employment benefits spent primarily in the Commonwealth of Pennsylvania.

System-wide Functions and Services Direct Economic Impact on the Commonwealth

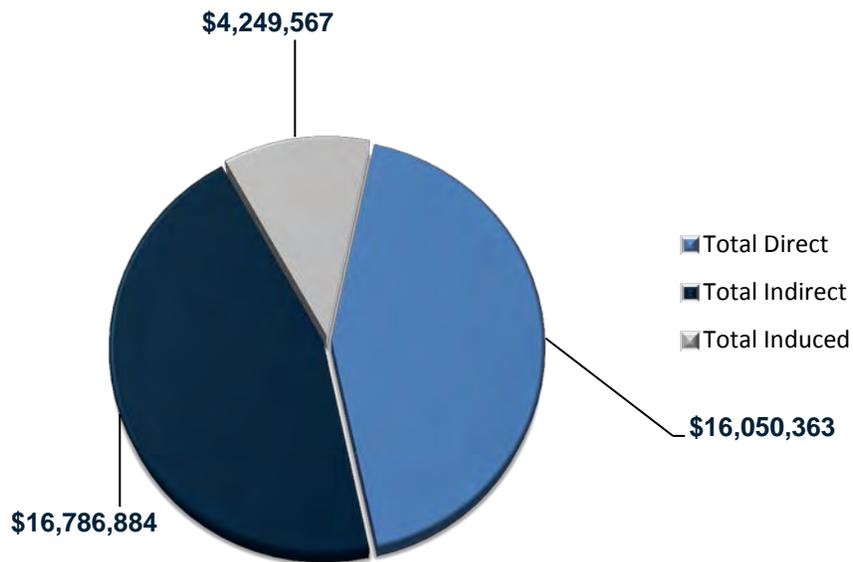
<i>(1) Institutional spending:</i>	<i>\$4,729,154</i>
<i>Benefits:</i>	<i>\$2,162,562</i>
<i>(2) Staff spending:</i>	<i><u>\$10,728,425</u></i>
<i>Total Direct Impact:</i>	<i><u>\$16,050,363</u></i>

As presented in **Table 15.2**, the direct impact, \$16,050,363, was multiplied by the applicable state multipliers obtained from the RIMS II data, resulting in a total economic impact of System-wide Functions and Services on the Commonwealth of \$37,086,814. By taking the difference between the total and direct economic impacts, the combined indirect and induced impact is calculated to be \$21,036,451. Please refer to **Appendix E** for an additional discussion related to the use of multipliers and the methodology employed to derive the direct and indirect economic benefits.

Table 15.2: Total Economic Impact of System-wide Functions and Services on the Commonwealth

University	Total Direct	Total Indirect	Total Induced	Total Impact
System-wide Functions and Services	\$ 16,050,363	\$ 16,786,884	\$ 4,249,567	\$ 37,086,814

Chart 15.1: Total Economic Impact (Direct + Indirect + Induced): \$37,086,814



The resulting return of taxpayer dollars via the Commonwealth’s appropriations has a significant and measurable economic impact on the Commonwealth as a whole. Per Act 188 of 1982, funding for the Board of Governors and Chancellor functions, one component of System-wide Functions and Services, is provided annually from half of one percent of state appropriations, tuition, room, and board charges. Other limited System-wide activities are allocated a portion of

the System’s appropriation by the Board of Governors and managed centrally in Harrisburg. In total, the fiscal year 2013-2014 budget of System-wide Functions and Services funded by state appropriations was \$4,838,914. Therefore, each dollar invested in System-wide Functions and Services yielded a return of \$7.66 in total economic impact, as is shown on **Table 15.3**.

Table 15.3: State Economic Impact of System-wide Functions and Services Appropriations

University	Total Impact	State Appropriations	Ratio
System-wide Functions and Services	\$ 37,086,814	\$ 4,838,914	7.66

Spending in addition to the ancillary spending of staff yielded income tax revenues to the Commonwealth, as well as to local municipalities and the state unemployment trust fund. **Table 15.4** illustrates the benefits provided by System-wide Functions and Services’ payroll expenditures.

Table 15.4: State Economic Impact of System-wide Functions and Services Payroll Tax Withholdings

University	State Tax Withholdings	Local EIT	Local Services Tax	Unemployment Tax	Total Tax Payments
System-wide Functions and Services	\$ 390,398	\$ 200,864	\$ 7,946	\$ 8,396	\$ 607,604

In addition, sales tax revenue was collected by the Commonwealth as a result of the consumption of taxable goods and services by System-wide Functions and Services’ staff. **Table 15.5** illustrates the sales tax revenue collected by the Commonwealth. Please refer to **Appendix E** for an additional discussion of the methodology employed to estimate the sale tax revenue collected by the Commonwealth.

Table 15.5: State Economic Impact of System-wide Functions and Services Sales Tax Revenue Collections

University	Total Faculty Spending	Spending subject to tax	Sales Tax Rate	Sales Tax Revenue
System-wide Functions and Services	\$ 15,104,550	\$ 3,608,477	6.00%	\$ 216,509

In the aggregate, the revenues realized by the Commonwealth in terms of payroll tax withholdings and sales tax receipts for System-wide Functions and Services were \$606,906 or 12.5 percent of the Commonwealth’s appropriations for fiscal year 2013-2014.

The composite spending activity also has a measureable effect on employment in the Commonwealth. Specifically the direct spending of the three categories enumerated above helps to create jobs. The employment impact of the aggregate spending of the entity and the ancillary spending of the staff is measured by the RIMS II⁵ multiplier which estimates the number of jobs created per every additional million in spending. Specifically, the RIMS II state multiplier for Pennsylvania indicated that for each additional million dollars of output by a State System institution, approximately 21.3 jobs were created or supported. In this manner, the employment impact of System-wide Function and Services on the Commonwealth approximated 341 jobs, as is shown in **Table 15.6**.

Table 15.6: Statewide Employment of System-wide Functions and Services on the Commonwealth: 341 Jobs

University	Total Direct	Jobs Output	Employment Impact
System-wide Functions and Services	16,050,363	21.26	341

Economic Development

Economic development involves improvements to the standard of living through the creation of jobs and the support of innovation and new research in a community’s region, state, or nation. The State System plays a role in enhancing the economic development of the regions in which the individual universities reside by assisting in the development and growth of new and existing businesses, as well as increasing the employment opportunities, both of which increase economic activity in the respective areas. The universities accomplish this in various ways, such as partnering with local businesses, providing education and job skills training, providing an outlet for research and development through incubators, and by providing financial and technical assistance.

⁵ Please refer to Appendix E for additional information related to the RIMS II multipliers.

The goal of Pennsylvania's State System of Higher Education and its 14 universities is fundamentally to educate the citizens of the Commonwealth. By providing higher education, the universities are not only helping to improve the economic development in the short-term, but in the long-run as well. Therefore, by way of establishing and accomplishing its mission, Pennsylvania's State System is benefiting the economic advancement of the Commonwealth. Primarily, the State System does this through the granting of undergraduate and graduate degrees, but also does so indirectly through its purchasing, expenditures, services, and by employing hundreds, even thousands, of people.

Overall, Pennsylvania's State System of Higher Education is a key player in supporting the economic development and growth of communities, counties, regions, and the Commonwealth overall. By providing sources of innovation and entrepreneurial assistance, the State System supplies economic growth to local businesses along with highly skilled and educated candidate employees. System-wide Functions and Services, as an integral part of the State System, aides the State System universities in providing an economic and competitive advantage in their respective regions and the state as a whole.

Exhibit 15.1

System-wide Functions and Services			
	Location: County		Dauphin
	Staff Headcount Paid in 2014		187
Financial Characteristics			
	Revenues, FY 2013-2014		\$ 7,177,363
	Education and General Appropriations		\$ 4,838,914
	Total Revenues		\$ 12,016,277
The Institution as a Consumer in the State			
	Institutional Expenditures		
	Institutional spending (excluding payroll)		\$ 4,500,241
	Capital Improvements		228,913
	Employee Benefits		2,162,562
	Total Direct Institutional Spending ¹		5,321,938
	Type 1 Multiplier		1.53
	Type 1 Effect (total indirect - induced)		8,161,192
	Type 2 Multiplier		2.33
	Type 2 Effect (total indirect)		12,410,759
	Induced Effect (type 2 effect - type 1 effect)		4,249,567
	Total Impact of Institutional Spending		\$ 21,982,265
	Staff Expenditures		
	Staff spending (direct)		\$ 10,728,425
	Household multiplier		1.41
	Total Impact of Staff Spending		\$ 15,104,550
The Institution as an Employer			
	Employment impact for the Commonwealth		
	Direct expenditures for the Commonwealth		\$ 16,050,363
	State multiplier		21.26
	Statewide Employment Impact based on Direct Expenditures (jobs)		341
The University as a Generator of State Government Revenue			
	Sales Tax		
	Total Staff Spending		\$ 15,104,550
	Imputed % of taxable spending		23.89%
	Spending subject to tax		3,608,477
	Sales tax rate		6%
	Total State Tax Revenue Generation		\$ 216,509
	Payroll Tax		
	Total payroll		\$ 13,037,864
	State tax withholdings		390,398
	Local EIT		200,864
	Local Services Tax		7,946
	Unemployment tax		8,396
	Total Payroll Tax Payments		\$ 607,604

¹Direct Institution Spending has been reduced to ensure System-wide Functions and Services funded by the universities are not overstated.

Appendix D: Economic Impact of Visitor Spending

As discussed in the body of the report, visitor spending was removed from the total economic impact analysis. The analysis of visitor spending was conducted differently due to the inherent limitation of the input-output models of the Type 1 and Type 2 multipliers.¹ According to the BEA's Report, *University Contribution Studies Using Input-Output Analysis*, the model and multipliers used in our analysis are not appropriate for "non-recurring short-term events, such as one-time sporting events." These one-time sporting events are the only events which the analysis was based on, due to data availability, and therefore multipliers were properly removed from the equation.

The analysis focused on sports most likely to generate revenue: football, men's basketball and women's basketball. By taking the average attendance and multiplying it by the average State System ticket price and the average number of home games, a direct impact was determined, as shown in **Table D.1**.²

Table D.1: Direct Economic Impact of Visitor Spending³

University	Football				Men's and Women's Basketball				State System
	Average Attendance	Average Ticket Price	Average Home Games	Direct Impact	Average Attendance	Average Ticket Price	Average Home Games	Direct Impact	Total Direct Impact
Bloomsburg	3,894	\$ 9.00	5	\$ 175,248	594	\$ 7.00	13	\$ 54,013	\$ 229,261
California	2,862	9.00	5	128,781	521	7.00	13	47,450	176,231
Cheyney	1,082	9.00	5	48,708	595	7.00	13	54,153	102,861
Clarion	2,155	9.00	5	96,993	416	7.00	13	37,837	134,830
East Stroudsburg	2,611	9.00	5	117,495	1,121	7.00	13	101,990	219,485
Edinboro	2,808	9.00	5	126,369	744	7.00	13	67,659	194,028
Indiana	2,730	9.00	5	122,828	2,798	7.00	13	254,646	377,474
Kutztown	4,056	9.00	5	182,520	655	7.00	13	59,599	242,119
Lock Haven	1,602	9.00	5	72,072	773	7.00	13	70,385	142,457
Mansfield	2,100	9.00	5	94,478	675	7.00	13	61,411	155,889
Millersville	1,563	9.00	5	70,313	605	7.00	13	55,025	125,337
Shippensburg	5,123	9.00	5	230,544	453	7.00	13	41,265	271,809
Slippery Rock	6,296	9.00	5	283,331	1,059	7.00	13	96,361	379,693
West Chester	4,484	9.00	5	201,789	796	7.00	13	72,432	274,221
Total	43,366			\$ 1,951,468	11,805			\$ 1,074,224	\$ 3,025,691

¹ For further detail regarding the multipliers, refer to Appendix E.

² The averages were computed on a sport by sport basis.

³ The revenues attributable to any teams that may have advanced to the post-season were not included in this analysis.

The additional money spent on hotels and lodging, food, parking and any other expenses incurred while visiting at a sporting event creates an indirect economic impact. For the purpose of this analysis, it was estimated that each visitor spent approximately \$50 per home football game and \$30 per home basketball game. Therefore, the indirect impact was calculated as shown in **Table D.2**.

Table D.2: Indirect Economic Impact of Visitor Spending

University	Football				Men's and Women's Basketball				State System
	Average Attendance	Average Spending/Visitor	Average Home Games	Indirect Impact	Average Attendance	Average Spending/Visitor	Average Home Games	Indirect Impact	Total Indirect Impact
Bloomsburg	3,894	\$ 50.00	5	\$ 973,600	594	\$ 30.00	13	\$ 231,482	\$ 1,205,082
California	2,862	50.00	5	715,450	521	30.00	13	\$ 203,355	918,805
Cheyney	1,082	50.00	5	270,600	595	30.00	13	\$ 232,085	502,685
Clarion	2,155	50.00	5	538,850	416	30.00	13	\$ 162,156	701,006
East Stroudsburg	2,611	50.00	5	652,750	1,121	30.00	13	\$ 437,100	1,089,850
Edinboro	2,808	50.00	5	702,050	744	30.00	13	\$ 289,965	992,015
Indiana	2,730	50.00	5	682,375	2,798	30.00	13	\$ 1,091,340	1,773,715
Kutztown	4,056	50.00	5	1,014,000	655	30.00	13	\$ 255,422	1,269,422
Lock Haven	1,602	50.00	5	400,400	773	30.00	13	\$ 301,650	702,050
Mansfield	2,100	50.00	5	524,875	675	30.00	13	\$ 263,190	788,065
Millersville	1,563	50.00	5	390,625	605	30.00	13	\$ 235,820	626,445
Shippensburg	5,123	50.00	5	1,280,800	453	30.00	13	\$ 176,850	1,457,650
Slippery Rock	6,296	50.00	5	1,574,063	1,059	30.00	13	\$ 412,978	1,987,040
West Chester	4,484	50.00	5	1,121,050	796	30.00	13	\$ 310,423	1,431,473
Total	43,366			\$ 10,841,488	11,805			\$ 4,603,816	\$ 15,445,303

By combining the direct and indirect effects of visitors, the total visitor spending impact was produced. However, it is estimated that the majority of those in attendance were students, or faculty and staff, and therefore, were perhaps admitted at a reduced cost or for free. For this reason, we estimated that only 40 percent of the attendees at the sporting events were “true visitors” and applied the percentage accordingly. The total visitor spending impact is shown in **Table D.3** below.

Table D.3: Total Economic Impact of Visitor Spending

University	Direct Impact	Indirect Impact	Prorated for True Visitors	Total Impact
Bloomsburg	\$ 229,261	\$ 1,205,082	40%	\$ 573,737
California	176,231	918,805	40%	438,014
Cheyney	102,861	502,685	40%	242,218
Clarion	134,830	701,006	40%	334,334
East Stroudsburg	219,485	1,089,850	40%	523,734
Edinboro	194,028	992,015	40%	474,417
Indiana	377,474	1,773,715	40%	860,475
Kutztown	242,119	1,269,422	40%	604,616
Lock Haven	142,457	702,050	40%	337,803
Mansfield	155,889	788,065	40%	377,581
Millersville	125,337	626,445	40%	300,713
Shippensburg	271,809	1,457,650	40%	691,784
Slippery Rock	379,693	1,987,040	40%	946,693
West Chester	274,221	1,431,473	40%	682,277
Total	\$ 3,025,691	\$ 15,445,303		\$ 7,388,398

Visitor spending had an overall economic impact of \$7.4 million. Attendance at football games alone constituted approximately 69 percent of the total visitor spending while men’s and women’s basketball constituted 31 percent.

Appendix E: Data Analysis Methodologies

To prepare the analysis for each of the 14 universities of Pennsylvania's State System of Higher Education, as well as System-wide Functions and Services, the following primary data categories were utilized:

- Publicly sourced documents;
- Subscription based information; and
- Information provided directly from the State System.

The purposes of this section and the information contained herein are intended to provide a listing of the documents and information relied upon, as well as the analytical procedures and methodologies utilized to ascertain the economic impact of State System universities on the Commonwealth of Pennsylvania, individually and in the aggregate.

This particular methodology was selected and utilized because it is considered by numerous economists to provide highly accurate and valid results. While, there are other acceptable methods to conduct an economic and employment impact of a university or system of universities, we have chosen and employed the Bureau of Economic Analysis RIMS II model, as discussed below.¹

For the purposes of this appendix, certain examples of the analytical procedures will be reproduced for illustrative purposes. Unless otherwise noted, the examples described herein will be applicable to all of the universities within the State System, as well as to System-wide Functions and Services.²

¹ Similar economic studies include alumni spending as a factor of total economic impact. This was excluded from the State System's analysis based on our discretion.

² The use of Bloomsburg University as an illustrative example is based solely on Bloomsburg's position in alphabetical order of the State System universities.

Economic Impact Study Analysis and Methodology

This study's key components include:

- Total economic impact of the State System's universities on the Commonwealth of Pennsylvania;
- The employment impact of the State System's universities upon the Commonwealth of Pennsylvania;
- Economic Development Inventory impacts of each university; and
- An analysis of the Geo Spatial data for the State System's universities' employees, students, and alumni.

Multiple data sources were reviewed and relied upon for the purposes of this analysis. The data relied upon was used to generate the specific databases applicable to the following key categories:

- Institutional Spending;
- Faculty and Staff Spending;
- Student Spending; and
- Capital Expenditures.

Please see the accompanying narrative text in this appendix for a detailed discussion of the data relied upon and the analytical procedures employed to quantify the direct, indirect, and induced economic impacts for each category. Calculations throughout this analysis are subject to rounding.

Bureau of Economic Analysis – RIMS II Data³

The Regional Input-Output Modeling System (RIMS II), a regional economic model, is a tool used by investors, planners, and elected officials to objectively assess the potential economic impacts of various projects. This model produces multipliers that are used in economic impact studies to estimate the total impact a project has on a region. The idea behind the results of RIMS II is that an initial change in economic activity results in other rounds of spending or economic activity.

RIMS II is based on a set of national industry input-output (I-O) accounts that show the goods and services produced by each industry and the use of these goods and services by industries and final users. Like most other regional I-O models, RIMS II adjusts these national relationships to account for regional supply conditions.

Regional I-O multipliers, such as those provided in the RIMS II data, share similarities with other macroeconomic (Keynesian) multipliers in that both types of multipliers provide a way to estimate the total impact that an initial change in economic activity has on an economy. They are both based on the idea that an initial change in economic activity results in diminishing rounds of new spending. Spending diminishes because of “leakages” from the economy in the form of savings, taxes, and imports.

Geospatial Analysis

The use of geocoding was used in this study to assess the distribution of employees, students, and alumni of each of the State System universities. The goal of the address geocoding process is to locate various features according to a specific address. The process involves matching the address of an observation to a specific address location within the target geographic area.

In this study, the observations (employees, students, and alumni) were geographically identified based on the postal zip codes associated with the address of their permanent residence.

³ Sections excerpted from the RIMS II Users Guide, https://www.bea.gov/regional/pdf/rims/rimsii_user_guide.pdf.

The residential address data that was geocoded in this study represents the complete population of each subgroup of the State System's employees, students, and alumni as of 2014. In recognition of potential problems that may result from inaccurate or unavailable data, the following steps were undertaken:

- Employees and staff - in instances where postal code data was not available, postal codes associated with the municipality in which local earned income tax was paid by the employee was used as a proxy for their permanent residence. In addition, if local municipality earned income tax data was not available and the employee was subject to Pennsylvania income tax withholdings, the postal code of the university at which the employee worked was used as a proxy. These instances were limited in number and do not materially affect the outcome of the analysis.
- Further, in the instances for students and alumni where postal code information was unavailable from the information provided, these individuals were considered to be outside of the Commonwealth of Pennsylvania. As a general observation, this issue was limited to the alumni data, which was obtained from the State System's living alumni database for all of the State System universities.

After the geocoding procedures were completed, the university employees were stratified based on the distance of their permanent residences relative to the postal code of the respective university. Specifically, this analysis began with the employee addresses located within a 10 mile radius of the university center and continued outward to include employees between 10 to 25 miles from the university center, and then finally to include all employees living greater than 25 miles from the university center.

The concept of measuring the distance of students or alumni from the university site does not represent a significant measure of the impact on the local community and economy. Rather the focus of the analysis of the State System's alumni is designed to measure the distribution of alumni after graduation and demonstrates the retention of the State System's alumni post-graduation within the Commonwealth of Pennsylvania. Specifically, the analyses show the

spread of alumni within the regional economies of the Commonwealth. The alumni were geocoded and then tabulated, for each university, by the county in which they reside.

The student population for each university was analyzed in a similar manner to the alumni data. Specifically, the student data was geocoded and then tabulated on a county by county basis. The resulting data represent the counties from which the students were drawn throughout Pennsylvania. The distribution of students at each of the State System's universities illustrates the significant impact that the State System plays in the education of the local population. This is consistent with the State System's mission to provide instruction for undergraduate and graduate students in the disciplines of liberal arts and sciences. Further, the universities within the State System aim to provide diverse, dynamic, meaningful experiences to inspire learners to grow both intellectually and personally to enable them to contribute positively to local and global communities.

Analytical procedures were applied to arrive at total spending (direct impacts) for each university. The direct impact attributable to each university for the fiscal 2013-2014 year can be broken down into the following four categories:

- Institutional spending;
- Faculty and staff spending on goods and services;
- Student spending on goods and services; and
- Capital expenditures.

Institutional Spending Analysis

The institution spending for each university was aggregated from the operation budgets for the 2013-2014 academic years. The spending data included all direct spending of the universities, exclusive of all salary and wages paid to faculty, staff, and student employees. The spending data, however, does include employee benefits and the capital spending that stems from the university's operating funds.

To avoid a potential double counting of the indirect economic benefits derived from the institutional spending, an allocation of the spending attributable to out-of state students is required, as is discussed in the example below. The delineation is necessary because the indirect benefits attributable to the in-state students, as well as in-state faculty and staff, are already captured in the Pennsylvania household spending multiplier. Specifically, this distinction is made to prevent overstatement of the Type I and Type II multiplied effect.⁴

A white paper authored by the Bureau of Economic Analysis provides guidance on the proper use of multipliers in the analysis and determination of the economic impacts that universities have on a surrounding region. Specifically the white paper states:⁵

- Most regional I-O models produce two types of multipliers. Type I multipliers account only for the “inter-industry” (direct and indirect) effect of an initial change in economic activity. Type II multipliers account for both the inter-industry and “household-spending” (induced) effects associated with an initial change in economic activity. Most university contribution studies are based on Type II multipliers, which are more difficult to use in a manner that avoids double-counting.
- Even though regional I-O multipliers have traditionally been used to estimate the economic impact of an incremental change in economic activity, such as an increase in the provision of educational services, these multipliers have increasingly been used to estimate the contribution of an entire industry, such as an institution (academic university) to a regional economy.

⁴ The Type I and Type II effect of the institutional spending captures all of the economic impacts of in-state consumers of the State System universities good and services

⁵ Sections excerpted from “University Contribution Studies Using Input-Output Analysis” by Zoe O. Ambargis, Charles Ian Mean, & Stanislaw J. Rzeznik (May 3, 2013)

- The value of university output should exclude any university services that are purchased by businesses inside the region. If using a Type II university multiplier, the value of university output should also exclude purchases of university services by households in the region. Not following these practices will result in double counting and inflated results.
- If a Type II university multiplier is used in the analysis, the value of the university output needs to be adjusted to exclude university output that is purchased by households in the region because the impact of their purchases is captured in the Type II multiplier. This adjustment can be made by prorating the measure of university output by the percentage of students that come from outside the region.

Further, the paper provides a step-by-step methodology to ascertain the contribution a university has on a region. The steps are as follows:

1. Calculated university output (Direct spending of the university);⁶
2. Prorate university output by the share of non-local students;
3. Separately multiply the pro-rated output by the Type I and Type II multipliers for universities; and
4. Subtract the result calculated with the Type I multiplier (total indirect less induced) from the result calculated with the Type II multiplier (total indirect) to separately identify the household-spending effect.

For illustrative purposes the analysis for Bloomsburg University has been reproduced below:

⁶ The direct spending of the university excludes the payroll for faculty, staff, and students.

Bloomsburg University:	<u>Amount</u>
Institutional Spending (Excluding Payroll)	\$61,695,020
Capital Improvements	2,412,867
Sub total	<u>64,107,887</u>
Employee Benefits	34,829,989
Total Institutional Spending (Total Direct Spending)	<u><u>\$98,937,876</u></u>
Institutional Spending prorated by % of out of state students (10.86%)	\$10,746,803
Type 1 Multiplier	1.5335
Type 1 Effect: (Total Indirect – Induced Effect)	\$16,480,222
Type 2 Multiplier	2.332
Type 2 Effect ⁷ (Total Indirect Spending)	\$25,061,544
Induced Effect ⁸ (Type 2 Effect - Type 1 Effect)	<u>\$8,581,322</u>
Total Impact of Institutional Spending (Total Direct Spending + Indirect Spending + Induced Spending)	<u><u>\$132,580,742</u></u>

Faculty and Staff Spending Analysis

To ascertain the effect of the faculty and staff spending the Type II household spending multiplier was applied to an estimate of faculty and staff spending on a university-by-university basis.⁹

An estimation of faculty and staff spending was based on spending data provided by the Bureau of Labor and Statistics (“BLS”) Consumer Expenditure Survey for 2013. The BLS data provided a detail of the average consumer spending for the separate categories which are as follows:

⁷ Indirect effects are defined as the changes in sales, income or jobs in sectors within the region that supply goods and services to a specific sector.

⁸ Induced effects are defined as the increased sales within the region from household spending of the income earned supporting in a specific sector.

⁹ Household spending multiplier for Pennsylvania obtained from the Bureau of Economic Analysis.

- Groceries
- Restaurants
- Housing
- Apparel and Services
- Transportation
- Health Care
- Entertainment
- Cash Contributions
- Personal Insurance and Pensions
- All Other Expenditures

The BLS data allowed for a spending analysis to be completed based on income stratification, estimating average spending by category over six income ranges. The annual income ranges begin at less than \$70,000 and work up incrementally to \$150,000 and greater. Accordingly, gross wages paid to faculty and staff was sorted by income level to which the applicable spending percentages were applied for each category.

For illustrative purposes the analysis for Bloomsburg University has been reproduced below:

Bloomsburg University:	<u>Permanent</u>	<u>Other</u>¹⁰	<u>Total</u>
Income (wages)	\$ 64,848,859	\$ 7,701,853	\$72,550,713
Groceries	4,465,037	773,026	5,238,064
Restaurants	2,885,129	424,257	3,309,387
Housing	18,634,533	3,009,266	21,643,799
Apparel and Services	1,769,004	264,046	2,033,049
Transportation	9,981,933	1,505,309	11,487,243
Health Care	4,053,423	684,306	4,737,728
Entertainment	2,662,553	382,280	3,044,833
Cash Contributions	1,912,814	262,355	2,175,170
Personal Ins & Pensions	5,690,671	562,232	6,252,903
All Other Expenditures	3,440,604	520,025	3,960,628
Total Consumption	\$55,495,702	\$8,387,101	\$ 63,882,803

¹⁰ Other employees include temporary and part-time employees, however all student wages are excluded.

Note that the reproduced analysis illustrates total spending for faculty and staff, in the aggregate, across all income ranges. Further, for the purposes of this analysis, payroll data was filtered to exclude student wages, as student spending was captured in a separate analysis, described below.

Continuing with the Bloomsburg University example, the total estimated consumption spending for faculty and staff was then used as the basis for the application of the Pennsylvania Type II household multiplier, which is reproduced below:

Bloomsburg University:	<u>Amount</u>
Faculty & Staff Spending - Direct	<u>\$63,882,803</u>
Household Multiplier (Type II)	<u>1.4079</u>
Total Faculty & Staff Spending Impact	89,940,599
Faculty Spending - Indirect Impact (Total less Direct Impact)	<u>\$26,057,796</u>

Student Spending Analysis

The third element of the direct economic impact analysis applicable to all of the State System’s universities is an estimation of student spending.¹¹ This analysis was based on the fall 2014 enrollment data for each university, which segregated the student enrollment into three broad categories, as follows:

- Students living on campus in university housing or university affiliated private housing;
- Student’s living off campus in private, non-affiliated housing; and
- Students living off campus with parents.

In order to capture the amount of student spending resulting from students who live in affiliated university housing, an aggregate of privatized housing fees for each university was obtained. A percent was then calculated to determine the amount of room and board fees that were collected by affiliates, rather than the universities, and subsequently applied to the total number of students living in affiliated university housing. Average cost estimates for room, board, books, and

¹¹ System-wide Functions and Services was not included this analysis.

supplies, and other expenses were then applied to the students who live off-campus and pay for room and board to parties other than the university directly.¹² In the other instances in which students lived in on-campus housing or with a parent, only books and supplies and other expenses were included in the aggregated total. This was done in order to avoid double counting room and board expenditures that have already been accounted for in other aspects of the analysis.

To calculate the total direct student spending, the Pennsylvania Type II household multiplier was applied to the total amount spent by all students, the results of which are reproduced below:

Bloomsburg University:	<u>Amount</u>
Student Spending – Direct	<u>\$90,272,210</u>
Household Multiplier (Type II)	<u>1.4079</u>
Total Student Spending Impact	127,094,244
Student Spending - Indirect Impact (Total less Direct Impact)	<u>\$36,822,034</u>

Direct Composite Employment Impact

In addition to an economic impact, there is an employment impact that arises from direct institutional, faculty and staff, and student spending or, what is referred to in the report as direct composite spending. By applying the Pennsylvania Type II Employment Output multiplier to the total direct composite spending, the amount of jobs supported as a result of the university's expenditures can be calculated. Specifically, for every additional million dollars of composite spending by a university, approximately 21.3 jobs are supported.

¹² Average cost estimates were supplied on a university by university basis by the State System.

For illustrative purposes, the direct composite employment impact of Bloomsburg University is reproduced below:

Direct Institutional Spending	Direct Faculty and Staff Spending	Direct Student Spending	Direct Composite Spending
\$98,937,876	\$63,882,803	\$90,272,210	\$253,092,889
	Direct Composite Spending	Jobs Output	Employment Impact
	\$253,092,889	21.26	5,380

Capital Expenditures Analysis

The last component of the State System’s total direct economic impact is the capital expenditures of each university. As mentioned previously in the report, Pennsylvania’s State System of Higher Education receives funding from the Governor’s Budget Office for its capital investments; as a result, the impact of these projects is segregated from the institutional spending impact. The following provides an overview of how the capital expenditures impact was calculated.

Historical data was obtained for the funding received for capital investments and the deferred maintenance. The capital projects, on average, take approximately four to five years to be executed, and therefore, a five-year weighted average was calculated for each university, with the most weight being placed on 2013-2014 fiscal year. This amount was combined with the funding per university provided for deferred maintenance to arrive at the total directly spent on capital expenditures.

The Pennsylvania Type I and Type II construction multipliers were then applied, in the same manner as applied on institutional spending, to calculate the indirect and induced effect of the capital expenditures.¹³

¹³ The construction multiplier was chosen because, as indicated by the State System, the majority of the funding is spent on renovations and additions. The construction multipliers assume that construction is being performed by a firm in the region and has enough spare capacity to take on the job without forcing up prices or demand. It also assumes that there is some amount of leakages from the local economy because of inputs of supplies or services that cannot be provided locally.

For illustrative purposes, the economic impact of Bloomsburg University’s capital expenditures is displayed below:

Bloomsburg University:	<u>Amount</u>
Capital Improvements (5-year Weighted Average)	\$9,165,333
Key ‘93 Deferred Maintenance	1,037,338
Total Capital Expenditures (Total Direct Spending)	<u>10,202,671</u>
Type 1 Multiplier	1.6844
Type 1 Effect (Total Indirect – Induced Effect)	\$17,185,380
Type 2 Multiplier	2.4656
Type 2 Effect (Total Indirect Spending)	\$25,155,706
Induced Effect (Type 2 Effect - Type 1 Effect)	<u>7,970,327</u>
Total Impact of Capital Expenditures	<u>\$43,328,705</u>

Direct Capital Expenditures Employment Impact

In calculating the direct capital expenditures employment impact, it is important to note that because a different type of multiplier is being used, the jobs output multiplier utilized is 17.9. In other words, for each additional million dollars spent on capital expenditures approximately 17.9 jobs are supported.

For illustrative purposes, the employment impact of Bloomsburg University’s capital expenditures is displayed below:

Direct Capital Expenditures	Jobs Output	Employment Impact
\$10,202,671	17.94	183

In the aggregate, the total economic impact for Bloomsburg University is quantified as follows:

<u>Category</u>	<u>Direct</u>	<u>Indirect</u>	<u>Induced</u>	<u>Total</u>
Institutional Spending	\$98,937,876	\$25,061,544	\$8,581,322	\$132,580,742
Faculty Spending	63,882,803	26,057,796	-	89,940,599
Student Spending	90,272,210	36,822,034	-	127,094,244
Capital Expenditures	10,202,671	25,155,706	7,970,327	43,328,705
Total	<u>\$263,295,561</u>	<u>\$113,097,080</u>	<u>\$16,551,649</u>	<u>\$392,944,290</u>

Commonwealth of Pennsylvania Sales Tax Revenue

An additional element of the economic impact on the Commonwealth as a result of the State System universities' presence is the sales tax revenue generated from the purchase of taxable goods and services. This analysis is based on the aggregate total of the direct and indirect consumption expenditures for faculty, staff, and students. To this total, a factor of approximately 23.9 percent was applied to estimate the amount of total consumption expenditures spent on taxable goods and services within Pennsylvania.¹⁴

The derivation of the taxable goods and services factor is shown as follows:

<u>Description</u>	<u>Amount</u>
Pennsylvania Gross Domestic Product	\$ 644,915,000,000
Pennsylvania Sales Tax Revenue	9,243,355,000
Pennsylvania Sales Tax Rate	<u>6.00%</u>
Imputed Sales Revenue Base	<u>\$ 154,055,916,667</u>
Percentage of Pennsylvania GDP which is Taxable	<u>23.89%</u>

The taxable goods and services factor was applied to the sum total of all consumption spending to estimate the sales tax receipts due to Pennsylvania. The estimated sales tax receipts for Bloomsburg University are reproduced below:

¹⁴ This factor was calculated by dividing the 2013 Pennsylvania sales tax revenue, as reported in the 2013 Pennsylvania Tax Collections Summary Report, by Pennsylvania's sales tax rate of six percent. This value was then divided again by Pennsylvania's 2013 Gross Domestic Product, \$644.9 billion, as reported in the 2013 Bureau of Economic Analysis, to arrive at the percentage of state gross domestic product taxable, 23.89 percent.

<u>Total Spending</u>	<u>Imputed % of Taxable Spending</u>	<u>Spending subject to tax</u>	<u>Sales Tax Rate</u>	<u>Sales Tax Revenue</u>
\$217,034,843	23.89%	\$51,849,624	6.0%	\$3,110,977

Institutional spending was not considered in this analysis as it would not be subject to Pennsylvania sales tax.

Appendix F: Information Relied On

General Documents Received:

12-13 Minor Objects.
13-14 Minor Objects.
14-15 Cost of Attendance.
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Economic Activity (System Student Housing).
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Appendix G: Supporting Geographic Data

	State System Students by Pennsylvania County by University, Fall 2014															Total
	East					Lock					Slippery		West			
	Bloomsburg	CALU	Cheyney	Clarion	Stroudsburg	Edinboro	IUP	Kutztown	Haven	Mansfield	Millersville	Shippensburg	Rock	Chester		
Adams	59	34	-	11	6	5	57	33	45	6	102	264	31	52	705	
Allegheny	14	1,902	29	715	9	656	1,768	5	48	12	14	28	1,781	39	7,020	
Armstrong	-	23	-	185	-	42	428	2	4	-	-	1	129	-	814	
Beaver	5	139	1	148	1	110	210	2	11	1	3	5	480	5	1,121	
Bedford	3	20	-	13	1	2	80	1	14	3	2	45	16	2	202	
Berks	282	47	10	36	152	13	189	1,663	108	38	426	258	43	494	3,759	
Blair	7	43	-	41	3	24	244	6	100	7	4	49	48	8	584	
Bradford	65	1	-	13	8	17	20	15	83	382	5	10	16	6	641	
Bucks	657	64	5	22	329	22	249	643	140	64	299	221	52	1,378	4,145	
Butler	3	75	-	245	2	166	406	1	19	4	3	6	1,131	6	2,067	
Cambria	6	76	-	68	1	32	680	2	42	6	10	27	81	1	1,032	
Cameron	2	4	-	12	-	4	19	1	10	1	1	-	10	1	65	
Carbon	108	6	-	6	96	3	14	120	25	12	15	20	3	27	455	
Centre	18	29	-	36	2	28	70	7	403	13	10	22	48	13	699	
Chester	353	107	36	24	94	13	281	446	87	21	452	284	53	3,745	5,996	
Clarion	2	19	-	690	-	29	60	-	11	4	1	2	63	2	883	
Clearfield	13	23	-	182	3	49	159	4	354	6	2	10	72	4	881	
Clinton	31	8	-	9	1	5	21	5	469	25	10	6	6	4	600	
Columbia	878	6	-	15	12	4	30	21	34	14	13	24	9	14	1,074	
Crawford	1	21	-	119	-	637	80	1	15	2	3	2	140	3	1,024	
Cumberland	186	57	1	39	22	25	242	131	95	44	262	1,174	50	209	2,537	
Dauphin	207	69	17	48	43	17	189	122	113	57	364	427	58	221	1,952	
Delaware	350	46	96	24	126	10	193	303	61	31	314	176	33	2,443	4,206	
Elk	4	16	-	105	1	71	96	-	39	9	1	3	53	-	398	
Erie	10	55	-	176	3	2,616	241	1	19	4	2	5	333	4	3,469	
Fayette	1	893	2	8	1	20	124	1	2	-	5	5	75	-	1,137	
Forest	-	4	-	33	-	11	2	-	2	-	-	-	5	-	57	
Franklin	29	41	-	18	6	6	83	22	34	6	55	938	33	31	1,302	
Fulton	-	7	-	2	-	-	7	-	4	-	6	51	4	-	81	
Greene	1	145	-	5	-	6	12	-	-	2	-	4	25	1	201	
Huntingdon	7	3	-	17	1	3	33	1	46	4	1	48	14	4	182	
Indiana	2	32	-	36	-	27	1,486	1	8	2	2	6	42	1	1,645	
Jefferson	2	17	-	241	-	48	196	-	53	-	-	5	25	-	587	
Juniata	19	1	-	1	2	3	15	1	34	7	6	27	2	5	123	
Lackawanna	243	16	3	16	203	8	58	125	36	43	22	24	13	176	986	
Lancaster	212	86	4	38	36	33	264	329	139	40	2,752	323	67	463	4,786	
Lawrence	-	39	4	91	-	94	89	-	2	-	-	3	486	2	810	
Lebanon	88	21	-	5	23	7	74	123	39	13	207	124	16	63	803	
Lehigh	406	27	8	25	308	18	114	1,044	99	21	111	105	33	345	2,664	
Luzerne	609	20	3	23	127	12	95	126	103	53	31	70	39	126	1,437	
Lycoming	199	13	2	22	11	15	73	24	384	138	30	39	34	29	1,013	
McKean	1	17	-	53	2	80	53	1	11	15	1	2	39	2	277	
Mercer	2	48	1	171	-	196	95	1	11	1	1	4	563	1	1,095	
Mifflin	38	6	-	2	4	8	53	3	89	7	11	60	6	3	290	
Monroe	221	17	7	22	1,684	13	92	187	54	21	26	59	24	105	2,532	
Montgomery	733	58	2	37	260	23	331	781	131	55	469	400	72	2,049	5,401	
Montour	215	1	31	6	1	4	22	3	21	14	7	5	6	4	340	
Northampton	301	31	4	11	770	7	121	632	79	27	103	108	34	286	2,514	
Northumberland	540	14	-	20	11	5	58	41	88	56	13	51	18	23	938	
Perry	30	13	-	12	5	6	29	24	30	21	31	91	10	17	319	
Philadelphia	676	123	469	82	309	58	694	517	220	144	380	305	39	1,247	5,263	
Pike	89	8	-	11	298	5	29	75	28	11	7	12	12	48	633	
Potter	9	8	-	11	1	9	8	-	26	47	-	1	18	2	140	
Schuylkill	319	15	-	15	57	10	46	283	73	16	61	93	11	69	1,068	
Snyder	125	8	1	9	1	2	20	8	32	21	6	17	6	13	269	
Somerset	1	82	-	19	-	11	136	1	11	1	-	18	42	1	323	
Sullivan	10	3	-	2	-	-	-	1	6	6	2	2	1	1	34	
Susquehanna	26	6	-	1	29	-	16	28	22	50	5	12	3	21	219	
Tioga	17	13	1	17	2	13	29	9	41	487	7	-	18	2	656	
Union	148	2	1	8	6	4	20	6	48	28	13	21	4	4	313	
Venango	4	12	-	512	-	125	48	1	4	-	2	-	132	-	840	
Warren	-	19	-	70	1	126	45	1	6	6	1	1	47	1	324	
Washington	2	1,137	-	97	1	83	292	1	12	2	3	14	267	4	1,915	
Wayne	75	7	-	8	99	5	20	32	22	38	11	9	6	24	356	
Westmoreland	11	712	-	200	3	128	1,097	4	27	1	7	16	389	11	2,606	
Wyoming	30	5	-	1	16	1	15	18	16	32	3	6	6	13	162	
York	207	125	7	44	57	31	280	211	148	61	924	607	71	331	3,104	
Total Pennsylvania	8,912	6,745	745	5,004	5,250	5,864	12,400	8,201	4,590	2,263	7,640	6,755	7,496	14,209	96,074	
Non-Pennsylvania	1,086	1,233	277	708	1,570	973	1,969	1,017	327	489	407	600	999	1,877	13,532	
Grand Total	9,998	7,978	1,022	5,712	6,820	6,837	14,369	9,218	4,917	2,752	8,047	7,355	8,495	16,086	109,606	

State System Alumni by Pennsylvania County by University, Fall 2014

	East				Lock				Slippery		West		Total		
	Bloomsburg	CALU	Cheyney	Clarion	Stroudsburg	Edinboro	IUP	Kutztown	Haven	Mansfield	Millersville	Shippensburg		Rock	Chester
Adams	178	100	-	126	75	65	311	140	180	98	548	1,545	91	156	3,613
Allegheny	241	9,834	138	5,637	90	5,872	14,609	170	420	228	212	364	9,388	217	47,420
Armstrong	6	182	-	864	5	193	2,253	8	14	19	9	16	606	8	4,183
Beaver	26	737	19	957	17	1,101	1,294	16	51	34	26	50	2,765	24	7,117
Bedford	11	165	-	77	6	39	342	17	99	30	44	448	83	26	1,387
Berks	1,640	180	24	187	726	121	783	10,647	461	365	2,450	1,239	265	2,453	21,541
Blair	68	153	-	259	18	143	1,521	34	459	80	73	389	288	54	3,539
Bradford	395	30	-	50	89	92	121	69	278	2,276	56	59	51	46	3,612
Bucks	3,115	253	51	204	1,769	185	1,147	3,162	748	415	2,127	1,402	282	4,412	19,272
Butler	55	663	-	2,007	15	1,129	2,711	23	77	50	27	71	6,815	33	13,676
Cambria	37	498	4	385	12	167	3,725	19	218	48	43	195	505	39	5,895
Cameron	6	11	-	54	1	34	47	2	39	24	4	1	16	2	241
Carbon	493	31	-	18	629	11	73	836	101	96	96	64	32	106	2,586
Centre	287	140	2	424	76	163	719	104	1,662	222	129	237	194	186	4,545
Chester	1,931	253	336	266	687	187	1,316	2,055	422	292	2,671	1,890	322	17,642	30,270
Clarion	6	64	-	3,082	5	153	312	-	39	15	3	21	260	7	3,967
Clearfield	83	88	-	1,073	12	184	1,055	13	1,313	61	34	44	279	13	4,252
Clinton	180	34	-	41	16	39	101	18	2,226	124	29	37	31	25	2,901
Columbia	4,553	34	3	68	78	28	147	118	152	184	110	107	56	79	5,717
Crawford	12	141	-	795	6	4,159	425	4	45	40	10	9	642	9	6,297
Cumberland	1,176	282	2	437	234	286	1,405	681	606	422	1,586	7,275	378	722	15,492
Dauphin	1,389	244	44	416	305	229	1,195	762	637	492	1,990	3,331	266	698	11,998
Delaware	1,077	125	921	157	565	105	711	1,055	252	210	1,547	996	156	10,576	18,453
Elk	21	60	-	594	2	352	471	4	151	62	5	9	152	6	1,889
Erie	44	298	10	1,175	15	12,399	1,279	23	105	93	25	32	1,064	22	16,584
Fayette	9	5,766	5	114	8	136	704	4	18	14	7	22	274	5	7,086
Forest	-	15	-	152	3	38	27	-	3	9	-	1	31	-	279
Franklin	143	139	-	170	72	93	479	120	186	98	292	5,007	183	155	7,137
Fulton	5	11	-	13	1	6	58	7	21	4	33	322	23	7	511
Greene	2	1,043	-	42	1	44	136	2	4	6	2	11	85	3	1,381
Huntingdon	39	36	-	59	12	40	222	26	224	41	61	414	41	19	1,234
Indiana	20	174	1	276	11	135	5,732	16	60	25	21	45	275	13	6,804
Jefferson	15	66	-	1,348	7	166	1,161	5	212	20	10	20	196	9	3,235
Juniata	118	8	-	27	8	12	42	17	112	38	82	253	16	15	748
Lackawanna	1,326	37	4	41	1,533	48	214	464	218	612	200	145	51	336	5,229
Lancaster	1,544	264	16	397	410	239	1,281	1,712	737	480	16,400	2,468	371	2,249	28,568
Lawrence	16	169	3	558	2	431	479	4	19	23	6	12	3,053	5	4,780
Lebanon	444	82	2	119	158	56	372	578	216	193	1,645	770	104	389	5,128
Lehigh	2,090	128	16	142	2,029	91	582	8,181	345	365	770	760	172	1,141	16,812
Luzerne	4,252	79	4	94	1,187	73	316	721	324	607	232	202	94	411	8,596
Lycoming	1,702	84	1	176	104	115	402	165	2,006	964	178	228	98	115	6,308
McKean	32	59	-	387	10	463	254	10	129	203	10	6	179	12	1,754
Mercer	20	230	7	967	7	1,385	619	11	59	34	10	14	3,135	16	6,514
Mifflin	136	30	1	65	11	44	147	40	338	81	90	342	25	35	1,385
Monroe	532	31	19	48	4,729	38	180	579	141	148	156	123	57	200	6,981
Montgomery	3,825	319	249	333	1,727	252	1,655	4,455	782	544	3,156	2,203	429	8,751	28,680
Montour	966	7	-	21	25	15	55	30	69	92	46	43	12	9	1,390
Northampton	1,683	93	9	129	4,108	88	429	4,160	353	362	675	557	148	832	13,626
Northumberland	3,105	32	1	77	78	41	140	187	449	318	173	236	41	84	4,962
Perry	185	42	-	72	40	43	135	77	134	84	220	689	46	61	1,828
Philadelphia	1,103	166	3,192	256	532	212	1,294	1,275	345	338	1,050	631	189	4,066	14,649
Pike	170	15	2	18	705	10	29	148	64	73	33	28	21	57	1,373
Potter	38	23	-	78	7	85	71	9	106	326	11	13	52	11	830
Schuykill	1,910	50	1	36	432	41	135	1,815	264	234	386	336	50	297	5,987
Snyder	672	24	-	35	24	14	87	65	192	122	78	166	29	38	1,546
Somerset	16	665	-	168	4	108	1,016	11	80	24	29	159	239	18	2,537
Sullivan	85	2	-	4	6	-	11	10	19	90	11	10	4	5	257
Susquehanna	265	10	-	18	161	25	39	89	95	343	52	28	20	37	1,182
Tioga	107	33	-	44	32	74	110	38	186	2,619	60	46	47	30	3,426
Union	768	27	-	50	55	30	111	54	240	171	100	129	28	57	1,820
Venango	10	104	-	2,798	3	749	292	3	36	16	10	10	680	9	4,720
Warren	12	74	-	461	5	1,054	212	10	65	76	9	11	225	6	2,220
Washington	39	8,251	4	623	16	760	1,782	24	55	23	20	71	1,065	26	12,759
Wayne	296	19	-	12	491	17	52	172	67	203	73	43	14	68	1,527
Westmoreland	78	5,760	2	1,967	23	1,386	7,454	24	193	68	52	176	2,172	49	19,404
Wyoming	174	10	-	13	110	5	41	60	49	148	51	17	4	36	718
York	990	367	20	484	313	289	1,355	757	776	459	4,269	3,855	392	1,010	15,336
Total Pennsylvania	45,972	39,144	5,113	32,245	24,653	36,387	67,985	46,115	20,746	16,678	44,623	40,453	39,357	58,253	517,724
Non-Pennsylvania	16,828	14,412	1,362	14,131	14,649	19,581	35,071	14,164	7,958	11,552	11,376	12,971	19,099	23,194	216,348
Grand Total	62,800	53,556	6,475	46,376	39,302	55,968	103,056	60,279	28,704	28,230	55,999	53,424	58,456	81,447	734,072

Appendix H: About Baker Tilly and the Preparers of the Report

Baker Tilly Virchow Krause, LLP (“Baker Tilly”) is a nationally recognized, full-service accounting and advisory firm whose professionals connect with clients and their businesses through refreshing candor and clear industry insight. With approximately 2,500 employees across the United States, Baker Tilly is ranked as one of the 12 largest accounting and advisory firms in the country. Headquartered in Chicago, Baker Tilly is also an independent member of Baker Tilly International, a worldwide network of independent accounting and business advisory firms in 133 countries, with 27,000 professionals. The combined worldwide revenue of independent member firms is \$3.6 billion.

Resumes of the primary authors of this study:



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Paul is a partner in the firm’s forensic, litigation, and valuation services group and has provided a variety of financial consulting and accounting services to attorneys, insurance companies, governmental agencies, and public and private corporations for more than 32 years. His responsibilities are carried out through financial and forensic analysis of financial statements and tax returns, general ledgers and other original books of entry, relevant contracts, and agreements, and industry data.

Paul has spoken before professional and educational groups on various aspects of financial analysis, litigation consulting, economic analysis, fraud investigations, and economic damages, and has co-authored various publications and articles.

Licenses / Certifications

- > Licensed CPA in Pennsylvania
- > Certified Fraud Examiner
- > Certified in Financial Forensics

Professional affiliations

- > American Institute of Certified Public Accountants (AICPA)
- > Pennsylvania Institute of Certified Public Accountants (PICPA)
- > PICPA Construction Industry Committee, Board Member
- > PICPA Image Enhancement Committee, Chair
- > Association of Certified Fraud Examiners

Education

- > Lehigh University, Bachelor of Science
- > Lehigh University, Master of Business Administration

Community involvement

- > North Penn Community Health Foundation, Board Member and Treasurer



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With over 14 years of experience in public accounting, Paul specializes in forensic analysis, business valuations, and forensic accounting. Paul’s focus has included quantifying economic impacts and damages resulting from insurance claims, and other analytical reviews.

Additionally, Paul has significant experience in valuing public and privately held entities, equity securities and financial and intangible assets. His valuation experience spans a wide range of industries, with valuation assignments prepared for estate and gift tax purposes, mergers and acquisitions, and purchase price allocations for financial reporting.

Licenses / Certifications

- > Certified Public Accountant, Pennsylvania
- > Accredited in Business Valuation
- > Certified in Financial Forensics

Professional affiliations

- > American Institute of Certified Public Accountants (AICPA)
- > Association of Certified Fraud Examiners
- > Loss Executives Association
- > American Society of Appraisers

Education

- > West Virginia University, Bachelor of Science
- > West Virginia University, Master of Professional Accountancy



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Jennifer is an associate in the firm’s forensic, litigation, and valuation services group where her responsibilities include preparation of financial analysis, economic research, as well as forensic accounting. She has experience in complex data analysis, economic modeling, and the review of financial documents. Other responsibilities include economic analysis, creation and presentation of data, and review of findings from investigations. In addition, she has performed and managed quality control procedures for reports and accompanying exhibits.

Prior to joining Baker Tilly, Jennifer interned at Chubb Corporation, as an Investment Accounting Intern, where she performed an assortment of financial accounting functions.

Education

- > University of Scranton, Bachelor of Science in Forensic Accounting