

2014 AICUP Economic and Community Impact Report Methodology and Data Sources

Definitions

Independent colleges and universities in Pennsylvania

This universe is the 96 non-profit, degree-granting institutions defined by the Pennsylvania Department of Education as “Private Colleges and Universities,” “Private, State-Aided Institutions,” or “Private Two Year Colleges” excluding the following nine institutions which are for-profit or restricted in educational purpose:

Art Institute of Philadelphia	International Institute for Restorative Practices
Art Institute of Pittsburgh	Pittsburgh Technical Institute
Art Institute of York	Reconstructionist Rabbinical College
Central Pennsylvania College	Restaurant School at Walnut Hill College
Hussian College	

A complete listing of the independent colleges and universities included in this study is shown on the last page of this methodology section.

Pennsylvania Regions

This report includes summaries of various economic impact figures by region in Pennsylvania. Regions were created using entire counties. Each independent college and university was assigned to a region using the county location of the main campus of the institution. The economic impacts of each institution within a particular region were then summed to create a region total.

Employment

Employment at independent colleges and universities

The total number of employees (full-time plus part-time excluding student employees) for fall 2014 was collected through a survey undertaken by AICUP in the spring of 2015. For AICUP member institutions that did not supply data on employment and for institutions that are not members of AICUP, data on employment was obtained from the U.S. Department of Education, National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS) Human Resource Survey.

Wages and salaries of employees at independent colleges and universities

Total wages and salaries paid to employees (full-time plus part-time excluding student employees) for fiscal year 2014 was collected through a survey undertaken by AICUP in the spring of 2015. For AICUP member institutions that did not supply data on wages and salaries and for institutions that are not members of AICUP, data on total wages and salaries paid to employees was obtained from the U.S. Department of Education, National Center for Education Statistics IPEDS Human Resource Survey and the IPEDS Finance Survey.

Ranking of Annual Payroll by Industry

Data on annual payroll by six-digit private industry group (using the categories of the North American Industry Classification System) is from the *2012 County Business Patterns* report produced by the U.S. Department of Commerce, Bureau of the Census.

Occupational Benefits

Value of occupational benefits paid by independent colleges and universities

The value of employment benefits paid to Pennsylvania-resident employees (full-time plus part-time excluding student employees) for fiscal year 2014 was collected through a survey undertaken by AICUP in the spring of 2015. For AICUP member institutions that did not supply data on employment benefits and for institutions that are not members of AICUP, data on benefits paid to employees is estimated using figures from the U.S. Department of Education, National Center for Education Statistics IPEDS Human Resource Survey.

Statewide Employment Impact

Total employment attributable to independent colleges and universities

The total number of statewide jobs attributable to the independent higher education sector in Pennsylvania is based on an employment multiplier calculated using the IMPLAN economic input-output modeling software (version 3.1, Minnesota Implan Group, Inc.).

A Top Industry in Pennsylvania

Ranking of independent colleges and universities among Fortune 500 companies

Total revenue for independent colleges and universities for fiscal year 2013 is from the U.S. Department of Education, National Center for Education Statistics IPEDS Finance Survey. Revenue data for fiscal year 2013 for Fortune 500 companies with headquarters in Pennsylvania is from the website of *Fortune* magazine. [<http://fortune.com/fortune500>]

Tax Income to State and Local Governments

Income taxes paid to state and local governments by independent colleges and universities

Data on total state and local income taxes paid by employees (full-time plus part-time excluding student employees) for fiscal year 2014 was collected through a survey undertaken by AICUP in the spring of 2015. For AICUP member institutions that did not supply data on taxes paid and for institutions that are not members of AICUP, this data is estimated using figures for comparable schools in the surrounding geographic area.

Bringing Federal Dollars to Pennsylvania

Federal funds for research and development purposes

Data represent the average of federally-financed academic research and development expenditures to colleges and universities in Pennsylvania for the years 2011-2013. Data is extracted from the National Science Foundation's *Survey of Research and Development Expenditures at Universities and Colleges* using the WebCaspar database [<https://ncesdata.nsf.gov/webcaspar>].

Impact of Purchasing by Independent Colleges and Universities

Purchases of goods and services

The value of goods and services purchased in Pennsylvania by independent colleges and universities in fiscal year 2014 was estimated using figures from the National Center for Education Statistics IPEDS Finance Survey. Using IPEDS data, total purchases of goods and services is calculated as total expenses minus (salary and wage expenses + benefits expenses + depreciation expenses).

The average daily expenditures on goods and services is calculated by taking the total estimated value of purchased goods and services by independent colleges and universities in Pennsylvania for fiscal year 2014 and dividing by 365.

Impact of Construction Expenditures

Construction and renovation expenses

Data on the estimated annual value of new construction and major renovation projects is from a survey undertaken by AICUP in spring 2015. This figure is an average of the value of projects underway during fiscal years 2011 through 2015. For AICUP member institutions that did not supply data on new construction and major renovation projects and for institutions that are not members of AICUP, various sources were searched for information on projects underway during fiscal years 2011-2015. These sources included institutional websites, annual financial reports, and alumni magazines.

The estimated number of statewide jobs attributable to construction and renovation activity of independent colleges and universities in Pennsylvania is based on an employment multiplier calculated using the IMPLAN economic input-output modeling software (version 3.1, Minnesota Implan Group, Inc.).

Spending by Students

Student Expenditures

The estimate of student spending at independent colleges and universities in Pennsylvania is based on the 2013-2014 student *Cost of Attendance* figure created by individual colleges and universities for financial aid purposes and obtained from the U.S. Department of Education, National Center for Education Statistics, IPEDS Institutional Characteristics Survey. For this report, spending by graduate students is assumed to equal spending figures for undergraduate students. Student expenditures exclude amounts spent on tuition and fees and also exclude room and board costs for students living on-campus.

The IMPLAN economic input-output model software was utilized to estimate total spending impact. Within this model, student spending was allocated to industry groups based on modified expenditure patterns of persons ages 18-24 living in the Northeast region as collected through the 2012-2013 Consumer Expenditure Survey. (*Table 3800. Consumer units with reference person under age 25 by region of residence: Annual average expenditures and characteristics*, U.S. Department of Labor, Bureau of Labor Statistics. 2014).

Spending by Visitors

Visitor expenditures

The estimate of spending by out-of-state visitors to campuses of independent colleges and universities is based on the number of non-Pennsylvania resident students attending independent colleges and universities and an assumption that each non-resident student receives two overnight visits per year from out-of-state family or friends. The number of overnight visits is multiplied by an average daily visitor expenditure figure obtained from the *Pennsylvania 2013 Annual Traveler Profile* report produced for the Pennsylvania Department of Community and Economic Development, Office of Tourism.

The IMPLAN economic input-output model software was utilized to estimate total spending impact. Within this model, out-of-state visitor spending was allocated to industry groups based upon estimated leisure traveler daily spending by category outlined in the *Pennsylvania 2013 Annual Traveler Profile*.

Industry Groups Used for Out-of-State Traveler Spending Estimate	Allocation of Per-Person Daily Spending
Amusement & Recreation	16%
General retail stores	18%
Restaurants	18%
Lodging hotels/motels	20%
Transit & Ground Transportation	14%
Gasoline and Auto Services	14%

No attempt was made to estimate spending by other types of short-term visitors (e.g., visits to cultural facilities, sporting events, meetings and workshops), so this method understates the total statewide economic impact of out-of-state visitors to campuses of independent colleges and universities.

Independent Colleges and Universities in Pennsylvania

Albright College	Manor College
Allegheny College	Marywood University
Alvernia University	Mercyhurst University
American College of Financial Services	Messiah College
Arcadia University	Misericordia University
Bryn Athyn College	Moore College of Art and Design
Bryn Mawr College	Moravian College
Bucknell University	Mount Aloysius College
Cabrini College	Muhlenberg College
Cairn University	Neumann University
Carlow University	Peirce College
Carnegie Mellon University	Pennsylvania Academy of the Fine Arts
Cedar Crest College	Pennsylvania College of Art and Design
Chatham University	Pennsylvania College of Health Sciences
Chestnut Hill College	Pennsylvania Institute of Technology
Curtis Institute of Music	Philadelphia College of Osteopathic Medicine
Delaware Valley University	Philadelphia University
DeSales University	Point Park University
Dickinson College	Robert Morris University
Drexel University	Rosemont College
Duquesne University	Saint Francis University
Eastern University	Saint Joseph's University
Elizabethtown College	Saint Vincent College
Franklin and Marshall College	Salus University
Gannon University	Seton Hill University
Geneva College	Summit University of Pennsylvania
Gettysburg College	Susquehanna University
Gratz College	Swarthmore College
Grove City College	The Commonwealth Medical College
Gwynedd Mercy University	Thiel College
Harcum College	Thomas Jefferson University
Harrisburg University of Science & Tech	University of Pennsylvania
Haverford College	University of Scranton
Holy Family University	University of the Arts
Immaculata University	University of the Sciences
Johnson College	Ursinus College
Juniata College	Valley Forge Christian College
Keystone College	Valley Forge Military College
King's College	Villanova University
La Roche College	Washington & Jefferson College
La Salle University	Waynesburg University
Lackawanna College	Westminster College
Lafayette College	Widener University
Lake Erie College of Osteopathic Medicine	Wilkes University
Lancaster Bible College	Wilson College
Lebanon Valley College	Won Institute of Graduate Studies
Lehigh University	Wistar Institute
Lycoming College	York College of Pennsylvania