



In the House!

Conducting an Economic Impact Study Internally

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Background

Spring 2006- Higher Education Council of Berks County (HECBC) commissioned a study to measure the economic impact of the five institutions of higher education located in the county.

- Albright College
- Alvernia College (now Alvernia University)
- Kutztown University
- Penn State Berks
- Reading Area Community College (RACC)



Caffrey and Isaacs, 1971.

- ▣ Familiarity with the community;
- ▣ Define the economic factors to be considered;
- ▣ Describe the kinds of data needed to calculate their magnitudes;
- ▣ Design data techniques suitable for the local situation;
- ▣ Select appropriate statistical techniques for analyzing the data;
- ▣ Invent methods to ensure most effective display of the results to the intended audiences;
- ▣ And lastly- DO THE WORK!



Caffrey and Isaacs, 1971- CONTINUED

The full range of such skills may not be available within the faculty and staff of the institution, and the services of an outside consultant are often solicited to help design the study or even conduct it. The cost of this assistance frequently discourages institutions from proceeding, and, unfortunately, those institutions with the most pressing need for economic impact studies may defer them because of anticipated costs. (p.3)



Aim and Scope of the Study

- ❑ Identify and define the primary direct economic impact components for which data are available or may be relatively easily estimated.
- ❑ Investigate range of multipliers used in similar studies to select upper and lower bound values to estimate the indirect economic impact.
- ❑ Report total economic impact (direct + indirect).
- ❑ Estimate economic impact of student volunteers.



Limitations of this Study

- ▣ Selection of geographic focus- Berks County
- ▣ Excluded impacts due to data/resource limitations
 - Employment effects
 - Non-credit course activity
 - Faculty research & grants
 - Entrepreneurial activity & academic-industry collaborations
 - Libraries and Learning Resource Centers
- ▣ Potential data error/bias



Direct Economic Impact Components

▣ Institutional Expenditures

- ▣ Operations
- ▣ Payroll
- ▣ Capital Projects

▣ Spending by Students

- ▣ Non-discretionary
- ▣ Discretionary

▣ Spending by Visitors



Institutional Expenditures

▣ Operations

- Core Expenditures: instruction, research, public service, academic support, student services, institutional support, operations & maintenance of facilities, depreciation, scholarship, and other miscellaneous operating expenses.

■ Data sources:

- ▣ IPEDS
- ▣ Institutional staff and/or institution fact books

▣ Payroll

▣ Capital Projects



Institutional Expenditures- CONTINUED

- ▣ Payroll : Nine-month equated faculty contracts were reported to maintain consistency across the institutions.
- ▣ Capital Projects
 - Land Improvements
 - Infrastructure
 - Buildings
 - Equipment
 - Art & Library Collections
 - Property obtained under capital leases
 - Construction in progress



Spending by Students

▣ Discretionary

- Snacks & beverages, personal care items, entertainment and technology.
- Data sources: IPEDS, *American Demographics*

▣ Non-discretionary (excludes tuition & books)

- Rent
- Data sources: US Census Bureau, *Berks County, Pennsylvania financial characteristics: 2004 Community Survey.*



Spending by Visitors

▣ Drivers of visitor activity

- Campus sponsored lectures and cultural events
- Athletics
- Prospective student visits
- Summer camps

▣ Data sources

- Admissions, Student Life, Athletics and other departmental reports on the number of visitors.
- Pennsylvania Tourism Office *2003 Annual Travel Profile*



Indirect Economic Impacts

The measurement of indirect economic impact is an attempt to capture the economic ripple effect that direct expenditures have in spurring additional spending and economic activity throughout Berks County.



Expenditure Multipliers

- Reviewed extensive literature
 - Widener University, 2005
 - Pennsylvania State University, 2003
 - Michigan's Public Universities, 2002
 - Brigham Young University, '86,'96,'02
 - University System of Georgia, 2000
 - West Virginia University, 1998
 - University of Washington, 1997
 - Connecticut independent colleges and universities, 1996
- Values ranged from 1.5 to 2.33



Multiplier Selection

- Upper estimate based on 2.3 multiplier, used in Penn State University's state-wide study.
- Lower estimate based on 1.78 multiplier, which was identified for the Harrisburg region in the Widener University study.



Indirect Economic Impact Computation

Total Direct Impact

(INSTITUTION + STUDENTS' + VISITORS' spending)

X Multiplier

= Indirect Economic Impact



TOTAL Economic Impact Computation

Direct Economic Impact

+

Indirect Economic Impact

= Total Economic Impact



Economic Impact of Community Service

- ▣ Habitat for Humanity
- ▣ Police Athletic League youth programs
- ▣ Educational summer camps
- ▣ Hosting school groups and partnering with local public schools
- ▣ Environmental restoration projects



Community Service- CONTINUED

Percentage of students volunteering

X

Economic value of students' time

X

Number of hours of community service

= Economic Value of Community Service



Community Service- CONTINUED

▣ Data sources

- Minimum wage (\$5.15 at that time) was the lower estimate of the value of a volunteer's time.
- Independent Sector, *Value of volunteer time*, 2005.
- Corporation for National and Community Service provides estimates of the percentage of students participating in volunteer activities annually.
- Internal reports from faculty (service learning initiatives), Student Life, and other departments.



Economic Impact Workbook – Part 1



Part II: The How-To's of the process

- ▣ Student spending
 - Discretionary
 - Non-discretionary
- ▣ Visitor Spending
- ▣ Community Service



Estimating Student spending

■ Discretionary

- Marketing faculty data source recommendation-
American Demographics
- IPEDS data on headcounts by
 - Academic standing
 - Degree classification
 - Gender
- Consider percentage of students in- and out- of study area



Estimating Student spending

■ Non-Discretionary

- Data on rental costs
 - Admissions Department
 - US Census Bureau, *American Community Survey*
- IPEDS data on headcounts
- Consider percentage of students living on- and off-campus.
- Consider percentage of students with permanent residences in- and out- of study area.



US Census Bureau (www.census.gov)

▣ People & Households

■ *American Community Survey*

- ▣ Social – education, ancestry, marital status, etc.
- ▣ Economic – income, employment status, occupation, etc.
- ▣ Housing - occupancy, tenure, rents, etc.
- ▣ Demographic – age, sex, race

▣ Business & Industry

▣ Geography



Bureau of Economic Analysis (www.bea.gov)

▣ Regional Economic Accounts

- GDP by state and metropolitan statistical area
- State and local personal income and employment
- Regional Fact Sheets

▣ Industry Economic Accounts

- GDP by Industry
- Satellite accounts
 - ▣ Travel & tourism
 - ▣ Innovation / R&D
 - ▣ Transportation
 - ▣ Healthcare



Visitor Spending Data Sources

▣ Headcount Data

- Internal: Athletics, Student Life, Alumni Relations, etc.
- External: Visitor's Bureau

▣ Financial Data / Spending Data

- Visitor's Bureau and/or Department of Tourism
 - ▣ PA Tourism Office
http://mediaroom.visitpa.com/files/tourismannualreport_2007.pdf
- Bureau of Labor Statistics (www.bls.gov)
 - ▣ Consumer Expenditure Surveys
 - ▣ American Time Use Survey



Value of Volunteer Services

▣ Headcount Data

- Internal: Student Life, Alumni Relations, Service-learning, Career Services/Internship Office
- External: Recipient organizations, Economic or Labor Development Agency

▣ Financial Data

- Bureau of Labor Statistics (www.bls.gov)
 - ▣ American Time Use Survey
 - ▣ Quarterly Census of Employment & Wages provides data on the U.S. as a whole , states, metropolitan areas (MA) and counties, subject to disclosure restrictions.



Economic Impact Workbook – Part 2



Scope & Limitations – revisited

- ▣ Selection of geographic focus
- ▣ Inclusion & Exclusion of economic impact factors
- ▣ Selection of appropriate multiplier(s)



Selection of geographic focus

- ▣ Aggregation choices:
 - City
 - County
 - Metropolitan Statistical Area
 - State
 - Other?
- ▣ What are the natural boundaries of influence/impact for your institution?
- ▣ Is data available for the geographic area of impact?
- ▣ Are there partner institutions that can or should be considered?



Excluded impact factors

□ Employment effects

- Is a labor economist or labor development specialist available to consult/assist with the project?

□ Non-credit course activity

- Could the CE Department assist with this in collaboration with key stakeholders in this area?

□ Faculty research & grants

- Might the NSF have data on the impacts of research investments and funding?



Excluded impact factors- CONTINUED

- ▣ Entrepreneurial activity & Academic-industry-government collaborations
 - Are there economic development agencies, Innovation Zone administrators or other business development organizations who could provide data?
- ▣ Libraries and Learning Resource Centers
- ▣ Others to include or consider?
- ▣ Be sure to explain what has been excluded and why.



Multiplier Selection

- ▣ This may be the most contentious item in the study.
- ▣ A justification of the selection(s) on one or more of the following is recommended:
 - Currency- was it recently used in another study?
 - Geographic Scope
 - Carnegie classification
- ▣ We suggest using a high- and low-estimate approach.



Economic Impact Workbook – Part 3



Concluding Comments & Thanks

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