6-24-1974

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A Measurement of the Economic and Social Impact of Ursinus College

Jan M. Smith
Spring, 1974

Departmental Honors in Economics

May, 1974

(Approval confirmed by
Dean Bozorth - 6/14/74.)
This paper is a discussion of the results I have found upon examining the many factors involved in estimating the impact of Ursinus College upon the boroughs of Collegeville and Trappe. I used as a basis, the model, "Estimating the Impact of a College or University on the Local Economy", by John Caffrey and Herbert H. Isaacs. My discussion follows their model, and attempts to objectively examine the information I gathered in respect to the Ursinus impact on the Collegeville-Trappe area.

Delineating the geographical area to be examined is very important. I approached the problem in this way. The borough of Collegeville is directly affected by the college, for it is within this borough that the college lies. I included Trappe, because many day students and faculty members reside there, and cannot be considered non-locals. I did not choose to use the Perkiomen Valley School District because it encompasses a wide geographical area, most of which would not be affected by the presence of the college as directly.

In considering the impact of Ursinus, it must be realized that the social impact is as important as the economic impact, as the two affect each other. Therefore a discussion must include the social factors.

This discussion considers only the primary economic impact. There is a very important secondary impact, in that
a percentage of the money Ursinus brings to the Collegeville-Trappe community is respent, and in the process a multiplier effect is generated. Also not examined was the relationship between the presence of the college, and the amount of inventory kept by local business. These relationships are difficult to determine, and require much time and extensive field work to gather the data.

Isaac and Caffrey have developed an elaborate model for estimating the impact of a college upon its surroundings. This expanded model includes much of the secondary impacts on business and local governments. (Please see next page.)

The model is comprehensive, and provides for all aspects of the complex interrelationship existing within the 'members' of the model.

I encountered one problem in researching this project. This was the idea of privacy. The school administration was very helpful, and I was able to obtain the information I needed. In regard to the surveys, however, the situation was somewhat different. I sent out five different surveys, and averaged 22.5%, which is approximately the norm for mail surveys. I did run into several instances of people feeling their privacy was being invaded, even though the survey was anonymous, and completely voluntary.

In interpreting the results, I have exercised a re-
FIG. 1  Economic impacts on local businesses, governments, and individuals

Source: "Estimating the Impact of a College or University on the Local Economy", John Caffrey and Herbert H. Isaacs
searcher's prerogative. Often the strict expansion of the results obtained through random sample seemed rather high, and I have indicated so.

I have gained an increased awareness of the effect Ursinus does have. It is a complex relationship that exists between a college and the area in which it lies. Many of the things we take at face value, often have a deeper effect. I have tried to examine the relationship between Collegeville-Trappe and Ursinus thoroughly, and feel I have discovered the major factors. My discussion follows. To make the discussion more easily understood, I have shown my computations in the appendix, rather than in the body of the paper.
I-Economic Factors--Purchasers

Basically, Ursinus contains four major groups as purchasers. These are: 1) the college, as an entity, 2) the faculty and staff, 3) the students, and 4) visitors to the college.

![Diagram of economic factors]

Figure 2: A Simple Expenditure Model

In considering the college as a purchaser, one must take into account the total expenditures, what percentage of that total is spent locally, the gross compensation to employees, and payments made to governments (see appendix A). The amount that the college injects directly into the local economy is $675,346.59 (based on 1972-1973 fiscal year). This figure does not include the catering service for the dining hall, as it is under a separate budget. The budget, although $543,304, has a minor effect on Collegeville-Trappe because only two employees are local, and none of the budget is spent locally.

The second major group of purchasers is the Ursinus
faculty and staff. There are a total of one-hundred ninety-eight faculty and staff, of which eighty-two, or 41.4% are local. I divided them into local and non-local categories, and sent a random sample survey to each category (see appendices B-F). Thirty-eight surveys were sent to local faculty and staff, and I received twelve in return, or 31.5% response. Twenty people were listed as being in the work force, earning $164,420 after taxes. An aggregate total of the respondents' estimates showed that approximately 11.3% of that income is spent in Collegeville-Trappe for food and beverage, and 6.1% for all other purchases.

I sent another random sample survey to fifty of the one-hundred sixteen non-local faculty and staff, and received fifteen in return, or 30% response. On the average, each person spends $21.81 per month for food and beverage in Collegeville-Trappe, and $16.38 for all other expenditures. In the aggregate, this means that $2,529.96 is spent monthly in Collegeville-Trappe for food and beverage, and $1,900.08 for all other purchases.

The third major group of purchasers is the Ursinus Student. The students can be subdivided into four groups: 1) resident students, 2) local day students, 3) non-local day students, and 4) student organizations, (which I shall discuss in the section on the money supply). Information as to
student organization expenditures was not readily obtainable.)

I sent eighty surveys to a random sample of the eight-hundred ninety-one resident students. I received sixteen in return, or a 20\% response. On the average, resident students spend $13.50 per month in Collegeville-Trappe for food and beverage, and $7.25 for all other purchases. In the aggregate, this means $12,028.50 is spent for food and beverage per month, and $6,459.75 for all other purchases per month by resident students.

The next subdivision is the local day students. I sent surveys to eleven of the twenty-two local day students, and received two in return, or a 18.1\% response. On the average, they spend $50.00 per month in Collegeville-Trappe for food and beverage, and $50.00 per month for all other purchases. In the aggregate, this means that local day students spend $1,100.00 per month for food and beverage, and $1,100.00 per month for all other purchases in Collegeville-Trappe.

Non-local day students are the next subdivision. I sent surveys to thirty-four of the two-hundred nine non-local day students and received three, or an 8.8\% response. (I believe the low response for day students is due to the fact that since they spend less time on campus, they feel less ties to the school, and therefore apathy toward student projects as a whole.) On the average, non-local day students
spend $9.00 per month for food and beverage in Collegeville-Trappe, and $6.00 per month for all other purchases. In the aggregate, this means non-local day students spend $1,881.00 per month for food and beverage in Collegeville-Trappe, and $1,254.00 for all other purchases.

The fourth major group of purchasers is visitors to the college. The visitors fall into several categories: 1) those coming for admissions interviews, 2) those attending major Ursinus events, 3) those attending cultural events, i.e., forums, concerts, 4) those attending athletic events, 5) those visiting students, 6) those making use of the school facilities, and 7) those attending catered affairs at Wismer (Appendix G).

Although it is difficult to measure economically the effect of these visitors, it is very important that they be discussed. Basically, the purchaser effects on Collegeville-Trappe that the visitors would have would be upon gas stations, eating establishments, and refreshment places (such as the Pen and Ink).

Approximately five thousand one-hundred fifty-seven people come to Collegeville-Trappe each year because of admissions. Seven thousand five-hundred people attend major Ursinus events. No figure could be obtained on those attending cultural events. Major sports events attract ten thousand three-hundred forty people each year, plus an unmeasured attendance at the other sports events: soccer, cross-country,
wrestling, girl's basketball, hockey, baseball, track, tennis, lacrosse, softball, and gymnastics. Caffrey and Isaacs estimate that at any given school, each student receives 1.5 visitors per year.\textsuperscript{1} Therefore, applying this figure to Ursinus, the aggregate total is one thousand five-hundred fifty-nine visitors to students per year. Information that was also unmeasured was the number of persons using the school facilities. The list, however, would include the pool, hockey camps, the 76'ers' camp, use by the local high school of the athletic facilities, and for their commencement, high school cross-country, and use in the summer, as by the visiting Japanese last summer. Approximately seven thousand people attend catered affairs at Wismer, but the effect of these visitors is minimal. They take their meal at Wismer (which affects the dining hall only), and usually return home again immediately. Gas purchases would be minimal, for when traveling, most people gas up when they leave. The aggregate total then, of visitors to Collegeville-Trappe because of Ursinus is somewhat more than thirty-one thousand six-hundred ninety-four people each year.
II-Economic Factors--Effect on Supply of Money

Basically, the money Ursinus causes to be placed in the banks in Collegeville-Trappe gives the banks a larger credit base with which to work. Combining time and demand deposits, and taking the average of the reserve requirement, Ursinus causes the credit base to expand by $2,841,704.60. (See appendix H) This allows the banks to make more mortgages and loans, thereby improving the economic flow of money in Collegeville-Trappe. Taking the results obtained from the surveys, and multiplying by the number from which the random sample was taken, Ursinus causes an additional $749,287 (see appendix I) to be deposited directly into the banks, from which most students base their expenditures--therefore, the higher the amount in the bank, the higher the local expenditures. Realistically speaking, however, I feel this estimate is too high. Ursinus has many students from the surrounding Pennsylvania-New Jersey area, and I feel that they would tend to keep their savings in their home banks, thereby lowering the estimate of the amount of money deposited into the Collegeville-Trappe banks.
III-Economic Factors--Local Government

Ursinus College has a tax-exempt status, and as such, is not required to pay taxes. It does, however, voluntarily pay $7,262.00 in taxes.

Of the faculty and staff, approximately one-third rent housing (according to the figures obtained in the surveys). Therefore, they do not directly pay borough taxes. It should be realized, however, that part of their rent (running from $135.00–$275.00 per month) is used by the landlord to pay the taxes. The faculty and staff who own their homes (approximately fifty-five) pay upwards of $3300.00 in borough taxes (see appendix J).

The children of the faculty and staff attend public school in Collegeville-Trappe, thereby placing additional costs upon the boroughs. This, however, is somewhat offset by the amount of state aid that is allocated to the boroughs because of the presence of these children. Approximately $6,600.00 is allocated by the state to the boroughs because of these faculty and staff children (see appendix K). I did not find any married students' children attending public school in Collegeville-Trappe. These faculty and staff children cost the boroughs approximately $17,088.00 per year, as reflected by the operating cost of the schools, leaving the
boroughs to make up the remaining $10,488.00. (See appendix L)

Finally, the college has its own Maintenance Department, which relieves some of the burden which would be placed on the boroughs, were the college not here, i.e. road maintenance and sanitation for the over one hundred acres. The college employs a security force to patrol the grounds, rather than using the boroughs' police, and this then does not become a cost burden to the boroughs.
There are many factors affecting the boroughs of Collegeville and Trappe that are unmeasurable, and many of them are social. The college does much more than occupy land in the community. It provides many services to Collegeville and Trappe. The Evening School offers educational opportunities including the Bachelors of Business Administration, and Associates' Degrees. The library's services are open to the community, and although small, contains many volumes and is constantly expanding. The actual physical plant of the college, along with being attractive, provides many opportunities for use by the community. In one borough report, it was pointed out that, "...college facilities, while accessible to borough residents, are under-utilized by them." Ursinus students often act as tutors at the High School for students having problems. The Collegeville Fire Company has now, and has had for several years, Ursinus students (the Bear Squad) as members—on a purely volunteer basis.

The fact that Collegeville-Trappe has a college located within its bounds has certain advantages. Ursinus lends an air of prestige to the area; even more so now that an Ursinus graduate has won a Nobel prize. The college draws faculty to live here, which means that a higher incidence of professional
people live in the boroughs of Collegeville and Trappe, 
"The collegiate atmosphere of Collegeville and the availability of new high cost housing draws the older and professional labor force to the borough."³ The borough of Collegeville is aware of the advantages Ursinus can offer, and feels, "The borough should take advantage of the presence of Ursinus College by working closely with the administration to the mutual benefit of the students, faculty, and staff, and by sharing facilities, to provide an academic and cultural atmosphere which would make the borough an educational and cultural center in the Perkiomen Valley."⁴ Yet in the same borough report it is pointed out that, "Ursinus College has remained too separated from the borough. The divisions between the townspeople, students and faculty have resulted in all three being poorer for such lack of contact."⁵ I feel it would be extremely beneficial to establish a committee of townspeople, administration, and students, to examine the social relationship between Ursinus and Collegeville-Trappe, and to make recommendations as how to improve that relationship. This is one example of economic waste—the misuse of potential—that could easily be corrected.
V-Summary

To summarize the economic impact, then, the college expends in a year's time, $675,346.59 directly into the Collegeville-Trappe economy. Non-local faculty and staff spend $4,430.04 per month in Collegeville-Trappe, or during a school year, $39,870.36. The resident students spend $18,488.25 per month, or $166,394.75 during the school year. Non-local day students expend $3,135.00 per month, or $28,215.00 during the school year. Local day students expend $100.00 per month, or $900.00 per school year. It can be estimated, then, that over a year's duration, Ursinus causes $910,726.70 to be injected directly into the economies of Collegeville and Trappe.

I have concluded, after researching this project, that Ursinus does have a positive impact on Collegeville-Trappe. Although the college does remove over one hundred acres of land from the tax list, Ursinus does voluntarily pay a comparable amount of taxes. The money spent by the four purchaser groups aids local business. The facilities of the college add a new dimension to the attractiveness of the Collegeville-Trappe area. The campus itself is extremely attractive, and the acres of green lawn preserve a somewhat rural look in the midst of "creeping suburbanism". There exists a great
opportunity, however, for increasing that positive impact. The expenses of a small college have grown so that it can no longer separate itself from the world surrounding it. Although the small college remains a bastion of intellectualism, the times have passed when the college could completely isolate itself, and rightly so. So much can be gained by the increasing interaction of the college and its surroundings—for all parties involved. Ursinus College must take some of the blame for the heretofore small interaction between itself and Collegeville-Trappe, but realization of that is the first step toward correction. Much can be gained by increasing the interaction with the members of the Collegeville-Trappe community—both economically, and socially.
Appendix A

Local Expenditures by the College:

Total college expenditures $4,387,577.34

Minus gross compensation to:
  - Faculty $1,038,531.00
  - Staff $512,291.00
  - Students $128,107.00

Minus taxes and other payments to govt, in lieu of taxes $7,262.00

= $2,701,386.34

Multiplied by the one-quarter that is spent locally $675,346.59

Total: Local expenditures by the college: $675,346.59
Appendix B
Sample Survey to Local Faculty and Staff:

In what type of housing do you reside?  Rent_________  Own Home_________

_______Number of children attending public school locally.
_______Number of household in work force.
_______Total income of household after payroll deductions.
_______Your estimate of the percentage of the above income spent for food in Collegeville-Trappe area business establishments.
_______Your estimate of the percentage of the above income spent for all other items in the Collegeville-Trappe area business establishments.
_______Average balances in checking and savings accounts in local banks and savings institutions.

Results:
Four rent.
Eight own their house.
Twelve children.
Total income-$164,420.
Estimate for food and beverage-11.3%.
Estimate for all other-6.2%.
Average balance-$6,250.
Appendix C

Sample Survey to Non-local Faculty and Staff:

_____ What is your approximate monthly expenditure for food and beverage in business establishments in the Collegeville-Trappe area?

_____ What is your approximate monthly expenditure for all other purchases made in Collegeville-Trappe area business establishments?

_____ What are your average balances in checking and savings accounts in the local banks and savings institutions?

Results:

Monthly expenditure for food-$21.81.
Monthly expenditure for all other-$16.38.
Average balance-$223.00.
Appendix D

Sample Survey to Resident Students:

_____ Male

_____ Female

_____ What is your approximate monthly expenditure for food and beverage in business establishments in the Collegeville-Trappe?

_____ What is your monthly expenditure for all other purchases made in Collegeville-Trappe business establishments?

_____ What are your average balances in checking and savings accounts in local banks and savings institutions?

Results:

Five male.
Eleven female.
Monthly expenditure for food-$13.50.
Monthly expenditure for all other-$7.25.
Average balance-$135.00.
Appendix E
Sample Survey to Local Day Students:

_____ Married
_____ Single

In what type of housing do you reside?
_____ Rent
_____ Own Home
_____ Parents' Home

_____ What is your approximate monthly expenditure for food
and beverage in business establishments in the
Collegeville-Trapp area?

_____ What is your approximate monthly expenditure for all
other purchases made in Collegeville-Trappe
establishments?

_____ What are your average balances in checking and savings
accounts in the local banks and savings institutions?

Results:

No married.
Two single.
Two reside with parents.
Monthly expenditure for food-$50.00.
Monthly expenditure for all other-$50.00.
Average balance-$220.00.
Appendix F
Sample Survey to Non-local Day Students:

_____ Male
_____ Female

What is your approximate monthly expenditure for food and beverage in business establishments in the Collegeville-Trappe area?

What is your approximate monthly expenditure for all other purchases made in Collegeville-Trappe establishments?

What are your average balances in checking and savings accounts in the local banks and savings institutions?

Results:
Two male.
One female.
Monthly expenditure for food-$9.00.
Monthly expenditure for all other-$6.00.
Average balance-$66.00.
Appendix G

Visitors to the College:

1) Admissions interviews 1719 per party \( \times 3 \) 5,157

2) Major Ursinus Events
- Parents' Day (Fall) 700
- Parents' Day (Spring) 700
- Messiah 600
- Homecoming 3500
- Alumni Day 500
- Commencement 1500

Total 7,500

3) Cultural Events - no figure obtainable

4) Athletic Events
- Football 2000
- Basketball 750
- Pool activities 7590

Total 10,340

5) Visitors to Students
- Students 1039
- Average number of visitors \( \times 1.5 \) 1,559

6) Users of school facilities - no figure obtainable

7) Catered Affairs at Wismer 7138

Total number of visitors: 31,694
Appendix H

Credit Base Expansion:

Time deposit of the college $1,964,000
Demand deposit of the college + 175,693

Average bank deposit of faculty and staff ($3,236.50) multiplied by the number of faculty and staff (198) $640,827

Average bank deposit of students ($188) multiplied by the number of students (1121) $210,748

Total deposits multiplied by the averaged reserve requirement (subtracted from one) $2,991,268 x .95

Credit Base Expansion: $2,841,704.60
### Appendix I

**Deposits Caused by Ursinus to be Placed in Local Banks:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Factor</th>
<th>Number</th>
<th>Formula</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average deposit of non-local day students multiplied by number of non-local day students</td>
<td>66</td>
<td>209</td>
<td>( 66 \times 209 )</td>
<td>13,794</td>
</tr>
<tr>
<td>Average deposit of local day students multiplied by number of local day students</td>
<td>220</td>
<td>22</td>
<td>( 220 \times 22 )</td>
<td>4,840</td>
</tr>
<tr>
<td>Average deposit of resident students multiplied by number of resident students</td>
<td>135</td>
<td>891</td>
<td>( 135 \times 891 )</td>
<td>120,285</td>
</tr>
<tr>
<td>Average deposit of non-local faculty and staff multiplied by number of non-local faculty and staff</td>
<td>223</td>
<td>116</td>
<td>( 223 \times 116 )</td>
<td>76,868</td>
</tr>
<tr>
<td>Average deposit of local faculty and staff multiplied by number of local faculty and staff</td>
<td>6250</td>
<td>82</td>
<td>( 6250 \times 82 )</td>
<td>512,500</td>
</tr>
</tbody>
</table>

**Student Organizations allocations from college** | 21,000 | 21,000

**Total deposits:** $749,287
Appendix J

An Estimate of Taxes Paid by Local Faculty and Staff:

Number of residences in Collegeville-Trappe: 1081

Number of local faculty and staff: 82
  Minus one-third renters: $\frac{82}{3} = 27$
  $\frac{55}{1081} = .05$

Total taxes paid in Collegeville-Trappe multiplied by proportion: $67,789 \times .05$

Taxes paid by local faculty and staff: $3,389.45$
Appendix K

State Aid Allocated to the Boroughs Because of the Presence of Children of College-related Families:

Total state aid to local public schools $1,797,761

Number of faculty and staff children attending local public schools 12

Total number of children attending local public schools 3168

Proportion multiplied by state aid

$1,797,761 \times \frac{12}{3168} = 6,651.72$

Total state aid allocated: $6,651.72$
Appendix L

Operating Costs of Local Public Schools Allocable to Children of College-related Persons:

Number of faculty and staff attending local public schools 12

Total number of children attending 3168

Local government budget for the public school $4,618,500

Proportion multiplied by operating costs $17,088.45

Operating cost allocable: $17,088.45
### Figure vi-1

**ACREAGE AND PERCENTAGE OF EXISTING LAND USE IN COLLEGEVILLE**

**AUGUST 1970**

<table>
<thead>
<tr>
<th>USE</th>
<th>ACRES Sub-total</th>
<th>Total</th>
<th>PERCENT OF TOTAL BOROUGH Sub-total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-urban land and farmland (including derelict or incomplete buildings)</td>
<td>456</td>
<td></td>
<td></td>
<td>43.5</td>
</tr>
<tr>
<td>Residential (excluding dormitories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-family residential</td>
<td>232</td>
<td>255*</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>Two and multi-family</td>
<td>11</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential-commercial</td>
<td>12</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streets, railroads and utilities</td>
<td>188</td>
<td></td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>Institutions; colleges (including dormitories)</td>
<td>118</td>
<td></td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive</td>
<td>8</td>
<td>15*</td>
<td>0.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Retail shop, financial</td>
<td>7</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>14</td>
<td></td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>3</td>
<td></td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,049</strong></td>
<td></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Commercial–residential (commercial properties with dwellings) are included as part of residential acreages.

**Source:** Montgomery County Planning Commission, Field Survey, August 1970.
FOOTNOTES


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Mr. Robert Cope, Superintendent of Schools, Schwenksville
Mr. Randy Davidson, Director of Aquatics, Ursinus College
Mr. Scott Dempsey, Manager, Wismer Hall, Ursinus College
Gottshall Realty, Collegeville
Miss Pat Kinzer, Secretary, Athletic Office, Ursinus College
Mr. Richard Richter, Vice-President of Ursinus College