



# The Local Economic Impact of INDIANA UNIVERSITY SOUTH BEND

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INDIANA UNIVERSITY  
SOUTH BEND

December 1998

OFFICE OF THE  
CHANCELLOR



Dear Fellow Citizens of Michiana:

Recently at a Project Future Board meeting, Mr. Jerry Christensen, Vice President and General Manager of Bowne South Bend Inc. stated that one of the primary reasons his company determined to move to our region was the significant presence of institutions of higher learning. Michiana is, in fact, extremely fortunate to have a large number of outstanding colleges and universities such as IUSB located here. These institutions not only provide firms like Bowne South Bend Inc. with a well-educated workforce but also add much to the quality of life for all of us.

Although the importance of IUSB and our sister institutions is given in terms of the contributions we make to the overall health of our community, less clear is the economic impact of IUSB on the region. As a result of this lack of understanding, I asked Professor Emeritus John Peck and Professor Paul Joray to complete an economic impact study for us. They generously agreed to complete this important study. I want to thank them both, once again, for going that extra mile for IUSB.

The study conservatively presents the significant economic impact our campus has on our community. I know you will be impressed by this highly readable and informative report. As IUSB continues to grow, the impact upon our region both educationally and economically will increase. Your continued support for this people's university will assure that our community continues to prosper.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth L. Perrin".

Kenneth L. Perrin  
Chancellor

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Assessing the Local Economic Impact of  
**INDIANA UNIVERSITY SOUTH BEND**

## Executive Summary

The provision of post-secondary education in the South Bend/Elkhart area economy is a major enterprise, far eclipsing the scope found in most communities of comparable size. With nine institutions of higher education and a variety of technical colleges that serve some 25,000 students and employ in excess of 7,000 persons, that sector of the economy ranks as one of the most significant local service-producing industries.

In recent decades, Indiana University South Bend (IUSB) has come to be a principal contributor in providing post-secondary education locally. The Bloomington campus offered extension classes in South Bend as early as 1916, however, the local campus did not evolve into a degree granting institution with its own facilities until the 1960s. Just prior to that major turning point in IUSB's history, credit enrollment was fewer than 1,500 and the full-time faculty numbered less than twenty.

By the mid-1970s, those numbers had soared to 5,000 and 140, respectively.

Today the University serves more than 7,100 students, has in excess of 20,000 alumni, employs 260 full-time faculty, and offers nearly a hundred certificate, associate, baccalaureate, and master degree programs, and some 800 continuing education non-credit courses.

Given a combination of IUSB's growth in recent years and a shift in the structure of the St. Joseph County economy from predominantly large manufacturers to more diversified service producing industries, the University with some 1,400 employees is now the county's seventh largest employer. It would seem predictable that the "industry" as a whole and IUSB as one of the major contributors would have a significant impact upon the area's economy.

A non-residential university makes its economic impact felt upon the local community in at least three important ways. The most significant

of these is *its impact upon the area's labor force*. Universities increase the levels of knowledge and skills of students attending the institutions, and especially of those graduating. This effect is particularly important in this instance, since 62 percent of IUSB graduates continue to reside in the local area; however, the impact is virtually impossible to measure since the information needed to make a calculation is not available.

A second important economic impact is associated with *the university's role as a major local employer*. During the 1997-98 academic year IUSB employed nearly 1,400 full- and part-time workers and recorded gross receipts of more than \$38 million.

The third impact, *the economic development impact*, which is the focus of this study, requires closer examination. The methodology employed in the study is an application of the Export Base Model that is often used in economic impact analysis. The following is a brief description of the rationale upon which the model is built.

To the extent that a university attracts a significant flow of income from outside the immediate area (in this case, from outside St. Joseph and Elkhart Counties), it becomes an important contributor to the creation of new income and jobs in the community. This "export income" is the driving force of an area economy, since export dollars are funneled back into the area economy principally through payroll expenditures and local purchases of supplies and services, thereby contributing to the economic development of the area. The Export Base Model provides measures of the diverse elements of this income flow.

The purpose of this report, then, is to provide, in part, an estimate of IUSB's economic development impact.

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## Executive Summary

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### Findings

As is summarized in the table on page 8, the economic impact of Indiana University South Bend was shown to include, in part, elements of the University's ongoing contribution to the economic development of the community through:

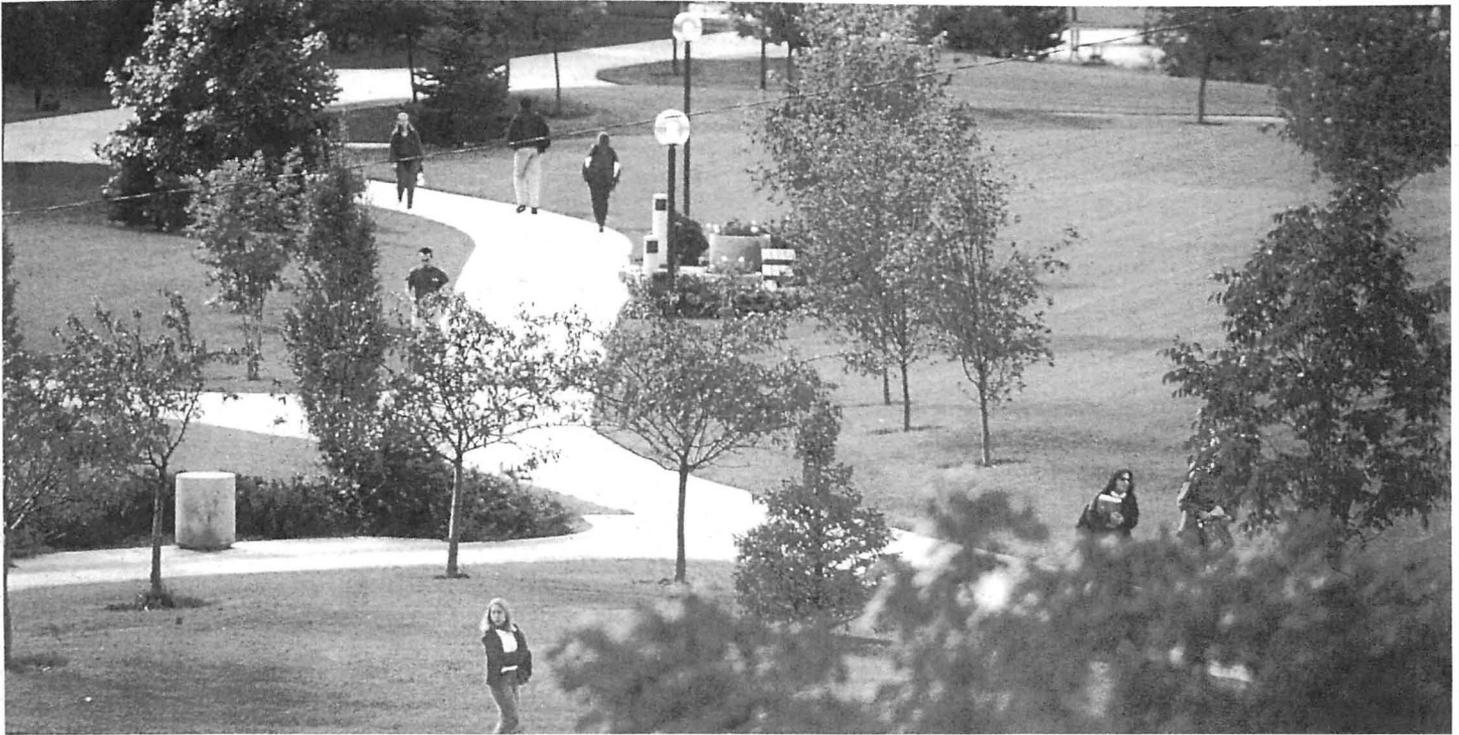
- the flow of outside revenues from the State of Indiana appropriation, non-resident student tuition and fees, and miscellaneous other sources;
- foreign student living expenses; and,
- the capturing of funds that resident students would have spent outside the area if IUSB's services were not available locally.

In addition, the periodic one-time impact of construction activity associated with the renovation and growth of University facilities — in this case, the yearly impact of building Wiekamp Hall — was included. Overall, the study shows that during the 1997-98 academic year IUSB produced \$50,909,452 in new income and 1,478 new jobs in the local area — dollars and jobs that would not otherwise exist locally in the absence of Indiana University South Bend.

### Conclusion

The findings of this study are impressive. For the most part, the income of a community is created by the manufacturing of goods that are shipped outside the area. As a rule, only a small proportion of service producing activity is exported and, therefore, is capable of providing the impetus for economic development. For example, many retailing activities provide little if any economic development impact. It was found here, however, that Indiana University South Bend, a prominent provider of educational services locally, is an exception to that rule. Of the University's \$38.5 million gross revenues in the 1997-98 academic year, more than 66 percent of these dollars came in the form of export income. That performance, from the standpoint of supporting local economic development, is comparable to that of most manufacturers of similar size.

Underlying trends also suggest that both the educational services industry overall and Indiana University South Bend are growing economic forces in the area. This trend certainly suggests that the economic development impact of IUSB should continue to play an increasing role in the overall economic well-being of the area.



*The presence of a regional publicly funded university makes a substantial contribution to the local economy.*

## Assessing the Local Economic Impact of INDIANA UNIVERSITY SOUTH BEND

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however, the local campus did not evolve into a degree granting institution with its own facilities until the 1960s. Just prior to that major turning point in IUSB's history, credit enrollment was fewer than 1,500 and the full-time faculty numbered less than twenty. By the mid-1970s, those numbers had soared to 5,000 and 140, respectively. Today the University serves more than 7,100 students, has in excess of 20,000 alumni, employs 260 full-time faculty, and offers nearly a hundred certificate, associate, baccalaureate, and master degree programs, and some 800 continuing education non-credit courses.

Given a combination of IUSB's growth in recent years and a shift in the structure of the St. Joseph County economy from predominantly large manufacturers to more diversified service producing industries, the University with some 1,400 employees is now the county's seventh largest employer. It would seem predictable that the "industry" as a whole and IUSB as one of the major contributors would have a significant impact upon the area's economy. It is the purpose of this report to provide, in part, an estimate of IUSB's contribution.

# Methodology

A non-residential university makes its economic impact felt upon the local community in at least three important ways. The major impact on the regional economy is *its impact upon the area's labor force*. Universities increase the levels of knowledge and skills of students attending the institutions, and especially of those graduating. As was found in a 1992 Federal Reserve study, "The Recent Rise in the Value of Education: Market Forces at Work," the impact on labor becomes a major component affecting the well-being of the region's economy. The area's ability to compete with other regions for establishing businesses will depend, in large part, on the way in which its quality of education affects the area labor force. While this impact is important, it is virtually impossible to measure since the information needed to make a calculation is not available.

A second important economic impact is associated with the university's role *as a major local employer*. During the 1997-98 academic year IUSB employed nearly 1,400 full and part-time workers and recorded gross receipts of more than \$38 million.

The third impact, *the economic development impact*, which is the focus of this study, requires closer examination. The methodology employed is an application of the Export Base Model that is often used in economic impact analysis. The following is a brief description of the rationale upon which the model is built.

To the extent that a university attracts a significant flow of income from outside the immediate area (in this case, from outside St. Joseph and Elkhart Counties), it becomes an important contributor to the creation

of new income and jobs in the community. This "export income" is the driving force of an area economy, since export dollars are funneled back into the area economy principally through payroll expenditures and local purchases of supplies and services, thereby contributing to the economic development of the area.

At the same time, two other important phenomena complement and enhance this economic development impact:

## IMPORT SUBSTITUTION — CAPTURING DOLLARS PREVIOUSLY SPENT OUTSIDE THE COMMUNITY

Early in a community's existence, in the absence of broad-based service and goods-producing sectors, much of the export income earned leaves the community for purchases of goods "imported" from outside the local area, which creates little additional area income. As the community prospers and grows, however, firms supplying goods and services find it profitable to locate and produce locally. This "import substitution" has the effect of capturing income that previously had "leaked out" of the area, and motivates continued economic development.

As development continues, resident institutions like Indiana University South Bend serve larger and larger populations. In IUSB's case, it eventually became economically feasible for the institution to offer four-year degrees and increasingly specialized services, such as graduate programs previously available to area residents only by commuting to other established areas. By having these services available locally, residents not only have ready access to the education they need, but the resulting import substitution also works to prevent the leakage of area dollars to

other communities.

## THE MULTIPLIER EFFECT

As the community acquires income through increased export activities and import substitution, a complementary "multiplier effect" takes place, that is the newly acquired dollars are now income for local producers who in turn spend a portion of their dollars locally in a second round of spending. Those expenditures generate still more income for other producers through successive additional rounds of spending. In this study of IUSB's economic impact, we found that each additional dollar of export income earned by IUSB expanded, through the multiplier effect, to a total of \$1.29. In addition, each job created by those dollars expanded to a total of 1.36 jobs by the time the multiplier effect ran its course.

The Export Base Model provides a means of measuring all of these elements of the economic development impact. Data from the 1997-98 academic year are the basis for impact estimates provided by the model in the first section of the report. In following sections, the one-time economic impact that is derived from the University's construction activity, and certain less tangible impacts related to the University's activities are addressed.

Traditionally, area exports were associated with the shipment of manufactured goods to outlying areas. In recent years, however, the nation has witnessed the emergence of services as the major source of metropolitan growth after a century in which manufacturing was dominant. On the other hand, not all services generate economic growth. In fact, few services give rise to exports due to two basic economic considerations — access and cost. Understandably, consumers dislike spending time and money traveling long distances to make

purchases. They prefer to have services as accessible as possible. In addition, most service activities do not enjoy substantial economies of scale and consequently do not benefit from large scale operation. As a result, even relatively small communities have plumbers, electricians, accountants, general medical practitioners, and the like. Such services, while perhaps substituting for imports from other communities, rarely bring a community export income since they are available nearly everywhere.

On the other hand, as will be shown in paragraphs to follow, a select group of services that include higher education, act as a significant source of export income and employment to their communities and, therefore, are important contributors to local economic development.

Direct Exports - University Revenues. Total Indiana University South Bend revenues in the 1997-98 academic year amounted to \$38,464,452. Of that amount, we estimate that \$25,485,564 was export income — income that flowed from outside into the St. Joseph and Elkhart County area — a figure representing some 66.3 percent of total receipts. These export revenues arose from a variety of sources. The largest source by far, amounting to \$21,725,212, consisted of the public appropriation that is provided an institution of higher education operated by the State of Indiana. Even though a portion of these funds were the result of state taxes that were levied in St. Joseph and Elkhart Counties, the total amount of the appropriation is considered to be export income since it can be assumed that in the absence of Indiana University's presence in South Bend/Elkhart, the taxes would still have been levied in order to support campuses in other communities.

Export revenues also flowed from student tuition and fees for the 7



*Indiana University South Bend's international students contribute \$1.2 million to the economy annually.*

## Findings

percent of students that reside outside the two counties and from 207 foreign students who reside in St. Joseph County while attending the University. And, one-quarter of remaining revenues (sales and services, transfers, foundation, etc.) make up the final category of export revenue.

### LEAKAGES

While IUSB produced \$25,485,564 of export revenues in the 1997-98 academic year, not all of these dollars remained in St. Joseph and Elkhart Counties and, therefore, not all contributed to the local income stream. Payment of employee fringe benefits were lost to the area, and some University employees reside outside of St. Joseph County. Salary expenditures associated with these employees who reside outside the area flow to outlying counties. In addition, some expenditures on supplies, equipment, and services went to vendors in other cities either by direct payments or indirectly through purchases made by local suppliers.

Estimates of such "leakages" made

in this study indicate that fringe benefits account for about 25 percent of salary and benefit expenditures, and some 7 percent of IUSB's employees reside outside the St. Joseph and Elkhart County area. These account, in total, to a leakage from the payroll category of \$771,032 in export income. In addition, it was estimated that about 84 percent of the dollars associated with supplies and services purchased from vendors located in the two-county area ultimately leak to sources outside the community. This leakage amounted to \$4,748,005 of export income. Taking leakages into account, then, a net total of \$13,708,347 in export income remained in St. Joseph and Elkhart Counties before multiplier effects were considered.

### DIRECT EXPORTS - INTERNATIONAL STUDENT LIVING EXPENSES

Since funds associated with covering most of the living expenses of IUSB's 207 foreign students originate from outside St. Joseph and Elkhart Counties, and in large part from

# Findings

foreign countries, they are categorized as export income and, therefore, contribute to the economic development impact of the University. It is reported in Indiana University's "Foreign Students — 1997-98 Annual Enrollment Survey" that, on average, yearly living expenses of \$5,996 were experienced by each resident foreign student. For IUSB, then, these expenses amounted to a total flow of \$1,241,172 of direct export income into the local economy.

## IMPORT SUBSTITUTION

As indicated in the earlier description of import substitution, the presence of Indiana University South Bend in St. Joseph and Elkhart Counties over the years has permitted virtually thousands of area residents, who would have otherwise matriculated to distant campuses, to acquire the educations they sought without having to leave their own community. From an economic development standpoint, this import substitution has retained a large volume of dollars locally that would have flowed to other communities. In order to estimate the effect of import substitution in the 1997-98 academic year, we have made three assumptions that we feel are conservative, to the extent that error in the calculation would underestimate the University's economic impact:

- 37 percent of the University's local students would have left the community for their educations in the absence of IUSB's presence;
- tuition and fee expenses of those students being educated in other communities would be the same as if they had attended IUSB; and,
- the living expenses of those students would be the same, \$5,996 per year, as were estimated

for the University's resident foreign students.

Given these assumptions, \$5,036,756 of retained tuition and fees, and \$13,829,188 that would have left the community for living expenses — a total of \$18,865,944 — is added to the direct economic development impact of IUSB.

## MULTIPLIER EFFECTS

This combination of exports and import replacement made a direct economic development contribution of \$33,815,463 to the St. Joseph and Elkhart Counties income stream in the 1997-98 academic year. As described previously, the multiplier effect magnifies the local impact of that income and of resulting job creation.

Estimates of employment and income multipliers vary from place to place, where the size of the community, the value added per employee in the export sector, and the type of industry are important determinants. Places with large populations tend to have higher multipliers because larger areas can support a more diverse local economy. Even for communities of the same size, the multiplier will vary due to the fact that export activities differ in the amount of value added per employee (i.e., the amount of income created per employee). Multipliers are above average in places with above average levels of value added in export activity, and vice versa. As a result, manufacturing multipliers tend to exceed multipliers in service industries. These factors suggest that the relatively small size of the St. Joseph and Elkhart County communities, combined with the lower value added per employee in education, and the fact that 84

percent of IUSB expenditures for supplies and purchased services leak out of the local area will tend to reduce the size of the applicable income and employment multipliers.

Minnesota IMPLAN Group, Inc. of Stillwater, Minn. was employed to calculate income and employment multipliers, 1.29 and 1.36 respectively, that are applicable to the "state government - education" sector in the IUSB area. An income multiplier of 1.29 suggests that for each dollar of direct income generated by the University, an additional \$0.29 of indirect income will be produced by the multiplier effect. An employment multiplier of 1.36 suggests that for each job created directly by the University, an additional .36 jobs are created indirectly through the multiplier effect.

After applying the 1.29 income multiplier, the \$33,815,463 of export revenues and import substitution added a total of \$43,621,946 to the area's income stream in the 1997-98 academic year. Further, this infusion of income created a total of 1,397 new jobs in the community, 370 of which were the result of the employment multiplier effect. It is important to note that these increases in area income and employment represent dollars and jobs that would not otherwise exist locally in the absence of Indiana University South Bend.

## CONSTRUCTION IMPACT

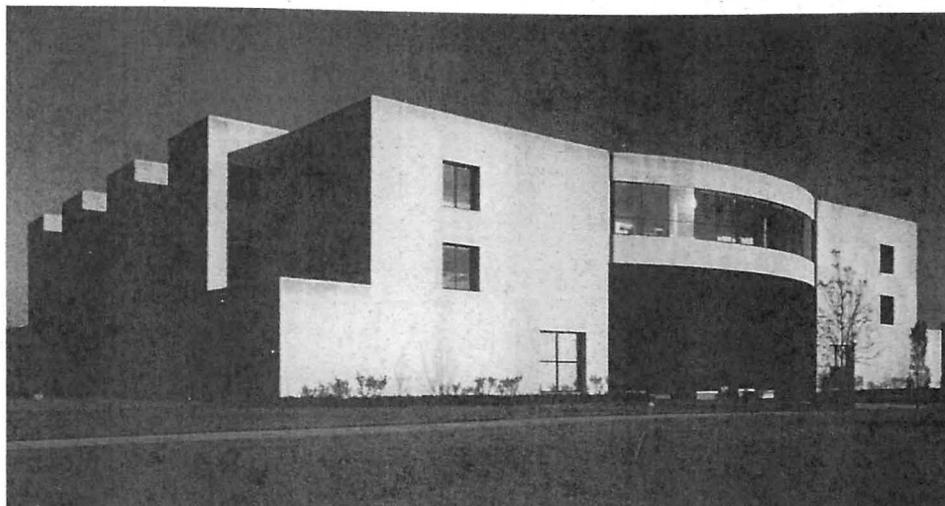
When assessing the overall economic impact made by Indiana University South Bend, one should not overlook the contribution made to that impact by periodic construction and renovation projects that enhance the University's ability to serve the community more effectively. Given the extraordinary growth of the University in recent decades, such projects have

been an on-going part of the campus' presence in the community. To illustrate the one-time economic impact of IUSB's construction activity, an analysis of the new Wiekamp Hall facility was made. The new facility was constructed over a two year period at a total cost of \$17,973,867. Given a construction industry income multiplier of 1.59, which is somewhat larger than that cited for education, the \$8,986,934 yearly local expenditure associated with the project created a new income stream of \$7,287,506 in the region after accounting for leakages. These local dollars also provided income to create 81 additional jobs in construction and the broader economy after applying a 2.18 construction industry employment multiplier.

### *Summary*

The economic impact of Indiana University South Bend has been shown in this report to include, in part, elements of both the University's ongoing contribution to the economic development of the community and the periodic one-time impact of construction activity associated with renovation and growth of University facilities. The accompanying table on page 8 summarizes the findings that were reported in preceding paragraphs, and indicates that *during the 1997-98 academic year IUSB produced \$50,909,452 in new income and 1,478 new jobs in the local area.*

The creation of new income and jobs reported in these pages is very impressive and certainly exceeds the economic impact of the vast majority of businesses or governmental entities found in the two-county area. On the other hand, as will be noted in the next section of the report, this study has not included all of the University's activities that have positive economic implications for the well-being of the local area.



*Dorothy and Darwin Wiekamp Hall*

## Summary & Other Impacts

### *Other Impacts*

Numerous populations, both external to the University and those from within, would need to be surveyed in order to quantify many additional sources of IUSB's economic impact, several of which would undoubtedly be very significant. Such surveying would be quite extensive, and a decision was made to let the study stand on the results reported thus far, recognizing that further research could be pursued that would enhance these results. On the other hand, we would want the reader to be at least cognizant of other ways in which the University enhances the area economy. The following is a partial listing of additional impacts not quantified in this report:

- the augmentation of students' productivity in the area labor force;
- community service of University employees and students through volunteerism, serving on boards, etc.;

- the education of literally thousands of individuals who because of their circumstances could not have received a college education;
- faculty and staff consulting activities;
- expansion of area banks' credit bases;
- visitor spending of faculty candidates, book salespersons, recruiters, conference attendees, etc.;
- the impact of state and federal tax payments;
- the value of IUSB generated studies, publications, research, economic briefings, etc.; and,
- voluntary charity on the part of employees and students such as United Way (\$28,000 in 1997), the Center for the Homeless, walks/runs for charitable causes, etc.

*“...the economic development impact of IUSB should continue to play an increasing role in the overall economic well-being of the area.”*

## Conclusion

The process of local economic development depends in large part upon those activities in the community that lead to the creation of export income, that is, income flowing from outlying areas. In turn, export income leads to the creation of additional income and jobs through a multiplier effect and through the local substitution of goods and services that were previously imported, both of which create still additional income and jobs in the local economy.

Most export income in the community is created by the manufacturing of goods that are shipped outside the area. As a rule, only a small proportion of service-producing activity is exported and, therefore, is capable of providing the impetus for economic development. For example, many retailing activities provide little if any economic

development impact. It is the finding of this study, however, that Indiana University South Bend, a prominent provider of educational services locally, is an exception to that rule. Of the University's \$38,464,452 gross revenues in the 1997-98 academic year, more than 66 percent of these dollars came in the form of export income. That performance, from the standpoint of supporting local economic development, is comparable to that of most manufacturers of similar size. Underlying trends also suggest that both the educational services industry overall and Indiana University South Bend are growing economic forces in the area. This trend certainly suggests that the economic development impact of IUSB should continue to play an increasing role in the overall economic well-being of the area.

### SUMMARY OF IUSB ECONOMIC IMPACT - 1997-98 ACADEMIC YEAR

Source	Direct Impact		Multiplier	Total Impact (Incl. Multiplier)		
	Income	Jobs		Income	Multiplier	Jobs
<i>Ongoing Economic Development Impact</i>						
University Export Revenue	\$13,708,347	416	1.29	\$17,683,767	1.36	566
International Students Liv. Exp.	\$1,241,172	38	1.29	\$1,601,112	1.36	51
Import Substitution	\$18,865,944	573	1.29	\$24,337,067	1.36	780
<b>SUB-TOTAL</b>	<b>\$33,815,463</b>	<b>1,027</b>		<b>\$43,621,946</b>		<b>1,397</b>
<i>One-Year Wiekamp Hall Construction</i>						
<b>TOTAL</b>	<b>\$4,583,337</b>	<b>37</b>	<b>1.59</b>	<b>\$7,287,506</b>	<b>2.18</b>	<b>81</b>
	<b>\$38,398,800</b>	<b>1,064</b>		<b>\$50,909,452</b>		<b>1,478</b>

## About the Project

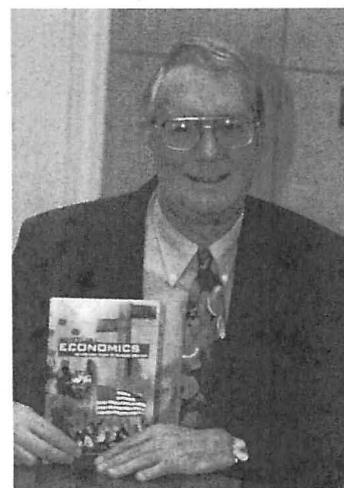
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Indiana University South Bend Chancellor Kenneth L. Perrin commissioned this economic impact study to give empirical shape to the contribution Indiana University South Bend makes to the Michiana economy.



John Peck, IUSB professor emeritus of economics, is the author of many of this community's most pointed analyses of economic factors. He is a former director of IUSB's Bureau of Business and Economics Research.



Paul Joray, IUSB professor of economics and co-director of IUSB's Center for Economic Education, has studied area economic trends during his more than two decades on the IUSB faculty.

Paul Kochanowski, IUSB professor of economics and co-director of IUSB's Center for Economic Education, also contributed to this report.