

Indiana University

South Bend

Impact Study 2008



Produced by the Indiana Business Research Center at Indiana University's Kelley School of Business

Table of Contents

TABLE OF CONTENTS.....	1
EXECUTIVE SUMMARY.....	3
Core Mission Benefits	4
Collateral Benefits	4
CHARACTERISTICS OF IU SOUTH BEND STUDENTS	7
Student Origin	7
Student Characteristics	9
Access and Affordability	10
Settlement of Alumni	11
CONTRIBUTION TO HUMAN CAPITAL.....	13
Degrees Conferred.....	13
Expected Lifetime Earnings	14
Adding to Indiana's Talent Pool	19
CIVIC CONTRIBUTION	21
Service-Learning	21
Volunteering	21
Charitable Contributions.....	25
Resources for the Community.....	26
THE ECONOMIC FOOTPRINT OF THE UNIVERSITY	27
Methodology.....	27
Principal Findings	27
CONCLUSION.....	32

Figures

Figure 1: IU South Bend Campus Region	6
Figure 2: IU South Bend Application Residency by Student Status, Fall 2007	7
Figure 3: Residence of Origin for Full-Time Students of IU South Bend, Fall 2007	8
Figure 4: IU South Bend Students by Age and Gender, Fall 2007	9
Figure 5: Ethnic Distribution of IU South Bend Students, Fall 2007	10
Figure 6: Financial Aid and Family Income Status of Full-Time IU South Bend Students, 2006-2007.....	10
Figure 7: Settlement Pattern of IU South Bend Graduates, Degrees Conferred 1998-2002.....	12

Figure 8: Associate's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007	13
Figure 9: Baccalaureate Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007	14
Figure 10: Master's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007	14
Figure 11: Life Sciences Degrees Conferred by Select Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007	19
Figure 12: Residence of IU South Bend Alumni with Life Sciences Degrees, 2008.....	20
Figure 13: Volunteer Time Spent by Activity for IU South Bend Students, 2006-2007.....	22
Figure 14: Volunteer Time Spent by Activity for IU South Bend Faculty and Staff, 2006-2007	24

Tables

Table 1: Estimated Benefits of Student and Staff Civic Contributions, IU South Bend, 2006-2007	5
Table 2: Estimated Employment and Economic Footprint, IU South Bend, 2006-2007	5
Table 3: Top 10 States for IU South Bend Graduates, Degrees Conferred 1998-2002	11
Table 4: Estimated Lifetime Earnings for Female Baccalaureate Degree Graduates, IU South Bend, 2002-2007	15
Table 5: Estimated Lifetime Earnings for Female Advanced Degree Graduates, IU South Bend, 2002-2007	16
Table 6: Estimated Lifetime Earnings for Male Baccalaureate Degree Graduates, IU South Bend, 2002-2007	17
Table 7: Estimated Lifetime Earnings for Male Advanced Degree Graduates, IU South Bend, 2002-2007....	17
Table 8: Difference in Lifetime Earnings between IU South Bend Graduates (Baccalaureate Degree or Higher) and U.S. Associate's Degree Graduates.....	18
Table 9: Economic Benefit of Service-Learning, IU South Bend, 2006-2007	21
Table 10: Economic Benefit of Student Volunteering Activities, IU South Bend, 2006-2007.....	23
Table 11: Economic Benefit of Employee Volunteering Activities, IU South Bend, 2006-2007	24
Table 12: Economic Benefit of Student Charitable Contributions, IU South Bend, 2006-2007.....	25
Table 13: Economic Benefit of Employee Charitable Contributions, IU South Bend, 2006-2007	26
Table 14: Community Resources Offered by IU South Bend.....	27
Table 15: Estimated Economic Footprint of IU South Bend, 2006-2007	28
Table 16: Estimated Employment Footprint of IU South Bend, 2006-2007	28

Executive Summary

Indiana University South Bend has played a fundamental role in its region since it was established in 1916. IU South Bend provides northern Indiana residents with affordable and convenient access to a range of continuing education, certificate and degree offerings at a premier university. As a result, IU South Bend strengthens the economic competitiveness of the area and increases the earning power of its residents. IU South Bend's impact on its region extends beyond its academic mission. The university's budget, the civic engagement of students and staff, and the campus' cultural contributions also bestow many economic benefits to the region.

The present study was undertaken to measure how IU South Bend improves the lives of all Hoosiers. This report presents policymakers, university officials and Indiana taxpayers with comprehensive yet conservative estimates of the university's impact. IU South Bend receives a significant commitment of state resources, and it is useful for any public institution, including universities, to show the rewards of such commitment.

One way to present how Indiana benefits from IU South Bend is to consider results related to the core mission of the university as well as results that are collateral to the university achieving its core mission. The core mission is education and research. Collateral benefits would include the economic benefits of the university spending associated with its core mission or the economic benefits of, for example, the service-learning that mobilizes students to work for free in the community.

A variety of methods were used to measure the core and collateral benefits of IU South Bend. The core benefits—meaning those benefits that relate to the university's core mission of education and research—are derived from university records or government data sources. These data highlight characteristics of the student body, the number and type of degrees conferred and the settlement patterns of recent graduates. Core benefits data help to answer many key questions including: Do alumni apply their skills in the state or find work elsewhere? Does IU South Bend curriculum support Indiana's economic development priorities in the life sciences?

This analysis of core benefits focuses almost exclusively on tangible metrics within the state. However, many benefits associated with the university's educational and research mission are difficult to quantify and are much broader in reach. Moreover, some benefits that flow from IU South Bend's core mission result in tangible economic benefits to the individuals who attend the university, namely, the expected increase in lifetime earnings resulting from higher educational attainment.

Following the presentation of the core benefits, attention turns to the collateral benefits of IU South Bend. These benefits recognize the effects that university expenditures and the activities of students, staff and visitors have on the local community. For instance, traditional input-output analysis reveals the economic activity related to the university's operating budget and student spending. The monetary value of student service-learning and student volunteering is also added into the total of collateral benefits. Additionally, the value of faculty and staff civic engagement is also measured.

The following bullet points summarize the key findings of these analyses.

Core Mission Benefits

- The first section of this report, **Characteristics of IU South Bend Students**, presents profiles of the student population and its recent graduates. IU South Bend's fall 2007 enrollment totaled 7,700 students—94 percent of whom were Indiana residents. Of the university's 4,100 degree recipients between 1998 and 2002, 76 percent were residing in Indiana as of 2008. The two leading counties of residence for this cohort are Indiana's St. Joseph and Elkhart counties.
- The **Contribution to Human Capital** section examines IU South Bend's degree output and the economic value of these degrees to recipients. IU South Bend conferred 3,630 associate's, baccalaureate, and master's degrees between 2002 and 2007 to students originally from its campus region (see Figure 1), accounting for 11 percent of all degrees conferred by Indiana public universities to this cohort. The most common field of study at the baccalaureate level was arts and humanities and education while business administration was the most frequent master's degree conferred. Over this five-year period, the university also awarded 462 degrees related to life sciences to residents in its campus region.
- IU South Bend graduates earning baccalaureate degrees or higher can expect far greater lifetime earnings than people with a two-year associate's degree. The typical male IU South Bend graduate can expect to earn \$1.7 million over his lifetime and the typical female graduate can anticipate \$1.3 million in lifetime earnings. These figures are 34 percent and 29 percent greater, respectively, than the expected lifetime earnings of male and female associate's degree recipients.

Collateral Benefits

- This report measures the economic benefits of IU South Bend's **Civic Contribution**. Through service-learning programs and volunteerism, students, staff and faculty "give back" to their community and to the state. Table 1 presents the imputed dollar value of their contributions.
- In addition, this report notes that members of the IU South Bend community also made \$475,900 in charitable contributions to organizations operating within the campus region.
- IU South Bend also enriches its region through community engagement programs, facilities and cultural offerings. Whether it's the Ernestine M. Raclin School of the Arts, the basketball team or the campus library, IU South Bend gives the area residents something to be proud of.
- Finally, the **Economic Footprint** section reports the employment and economic significance of spending by the university, students and visitors. The estimates in Table 2 report the effects of direct expenditures (e.g., university purchases and compensation of

faculty and staff) as well as the “ripple effects” of these expenditures within the community. In addition to IU South Bend’s employment of 596 faculty and staff, university spending accounts for an additional 410 jobs in the region.

Table 1: Estimated Benefits of Student and Staff Civic Contributions, IU South Bend, 2006-2007

Civic Contribution	Estimate of Economic Benefit
Service-Learning	\$41,100
Student and Staff Volunteerism	\$480,500
Total	\$521,600

Source: Indiana Business Research Center (IBRC)

Table 2: Estimated Employment and Economic Footprint, IU South Bend, 2006-2007

Type of Spending	Total Employment Effects (number of jobs)	Total Economic Output Effects (in millions)
Faculty and Staff Compensation	280	\$45.0
University Purchases and Construction Expenditures	130	\$21.1
Visitor Expenditures	3	\$0.1
Total	413	\$66.2

Source: IBRC, using IMPLAN model results

Figure 1: IU South Bend Campus Region



Source: Indiana Business Research Center

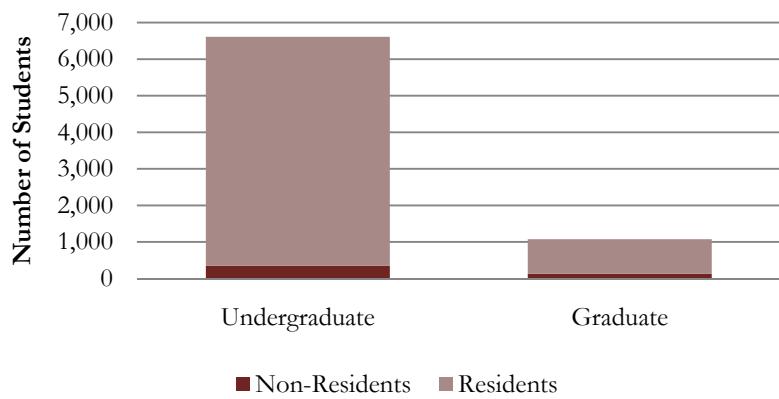
Characteristics of IU South Bend Students

In the fall of 2007, IU South Bend had an enrollment of 7,686 students. Fifty-one percent of these students attended full-time, while the remaining 49 percent attended part-time.

Student Origin

Overall, 94 percent of IU South Bend students are Indiana residents (see Figure 2). This varies by student status, however. Five percent of undergraduates come from out of state, compared to 12 percent of graduate students.

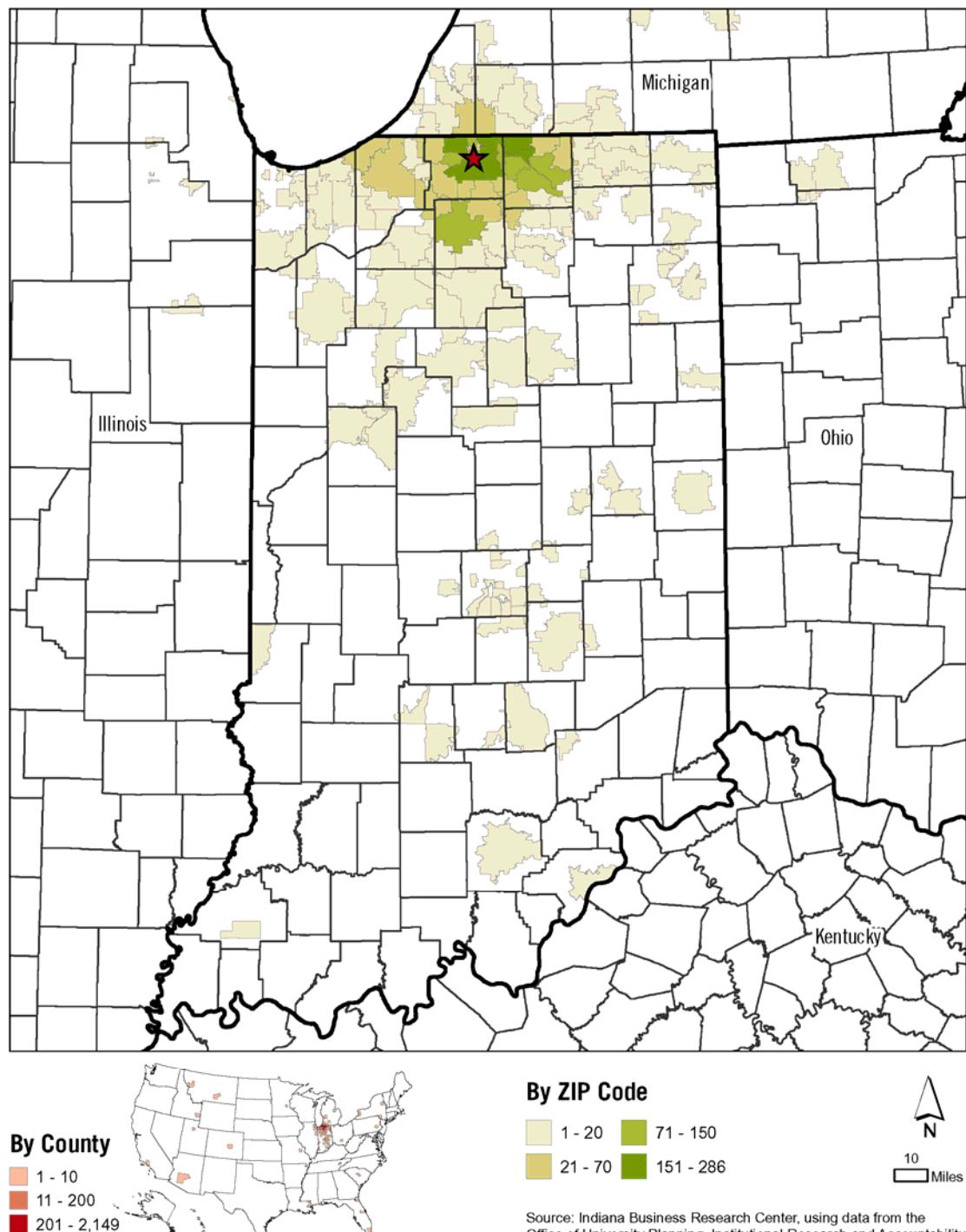
Figure 2: IU South Bend Application Residency by Student Status, Fall 2007



Source: IBRC, using data from the Office of University Planning, Institutional Research and Accountability

Figure 3 shows the frequency of full-time students by ZIP code for Indiana and the surrounding areas. Two percent of the student body comes from Michigan.

Figure 3: Residence of Origin for Full-Time Students of IU South Bend, Fall 2007

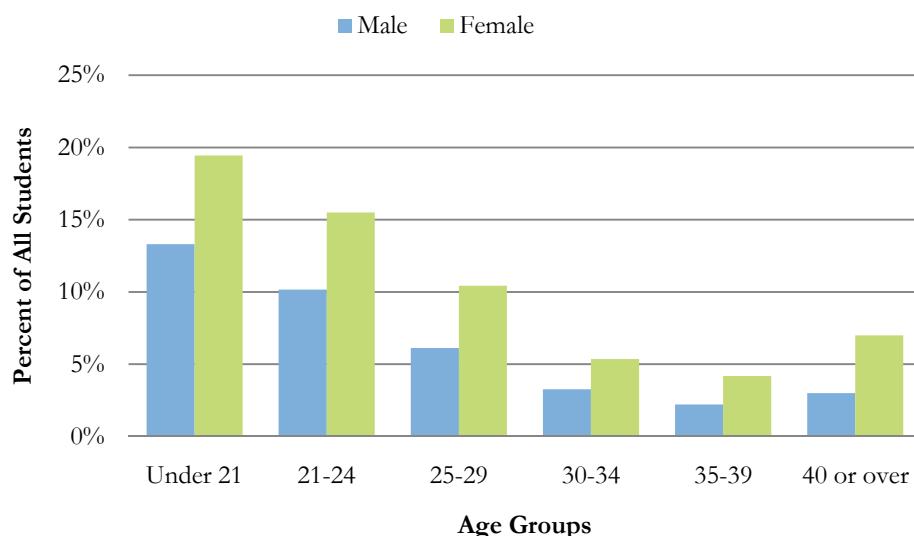


Student Characteristics

Age and Gender

Thirty-three percent of IU South Bend students are under the age of 21. As shown in Figure 4, women outnumber men in each age group, comprising 62 percent of the student body overall. The gap is smallest in the under 21 age group, where women comprise 59 percent of the category; the largest difference is for the 40-or-over age group, where women account for 70 percent of the total.

Figure 4: IU South Bend Students by Age and Gender, Fall 2007

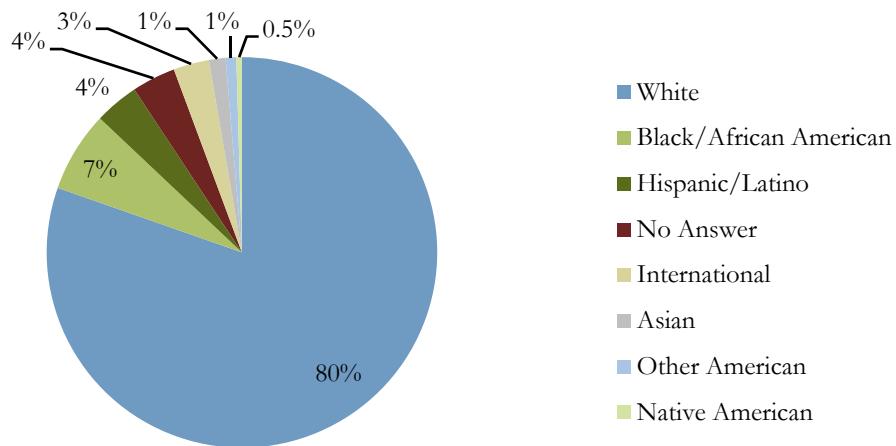


Source: IBRC, using data from the Office of University Planning, Institutional Research and Accountability

Ethnicity

Eighty percent of the student body categorize themselves as white (see Figure 5). Under-represented minorities (blacks, Hispanics and Native Americans) account for 11 percent of all students. Blacks comprise 6.7 percent of the student body, followed by Hispanics at 3.7 percent and Native Americans at 0.5 percent.

Figure 5: Ethnic Distribution of IU South Bend Students, Fall 2007



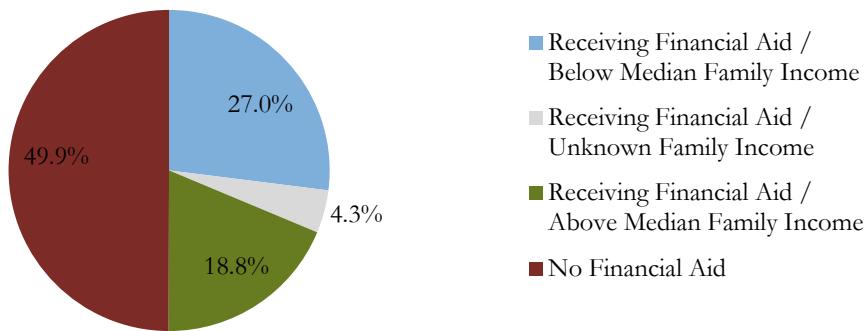
Note: Data on ethnicity were collected only for students applying from within the United States. The international category includes all those who applied from elsewhere in the world because the concept of ethnic identification varies from country to country. The Native American grouping includes both the American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander categories.

Source: IBRC, using data from the Office of University Planning, Institutional Research and Accountability

Access and Affordability

Figure 6 shows that just over half of full-time IU South Bend students receive financial aid. Additionally, 27 percent of full-time students both receive financial aid and are from households with family incomes lower than the Indiana median of \$47,074.

Figure 6: Financial Aid and Family Income Status of Full-Time IU South Bend Students, 2006-2007



Note: Where family income data for financial aid recipients is “unknown,” income data may have been suppressed due to confidentiality requirements or the aid recipient may not be an Indiana resident.

Source: IBRC, using data from the Indiana Commission for Higher Education

Settlement of Alumni

Where alumni settle after graduation plays a key role in analyzing the ultimate significance of a university campus. In contrast to those who leave, alumni who remain make ongoing contributions (e.g., increased productivity, income and cultural contributions) to their geographic region well after they complete their degrees. Table 3 shows that 76 percent of recent IU South Bend graduates—those who received their degrees between 1998 and 2002—resided in the state as of 2008. The next most popular states were Michigan and Illinois.

Table 3: Top 10 States for IU South Bend Graduates, Degrees Conferred 1998-2002

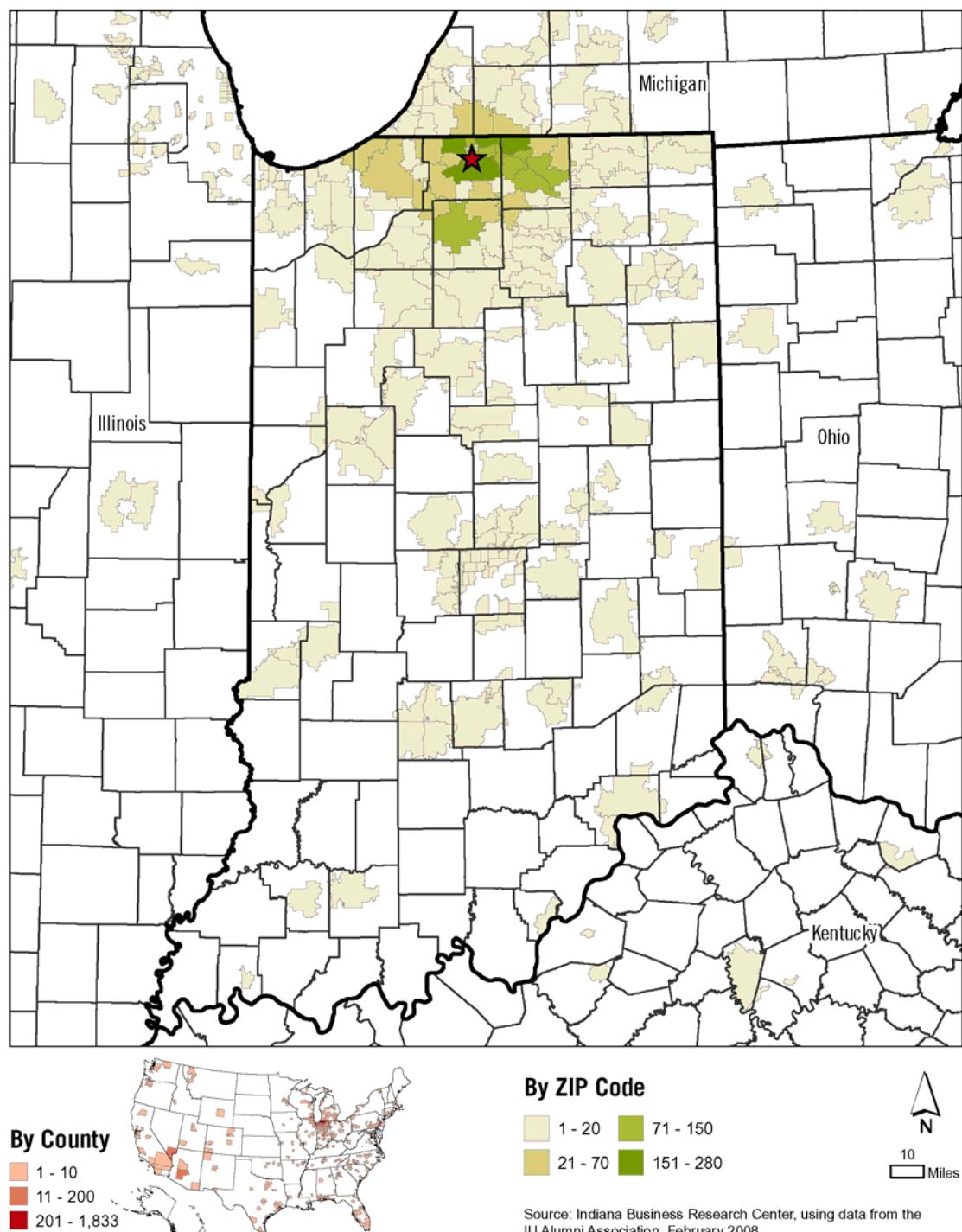
Residence	Percent
Indiana	76.3
Michigan	6.4
Illinois	2.1
Florida	1.0
California	1.0
Ohio	1.0
Texas	0.9
North Carolina	0.8
Arizona	0.6
Pennsylvania	0.5
Top Ten	90.6

Note: The international/unknown category accounts for 3.5 percent of graduates.

Source: IBRC, using data from the IU Alumni Association as of February 2008

Figure 7 shows the settlement pattern for recent graduates by ZIP code for Indiana and the surrounding states. IU South Bend graduates who earned their degrees between 1998 and 2002 have settled in 54 Indiana counties. Forty-four percent of recent graduates (1,833 people) remained in St. Joseph County as of 2008. The next most common counties included neighboring Elkhart County (647 recent graduates) and Marshall County (181 recent graduates). Overall, 60 percent of IU South Bend's 4,140 degree recipients between 1998 and 2002 lived in the campus region in 2008.

Figure 7: Settlement Pattern of IU South Bend Graduates, Degrees Conferred 1998-2002

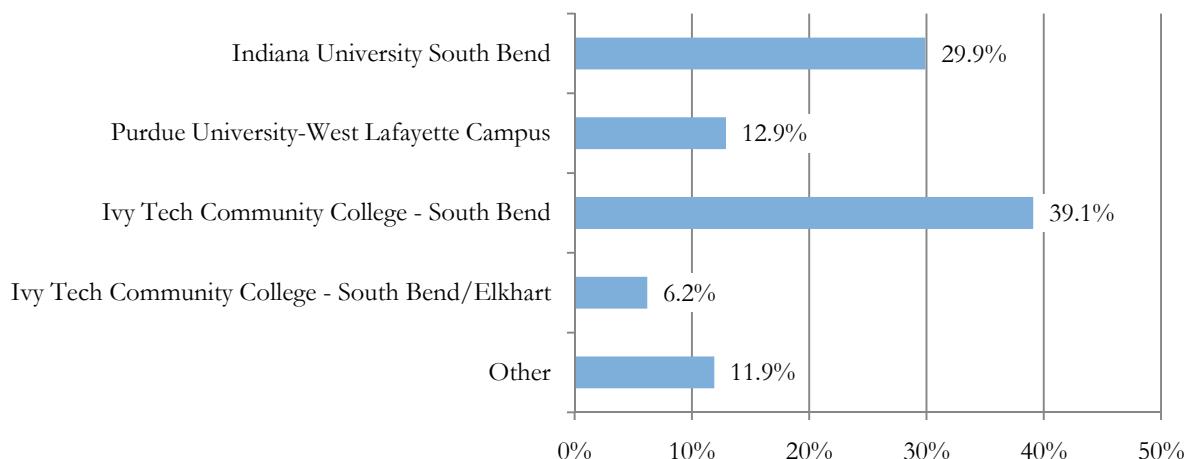


Contribution to Human Capital

Degrees Conferred

Thirty percent of St. Joseph and Elkhart counties' residents chose IU South Bend (including its Elkhart Center) to complete their associate's degrees among Indiana public universities during the 2002-2007 academic years. Figure 8 shows that this amount is second only to the 39 percent who completed their degrees at the South Bend campus of Ivy Tech Community College. No other institution granted more than 13 percent of the associate's degrees of St. Joseph and Elkhart counties' residents.

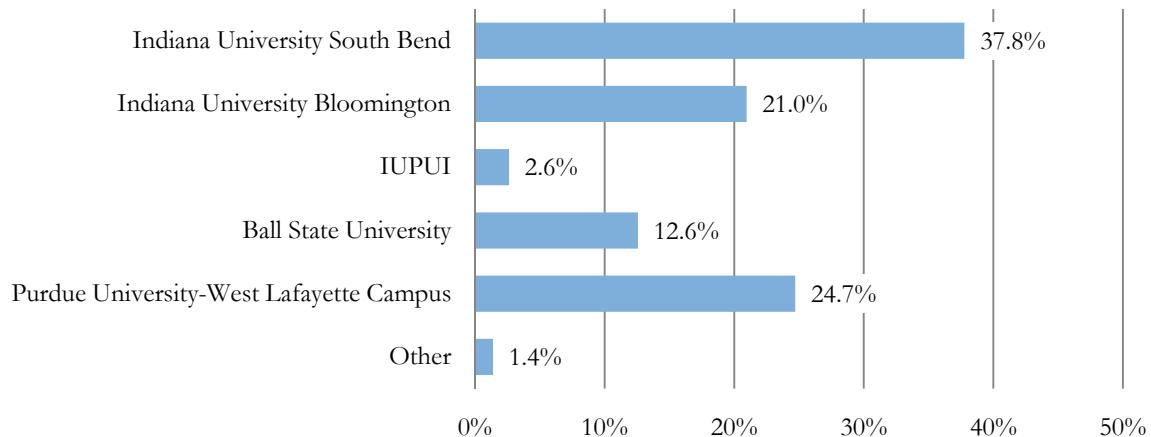
Figure 8: Associate's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007



Source: IBRC, using data from the Indiana Commission for Higher Education

IU South Bend was easily the most popular state school among the region's baccalaureate degree graduates, granting 38 percent of these degrees obtained by those from the campus region (see Figure 9). In addition, almost a quarter of the region's public school graduates obtained their baccalaureate degrees from Purdue University-West Lafayette and 21 percent from IU Bloomington.

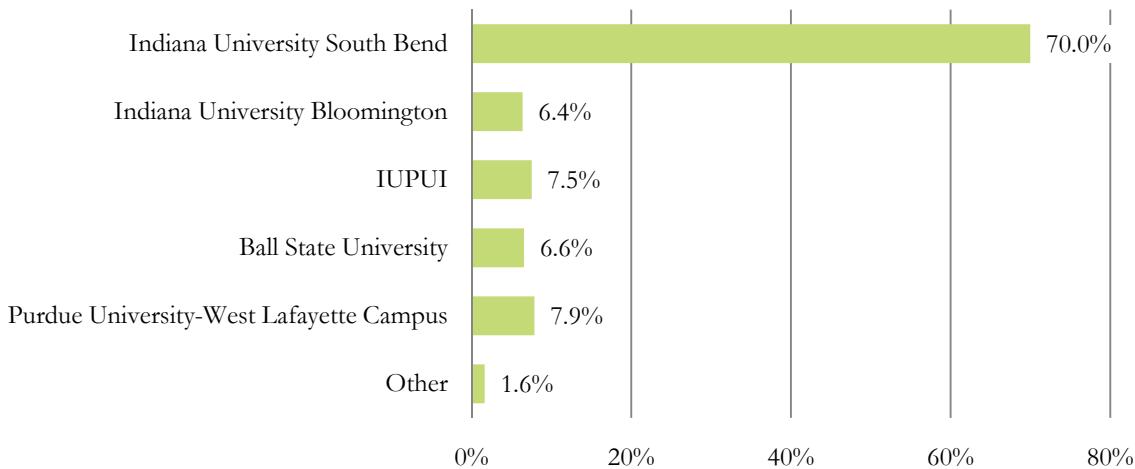
Figure 9: Baccalaureate Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007



Source: IBRC, using data from the Indiana Commission for Higher Education

A striking 70 percent of Elkhart and St. Joseph counties' residents obtained their master's degrees from IU South Bend. Figure 10 below shows that no other institution conferred even as much as 8 percent of these residents' master's degrees, showing a strong local preference among graduates between 2002 and 2007.

Figure 10: Master's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007



Source: IBRC, using data from the Indiana Commission for Higher Education

Expected Lifetime Earnings

Indiana University provides an education that not only enriches its graduates intellectually, but also financially. By granting baccalaureate, master's, professional and doctoral degrees in diverse fields, IU allows Indiana residents the opportunity to greatly enhance their career options and wage-earning

potential beyond what they may have earned with merely an associate's degree or less. Here we consider the increased lifetime earnings for female and male graduates completing the most popular degrees on the IU South Bend campus. Lifetime earnings are estimated synthetically by summing the average wages for different age cohorts of full-time, year-round workers for each degree level and field.¹

Table 4 shows that a recent female IU South Bend baccalaureate graduate is expected to earn \$1.2 million dollars from employment over the course of her lifetime. While the most popular degree field—education—is associated with lifetime earnings of under \$1 million, most graduates earn substantially more, even without completing an additional graduate degree. In particular, graduates of popular degrees in arts and humanities, business administration and management degrees and nursing are all projected to make lifetime earnings of over \$1.3 million.

Table 4: Estimated Lifetime Earnings for Female Baccalaureate Degree Graduates, IU South Bend, 2002-2007

Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Education (except Administrative and Math & Science Education)	89	\$964
Arts and Humanities (except Music, Visual & Performing Arts)	74	1,303
Business Administration and Management	51	1,347
Nursing	42	1,368
Social Sciences (except Economics)	40	1,182
Criminal Justice/Protective Services	21	1,323
Communications	15	1,329
Allied Health Fields (except Nursing)	15	1,370
Drama / Fine, Visual & Performing Arts	15	1,222
Biological, Agricultural & Food Sciences	9	1,263
Other Fields	14	1,329
Overall	385	\$1,227

Note: Numbers may not sum due to rounding. Lifetime earnings are synthetic estimates based on average wages for graduates by age, degree level and field. Figures have been adjusted to 2006 dollars and future earnings have been discounted at 3 percent.

Source: IBRC, using data from the Indiana Commission for Higher Education and the National Survey of College Graduates

¹ For more detail, please read the methodology section of the main report.

Female graduates who earn advanced degrees at IU South Bend typically earn an estimated \$1.35 million from employment over their lifetimes (see Table 5). The 100 graduates who receive master's degrees in the most popular field—education—have an estimated earning potential of \$1.2 million. Earning even more, are graduates in administration and management: \$1.4 million for public and educational programs and \$1.8 million for those in business programs.

Table 5: Estimated Lifetime Earnings for Female Advanced Degree Graduates, IU South Bend, 2002-2007

Degree Type	Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Master's	Education (except Administrative and Math & Science Education)	100	\$1,242
Master's	Public and Educational Administration and Management	24	1,388
Master's	Business Administration and Management	23	1,848
Master's	Arts and Humanities (except Music, Visual & Performing Arts)	6	1,201
Master's	Music	3	1,164
Master's	Social Sciences (except Economics)	1	1,287
Overall		157	\$1,351

Note: Numbers may not sum due to rounding. Lifetime earnings are synthetic estimates based on average wages for graduates by age, degree level and field. Figures have been adjusted to 2006 dollars and future earnings have been discounted at 3 percent.

Source: IBRC, using data from the Indiana Commission for Higher Education and the National Survey of College Graduates

Meanwhile, men who recently completed baccalaureate degrees are expected to earn \$1.6 million dollars in lifetime earnings from employment (see Table 6). The most popular degree field—business administration and management—is associated with lifetime earnings of \$1.9 million, even if these graduates do not complete an additional advanced graduate degree. Other popular degree fields are the arts and humanities, as well as education, and these fields allow graduates lifetime earnings of over \$1.5 million and \$1.2 million, respectively.

Table 6: Estimated Lifetime Earnings for Male Baccalaureate Degree Graduates, IU South Bend, 2002-2007

Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Business Administration and Management	49	\$1,902
Arts and Humanities (except Music, Visual & Performing Arts)	39	1,553
Education (except Administrative and Math & Science Education)	23	1,250
Criminal Justice/Protective Services	15	1,435
Computer and Information Science (not programming)	14	1,965
Social Sciences (except Economics)	11	1,757
Drama / Fine, Visual & Performing Arts	10	1,405
Communications	8	1,539
Biological, Agricultural & Food Sciences	5	1,549
Mathematics and Physical Sciences	5	1,805
Other Fields	12	1,693
Overall	192	\$1,646

Note: Numbers may not sum due to rounding. Lifetime earnings are synthetic estimates based on average wages for graduates by age, degree level and field. Figures have been adjusted to 2006 dollars and future earnings have been discounted at 3 percent.

Source: IBRC, using data from the Indiana Commission for Higher Education and the National Survey of College Graduates

Male graduates who earn advanced degrees at IU South Bend typically earn roughly \$1.9 million from employment over their lifetimes (Table 7). In particular, the most popular master's degree field—business administration and management—can earn graduates \$2.4 million.

Table 7: Estimated Lifetime Earnings for Male Advanced Degree Graduates, IU South Bend, 2002-2007

Degree Type	Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Master's	Business Administration and Management	35	\$2,420
Master's	Education (except Administrative and Math & Science Education)	28	1,367
Master's	Public and Educational Administration and Management	9	1,634

Degree Type	Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Master's	Arts and Humanities (except Music, Visual & Performing Arts)	4	1,264
Master's	Music	2	1,058
Master's	Social Sciences (except Economics)	1	1,685
Overall		79	\$1,857

Note: Numbers may not sum due to rounding. Lifetime earnings are synthetic estimates based on average wages for graduates by age, degree level and field. Figures have been adjusted to 2006 dollars and future earnings have been discounted at 3 percent.

Source: IBRC, using data from the Indiana Commission for Higher Education and the National Survey of College Graduates

The value of obtaining a four-year college degree or higher is highlighted when one compares the difference between the estimated lifetime earnings of IU South Bend's baccalaureate and advanced degree graduates with the earnings of associate's degree graduates nationwide (see Table 8). Over the life course, IU South Bend's female graduates are expected to make \$280,000 (or 29 percent) more than associate's degree graduates. Male graduates are expected to make over \$429,000 (or 34 percent) more than associate's degree graduates.

Table 8: Difference in Lifetime Earnings between IU South Bend Graduates (Baccalaureate Degree or Higher) and U.S. Associate's Degree Graduates

Category	Women (\$1000s)	Men (\$1000s)
Average Lifetime Earnings for Alumni (2002-2007) with Baccalaureate Degrees or Higher	\$1,263	\$1,707
Average Lifetime Earnings for U.S. Associate's Degree Graduates	\$983	\$1,278
Additional Lifetime Earnings Attributable to Higher Degree	\$280	\$429

Note: Numbers may not sum due to rounding. Lifetime earnings are synthetic estimates based on average wages for graduates by age, degree level and field. Figures have been adjusted to 2006 dollars and future earnings have been discounted at 3 percent.

Source: IBRC, using data from the Indiana Commission for Higher Education, National Survey of College Graduates and the U.S. Census Bureau

Combining the additional earnings of baccalaureate and advanced degree graduates of IU South Bend (compared to holders of associate's degrees) leads to an estimated \$268 million increase in lifetime earnings related to degrees conferred annually. Of course, not all of this remains in Indiana, and it can't properly be considered an economic impact of the campus in the traditional sense. Nonetheless, the figure does convey a sense of the incremental value placed on the education received by graduates of IU South Bend.

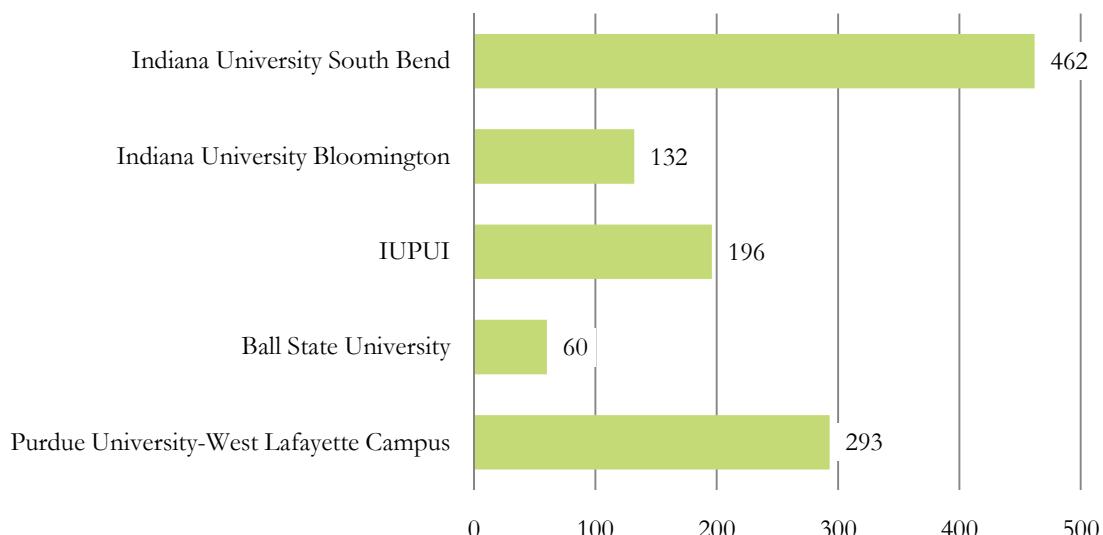
Adding to Indiana's Talent Pool

Indiana University plays a vital role to the state's economic development efforts by training future leaders and practitioners with skills that are closely aligned with major industries. This report focuses on the high-paying life sciences industry—key among Indiana's industrial initiatives—since the state is among the “nation's top four life sciences leaders” due to its high number and concentration of life sciences-related jobs.²

Life Sciences

IU South Bend leads the way in granting life sciences degrees to Elkhart and St. Joseph natives among Indiana four-year public institutions (see Figure 11). Over the five academic years between 2002 and 2007, 462 local residents obtained life sciences degrees from IU South Bend compared to 293 from Purdue University-West Lafayette and 196 percent from IUPUI.

Figure 11: Life Sciences Degrees Conferred by Select Public Universities for Graduates Originally from the IU South Bend Campus Region, 2002-2007

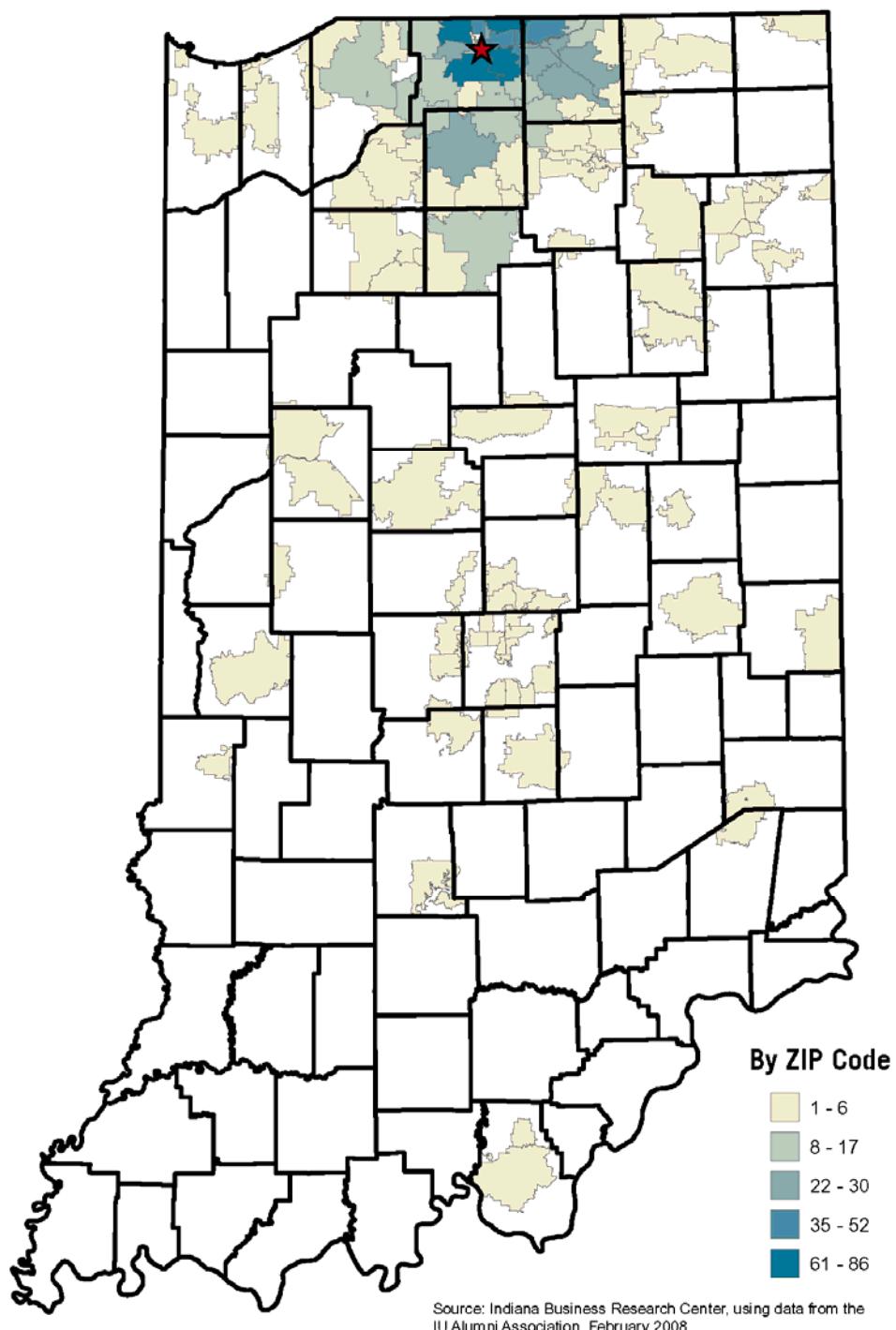


Source: IBRC, using data from the Indiana Commission for Higher Education

Over three-quarters of IU South Bend's graduates stay within Indiana (76 percent). Of these, almost all stay very close to the South Bend metropolitan area (see Figure 12).

² This information comes from the Indiana Economic Development Corporation: www.in.gov/iedc/industry.htm

Figure 12: Residence of IU South Bend Alumni with Life Sciences Degrees, 2008



Civic Contribution

Service-Learning³

The largest service-learning program at IU South Bend is the School of Education's M401 course. Here, seniors majoring in elementary education (38 students for the 2006-2007 academic year) are each required to contribute 60 hours of service during the semester at public schools in South Bend, Mishawaka, Elkhart and other neighboring school corporations. Dental hygiene students also have a major service requirement that requires them to plan sealant clinics, education programs or other projects at area social service agencies. Table 9 shows that the reported 4,432 hours of service-learning yield an estimated economic benefit of \$41,079 for the 2006-2007 academic year.⁴

Table 9: Economic Benefit of Service-Learning, IU South Bend, 2006-2007

Department/School (Volunteer Role)	Reported Hours	Equivalent Hourly Compensation	Equivalent Annual Compensation
Education (child tutor)	2,280	\$10.43	\$23,779
Dental Hygiene (dental assistant)	1,225	16.19	19,834
Psychology (researcher)	260	17.31	4,500
Sociology (child tutor)	420	10.43	4,380
Business (marketing consultant/researcher)	140	17.31	2,423
Nursing (health promotion advocate)	92	11.22	1,032
Fine Arts (documentary film assistant)	15	21.67	325
Total	4,432		\$56,273
Price-to-Client Value Ratio			73%
Overall Economic Benefit of Service-Learning			\$41,079

Note: Numbers may not sum due to rounding. Equivalent hourly compensation is based on wages and benefits of similar occupations and the overall economic impact assumes a 0.73 market price-to-client value ratio. Please see the methodology section for details.

Source: IBRC, using reported hours of service provided by Indiana University South Bend, Office of Career Services and wage data from the U.S. Bureau of Labor Statistics

Volunteering

Volunteers at IU South Bend take part in many activities coordinated by the Office of Community Links. These include the Titans of Tomorrow campus tutoring program and agency tours that expose interested volunteers to several organizations needing help.

³ Information on hours of service comes from Indiana University South Bend, Office of Career Services, courtesy of Tasha Browning.

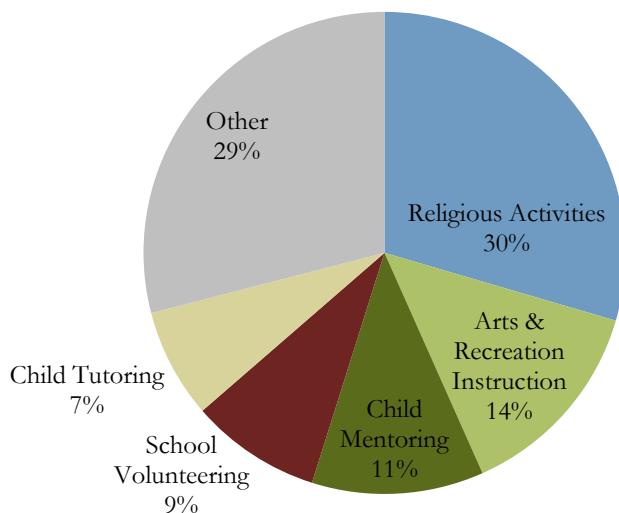
⁴ This study accounts for the possibility that not all services provided by volunteers would be funded if the organization, or the organization's clients, had to pay fair market value. The literature on volunteering suggests using a 0.73 factor of proportionality between market price of service and client value. Please see the methodology in the full IU Impact Study for more information.

Some major civic engagement resources at IU South Bend include the following:

- American Democracy Project
- Black Man's Think Tank
- Conversations on Race
- Entrepreneurship Lecture Series
- Experts Guide/Speakers Bureau
- Indiana Campus Compact
- One Book, One Campus

IU South Bend students volunteered an average of 58 hours per student over the 2006-2007 academic year according to the IU Student Survey of full-time students.⁵ Figure 13 presents the most popular volunteer activities for these full-time students. Following religious activities, arts and recreation instruction, child mentoring, and school volunteering were also popular activities.

Figure 13: Volunteer Time Spent by Activity for IU South Bend Students, 2006-2007



Source: IBRC, using volunteer data from the IU Student Survey 2008

After extrapolating the student survey results to the entire full-time student body, IU South Bend student service totaled over 226,000 volunteer hours. This service was conducted overwhelmingly within Elkhart and St. Joseph counties. Table 10 summarizes the volunteer services of IU South Bend students and estimates that this service amounts to a net economic benefit of \$380,222 to the campus region.

⁵ Full-time students were analyzed and reported because they more likely reflect volunteering that would not have occurred "but for" the presence of the university. In addition, this also implies that the economic benefit figures for volunteering are conservative.

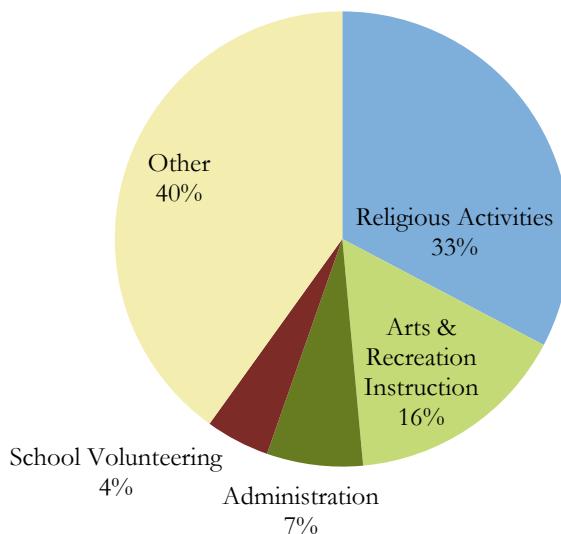
Table 10: Economic Benefit of Student Volunteering Activities, IU South Bend, 2006-2007

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
Religious Activities	66,762	84.1	\$11.97	\$671,598
Child Mentoring	26,044	84.9	12.63	279,317
Arts & Recreation Instruction	31,191	83.5	9.74	253,600
All Other Activity	27,994	84.9	9.52	226,359
School Volunteering	19,834	89.5	10.43	185,118
Child Tutoring	16,588	87.7	10.43	151,667
Adult Mentoring	10,194	88.4	14.35	129,235
Animal Care	13,171	82.9	9.22	100,655
Hospital Activities	5,572	82.2	12.78	58,494
Poverty Relief	6,281	87.7	9.22	50,736
Neighborhood Cleanup/ Housing Development	1,219	87.9	10.54	11,291
Camp Volunteering	1,163	46.4	9.74	5,256
Total	226,011			\$2,123,327
Percent of Students Not from Campus Region				24.53%
Price-to-Client Value Ratio				73%
Overall Economic Benefit of Student Volunteering				\$380,222

Note: Numbers may not sum due to rounding. Equivalent hourly compensation is based on wages and benefits of similar occupations. The overall economic impact accounts only for students who did not previously reside in the campus region and assumes a 0.73 market price-to-client value ratio. Table reports full-time students. The number of full-time students in the fall of 2007 was 3,913. Please see the methodology section for details.

Source: IBRC, using volunteer data from the IU Student Survey 2008, student origin data from the Indiana University Office of University Planning, Institutional Research and Accountability and wage data from the U.S. Bureau of Labor Statistics

The IU Faculty and Staff survey conducted in early 2008 revealed that the survey participants volunteered an average of 47 hours over the 2006-2007 academic year. Figure 14 shows the most popular volunteer activities among IU South Bend employees. Notable here is that while religious activities were the most popular, arts and recreation instruction were more popular among faculty at IU South Bend than almost any other IU campus.

Figure 14: Volunteer Time Spent by Activity for IU South Bend Faculty and Staff, 2006-2007

Source: IBRC, using volunteer data from the IU Faculty and Staff Survey 2008

After extrapolating the faculty and staff survey results to all full-time employees, IU South Bend employee volunteer service totaled over 26,700 hours. These hours were almost entirely conducted within the campus region. Table 11 summarizes the hours of volunteer service estimated for IU South Bend employees. Taking a conservative approach, IBRC analysis assumed that “but for” the presence of the university, the faculty would not live and work in the IU South Bend campus region and as a result, would not volunteer in the area. While this is likely true of professional staff as well, the university employee data did not allow breaking out professional staff—“but for” the university—and other staff for whom the “but for” argument would not hold. (The survey revealed that a majority of staff were not as economically tied to the university as were the faculty.) As a result, the conservative estimate of net economic benefits counts only full-time faculty and those benefits total over \$100,000. The upper bound of the estimate, on the other hand, includes all full-time employees and totals nearly \$280,000.

Table 11: Economic Benefit of Employee Volunteering Activities, IU South Bend, 2006-2007

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
Religious Activities	8,740	96.1	\$11.97	\$100,496
All Other Activity	9,140	96.9	9.52	84,313
Arts & Recreation Instruction	4,232	100.0	9.74	41,201
Administration	1,825	90.6	14.31	23,659
School Volunteering	1,214	100.0	10.43	12,659
Child Mentoring	550	100.0	12.63	6,945
Neighborhood Cleanup/ Housing Development	473	100.0	10.54	4,983

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
Poverty Relief	375	92.0	9.22	3,178
Media	172	100.0	13.05	2,240
Total	26,720			\$279,675
Percent of Employees Who Are Faculty				49.11%
Price-to-Client Value Ratio				73%
Overall Economic Benefit of Employee Volunteering				\$100,271

Note: Numbers may not sum due to rounding. Equivalent hourly compensation is based on wages and benefits of similar occupations. The overall economic impact accounts only for faculty and assumes a 0.73 market price-to-client value ratio. Table reports full-time employees. The number of full-time employees in the fall of 2007 was 564. Please see the methodology section for details.

Source: IBRC, using volunteer data from the IU Faculty and Staff Survey 2008, student origin data from the Indiana University Office of University Planning, Institutional Research and Accountability and wage data from the U.S. Bureau of Labor Statistics

Charitable Contributions

IU South Bend also “gives back” to the region through student and employee donations to charities. Table 12 shows that full-time IU South Bend students donated an average of \$69 per student over the 2006-2007 academic year. Extrapolating the survey average to the entire full-time student body, students at IU South Bend gave nearly \$270,000. Seventy-one percent of these funds—about \$192,000—were received by organizations within Elkhart and St. Joseph counties.

Table 12: Economic Benefit of Student Charitable Contributions, IU South Bend, 2006-2007

Region of Charitable Giving	Percentage of Total	Contribution per Person
Inside Campus Region	71.3%	\$49
Other Parts of Indiana	14.2%	\$10
Outside of Indiana	14.6%	\$10
Total Contribution per Person		\$69
Total Contribution of All Students		\$269,843
Contribution within Campus Region		\$192,263

Note: Table reports full-time students. In the fall of 2007, the number of full-time students was 3,913.

Source: IBRC, using charitable contribution data from the IU Student Survey 2008, student origin data from the Indiana University Office of University Planning, Institutional Research and Accountability

Full-time employees have more resources than the average student and can be even more generous. Based on the IU Faculty and Staff Survey, full-time employees contributed an average of \$688 during the 2006-2007 academic year. Multiplying this average by the number of full-time faculty and staff, IU South Bend employees gave over \$388,000. Table 13 shows that the majority of these funds

were donated to charities operating in the region. The impact in the South Bend campus region was nearly \$284,000.

Table 13: Economic Benefit of Employee Charitable Contributions, IU South Bend, 2006-2007

Region of Charitable Giving	Percentage of Total	Contribution per Person
Inside Campus Region	73.1%	\$503
Other Parts of Indiana	8.4%	\$58
Outside of Indiana	18.5%	\$127
Total Contribution per Person	\$688	
Total Contribution of All Employees	\$388,146	
Contribution within Campus Region	\$283,657	

Note: Table reports full-time employees. In the fall of 2007, the number of full-time faculty and staff was 564.

Source: IBRC, using charitable contribution data from the IU Faculty and Staff Survey 2008, student origin data from the Indiana University Office of University Planning, Institutional Research and Accountability

Resources for the Community

Members of the public are welcome to use numerous facilities and resources on the IU South Bend campus.

Arts and Culture

IU South Bend's Ernestine M. Raclin School of the Arts is active in community outreach events and community activities in the Michiana Area. In addition, art and culture resources are available through the Learning Resource Center.

Library Services

Besides students, faculty and staff, 1,175 members of the public used IU South Bend's Franklin D. Schurz Library during the 2006-2007 academic year. Community members borrowed 2,829 books for a benefit valued at nearly \$21,000. IBRC analysts used the estimated value of \$7.42 per loaned book based on the methodology used in the report, *The Economic Impact of Libraries in Indiana*.⁶ In addition, members of the public are free to use the library's audiovisual resources and computer services by requesting a free network ID.

Other Resources

Table 14 catalogs five types of resources available to members of the public.

⁶ Indiana Business Research Center. 2007. "The Economic Impact of Libraries in Indiana." Available online at: www.ibrc.indiana.edu/studies/EconomicImpactOfLibraries_2007.pdf

Table 14: Community Resources Offered by IU South Bend

Community Resource	Adult/ Continuing Education	K-12 Education Resources	Economic Development/ Business Leadership	Event Hosting/ Shopping Facilities	Recreation Facilities & Sporting Events
Bureau of Business and Economic Research				x	
Center for Economic Education			x		
Child Development Center			x		
Entrepreneurship Lecture Series	x			x	
Extended Learning Services	x				
Intercollegiate Athletics - <i>Titans</i>					x
Learning Resource Center		x			
Student Activities Center				x	x

Note: This list does not include the civic engagement or arts and cultural resources discussed earlier in the report.
Source: Indiana Business Research Center, with input from campus administrators

The Economic Footprint of the University

Methodology

The Indiana Business Research Center analyzed the significance of IU South Bend on the university's campus region. The analysis measures the economic effect of IU compensation and purchasing expenditures, together with the spending of students and visitors that the institution attracts. The IBRC used the IMPLAN economic analysis tool, developed by University of Minnesota researchers over 20 years ago and in use by over 1,500 clients today. It is a standard input-output model that calculates the economic ripple effects created by the purchases of the university, the compensation of its faculty and staff, and the collateral expenditures of students and the visitors attending IU-related events.⁷ Users of the model's results should be aware that the figures are estimates, not a precise accounting of the effects of IU South Bend on the regional economy.

Principal Findings

- The total estimated economic footprint of IU South Bend on the university campus region amounts to \$66.2 million annually.

⁷ For a discussion on the conceptual difference between economic impact and economic footprint, please see the methodology section of the full IU impact report.

- This estimated economic activity generates approximately \$2.2 million in state and local taxes.
- IU South Bend faculty and staff spending, together with university direct purchases and construction projects, results in ripple effects of approximately \$14.3 million in additional economic activity and accounts for approximately 130 jobs in the campus region.

Table 15 presents the relative economic effects of four major spending categories and their ripple effects. The ratio of the ripple effect to the direct effect depends on several factors, but two important factors are the size of the model region—the larger, the greater the ripple effects—and the degree to which the region is able to supply the goods and services demanded by the consumers and businesses of the region.

Table 15: Estimated Economic Footprint of IU South Bend, 2006-2007

Economic Output Effects of University	Direct Effects (in millions)	Ripple Effects (in millions)	Total Footprint (in millions)
Faculty and Staff Compensation	\$34.9	\$10.0	\$45.0
University Purchases of Goods and Services	12.8	2.7	15.5
University Construction	3.9	1.6	5.6
Visitor Expenditures Attributed to IU Events	0.1	0.0	0.1
TOTAL Effect on Economic Output	\$51.7	\$14.3	\$66.2

Source: IBRC, using IMPLAN results based on IPEDS financial data reported by universities to the National Center for Education Statistics, Office of Financial Aid, IU Student Survey 2008, Office of Planning, Institutional Research and Accountability

Table 16 presents the employment impact of IU South Bend. In addition to the 596 persons employed by IU South Bend,⁸ the spending by university faculty, staff and students, together with university purchasing, accounts for another 413 jobs in the region. The reader should be aware that the types of jobs, and their associated wages and salaries, do not all have the same ripple effects. While the model estimates that IU South Bend creates demand for higher-paying jobs like physicians to serve faculty and staff, a majority of jobs are in the lower-paying service sector.

Table 16: Estimated Employment Footprint of IU South Bend, 2006-2007

Employment Effects of University	Direct Effects	Ripple Effects	Total Footprint
Faculty and Staff Compensation	200	80	280
University Purchases of Goods and Services	50	30	80
University Construction	30	20	50
Visitor Expenditures Attributed to IU Events	3	-	3
TOTAL Effect on Employment	283	130	413

Source: IBRC, using IMPLAN model results

⁸ Based on IBRC's full-time equivalent calculations using payroll data received from the Office of Planning, Institutional Research and Accountability.

Economic Injections and Leakages

In many ways, measuring the economic impact of a business or institution is an exercise in keeping track of good money (monetary flows into a region), bad money (monetary flows out of a region) and neutral money (transactions that re-circulate money within a region). Another way to view good money is as an injection into a region's economy. Tourism is the classic example. Another way to view bad money is a leakage from a regional economy. Purchasing oil from overseas may be a good example of this concept. The presence of a business or institution that helps to stop leakages, or retain economic activity, is said to have an import substitution effect.

Adopting the counter-factual, or "but for," approach to economic impact analysis in order to raise the analytical rigor of impact studies presents the analyst with thorny issues: What counts as impact and what doesn't?⁹ The main thrust of the "but for" approach is the question: If the institution that is under study disappeared, would the money disappear too? Economic injections like spending from out-of-state students in a regional or state economy—the tourism effect—would clearly qualify as an impact. Stemming the leakages that would result from college students going out of state to pursue their degree—the import substitution effect that keeps neutral money from becoming bad money—would also qualify. A flagship state university like IU Bloomington would arguably qualify as having "impact" for the above two reasons.

Regional campuses are not so clear cut. The argument that regional campuses bring in out-of-state (or out-of-region) students, or stem the flow of students leaving the state (or region) to attend a university elsewhere, is more tenuous. Moreover, the regional campuses do not attract as much out-of-state research funding. State appropriations also make up a much larger share of the operating budget. The state funds wouldn't be lost to the state or region if IU South Bend did not exist. The state funds would either be returned to Indiana taxpayers or redirected to other regional programs and projects. In short, regional campus expenditures are more akin to the re-circulation of funds than an injection of funds.

Because many institutions cannot claim that they have impact in the strictest sense of the term, that is, either generating injections or plugging leakages, other terms have been proposed to describe their economic role. Some researchers and analysts have proposed the term "contribution" to describe the size of the economic interaction these institutions have in the local, regional or state economy. Whatever the term used to measure the size of an institution's presence, the most conservative and honest approach would explain the conceptual and economic differences between impact, contribution and footprint. For this reason, the IBRC uses the term economic footprint to include all categories of monetary flows— injections, retention and recirculation—rather than economic impact.

In recent years, state universities—in their desire to advance their case for support to state legislatures—have highlighted the fact that universities and students attract visitors and those visitors bring money, good money, to their region. In this way, institutions have augmented their reported economic footprint. While there is nothing analytically wrong with counting the economic

⁹ John A. Siegfried, Allen R. Sanderson, Peter McHenry. "The economic impact of colleges and universities," *Economics of Education Review* 26 (2007): 546–558.

injections, if one adds the injections, one must also subtract the leakages to be analytically consistent. Most university impact reports do not subtract leakages.

In an attempt to conduct a balanced and consistent analysis of injections and leakages, the IBRC included questions in the 2008 Student Survey to measure the frequency and spending associated with travelers from out of the campus region and IU student travel to destinations outside the region. According to the survey results, IU South Bend students travel out of the region longer and spend more in the process than those who come to the area to visit IU students. In other words, this is not an advantageous calculation.

On the other hand, visitors from out of the region who attend IU sporting events, cultural events or attend conferences do provide injections to the regional economy. These visitors, and their economic injections, are enumerated in the “visitor expenditures attributed to IU events” category. Because these visitors are not tied to students, their spending is assumed to be net injections. That said, the percentage of those visitors coming from outside the campus region is small.

Following the lead of the economic impact study conducted for the Jacob’s School of Music in 2007, the research team assumed that 17 percent of visitors who attend all types of events—cultural, sporting or otherwise—were from outside the campus region. The 17 percent figure was used for all campus regions for the sake of consistency. (The assumption is probably the most heroic for the Bloomington campus because the state of Indiana is the campus region.) Each out-of-region visitor is assumed to spend on average \$44 per visitor day (in 2008 dollars) on hotels, meals and shopping. Event tickets and refreshment sales, as well as payments for conference meals and lodging, are included in the university “auxiliary enterprise” expenditures; as a result, including them in the visitor-day spending total would be double counting.

As one can see in Table 15 and Table 16, the portion of the economic footprint associated with university events is relatively small compared to the university’s operating budget and student spending on housing, foods and incidentals. Just the same, this is an important expenditure category and future university impact studies would be well served to have more accurate and detailed data on how many event attendees originate from outside the region as well as how much an event attendee spends locally on lodging, meals and shopping.

Explaining the Data and the Results

In this report, the term “ripple effects” is used to describe the cascading effects of a purchase by either institutions (such as a university or business) or consumers in a regional or state economy. Direct expenditures, or direct effects, are re-circulated in the economy when recipients of the first round of spending “re-spend” a portion of their income with other businesses and individuals within a region. A purchase at a retail store by a consumer, for example, is the end of a chain of economic transactions and relationships. Working backward, a purchase of a gallon of milk at the local grocery store provides some income to the grocery worker and some profit to the store owner. If the milk was produced locally, it also provides income to the dairy farmer, the local large-animal veterinarian and a local agricultural supply store, to name a few. Those incomes are re-circulated in the local economy as those people spend their income on auto repair, groceries or home repair. Hence, that \$5 for the gallon of milk can be multiplied to \$7.50 or \$8.00 depending on how much of the money is retained and re-spent locally.

The IU South Bend campus region for the analysis is comprised of Elkhart and St. Joseph counties. Thus, the economic effects were measured for the campus region within Indiana, in contrast to measuring the economic benefits of IU South Bend on St. Joseph County alone. As stated in the full IU Impact Report, IBRC researchers attempted to rigorously apply the “but for” principle as expounded by Siegfried, Sanderson and McHenry.¹⁰ The research teams assumed, because of IU South Bend’s mission and student composition—49 percent of the students are part-time—that most, if not all, students were economically and relationally tied to the campus region. If IU South Bend didn’t exist, most of the individuals who comprise the student body would still be living there.

The IBRC researchers assumed that IU South Bend students would not leave the campus region and their spending would remain in the region even if IU South Bend did not exist. As a result, the regional impact of student spending on housing, groceries, entertainment and the like was not included in the economic benefits of IU South Bend. On the other hand, “but for” the existence of IU South Bend, an argument can be made that these students would be less likely to earn a four-year degree.¹¹ As a result, IU South Bend is credited with augmenting the region’s stock of human capital and increasing the lifetime earnings of IU South Bend alumni. (Please see the section on lifetime earnings for the dollar value of this benefit. See also the full report for a more complete discussion of assumptions and methodology.) Another way to look at it, “but for” IU South Bend’s existence, the region would lose additions to the region’s stock of human capital and those enhanced earnings, but would not lose a significant volume of economic activity due to non-university related student spending.

The sum of all the direct effects will not add up to the IU South Bend total operating budget as reported by the Integrated Postsecondary Education Data System (IPEDS). There are several reasons for this:

1. To assess the effects of spending by faculty and staff, the analyst must reduce total compensation to reflect the leakages associated with income taxes, payroll taxes and savings.
2. Scholarships and student financial assistance are a reduction in revenues, even though they are treated as an expense in the university books.
3. The IMPLAN model calculates the effects of current spending, not the consumption of fixed capital, i.e., depreciation.
4. Construction expenditures can vary greatly over time. As a result, a five-year average of construction expenditures was used.

¹⁰ *Ibid.*

¹¹ Although there are other educational institutions in the region, IU South Bend is the only four-year public university. Because tuition is lower, it is more accessible to area residents.

Conclusion

IU South Bend makes a vital contribution to St. Joseph and Elkhart counties. This study presents a comprehensive, innovative and conservative assessment of the economic impact that IU South Bend has on its region. IBRC researchers used many of the standard tools and methods to measure IU South Bend's impact. The economic effects are clear. Through the spending of 596 full-time employees and purchases of goods and services, IU South Bend creates economic ripples through the region. This analysis estimated that the direct and ripple effects of university expenditures accounts for \$66.2 million of the economic activity in St. Joseph and Elkhart counties.

Students, faculty and staff “give back” to the community by volunteering and contributing to local charities. This study is one of few that chronicles and measures the economic benefits of community and civic engagement. Information related to IU South Bend’s civic engagement was gathered through an extensive student and staff survey that collected data on a range of topics including spending patterns, volunteer activities and charitable contributions. The civic engagement dollar figure, which totals approximately \$521,600, was estimated by applying to total service-learning and volunteer hours the equivalent wages of occupations performing similar roles.

Assigning a dollar value to a university is a challenging task. Many university impact studies have overestimated the economic impact and overlooked, or underestimated, the other types of economic and cultural contributions that the institution makes to the region it serves. Clearly, the total dollar-and-cents contribution of IU South Bend as reported in this study is but one dimension of IU South Bend’s total impact. This study attempted to provide a balanced view by expanding the scope and understanding of the contributions—tangible economic contributions as well as intangible contributions—that a university makes.