

Indiana University

Northwest

Impact Study 2008



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

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Executive Summary

Indiana University Northwest in Gary has played a fundamental role in its region since it was established in 1959. IU Northwest provides Northwest 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 Northwest strengthens the economic competitiveness of the area and increases the earning power of its residents. IU Northwest'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 Northwest improves the lives of Hoosiers in northwest Indiana. This report presents policymakers, university officials and Indiana taxpayers with comprehensive yet conservative estimates of the university's impact. IU Northwest 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 Northwest 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 Northwest. 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 Northwest 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 Northwest's core mission result in tangible economic benefits to the individuals who attend the university, namely, the expected increase in lifetime earnings that result from higher educational attainment.

Following the presentation of the core benefits, attention turns to the collateral benefits of IU Northwest. 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 Northwest Students**, presents profiles of the student population and its recent graduates. IU Northwest's fall 2007 enrollment totaled 4,800 students—99 percent of whom were Indiana residents. Of the university's 3,100 degree recipients between 1998 and 2002, 81 percent were residing in Indiana as of 2008. The two leading counties of residence for this cohort are Indiana's Lake and Porter counties.
- The **Contribution to Human Capital** section examines IU Northwest's degree output and the economic value of these degrees to recipients. IU Northwest conferred 3,500 associate's, baccalaureate and master's degrees between 2002 and 2007 to students originally from its campus region (see Figure 1), accounting for 16 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 business administration, while public and educational administration was the most frequent master's degree conferred. Over this five-year period, the university also awarded 1,000 degrees related to life sciences to residents in its campus region.
- IU Northwest 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 Northwest 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 37 percent and 33 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 Northwest's **Civic Contribution**. Through service-learning programs and volunteerism, students, staff and faculty “give back” to their community and to the campus region. Table 1 presents the imputed dollar value of their contributions.
- In addition, this report notes that members of the IU Northwest community also made \$136,200 in charitable contributions to organizations operating within their campus region
- IU Northwest also enriches its region through community engagement programs, facilities and cultural offerings. Whether it's the Center for Economic Education, the Gallery of Contemporary Art or the campus library, IU Northwest 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 reports 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 Northwest’s employment of 432 faculty and staff, university spending accounts for an additional 280 jobs in the region.

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

Civic Contribution	Estimate of Economic Benefit
Service-Learning	\$41,600
Student, Faculty and Staff Volunteerism	\$83,200
Total	\$124,800

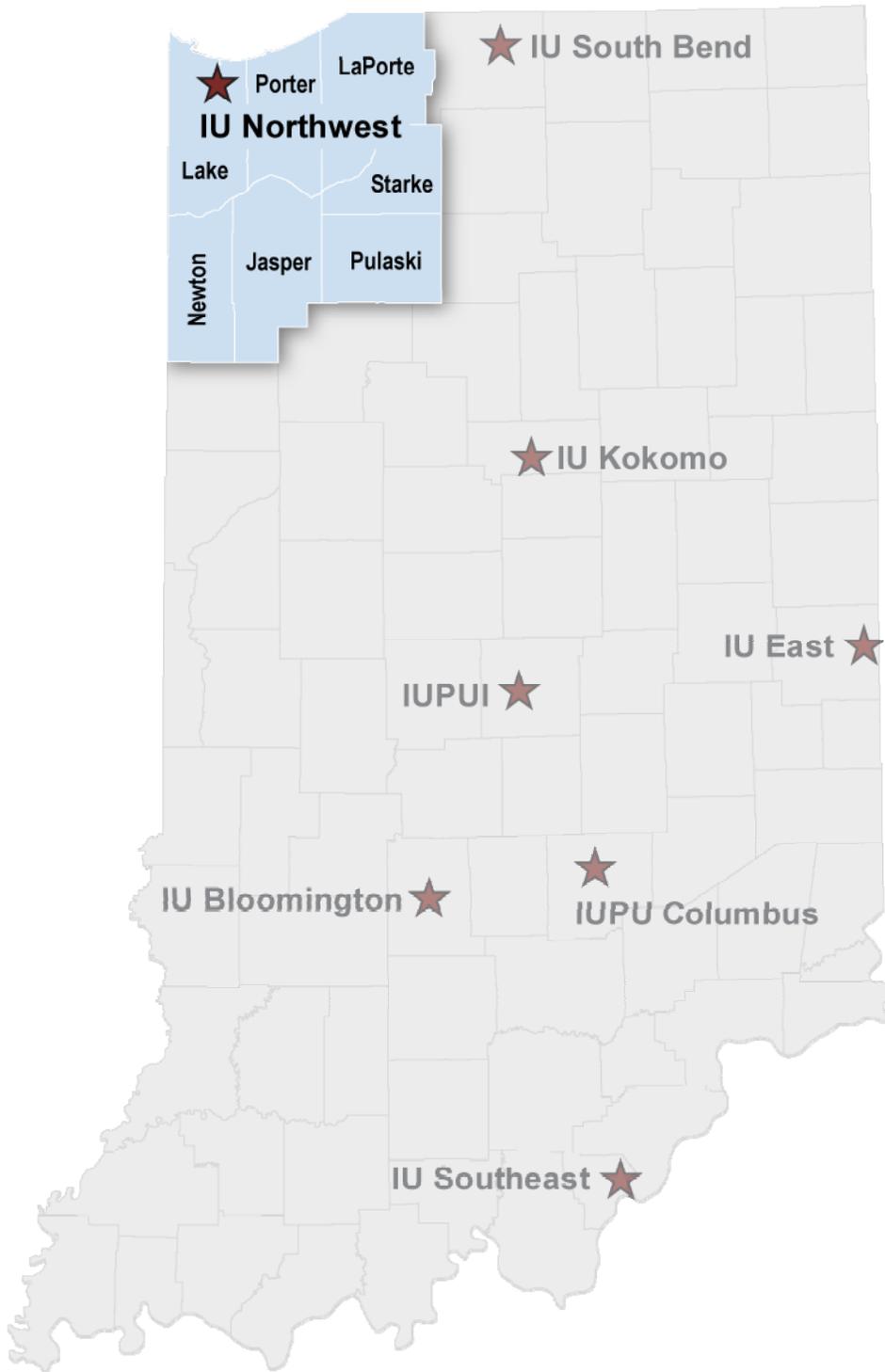
Source: Indiana Business Research Center (IBRC)

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

Type of Spending	Total Employment Effects (number of jobs)	Total Economic Output Effects (in millions)
Faculty and Staff Compensation	180	\$31.3
University Purchases and Construction Expenditures	100	\$23.4
Visitor Expenditures	3	\$0.1
Total	283	\$54.8

Source: IBRC, using IMPLAN model results

Figure 1: IU Northwest Campus Region



Source: Indiana Business Research Center

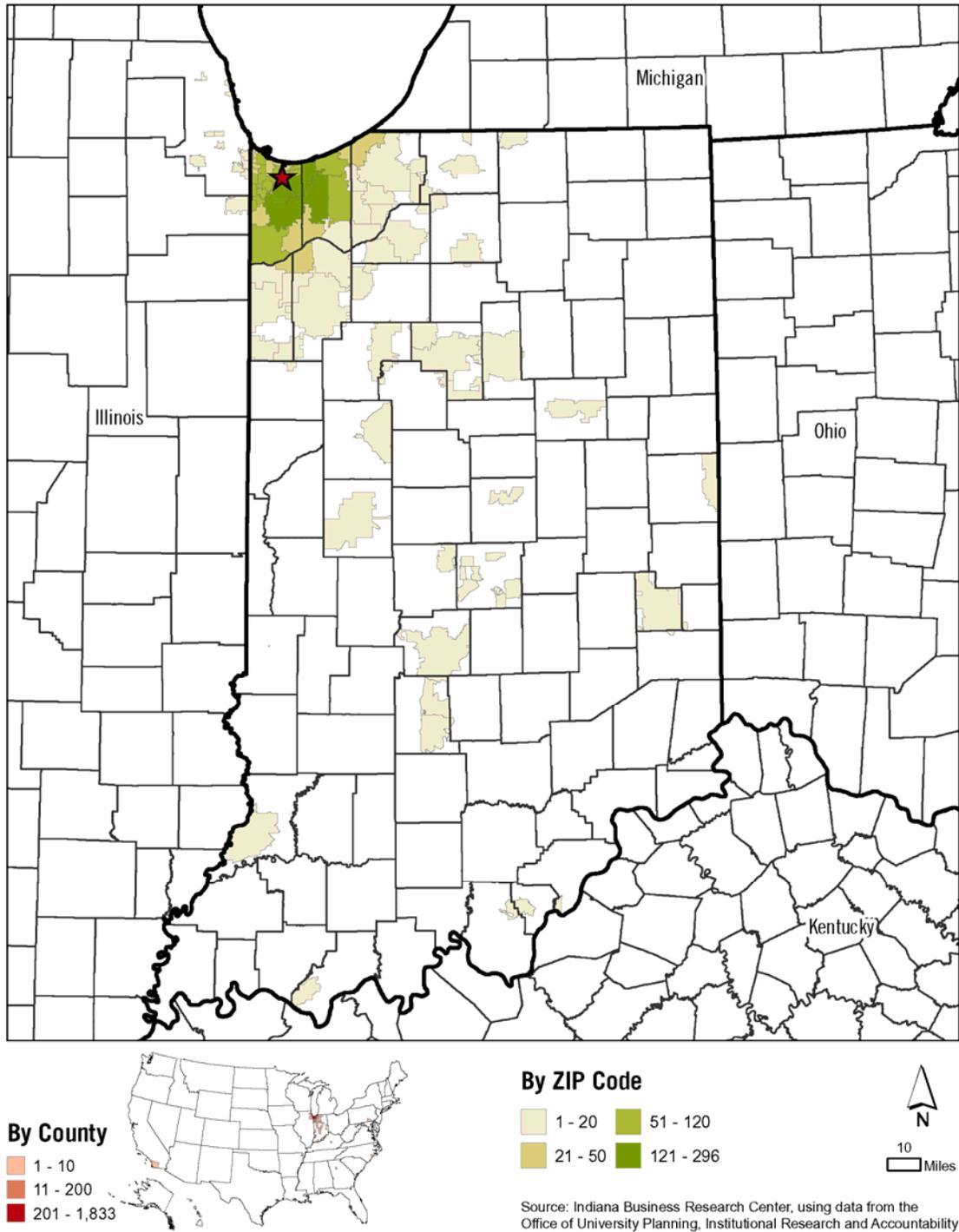
Characteristics of IU Northwest Students

In the fall of 2007, IU Northwest had an enrollment of 4,790 students. Fifty-four percent of these students attended full-time, while the remaining 46 percent attended part-time.

Student Origin

Overall, 99 percent of IU Northwest students are Indiana residents. Figure 2 shows the number of full-time students by ZIP code for Indiana and the surrounding areas.

Figure 2: Residence of Origin for Full-Time Students of IU Northwest, Fall 2007

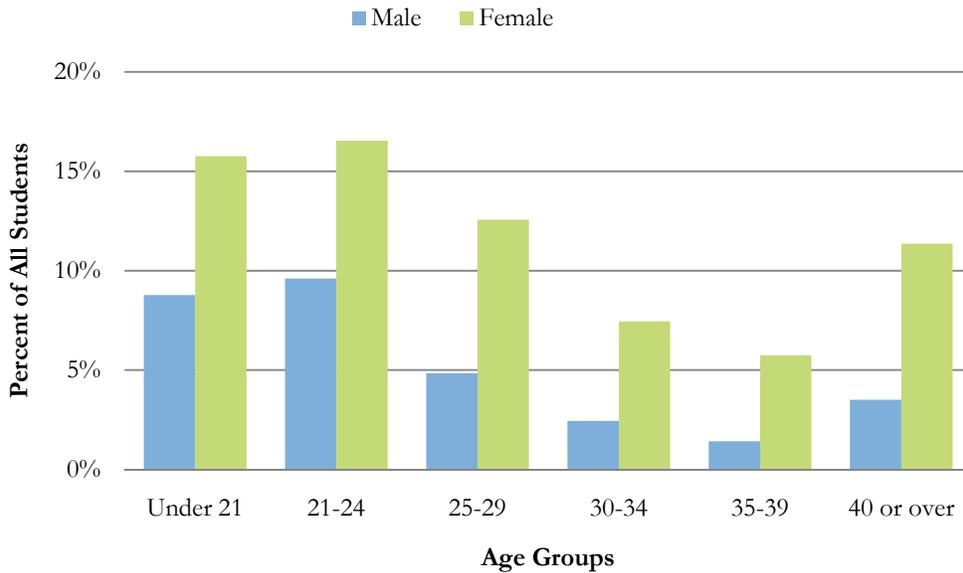


Student Characteristics

Age and Gender

Twenty-six percent of IU Northwest students are between 21 and 24 years old, with another 25 percent of the student body under the age of 21. As shown in Figure 3, women dramatically outnumber men across all age groups, comprising 69 percent of the student body overall—the highest percentage of any IU campus.

Figure 3: IU Northwest Students by Age and Gender, Fall 2007



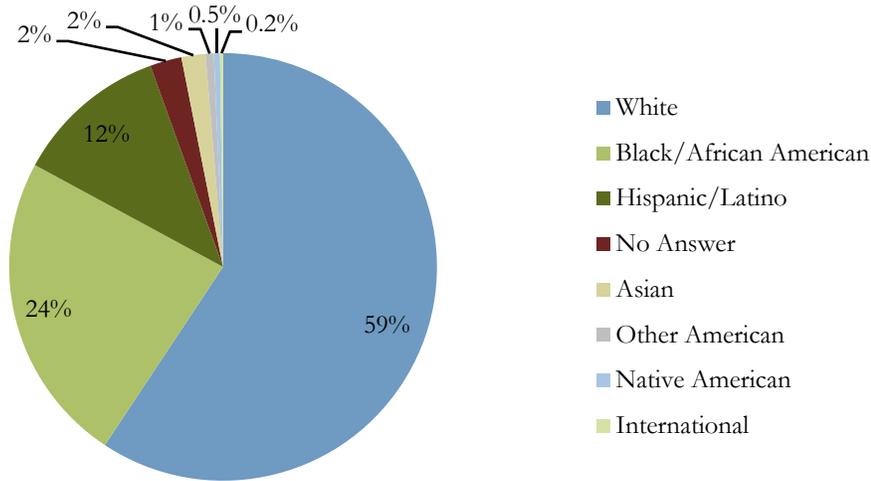
Source: IBRC, using data from the Office of University Planning, Institutional Research and Accountability

Ethnicity

Just 59 percent of the student body categorize themselves as white (see Figure 4). The Northwest campus is unique in the fact that black students, largely due to the racial makeup of the surrounding area, comprise nearly a quarter of the student body.

Under-represented minorities (blacks, Hispanics and Native Americans) account for an astounding 36 percent of all students. Blacks comprise 23.6 percent of the student body, followed by Hispanics at 11.6 percent and Native Americans at 0.5 percent.

Figure 4: Ethnic Distribution of IU Northwest Students, Fall 2007



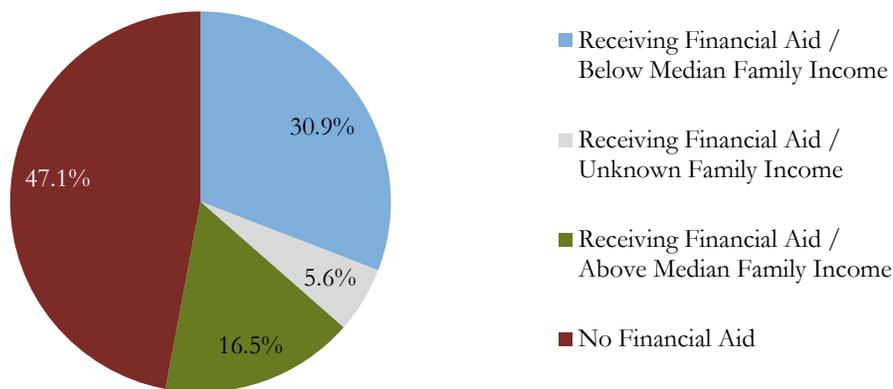
Note: Data on ethnicity were collected only for students applying from within the United States. The international category includes all those who applied from elsewhere in the world, because the concept of ethnic identification varies from country to country. The Native American grouping includes both 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 5 shows that over half of full-time IU Northwest students receive financial aid. Additionally, nearly 31 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 5: Financial Aid and Family Income Status of Full-Time IU Northwest 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 81 percent of recent IU Northwest graduates—those who received their degrees between 1998 and 2002—resided in the state as of 2008. The next most popular states were Illinois and Arizona.

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

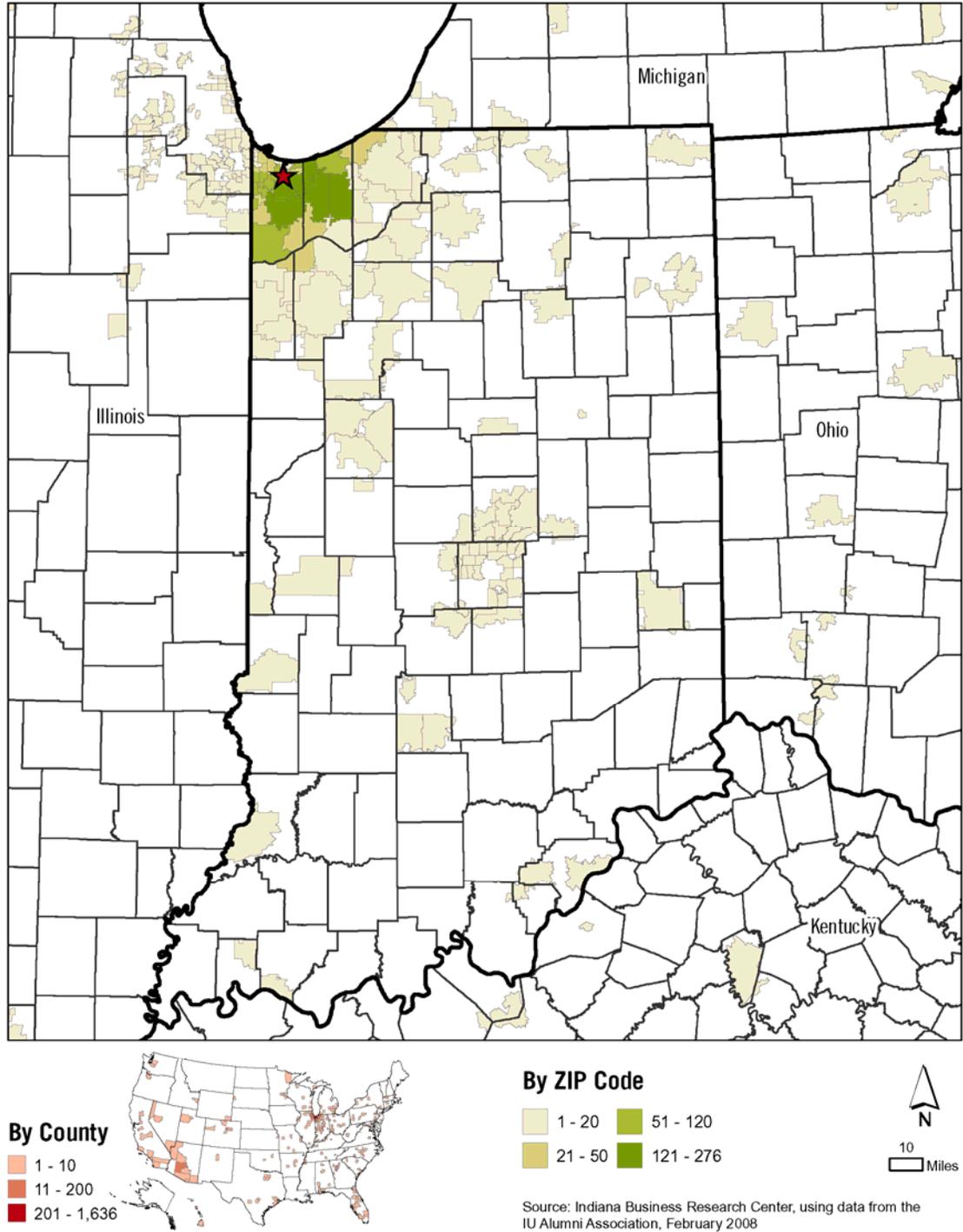
Residence	Percent
Indiana	81.2
Illinois	4.9
Arizona	1.5
Florida	1.3
California	0.9
Texas	0.8
Georgia	0.7
Ohio	0.7
Michigan	0.6
North Carolina	0.4
Top Ten	92.9

Note: The international/unknown category accounts for 3.2 percent of graduates.

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

Figure 6 shows the settlement pattern for recent graduates by ZIP code for Indiana and the surrounding states. IU Northwest graduates who earned their degrees between 1998 and 2002 have settled in 38 Indiana counties. Over half of all recent graduates (1,636 people) still resided in Lake County in 2008. The next most common counties of residence in 2008 include Porter County, Indiana (596 recent graduates) and Cook County, Illinois (111 recent graduates). Overall, 77 percent of IU Northwest's 3,137 degree recipients between 1998 and 2002 lived in the campus region in 2008.

Figure 6: Settlement Pattern of IU Northwest Graduates, Degrees Conferred 1998-2002

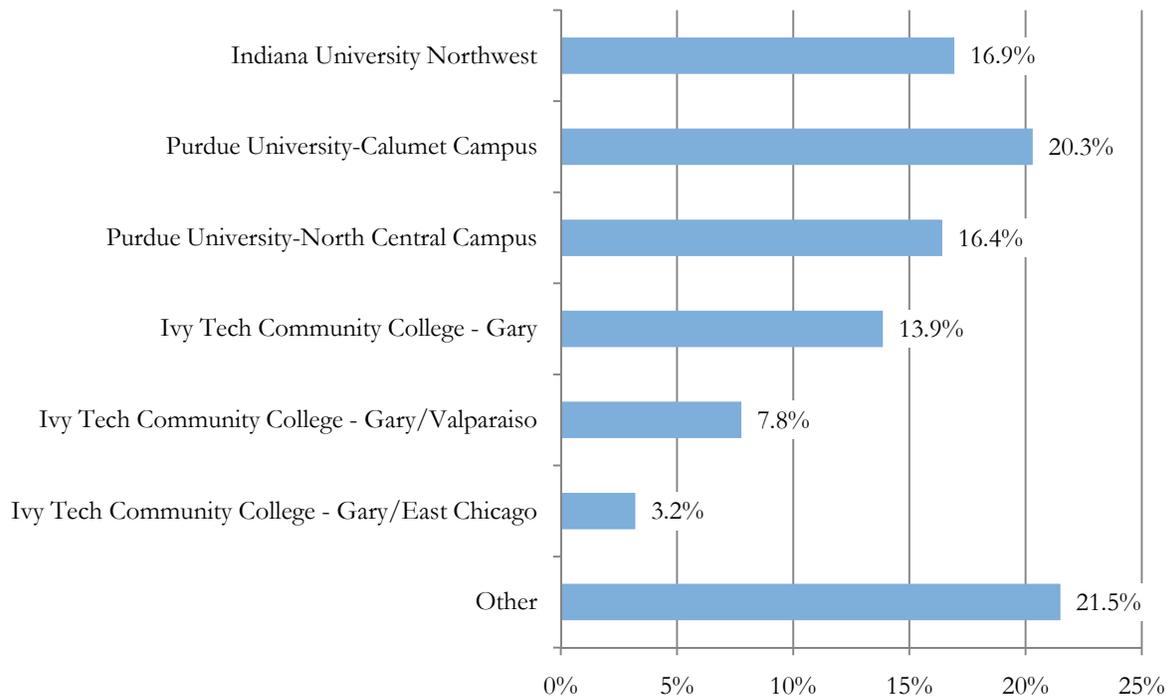


Contribution to Human Capital

Degrees Conferred

Although residents of Northwest Indiana¹ have a wide variety of institutions from which to obtain their associate's degree, IU Northeast emerges as the second most popular institution. Purdue University's Calumet and North Central campuses are also among the top three state universities from which Northwest Indiana natives obtained their associate's degrees during the 2002-2007 academic years (see Figure 7). These institutions were more popular than the three Ivy Tech Community College campuses in Gary, Valparaiso and East Chicago.

Figure 7: Associate's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU Northwest Campus Region, 2002-2007

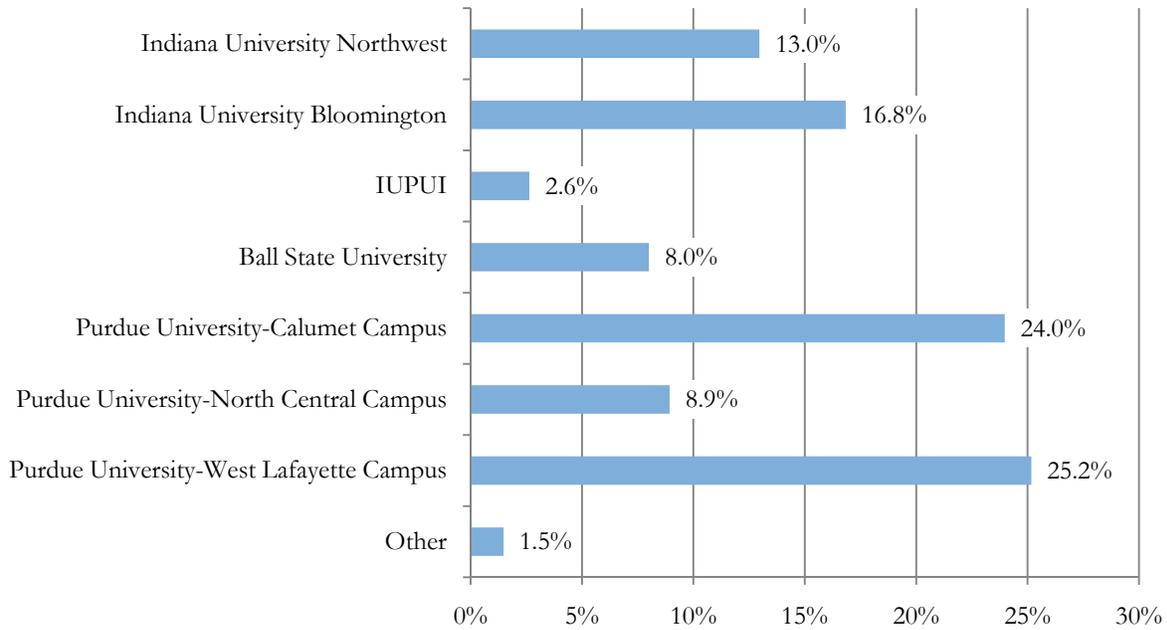


Source: IBRC, using data from the Indiana Commission for Higher Education

Figure 8 shows that almost one-third of Northwest Indiana residents achieved baccalaureate degrees from IU campuses during the 2002-2007 academic years, particularly IU Bloomington (17 percent) and the local IU Northwest campus (13 percent). However, Purdue University's three nearby campuses accounted for nearly 60 percent of this region's baccalaureate degree recipients.

¹ As illustrated in Figure 1, the IU Northwest campus region includes the following seven counties: Jasper, Lake, LaPorte, Newton, Porter, Pulaski and Starke counties.

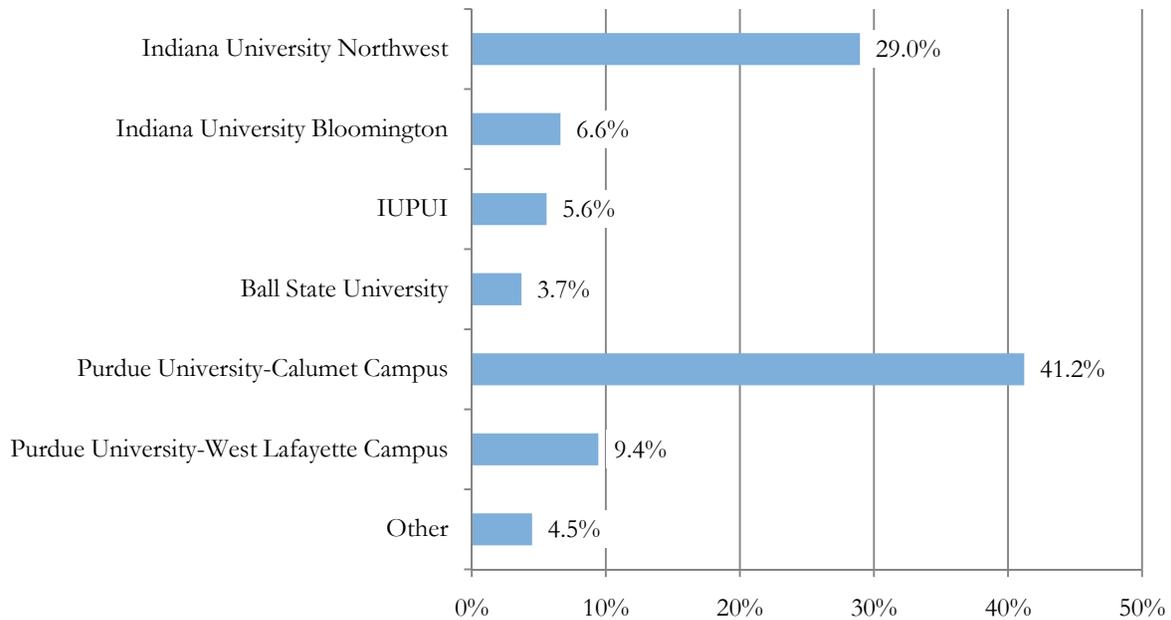
Figure 8: Baccalaureate Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU Northwest Campus Region, 2002-2007



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

For Northwest Indiana residents earning master’s degrees, IU Northwest was the second most popular institution, at 29 percent, to Purdue’s Calumet campus (41 percent). These two institutions were by far the most likely to grant master’s degrees to this population during the 2002-2007 academic years with no other institution granting over 10 percent of the master’s degrees to Northwest Indiana residents (see Figure 9).

Figure 9: Master's Degrees Conferred by Indiana Public Universities for Graduates Originally from the IU Northwest 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 Northwest 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.²

Table 4 shows that a recent female IU Northwest baccalaureate graduate is expected to earn close to \$1.3 million dollars from employment over the course of her lifetime. The most popular degree fields—arts and humanities, as well as social sciences—are associated with lifetime earnings of \$1.3 million and \$1.2 million, respectively. In particular, graduates in nursing and allied health fields are projected to earn close to \$1.4 million, even without completing an additional graduate degree.

² For more detail, please read the methodology section of the main report.

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

Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Arts and Humanities (except Music, Visual & Performing Arts)	48	\$1,303
Social Sciences (except Economics)	43	1,182
Education (except Administrative and Math & Science Education)	37	964
Business Administration and Management	33	1,347
Nursing	32	1,368
Criminal Justice/Protective Services	27	1,323
Allied Health Fields (except Nursing)	20	1,370
Drama / Fine, Visual & Performing Arts	8	1,222
Public and Educational Administration and Management	7	1,173
Communications	6	1,329
Other Fields	14	1,434
Overall	273	\$1,260

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

Female graduates who earn advanced degrees at IU Northwest typically earn an estimated \$1.4 million from employment over their lifetimes (see Table 5). The 38 graduates who receive master's degrees in the most popular field—public and educational administration and management—have an estimated earning potential of almost \$1.4 million. Earning even more, are graduates in business administration and management who are projected to earn over \$1.8 million in their lifetimes.

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

Degree Type	Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Master's	Public and Educational Administration and Management	38	\$1,388
Master's	Education (except Administrative and Math & Science Education)	23	1,242
Master's	Business Administration and Management	18	1,848
Overall		79	\$1,448

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 over \$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 in the arts and humanities and criminal justice fields whose graduates can make lifetime earnings of more than \$1.5 million and \$1.4 million, respectively.

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

Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Business Administration and Management	27	\$1,902
Arts and Humanities (except Music, Visual & Performing Arts)	23	1,553
Criminal Justice/Protective Services	20	1,435
Social Sciences (except Economics)	10	1,757
Education (except Administrative and Math & Science Education)	7	1,250
Computer and Information Science (not programming)	6	1,965
Public and Educational Administration and Management	5	1,689

Field of Study	Average Annual Number of Graduates (2002-2007)	Lifetime Earnings per Person (in thousands)
Mathematics and Physical Sciences	5	1,805
Biological, Agricultural & Food Sciences	4	1,549
Allied Health Fields (except Nursing)	3	1,768
Other Fields	7	1,563
Overall	116	\$1,655

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 Northwest typically earn an estimated \$2 million from employment over their lifetimes (see 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 Northwest, 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	22	\$2,420
Master’s	Public and Educational Administration and Management	12	1,634
Master’s	Education (except Administrative and Math & Science Education)	8	1,367
Overall		42	\$1,994

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 underscored when one compares the difference between the estimated lifetime earnings of IU Northwest’s baccalaureate and advanced degree graduates with the earnings of associate’s degree graduates nationwide (see Table 8). Over the life course, IU Northwest’s female graduates are expected to make \$320,000 (or 33 percent) more than associate’s degree graduates. Male graduates are expected to make over \$467,000 (or 37 percent) more than associate’s degree graduates.

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

Category	Women (\$1000s)	Men (\$1000s)
Average Lifetime Earnings for IU Northwest Alumni (2002-2007) with Baccalaureate Degrees or Higher	\$1,302	\$1,746
Average Lifetime Earnings for U.S. Associate’s Degree Graduates	\$983	\$1,278
Additional Lifetime Earnings Attributable to Higher Degree	\$320	\$467

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 Northwest (compared to holders of associate’s degrees) leads to an estimated \$187 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 Northwest.

Adding to Indiana’s Talent Pool

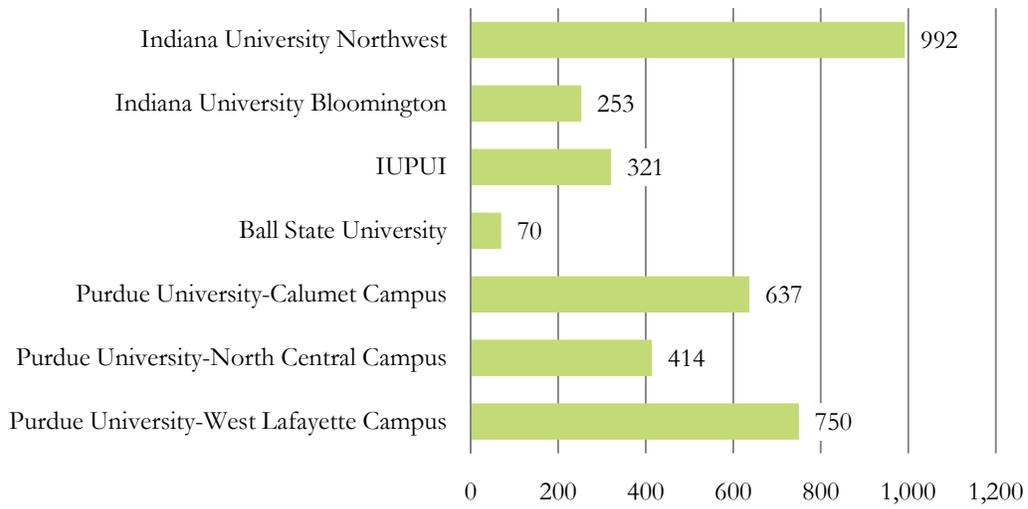
Indiana University plays a vital role to the state’s economic development efforts by training future leaders and practitioners with skills that are closely aligned with major industries. This report focuses on the high-paying life sciences industry—key among Indiana’s industrial initiatives—since the state is among the “nation’s top four life sciences leaders” due to its high number and concentration of life sciences–related jobs.³

Life Sciences

Among four-year public institutions in Indiana, IU Northwest is the top choice of Northwest Indiana residents completing life sciences degrees. Of these residents, 992 graduated from IU Northwest, notably more than any other campus (see Figure 10).

³ This information comes from the Indiana Economic Development Corporation: www.in.gov/iedc/industry.htm

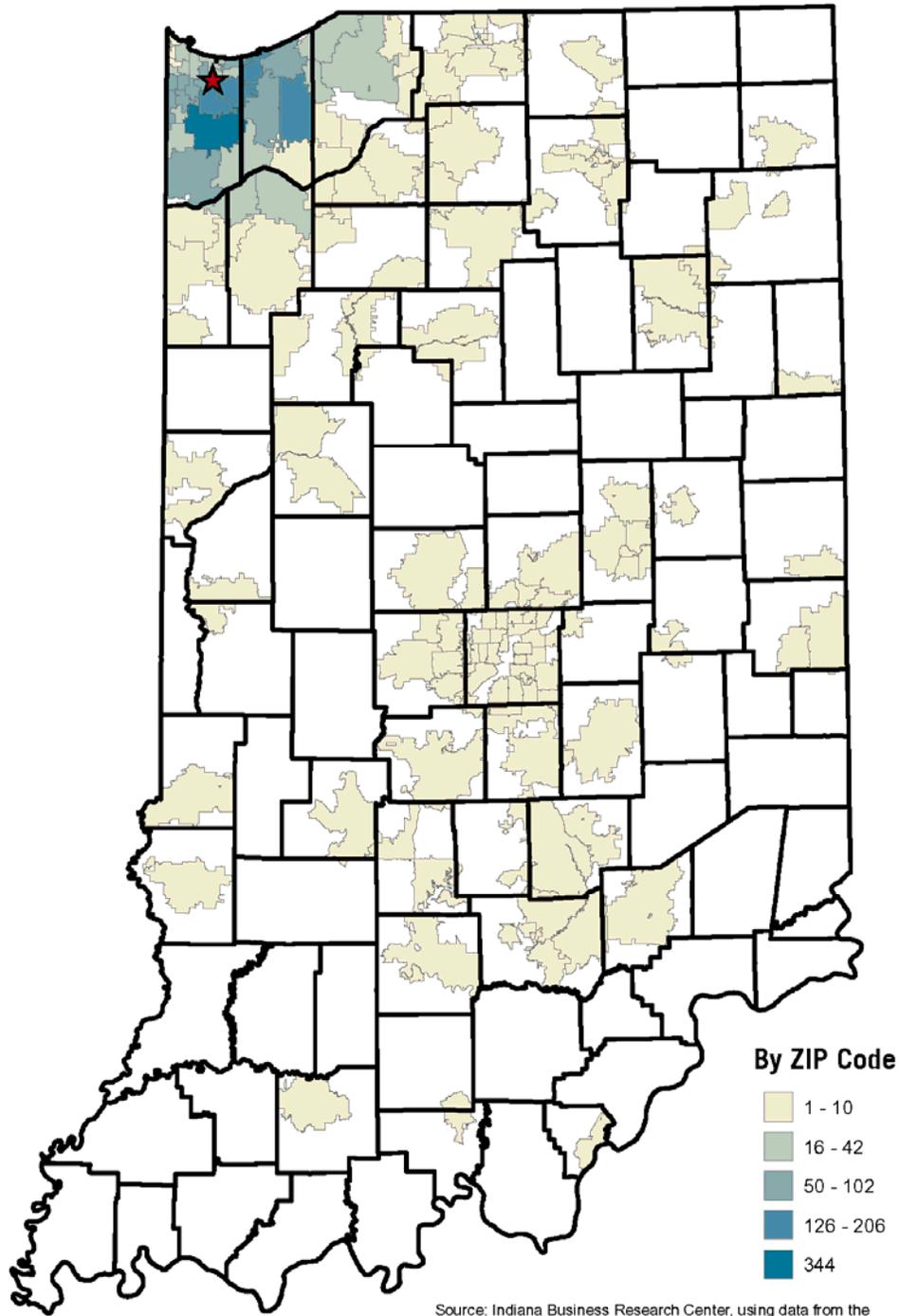
Figure 10: Life Sciences Degrees Conferred by Select Public Universities for Graduates Originally from the IU Northwest Campus Region, 2002-2007



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

Seventy-six percent of all IU Northwest alumni with life sciences degrees also remain in Indiana and predominantly in the northwestern part of the state (see Figure 11).

Figure 11: Residence of IU Northwest Alumni with Life Sciences Degrees, 2008



Civic Contribution

Service-Learning⁴

At IU Northwest, a few key courses contribute over 5,000 hours of community service through their service-learning components. Most noteworthy among these programs is “F200: Examining Self as Teacher” offered by the Education department. Seven sections of approximately 20 students each complete 20 hours of volunteer service working with students at the elementary, middle or high school level either as classroom aides or through a variety of after-school or co-curricular programs, such as the Science Olympiad. Another noteworthy example of service-learning is the personal finance course (F260) in which business students work in teams to craft financial plans for actual clients—residents of Northwest Indiana who need advice to achieve their financial goals. In total, Table 9 shows that IU Northwest students contributed over 5,000 hours through service-learning courses with equivalent employment costs of \$56,925 during the 2006-2007 academic year. This translates to an estimated benefit in the region of \$41,555 for the year.⁵

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

Department (Volunteer Role)	Estimated Hours	Equivalent Hourly Compensation	Equivalent Annual Compensation
Education (child tutor)	2,956	\$10.43	\$30,829
Business & Economics (financial advisor/consultant)	1,356	12.63	17,123
English (child tutor)	240	10.43	2,503
Dental Education (dental hygiene presenter)	192	12.78	2,454
Communications (programming and broadcast assistant - television)	180	13.05	2,349
Psychology (adult/child mentoring)	108	12.63	1,364
Women’s Studies (domestic violence counselor)	24	12.63	303
Total	5,056		\$56,925
Price-to-Client Value Ratio			73%
Overall Economic Benefit of Service-Learning			\$41,555

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 Northwest, Center for Excellence in Teaching and Learning and wage data from the U.S. Bureau of Labor Statistics

⁴ Information on hours and type of service was compiled by Jun Park (coordinator of service-learning), Indiana University Northwest Center for Excellence in Teaching and Learning.

⁵ 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 section in the full IU Impact Study for more information.

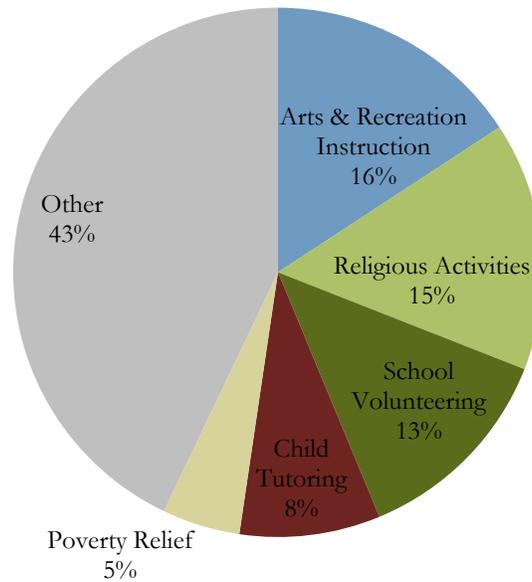
Volunteering

Some major civic engagement resources at IU Northwest include the following:

- Bicycle Safety Rodeo
- Campus Compact Committee
- Center for Excellence in Teaching and Learning
- Child Care Center
- Household Hazardous Waste Collection
- Northwest Indiana Environmental Justice Resource Center
- Volunteer Income Tax Assistance (VITA)
- WIUN (streamed radio)

IU Northwest students volunteered an average of 46 hours over the 2006-2007 academic year according to the IU Student Survey of full-time students. Figure 12 presents the most popular volunteer activities for these full-time students.⁶ Notable here is that IU Northwest is one of only two IU campuses where religious activities were not the major form of volunteering. Instead, arts and recreation instruction was the most popular form of service, followed by religious activities and school volunteering.

Figure 12: Volunteer Time Spent by Activity for IU Northwest 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 Northwest student service totaled over 117,000 volunteer hours. This service was conducted overwhelmingly

⁶ 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.

within the campus region. Table 10 summarizes the volunteer services of IU Northwest students and estimates that this service amounts to a net economic benefit of \$22,134 to the campus region.⁷

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

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
All Other Activity	50,279	93.8	\$9.52	\$448,908
Religious Activities	17,798	92.9	11.97	197,782
Arts & Recreation Instruction	18,482	92.9	9.74	167,100
School Volunteering	14,991	97.1	10.43	151,752
Child Tutoring	10,063	92.6	10.43	97,180
Poverty Relief	5,579	93.2	9.22	47,916
Total	117,192			\$1,110,638
Percent of Students Not from Campus Region				2.73%
Price-to-Client Value Ratio				73%
Overall Economic Benefit of Student Volunteering				\$22,134

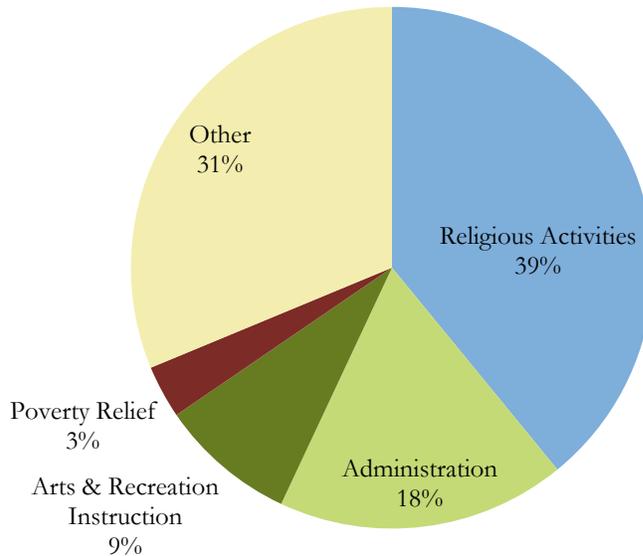
Note: Numbers may not sum due to rounding. Equivalent hourly compensation is based on wages and benefits of similar occupations. The overall economic benefit accounts only for students who did not previously reside in the campus region and assumes a 0.73 market price-to-client value ratio. Table reports full-time students. The number of full-time students in the fall of 2007 was 2,567. 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 43 hours over the 2006-2007 academic year. Figure 13 shows the most popular volunteer activities among IU Northwest employees. As with most campuses, religious activities were easily the most popular form of volunteering, though employees also served a substantial amount of volunteer time in administration capacities in local organizations.

⁷This economic impact figures may strike the reader as surprisingly low given the large number of volunteer hours estimated for IU Northwest students. However, this report is careful not to inflate the net economic impact of volunteering by only taking credit for the volunteer hours of the 2.7 percent of students from outside the campus region.

Figure 13: Volunteer Time Spent by Activity for IU Northwest 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 Northwest employee volunteer service totaled over 18,000 hours. These hours were conducted overwhelmingly within the campus region. Table 11 summarizes the hours of volunteer service estimated for IU Northwest 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 Northwest 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 \$61,030 in the IU Northwest campus region. The upper bound of the estimate, on the other hand, includes all full-time employees and totals \$186,533.

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

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
Religious Activities	7,051	91.1	\$11.97	\$76,889
All Other Activity	5,429	90.7	9.52	46,902
Administration	3,230	94.7	14.31	43,775
Arts & Recreation Instruction	1,529	84.2	9.74	12,539
Poverty Relief	592	85.2	9.22	4,646

Volunteer Role	Total Annual Hours	Percent of Hours in Campus Region	Equivalent Hourly Compensation	Equivalent Annual Compensation
Neighborhood Cleanup/ Housing Development	211	80.0	10.54	1,782
Total	18,043			\$186,533
Percent of Employees Who Are Faculty				44.82%
Price-to-Client Value Ratio				73%
Overall Economic Benefit of Employee Volunteering				\$61,030

Note: Numbers may not sum due to rounding. Equivalent hourly compensation is based on wages and benefits of similar occupations. The overall economic benefit accounts only for faculty and assumes a 0.73 market price-to-client value ratio. Table reports full-time employees. In the fall of 2007, the number of full-time faculty and staff was 415. 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 Northwest also “gives back” to the region through student and employee donations to charities. Table 12 shows that full-time IU Northwest students donated an average of \$93 over the 2006-2007 academic year. Extrapolating the survey average to the entire full-time student body, students at IU Northwest gave more than \$238,000. Sixty-three percent of these funds—over \$150,000—were received by organizations within the seven-county campus region.

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

Region of Charitable Giving	Percentage of Total	Contribution per Person
Inside Campus Region	63.0%	\$58
Other Parts of Indiana	21.3%	\$20
Outside of Indiana	15.8%	\$15
Total Contribution per Person		\$93
Total Contribution of All Students		\$238,495
Contribution within Campus Region		\$150,133

Note: Table reports full-time students. In the fall of 2007, the number of full-time students was 2,567.

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

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 \$760 during the 2006-2007 academic year. Multiplying this average by the number of full-time faculty and staff, IU Northwest employees gave over \$315,000. Table 13 shows that 59 percent of these funds were donated to charities operating in the region. The impact in the IU Northwest campus region was \$186,000.

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

Region of Charitable Giving	Percentage of Total	Contribution per Person
Inside Campus Region	59.0%	\$448
Other part of Indiana	14.3%	\$109
Outside of Indiana	26.7%	\$203
Total Contribution per Person		\$760
Total Contribution of All Employees		\$315,397
Contribution within Campus Region		\$186,053

Note: Table reports full-time employees. In the fall of 2007, the number of full-time faculty and staff was 415.
 Source: IBRC, using charitable contribution data from the IU Faculty and Staff Survey 2008

Resources for the Community

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

Arts and Culture

IU Northwest has several cultural resources available to the public including Theatre Northwest, which offers a score of public plays every year. Four categories of key resources offered by IU Northwest are summarized in Table 14.

Table 14: Arts and Culture Resources Available at IU Northwest

Resource	Music & Performing Arts	Fine & Visual Arts	Film	Popular Media
Center for Regional Excellence	X	X		
Department of Fine Arts		X		
Department of Performing Arts	X			
Gallery for Contemporary Art		X		
Gallery Northwest		X		
<i>Monday Movies</i> Spring Film Series			X	
Spirits Literary Magazine				X
Theatre Northwest	X	X		
WIUN (streamed radio station)				X

Source: IBRC, using information compiled from IU Campus Events listings at: www.indiana.edu/arts/

Library Services

Besides students, faculty and staff, 1,052 members of the public used the IU Northwest library during the 2006-2007 academic year. Community members borrowed 486 books for a benefit valued

at \$3,606. 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*.⁸ 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 15 catalogs five types of resources available to members of the public.

Table 15: Community Resources Offered by IU Northwest

Community Resource	Adult/ Continuing Education	K-12 Education Resources	Economic Development/ Business Leadership	Physical & Mental Health Treatment	Recreation Facilities & Sporting Events
Career Services - Internship Program			X		
Center for Economic Education	X	X			
College Goal Sunday		X			
College Prep 101		X			
Dental Clinic				X	
Division of Continuing Studies	X				
Great Lakes Center for Public Affairs and Administration			X		
Household Hazardous Waste Collection					
Information Technology Training	X				
Intercollegiate Athletics - <i>RedHawks</i>					X
Kids College		X			
Northwest Indiana Center for Data and Analysis			X		
Savannah Fitness and Recreation Center					X
Theatre Northwest					
Work Study Program			X		
Working Smarter Seminar			X		

Note: This list does not include the civic engagement or arts and cultural resources discussed earlier in the report.

Source: IBRC, with input from campus administrators

⁸ Indiana Business Research Center. 2007. "The Economic Impact of Libraries in Indiana." Available online at: www.ibrc.indiana.edu/studies/EconomicImpactOfLibraries_2007.pdf

The Economic Footprint of the University

Methodology

The Indiana Business Research Center analyzed the significance of IU Northwest 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.⁹ Users of the model's results should be aware that the figures are estimates, not a precise accounting of the effects of IU Northwest on the regional economy.

Principal Findings

- The total economic footprint of IU Northwest on the university campus region amounts to \$54.8 million annually.
- This economic activity generates approximately \$1.8 million in state and local taxes.
- IU Northwest faculty and staff spending, together with university direct purchases and construction projects, results in ripple effects of approximately \$11.5 million in additional economic activity and accounts for approximately 90 jobs in the university campus region.

Table 16 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 16: Estimated Economic Footprint of IU Northwest, 2006-2007

Economic Output Effects of University	Direct Effects (in millions)	Ripple Effects (in millions)	Total Footprint (in millions)
Faculty and Staff Compensation	\$25.1	\$6.2	\$31.3
University Purchases of Goods and Services	10.8	2.5	13.3
University Construction	7.4	2.8	10.1
Visitor Expenditures Attributed to IU Events	0.1	0.0	0.1
TOTAL Effect on Economic Output	\$43.3	\$ 11.5	\$54.8

⁹ For a discussion on the conceptual difference between economic impact and economic footprint, please see the methodology section of the full IU impact report.

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 17 presents the employment impact of IU Northwest. In addition to the 432 persons employed by IU Northwest,¹⁰ the spending by university faculty, staff and students, together with university purchasing, accounts for another 283 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 Northwest 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 17: Estimated Employment Footprint of IU Northwest, 2006-2007

Employment Effects of University	Direct Effects	Ripple Effects	Total Footprint
Faculty and Staff Compensation	130	50	180
University Purchases of Goods and Services	20	10	30
University Construction	40	30	70
Visitor Expenditures Attributed to IU Events	3	0	3
TOTAL Effect on Employment	193	90	283

Source: IBRC, using IMPLAN model results

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?¹¹ 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.

¹⁰ Based on IBRC's full-time equivalent calculations using payroll data received from the Office of Planning, Institutional Research and Accountability.

¹¹ John A. Siegfried, Allen R. Sanderson, Peter McHenry. “The economic impact of colleges and universities,” *Economics of Education Review* 26 (2007): 546–558.

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 Northwest 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 injections, if one adds these 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 Northwest students travel out of state 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 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 16 and Table 17, 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 Northwest campus region for the analysis is comprised of Jasper, Lake, LaPorte, Newton, Porter, Pulaski, and Starke counties. Thus, the economic effects were measured for the campus region within Indiana, in contrast to measuring the economic benefits of IU Northwest on Lake County alone. As stated in the full IU Impact Report, the IBRC researchers attempted to rigorously apply the “but for” principle as expounded by Siegfried, Sanderson and McHenry.¹² The research teams assumed, because of IU Northwest's mission and student composition—46 percent of the students are part-time—that most students were economically and relationally tied to the campus region. As a result, opportunities to pursue a four-year university degree were limited. If IU Northwest didn't exist, most of the individuals who comprise the student body would still be living there.

The IBRC researchers assumed that IU Northwest students would not leave the campus region and their spending would remain in the region even if IU Northwest 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 Northwest. On the other hand, “but for” the existence of IU Northwest, an argument can be made that these students would not have an opportunity to earn a four-year degree. As a result, IU Northwest is credited with augmenting the region's stock of human capital and increasing the lifetime earnings of IU Northwest 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 Northwest'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.

¹² *Ibid.*

The sum of all the direct effects will not add up to the IU Northwest 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.

Conclusion

IU Northwest makes a vital contribution to Northwest Indiana. This study presents a comprehensive, innovative and conservative assessment of the economic impact that IU Northwest has on its region. IBRC researchers used many of the standard tools and methods to measure IU Northwest's impact. The economic effects are clear. Through the spending of 432 full-time employees and purchases of goods and services, IU Northwest creates economic ripples through the region. This analysis estimated that the direct and ripple effects of university expenditures accounts for \$54.8 million of the region's economic activity.

Students, faculty and staff also “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 the community and civic engagement. Information related to IU Northwest'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 \$124,800, 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 Northwest as reported in this study is but one dimension of IU Northwest'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.