
University of Iowa

Economic Impact Study

Fiscal Year 2008-2009

Executive Report • September 30, 2010



Table of Contents



| | |
|---|----------|
| University of Iowa Economic Impact | 2 |
| Introduction | 3 |
| UI Spending Supports State Economy | 4 |
| UI Visitor Impact | 6 |
| Strengthening State and Local Government through Tax Revenues | 7 |
| UI Research Generates a Far Reaching Economic impact | 8 |
| UI Research Creates High-Quality Jobs | 10 |
| Economic Development & Technology Transfer | 11 |
| UI Research Commercialization | 12 |
| UI Community Benefits | 13 |
| Appendix A: Definition of Terms | 14 |
| Appendix B: Peer University and Industry Comparisons | 15 |
| Appendix C: Methodology | 19 |
| Appendix C: FAQs about Economic Impact Analysis | 22 |

University of Iowa Economic Impact

University of Iowa Annual Impact on the Iowa Economy



\$6.0 billion in total economic impact generated by UI operations in the state of Iowa

\$1.4 billion in total University-related spending (capital and goods and services)

51,818 jobs created in the state of Iowa as a result of the UI

\$429.5 million in external sponsored research, supporting more than **6,275 jobs**

\$208.1 million in direct and indirect expenditures associated with people visiting UI

\$486.9 million to state and local government taxes, including sales, property, and business

INTRODUCTION

Tripp Umbach was retained in October 2009 by the University of Iowa to measure the economic, employment, and government revenue impact of operations and research. In completing this report, Tripp Umbach used primary data supplied by the



University of Iowa in conjunction with information from Tripp Umbach's national databases developed over the years by conducting economic impact studies commissioned by prominent universities and medical schools throughout the country. Key economic impact findings presented within the summary include the total current (2009) economic, employment, and state and local government revenue impact of the University of Iowa's operations.

The University of Iowa is a major national research university. It is composed of 11 colleges, the largest of which is the College of Liberal Arts and Sciences, enrolling most of Iowa's undergraduates. The Henry B. Tippie College of Business, the Roy J. and Lucille A. Carver College of Medicine, and the Colleges of Education, Engineering, Nursing, and Pharmacy, enroll undergraduates, and with the Colleges of Dentistry, Law, and Public Health provide graduate and professional education in conjunction with the Graduate College.

More than 30,000 students enroll at the University of Iowa each year. Some 58 percent come from Iowa, 25 percent from adjoining states, and 9 percent from the remaining states. International students from 104 countries make up 8 percent of the University's enrollment. The UI educates many of the state's professionals: 79 percent of Iowa's dentists, 50 percent of Iowa's physicians, 48 percent of Iowa's pharmacists and teachers and administrators are present in 80 percent of Iowa's K-12 school districts.

The University has world-renowned research programs in genetics, hydraulics, and speech and hearing, and has recorded major innovations in agricultural medicine, biocatalysis, biomedical engineering, biomedical sciences, and pharmacology education. Its graduate programs in audiology, printmaking, creative writing, speech-language pathology, and nursing service administration are top-ranked. The University of Iowa operates one of the nation's most advanced and comprehensive

university-owned teaching hospitals. It also has developed the most technically advanced driving simulator in the world.

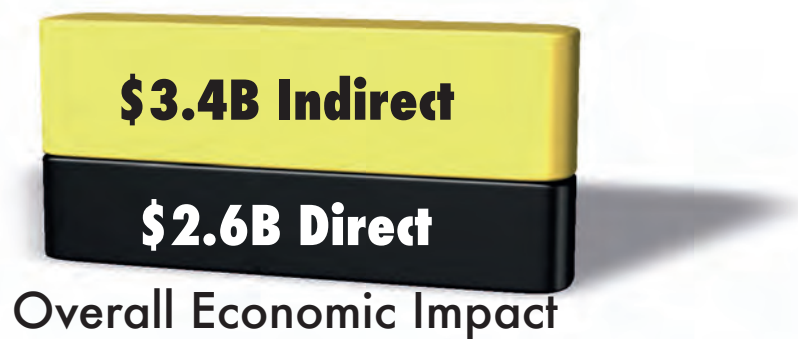
The University of Iowa's daily operations provide ongoing financial benefits to the state's economy. Though its primary missions are education, research, and community service, an institution as vast as the UI also is central to the fiscal health and well-being of the state of Iowa. The University significantly impacts the statewide economy through expenditures, government revenues, and the employment and personal income of residents.

UI SPENDING SUPPORTS STATE ECONOMY

Statewide expenditures by the University and related constituencies totaled **\$2.6 billion** in fiscal year FY 08-09. The University of Iowa affected business volume in Iowa and the local region in two ways:

- 1) Direct expenditures for goods and services by the University, its employees, students, and visitors. This supported local businesses, which in turn employed local individuals to sell the goods and provide the services that University constituencies needed.
- 2) Induced or indirect spending within the state of Iowa. The businesses and individuals that received direct expenditures re-spent this money within the state, thus creating the need for even more jobs.

As a result of expenditures on goods and services by the University, the overall economic impact of all the UI's operations on the state of Iowa in 2009 was **\$6.0 billion** (\$2.6 billion direct impact and \$3.4 billion indirect). Therefore, **\$1.00 of every \$30.00 in the Iowa economy is supported by the University of Iowa.**¹



¹ Total State Business Volume for the state of Iowa is \$183,575,412,000.

In FY 08-09, the University of Iowa received \$379.4 million in appropriations from the state of Iowa. **For every \$1 invested in the University of Iowa by the state, \$15.81 is generated in the state's economy.** The total UI operation budget for FY 08-09 was \$2.68 billion.

Included in this impact is a significant impact from out-of-state students paying tuition and bringing fresh dollars into the Iowa economy. In FY08-09, more than \$143.7 million in fresh dollars entered the state of Iowa in the form of tuition from out-of-state students, but the impact of these students is much larger than tuition payments. It is estimated that out-of-state students have a total impact on the state of Iowa of \$380 million.

Fresh dollars also enter into the Iowa economy as a result of UI's research enterprise. In FY 08-09, the UI received \$429.5 million dollars in external research funding from out of the state of Iowa. This research funding is received through competitive grants such as the NIH and NSF and without the presence of the UI, these dollars would not enter the Iowa economy.

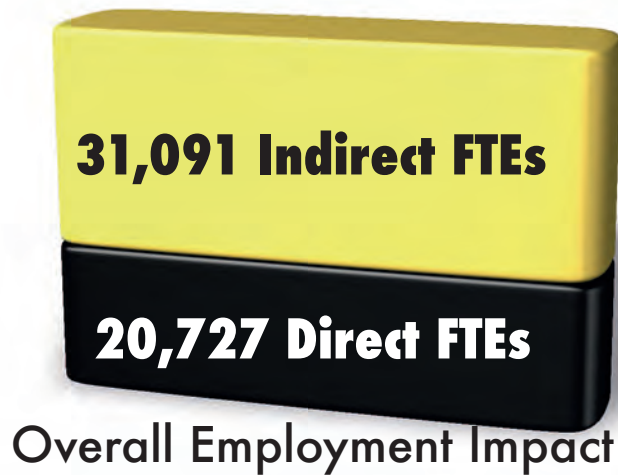
Sustaining and Creating Employment for Iowans

Both directly and indirectly, the University of Iowa supported **51,818 jobs** in the state of Iowa. **Over one out of 30 jobs in the state is attributable to the UI.** The University directly employed 20,727 full-time faculty, staff and students during FY 08-09. With \$6.0 billion in direct and indirect impact, an additional 31,091 indirect local jobs were created.

The University of Iowa is one of the top employers in the state of Iowa. The ranking of top Iowa employers has not been completed by the State since 2003, however the study ranked the University of Iowa as the 3rd largest employer in the state preceded by Hy-Vee and Walmart. It is critical to note that the types of direct jobs provided by the UI are higher paying and provide benefits to its employees and generate a significantly higher indirect multiplier than the retail sector. Based upon the analysis completed by the State, Tripp Umbach believes that the University of Iowa is the largest single contributor to the Iowa economy.

The University of Iowa supports thousands of jobs annually statewide in virtually every sector of the Iowa economy, such as construction, business and professional services, restaurants and hotels, information technology, security, and temporary employment companies. These indirect jobs (31,091 FTEs) are in support of the nearly 21,000 Iowa residents who are employed directly by the University. In addition, the population of the University community—and the workers who support that community

—also create a need for additional employees in governmental and service facilities, such as schools and day care facilities.



UI VISITOR IMPACT

The University attracted thousands of visitors from outside the state of Iowa in FY 08-09 who brought “new” money through their spending. Visitors came to the campus as prospective students, to see family or friends, to seek medical care or to visit a patient, for business or educational purposes, and to see theater performances and other cultural events. Visitor spending in direct expenditures in Iowa associated with all groups was \$208.1 million in FY 08-09.

In addition to this visitor impact, the University also has a significant visitor impact from its preeminent position in many sporting events from women’s rowing to men’s football. The impact of sports on Iowa City and the state of Iowa is significant. A recent economic impact study (August 2010) conducted under the direction of the Iowa City/Coralville Area Convention and Visitors Bureau found that the economic impact of the University of Iowa football program on Johnson County exceeds \$100.1 million. This economic impact study examined the seven-home game schedule with each game having an impact of more than \$14.5 million and attracting on average 51,000 visitors to Johnson County.

STRENGTHENING STATE AND LOCAL GOVERNMENT THROUGH TAX REVENUES

As a unit of state government, it is true that the UI does not pay state taxes as a private company does, e.g., corporate income tax. However, employees at public universities pay income tax, sales tax and other local taxes such as real estate property taxes. These are examples of how the University directly contributes taxes to the state.

The presence of the University and its spending also generates significant indirect taxes paid by companies who receive payments from the University.

Furthermore, visitors to the university from out of state pay a wide range of taxes which include, hotel motel, rental car, fuel, airport taxes, sales taxes, parking taxes. When looking at the combination of how the University of Iowa directly and indirectly contributes back to the state each year, the University contributes more to the state than it receives from the state.

State and local government revenues attributable to the presence of the University of Iowa totaled \$486.9 million in FY 08-09 (\$192.9 million directly paid or directly generated). \$294.0 million in state and local tax revenue is generated indirectly. For every **\$1 in state funding appropriated to the UI, \$1.28 in tax revenue is returned to state and local governments.**

| Tax revenue | Direct payments and directly generated by University of Iowa | Indirectly generated in the Iowa economy | Total |
|--|---|---|------------------------|
| Total | \$192.9 million | \$294.0 million | \$486.9 million |
| State* | \$132.4 million | \$178.0 million | \$310.4 million |
| Local | \$60.5 million | \$116.0 million | \$176.5 million |
| * Direct state taxes include \$84.1 million in payments made by the University of Iowa directly to the State with the remaining direct payments in the form of state taxes paid by University of Iowa employees. | | | |

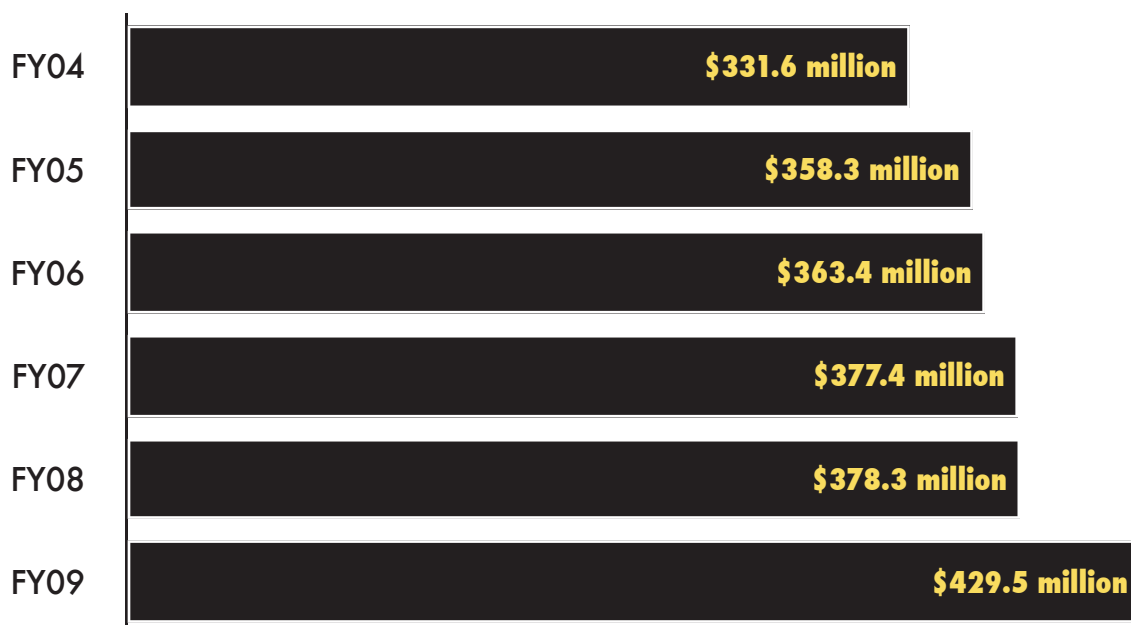
Through its local spending as well as direct and indirect support of jobs, the presence of the University stabilizes and strengthens the local and statewide tax base. Without the University of Iowa, there would be fewer jobs and less spending in the area.

UI RESEARCH GENERATES A FAR REACHING ECONOMIC IMPACT

As a major academic research center in the United States, the University of Iowa annually brings hundreds of millions of dollars to the state in government- and industry-sponsored research and projects. The University of Iowa has received an impressive \$429.5 million in sponsored research funds in FY 08-09, a tribute to the exceptional quality of their diverse and innovative faculty, students, and staff, and the power of the UI intellectual community. Iowa ranks 20th among public universities in federal research and development funding. External funding to the UI has been growing consistently for the past 23 years. The increase from FY08 to FY09 as is an impressive 10.3 percent.²

| Total Award Dollars FY 09 by College | |
|---|----------------------|
| Business | \$300,000 |
| Dentistry | \$4,500,000 |
| Education | \$3,900,000 |
| Engineering | \$21,200,000 |
| Graduate College | \$2,500,000 |
| Law | \$900,000 |
| Liberal Arts and Sciences | \$42,100,000 |
| Medicine | \$212,500,000 |
| Nursing | \$7,700,000 |
| Other Administrative Units | \$71,800,00 |
| Pharmacy | \$14,700,000 |
| Public Health | \$47,400,00 |

The University of Iowa External Funding FY 2004-2009



² Source: The University of Iowa. Annual Report for Research, 2009. <http://research.uiowa.edu/report/awarddata.html>

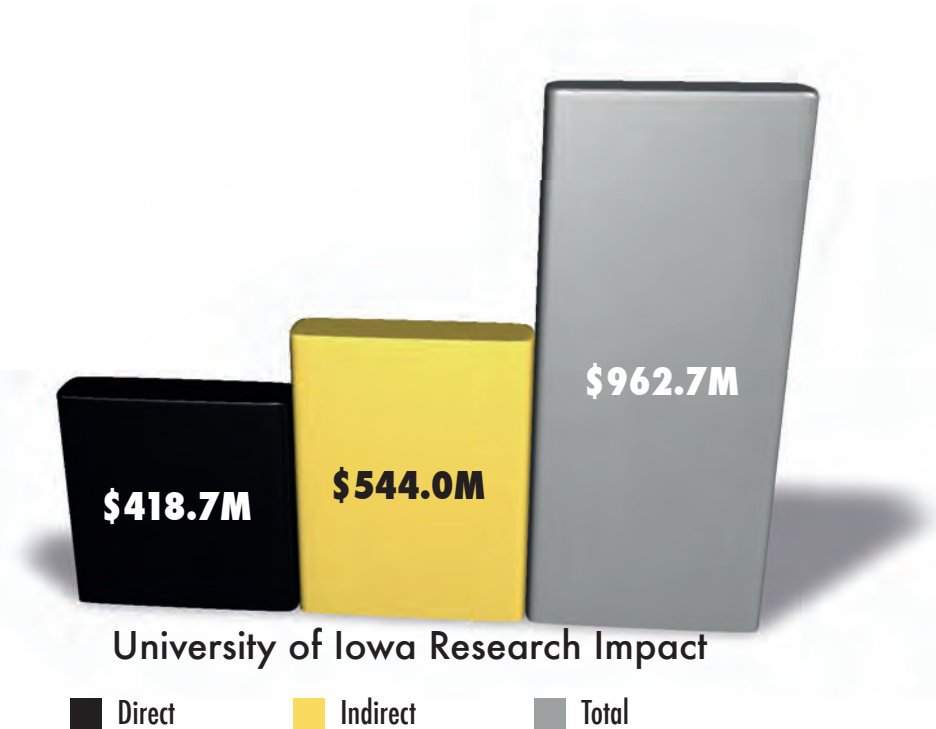
UI research has led to diverse discoveries and developments, including the Van Allen radiation belts, educational television, and the Gallup Poll, and to advances in blood banking, biotechnology, computer simulation and computer-aided design, and educational testing.

The University of Iowa is dedicated to providing an environment in which the collective and individual imaginations of faculty members, staff members, and students can flourish. The UI's success hinges on advocating for research, providing a high level of service to faculty and staff, creating innovative partnerships, and expecting excellence.

The University of Iowa fosters interdisciplinary collaborations among its constituents and assists them in creating such alliances. The UI prides itself on a service philosophy that helps facilitate all aspects of research and economic development at the University. Research development is promoted by maintaining state of the art core facilities and making strategic investments to initiate and maintain programs with promise for success. Through an internal network of grant administrators and support staff, the UI assists investigators and departments in cultivating external research support. The University works to increase engagement and partnerships across departments, colleges, industries, other universities and the state of Iowa. It also provides expertise and support to faculty and staff in the commercialization of University intellectual property, and helps bring these new ideas to the marketplace.

The University of Iowa Research Park is central to the University's interaction with industry and the public. Within the research park, the following enterprises are housed: the **UI Hygienic Laboratory**, the state's public health and environmental laboratory; **National Advanced Driving Simulator**, the world's most sophisticated ground vehicle simulator; **Center for Biocatalysis and Bioprocessing**, which supports development of biotechnology for health, chemistry, and agriculture; the **UI Technology Innovation Center**, a business incubator; and the **BioVentures Center**, for life science companies that need wet laboratory space. The **UI Research Foundation** filed 128 patent applications for inventions in FY 08-09 and earned more than \$24 million in license revenue.

The University of Iowa's research vision is to create an outstanding climate of support for University of Iowa researchers, broadly enabling stellar research advances. **The economic impact of the UI research engine is \$962.7 million (\$418.7 million direct).**



The University's research operations make tangible and quantifiable economic contributions. Along with creating jobs for research staff and support personnel, UI scientists are contributing to new product development and technology commercialization. Knowledge and technology transfers have helped to start commercial ventures that promote entrepreneurship, economic development, and job creation.

UI RESEARCH CREATES HIGH-QUALITY JOBS

In FY 08-09, the University received \$429.5 million for sponsored research and other sponsored programs, supporting 6,275 full-time equivalent (FTE) jobs. These jobs include not only direct employment by the University of Iowa research professionals (2,510 direct FTEs) but also indirect jobs created for supply and equipment vendors, contractors, and laborers for the construction and renovation of laboratory facilities, administrators and managers who support the research infrastructure, and jobs created in the community by the disposable income of the scientific workforce.



As the University continues to attract, and consequently spend, increasingly higher levels of research dollars, the number of jobs supported continues to grow. With continued high levels of research funding and consequent expenditures, the University will remain a source of support for thousands of local jobs based on its research funding alone.

ECONOMIC DEVELOPMENT & TECHNOLOGY TRANSFER

Public research universities such as the University of Iowa stimulate economic development and extend the benefits of learning and discoveries to the citizens of the community, region, state, nation, and world. University-based research has proved to have a substantial and measurable affect on business formation and economic development. Research performed by Adam Jaffe at Harvard found that “...a state that improves its university research system will increase local innovation both by attracting industrial R&D and augmenting its productivity.”³

The University of Iowa supports economic development through the John Pappajohn Entrepreneurial Center, which provides entrepreneurial development and education; the IOWA Centers for Enterprise

³ Jaffe, Adam B., “Real Effects of Academic Research,” *American Economic Review*, March 1991, pp. 957-970.

and the University of Iowa Research Park, which provide incubation for technology-based companies; and the University of Iowa Research Foundation, which supports technology commercialization.

In 2008, the University of Iowa Research Park launched its BioVentures Center, a business incubator that will house both start-up companies commercializing UI biotechnology research as well as life science ventures wanting to locate near the University and use its research capabilities. The 35,000-square-foot business incubator facility in Coralville, Iowa, provides 20 wet laboratories and 16 offices for start-up and early-stage biotech companies. The BioVentures Center is the largest wet laboratory business incubator in the state of Iowa and is the first major wet laboratory space for start-up companies to open at the UI.

UI RESEARCH COMMERCIALIZATION





By helping faculty researchers translate innovations to products and services, the University of Iowa Research Foundation (UIRF) extends the UI's reach beyond academic circles and research laboratories to impact the public. Innovative research often is the spark igniting an important discovery that touches many people's lives, benefits greater society, inspires new research, and generates income. In FY 08-09, royalty and license revenue increased by 4 percent for a total of \$22.4 million. In 2007, the UIRF was ranked 19th in the country for revenue generation by the *Chronicle of Higher Education*.

The University of Iowa does not just contribute to business enterprises through its research, it also actively promotes business enterprise formation, commercialization, and expansion via University business incubators and small business advisory services. Research and investments in research result in impacts outside of operations, specifically spin-off businesses, patents, and licenses. The impact of research often is not shown in the economy until years after its initiation. Based upon current research funding of \$429.5 million, the economic impact of spin-off businesses and commercialization of research in existing companies is estimated to be between **\$1.4 billion (conservative)** and **\$2.4 billion (aggressive)** on the state's economy by 2020.⁴

⁴ For every new dollar in sponsored research within 10 years an additional \$3.18 (conservative) will be generated in the local economy. For every new dollar in sponsored research (medical and biomedical cluster) within 10 years an additional \$5.70 (aggressive) will be generated in the local economy. Tripp Umbach economic impact models showing commercialization of research dollars developed initially in 2001 for the Mayo Clinic and the University of Minnesota.

UI COMMUNITY BENEFITS

The University of Iowa's total impact on the state of Iowa goes beyond the annual economic impact presented in this report. In addition to the overall \$6.0 billion dollar impact generated by the University of Iowa in the state, Tripp Umbach estimates that University of Iowa staff, faculty, physicians, students, medical residents, and fellows who received their training at the University of Iowa generate more than \$300 million annually in charitable donations, volunteer services, and provision of free care. These benefits (in addition to the \$6.0 billion annual impact) include the following:

-  In 2009, UIHC provided more than \$232.5 million in care to Iowa state residents for which it did not receive full compensation (charity care or bad debt).
-  UI staff, faculty, and student employees donated \$24.8 million in 2009 to local charitable organizations.⁵
-  UI staff and faculty provide hours of volunteer services. The economic value of such services is estimated at more than \$17.0 million.
-  UI students (undergraduate and graduate) also provide benefits in the form of contributions to local charities. It is estimated that the students donate nearly \$6.5 million to local charities and that their volunteer activities are valued at nearly \$20.5 million. These dollars are in addition to the economic impact outlined above.

⁵ Source: Tripp Umbach has conducted survey research where students (primary), staff and faculty (secondary) provide estimates on spending patterns, including information on the number of volunteer hours and charitable donations in which they provide. Tripp Umbach used a conservative assumption of \$20.10 per hour to calculate the value of volunteer services. This amount was originally calculated independently by the Points of Light Foundation.

APPENDIX A: DEFINITION OF TERMS

| | |
|------------------------------|---|
| Study Year | FY July 1, 2008 - June 30, 2009 |
| Total Economic Impact | The total economic impact of an institution includes both the direct impact and the indirect impact generated in the economy as a result of the institution. Direct impact includes items such as institutional spending, employee spending, and spending by visitors to the institution. Indirect impact, also known as the multiplier effect, includes the re-spending of dollars within the local economy. |
| Total Business Volume | Total sales receipts generated within a given geographic area (state of Iowa). Business volume includes wholesale, retail and service sector spending as well as value added in the manufacturing process. |
| Multiplier Effect | The multiplier effect is the additional economic impact created as a result of the institution's direct economic impact. Local companies that provide goods and services to an institution increase their purchasing by creating a multiplier. |
| Direct Tax Payments | Direct tax payments made by an institution or person to a unit of government. |
| Indirect Tax Payments | Government revenue that is collected by governmental units in addition to those paid direct by an institution, including taxes paid directly by visitors to the institution, and vendors who sell products to the institution. |
| Direct Employment | Total employees based on full-time equivalents (FTEs) |
| Indirect Employment | Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases thus creating an employment multiplier. |

APPENDIX B: PEER UNIVERSITY AND INDUSTRY COMPARISONS

Peer Comparisons


UI's operational impact of \$6.0 billion annually compares quite favorably with other peer universities. It is noteworthy however, that each economic impact study is unique and these comparisons are not based upon identical methodologies or data collection practices.


| Peer University Comparisons | | | | | |
|--|---------------------------|---------------------------|------------------------------|--|---|
| Peer University | State Investment FY 07-08 | State Investment FY 08-09 | Economic Impact* | Statewide Economic Activity Generated per Dollar of State Investment | Efficiency of Dollars |
| University of Iowa | \$343.7 M | \$379.4 M | \$6.0 B (2009, ACE) | \$15.81 | \$379.4 M in investment leads to \$6.0B in impact |
| Indiana University | \$489.4 M | \$509.6 M | \$4.6 B (2008, IMPLAN) | \$9.03 | \$509.6 M in investment leads to \$4.6 B in impact |
| University of Wisconsin-Madison | \$461.1 M | \$491.9 M | \$4.7 B (2002, Input-Output) | \$9.55 | \$491.9 M in investment leads to \$4.7 B in impact |
| University of Minnesota | \$711.3 M | \$697.4 M | \$9.6 B (2003, IMPLAN) | \$13.76 | \$697.4 M in investment leads to \$9.6 B in impact |
| University of North Carolina | \$596.3 M | \$622.1 M | \$10.4 B (2009, REMI) | \$16.72 | \$622.1 M in investment leads to \$10.4 B in impact |
| *Note: The methodologies used to complete the economic impact studies by the peer universities in the table vary by entity. It is also important to note that Tripp Umbach did not perform the analysis for these economic impact studies. | | | | | |

State of Iowa Economy Overview

Iowa has a very diversified economy. Manufacturing, biotechnology, finance and insurance services, and government services contribute substantially to Iowa's economy.⁶ This economic diversity has helped Iowa weather the late 2008 recession better than most states, with unemployment substantially lower than the rest of the nation.^{7,8} As of January 2010, the state's unemployment rate was 6.6%.

Economic impact studies completed by other industries in the state of Iowa provide a way to contextualize the economic impact of the University of Iowa.⁹ The \$6.0 billion impact of the University of Iowa is comparable to the aviation industry, travel and tourism and community hospitals.

 *Economic Impact of Travel on Iowa Counties (2007): \$6.3 billion in economic impact and 64,900 jobs¹⁰*

 *Economic Impact of Aviation on Iowa (2009): \$5.4 billion in economic impact and 47,304 jobs¹¹*

 *Economic Impact of Iowa's Community Hospitals (2010): \$6.1 billion in economic impact and 148,000 jobs¹²*

According to analysis completed by the US Bureau of Labor and Statistics published in January 2010, the top five non-farm employment clusters in the state of Iowa are: 1) trade, transportation & utilities, 2) government, 3) education & health services, 4) manufacturing and 5) leisure and hospitality.¹³ The table below profiles the employment numbers by job type in the state of Iowa.

⁶ *Iowa Industries*, Iowa Workforce Development. <http://www.iowalifechanging.com/downloads/iaindustries.pdf>

⁷ Iowa's initial jobless claims grow. Des Moines Register April 2, 2009, <http://www.desmoinesregister.com/article/20090402/BUSINESS/90402018/-1/NEWS04>

⁸ City has lowest unemployment in nation, *Iowa City Press-Citizen* May 5, 2009, <http://www.press-citizen.com/article/20090604/NEWS01/906040336/1079/news01>

⁹ The methodology used to complete these economic impact studies varies by study. These studies were not completed by Tripp Umbach.

¹⁰ Source: A Study Prepared for the **Iowa Department of Economic Development Iowa Tourism Office** By the Research Department of the Travel Industry Association. September 2008.

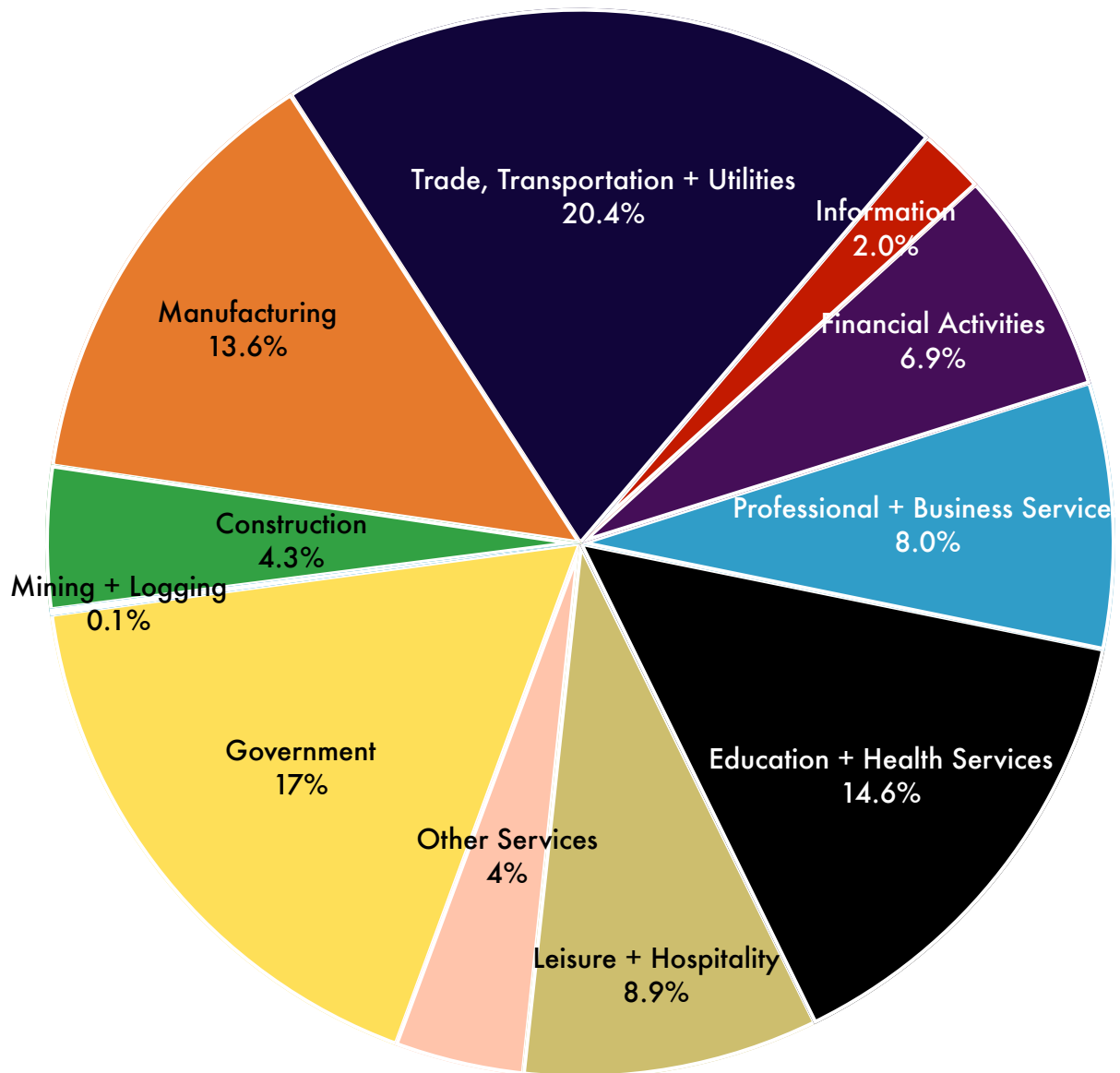
¹¹ Source: Iowa Economic Benefits of Aviation: Uses and Benefits of Aviation in Iowa. 2009.

¹² Source: Economic Impact of the Health Sector, State of Iowa. Iowa Hospital Association, January 2010.

¹³ Bureau of Labor and Statistics, January 2010.

| Iowa State Economy (January 2010) | |
|--|-----------|
| Labor Force Data* | |
| Civilian Labor Force | 1,680,900 |
| Employment | 1,570,200 |
| Unemployment | 110,700 |
| Unemployment Rate | 6.6% |
| Non-Farm Wage and Salary Employment** | |
| Total Non-Farm | 1,465.1 |
| Mining and Logging | 2.1 |
| Construction | 63.1 |
| Manufacturing | 198.6 |
| Trade, Transportation, and Utilities | 298.7 |
| Information | 29.5 |
| Financial Activities | 100.7 |
| Professional & Business Services | 117.9 |
| Education & Health Services | 213.4 |
| Leisure & Hospitality | 131.1 |
| Other Services | 57.2 |
| Government | 252.8 |
| *Number of persons, in thousands, seasonally adjusted. | |
| **Number of jobs, in thousands, seasonally adjusted. | |

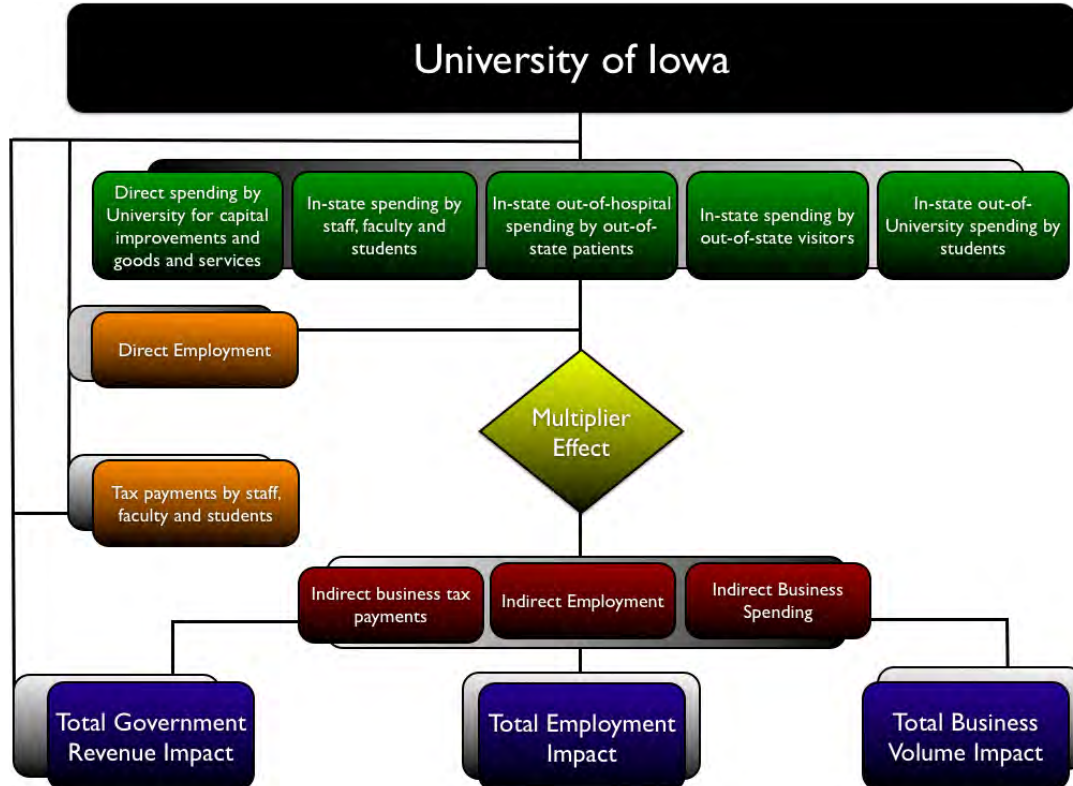
The graphic below depicts the percentage of jobs by sector in the Iowa economy.



APPENDIX C: METHODOLOGY

Impact on State Business Volume, Employment and Government Revenue

The University is a major employer in the state and, as such, a major generator of personal income for state residents. Businesses operating within Iowa in the wholesale, retail, service, and manufacturing sectors benefit from the direct expenditures of the institutions and their faculty, staff, students, and visitors on goods and services. In addition, many of these “direct” expenditures are re-circulated in the economy as recipients of the first-round of income re-spend a portion of this income with other businesses and individuals within the state. This re-spending is termed the “multiplier” or “indirect” effect.



This economic impact analysis measures the effect of both direct and indirect business volume and government revenue impacts for the entire University of Iowa. The methodology employed in the calculation of these impacts is derived from the standard set of impact research tools developed by the American Council on Education (ACE)¹⁴ for the measurement of college and university economic

¹⁴ Caffrey, John and Isaacs, Herbert, “Estimating the Impact of a College or University on the Local Economy,” American Council on Education, 1971.

impact. The ACE-based methodology is well established, having been used in hundreds of impact studies throughout the United States. Tripp Umbach previously has used the same methodology at the University of Washington and for the Pennsylvania State University.

The ACE methodology employs linear cash-flow modeling to track the flow of institution-originated funds through a delineated spatial area.¹⁵ For the University of Iowa impact analysis, computerized spreadsheet models were developed for the University as a whole and for each of the major functions, with the models measuring impact on the state economy and government revenues. The figure below shows the general structure of the impact models used for the University of Iowa.

By using this economic impact model, the Tripp Umbach research team has been able to provide the University of Iowa with a detailed quantification of the total direct and indirect impact of the University on the economy of Iowa. The impact models provide measures of business volume and state government revenues allocable to the university, together with breakouts of the individual categories of spending that comprise the total impact (e.g. institutional capital spending, student spending, faculty spending, etc.).

Employment Impact

The research reported here, measures the direct employment impact of the University. In addition, the research quantifies the indirect employment generated at in-state businesses by expenditures emanating from the university. An employment multiplier of 2.5 was generated by Tripp Umbach for the University of Iowa project. While employment multipliers at the state level are as low as 1.4, the multiplier for the UI is comparatively higher due to the large amount of out-of state visitors and research grants and the impact of out-of-state students and their visitors.

Data Sources

As noted above, this research project closely follows the ACE methodology for the performance of impact analysis for a higher education institution. The methodology requires that a university supply detailed information related to expenditure levels and geographic location of expenditures, together with staffing and other related economic information. The main sources of data used in the University of Iowa economic impact study are as follows:

¹⁵ The ACE methodology is highly adaptable to different geographic scales. It is suitable for measuring impact on neighborhoods, municipalities, counties, states, regions or nations.

UI Supplied Data: The University's finance office maintains a broad range of operational and financial data for the institution. During initial consultations between Tripp Umbach and the University it was determined that, where possible, these central databases should be used to avoid overburdening the departments with data collection requirements.

Secondary-Sourced Data: Census Data from the economic census, together with Bureau of Labor Statistics information, were required for completion of the models. Tripp Umbach gathered budgetary information for each of the major UI units to facilitate the modeling of government revenue impacts allocable to the University. To complete the economic impact models, Tripp Umbach used student, faculty, and staff spending data from primary data and assumptions from other studies completed for similar universities and other recent projects throughout the country.

APPENDIX C: FAQs ABOUT ECONOMIC IMPACT ANALYSIS

What is economic impact?

Economic impact begins when an organization spends money. Economic impact studies measure the direct economic impact of an organization's spending plus additional indirect spending in the economy as a result of direct spending. Economic impact has nothing to do with dollars collected by institutions, their profitability, or even their sustainability, since all operating organizations have a positive economic impact when they spend money and attract spending from outside sources.

Direct economic impact measures the dollars that are generated within the state of Iowa due to the presence of the University of Iowa. This includes not only spending on goods and services with a variety of vendors within the state, and the spending of its staff and visitors, but also the business volume generated by businesses within Iowa that benefit from the UI's spending. It is important to remember that not all dollars spent by a university remain in its home state. Dollars that are spent outside of the state in the form of purchases from out-of-state vendors are not included in the university's economic impact on the state.

The total economic impact includes the "multiplier" of spending from companies that do business with the UI. Support businesses may include lodging establishments, restaurants, construction firms, vendors, temporary agencies, etc. Spending multipliers attempt to estimate the ripple effect in the state economy where the spending occurs. For example: Spending by the UI with local vendors provides these vendors with additional dollars that they re-spend in the local economy, causing a "multiplier effect."

What multipliers were used in this study?

Tripp Umbach uses economic impact (also referred to as business volume impact) multipliers recommended by the American Council on Education. The indirect impacts represent the re-spending which takes place in the study areas. The multipliers utilized this study are based upon research conducted by Caffrey and Isaacs in 1971, and are appropriate for major research universities.

Economic impact multipliers: State business volume multiplier = 2.3

What methodology was used in this study?

The methodology employed in the calculation of the impact of the University of Iowa was derived from the standard set of impact research tools developed by the American Council on Education (ACE) for the measurement of college and university economic impact. The ACE-based methodology is well-established, having been used in hundreds of impact studies throughout the United States. The ACE methodology employs linear cash-flow modeling to track the flow of institution-originated funds through a delineated spatial area.

What is employment impact?

Employment impact measures the direct employment (staff, faculty, administration) plus additional employment created in the economy as a result of the economic impact of the University of Iowa.

Indirect employment impact refers to other employees throughout the region that exist because of the UI's economic impact. In other words, jobs related to the population — city services (police, fire), employees at local hotels and restaurants, clerks at local retail establishments, and residents employed by vendors used by the UI.

The approximate ratio of direct to indirect state employment for the University of Iowa is 1 to 2.5. This is a much stronger ratio than other industries, which is typically one indirect job for every one direct job.

How is the tourism impact of an institution measured?

Universities are by nature major tourism destinations. Students, faculty, and staff visit universities on a regular basis for conferences and meetings. Parents and friends visit students frequently, and the general public travels to universities for sporting events, concerts, and cultural events. The economic impact models created by Tripp Umbach for the University of Iowa calculate the net impact of spending within the state of Iowa from visitors from outside of the state. The tourism impact of a major university represents hundreds of millions of dollars annually in the flow of “fresh” dollars, dollars attracted from out-of-state, into the state's economy. The models include only spending by visitors who come to Iowa from outside the state who visit the UI.

What is the difference between direct and indirect taxes?

Direct tax dollars include sales taxes and net corporate income taxes paid directly by the institution and its employees to the state, while indirect taxes include taxes paid to the state by vendors that do business with the University of Iowa.

Is this a one-time impact or does the impact repeat each year?

The results presented in the University of Iowa economic impact study are generated on an annual basis. The economic impact in future years can either be higher or lower based on number of students, capital expansion, increases in external research, and state appropriations.

What types of economic impacts are typically presented in a comprehensive economic impact report?

There are three standard measures that institutions use when measuring and communicating their economic impact:

1. Direct spending – How many direct dollars spent annually by the university, its employees, and its visitors that remain in the state of Iowa.
2. Indirect spending – How many direct dollars are spent annually by businesses that receive money from the UI within the state of Iowa.
3. Induced impacts – How many direct dollars are spent annually as a result of the products and services provided by an organization. One example is the capitalization of research innovation. Induced economic impact occurs when new products are developed based on research conducted at the UI.

What are Tripp Umbach's qualifications to perform an Economic Impact Study for the University of Iowa?

Tripp Umbach is the national leader in providing economic impact analysis to leading health care organizations, universities and academic medical centers. We have completed more than 150 economic impact studies over the past 20 years for clients such as The Pennsylvania State University, The Ohio State University, Mayo Clinic Rochester, Cleveland Clinic, University of Florida Shands HealthCare, the University of North Carolina Hospitals, the University of Pennsylvania Medical Center, the University of Pittsburgh Medical Center, and the Ohio State University Medical Center.

Tripp Umbach recently finished the fourth national study of all 125 medical schools and 400 teaching hospital affiliates for the Association of American Medical Colleges. Tripp Umbach has completed statewide studies for multiple institutions in Ohio, New York, Pennsylvania, Virginia, South Carolina, Wisconsin and Minnesota. Finally, our firm has completed economic impact studies at the metropolitan level in Boston, Pittsburgh, Philadelphia, and Chicago.