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The Economic Contributions of Marian University's College of Osteopathic Medicine

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Executive Summary

Summary of Investments and Economic/Fiscal Contributions

During the development of the College of Osteopathic Medicine, Marian will invest \$32,011,130 (not including financing costs) in building improvements and equipment purchases as well as over \$700,000 in professional services contracts. The annual operating budget of the College will range from \$14.6 million in 2013 to \$18.2 million in 2016. Total employee compensation (wages and benefits) at Marian attributable to the College of Osteopathic Medicine will range from \$7.6 million in 2013 to \$10.5 million in 2016, and the number of students will gradually increase from 150 in 2013 (first year of classes) to 600 in 2016.

While Marian’s initial investment and annual operating budget represent the direct economic contributions of the College, as Marian’s investments and the spending of students and visitors work their way through the local economy, the one-time benefits of building improvements and professional services in the metro area will exceed \$53.5 million and project development will generate approximately \$1.1 million in state and local taxes.

The economic contributions of project development investments in the metro area are estimated to be:

	Direct Investment	Total economic contribution	Employment	Employee compensation
Construction/equipment	\$32,011,130	\$52,494,000	505	\$17,447,505
Professional services	\$707,400	\$1,266,000	12	\$973,545

In 2013, the first year of operations, the economic contribution to the metro area of college operations and the associated student and visitor spending will be nearly \$29 million. The economic activity associated with the College of Osteopathic Medicine is estimated to generate nearly \$650,000 in state and local taxes.

The 2013 economic contributions of the school operations, student spending, and visitor spending in the metro area are estimated to be:

	Direct Investment	Total economic contribution	Employment	Employee compensation
Annual operations	\$14,636,353	\$26,123,866	355	\$10,182,260
Student spending	\$2,007,720	\$2,741,000	19	\$603,000
Visitor spending	\$54,800	\$113,300	2	\$15,900

In 2016, the first year the College of Osteopathic Medicine will be operating at maximum capacity, the economic benefits associated with the college in the metro area will be nearly \$45 million. Additionally, operations of the college and the spending of visitors and students are expected to generate over \$745,000 in state and local taxes.

By 2016, we estimate that the economic contributions of annual operations and student and visitor spending in the metro area will be:

	Direct Investment	Total economic contribution	Employment	Employee compensation
Annual operations	\$18,523,016	\$33,061,023	458	\$13,163,684
Student spending	\$8,030,880	\$10,965,000	74	\$2,412,000
Visitor spending	\$142,800	\$295,300	5	\$122,200



Introduction

Marian University (Marian) intends to create Indiana's first College of Osteopathic Medicine. Marian has retained the Center for Urban Policy and the Environment (Center) to determine the economic and fiscal benefits attributable to the one-time start-up investments and annual operations of the school. The Center will estimate the economic benefits at three levels of geography: local (Marion County), regional (the metro area¹), and statewide (Indiana). The estimated economic benefits include the one-time investments made by Marian and its partner hospital(s) required to develop the physical and personnel infrastructure necessary to support school operations, as well as the annual benefits attributable to school operations, and student and visitor spending. The economic estimates are primarily based on budget, expenditure, and enrollment data included in the report *Marian University College of Osteopathic Medicine forecasted Financial Statements (June 30, 2011-2016)* completed by BKD CPAs and Advisors (BKD) and provided to the Center by Marian University.²

The principal method for estimating the economic contributions of Marian's College of Osteopathic Medicine is input/output modeling. Input/output modeling is the most commonly used methodology to estimate the indirect and induced (or more commonly known as spin-off) benefits attributable to the initial or direct expenditures related to construction and operations of a wide range of investments. For example, the wages paid to faculty and staff at the new College of Osteopathic Medicine represents a portion of the initial or direct economic contribution of school operations. Indirect and induced impacts are generated as the faculty and staff spend their wages to purchase groceries, attend movies, and make improvements to their homes. Their spending then generates additional economic activity at the stores and firms with which they do business, which results in additional jobs and wages, and even more economic activity as the employees of these stores and firms spend their wages. The Center uses the IMPLAN input/output model to estimate these additional benefits. IMPLAN is one of the two most commonly used input/output models for estimating economic impact.

State and local tax estimates include state personal and corporate income tax, sales tax attributable to worker spending, local option income tax, Innkeepers Tax, and Food and Beverage Tax. The estimates of state and local income tax are based on the employee compensation estimates generated by the input/output model and assume effective tax rates of 2.9 percent for Indiana and 1 percent locally. Similarly, the Innkeepers and Food and Beverage tax estimates are based on total output (direct, indirect, and induced) produced by the input/output model for the hotel and motel accommodations, and the food services and drinking places economic sectors. Over 80 percent of the six estimated tax revenue sources will be generated for the state with the remaining share accruing to local governments. The majority of the local tax revenue is expected to be generated in Marion County; this is in part attributable to the location of the investment and to the fact that all three tax rates are higher in Marion County than in other parts of the metro area. Based on input/output modeling outputs, it is expected that 90 percent of the Food and Beverage Tax and nearly 80 percent of the Innkeepers Tax will be collected in Marion County. An estimate of the local option income tax distribution across counties would be based on the county of residence of the workers rather than on the place of work; this makes estimating the local option income tax by county very uncertain so a generic rate of one percent has been used.

As previously stated, the economic impact will be estimated for three levels of geography. While the economic impact data are presented as a range for the three areas, technicalities within input/output modeling prohibit us from suggesting that the net impact on the state or metro area could be calculated by subtracting the impact within Marion County.

¹ The metro area is defined as Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby counties.

² The Center's use of the data provided by BKD does not imply agreement or disagreement with BKD's forecasts.



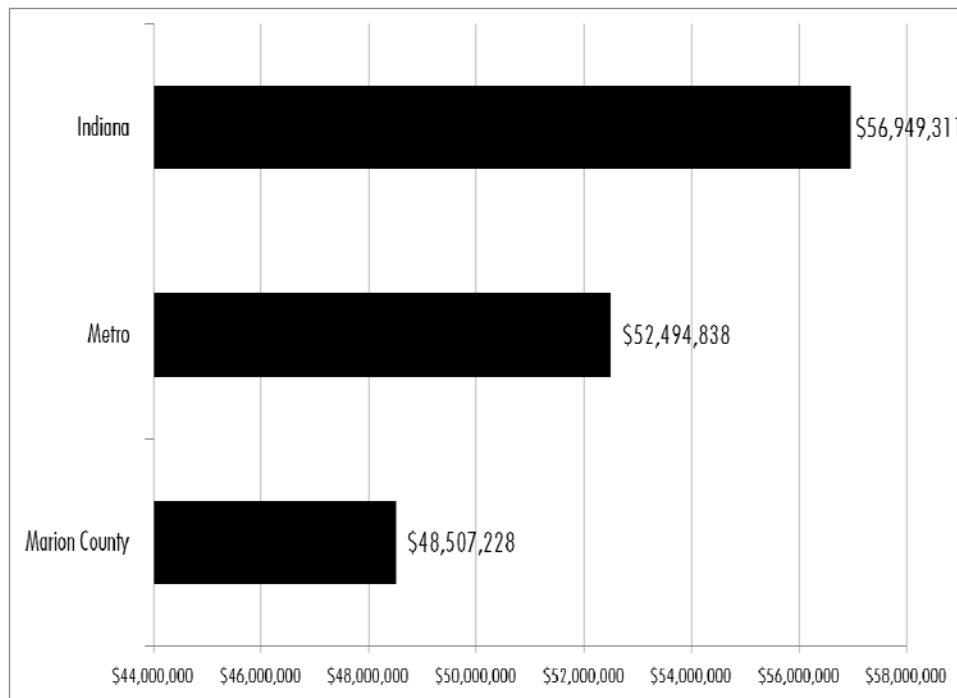
Economic Contributions Attributable to Project Development

Project development expenditures related to the business plan, marketing efforts, and building improvements represent the initial economic contributions of the College of Osteopathic Medicine. Project development investments represent a singular event (which may take place over a period of years) rather than an ongoing event.

Economic Contributions Attributable to Building Improvements

It is anticipated that Marian University will invest \$32,011,130 (not including financing costs) in site improvements, the construction of new building space, and equipment required for the College of Osteopathic Medicine. As seen in Figure 1, as the investment in construction and remodeling works its way through the economy, the total economic impact is expected to range from over \$48.5 million for Marion County to nearly \$57 million when the statewide impacts are considered. Included in the construction and remodeling economic contributions are approximately 320 direct project-related jobs (full-time equivalent (FTE) jobs represent 52 weeks of employment) and approximately 185 indirect and induced jobs (FTE). Direct employee wages are expected to total \$11.3 million and indirect wages are estimated to be over \$6 million.

Figure 1: Total Economic Contribution of Building Improvements

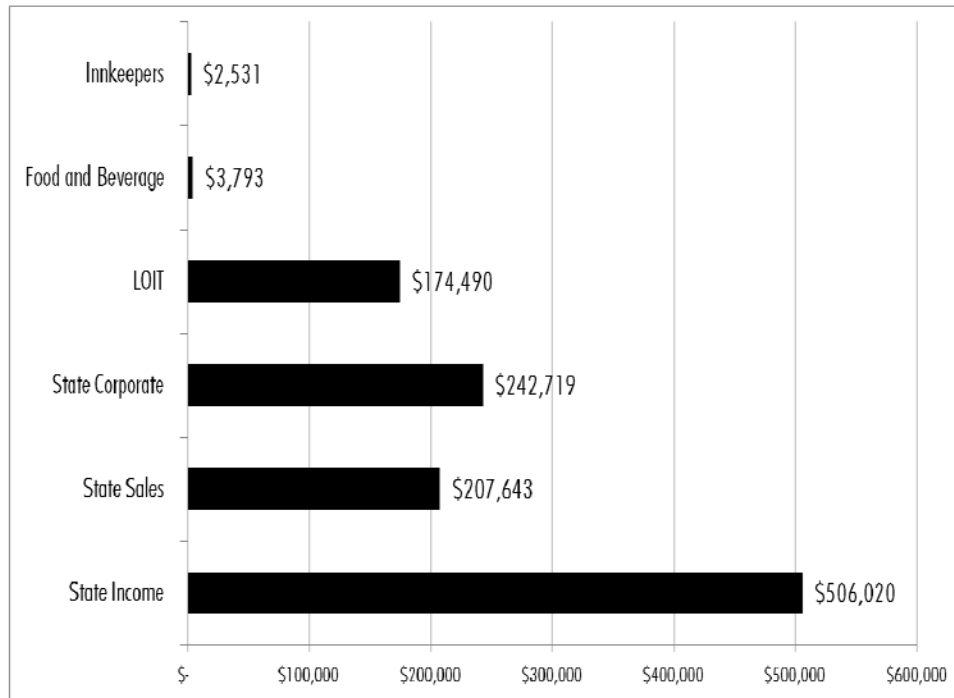




State and Local Tax Revenue Attributable to Building Improvements

The direct, indirect, and induced economic activity associated with building improvements is expected to generate approximately \$1.1 million in state and local tax revenue. The estimates in Figure 2 represent the average of estimates of tax revenues for Marion County, the metro area, and statewide.

Figure 2: State and Local Taxes Attributable to Building Improvements

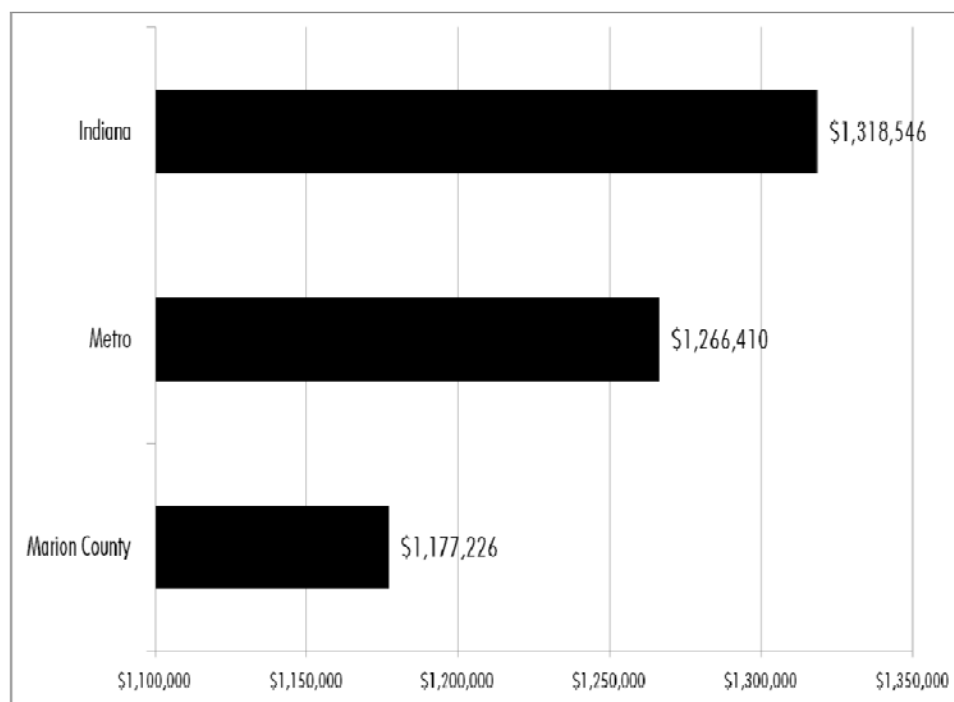




Economic Contributions Attributable to Project Development Consulting

It is anticipated that Marian will invest \$707,480 to obtain professional services related to the development of the college. As seen in Figure 3, as the professional service-related investment (associated with project development consulting) works its way through the local economies of Marion County, the metro area, and the state of Indiana, the total economic impact is expected to range from over \$1.3 million when considering the potential impacts across the state to over \$1.2 million when the analysis is limited to Marion County. Included in the project development consulting economic contributions are approximately seven FTE professional service jobs directly serving Marian (these seven employees actually represent seven 52-week FTE positions and are more likely to be employed by consulting firms than Marian) and five indirect and induced jobs (FTE), which represent jobs related to the spending of the professional service firms and their employees. Direct employee wages are expected to be approximately \$600,000 and indirect wages are estimated to be approximately \$370,000.

Figure 3: Economic Contribution of Project Development Consulting

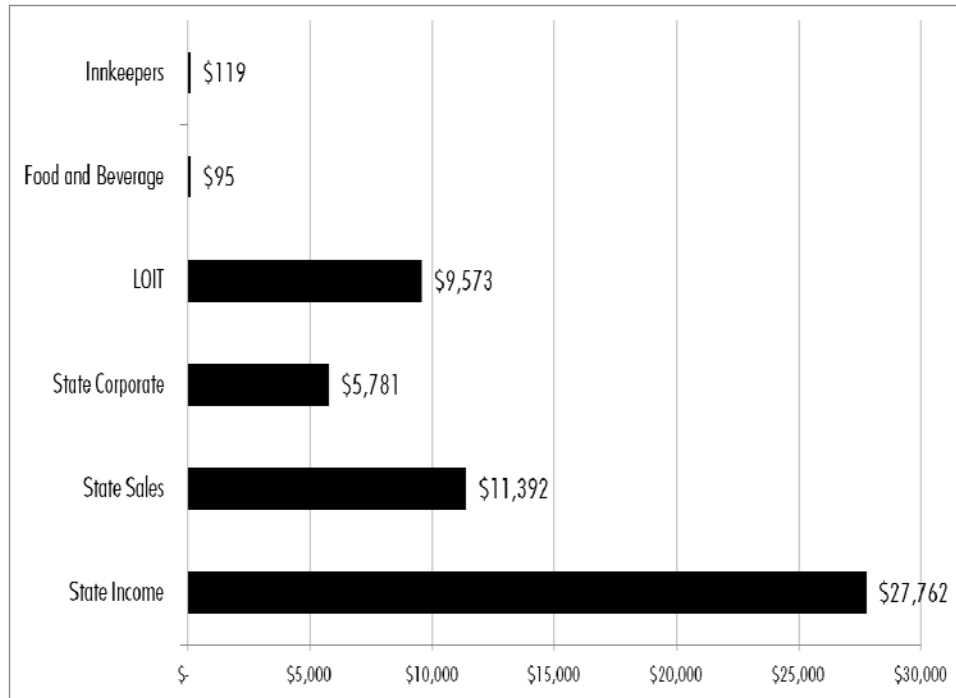




State and Local Tax Revenue Attributable to Project Development Consulting

The direct, indirect, and induced economic activity associated with project development consulting is expected to generate over \$54,000 in state and local tax revenue. The estimates in Figure 4 represent the average of estimates of tax revenues for Marion County, the metro area, and statewide.

Figure 4: State and Local Taxes Attributable to Project Development Consulting





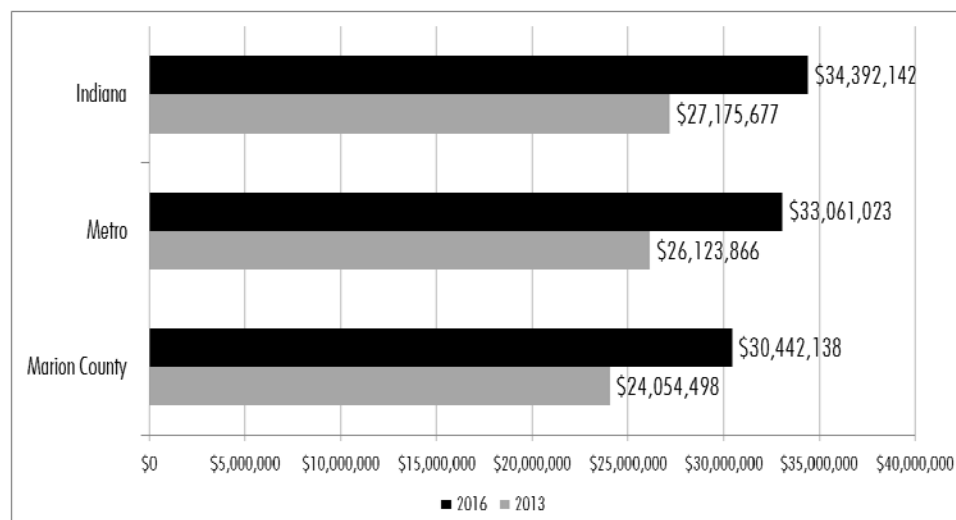
Annual economic contributions attributable to operations

While the economic contributions attributable to project start-up investments such as building improvements and project development consulting services are one-time events, the economic contributions of college operations are ongoing and are projected to grow as the college becomes more established and the number of students, faculty, and visitors increases. Faculty and college operations; the spending of students who are new to Marion County, the metro area, or Indiana; as well as visitors of the school (conferences, etc.) and students (family and friends) represent three different types of annual economic contributions. To provide a better understanding of the annual impacts and the growth potential of the college's economic contributions, estimates for 2013 (first full year of operations) and 2016 (when student capacity is achieved) are presented.

Economic contributions attributable to college operations

College operations represent the day to day activities of the faculty and staff as they provide students with the training and experience necessary to become doctors. Among the direct impacts of college operations are the wages of professors and staff associated with the school as well as operational expenditures on utilities, maintenance, library, marketing, student recruitment, and professional development. As the direct investments required to operate the college work their way through the economy, the expenditures stimulate additional spending by faculty and staff as well as investments by firms providing services to the university. In 2013, the estimated operating budget of the college is \$14,636,353 and it is expected that the initial investment in the College of Osteopathic Medicine will result in an additional \$9 to \$12 million of additional economic activity within the city, metro area, and state. By 2016, the operating budget of the College of Osteopathic Medicine will increase to \$18,523,016 and the indirect or spin-off impact will grow to between \$12 million and \$16 million.

Figure 5: Total Economic Contributions of Operations



In 2013, it is expected that there will be approximately 355 direct and indirect jobs associated with operations at the College of Osteopathic Medicine and its expenditures. The direct wages associated with the college will be over \$7.6 million and indirect employee compensation will be approximately \$2.5 million. Included in the estimated operations related economic contributions for 2016 are approximately

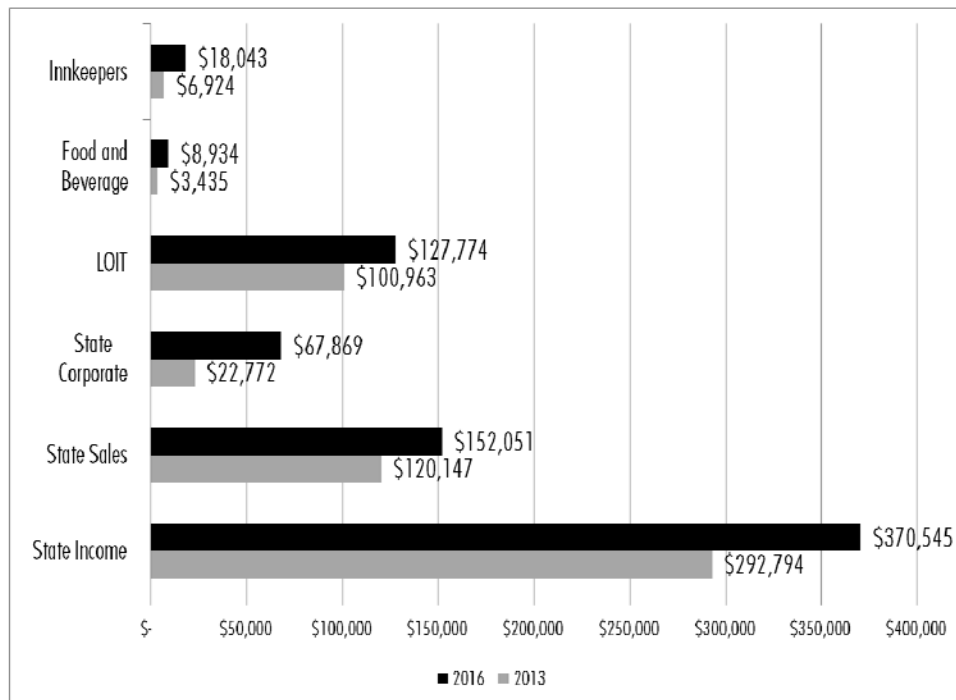


450 direct and indirect jobs. Direct employee wages and benefits are expected to exceed \$10.5 million and indirect wages are estimated to be approximately \$2.6 million.

State and Local Tax Revenue Attributable to Operations

In 2013, the direct, indirect, and induced economic activity associated with the ongoing operations of the College of Osteopathic Medicine is expected to generate over \$643,000 in state and local tax revenue. By 2016, the amount of state and local tax revenue should increase to over \$745,000. Because Marian University is a nonprofit organization it pays no corporate income tax, thus only the spin-off economic activity is considered in the estimate of corporate income taxes. The estimates in Figure 6 represent the average of estimates of tax revenues for Marion County, the metro area, and statewide.

Figure 6: State and Local Tax Revenue Attributable to Operations



Economic Contributions Attributable to Student Spending

According to Alloy Media Marketing's 8th Annual College Explorer study in 2007, 13.6 million students between the ages of 18 and 30 will spend \$237 billion (an average of nearly \$17,400 per student). In a related study of student spending habits, the Chronicle of Higher Education Almanac found that slightly over 20 percent of the student spending was directed towards tuition. While the money spent on tuition cannot be considered (it is part of the revenue that makes spending for school operations possible and as a result is included in the economic impact of operations), student spending on discretionary and entertainment items as well as on rent, food, and supplies that would not have otherwise been spent in Marion County, the metro area, or the state of Indiana, is truly new to the area and does generate new economic activity.

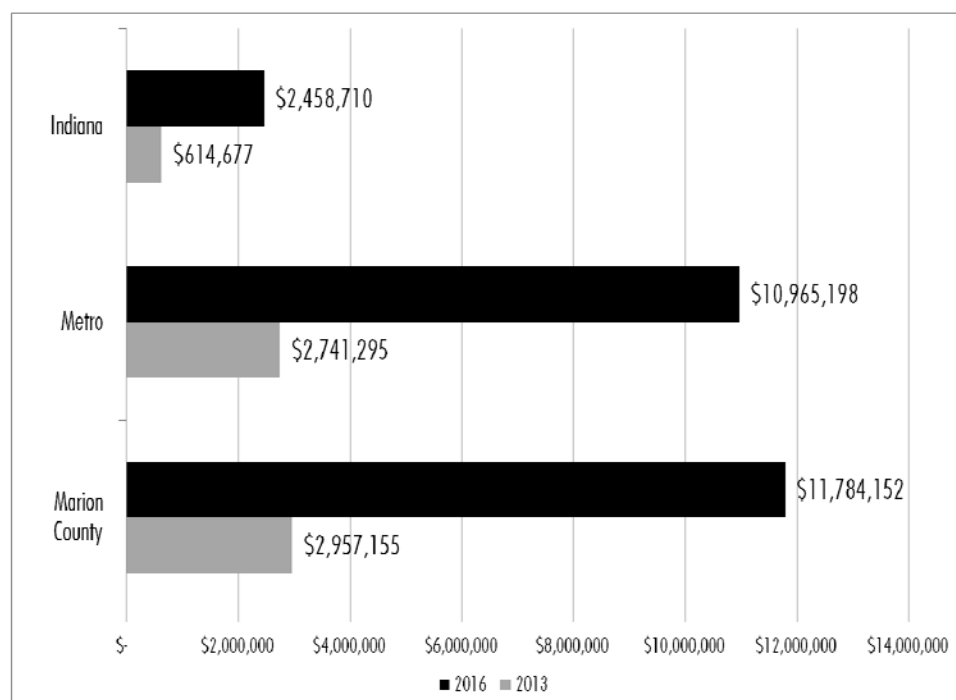
Student population data provided by BKD CPAs & Advisors, suggests 150 total students on campus in 2013 and 600 total students in 2016. The 2010 entering class at the IU School of Medicine had 268 in-state students and 54 out-of-state enrollees, if we apply similar ratios to the Marian University students 25 of the 150 students in 2013 and 100 (out of 600) in 2016 would be from out of state and considered new to Indiana. While 25 of the 150 students at the College of Osteopathic Medicine in 2013 are estimated to



be from out of state, we estimate, based on the proportion of Indiana’s population within the metro area relative to the entire state 2009 population (population data from the Indiana Business Research Center), that 74 percent or 92 of the 125 Indiana resident students would be from outside the metro area. Because these 92 students did not previously reside within the metro area their spending would be new to the metro area (but not new to Indiana). As a result, when estimating the economic contribution of student spending in Indiana, we use the spending of only the 25 out-of-state students as new to Indiana. The spending of the 25 out-of-state students plus the spending of the 92 students who reside in Indiana but not in the metro area would be counted as new in the estimate of student spending in the metro area. Using similar methodology, we estimate that in 2013, 108 of the 125 Indiana students would not have previously resided in Marion County and thus their spending as well as the spending of the 25 out-of-state students can be considered as new to Marion County (133 total new students to Marion County). By 2016, using the same methods, we estimate that 100 of the 600 students at the college would be from out of state and that of the 500 in-state students 368 (468 total) would be new to the metro area and 430 (530 total) new to Marion County.

Based on the spending data from Alloy Media Marketing’s and the Chronicle of Higher Education Almanac estimate as well as our student distribution estimates, we estimate that in 2013 the expected 150 students at the College of Osteopathic Medicine will spend nearly \$2.6 million on non-tuition related student goods and services. In 2016, we estimate total student spending to be over \$10 million. We estimate that 89 percent of that spending will be new to Marion County, and that 78 percent will be new to the metro area, and 17 percent new to Indiana. As the student spending works its way through the local economy, the additional economic impacts in 2013 will range from nearly \$3 million in Marion County to over \$600,000 throughout the state (the lower state figure is attributable the fact that less students at the College of Osteopathic Medicine will be new to Indiana than will be new to Marion County). In 2016, with full enrollment at the College, the economic contribution of student spending will increase to over \$11 million in Marion County and nearly \$3.5 million in Indiana. By 2016, it is expected that 76 Marion County jobs and over \$2.6 million in wages will be the result of spending by the College of Osteopathic Medicine students.

Figure 7: Economic Contributions of Student Spending

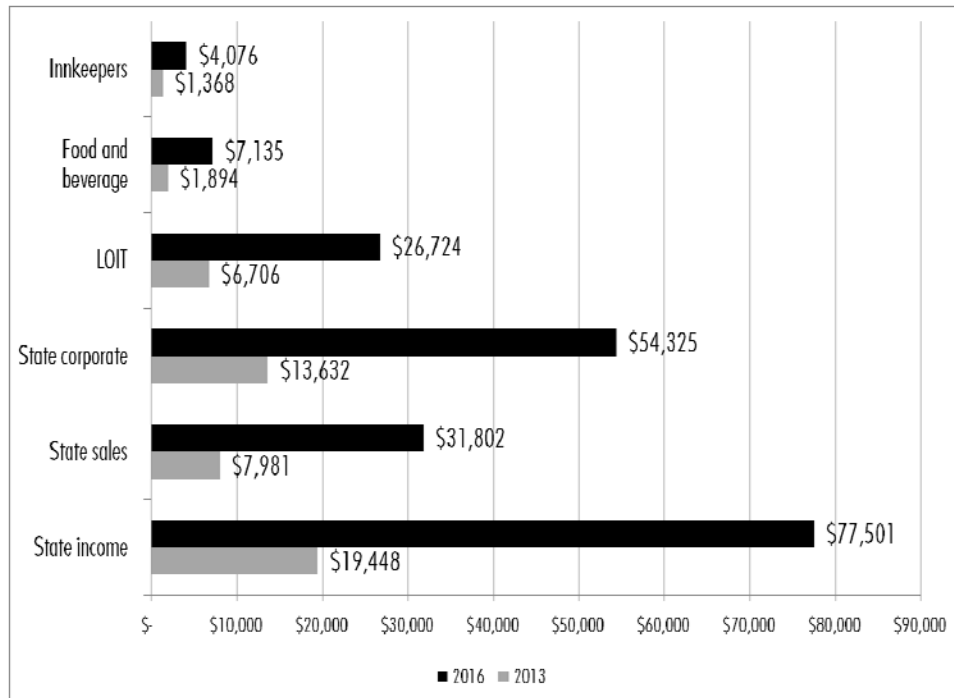




State and Local Tax Revenue Attributable to Student Spending

Once full enrollment is achieved in 2016, the direct, indirect, and induced economic activity associated with student spending is expected to generate over \$200,000 in state and local tax revenue per year. The estimates in Figure 8 represent the average of estimates of tax revenues for Marion County, the metro area, and statewide.

Figure 8: State and Local Tax Revenue Attributable to Student Spending

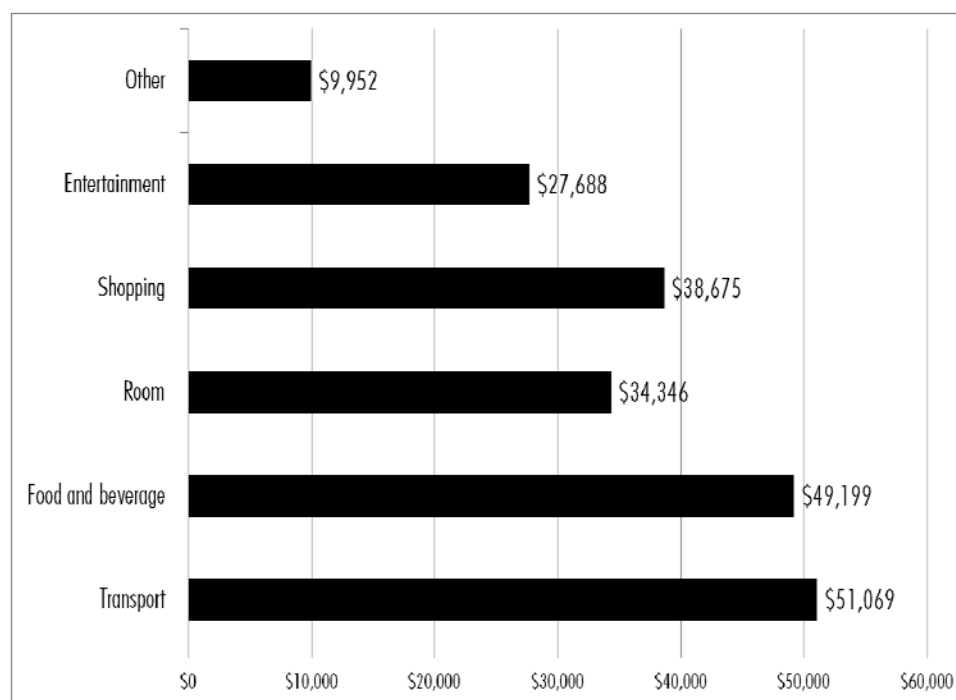




Economic Contributions Attributable to Visitor Spending

According to D.K. Shifflet's most recent study of the spending patterns of Marion County visitors, the typical visitor spends \$85 per day while in the county. The average size of a visiting party is 2.8 people and the average stay is 3 days, as a result the typical visitor event generates \$714 of spending per visit. Visitors to the new College of Osteopathic Medicine would include family and friends visiting students as well as vendors of books and equipment, and those attending conferences and meetings. If 200 of these visitor events occur annually, over \$142,000 of new visitor spending will occur in Marion County. This spending will generate over \$68,000 in indirect and induced economic activity. The over \$210,000 in total economic activity will include five jobs and over \$122,000 in employee compensation. The largest economic contribution of visitor spending will be in the transportation and food and beverage sectors, with each generating approximately \$50,000 of total economic impact.

Figure 9: Economic Contributions of Visitor Spending

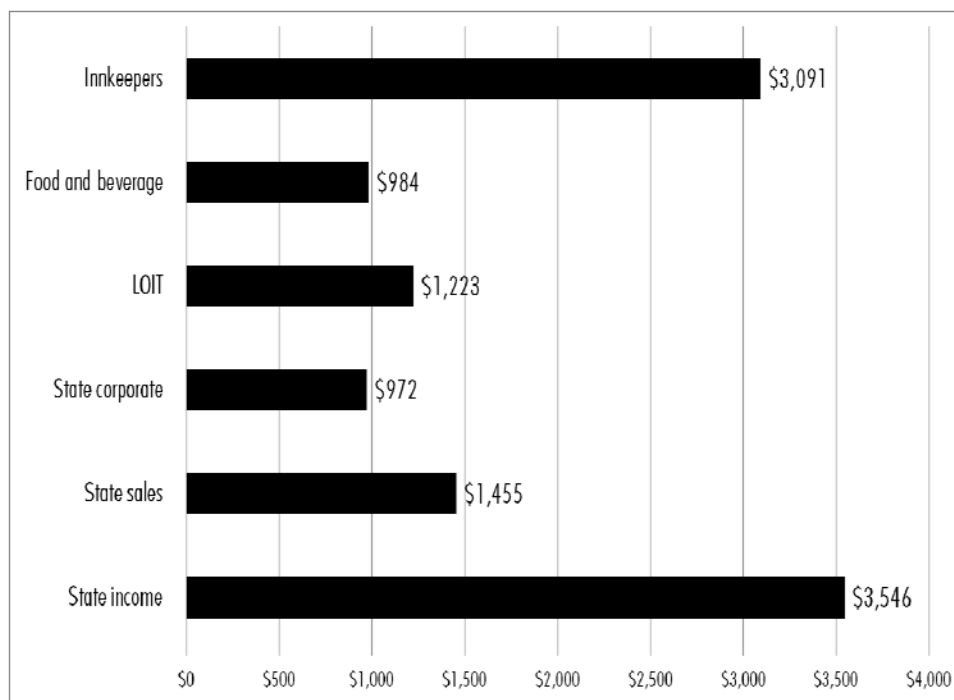




State and Local Tax Revenue Attributable to Visitor Spending

The over \$210,000 of visitor related direct, indirect, and induced economic activity is expected to generate nearly \$11,300 in state and local tax revenue per year. The estimates in Figure 10 represent the average of estimates of tax revenues for Marion County, the metro area, and statewide.

Figure 10: State and Local Tax Revenue Attributable to Visitor Spending





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