

# **Economic and Fiscal Impacts of St. Elizabeth Healthcare System (Hospitals and Physician Offices)**

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## Introduction

St. Elizabeth Healthcare contracted with the Center for Economic Analysis and Development, Haile|US Bank College of Business, Northern Kentucky (CEAD) to provide an economic and fiscal impact analysis of both its hospital system and its physician system.

St. Elizabeth Healthcare operates within the Cincinnati metropolitan statistical area (MSA)<sup>1</sup> and wanted an analysis reflecting its total impacts on the MSA, as well as on Northern Kentucky and the Commonwealth of Kentucky. Total economic impacts include the direct effects of an operation, including employment, payroll and total revenues, and the indirect and induced effects generated by the economic activity of the organization and its employees within the region.<sup>2</sup>

In addition to its hospital operations, St. Elizabeth Healthcare operated physician offices, both primary care and specialty care, throughout the Cincinnati MSA.

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<sup>1</sup> The Cincinnati metropolitan statistical area is comprised of 15 counties including Boone, Bracken, Campbell, Grant, Gallatin, Kenton and Pendleton counties in Kentucky; Dearborn, Ohio, and Union counties in Indiana; and Brown, Butler, Clermont, Hamilton and Warren counties in Ohio. This analysis reflects multiplier impacts of operations in Kentucky and Ohio.

<sup>2</sup> See the Methodology section for a detailed discussion of multiplier effects.

## Executive Summary

Health care is, first and foremost, about serving the health and wellness needs of people. But as an industry, health care also provides much needed jobs and income.

Health care is one of the largest industries in Northern Kentucky, accounting for more than 1 in 10 jobs. Health care impacts a region's ability to attract and retain employers and talent.

St. Elizabeth Healthcare, the largest employer in Northern Kentucky, is a substantial and valuable regional economic driver. It provides jobs, creates vendor/service opportunities and generates spending in the state and throughout local communities where facilities are located and employees reside.

The Center for Economic Analysis and Development housed in the Haile|US Bank College of Business at Northern Kentucky University prepared a study titled "Economic and Fiscal Impacts of St. Elizabeth Healthcare System," which includes the St. Elizabeth hospitals and St. Elizabeth Physician offices, for the fiscal year 2014 (the latest available data).

The study showed:

- The total economic impact of St. Elizabeth Healthcare hospitals in Northern Kentucky alone in 2014 was \$1.6 billion. That includes direct effects of operations and the indirect and induced effects generated by the economic activity of the organization and its employees in the region.
- The total economic impact of St. Elizabeth Healthcare physicians – primary care and urgent care offices – in Northern Kentucky in 2014 was more than \$447 million.
- St. Elizabeth Healthcare invested in capital improvements a combined \$234 million from 2013-2015. Total economic impact of that spending in the Cincinnati MSA was more than \$416 million.
- St. Elizabeth employees (hospital and physicians) accounted for 4 percent (7,540) of the Northern Kentucky workforce.
- St. Elizabeth had a total payroll of more than \$586 million.
- St. Elizabeth hospitals and its employees contributed roughly \$60 million combined in local and state taxes, including sales tax and city and county payroll taxes.
- St. Elizabeth physicians contributed roughly \$20 million combined in local and state taxes.

## Key Findings

### *St. Elizabeth Healthcare Hospitals*

- St. Elizabeth Healthcare Hospitals operates “full-service inpatient hospitals in Edgewood, Florence, Fort Thomas, and Williamstown, as well as a chemical dependency treatment center in Falmouth.” In addition to full emergency and ambulatory care services in Covington.<sup>3</sup>
- Cincinnati MSA<sup>4</sup>
  - Direct hospital employment was more than 4,550 (FTE)<sup>5</sup> in 2014. Total employment (as a result of direct and multiplier impacts) was nearly 11,600 in the Cincinnati MSA.
  - Direct revenues were more than \$984 million in 2014. Total revenues (as a result of direct and multiplier impacts) were nearly \$2 billion in the Cincinnati MSA.
- Commonwealth of Kentucky
  - Hospital total employment (as a result of direct and multiplier impacts) was nearly 10,300 in the Commonwealth of Kentucky.
  - Total revenues (as a result of direct and multiplier impacts) were more than \$1.6 billion in the Commonwealth of Kentucky.
- Northern Kentucky
  - Hospital total employment (as a result of direct and multiplier impacts) was nearly 10,300 in Northern Kentucky.<sup>6</sup>
  - Total revenues (as a result of direct and multiplier impacts) were approximately \$1.6 billion in Northern Kentucky.

### *St. Elizabeth Healthcare Physicians*

- St. Elizabeth Healthcare Physicians operates more than 60 primary care and urgent care offices in Northern Kentucky, and more than 80 specialist locations primarily in Northern Kentucky, as well as offices in Cincinnati and Indiana. There were more than 1,440 full and part-time employees in 2014.
- Cincinnati MSA<sup>7</sup>
  - Total employment (as a result of direct and multiplier impacts) was more than 3,400 jobs in the Cincinnati MSA.
  - Total revenues (as a result of direct and multiplier impacts) were close to \$500 million in the Cincinnati MSA.
- Commonwealth of Kentucky
  - Physician offices total employment (as a result of direct and multiplier impacts) was more than 3,100 in the Commonwealth of Kentucky.
  - Total revenues (as a result of direct and multiplier impacts) were more than \$444 million in the Commonwealth of Kentucky.

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<sup>3</sup> Downloaded from <http://www.stelizabeth.com/Locations.aspx> on 4/28/2016.

<sup>4</sup> See Introduction and Methodology for description of MSA and multiplier impacts.

<sup>5</sup> FTE or full-time equivalents are calculated by dividing the total hours worked by 2080, the number of hours that a full-time employee would work in one year.

<sup>6</sup> Northern Kentucky refers to the seven counties in Northern Kentucky that are part of the Cincinnati MSA: Boone, Bracken, Campbell, Grant, Gallatin, Kenton and Pendleton counties.

<sup>7</sup> See Introduction and Methodology for description of MSA and multiplier impacts.

- Northern Kentucky<sup>8</sup>
  - Physician offices total employment (as a result of direct and multiplier impacts) was more than 3,100 in Northern Kentucky.
  - Total revenues (as a result of direct and multiplier impacts) were more than \$447 million in Northern Kentucky.

### ***Fiscal Impacts***

- St. Elizabeth Healthcare Hospitals and its employees contribute large amounts of money to state and local governments in Kentucky: an estimated total in local and state taxes of approximately \$60 million, which included more than \$12.5 million in Hospital Service tax; more than \$12.5 million in sales tax based on employee purchases; and more than \$9 million in city and county payroll taxes.
- Similarly, St. Elizabeth Healthcare Physician Offices and its employees contribute large amounts of money to state and local governments in Kentucky: an estimated total in local and state taxes of approximately \$20 million, which included more than \$5.2 million in sales tax based on employee purchases; and more than \$5.2 million in city and county payroll taxes.

See Results section for complete discussion of these findings.

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<sup>8</sup> Northern Kentucky refers to the seven counties in Northern Kentucky that are part of the Cincinnati MSA: Boone, Bracken, Campbell, Grant, Gallatin, Kenton and Pendleton counties.

## Methodology

### ***Economic Impacts of Operations (Including Multiplier Effects)***

Estimates of the direct impact of St. Elizabeth Healthcare hospitals and physicians offices on the local economy tell only part of the story. Both hospitals and physicians offices have an indirect impact on the economy, creating a total impact greater than the direct impact alone. The indirect impacts of hospitals and physicians offices are estimated using an economic multiplier.

An economic driver is a company or an industry that brings new money into the area from outside. These new moneys from hospitals and physicians offices are distributed within the local economy as both the businesses and their employees make purchases for food, entertainment, transportation and other goods and services. This initial infusion of new money into the community creates several rounds of spending and re-spending, starting with the hospitals and physicians offices themselves, which spend money in the region for supplies and services. In addition, employees are paid with hospital and physician office revenues. The employees in turn buy goods and services from area companies, creating income for these companies. These companies, in turn, pay their employees and purchase goods and services from other area companies. This cycle of spending and re-spending continues until the initial infusion of new money is offset by leakages. Leakage occurs when money is spent outside of the community. For example, at the local level, state taxes are a leakage. Likewise, the purchase of an automobile in Tennessee by a Kentucky resident would be a leakage. The main sources of leakages are savings, taxation and the purchase of imported goods. The estimated magnitude of this process of spending and re-spending is called the regional multiplier.

In other words, the regional multiplier measures the estimated total impact given the direct impact, which is a known amount. The difference between the estimated total impact and the direct impact is the result of the multiplier effects from the spending of both the business itself (indirect effect) and its employees (induced effect). CEAD used IMPLAN software to calculate the impacts of St. Elizabeth Healthcare Hospitals and Physician Offices' operations and patrons. IMPLAN software is based on multipliers calculated by the U.S. Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II).<sup>9</sup>

While designed to reflect a one-time addition to an economy of new business, the multipliers and the models based on them also are the best measure of the impacts of an on-going operation within an economy. These multipliers are calculated to reflect the changes that occur within the economy during one year as a result of the rounds of spending and respending.

St. Elizabeth Healthcare provided CEAD with total revenues, employment and payroll (including benefits) for its hospitals and physicians offices, as well as hospital provider taxes paid for each of the four hospital locations. These data provided the necessary information to estimate the indirect, induced and total impacts on the Cincinnati MSA, the State of Kentucky and Northern Kentucky.

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<sup>9</sup> More information about IMPLAN can be found at <http://implan.com/V4/Index.php> and about the RIMS II multipliers at <http://www.bea.gov/regional/index.htm>.

In addition to the IMPLAN estimates of local tax revenues, St Elizabeth Physicians provided county and city payroll taxes paid in 2014, which are based on the county and city where the employment occurs. CEAD estimated the county and city payroll taxes of the St Elizabeth Hospital employees, and St Elizabeth Hospitals provided the Hospital Provider Tax for 2014. Estimates for additional specific taxes, such as income tax and property tax, were beyond the scope of this analysis.

## Results

### ***Economic Impacts: St. Elizabeth Healthcare Hospitals***

St. Elizabeth Healthcare Hospitals operates “full-service inpatient hospitals in Edgewood, Florence, Fort Thomas, and Williamstown, as well as a chemical dependency treatment center in Falmouth.” In addition, full emergency and ambulatory care services are available in Covington.<sup>10</sup> St. Elizabeth Healthcare Hospitals, although all in Kentucky, would reasonably be described as serving the Cincinnati MSA<sup>11</sup> as well as serving the Commonwealth of Kentucky. The Cincinnati MSA is comprised of more than 2 million people, more than 400 thousand of whom live in Northern Kentucky.<sup>12</sup> In 2014, there were more than 1 million jobs in the Cincinnati MSA, with more than 175 thousand in Northern Kentucky.<sup>13</sup> Of these, hospitals accounted for more than 47,000 employees in the Cincinnati MSA (detailed data were not available for the Northern Kentucky counties).

St. Elizabeth Healthcare Hospitals employed more than 6,100 full and part-time people (4554 FTE) in 2014 as shown in Table 1. Its payroll including benefits was more than \$410 million and direct revenues were more than \$984 million.

As described in the Methodology section, direct employment, payroll and revenues are not the only impacts on an economy. As the organization and its employees purchase goods and services within an economic region, additional jobs, payroll and revenues are generated. For St. Elizabeth Healthcare Hospitals in the Cincinnati MSA, these indirect and induced effects resulted in total revenues of more than \$1.9 billion, more than 11,500 jobs and more than \$757 million in payroll in the region.

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<sup>10</sup> <http://www.stelizabeth.com/Locations.aspx>

<sup>11</sup> The Cincinnati metropolitan statistical area is comprised of 15 counties including Boone, Bracken, Campbell, Grant, Gallatin, Kenton and Pendleton counties in Kentucky; Dearborn, Ohio, and Union counties in Indiana; and Brown, Butler, Clermont, Hamilton and Warren counties in Ohio.

<sup>12</sup> U.S. Census Bureau, American Community Survey, 2008-2012.

<sup>13</sup> U.S. Bureau of Labor Statistics, QCEW 2014 preliminary data.

**Table 1. Economic Impacts: St. Elizabeth Healthcare Hospitals, 2014,  
Cincinnati MSA**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>    |
|---|---------------|-----------------|----------------|-----------------|
| <b>Revenues</b>                                     | \$984,185,425 | \$390,034,403   | \$582,584,531  | \$1,956,804,359 |
| <b>Employment (FTE)</b>                             | 4,554         | 2,676           | 4,356          | 11,585          |
| <b>Payroll</b>                                      | \$410,296,134 | \$139,667,766   | \$207,057,635  | \$757,021,535   |
| <b>Average Annual Wage<br/>(including Benefits)</b> | \$90,096      | \$52,193        | \$47,537       | \$65,345        |

In addition to the economic impacts on the Cincinnati MSA, CEAD analyzed the impacts of St. Elizabeth Healthcare Hospitals on the seven counties that comprise the Northern Kentucky portion of the Cincinnati MSA and on the Commonwealth of Kentucky. As would be expected, the impacts on Northern Kentucky were lower than on the Cincinnati MSA.

Since the IMPLAN model takes into account commuting patterns, one would expect the impacts to be largest on the MSA, then Kentucky and then Northern Kentucky. The Kentucky impacts would include employees traveling from all Kentucky counties, but not from the rest of the Cincinnati MSA and the Northern Kentucky impacts would include only employees traveling from the seven counties in Northern Kentucky. The same is true for both organization and employee spending patterns. For details, see Tables 2 and 3.

**Table 2. Economic Impacts: St. Elizabeth Healthcare Hospitals, 2014,  
Northern Kentucky**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>    |
|---|---------------|-----------------|----------------|-----------------|
| <b>Revenues</b>   | \$984,185,425 | \$246,699,021   | \$371,968,598  | \$1,602,853,044 |
| <b>Employment (FTE)</b>                                 | 4,554         | 2,388           | 3,338          | 10,280          |
| <b>Payroll</b>  | \$410,296,134 | \$89,156,193    | \$135,504,879  | \$634,957,206   |
| <b>Average Annual<br/>Wage (including<br/>Benefits)</b> | \$90,096      | \$37,343        | \$40,592       | \$61,768        |

**Table 3. Economic Impacts: St. Elizabeth Healthcare Hospitals, 2014,  
Commonwealth of Kentucky**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>    |
|---|---------------|-----------------|----------------|-----------------|
| <b>Revenues</b>   | \$984,185,425 | \$271,240,865   | \$390,374,821  | \$1,645,801,111 |
| <b>Employment (FTE)</b>                                 | 4,554         | 2,406           | 3,311          | 10,271          |
| <b>Payroll</b>  | \$410,296,134 | \$95,222,356    | \$135,045,614  | \$640,564,104   |
| <b>Average Annual<br/>Wage (including<br/>Benefits)</b> | \$90,096      | \$39,577        | \$40,787       | \$62,366        |

## ***Economic Impacts: St. Elizabeth Healthcare Physicians***

In addition to its hospitals in Northern Kentucky, St. Elizabeth Healthcare operated physician offices (more than 60 primary and urgent care locations and more than 80 specialty care offices) throughout the Cincinnati MSA in 2014, whose impacts were also analyzed. Tables 4, 5 and 6 present the impacts on the Cincinnati MSA of the physician office operations on Northern Kentucky and on the Commonwealth of Kentucky

**Table 4. Economic Impacts: St. Elizabeth Healthcare Physicians, 2014, Cincinnati MSA**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>  |
|---|---------------|-----------------|----------------|---------------|
| <b>Revenues</b>                                 | \$228,960,880 | \$58,974,983    | \$210,244,303  | \$498,180,166 |
| <b>Employment (FTE)</b>                         | 1,298         | 440             | 1,686          | 3,424         |
| <b>Payroll</b>                                  | \$175,889,355 | \$27,167,420    | \$89,366,071   | \$292,422,846 |
| <b>Average Annual Wage (including Benefits)</b> | \$135,508     | \$61,744        | \$53,005       | \$85,404      |

**Table 5. Economic Impacts: St. Elizabeth Healthcare Physicians, 2014, Northern Kentucky**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>  |
|---|---------------|-----------------|----------------|---------------|
| <b>Revenues</b>                                 | \$228,960,880 | \$49,892,755    | \$168,287,359  | \$447,140,994 |
| <b>Employment (FTE)</b>                         | 1,298         | 443             | 1,393          | 3,134         |
| <b>Payroll</b>                                  | \$175,889,355 | \$21,537,836    | \$67,250,702   | \$264,677,893 |
| <b>Average Annual Wage (including Benefits)</b> | \$135,508     | \$48,618        | \$48,278       | \$84,454      |

**Table 6. Economic Impacts: St. Elizabeth Healthcare Physicians, 2014, Commonwealth of Kentucky**

|   | <b>Direct</b> | <b>Indirect</b> | <b>Induced</b> | <b>Total</b>  |
|---|---------------|-----------------|----------------|---------------|
| <b>Revenues</b>                                 | \$228,960,880 | \$48,086,748    | \$167,460,243  | \$444,507,871 |
| <b>Employment (FTE)</b>                         | 1,298         | 423             | 1,421          | 3,143         |
| <b>Payroll</b>                                  | \$175,889,355 | \$23,453,251    | \$74,189,539   | \$273,532,145 |
| <b>Average Annual Wage (including Benefits)</b> | \$135,508     | \$55,445        | \$52,209       | \$87,029      |

## ***Fiscal Impacts: St. Elizabeth Healthcare Hospitals***

As a part of the CEAD’s analysis and the IMPLAN impact analysis, the fiscal impacts were also estimated. CEAD estimated the payroll subject to local payroll taxes for both the hospitals and the physician offices.

It is important to note that fiscal impact estimates are subject to more variation than the economic impacts. IMPLAN estimates of tax impacts use a variety of data sources, including the Annual Survey of Government Finances to estimate total tax revenues to the state and local governments, which it then “disburses” across all local governments in the same manner for all industries. This can lead to either overestimation or underestimation depending on industry specific differences. For example, hospitals are subject to a Hospital Provider Tax, which might result in underestimation.

The IMPLAN model analysis showed more than \$60 million in state and local taxes paid in 2014 based on direct employment, payroll and revenues.

Table 7 shows the hospital Provider Tax which was provided by St Elizabeth Hospitals, as well as an estimate by CEAD of tax revenues to cities and counties and state sales tax revenues, all of which would be included in the IMPLAN estimates. CEAD did not estimate income or other specific taxes.

**Table 7. Specific taxes paid by St. Elizabeth Healthcare Hospitals (Kentucky only):**

|  | <b>2014</b>       |
|--|-------------------|
| <b>Payroll taxes to cities and counties</b>        | \$17,903,402      |
| <b>State sales tax based on employee purchases</b> | 9,078,237         |
| <b>Hospital Provider tax</b>                       | <u>12,550,651</u> |
| <b>Total</b>                                       | \$39,532,290      |

St. Elizabeth Healthcare Physician Offices fiscal impacts were analyzed using both IMPLAN and the specific taxes listed in Table 7 (with the exception of the Hospital Provider Tax). The IMPLAN model analysis showed more than \$20 million in state and local taxes paid in 2014 based on direct employment, payroll and revenues. Table 8 shows an estimate by CEAD of state sales tax revenues as well as tax revenues to cities and counties and state sales tax revenues, which were provided by St Elizabeth, all of which would be included in the IMPLAN estimates.

**Table 8. Specific taxes paid by St. Elizabeth Healthcare Physician Offices (Kentucky only):**

|  | <b>2014</b>      |
|--|------------------|
| <b>Payroll taxes to cities and counties</b>        | \$1,765,293      |
| <b>State sales tax based on employee purchases</b> | <u>5,276,681</u> |
| <b>Total</b>                                       | \$7,041,974      |

## ***Capital Investments***

St. Elizabeth's Healthcare has invested in capital improvements of approximately \$67 million in 2013, \$82 million in 2014, and \$85 million in 2015. These capital improvements had total impacts on the Cincinnati MSA (as a result of direct and multiplier impacts) of more than \$128 million in 2013, close to \$153 million in 2014 and more than \$135 million in 2015. See Table 9 for more detail.

**Table 9. St. Elizabeth Healthcare Capital Investments**

| YEAR | CAPITAL INVESTMENT | INDIRECT PLUS<br>INDUCED | TOTAL IMPACTS |
|------|--------------------|--------------------------|---------------|
| 2013 | \$67.0             | \$61.2                   | \$128.2       |
| 2014 | \$82.0             | \$70.8                   | \$152.8       |
| 2015 | \$85.0             | \$50.6                   | \$135.6       |

**CINCINNATI MSA, KENTUCKY AND OHIO COUNTIES**

## ***Summary***

St. Elizabeth Healthcare Hospitals and Physicians Offices have important impacts on the overall economy and on the tax revenues flowing to multiple taxing entities. The combined operations provide direct jobs and payroll within the communities they serve, as well as within the communities where their employees live. In addition to direct impacts, the operations themselves conduct business within the local communities as do the employees, multiplying the effects of the direct impacts, to the benefit of many other businesses.

## Appendix 1: Estimated Local Impacts by Industry Sector

IMPLAN total impacts are based on one year of changes within the affected economies. The following tables show the industries most affected by organization and employee spending on the Commonwealth of Kentucky by both the St Elizabeth Hospitals and St Elizabeth Physicians systems.

**Appendix 1, Table 1. Estimated St. Elizabeth Healthcare Hospitals impacts on local companies, Commonwealth of Kentucky, 2014**

| <b>Estimated St. Elizabeth Healthcare Hospitals impacts on local companies</b>       | <b>IMPLAN one year impacts</b> |
|--|--------------------------------|
| <b>Total</b>   | <b>\$271,240,865</b>           |
| <b>Real estate establishments</b>  | <b>\$50,931,748</b>            |
| <b>Management of companies and enterprises</b>                                       | <b>\$16,049,691</b>            |
| <b>Medical and diagnostic labs and outpatient and other ambulatory care services</b> | <b>\$14,988,009</b>            |
| <b>Employment services</b>   | <b>\$14,709,542</b>            |
| <b>Insurance carriers</b>  | <b>\$14,030,158</b>            |
| <b>Wholesale trade businesses</b>  | <b>\$8,540,738</b>             |
| <b>Telecommunications</b>  | <b>\$8,157,516</b>             |
| <b>Services to buildings and dwellings</b>   | <b>\$7,328,756</b>             |
| <b>Accounting, tax preparation, bookkeeping, and payroll services</b>                | <b>\$7,204,874</b>             |
| <b>Electric power generation, transmission, and distribution</b>                     | <b>\$6,666,397</b>             |
| <b>Food services and drinking places</b>   | <b>\$5,984,872</b>             |
| <b>Monetary authorities and depository credit intermediation activities</b>          | <b>\$5,753,191</b>             |
| <b>Other state and local government enterprises</b>                                  | <b>\$5,244,856</b>             |
| <b>Nondepository credit intermediation and related activities</b>                    | <b>\$5,197,990</b>             |
| <b>Management, scientific, and technical consulting services</b>                     | <b>\$5,106,205</b>             |
| <b>Legal services</b>  | <b>\$5,028,793</b>             |
| <b>US Postal Service</b>   | <b>\$4,681,130</b>             |
| <b>Maintenance and repair construction of nonresidential structures</b>              | <b>\$4,558,752</b>             |
| <b>Transport by truck</b>  | <b>\$3,561,203</b>             |
| <b>Automotive repair and maintenance, except car washes</b>                          | <b>\$3,507,142</b>             |

**Appendix 1, Table 2. Estimated St. Elizabeth Healthcare Hospitals employee impacts on local companies, Commonwealth of Kentucky, 2014**

| <b>Estimated St. Elizabeth Healthcare Hospitals purchases from local companies</b>   | <b>IMPLAN one year impacts</b> |
|--|--------------------------------|
| <b>Total</b>   | <b>\$390,374,822</b>           |
| <b>Imputed rental activity for owner-occupied dwellings</b>                          | <b>\$42,374,557</b>            |
| <b>Offices of physicians, dentists, and other health practitioners</b>               | <b>\$27,157,085</b>            |
| <b>Private hospitals</b>   | <b>\$26,067,686</b>            |
| <b>Food services and drinking places</b>   | <b>\$22,416,938</b>            |
| <b>Monetary authorities and depository credit intermediation activities</b>          | <b>\$19,185,268</b>            |
| <b>Real estate establishments</b>  | <b>\$14,694,362</b>            |
| <b>Nondepository credit intermediation and related activities</b>                    | <b>\$12,882,841</b>            |
| <b>Wholesale trade businesses</b>  | <b>\$12,794,254</b>            |
| <b>Insurance carriers</b>  | <b>\$10,255,960</b>            |
| <b>Nursing and residential care facilities</b>                                       | <b>\$9,101,955</b>             |
| <b>Other state and local government enterprises</b>                                  | <b>\$8,006,986</b>             |
| <b>Telecommunications</b>  | <b>\$7,226,933</b>             |
| <b>Medical and diagnostic labs and outpatient and other ambulatory care services</b> | <b>\$6,822,171</b>             |
| <b>Retail Stores - Motor vehicle and parts</b>                                       | <b>\$6,756,916</b>             |
| <b>Retail Stores - General merchandise</b>   | <b>\$6,447,955</b>             |
| <b>Petroleum refineries</b>  | <b>\$6,421,026</b>             |
| <b>Civic, social, professional, and similar organizations</b>                        | <b>\$6,116,963</b>             |
| <b>Retail Stores - Food and beverage</b>   | <b>\$5,842,834</b>             |
| <b>Legal services</b>  | <b>\$4,502,710</b>             |
| <b>Electric power generation, transmission, and distribution</b>                     | <b>\$4,320,067</b>             |

**Appendix 1, Table 3. Estimated St. Elizabeth Healthcare Physician Offices purchases from local companies, Commonwealth of Kentucky, 2014**

| <b>Estimated Physician Offices purchases from local companies</b>                    | <b>IMPLAN one year impacts</b> |
|--|--------------------------------|
| <b>Total</b>   | <b>\$48,086,748</b>            |
| <b>Real estate establishments</b>  | <b>\$3,804,921</b>             |
| <b>Insurance carriers</b>  | <b>\$3,605,176</b>             |
| <b>Monetary authorities and depository credit intermediation activities</b>          | <b>\$3,128,910</b>             |
| <b>Accounting, tax preparation, bookkeeping, and payroll services</b>                | <b>\$2,532,858</b>             |
| <b>Food services and drinking places</b>   | <b>\$2,356,730</b>             |
| <b>Management, scientific, and technical consulting services</b>                     | <b>\$2,337,655</b>             |
| <b>Employment services</b>   | <b>\$2,325,954</b>             |
| <b>Medical and diagnostic labs and outpatient and other ambulatory care services</b> | <b>\$2,159,349</b>             |
| <b>Telecommunications</b>  | <b>\$2,138,247</b>             |
| <b>Wholesale trade businesses</b>  | <b>\$1,654,779</b>             |
| <b>Legal services</b>  | <b>\$1,628,601</b>             |
| <b>Nondepository credit intermediation and related activities</b>                    | <b>\$1,354,080</b>             |
| <b>Services to buildings and dwellings</b>   | <b>\$1,233,277</b>             |
| <b>Management of companies and enterprises</b>                                       | <b>\$974,607</b>               |
| <b>Insurance agencies, brokerages, and related activities</b>                        | <b>\$972,819</b>               |
| <b>Business support services</b>   | <b>\$841,763</b>               |
| <b>Civic, social, professional, and similar organizations</b>                        | <b>\$789,637</b>               |
| <b>US Postal Service</b>   | <b>\$768,964</b>               |
| <b>Office administrative services</b>  | <b>\$708,334</b>               |
| <b>Maintenance and repair construction of nonresidential structures</b>              | <b>\$695,148</b>               |

**Appendix 1, Table 4. Estimated St. Elizabeth Healthcare Physician Offices employee purchases from local companies, Commonwealth of Kentucky, 2014**

| <b>Estimated Physician Offices purchases from local companies</b>                    | <b>IMPLAN<br/>one year<br/>impacts</b> |
|--|--|
| <b>Total</b>   | <b>\$167,460,243</b>                   |
| <b>Imputed rental activity for owner-occupied dwellings</b>                          | <b>\$18,353,184</b>                    |
| <b>Offices of physicians, dentists, and other health practitioners</b>               | <b>\$11,609,015</b>                    |
| <b>Private hospitals</b>   | <b>\$11,124,700</b>                    |
| <b>Food services and drinking places</b>   | <b>\$9,615,930</b>                     |
| <b>Monetary authorities and depository credit intermediation activities</b>          | <b>\$8,190,420</b>                     |
| <b>Real estate establishments</b>  | <b>\$6,226,333</b>                     |
| <b>Nondepository credit intermediation and related activities</b>                    | <b>\$5,526,579</b>                     |
| <b>Wholesale trade businesses</b>  | <b>\$5,447,101</b>                     |
| <b>Insurance carriers</b>  | <b>\$4,426,605</b>                     |
| <b>Nursing and residential care facilities</b>                                       | <b>\$3,897,297</b>                     |
| <b>Other state and local government enterprises</b>                                  | <b>\$3,423,275</b>                     |
| <b>Telecommunications</b>  | <b>\$3,083,545</b>                     |
| <b>Medical and diagnostic labs and outpatient and other ambulatory care services</b> | <b>\$2,920,215</b>                     |
| <b>Retail Stores - Motor vehicle and parts</b>                                       | <b>\$2,916,456</b>                     |
| <b>Retail Stores - General merchandise</b>   | <b>\$2,783,216</b>                     |
| <b>Petroleum refineries</b>  | <b>\$2,738,018</b>                     |
| <b>Civic, social, professional, and similar organizations</b>                        | <b>\$2,634,092</b>                     |
| <b>Retail Stores - Food and beverage</b>   | <b>\$2,522,019</b>                     |
| <b>Legal services</b>  | <b>\$1,925,158</b>                     |
| <b>Electric power generation, transmission, and distribution</b>                     | <b>\$1,838,367</b>                     |