

Regional Health Care as an Economic Generator
Economic Impact Assessment
Dothan, Alabama Health Care Industry

November 15, 2011

Dothan, Alabama, located a few short miles from the state lines of Florida and Georgia, is one of the region's most progressive cities. The Dothan Area Chamber of Commerce supports a vision for economic development and healthcare improvement. Dothan has built-in advantages that make it better for business and supporting a regional healthcare industry: **strategic location, easy access to markets, strong work ethic, trained workforce, sound and diversified economy, first-rate educational institutions and pro-business tax structure.**

The Dothan Area Chamber of Commerce (DACC) is a membership driven action agency designed to meet community and economic development needs. The DACC contracted **Tripp Umbach**, a nationally recognized economic impact consulting firm, to quantify the baseline economic impact of the Dothan region's health care industry; identifying the economic impacts associated with health care delivery and research. To this point in time, a quantification of the economic impact had not been completed. The report further supports the development of Dothan, Alabama as a place of quality and opportunity; a regional leader in healthcare services and research.



Health Care Industry

The Dothan Area health care industry directly employs over 8,700 jobs in the region and supports nearly \$2 billion of economic activity in Alabama.

It has been proven; the healthcare industry and the jobs it supports attract talent to a region and are vital factors for people choosing where to live. The presence of a strong health care economy oftentimes provides an enhanced image to a city or region. It is hard to imagine a better class of jobs in the area, that is, those affiliated with health care and academic medical education. As the region anticipates the first class of students to enroll at the Alabama College of Osteopathic Medicine (ACOM), it is important to embrace the teaching function of ACOM and the importance of training future individuals to serve as doctors in the community. Studies have shown that medical students trained in the region are more likely to remain to practice as doctors. Tripp Umbach projects the total economic impact of ACOM will be approximately \$300 million by 2030 and will support more than 1,900 jobs in Alabama's economy. ACOM will be a valuable resource to the healthcare community and generate a spin-off effect that benefits the entire Dothan region.

This report focuses on the primary objective identified by DACC.

IMPACT ANALYSIS

Measure the current economic, employment, and government revenue impacts at the statewide and regional level of the Dothan, Alabama regional healthcare economy.¹

¹ Economic impact analysis has been completed to quantify Dothan's healthcare economy on two geographic areas: Alabama and Houston County.

The health care industry in Dothan, Alabama is anchored by two hospitals operating in the community. Southeast Alabama Medical Center (SAMC) is a not-for-profit community health system dedicated to improving the health and quality of life of the residents of southeast Alabama, southwest Georgia and the Florida Panhandle.² SAMC operates as a 420-bed regional referral center, serving approximately 600,000 people throughout its neighboring communities and counties. Flowers Hospital, a 235-bed hospital, serves the healthcare needs of the Dothan community; it also functions as a major referral center for the Tri-State area.³

The health care industry extends beyond the substantial economic contribution supported by the regional hospitals. Health care includes ambulatory care centers, such as physician’s offices and other health practitioners. Nursing and residential care facilities are also included in the economic impact analysis. In addition to health care delivery and care, employment at medical and diagnostic laboratories was also included in the impact analysis. Table 1 illustrates the industry sectors comprising the definition of the health care industry utilized in the economic impact report. Tripp Umbach supports this definition based on the existing economic structure of the region.

NAICS Code ⁴	Industry Definition
621	Ambulatory Health Care Services
6211	Offices Of Physicians
6212	Offices Of Dentists
6213	Offices Of Other Health Practitioners
6214	Outpatient Care Centers
6215	Medical & Diagnostic Laboratories
6216	Home Health Care Services
6219	Other Ambulatory Health Care Services
622	Hospitals
6221	General Medical & Surgical Hospitals
6222	Psychiatric & Substance Abuse Hospitals
6223	Specialty (Except Psychiatric & Substance Abuse) Hospitals
623	Nursing & Residential Care Facilities
6231	Nursing Care Facilities
6232	Residential Mental Retardation, Mental Health & Substance Abuse Facilities
6233	Community Care Facilities For The Elderly
6239	Other Residential Care Facilities

Table 1- Health Care Industry Definition

² "About Us." Southeast Alabama Medical Center - Dothan, Alabama - 334.793.8111. Web. 01 June 2011. <<http://www.samc.org/index.php/aboutus.html>>.

³ "ProMedica Hospitals Flower Hospital." ProMedica. Web. 01 June 2011. <<http://www.promedica.org/default.aspx?PageID=654>>.

⁴ The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Tripp Umbach estimates the Dothan, Alabama health care industry supports 16,400 jobs in the State of Alabama. The Dothan health care industry directly employs more than 8,700 jobs. These jobs support nearly \$2.0 billion of economic activity within Alabama.

Health Care Industry Economic Impact Analysis - Key Findings:

- The Dothan area health care industry has a total **annual economic impact of nearly \$2 billion** on Alabama.
 - The health care industry has a direct impact of approximately \$1.12 billion on the state and supports nearly \$835 million of economic activity due to the extensive operations.
- The Dothan area health care industry supports a total of **16,447 jobs** within Alabama.
 - Table 2 below illustrates that the health care industry directly employs 8,716 people within the Dothan area and supports an additional 7,731 jobs in the region through the extensive operations of the health care sector.
 - Approximately one out of three jobs⁵ in the Dothan Area is supported directly or indirectly by the health care industry.

NAICS Code	Industry Definition	Total Employment ⁶
621	Ambulatory Health Care Services	3,125
622	Hospitals	4,538
623	Nursing & Residential Care Facilities	1,053
	Total	8,716

Table 2- Health Care Industry Employment

- Health care and state/local government organizations are the largest employers in the Dothan area. Many **industry sectors rely** on the economic activity **supported by** the operations of **Dothan's health care industry**.
- The Dothan area health care industry generates approximately **\$80 million in local and state taxes** through its operations, employment and spending statewide.

5 Total employment based on 46,292 employed individuals in Houston County, data based on September 2010, retrieved May 2011.

6 Data retrieved from Dun & Bradstreet's Million Dollar Database on May 25, 2011.

What does economic impact measure?

Economic impact measures the direct, indirect and induced economic impact stemming from the operations of Dothan, Alabama's health care industry. Economic impact measures activity such as institutional expenditures for capital improvements, goods and services. Economic impact also includes spending by staff, spending by visitors, and spending by vendors of the health care industry. The overall result is a multiplied economic impact that is a direct result of Dothan's health care industry presence and spending patterns.⁷

The direct, indirect and induced employment impact generated from the operations of Dothan's health care industry includes individuals who work directly as well as indirectly for these institutions.

Indirect employment represents additional jobs created as a result of the health care industry's operations. Local companies that provide goods and services to health care institutions hire additional individuals to support the purchasing of the health care industry and their employees.

The tax revenue impact of the health care industry includes income, sales, real estate, and corporate income and capital stock/franchise taxes.



⁷ The economic impact analysis is based on the total number of employees working for each of the health care industry sectors identified in the analysis within the defined geographic border of Houston County. No assumptions were made based on institutional expenditures or the percentage of institutional spending made by each anchor institution beyond the defined county or state area.

How substantial are the economic assets of Dothan’s health care industry?

Dothan’s health care industry has a total economic impact of approximately \$2.0 billion within Alabama. The impact on Houston County is more than \$1.8 billion. The concentrated health care industry employment results in considerable economic activity in the region.

	Alabama	Houston County
Direct Effect	\$1.120 billion	
Indirect Effect	\$ 349 million	\$ 270 million
Induced Effect	\$ 486 million	\$ 412 million
Total Effect	\$1.955 billion	\$1.802 billion

Table 3 – Economic Impact

Dothan’s health care industry generates approximately \$80 million in local and state taxes through its operations, employment and spending statewide. Government revenue includes collections on employee compensation, indirect business tax, corporate profits and dividends.

How many jobs are supported by Dothan's health care industry?

Jobs take precedence over livability when people are choosing where to locate. In a recent study completed by The Economics Institute, a livability survey showed that the main reason for professionals to move to a city is its jobs market and cost of living.⁸

The health care industry of Dothan, Alabama directly employs 8,716 people within Houston County and is indirectly responsible for the employment of more than 8,000 additional indirect and induced jobs in the state and region. There are approximately 46,292 employees within Houston County. Based on these projections, Dothan's health care industry is responsible for approximately 36% of the jobs in Houston County.⁹ **Stated another way, nearly 1 out of every 3 jobs in Houston County are directly employed or supported by the operations of the health care industry in the region.**

The employment impact of the health care industry is greater within the larger geographic area of Alabama as even more jobs are supported by the operations of Dothan's health care industry, payroll and spending.

	Alabama	Houston County
Direct Effect	8,716 jobs	
Indirect Effect	3,208	3,196
Induced Effect	4,523	4,208
Total Effect	16,447	16,120

Table 4 – Employment Impact

8 "Liveanomics." BUSINESS RESEARCH. Web. 12 Mar. 2011.
<<http://www.businessresearch.eiu.com/liveanomics.html>>.

9 All employment impacts are shown in total jobs. This includes full-time and part-time head counts.

How great an impact does Dothan’s health care industry have on other employers in the region?

Many industry sectors rely on the economic activity supported by the operations of Dothan’s health care industry. The health care sector obviously supports industries such as hospitals and physician’s offices, however, real estate and food services benefit substantially by a thriving health care sector. The development of ACOM and support of medical education in the region will increase opportunities to expand on medical and diagnostic labs. Dothan’s health care industry supports employment in a variety of sectors. Table 5 illustrates the top industries supported by the health care industry of Dothan.

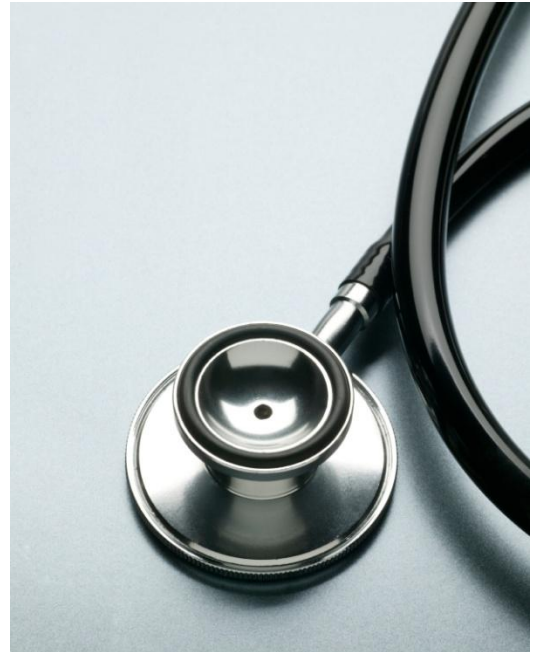
Economic Impact Detail - Top Sectors Supported by Dothan’s Health Care Industry

Industry Sector	Total Jobs	Total Labor Income	Total Impact
Private hospitals	4,767	\$265,388,355	\$623,815,098
Offices of physicians, dentists, and other health practitioners	2,941	\$278,847,978	\$462,087,196
Real estate establishments	1,302	\$8,565,531	\$88,872,989
Nursing and residential care facilities	1,218	\$36,728,247	\$69,930,560
Food services and drinking places	694	\$12,714,887	\$37,529,112
Employment services	636	\$10,039,541	\$14,752,849
Medical and diagnostic labs and outpatient and other ambulatory care services	337	\$16,182,146	\$41,649,937
Home health care services	263	\$12,368,367	\$18,934,145
Wholesale trade businesses	203	\$10,958,292	\$27,100,057
Private household operations	197	\$727,748	\$745,564

Table 5 – Industry Sector Detail

The “**Health Care Industry Economic Impact Assessment**” provides a baseline economic impact inventory to track expansion of the Dothan area regional health care economy.

- Jobs and the economic activity of the health care industry highlight the strengths of Dothan’s infrastructure. The health care industry supports more than 16,000 jobs and generates approximately \$1.8 billion of economic impact within Houston County.
- The Dothan, Alabama health care industry supports 16,400 jobs in the State of Alabama. The Dothan health care industry directly employs more than 8,700 jobs. These jobs support nearly \$2.0 billion of economic activity within Alabama.
- The Dothan health care industry also creates more than \$80 million of state and local government revenue to support community services.
- There is untapped potential given the development of the Alabama College of Osteopathic Medicine (ACOM). Medical education seeks to improve the health of the region by developing essential primary care providers. The economic health of the region is also impacted. Tripp Umbach projects the total economic impact of ACOM will be approximately \$300 million by 2030 and will support more than 1,900 jobs in Alabama’s economy.
- The findings of this report provide the economic quantification of an industrial based strategy for the Dothan Area Chamber of Commerce.



In order to quantify the impact of Dothan, Alabama's health care industry within the various geographic areas (Alabama and Houston County) analyzed within this study, it was necessary for Tripp Umbach to establish a study methodology. It was important that the methodology used would insure a comprehensive, yet conservative, estimate of the operations' impact, based on information compiled using uniform and consistent techniques. In addition, the study team sought to develop a reproducible methodology assuring that subsequent studies could build upon the information and knowledge gained through this effort.

Tripp Umbach determined that the use of IMPLAN Pro, economic impact model software, was most appropriate for this analysis.¹⁰ The IMPLAN econometric model operates by estimating the direct impact, indirect impacts and induced impacts of specific economic activity. Direct economic impacts, are those attributable to the initial economic activity, for example, an operation with ten full time employees creates ten direct jobs. Indirect economic impacts are those economic activities undertaken by vendors and suppliers within the supply chain of the direct activity because of the initial economic activity. For example, suppliers of goods, materials and services used in the direct activities produce indirect economic impacts. Induced economic impacts result from the spending of wages paid to employees in local industries involved in direct and indirect activities. Tripp Umbach selected the IMPLAN model due to its frequent use in economic impact in addition to its development independent of local influences.

Tripp Umbach collected employment information related to the health care industry in Houston County and also worked with representatives at the Dothan Area Chamber of Commerce to collect employment statistics directly from Southeast Alabama Medical Center (SAMC) and Flowers Hospital.

In this report, the impact was measured using IMPLAN datasets. The IMPLAN data files include information for 528 different industries (generally three or four digit SIC code breakdown) and 21 different economic variables. IMPLAN sources their employment data from ES202 employment security data supplemented by county business patterns and REIS data. Employment data utilized in the analysis includes full-time and part-time positions.

It should be noted that, at the time of performing the impact assessment, the most recent IMPLAN data files were for 2009. It is unlikely that the fundamental economic structure of the geographic areas has changed to an extent that would invalidate the analysis. IMPLAN data and accounts closely follow the accounting conventions used in the "Input/ Output Study of the U.S. Economy" by the U.S. Bureau of Economic Analysis and the rectangular format recommended by the United Nations.

Tripp Umbach supplied additional information as required to supplement the data supplied by the Dothan Area Chamber of Commerce.

¹⁰ MIG, Inc., IMPLAN System, 502 2nd Street, Suite 301, Hudson, WI 54016 www.implan.com