

Hospitals and the Louisiana Economy, 2014 Report Highlights

Hospitals, while providing vital and necessary medical services in the communities they serve, also are major economic agents within the state, generating more than \$29.9 billion annually in economic activity and directly employing more than 98,000 people. Hospitals make up approximately 35 percent of total healthcare employment and close to half of the annual payroll of the healthcare sector. They contribute to the economic stability and viability of the community and regional economies based on their employment and their connection to other businesses within the community. Jobs associated with hospitals require a wide spectrum of skills, and the average wage for hospital personnel is significantly higher than other service sector jobs.

Healthcare Compared to Other Industries within the State

In 2012, 12,041 healthcare establishments employed 285,950 Louisiana residents with a payroll of more than \$10.9 billion. The healthcare sector is the largest employer in the state when measured by total payroll expenditures, and hospital payroll makes up the largest component of the healthcare sector.

	Number of Business Establishments	Number of Employees	Number of Establishments with 500 or More Employees	Annual Payroll (in billions)
Healthcare	12,041	285,950	58	\$10.910
Mining	1,691	54,434	15	\$3.428
Manufacturing	3,307	127,354	35	\$8.071
Utilities	522	11,676	3	\$0.931
Construction	7,926	128,982	19	\$6.801
Wholesale Trade	5,637	75,843	3	\$4.077
Retail Trade	16,774	223,908	6	\$5.460

Table 1: Comparisons of Industries in Louisiana, 2014

Source: County Business Patterns, U.S. Census Bureau, 2012

Hospitals in Louisiana

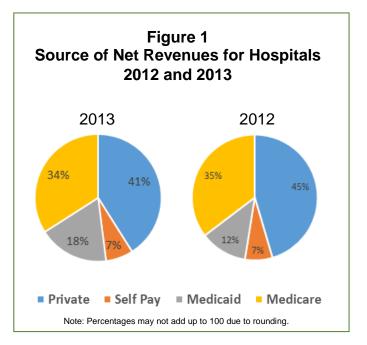
The state's 207 hospitals provided jobs for 98,224 people with an annual payroll of more than \$4.62 billion, as reported in the federal publication County Business Patterns 2012. Fifty one Louisiana hospitals had 500 or more employees, and 30 hospitals had 1,000 or more employees. Hospitals accounted for 1.7 percent of all healthcare establishments in Louisiana; however they made up 34 percent of the total employees and 42.2 percent of the total healthcare sector payroll.

Healthcare providers are a major economic influence within a community, and, of these healthcare providers, hospitals are the most dominant economic contributors in a community's economy.

Hospital Revenue Sources

Hospitals receive their revenues from private insurance companies; federal insurance programs such as Medicare; federal and state insurance programs such as Medicaid; and selfpayment by individuals.

According to a 2013 survey of hospitals in Louisiana, 41 percent of total net revenues (gross revenues less contractual adjustments) came from private insurers, 34 percent from Medicaid, and 7 percent from self-pay and the uninsured. A comparison of the sources of total net revenues for hospitals is provided in Figure 1 for 2012 and 2013.



Medicare and Medicaid made up more than 50 percent of total net revenues for hospitals in New Orleans (Region 1), Alexandria (Region 6), Shreveport-Bossier (Region 7), and Monroe (Region 8). The three regions with the least amount of Medicare and Medicaid net revenues are Baton Rouge (Region 2), Lake Charles (Region 5), and the Northshore (Region 9).

Healthcare and Hospitals in Louisiana by MSAs

A snapshot of the economic influence of healthcare and hospitals in the eight metropolitan statistical areas (MSAs) within the state and in the rural parishes is presented in Table 2.

Alexandria, Lafayette, Monroe, New Orleans, and Shreveport-Bossier have a larger proportion of the healthcare and hospital workers than their overall proportion of the state's population. Baton Rouge, Houma-Thibodaux, and Lake Charles have proportionately fewer workers in healthcare and hospitals than the size of their population.

	% State Population	% Healthcare Employees	% Healthcare Payroll	% Hospital Employees	% Hospital Payroll		
Alexandria	3.4	4.8	4.7	7.3	6.2		
Baton Rouge	17.7	16.5	16.4	13.8	12.7		
Houma-Thibodaux	4.6	3.9	4.3	3.3	3.1		
Lafayette	6.0	8.6	9.4	6.2	6.1		
Lake Charles	4.4	4.4	4.3	3.3	3.1		
Monroe	3.9	5.0	4.5	4.7	4.2		
New Orleans	25.8	24.7	27.9	27.2	32.0		
Shreveport	8.8	11.2	12.2	15.0	15.7		
Rural Parishes	25.4	21.1	16.3	18.2	16.3		

Table 2: Healthcare and Hospital Payrolls and Employeesby Metropolitan Area State of Louisiana, 2012

Source: 2014 Hospital Survey and U.S. Census

Healthcare in Louisiana's Rural Parishes

The 35 rural parishes make up the second largest healthcare market in terms of employees, with over 60,000 healthcare employees, or about 21 percent of all healthcare employees in the state (see Table 2). The rural parishes make up about 16 percent of the healthcare payroll in the state. These rural parishes have about 18,000 hospital employees, which is 18 percent of all hospital workers in the state. The hospital payroll in the rural parishes make up about 16 percent of the statewide payroll.

Economic Impact of Hospitals

The capital projects associated with hospitals and the ongoing expenditures of all the hospitals have a ripple effect on the economy. These economic impacts are illustrated in Table 3. During 2012 and 2013, Louisiana hospitals averaged capital expenditures of approximately \$870 million per year. These expenditures impacted the overall economy by creating and supporting almost 15,000 jobs, personal earnings of \$583 million, and state and local tax collections of \$78 million.

Annual direct hospital expenditures are estimated to be \$14.1 billion which, in turn, creates and supports 294,548 jobs in Louisiana with personal earnings of almost \$12 billion per year and state and local tax collections of approximately \$1.6 billion per year.

Table 3: Economic Impact of Construction and Ongoing Activities of Louisiana Hospitals (Estimated Construction Outlays of \$870 Million Per Year and Ongoing Direct Hospital Expenditures of \$14.1 Billion)

Type of Spending	Business Sales (\$ millions)	Personal Earnings (\$ millions)	Jobs Created	Tax Collections (\$ millions)
Capital Expenditures	1,944.3	583.0	14,913	78.0
Ongoing Expenditures	29,999.3	11,893.7	294,548	1,582

Source: Louisiana Input-Output Model and 2014 Hospital Survey

Hospital expenditures serve as an important economic input in promoting, requiring, and supporting jobs in the state and local economies. These jobs vary to include not only the actual hospital workers, but also construction jobs associated with building homes for hospital employees.

Hospital expenditures support over 135,000 jobs in the service sector of the economy that are not hospital employees. These jobs vary widely to include professional services (such as consulting, legal, or accounting services), repair services, entertainment and recreational activities, and related healthcare services. In addition, almost 30,000



jobs are supported in wholesale and retail trade ranging from department store personnel and food service workers to more directly related vocations such as pharmacists.

Impact on State and Local Tax Collections

The overall economic activity that is supported by hospital expenditures leads to \$868 million in state tax collections and \$714 million in local tax collections. State collections of \$868 million represent about 7 percent of all taxes and fees collected by state government.

Medicaid, Hospitals and the Louisiana Economy

The Medicaid program is jointly funded by the state and federal government with the federal government paying in Louisiana approximately 62.05 percent of the Medicaid outlays according to the Federal Medical Assistance Program (FMAP). Under the Children's Health Insurance Program (CHIP), there is also an enhanced FMAP that is 73.44 percent, so the state puts up 26.64 cents to get one dollar.

The Medicaid program is leveraged so that the federal government matches state Medicaid dollars with additional funding. Medicaid-related revenues vary from region to region, but overall for the state, Medicaid-related hospital expenditures create and support over 48,000 jobs and over \$137.5 million of state tax collections and \$117.8 million of local tax collections.

Hospital expenditures have a major economic impact on the state in terms of business activity, personal earnings, and overall jobs created and supported. Similarly, hospital expenditures have a substantial impact on all regions of the state since hospitals are scattered throughout the state.

A major reduction in hospital expenditures in any part of the state will create economic ripples that will be difficult to offset immediately by other economic measures.

Effects of the Current Market Condition on Hospitals

Hospitals, like any other business, are affected by current economic conditions in many ways. According to hospital financial data collected by the LHA:

- 80% have seen an increase in emergency room visits for uninsured patients;
- 75% have seen a decrease in patient account collections; and
- 57% have seen a decrease in elective surgeries.

Hospitals have made or are considering the following changes in order to cut costs because of current market conditions:

- 60% reduced services, and 33% are considering reducing services;
- 31% eliminated vacant positions, and 35% are considering it;
- 13% have reduced community benefit programs, and another 16% are considering reducing community benefit programs; and
- 9% halted construction, equipment purchases and other projects, and 20% are considering it.

Economic Impact of Reducing Medicaid Reimbursement to Hospitals

The impact of the state reducing its direct expenditures for Medicaid by \$150 million would have the following impact:

- A loss of an additional \$245 million of federal dollars for an overall reduction of \$395 million in state funds.
- A loss of approximately 8,144 jobs statewide. Each region, on average, would lose 904 jobs.
- A reduction in personal earnings of \$329 million.
- A reduction in overall business transactions of \$800 million.



Hospitals and the Louisiana Economy, 2014 was prepared for the LHA by Dr. James A. Richardson, Alumni Professor of Economics, Louisiana State University

Hospitals and the Louisiana Economy, 2014



Prepared for the Louisiana Hospital Association By James A. Richardson*, Alumni Professor of Economics, Louisiana State University August 2014

*Dr. Richardson is solely responsible for the facts, findings and conclusions presented in this report.

Hospitals and the Louisiana Economy 2014

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prepared for

Louisiana Hospital Association Baton Rouge, Louisiana

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Executive Summary Hospitals and the Louisiana Economy, 2014

The ultimate purpose of the healthcare sector is to provide appropriate and necessary medical services to enhance the quality of life of the citizens of Louisiana. In the process of providing these vital services, the healthcare sector becomes a significant economic engine within the state and local communities, and hospitals make up over 35 percent of total healthcare employment and close to half of the annual payroll of the healthcare sector. Hospitals, while providing important and necessary medical services to the community, also become major economic agents within the community. They contribute to the economic stability and viability of the community and regional economies based on their employment and their connection to other businesses within the community. Jobs associated with hospitals require a wide spectrum of skills, and the average wage for hospital personnel is significantly higher than other service sector jobs.

Healthcare and Hospitals Compared to Other Industries in Louisiana

In the most recent (2012) national, state, and parish data issued by the County Business Patterns with the US Census, 285,950 persons were employed in the healthcare and social assistance sector in Louisiana with an annual payroll of almost \$10.9 billion. Healthcare employment makes up over 15 percent of the total workforce in Louisiana in 2012 and just over 18 percent of the private workforce. The healthcare sector has a large number of establishments compared to mining, manufacturing, utilities, and construction, but only about three-quarters of the establishments in retail trade. Healthcare has almost 30 percent more employees than retail trade but a payroll that is twice as high. Hospital employment in the 2012, according to the US Census is 98,224 with a payroll of \$4.6 billion. Hospital employment represents just over 36 percent of healthcare and social assistance employment in Louisiana. Industry comparisons are illustrated in Table ES.1.

Hospitals in Louisiana

The state's 207 hospitals, receiving net revenues from private insurers, Medicare, Medicaid, and self-pay, provided jobs for 98,224 persons with an annual payroll of over \$4.62 billion as reported in the 2012 federal publication, County Business Patterns. Fifty-one Louisiana hospitals had 500 or more employees. Thirty hospitals had 1,000 or more employees. Hospitals made up 1.7 percent of all healthcare establishments in

Industry Classification	# Business Establishments	# Employees	Establishments with 500 or employees	Annual Payroll (\$ billions)
Mining	1,691	54,434	15	3.428
Manufacturing	3,307	127,354	35	8.071
Utilities	522	11,676	3	0.931
Construction	7,926	128,982	19	6.801
Wholesale Trade	5,637	75,843	3	4.077
Retail Trade	16,774	223,908	6	5.460
Healthcare Sector	12,041	285,950	58	10.910
Hospitals	207	98,224	51	4.653

Source: County Business Patterns, U.S. Bureau of Census, 2012

Louisiana, but these hospitals made up 34 percent of the total employees and 42.2 percent of the payroll of the healthcare sector. Healthcare providers are a major economic influence within a community, and, of these healthcare providers, hospitals are the most dominant economic contributors in a community's economy.

In 2012, Louisiana hospitals received 45 percent of their net revenues from private insurance, 35 percent from Medicare, 12 percent from Medicaid, and 7 percent from self-pay, while in 2013 net revenues from private insurance made up 41 percent of total net revenues, Medicare 34 percent, Medicaid 18 percent, and self-pay 7 percent. Medicaid increased sharply from 2012 to 2013. Medicare and Medicaid make up more than 50 percent of total net revenues for hospitals in New Orleans (Region 1), Alexandria (Region 6), Shreveport-Bossier (Region 7), and Monroe (Region 8). The three regions with the least amount of Medicare and Medicaid net revenues will be Baton Rouge (Region 2), Lake Charles (Region 5), and the Northshore (Region 9). The sources of payments provide insight into the demographics and socioeconomic characteristics of a region and the markets in which hospitals work.

Healthcare and Hospitals in Louisiana by MSAs

A snapshot of the economic influence of healthcare and hospitals in the eight metropolitan statistical areas (MSAs) within the state and in the rural parishes is presented in Table ES.2. Alexandria, Lafayette, Monroe, New Orleans, and Shreveport-Bossier have a larger proportion of the healthcare and hospital workers than its quarall proportion of

than its overall proportion of the state's population. Baton Rouge, Houma-Thibodaux, Lake Charles, and the rural parishes have proportionately fewer workers in healthcare and hospitals than the size of its population.

Economic Impact of Hospitals

The capital projects associated with hospitals and the ongoing expenditures of all the hospitals have a ripple effect on the economy. These economic impacts are illustrated in Table ES.3. During 2012 and 2013

Table ES-2. Healthcare and Hospital Payrolls and Employees
by Metropolitan Statistical Area (MSA), State of Louisiana, 2012

Louisiana MSAs	% State Population	% Healthcare Employees	% Healthcare Payroll	% Hospital Employees	% Hospital Payroll
Alexandria	3.4	4.8	4.7	7.3	6.2
Baton Rouge	17.7	16.5	16.4	13.8	12.7
Houma-Thibodaux	4.6	3.9	4.3	3.3	3.1
Lafayette	6.0	8.6	9.4	6.2	6.1
Lake Charles	4.4	4.4	4.3	3.3	3.1
Monroe	3.9	5.0	4.5	4.7	4.2
New Orleans	25.8	24.7	27.9	27.2	32.0
Shreveport-Bossier	8.8	11.2	12.2	15.0	15.7
Rural	25.4	21.1	16.3	18.2	16.3

Source: 2014 Hospital Survey and US Census

Louisiana hospitals averaged capital expenditures of around \$870 million per year. These expenditures impacted the overall economy by creating and supporting almost 15,000 jobs, personal earnings of \$583 million, and state and local tax collections of \$78 million. Capital expenditures will vary from year to year, but given the number of hospitals and the necessary improvements on a continuous basis, it is certainly probable that capital expenditures will continue at a fairly consistent pace. Expenditures may and almost surely will vary within a region from year to year.

Annual direct hospital expenditures are estimated to be \$14.1 billion which, in turn, creates and supports 294,548 jobs in Louisiana with personal earnings of almost \$12 billion per year and state and local tax collections of approximately \$1.6 billion per year.

Medicaid/Hospitals and the Louisiana Economy

Two influential payment plans are public programs, namely Medicaid, a joint state and federal government program for specific individuals and families that are unable to pay for healthcare services for themselves, and Medicare, a federally sponsored program for healthcare services for the elderly. The Medicaid program

Table ES-3. Economic Impact of Construction and Ongoing Activities of Hospitals in Louisiana (Estimated Construction Outlays of \$870 million per year and Ongoing Direct Hospital Expenditures of \$14.1 billion)

Type of Spending	Business Sales (\$ millions)	Personal Earnings (\$ millions)	Jobs Created	Tax Collections (\$ millions)
Capital Expenditures (Not guaranteed to be recurri	1,944.3	583.0	14,913	78.0
Ongoing Expenditures (Annual Expenditures)	29,999.3	,893.7	294,548	1,582.0

Source: 2014 Hospital Survey and Louisiana Input-Output Model

is jointly funded by the state and federal government with the federal government paying in Louisiana approximately 62.05 percent of the Medicaid outlays according to the Federal Medical Assistance Program (FMAP). There is also an enhanced FMAP that is 73.44 percent so the state puts up 26.64 cents to get one dollar. The Medicaid program is leveraged so every dollar the state puts up the federal government will put up additional dollars. In Table ES.4 the estimated economic impact of Medicaid-related direct expenditures by hospitals is presented. Medicaid-related revenues vary from region to region, but, overall for the state Medicaid-related hospital expenditures create and support over 48,000 jobs and over \$117.9 million of state tax collections of over \$137.5 million and \$117.8 million of local tax collections.

DHH Region	% of Revenues from Medicaid	Jobs Created & Supported	Personal Earnings (\$ millions)	State and Local Tax Collections
New Orleans	31.7	11,655	470.6	28.2
Baton Rouge	8.9	3,259	131.6	7.9
Houma-Thibodaux	5.1	1,895	76.5	4.6
Lafayette	12.2	4,485	181.1	10.9
Lake Charles	11.2	4,124	166.5	10.0
Alexandria	13.5	4,963	200.4	12.0
Shreveport-Bossier	- 28.2	10,365	418.5	25.1
Monroe	13.7	5,056	204.2	12.2
Northshore	7.7	2,851	115.1	6.9
State	18.0	48,653	1,964.6	137.5

Table ES-4. Annual Economic Impact of Hospital Care Associated with Medicaid on Louisiana Economy and DHH Regions

Source: 2014 Hospital Survey and Louisiana Input-Output Model

Hospitals and the Louisiana Economy, 2014

Introduction

The ultimate purpose of the healthcare sector is to provide appropriate and necessary medical services to enhance the quality of life of the citizens of Louisiana. In the process of providing these vital services, the healthcare sector becomes a significant economic engine within the state and local communities. Hospitals make up over 35 percent of total healthcare employment and close to half of the annual payroll of the healthcare sector. This report focuses on the economic significance of hospitals in Louisiana and within local communities of the state, including the nine DHH administrative zones created by the Department of Health and Hospitals and the metropolitan areas within these regional labor markets.¹

Economic significance is determined through the following considerations:

- 1. Hospitals are significant participants in the healthcare sector as indicated by the number of employees and annual payroll in hospitals throughout the state.
- 2. Hospitals are created to serve the people in a community and are not necessarily the initial driver in the economic development process. One does not build a new hospital because the economy needs a stimulus. Hospitals are built because the community needs essential healthcare services and will not grow and prosper without them. From this perspective, hospitals serve an important support role. The lack of medical care and facilities can deter economic development. Economic development may start without an adequate healthcare system, but economic development and growth will not continue unless an acceptable healthcare system is created, including the presence of hospitals.
- 3. The exception to this role of hospitals as a support industry would be the development of a medical complex that provided healthcare assistance for people from around the nation and world based on an overall reputation or specific specialties in healthcare treatment and/or the development of healthcare facilities that provide research, product development, and other such activities. Medical districts are typically centered by a network of hospitals.²
- 4. In addition to being an important and essential amenity in shaping the long-term economic and social development of a community, hospitals, as the community develops, hire trained personnel to deliver the medical services, and the hospitals develop commercial relationships with other businesses in the region. The hospital becomes an economic agent. Hospitals are labor-intensive, meaning employment in a hospital will be substantial compared to other business enterprises.³
- 5. The net revenues of the hospitals come from a variety of sources—private insurance, Medicare, Medicaid, and some self-pay. Statewide, these net revenues approach just over \$14 billion per year as of 2013. People across the state pay insurance premiums, state and federal taxes, and some direct hospital charges; some communities will provide these hospital services more than others, so certain communities may be net beneficiaries of the process by which U.S. citizens pay for healthcare. Once the hospitals are created as viable economic agents and located around the state, the hospitals provide jobs, business relationships, and services that are not easily replaced. First and most important, the hospitals provide the basic service of healthcare that allows the people to be productive citizens and, second, the hospitals provide a solid economic backdrop for the communities in which the hospitals are located. Hospitals must be scattered across the state in order to meet the demands of their clients.
- 6. The Medicaid program can be a net engine of economic development because of the funding relationship between the State and the Federal government. For every 38 cents Louisiana contributes to this program, the federal government contributes 62 cents.⁴ The state can leverage its dollars. A \$150 million commitment by the state to the Medicaid program, assuming a 62 percent match by the federal government, will lead to a federal commitment of approximately \$245 million in Louisiana's Medicaid program, so Louisiana gets about \$1.65 dollars for every dollar the state puts up. This FMAP rate can change given economic conditions in the state. At one time it was approximately a 70 to 30 federal match but Louisiana incomes rose as a consequence of Hurricane Katrina and the

FMAP diminished. If incomes remain higher in Louisiana, then the rate will remain at the 62 to 38 federal match.

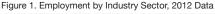
7. Hospitals become leaders of the economic development process for many reasons. If research and teaching hospitals are created, this could spur other developments. Research and teaching become major responsibilities of the hospitals. If a hospital becomes one of the leading research centers or treatment facilities for a particular disease, patients may come from across the country or even the world. New industries can be attracted to these research/teaching medical complexes. The development of the BioDistrict in New Orleans and the grouping of hospitals in Baton Rouge along with the Pennington BioMedical Research Center are examples of possible medical districts that could be economic drivers from a research and development perspective as well as creating specialties that will attract medical consumers from outside the region and state. In this situation, hospitals not only serve local, national, and international patients, but they also compete for National Institute of Health grants, private industry contracts and grants, new product development, start-up capital for new firms, as well as other funding sources.

Hospitals are intrinsically linked to other sectors of the economy through the hiring practices and business transactions required to provide a hospital's important services. This report focuses on the magnitude of these economic linkages, particularly on hospitals as an integral part of communities across the state. The report also quantifies the special connection between Medicaid and the Louisiana economy because of the federal matching program.

Healthcare and Hospitals Compared to Other Industries within the State

In the most recent (2012) national, state, and parish data issued by the County Business Patterns through the US Census, 285,950 persons were employed in the healthcare and social assistance sector in Louisiana with an annual payroll of almost \$10.9 billion.⁵ Employment in the Louisiana healthcare sector has grown from 57,544 persons in 1977 to 285,950 persons in 2012, nearly a fivefold increase. Healthcare employment as a share of the total workforce has grown from 4.3 percent of in 1977 to over 15 percent

of the total workforce in Louisiana in 2012 and just over 18 percent of the private workforce. Nationally, employment in healthcare and social assistance makes up about 15 percent of total private employment. Louisiana hospitals in 2012 employed 98,224 people with a payroll of \$4.6 billion, according to the US Census. Hospitals provide approximately 5 percent of total private employment in Louisiana and just over 4 percent nationally. Hospital employment represents just over 36 percent of healthcare and social assistance employment in Louisiana.



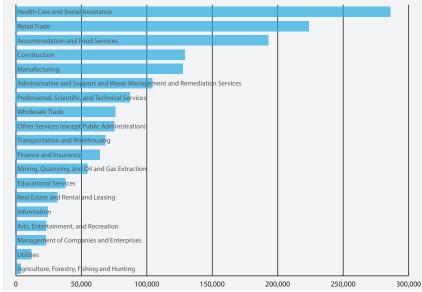
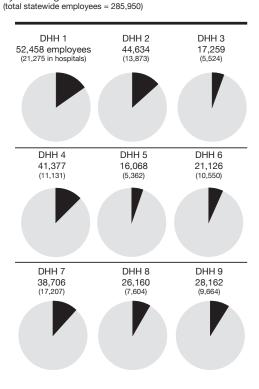


Figure 2. Health Care and Social Assistance Employees by DHH Region



The number of employees in the healthcare sector compared to other sectors of the Louisiana economy is illustrated in Figure 1. Healthcare and social assistance is the largest sector in the state with more than 280,000 employees. Only six sectors, not including the public sector, have more than 100,000 employees: healthcare and social assistance, retail trade, accommodations and food service, construction, manufacturing, and administrative and support and waste management. The only other sector in the state with more than 200,000 employees is the retail trade sector. If we were to isolate Hospitals as a major sector and not just a subpart of Healthcare and Social Assistance, it too would have close to 100,000 employees.

Employment is further illustrated by Figure 2 in terms of healthcare and hospital employment by parish and by the nine DHH zones. East Baton Rouge Parish, as a parish, has the most healthcare workers with almost 37,000 employees, but Orleans and Jefferson Parishes together have just over 51,000 healthcare employees. Jefferson has slightly more hospital workers than East Baton Rouge, but Jefferson and Orleans parishes have over 21,000 hospital employees compared to almost 12,000 in East Baton Rouge Parish. Every Parish has healthcare employment with the lowest healthcare employment in Cameron Parish with 50 healthcare

employees and 78 healthcare employees in Tensas Parish and the highest in East Baton Rouge Parish. The average number of healthcare employees per parish is approximately 4,500, but there is a wide variation. Twenty-seven parishes have fewer than 1,000 healthcare workers, eleven parishes have between 1,000 and 2,000 healthcare workers, fourteen parishes have between 2,000 and 5,000 healthcare workers, three parishes have between 5,000 and 10,000 healthcare workers, four parishes have between 10,000 and 20,000 healthcare workers, and five parishes have over 20,000 healthcare workers. This distribution of healthcare employees correlates with the population variance in the state.

Eight parishes have no hospital employment. Nine parishes have between 1,000 and 5,000 hospital employees, while seven parishes have over 5,000 hospital workers. Caddo has the most hospital workers, almost 14,000. Orleans, East Baton Rouge, and Jefferson parishes are just behind Caddo in the number of hospital employees. Hospitals, just like healthcare services, are spread across the state.

Healthcare employment (not including Social Assistance) by subsector is illustrated in Figure 3 based on information from the Louisiana Workforce Commission and the Bureau of Labor Statistics. Ambulatory care (which includes offices of physicians and other facilities not defined as hospitals) and physicians make up 44 percent of the healthcare employment nationally and just over 39 percent in Louisiana. Hos-

pitals make up 33 percent of healthcare employment nationally but over 41 percent in Louisiana. Nursing and residential care facilities make up 23 percent of healthcare employment nationally and 20 percent in the US.

The ranking of the various sectors of the Louisiana economy by business establishments, employment, and annual wage is shown in Table 1. Ten industries pay their employees more than \$50,000 per year;

Figure 3. Breakdown of Healthcare Services, Louisiana

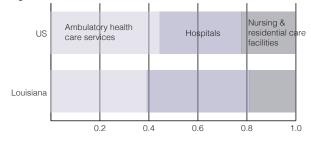


Table 1. Establishments, Employment, and average Annual Wage by Employment Sector 2012 Data

	Establishments	Employees	Annual Wage
Retail Trade	16,774	223,908	\$24,388
Health Care and Social Assistance	12,041	286,022	\$38,251
Professional, Scientific, and Technical Services	11,767	87,114	\$59,348
Other Services (except Public Administration)	9,652	75,356	\$27,603
Accommodation and Food Services	9,046	192,889	\$16,579
Construction	7,926	128,982	\$52,729
Finance and Insurance	7,734	64,207	\$56,686
Wholesale Trade	5,637	75,843	\$53,768
Administration/Waste Services	4,566	104,316	\$32,871
Real Estate and Rental and Leasing	4,466	31,516	\$48,247
Transportation and Warehousing	3,786	68,301	\$53,591
Manufacturing	3,307	127,354	\$63,430
Mining, Quarrying, and Oil and Gas Extraction	1,691	54,434	\$78,670
Information	1,393	24,440	\$51,375
Arts, Entertainment, and Recreation	1,393	23,295	\$30,776
Educational Services	1,146	37,913	\$33,915
Management of Companies and Enterprises	616	22,945	\$95,277
Agriculture, Forestry, Fishing and Hunting	596	3,771	\$39,897
Utilities	522	11,676	\$79,747

six industries including the healthcare sector pay between \$30,000 per year to \$49,999 per year; three industries pay their employees less than \$30,000 per. Of all private business establishments in Louisiana, only 237 establishments have 500 or more employees; the healthcare sector has 58 such establishments, accounting for almost 25 percent of all business establishments with 500 or more employees.

In Louisiana and in the nation, the healthcare sector has grown more rapidly than the population and more rapidly than the overall economy. There are various reasons for such growth: changing demographics, advances in medical technology, and the emer-

gence of a more affluent society certainly contribute. The growth is in line with the overall demands of the population. In the process of providing these healthcare services, the healthcare sector has become a major economic agent throughout the state. The healthcare industry provides direct jobs and wages to its employees and provides economic linkages to many other industries that work with healthcare providers. Other support industries, such as retail trade and financial services necessary to serve the hospital and other employees, will become part of the local economy.

Healthcare in Louisiana by MSAs and DHH Districts

The nine DHH regions, along with the percent of the state's population, are illustrated in Map 1 (see page 16). Within each of these regions a major metropolitan statistical area (percent of population in MSA) as defined by the U. S. Department of Commerce is located.

- New Orleans MSA overlaps DHH 1, 3, and 9 (25.8 percent)
- Baton Rouge MSA overlaps both DHH 2 and 9 (17.7 percent)
- Houma-Thibodaux MSA in DHH 3 (4.6 percent)
- Lafayette MSA in DHH 4 (6.0 percent)
- Lake Charles MSA in DHH 5 (4.4 percent)
- Alexandria MSA in DHH 6 (3.4 percent)
- Shreveport-Bossier MSA in DHH 7 (8.8 percent)
- Monroe MSA in DHH 8 (3.9 percent)
- Rural Parishes, across DHH districts (25.4 percent)

We will focus on the economic impact of the hospital industry within each region, but we want to present a snapshot of the economic influence of the healthcare industry in the eight MSAs, since this is a geographic area in which the data are collected. The eight MSAs are closely connected geographically to the nine DHH regions. A summary of the healthcare industry as well as hospitals within each MSA and the rural parishes is contained in Table 2.

The percentage of healthcare employees and payroll and the percentage of hospital employment and

Table 2. Healthcare and Hospital Payrolls and Employees by Metropolitan Statistical Area (MSA), State of Louisiana, 2012

Louisiana MSAs	% State Population	% Healthcare Employees	% Healthcare Payroll	% Hospital Employees	% Hospital Payroll
Alexandria	3.4	4.8	4.7	7.3	6.2
Baton Rouge	17.7	16.5	16.4	13.8	12.7
Houma-Thibodeaux	4.6	3.9	4.3	3.3	3.1
Lafayette	6.0	8.6	9.4	6.2	6. I
Lake Charles	4.4	4.4	4.3	3.3	3.1
Monroe	3.9	5.0	4.5	4.7	4.2
New Orleans	25.8	24.7	27.9	27.2	32.0
Shreveport-Bossier	8.8	11.2	12.2	15.0	15.7
Rural	25.4	21.1	16.3	18.2	16.3

Source: 2014 Hospital Survey and US Census

payroll in each MSA are compared to the percentage of population that lives in each MSA. Alexandria, Lafayette, Monroe, and Shreveport-Bossier MSAs have a larger percentage of employment in the healthcare sector than their percentage of the state's population. Alexandria, Lafayette, Monroe, New Orleans, and Shreveport-Bossier MSAs have a

larger percentage of hospital employment than their percentage of the state's population.

The New Orleans MSA (including the seven parishes of Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany) is the largest Louisiana MSA in terms of population, healthcare and hospital payroll, and healthcare and hospital employment with approximately 26 percent of the state's population, 25 percent of all healthcare employees, and 27 percent of all hospital employees.

The second largest healthcare market in terms of employees is in the 35 rural parishes with over 60,000 healthcare employees, or about 21 percent of all healthcare employees in the state, but the rural parishes only make up about 16 percent of the healthcare payroll in the state. These rural parishes have about 18 percent (18,000) of all hospital workers in the state and the hospital payroll in the rural parishes make up about 16 percent of the statewide payroll. The rural parishes are labor-intensive in healthcare employees, but there is a pay differential between employees in rural areas and urban areas. These 35 parishes have 25.4 percent of the state's population.

The Baton Rouge MSA (including the parishes of Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, West Baton Rouge, and West Feliciana) has 17.7 percent of the state's population. The Baton Rouge MSA has 16.4 percent of payroll of the healthcare industries and 16.5 percent of statewide healthcare employees, while the Baton Rouge MSA has almost 14 percent of the state's hospital employees and just under 13 percent of the state's hospital payroll. The Baton Rouge Metropolitan Area represents the third largest healthcare market in the state in terms of healthcare employees and is the second largest MSA in terms of healthcare payroll.

The Shreveport Metropolitan Area (including the parishes of Bossier, Caddo, and De Soto) has 8.8 percent of the state's population but 12.2 percent of the state's healthcare payroll and 11.2 percent of healthcare employees. With respect to hospitals, Shreveport-Bossier has 15 percent of statewide hospital employees and almost 16 percent of the statewide hospital payroll. In terms of payroll and employees, the Shreveport Metropolitan Area is the fourth largest healthcare share.

Lafayette (including Lafayette Parish and St. Martin Parish) represents 9.4/6.1 percent of statewide healthcare/hospital payroll and 8.6/6.2 percent of statewide healthcare/hospital employees. The Lafayette MSA has 6.0 percent of the state's population as of 2010.

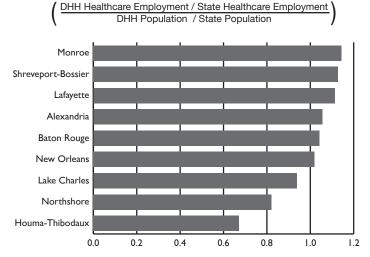
Lake Charles (Calcasieu and Cameron) and Houma-Thibodaux (Assumption, Lafourche, and Terrebonne) MSAs each represent 4.3 percent of the statewide healthcare payroll and 4.4 and 3.9 percent, respectively, of statewide healthcare employees. Both Lake Charles and Houma-Thibodaux have 3.3 percent of statewide hospital employees and 3.1 percent of statewide hospital payroll. Lake Charles has 4.4 percent of the state's population, while Houma-Thibodaux has 4.6 percent of the state's population.

Figure 4. Ratio of Relative Healthcare Employment to Population

The Monroe MSA (including Ouachita and Union parishes) represents 4.5/4.2 percent of statewide healthcare/hospital payroll and 5.0/4.7 percent of statewide healthcare/hospital employees. The Monroe MSA has 3.9 percent of the state's population.

The Alexandria MSA (including Rapides and Grant parishes) represents 4.7/6.2 percent of the statewide healthcare/hospital salaries and 4.8/4.7 percent of healthcare and hospital employees. The Alexandria MSA has 3.4 percent of the state's population.

In Figure 4, the percent of healthcare employees in a DHH administrative area is compared



to the percent of the population in the respective regions. A number greater than 1.0 indicates that the percent of healthcare employees in the region exceeds the percent of the relative population in the region. Healthcare employees are more numerous proportionately in Monroe, Shreveport-Bossier, Lafayette, Alexandria, Baton Rouge, and Orleans. Healthcare employees are less numerous proportionately in Lake Charles, the Northshore and Houma-Thibodaux. In the DHH areas of New Orleans and Baton Rouge, the ratio of percent of healthcare workers compared to the percent of population are very close to 1. The healthcare industry is larger in the New Orleans and Baton Rouge DHH regions, but, proportionately, the healthcare industry is more significant in the Alexandria, Shreveport/Bossier, Lafayette, and Monroe DHHs.

Hospitals in the Louisiana Economy

Hospitals make up a significant part of the healthcare sector in terms of employees and payroll, as illustrated in Figures 2 and 3. Hospitals are major economic agents in any local economy; at a basic level, people work for hospitals, and these people are consumers within the region and state. Additionally, hospitals purchase supplies and services from other companies within the community and the state. These companies, in turn, purchase materials from other companies within the region and the state and hire people to work for them.

Hospitals and Net Revenues

Hospitals receive their revenues from private insurance companies, federal insurance programs such as Medicare, federal and state insurance programs such as Medicaid, and self-payment by individuals. The category of private insurance includes those who have insurance policies either through their work

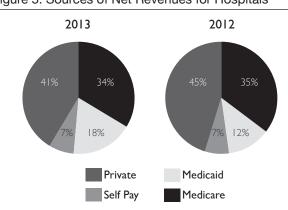
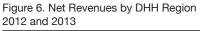


Figure 5. Sources of Net Revenues for Hospitals

or individually. The federal government is the insurer through the Medicare program for persons above the age of 65 who are retired and not eligible for employer coverage and persons with disabilities; the federal and state governments are the insurers through the Medicaid program for income-qualified persons. Some individuals do not carry insurance or cannot afford insurance and do not qualify for Medicare or Medicaid; these people either pay directly or rely on other types of public assistance.





Note: Region 6 reported negative Self Pay revenues in 2012 and 2013

According to a 2014 survey of hospitals in Louisiana for 2012 and 2013 and as illustrated in Figure 5, 41 percent of net revenues (gross revenues less contractual adjustments) come from private insurers in 2013 as compared to 45 percent in 2012; 34 percent from Medicare in 2013 as compared to 35 percent in 2012; 18 percent from Medicaid in 2013 as opposed to 12 percent in 2012; and 7 percent from self-pay and the uninsured in both 2013 and 2012.

The various sources of hospital net revenues by the nine DHH districts are presented in Figure 6 for 2012 and 2013. The distribution of payments reflects the population and market served by the network of hospitals; hospitals must accommodate their markets. Medicaid payments are especially significant in DHH Region 1 (New Orleans) and DHH Region 7 (Shreveport), while private insurance is a major revenue source for hospitals in almost all regions. (DHH Region 7 has the smallest portion of private insurance payments). The New Orleans region (Region 1) has the least amount of Medicare payments compared to the other regions.

The source of hospital revenues is further defined in Figure 7 where we note the amount of net revenues related to Medicare and Medicaid sources. These two sources of net revenues make up more than 50 percent of total net revenues for hospitals in Region 1 (New Orleans), Region 6 (Alexandria), Region 7 (Shreveport-Bossier), and Region 8 (Monroe). The three regions with the least amount of Medicare and Medicaid net revenues are Region 2 (Baton Rouge), Region 5 (Lake Charles), and Region 9 (Northshore).

A comparison of the sources of net revenues for hospitals is provided in Table 3 for 2004, 2007, 2009, 2011, 2012, and 2013.⁶ The surveys suggest some variation in the source of revenues for hospitals: Medicaid payments range from 10 percent in 2004 to 20 percent in 2009 (18 percent in 2013). Private insurance makes up just over 40 percent of all payments and Medicare about 34 percent. Economic conditions influence the variation in the source of payments as well as federal and state policies on healthcare. Demographics can drive the

Medicare portion of total payments to hospitals up, and the changes in federal healthcare policy may increase further the amount of Medicaid dollars in the overall hospital budget, depending on whether the state decides at some point to expand its Medicaid program according to the policies outlined in the Affordable Care Act, 2010.

Hospitals and Jobs

The state's 207 hospitals provided jobs for 98,224 persons with an annual payroll of over \$4.62 billion as reported in the 2012 federal

Table 3. Sources of Net Revenues for Hospitals

Year of Survey	Sources of Revenues for Hospitals				
	Private	Medicare	Medicaid	Self-pay	
2004	44%	38%	10%	9%	
2007	39	31	16	15	
2009	41	31	20	7	
2011	41	31	19	8	
2012	45	35	12	7	
2013	41	34	18	7	

Source: Surveys conducted by the Louisiana Hospital Association.

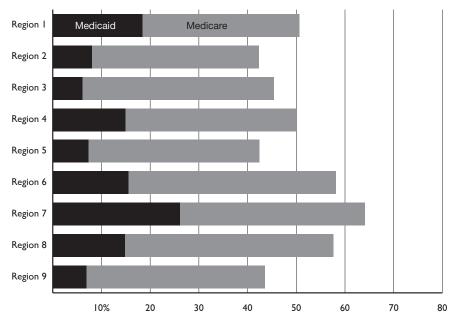


Figure 7. Medicare and Medicaid as a Percent of Net Revenues

publication, County Business Patterns. Fifty-one Louisiana hospitals had 500 or more employees. Thirty hospitals had 1,000 or more employees. Hospitals accounted for 1.7 percent of all healthcare establishments in Louisiana but 34 percent of the total employees and 42 percent of the payroll in the healthcare sector. Healthcare providers are a major economic influence within a community, and, of these healthcare providers, hospitals are the most dominant economic contributors in a community's economy. The 2012 publication of the Louisiana

Workforce Commission reported hospital employment of 102,190 and a payroll of \$5.2 billion.⁷ Hospital employment is a significant factor throughout the state based on employment and payroll estimates of the US Census and the Louisiana Workforce Commission.

Comparing hospitals to other industries provides context for their size and magnitude. These comparisons are illustrated in Table 4. The healthcare sector has a large number of establishments compared to mining, manufacturing, utilities, and construction, but only about three-quarters of the establishments in retail trade. Healthcare has almost 30 percent more employees than retail trade but a payroll that is twice as high. According to the 2012 County Business Patterns, although hospitals have very few establishments, nevertheless they account for about 34 percent of the number of employees working in the healthcare sector and about 42 percent of the payroll of the healthcare sector. The payroll of the healthcare sector in Louisiana is larger than the payroll of any other industrial classification in the state. The next largest payroll in Louisiana in 2012 belonged to manufacturing at just over \$8 billion with 127,354 employees. The average annual wage in manufacturing is approximately \$63,000. In healthcare the average wage is around \$38,000.

Hospitals have, on average, 475 employees per establishment; by comparison, other sectors have much lower per-establishment employment rates, including manufacturing (38 employees per facility), mining companies (32 employees per establishment), utilities (22 employees per facility). construction (16 employees per company), and retail trade (13 employees per establishment). Hospitals are labor-intensive and people-intensive in terms of providing their services to the public, but they also must be of a certain

Year of Survey	Sources of Revenues for Hospitals			
	Private	Medicare	Medicaid	Self-pay
2004	44%	38%	10%	9%
2007	39	31	16	15
2009	41	31	20	7
2011	41	31	19	8
2012	45	35	12	7
2013	41	34	18	7

Table 3. Sources of Net Revenues for Hospitals

Source: Surveys conducted by the Louisiana Hospital Association.

size in order to provide the services essential to the community. These factors are major reasons why hospitals become significant economic agents in a community. Hospital employees are typically paid more than other professionals in the healthcare sector. In 2012, hospital employees averaged almost \$47,500 annually. Other healthcare employees averaged about \$33,500 annually.

Economic Impacts of Louisiana Hospitals

The economic benefits of the hospital industry expand far beyond the doors of the hospitals and the people directly employed by these facilities. Construction activity for hospital facilities also creates jobs for persons in the construction industry and the related suppliers, in addition to the economic ripple effects that are associated with major construction projects, such as spending resulting from new income within a region.⁸ Once the construction project is completed, then the operation of the hospital, as suggested by the direct employment noted above, creates economic spillovers throughout the economy. The economic significance of the hospital industry spreads far beyond the doors of the hospitals. These economic impacts are estimated and summarized in the following sections and are evaluated statewide and by DHH regions (illustrated in Map 1 below).

Construction Activity and Louisiana Hospitals

The extent of construction activity varies annually among Louisiana hospitals. At any given time, a hospital may require regular maintenance and upgrading of facilities, but each hospital will not be in an expansion mode each and every year; however, some hospitals in the region will be expanding so construction activity is expected to occur annually. From 2012 to 2013 Louisiana hospitals averaged, based on a survey of Louisiana hospitals, construction expenditures on buildings of \$870 million per

Table 4. Comparisons of Industries in Louisiana, 2012

Industry Classification	# Business Establishments	# Employees	Establishments with 500 or employees	Annual Payroll (\$ billions)
Mining	1,691	54,434	15	3.428
Manufacturing	3,307	127,354	35	8.071
Utilities	522	11,676	3	0.931
Construction	7,926	128,982	19	6.801
Wholesale Trade	5,637	75,843	3	4.077
Retail Trade	16,774	223,908	6	5.460
Healthcare Sector	12,041	285,950	58	10.910
Hospitals	207	98,224	51	4.653

Source: County Business Patterns, U.S. Bureau of Census, 2012

year. This average, derived from the survey of Louisiana hospitals, is extrapolated to include all hospitals in the state. Hospitals also spent on average \$805 million per year on capital expenditures associated with new equipment. These construction expenditures led to the creation and support of more than 14,000 jobs per year for each year that the construction projects were going on. The economic impact on the statewide economy is illustrated in Table 5.

The construction activity affects the state's

economy in many ways, from small establishments, such as convenience stores serving the general population, to large establishments that provide business services required by contractors or chemical companies that supply necessary materials. In total, the business establishments in the state experienced additional business sales of \$1.944 billion because of the annual construction expenditures of Louisiana hospitals. An additional 14,913 jobs are created and supported with personal earnings of \$583 million. These jobs vary and include almost 6,900 jobs in the construction sector, over 3,700 jobs in the service sector, about 2,100 jobs in wholesale and retail trade, and just over 500 jobs in the financial services sector. The economic activity associated with the construction of hospital facilities will also lead to an additional \$42.6 million in state tax collections and \$35 million in local tax collections per year for the duration of the construction activity.

Capital expenditures per region are shown in Table 6. Capital expenditures range from a high of over \$240 million in Region 1 to a low of just over \$10 million in Region 8. The average capital expenditures per region for 2007 and 2008 were \$92.0 million per year. The capital expenditures will vary over years with respect to the region in which the capital expenditures are occurring.

The distribution of capital expenditures depends on the construction activity across the state during the

Table 5. Economic Impact of Construction of Hospitals in Louisiana (Estimated Construction Outlays of \$870 million per year based on average of estimated capital expenditures in 2012 and 2013)

Industry	Business Sales (\$ millions)	Earnings (\$ millions)	Jobs Created
Agriculture & Mining	21.56	4.31	189
Construction	885.20	287.28	6,885
Manufacturing	228.69	47.86	1,030
Transportation & Utilities	95.52	26.09	471
Wholesale & Retail Trade	165.26	60.91	2,107
Finance, Insurance, Real Estate	147.90	17.36	511
Business and Personal Services	400.16	139.17	3,720
TOTAL	1,944.3	583.0	14,913

Source: Louisiana Input-Output Model, RIMS II and 2014 Hospital Survey

last two years as based on the 2014 Louisiana Hospital Association Survey. It is not a projection of what the next two or three years will be like in terms of the level of the construction activity or the distribution of the construction across regions. However, the overall statewide magnitude of the economic impacts associated with \$870 million of construction activity can be projected to other years if hospitals in general continue to average this amount of construction activity.⁹

These construction expenditures refer only to

new buildings, improvement and renovation of existing buildings, and other such expenditures. Capital expenditures relating to the purchase of new equipment are not included in these computations since the new equipment could be purchased from out-of-state vendors, so the impact on the Louisiana economy would be minimal.

Ongoing Impact and Support of Louisiana Hospitals for the Louisiana Economy

Total estimated hospital expenditures, including payroll plus expenditures on supplies and other services, amount to \$14.1 billion in 2013. This estimate of total expenditures by hospitals is based on the 2014 survey of Louisiana hospitals extrapolated to include all hospitals in the state. Hospital expenditures serve as an important economic input in promoting, requiring, and supporting jobs in the state and local economies. Hospital expenditures are also recurring: the construction of a hospital facility may be a short-term stimulus to the state and local economy since the construction project will be completed within a two or three-year period, but the operation of a hospital is ongoing.

A summary of the estimated statewide economic impacts related to hospital expenditures of \$14.1 billion is presented in Table 7. Overall business activity as measured by business sales, including the direct hospital expenditures of \$14.1 billion, amounts to \$29.9 billion. Personal earnings associated with these business transactions amount to almost \$12.0 billion with 294,548 direct and indirect jobs supported by the hospital expenditures. These jobs vary to include not only the actual hospital workers, but also construction jobs that might be associated with building homes for hospital employees and service related jobs including persons working in wholesale and retail trade, or persons working in other personal and business services

The overwhelming majority of the jobs will be in the personal and business services sector of the economy. This is not surprising since all of the hospital jobs and related healthcare activities are in the service sector of the economy. Hospital expenditures support over 135,000 jobs in the service sector of the economy that are not hospital employees. These jobs vary widely to include professional services (such as consulting, legal, or accounting services), repair services, entertainment and recreational activities, and related healthcare services. In addition, almost 30,000 jobs are supported in wholesale and retail trade ranging from department store personnel and food service workers to more directly related vocations such as pharmacists. Jobs are also created in agriculture and mining, construction, manufacturing, and transportation and communications. Some new employees of the hospital sector or related companies will require the construction of homes and apartments, will demand accessible commercial establishments, and will require transportation services and communication and utility services. The point is that new employees typically mean new residents, which entails increased demand for services followed by supply – a truly demonstrative illustration of economic ripple effects.

Table 6. Distribution of Economic Impacts Associated with Capital Expenditures, 2012-2013 (based on average of capital expenditures in DHH regions)

DHH Region	Business Sales (\$ millions)	Personal Earnings (\$ millions)	Jobs Supported and Created	Local Taxes (\$ millions)
New Orleans	630.3	189.0	4,834	11.3
Baton Rouge	455.9	136.7	3,497	8.2
Houma-Thibodaux	73.6	22.1	565	1.3
Lafayette	233.5	70.0	1,791	4.2
Lake Charles	14.0	4.2	107	0.3
Alexandria	6.2	1.9	47	0.1
Shreveport-Bossier	149.4	44.8	1,146	2.7
Monroe	72.6	21.8	557	1.3
Northshore	308.8	92.6	2,368	5.6
State (\$870 million) 1,944.3	583.0	14,913	35.0

Hospital expenditures become the basic economic input that supports a variety of economic transactions and jobs. These economic activities are supported throughout the state since hospitals are distributed throughout the state. Major manufacturers have a significant impact on the state's economy, but this impact is typically concentrated in the area of the state in which the manufacturer is located. Hospitals, on the other hand, are distributed throughout the state since the persons they serve are scattered throughout the state.

The reason for the connection of hospital expenditures to other employment in the region is the labor-intensive nature of hospital services. Hospitals hire large numbers of people to carry out their responsibilities. These people require the basic services to satisfy their lifestyle.

Hospital expenditures have a major economic impact on the state in terms of business activity, household earnings, and overall jobs supported. The net impact on the state is diminished since many of the funds for healthcare activities will be either private dollars spent by citizens of the state or direct state appropriations, and these dollars could be spent in a number of ways. However, once the spending pattern is established, the establishment of hospitals and other healthcare facilities create a major economic force within the state. Similarly, hospital expenditures have a substantial impact on all regions of the state since hospitals are scattered throughout the state. A major reduction in hospital expenditures in any part of the state will create economic ripples that will be difficult to offset quickly by other economic measures.

Impact on State and Local Tax Collections

Any impact on overall economic activity, including business transactions, household earnings, and jobs, will also lead to state and local tax collections since state and local taxes are sensitive to how well the economy is doing. The overall economic activity that is supported by hospital expenditures, in turn, leads to \$868 million in state tax collections and \$714 million in local tax collections. The state tax collections include sales and income taxes, excise taxes, and other business taxes. These are taxes that are paid by persons and businesses around the state since the economic activity covers every sector of the state's economy. Local taxes include sales taxes, property taxes, and other minor taxes that are collected by local governments. State collections of \$868 million represent about 7 percent of all taxes and fees collected by the state government.

Ongoing Economic Impact of Hospital Expenditures by DHH Region

The estimated distribution of the economic impact by DHH region is presented in Table 8. Jobs created and supported vary from over 53,000 in the New Orleans region (Jefferson, Orleans, Plaquemines, and St. Bernard) to about 18,000 in Regions 5 (Allen, Beauregard, Calcasieu, Cameron, and Jefferson Davis) and about 20,000 in Region 6 (Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, and Winn). The most important characteristic is the disbursement of economic benefits associated with healthcare and hospital expenditures. Direct spending by hospitals has a substantial earnings and employment impact throughout the state. This also suggests that local tax collections will be spread throughout the state.

Local tax collections directly related to the economic activities of hospitals are also illustrated in Table 8 by region. These local tax collections are related to the business activities associated with hospitals, em-

Table 7. Statewide Economic Impact of
Operation of Hospitals in Louisiana, 2013
(Estimated Hospital Expenditures of \$14.1 billion, derived from 2014 Hospital Survey)

Industry	Business Sales (\$ millions)	Earnings (\$ millions)	Jobs Created
Agriculture & Mining	437.26	82.49	2,094
Construction	361.24	112.38	2,355
Manufacturing	2,483.80	406.42	6,646
Transportation & Utilities	2,623.86	613.69	11,764
Wholesale & Retail Trade	2,190.31	880.31	29,860
Finance, Insurance, Real Estate	3,386.97	316.21	6,082
Business and Personal Services	18,515.89	9,482.23	235,747
TOTAL	29,999.3	11,893.7	294,548

Source: Louisiana Input-Output Model, RIMS II and 2014 Hospital Survey

ployees of hospitals spending their paychecks, companies that provide products and services to hospitals, persons who work for these companies, and so on. Hospitals support over \$128 million of local tax collections in the New Orleans region and \$107 million in the Baton Rouge DHH district.

All districts collect at least \$40 million in local tax collections with the Lafayette district collecting just over \$90 million. These local tax collections fund school districts, parish and municipal governments, special districts, sheriffs, and other local activities.

Medicaid and Hospital Expenditures

Healthcare services in the United States and in Louisiana are supported by a variety of payment plans, including private insurance, health maintenance organizations, and self-pay, but two influential payment plans are public programs, namely Medicaid, a joint state and federal government program for specific individuals and families that are unable to pay for healthcare services for themselves, and Medicare, a federally sponsored program for healthcare services for the elderly. The state and federal government jointly fund the Medicaid program. In Louisiana the federal government pays 62.05 percent of the Medicaid outlays according to the Federal Medical Assistance Program (FMAP). There is also an enhanced FMAP in which the federal government pays 73.44 percent of the healthcare costs, so the state contributes 26.64 cents to get one dollar. The Medicare program is funded entirely through the federal government.

The different sources of net hospital funding in Louisiana are shown in Table 9. Some hospitals serve a substantially older population so a large majority of their revenues are Medicare-related. Other hospitals, due to location, may serve a less affluent market so their revenues are influenced by Medicaid-related patients. Medicare- and Medicaid-related revenues represent over 50 percent of total hospital revenues.

It is estimated from the 2014 Hospital Survey that Medicaid hospital expenditures constituted approximately 18 percent of all hospital revenues in 2013 and 12.5 percent in 2012. This estimate varied over time and will vary across the state: over 30 percent of revenues in New Orleans and close to 30 percent in the Shreveport-Bossier area come from the Medicaid program. Hospitals in Baton Rouge get about 9 percent of their net revenues from Medicaid-insured patients. Houma-Thibodaux only gets about 5

Table 8. Economic Impact of Operation of Hospitals in Louisiana By DHH Region, 2013 (Estimated Hospital Expenditures of \$14.1 billion, derived from 2014 Hospital Survey)

DHH Region	Business Sales (\$ millions)	Personal Earnings (\$ millions)	Jobs Supported and Created	Local Taxes (\$ millions)
New Orleans	5,399.9	2,141	53,019	128.5
Baton Rouge	4,499.9	1,784	44,182	107.0
Houma-Thibodaux	2,699.9	1,070	26,509	64.2
Lafayette	3,899.9	1,546	38,291	92.8
Lake Charles	1,800.0	714	17,673	42.8
Alexandria	2,100.0	833	20,618	50.0
Shreveport-Bossier	3,599.9	1,427	35,346	85.6
Monroe	2,399.9	951	23,564	57.1
Northshore	3,599.9	1,427	35,346	85.6
State (\$14.1 billion)) 29,999.3	11,893.7	294,548	714.0

percent of its net revenues from Medicaid-related patients, while the Northshore hospitals get just under 8 percent of their net revenues from Medicaid.

The economic impacts of the Medicaid hospital expenditures are shown in Table 10 by state and by region. Medicaid hospital expenditures statewide support 48,653 jobs with personal earnings of \$1,964.5 million. Medicaid hospital expenditures supported

Table 9. Sources of Net Revenues for Payment of Hospital Charges,	
Based on 2014 Hospital Survey	

DHH Region	% Private	% Medicare	% Medicaid	% Self-pay
New Orleans	36.3	30.0	31.7	2.0
Baton Rouge	48.0	32.8	8.9	10.3
Houma-Thibodaux	46.3	39.8	5.1	8.8
Lafayette	41.8	33.8	12.2	12.1
Lake Charles	43.6	32.9	11.2	12.3
Alexandria	44.8	35.9	13.5	5.8
Shreveport-Bossier	30.1	39.8	28.2	1.9
Monroe	36.3	43.2	13.7	6.8
Northshore	43.6	34.8	7.7	13.9
State	41.3	33.6	18.0	7.1

Source: 2014 Hospital Survey

the largest number of jobs in the New Orleans area with 11,655 jobs and with local tax collections of \$28 million, the Shreveport-Bossier region with over 10,000 jobs and \$25 million of local tax collections, the Monroe area with over 5,000 jobs created and supported and \$12 million of local tax collections, and the Alexandria, Lake Charles, and Lafayette areas with jobs created and supported between 4,000 and 5,000 jobs with between \$10 and \$12 million of local tax collections. In total, local tax collections amount to almost \$118 million. The state receives almost \$138 million in state collections.

The Economic Impact of Reducing Medicaid Hospital Expenditures

Reducing any major government program obviously creates an economic downturn for persons providing the services for which the government is paying and for communities in which this service is concentrated. Reducing Medicaid expenditures is leveraged since the federal government matches the state government's contribution to the Medicaid program with 62.05 cents for every 37.95 cents the state contributes. A reduction of direct expenditures by the state on the Medicaid program of \$150 million is the equivalent of reducing expenditures by \$395 million given the federal match.

The projected economic impact of this \$395 million reduction in Medicaid hospital expenditures would be a reduction of 8,144 jobs statewide, a reduction in personal earnings of \$329 million, and a reduction in overall business transactions of just over \$800 million. On average each parish will lose 127 jobs and each region on average will lose 904 jobs. Medicaid is a leveraged program, so every time the state decides to cut back spending on Medicaid, the federal government also cuts back spending. This is a dimension of the Medicaid program that needs to be understood.

Summary and Conclusions

The healthcare sector in Louisiana, including 207 hospitals, provides a range of healthcare services to the citizens of Louisiana. In providing essential healthcare services, the industry becomes an important economic force within the communities and the state. Almost 286,000 persons, with an estimated payroll approaching \$11 billion, work for 12,039 healthcare establishments with 58 of these establishments have 500 or more employees. In addition, the healthcare sector accounts for approximately 16 percent of the state's private payroll. Hospitals alone account for almost 100,000 employees and an annual payroll of \$4.6 billion.

Hospitals are scattered throughout the state in order to provide the necessary medical services to the residents of the state. The New Orleans MSA represents about 27 percent of total hospital employees in the state, while the 35 rural parishes (those parishes not assigned to a MSA) account for 18 percent of total hospital employees. Baton Rouge MSA, with its regional medical facilities, accounts for 14 percent of all hospital employees, while the Shreveport MSA accounts for almost 15 percent of hospital employees. Lafayette MSA accounts for 6 percent of statewide hospital employees. Alexandria MSA accounts for almost 7 percent of the state's hospital employees, Monroe MSA for 5.0 percent, Lake Charles MSA for just over 3 percent, and Houma-Thibodaux MSA for just over 3 percent.

Hospitals generate economic activity throughout the economy due to the magnitude of expenditures, including payroll and construction activity. Hospitals engaged in construction projects for 2012 and 2013 averaged annual capital expenditures on building and building improvements of approximately \$870 million. This construction activity led to the creation and support of 14,913 jobs within the state, only half of which was directly in the construction industry; about one-third of these jobs were related to services including wholesale and retail trade and the business and personal services sector. Because of this economic activity, the state collects about \$43 million in net new taxes and local governments about \$35 million in additional local tax collections. These jobs and additional tax collections, of course, last as long as the construction activity; however, in the hospital industry, there will always be construction activity, varying by region.

Hospitals are ongoing enterprises with estimated total expenditures of \$14.1 billion per year. This substantial economic input leads to the creation and support of more than 290,000 jobs in the Louisiana economy with related personal earnings of \$11.9 billion. These jobs vary from those created specifically at the hospitals to those required in order to fulfill the demands of new residents and workers at the hospitals. These jobs are spread around the state with the following approximate distribution:

- 53,019 in Region 1 (Jefferson, Orleans, Plaquemines, and St. Bernard),
- 44,182 in Region 2 (Ascension, East Baton Rouge, East Feliciana, Pointe Coupee, West Baton Rouge, and West Feliciana),
- 26,509 in Region 3 (Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, and Terrebonne),
- 38,291 in Region 4 (Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, and Vermilion),
- 17,673 in Region 5 (Allen, Beauregard, Calcasieu, Cameron, and Jefferson Davis),
- 20,618 in Region 6 (Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, and Winn),
- 35,346 in Region 7 (Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, and Webster),

- 23,564 in Region 8 (Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, and West Carroll), and
- 35,346 in Region 9 (Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington).

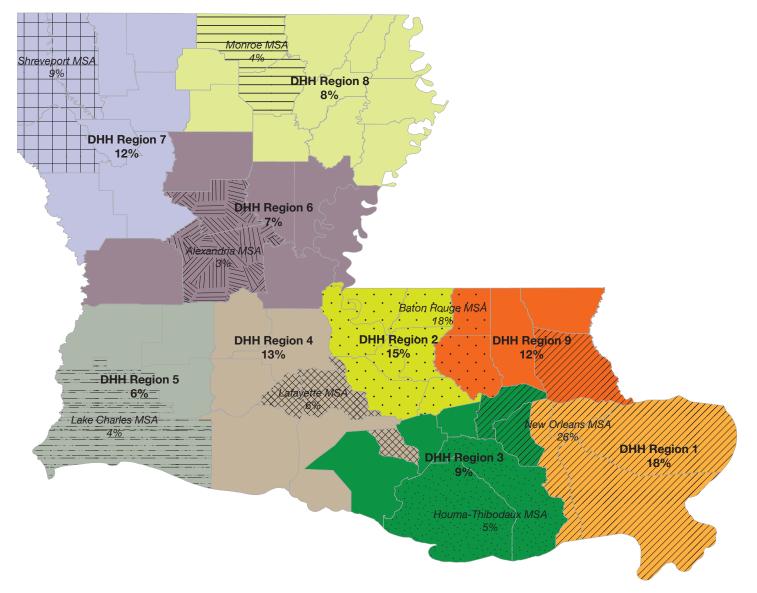
The overall economic activity that is supported by hospital expenditures, in turn, leads to \$868 million in state tax collections and \$713 million in local tax collections.

Hospitals are funded through private insurance plans, self-paying customers, and public programs, namely Medicare for the elderly and Medicaid for the less affluent. The Medicaid program is especially important since it is a matching program with the state receiving federal support dependent upon state contributions – the federal government contributes about 62 cents of every dollar and the state contributes about 38 cents of each Medicaid dollar. In Louisiana in 2013, 18 percent of net revenues were Medicaid-related as compared to 12.5 percent in 2012. Medicaid-related expenditures led to the creation and support of 48,653 jobs with personal earnings of \$1.94 billion.

Reducing any major government program obviously creates an economic downturn for persons providing the service for which the government is paying and for communities in which this service is concentrated. Medicaid contributions are leveraged and have exacerbated effects due to the federal-matching program - if the state reduces its direct expenditures for Medicaid by \$150 million, the state will lose an additional \$245 million of federal dollars for an overall reduction of \$395 million.

The projected economic impact of this \$395 million reduction in Medicaid hospital expenditures would be a reduction of 8,144 jobs statewide, a reduction in personal earnings of \$329 million, and a reduction in overall business transactions of just over a \$800 million. On average, each parish will lose 127 jobs and each region on average will lose 904 jobs.

Hospital expenditures have a major economic impact on the state in terms of business activity, personal earnings, and overall jobs created and supported. Similarly, hospital expenditures have a substantial impact on all regions of the state since hospitals are scattered throughout the state. A major reduction in hospital expenditures in any part of the state will create economic ripples that will be difficult to offset immediately by other economic measures.



Map of DHH Regions and Metropolitan Statistical Areas (Percent of State Population)

Notes

¹ During the past year, public hospitals have been gradually closed down with their patient care being transferred to private or not for profit hospitals. These changes may affect the source of revenues for the private hospitals taking on this new responsibility, but hospitals are still playing a major role in the provision of healthcare services to the communities across Louisiana.

² As examples, see the Memphis Medical District, the Texas Medical District in Houston, the Cleveland Institute of Medicine, and the Medical District of Birmingham on the campus of the University of Alabama in Birmingham, Alabama.

³ As an example of a hospital being important to a region's development, follow the story of St. Bernard Parish where the St. Bernard Parish Hospital has just opened its doors after Hurricane Katrina in 2005. The parish of over 40,000 persons has been without direct hospital care in the parish since Katrina.

⁴ This matching ratio varies with the policies of the federal government. The American Recovery and Reinvestment Act of 2009 provided a higher federal government match Medicaid for several years, but ultimately Louisiana will have a FMAP (Federal Medical Assistance Percentage) rate of approximately 62%. The FMAP rate, at one time, was approximately 70%, but due to rising income associated with the surge in incomes associated with the Katrina recovery, the FMAP rate has been diminished in Louisiana.

⁵ County Business Patterns, 2012. The Louisiana Workforce Commission, 2012 Annual Average, reported an employment estimate of just over 289,000 for healthcare and social assistance. Hospital employment from the Louisiana Workforce Commission is estimated to be just over 105,000.

 $^{\rm 6}\,$ Data derived from surveys distributed by the Louisiana Hospital Association in each respective year.

⁷ Louisiana Workforce Commission, Annual Report, 2012.

⁸ The methodology used to trace and estimate the economic impact of the construction and operation of hospitals on the regional economy and the Louisiana economy is the input-output (I/O) model, an economic model that describes inter-industry relations within a state and region. The input-output model mathematically describes the transactions necessary among various industries as these industries produce goods and services for consumers, other businesses and industries, and government. It provides a systematic method to analyze inter-industry relationships.

⁹ In the 2011 survey average capital expenditures per year for all regions were just over 900 million, while back in 2007 it was just slightly less than \$600 million.



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