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The economic contributions of Baptist Health Systems of South Florida : an analysis performed by Center for Economic Development Research, College of Business Administration, University of South Florida

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The Economic Contributions of Baptist Health Systems of South Florida

An Analysis Performed by

CENTER FOR ECONOMIC DEVELOPMENT RESEARCH
College of Business Administration



1101 Channelside Dr., 2nd Floor N., Tampa, Florida 33602
Office: (813) 905-5854 or Fax: (813) 905-5856

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Preface

Baptist Health Systems of South Florida is the largest and most respected not-for-profit health care organization in South Florida. With corporate headquarters located in Miami-Dade County, Florida, Baptist Health Systems of South Florida was created in 1995. Sources of operating funds for the organization include revenue from inpatient and outpatient treatment and endowments. This study was commissioned by Baptist Health Systems of South Florida and performed by the Center for Economic Development Research, College of Business Administration, University of South Florida. The purpose of the study is to quantify the organization's economic contribution to the Miami-Dade County and Monroe County region. The Center for Economic Development Research provides information and conducts research on issues related to economic growth and development in the Nation, in the state of Florida, and particularly in the central Florida region. The Center serves the faculty, staff, and students of the College of Business Administration, the University, and individuals and organizations in the University's service area. Activities of the Center for Economic Development Research are designed to further the objectives of the University and specifically the objectives of the College of Business Administration.

Robert Anderson, Dean, College of Business Administration (COBA), USF
Kenneth Wieand, Director, Center for Economic Development Research (CEDR), COBA, USF
Dennis G. Colie, Economist and Principal Investigator, CEDR, COBA, USF
Alexander A. McPherson, Research Associate, CEDR, COBA, USF

Executive Summary

The purpose of this analysis is to quantify the Baptist Health Systems of South Florida's economic contribution to the Miami-Dade County and Monroe County region. Specifically, we quantify the economic contribution of operating expenditures, payroll, and major capital investment expenditures. Due to the circulation of funds within the area of interest, the impact of the spending activity associated with the organization is a multiple of the initial, or first, round of spending. Employment, labor income, and output are the measures of economic contribution. The data used to estimate the organization's economic contribution are from fiscal year 2000. The impact of operating expenditures and payroll is interpreted as the organization's expected *annual* economic contribution to the region, even if there were no further growth in its activities. Major capital investment is considered a one-time expenditure.

The quantifiable economic contributions of Baptist Health Systems of South Florida (BHSSF) to the region are ---

Regional Output. BHSSF's annual operating expenditures of \$314.46 million generate \$446.44 million of regional output. And, a payroll of \$244.73 adds another \$304.64 million of regional output. Hence, combined BHSSF operations annually contribute slightly more than \$751 million of output of goods and services in the Miami-Dade / Monroe County region. That is, for every \$100 spent by BHSSF for continuing operations and payroll, \$134 of regional output is produced. Additionally, the current (fiscal year 2000) level of major capital projects contributes just over \$64.30 million of output to the bi-county region's economy.

Employment. The combined BHSSF operations and payroll are responsible for 14,087 jobs in the bi-county region, including 7,035 jobs at BHSSF. That is, for every job at BHSSF, another job is created in the region. In addition, the current level of major capital projects adds 631 more jobs.

Labor Income. The workers in the 14,087 jobs attributable to combined BHSSF operations and payroll receive labor income totaling \$470.73 million per year, including BHSSF's \$244.73 million annual payroll. That is, for every \$100 of BHSSF payroll, another \$92 in labor income is generated for workers in the bi-county region. Further, the current level of capital projects increases regional labor income by \$22.56 million.

The Baptist Health Systems of South Florida consists of four major hospitals as well as several outpatient care clinics. The major hospitals are Baptist Hospital, South Miami Hospital, Homestead Hospital, and Mariners Hospital. The economic contributions of each hospital, as a component part of the BHSSF, are reported in the body of this report.

I. Introduction.

The purpose of this analysis is to quantify Baptist Health Systems of South Florida's economic contribution to Miami-Dade County and Monroe County. If the Baptist Health Systems activities were to cease, or even if its spending activities were decreased, the result would be loss of jobs, income and production within these counties. This study estimates the loss if the Baptist Health Systems were to stop operations. In the parlance of economic impact analysis, the quantifiable estimate of loss is the *Baptist Health Systems' economic contribution to the region*.¹ We define the region as the bi-county area including Miami-Dade and Monroe counties. These counties are considered the immediate service area of Baptist Health Systems.

Specifically, we examine the quantifiable economic effects of operational expenditures and payroll for activities promoted by the Baptist Health Systems. We refer to the aforementioned as the Baptist Health Systems' spending activities.

Due to the circulation of funds within the Region, the impact of Baptist Health Systems' spending activities results in a "multiplier effect." That is, there are links among the various commercial elements of the regional economy. Through these links, second and subsequent rounds of spending occur following the initial expenditures by Baptist Health Systems. For example, when Baptist Health Systems purchases locally produced signs, the manufacturer of the signs, in turn, must spend a portion of the funds received from Baptist Health Systems to hire workers, buy machinery, and pay for accounting services. The first-round or initial spending produces a direct effect on the area. The economic effects of subsequent spending by businesses, such as the purchase of the manufacturing machinery and accounting services, are called indirect effects. In addition, workers' spending, which becomes possible due to their incomes motivated by first round expenditures, leads to induced effects. This cycle continues, round by round, until the initial expenditure by Baptist Health Systems has a multiple effect on employment, income, and production within the area.

Subsequent rounds of spending continue within the area until the Baptist Health Systems' initial expenditures "leak" out of the area's economy. Leaks occur due to taxes, savings, and spending to import goods and services from outside the region.

In this study, we estimate the impact of annual spending by Baptist Health Systems. The impact is measured by employment, labor income, and production. The data used in the estimation process are from fiscal year 2000, which began October 1, 1999 and ended September 30, 2000. The impact on employment is measured in terms of jobs. Labor income, which is aggregated

¹See Appendix B, "Regional Economic Development Analysis," for an explanation of the technique of economic impact analysis used for this study.

from all sources, including employment income and proprietors' income, is denominated in nominal year 2000 dollars. Output, also called production, is measured at nominal year 2000 dollars.

We purposefully include a year's operating expenses and payroll, and exclude capital expenditures, when analyzing the multiplier effect so that our quantifiable estimate of Baptist Health Systems' economic contribution may be measured and understood as an annual occurrence. That is, as long as Baptist Health Systems' doors remain open, we expect that the quantifiable contribution will continue from year to year. The effect of current capital expenditures are separately reported herein.

The combined effect of all operations is discussed in Section III, Sections IV-VII include analyses of the effect of operations of four individual major hospitals. The effect of capital expenditures is discussed in Section VIII. Conclusions of this study may be found in Section IX.

Appendices A and B explain the terminology and technique of this analysis. Appendix C is the input data provided by Baptist Health Systems of South Florida. Appendix D includes a series of tables which indicate summary and component economic contributions to Miami-Dade County and Monroe County.

II. History, Organization and Function.

The Baptist Health Systems of South Florida was formed in 1995 with the merger of its four primary hospitals under one corporate umbrella. The coalition is the largest and most respected not-for-profit health care organization in south Florida. The constituent hospitals include Baptist Hospital, South Miami Hospital, Homestead Hospital, and Mariners Hospital. Several outpatient clinics and treatment centers complete the organizational structure.

Facilities.

Baptist Hospital was first opened in 1960, and currently houses 513 beds. During fiscal year 2000, this hospital treated approximately 80,000 emergency cases together with about 29,000 hospitalized patients.

South Miami Hospital first opened in 1960 with 100 beds. Throughout the hospital's history, the surrounding vicinity has grown dramatically, and this hospital has likewise grown to 500 beds at the present time to keep up with the health care needs of a growing population.

Homestead Hospital originally opened in 1940, and currently houses 120 beds. This facility has been nationally recognized for its reaction to the public need following Hurricane Andrew.

Mariners Hospital serves the upper Florida Keys with a new 42 bed facility which opened in February, 1999. The current structure is three times larger than the old facility, which originally opened in 1959 with 9 beds. This hospital treated approximately 11,000 emergency cases in the past year.

Future Growth.

As population growth trends in south Florida continue upward, more demand for health care services are likely. Baptist Health Systems of South Florida is poised to meet increased demand for these services due to its adoption of a strategy for financing capital expansion. Various fundraising foundations promote individual hospitals and the entire hospital group as a benefactor for charitable endowment contributions, where funds may be targeted to specific expansion objectives.

Baptist Health Systems Operations.

Operating funds for Baptist Health Systems of South Florida come primarily from patient admissions. For fiscal year 2000, Baptist Health Systems' total operating expenditures were

\$314,460,000² and BHSSF payroll totaled \$244,727,000 which was paid to 7,035 full-time equivalent employees.³

In addition to the annually recurring expenditures above, the Baptist Health Systems disbursed almost \$36.52 million on non-recurring capital expenditures in fiscal year 2000.

²Baptist Health Systems of South Florida organizes its financial accounting on a fiscal year basis starting each October 1. Fiscal year 2000 extends from October 1, 1999 to September 30, 2000.

³The Center for Economic Development Research uses the following categories of employees: full-time and part-time. Full-time employment is defined as 2,080 hours annually. The number of employees listed in Appendix C provided by Baptist Health Systems is assumed to be 100% full-time employee equivalents during the fiscal year.

III. Economic Contribution of Baptist Health Systems Combined Operations.

Baptist Health Systems of South Florida (BHSSF) purchases goods and services to provide the healthcare it offers at four major hospitals and several outpatient care clinics. This direct spending by Baptist Health Systems takes two forms: operating expenditures and payroll. These forms of spending have an economic impact on the bi-county region of Miami-Dade County and Monroe County. The economic impact is measurable in terms of increased employment, labor income and output.

Baptist Health Systems' operating expenses for activities in fiscal year 2000 were \$314,460,000. Additionally, a total of \$244,727,000 was paid to 7,035 employees. Reducing the \$244,727,000 for income and payroll taxes, total disposable personal income, i.e. spending power, originating directly from BHSSF amounted to \$211,445,000.⁴

As a result of the above operating and payroll expenditures, a total of 14,087 jobs are created in the Miami-Dade County and Monroe County region. Annually, the workers in these 14,087 jobs earn almost \$470.73 million of income, while producing an output valued at approximately \$751.07 million.

Contribution of Baptist Health Systems Due to Operating Expenditures

Out of the 14,087 total jobs indicated above, about 10,878 jobs within the bi-county region depend on the Baptist Health Systems' spending for goods and services. Annually, the workers in these 10,878 jobs earn almost \$374.41 million of income, while producing an output valued at approximately \$446.44 million.

Contribution of Baptist Health Systems Payroll

During fiscal year 2000, employees of BHSSF were paid labor income totaling \$244,727,000. After income and payroll taxes, the employees had \$211,445,000 in spending power. The employees have an economic impact on the region when they spend this disposable income to buy goods and services in the region. This impact is measurable in terms of increased employment, labor income and output.

⁴Disposable personal income = 0.864 times payroll. According to the Florida Statistical Abstract 2000, total disposable personal income in Florida for 1999 was \$365,711 million, while total personal income was \$423,460 million. The disposable personal income factor is, therefore, \$365,711/\$423,460, or 0.864.

As a result of the payroll, 3,209 jobs out of the 14,087 total jobs indicated above are created, which annually earn almost \$96.32 million of income, while producing output valued at approximately \$304.64 million.

Distribution of Effects

The following table summarizes the distribution of the *Contribution of the Baptist Health Systems Operating Expenditures and Payroll to the Miami-Dade County and Monroe County region* among business sectors by aggregating the effects at the 1-digit Standard Industrial Classification (SIC) code level.

Contribution of the Baptist Health Systems Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region

<u>Sector</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Agriculture	67 jobs	\$ 1,062,898	\$ 2,848,388
Mining	*	3,912	22,575
Construction	146	5,468,725	10,192,394
Manufacturing	267	12,371,255	53,828,843
Transportation & Public Utilities	277	12,973,747	46,815,668
Trade	2,108	52,643,174	115,673,068
Finance (FIRE)	586	24,067,659	119,934,472
Services	10,420	352,702,084	198,983,906
Institutions ⁵			185,899,785
Government & Other	<u>216</u>	<u>9,433,221</u>	<u>16,875,622</u>
Total Contributions	14,087 jobs	\$470,726,675	\$751,074,721

* = less than 1 full-time job

Additional Contribution of the Baptist Health Systems Capital Expenditures

During fiscal year 2000, Baptist Health Systems spent approximately \$36.52 million in capital investment. As a result of this capital investment, 631 jobs were created in fiscal year 2000 in addition to the 14,087 jobs indicated above. The workers in these 631 jobs earned more than \$22.56 million of income, while producing output valued at approximately \$64.31 million.

⁵“Institutions” are direct (immediate) leakages from the region. Most of this output is for the purchase of goods and services from outside the region. The purchases directly benefit BHSSF, but produce no further output impact, employment, or labor income impacts in the region.

Baptist Health Systems – Combined Operations

See the spreadsheet at Appendix D, Table 1, for a breakout of the direct, indirect and induced effects.

IV. Economic Contribution of Baptist Hospital Operating Expenditures, Payroll, and Capital Expenditures.

Baptist Hospital is the largest of four major hospitals operated by Baptist Health Systems of South Florida. Each hospital requires goods and services to provide the healthcare it offers. This direct spending for goods and services takes the same two forms as has been shown in Section III: operating expenditures and payroll. These forms of spending have an economic impact on the bi-county region of Miami-Dade County and Monroe County. The economic impact is measurable in terms of increased employment, labor income and output.

Baptist Hospital's operating expenses for activities in fiscal year 2000 were \$175,757,000. Additionally, a total of \$109,905,000 was paid to 3,535 employees. Reducing the \$109,905,000 for income and payroll taxes, total disposable personal income, i.e. spending power, originating directly from Baptist Hospital amounted to \$94,758,000.

As a result of the above operating and payroll expenditures, a total of 7,124 jobs are created in the Miami-Dade County and Monroe County region. Annually, the workers in these 7,124 jobs earn over \$225.64 million of income, while producing an output valued at approximately \$386.33 million.

Contribution of Baptist Hospital Due to Operating Expenditures

Out of the 7,124 total jobs indicated above, about 5,683 jobs within the bi-county region depend on Baptist Hospital's spending for goods and services. Annually, the workers in these 5,683 jobs earn almost \$102.39 million of income, while producing an output valued at approximately \$249.52 million.

Contribution of Baptist Hospital Payroll Spending

During fiscal year 2000, employees of the Baptist Hospital were paid labor income totaling \$109,905,000. After income and payroll taxes, the employees had \$94,958,000 in spending power. The employees have an economic impact on the Region when they spend this disposable income to buy goods and services in the region. This impact is measurable in terms of increased employment, labor income and output.

As a result of the payroll, 1,441 jobs out of the 7,124 total jobs indicated above are created, which annually earn almost \$43.26 million of income, while producing output valued at approximately \$136.81 million.

Distribution of Effects

The following table summarizes the distribution of the *Contribution of the Baptist Hospital Operating Expenditures and Payroll to the Miami-Dade and Monroe County Region* among business sectors by aggregating the effects at the 1-digit Standard Industrial Classification (SIC) code level.

Contribution of the Baptist Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region

<u>Sector</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Agriculture	35 jobs	\$ 558,283	\$ 1,486,742
Mining	*	2,141	12,441
Construction	76	2,867,385	5,322,116
Manufacturing	142	6,629,684	28,802,087
Transportation & Public Utilities	144	6,705,014	24,147,602
Trade	1,025	25,812,308	57,031,406
Finance (FIRE)	299	12,226,819	60,803,165
Services	5,293	165,895,795	103,203,554
Institutions ⁶			96,787,884
Government & Other	<u>110</u>	<u>4,944,183</u>	<u>8,734,387</u>
Total Contributions	7,124 jobs	\$225,641,612	\$386,331,384

* = less than 1 full-time job

Additional Contribution of the Baptist Hospital Capital Expenditures

During fiscal year 2000, Baptist Hospital spent approximately \$28.93 million in capital investment. As a result of this capital investment, 499 jobs are created in fiscal year 2000 in addition to the 7,124 total jobs indicated above, which earn more than \$17.87 million of income, while producing output valued at approximately \$50.94 million.

Baptist Hospital

See the spreadsheet at Appendix D, Table 2, for a breakout of the direct, indirect and induced effects.

⁶ See footnote 5.

V. Economic Contribution of South Miami Hospital Operating Expenditures, Payroll, and Capital Expenditures.

South Miami Hospital is the second largest of four major hospitals operated by Baptist Health Systems of South Florida. Each hospital requires goods and services to provide the healthcare services it offers. This direct spending for goods and services takes the same two forms as has been shown in Section III: operating expenditures and payroll. These forms of spending have an economic impact on the bi-county study region of Miami-Dade County and Monroe County. The economic impact is measurable in terms of increased employment, personal income and output.

South Miami Hospital's operating expenses for activities in fiscal year 2000 were \$100,078,000. Additionally, a total of \$69,054,000 was paid to 2,254 employees. Reducing the \$69,054,000 for income and payroll taxes, total disposable personal income, i.e. spending power, originating directly from South Miami Hospital amounted to \$59,663,000.

As a result of the above operating and payroll expenditures, a total of 4,383 jobs are created in the Miami-Dade County and Monroe County region. Annually, the workers in these 4,383 jobs earn more than \$137.50 million of income, while producing an output valued at approximately \$228.04 million.

Contribution of South Miami Hospital Due to Operating Expenditures

Out of the 4,383 total jobs indicated above, about 3,477 jobs within the bi-county region depend on South Miami Hospital's spending for goods and services. Annually, the workers in these 3,477 jobs earn almost \$110.33 million of income, while producing an output valued at approximately \$142.08 million.

Contribution of South Miami Hospital Payroll Spending

During fiscal year 2000, employees of the South Miami Hospital were paid labor income totaling \$69,054,000. After income and payroll taxes, the employees had \$59,663,000 in spending power. The employees have an economic impact on the Region when they spend this disposable income to buy goods and services in the region. This impact is measurable in terms of increased employment, personal income and output.

As a result of the payroll, 906 jobs out of the 4,383 total jobs indicated above are created, which annually earn almost \$27.18 million of income, while producing output valued at approximately \$85.96 million.

Distribution of Effects

The following table summarizes the distribution of the *Contribution of the South Miami Hospital Operating Expenditures and Payroll to the Miami-Dade and Monroe County Region* among business sectors by aggregating the effects at the 1-digit Standard Industrial Classification (SIC) code level.

Contribution of the South Miami Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region

<u>Sector</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Agriculture	21 jobs	\$ 326,512	\$ 871,921
Mining	*	1,230	7,127
Construction	45	1,678,283	3,120,688
Manufacturing	83	3,843,613	16,709,413
Transportation & Public Utilities	85	3,949,465	14,236,044
Trade	621	15,567,457	34,309,584
Finance (FIRE)	177	7,257,118	36,122,497
Services	3,288	101,985,441	60,694,853
Institutions ⁷			56,825,599
Government & Other	<u>63</u>	<u>2,894,318</u>	<u>5,141,489</u>
Total Contributions	4,383 jobs	\$137,503,437	\$228,039,215

* = less than 1 full-time job

Additional Contribution of the South Miami Hospital Capital Expenditures

During fiscal year 2000, South Miami Hospital spent approximately \$6.46 million in capital investment. As a result of this capital investment, 112 jobs are created in fiscal year 2000 in addition to the 4,383 total jobs indicated above, which earn almost \$4 million of income, while producing output valued at approximately \$11.37 million.

South Miami Hospital

See the spreadsheet at Appendix D, Table 3, for a breakout of the direct, indirect and induced effects.

⁷ See footnote 5.

VI. Economic Contribution of Homestead Hospital Operating Expenditures and Payroll.

Homestead Hospital is one of the four major hospitals operated by Baptist Health Systems of South Florida. Each hospital requires goods and services to provide the healthcare services it offers. This direct spending for goods and services takes the same two forms as has been shown in Section III: operating expenditures and payroll. These forms of spending have an economic impact on the bi-county study region of Miami-Dade County and Monroe County. The economic impact is measurable in terms of increased employment, personal income and output.

Homestead Hospital's operating expenses for activities in fiscal year 2000 were \$25,018,000. Additionally, a total of \$16,851,000 was paid to 546 employees. Reducing the \$16,851,000 for income and payroll taxes, total disposable personal income, i.e. spending power, originating directly from Homestead Hospital amounted to \$14,559,000.

As a result of the above operating and payroll expenditures, a total of 1,073 jobs are created in the Miami-Dade County and Monroe County region. Annually, the workers in these 1,073 jobs earn almost \$33.80 million of income, while producing an output valued at approximately \$56.49 million.

Contribution of Homestead Hospital Due to Operating Expenditures

Out of the 1,073 total jobs indicated above, about 852 jobs within the bi-county region depend on the Homestead Hospital's spending for goods and services. Annually, the workers in these 852 jobs earn almost \$27.17 million of income, while producing an output valued at approximately \$35.52 million.

Contribution of Homestead Hospital Payroll Spending

During fiscal year 2000, employees of the Homestead Hospital were paid labor income totaling \$16,851,000. After income and payroll taxes, the employees had \$14,559,000 in spending power. The employees have an economic impact on the Region when they spend this disposable income to buy goods and services in the Region. This impact is measurable in terms of increased employment, personal income and output.

As a result of the payroll, 221 jobs out of the 1,073 total jobs indicated above are created, which annually earn almost \$6.63 million of income, while producing output valued at approximately \$20.98 million.

Distribution of Effects

The following table summarizes the distribution of the *Contribution of the Homestead Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region* among business sectors by aggregating the effects at the 1-digit Standard Industrial Classification (SIC) code level.

Contribution of the Homestead Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region

<u>Sector</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Agriculture	5 jobs	\$ 81,074	\$ 216,354
Mining	*	307	1,779
Construction	11	416,647	774,385
Manufacturing	21	956,481	4,157,431
Transportation & Public Utilities	21	978,937	3,527,867
Trade	153	3,836,299	8,460,109
Finance (FIRE)	44	1,795,399	8,934,611
Services	802	25,016,580	15,050,030
Institutions ⁸			
14,096,524			
Government & Other	<u>16</u>	<u>718,506</u>	<u>1,274,604</u>
Total Contributions	1,073 jobs	\$33,800,230	\$56,493,694

* = less than 1 full-time job

Homestead Hospital

See the spreadsheet at Appendix D, Table 4, for a breakout of the direct, indirect and induced effects.

⁸See footnote 5.

VII. Economic Contribution of Mariners Hospital Operating Expenditures and Payroll.

Mariners Hospital is one of the four major hospitals operated by Baptist Health Systems of South Florida. Each hospital requires goods and services to provide the healthcare services it offers. This direct spending for goods and services takes the same two forms as has been shown in Section III: operating expenditures and payroll. These forms of spending have an economic impact on the bi-county study region of Miami-Dade County and Monroe County. The economic impact is measurable in terms of increased employment, personal income and output.

Mariners Hospital's operating expenses for activities in fiscal year 2000 were \$12,371,000. Additionally, a total of \$6,194,000 was paid to 213 employees. Reducing the \$6,194,000 for income and payroll taxes, total disposable personal income, i.e. spending power, originating directly from Baptist Health Systems amounted to \$5,352,000.

As a result of the above operating and payroll expenditures, a total of 446 jobs are created in the Miami-Dade County and Monroe County region. Annually, the workers in these 446 jobs earn over \$13.73 million of income, while producing an output valued at approximately \$25.27 million.

Contribution of Mariners Hospital Due to Operating Expenditures

Out of the 446 total jobs indicated above, about 365 jobs within the bi-county region depend on the Mariners Hospital's spending for goods and services. Annually, the workers in these 365 jobs earn almost \$11.30 million of income, while producing an output valued at approximately \$17.56 million.

Contribution of Mariners Hospital Payroll Spending

During fiscal year 2000, employees of the Mariners Hospital were paid labor income totaling \$6,194,000. After income and payroll taxes, the employees had \$5,352,000 in spending power. The employees have an economic impact on the Region when they spend this disposable income to buy goods and services in the Region. This impact is measurable in terms of increased employment, personal income and output.

As a result of the payroll, 81 jobs out of the 446 total jobs indicated above are created, which annually earn almost \$2.44 million of income, while producing output valued at approximately \$7.71 million.

Distribution of Effects

The following table summarizes the distribution of the *Contribution of the Mariners Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region* among business sectors by aggregating the effects at the 1-digit Standard Industrial Classification (SIC) code level.

Contribution of the Mariners Hospital Operating Expenditures and Payroll to the Miami-Dade County and Monroe County Region

<u>Sector</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Agriculture	2 jobs	\$ 37,243	\$ 98,610
Mining	*	148	866
Construction	5	190,977	353,124
Manufacturing	10	450,309	1,953,666
Transportation & Public Utilities	10	440,619	1,583,916
Trade	63	1,609,765	3,577,243
Finance (FIRE)	20	790,354	3,922,442
Services	329	9,885,073	6,804,698
Institutions ⁹			6,404,578
Government & Other	<u>7</u>	<u>329,183</u>	<u>574,774</u>
Total Contributions	446 jobs	\$13,733,671	\$25,273,917

* = less than 1 full-time job

Mariners Hospital

See the spreadsheet at Appendix D, Table 5, for a breakout of the direct, indirect and induced effects.

⁹See footnote 5.

VIII. Economic Contribution of Capital Expenditures.

As previously mentioned in Sections III-V, investment in capital infrastructure was undertaken by Baptist Health Systems during fiscal year 2000. A total of \$36,517,000 in expenditures was made in this period. Of this amount, \$28,926,000 was spent at Baptist Hospital and \$6,459,000 was spent at South Miami Hospital. The remaining \$1,132,000 was not allocated to a particular hospital, and is assumed to have been spent elsewhere within the corporate structure.

The economic effect of capital expenditures is considered to be non-recurring. Due to the nature of expenditure, this once-only type of expenditure cannot be viewed as ongoing, continual contributions to a region's economy. On the contrary, however, capital expenditures are considered immediate injections of economic activity with effects to output, income, and employment during the period of study.

In the case of Baptist Health Systems, it was presumed, for purposes of analysis, that all capital expenditures took the form of construction spending. Although it is conceivable that some of these expenditures were made for equipment purchases, furnishings, or maintenance, it is likewise conceivable that installation, delivery, or repair required activities distinctly similar to construction activities.

The economic contribution of Baptist Health Systems' combined overall capital expenditures in fiscal year 2000 was to add a total of 631 jobs to the Miami-Dade/Monroe County region. These 631 jobs earned more than \$22.56 million of income, while producing output valued at approximately \$64.31 million.

Baptist Hospital's capital expenditures in fiscal year 2000 had the economic effect of adding 499 jobs to the Miami-Dade/Monroe County region. These 499 jobs earned more than \$17.87 million of income, while producing output valued at approximately \$50.94 million.

The contribution of South Miami Hospital's capital expenditures in fiscal year 2000 to the regional economy was to add 112 jobs to the Miami-Dade/Monroe County region. These 112 jobs earned almost \$4 million of income, while producing output valued at approximately \$11.37 million.

It could be suggested that the region's economy would experience loss of jobs, income, and a reduction in output after completion of these expenditures. However, it is clear that Baptist Health Systems possesses a primary objective of growing with the region. The short-range capital expenditure budget at Baptist Health Systems is close to \$100 million. As expansion is warranted, capital expenditure will continue.

IX. Conclusions.

Baptist Health Systems of South Florida has 7,035 employees, with a total annual payroll of about \$244.73 million. And, Baptist Health Systems spends \$314.46 million per year on operations.

The following table summarizes the quantifiable economic contribution of the Baptist Health Systems. The contributions shown in the table reflect the *total* jobs, income, and output created within the Miami-Dade County / Monroe County region, which are a result of Baptist Health Systems' existence.

Contribution to Region

<u>Recurring Activity</u>	<u>Employment</u>	<u>Labor Income</u>	<u>Output</u>
Baptist Health Systems' Operating expenditures	10,878 jobs	\$374,406,919	\$446,439,046
Baptist Health Systems' Employee spending	<u>3,209</u>	<u>96,319,756</u>	<u>304,635,675</u>
Total impacts	14,087 jobs	\$470,726,675	\$751,074,721
 <u>Non-recurring Activity</u>			
Capital investment expenditures	631 jobs	\$22,564,257	\$64,308,283

Hence, the **recurring economic contributions** of the Baptist Health Systems to the bi-county region are:

Regional Output. The workers in the 14,087 jobs created in the region as a result of the Baptist Health Systems' existence, produced goods and services valued at \$751.07 million. Of these \$751.07 million worth of goods and services produced in the region, Baptist Health Systems of South Florida was directly responsible for purchases totaling \$314.46 million for operations.

Employment. There are 7,035 full-time equivalent employee jobs at Baptist Health Systems, plus an additional 7,052 jobs created in the bi-county region as a result of the Baptist Health Systems' existence and continuing operations. Thus, the Baptist Health Systems contributes 14,087 jobs to the bi-county region. For every job at Baptist Health Systems another job is created in the region.

Labor Income. The Baptist Health Systems' annual payroll is \$244.73 million for employees at the Baptist Health Systems, plus the \$226.00 million earned by workers in the 7,052 jobs created in the region. Thus, Baptist Health Systems contributes \$470.73 million of income for workers in the bi-county region. For every dollar of labor income received by Baptist Health Systems' workers another \$0.92 of income is created for other workers in the region.

The above quantities measure the activities of Baptist Health Systems during FY 2000 and reflect recurring activities. Thus, we interpret these quantities as the Baptist Health Systems' expected *annual* economic contribution to the region, even if there were no further growth in activities.

During fiscal year 2000, Baptist Health Systems also disbursed almost \$36.52 million for major capital projects. These projects contributed \$64.30 million in output to the regional economy, while adding 631 jobs which earned \$22.56 million in labor income.

Appendix A. Glossary

Employment. Employment is wage-rate and salaried positions as well as self-employed jobs. It includes full-time and part-time jobs at a given point in time.

Multiplier. A multiplier is the I-O model's prediction of the regional economic impact of a change in final demand or spending. For example, if the output multiplier were 1.84, the regional economic impact of a \$10,000 increase in government purchases is predicted to be \$18,400 (1.84 times the \$10,000 base amount of increased spending). A Type I multiplier measures the direct and indirect effects of a change in economic activity. It measures inter-industry effects only, i.e., businesses buying from other local businesses. A Type II multiplier measures direct, indirect, and induced effects. Using Type II multipliers, induced effects are a linear function of the income and expenditures of households due to a change in final demand or spending. A Type III multiplier also measures direct, indirect, and induced effects. It assumes the region is at full employment and, therefore, each job adds or subtracts from regional population with the associated average spending per person. Using Type III multipliers, induced effects are a linear function of average expenditures per job and the number of jobs created or lost due to a change in economic activity. Type II multipliers are more commonly used for impact analysis because of the large population shifts often implied by Type III multipliers.

Output. Output is the value of production of goods and services for a given time period. Output is measured as the total value of purchases by intermediate and final consumers. Output can also be thought of as the value of sales plus or minus inventory.

Labor income. Labor income is payment, received over a given time period, as employment compensation or proprietor's income. Personal income includes labor income, interest, dividends, pension income, and transfer payments linked to the recipient's place of residence. Personal disposable income is what remains from personal income after income and payroll taxes are deducted. This analysis applies the disposable income factor to labor income to estimate employees' spending power.

Regional Purchase Coefficient. Regional Purchase Coefficients (RPCs) are derived from econometric equations to predict local purchases based on the region's characteristics. The coefficients mathematically describe the actual trade flows (imports and exports) for the region for each commodity. The RPC represents the portion of the total local demand that is met by regional production. One minus the RPC represents the portion of total local demand that is met by importing the good or service from outside the region, thereby generating a "leak" from the regional economy.

Appendix B. Regional Economic Development Analysis

*The Center for Economic Development Research (CEDR), College of Business Administration, University of South Florida (USF), uses the **IMPLAN Professional**TM Social Accounting and Impact Analysis Software for economic impact analyses. Data (1998) for each county in the state of Florida are available. County-wide data may be aggregated to focus on a region, such as the bi-county region – Miami-Dade and Monroe - of special importance to Baptist Health Systems. The following article briefly explains the economic impact analysis and the assumptions upon which the analysis is based.*

The Impact Analysis.

Economic impact analysis is based on conditional, predictive models of the form: If ...then... An input-output model is one type of model used in impact analysis. Other generally accepted models are the economic base model and the income-expenditure model. Compared with the input-output model, both the economic base and income-expenditure models are limited in application to small economic regions in which the interdependencies (sales/purchase relationships) between producing sectors are insignificant.

Interindustry relationships were first described in 1758 by the Frenchman Francois Quesnay, founder of the physiocratic or “natural order” philosophy of economic thought. The physiocrats depicted the flow of goods and money in a nation, and thus made the first attempt to describe the circular flow of wealth on a macroeconomic basis. Wassily Leontief was born in Russia in 1906 and first studied economic geography at the University of St. Petersburg before moving to Berlin and China. He came to the United States in 1931 and, after a brief 3-month stint at the National Bureau of Economic Research in New York, he was hired by Harvard University. At Harvard, Professor Leontief undertook a research project that encompassed a 42-industry input-output table showing how changes in one sector of the economy lead to changes in other sectors. From this research, he developed the concept of multipliers from input-output tables, and was subsequently awarded the Nobel prize in economics in 1973 for his development of input-output (I-O) economics.

The historical transactions data in the I-O model represent the sales and purchases between sectors that occurred over an estimation period. These data describe each sector’s “purchases” and “sales” linkages with the rest of the economy. For each productive sector the transaction data take into account all sales revenue and costs, with the difference between revenue and costs being profit, which is a part of value added. (Total value added to a product at each stage of its production is the sum of wages and salaries, rents, profits, interest, and dividends.) The historical transaction or descriptive data are used to create the *descriptive* model of information about local economic interactions called *regional economic* accounts. These accounts, or transaction tables, describe a local economy in terms of the flow of dollars from purchasers to producers within the defined region.

For example, an increase in government purchases (first round) of output from the “manufacturing” sector of a region may require the “manufacturing” industry, in order to expand output, to purchase (second round) factor inputs from other sectors of the regional economy. In

turn, these other sectors may have to purchase (third round) inputs to deliver the supporting production of factors to the “manufacturing” sector. The rounds of spending will continue with each round becoming increasingly weaker in its impact because of leakages from the region attributable to imports, savings, and taxes.

The first round is called the direct effects of the change in final demand (consumption) in a sector(s) of the economy. The second and subsequent rounds are collectively referred to as the indirect effects of interindustry purchases (reduction in purchases) in response to direct effects.

The *open* I-O model just described does not take into account changes in spending in the region, in response to the direct effects, for household consumption. Changes in spending from households as income or population increases (decreases) due to changes in the level of production are called induced effects.

Induced effects are incorporated into the I-O descriptive model by forming a *closed* model. That is, transactions of the household sector are made endogenous to the model by treating households as a producing sector. The household sector sells its labor to the other producing sectors and purchases factor inputs, i.e. consumption expenditures, in order to maintain its labor.

There are two steps in impact analysis using the I-O model. First, the descriptive model is created; then, the predictive model is derived from the descriptive model. The descriptive model contains information about interindustry transactions called the *regional economic accounts*. The information describes the flow of dollars from purchasers to producers within the region.

In addition to the regional economic accounts, the descriptive I-O model includes the *social accounts*. Social accounting data include, for example, taxes paid by businesses and households to government, and transfer payments from government to businesses and households. Trade flows also are a part of the social accounts.

Trade flows describe the movement of goods and services between the region and the rest of the world, that is imports and exports. The analyst must choose between *regional purchase coefficients* (RPCs) or supply/demand pooling. RPCs are econometrically derived to predict local purchases based upon a region’s characteristics. In contrast, *supply/demand pooling* presumes everything that can be purchased locally, will be. Hence, it will lead to larger multipliers than RPCs, because the leakages for imports are less. (The analyst also decides if local purchase coefficients - LPCs - are to be applied to an event during impact analysis. If the LPCs were to be applied, the model’s RPCs are used to determine how much of the first-round expenditure is used to purchase local products and how much is for imported items. Otherwise, the RPCs are applied to second and subsequent rounds of spending only.)

The regional economic accounts and social accounts are used to build *multipliers*. The multipliers are the *predictive* I-O model. A set of multipliers are expected changes in output for each industry in the model given a one dollar change in final demand for any particular industry or commodity.

A multiplier measures the effects of a change in final demand(s) in a region. The change in economic activity is called the *impact*. The impact is essentially the expected or predicted consequence of a change in final demand(s) within the region due to a single event or a group of events. A group of related events may be referred to as a project.

A Type I multiplier measures the direct and indirect effects of a change in economic activity. It only captures interindustry effects within the region. In addition to the direct and indirect effects, a Type II multiplier captures the induced effects of changes in household income and expenditures. A Type III multiplier also captures direct, indirect, and induced effects. However, the Type III multiplier estimates the induced effects based upon changes in employment. It assumes the region is at full employment, then each job added or subtracted by the impact is associated with the region's average expenditures per person. A Type II multiplier is most commonly used in impact analyses.

Personal consumption expenditures (PCE) are spending by households and are strongly related to total personal income. Total personal income is income from all sources, including employment income and transfer payments that are based on place of residence. Because of commuting patterns, PCE in a region may not be strongly related to employment income in that location. Hence, the income based induced effects of the Type II multiplier are normally adjusted so that a regional average amount of transfer payments is associated with a change in employment income. Such multiplier is called a Social Accounting Matrices (SAM) Income multiplier. However, suppose that an increase (decrease) in employment income is not anticipated to be associated with a corresponding change in regional transfer payments. For instance, it may be believed that an increase in final demand will only generate low paying jobs. Then, it is likely that the under-employed will be hired and transfer payments will not increase in the region. Accordingly, a Specific Disposable Income may be applied to the Type II multipliers. That is, the change in household consumption expenditures is estimated by disposable income, which is defined as a specified (by the analyst) percentage of employment income.

A change in final demand may be applied to an industry or to a commodity. Industries are businesses producing goods and services; commodities are the goods and services being produced. An industry can make more than one commodity. An industry usually is named for the primary, by value, commodity it produces. Commodities produced by an industry, other than its primary commodity, are called secondary commodities or by-products. An industry applied change in final demand has a direct effect on the selected industry only. A commodity applied change in final demand directly affects all industries that produce the commodity, whether as a primary or secondary commodity. The analyst chooses between an industry or commodity applied change in final demand. The choice is appropriately based on the circumstance for the change in final demand. The choice will affect the predicted impact.

As an alternative to estimating the economic impact of a change in final demand ("at the factory door"), the analyst may estimate the impact of a change in sales and employee payroll for a particular institution, e.g. state/local government education, or business sector. Then, a typical expenditure pattern for the institution or industry is generated to assess the economic impact of the change in sales and payroll. (If the event under study is believed to have an atypical expenditure pattern, this alternative approach is inappropriate. Instead the analyst should specify

the expenditure pattern of the institution or industry in detail.) Using this alternative approach, the direct effect on final demand, i.e. output, in the region will be less than the change in sales. This happens because the model includes the institution's or industry's production function and final demand is an estimate of the value, in producer prices, of the factor inputs needed to generate the specified change in level of sales. The difference between the estimated change in final demand and the change in sales is total value added. Also, with this approach, the induced effects are interpreted as resulting from a change in household spending by the suppliers of the institution's or industry's factor inputs (first round) as well as subsequent rounds of interindustry sales/purchases.

Margins are used to convert purchaser prices to producer prices. Margins depend on the consumer. For example, households pay the full retail margins, but government may pay little or no retail margins because it has more buying power than individual households. Margins split a purchaser price into appropriate producer values, each value impacting a specific industry. For example, the purchaser price of a tire at an automotive retailer includes the producer price at the factory door plus transportation costs, the wholesaler's markup, and the retailer's markup. Unless edited by the analyst, margins used in impact analysis are national averages.

A deflator may be used to convert expenditures to the base year (estimation period) used to calculate predictive multipliers and to inflate the reports of impact analysis to the current year. Deflators are associated with commodities, and are also used to adjust margin values.

A predicted regional impact may be gauged in terms of output (a change in production measured in dollars), of employment (a change in employment measured by number of jobs), or of personal income (a change in income from all sources, including employment and transfer payments, for persons residing in the region).

I-O Model Assumptions.

The following are the fundamental assumptions of the I-O model. First, it is assumed that the proportions in which each sector purchases its inputs from all other sectors are invariant over the period of analysis. The implications of this assumption are unchanged technology, constant relative prices, no shift in the mix production activities within sectors, and no new significant firm has moved into or out of the region.

Second, the I-O model assumes linear production functions, that is a sector's inputs remain in proportion to its output. This implies that no industry enjoys economies of scale. Third, each sector of the regional economy is assumed to be homogeneous. An increase (decrease) in a sector's final demand will always have the same impact on the economy. And fourth, in the closed I-O model, it is assumed that the household sector's marginal propensity to consume equals its average propensity to consume.

Prepared by:
Dennis G. Colie, Ph.D.
Economist
E-mail: DCOLIE@coba.usf.edu

Appendix C. Economic Impact Inputs

The following table was supplied by Baptist Health Systems for use as input figures in analysis of the economic contributions for Fiscal Year 2000:

Baptist Health Systems of South Florida, Inc.
Fiscal Year Ended September 30, 2000

	Gross Payroll (excluding benefits) (000)	Operating Expenses (excluding bad debts) (000)	Capital Expenditures		Number of Employees	
			Routine	Major Projects	Miami-Dade	Monroe
Baptist Health Systems - Combined	\$244,727	\$559,187	\$30,199	\$36,517	6,809	226
Baptist Hospital	\$109,905	\$285,662	\$7,532	\$28,926	3,535	
South Miami Hospital	\$69,054	\$169,132	\$5,183	\$6,459	2,254	
Homestead Hospital	\$16,851	\$41,869	\$638		546	
Mariners Hospital	\$6,194	\$18,565	\$1,064			213

Notes:

1. Operating expenditures listed include gross payroll (from column to the left). Operating expenditure amounts input in analysis exclude payroll figures.
2. Capital expenditure columns are in 000's.
3. Routine capital expenditures approximate depreciation amounts. Operating expenses shown include depreciation. Operating expenditure amounts input in analysis exclude depreciation and include routine capital expenditures.

Appendix D. Model Results Tables

The following pages indicate results of the analysis in terms of output, employment, and personal income. Tables are included for combined operations and four individual hospitals.

Table 1 Baptist Health Systems Combined Operations.....26
Table 2 Baptist Hospital.....27
Table 3 South Miami Hospital.....28
Table 4 Homestead Hospital.....29
Table 5 Mariners Hospital.....30

Table 1

Baptist Health Systems - Combined Operations

Contributions to Output

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 310,813,402	\$ 52,760,910	\$ 82,864,734	\$ 446,439,046	1.44
Payroll	\$ 208,698,717	\$ 34,303,943	\$ 61,633,015	\$ 304,635,675	1.46
Total	\$ 519,512,119	\$ 87,064,853	\$ 144,497,749	\$ 751,074,721	1.45

Contributions to Employment

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	9,215	600	1,063	10,878	1.18
Payroll	2,025	393	791	3,209	1.58
Total	11,240	993	1,854	14,087	1.25

Contributions to Labor Income

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 319,856,870	\$ 21,672,936	\$ 32,877,113	\$ 374,406,919	1.17
Payroll	\$ 57,747,234	\$ 14,119,230	\$ 24,453,292	\$ 96,319,756	1.67
Total	\$ 377,604,104	\$ 35,792,166	\$ 57,330,405	\$ 470,726,675	1.25

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Capital Expenditures, Major Projects					
Contributions to Output	\$ 36,516,996	\$ 13,483,593	\$ 14,307,694	\$ 64,308,283	1.76
Contributions to Employment	289	158	184	631	2.18
Contributions to Labor Income	\$ 11,300,427	\$ 5,587,161	\$ 5,676,669	\$ 22,564,257	2.00

Table 2

Baptist Hospital

Contributions to Output

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 173,718,849	\$ 29,488,961	\$ 46,314,498	\$ 249,522,308	1.44
Payroll	\$ 93,724,672	\$ 15,405,584	\$ 27,678,820	\$ 136,809,076	1.46
Total	\$ 267,443,521	\$ 44,894,545	\$ 73,993,318	\$ 386,331,384	1.44

Contributions to Employment

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	4,753	336	594	5,683	1.20
Payroll	910	176	355	1,441	1.58
Total	5,663	512	949	7,124	1.26

Contributions to Labor Income

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 151,896,352	\$ 12,113,370	\$ 18,375,573	\$ 182,385,295	1.20
Payroll	\$ 25,933,752	\$ 6,340,816	\$ 10,981,749	\$ 43,256,317	1.67
Total	\$ 177,830,104	\$ 18,454,186	\$ 29,357,322	\$ 225,641,612	1.49

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Capital Expenditures, Major Projects					
Contributions to Output	\$ 28,925,998	\$ 10,680,680	\$ 11,333,471	\$ 50,940,149	1.76
Contributions to Employment	229	125	145	499	2.18
Contributions to Labor Income	\$ 8,951,342	\$ 4,425,725	\$ 4,496,627	\$ 17,873,694	2.00

Table 3

South Miami Hospital

Contributions to Output

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 98,917,454	\$ 16,791,345	\$ 26,371,992	\$ 142,080,791	1.44
Payroll	\$ 58,888,089	\$ 9,679,473	\$ 17,390,862	\$ 85,958,424	1.46
Total	\$ 157,805,543	\$ 26,470,818	\$ 43,762,854	\$ 228,039,215	1.45

Contributions to Employment

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	2,948	191	338	3,477	1.18
Payroll	572	111	223	906	1.58
Total	3,520	302	561	4,383	1.25

Contributions to Labor Income

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 92,964,345	\$ 6,897,488	\$ 10,463,256	\$ 110,325,089	1.19
Payroll	\$ 16,294,419	\$ 3,983,994	\$ 6,899,935	\$ 27,178,348	1.67
Total	\$ 109,258,764	\$ 10,881,482	\$ 17,363,191	\$ 137,503,437	1.26

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Capital Expenditures, Major Projects					
Contributions to Output	\$ 6,459,000	\$ 2,384,931	\$ 2,530,695	\$ 11,374,626	1.76
Contributions to Employment	51	28	33	112	2.20
Contributions to Labor Income	\$ 1,998,780	\$ 988,238	\$ 1,004,069	\$ 3,991,087	2.00

Table 4

Homestead Hospital

Contributions to Output

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 24,727,882	\$ 4,197,585	\$ 6,592,603	\$ 35,518,070	1.44
Payroll	\$ 14,369,906	\$ 2,361,990	\$ 4,243,728	\$ 20,975,624	1.46
Total	\$ 39,097,788	\$ 6,559,575	\$ 10,836,331	\$ 56,493,694	1.44

Contributions to Employment

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	719	48	85	852	1.18
Payroll	140	27	54	221	1.58
Total	859	75	139	1,073	1.25

Contributions to Labor Income

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 22,828,228	\$ 1,724,269	\$ 2,615,657	\$ 27,168,154	1.19
Payroll	\$ 3,976,174	\$ 972,176	\$ 1,683,726	\$ 6,632,076	1.67
Total	\$ 26,804,402	\$ 2,696,445	\$ 4,299,383	\$ 33,800,230	1.26

Table 5

Mariners Hospital

Contributions to Output

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 12,227,542	\$ 2,075,638	\$ 3,259,937	\$ 17,563,117	1.44
Payroll	\$ 5,282,487	\$ 868,286	\$ 1,560,027	\$ 7,710,800	1.46
Total	\$ 17,510,029	\$ 2,943,924	\$ 4,819,964	\$ 25,273,917	1.44

Contributions to Employment

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	299	24	42	365	1.22
Payroll	51	10	20	81	1.59
Total	350	34	62	446	1.27

Contributions to Labor Income

Contribution from:	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier
Operating Expenditures	\$ 9,149,644	\$ 852,623	\$ 1,293,401	\$ 11,295,668	1.23
Payroll	\$ 1,461,672	\$ 357,380	\$ 618,951	\$ 2,438,003	1.67
Total	\$ 10,611,316	\$ 1,210,003	\$ 1,912,352	\$ 13,733,671	1.29