

ECONOMIC IMPACT OF SUMNER REGIONAL HEALTH SYSTEMS, INC.

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TABLE OF CONTENTS

I. EXECUTIVE SUMMARY..... 2

II. INTRODUCTION..... 9

III. ABOUT SRHS..... 11

- i. SUMNER REGIONAL MEDICAL CENTER..... 11
- ii. TROUSDALE MEDICAL CENTER..... 11
- iii. CARTHAGE GENERAL HOSPITAL..... 11
- iv. SMITH COUNTY MEMORIAL HOSPITAL..... 12
- v. SUMNER FOUNDATION..... 12
- vi. SUMNER HOMECARE & HOSPICE..... 12
- vii. SUMNER CATERING & CONFERENCE CENTER..... 13
- viii. WESTMORELAND MEDICAL PAVILION..... 13
- ix. WESTMORELAND PHARMACY 13
- x. SUMNER HEALTHPLEX..... 13
- xi. TROUSDALE EMS..... 13
- xii. DEKALB EMS..... 14
- xiii. RED BOILING SPRINGS RURAL HEALTH CLINIC..... 14
- xiv. EXECUTIVE HOUSE APARTMENTS..... 14
- xv. CLAY EMS 14

IV. SRHS FY 2006 ECONOMIC IMPACT..... 15

- 1. IMPACT OF OPERATING EXPENDITURES..... 15
- 2. IMPACT OF SRHS EMPLOYEE SPENDING..... 18
- 3. IMPACT OF SRMC PARKING GARAGE CONSTRUCTION..... 21
- 4. OTHER ACTIVITIES..... 21

V. IMPACT OF SRHS ACTIVITIES IN FY 2006 – FY 2009..... 22

- 1. CONSTRUCTION PROJECTS..... 22**
 - 1.1 SRMC New Patient Tower..... 22
 - 1.2 HealthPlex & Wellness Center..... 23
 - 1.3 Residential Hospice..... 24
- 2 OPERATIONS AND EMPLOYEE SPENDING..... 24**

VI. CONCLUSION..... 25

APPENDIX A: METHODOLOGY..... 27

APPENDIX B: ABOUT ECONOMIC STRATEGY..... 29

I. EXECUTIVE SUMMARY

Sumner Regional Health Systems, Inc., (SRHS) is a four-hospital, not-for-profit healthcare organization headquartered in Gallatin, TN. SRHS serves eleven counties in the northern middle Tennessee region. The system provides a wide spectrum of general and specialized healthcare services through its three rural hospitals: Trousdale Medical Center (TMC) located in Hartsville, TN; Carthage General Hospital (CGH) and Smith County Memorial Hospital (SCMH) each located in Carthage, TN; and, its 145-bed flagship hospital, Sumner Regional Medical Center (SRMC) located in Gallatin, TN. Since 2000, SRHS has acquired the three rural hospitals which have not only strengthened its flagship hospital, but also enhanced the quality of healthcare in the communities it has entered. In addition to its four hospital facilities, SHRS also owns and operates eleven additional not-for-profit affiliates.

SRHS has contracted with the Economic Strategy Center (ESC) of Atlanta, Georgia, to analyze the economic impact of SRHS on the local communities it serves. This report highlights the significant role SRHS plays within local communities. It examines and quantifies the direct impact of SRHS on the local economy in terms of **employment**, **operational expenditures** and **payroll** in Fiscal Year 2006 (June 2005 - May 2006)¹. It also demonstrates the “ripple” effect from subsequent rounds of re-spending of the dollars the healthcare sector brings into the community and the jobs it helps create. In addition, the report shows the estimated **impact of approved construction projects** that will be implemented in the next few years and it illustrates the benefits that SRHS provides for a **safe and healthy community**.

The estimated impacts of SRHS operations and payroll presented in this report may be interpreted as SRHS’ estimated annual economic contribution to the region. However, the construction impact is a one-time impact and should be attributed to the year that construction activity takes place.

¹Sumner Regional Health Systems acquired Smith County Memorial Hospital (SCMH) on March 31, 2006. Thus, only SCMH data for the April – May 2006 time period is included in this analysis.

KEY FINDINGS

✓ Sumner Regional Health Systems Impact as a Major Employer

- In FY 2006, SRHS employed **1,287 full-time (job equivalent) employees**. Of these:
 - 902 FTEs were employed in Sumner County
 - 91 in Trousdale County
 - 249 in Smith County
 - 22 in DeKalb County
 - 16 in Clay County
 - 7 in Macon County
- During this time period, SRHS employees earned a **payroll of \$70,994,018** (including benefits). The earned payroll was distributed among counties as follows:
 - Sumner County - \$57,360,426
 - Smith County - \$7,813,216
 - Trousdale County - \$4,427,989
 - DeKalb County - \$643,164
 - Clay County - \$465,847
 - Macon County - \$283,376
- Dollars earned by SRHS employees and spent on food, clothing, utilities, car payments, mortgage payments, rent, etc., have generated:
 - An additional **\$9,558,802 in business activity/output** for the local economy.
 - **373 jobs**
 - An additional **\$11,503,455 in personal income**

✓ The Impact of Sumner Regional Health Systems Operations

- In FY 2006, SRHS spent approximately **\$66,478,161** on goods and services it needed to provide quality healthcare (such as medical supplies, electricity for its buildings, and food for patients). Based on the location of each hospital and/or affiliate, spending on operations was allocated as follows:
 - Sumner County - \$51,869,237
 - Smith County - \$9,323,336
 - Trousdale County – \$4,404,295
 - DeKalb County - \$452,833
 - Clay County – \$290,814
 - Macon County - \$137,646
- Dollars spent to buy goods and services flow from the health system and its hospitals and affiliates to vendors and businesses. These dollars then ripple throughout the economy. Dollars spent by SRHS generated approximately:
 - **\$10,127,741 in additional business activity/output**
 - **352 new jobs**
 - **An additional \$12,837,162 in personal income**

✓ Sumner Regional Health Systems Activities Generate Tax Revenue

As SRHS spends dollars on payroll and operating expenditures, it indirectly supports local business activity and helps generate additional jobs. During the re-spending cycle, SRHS activities generate local tax revenue for the counties and cities within the region of its activities. These activities generated estimated **total local tax revenue of \$4,444,292.**

✓ The Impact of Sumner Regional Health Systems Construction Activity

SRHS construction activity impacts a great number of local economic sectors from convenience stores and local grocery stores to insurance agents providing policies for the contractors and other companies working on the project.

In FY 2006, SRHS completed the construction of a 194,000 square-foot, 6-level, 600-space parking garage on the SRMC campus in Sumner County with a **construction cost of \$5,767,742**. The construction activity generated an additional:

- **\$3,027,830 in business output**
- **\$3,835,011 in personal income**
- **86 new jobs**
- **\$649,703 in state/local tax revenue**

Additional Construction projects totaling \$74,665,456 within Sumner County have begun and will continue to be launched over the next few months. They include:

- A new patient tower on the SRMC Campus with an estimated construction cost of \$53,655,456
- A Health & Wellness Center with an estimated construction cost of \$17,000,000
- A Residential Hospice with an estimated construction cost of \$4,000,000

These projects will result in improved healthcare services for the local community. They also will generate local jobs, additional income, and business activity. They are expected to generate:

- **1,247 local jobs**
- **\$51,665,081 in personal income**
- **an additional \$39,423,606 in output/business sales**
- **\$3.1 million in local tax revenue**

✓ Sumner Regional Health Systems Generates Other Positive Impacts

SRHS continues to enhance the delivery of healthcare in the communities it has entered. In FY 2006:

- SRHS recruited **forty-five physicians**
- SRHS provided a total of **\$6,247,978 in uncompensated care:**
 - \$5,533,337 in charity care
 - \$714,641 in prison care
- Volunteers spent approximately **35,072 hours** system-wide. Although the volunteers do not get compensated for their time, their efforts had a great impact on their community.
- SRHS also contributes to the community by directly and indirectly promoting economic development. Such direct and indirect effects can result from a quality healthcare sector, which is a very important factor in *helping communities attract and retain job-creating businesses and industries.*
- *A productive workforce* is critical to attracting new firms and retaining existing firms. The health status of local workers is a key component of productivity. Local health care providers can improve the health and productivity of the local workforce by promoting preventive care, thus leading to long-term economic benefits.
- Also, by building a strong rural network of healthcare providers, SRHS helps *keep health dollars at home* by ensuring that residents get medical services within the region and thus retaining their health care expenditures within the local economy.

CONCLUSION

✓ **SRHS FY 2006 Impact (Operations, Payroll & Garage Construction)**

Sumner Regional Health Systems is a major contributor to the economy of Sumner County and surrounding region. As SRHS spends dollars for operating and capital expenditures, it supports and creates jobs and payroll in other local businesses. When jobs and payroll created in other businesses are added into the analysis, the total quantifiable economic contribution of SRHS to the local economy in **FY 2006** is:

- The aggregate annual **economic impact of SRHS is \$194.1 million.** This includes:

- Personal income of **\$28.1 million.**
- Output/business activity (direct, indirect and induced) of **\$143.2 million.**

Every dollar SRHS spends on operations or payroll injects an additional \$.36 in the area economy.

- The total impact on employment in Sumner County and surrounding regions is **2,098 jobs.**

- 1,287 direct jobs
- 811 jobs created as result of SRHS activities

Every SRHS job creates an additional .6 jobs in the area economy.

- These economic activities combined generated about **\$4.4 million** annually in state/local tax revenue.

✓ **SRHS FY 2007 – FY 2009 Future Construction Impact**

Based on publicly announced construction projects that begun in late 2006 and will begin in 2007 (i.e., new patient tower on SRMC campus, Health & Wellness Center, and Residential Hospice), SRHS is estimated to generate an **additional economic impact of \$165.7 million.** Of this:

- Approximately **32 percent or \$51.6 million is local income** presented in the form of wages to local households.
- **\$114,079,062 will be business activity/output** for local businesses.

In addition, the construction projects are estimated to create an additional **1,247 (mainly construction) jobs** and generate approximately **\$3,396,929 in local tax revenue.**

✓ SRHS Total Impact FY 2006 – FY 2009

A period of four fiscal years was utilized to measure SRHS total economic impact. This measurement period includes all currently announced constructions projects as well as SRHS operational activities. With regards to SRHS operation activities, a simplistic and conservative assumption was made that SRHS FY 2006 operational activities would remain unchanged through FY 2009.

Based on these assumptions, the total, four-year economic impact of SRHS is estimated to be **\$940,829,934 million**. Of this:

- Approximately **17 percent** or **\$156,869,255** is generated **local income** for local households.
- **\$783,960,679** in **local business activity/output**

In addition, SRHS activities are expected to generate **estimated local tax revenue of \$21,228,340** and a total of **4,359 local jobs**.

These findings provide strong evidence of SRHS significant economic impact to Sumner County and the surrounding region.

II. INTRODUCTION

The objective of this report is to *identify* and *quantify* the economic impact of Sumner Regional Health Systems. More specifically, the report will:

- Measure the economic impact of Sumner Regional Health Systems ***employment.***
- Measure the economic impact of Sumner Regional Health Systems ***payroll.***
- Measure the economic impact of Sumner Regional Health Systems ***operational activities.***

The economic impact estimates are calculated using direct spending by SRHS, along with regional economic multipliers, to determine its indirect effects on other industries and households in the region. The impact on employment is measured in terms of jobs. Personal income and output are shown *in 2006 dollars* (findings are adjusted for inflation).

Although the focus of this study is the quantifiable economic effects of SRHS in the local economy, it is recognized that ***there are additional, positive, but difficult to quantify***, impacts that Sumner Regional Health Systems has on the region. It is almost impossible to put a dollar value on the medical benefits to patients treated at SRHS facilities. The care received by patients from Sumner County (and other surrounding counties) contributes to a healthier, more productive, regional population.

Sumner Regional Health Systems not only provides planned and emergency medical care for the residents of their communities, but also is one of the largest employers in the region.

Also, having a hospital in the community is an important factor for businesses looking to locate in the area.

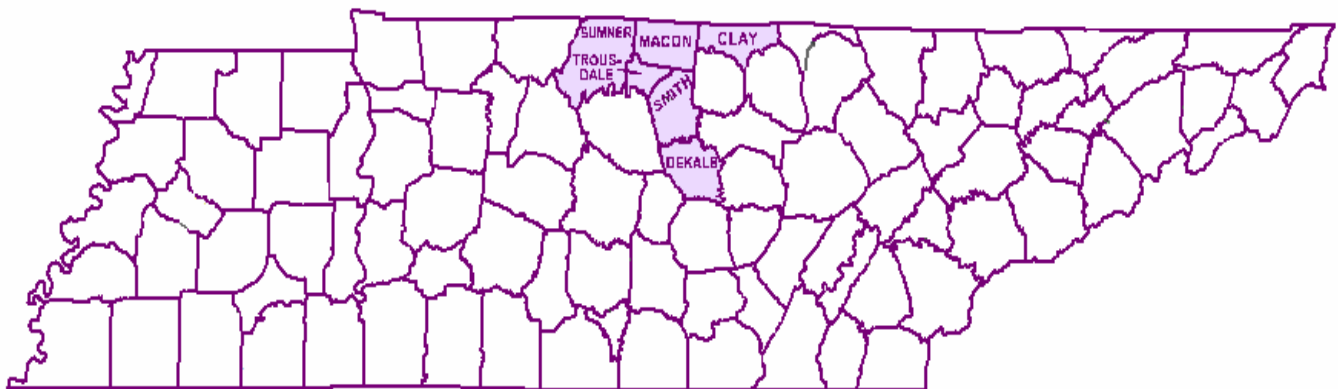
The local health care system plays a crucial role in “keeping local health care dollars at home.” Health care dollars come from various sources such as private insurance, consumer out-of-pocket payments, Medicare and Medicaid transfer payments. If these expenditures leave the county, they represent a real loss of potential jobs and income to local residents.

Also, health care facilities are important purchasers of local goods and services, thus contributing to the growth of local payrolls and taxes.

This analysis is divided into five major sections. The first section summarizes the study's findings. The second section describes the analysis and its data sources. The third section provides a summary of Sumner Regional Health Systems activities and the activities of its affiliates. The fourth section demonstrates the direct and indirect economic impact of SRHS FY 2006 operating expenses, spending by employees (payroll impact) and the parking garage construction impact. The fifth section presents the economic impact of the health care system on the local economy. Finally, Appendix A explains the methodology used in this report and Appendix B provides a summary of the Economic Strategy Center.

Region

The map below highlights the counties where Sumner Regional Health Systems operates.



This report will show the economic impact of Sumner Regional Health Systems in the six-county region (Sumner, Trousdale, Macon, Clay, Smith and DeKalb Counties) of Middle Tennessee where SRHS hospitals and affiliates are physically located. *NOTE: At the time this report was published, SRHS no longer owns or operates Clay EMS. Thus, SRHS currently does not maintain a physical presence in Clay County.*

Data Sources

The economic impact analysis is based on data provided from Sumner Regional Health Systems. SRHS provided data on staffing, operating expenditures, capital purchases and patient demographics.

III. ABOUT SUMNER REGIONAL HEALTH SYSTEMS, INC.

Sumner Regional Health Systems (SRHS) is a four-hospital, not-for-profit health system headquartered in Gallatin, Tennessee, providing a wide spectrum of general and specialized healthcare services in the six counties of the northern middle Tennessee region where it has facilities and eleven counties overall. In addition to its four (4) hospitals, SRHS also owns and operates eleven (11) not-for-profit affiliates. *NOTE: At the time this report was published, SRHS no longer owns or operates Clay EMS. Thus, SRHS currently has facilities in five counties of northern middle Tennessee and operates ten (10) not-for-profit affiliates.*

SRHS continues to promote optimal health to its communities through networking of quality services in a socially, ethically and financially responsible manner. Its hospitals and affiliates include:

i. Sumner Regional Medical Center

Sumner Regional Medical Center (SRMC), the 145-bed flagship hospital of SRHS is located in Gallatin, TN and started in 1959 as Sumner County Memorial Hospital. In 1994, SRMC became a private, not-for-profit healthcare facility.

The hospital has experienced tremendous growth over the years and now has more than 900 employees and 150 physicians. SRMC is one of the largest, non-government employers in Sumner County, and provides quality care in cancer treatment, cardiac care, same day surgery, orthopedics, diagnostics, women's health, rehabilitation services and much more. SRMC continues to grow in its services and staff to meet the healthcare needs of its community.

ii. Trousdale Medical Center

Trousdale Medical Center (TMC) is a 25-bed, critical access hospital in Hartsville, TN with over 90 employees. The facility expands on SRHS' mission to provide quality care throughout the region. It offers an extensive range of inpatient, outpatient and emergency services for adults and children including cardiographics, diagnostic services, inpatient/outpatient rehabilitation services, and specialty clinics such as orthopedics.

iii. Carthage General Hospital

Carthage General Hospital (CGH) is a 25-bed, critical access hospital in South Carthage. More than 40 physicians and mid-level providers are on the CGH

medical staff, offering specialty services in ear, nose and throat; cardiology; pulmonary; urology; oncology; podiatry; psychiatry; orthopedics; and cardiovascular care, neurology, obstetrics and gynecology. Psychotherapy services are also available. CGH operates emergency medical services in Trousdale, Clay and DeKalb counties, as well as Red Boiling Springs Rural Health Clinic. CGH is also affiliated with the Four County Wellness Center and Four County School Based Clinics. SRHS acquired the hospital in February 2004. *NOTE: At the time this report was published, CGH no longer operates Clay EMS nor is it affiliated with the Four County Wellness Center or Four County School Based Clinics.*

iv. Smith County Memorial Hospital

On March 31, 2006, Smith County Memorial Hospital joined the Sumner Regional Health Systems family. SCMH is a 63-bed acute care facility offering general medical and surgical care, 24-hour emergency services, skilled nursing, psychiatric services and geriatric care. SCMH is located approximately 55 miles from Nashville in Carthage, Tennessee. SCMH and CGH combined have nearly 250 employees.

v. Sumner Foundation

Sumner Foundation was established in March 1995 as a not-for-profit, non-taxed supported organization. Its mission is to help others by providing a framework of giving and gifting; giving by all within their means and gifting to fill the needs of patients, families, hospital associates and the community at large that are not met under usual circumstances.

The Foundation hosts two major fund-raising events each year, which have raised more than \$1 million for Sumner Hospice over the past several years. The Foundation also assists with community fund-raising campaigns, like the Dodson Family Health Center – a new health department facility for Sumner County which opened in 2002. The Foundation also provides transportation for cancer patients through Sumner Care-A-Van and offers overnight housing to patients' families at the Sumner Hospitality House.

vi. Sumner Homecare & Hospice

Sumner Homecare & Hospice provides services in a nine-county area, including Sumner, Davidson, Robertson, Wilson, Trousdale, Macon, Smith, DeKalb, Putnam and Jackson. Sumner Homecare offers convenient, cost-effective and reliable care for

patients who have healthcare needs at home, often after they are discharged from the hospital. Sumner Hospice provides both inpatient and outpatient care to those patients with life limiting illness when seeking a cure is no longer appropriate.

vii. Sumner Catering & Conference Center

The Sumner Catering & Conference Center is a complete catering service and state-of-the-art conference facility available for public use.

viii. Westmoreland Medical Pavilion

Westmoreland Medical Pavilion opened in June 2004, bringing the community convenient access to health care services. The 13,000-square-foot facility includes medical office space and laboratory and diagnostic services. The facility also provides space for specialty clinics and houses the Westmoreland Pharmacy.

ix. Westmoreland Pharmacy

The Westmoreland Pharmacy opened in September 2004. The pharmacy brought much-needed services to the area, including prescriptions, medical supplies and over-the-counter medicines.

x. Sumner Healthplex

Sumner Healthplex is a fitness and wellness center for the entire family. It offers individual and family memberships and a variety of fitness equipment, activities and classes for beginners and advanced participants. Certified personal trainers and a massage therapist are on staff. Members receive a personalized Exercise Tolerance Test which includes an EKG test, height and weight measurements, blood pressure check, body composition, flexibility assessment and cardiovascular risk assessment.

xi. Trousdale EMS

Trousdale EMS in Hartsville, TN is the primary pre-hospital emergency medical care provider and transportation service for Trousdale County.

xii. DeKalb EMS

DeKalb EMS in Smithville, TN is the primary pre-hospital emergency medical care provider and transportation service for DeKalb County.

xiii. Red Boiling Springs Rural Health Clinic

Red Boiling Springs Rural Health Clinic located in Red Boiling Springs, TN is an ambulatory care clinic with family focused services. All services are provided by a Family Nurse Practitioner and/or a Certified Nurse Midwife under the direction of a physician. RBS Clinic offers quality family care at all stages of life, from newborn to elderly.

xiv. Executive House Apartments

Executive House Apartments is in Gallatin, TN. This community is comprised of 2 two-story buildings with a total of 39 apartment units: 24 two-bedroom, one bath units and 15 one-bedroom, one-bath units. The property is conveniently located next to campus of SRHS' flagship hospital, SRMC.

xv. Clay EMS

Clay EMS in Celina, TN is the primary pre-hospital emergency medical care provider and transportation service for Clay County. ***NOTE: At the time this report was published, SRHS no longer owns or operates Clay EMS.***

IV. SRHS FY 2006 ECONOMIC IMPACT

A community's healthcare system is an important component of its local economy. Its importance can be measured via the linkages the healthcare sector shares with other local industries.

The impact of SRHS expenditures and SRHS employee spending, known as secondary impacts, are calculated with widely used and accepted economic multipliers, which represent the recycling of local dollars and income. There are three types of multiplier effects: **direct**, **indirect** and **induced multipliers**.

- ✓ The **direct impact** shows initial operational expenditures and wages paid to SRHS employees.
- ✓ The **indirect impact** captures the changes in employment, income, and sales in various industry sectors of the local economy that supply goods and services to SRHS.
- ✓ The **induced impact** - shows the increased activity from household spending of the income earned and various supporting industry sectors of the local economy.

1. OPERATING EXPENDITURES

The economic impact of SRHS, in the six-county region where it has facilities physically located, is generated through its operating and employment expenditures. Operations require substantial spending on staffing, equipment, utilities and other goods and services. When a hospital buys goods and services such as linens, food, office supplies, or utilities, these purchases support other businesses in the region.

The operating and personnel expenditures feed through the local economy creating additional indirect and induced economic impacts in the region's economy as hospitals and their employees spend money. These secondary benefits are measured through multipliers using an input-output model and data from IMPLAN (the model and data are further discussed in Appendix A), a model that is widely used by economists and academics across the United States.

1.1 Impact of SRHS Operating Expenditures on Output

The impact on output represents the amount of local business activity generated as result of SRHS operational activities (see Table 1). This revenue represents sales from suppliers to the healthcare providers. The \$66.4 million in Table 1 represents the direct sales from SRHS. Healthcare vendors are supplied by other vendors, thus creating more employment and income opportunities. Subsequently, the indirect impact is \$4.6 million dollars. Finally, SRHS employees purchase goods and services in the local economy and represent the induced impact on the region. The induced impact on the region's economy is \$5.4 million.

The economic model yields a total output of nearly \$76.6 as shown in Table 1.

TABLE 1, IMPACT OF SRHS' EXPENDITURES ON OUTPUT

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	\$50,411,153	\$3,970,400	\$4,551,139	\$58,932,692
Trousdale Medical Center	\$4,132,248	\$183,041	\$152,862	\$4,468,151
Carthage General Hospital	\$8,075,889	\$235,937	\$345,635	\$8,657,461
Smith County Memorial Hospital*	\$1,247,447	\$36,444	\$53,389	\$1,337,280
Westmoreland Medical Pavilion/Pharmacy	\$1,458,084	\$230,148	\$296,741	\$1,984,973
Trousdale EMS	\$272,047	\$7,099	\$7,617	\$286,763
DeKalb EMS	\$452,833	\$14,989	\$19,836	\$487,658
Clay EMS	\$290,814	\$5,643	\$7,146	\$303,603
Red Boiling Springs Rural Health Clinic	\$137,646	\$4,119	\$5,556	\$147,321
TOTAL	\$66,478,161	\$4,687,820	\$5,439,921	\$76,605,902

* SCMH data for April – May 2006 time period is included in this analysis

1.2 Impact of SRHS' Operating Expenditures on Employment

The employment multiplier demonstrates the relationship between SRHS expenditures and job creation within the local region. The economic model indicates that there are 353 total jobs attributable to SRHS' operating expenditures (Table 2).

TABLE 2, IMPACT OF SRHS' EXPENDITURES ON JOBS

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	191	39	46	276
Trousdale Medical Center	16	2	2	20
Carthage General Hospital	23	2	4	29
Smith County Memorial Hospital*	4	-	1	5
Westmoreland Medical Pavilion/Pharmacy	13	2	3	18
Trousdale EMS	1	0	0	1
DeKalb EMS	1	0	1	2
Clay EMS	1	0	0	1
Red Boiling Springs Rural Health Clinic	1	0	0	1
TOTAL	251	45	57	353

* SCMH data for April – May 2006 time period is included in this analysis

1.3 Impact of SRHS Operating Expenditures on Earnings

Table 3 provides the direct, indirect and induced impact on the region's labor income due to SRHS operational activities. The study indicates that SRHS operational dollars translate into local spending thus, creating additional jobs and generating income in the region. The spillover or indirect impact from SRHS expenditures is estimated to be \$1.6 million. The induced impact is \$1.7 million and results in a total income impact of \$12.8 million earned household income in the region.

TABLE 3, IMPACT OF SRHS' EXPENDITURES ON EARNINGS/INCOME

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	\$7,608,829	\$1,431,969	\$1,444,588	\$10,485,386
Trousdale Medical Center	\$376,010	\$71,132	\$42,370	\$489,512
Carthage General Hospital	\$752,203	\$79,108	\$112,249	\$943,560
Smith County Memorial Hospital*	\$116,189	\$12,220	\$17,339	\$145,748
Westmoreland Medical Pavilion/Pharmacy	\$477,130	\$85,113	\$94,198	\$656,441
Trousdale EMS	\$20,548	\$2,380	\$2,111	\$25,039
DeKalb EMS	\$41,326	\$5,144	\$6,251	\$52,721
Clay EMS	\$19,050	\$1,708	\$2,072	\$22,830
Red Boiling Springs Rural Health Clinic	\$13,004	\$1,297	\$1,624	\$15,925
TOTAL	\$9,424,289	\$1,690,071	\$1,722,802	\$12,837,162

* SCMH data for April – May 2006 time period is included in this analysis

NOTES:

- ✓ * Employment, Labor Income and Output include Direct, Indirect and Induced impacts.
- ✓ Totals may not add up due to rounding.
- ✓ Personal Income and Output are estimated in 2006 dollars.

1.4 Impact of SRHS Operating Expenditures on State, County and City Tax Revenue

SRHS operations generated approximately \$1.5 million in state, county and city tax revenue. Table 4 shows the estimated tax revenue generated by the activities of SRHS affiliates.

TABLE 4, IMPACT OF SRHS' EXPENDITURES ON TAX REVENUE

	Amount
Sumner Regional Medical Center	\$1,246,461
Trousdale Medical Center	\$27,909
Carthage General Hospital	\$127,601
Smith County Memorial Hospital*	\$19,170
Westmoreland Medical Pavilion/Pharmacy	\$48,384
Trousdale EMS	\$2,944
DeKalb EMS	\$7,003
Clay EMS	\$3,551
Red Boiling Springs Rural Health Clinic	\$2,472
TOTAL	\$1,485,495

* SCMH data for April – May 2006 time period is included in this analysis

2. Economic Impact of Spending by SRHS Employees

Employment and payroll are important direct economic activities created from the health care industry. In FY 2006, SRHS employed total of employed **1,287 full-time (job equivalent) employees (FTEs)** and paid **wages and salaries (including benefits) of \$70.9 million**. Table 5 shows the number of FTEs employed by each SRHS affiliate and the respective payroll expenses.

TABLE 5. SRHS' EMPLOYMENT AND PAYROLL

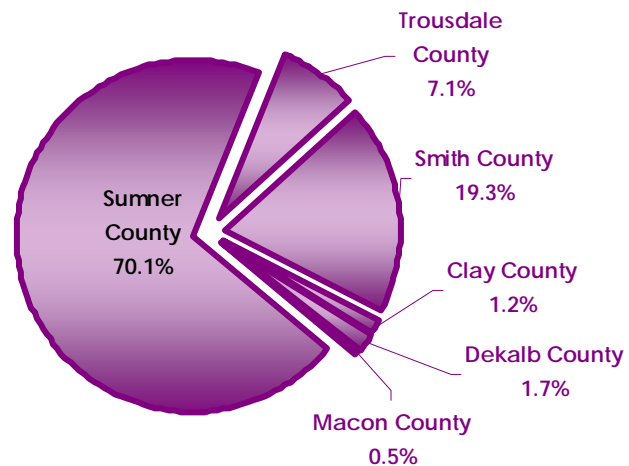
SRHS Affiliates	Number of FTEs	Payroll (inc. benefits)
Sumner Regional Medical Center	894	\$56,932,992
Trousdale Medical Center	74	\$3,823,343
Carthage General Hospital	140	\$6,858,480
Smith County Memorial Hospital*	109	\$954,736
Westmoreland Medical Pavilion/Pharmacy	8	\$427,434
Trousdale EMS	17	\$604,646
DeKalb EMS	22	\$643,164
Clay EMS	16	\$465,847
Red Boiling Springs Rural Health Clinic	7	\$283,376
TOTAL	1,287	\$70,994,018

* SCMH data for April – May 2006 time period is included in this analysis

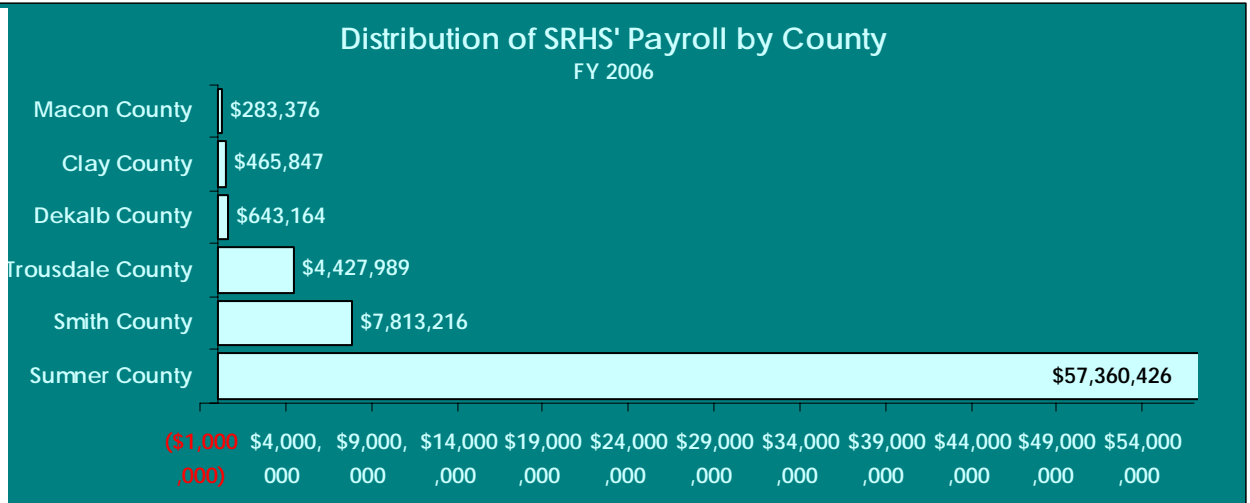
Total FTE Employment by County:

- 902 in Sumner County.
- 91 in Trousdale County
- 249 in Smith County
- 22 in DeKalb County
- 16 in Clay County
- 7 in Macon County

SRHS' Employment Distribution by County



As the graph shows, the majority of SRHS payroll – **80.3%** - was earned by households in Sumner County (TN).



These direct activities account for only a fraction of SRHS' total economic impact. SRHS employees generate an economic impact in the region's economy when they spend their disposable income to buy goods and services within the region, thus, supporting a number of local service jobs such as mechanics, retail clerks, real estate agents and bankers. ***This impact is measurable in terms of increased employment, personal income and output.*** The total impact is the sum of direct, indirect, and induced spending.

2.1 Impact of SRHS Employee Expenditures on Job Creation

About 372 jobs within the region, in addition to the 1,287 direct full-time equivalent jobs, depend upon SRHS employment payroll. ***Annually, the workers in these 372 jobs earn approximately \$11.5 million of personal income, while producing an additional output valued at approximately \$9.6 million (total of \$80.8 million including the direct impact) and generating local tax revenue of \$2.7 million.*** This contribution of each facility is presented in Tables 6 - 8 below.

TABLE 6, IMPACT OF SRHS' EMPLOYEE SPENDING ON JOBS

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	224	41	42	306
Trousdale Medical Center	12	1	2	15
Carthage General Hospital	29	3	4	36
Smith County Memorial Hospital*	4	-	1	5
Westmoreland Medical Pavilion/Pharmacy	2	-	-	2
Trousdale EMS	2	-	-	2
DeKalb EMS	3	-	-	3
Clay EMS	2	-	-	2
Red Boiling Springs Rural Health Clinic	1	-	-	1
TOTAL	279	45	49	372

* SCMH data for April – May 2006 time period is included in this analysis

2.2 Impact of SRHS Employee Expenditures on Income

SRHS employees are paid a total of **\$70,994,018** as shown in Table 5. This income translates into local spending, additional jobs and income in the region. The ripple effect of SRHS employee spending is estimated to be **\$11.5 million in income** (Table 7).

TABLE 7, IMPACT OF SRHS EMPLOYEE SPENDING ON EARNINGS/INCOME

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	\$6,889,529	\$1,427,142	\$1,304,481	\$9,621,152
Trousdale Medical Center	\$301,695	\$34,493	\$30,285	\$366,473
Carthage General Hospital	\$846,358	\$92,065	\$125,679	\$1,064,102
Smith County Memorial Hospital*	\$116,189	\$12,220	\$17,339	\$145,748
Westmoreland Medical Pavilion/Pharmacy	\$47,533	\$9,978	\$9,019	\$66,530
Trousdale EMS	\$46,997	\$5,285	\$4,709	\$56,991
DeKalb EMS	\$75,705	\$8,367	\$11,236	\$95,308
Clay EMS	\$41,968	\$3,482	\$4,476	\$49,926
Red Boiling Springs Rural Health Clinic	\$28,022	\$3,339	\$3,483	\$34,844
TOTAL	\$8,393,996	\$1,596,371	\$1,510,707	\$11,501,074

* SCMH data for April – May 2006 time period is included in this analysis

2.3 Impact of SRHS Employee Expenditures on Output

TABLE 8, IMPACT OF SRHS EMPLOYEE SPENDING ON OUTPUT

	Direct	Indirect	Induced	Total
Sumner Regional Medical Center	\$56,932,992	\$4,307,996	\$4,109,843	\$65,350,831
Trousdale Medical Center	\$3,823,343	\$102,327	\$109,277	\$4,034,947
Carthage General Hospital	\$6,858,480	\$277,220	\$386,980	\$7,522,680
Smith County Memorial Hospital*	\$1,247,447	\$36,444	\$53,389	\$1,337,280
Westmoreland Medical Pavilion/Pharmacy	\$427,434	\$32,343	\$30,855	\$490,632
Trousdale EMS	\$604,646	\$15,688	\$16,993	\$637,327
DeKalb EMS	\$643,164	\$25,896	\$35,655	\$670,163
Clay EMS	\$465,847	\$11,565	\$15,434	\$492,846
Red Boiling Springs Rural Health Clinic	\$283,376	\$10,902	\$11,920	\$306,198
TOTAL	\$71,286,729	\$4,820,381	\$4,770,346	\$80,842,904

* SCMH data for April – May 2006 time period is included in this analysis

2.4 Impact of SRHS Employee Expenditures on State and Local Tax Revenue

Table 9 demonstrates the impact of each SRHS affiliate to the local tax revenue.

TABLE 9, IMPACT OF SRHS EMPLOYEE SPENDING ON TAX REVENUE

	Amount
Sumner Regional Medical Center	\$2,269,105
Trousdale Medical Center	\$107,049
Carthage General Hospital	\$242,135
Smith County Memorial Hospital*	\$33,706
Westmoreland Medical Pavilion/Pharmacy	\$17,036
Trousdale EMS	\$15,613
DeKalb EMS	\$20,665
Clay EMS	\$11,803
Red Boiling Springs Rural Health Clinic	\$2,472
TOTAL	\$2,719,584

* SCMH data for April – May 2006 time period is included in this analysis

3. Economic Impact of SRMC Parking Garage Construction

The project is a 194,000 square-foot, 6-level, 600-space parking garage with brick exterior. The facility has two entry points and is located on the corner of Steam Plant Road and Hartsville Pike in Gallatin, Tennessee. The parking garage houses handicap parking places on its first floor. There are two elevators and two stairways located in the subject facility.

The construction of the SRMC new parking garage has had a great impact on the Sumner County economy. The project generated an estimated **total economic impact of \$12.6 million**. Of this, approximately **30 percent (\$3.8 million) is in the form of wages to local households**.

Spending on construction is estimated to be over \$5 million during Fiscal Year 2006. This is estimated to create an additional:

- ▶ \$3 million in indirect business sales (output).
- ▶ \$3.8 million in household income.
- ▶ A total of 86 jobs.
- ▶ \$231,591 in State/Local tax revenue

TABLE 10. PARKING GARAGE

	Direct	Indirect	Induced	Total
Employment	55	13	18	86
Income	\$2,769,481	\$497,500	\$568,030	\$3,835,011
Output/Business Activity	\$5,767,740	\$1,271,364	\$1,756,466	\$8,795,570

4. Impact of other activities

SRHS provides medical services to patients in Sumner, Smith, Macon, Trousdale, DeKalb and Clay Counties in Tennessee. However, it also draws patients from other surrounding areas as well.

In lieu of taxes, SRHS provides uncompensated care for charity patients and local prisoners. The **uncompensated care in FY 2006 was valued at \$6.24 million**. Of this, \$5.53 million was in charity care and the remainder, \$714,641, was prisoner care.

V. ESTIMATED IMPACT OF SRHS ACTIVITIES IN FY 2006-2009

TIME PERIOD

1. FUTURE CONSTRUCTION

SRHS is expected to begin a number of construction projects that will be completed in the next few years with an estimated construction cost of \$74.6 million. These expenditures create significant construction employment and are part of the significant impact SRHS has on the region's economy.

1.1 New Patient Tower Construction

The project consists of additions and renovations to the existing Sumner Regional Medical Center located in Gallatin, Tennessee. New construction will consist of approximately 198,000 square feet and include the following services:

- ✓ **Level One:** Powerhouse, Emergency Department, Imaging, Security
- ✓ **Level Two:** Admissions/Registration, Patient Financial Services, Pre-Admission Testing, Medical Staff Services, Physicians Lounge. Existing Same Day Surgery Expansion, Administrative Board Room, Unassigned Space
- ✓ **Level Three:** Surgery, Recovery, Central Sterile, Labor and Delivery
- ✓ **Level Four:** CCU, CCU Shell-In Area, Respiratory Therapy Storage
- ✓ **Level Five:** 24 Bed (Private) Medical/Surgical Unit
- ✓ **Level Six:** 24 Bed (Private) Medical/Surgical Unit
- ✓ **Level Seven:** 24 Bed (Private) Medical/Surgical Unit

In addition, each level will contain appropriate horizontal and vertical primary circulation, public spaces and MEP space requirements. All new medical/surgical private patient rooms will incorporate the "Wellness Environments" concept. The seven-level tower will be designed structurally to accommodate one additional level of vertical expansion in the future.

Renovation will consist of approximately 21,000 square feet and include Obstetrics Post Partum Unit, Nursery, Labor and Delivery.

Initiation of construction is scheduled to occur during the fourth quarter, 2006 with the implementation of a "Part A" early construction package. Estimated duration of new construction is 18 months, with an additional 8 months of renovation work.

The construction of the SRMC new patient tower will have a great impact on Sumner County's economy. This project is estimated to generate a **total economic impact of \$122.3 million**. Of this, approximately **31 percent (\$38.8 million) is in the form of wages to local households**.

The estimated development cost (construction, survey, testing and professional fees) is approximately \$80 million. This is estimated to create an **additional:**

- ▶ \$29.9 million in indirect business sales (output).
- ▶ \$38.8 million in household income.
- ▶ A total of 877 jobs.
- ▶ \$2,605,014 in State/Local tax revenue

TABLE 11. New PATIENT TOWER

	Direct	Indirect	Induced	Total
Employment	571	127	179	877
Income	\$28,303,518	\$4,710,940	\$5,799,800	\$38,814,259
Output/Business Activity	\$53,655,456	\$12,073,948	\$17,795,377	\$83,524,780

* Totals may not add up due to rounding

1.2 **Healthplex & Wellness Center Construction**

The construction of SRHS Healthplex & Wellness Center will have a significant economic and fiscal impact on the Sumner County's economy. This project is estimated to generate a **total economic impact of \$35 million**. Of this, approximately **30 percent (\$10.3 million) is in the form of wages to local households**.

Spending on construction is estimated to be over \$17 million during fiscal year 2007. This is estimated to create an additional:

- ▶ \$7.5 million in indirect business sales (output).
- ▶ \$10.3 million in household income.
- ▶ A total of 299 jobs.
- ▶ \$634,045 in State/Local tax revenue

TABLE 12. Healthplex & Wellness Center

	Direct	Indirect	Induced	Total
Employment	222	34	43	299
Income	\$7,761,034	\$1,252,957	\$1,359,072	\$10,373,063
Output/Business Activity	\$17,000,000	\$3,362,960	\$4,275,987	\$24,638,947

1.3 Residential Hospice Construction

Residential Hospice care occupies a specialized and growing niche in the healthcare industry.

Spending on the Residential Hospice construction is estimated to be over \$4 million during. This is estimated to create an additional:

- ▶ **\$5.9 million in output/business activity.**
- ▶ **\$2.4 million in household income.**
- ▶ **A total of 71 jobs.**
- ▶ **\$ 157,870 in State/Local tax revenue**

TABLE 13. Residential HOSPICE CONSTRUCTION

	Direct	Indirect	Induced	Total
Employment	52	8	11	71
Income	\$1,826,126	\$294,813	\$356,821	\$2,477,760
Output/Business Activity	\$4,000,000	\$791,285	\$1,124,049	\$5,915,334

2. SRHS OPERATIONS AND EMPLOYEE SPENDING

A period of four fiscal years was utilized to measure SRHS' total impact. Included in this measurement period are all currently announced constructions projects as well as SRHS operational activities. With regards to SRHS operational activities, a simplistic and conservative assumption was made that SRHS FY 2006 operational activities would remain unchanged through FY 2009.

Assuming that SRHS activities and other sectors of the area economy would maintain the same growth patterns as exhibited during the preceding year, the aggregate, four-year economic impact of SRHS is estimated to be **\$940,829,934 million**. Of this:

- Approximately **seventeen percent** or **\$156,869,255** is generated **local income** for local households.
- **\$783,960,679** in **local business activity/output**

In addition, SRHS activities are expected to generate **estimated state, county and city tax revenue of \$21,228,340** and a total of **4,359 jobs**.

VI. CONCLUSION

Health care employees and health care expenditures are important components of an area's economy. This analysis highlights the economic impact of Sumner Regional Health Systems. The economic impact is measured by the direct **jobs**, **income**, **output** and **tax revenue** associated with the SRHS' operations and payroll. Furthermore, SRHS has indirect impacts on the local economy, creating additional jobs and income in other sectors.

1. SRHS FY 2006 Impact (Operations, Payroll and Parking Garage Construction)

Study findings show that Sumner Regional Health Systems has a staggering impact on the region's economy. **The SRHS hospitals and affiliates** generate a combined impact of:

- A total of **2,098 FTE Jobs**
 - ▶ 1,287 direct jobs.
 - ▶ 352 indirect and induced FTEs from *SRHS operations*.
 - ▶ 373 indirect and induced FTEs from *SRHS payroll/ employee spending*.
 - ▶ 86 indirect and induced FTEs from *SRHS construction activities (SRMC Parking Garage)*.

- A total of **\$99,169,646 Personal Income in the region**
 - ▶ \$70,994,018 direct personal income (from payroll).
 - ▶ \$12,837,162 indirect and induced personal income from *SRHS operations*.
 - ▶ \$11,503,455 indirect and induced personal income from *SRHS payroll/ employee spending*.
 - ▶ \$3,835,011 indirect and induced personal income from *SRHS construction activities (SRMC Parking Garage)*.

- A total of **\$128,687,983 in Output/Business Sales**
 - ▶ \$66,478,161 direct output.
 - ▶ \$10,127,741 indirect and induced output from *SRHS operations*.
 - ▶ \$9,558,802 indirect and induced output from *SRHS payroll/ employee spending*.
 - ▶ \$8,795,570 indirect and induced output from *SRHS construction activities (SRMC Parking Garage)*.

- **A total local Tax Revenue of \$4,436,670**
 - ▶ Estimated local tax revenue of \$1,485,495 from *SRHS operations*.
 - ▶ Estimated local tax revenue of \$2,719,584 from *SRHS payroll/employee spending*.
 - ▶ Approximately \$231,591 local tax revenue generated from *SRHS construction activities (SRMC Parking Garage)*.

2. SRHS FY 2007 – FY 2009 Construction Impact

Construction projects that will begin by late 2006 and early 2007 (i.e., New Patient Tower on SRMC campus, Healthplex & Wellness Center, and Residential Hospice), are estimated to generate:

- **1,247 jobs (mainly construction)**
- **\$51.6 million is local income** presented in the form of wages to local households.
- **114,079,062 will be business activity/output** (direct, indirect and induced) for local businesses.
- In addition, the construction projects are estimated to create an additional and generate approximately **\$3,396,929 in local tax revenue**.

While the estimates of economic impact are substantial, they represent only a portion of the overall benefits to the region. Following are some additional key benefits:

- ✓ Sumner Regional Health Systems represents one of the largest employers in the area and also serves as one of the largest contributors to income.
- ✓ Sumner Regional Health Systems helps to enhance community services and the quality of life for community residents.
- ✓ The attraction and retention of new business and retirees also depends on access to adequate health care services.
- ✓ Also contributes substantially to retail sales in the region.

In summary, Sumner Regional Health Systems is an engine for the region's economy by providing jobs, income and helping improve the county's quality of life.

APPENDIX A: METHODOLOGY OF ECONOMIC IMPACT ANALYSIS

An economic impact analysis measures an organization’s total economic effect on the region. The total economic effect is derived not only from the direct expenditures made by the organization in the geographic area under analysis, but also from the economic benefits that accrue to local businesses and households from the re-circulation of this money. This approach requires understanding the nature and extent of an organization’s local expenditures to calculate how they affect overall business sales, household earnings, and employment in the region.

Economic impact analyses multiply local expenditures by an industry and location specific factor that reflects how much *indirect* business activity, earnings, and employment will result after the initial spending or investment has occurred.

Measuring the **indirect** and **induced** impacts related to the payroll, operations and capital expenditures of Sumner Regional Health Systems is made possible by multipliers derived from an input-output table for Sumner County.

The IMPLAN model was used to generate the economic impact of Sumner Regional Health Systems in Sumner County, TN. IMPLAN (**IM**ppact **AN**alysis for **PL**ANNing) is an input-output model that is used to estimate the economic impact of economic changes within a given area.

The total economic impact of Sumner Regional Health Systems in Sumner County is the sales, income, and jobs of SRHS plus its direct, indirect, and induced impacts on the local economy. More simply stated, the total economic impact is the value of SRHS’ expenditures plus the value of any other local economic activity that is directly or indirectly linked to it.

Definitions

Economic Impact Multipliers - The impact of local health care expenditures and health care employee expenditures are called multiplier effects. Multiplier effects are a simplified way of representing these economic effects in a local economy. The multiplier is interpreted as the impact of a one-unit change in sales, employment, or income that results in a total dollar employment, or income, impact on the local economy.

In essence, the multiplier represents the recycling of local dollars and income. This recycling process creates additional jobs and income in the region. Leakage of dollars and income out of the county, via taxes or non-local spending, reduces the size of the multiplier effect and reduces the potential size of the local economy.

The economic impact includes three components:

- ✓ The **direct impact** - comprises initial operational expenditures and wages paid to employees in the health care sector of the local economy.
- ✓ The **indirect impact** - captures the changes in employment, income, and sales in various industry sectors of the local economy that supply goods and services to the health care sector.
- ✓ The **induced impact** - shows the increased sales from household spending of the income earned in the health care sector and various supporting industry sectors of the local economy.

Personal Income – consists of employee compensation and proprietor income (payments received by self-employed individuals as income).

Local Tax Revenue – consist primarily of excise and sales taxes paid by individuals to businesses. These taxes occur during the normal operation of these businesses but do not include taxes on profit or income.

APPENDIX B: ABOUT THE ECONOMIC STRATEGY CENTER

The Economic Strategy Center is an economic research and analysis firm. The ECS focuses specifically on applying state-of-the-art tools and techniques for evaluating the *past*, *present* and *future* economic impacts of policies, programs, facilities and industries.

The ESC's analytical expertise is supported by thorough, in-depth research, utilizing an array of local and national sources.

The Economic Strategy Center has provided research and economic analysis services to hundreds of organizations throughout the U.S. The ESC performs studies in each client's region to identify economic trends and measure each program's economic impact in the local economy. The ESC produces relevant, realistic, results-oriented proof of an organization's effectiveness by quantifying its return on investment (ROI).

The ESC helps clients address three types of issues:

- **Market Analysis** - How will my organization be affected by changes in the economy? What should I do to respond to them?
- **Cost/Benefit Analysis** --What will be the economic impact/benefits and costs of my project/program? What should I do to maximize net value? What is the best way to communicate our value?
- **Economic Strategy** -- How can my project/program affect business growth and attraction? How can I best target my efforts?

The ESC has the skill and broad experience in turning complex data into information that leads to **strategic decisions** and the realization of **aggressive goals**. The ESC's products provide clear, yet sophisticated analysis **customized to meet** the particular needs of each organization.

The ESC is an accredited member of the **American Economic Association**, **National Association for Business Economics**, **ACCRA - The Council for Community and Economic Research** and **International Economic Development Council**.

The Economic Strategy Center is headed by **Juli Golemi**, a trained economist with a strong research and analysis background. Juli earned her Master's Degree in Economics from Middle Tennessee State University and completed studies at Vanderbilt University and England's Cambridge University.

Before joining the Economic Strategy Center, Juli was Director of Research for Target Market Development, Inc. in Nashville, TN, where she identified business trends and issues affecting a wide range of business and economic sectors. Juli also was an Adjunct Professor at Columbia State Community College where she taught Principles of Macroeconomics. Earlier, as a research associate to the former President of the Federal Reserve Bank (Southern Region), Juli's research was often utilized for presentations, academic papers and professional journals.