Research & Analytical Services A Unit of Information Services & Planning Division

Summer 2010

Volume 25, Issue 1

Research Briefs

KEY FINDINGS

- STC students enjoy a 15.4% real rate of return on their investments of time and money.
- Over the course of a working lifetime, the average associate's degree graduate in the STC Service District earns \$320,000 more than someone with a high school diploma.
- Every dollar of state and local tax money invested in the College today yields a cumulative of \$14.20 in benefits that accrue to all Texas residents.
- STC recovers all state and local government costs of supporting it, and even generates a small surplus.

IMPLICATIONS

For Practice:

- Publicize the findings of economic impact studies to all stakeholders utilizing various internal and external communication outlets.
- Draw on the findings as a justification for continued public financial support for STC as necessary.

For Policy:

 Periodically repeat economic impact studies as enrollment continues to grow.

For Research:

 Triangulate with qualitative studies to recognize the praises and concerns from the community regarding STC Service District's future education needs.



The Economic Contribution of South Texas College Changing Lives, Changing Communities

FY2009

South Texas College (STC) has witnessed phenomenal growth—from just 1,000 students in 1994 to more than 28,000 in spring 2010—because of a population eager for a chance to improve their lives. STC is not only a primary source of post-secondary education to residents in its service district (Hidalgo and Starr counties) but also is an employer and a buyer of goods and services, hence, STC promotes economic growth in more than one way. The information presented in this brief displays the economic impact of STC's presence and of the education it provides.

Background

STC takes pride in its role to foster an environment for the students and community to achieve a better quality of life and to serve as the cornerstone for the economic vitality of South Texas. By raising the skill level of the labor force and increasing consumer spending, STC serves as the catalyst for regional economic prosperity and social mobility. Economic impact analysis of a higher education institution estimates the direct and indirect effects of expenditures incurred because of the institution's presence on the local or state economy. These impacts can include institutional expenditures on services and supplies, expenditures by faculty and staff from salaries and wages paid by the institution, and student expenditures for items such as housing, transportation, and groceries. STC employed two methods to estimate its economic impact. First, internally, the College calculated a total tangible economic impact cashflow based on Caffrey and Isaacs model¹. Second, the College supplemented the cash-flow model by outsourcing a more detailed economic impact study conducted for STC by the Economic Modeling Specialists Inc. (EMSI)².

Purpose of Study

These two economic impact studies have been undertaken to demonstrate that both the STC Service District and the state of Texas economies benefit from the presence of the College. Specifically, the College wanted to assure to all stakeholders that postsecondary degrees and certificates awarded by STC have significantly positive economic effects on students as well as the community overall, that STC is a great investment for students and taxpayers, and that the College contributes to the economic vitality of the region.

Methodology

The first method involved estimating the economic impact of the College, by means of the Caffrey and Isaacs model, for the fiscal year 2009 (FY2009) from the portions of employee salaries, student expenditures, institutional expenditures, and new construction spent

locally, supplied by the Business Office at STC. For the alternate method, Research and Analytical Services (RAS) and the Comptroller's office at STC provided institutional and financial data to EMSI who in return prepared a detailed economic impact analysis made of two parts: investment analysis and economic growth analysis.

Research Questions

In this brief, the readers can find answers to the following questions:

- What are the findings of both economic impact studies?
- What are the differences and similarities of the two methods in estimating STC's contribution to the vitality of the local economy?
- How do these findings complement, strengthen, and validate one another?

Findings

Caffrey and Isaacs Model

The local purchases of goods and services by the College and its faculty, staff, and students totaled

¹ Caffrey, B., and Isaacs, P. (1971), Estimating the Impact of a College or University on the Local Economy, Washington, D.C., American Council on Education. ² http://www.economicmodeling.com/

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The Economic Contribution of South Texas College (cont.)

to nearly \$79 million, which is the direct economic impact of STC. These moneys trigger additional business volume in the local economy as they are re-spent by local businesses for purchases from other local businesses. This recycling process continues with diminishing amounts (due to taxes paid and money spent outside the region). Using a recycling multiplier (this value can range from a conservative 1.8, to a median 2.4, to a liberal 3.0), the total economic impact is calculated from the direct impact. Accordingly, the total economic impact of STC could have been as high as \$231 million in FY2009 (see Figure 1).

EMSI's Economic Impact Study

From an investment standpoint, STC students enjoy a 15.4% real rate of return on their investments of time and money. It is estimated that every dollar of state and local tax money invested in the College today yields a cumulative of \$14.20 in benefits that accrue to all Texas residents, in terms of added taxable income and avoided social costs. State and local taxpayers earn a 3.2% real rate of return (6.2% nominal rate) on their investment in STC (see Table 1). From an economic growth perspective, STC affects the local economy in three ways: (1) it is

estimated that the STC Service District economy receives a net of \$68 million in added labor and non-labor income due to STC operations each year, (2) the offcampus spending of STC's non-local students generates approximately \$826,100 in added income in the STC Service District economy each year, and (3) it is estimated that the accumulated contribution of STC instruction received by former



students (both completers and noncompleters) annually adds some \$107.4 million in income to the STC Service District. Altogether, the average annual added income due to the activities of STC and its former students equals \$176.2 million. This is approximately equal to 1.3% of the total STC Service District economy (see Table 2 and full report³).

How do the models compare?

Caffrey & Isaacs model focuses on demand-side effects of expenditures and their multiplier impact on the economy. It is a quick and simple way of looking at the monies injected into the region's economy due to the College's existence and how much total impact is created due to

Table 1

Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
Student Perspective	15.4%	5.2	9.7
Social Perspective	NA	14.2	NA
Taxpayer Perspective	3.2%	1.0	25.3
			
	Table 2		
ECONOMIC GROWTH RESU	LTS AT A GLANCE		J P - HE KED DIKK, M P
ECONOMIC GROWTH RESU	LTS AT A GLANCE	Total Added Inco	me (\$ Millions)
ECONOMIC GROWTH RESU	LTS AT A GLANCE	Total Added Inco	me (\$ Millions)
	LTS AT A GLANCE		me (\$ Millions) Produc-
Added Income	LTS AT A GLANCE	Total Added Inco	Produc- tivity
Added Income College Spending Effect	\$68,027,000	Spending	Produc-

recycling of those monies in the region. EMSI's economic study makes use of an input-output which also calculates supply effects in addition to the demand-side effects. The supply effects stem from human capital generation through education (credit hours taken, certificates and degrees earned by students within that year). Social benefits from increased education are quantified as well. To sum up, these two models complement one another in the sense that Caffrey & Isaacs model can be the starting point to a comprehensive economic impact study. After clear-cut results it provides rapidly, a more detailed input-output model, such as EMSI's, can be employed to obtain a more detailed analysis broken down into categories (e.g., student perspective, social perspective, student productivity effect).

Implications for Further Research and Practice

The results demonstrate that STC is a great investment from multiple perspectives. The college enriches the lives of students and increases their lifetime incomes. It benefits taxpayers by generating increased tax revenues from an enlarged economy and reducing the demand for taxpayer-supported social services. Finally, both models assert that it contributes to the vitality of the local economy.

> The preceding analyses provide justification for continued public financial support for STC. As STC continues to lead the transformation of the region to a "collegegoing" culture, whereby attending and completing higher education is expected for all, and enrollment grows even more, its economic impact is expected to increase. STC plans to periodically repeat economic impact studies to monitor how notably it is changing lives and changing communities.

³ http://isp.southtexascollege.edu/ras/research/economic_impact_study.html