

The Economic Impacts of Angelo State University

Prepared by:

Bradley T. Ewing, Ph.D.
Rawls Professor of Operations Management
Texas Tech University
Rawls College of Business
(806) 742-3939
bradley.ewing@ttu.edu

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Executive Summary

The main campus of Angelo State University operates in San Angelo, Texas. The university currently enrolls 6,300 students and plans to increase that number to 10,000 by the year 2020. The school has gained a reputation as one of the nation's best colleges for programs in the liberal arts, sciences, and professional disciplines.

This study provides estimates of the economic impact of Angelo State University on Tom Green County in the year 2009. In addition to the ongoing operations and payroll impacts of the university, the specific impacts of student spending and visitor-related spending are provided. The study also highlights the annual workforce contribution for the state of Texas from the graduates of Angelo State University.

The *Current* Impact of Angelo State University on the Tom Green County Economy

- Angelo State University operations, employees, students and visitors, currently generate a total economic impact of \$208.5 million per year for the Tom Green County
- Angelo State University helps sustain over 2,000 jobs in Tom Green annually
- The economic impact of the Angelo State University includes an annual household earnings impact of nearly \$102 million
- Angelo State University students spend money locally and contribute to the economic impact of the university. The share of total impacts attributed to student spending is:
 - \$74.7 million in economic output
 - \$20.4 million in household income
 - 828 jobs
- Angelo State University visitor-related spending contributes to the economic impact of the university. The share of total impacts attributed to visitor-related spending is:
 - \$14.2 million in economic output
 - \$4.5 million in household income
 - 190 jobs

Graduates of Angelo State University add annually to the stock of human capital and skilled workforce in Texas and provide economic value to the Texas economy:

- The annual contribution to the Texas workforce by graduates of Angelo State University is \$484 million

The Economic Impacts of Angelo State University

Introduction

Angelo State University is the second largest institution in the Texas Tech University System and enrolls more than 6,300 students at its main campus in San Angelo. Recently, Angelo State earned national recognition from the *Princeton Review* as one of the nation's "Best 371 Colleges" and from the *Chronicle of Higher Education* as one of the "Great Colleges to Work for."

Today, Angelo State offers nearly 100 degree programs and has more than 27,000 alumni around the globe. Under the leadership of President Joseph Rallo, Angelo State is committed to the System's vision of increasing enrollment to 10,000 students by the year 2020. This vision would bring nearly 3,700 more students to Angelo State in the next 10 years, growing student enrollment by more than 55 percent.

Taken together, Angelo State University is a powerful and substantial economic force in the city of San Angelo, Tom Green County and beyond. Angelo State University expenditures on educational and administrative services, building supplies, equipment, maintenance, repair and construction as well as spending by Angelo State University employees, students, and visitors generates substantial economic impacts for the region. Moreover, with a larger student body these impacts will grow significantly larger over time.

History

Angelo State University was founded in 1928, opening its doors with an enrollment of 112 students at its first location near downtown San Angelo. Originally named San Angelo Junior College, the university was established after an immense amount of community support from the citizens of San Angelo, who raised funds for the college through local contributions and a self-imposed city tax.

The university officially broke ground on the Administration Building at its current location in 1947 and formally became a state-supported institution after Gov. John Connally signed legislation in 1963. Two years later, the university changed its name and became known as Angelo State University in 1965. On Sept. 1, 2007, Angelo State joined the Texas Tech University System with legislative approval and Gov. Rick Perry's signature.

Purpose of this Study

The purpose of this study is to estimate the economic impact of Angelo State University on the city of San Angelo and Tom Green County. In addition to the operational impacts of the university, this study sheds light on the impacts associated with student spending and university visitor-related spending. A special feature of this study is an analysis of the workforce contribution that Angelo State University graduates make to the state of Texas on an annual basis.

For purposes of determining the economic impact of the Angelo State University on the greater San Angelo area, the study is limited to Tom Green County. To the extent that Angelo State University operates (i.e., hires employees from Fort Worth or Austin, etc.) and purchases goods and services outside this region, the results of this analysis may be understated.

Tom Green County

Tom Green County is situated in West Texas in an area known for ranching and the Concho River. The county covers approximately 1,522 square miles. The county has an estimated 2009 population of 108,378. The county is comprised of nearly 42,000 households and the median household income is over \$42,000 (est. 2009) although roughly 15 percent of the residents live below the poverty line. Total personal income exceeds \$3.5 billion (est. 2009).

The population of Tom Green County is fairly well-educated, which is not surprising given it is home to Angelo State University. In fact, 76 percent of the population over the age of 25 are high school graduates, while nearly 20 percent of the population holds a Bachelor's degree or higher. The greater San Angelo area features a diverse economic environment with over 57,000 persons employed in the county and 203 distinct industrial sectors (NAICS) represented in the economy.

The Ongoing Operations of Angelo State University

The organization's operating budget was examined in order to determine the economic impact of Angelo State University. These expenses included payroll and employee benefits as well as expenditures on supplies, purchased services, and other items. Moreover, Angelo State University is an enterprise that is continuously maintaining, renovating, and adding new facilities and physical capital on a yearly basis. In any given year, Angelo State University has significant capital needs and spends accordingly. The economic impact analysis is premised on both standard operating expenses, including payroll, and capital spending. The university divides the operating budget into four main categories or funds: educational & general, auxiliary, current restricted, and designated.

According to the Angelo State University, Summary Operating Budget for Fiscal Year 2009, these funds total \$93,611,494.

Angelo State University employs nearly 800 faculty and staff and payroll (i.e., wages and salaries) accounts for a significant portion of the operating budget. In 2009 there were 254 faculty and more than 500 staff. The expenditures made by Angelo State University faculty and staff on goods and services, housing, and other items provide a significant contribution to the region's economy.

Primary Impacts of Angelo State University Operations and Employees

ASU Employees (faculty and staff)	767
ASU Expenditures	\$93,611,494

Secondary Impacts from Angelo State University Operations and Employees

Jobs	305
Household Income	\$15,143,141
Output	\$25,927,078

Sub-Total: *Impacts of Angelo State University Operations and Employees*

Jobs	1,072
Household Income	\$76,683,994
Output	\$119,538,572

Angelo State University Students and Local Spending

Angelo State University enrolls nearly 6,400 students. Of this amount close to 25 percent of students reside on-campus. Of these, more than 2,500 students are from Tom Green County and the seven adjacent counties (referred to as “within region” students) and over 3,800 are from outside the local region.

In terms of local economic impact, only the spending by non-local students adds directly to the economic base of Tom Green County. This is because local students would presumably live and spend their money here anyway. Of course, to the extent that local students remain in the area and attend Angelo State instead of another out-of-region college (e.g., Texas State University, Tarleton State University, Texas A&M University – Kingsville), then their not leaving the county reduces the “leakage” of income to other areas and effectively works in favor of the San Angelo economy. Furthermore, only expenses on such things as

room and board, transportation, books and supplies, and other personal expenses are included in the economic impact of student spending (i.e., tuition and fees, a significant cost of obtaining an education, are already included in the education and general funds of the operating budget of the university).

The College Board provides estimates of expenses for students at public 4-year colleges in the Southwest. Over the typical school year, the average student spends \$13,454 (est. 2009) beyond tuition and fees. Angelo State students are projected to spend nearly \$66.94 million in San Angelo during the 2009-10 academic and summer terms. To some degree, student spending in 2009 was probably affected by the recent recessionary economy. While Tom Green County fared reasonably well during this downturn, the spending patterns of many out-of-region students may have been more economical than in periods of economic expansion.

Impacts from Angelo State University Student Spending

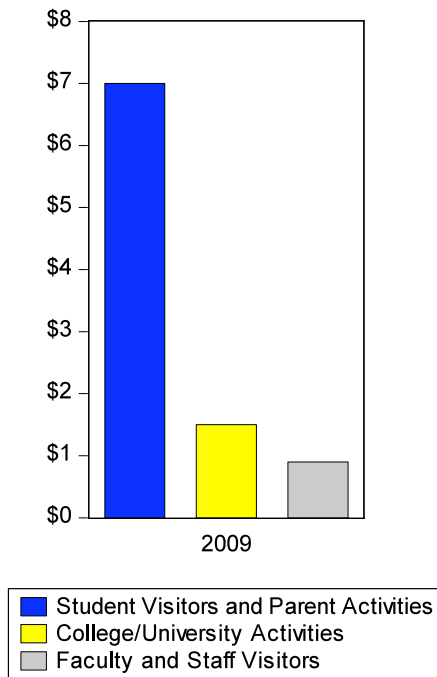
Jobs	828
Household Income	\$20,387,678
Output	\$74,682,134

Angelo State University Visitor-Related Spending

Angelo State University attracts thousands of visitors each year who come for a variety of events including concerts, reunions, museum, athletics and art performances. Additionally, many university programs, colleges and departments attract visitors to participate in interviews, campus tours, enrollment programs, and to accompany students to campus and attend graduation ceremonies. The campus is also host to many conferences, outreach programs and other university-sponsored activities. Many of these visitors are from out of town and stay in local hotels and motels, dine in local restaurants, and make purchases at many retail establishments.

It is estimated that university visitor-related spending amounted to \$9.4 million in 2009. The largest portion of this spending is attributed to student visitors and parent activities (\$7 million), followed by college/university activities whose visitors travel expenses were not covered by university funds (\$1.5 million), and faculty and staff visitors (\$0.9 million).

2009 University Visitor-Related Spending (\$ million)



Impacts from Angelo State University Visitor-related Spending

Jobs	190
Household Income	\$4,548,876
Output	\$14,245,815

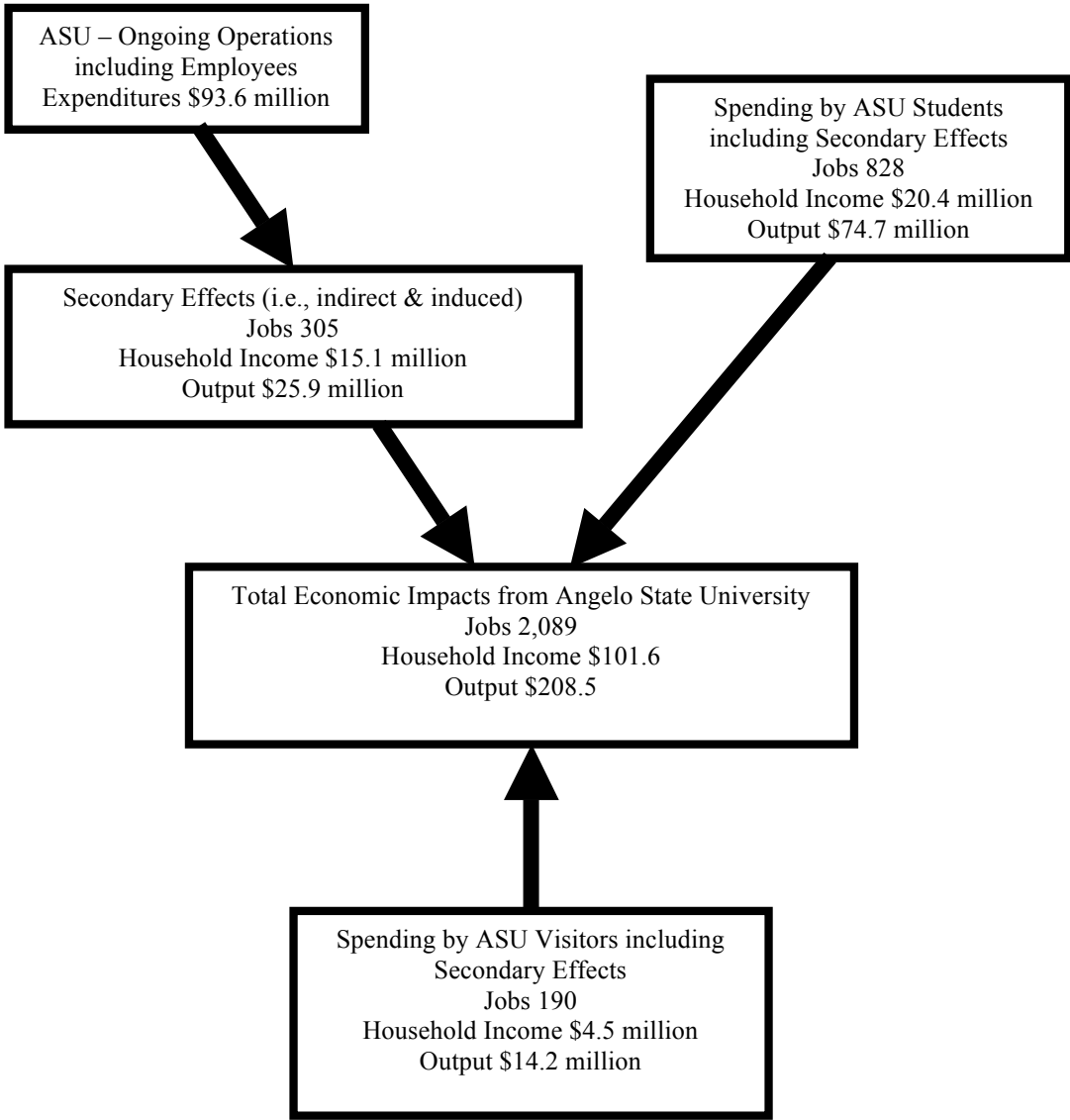
Summary of Economic Impacts of Angelo State University on the City of San Angelo – Tom Green County Economy in 2009

The total economic impact of Angelo State University on the San Angelo area economy is comprised of the local impacts from ongoing operations, payroll and employment, spending by students and university-related visitors. In all, the direct and secondary economic impacts associated with the Angelo State University enterprise account for 3.6 percent of total employed persons and more than 2.8 percent of total personal income in the county. Moreover, the amount of total output that arises as a result of Angelo State University amounts to nearly 5 percent of Tom Green County’s Gross Regional Product.

Total Impacts of Angelo State University Operations, Employees, Students, and University-related Visitors

Jobs	2,089
Household Income	\$101,620,548
Output	\$208,466,521

The accompanying schematic diagram illustrates these impacts and highlights the components that comprise the *local* economic impacts of the Angelo State University.



Employment

Angelo State University employs more than 760 faculty and staff. The amount of spending by the university as well as the spending by Angelo State University employees and students on goods and services sustains more than **2,000 jobs** in the greater San Angelo economy. All told, this represents 3.6 percent of the total employment in the county.

Household Income

Of the total economic activity generated by Angelo State University, close to **\$102 million** is in the form of household income to the citizens of Tom Green County. This impact alone accounts for nearly 3 percent of the total personal income in the county. More importantly, this impact is on an annual basis and growing each and every year.

Output

The ongoing operations and related expenditures of Angelo State University lead to total economic impacts (i.e., output) of over **\$208 million** per year. This large impact on output is distributed across many industries in the area and felt by nearly every Tom Green County household in one way or another. In fact, the economic impact of Angelo State University is far-reaching and certainly goes beyond the limited area that this study addresses.

Angelo State University's Skilled Workforce Contribution

The education that Angelo State University provides students adds annually to the overall human capital and earning power of the workforce. Economic studies have documented the differences in income earning potential of various degree attainment levels, particularly as compared to workers with only a high-school degree or equivalent. According to Kantrowitz (2007), these income differentials measured in lifetime earnings are substantial. The accompanying table shows how much more a person with a university degree earns over their lifetime than a person with just a high school degree earns over their lifetime. The income differences are shown in present dollars (i.e., inflation effects have been removed):

Degree Attained	Lifetime Income Difference Between Highest Degree Attained and a High School Degree (\$ million, today's dollars)
Master's	\$1.81
Baccalaureate	\$1.21

Associate's	\$0.39
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Lifetime earnings differences are used to estimate the economic value of Angelo State University's contributions to the Texas workforce. The economic value is based on the number of graduates in a year (i.e., 2009), by degree attained, and the corresponding lifetime earnings difference with two adjustments. First, for purposes of this study, it is assumed that 75 percent of Angelo State University graduates remain and work in the state of Texas. Labor economists have determined that a large share of the earnings difference between those with university degrees and those without is attributable to *self-selection bias* and/or various *unobservables* such as drive, motivation, natural ability, etc. Thus, a second adjustment is made such that only 50 percent of the earnings differences of those graduates remaining in Texas is attributable to the education received at Angelo State University. In a further attempt to be as conservative as possible, the economic value of workforce contribution does not contain a multiplier.

The annual contribution to the Texas workforce from the graduates of Angelo State University is estimated to be **\$484 million**. Clearly, the impact of an educated population and workforce may be the single most important benefit that an institution of higher education may provide.

**Summary of Economic Impacts of Angelo State University
on Tom Green County Economy, 2009**

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Impacts from Angelo State University Student Spending

Jobs	823
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Impacts from Angelo State University Visitor-related Spending

Jobs	190
Household Income	\$4,548,876
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Total Impacts of Angelo State University Operations, Employees, Students, and University-related Visitors

Jobs	2,089
Household Income	\$101,620,548
Output	\$208,466,521

ASU: A Major Force in the Economy

Angelo State University is the fourth largest employer in Tom Green County. The volume of spending by Angelo State University faculty and staff sustains numerous jobs in the area. Moreover, many Angelo State University employees have relocated to San Angelo specifically to work at the university. This in-migration of individuals from other areas works to strengthen the local economy. While Angelo State University's campus operates in San Angelo, a large percentage of the students come from outside the immediate area.

In economic terms, Angelo State University is referred to as an *export* industry, that is, Angelo State University generates revenues from students outside the greater San Angelo region. These students, by choosing the educational services and opportunities provided by Angelo State University, direct revenues into the San Angelo area instead of, for example, Fort Worth, Austin, Midland or elsewhere. This new money in the local economy acts to reinforce Angelo State University's role as a major force in economic development and helps to sustain the economic activity of the region. Angelo State students generate substantial economic benefits to the people and business owners who live and work *within* the San Angelo area.

Adding to the positive economic benefits that students who reside outside of the region provide to the San Angelo area, is that many local college students decide to attend Angelo State, thus keeping dollars in the area instead of "leaking" out to other cities (e.g., Abilene, Austin, San Marcos, etc.).

There are many other benefits that Angelo State University bestows on the San Angelo area and, indeed, on the state of Texas and beyond. Most importantly, economists have documented the relationship between education and earnings, productivity, health, and longevity. By providing higher educational and related services to persons in West Texas, Texas and beyond, the levels of educational attainment, work force success, overall societal welfare and standard of living are higher than they would be otherwise. The economic value of Angelo State University's contribution to the workforce may have the largest impact of any other activity on the state economy.

Angelo State also impacts the community and local economy in other ways. For example, Angelo State University draws spectators for athletic events and audiences for cultural events and graduation ceremonies. Parents, family and friends come to San Angelo to visit students, faculty and staff while many college and university departments host events and activities that draw visitors from many places. The spending during these campus visits by out of town persons or by people that would otherwise have decided to stay home that day constitute another avenue for generating economic impacts in San Angelo. Additionally, Angelo State offers a number of cultural and educational programs, as well as facilities, to

the public and thus provides intangible benefits that improve the quality of life of those in the local community.

Clearly, a substantially larger university, with more students, staff and faculty, and continuing improvements in academic excellence provides enormous growth potential and will help maintain a sustainable economic environment in which San Angelo area businesses, households, and citizenry can prosper.

Economic Impact Analysis - Methodology

In order to support Angelo State University's mission of preparing students to be responsible citizens and to have productive careers, a number of expenditures are made that impact the local economy. The economic impact of Angelo State University is measured from spending on payrolls, operating expenses, and capital spending (e.g., construction projects), which in turn generate jobs and income in the San Angelo regional economy. Additionally, a large number of students from outside the immediate region attend Angelo State University. While attending school, these students live and spend money in San Angelo which generates jobs and income in the regional economy. This report provides a measure of the contribution that Angelo State University has on the local economy. Results from this study should be of interest to state and local policymakers, citizens, and business people and may be used to further the economic development of San Angelo and Tom Green County.

A regional economic model, referred to as an *input-output* (I-O) model by economists, was constructed to measure the economic impact that Angelo State University has on the greater San Angelo economy. The basis of the model is the spending patterns of individuals and businesses in the region. In particular, expenditures by Angelo State University on equipment and supplies occur within the region and elsewhere, while Angelo State University faculty and staff tend to spend the majority of their income locally. Economists generally categorize the economic impacts from these expenditures into two types of effects: direct and secondary. Direct effects represent those expenditures within the region of the institution, that is, Angelo State University. Direct effects lead to secondary effects in the form of business-to-business transactions in the region (e.g., to restore inventory) and also to new income in the form of wages and salaries, rent and interest payments, payments to proprietors and stockholders for investment, etc.

The regional economic model identifies the "linkages" within the economy that exist between businesses (or enterprises) and other businesses, and businesses (or enterprises) and final consumers. From the regional economic model, a set of industrial sector "economic multipliers" unique to the regional economy are calculated. These multipliers are used to provide a comprehensive assessment of the local economic impact of Angelo State University. Specifically, the economic impact analysis provides information as to the number of jobs created and sustained by the ongoing operation of Angelo State University, the income added to the local economy from Angelo State University's operations, which includes household income or earnings, and the total output (in dollars) that Angelo State University contributes to the local economy.

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