



ECONOMIC IMPACT OF SFA

*Analysis of the Contribution of
Stephen F. Austin State University
to the Nacogdoches Economy*



**STEPHEN F. AUSTIN
STATE UNIVERSITY**
THE UNIVERSITY OF TEXAS SYSTEM
NACOGDOCHES, TEXAS

2025

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Executive Summary

Stephen F. Austin State University plays an important role in providing quality education at the undergraduate, masters, and doctoral levels to students throughout Texas. It also contributes to the economy of Nacogdoches County by being a major employer, attracting thousands of students and tens of thousands of visitors to the area, and engaging in substantial economic activity with local and regional businesses.

We estimate the impact on the local economy of the university's operations, the spending by students enrolled during the academic year as well as summer terms, employee spending, and the spending by out-of-town visitors on the region that would not take place if not for SFA.

Using data from the 2022-2023 academic year, the total economic impact of the university locally was \$348,429,488. Given the total regional output (GRP) of about \$3.3 billion for Nacogdoches County, SFA is responsible for \$1 out of every \$9.50 of economic activity taking place in the county. Likewise, the 4,819 jobs created or supported in the county because of SFA represent over 18 percent of total local employment.

The largest components of SFA's total economic contribution are spending by students and employees (i.e., faculty and staff), accounting, respectively, for about \$149 million and \$122 million of impact. University operations add over \$65.5 million of activity, while visitors to Nacogdoches who are drawn to the area by the university's presence contribute nearly \$12 million in additional economic impact.



ECONOMIC IMPACT STUDY

The Setting: Stephen F. Austin State University

Stephen F. Austin State University (SFA) is a regional comprehensive public university located in Nacogdoches, TX. The university is organized into six academic colleges – Nelson Rusche College of Business, James I. Perkins College of Education, Micky Elliott College of Fine Arts, Arthur Temple College of Forestry and Agriculture, College of Liberal and Applied Arts, and College of Sciences and Mathematics. Altogether, SFA offers over 100 undergraduate majors, over 46 masters degrees, and four doctoral degrees.

In the Fall of 2022, SFA enrolled 11,327 students, most (approximately 87 percent) at the undergraduate level, owing to the long and rich tradition of the university's focus on undergraduate education. The vast majority of students come from Texas, and over 90 percent come from within 200 miles of campus – a radius that includes the Houston and Dallas-Fort Worth metropolitan areas as well as the more rural East Texas region. Out-of-state students make up about four percent of the student population and represent 42 states; foreign students make up only 1.3 percent of the student body, but represent 48 countries.

The university employed 725 faculty during the 2022-2023 academic year, 73 percent of whom were full time, as well as 919 staff, 88 percent of those as full-time employees. Along with student enrollment, faculty and staff compensation is a key driver of SFA's economic contribution to the region.

In September 2023, SFA became the 14th member of the University of Texas System. Previously, it remained one of only two independent public universities in Texas. The transition to the UT System is ongoing, but the period covered by the present study precedes this affiliation.

In the 2022-2023 fiscal year, the university had an operating budget of over \$273.7 million, representing an increase of about 4.4 percent over the previous fiscal year. The largest budgeted expenditure categories were employee salaries and benefits (nearly 48 percent) and operations and maintenance (O&M, almost 40 percent).

The Region

The present study assesses the impact of Stephen F. Austin State University on the economy of Nacogdoches County. While the university clearly attracts a number of students, employees, and visitors from outside of the area (and often from outside of Texas), and SFA graduates frequently relocate to areas outside of Nacogdoches County, thus impacting the economies of those regions, these considerations are beyond the scope of this study. Our focus is on the contribution of SFA's day-to-day operations – spending by the university, its employees, students, and visitors – on the local economy.

Nacogdoches County had a population of 65,375 in 2023 and a median household income of \$51,200, which is nearly \$24,000 below the national median household income of \$75,100. The cost of living in the county is comparatively lower than the state and national averages.

The Gross Regional Product (GRP) of Nacogdoches County was \$3.3 billion in 2023. The area's largest employers are the education sector, including SFA and the Nacogdoches Independent School District, and manufacturing, retail, and healthcare industries.

With respect to levels of educational attainment, nearly 30 percent of county residents possess only a high school diploma; another 24.4 percent have some college, and only 16 percent have a bachelor's degree. The latter proportion is more than five percent below the national average, reflecting the fact that many



SFA alumni move to larger population centers after graduation. On the other hand, 9.4 percent of the population have an advanced degree, which is consistent with a majority of SFA faculty residing in the county.

Economic Impact Assessment

Since SFA was founded in 1923, its operations have contributed to Nacogdoches County, its residents, and local governments. It has provided access to high quality education in Deep East Texas along with access to theater, fine arts, and athletics events for students and the community. The university provides significant benefits to the local economy as well through the creation of jobs, income, and output.

IMPACT BEYOND THE NUMBERS

Of course, the total value of the university goes far beyond simply its economic impact on employment and output. It is worth recognizing these additional sources of SFA's contribution, even if they are not the focus of this study.

First, there is a great deal of value in any university contributing to creating a better educated populace that is not immediately captured by people's earnings or spending. Higher levels of educational attainment by themselves benefit the society at large, as residents become better informed consumers, voters, and overall decision makers.

Second, SFA graduates have greater potential to achieve higher levels of lifetime earnings relative to the earnings they could receive if they did not have access to SFA. Obviously, exact measures of these additional lifetime earnings are difficult to obtain: they depend on many future decisions made by individuals as well as circumstances outside of their control as their career paths develop. Moreover, as graduates move from one area to another over the course of their lives taking their incomes with them, the impact of those earnings becomes even more difficult to ascertain.¹

Third, the contributions to the state and national economies of the approximately 109,480 living SFA alumni are certain to be substantial.

Fourth, there are significant benefits to the state of Texas of the investment of state funds (i.e., tax dollars) into educating the state population through institutions like SFA.²

Fifth, and related to the previous item, the additional earnings of SFA graduates raise the tax base for state and local authorities' revenue collections. Specifically relevant to Nacogdoches County, many alumni do remain in the area after graduation, and they continue earning and spending locally thereby contributing to sales and property tax revenues.

Finally, there are likely substantial social benefits to SFA graduates' higher earning potential. As residents' incomes grow, Texas is likely to see lower rates of crime and lower rates of reliance on welfare and other social services, thereby contributing to the prosperity of the state.

¹The Bureau of Labor Statistics found that in 2023 people with an undergraduate degree had 66.1 percent greater median earnings than people with only a high school diploma.

²For example, a recent economic impact study of the University of Houston (UH) performed by EMSI, estimates that the rate of return to Texas on the investment of state funds directed to UH is about 13.8 percent.



METHODOLOGICAL APPROACH

The analysis to follow estimates the economic benefits of SFA based on the 2022-2023 academic (and fiscal) year.³ The economic impact model uses detailed expenditure data provided by SFA as inputs to generate impact estimates. Steps were taken in the data collection process to prevent double counting of expenditures in various spending categories. Relevant details are discussed below wherever applicable.

There are three main components of the analysis: the direct effects of SFA, the indirect effects, and the multiplier (or induced) effects. As SFA provides jobs and pays its employees, income from employment is created directly. Additionally, income and employment are generated indirectly when SFA purchases goods and services from local manufacturers, service providers, and vendors – firms that in turn hire workers, earn profits, and generate income. The multiplier process results in the creation of further income and employment as workers spend their earnings locally and as other firms generate sales, earn profits, and hire new employees.

Translating direct effects into total effects through multiplier analysis requires the use of Regional Input-Output Modeling System (RIMS II) multipliers, which are specific to Nacogdoches County, based on 2021 regional data, and come from the US Bureau of Economic Analysis (BEA). To summarize, the three components of impact that are the focus of this study are:

- Direct effects are attributable to the actual operation of the university, including construction expenditures, employment of faculty and staff (the direct employment impact) and payments to these workers, spending by students in the county, and spending by visitors to the area.
- Indirect effects result from the university's purchases of goods and services.
- The multiplier effect occurs as the direct and indirect incomes are spent and re-spent within the region. For example, SFA employees spend a portion of their wages and salaries in the local community on goods and services, such as housing, clothing, and food. Likewise, the owners of businesses receiving these payments will use a portion of the proceeds to pay their employees wages and earn profits, continuing the cycle. Throughout each of these subsequent rounds of spending, a portion of the direct and indirect income leaks out of the local economy through federal taxes, payments to non-residents, savings, and spending outside of the local area. This diminishes the multiplier effect on the local economy.

In the following sections, we summarize our approach to collecting data and estimating each portion of the university's activities and their economic impact.

STUDENT SPENDING

Students attending SFA are responsible for a substantial amount of spending in Nacogdoches County as many students come from outside the county and bring new economic activity to the area.⁴ We combine institutional data with information from Education Data Initiative to estimate the impact of student spending. We segment students into four separate categories:

1. Students living on campus
2. Students living off-campus with relatives
3. Students living off-campus on their own
4. Fully online students

³This report is an update of a similar study performed in 2017 using 2015-2016 data. Due to several changes in the way data are collected and reported as well as a number of methodological changes, direct comparisons of results between the current study and the original one are likely not very informative. The original 2017 study can be found in the References section. A detailed appendix summarizing the differences between the two studies can be made available upon request.

⁴Students originally from Nacogdoches County are included in student spending attributable to the university. If SFA did not exist, these students would likely attend another university outside the county, taking their spending with them, which would reduce local economic activity.



Students spend money on rent and utilities, books, meals at restaurants, groceries, and miscellaneous items. Depending on the student's residential status, spending in the county differs for each of these categories. For example, we assume fully online students do not live in Nacogdoches County, and the only applicable spending they do within the county is on books. By contrast, we assume students living off-campus on their own spend money on all the previously mentioned expenditure categories, while students living off-campus with a relative are assumed to not spend money on rent and utilities.

For students living on campus, we exclude room and board as those fees are included in the regular operating expenses of the university, which are accounted for elsewhere in the analysis. We do, however, include meal plans here as they are not included in the operating expenses portion.

For all students, regardless of residence category, we exclude payments to SFA for tuition and fees as they support spending already accounted for in the university budget, which we address separately.

Table 1 displays information on student spending profiles by residence category and spending type. A total of 11,327 students attended SFA in Fall 2022. Of those, 3,334 students lived on campus, while 2,962 students were fully online and assumed to live outside of Nacogdoches County. A total of 5,031 students lived off-campus, of whom 277 lived off-campus with a relative, and the remaining 4,754 lived off-campus on their own.

Table 1: Student Spending Profile

Residence Category	Spending Categories							Total Monthly	Nine-month Total
	Number of Students	Rent and Utilities	Books	Discretionary	Restaurants	Groceries	Meal Plan		
On-campus	3,334	N.A.	\$134.22	\$421.11	\$68.40	N.A.	\$492.76	\$1,116.49	\$10,048.40
Off-campus with Relatives	277	N.A.	\$134.22	\$517.11	\$68.40	\$103.60	N.A.	\$823.33	\$7,410.00
Off-campus	4,754	\$1,331.44	\$134.22	\$524.44	\$342.00	\$259.00	N.A.	\$2,591.11	\$23,320.00
Fully Online	2,962	N.A.	\$134.22	N.A.	N.A.	N.A.	N.A.	\$134.22	\$1,208.00
Source	(e)	(c)	(a)	(c)	(d)	(c)	(b)		

(a) SFA Tuition and Costs
(b) Lumberjack Eats (SFA's Dining Services)
(c) Education Data Initiative
(d) Lexington Law
(e) SFA Office of Strategic Analytics and Institutional Research (SAIR)

Using data in Table 1, we estimate that the monthly expenditures for a student living on-campus in 2022-2023 totaled \$1,116. Assuming the student attends for the entire nine-month academic year, they would spend a total of \$10,048 on books, discretionary items, eating out at restaurants, and meal plans. A student who lives off-campus with relatives has a monthly expenditure of \$823, bringing their academic year spending to \$7,410. They spend money on books, discretionary items, restaurants, and groceries.

A student living off-campus on their own spends \$2,591 a month on rent and utilities, books, discretionary items, meals at restaurants and groceries. For a full academic year, a student living off-campus on their own spends \$23,320. A fully online student spends \$134 on books monthly or \$1,208 for an academic year.

In total, students who attended SFA in 2022-2023 spent almost \$150 million on rent, utilities, books, and groceries. However, students can purchase groceries, books, etc. outside of Nacogdoches County. The BEA estimates that 68 percent of expenditures take place in the same county in which the consumers reside.⁵ Because of this, we assert that 68 percent of spending by students occurs locally, making direct student spending nearly \$102 million.

⁵See Dunn and Gholizadeh (2023) for details.

After these monetary portions were injected into the local economy, additional employment and income were generated via the indirect and multiplier processes discussed previously as shown in Table 2.

Table 2: *Impact of Student Spending, September 2022 – May 2023*

	Employment	Output
Direct Effect	1,133	\$101,996,812
Indirect & Induced Effect	921	\$39,809,692
Total Effect	2,054	\$141,806,504

As a result of students attending SFA and spending locally, output across the county increased by over \$141 million. The output multiplier – total output impact divided by direct spending by SFA students – was 1.39. This suggests that for every dollar directly spent by SFA students in Nacogdoches County, local output increased by \$1.39.

Another important measure of economic benefits created by SFA student spending is employment. About 921 jobs were created indirectly and through the multiplier effect, bringing the total employment benefit of SFA student expenditures to 2,054 jobs.

Students do not just attend SFA in the fall and spring semesters. Around 3,884 students registered for classes in the summer of 2023. Of those, we estimate that 1,109 resided in Nacogdoches County. Table 3 summarizes these students by their residential status.

Table 3: *SFA Summer 2023 Enrollment and Residence*

Student Residence Category	Number of Students
On-campus	227
Off-campus with Relatives	49
Off-campus	833
Fully Online	2,775
Total Summer 2023	3,884
Total Summer 2023 in Nacogdoches	1,109

We use the same student spending profiles discussed in Table 1 but for a three-month time frame to reflect the summer term. We assume students who live on-campus, off-campus with relatives, or off-campus on their own are physically present in Nacogdoches County as these students were registered for at least one on-campus face-to-face class in Summer 2023. The 1,109 estimated resident students spent just over \$5 million locally. That spending made its way through the economy and ultimately increased county output by a little less than \$7 million and created 54 total jobs. Table 4 highlights this information.

Table 4: *Impact of Student Spending, June 2023 - August 2023*

	Employment	Output
Direct Effect	11	\$5,002,451
Indirect & Induced Effect	43	\$1,963,180
Total Effect	54	\$6,965,631



EMPLOYEE SPENDING

The university's operating expenses represent the largest component of its economic impact on Nacogdoches County. These expenses reflect direct spending by SFA in the local community on goods and services and indirect spending done as a result of the university paying wages to its faculty, staff, and student workers who then spend a portion of their earnings locally. We separate the operating expenses into three categories: salaries and wages (including benefits) paid to employees, operation and maintenance (O&M), and large-scale construction projects.

Salaries and wages include all money paid to employees as well as the associated fringe benefits. In the 2022-2023 academic year, SFA employed 527 full-time and 198 part-time faculty. In the same year, 809 individuals were employed as full-time and another 110 as part-time staff at SFA. The vast majority, about 74.6 percent, of these SFA employees live within Nacogdoches County. Table 5 shows the breakdown of faculty and staff for the 2022-2023 academic year.

Table 5: *SFA Employees (2022-2023)*

	Faculty	Staff	Total
Full-time	527	809	1,336
Part-time	198	110	308
Total	725	919	1,644

According to SFA's Annual Financial Report (AFR) filed with the Texas Higher Education Coordinating Board (THECB), the total wages and salaries paid for the 2022-2023 academic year totaled \$130,844,716. We make several adjustments to this figure to help avoid any double counting and to account for any leakages out of the county.

First, we only consider the following compensation categories: faculty salaries, exempt salaries, classified wages, longevity, and hazard duty pay. Second, we exclude the \$2,631,817 in student wages as well as \$30,786,200 in employee benefits, which are accounted for separately in Table 7. This leaves \$97,426,699 in remaining total wages and salaries paid. Finally, we only include spending by workers residing in Nacogdoches County, 74.6 percent of the total. Thus, estimated SFA labor income spent locally in 2022-2023 was \$72,680,317.

Table 6 highlights the direct, indirect and induced, and total effects of SFA employee spending. In 2022-2023, 1,644 individuals were directly employed by SFA and account for almost \$73 million in direct payroll. As employees use their income to make local purchases, additional income, employment, and output are created. As a result of this indirect and multiplier process, employment increased by 1,958 and total output increased by over \$120 million.

Table 6: *Impact of SFA Employee Salaries and Wages*

	Employment	Output
Direct Effect	1,644	\$72,680,317
Indirect & Induced Effect	314	\$47,758,237
Total Effect	1,958	\$120,438,554



Fringe Benefits

SFA also provides its employees with fringe benefits. Some of these benefits will have an impact on spending within Nacogdoches County. We only consider the health benefits here, which make up about 61 percent of total fringe benefits. Of the \$18,779,582 in health insurance expenditures, only a portion is spent and stays locally, so we estimate that \$1,213,161 are retained in the health-related sector of the economy. Due to SFA employees using some of their health insurance benefits in the county, output increases by almost \$2 million and supports 15 additional local jobs. Table 7 displays these findings.

Table 7: Impact of Employee Health Insurance Benefits

	Employment	Output
Direct Effect	3	\$1,213,161
Indirect & Induced Effect	12	\$547,014
Total Effect	15	\$1,760,175

UNIVERSITY OPERATIONS

The second category of university spending is on continuous operation and maintenance, which represents direct spending by SFA on goods and services. Again, we utilize the AFR to determine specific spending categories and amounts. We exclude the amounts in the report dedicated to travel, depreciation and amortization, scholarships, and claims and judgments because their inclusion either resulted in double counting, represented a cost but not a true expense actually paid, or the money was likely not spent locally.

Table 19 on the last page of the report provides a breakdown of the university budget for 2022-2023. SFA spent \$57,906,130.47 on operation and maintenance, but it is likely that this full amount was not spent solely in Nacogdoches County. A report on the impact of colleges on local economies published by Brookings estimates that 49 percent of spending goes toward local goods and services.⁶ We apply this proportion to the SFA's operation and maintenance figure, making direct spending by SFA on O&M in the county around \$28 million. The direct employment figure is zero here as the employees hired by SFA that help maintain the university are already accounted for in the employee spending component of the analysis.

University operations and maintenance support 230 local jobs as a result of over \$28.3 million infused into the local economy on purchases of goods and services for O&M purposes, and a total of over \$35 million in economic activity was added to the county. Table 8 summarizes these figures.

Table 8: Impact of University Operations

	Employment	Output
Direct Effect	—	\$28,374,004
Indirect & Induced Effect	230	\$6,892,681
Total Effect	230	\$35,266,685

The third category of university spending is construction projects, and it is measured separately for a number of reasons. First, the way that construction spending affects the local economy is different from other university operations. Second, simply taking spending on construction projects in any given year is

⁶See Rothwell (2015) for details.

a poor estimate of typical annual construction activity as most major projects span multiple years; at the same time, construction can be “lumpy” where some years see significantly more building activity than others.

To address these issues, we average the most recent ten years of construction expenses to arrive at a yearly estimate of construction spending of \$21,166,650.45. Table 9 presents the historical construction spending data.

Table 9: *Annual Construction Spending 2014-2023*

Year	Total Spending
2014	\$4,561,518.33
2015	\$10,929,453.78
2016	\$14,492,680.71
2017	\$16,426,675.05
2018	\$36,383,083.92
2019	\$15,021,455.38
2020	\$15,405,068.18
2021	\$28,367,443.41
2022	\$31,160,803.19
2023	\$28,918,322.50
Avg. Annual Spending	\$20,166,650.45

Using the estimated annual spending on construction of \$20,166,650.45, we calculate the local economic impact shown in Table 10. We assume that all of the construction spending happens locally as construction projects are typically carried out by local contractors using local materials and equipment. Annually, SFA construction projects support about 268 jobs and generate over \$30 million in additional economic activity for Nacogdoches County. The output multiplier is 1.50, which suggests that for every dollar directly spent by SFA on construction in Nacogdoches County, output increases by \$1.50.

Table 10: *Impact of Avg. Annual Construction Spending*

	Employment	Output
Direct Effect	96	\$20,166,650
Indirect & Induced Effect	172	\$10,121,642
Total Effect	268	\$30,288,292

VISITOR SPENDING

The last component of SFA's impact is the draw of visitors to the local area who would not be here if not for SFA and its activities. People visit SFA for a variety of reasons. Some of those include tours, athletic events, camps, fine arts events, etc. Table 11 details the events, visitors, days per visit, and the estimated number of visitor days for 2022-2023 academic year.

Data on campus tours, Showcase Saturdays (SFA's Open House event aimed at recruiting current high school juniors and seniors), and the Axe'cepted Student Day (SFA's event aimed at offering a unique personalized look at campus life for admitted students) came from SFA's Office of Admissions. We assumed that each visitor for these events spent one day in Nacogdoches while visiting campus. Around 2,667 individuals came to Nacogdoches to tour SFA, while almost 800 admitted students and their families attended the Axe'cepted Student Day. Over the course of 2022-2023, about 7,286 individuals traveled to Nacogdoches for Showcase Saturdays.



Table 11: *Visitors to Nacogdoches Attributable to SFA*

Source	Visitors	Days per Visit	Visitor Days
Individual Tours	2,667	1	2,667
Axe'cepted Student Day	795	1	795
Showcase Saturdays	7,286	1	7,286
Fine arts performances	6,281	0.33	2,073
Athletic events	26,227	0.33	8,655
SFA commencement	21,835	1	21,835
Freshman orientation	7,218	2	14,436
Campus Recreation camps	3,330	1	3,330
Organizations using Campus Rec	1,107	1	1,107
ISD visitors using Campus Rec	780	0.5	390
Homecoming 5K	68	1.5	102
Partnership Event	510	1	510
Special Olympics	350	0.5	175
Area church activities	154	0.5	77
Prospective student visitors	10,000	1	10,000
Visitors of enrolled students	101,943	1	101,943
Visitors of employed faculty	6,525	1	6,525
Visitors of employed staff	8,271	1	8,271
Total	205,347		190,177

Also provided by SFA's Office of Admissions was information on Freshman Orientation and the Community Partnership Event. An estimated 7,218 visitors attended the various Freshman Orientation sessions in 2022-2023, and 510 individuals took part in Partnership Day Event activities. Freshman Orientations last two days, while the Partnership Day attracts visitors to Nacogdoches for one day.

Fine Arts

Attendance totals for music concerts, theater performances, gallery exhibitions, and other fine arts events were supplied by SFA's Micky Elliott College of Fine Arts Box Office. These activities have been grouped into a Fine Arts Performances category. According to the Box Office staff, 12,562 individuals attended fine arts performances in 2022-2023; an estimated 50 percent of patrons traveled to Nacogdoches from out of town,⁷ making the total number of Fine Arts Performances visitors 6,281. We estimate that these individuals spend one-third of their day in Nacogdoches. Table 12 provides detailed attendance numbers by type of fine arts event as well as revenue generated from ticket sales.⁸

Table 12: *Fine Arts Visitor Attendance and Box Office Revenues*

	Attendance	Revenues
College of Fine Arts	3,140	\$18,271
Dance	610	\$3,081
Music	5,804	\$16,779
Theatre	3,008	\$19,916
Total	12,562	\$58,046

⁷We assume that "out of town" is synonymous with "from outside of the county" for our purposes.

⁸Revenue itself from ticket sales does not directly impact the local economy (besides increasing the university's budget, which is already addressed elsewhere). These figures are presented here are for illustrative purposes only.



Athletics

Attendance at athletic events was provided by SFA Athletics, who provided information on actual visitor counts, admissions ticket sales, and attendance estimates (for events with free admission). The total number of visitors for athletic events in the 2022-2023 academic year was 131,133, and we estimate that 20 percent were visitors from outside of Nacogdoches County. That makes the total number of out-of-town visitors due to athletic events 26,227. We also assume that the typical athletic event visitor spends a third of their day locally. Table 13 shows attendance by sport and the corresponding revenues.

Table 13: *Athletics Visitor Attendance and Revenues*

	Attendance	Revenues
Baseball	4,500	\$18,421
Men's Basketball	42,467	\$253,344
Women's Basketball	23,142	\$48,815
Football	48,969	\$412,902
Soccer	2,867	\$8,072
Softball	4,542	\$5,263
Volleyball	4,646	\$9,440
Total	131,133	\$756,257

Commencement Ceremonies

There are three SFA commencement ceremonies during the academic year in Fall, Spring, and Summer. Fall commencement occurs in December, while the Spring ceremonies happen in May and Summer ceremonies take place in August. In Fall 2022, SFA split commencement into three smaller ceremonies. The Spring 2023 graduation ceremonies were split into four separate events, and the Summer 2023 commencement was one ceremony. The combined total number of tickets scanned for the graduations for 2022-2023 was 21,835.⁹ We assume each commencement visitor spends an average of one day in Nacogdoches.

Campus Recreation Activities and Visitors

SFA's Campus Recreation holds a number of events on and off campus that bring visitors to Nacogdoches. Staff provided us with participation data associated with these events. Campus Recreation hosts many camps throughout a given year: basketball, volleyball, high school band camps, etc. We estimate that 3,330 visitors came to Nacogdoches for camps and spent a day in town.

Organizations also utilize Campus Recreation facilities and are often out-of-town groups like professional organizations and club sports. Approximately 1,107 individuals visited Nacogdoches County with their organizations to utilize SFA facilities. We estimate they also spent one day in the county.

Various Independent School Districts (ISD) are another set of groups who use Campus Recreation facilities. Around 780 out-of-town ISD visitors came to Nacogdoches for events such as senior trips, pool parties, etc. and spent one-half of a day in town. Additionally, area churches utilized Campus Recreation facilities in 2022-2023. About 154 people visited SFA campus as part of church activities and spent half a day.

⁹Tickets for commencement ceremonies are available for free but are limited in number – i.e., every graduate receives a small number of tickets to accommodate family and guests. It is therefore likely that the number of tickets scanned understates the total number of visitors to Nacogdoches during commencements.



Other groups that utilize Campus Recreation facilities do so for Special Olympics events. In 2022-2023, SFA had 350 visitors participating in Special Olympics events that spent half a day in town. Finally, Campus Recreation provided information on visitors to campus for SFA's Homecoming, which brought in 68 out-of-town visitors that participated in the 5K race. We assume these runners spend 1.5 days in Nacogdoches for the festivities.

Other Campus Visitors

Lastly, we estimate that about 10,000 potential students visit the campus and Nacogdoches County during the year.¹⁰ We also estimate that each student (11,327), faculty member (725), and staff member (919) have an average of one out-of-town visitor per month during the academic year (9 months). We assume each visitor stays one day in town. Collectively, we estimate that 190,177 visitor days took place in 2022-2023 that can be directly attributed to SFA and its functions.

Visitor Spending Profile

A key component of estimating the impact SFA visitors have on the local economy is determining the visitor spending profile: a measure of how much a typical visitor spends on items such as lodging, meals, and other purchases while in Nacogdoches. The daily spending on accommodation and food is based on the US federal government's per diem rates for daily lodging, meals, and incidental expenses in Nacogdoches for 2022-2023. We make several adjustments to these reported values.¹¹

Estimation of the amount spent by visitors on general merchandise typically requires a separate study, which would include surveys of shoppers over several months. Given time and resource constraints, we rely in our estimation instead on results of past such studies.

More specifically, the 2017 SFA economic impact assessment reported that general merchandise purchases totaled about \$5 per visitor per day. In order to adjust or "inflate" this figure to the comparable rate in 2022-2023, we use the percentage increase observed in the lodging and meals rates discussed above. This cumulative increase is about 55 percent, and when applied to the \$5 spending estimate on general merchandise cited in the 2017 study, produces an estimate of \$7.75. We feel this is an accurate enough approximation of a median visitor's purchases of goods in Nacogdoches in 2023.

Altogether, we estimate that an SFA-related visitor spends around \$46.21 per day in Nacogdoches County. Table 14 summarizes this estimated visitor spending profile.

Table 14: *Daily Spending by Visitors to Nacogdoches*

Accommodation	\$16.33
Food	\$22.13
General Merchandise	\$7.75
Total	\$46.21

¹⁰This is in addition to visitors who schedule tours through the Office of Admissions.

¹¹The daily lodging rate for Nacogdoches was \$98 in 2022-2023, as reported by US General Services Administration (GSA). We use one-third of this amount, or \$32.67 (corresponding to eight business hours of the 24-hour day) to reflect that most visitors take day trips to Nacogdoches and therefore do not always spend the night. We further recognize that most visitors travel in pairs, so the individual lodging rate is best approximated by one-half of this amount, or \$16.33.

Similarly, we rely on the first and last day of travel rate (i.e., partial travel days) for meals and incidental expenses for Nacogdoches; we further reduce it by 50 percent to better align our estimate with prevailing food prices locally and anecdotal knowledge of what businesses visitors tend to patronize when in town. Our final estimate of the daily food spending is \$22.13 per individual per day.

Using the daily spending value of \$46.21 in combination with the number of visitor days detailed in Table 11, we estimate that direct visitor spending in Nacogdoches County in 2022-2023 was nearly \$9 million. Visitors to town due to SFA-related activities increased county output by almost \$12 million and increased employment by 239. These results are displayed in Table 15.

Table 15: *Impact of Visitor Spending*

	Employment	Output
Direct Effect	158	\$8,788,056
Indirect & Induced Effect	82	\$3,115,590
Total Effect	240	\$11,903,646

Total Impact

When combined, all of the spending categories together have a total employment effect of 4,819 new jobs supported and over \$348 million in new economic activity generated in Nacogdoches County due to SFA. Table 16 details the total results.

Table 16: *Total Impact of SFA Activities*

	Employment	Output
Direct Effect	3,045	\$238,221,452
Indirect & Induced Effect	1,774	\$110,208,036
Total Effect	4,819	\$348,429,488

Tables 17 and 18 provide a listing of the local sectors of the economy most affected by SFA operations and activities for 2022-2023. Table 17 lists the sectors that had the greatest output effects and Table 18 lists the sectors with the greatest employment effects. While there is a great degree of overlap between the two lists – for example, Households and Construction – there are also some differences. For example, General Merchandise Stores is at the top of the jobs created list but is third in the output generated list, while Rental and Leasing Services is at the top of the output created list but it is fourth in the jobs created list.



Table 17: Top Affected Sectors by Output

Sector	Additional Output Generated
Rental and leasing services and lessors of nonfinancial intangible assets	\$60,123,327
Households	\$51,327,579
General merchandise stores	\$49,069,206
Food services and drinking places	\$36,701,864
Construction	\$30,288,292
Educational services	\$13,883,113
Food and beverage stores	\$11,422,943
Other services	\$ 8,303,808
Utilities, Publishing industries (except Internet), and Broadcasting (except Internet) and telecommunications	\$6,252,228
Accommodation	\$4,119,510
Professional, scientific, and technical services	\$1,912,562
Ambulatory health care services	\$1,760,175
Management of companies and enterprises	\$267,335
Printing and related support activities	\$261,266
Monetary Authorities-central bank, credit intermediation, and related services	\$12,023

Table 18: Top Affected Sectors by Employment

Sector	Additional Jobs Created
General merchandise stores	423.26
Households	337.77
Food services and drinking places	262.40
Rental and leasing services and lessors of nonfinancial intangible assets	218.18
Construction	171.60
Educational services	138.63
Food and beverage stores	97.41
Other services	59.27
Accommodation	23.04
Utilities, Publishing industries (except Internet), and Broadcasting (except Internet) and telecommunications	15.71
Ambulatory health care services	11.77
Professional, scientific, and technical services	11.20
Printing and related support activities	1.48
Management of companies and enterprises	1.35
Monetary Authorities-central bank, credit intermediation, and related services	0.04



Conclusion

While the total value to the local economy of SFA's presence goes far beyond the number of jobs it supports and the additional income and output it creates, it is worthwhile to measure those employment and income impacts.

In this study, we combine institutional data made available by a variety of SFA offices and departments with the latest regional multiplier data from the BEA (RIMS II) to estimate the total impact of each of the following categories of spending created or supported by the university:

- Student spending: **2,108** jobs and **\$148,763,135** of additional output
- Employee spending: **1,973** jobs and **\$122,198,729** of additional output
- University operations, including construction: **498** jobs and **\$65,554,977** of additional output
- Visitor spending: **239** jobs and **\$11,903,646** of additional output

Altogether, SFA creates or supports **4,819** additional jobs and has a total economic impact of **\$348,429,488**. To put these values into context, the university is responsible for over 18 percent of all jobs in Nacogdoches County and approximately 10.5 percent of the value of total output generated.

Sectors benefiting the most in terms of both jobs supported and new output created are retail, hospitality (including restaurants and lodging), and housing. This is, of course, consistent with the activities of a typical university.

The scale of importance to the Nacogdoches economy of SFA cannot be overstated, as the results of this report demonstrate. Additionally, it is worth recognizing that the university's affiliation with the UT System, which became effective in the Fall of 2023, after the period covered by this report, is poised to have a significant impact on SFA's future. From growth in student enrollment to greater focus on research and creative activities to potentially greater visibility afforded by the system, the role SFA plays in the region is likely to expand.



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Table 19: University Budget (FY 2022-2023)

Operating Expenses	Instruction	Research	Public Service	Academic Support	Student Services	Institutional Support	O&M Plant	of	Schol. and Fell.	Aux. Enterprises	Depr. and Amort.	Total Expenses
Cost of Goods Sold	11,183.23	(1,000.00)	29,835.12	264,974.20	4,926.70	1,458.50	-	-	-	10,774,259.91	-	11,085,637.66
Prof. Fees and Services	114,523.52	48,988.34	181,974.20	122,913.92	686,726.05	449,494.84	870,742.81	-	-	168,713.58	-	2,644,077.26
Materials and Supplies	2,143,686.58	277,173.52	348,926.85	2,290,694.65	3,517,525.83	2,197,186.84	7,502,584.63	-	-	1,528,707.26	-	19,806,486.16
Com. and Utilities	264,364.89	49,445.27	2,040.00	1,694,934.55	398,157.35	556,693.41	3,836,468.00	-	-	2,822,251.86	-	9,624,355.33
Repairs and Maintenance	236,627.31	15,624.77	(114,960.94)	242,036.94	612,141.52	1,499,998.68	2,459,266.16	-	-	1,500,619.35	-	6,451,353.79
Rentals and Leases	206,789.51	83,670.52	168,020.01	271,467.94	1,068,781.20	94,836.35	820,394.45	-	-	(106,585.88)	-	2,607,374.10
Printing and Reproduction	61,515.52	10,987.47	25,550.20	31,104.71	165,100.13	154,395.54	386.35	-	-	(52,581.91)	-	396,458.01
Fed. Pass-Thru Expenditure	-	2,704.75	16,815.00	-	-	-	-	-	-	-	-	19,519.75
State Pass-Thru Expenditure	-	-	-	-	-	-	-	-	-	-	-	-
Bad Debt Expense	-	-	-	2,075.57	73,299.48	291,797.78	-	-	-	-	-	367,172.83
Interest Expense	6.61	-	-	28.12	-	8,246.47	10,527.55	-	-	-	-	18,808.75
Other Operating Expenses	383,927.85	96,726.37	99,083.63	723,419.02	3,156,110.66	1,040,641.13	(1,434,886.25)	-	-	819,864.42	-	4,884,886.83
Total Operating Expenses	3,422,625.02	584,321.01	757,284.07	5,643,649.62	9,682,768.92	6,294,749.54	14,065,483.70	-	-	17,455,248.59	-	57,906,130.47