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An Economic Impact Analysis of Florida Institute of Technology

A Project for Florida Institute of Technology
Prepared by the Regional Economic Consulting Group

Clyde Diao, PhD
Jared Parker, MS

June 2024

Florida Tech Impact – Highlighted Findings

- Florida Tech annually generates $1.6 billion in economic impact from spending by the University, its students, and alumni.
- As a result of the $1.6 billion economic impact:
    - Florida Tech's economic activity creates 12,144 jobs.
    - Florida Tech's economic ripple effects produce $512.6 million in total wages and salaries.
    - Each graduating class of Florida Tech contributes $1.1 billion to the economy of Florida over 30 years.
    - The annual per capita student impact of Florida Tech is more than $163,000.
- Economic activity of Florida Tech contributes $60 million in taxes each year to the state of Florida and local governments.
- On average, a Florida Tech bachelor's degree equals $55,461 in additional salary each year.
- By 2033, the industries hiring Florida Tech graduates will need more than 300,000 jobs in Florida alone.
- By 2033, the industries hiring Florida Tech graduates will grow by more than 11,000 jobs on Florida's Space Coast.
- Engineering and aerospace manufacturing hiring Florida Tech graduates expect:
    - 17% growth in the industry statewide by 2033.
    - 112% growth in engineering and aerospace manufacturing jobs on Florida's Space Coast by 2033.

Executive Summary

Florida Institute of Technology (Florida Tech) plays a significant role in Florida's overall educational and economic development. Offering diverse programs, including STEM-oriented degrees at both undergraduate and graduate levels, the University enrolled over 9,500 students for the 2023-24 school year, with graduates entering the workforce in highly demanded and growing industries. To quantify its contribution to economic development, Florida Tech has sought the help of the Regional Economic Consulting (REC) Group to evaluate the University's impact on the economy at the local and state level.

The REC Group is a research organization that evaluates the economic effects of both public and private sector initiatives. The REC Group employs a variety of analytical tools and econometric models to conduct its analyses. The economists at the REC Group offer a distinct viewpoint, having worked in the Florida government's economic units and possessing direct knowledge of the Florida economy.

The study consists of an analysis of the University's direct impact and dynamic impact. The direct impact phase determines three primary expenditures incurred by the University: the total operating and capital expenditures of the University itself, the expenditures of current students in attendance, and the alumni differential earnings of Florida Tech graduates. The direct impacts are inputs for the dynamic phase, which examines the direct, indirect, and induced impacts of Florida Tech on newly created jobs, labor income, economic output, and taxes.

Table 1. Executive Summary
Economic Impact of Florida Tech ($Millions)

	2022-2023
TOTAL SPENDING	$1,157.4
JOBS (COUNT)	12,144
LABOR INCOME	$512.6
ECONOMIC OUTPUT	$1,562.9
STATE & LOCAL TAX	$60.0

The REC Group found that Florida Tech's economic impact accounts for 12,114 jobs created, $512.6 million in labor income, $1.6 billion in economic output, and $60 million in state and local taxes. Each student's economic contribution to the Florida economy is $163,026.

The REC Group has analyzed industry employment in Florida at local and state levels. This analysis aims to determine the employment opportunities available to graduates of Florida Tech in some of the most advanced industries in the state. Florida Tech is strategically positioned to provide its graduates with a competitive edge, enabling them to take advantage of career opportunities within an advanced technological hub. The industries that Florida Tech caters to will experience strong economic growth in the future, even in the face of setbacks in the healthcare and insurance industries. Overall, there is a trend of ever-increasing job opportunities, which bodes well for Florida Tech graduates seeking employment.

Florida Tech is a considerable contributor to Florida's economy. It provides job opportunities for its graduates and contributes to the economy through its daily operations. The education imparted by the University produces skilled and knowledgeable workers for Florida's growing and thriving economy, making it an important institution in the region.

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Introduction

Florida Institute of Technology (Florida Tech) is a private research university in Brevard County, Florida. Located conveniently on the Space Coast, the University offers numerous programs catering to engineering and aeronautical fields with a mission to achieve recognition as an innovative technology-focused educational and research institution. As a STEM-oriented university, Florida Tech's high graduation rates and job placements in desirable occupations add to the rapidly growing Florida economy. As a state with a strong concentration of employment in the technical and professional industries, Florida Tech produces a desirable supply of graduates in these highly demanded sectors.

The University aids the economic growth of Florida in several capacities. Firstly, the operations of the University facilitate economic activity through university spending, which includes spending on instruction, institutional support, operational spending, and capital expenses. Secondly, the University's students spend money on lodging, meals, and other miscellaneous expenses during their time at the University. Students not living on campus inject spending into Brevard's local economy in these spending areas, with nonresident students creating the most significant impact with their added presence in the economy. Thirdly, the graduates who remain in the state upon completion of their degrees stimulate economic spending as they enter the workforce, with additional impacts on employment and labor income.

Considering the areas in which the University is stimulating the economy, Florida Tech has tasked the Regional Economic Consulting Group (REC Group) with measuring the University's economic impact. REC Group measures how the University affects Florida by evaluating the direct impacts of three primary facets: university spending, student spending, and alumni earnings. After examining the impacts of these methods individually, the three approaches combine to dynamically measure the direct, indirect, and induced effects on jobs, labor income, output, and tax revenues. Finally, the REC Group examines the employment growth of the primary industries in Florida to which Florida Tech graduates enter upon completing their degrees. The direct and dynamic factors and the employment forecast illustrate the benefits of Florida Tech on the Florida economy.

Regional Economic Consulting Group Background

The Regional Economic Consulting (REC) Group is a research group measuring the economic impacts of public and private sector projects. They build impact studies and provide statistical validation for public policy, economic development strategies, and investment. The REC Group covers a wide range of topics, from economic outlooks to demographic and labor market studies, and uses the latest econometric modeling, methodologies, and techniques.

The REC Group uses various analytical tools: REMI modeling, IMPLAN, cost-benefit analysis, general input-output analysis, and econometric modeling. Impacts can come from jobs created or lost and fiscal impacts examining dollars gained or lost for projects and initiatives. The REC Group has experience producing studies and presenting them publicly.

The REC Group's economists bring a unique perspective from the Florida government's economic units and have firsthand knowledge of the Florida economy. That competitive advantage affords them an intimate familiarity with Florida-specific economic mechanisms. The REC Group brings that ability to the private sector to better position impacts and promote initiatives for the future.

Florida Institute of Technology Background

Florida Tech was established in 1958 to provide educational opportunities for professionals working in the growing Space Coast of Florida.[1] The University has grown in its 66 years, accumulating over 70,000 alumni working in highly desirable fields since its establishment.[2] Consisting of four colleges, the University offers over 200 programs with primary areas of study in engineering, aerospace, computer science (cyber), science (with premed options), aviation, business, journalism, meteorology, and more. Offering a wide range of undergraduate and graduate programs, Florida Tech students can pursue their respective degrees on campus or virtually. These programs feed into many of the largest sectors currently comprising employment in Florida, including the specific industries of:

- **Professional, Scientific, and Aerospace Engineering (NAICS 54):** This industry includes legal services, accounting, technical consulting, computer science, and engineering.
- **Construction (NAICS 23):** This industry includes civil engineering construction, non-residential building construction, land subdivisions, and specialty trade contractors.
- **Finance, Banking, and Insurance (NAICS 52):** This industry includes banks, insurance carriers, agencies, brokerages, and investments.
- **Healthcare (NAICS 62):** This industry includes healthcare services, physician offices, dentist offices, outpatient care centers, and hospitals.

The economy of Florida is one of the largest and fastest-growing in the United States, with 9,358,228 total employment, growing at 2.4% over the year reported by employees in February 2024.[3] The state has experienced significant employment growth and economic development in recent years, stemming from several diverse sectors. The state's current industry comprises the professional and technical fields, educational services, and healthcare. Positions within these

[1] About Florida Institute of Technology, https://www.fit.edu/about/
[2] Florida Tech Facts and Figures, https://www.fit.edu/about/facts-and-figures/
[3] Quarterly Census of Employment and Wages - Bureau of Labor Statistics (bls.gov), https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=0&year=2022&qtr=A&own=0&ind=10&supp=1

industries vary among engineers, medical professionals, and education instructors, illustrating a high demand for employees with strong technical or STEM-oriented backgrounds to fill these positions.

Florida Tech's home county, Brevard, is one of 67 counties in the state and has a concentration of employment in several of the same industries as the top industries for Florida. Notably, Brevard County is home to the Space Coast, known for the NASA-Kennedy Space Center, the Cape Canaveral Space Force Station, Patrick Space Force Base, Blue Origin, Boeing, Dassault, Embraer, Lockheed Martin, Space X, and United Launch Alliance with many aircraft and spacecraft assembled and launched right from the region. Furthermore, the military and defense industry is a significant industry cluster in Florida, ranking the fifth highest in the United States with 20 major military installations.[4] Brevard County greatly contributes to the state's military and defense growth, considering the presence of the Air Force, Space Force, and Naval installations along the Space Coast. With a growing demand for individuals to supply these industries, Brevard and Florida provide ample opportunities to supply a workforce with strong technical backgrounds and aerospace knowledge.

Objectives

This study analyzes Florida Tech's economic impact on the Florida economy in multiple parts, primarily with a direct and dynamic impact analysis. An employment forecast for Florida Tech-supported industries with the highest employment levels in Florida follows.

The direct impact analysis examines Florida Tech's economic impacts and contributions through the University's capital and operational spending, current student expenditures, and alumni earnings. These multiple components translate into indirect and induced impacts in terms of the total number of jobs created, the change in labor income, the effects on gross domestic product, the impact on economic output, and state and local taxes for the dynamic impact analysis. These impacts are measured at direct, indirect, and induced levels.

[4] Office of Military and Defense - FloridaJobs.org, https://www.floridajobs.org/office-directory/division-of-economic-development/office-of-military-and-defense

Sources of Data

The sources of data used in this study:

- Integrated Postsecondary Education Data System (IPEDS), U.S. Department of Education[5]
- Integrated Public Use of Microdata Series (IPUMS) from U.S. Census Data[6]
- Institutional data provided directly by Florida Tech
- Classification of Instructional Program (CIP) to Standard Occupational Classification (SOC) Crosswalk: Joint effort by the Bureau of Labor Statistics and the National Center for Education Statistics
- U.S. Bureau of Economic Analysis's Regional Input-Output Modeling System (RIMS II) multipliers[7]
- Regional Economic Consulting Group Forecasts using S&P, U.S. Bureau of Labor Statistics, and U.S. Bureau of Economic Analysis Data Series

The REC Group uses information provided by the Integrated Postsecondary Education Data System (IPEDS) and data provided by Florida Tech to examine the University's operational and student expenditures. According to the 2023 fall enrollment data provided by Florida Tech, the University had 9,587 students enrolled, with 4,613 students enrolled exclusively in online classes. Of the 4,974 students enrolled in classes on campus, 3,458 students were pursuing an undergraduate degree. In comparison, the remaining 1,516 students are in graduate programs.

The REC Group also uses the census data available through IPUMS and IPEDS data to calculate the earnings differentials by level of education. Collapsing the census data by Standard Occupation Classification (SOC) provides occupation titles for employed persons. It allows the REC Group to calculate total employment and the average annual income per occupation in Florida. Having unique occupations, the Group can use the federal CIP-SOC crosswalk to merge the Classification of Instructional Program (CIP) onto the state's SOC, generally allowing us to identify which degrees lead to which occupations. The CIPs merged into the SOCs are further limited to the degrees offered by Florida Tech for this study. Therefore, utilizing the federal CIP-SOC crosswalk, the levels of education can be properly weighed by educational fields offered by Florida Tech.

This merger presents a many-to-many match, where several degrees may lead to different occupations and vice versa. For instance, majoring in finance may allow the opportunity to work as a financial analyst or project manager, with the degree attained presenting the opportunity for several possible career paths. Similarly, the project manager occupation may be available for a graduate in finance and accounting, further illustrating the many-to-many challenge.

[5] IPEDS Data, https://nces.ed.gov/ipeds/use-the-data
[6] IPUMS USA, https://usa.ipums.org/usa/
[7] Regional Input-Output Modeling System (RIMS II) User's Guide | U.S. Bureau of Economic Analysis (BEA), https://www.bea.gov/resources/methodologies/RIMSII-user-guide

Employment is collapsed by the employee count within relevant occupation groups to find total employment and weighted average income for each distinct CIP and SOC combination.

Assumptions and Methodology

Assumptions

Assumptions used by this study:

- **University spending captures the impact of remote students.** Remote students do not stimulate any spending except through university spending from tuition and fees. They either remain in their respective states or are resident students already in baseline economic spending within Florida. Therefore, university spending captures remote students' economic impact through tuition, fees, and books.
- **Florida residents represent 37.2% of all students.** The REC Group determined this using Florida Tech data: 37.2% of first-year students claim residency in Florida. This statistic applies to all levels of education at the University and assumes 37.2% of all students are state residents.
- **Resident students only impact apartment spending.** These students do not add to new spending on off-campus meals or general miscellaneous spending because general economic activity already includes resident Floridians eating and spending on general goods.
- **About 26.7% of students living off-campus live with family.**[8] U.S. Department of Education found that 26.7% of students living off-campus live with their families nationally.
- **Only nonresident students purchasing food off-campus have an impact on meal spending.** Any meals purchased by nonresident students without a meal plan have an impact. Resident students would not impact any meal spending in Florida because their spending is in a Florida economic baseline.
- **The lifetime earnings of alumni are 30 years.** The REC Group has chosen 30 years to make the alumni impact comparable to similar studies conducted for other institutions.
- **Florida Tech reaches dorm capacity.**
- **Graduates remaining in Florida account for 45.8% of all graduates.**[9]

[8] U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2020 Undergraduate Students (NPSAS:UG). Using the national average as a standard instead of a survey.
[9] Florida Tech Survey response: 45.8% stay in Florida, REC ICUF Impact & FSU SUS Impact Studies

- **The average student housing cap rate is 5.55%.** Value is consistent with S&P Global Market Intelligence's findings, with 5.55% being the midpoint of its most recent Residential Real Estate Investment Trust observations.[10]

Methodology

Direct Impact

The primary objective of the static phase of the study is to first identify the expenditures that affect Florida's economy. This impact would not have occurred without the presence of Florida Tech. Therefore, the study starts by looking at university spending and the University's students.

University spending is divided into two primary categories: capital and operational expenditures and student expenditures. These expenditures constitute the economic impact of the University itself. Still, the University also contributes to the economy through alumni earnings. Alumni earnings are included within the scope of the study because if the University had not existed, the alumni would have gone to other universities and potentially crowded out existing students.

Capital and Operational Spending

Capital spending refers to the costs of capital expansion for the University, such as construction and new facilities, as well as all renovations or improvements of existing structures. Operational spending is the continuous expense of the University's day-to-day operations. The total cost of university operations can be divided into six categories: academic support, auxiliary enterprises, institutional support, instruction, research, and student service.

Student Spending

Student spending is a typical student's total expenses in one year. Students generally exhaust their spending across four primary categories: tuition and fees, lodging, meals, and miscellaneous spending. Institutional operating expenditures already capture the impact of tuition and fees for all students, as well as lodging and meals for on-campus students who choose dormitories and on-campus meal plans. Therefore, the economic impact of student spending includes rent for off-campus apartments, all off-campus meals, and general miscellaneous spending.

Student spending classifies student counts as remote or traditional students according to the Florida Tech fall 2023 enrollment. The impact of remote students is separate from that of traditional students, with the impact of remote students exclusively on university spending. Out-of-state remote students do not affect lodging, meals, or miscellaneous spending in Florida. In

[10] S&P Global Market Intelligence, Residential Property 2022, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/median-implied-cap-rate-for-us-reits-expands-again-in-q3-2023-78946782; Specific value is in the Median Implied Capitalization by Sector table. It is the average of 2022 and 2023 for Residential REIT

contrast, in-state remote students incur those costs regardless of their decision to enroll in Florida Tech classes. Therefore, Florida Tech students solely participating in remote online classes and not participating in coursework on-campus are not considered contributors to the student expenditure analysis.

Traditional students (i.e., attending classes on-campus) influence student spending according to residency status and lodging situation. Approximately 37.2% of all students are assumed to be residents of Florida because 37.2% of first-time enrolled students claimed Florida as their state of residence. This initial cohort matriculates through the educational levels, and based on their initial status, they are considered either in or out-of-state.

Traditional students can be divided into three general lodging categories: students on campus, students off-campus with family, and students off-campus without family. University expenditures include spending by students living on campus through dormitory expenditures and meal spending by a university-offered meal plan. However, nonresident students still generate miscellaneous spending and spending from meals purchased off-campus during their university tenure. Many students opt-in to a university-provided meal plan. However, students still choose to purchase meals off campus. The total economic impact of meal spending is reduced by meal plan spending.

The impact of apartment spending on off-campus housing varies between those choosing to live at home and those living in apartments. Resident students living off campus can live with their families rather than securing an apartment independently. According to the National Center for Education Statistics (NCES), 26.7% of students nationwide live at home.[11] Those who choose to live with their family do not contribute to new student expenditures as their lodging, meals, and miscellaneous spending are not new to Florida but are already in overall spending within the state. Resident students securing independent apartments consequently only affect the lodging portion of student spending as their rent is considered new spending. Meanwhile, a nonresident student living off campus has the largest impact on all the groups of students as all spending incurred is considered new to the state.

In conclusion, the total student expenditures only factor into the static impact for certain students. Apartment spending comprises all students living off-campus without their families. Meal spending is generated only by off-campus meals purchased by nonresident students. Finally, miscellaneous spending only counts for all nonresident students.

[11] U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2020 Undergraduate Students (NPSAS:UG).

Alumni Earnings

Alumni earnings are the impact of Florida Tech alumni earnings and spending on the economy. The impact is measured by the direct value of the earnings of graduates in a cohort for a specific year, with the number of cohorts based on a graduate's career life, for this study, thirty years. The earnings of all existing alumni contribute to the total impact on the state. A differential of degree earnings measures per degree impact.

Table 2 displays the difference in earnings per level of education, with the expectation that each additional educational advancement has a matching addition to expected earnings.

Table 2. Degree Earnings Differential
Additional Value of Educational Attainment by Degree

	EARNINGS	DIFFERENTIAL
ASSOCIATE'S DEGREE	$62,275	$31,595
BACHELOR'S DEGREE	$86,141	$55,461
MASTER'S DEGREE	$100,283	$14,142
PHD RESEARCH	$92,569	$6,428
PHD PROFESSION	$128,964	$42,824
POST BACHELOR'S DEGREE	$86,141	$0

Source: CIP-SOC Crosswalk. US Census

The differential for an associate's or bachelor's degree reflects the additional income an individual will receive with a degree higher than a high school diploma. The differential for higher educational levels, such as master's and doctoral degrees, is the difference in expected earnings from a bachelor's degree, as a bachelor's degree is traditionally a prerequisite for these higher degrees. Only Florida Tech graduates who remain in Florida have an additional earnings impact on the state's economy; therefore, aggregate alumni earnings equal the total alumni by degree and respective earnings differential for the 45.8% of graduates staying in Florida after degree completion.

Dynamic Impact

The dynamic impact analysis shows the broader impacts of how the change in one variable leads to the change in others, specifically the interdependencies between different sectors of the economy. The model depicts inter-industry relationships within an economy, leading to how the

output from one industrial sector may become an input to another industrial sector. A change in one industry could affect other industries either directly, indirectly, or as an induced effect. Direct, indirect, and induced effects are the cornerstones of dynamic economic impact estimation.

An example of a direct impact is an individual buying a good; the direct cost is $5. The immediate effect would be $5. The indirect stage encompasses the supply chain. In the $5 item example, the indirect costs would be costs associated with acquiring intermediate products to produce the item and making it available for sale. The third and final stage of a dynamic impact is the induced impact. The tertiary effects are those induced impacts that occur after the $5 item sells, and the proceeds, salaries, and wages become additional spending in the economy as a part of consumption. Together, these three areas tie a multistage impact that pushes beyond a direct static analysis to give a better-rounded view of how expenditures impact the economy.

The REC Group utilizes the U.S. Bureau of Economic RIMS II (RIMS II) multipliers to look at the ripple effects in the economy using the three general stages analyzed in the direct impact analysis: University, student, and alumni earnings. RIMS II maintains unique industry sectors that allow the REC Group to focus specific spending to accurately estimate economic effects for each stage, with specific industries assigned to the multiple models run for each stage. For these stages, the REC group calculates six models:

- University Capital Expenditures
- University Operational Expenditures
- Student Apartment Spending
- Student Meals Spending
- Student Miscellaneous Spending
- Alumni Earnings

University spending uses two models. Capital expenditures are treated as Non-residential Structures to capture construction costs incurred by the University. Operational expenditures are treated as the Junior Colleges, Colleges, University, and Professional Schools sector to account for any spending by Florida Tech on instruction, staff, or other costs to maintain the activities of the University.

Three of the dynamic models are run for student spending. Apartment spending is treated as Real Estate, meals spending is a product of All Other Food and Drinking Places multipliers, and miscellaneous spending is treated as General Merchandise Stores to encompass any general spending by Florida Tech students.

Finally, alumni earnings are addressed entirely in the household sector to encompass all the spending in a household with the assumption that these alumni choose to remain in Florida after

their degree completion, which is estimated to be 45.8%. Alumni earnings are structured differently from the University and student spending, as different educational attainment levels will affect an individual's consumption behavior. For example, an individual earning $ 100,000 a year will utilize their disposable income differently than an individual earning $50,000 annually. Therefore, alumni earnings are calculated according to the earnings differential of each degree classification and how additional earnings compare to additional educational attainment.

The dynamic impact analysis takes these different stages to summarize the total direct, indirect, and induced impacts on the economy in four general statistics: the impact on the number of jobs created, the impact on labor income, the impact on new economic output, and the impact on taxes generated at the state and local level.

Results, Findings, and Analysis

Static Impacts- Direct Spending

University Spending

Table 3 displays the direct spending incurred by the University for the 2022-23 F.Y. University spending is devoted primarily to instruction at $79.6 million, followed by institutional support at $44.8 million. The remaining operational expenses jointly make up $71.3 million for a total operational expense of $195.6 million. Additionally, capital spending incurred by Florida Tech accounts for $9.2 million, for a total of $204.8 million in university spending.

Table 3. University Expenditures
Direct Impacts ($Millions)

	EXPENDITURES
OPERATIONS	
ACADEMIC SUPPORT	$7.9
AUXILIARY ENTERPRISES	$29.1
INSTITUTIONAL SUPPORT	$44.8
INSTRUCTION	$79.6
RESEARCH	$15.6
STUDENT SERVICE	$18.7
TOTAL OPERATIONS SPENDING	$195.6
CAPITAL EXPENDITURES	
CAPITAL EXPENDITURES	$9.2

Source: Florida Tech and IPEDS Data

Student Spending

The results of the student expenditures classify students according to residency and illustrate their three primary expenses: apartments, meals, and miscellaneous. Separating the students allows the REC Group to differentiate students' costs from university costs to avoid overestimating spending in the economy.

Table 4 shows an in-person enrollment of 4,974 students at Florida Tech for fall 2023. Proportioning students according to first-time fall enrollment residency status, 37.2% of enrolled students are Florida residents, equating to 1,850 students. Florida residents have no new impact on meal spending or miscellaneous spending; assuming they stay in the state, they are residents of Florida and must purchase meals and miscellaneous goods regardless of attending Florida Tech or any university or college. Conversely, nonresident students purchasing university meal plans will reduce total meal spending, but any purchases of meals off campus without a meal plan and general miscellaneous spending do impact Florida.

Regardless of residency status, students living on campus do not generate any apartment spending, as university spending on dormitories includes those costs. The study assumes the University reaches dormitory capacity, 2,034 students live on campus, and they do not affect apartment spending. The remaining students not opting for on-campus housing must secure off-campus accommodation, independently or with family. According to NCES, 26.7% of students opt

to live at home, equating to 1,326 students living at home. The remaining student body choosing to live off-campus totals 1,614 students, and these students represent all apartment spending.

Apartment spending assumes an average rental rate of $1,834 based on a three-bedroom apartment, with each student maintaining two roommates.[12] Apartment spending is the rent of the apartment for the duration of a one-year lease, divided evenly between three roommates, equating to a total of $11.8 million spent on apartment rent. Additionally, IPEDS provides data regarding average miscellaneous and off-campus meal spending per academic year. $13.1 million is spent on miscellaneous spending by nonresident students. Finally, meal spending utilizes the Florida Tech-provided cost of off-campus charges (less rent) to calculate the total meal spending for nonresident students. Many nonresident students are expected to live on campus and will likely opt-in to the university meal plan. The average spending on meal plans is subtracted for a total of $13.0 million on meal spending, adding to a total student spending impact of $38.0 million.

Table 4. Student Expenditures
Direct Impacts

	TOTAL
STUDENT COUNTS BY RESIDENCY	
RESIDENT STUDENTS	1,850
NON-RESIDENT STUDENTS	3,124
STUDENT COUNTS BY LODGING	
ON-CAMPUS	2,034
OFF-CAMPUS WITH FAMILY	1,326
OFF-CAMPUS WITHOUT FAMILY	1,614
STUDENT EXPENDITURES ($MILLIONS)	
APARTMENT SPENDING	$11.8
MEALS SPENDING	$13.0
MISCELLANEOUS SPENDING	$13.1
TOTAL STUDENT SPENDING	$38.0

Sources: NCES, Florida Tech Provided Data

Alumni Earnings

Table 5 quantifies the impacts of alumni earnings in Florida according to the lifetime earnings of Florida Tech graduates. The study assumes a 30-year career life for an individual following

12 U.S. Department of Housing and Urban Development's Fair Market Rent, F.Y. 2023 FMR for Palm Bay-Melbourne-Titusville, FL MSA, https://www.huduser.gov/portal/datasets/fmr.html

graduation from their respective program; there are at least 30 individual cohorts within a single year of spending. The aggregated lifetime earnings of these individuals are determined using the degree differential for each degree level and the number of graduates expected to remain in Florida. The degree differential determines the additional earnings from achieving a higher level of education. For instance, the earnings differential of going from a high school degree to a bachelor's degree is $55,461, while the additional earnings from a bachelor's degree to a master's degree is $14,142. The average additional value of attending Florida Tech for any degree is $22,931 in additional earnings.

The total number of degrees awarded in 2023 was 2,989; in this total, some students have earned more than one degree at different levels. Only the highest degree earned per student is considered to avoid overestimating lifetime earnings. Total single degrees amount to 2,903 degree recipients. Approximately 45.8% of graduates remain in Florida after completing their degree, resulting in 1,330 remaining in Florida from the 2023 cohort. Consequently, doctoral lifetime earnings added $17.1 million, master's degrees added $307 million, and bachelor's degrees added $558.6 million, for a total added value of $914.7 million in alumni earnings.

Table 5. Alumni Earnings Direct Impacts

	DIFFERENTIAL ($DOLLARS)	COMPLETIONS	REMAIN IN FLORIDA	LIFETIME EARNING ($MILLIONS)
ASSOCIATE'S DEGREE	$31,595	64	29	$25.8
BACHELOR'S DEGREE	$55,461	733	336	$558.6
MASTER'S DEGREE	$14,142	1,580	724	$307.0
PHD RESEARCH	$6,428	48	22	$4.2
PHD PROFESSION DEGREE	$42,824	29	13	$17.1
POST BACHELOR'S DEGREE	$0	449	206	$0.0

Source: CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data

Direct Impacts Summary

Table 6 summarizes the direct impacts of Florida Tech, aggregating by the main categories to use as inputs for the dynamic analysis. Florida Tech's direct expenditures, composed of operational, capital, and student spending, amount to $242.8 million. In addition, alumni earnings, or money paid by Florida employers to Florida Tech graduates, are estimated at $914.7 million. The total spending from the University, students, and higher alumni earnings is approximately $1.2 billion.

Table 6. Direct Spending Summary
Direct Impacts ($Millions)

	TOTAL
TOTAL DIRECT SPENDING	
TOTAL STUDENT SPENDING	$195.6
TOTAL CAPITAL SPENDING	$9.2
TOTAL STUDENT SPENDING	$38.0
TOTAL DIRECT SPENDING	$242.8
ALUMNI EARNINGS	
TOTAL ALUMNI EARNINGS	$914.7
TOTAL SPENDING & EARNINGS	
TOTAL SPENDING & EARNINGS	$1,157.4

Source: CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data

Dynamic Impacts

Table 7 summarizes the dynamic impacts of Florida Tech. University and student spending, as well as alumni earnings spent in the economy, have created 12,114 jobs in the economy. Student spending and alumni earnings affect the economy by purchasing goods and services from business establishments, consequently stimulating hiring activity. In this manner, student spending and alumni earnings generate job impacts through the induced portions of the dynamic model, with the induced impact accounting for 9,084 jobs. Of these jobs, 8,030 jobs result from alumni earnings, while 1,054 jobs result from apartment spending and off-campus meals spending.

$512.6 million in earnings was generated, with $339.9 million generated by alumni earnings. Alumni earnings are measured as household spending, which is considered consumption. Households generally do not create a direct or indirect impact but instead have a large impact on generated business and spending. Therefore, all alumni earnings are captured entirely in the induced impact. The induced earnings account for $384.9 million, while the total direct and indirect earnings amount to $127.7 million.

The dynamic model has shown a total impact on economic output of $1.6 billion. The direct and indirect effects have added $317.1 million in output, while induced output is $1.2 billion. Alumni earnings are unique, where the earnings differential represents labor income expenditures by the employer to the alumni, and the induced effect represents the impact of alumni spending these same earnings in the economy. The effect of alumni earnings accounts for

$1.1 billion in output as an induced impact. Alumni earnings are addressed entirely in the household sector to encompass all the spending in a household with the assumption that these are the alumni choosing to remain in Florida following their degree completion.

Table 7. Dynamic Impacts
Direct, Indirect, and Induced Impacts ($Millions)

	UNIVERSITY SPENDING					
	CAPITAL SPENDING	OPERATIONS	STUDENT SPENDING	SUBTOTAL	ALUMNI EARNINGS	TOTAL IMPACT
JOBS (COUNT)						
DIRECT AND INDIRECT	104	2,405	521	3,030	0	3,030
INDUCED	52	923	79	1,054	8,030	9,084
TOTAL	156	3,328	599	4,084	8,030	12,114
EARNINGS						
DIRECT AND INDIRECT	$5.9	$105.1	$16.7	$127.7	$0.0	$127.7
INDUCED	$2.2	$39.1	$3.7	$45.0	$339.9	$384.9
TOTAL	$8.1	$144.2	$20.3	$172.7	$339.9	$512.6
ECONOMIC OUTPUT						
DIRECT AND INDIRECT	$12.9	$252.2	$52.0	$317.1	$0.0	$317.1
INDUCED	$7.1	$125.9	$17.8	$150.8	$1,095.0	$1,245.8
TOTAL	$20.0	$378.1	$69.8	$467.9	$1,095.0	$1,562.6

Source: RIMS II, CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data

Tax Impacts

Table 8 illustrates the total tax impact at both the state and local levels. State tax totals $31.2 million, comprising sales, corporate income, and communications services taxes. Local tax impact amounts to $28.8 million in tax revenue. Total state and local tax amounts to $60 million, resulting from university spending and construction, student spending, and alumni earnings.

As an independent university, Florida Tech is mostly exempt from taxes. However, materials for construction activities are not exempt. The value calculated presents the ceiling for sales tax collected on construction expenditures. The portion of expenditures consumed through labor and wages is not observable at the direct level in the RIMS II framework. For this reason, the tax rates apply to total construction spending. A capitalization rate of 5.55% determines the property values for student housing.[13] to calculate the market value for student housing. The appropriate

[13] US housing market: US home prices hit highest annual gain since December 2022, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-housing-market-us-home-prices-hit-highest-annual-gain-since-december-2022-80633733

millage rate for Brevard County is applied to the market value of the student housing to calculate the ad valorem taxes paid.

The additional taxes paid from alumni earnings use an effective tax rate. This rate independently utilizes the relationship between total state-level tax revenue, county-level revenue, and state gross domestic product. The state rate is 3.2%[14] [15] and the local rate is 2.7%.[16] [17] Using revenue data from the Florida Legislative Office of Economic and Demographic Research.

Table 8. Tax Impacts ($Millions)

	LOCAL	STATE	TOTAL
CONSTRUCTION SPENDING			
CONSTRUCTION SPENDING	$0.1	$0.6	$0.6
STUDENT SPENDING			
MEALS AND MISCELLANEOUS	$0.3	$1.6	$1.8
HOUSING (PROPERTY TAX)	$3.7	$0.0	$3.7
TOTAL STUDENT SPENDING	$4.0	$1.6	$5.6
ALUMNI EARNINGS			
ALUMNI EARNINGS	$24.7	$1.6	$5.6
TOTAL TAX IMPACT			
TOTAL TAX IMPACT	$28.8	$31.2	$60.0

Source: CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data

Economic Impact Summary

The economic impact summary, illustrated in Table 9, showcases Florida Tech's total economic contribution to Florida. The University spent $195.6 million on operating costs and $9.2 million on capital spending, with students spending $38.0 million on meals, lodging, and miscellaneous expenditures. Florida Tech alumni contributed an impressive $914.7 million, for a total direct impact of $1.2 billion on Florida.

The $1.2 billion of direct spending by Florida Tech, its students, and alumni results in a dynamic impact of 12,114 jobs created in the state, with $512.6 million generated in labor income and $1.6 billion added to the state's output. Furthermore, state and local governments benefit from an additional $60.0 million of tax revenue because of Florida Tech.

[14] Legislative Office of Economic and Demographic Research, https://edr.state.fl.us/
[15] Regional Economic Consulting Group Forecast using S&P Data series
[16] Ibid.
[17] Legislative Office of Economic and Demographic Research, https://edr.state.fl.us/

Table 9. Economic Impacts of Florida Tech
Direct and Dynamic Impacts ($Millions)

	2022-2023
DIRECT IMPACTS	
TOTAL OPERATIONS SPENDING	$195.6
CAPITAL SPENDING	$9.2
TOTAL STUDENT SPENDING	$38.0
TOTAL ALUMNI EARNINGS	$914.7
TOTAL SPENDING & EARNINGS	$1,157.4
DYNAMIC IMPACTS	
JOBS (COUNT)	12,114
EARNINGS	$512.6
ECONOMIC OUTPUT	$1,562.9
TAX IMPACT	
TOTAL TAX IMPACT	$60.0

Source: RIMS II, CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data

Industry Outlooks

In addition to the direct and dynamic impact analyses, the REC Group examines the share of employment held by Brevard County in specific industries. As employment grows in the many sectors of Florida, some are growing more rapidly than others and, therefore, have a higher demand for individuals equipped with skills to fill the increasing demand. Florida Tech's role in the rapidly growing economy sets center stage for its graduates as a source of labor for these industries. Employment in industries fed by Florida Tech graduates is used to map the path of students from their completed degrees to their respective careers. This mapping utilizes the federal CIP-SOC crosswalk in the direct and dynamic analysis previously for alumni earnings, only this time adding industry identification.

The North American Industry Classification System (NAICS) is used to identify the primary industries under which all employment in the United States falls. Employment according to the NAICS code available in IPUMS, with every SOC-classified person assigned to some NAICS. This relationship is a many-to-many situation with several SOCs working in multiple NAICS, similar to the many-to-many relationship between occupations and degrees. The SOCs available act as a map for finding how degrees feed into different industries, and then industries collapse by

employment according to the specific Florida Tech degrees that feed into these industries. Filtering the industry scope to those in which Florida Tech graduates can enter shows how Florida Tech is adding to employment in the state and forecasts the share of employment and overall employment growth expected in Brevard County.

Background

To understand the significance of any employment contribution attributed to Florida Tech, the REC Group first identifies the largest industries in Florida and then filters by those that Florida Tech graduates can enter. As Florida Tech graduates enter the workforce, the impact measures existing employment needs for the state and the county by considering the additional employment demand that a supply of Florida Tech graduates could meet. The REC Group produces forecasts internally for these industries. The figures below reflect proprietary econometric models developed by REC Group using S&P Global, Bureau of Labor Statistics (BLS), and Bureau of Economic Analysis (BEA) data.

Table 10 shows the largest industries by employment into which Florida Tech graduates can enter, quantifying the demand for graduates over one year for Florida and Brevard County. The largest change in employment for one year in Brevard is evident in the professional, scientific, and aerospace industries. In contrast, the largest change in Florida is evident in construction.

Table 10. Industry Outlook for Florida Tech-Supported Industries in Florida

	EMPLOYMENT DIFFERENTIAL			
	STATEWIDE	BREVARD	BREVARD RANKING	FLORIDA TECH GRADUATES
TOP FLORIDA INDUSTRIES				
PROFESSIONAL, SCIENTIFIC, & AEROSPACE INDUSTRIES	32,167	1,610	8	1,870
FINANCE & INSURANCE	5,200	354	15	1,071
CONSTRUCTION	42,159	786	13	1,696
HEALTH CARE SERVICES	28,766	648	11	2,316
HOSPITALS	26,267	-25	13	1,282
BANKING	-1,781	42	9	838
TOP BREVARD RANKING				
AEROSPACE MANUFACTURING	-215	1,149	1	1,633

Source: CIP-SOC, Crosswalk, US Census, Florida Tech Provided Data, REC Group Forecast March 2024

It is important to note that several students who graduated may have the eligibility to work in multiple industries. Therefore, the student count is not an exclusive number. Florida Tech has supplied a total of 2,903 students. Nearly half of the new jobs created in Brevard County are attributed to the Aerospace Manufacturing Sector. Aerospace Manufacturing is not one of the largest industries in Florida. Still, it is a specific industry in which Brevard has the largest share of employment for the whole state compared to other counties. While the statewide employment differential is negative, Brevard has astounding growth in this industry.

The overall annual growth calculated in Table 10 for Florida Tech-supported industries statewide is 132,778. However, between 2022 and 2023, 3,415 new local job opportunities were available in Brevard County. The following graphs illustrate that the demand for employees in these industries remains strong and is expected to grow.

Industry Results

Employment levels vary greatly between the state and county, as Brevard County makes up only a portion of total employment in Florida; therefore, focusing on employment growth will highlight Florida Tech's impact. The industries of interest are those that have the largest number of employees in the state for industries that Florida Tech graduates have the possibility of entering. The largest industries Florida Tech programs tie to include engineering, aerospace manufacturing, finance and insurance, construction, healthcare, hospitals, and banking.

Professional, Scientific, and Aerospace Industries

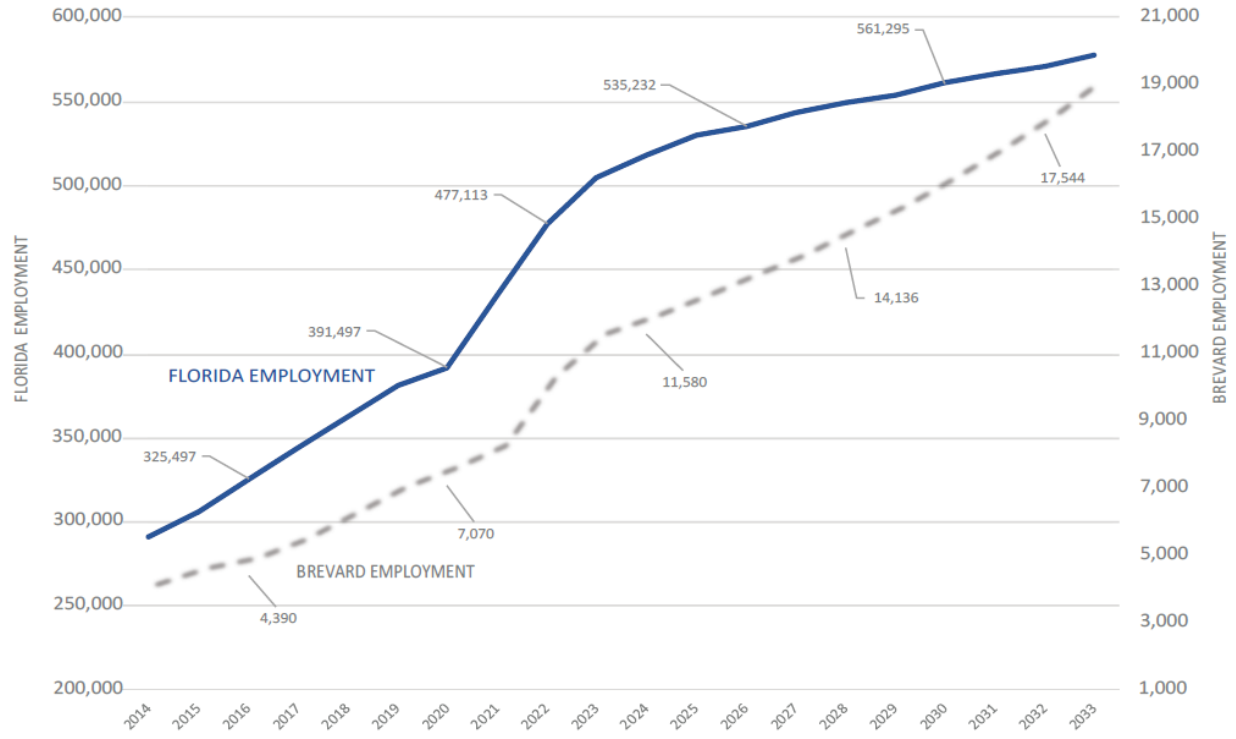
The fastest-growing industry in Brevard County and Florida is the Professional, Scientific, and Technical Services field. This industry encompasses several large professions, such as accounting, technical consulting, computer science, and engineering. This study removes the legal, accounting, and marketing sectors from the professional industries to highlight the growth of technical fields. Using the REC Group's analysis of the Classification of Instruction Programs and Standard Occupation Code crosswalk, several Florida Tech programs funnel into this sector. Over 62% of Florida Tech graduates completing degrees offer occupational opportunities in technical and professional fields. Engineering comprises much of this industry growth, with the varying demand for civil, aerospace, and mechanical engineers.

Figure 1 combines the following four-digit NAICS:

- **5413** - Architectural and Engineering Services
- **5414** - Specialized Design Services
- **5415** - Management and Technical Consulting Services

- **5416** - Computer Systems Design and Related Services
- **5417** - Scientific Research and Development Services
- **3364** - Aerospace Product and Parts Manufacturing

Figure 1: Engineering, Professional, and Aerospace Manufacturing



Source: REC Group Forecast March and S&P Base Data

A unique opportunity available to Brevard County is the growing presence of aerospace demands along the Space Coast, as evidenced in the county's rapid increase in aerospace manufacturing despite the overall employment decline for this industry at the statewide level. The increase in aerospace demand for the county is unsurprising when considering the businesses present, including SpaceX, Blue Origin, Boeing, Lockheed Martin, and Embraer.[18]Private enterprise comes in addition to the presence of government installations such as the Patrick Space Force Base, NASA Kennedy Space Center, Cape Canaveral Space Force Station, and its Naval Ordnance Test Unit Headquarters.

[18] Space Florida, https://www.visitspacecoast.com/launches/

Florida boasts a significant military presence, with 20 military bases within its borders.[19] The Federal Department of Defense (DOD) budget has allocated a massive $30.2 billion to Florida, demonstrating the military's direct impact on the state's economy.[20] Additionally, the DOD has awarded contracts worth $21.5 billion to companies operating within Florida, again underscoring the state's importance in the national security and defense industry and a key driver of demand for Florida Tech graduates.[21] The defense industry's dynamic impact contributes $96.6 billion to the state's economy. It creates job opportunities for 860,000 total workers, including direct workers, supply chain employment, and increased economic activity.[22] [23]

Figure 1 highlights strong employment growth for sectors Florida Tech graduates feed directly into. These sectors have historically experienced strong growth in Florida, specifically in Brevard County, underlining the need for Florida Tech. Brevard's industry clusters, powered by public and private enterprises ranging from DOD private contractors to private space enterprises and Port Canaveral, display the dynamism occurring on the Space Coast.

The Engineering, Professional, and Aerospace Manufacturing degrees produced by Florida Tech work in conjunction with Brevard's share of highly technical employment to provide skilled workers and a strong employment outlook. After graduation, Florida Tech students can feed directly into a robust and dynamic economy at the regional and state levels.

Venture Capital Disbursements in Florida

Florida has seen significant growth in venture capital investments in recent years. According to the National Center for Science and Engineering Statistics (NCSES) recent data, Florida ranks sixth in the United States in total investment, with a total of $8.8 billion invested in various ventures in the state.[24]

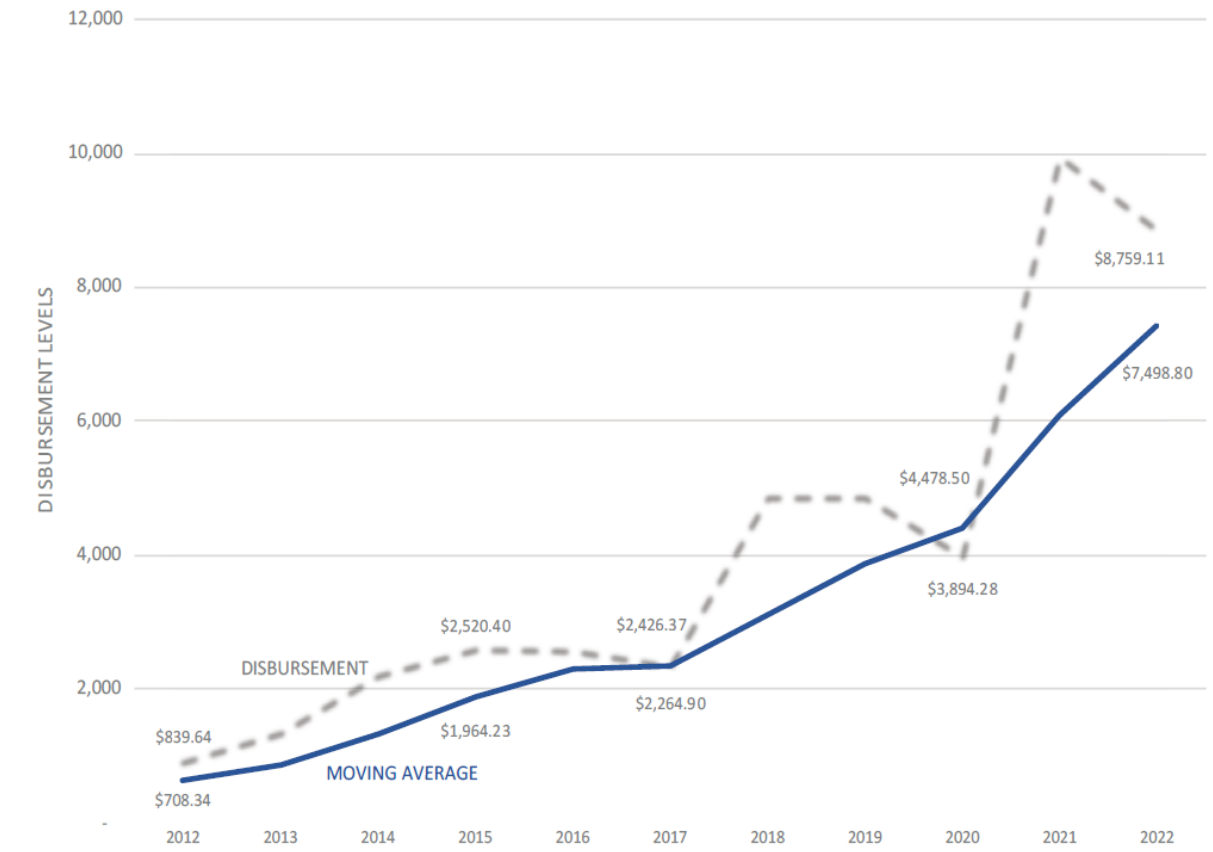
Florida ranks 15th in venture capital disbursements per million dollars of state gross domestic product (GDP) and sixth nationwide in venture capital invested.[25] From 2012 to 2022, Florida has experienced an average annual growth rate of 34%, indicating a strong and steady upward trend

[19] Florida Department of Commerce, The Office of Military and Defense, https://www.floridajobs.org/office-directory/division-of-economic-development/office-of-military-and-defense
[20] Florida Department of Commerce, The Office of Military and Defense, https://www.floridajobs.org/office-directory/division-of-economic-development/office-of-military-and-defense
[21] Select Florida, Military and Defense Programs, https://selectflorida.org/military-defense/
[22] Florida Military and Defense Economic Impact Study, January 2022, https://selectflorida.org/wp-content/uploads/Florida-2022-EIS-Summary-Book-Final.pdf
[23] Ibid., Page 2
[24] National Center for Science and Engineering: State Indicators, https://ncses.nsf.gov/indicators/states/indicator/venture-capital-per-deal
[25] Ibid.

in venture capital investments.[26] Several factors make Florida a vibrant investment for venture capital, including the state's robust tech industry and favorable business climate.[27][28]

Figure 2 presents absolute levels of venture capital investment within the state.

Figure 2. Venture Capital Disbursements in Florida



Source: National Center for Science and Engineering: State Indicators

The data related to venture capital disbursement is highly unstable. To better understand the trend and account for the volatility, two values are presented: the actual level of disbursement and a three-year moving average.

Between 2012 and 2022, venture capital disbursement increased by more than 9.4 times its initial value. Despite the volatility throughout the data, the general trend is still very positive. This trend

[26] Ibid.
[27] 2024 State Business Tax Climate Index, Tax Foundation, https://taxfoundation.org/research/all/state/2024-state-business-tax-climate-index/
[28] Information Technology, SelectFlorida, https://selectflorida.org/wp-content/uploads/Information-Technology-Profile.pdf

has remained strong despite economic challenges such as those caused by the COVID-19 pandemic.[29]

Florida's success in the venture capital industry has attracted many investors and entrepreneurs to the state, creating new startups and expanding existing businesses.[30] Florida has the highest rate of entrepreneurship in the United States, with over 13,000 small businesses per 100,000 residents.[31] As presented earlier in Table 10, more than 1,071 Finance and Insurance Florida Tech graduates can benefit from the market opportunities offered by venture capital. Additionally, the Finance and Insurance Sector will need 5,200 new jobs across the state. With its growing economy and supportive business environment, Florida is a promising destination for investors in innovative, high-growth ventures.

Other Industries

As the technical and professional fields surrounding the aerospace industry experience astounding growth, several other large industries with Florida Tech ties are experiencing employment changes. Florida Tech presents an opportunity to contribute to these industries.

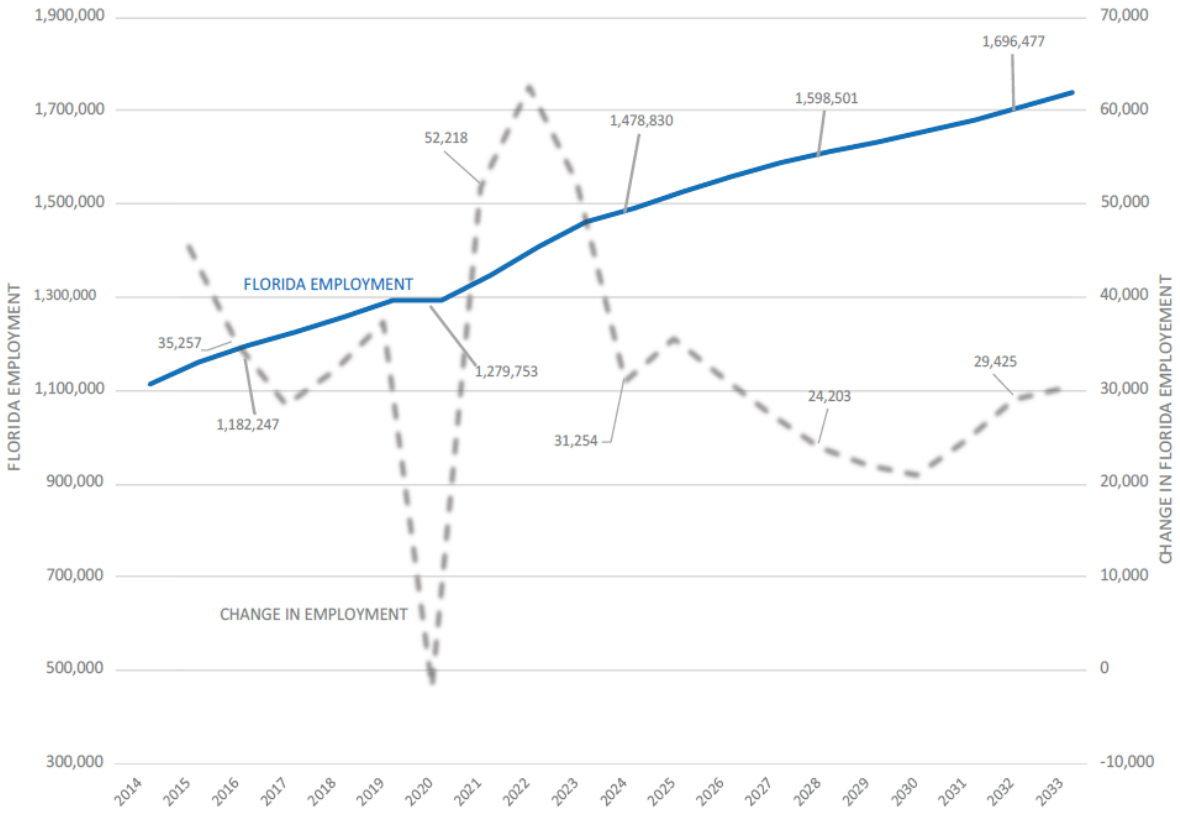
As shown in Figure 3, these additional industries generally follow normal trends that move with population-driven demand. Some specific industries were significantly disrupted in the last several years and show signs of returning to previous trends and relationships. The outlook for construction, healthcare, finance, banking, and insurance in Brevard County maintains a relatively stable, proportional relationship to Florida statewide. There is also less of a specific geographic nexus for these industries in Brevard County.

[29] National Center for Science and Engineering: State Indicators, https://ncses.nsf.gov/indicators/states/indicator/venture-capital-per-deal

[30] Information Technology, SelectFlorida, https://selectflorida.org/wp-content/uploads/Information-Technology-Profile.pdf

[31] UFINNOVATE, Florida Ranks #1 in the Nation for Entrepreneurship (Alachua Chronicle), https://innovate.research.ufl.edu/2023/10/25/florida-the-entrepreneurial-state/

Figure 3. Construction, Healthcare, Banking, & Insurance with Annual Employment Change



Source: REC Group Forecast March and S&P base data

The construction change can link to the migratory patterns of individuals moving to Florida from out of state. As the supply of individuals entering the state has increased in recent years, especially following the COVID-19 pandemic, demand for additional residential and commercial buildings could be a reasonable cause of fluctuation in the change of jobs in Florida.[32] For this study, the focus is on a narrower industry and its overall outlook. Other Heavy and Civil Engineering Construction encompasses these types of construction: dam, marine, dock, dredging, flood control projects, underwater trenching, and earth retention.

The healthcare industry, composed of hospitals and alternative healthcare facilities, creates the above trajectory for 2020. COVID-19 generally hurt the healthcare sector in 2020, consequently impacting the change in jobs for the industry. The change in employment remains positive but at a moderating rate out into the forecast period as the sector group recovers and performs a

[32] Tampa Bay EDC, "How many people moved to Florida this past year?", https://tampabayedc.com/news/how-many-people-moved-to-florida-this-past-year/

retracement effect because of the pandemic. The hiring explosion following a drop in employment has reduced the outlook for employment growth.

In general, the insurance industry's growth rate in Brevard County is pacing that of Florida's growth. While the statewide insurance employment level took a significant fall in 2023, employment growth appears to have restabilized at a slower rate. This industry group has faced a number of headwinds in the past few years. Businesses in the insurance sector have faced uncertainty in the home insurance market, especially.[33] This reduction looks to be a short-term correction, and the industry group expects to remain in this new, slower growth equilibrium for the remainder of the forecast.

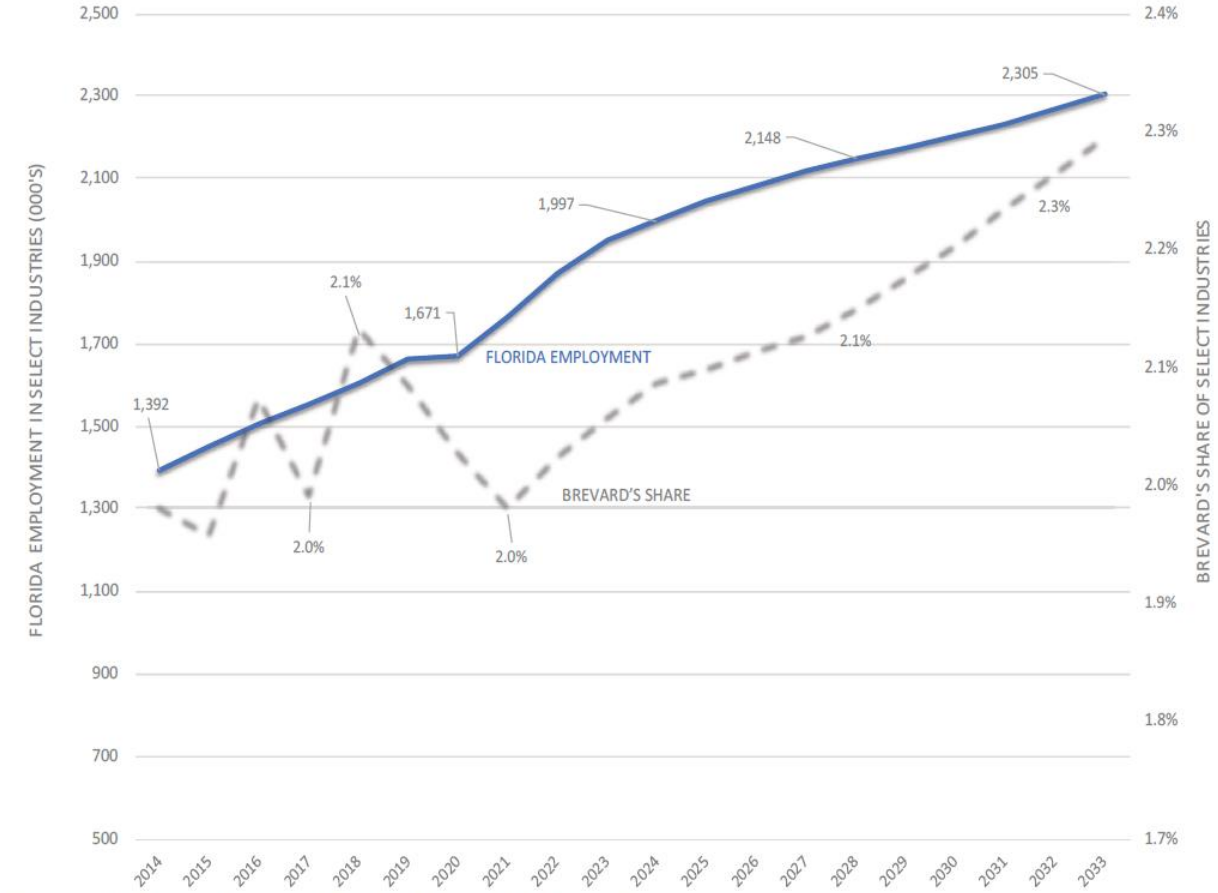
Several degree programs at Florida Tech are designed to prepare students for careers in industries such as construction, healthcare, banking, and insurance. Employment in construction is heavily influenced by migration patterns, while the healthcare industry is recovering from the challenges brought on by the pandemic. Despite uncertainties in the home insurance market, the insurance sector shows signs of stabilization. Much like the engineering fields outlined earlier, all three sectors have positive outlooks and can provide strong demand for Florida Tech graduates.

[33] A ray of sunshine for Florida's troubled residential property insurance market, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/a-ray-of-sunshine-for-florida-s-troubled-residential-property-insurance-market-76572524

Employment Outlook Summary

Figure 4 illustrates Brevard County's share of employment for all major industries tied to Florida Tech degrees.

Figure 4: Brevard's Share of Major Industries Tied to Florida Tech Programs



Source: REC Group Forecast March 2024 and S&P Base Data

Figure 4 illustrates the level of jobs statewide for all relevant fields that Florida Tech graduates can support. Florida employment levels of relevant industries maintain a strong growth pattern. According to REC Group's forecast in Figure 4, between 2024 and 2033, Florida expects to add 307,655 jobs tied to fields that present opportunities for graduates. Brevard's concentration of these jobs is steadily increasing, from 2.1% to 2.3% in 10 years, with nearly 9% growth in industrial concentration. Graduates of Florida Tech have excellent employment opportunities in the

Brevard, the Space Coast, and surrounding areas, thanks to the strong alignment between their skills and the industrial makeup of the region.

Figure 4 is significant for two reasons. Firstly, the fields that Florida Tech prepares its graduates for are highly technical, and these fields are all experiencing growth. Despite recent challenges in the healthcare industry and the ongoing crises in insurance markets, both sectors still have a positive outlook for the future. Secondly, Brevard County is a hub for highly technical engineering fields. Florida Tech is located within some of the most advanced industries in the world, which gives graduates an advantage when it comes to finding jobs in their chosen careers.

Another key value that highlights the importance of Florida Tech's degrees is the employability metric. The Global Employability University Ranking Survey (GEURS) ranks the top 250 universities worldwide on employability by asking employers which graduates they prefer.[34] As of 2024, Florida Tech ranks 77th worldwide and 18th in the United States.[35] The University of Florida appeared in the same survey and ranked 167th in the 2022 edition.[36] Using the GEURS results and referencing the data in Figure 4, both lend weight to one another to provide a strong market picture of the value Florida Tech brings.

Conclusion

The study's main objective is to examine Florida Tech's significance for the educational and economic development of Brevard County and Florida. It uses a direct and dynamic approach. Results show that Florida Tech economically benefits the state and its local county. The University, with over 9,500 students and over 70,000 alumni, significantly impacts the economy in terms of employment growth, labor income, economic output, and tax revenue.

The REC Group found that Florida Tech's economic impact accounts for 12,114 jobs created, a $1.6 billion economic impact, and $60.0 million in state and local taxes.

The REC Group's former state economists provide forecasts to provide greater insights into the employment outlook regionally and statewide. This forecast affords the University a better understanding of future labor market trends.

The importance of the University is evident in the employment demand for Florida Tech graduates. The impact analysis results show that Florida Tech plays a significant role in the ongoing growth of Florida's economy. Florida Tech is strategically positioned to offer its graduates a competitive edge so they can take advantage of career opportunities within an advanced technological hub. Additionally, the industries that education from Florida Tech caters

[34] Geurs 2024, https://www.employability-ranking.com/
[35] Ibid.
[36] Ibid.

look to experience strong economic growth in the future. Even the recent setbacks in the healthcare and insurance industries cannot halt the trend of ever-increasing job opportunities.

Florida Tech plays a significant role in boosting the growth and development of the state's economy. The University's operations and capital spending considerably contribute to the regional economy. The University offers a range of courses and programs that cater to the needs of various industries, including engineering, science, business, and more. With the education they receive, alumni provide an additional economic benefit across the state.

Overall, Florida Tech is an important contributor to the Florida economy and plays a crucial role in producing skilled workers and driving innovation in the state's advanced industries, which are growing out of Brevard County.

Appendix – Biographies

Dr. Clyde L. Diao

Chief Economist & Managing Partner

Dr. Clyde Diao is an economist with 34 years of experience. His expertise includes forecasting and analyzing tax issues; managing, developing, and conducting economic research projects on development and environmental issues; econometric and regional economic analysis; developing large econometric models for the State of Florida.

Dr. Diao served as the Deputy Policy Coordinator with the Florida Executive Office of the Governor. His primary responsibility included analyzing the U.S. Economy and forecasting Florida's economy and demographics as the basis for Florida's state revenues. He developed the State of Florida's econometric models that forecast and analyze Florida's employment, income, housing, construction, tourism, and transportation.

As the Deputy Policy Coordinator, he also worked on various tax policy issues relating to corporate income tax, documentary stamps tax, intangibles tax, communication services, gross receipts taxes, highway safety taxes, tobacco taxes, and estate tax, among others. Using sophisticated regional modeling techniques, Dr. Diao conducted analyses to determine the economic impacts of various state policies — some of which are highly controversial issues that would require Dr. Diao's expert advice for the Executive Office of the Governor.

In 2010, Dr. Diao was appointed by Gov. Charlie Crist to be the Census Liaison for the State. He was instrumental in developing the strategy for the 2010 Census, which saw a sharp increase in participation from 65% to 74% and added two more congressional seats for Florida. Florida became a model to the nation in the 2010 Census.

He is also the former Chief Economist at the Florida Department of Environmental Protection, where he was involved in various aspects of environmental regulation policy. He has appeared in court as an expert witness for the State of Florida.

Dr. Diao has been a vocal proponent of Asian American issues outside the office. He founded the Asian Coalition of Tallahassee and has been chairman for ten years. ACT is the umbrella organization that aims to unite Asian Americans in the region. He was also the leader of the Big Bend Filipino American Association for ten years, the BBFAA's longest-serving president. Dr. Diao has fought for issues that impact the Asian American community, such as eliminating the Alien Land Law in Florida's constitution and the State's declaration of the Asian American Heritage Month.

Dr. Diao is from Cagayan de Oro City, Philippines. He graduated with honors from Xavier University/Ateneo de Cagayan, a Jesuit institution, and received his M.S. and PhD in Economics at Florida State University as a World Bank scholar.

Jared Parker, MS

Chief Executive Officer, Managing Partner & Economist

Jared Parker is a founding partner and economic consultant at the Regional Economic Consulting Group. He comes from an economics career within the State of Florida's Government. He maintains a wide range of experience in state policy impacts.

Before founding the Regional Economic Consulting Group, Jared Parker worked in the Florida Legislative Office of Economic and Demographic Research (EDR) and the Florida Department of Revenue Tax Research Unit. He was responsible for projecting revenues and determining the fiscal impacts of pending bills to the Legislatures' Revenue Estimating Panel. His policy experience includes sales tax exemptions, corporate income, insurance premium taxes and credits, Communication Services, Documentary Stamps, Intangibles taxes, and electric and gas utilities.

While at EDR, Jared Parker was involved with many long-term impact projects for general state policy. He participated in the State's analysis and committee hearings featuring the Patient Protection and Affordable Care Act and the later attempt to expand Medicaid under Florida's Health Insurance Exchange. He was also involved with the 2010 B.P. Oil Spill, hurricane disaster impacts, and numerous constitutional amendments.

Jared Parker received his M.S. in Applied Economics from Florida State University and has a broad range of experience on various topics about local, State, and regional economies. With many years of hands-on experience in measuring the state economy for the Legislature, he has been a part of the revenue estimating process that both the Governor and the Legislature depend on to create their budgets for the past decade.

He brings invaluable experience to the REC Group in producing in-depth outlooks and impacts and can deliver results clearly and concisely.