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AN IMPACT ANALYSIS OF THE ICUF INSTITUTIONS ON FLORIDA'S ECONOMY

A Project by Independent Colleges and Universities of Florida

Prepared by the Regional Economic Consulting Group

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EXECUTIVE SUMMARY

The Independent Colleges and Universities of Florida (ICUF) institutions play a significant role in the state's education and economic development. There are thirty institutions spread across the state, totaling more than 157,000 students. To determine their economic contributions and their importance to the Florida economy, ICUF has sought the help of the Regional Economics Consulting (REC) Group to undertake an in-depth study. Below are the results.

Executive Summary

($Millions)

	2019-20
Economic Impact of the ICUF Institutions (Table 8)	
ICUF Institutions Jobs Impact (Jobs)	100,898
ICUF Institutions Economic Impact (Output)	$15,690.9
ICUF Institutions State & Local Taxes	$1,140.0
Economic Impact of the Lifetime Degree Earnings (Table 9)	
Lifetime Earnings Jobs Impact (Jobs)	131,585
Lifetime Earnings Economic Impact (Output)	$21,107.1
Lifetime Earnings State & Local Taxes	$7,269.9
Economic Impact of EASE (Table 10)	
EASE Jobs Impact (Jobs)	21,934
EASE Economic Impact (Output)	$3,533.7
EASE State & Local Taxes	$282.2
EASE Economic Return per Student ($Dollars)	$88,132
State & Local Return on Investment	2.4777

The study began by conducting a survey to gather various operating costs, student-associated expenditures, and graduation information. It includes data on revenues, budgets,

undergraduate and graduate class sizes, in-state, out-of-state and international students, among other details. Data from the US Department of Education, Integrated Postsecondary Education Data System (IPEDS), was used to ensure consistency with the survey results and provide additional support to the study.

The economic study involves two phases: static and dynamic. The static phase determines the direct operating and capital expenditures by the ICUF institutions, the total cost of attendance by students broken down into different expense categories, and the differential earnings of new graduates. The total direct expenditures by the institutions and students were used as inputs to IMPLAN modeling to determine the dynamic phase.

The REC Group found that the economic impact of the ICUF Institutions, from both their direct spending and their students' spending, account for 100,898 jobs created, a $15.7 billion economic impact, and more than $1.1 billion in state and local taxes. Lifetime earnings of degrees awarded lead to 131,585 jobs, $21.1 billion in economic impact, and $7.3 billion in taxes collected over 30 years. As a subset of the larger ICUF, the EASE program supports 21,394 jobs created, $3.5 billion in economic output, and $282.2 million in taxes collected.

Specifically for the EASE program, the economic, state, and local government returns are substantial. Each EASE student creates $88,100 in economic output. Furthermore, for every dollar put into the program by the state, it generates $2.48 in tax collections.

Additional cuts to the EASE program run the risk of negative implications to the number of students who can barely afford to go to college and their lifetime earnings. If the state cuts the funding of the EASE program, some students will try to find their way into the state university system because of the lower cost of attendance. The state university system has reached its maximum capacity with an overall acceptance rate of 46.5% in the Fall semester.[1] To provide additional capacity to accommodate displaced students, the state universities will have to add more facilities and hire more professors.

The ICUF member institutions are a powerful driver of the Florida economy. The benefits from their day-to-day operations bring over a hundred thousand jobs to the state and provide billions in economic activity. The school system offers future educated workers for the state's robust and growing economy. A supporting program like EASE has significant economic impacts by tens of thousands of jobs provided and billions in economic activity. It also helps with affordability and access to education. The Independent Colleges and Universities of Florida are a cornerstone of what makes Florida truly special in all facets.

[1] https://www.acceptancerate.com/schools/

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INTRODUCTION

The Independent Colleges and Universities of Florida (ICUF) is a diverse association of private educational institutions.[2] Florida's thirty not-for-profit independent institutions play a distinct role in the state's progress, productivity, and prosperity through high graduation rates and excellent job placements. ICUF institutions educate and equip students with the knowledge to make a positive difference and create a robust workforce to develop tomorrow's economy. The Universities and Colleges have been educating students by instilling values, attitudes, skills, and behaviors that align with those necessary for a vibrant economy.

The ICUF institutions themselves are a powerful economic engine to Florida. The sheer magnitude of their operations lends excellent weight to job creation, income, the Florida GDP, and overall productivity. They affect the economy in three facets: the first through their large budgets, secondly through their more than 157,000 students' expenditures in the economy, and finally through the educated workforce creation for the world of tomorrow.

The ICUF Association tasks the Regional Economic Consulting Group (REC Group) to measure the economic impact of their member institutions. Notably, the Group looks at how the system influences employment, income, Gross Domestic Product, and output and their effects on local and state tax revenues.

To gauge the economic importance of the ICUF institutions on the economy, the Group used three approaches by measuring the impact of universities' expenditures, the expenditures by students on their lodging, meals, and miscellaneous spending, and finally looking at the economic impact of future earnings of their collegiate graduates. The three combined approaches measure ripple effects across direct, indirect, and induced levels on jobs, labor income, GDP, economic output, and local and state tax revenues. Together these factors illustrate the private, not-for-profit university system's benefit to the Florida economy.

Regional Economic Consulting Group Background

The Regional Economic Consulting Group is a research group measuring the economic and financial effects of public and private sector projects. The REC Group builds impact studies and helps provide statistical validation to public policy, economic development strategies, and impact investment. The REC Group covers a wide-ranging field spanning economic outlooks to demographic and labor market studies and uses the latest techniques in econometric modeling and methodologies.

[2] About ICUF, https://icuf.org/about-icuf/

The 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 consequences 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 coming from the economic units of the Florida Government and have firsthand knowledge of the Florida Economy. That competitive advantage affords the REC Group an intimate familiarity with Florida-specific financial mechanisms. The REC Group brings that ability to the private and government sectors to better position impacts and promotes initiatives for the future.

A Brief Background

Independent Colleges and Universities of Florida

Composed of 30 colleges and universities, ICUF was established in 1965 to provide a collective voice of Florida's private non-profit colleges and universities. Each ICUF institution is a non-profit school, Florida-based, and accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). The schools offer a wide range of undergraduate, graduate, professional, and continuing education programs and diverse students, campuses, and missions.[3]

The REC Group surveyed the institutions to collect primary data and also used information from the Integrated Postsecondary Education Data System (IPEDS) to build the profile of Florida's not-for-profit university collegiate system. The total operating budget of all schools was $6.9 billion in the Fiscal Year 2019-20 and employed 49,037 Floridians statewide. The Group also found that the schools have a total enrollment of 157,694 students. Of this, 112,490 students are undergraduates, while 45,204 students account for the graduate level. Enrollments range from 400 to 21,000 students per ICUF member institution spread out across more than 200 sites in Florida.[4] Each year for the past three years, the system has graduated close to forty thousand students annually.

Below is the list of ICUF members:

- *AdventHealth University - Orlando*
- *Ave Maria University - Ave Maria*
- *Barry University - Miami Shores*
- *Beacon College - Leesburg*
- *Bethune - Cookman University - Daytona Beach*

[3] About ICUF, https://icuf.org/about-icuf/
[4] IBID

- *Eckerd College - St. Petersburg*
- *Edward Waters University - Jacksonville*
- *Embry -Riddle Aeronautical University - Daytona Beach*
- *Everglades University - Boca Raton*
- *Flagler College - St. Augustine*
- *Florida College - Temple Terrace*
- *Florida Institute of Technology - Melbourne*
- *Florida Memorial University - Miami Gardens*
- *Florida Southern College - Lakeland*
- *Hodges University – Ft. Myers*
- *Jacksonville University - Jacksonville*
- *Keiser University - Ft. Lauderdale*
- *Lynn University - Boca Raton*
- *Nova Southeastern University - Ft. Lauderdale*
- *Palm Beach Atlantic University-West Palm Beach*
- *Ringling College of Art and Design - Sarasota*
- *Rollins College - Winter Park*
- *Saint Leo University - Saint Leo*
- *St. Thomas University - Miami Gardens*
- *Stetson University - DeLand*
- *Southeastern University - Lakeland*
- *The University of Tampa - Tampa*
- *University of Miami - Coral Gables*
- *Warner University - Lake Wales*
- *Webber International University - Babson Park*

The ICUF Institutions provide a variety of degrees for their students to pursue. In FY 2019-20, the institutions saw a combined 39,396 students graduate. The top five degrees include Business Administration, Nursing, Psychology, Criminal Justice, and Communications. Based on the Group's survey research, roughly 66% of the graduating students choose to stay in Florida, but the average jumps to 74% for the top five degrees. Nursing is the second most common degree graduating after Business Administration. Nurses also have the highest state retention rates at an impressive 85%.

Effective Access to Student Education (EASE) Program

Florida's independent colleges and universities are engines of opportunity for Floridians. Florida's Effective Access to Student Education (EASE) is a grant available to Florida resident undergraduate students attending at least 12 hours per term. EASE Funding helps alleviate

some of the costs for many students and achieve high-quality education at private, not-for-profit institutions that would have otherwise been unattainable. Notably, these institutions accept more minority students, low-income students, and more students over 25 than the State University System.[5] With EASE, the access to higher education for many students in these demographics is more affordable. Students can effectively break barriers to higher incomes and make themselves valuable to the future of Florida.

As of FY 2019-20, approximately 40,096 full-time equivalent undergraduate in-state students at Florida's not-for-profit private institutions receive EASE grants. The EASE program provides a total of $2,841 per year of subsidy to a student that goes to an eligible not-for-profit private college or university.

OBJECTIVES

The study aims to achieve a three-part analysis in breaking down the economic impact of the ICUF member institutions on Florida's economy.

The first part analyzes the economic impacts and contributions of the ICUF institutions' expenditures through operating and capital spending. The second part analyzes student expenditures on tuition, fees, food, lodging, and miscellaneous items. The third and final part estimates the lifetime earnings of graduates remaining in the state.

All three components will be measured and translated into the total number of jobs created, labor income, effects on the Gross Domestic Product, impact on economic output, and state and local taxes. All impacts occur at direct, indirect, and induced levels.

Lastly, the study will also provide a brief profile and economic impact of the EASE program to analyze its importance to students and the economy.

METHODOLOGY

The overall strategy of the study is to approach the analysis in two phases: the static phase and the dynamic phase. The static phase refers to the actual direct expenses that the institutions incur. Expenditures include the total operating costs, capital expenditures of the schools, day-to-day student spending, and lifetime spending of the graduates. All expenses are considered direct costs to be used as inputs to estimate the total direct and indirect and induced effects.

The dynamic phase investigates the ripple effects on the economy resulting from these expenditures. The phase covers how the direct costs affect other sub-industries or related

[5] Financial Aid, https://icuf.org/financial-aid/

industries in the economy. A dynamic analysis is where simulated direct spending is injected into the economy to produce a series of direct, indirect, and induced effects. Those effects capture economic ripples spreading across all industries to calculate the total numbers of jobs created, labor income produced, GDP, and economic Output. The study uses the widely accepted software IMPLAN, built on RIMS II economic multipliers, by the US Bureau of Economic Analysis to measure the economic impacts of the ICUF Institutions.

STATIC ANALYSIS

The survey gathered various information related to operating costs, capital expenditures, student-associated expenditures, graduation information and information related to the EASE program. The survey received a 100% response rate. The results sum up into totals for confidentiality reasons to create a general profile of the not-for-profit university system in Florida. Once in hand, the results were then checked back against the Integrated Postsecondary Education Data System (IPEDS) to build a robust dataset and to ensure consistency in the data before the analysis began.

A sample of the survey instrument is in Appendix II.

The first phase of the study is concerned with identifying expenditures that impact the Florida economy. An impact on the Florida economy defines spending that otherwise would not occur in the absence of the university system. The expenditures break down into two general areas: the schools' operating costs and capital expenditures, and the students' spending. Together, these two pieces represent the economic impact of the institutions themselves. However, the institutions provide something important that must also be considered when looking into its impact on the economy: their graduates. The lifetime spending by the graduates is a separate but related economic impact of the ICUF Member Institutions. The last direct expenditure relates to the EASE program and analyzes its direct spending as a subset of the total University system.

Direct spending by the schools is composed of operating and capital expenditures. Operating costs are the ongoing expenses of day-to-day operations. They are divided into eleven different categories for the study's purposes to illustrate better what the costs entail. Ultimately the costs are summed up as a total used for the dynamic phase. The second area of direct spending is capital costs. These are the costs associated with building construction, renovation, and improvements.

Student spending is the general expenditure that a typical student would incur over a year. There are five categories to which students spend their money: tuition, fees, lodging expenses, food expense, and miscellaneous spending. Tuition and fees, dorm lodging, and any meal or board plans all have their impacts captured by institutional operating expenditures. Therefore,

student expenditures independently impact the economy through apartment rentals, off-campus meals (or 'Meals'), and miscellaneous spending. Student counts based on the Fall enrollment, which corresponds with the university fiscal year, are divided into three groupings: Undergraduate Florida Residents, Undergraduate Non-Florida Residents, and Graduate Students. The three groupings filter and isolate the relevant spending items to quantify students' impactful spending on the Florida economy.

The first assumption separates traditional students from remote students. Remote students do not have an economic impact in the State of Florida. Out-of-state Remote students would have no effect through meals, lodging, or miscellaneous spending on the Florida economy as they do not reside in Florida. For in-state, remote students, meals, housing, and various expenditures would take place regardless of the existence of the university system and their choice to attend small classes. Therefore, remote online students are dropped from the student expenditure analysis.

Undergraduate Florida resident students separate into several groups: undergraduate students living on-campus, undergraduate students living off-campus with their families, and undergraduate Florida students without their families. Florida students living on-campus spend money on tuition, dorm lodging, and meal plans. All of which is on-campus spending and are captured by the ICUF institutions operating expenses. If they live off-campus with their families, there is no spending on meals and lodging. Miscellaneous expenditures generally have no economic effect as these are Floridians. They are spending on these items regardless of the existence of the ICUF Institutions, which leaves Off-campus meals and Apartment expenditures.

Meal expenditures still have no economic impact as Floridians must eat with or without the schools' existence. However, Florida Resident students living off-campus and not with their families assume to be renting an apartment due to relocating within the state to attend classes at their respective schools. Apartments are the only economic impact resulting from a Florida resident student's expenditure.

Undergraduate Non-Florida Residents carry the most impacts. These are out-of-state students who have relocated to Florida to attend not-for-profit universities. All of their spending is predicated on the ICUF Institutions and is considered new spending to the state. Students are grouped into non-Florida students living on-campus and non-Florida students living off-campus. Dorm lodging and meal plans count in institutional spending. In contrast, their miscellaneous spending directly impacts Florida as new spending and not captured by the schools. Non-resident Florida students who live off-campus have impacts through apartment expenditures, meals, and miscellaneous spending.

Graduate students account for the final grouping. The first assumption for all graduate students is that they live off-campus. They are in three base groups: Florida residents living with their families, Florida residents living without their families, and non-Florida residents. Graduate

students who are Florida residents living with their families hold no quantifiable impact. They have no new costs towards meals and lodging. The institutional spending captures their spending directly on school, and their miscellaneous spending would happen regardless. Florida residents not living with their families impact the economy through apartment expenditures. Like the undergraduates, the study assumes that graduate Floridian students have moved and acquired an apartment to take classes and would impact the economy. The last grouping, non-Florida resident graduate students, has the same impact as the undergraduate non-Florida students. Their relocation to Florida to attend classes impacts the lines of purchasing related to apartments, meals, and making miscellaneous expenditures.

Altogether, the impact by the three major groupings would come from student spending from Florida resident undergraduates and graduates spending on apartments, Non-resident undergraduate and graduates spending on apartments, off-campus meals, and their miscellaneous expenditures.

The third area of static impact involves the lifetime earnings of degrees graduating each year. Each degree carries new opportunities and higher earning potential throughout their future careers. The static impact of lifetime earnings quantifies the direct lump sum value of the next thirty years of wealth creation derived in present value. The REC Group used the average earnings per educational level published by the Florida Department of Education in Fall 2019 for ICUF schools. The dollar value was adjusted using the rate of inflation in 2020 where the dollar value was pegged throughout the 30-year period. The graduates will continue to consume goods and services over time, creating impacts on the economy, holding everything constant. Educated workers are an incredible resource in any economy and powerful drivers for the future. The schools provide an ongoing release of educated workers tied to thirty years of wealth creation at higher incomes, thanks to their degrees.

Annual Degree Earnings		
Degrees	Earnings[7]	Differential
Highschool Degree	$25,644	$0
Certification	$43,620	$17,976
Associate of Arts Degree	$37,388	$11,744
Bachelor's Degree	$47,312	$21,668
Master's Degree	$70,736	$23,424
Doctoral Degree	$79,596	$8,860

[7] Earnings by Education Level, https://www.fldoe.org/accountability/fl-edu-training-placement-info-program/initial-quarterly-earnings.stml

The table above shows the earnings differential per level of education. If a particular student earns a master's degree, the earnings differential is the difference between the average earnings of a master's degree versus the average earnings of a bachelor's degree. That is due to the previous earnings differential of a bachelor's degree compared to a high school degree captured in prior years. Only the marginal change in education is considered an impact on Florida. Thus, the aggregate lifetime earnings is calculated by multiplying the number of graduates by their types of degrees and their respective earnings differential.

The final portion of the static analysis involves measuring the Effective Access to Student Education (EASE) program. In the absence of the EASE program, an individual student now unable to participate in the ICUF schools could still have an opportunity in the public universities in Florida. However, while that student may find education, another student is losing their chance at education in the public schools as they crowd out. Their slot in the education system's absence of EASE is now taken by what otherwise would have been an ICUF participant, given that the universities, public and private, operate at maximum capacity. The state university system has reached its maximum capacity with an overall acceptance rate of 46.5% in the Fall semester.[6]

The detailed EASE analysis is a subset of the greater ICUF Member Institution's impact and uses the same methodology. It helps provide a deeper understanding of the importance of EASE funding, and the economic return provided by the program. EASE treats as a microcosm in

[6] https://www.acceptancerate.com/schools/

which the same general impacts of university spending and student spending focuses on students receiving benefits from the EASE program.

The EASE program is limited to undergraduate Florida residents taking a minimum of 12 hours of course work per term. Impacts related to EASE separates as direct expenditures to tuition and fees, room and board, and apartment expenditures. Florida undergraduates are divided into three groups: Florida resident students receiving EASE and living on campus, off-campus with family, and without family. Florida residents living on-campus impact through expenditures in tuition, fees, dorm lodging, and meal plans; living off-campus with family impacts only tuition and fees. EASE students living off-campus without their families affect the economy by their education, fees, and any apartment expenses.

The goal of the static phase is to isolate specifically which areas the ICUF schools directly impact the state's economy. ICUF Member Institutions influence the economy through their direct expenditures, their student body's spending, and the lifetime earnings of their graduates. University spending divides between the operating budget and the capital budget. Student expenditures are filtered to isolate which direct spending affects the Florida economy through lodging, food, and miscellaneous expenditures. Lifetime earnings affect the economy by individuals achieving higher levels of education and quantifying the additional 30 years' worth of value a worker would receive through their newly awarded degree. The three areas of static impact are isolated and summed up to measure direct expenditures as inputs for the second phase of the study, the dynamic analysis.

DYNAMIC ANALYSIS

Dynamic impacts are the change in one variable leading to the change in others. The concept of the economic input-output model shows the interdependencies between different sectors of a national economy or different regional economies. 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. Thus, a change in one industry could affect other industries either directly, indirectly, or induced. Direct, indirect, and induced effects are the cornerstones of an economic impact.

An example of direct impacts is individuals buying a good, and the direct cost is $5. The immediate impact 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 that after our $5 item sells, 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 IMPLAN model uses three general stages. The first is the economic impact that the universities and their students have. Secondly, the result of the graduates and their lifetime earnings, and lastly, the EASE program. The first stage includes five separate model runs:

1. Operating Expenditures
2. Capital Expenditures
3. Total Apartment Expenditures
4. Total Meals Expenditures
5. Total Miscellaneous Expenditures

IMPLAN maintains 546 unique industry sectors that can help focus specific spending and accurately capture their effects on the economy. Operating expenditures are treated as general expenditures by educational institutions, while capital expenditures spend on constructing educational structures. Apartment expenditures are on tenant-occupied housing expenditures, meals apply to general grocery purchases, and miscellaneous spending is on available retail.

Lifetime earnings and their economic impacts are structured differently than the ICUF Member Institution impacts. There are four general classifications of degrees:

1. Doctoral Degrees
2. Master's Degrees
3. Bachelor's Degrees
4. Associates of Arts Degrees

Unlike the general 546 categories, IMPLAN uses direct expenditures, lifetime earnings, and available incomes associated to each degree and their changing consumption behavior. For example, someone earning $75,000 will behave differently than an individual earning $45,000 per year. Therefore, the degree earnings differential pertains to the new income bracket for someone going from a bachelor's degree to a master's degree or from a high school diploma to a bachelor's degree.

The third stage is the EASE impact analysis. As a subset of the larger not-for-profit institutions, EASE uses the same economic sectors to measure a tighter impact on students receiving EASE. Tuition, fees, dorm lodging, and meal plans influence student spending differently from general university spending. The EASE impact builds on a total result of the students themselves instead of the available university system in conjunction with their students spending.

Together the static and dynamic phases come to paint a picture that displays the direct actions the schools are taking in the economy, and on the other side, reveal what those actions mean to the larger view. The dynamic impacts will summarize four general statistics that represent the ripple effects across the economy in total: the impact on jobs created, the impact on labor income, the impact on GDP, and the new economic output produced. The dynamic phase also provides the amount of taxes generated at the state and local levels.

The goal of the methodology is to provide a well-rounded view of what the ICUF Member Institutions mean to Florida. These statistics give a concise statement of the importance of the not-for-profit schools and powerful insight into what the system means for Floridians across the state.

ASSUMPTIONS AND DATA

Sources of data used in the study:

- Survey Data of the 30 ICUF member institutions
- Integrated Postsecondary Education Data System (IPEDS), US Department of Education
- Budget Appropriations of EASE
- Florida Department of Education. Florida Education and Training Placement Information Program (FETPIP), Division of Technology and Innovation Annual Outcomes Report, Fall 2019. Data Released December 2020.
- Independent Colleges and Universities of Florida
- AcceptanceRate.com
- Data Points, American Association of Community Colleges, Vol 7/Issue 21, Dec 2019.

Significant assumptions used by the study:

- Remote students do not impact the economy other than through tuition, fees, and books, which are already accounted for university spending.
- 13.1% of students stay with family.
- 100% of students living on campus have a meal plan, 100% of students living off-campus do not.
- Floridians do not add new spending to off-campus meals or general miscellaneous expenditures.
- Graduate students are assumed to stay off-campus.
- Lifetime earnings take a 30-year earnings period.
- 66% of ICUF graduates remain in Florida

ANALYSIS AND FINDINGS

STATIC IMPACT

Table 1 displays the direct expenditures by the ICUF Institutions. The bulk of the spending is on instruction costs followed by hospital services, institutional support, and other expenses. In FY 2019-20, $1.9 billion came from instruction, $1.1 billion from hospital services, $818.1 million arose from institutional support, and $859.1 million from other expenses.

Table 1: Institutional Expenditures

($Millions)

	2019-20
Operating Expenditures	
Instruction	$1,873.1
Research	$352.1
Public Service	$184.7
Academic Support	$471.9
Student Service	$659.5
Institutional Support	$818.1
Auxiliary Enterprises	$574.9
Grant Aid	$15.1
Hospital Services	$1,110.2
Independent Operations	$15.8
Other Expenses	$859.1
Total Operating Expenditures	$6,934.5
Non-operating Expenditures	
Capital Expenditures	$417.6

The different areas of spending are direct cash injections into the economy. The schools' day-to-day operations account for more than $6.9 billion, and their capital expenditures account for another $417.6 million in FY 2019-20, for a total of $7.4 billion.

Tables 2 through 4 filter students by resident and educational status and breakout five typical expenses (tuition, fees, lodging, food, ad miscellaneous) to better position and drill down the impact and prevent double counting. Grouping the five general expenses allows for removing the costs already accounted for by university expenditures and separating expenses that would not impact the economy without the ICUF Member Institutions.

Table 2: Undergraduate Florida Students

($Millions)

	2019-20
Undergraduate Student Counts (Fall Enrollment)	
Undergraduate Students	112,490
Traditional Undergraduate Students	96,881
Florida Undergraduate Students	57,969
Florida On-campus Undergraduate Students	15,693
Florida Off-campus Undergraduate Students (w/Family)	14,736
Florida Off-campus Undergraduate Students (w/o Family)	27,540
Undergraduate Students Living On-campus	
On-campus Tuition & Fee Expenditures	$474.4
Dorm Expenditures	$131.2
Board Expenditures	$48.9
On-campus Miscellaneous Expenditures	$63.2
Undergraduate Students Living Off-campus w/Family	
Off-campus Tuition & Fee Expenditures w/Family	$445.5
Off-campus Miscellaneous Expenditures w/Family	$69.5
Undergraduate Students Living Off-campus w/o Family	
Off-campus Tuition & Fee Expenditures w/o Family	$832.6
Apartment Expenditures	$218.3
Meals Expenditures	$85.8
Off-campus Miscellaneous Expenditures w/o Family	$131.4

Table 2 is the first of three tables describing general groups of student spending—the tables group by Florida undergraduate students, non-Florida undergraduate students, and graduate students. In table 2, there are 112,490 undergraduate students in the Fall enrollment of 2019.

Using a combination of IPEDS data and survey responses, 96,881 students participate in traditional on-campus classes. The remainder of 15,609 are considered remote students.

From the survey, Florida resident students have a Florida home address as an origination address, meaning students do not count as residents if they moved here from out of state and later gained a permanent Florida address. Of the 96,881 Traditional Undergraduate Students, 57,969 are Florida Residents.

The 57,969 traditional Florida students act as the starting point. They divide into three categories: Florida students living on campus, Florida students living off-campus with their families, and Florida students without their families. Florida students living on campus are from the survey data. Students living off-campus use a researched distribution value of 13.1% of total students living at home with their families.[7] The remainder is considered students neither living on campus nor with their families.

The largest of the three groups are the Florida undergraduates living off-campus without their families (27,540), followed by students living on campus (15,693), and finally, students living off-campus with their families (14,736).

Undergraduate Florida students living on-campus distribute spending by dorm rooms, board, tuition, fees, and miscellaneous expenditures. All spending data is acquired through IPEDS and their cost-of-attendance variables. Undergraduate Florida students living off-campus with their families have lodging and food expenses not considered. Respective households cover those costs and have no bearing on the analysis. Students living off-campus without families pay for accommodation and food from spending on apartments and off-campus meals.

[7] American Association of Community Colleges. Data Points: Student residence, December 2019.

Table 3: Undergraduate Non-Florida Students

($Millions)

	2019-20
Undergraduate Student Counts (Fall Enrollment)	
Non-Florida Undergraduate Students	38,912
Non-Florida On-campus Undergraduate Students	19,830
Non-Florida Off-campus Undergraduate Students	19,082
Undergraduate Students Living On-campus	
On-campus Tuition & Fee Expenditures	$599.5
Dorm Expenditures	$165.8
Board Expenditures	$61.8
On-campus Miscellaneous Expenditures	$79.8
Undergraduate Students Living Off-campus	
Off-campus Tuition & Fee Expenditures	$576.9
Apartment Expenditures	$151.2
Meals Expenditures	$59.5
Off-campus Miscellaneous Expenditures	$91.1

Table 3 groups the non-Florida undergraduate students together. Non-Florida undergraduates are derived from Table 2's total student population, filtering out the remote students, and keeping the remaining students not counted as Florida undergraduate students. There are only two main groupings for non-Florida students: students living on-campus (19,830) and living off-campus (19,082).

Non-Florida students living on-campus face similar expenditures to their Florida resident counterparts. They pay for dorm rooms, board, tuition, fees, and miscellaneous. Off-campus non-Florida students face a matching set of expenditures with apartments and off-campus meals. They differ from their Florida resident counterparts in that miscellaneous spending and meals away from campus impact the Florida economy as new spending.

Table 4: Graduate Students

($Millions)

	2019-20
Graduate Student Counts (Fall Enrollment)	
Graduate Students	45,204
Traditional Graduate Students	32,172
Florida Graduate Students	21,642
Florida Off-campus Graduate Students (w/Family)	5,922
Florida Off-campus Graduate Students (w/o Family)	15,721
Non-Florida Off-campus Graduate Students	10,530
Florida Graduate Students Living Off-campus w/Family	
Off-campus Tuition & Fee Expenditures w/Family	$98.0
Off-campus Miscellaneous Expenditures w/Family	$27.9
Florida Graduate Students Living Off-campus w/o Family	
Off-campus Tuition & Fee Expenditures w/o Family	$260.1
Florida Graduate Apartment Expenditures	$124.6
Florida Graduate Meals Expenditures	$49.0
Off-campus Miscellaneous Expenditures w/o Family	$75.0
Non-Florida Graduate Students	
Non-Florida Tuition & Fee Expenditures	$174.2
Non-Florida Graduate Apartment Expenditures	$83.4
Non-Florida Graduate Meals Expenditures	$32.8
Non-Florida Miscellaneous Expenditures	$50.3

Table 4 examines the graduate student grouping. In two key areas, graduate students' expenditures differ from Tables 2 and 3. Graduate students are a separate population, and none of the students are assumed to live on-campus.

There are 45,204 graduate students as of Fall 2019. They break down to 32,172 students attending classes on campus, and 21,642 are considered Florida residents. Florida graduate students are subdivided into those living with their families (5,922) and those without (15,721). Non-Florida residents make up the remaining students and account for 10,530 students.

Table 5: Static Impacts Summary

($Millions)

	2019-20
Institutional Expenditures	
Total Operating Expenditures	$6,934.5
Capital Expenditures	$417.6
Apartment Expenditures	
Florida Undergraduate Apartment Expenditures	$218.3
Non-Florida Undergraduate Apartment Expenditures	$151.2
Florida Graduate Apartment Expenditures	$124.6
Non-Florida Graduate Apartment Expenditures	$83.4
Total Apartment Expenditures	$577.5
Meals Expenditures	
Non-Florida Undergraduate Meals Expenditures	$59.5
Non-Florida Graduate Meals Expenditures	$32.8
Total Meals Expenditures	$92.3
Miscellaneous Expenditures	
Non-Florida Undergraduate On-campus Miscellaneous Expenditures	$79.8
Non-Florida Undergraduate Off-campus Miscellaneous Expenditures	$91.1
Non-Florida Graduate Miscellaneous Expenditures	$50.3
Total Miscellaneous Expenditures	$221.2

Table 5 is a product of Tables 1 through 4. Table 5 focuses on the spending that will positively impact the Florida economy. The five direct expenditures run through the IMPLAN modeling include operating, capital, total apartment, meals, and miscellaneous spending.

Operating and capital expenditures are pulled directly from Table 1 and are the schools' cash injection into the economy. By FY 2019-20, the total amount spent is more than $6.9 billion while their capital expenditures are $417.6 million, adding to $7.4 billion.

Student expenditures on apartments filter and isolate which spending by relevant parts of the student body mattered in context. Table 5 separates undergraduate Florida residents living off-campus without their families, all non-Florida undergraduate off-campus students, graduate Florida students, and graduate non-Florida students. The grouping implies that all stayed in apartments while attending class on campus are economic impacts predicated on the ICUF Member Institutions. Total Apartment Expenditures were $577.5 million FY 2019-20.

Off-campus meals expenditures are more limited by which groups impact Florida. Florida students eating in Florida is not an impact because of the institutions. Regardless, they will spend on food with or without the institutions. Meals that have impacts are relegated to off-campus meals for undergraduate and graduate non-Florida students. Fall in FY 2019-20, the amount added to $92.3 million.

The final area of student spending is the student's miscellaneous expenditures. As with the off-campus meals, miscellaneous student expenditures only matter for non-Florida students. Florida resident students will generally spend regardless of the schools. Miscellaneous spending for non-Florida undergraduate and graduate students would not occur in Florida without being attracted to relocate to the state by the schools. Unlike meals spending, there are no institutional mechanisms to create double-counting as lodging and food through dorm rooms and board offerings. All miscellaneous spending done by non-Florida residents is an impact. FY 2019-20 saw $221.2 million on miscellaneous expenditure by non-Florida students.

Table 5 is ultimately a summary that ties the earlier pieces and parts of the static analysis together to provide clear and concise values that matter to the Florida economy. In this case, it is the institutions' spending habits on operating and capital expenditures and their student's spending on apartments, meals, and miscellaneous spending. The next set of tables shows the economic ripple effects resulting from these cash injections to provide a bigger picture of the spending to the overall economy.

DYNAMIC IMPACT

Independent Colleges and Universities of Florida

Tables 6.1 and 6.2 provide the results from IMPLAN across the five major areas of spending identified. Each area of spending evaluates direct impacts, and indirect and induced impacts for job creation, labor income, GDP, and economic output. Job creation is the number of new jobs resulting from the institutions' economic weight to Florida. Labor incomes are those same jobs and the aggregated value of their paychecks. GDP is the final goods and services, minus any

goods acquired in the production process, produced due to the institution's effect on the economy. Economic output is the sum of all goods and services including intermediate products produced by immediate spending. Table 6.1 accounts for the direct impact, while Table 6.2 describes the impacts to the supply chain and consumption patterns creating additional indirect and induced effects.

In the case of the previous $5 good example, the direct impact is the cost of the good, while the indirect impact is the cost of supplying the goods to be sold. Induced effects are the earnings by workers spent in the economy from the sold goods. The same condition is the central theme of Tables 6.1 and 6.2.

Table 6.1 Dynamic Impacts

Direct Impacts ($Millions)

	2019-20
Employment Impacts (Jobs)	
Operating & Capital Expenditures Employment	52,205
Apartment & Meals Expenditures Employment	1,733
Miscellaneous Expenditures Employment	2,770
Total Direct Employment	56,708
Labor Income Impacts	
Operating & Capital Expenditures Labor Income	$3,893.6
Apartment & Meals Expenditures Labor Income	$59.3
Miscellaneous Expenditures Labor Income	$92.7
Total Direct Labor Income	$4,045.6
GDP Impacts	
Operating & Capital Expenditures GDP	$5,358.7
Apartment & Meals Expenditures GDP	$582.6
Miscellaneous Expenditures GDP	$132.2
Total Direct GDP	$6,073.5
Economic Output Impacts	
Operating & Capital Expenditures Output	$7,536.6
Apartment & Meals Expenditures Output	$676.5
Miscellaneous Expenditures Output	$224.7
Total Direct Output	$8,437.9

Table 6.2: Dynamic Impacts

Indirect & Induced Impacts ($Millions)

	2019-20
Employment Impacts (Jobs)	
Operating & Capital Expenditures Employment	41,566
Apartment & Meals Expenditures Employment	1,189
Miscellaneous Expenditures Employment	1,436
Total Indirect & Induced Employment	44,190
Labor Income Impacts	
Operating & Capital Expenditures Labor Income	$1,963.3
Apartment & Meals Expenditures Labor Income	$66.9
Miscellaneous Expenditures Labor Income	$78.4
Total Indirect & Induced Labor Income	$2,108.6
GDP Impacts	
Operating & Capital Expenditures GDP	$3,552.0
Apartment & Meals Expenditures GDP	$105.0
Miscellaneous Expenditures GDP	$126.1
Total Indirect & Induced GDP	$3,783.2
Economic Output Impacts	
Operating & Capital Expenditures Output	$6,826.9
Apartment & Meals Expenditures Output	$194.7
Miscellaneous Expenditures Output	$231.4
Total Indirect & Induced Output	$7,253.0

The ICUF Institutions creates 56,708 jobs in the economy in FY 2019-20. These jobs are a product of operating and capital expenditures. Another 1,733 jobs arise from student spending on apartments and off-campus meals, and an additional 2,770 jobs result from miscellaneous spending. Indirect and induced effects add another 44,190 jobs. Most indirect and induced jobs (41,566) are produced by operating and capital spending. Another 1,189 jobs result from spending on apartments and off-campus meals. Students' miscellaneous expenditures add another 1,436 jobs.

Corresponding total direct labor income amounts to $4 billion. The bulk of $3.9 billion comes from operating and capital budgets, $59.3 million from apartments and meals, and $92.7 million from miscellaneous spending. An additional of $2.1 billion comes from indirect and induced labor income, with $2 billion resulting from operating and capital spending. Apartments and meals add $66.9 million and another $78.4 million from students' miscellaneous expenditures.

GDP's direct impact is $6.1 billion with total economic output of $8.4 billion for FY 2019-20. Operating and capital expenditures add $5.4 billion in GDP and $7.5 billion in output. Apartment and meals account for another $582.6 million in GDP and $676.5 million in Output. Lastly, miscellaneous expenditures add $132.2 million in GDP and $224.7 million in economic output.

From indirect and induced levels, adds $3.8 billion in GDP and $7.3 billion in output. Operating and capital spending makes up $3.6 billion in GDP and $6.8 billion in output. Student's apartments and off-campus meals account for $105 million and $194.7 million of GDP and output in FY 2019-20. Finally, miscellaneous spending adds $126.1 million and $234.1 million.

Table 7 covers the new taxes generated from the member institutions' economic activities. The taxes generated are by type and separated between state and local levels. The two main areas of taxation for the local governments are sales and property taxes, while for the state, it revolves around state sales tax and corporate income taxes.

Table 7: Dynamic Tax Impacts

($Millions)

	2019-20
Local Taxes	
Local Sales Tax	$48.4
Property Tax	$228.2
Local Other Taxes	$309.0
Total Local Taxes	$585.6
State Taxes	
State Sales Tax	$238.0
Corporate Income Tax	$20.7
State Other Taxes	$295.8
Total State Taxes	$554.5

The member institutions are largely tax-exempt, but that does not prevent taxes from being generated throughout the supply chain and by induced consumption resulting from schools' expenditures. There are also the added taxes created from construction projects and student spending.

Local taxes amounted to $585.6 million in FY 2019-20. These taxes result from the combination of the institutions' spending, building, and their students' spending. The bulk of the revenues collected came from property tax, $228.2 million and $309 million from other taxes. Local sales tax collected $48.4 million.

State taxes have a dominant form of taxation in general sales tax. In FY 2019-20, $238 million of the $554.5 million collected under sales resulted from the culmination of direct and related spending by the member institutions as well as activities of other related industries. Corporate income tax was the second-largest source of revenue in context, amounting to $20.7 million.

For both State and Local tax collections, other taxes represent a multitude of taxation ranging from the documentary stamp, communications services, intangible taxes, insurance premium, franchise fees, impact fees, and public service tax. None of these items amount to more than

the corporate income tax for the State government or the sales tax for the Local government. They are all lumped into a catch-all category of “Other Taxes.”

Table 8: Dynamic Impacts Summary

($Millions)

	2019-20
Static Impacts	
Total Operating Expenditures	$6,934.5
Capital Expenditures	$417.6
Total Apartment Expenditures	$577.5
Total Meals Expenditures	$92.3
Total Miscellaneous Expenditures	$221.2
Dynamic Impacts	
Total Employment (Jobs)	100,898
Total Labor Income	$6,154.1
Total GDP	$9,856.7
Total Output	$15,690.9
Dynamic Tax Impacts	
Total Local Taxes	$585.6
Total State Taxes	$554.5
Total Taxes	$1,140.0
Economic Impact	
Jobs Impact (Jobs)	100,898
Economic Impact (Output)	$15,690.9
State & Local Taxes	$1,140.0

Table 8 is the culmination of all prior tables to help summarize and round out what the ICUF Member Institutions mean economically to Florida. Using the latest fiscal year, FY 2019-20, the ICUF Member Institutions and their students spent $6.9 billion in operating costs, $417.6 million in capital construction and improvements, $577.5 million for off-campus lodging, $92.3 million on off-campus meals, and $221.2 million on miscellaneous spending and general retail purchases. The total cash infusion into the Florida economy amounts to $8.24 billion.

What does that mean for Florida? That means 100,898 jobs for Floridians. It means $6.2 billion in labor income and paychecks. The economy of Florida as measured by the Gross Domestic Product (GDP) is $9.9 billion larger due to the ICUF Institutions. To put the value in perspective, the total Florida economy at its peak in the 4th quarter of 2019 in FY 2019-20 was $973.5 billion, according to the Legislative Office of Economic and Demographic Research. One dollar for every one hundred dollars spent occurred due to the ICUF institutions in Florida.

Three specific statistics can briefly summarize the impact study in the first part of the analysis: the jobs created, the economic impact, and the taxes generated. The economic impact of the ICUF Institutions on the State of Florida provides 100,898 jobs, provides an economic output of $15.7 billion, and $1.1 billion in taxes generated for state and local governments.

Lifetime Earnings

The Lifetime earnings impact quantifies the annual degrees awarded by the ICUF member institutions and the corresponding impact value of their potential wealth for the next thirty years. Table 9 provides the number of degrees awarded each year, how many of those degrees stay in the state, the aggregated differential of their lifetime earnings, and the dynamic impacts of the graduates.

Table 9: Lifetime Earnings Impacts

($Millions)

	2019-20
Lifetime Earnings of Graduates Remaining in Florida	
Total Degrees Awarded (Counts)	39,396
Graduates Remaining in Florida (Counts)	26,001
Doctoral Lifetime Earnings	$604.2
Masters Lifetime Earnings	$5,228.8
Bachelors Lifetime Earnings	$8,719.5
Associate of Arts Lifetime Earnings	$1,010.8
Total Lifetime Earnings	$15,563.3
Dynamic Impacts	
Total Employment (Jobs)	131,585
Total Labor Income	$6,609.6
Total GDP	$11,975.9
Total Output	$21,107.1
Dynamic Tax Impacts	
Total Local Taxes	$3,598.9
Total State Taxes	$3,671.1
Total Taxes	$7,269.9
Economic Impact of Lifetime Earnings	
Jobs Impact (Jobs)	131,585
Economic Impact (Output)	$21,107.1
State & Local Taxes	$7,269.9

The total degrees awarded in FY 2019-20 was 39,396. Based on the survey results, 66% of the students remained in Florida, keeping 26,001 degrees awarded. Doctoral lifetime earnings differential aggregated to a new wealth of $604.2 million. Master's degrees added $5.2 billion, bachelor's differential added $8.7 billion, and associates of arts added $1 billion.

Bachelor's degrees added by far the most value due to its sheer number of degrees. Bachelor's degrees awarded in FY 2019-20 accounted for 19,681 degrees. They nearly doubled the number of master's degrees awarded (11,274). The aggregate earnings of awarded masters were the second-highest due to their having the most significant earnings differential. Going from a bachelor's to a master's adds $23,424 in annual income compared to a master's to a doctoral degree ($8,860) or a high school degree to a bachelor's degree ($21,668).

All told, the next thirty years' worth of added wealth produced by degrees awarded in a single year is $15.6 billion. The resulting impact was 131,585 jobs, $6.6 billion in labor income, $12 billion in new GDP, and $21.1 billion in economic output. A total of $7.3 billion in taxes generates $3.7 billion going to the state and $3.6 billion to local governments.

The economic engine of the degrees awarded for a single year adds to Florida's next 30 years of economic activity 131,585 jobs, $21.1 billion in economic output, and generates $7.3 billion in taxes.

The ICUF Institutions provide a multitude of educational opportunities. The survey asked for some of the top degrees offered by the institutions for informational purposes. Below are the study's results for the top 10 undergraduate and graduate degrees attained at the schools.

The following are the top 10 undergraduate degrees:

1. Business Administration
2. Nursing
3. Psychology
4. Criminal Justice and Criminology
5. Communication
6. Biology
7. Aeronautical Science
8. Educational Studies/Reading/Elementary/Secondary
9. Health Care Science/ Administration
10. Ministerial Leadership/Ministry

The following are 10 top graduate and professional degrees:

1. Master's in Business Administration/ Entrepreneurship
2. JD Law
3. Doctor of Medicine

4. Master of Science in Nursing, Practitioner, Educator, Anesthesia, Informatics
5. Master of Science in Education
6. Pharmacy-Doctor's-Professional Practice
7. Master of Science, Clinical Mental Health Counseling
8. MA-Professional Behavior Analysis/Psychology
9. Doctor of Philosophy
10. Master's in Public Health Administration

Effective Access to Student Education (EASE) Program

Table 10 begins with the static direct effects of the EASE program by looking at the number of students that received the EASE grant in FY 2019-20. A total of 40,096 full-time equivalent students received EASE funding, with a total budget allotted of $113,912,736 according to budget appropriations for FY 2019-20. Each student received $2,841 to help alleviate some of their tuition cost.

EASE students themselves are undergraduate Florida resident students taking a minimum of 12 semester hours per term. Like the analysis breaking out undergraduates from graduates and Florida residents from non-Florida residents, EASE students have a unique set of impactful expenditures. They have impactful spending on tuition and fees, room and board, and apartment expenditures. However, as they are Floridians, any off-campus meals or miscellaneous spending does not impact the Florida economy.

The impactful spending breaks out the number of students receiving EASE and their tuition and fees, room and board, and apartment spending. The ensuing spending flows into dynamic effects to calculate impacts on job creation, labor income, GDP and economic Output, and taxes generated.

Table 10: Economic Impact of EASE

($Millions)

	2019-20
Static Impacts	
Students Receiving EASE (Counts)	40,096
EASE Funding	$113.9
Tuition & Fees Expenditures	$1,502.9
Room & Board Expenditures	$153.3
Apartment Expenditures	$246.5
Dynamic Impacts	
Total Employment (Jobs)	21,934
Total Labor Income	$1,353.2
Total GDP	$2,267.4
Total Output	$3,533.7
Dynamic Tax Impacts	
Total Local Taxes	$146.1
Total State Taxes	$136.2
Total Taxes	$282.2
Economic Impact of EASE	
Jobs Impact (Jobs)	21,934
Economic Impact (Output)	$3,533.7
State & Local Taxes	$282.2
Economic Return per Student ($Dollars)	$88,132
State & Local Return on Investment	2.4777

The 40,096 full-time equivalent students receiving EASE spend $1.5 billion on tuition and fees. The EASE subsidy funded by the state creates a leveraging component where the $113.9 million spent by the State Government allows students to pay the total tuition of $1.5 billion. With the $1.5 billion comes spending on room and board ($153.3 million) and apartment expenditures ($246.5 million).

There are 21,934 jobs due to the EASE program, $1.4 billion in total labor income, $2.3 billion in GDP, and $3.5 billion in economic output. Thanks to EASE, taxes are $282.2 million broken down into $136.2 million for the state, and $146.1 million for the local governments.

The EASE program's direct spending and resulting dynamic effects lead to 21,934 jobs, $3.5 billion in economic output, and $282.2 million in state and local taxes. Each EASE student contributes $88,132 to the economy due to the subsidy provided by the state. The State & Local Taxes' Return on Investment (ROI) of EASE is 2.4777. For every dollar spent by the State of Florida on the EASE program, there is a return of $2.48 in new taxes.

Additional cuts to the EASE program could negatively affect the number of students who can barely afford college. It would have negative implications on their future lifetime earnings. If the state further cuts the budget of the EASE program, some of these students will try to find their way to the state university system because of the lower cost of attendance. The problem is that most state universities have reached their maximum capacity. To accommodate these displaced students, the state universities will have to add more facilities and hire more professors. The alternative to EASE is expensive and will take time to implement to become operational as a reasonable replacement.

With the reduction of EASE subsidy from $3,500 to $2,841 per student in FY 2018-19, any further cuts could adversely impact the number of students supported and the economy.

CONCLUSION

The study's primary goal is to weigh the importance of the ICUF member institutions on Florida's economy. Unlike studies relying solely on secondary data, the project surveyed to gather primary relevant data. All thirty ICUF member institutions provided feedback to achieve a 100 percent response rate. The study also relied partially on official data submitted by the institutions to the US Department of Education's IPEDS database to check for consistency in the survey results and use some of the published data.

Based on the findings, the contributions by the ICUF member institutions to Florida's economy are genuinely significant. With 30 member institutions and a total student population of 157,694 spread across the state, the economic impact of their economic activities on

employment, labor income, Gross Domestic Product, economic output, and tax revenues underscores their role in the state's economic development.

So, how significant is the ICUF member institutions' contributions to Florida's economy? The ICUF institutions create 100,898 jobs adding $6.2 billion in labor income in FY 2019-20. They add $9.9 billion to the State's GDP and produce a total output of $15.7 billion. They also generate tax revenues to local governments amounting to $585.6 million and $554.5 million to the state, for a total of $1.1 billion.

The study also estimated the value of the graduates' lifetime earnings for 30 years. Out of 39,396 degrees awarded in FY 2019-20, the analysis assumes that 26,001, or 66% of the graduates, will stay in Florida. The aggregate total lifetime earnings for those staying in Florida amounts to $15.6 billion. Their total expenditures create 131,585 jobs and $6.6 billion in labor income. They will add $12 billion to GDP, producing a total economic output of $21.1 billion. Local and state taxes generated will reach up to $7.3 billion. All impacts will materialize over 30 years.

Lastly, the study also analyzed the impacts of the EASE program, which provides a subsidy to Florida resident undergraduate students that attend private institutions as a subset of the overall impact. The state budgeted $113.9 million to support 40,096 students in FY 2019-20. EASE students spend on tuition and fees, room and board, and apartments, create 21,934 jobs and add $1.4 billion of labor income. It also adds $2.3 billion to the GDP and produces $3.5 billion in economic output. The program creates $282.3 million in local and state tax revenues. So how significant is their contribution to the economy? On a per-student basis, it amounts to $88,132 of economic contribution per EASE student. The ROI to the state’s investment in terms of taxes is 2.48. Every tax dollar invested by the state brings back a return of $2.48 in tax revenues.

The Independent Colleges and Universities of Florida are a powerful economic engine of the state’s economy in both the present and future. Their direct spending, their student's spending, their graduates, and their EASE recipients provide impacts that span the range of hundreds of thousands of jobs, tens of billions of dollars, and multiple billions in new taxes to collect. The ICUF institutions benefit the economy not only by their sheer magnitude and size but by the skills that they ingrain in current and future Floridians. They train students in administration, nursing, communications, science, and leadership. These all span their economic impacts beyond the report's scope through innovation and creation that help further develop and grow the Florida economy of tomorrow. Through EASE subsidies, opportunities are afforded to all classes to help reduce poverty and spur social mobility. The Independent Colleges and Universities of Florida are a cornerstone of Florida and its economy. The institutions are something that makes Florida an extraordinary place to live.

APPENDIX I- IMPLAN Model and Definitions

IMPLAN MODEL

Input-Output (I-O) modeling is a foundational concept all industries, households, and government connect through buy-sell relationships. Therefore a given economic activity supports a ripple of additional economic activity throughout the economy. IMPLAN is an I-O modeling system that uses annual, regional data to map these buy-sell relationships so users can predict how specific economic changes will impact a given regional economy or estimate the effect of past or existing economic activity. Input-output accounting (using the IMPLAN model) describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value-added, and imports are equal to the value of the commodities produced. Industries producing goods and services for final use and purchases for final use (final demand) drive the model. Industries producing goods and services for final demand purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services continues until leakages from the region stop the cycle. The resulting sets of multipliers describe the change of output for every regional industry caused by a US$1.00 change in final demand for any given industry.

Input-Output (I-O) Analysis and IMPLAN predict the ripple effect of economic activity by using data about the previous spending. Production in a given Sector in an economy supports the demand for production in Sectors throughout the economy, both due to supply chain spending and spending by workers. One of the tenets that makes IMPLAN so attractive is that there are no black boxes. Analysts can view the background data used in the models and customize them with local data and knowledge.

DIRECT EFFECTS

Direct impacts are changes that occur in “front-end” businesses that would initially receive expenditures and operating revenue as a direct consequence of the operations and activities. For example, in the case of film and entertainment production, direct impacts are related to the direct expenditures made by production companies.

They are the initial exogenous change in final demand in terms of Industry Output, Employment, and Labor Income Dollars. They are one or more production changes or expenditures made by producers/consumers due to an activity or policy. Direct effects can be positive or negative. These initial changes are determined by an analyst and demonstrate the result of an action or policy. Applying these initial changes to the multipliers in IMPLAN will then display how a region will respond economically to these changes. When consumers

purchase goods and services, they create final demand for the industries producing the goods and services they consume.

INDIRECT EFFECTS

Indirect effects are the business-to-business purchases in the supply chain taking place in the region that stem from the initial industry input purchases. As the industry specified spends their money in the region with their suppliers, it shows an indirect effect.

INDUCED EFFECTS

Induced effects are the values stemming from household spending of Labor Income after removing taxes, savings, and commuter income. The induced effects generate expenditures of the employees within the business' supply chain.

Total Impacts calculate by adding direct, indirect, and induced economic effects.

EMPLOYMENT

Employment is the number of additional jobs created. Employment data in IMPLAN follows the exact definition as Bureau of Economic Analysis Regional Economic Accounts (BEA REA) and Bureau of Labor Statistics Census of Employment and Wages (BLS CEW) data, which is full-time/part-time annual average. Thus, 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job can be either full-time or part-time. Similarly, a job that lasts one quarter of the year would be 0.25 jobs. Note that a person can hold more than one job, so the job count is not necessarily the same as employed persons. Jobs in IMPLAN are not the same as a full-time equivalent number.

LABOR INCOME

Labor Income represents the total value of all forms of employment income paid throughout a defined economy during a specified period. It reflects the combined cost of total payroll paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners (e.g., capital consumption allowance) across the defined economy. Labor Income (LI) encompasses two additional representative metrics called Proprietor Income (PI) and Employee Compensation (EC).

VALUE ADDED or GDP

Value Added represents the difference between *output* and the cost of *Intermediate Inputs* throughout a defined economy during a specified period. It equals gross Output minus Intermediate Inputs (consumption of goods and services purchased from other industries or imported). Value Added is a measure of the contribution to GDP made by an individual producer, Industry, or Sector.

OUTPUT

All analysis in IMPLAN is output, which is the value of production by industry in a calendar year. The total gross weight of goods and services produced by a given sector measures the price paid to the producer (versus the price paid by the consumer, which can include transportation and retail mark-ups). It is the broadest measure of economic activity. IMPLAN Output data primarily come from the same sources as those used by the BEA in developing their Benchmark Input-Output tables. Since the output is the total production value of a Sector, it includes all components of production value or Output for a given Sector: Output = Employee Compensation + Proprietor Income + Intermediate Expenditures + Tax on Production and Imports + Other Property Income.

OTHER PROPERTY INCOME

Other Property Income (OPI), previously denoted as "Profit," includes consumption of fixed capital (CFC), corporate profits, and business current transfer payments (net). Subsidies for government enterprises are considered negative profits. Any subsidization of government enterprise counts as negative value towards the government enterprise sector's OPI.

TAXES ON PRODUCTION & IMPORTS

Taxes on Production & Imports and fewer subsidies (TOPI) include sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. For all Sectors other than government enterprises, subsidies count as a negative value towards TOPI.

APPENDIX II -The Survey

Information Needed for the ICUF Economic Analysis Project

Name of University/College
Contact Person
Title
Tel Number
Email Address

Please complete the form by November 1, 2021.
Information provided will be strictly kept confidential.

1. Total Annual Operating Cost
1a. Total Salaries and Wages
1b. Total Administrative Costs
1c. Total Other Costs (excluding salaries and wages and administrative costs)

2. Total Employment (Florida only)
2a. Total Number of Employees (both permanent and part-time)
2b. Federal Work-Study Employees

3. Total Annual Capital Expenditures (if any)
Total Project Cost $
Date of Project Initiation
Date of Project Completion

4. Total Revenues
4a. Total Revenues from Tuition Fees
4b. Total Grant from the EASE program
4c. Total Revenues from Grants, Endowment, and Other Sources

5. Revenues from Lodging/Dormitory (if any)

6. Number of Students Residing at School Dormitory (if any)
6a. In-State
6b. Out-of-State
6c. International
6d. EASE Students

7. Total Number of Undergraduate Students
7a. In-State

7b. Out-of-State
7c. International
7d. EASE Students

8. Estimated Annual Average Cost to Students
(includes tuition fees, board and lodging, and others)

8a. Annual Average Cost per undergraduate in-state student
8b. Annual Average Cost per undergraduate out-of-state student
8b. Annual Average Cost per undergraduate international student

9. Total Number of Graduate Students

9a. In-State
9b. Out-of-State
9c. International

10. Estimated Annual Average Cost to Graduate Students
(include tuition fees, board and lodging, and others)

10a. Annual Average Cost per in-state graduate student
10b. Annual Average Cost per out-of-state graduate student
10c. Annual Average Cost per graduate international student

11. Total Number of Students Graduated

12. Top 20 Degrees with the Highest Number of Graduates

13. Top 20 Degrees with the Highest Number of Graduates Funded by EASE Program

APPENDIX III – Biographies

DR. CLYDE L. DIAO

ECONOMIC CONSULTANT & FOUNDER

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 pertaining to 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, where his main responsibility included analyzing the US Economy, forecasting Florida's economy and demographics as the bases for Florida's state revenues. He developed the State of Florida's econometric models that are used to 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 and gross receipts taxes, highway safety taxes, tobacco taxes and estate tax among others. Using sophisticated regional modeling techniques, Dr. Diao conducted analysis 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 and has also appeared in the courts of law as an expert witness for the state of Florida to defend the position of the State.

Outside of the office, Dr. Diao has been a vocal proponent of Asian American issues. He is the founder of the Asian Coalition of Tallahassee and served as Chairman for 10 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 10 years, the BBFAA's longest serving president. Dr. Diao has fought for issues that impact the Asian American community, such as the elimination of 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 from Xavier University/Ateneo de Cagayan a Jesuit institution with honors and received his MS and PhD in Economics at Florida State University as a World Bank scholar.

JARED PARKER

ECONOMIC CONSULTANT & FOUNDER

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.

Prior to founding the Regional Economic Consulting Group, Jared Parker worked in the Florida Legislative Office of Economic and Demographic Research (EDR), and prior to that the Tax Research Unit of the Florida Department of Revenue. He was responsible for projecting revenues and determining 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 stamp and Intangibles taxes, and electric and gas utilities.

Jared Parker was involved with many long-term impact projects for general state policy while at EDR. 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 involved with the BP Oil Spill impacts of 2010, hurricane disaster impacts, and numerous Constitutional Amendments.

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

He brings to the REC Group invaluable experience in producing in-depth outlooks and impacts and can deliver results in a clear and concise manner.