



# Economic Impact Analysis

## of the Florida Small Business Development Center

### – Final Report

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**The Florida Small  
Business Development  
Center Network**

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**October, 2018**

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## Executive Summary

The Florida Small Business Development Center (SBDC), over the last 40 years, has been one of the pioneers in assisting small business' creation and development, and providing counseling to small businesses across the state of Florida. The SBDC network has promoted a statewide partnership between Florida's higher education institutions and economic development organizations, including pre-venture and established businesses. The SBDC network provides expert counseling to support emerging and established business owners. SBDCs counseling comes in term of management and technical assistance, from the development of the business plan to securing Federal and State Government agencies' funding. The mission of the Florida SBDC network is to enable the overall economic growth and to increase businesses profitability and economic prosperity in Florida.

The Florida SBDC network is engaged in several activities to attain the objectives of its mission. In order to do so, it has split its activities into three major programs, including; the SBDC core program, the procurement and technical assistance program, and the growth acceleration program. Each one of these programs includes specific counseling. In 2017, Florida SBDCs served nearly 18,970 Pre-venture and established small businesses through consulting and training. The direct effects of these counseling services on Florida's economy were 11,784 jobs created<sup>1</sup> and 5,189 jobs retained or saved, hence a total of 16,973 jobs.<sup>2</sup> The combined direct, indirect and induced economic impact jobs creation is an estimated 28,876 jobs (at a taxpayer cost of \$326 per job).

In 2017, approximately 222,714 counseling hours were provided to clients via the SBDC network. Of these, the Pre-venture businesses received 24,035 hours of counseling (10.8 percent of total hours), and the longer-term established business clients received 198,679 hours of assistance (or 89.2 percent of total hours) from the SBDC network.

The Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) was contracted in September 2017 to conduct a study on the economic impacts of the Florida SBDC's activities. The impacts included an estimation of jobs creation and retention/saved, and the direct, indirect and induced effects specific to output or sales/revenues, jobs, income, and value-added (GRP). Following a multi-level economic modeling approach consistent with previous economic impact studies conducted for the SBDC,

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<sup>1</sup> Above 'normal' EMSI estimated employment growth

<sup>2</sup> Estimates based on a sample of survey respondents

FSU CEFA estimated that about 28,876 jobs were generated, with over \$3.2 billion in output or sales/revenues, \$1.25 billion in labor income and over \$1.7 billion in value added or Gross Regional Product (GRP), as a result of the Florida SBDC’s counseling services to small established businesses (SME’s) and Start-Ups. Based on the survey results, the research team also performed analyses on the distribution of hours allocated for counseling purposes. FSU CEFA based its economic methodology on the previous studies conducted by the UWF HAAS Center “Impact of SBDC Business Development Activities on the Florida Economy” and Dr. James J. Chrisman’s report on the “Economic Impact of Small Business Development Center Counseling Activities in Florida: 2010-2011”, and on other studies conducted for the SBDC’s and commissioned by the Association of Small Business Development Centers. Regarding the overall goals of the present economic analysis conducted by FSU CEFA, the SBDC Network requested that the study design include an economic analysis for 2017 using the IMPLAN® software model to estimate the economic impacts including direct, indirect, and induced impacts resulting from the SBDC network’s consultancy services. FSU CEFA used the survey results to estimate input data metrics for each industry sector, and by region, in terms of employment, sales, and value added. Each of the nine reported SBDC regions has been analyzed using the same data preparation and modeling methodology. The economic impacts of the SBDC in 2016-2017 are summarized in the following Table ES1, and include the total output or sales/revenues, the total jobs created and retained/saved, total labor income (wages), and the total value added (GRP).

<b>Table ES.1: Impact of FSBDC Activities in 2017</b>	
<b>Type of Impact*</b>	<b>Statewide Impact</b>
<b>Sales/Output</b>	<b>\$3,247,945,078</b>
<b>Total Jobs</b>	<b>28,876</b>
<b>Labor Income</b>	<b>\$1,250,132,876</b>
<b>Value Added/GRP</b>	<b>\$1,716,463,331</b>

\*The total economic impacts include direct, indirect and induced impacts

## Introduction



In September 2017, the Small Business Development Center (SBDC)<sup>3</sup> contracted with the Florida State University Center for Economic Forecasting and Analysis (FSU CEFA)<sup>4</sup> to conduct an economic impact analysis of the SBDC programs' impact on Florida's economy. The economic impact study is based on client survey data collected by the SBDC, covering its' nine regions.<sup>5</sup> The survey data collected was provided to FSU CEFA in August 2018, by the SBDC's Network Headquarters. The study for this year used survey data collected by the National Business Research Institute (NBRI) for Florida.<sup>6</sup>

Established in 1976, the Florida SBDC's are the only statewide provider of entrepreneurial and business development services in Florida. They play a vital role in Florida's economic development, by assisting entrepreneurs in every stage of the business life cycle. According to the SBDC website, they have assisted hundreds of thousands of emerging and growing businesses by providing professional expertise, tools, and information, as a means to make sound business decisions in a complex and ever-changing marketplace. Over the last 40 years, the SBDC's have provided assistance to over 1.3 million businesses in Florida. A sample of business clients may be found on the SBDC website,<sup>7</sup> where targeted businesses range from Industries (e.g., construction, manufacturing, other retail, service and wholesale) to Service Types (e.g., business continuation and research, consulting, government consulting, growth acceleration, international trade, and training).

The SBDC Network is obliged to report on its cost-effectiveness (economic impact) on an annual basis. In the most recent annual report (2017) the SBDC reported to have delivered 112,098 business consulting hours, to over 11,173 clients/business owners. As a result, SBDC created and retained/saved 35,106 jobs,

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<sup>3</sup> Florida Small Business Development Network (Florida SBDC), see: <http://floridasbdc.org/>

<sup>4</sup> FSU Center for Economic Forecasting and Analysis (FSU CEFA), see: <http://www.cefa.fsu.edu>

<sup>5</sup> With 10 regional offices, 45 satellite centers, and over 50 outreach locations, serving all 67 counties

<sup>6</sup> See: [www.NBRII.com](http://www.NBRII.com)

<sup>7</sup> See: <http://floridasbdc.org/success-stories/>

increased sales by \$4.0 billion, acquired \$461.8 million in government contract awards, facilitated \$479.8 million investments in capital outlay, and started over 328 new businesses.<sup>8</sup>

The purpose of this FSU CEFA economic impact study was to provide an economic impact analysis of SBDC's activities in Florida, in 2017. The economic impacts were to be associated with the consulting services offered in the three primary programs of Florida's SBDC Network: The Small Business Development Center (SBDC) core program, the Procurement and Technical Assistance Center (PTAC) program, and the Growth Acceleration Program (GAP). FSU CEFA based its economic analysis methodology on the methodology used in prior reports, which began in 2010-2011 with a report by Dr. James Chrisman of Mississippi State University, and where reporting was continued by the HAAS Center, thereafter. FSU CEFA maintained a similar format and methodological approach as the previous studies, and applied methodological improvements, where appropriate.

FSU CEFA received data from a survey conducted by the FSBDC network (and conducted on a national level). The survey tallied 1,639 responses to the survey questionnaire (a 9.4 percent response rate).<sup>9</sup> It was assumed that the respondent's results represented the entire population of clients, and was defined by all clients who received at least one hour or more of the SBDC counseling services in 2017. For the purpose of this report, the employment changes that occurred in this sample of SBDC clients were compared to changes in employment of all businesses in Florida using the annual report of the Economic Modeling Specialists, Inc. (EMSI).<sup>10</sup> The resulting incremental growth was assumed to reflect the sample's performance due to SBDC's activities. These results were further extrapolated to the client population of the SBDC. By doing so, the research team was able to estimate tax revenues generated due to SBDC counseling. The tax revenues generated by clients were subsequently compared to the total cost of the Florida SBDC network for 2017 as a measure of cost-effectiveness.

FSU CEFA estimated the jobs created and retained/saved due to the counseling services provided to SBDC's clientele. The subset of Pre-venture and independent contractors was not analyzed due to insufficient survey data from the respondents. The SBDC counseled approximately 18,970 clients during 2017, including Pre-ventures, Start-ups and existing businesses.

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<sup>8</sup> See: <http://floridasbdc.org/Reports/2017-Annual-Report/2017-Annual-Report.pdf>

<sup>9</sup> The survey was distributed to a total of 18,750 SBDC clients in Florida.

<sup>10</sup> EMSI 2017 data was provided by the UWF HAAS Center on September 7, 2018.

## **The Florida Small Business Development Center (SBDC) Programs**

The SBDC assists businesses through different programs, with each program having a unique mission to assist in development and growth of businesses, to secure funding and contracts, and to potentially expand into the international market. These programs are designed to aid small businesses and aspiring entrepreneurs throughout the state of Florida. The SBDC's are hosted by leading universities and other economic development partners in the state, and the programs are funded in part through a partnership with the National Small Business Administration (SBA).

### **The Core Program**

The SBDC consultants assist Pre-venture clients to gain entrepreneurial knowledge and with preparation of business plans. The SBDC also assists Pre-venture and established businesses to meet with bankers and ultimately secure financing in terms of loans. Many clients reported that this program helped them create and expand their businesses at reduced costs. To prepare businesses to face challenges in the dynamic marketplace, the SBDC network supports businesses to improve efficiencies through their core program.

### **The Procurement and Technical Assistance Center Program**

Under the procurement and assistance program, the SBDC helps small businesses to secure Federal contracts and funding. This program operates through varied activities, including outreach activities to promote the mission of the SBDC for the procurement program. In 2017, SBDC clientele secured \$145.6 million in Government Contracts.<sup>11</sup>

### **The Growth Acceleration Program**

Through the Growth Acceleration Program, the SBDC network is assisting businesses to export their products or services onto the international markets. This program operates by helping businesses in planning for successful entry into foreign markets and by supporting businesses to find proper and effective markets. The SBDC assists these businesses to meet their individual goals based on their business plans. The SBDC International Trade Specialists provide their clients with partner networking, including networking with Enterprise Florida, Inc. and the U.S. Commercial Service, for providing training in exports.

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<sup>11</sup> Data obtained from the Florida SBDC.

## Literature Review

### Origin and Mission of the Small Business Development Centers

The U.S. Congress introduced The Small Business Development Center Act of 1977 in March 1977. The mission of Small Business Development Centers (SBDCs) is to aid small businesses and aspiring entrepreneurs throughout the United States and its territories. SBDCs help entrepreneurs realize the dream of business ownership and help existing businesses remain competitive in a complex, ever-changing global marketplace. SBDCs are hosted by leading universities and state economic development agencies and funded in part through a partnership with the U.S. Small Business Administration (SBA).<sup>12,13</sup> Currently, there are nine universities and colleges selected for the pilot program in Florida.<sup>14</sup>

SBDC advisors provide aspiring and current small business owners a variety of free business consulting and *low-cost* training services including: business plan development, manufacturing assistance, financial packaging and lending assistance, exporting and importing support, disaster recovery assistance, procurement and contracting aid, market research help, program support, and healthcare guidance. SBDC activities include three types of programs: The SBDC Core Program, The Procurement and Technical Assistance Center (PTAC) Program, and The Growth Acceleration Program (GAP). (Sanogo and Harrington, 2017).

The SBDC Core Program assists pre-venture clients to gain entrepreneurial knowledge with preparation of business plans, helps meet with bankers and secure financing loans, and helps reduce costs and improve efficiency. The PTAC Program helps secure Federal contracts and funding. Lastly, the GAP assists business to export products/services onto the international market, including entering into foreign market, finding proper and effective market, and providing training in exports.

State-designated as Florida's Principal Provider of Business Assistance [§ 288.001, Fla. Stat.], the Florida SBDC Network has helped businesses in Florida grow and succeed for over 40 years. The network has served more than 1.3 million aspiring and emerging businesses. Their attributed success confirms that Florida SBDC services are cost-effective and deliver a significant Return on Investment.<sup>15</sup>

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<sup>12</sup> <https://www.sba.gov/tools/local-assistance/sbdc>

<sup>13</sup> The U.S. Small Business Administration (SBA) was created in 1953 by an act of Congress in response to a growing awareness of the importance of small businesses to the national economy.

<sup>14</sup> <http://floridasbdc.org/>

<sup>15</sup> <http://floridasbdc.org/results/>



## Small Business Development Current Literature

Ninety-nine percent all the registered firms in the U.S. are regarded as small businesses, based on an estimation of the SBA (U.S. Small Business Administration, 2016; Rolleri, Nadim, and Lussier, 2016). Although no uniform definition of “small” business has been offered, the SBA provides the following guidelines: “A small business concern shall be deemed to be one which is any business that is independently owned and operated, and which is not dominant in its field of operation ... or in number of employees, dollar volume of business, net worth, net income, a combination thereof, or other appropriate factors.” (U.S. Small Business Administration, 2009).

It is often asked why some businesses succeed and others fail. The following are listed as the main determinant factors for success: capital, record keeping and financial control, management experience, professional advisors, education, staffing, product/service, economic timing, age, partners, minority, and marketing (Lussier and Halabi, 2010). Under-capitalization, lack of planning, trade credit, tax burden and regulation, personal issues, unrealistic expectations, poor cash flow, loss of key personnel, growing pains, lack of technology, poor location, natural disaster, poor record keeping, and failure to use advice, are regarded as main reasons leading to business failure (Bradley and Cowdery, 2014). External factors affecting business success or failure include government and financial support, and other types of support. According to the White House Office of Management and Budget (OMB, 2014),<sup>16</sup> the President’s 2013 budget supported \$16 billion in SBA loan guarantees (Rolleri, Nadim, and Lussier, 2016). Other external supportive actions are promoting impact investment in economically distressed regions and improving small business and exporter-access to Federal services, etc. Establishments of the U.S. Small Business Administration (SBA) and the Small Business Development Centers (SBDCs) are also considered as supportive activities from the external, or public side.

By offering guidelines for small business owners, Rolleri, Nadim, and Lussier (2016) recommended that most mature small businesses perform an annual strategic longevity and health maintenance evaluation to ensure their viability. A summary of items in internal operations and interaction with larger system/external stakeholders include:

Internal operations:

- Structure, process, functions, and culture
- Financial health
- Financial system adequacy
- Business model adequacy

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<sup>16</sup> <https://obamawhitehouse.archives.gov/omb>

Interaction with larger system/external stakeholders:

- Compliance with regular requirements
- Environmental friendliness
- Competitive advantage
- Local trends and political awareness and community relations
- Zoning and conservation and other local regulations
- Sustainable business practices

Other recent studies focusing on specific impact factors include Dahmen and Rodriguez (2014), Dunne, Aaron, McDowell, Urban, and Geho (2016), Overall (2016), Peretti-Watel (2003), and Kuntze and Matulich (2016).

Dahmen and Rodriguez (2014) investigated the correlation between the financial literacy skills of entrepreneurs and small businesses' financial strength. They used a survey of the business owners, which was based on a business health assessment review conducted during Jan 2012-Jan 2013 by the GAP consultant at the SBDC at USF, on 14 small businesses (that requested GAP), to determine their level of financial understanding and their use of financial statements in making management decisions. The authors found a strong association between the small businesses' financial strength and the business owners' habits of mind with regard to their financial statements, and concluded that non-regular review of financial statements is associated with experiencing financial difficulties.

Dunne, Aaron, McDowell, Urban, and Geho (2016) examined the impact of the individual entrepreneur on fostering new production innovation within firms from perspectives of leadership style, negotiation style, and organizational efficacy. The authors found that small business leaders who are inspirational, who negotiate competitively, and who lead efficacious organizations establish environments that are more likely to yield new product innovations.

Business failures are thought to be the result of cognitive biases, which cause entrepreneurs to misperceive the risks associated with their ventures. Cognitive biases do not directly lead to risky entrepreneurial behaviors, but rather indirectly. The most recent study, Overall (2016) proves high failure rate is associated with new venture Start-Ups. Peretti-Watel (2003) discussed the theories of planned behavior and reasoned action. Kuntze and Matulich (2016) provided research findings regarding the challenges of cognitive biases, a known cause of the high rate of failure for Start-Ups.

According to Sanogo and Harrington (2017), the focus of recent literature has been more oriented towards identifying factors of entrepreneurial success, in lieu of identifying entrepreneurial candidates with high likelihood of failure (Chaterjee and Das, 2015; Kumar and Sihag, 2012).

Encouraging entrepreneurship and small business activity is the key to economic growth. The need to address faulty expectations is critical. It is also important to highlight and include the current small business concerns in the further development of economic impact studies.

### **Relevant Economic Impact Studies Relating to the SBDC Programs**

In the most recent annual report (2017) of the Florida SBDC Network, over 112,000 hours of business consulting to more than 11,000 client businesses in 2016 was reported. According to the Florida SBDC's Annual Report as a result of this assistance, client businesses created, retained, and saved 35,106 jobs; grew sales \$4.0 billion; acquired \$461.8 million in government contract awards; accessed \$479.8 million in capital investments; and started 328 new businesses.<sup>17</sup>

The most recent study of economic impact of SBDCs programs was conducted by Sanogo and Harrington (2017). The authors analyzed survey data (conducted by the Florida SBDC Network) for the following: business consulting hours delivered to clients/business owners, created and retained/saved jobs, increased sales, government contract grants, and new businesses. The study estimated the economic impacts of the Florida SBDCs' activities for both quantity and quality assessments. Economic impacts were summarized by four types of outcomes: sales/output, total jobs, labor income, and value added/gross regional production. The quality assessment was concluded based on survey data relating to whether the SBDC counseling services were perceived as beneficial by the served clients.

Additional recent studies on the economic impacts of small business were: Fitzgerald and Muske (2016) and Small Business and its Impact on Florida (2016).<sup>18</sup> Fitzgerald and Muske (2016) classified family businesses as entrepreneurial or small businesses and verified the distinction between groups and the role of family businesses in economic development. The authors used data of business owners identified and surveyed in the 1997, 2000, and 2007 waves of the National Family Business Survey (NFBS) to answer two main questions: (1) are there distinguishable differences between small business owners and entrepreneurs such that they can be categorized or statistically "sorted". If indeed the subjects can be grouped, a second research question focuses on the contribution that each type of owner might provide to

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<sup>17</sup> <http://floridasbdc.org/results/>

<sup>18</sup> <http://floridasbdc.org/Reports/2016-State-of-Small-Business/mobile/index.html#p=1>

the family, as well as what each type of owner might mean to the community, and; (2) How do the groups compare using objective and subjective measures of business success at a single point in time, as well as over time? The findings indicated the importance of supporting family business owners due to their important contributions to the long-term sustainability of its community's economic sector. Entrepreneurs achieve greater gross income and number of employees, while small business owners offer stability during economic downturns.

The Small Business and its Impact on Florida (2016) highlighted the job impacts of Florida small businesses. In 2016, 3.1 million workers were employed by 2.3 million small businesses in Florida, which comprises 42.3% of all Florida employees. Small businesses make up 98.9% of Florida employers. Three out of every four new jobs are created by small businesses. As increasing confidence in sales and jobs grows over time, there is a high demand for small business development in Florida. At the same time, Florida small businesses also face different challenges. The top five challenges listed in the report were: "accessing capital", "market growth development", "strategic planning", "technology", and "operations management".

### **Discussion of the Methodology of Economic Impact of Small Business Consultation**

In Sanogo and Harrington (2017), there was a detailed discussion of the methodologies that are commonly used to analyze the economic impacts of small business consultations. Two representative studies are Chrisman (2012) and Wood (1994).

Wood (1994) defined the primary and secondary benefits of small business assistant programs to the economy. The author expressed that the primary benefit is the direct increase in sales and employment of small businesses, and the secondary benefit exists only if the sales and jobs are new to the economy. In the study, previous inaccurate measures were listed, and suggestions to reduce those inaccuracies were provided. In literature, client satisfaction, efficiency, academic reactions to college-based programs, and economic impacts are regarded as measures of the effectiveness of small business assistant programs. Clients' increases in sales, employment, and profits were used to gauge benefits and costs. Wood (1994) applied the distinction between the primary and secondary benefits to use as a measure of a benefit-cost analysis, and to refine the primary benefit, and to correct estimates to further identify specific secondary benefits which are beneficial to the economy.

Chrisman (2012) analyzed the changes in sales revenue and employment, jobs and sales revenue maintained, and financing obtained by established businesses and pre-ventures which received five or more hours of counseling assistance (who were referred as long-term clients) from SBDC's in 2010. Their

performance improvements were compared with the weighted average changes in performance of all businesses in the United States and then were used to estimate tax revenues generated for state and federal governments as a result of SBDC's counseling. In this study, the tax revenues generated by the long-term clients were compared to the total costs of providing the SBDC services. In addition, the financing obtained by clients as a direct result of SBDCs' assistance was also analyzed.

There has been a long-standing debate between these two studies. According to Sanogo and Harrington (2017), the methodologies applied in Wood (1994) were designed based on the demand side of counseling assistance. The methodology outlined in Wood (1994) was criticized for its' static feature analysis, (i.e. there was no dynamic nature attributed to economic growth). On the other hand, the methodology applied in Chrisman (2012) was criticized in that there was a perceived estimation bias based on the definition of benefits in Wood (1994). Chrisman (2012) was thought to systematically underestimate the primary benefit of SBDCs' counseling assistance, while overestimating the secondary, or indirect, benefits. The two alternative methods suggested by Wood to correct for this bias are Travel Cost and/or Contingent Valuation.

As Chrisman (2012)'s methodology is the most standardized nationwide and has been used to conduct the analysis for the economic impact of SBDCs' counseling activities in the United States, the FSU CEFA team determined that his latest study provided the most comprehensive methodological framework to conduct an economic impact estimation of the Florida Small Business Development Center programs.

### **Overview of Chrisman (2012), Economic Impact of Small Business Development Center Counseling Activities in the United States: 2010-2011 (Revised)**

Chrisman (2012) presented the results of the 16<sup>th</sup> National Study of the economic impact of SBDC counseling activities in the United States. Information was analyzed of changes in sales revenue and employment, jobs and sales revenue maintained, and financing obtained of SBDC long-term clients.

Data were used from 60 of the 63 SBDCs in the United States. The sample comprised 7,849 established businesses and 3,094 pre-ventures that received five or more hours of counseling assistance in 2010. Since the clients surveyed represented the entire long-term client population of the 60 SBDC programs that participated in the study, the response bias did not appear to be a concern (as indicated in the report).

The main steps involved in the data analysis were as follows:

- The performance improvements of the responding sample, including changes in sales revenues and employment, jobs and sales revenues, and financing obtained (in the year after receiving

assistance), were compared to the weighted average changes in performance of all businesses in the United States.

- The incremental improvements in the sample's performance – over and above what they would have been had they performed like the average business – were extrapolated across the entire long-term client population of the SBDC. A host of qualitative questions were asked concerning the availability of comparable assistance from *private* consultants and the quality of the counselors. Only those clients who indicated that the SBDC's services were beneficial were used to calculate performance improvements to avoid overestimation of the impact of the SBDC program. This is pertinent to the quality assessment of SBDC counseling services.
- The performance improvements were then used to estimate the tax revenues generated for state and federal government as a result of SBDC counseling.
- The tax revenues generated by the long-term clients were compared to the total costs of providing services offered by the SBDC.
- Lastly, clients were asked to indicate whether the SBDC program had assisted them to obtain financing and if so, the amount of debt and equity financing they were able to obtain as a direct result of the counseling received from the SBDC.

Highlights of the sample and the methodology:

The entire population of long-term clients of the 60 participating centers was sent a questionnaire, in which clients were asked to evaluate the SBDC's services, provide their sales revenues and employment levels for 2010 and 2011, estimate jobs and sales revenues, and indicate the amount of financing they were able to obtain that could be credited to the SBDC program. The procedures described below were utilized to determine if the number of responding clients obtained from the sampling plan were sufficient to obtain a statistically reliable sample.

- In order to determine if the number of respondents was actually sufficient to obtain a reliable and valid estimation of the average changes in sales revenue and employment of SBDC clients, the confidence interval of the variable's means was checked.
- To ensure that respondents were representative of the population, there is a minimum likelihood of response bias, and the data are reliable, a series of statistical tests was conducted:

*Representativeness:* Each center was asked to provide demographic information (gender and ethnic background of client, industry in which business competes) for all clients surveyed and for all respondents. Comparisons and Chi-square goodness-of-fit tests were applied to standardized data. Results indicated that both the established business and pre-venture respondents were proportionally representative of the population in terms of the gender of the primary owner.

*Response Bias:* The questionnaire was sent to clients in several waves. Respondents were divided into groups of early and late responders according to when they responded to the questionnaire, and compared in terms of their reported sales revenue, employment, financing obtained, and evaluation of the SBDC's services. This made it possible to investigate the issue of response bias. Results of t-tests and Analysis of Variance (ANOVA) indicated that early responding established business clients evaluated the SBDC's services more favorably than later responding clients. Moreover, early responding pre-venture clients reported higher first-year sales than clients who responded later.

*Reliability:* The reliability of the questionnaire was assessed by a point bi-serial correlation analysis comparing clients' perceptions of whether the SBDC's services were beneficial and their: (1) evaluation(s) of the knowledge and expertise of the counselors; (2) working relationships with the counselors, and; (3) willingness to recommend the SBDC to others. The results of the respective comparisons were statistically significant, which indicated the clients' responses to the questionnaire appeared to be reliable.

### **Overview of the Methodology in 2014 Haas Center Report**

In 2014, the Florida SBDC Network requested a comparative economic impact study using the IMPLAN model to estimate the economic impacts of the SBDC Network activities on: Employment, Sales, Income and Value Added (GRP). The Haas Center's report provided these outcome measures as Direct, Indirect, and Induced economic impacts. Compared with Chrisman (2012), the impacts of Pre-ventures, as well as capital and contract dollars from their overall impact estimation, were not reported. The Haas Center highlighted three basic elements regarding data collection, namely: 1) the survey respondents reported on *two-year* employment; 2) the survey respondents reported how many jobs were retained by their business as a consequence of SBDC consulting activities, and; 3) the survey respondents reported on the total value of capital or government contracts that were successfully acquired as the results of SBDC counseling assistance.

The Haas Center assumptions have been further summarized as follows:

- Any negative job growth calculated by their formula were zeroed out;
- The self-reported jobs-retained numbers were used to calculate the SBDC impact in terms of total jobs retained across the Florida economy;
- The survey's respondents who participated do not differ significantly from those who did not participate.

The businesses that participated in the survey were classified into five high-level industry categories, including: Construction, Manufacturing, Retail, Professional Services, and Wholesale Trade. The Haas Center computed the total numbers of jobs created and jobs retained/saved for established firms in each of these industry categories. The total economic impacts of the SBDC activities were estimated by the Haas Center using the IMPLAN software tool. The researchers analyzed the data at the finer NAICS code level of resolution, with impacts including the direct, indirect, and induced economic impacts, across a variety of categories, including; employment, income, value added, and total economic output.

## Study Data and Methodology

The survey and economic analysis consisted of a two-pronged methodology. First, the direct employment impact levels were estimated using the survey data provided to FSU CEFA by the SBDC administration. The second prong encompassed an economic impact assessment of the SBDC network activities based on the direct impacts, through estimation of the Indirect, and Induced effects of the SBDC's activities using the IMPLAN® software tool.

## Survey Methodology

The study for this year used survey data collected by the National Business Research Institute (NBRI) for Florida. The survey was different than previous years in that the NBRI collected survey responses on a national level. There were an overall total of 23,403 completed responses for a potential universe (or population) of businesses totaling 268,773. For this study, data collection was conducted through a 32-questionnaire survey on a sample of Florida SBDC's clients.<sup>19</sup> A total of 18,970 clients were served by the SBDC during 2016-17. The SBDC's provided a total of 222,714 hours of counseling services, to both established businesses (198,679 hours) and Pre-venture clients (24,035 hours). The SBDC reported that 1,568 surveys/questionnaires returned undeliverable, hence, a total of 17,402 clients successfully received the survey. For this analysis, the research team assumed the client population to be the number of clients which were reached by the survey. In total, there were 1,639 survey responses (i.e., a 9.4 percent response rate).<sup>20</sup> Based on the survey data, the research team evaluated the changes in sales revenues and employment, the jobs created and retained/saved, the financing obtained, and the gains in term of tax revenues.

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<sup>19</sup> Survey was distributed to 18,970 SBDC clients (based on the total number of clients served with one hour or more of counseling in 2016-17). See Appendix B for a copy of the survey.

<sup>20</sup> Florida's response was 9.4 percent, slightly higher than the national survey response rate of 8.7 percent.



The survey elicited information concerning the Florida SBDC counseling clients': e.g., demographic background, business status, business industry, business employment for 2016 and 2017, employment saved, business revenue, business financing, government contracts acquired, customer satisfaction, among others.

The FSU CEFA research team did not discuss the accuracy of the translation of the survey raw data nor the reliability of the survey data with the SBDC. The responses revealed insufficient data on the Pre-ventures, although a few Pre-venture clients addressed the survey questionnaire. Due to fewer data received for the Pre-venture clients, the research team primarily focused the analyses on established business clients only (Start-Ups and Small Medium Enterprises (SMEs)) of the Florida SBDC.

### **Survey Data**

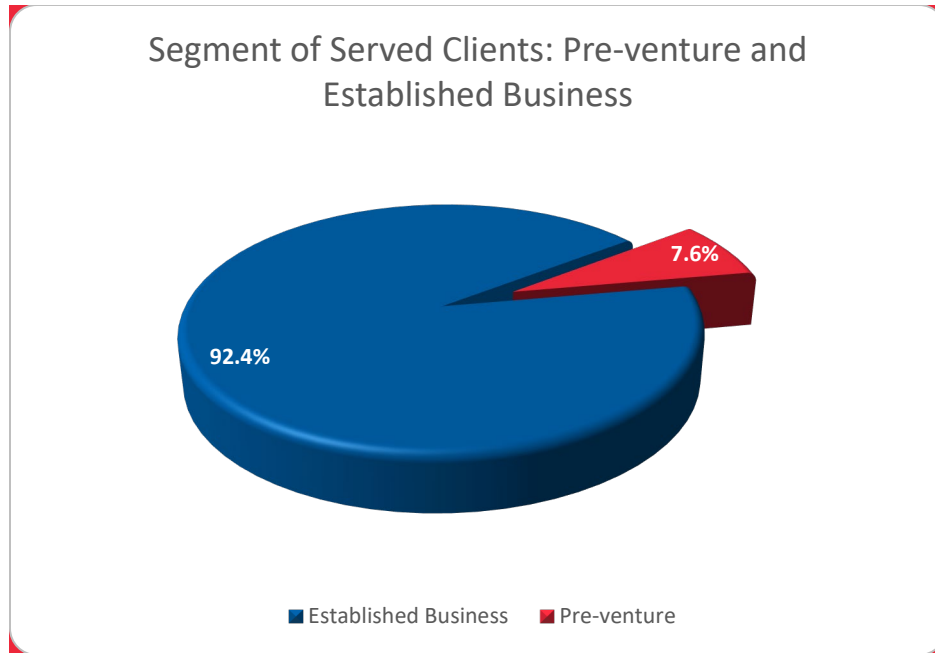
The survey data included different types of data including discrete, continuous and categorical. The employment in 2016 and 2017 consisted of full-time and part-time employment, as well as full-time and part-time independent contractors. These were designed to ask the respondents to indicate the number of employees in their business. To calculate the employment for each year, the research team assumed that two part-time employees equaled one full-time employee.<sup>21</sup>

### **Descriptive Analysis of the Survey Data**

Through further examination of the survey data, it was found that 7.6 percent of the SBDC clients were Pre-venture clients, and 92.4 percent were established businesses (see Figure 1). Given the characteristics of the Pre-venture, further data analyses were not possible due to insufficient data. The research team thus focused on established businesses (Start-Ups and Small Medium Enterprises (SMEs)) only. Of these, 52 percent of established businesses were owned by males, and 46 percent were owned by females (1.2 % were unknown). Similarly, of the established businesses, 59 percent were owned by whites, while 41 percent were owned by ethnic minorities.

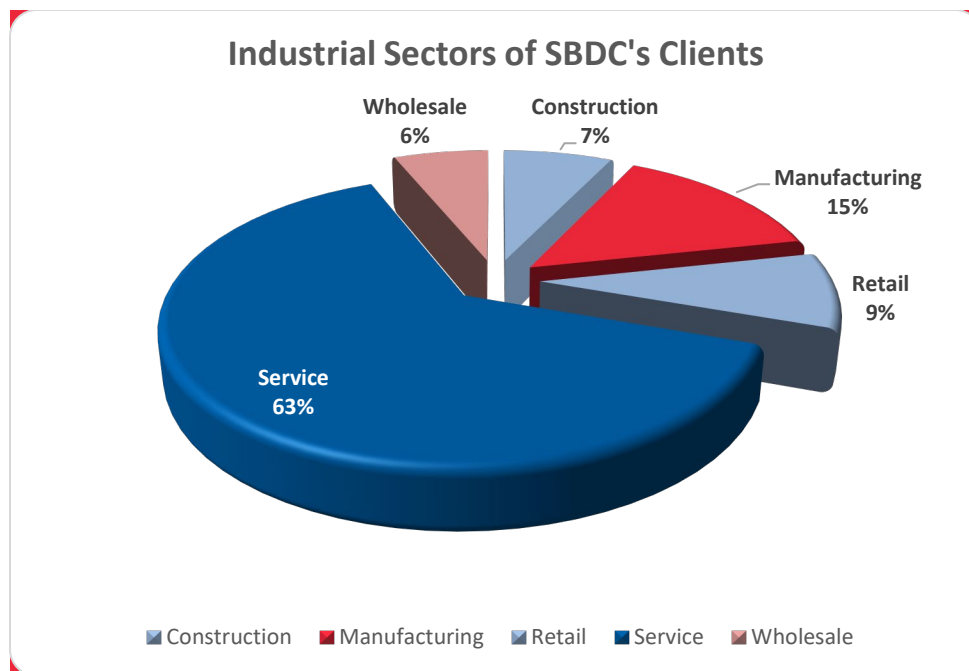
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<sup>21</sup> It is noted that independent contractors were not included.



**Figure 1. Classification of SBDC Survey Respondents:  
Pre-venture and Established Businesses**

By focusing on established businesses only, Figure 2 presents the breakout percentages of the SBDC’s clients who received at least one hour or more counseling services, by specific industry sector.



**Figure 2. The Industrial Sector Breakouts of the SBDCs Survey Respondents**

## Established Businesses

The established businesses represented approximately 92 percent of the SBDC's client base. The efforts of the SBDC to log the served clients according to the North American Industrial Classification System (NAICS) codes were mostly successful. More than 96 percent of the survey respondents provided a NAICS code associated with their business. The SBDC established business clients were further classified into two categories: Start-Ups and Small Medium Enterprises (SME's).

## Survey Data Validation and Analysis

Pertaining to the survey responses, about 92 percent of the survey data were related to established businesses (SME's and Start-Ups). Pre-venture counseling did not generate employment or revenues during 2016-17, thus the research team did no further economic analyses on this subset. The study also doesn't include impacts on independent contractors, as the data is not as detailed for modeling as the data on SME's and Start-ups (which is already limited).

Therefore, all analyses were based on the established businesses (SMEs and Start-Ups). The sample data were categorized in different subgroups of businesses, by:

- Region (one of the nine activity regions of the SBDC);
- Market segment (Start-Up or SME), and;
- Industrial sector category (i.e. Retail, Services, Wholesale, Manufacturing, and Construction).

Table 1 shows the absolute survey frequencies by market segment (SME and Start-Up), by industry, and by region. The shading shows higher frequencies in red and lower frequencies in blue. In the total columns and rows, frequencies are shown in green. Dark grey cells represent "No Data Available". As can be surmised from the table, only a few fields (two fields) represent enough data points for statistical analyses per subset (Industry - Region). As a result, only descriptive statistics would be possible with no inferences to the overall clientele and/or results of the consulting hours. For further inferences, region and industry frequencies were recalibrated, or redistributed, to each cell using a double weighting methodology, across both region and industry sector frequencies.<sup>22</sup> The recalibrated survey results are provided in Table 2 for both years 2016 (to the left) and 2017 (to the right), respectively. Shading is provided showing higher employment numbers in red, and lower numbers in blue.

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<sup>22</sup> The recalibration process is explained in Appendix A.

**Table 1. Survey Frequencies: by Market Segment, by Region and Industry, for Years 2016-17**

SME	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	8	91	9	23	14	145
FAMU	3	26	1	5	4	39
UNF	22	124	12	27	9	194
UCF	22	181	13	43	26	285
USF	13	104	8	19	14	158
IRSC	7	31	3	16	1	58
FGCU	14	89	7	16	8	134
FAU	5	66	12	20	10	113
FIU	17	109	20	27	10	183
Total	111	821	85	196	96	1,309

Startup	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	2	8	1	1	2	14
FAMU		3		1	1	5
UNF	3	21	1	1	1	27
UCF	3	25	1	2	2	33
USF	1	20		6		27
IRSC		3		1		4
FGCU	3	9	1		1	14
FAU	1	6		2	1	10
FIU	1	3	3	3	1	11
Total	14	98	7	17	9	145

Total	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	10	99	10	24	16	159
FAMU	3	29	1	6	5	44
UNF	25	145	13	28	10	221
UCF	25	206	14	45	28	318
USF	14	124	8	25	14	185
IRSC	7	34	3	17	1	62
FGCU	17	98	8	16	9	148
FAU	6	72	12	22	11	123
FIU	18	112	23	30	11	194
Total	125	919	92	213	105	1,454

\*\* Dark Grey shaded cells indicate no survey data

^ Shading shows higher employment numbers in red, and fewer employment numbers in blue.

**Table 2. Estimated Total Employees: by Market Segment, by Region and by Industry, for Years 2016 and 2017**

2016							2017						
SME	Retail	Service	Wholesale	Manufacturing	Construction	Total	SME	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	46	387	66	155	53	708	UWF	55	446	64	168	59	792
FAMU	32	265	45	107	36	485	FAMU	36	295	42	111	39	524
UNF	63	531	90	213	73	971	UNF	73	594	85	224	78	1,054
UCF	88	736	125	296	101	1,347	UCF	108	883	127	332	116	1,567
USF	59	494	84	199	68	904	USF	73	594	85	224	78	1,054
IRSC	39	324	55	130	45	593	IRSC	46	376	54	142	50	667
FGCU	44	365	62	146	50	667	FGCU	55	448	65	169	59	796
FAU	40	337	57	135	46	616	FAU	49	395	57	149	52	701
FIU	61	510	86	205	70	932	FIU	69	561	81	211	74	996
Total	472	3,950	670	1,587	543	7,222	Total	564	4,593	661	1,729	605	8,152

Startup	Retail	Service	Wholesale	Manufacturing	Construction	Total	Startup	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	0.2	1.3	0.1	1.2	0.2	3.0	UWF	1.6	13.7	1.0	4.7	1.1	22.0
FAMU	0.0	0.1	0.0	0.1	0.0	0.2	FAMU	0.9	7.9	0.6	2.7	0.6	12.7
UNF	0.4	2.3	0.2	2.1	0.3	5.2	UNF	2.3	20.3	1.4	6.9	1.6	32.6
UCF	0.7	4.6	0.4	4.2	0.5	10.4	UCF	2.9	24.8	1.7	8.4	1.9	39.7
USF	1.0	6.5	0.5	6.0	0.7	14.7	USF	3.2	27.4	1.9	9.3	2.1	43.9
IRSC	0.3	1.9	0.1	1.7	0.2	4.2	IRSC	0.9	7.9	0.6	2.7	0.6	12.7
FGCU	0.5	3.2	0.2	3.0	0.4	7.3	FGCU	1.8	15.4	1.1	5.2	1.2	24.7
FAU	0.5	3.5	0.3	3.2	0.4	7.9	FAU	2.9	24.8	1.7	8.4	1.9	39.7
FIU	0.4	2.6	0.2	2.4	0.3	6.0	FIU	1.6	13.7	1.0	4.7	1.1	22.0
Total	4.0	26.0	2.0	24.0	3.0	59.0	Total	18.0	156.0	11.0	53.0	12.0	250.0

Total	Retail	Service	Wholesale	Manufacturing	Construction	Total	Total	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	46	388	66	157	53	711	UWF	56	460	65	173	60	814
FAMU	32	265	45	107	36	485	FAMU	37	303	43	114	40	537
UNF	64	533	90	216	73	976	UNF	75	614	87	230	80	1,087
UCF	89	741	125	300	102	1,357	UCF	111	908	129	341	118	1,607
USF	60	501	84	205	69	918	USF	76	621	87	233	80	1,098
IRSC	39	326	55	132	45	597	IRSC	47	384	55	144	50	680
FGCU	44	368	62	149	50	674	FGCU	57	464	66	174	60	821
FAU	41	341	57	139	47	624	FAU	51	420	59	157	54	741
FIU	61	513	87	207	70	938	FIU	71	575	82	216	75	1,018
Total	476	3,976	672	1,611	546	7,281	Total	582	4,749	672	1,782	617	8,402

\*Data may not add up exactly due to rounding

^ Shading shows higher employment numbers in red, and lower numbers in blue.

Similar to the methodology used in previous years, the research team compared the employment and associated changes of the sample clients for 2016, with those of 2017, in order to estimate the number of jobs created (i.e. the difference between the 2016 and 2017 data points in Table 2). The jobs created by the established businesses were expressed in relative growths per segment, region and industry. Next, the

growth was benchmarked against the specific region and industry sector in Florida. In other words, the rates of employment growth, relating to the surveyed clients for each subgroup, were compared with the growth of all businesses under normal conditions, in the region. This was done by comparisons with the Economic Modeling Specialists, Inc. (EMSI)-produced industry jobs reports for 2017. Only the differential growth was attributed to the measure of SBDC assistance. Table 3 provides the EMSI-relative growth of all businesses, per region and Industry, under normal conditions, and used for the comparative analyses, for years 2016-17.

**Table 3. EMSI Growth Rates by Region and by Industry Sector for Years 2016-17**

SME	Retail	Service	Wholesale	Manufacturing	Construction
UWF	1.2%	1.6%	2.9%	-4.3%	3.4%
FAMU	-1.5%	1.5%	4.6%	0.3%	2.4%
UNF	3.0%	1.8%	-0.3%	2.5%	7.8%
UCF	2.1%	2.7%	1.3%	4.2%	7.3%
USF	0.7%	1.9%	2.1%	0.5%	4.0%
IRSC	0.3%	2.4%	1.2%	1.2%	7.4%
FGCU	1.1%	1.7%	1.8%	-2.1%	3.9%
FAU	0.2%	2.2%	0.8%	0.9%	4.3%
FIU	0.0%	1.5%	0.3%	1.2%	3.6%

The actual survey-derived business growth minus the EMSI-derived expected “normal” (or baseline) growth is defined as the growth attributed to the SBDC-specific activities. This net, or incremental growth, was transposed or scaled to the population level as total jobs created, as shown in Table 4.

**Table 4. Estimated Total Jobs Created 2017: by Market Segment, by Region, and by Industry, Attributed to SBDC Activities**

SME	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	96	646	(75)	213	48	928
FAMU	60	323	(62)	53	21	395
UNF	94	663	(51)	77	8	791
UCF	224	1,543	14	303	98	2,182
USF	162	1,099	8	289	94	1,652
IRSC	87	535	(25)	117	22	735
FGCU	132	938	22	302	86	1,479
FAU	98	627	(2)	148	49	919
FIU	96	539	(72)	55	21	638
<b>Total</b>	<b>1,048</b>	<b>6,913</b>	<b>(244)</b>	<b>1,556</b>	<b>446</b>	<b>9,719</b>

Start-	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	16	135	46	58	8	263
FAMU	12	84	14	30	5	144
UNF	20	191	14	37	2	263
UCF	24	213	9	35	9	289
USF	25	231	7	39	12	315
IRSC	7	63	12	10	2	93
FGCU	15	136	7	30	8	196
FAU	28	231	10	58	13	340
FIU	14	116	10	19	4	162
<b>Total</b>	<b>160</b>	<b>1,399</b>	<b>128</b>	<b>315</b>	<b>63</b>	<b>2,065</b>

Total	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	112	781	(29)	271	56	1,191
FAMU	71	407	(48)	83	26	539
UNF	114	854	(37)	114	10	1,054
UCF	248	1,756	22	338	107	2,471
USF	187	1,331	16	327	106	1,966
IRSC	95	597	(14)	127	24	828
FGCU	147	1,074	29	332	93	1,675
FAU	125	858	8	206	62	1,259
FIU	110	655	(62)	73	25	801
<b>Total</b>	<b>1,208</b>	<b>8,312</b>	<b>(116)</b>	<b>1,871</b>	<b>509</b>	<b>11,784</b>

\*Data may not add up exactly due to rounding

^ Shading shows higher employment numbers in red, and fewer employment numbers in blue.

A similar procedure, as outlined above, was applied to the calculation of retained/saved jobs, due to the SBDC activities. The actual outcomes were recalibrated according to the methodology described above, across both region and industry sector frequencies. The estimated total retained/saved jobs attributed to SBDC activities are provided in Table 6.

**Table 6. Estimated Total Employment Retained/Saved 2017: by Market Segment, by Region, and by Industry, Attributed to SBDC Activities**

SME	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	16	271	23	59	17	386
FAMU	6	111	9	24	7	159
UNF	33	578	49	127	36	823
UCF	27	464	40	102	29	662
USF	20	352	30	77	22	502
IRSC	11	191	16	42	12	272
FGCU	26	445	38	98	28	635
FAU	45	776	66	170	49	1,106
FIU	24	410	35	90	26	584
<b>Total</b>	<b>207</b>	<b>3,598</b>	<b>307</b>	<b>790</b>	<b>226</b>	<b>5,128</b>

Startup	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	0.2	5.4	0.3	1.0	0.0	7.0
FAMU	0.0	0.1	0.0	0.0	0.0	0.1
UNF	0.4	8.5	0.5	1.6	0.0	11.0
UCF	0.3	6.6	0.4	1.3	0.0	8.5
USF	0.2	5.8	0.4	1.1	0.0	7.5
IRSC	0.2	3.8	0.2	0.7	0.0	4.9
FGCU	0.2	4.4	0.3	0.8	0.0	5.7
FAU	0.3	7.6	0.5	1.5	0.0	9.9
FIU	0.2	4.9	0.3	0.9	0.0	6.4
<b>Total</b>	<b>2.0</b>	<b>46.9</b>	<b>3.0</b>	<b>9.0</b>	<b>0.1</b>	<b>61.0</b>

Total	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	16	276	23	60	17	393
FAMU	6	111	9	24	7	159
UNF	34	586	50	128	36	834
UCF	27	471	40	103	29	670
USF	21	358	30	78	22	510
IRSC	11	195	17	43	12	277
FGCU	26	450	38	99	28	641
FAU	45	783	67	172	49	1116
FIU	24	415	35	91	26	590
<b>Total</b>	<b>209</b>	<b>3645</b>	<b>310</b>	<b>799</b>	<b>226</b>	<b>5,189</b>

\* Data may not add up exactly due to rounding

\*\*Shading shows higher averages in red, and lower averages in blue.

In total, the final estimates for created and retained/saved employment, attributed to SBDC-specific activities, are provided in Table 7.



**Table 7. Estimated Total Created and Retained/Saved Employment 2017: by Market Segment, by Region, and by Industry, Attributed to SBDC Activities**

SME	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	112	917	(52)	272	65	1,314
FAMU	66	435	(52)	77	28	554
UNF	127	1,240	(1)	204	44	1,614
UCF	251	2,007	53	405	128	2,844
USF	182	1,452	38	366	116	2,154
IRSC	98	725	(9)	159	34	1,007
FGCU	158	1,383	60	399	114	2,114
FAU	142	1,403	64	318	98	2,025
FIU	119	949	(37)	145	46	1,222
<b>Total</b>	<b>1,255</b>	<b>10,511</b>	<b>63</b>	<b>2,346</b>	<b>672</b>	<b>14,847</b>

Startup	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	16	140	46	59	8	270
FAMU	12	84	14	30	5	144
UNF	20	199	14	38	2	274
UCF	24	219	9	36	9	297
USF	26	237	8	40	12	322
IRSC	8	66	12	11	2	98
FGCU	15	141	7	31	8	202
FAU	28	238	11	59	13	350
FIU	14	121	10	20	4	169
<b>Total</b>	<b>162</b>	<b>1,446</b>	<b>131</b>	<b>324</b>	<b>63</b>	<b>2,126</b>

Total	Retail	Service	Wholesale	Manufacturing	Construction	Total
UWF	128	1,057	(6)	332	73	1,583
FAMU	78	518	(38)	107	33	698
UNF	147	1,440	13	242	46	1,888
UCF	275	2,227	62	441	137	3,141
USF	207	1,689	46	406	128	2,476
IRSC	106	792	3	169	36	1,106
FGCU	173	1,524	67	431	121	2,316
FAU	170	1,641	74	378	111	2,374
FIU	133	1,070	(27)	164	50	1,391
<b>Total</b>	<b>1,417</b>	<b>11,957</b>	<b>194</b>	<b>2,670</b>	<b>735</b>	<b>16,973</b>

\* Data may not add up exactly due to rounding

\*\*Shading shows higher averages in red, and lower averages in blue.

The results are further summarized in Tables 8 and 9. The employment was allocated to each one of the five industry sectors (Table 8) in term of jobs created and retained/saved, by industry sector. Next, the employment results, by industry sector and by the corresponding nine SBDC regions, are shown in Table 9. Table 9 also provides further detail of the industry performances by regions.

**Table 8. Estimated Total Jobs Created and Retained/Saved, by Industry Sector, in Florida for 2017**

Estimated Total Jobs Created and Retained/Saved, by Industry Sector, in Florida, 2017						
Industry	SBDC Employment Growth	Florida Employment Growth	Incremental Growth	Jobs Created	Jobs Retained	Total Jobs
Retail	22.3%	1.1%	21.2%	1,208	209	1,417
Professional Services	19.4%	2.0%	17.4%	8,312	3,645	11,957
Wholesale Trade	0.0%	1.1%	-1.1%	-116	310	194
Manufacturing	10.6%	1.3%	9.3%	1,871	799	2,670
Construction	13.0%	5.1%	7.9%	509	226	735
<b>Total</b>	<b>15.4%</b>	<b>2.0%</b>	<b>13.4%</b>	<b>11,784</b>	<b>5,189</b>	<b>16,973</b>

The jobs created and retained/saved reflect the incremental change due to the Florida SBDC-specific activities relating to job growth, exceeding, or not exceeding, the overall state standard.<sup>23</sup> As mentioned earlier, the industry sector-specific Florida employment growth rates for 2016-17 were obtained using the EMSI annual reports for the 2016-17 employment in Florida. According to Table 8, the leading industry sector for the SBDC-specific industries is the Retail sector, with 22.3 percent in expected job growth, in comparison with the 1.1 percent statewide. At the regional level, the retail firms had the highest job growth in all SBDC regions. Next, the Services sector figure prominently relating to job growth. Retail created 1,208 jobs and retained 209 jobs, due to the counseling services provided by the SBDC. Based on the survey data and related to jobs created or retained/saved analyses, the top performing region was the fifth region: University of South Florida (USF), with a record number of 1,966 jobs created and 510 jobs retained/saved, as a result of SBDC activities in 2017. In summary, a total of 11,784 jobs were created and 5,189 retained/saved, for a total direct impact of 16,973 SBDC-related jobs as a result of SBDC-specific activities between 2016 and 2017.

<sup>23</sup> Not exceeding refers or results to negative job growth for SBDC

**Table 9. Estimated Total Jobs Created and Retained/Saved, by Region and Industry, in Florida, for 2016-17**

Region	Industry	SBDC Employment Growth	Florida Employment Growth	Incremental Growth	Jobs Created	Jobs Retained	Total Jobs
Region 1: UWF	Retail	21.4%	1.2%	20.2%	112	16	128
	Service	18.5%	1.6%	16.8%	781	276	1,057
	Wholesale	-0.8%	2.9%	-3.7%	-29	23	-6
	Manufacturing	10.2%	-4.3%	14.5%	271	60	332
	Construction	12.2%	3.4%	8.7%	56	17	73
Total Region 1		14.6%	1.5%	13.1%	1,191	393	1,583
Region 2: FAMU	Retail	17.3%	-1.5%	18.8%	71	6	78
	Service	14.3%	1.5%	12.8%	407	111	518
	Wholesale	-4.3%	4.6%	-8.9%	-48	9	-38
	Manufacturing	6.8%	0.3%	6.5%	83	24	107
	Construction	8.4%	2.4%	5.9%	26	7	33
Total Region 2		10.7%	1.2%	9.5%	539	159	698
Region 3: UNF	Retail	17.9%	3.0%	14.9%	114	34	147
	Service	15.1%	1.8%	13.4%	854	586	1,440
	Wholesale	-3.7%	-0.3%	-3.4%	-37	50	13
	Manufacturing	6.9%	2.5%	4.4%	114	128	242
	Construction	8.9%	7.8%	1.1%	10	36	46
Total Region 3		11.3%	2.3%	9.0%	1,054	834	1,888
Region 4: UCF	Retail	25.5%	2.1%	23.3%	248	27	275
	Service	22.5%	2.7%	19.8%	1,756	471	2,227
	Wholesale	2.8%	1.3%	1.5%	22	40	62
	Manufacturing	13.6%	4.2%	9.4%	338	103	441
	Construction	17.0%	7.3%	9.6%	107	29	137
Total Region 4		18.4%	3.0%	15.5%	2,471	670	3,141
Region 5: USF	Retail	26.7%	0.7%	26.0%	187	21	207
	Service	24.1%	1.9%	22.2%	1,331	358	1,689
	Wholesale	3.6%	2.1%	1.5%	16	30	46
	Manufacturing	13.8%	0.5%	13.4%	327	78	406
	Construction	17.0%	4.0%	12.9%	106	22	128
Total Region 5		19.6%	1.8%	17.8%	1,966	510	2,476

**Table 9. Estimated Total Jobs Created and Retained/Saved: by Region and Industry, in  
Florida, for 2016-17, Cont.**

Region (R)	Industry	SBDC Employment Growth	Florida Employment Growth	Incremental Growth	Jobs Created	Jobs Retained	Total Jobs
<b>Region 6: IRSC</b>	Retail	20.6%	0.3%	20.2%	95	11	106
	Service	17.7%	2.4%	15.3%	597	195	792
	Wholesale	-0.9%	1.2%	-2.1%	-14	17	3
	Manufacturing	9.2%	1.2%	8.0%	127	43	169
	Construction	11.9%	7.4%	4.4%	24	12	36
<b>Total Region 6</b>		<b>13.8%</b>	<b>2.4%</b>	<b>11.5%</b>	<b>828</b>	<b>277</b>	<b>1,106</b>
<b>Region 7: FGCU</b>	Retail	29.0%	1.1%	27.9%	147	26	173
	Service	26.1%	1.7%	24.4%	1,074	450	1,524
	Wholesale	5.7%	1.8%	3.9%	29	38	67
	Manufacturing	16.4%	-2.1%	18.6%	332	99	431
	Construction	19.3%	3.9%	15.4%	93	28	121
<b>Total Region 7</b>		<b>21.8%</b>	<b>1.6%</b>	<b>20.1%</b>	<b>1,675</b>	<b>641</b>	<b>2,316</b>
<b>Region 8: PBSC</b>	Retail	25.8%	0.2%	25.6%	125	45	170
	Service	23.2%	2.2%	21.0%	858	783	1,641
	Wholesale	2.0%	0.8%	1.1%	8	67	74
	Manufacturing	13.3%	0.9%	12.4%	206	172	378
	Construction	15.4%	4.3%	11.1%	62	49	111
<b>Total Region 8</b>		<b>18.6%</b>	<b>1.9%</b>	<b>16.7%</b>	<b>1,259</b>	<b>1116</b>	<b>2,374</b>
<b>Region 9: BRC</b>	Retail	15.0%	0.0%	14.9%	110	24	133
	Service	12.2%	1.5%	10.7%	655	415	1,070
	Wholesale	-5.7%	0.3%	-6.0%	-62	35	-27
	Manufacturing	4.2%	1.2%	3.0%	73	91	164
	Construction	6.5%	3.6%	2.9%	25	26	50
<b>Total Region 9</b>		<b>8.5%</b>	<b>1.4%</b>	<b>7.2%</b>	<b>801</b>	<b>590</b>	<b>1,391</b>
<b>Total Statewide</b>		<b>15.4%</b>	<b>2.0%</b>	<b>13.4%</b>	<b>11,784</b>	<b>5,189</b>	<b>16,973</b>

## Economic Impact Analysis

### Economic Impact Analysis Methodology

The total economic impacts of SBDC-related spending were estimated with multipliers generated using a regional economic input-output model for the state of Florida constructed by the IMPLAN® economic impact modeling system (IMPLAN Group, LLC, 2016). IMPLAN® is a widely accepted integrated input-output model, used extensively by state and local government agencies to measure impacts proposed legislative and other program and policy economic impacts across private and public sectors. There are several advantages to using IMPLAN®:

- It is calibrated to local conditions using a relatively large amount of local county level and state of Florida specific data;
- It is based on a strong theoretical foundation, and;
- It uses a well-researched and accepted applied economics impact assessment methodology supported by many years of use across all regions of the U.S.

The economic impact model used for this analysis is developed for the counties of Florida and includes 536 business sectors (based on the North American Industrial Classification System, or NAICS) and the latest datasets – year 2016 data. IMPLAN®’s principal advantage is that it may be used to estimate direct, indirect and induced economic impacts for any static (point-in-time) economic stimulus. Through the estimation of economic multipliers, the “ripple” effects of supply chain spending for input purchases are captured (indirect effects), and household spending by employees (induced effects) for new final demand to the regional economy, as well as direct spending and employment. Economic multipliers for each business sector and household income category are used to estimate the following economic impacts: economic output or revenue, employment (fulltime and part-time jobs), value added (GRP), labor-income, among other economic impacts.

### Economic Impact Model Input Data

The input data used for the economic modeling analysis included the estimated direct jobs created and retained/saved due to SBDC activities for 2017. The total of the direct jobs created and retained were assigned to appropriate industry sectors, or NAICS, codes. These data were further translated into IMPLAN®-specific industry sectors for the economic impact modeling analysis. Initially, there were 18 separate economic models generated; representing the market segments (SME or Start-Up), for each of the nine regions. The economic impact results, in terms of output, employment, labor income and value-added (or GRP) were then compiled and presented in the following Tables.

## Economic Impact and Statewide Results

The economic impact results are presented in Table 10 for the market segments statewide impacts, and in Tables 11 and 12 relating to the regional impacts. The summation of the two market segment estimates provided the total economic impacts for the SBDC network in Florida. The statewide economic impact of the SBDC services reflected by 16,973 direct jobs created and retained/saved by the SMEs and Start-Ups, have generated an additional 4,209 indirect jobs and 7,693 induced jobs; for a total of 28,876 jobs. For 2017, the 16,973 direct jobs attributed to both SME's and Start-Ups generated nearly \$1.25 billion in labor income. In addition, they produced more than \$3.25 billion of output (sales/revenues), and contributed nearly \$1.72 billion in value-added, or Gross Regional Product (GRP), to the Florida economy.

**Table 10. The SBDC Statewide Estimated Economic Impacts in 2018 Dollars**

Table 10.2017 Statewide Economic Impact				
Impact Type	Output	Employment	Labor Income	GRP / Value-added
SMEs				
Direct Effect	\$1,362,366,798	14,848	\$598,909,613	\$637,202,807
Indirect Effect	\$538,806,384	3,675	\$190,548,679	\$308,603,137
Induced Effect	\$924,828,405	6,695	\$298,683,759	\$542,852,678
<b>Total Effect</b>	<b>\$2,826,001,587</b>	<b>25,218</b>	<b>\$1,088,142,051</b>	<b>\$1,488,658,622</b>
Start-Ups				
Direct Effect	\$206,138,391	2,126	\$90,123,262	\$102,388,561
Indirect Effect	\$78,441,792	534	\$27,654,555	\$44,936,775
Induced Effect	\$137,363,308	998	\$44,213,008	\$80,479,373
<b>Total Effect</b>	<b>\$421,943,491</b>	<b>3,658</b>	<b>\$161,990,825</b>	<b>\$227,804,709</b>
SME's and Start-Ups				
Direct Effect	\$1,568,505,189	16,973	\$689,032,875	\$739,591,368
Indirect Effect	\$617,248,176	4,209	\$218,203,234	\$353,539,912
Induced Effect	\$1,062,191,713	7,693	\$342,896,767	\$623,332,051
<b>Total Effect</b>	<b>\$3,247,945,078</b>	<b>28,876</b>	<b>\$1,250,132,876</b>	<b>\$1,716,463,331</b>

\*Data may not add up exactly due to rounding

## Economic Impact Analysis and Regional Results

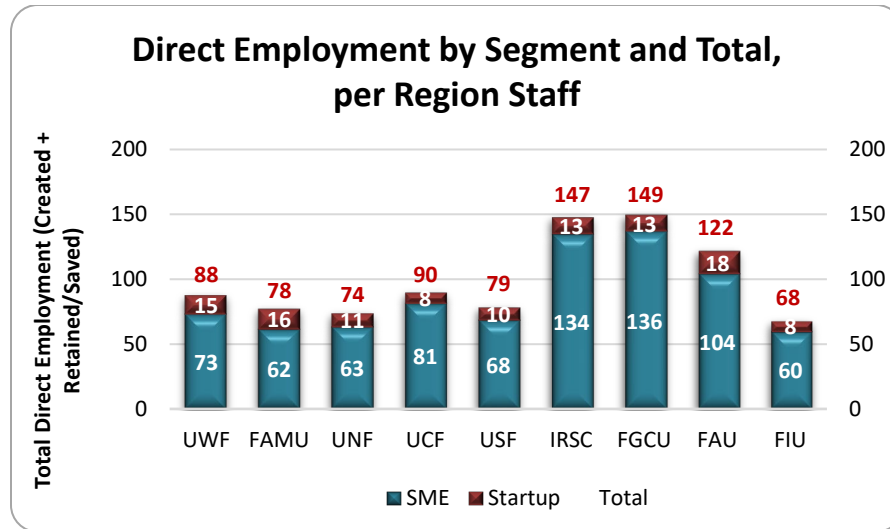
The Florida SBDC's are supported at a regional level, by their higher education institution partners. These institutions represent a vital resource to the Florida SBDC network. The Florida SBDC's are divided into nine regional areas across the state. The Florida SBDC Network Headquarters is located in Escambia County in Region 1 represented by the University of West Florida.



**Figure 5. The Florida SBDC Network Regions**

As one measure of effectiveness, Figure 6 shows the direct employment (created and retained/saved) by segment (SME and Start-Ups) expressed as a ratio over Regional SBDC total staff (Support Staff plus Professional Staff/ Consultants).<sup>24</sup> It shows that Region 7 (FGCU) is most effective in jobs created and retained/saved, with SMEs and in total. Region 8 (FAU) is most effective in jobs created and retained/saved, with Start-Ups.

<sup>24</sup> Data as provided by SBDC; “management and support staff” and “consulting and training” (i.e., no State-office overhead), where part-time is assumed 0.5 FTE.



**Figure 6. Direct Employment by Market Segment and Total, per Region Staff**

The regional economic direct, indirect, and induced impacts of the Florida SBDC network are presented in terms of jobs created and retained/saved within the established businesses; SMEs and Start-Ups (see Tables 11 and 12). Table 11 depicts the economic impact results for the SME's, and Table 12 represents the economic impact results for the Start-Ups. Relating to the regional economic impacts of the SME's, there was evidence of variations between regions. For example, in Region 4, there were 2,844 direct jobs created or retained/saved, and 5,079 total job impacts (direct, indirect and induced impacts). Other high performing regions included: Region 5, Region 7, and Region 8, which demonstrated employment growth of 16.8 percent, 14.0, and 14.0 percent, respectively.



**Table 11. The Estimated Economic Impacts of SME's, by SBDC Region, in 2018 Dollars**

Region	Direct Effect	Indirect Effect	Induced Effect	Total Effect	% of State
<b>Economic Output (Sales) in US \$</b>					
Region 1: UWF	\$111,847,811	\$36,564,776	\$50,013,048	\$198,425,635	7.0%
Region 2: FAMU	\$42,035,628	\$13,826,071	\$25,907,252	\$81,768,951	2.9%
Region 3: UNF	\$117,983,612	\$51,735,531	\$77,244,587	\$246,963,730	8.7%
Region 4: UCF	\$253,587,926	\$113,848,017	\$199,183,977	\$566,619,920	20.1%
Region 5: USF	\$228,485,253	\$96,774,835	\$208,750,640	\$534,010,728	18.9%
Region 6: IRSC	\$70,694,572	\$21,542,594	\$32,389,989	\$124,627,155	4.4%
Region 7: FGCU	\$232,390,487	\$76,238,456	\$119,887,138	\$428,516,081	15.2%
Region 8: FAU	\$200,009,157	\$85,743,534	\$135,639,900	\$421,392,591	14.9%
Region 9: FIU	\$105,332,352	\$42,532,570	\$75,811,874	\$223,676,796	7.9%
<b>Employment</b>					
Region 1: UWF	1,314	269	382	1,965	7.8%
Region 2: FAMU	554	104	201	859	3.4%
Region 3: UNF	1,614	359	564	2,537	10.1%
Region 4: UCF	2,844	787	1,448	5,079	20.1%
Region 5: USF	2,154	623	1,461	4,238	16.8%
Region 6: IRSC	1,007	166	258	1,431	5.7%
Region 7: FGCU	2,114	533	887	3,534	14.0%
Region 8: FAU	2,025	553	958	3,536	14.0%
Region 9: FIU	1,222	281	536	2,039	8.1%
<b>Labor Income in US \$</b>					
Region 1: UWF	\$45,261,843	\$11,598,149	\$15,225,933	\$72,085,925	6.6%
Region 2: FAMU	\$21,538,788	\$4,750,496	\$7,874,596	\$34,163,880	3.1%
Region 3: UNF	\$45,507,582	\$18,363,857	\$25,174,925	\$89,046,364	8.2%
Region 4: UCF	\$103,272,689	\$39,575,914	\$64,801,424	\$207,650,027	19.1%
Region 5: USF	\$110,846,144	\$34,763,785	\$67,681,314	\$213,291,243	19.6%
Region 6: IRSC	\$28,757,009	\$6,793,680	\$10,097,575	\$45,648,264	4.2%
Region 7: FGCU	\$101,825,786	\$27,746,353	\$38,312,999	\$167,885,138	15.4%
Region 8: FAU	\$86,254,835	\$31,999,203	\$44,478,883	\$162,732,921	15.0%
Region 9: FIU	\$55,644,937	\$14,957,242	\$25,036,110	\$95,638,289	8.8%
<b>Value Added (Gross Regional Product)</b>					
Region 1: UWF	\$43,883,670	\$19,788,690	\$28,792,839	\$92,465,199	6.2%
Region 2: FAMU	\$18,214,230	\$7,580,392	\$14,812,022	\$40,606,644	2.7%
Region 3: UNF	\$48,139,911	\$29,271,424	\$44,998,433	\$122,409,768	8.2%
Region 4: UCF	\$114,953,547	\$64,758,099	\$117,778,161	\$297,489,807	20.0%
Region 5: USF	\$114,706,240	\$55,694,392	\$121,839,513	\$292,240,145	19.6%
Region 6: IRSC	\$32,723,412	\$11,442,284	\$18,338,394	\$62,504,090	4.2%
Region 7: FGCU	\$115,916,662	\$43,730,015	\$70,502,624	\$230,149,301	15.5%
Region 8: FAU	\$95,293,920	\$51,608,668	\$80,675,474	\$227,578,062	15.3%
Region 9: FIU	\$53,371,215	\$24,729,173	\$45,115,218	\$123,215,606	8.3%

**Table 12. The Economic Impacts of Start-Ups, by SBDC Region, in 2018 Dollars**

Region	Direct Effect	Indirect Effect	Induced Effect	Total Effect	% of State
<b>Economic Output (Sales) in US \$</b>					
Region 1: UWF	\$30,904,272	\$9,563,157	\$12,923,318	\$53,390,747	12.7%
Region 2: FAMU	\$16,385,036	\$4,992,732	\$8,989,709	\$30,367,477	7.2%
Region 3: UNF	\$21,177,634	\$8,966,722	\$13,935,205	\$44,079,561	10.4%
Region 4: UCF	\$25,301,289	\$11,290,479	\$20,477,761	\$57,069,529	13.5%
Region 5: USF	\$32,142,857	\$13,194,447	\$30,863,926	\$76,201,230	18.1%
Region 6: IRSC	\$8,626,358	\$2,534,216	\$4,002,399	\$15,162,973	3.6%
Region 7: FGCU	\$21,123,463	\$6,826,974	\$11,347,085	\$39,297,522	9.3%
Region 8: FAU	\$33,694,769	\$14,432,738	\$23,066,898	\$71,194,405	16.9%
Region 9: FIU	\$16,782,713	\$6,640,327	\$11,757,007	\$35,180,047	8.3%
<b>Employment</b>					
Region 1: UWF	269	69	99	437	11.9%
Region 2: FAMU	145	37	70	252	6.9%
Region 3: UNF	273	61	102	436	11.9%
Region 4: UCF	297	78	149	524	14.3%
Region 5: USF	323	86	216	625	17.1%
Region 6: IRSC	99	20	32	151	4.1%
Region 7: FGCU	202	48	84	334	9.1%
Region 8: FAU	349	92	163	604	16.5%
Region 9: FIU	169	43	83	295	8.1%
<b>Labor Income in US \$</b>					
Region 1: UWF	\$10,936,992	\$3,066,305	\$3,938,973	\$17,942,270	11.1%
Region 2: FAMU	\$6,900,908	\$1,685,864	\$2,738,635	\$11,325,407	7.0%
Region 3: UNF	\$8,196,820	\$3,212,115	\$4,543,660	\$15,952,595	9.8%
Region 4: UCF	\$10,797,457	\$3,926,448	\$6,661,953	\$21,385,858	13.2%
Region 5: USF	\$16,913,992	\$4,755,622	\$10,006,178	\$31,675,792	19.6%
Region 6: IRSC	\$3,408,462	\$801,047	\$1,248,044	\$5,457,553	3.4%
Region 7: FGCU	\$9,864,862	\$2,481,549	\$3,626,199	\$15,972,610	9.9%
Region 8: FAU	\$14,765,458	\$5,390,438	\$7,563,940	\$27,719,836	17.1%
Region 9: FIU	\$8,338,311	\$2,335,167	\$3,885,426	\$14,558,904	9.0%
<b>Value Added (Gross Regional Product)</b>					
Region 1: UWF	\$14,540,245	\$5,212,857	\$7,440,805	\$27,193,907	11.9%
Region 2: FAMU	\$8,238,292	\$2,698,546	\$5,141,196	\$16,078,034	7.1%
Region 3: UNF	\$9,353,222	\$5,105,648	\$8,118,483	\$22,577,353	9.9%
Region 4: UCF	\$11,957,614	\$6,446,563	\$12,108,548	\$30,512,725	13.4%
Region 5: USF	\$17,175,129	\$7,654,177	\$18,013,773	\$42,843,079	18.8%
Region 6: IRSC	\$4,736,911	\$1,339,937	\$2,266,058	\$8,342,906	3.7%
Region 7: FGCU	\$11,057,514	\$3,927,150	\$6,673,166	\$21,657,830	9.5%
Region 8: FAU	\$16,132,049	\$8,688,041	\$13,719,362	\$38,539,452	16.9%

## Summary of Fiscal Impacts for 2016

Lastly, the FSU CEFA research team analyzed the fiscal impacts of the Florida SBDC's. In 2016, the SBDC Network received funding from a variety of sources, including: Federal Government agencies, the state of Florida, other local and regional match investment provided by host partner institutions of higher education, and public and private sector organizations. The 2016 annual cost of the Florida SBDC advising/consulting activities was \$18.7 million. Of that amount, the Florida SBDC was able to leverage \$10.4 million in host partner and state investment to secure \$7.8 million in federal expenditures for further financing of the SBDC's activities. The research team assumed that the total cost of the Florida SBDC network operations was \$10.4 million. The IMPLAN® model was used to estimate the fiscal impacts associated with SBDC's activities. The research team calculated the tax impacts by region for SMEs and Start-Ups across the nine regions (see Table 13). The tax impacts included the federal, state & local impacts, by the following types: employee compensation, production and import taxes, household taxes, and corporate taxes. The sum of all types of tax collections by region, and market segment, were reported in the following Table. Across the various categories, the data indicate that the SBDC was responsible for generating \$382.6 million in tax revenues (in \$2018). Finally, the cost-effectiveness, (or Return on Investment) was \$36.62 in taxes generated for every \$1 in state investment.<sup>25</sup>

**Table 13. The SBDC Fiscal (Federal, State & Local) Impacts, in 2018 Dollars**

Region	SMEs	Start-Ups	TOTAL
<b>Region 1: UWF</b>	\$19,649,622	\$7,029,982	<b>\$26,679,605</b>
<b>Region 2: FAMU</b>	\$7,604,290	\$3,729,814	<b>\$11,334,104</b>
<b>Region 3: UNF</b>	\$27,023,089	\$5,307,147	<b>\$32,330,236</b>
<b>Region 4: UCF</b>	\$66,979,476	\$6,938,582	<b>\$73,918,058</b>
<b>Region 5: USF</b>	\$66,699,186	\$9,833,921	<b>\$76,533,107</b>
<b>Region 6: IRSC</b>	\$16,450,333	\$2,312,554	<b>\$18,762,886</b>
<b>Region 7: FGCU</b>	\$48,666,929	\$4,605,267	<b>\$53,272,196</b>
<b>Region 8: FAU</b>	\$50,294,312	\$8,565,267	<b>\$58,859,580</b>
<b>Region 9: FIU</b>	\$26,321,180	\$4,589,592	<b>\$30,910,771</b>
<b>Total</b>	<b>\$329,688,417</b>	<b>\$52,912,126</b>	<b>\$382,600,543</b>

<sup>25</sup> Calculation: Total taxes generated (\$382.6 million) /state investment or cost (\$10.4 million)

## Conclusions

The Florida Small Business Development Center (SBDC), over the last 40 years, has been one of the pioneers in assisting small business' creation and development, and providing counseling to small businesses across the state of Florida. The SBDC network has promoted a statewide partnership between Florida's high education institutions and economic development organizations, including pre-venture and established businesses. The SBDC network is dedicated to provide expert counseling to support emerging and established business owners. SBDCs counseling comes in term of management and technical assistance, from the development of the business plan to securing Federal and State Government agencies' funding. The mission of the Florida SBDC network is to enable the overall economic growth and to increase businesses profitability and economic prosperity in Florida.

The Florida SBDC network is engaged in several activities to attain the objectives of its mission. In order to do so, it has split its activities into three major programs, including; the SBDC core program, the procurement and technical assistance program, and the growth acceleration program. Each one of these programs includes specific counseling. In 2017, Florida SBDCs served nearly 18,970 Pre-venture, Start-up and established small businesses through consulting and training. The direct effects of these counseling services on Florida's economy are 11,784 jobs created and 5,189 jobs retained or saved (at a cost of \$362 per job), hence a total of 16,973 jobs.

In 2017, approximately 222,714 counseling hours were provided to clients via the SBDC network. Of these, the Pre-venture businesses received 24,035 hours of counseling (10.8 percent of total hours), and the longer-term established business clients received 198,679 hours of assistance (or 89.2 percent of total hours) from the SBDC network.

The Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) was contracted in September 2017 to conduct a study on the economic impacts of the Florida SBDC's activities. The impacts included an estimation of jobs creation and retention/saved, and direct, indirect and induced impacts of output or sales/revenues, jobs, income, and value-added (GRP) and jobs. Following a multi-level economic modeling approach consistent with previous economic impact studies conducted for the SBDC, FSU CEFA estimated that 28,876 jobs were generated, with approximately \$3.25 billion in output (or sales/revenues), \$1.25 billion in labor income (or wages) and over \$1.72 billion in value added (or Gross Regional Product (GRP)), as a result of the SBDC's counseling services to small established businesses (SME's and Start-Ups). FSU CEFA based its economic methodology on the previous studies conducted by

the UWF HAAS Center “Impact of SBDC Business Development Activities on the Florida Economy” and Dr. James J. Chrisman’s report on the “Economic Impact of Small Business Development Center Counseling Activities in Florida: 2010-2011”, and on other studies conducted for the SBDC’s and commissioned by the Association of Small Business Development Centers. Several improvements were made to the methodology and described earlier in this report narrative. FSU CEFA used the survey results to estimate input data metrics for each industry sector, by region, in terms of employment, sales, income, and value added. Each of the nine SBDC regions were analyzed using the same data preparation and modeling methodology. The economic impacts of the SBDC in 2016-17 are summarized in Table 14, and include the total output or sales/revenues, the total jobs created and retained/saved, total labor income (wages), and the total value added (GRP).

## Summary of Economic Impact Results

**Table 14. Total Economic Impacts of the SBDC, in 2018 Dollars**

Type of Impact*	2017 Statewide Impact
Employment	28,876
Labor Income	\$1,250,132,876
Economic Output (Sales)	\$3,247,945,078
Value Added (GRP)	\$1,716,463,331

\*The total economic impacts include direct, indirect and induced impacts

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## Appendices

### Appendix A. Raw Frequencies Adjustment

For inferences, region and industry sample frequencies were recalibrated, or redistributed, to each cell using a weighting methodology, across both region and industry sector frequencies, according to the following equation:

$$Y = \sqrt[2]{e^{(\ln(\sum Region\ n) + \ln((\sum Ind.i)^2))}}/\alpha$$

The use of the formula has the added benefit that most missing fields could be populated or estimated. In cases where the formula still fell short, cross-calculations were used.

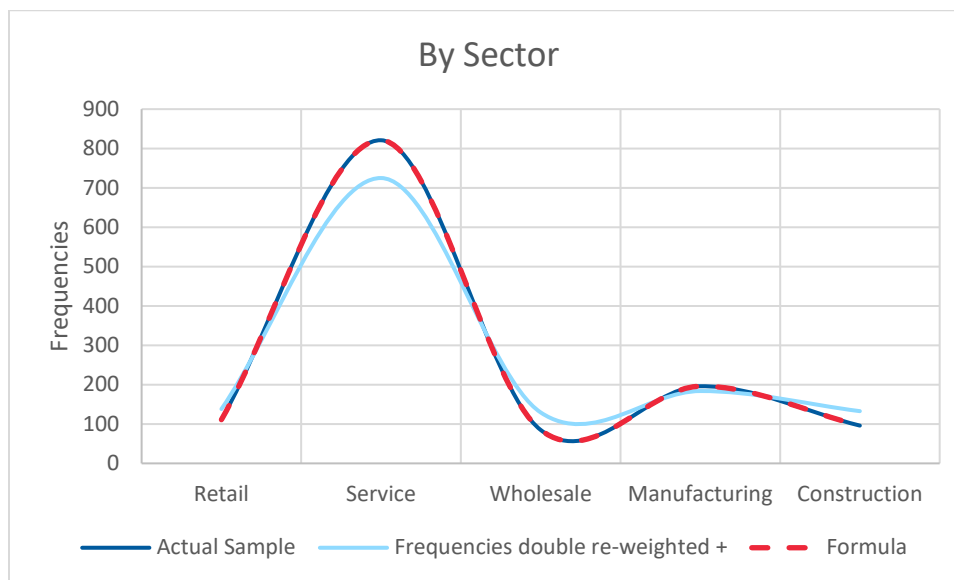
In applying the formula, industry and regional total sums (total rows and columns) are used to re-populate the individual matrix nodes, this assuming that the totals (row and column) are “closer” to the needed sample sizes than the broken out or subsets data points, per industry and region. In using the formula, the “redistribution” to industry was kept near intact, whereas the “redistribution” by region was slightly altered. The research team left the industry results as they represent a potential better distribution<sup>26</sup> (as the subtotal was divided over five categories only). In addition, the industry cross-section of the sample still has a meaning in terms of not only the SBDC clientele, but ultimately also in terms of distribution of the industries within the larger Florida economy. On the regional side, the formula results shows a slight “smoothing”. It should be noted that the frequency range would have been smoothed as extreme frequencies would have been pared as the result of a distribution application (or overlay). The distribution per region can be perceived as a measure of rank, as the sample size overall is too small. The  $\alpha$  factor in the formula is only an adjustment factor to scale the totals back to the original order or size. Figures 6 and 7 show the recalibration or redistribution from the industry and regional perspectives, respectively.

---

<sup>26</sup> None of the exponential shaped distributions using @RISK software offered a close enough theoretical distribution on the sample, this for inferences purposes on the clientele population.

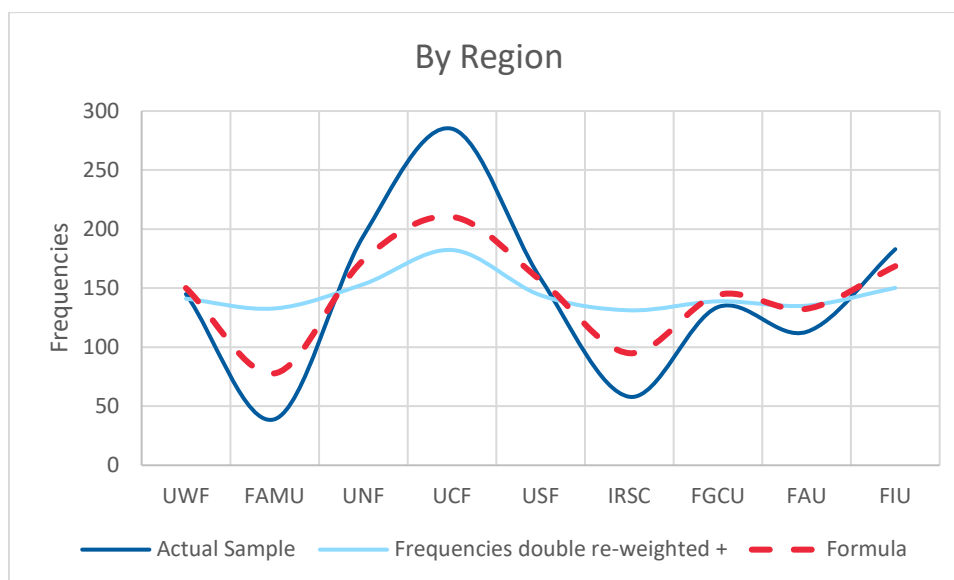


**Figure 6: Comparative View of the Redistribution of the SBDC Clientele Survey Sample Frequencies by Sector**



The actual sample frequencies match the results using the formula. For comparative purposes the formula used in last year's analyses is added (line; "Frequencies double r-weighted"), and which methodology using the present survey results would have shown a slight "smoothing".

**Figure 7: Comparative View of the Redistribution of the SBDC Clientele Survey Sample Frequencies by Region**



The distribution over the regions show more "volatility", where the actual sample frequencies are represented with the blue line. The formula results are depicted by the red dashed line, and last year's (FSU

CEFA 2016) methodology in light blue line (line; “Frequencies double r-weighted”). The two series, “Actual Sample” frequencies and the “Frequencies double re-weighted” may be interpreted as representing the tails, whereas the “Formula” results represent a more “middle” bracket of a distribution, if distributions were placed vertically in the figure on each region. It is the best representation that the FSU CEFA could offer given the small sample size.

## Appendix B. Copy of the SBDC Survey Questionnaire



We appreciate your participation in this important survey for the Small Business Development Center (SBDC) in your state. This year all of the SBDCs in the country are working together with the National Business Research Institute (NBRI) to collect our responses to this survey. Please be assured that all individual responses will be held in the strictest confidence.

Your responses to the following questions will help guide our efforts to enhance our services and ensure that small business owners' needs are being met. Additionally, the findings from this survey provide our state and federal funding partners a calculation of their return on investment. It is their investment that allows us to provide consulting services at no direct cost.

Thanks for taking a few minutes of your valuable time to complete this survey!

---

### Instructions:

1. Proceed to the survey questions by clicking on the Next Page button below.
2. After reaching the survey questions, please read each of the survey questions completely. Then, indicate your response using the scale shown on the survey.
3. After answering the survey questions, please click on the Submit Survey button to submit your answers for processing.

---

Was the service you received from the SBDC beneficial?

- ☐ No
- ☐ Yes

---

Overall, how satisfied were you with the consulting and/or training you received from your local SBDC?

- ☐ Very Dissatisfied
- ☐ Somewhat Dissatisfied
- ☐ Satisfied
- ☐ Somewhat Satisfied
- ☐ Very Satisfied

---

How would you rate the knowledge and expertise of your SBDC consultant or trainer?

- ☐ Poor
- ☐ Below Average
- ☐ Average
- ☐ Above Average
- ☐ Excellent

---

How would you describe your overall working relationship with your SBDC consultant?

- ☐ Poor
- ☐ Below Average
- ☐ Average
- ☐ Above Average
- ☐ Excellent

---

Would you recommend the SBDC to a friend or business associate?

- ☐ No
- ☐ Yes

---

Did you own a business in 2016 and/or 2017?

- ☐ No - Never Started
- ☐ No - Closed Business
- ☒ Yes - I Own and Operate an Active Business

---

What YEAR was the business originally ESTABLISHED?

Please Select

---

What business type best describes your business?

Please Select

---

**Including yourself, and other owners, how many people did you employ at the end of each calendar year below? If you were not operating, please enter N/A.**

---

2017 Number of full-time paid employees (35 hours or more per week)

---

2017 Number of part-time paid employees (fewer than 35 hours per week)

---

2017 Number of independent contractors (1099s)

---

2016 Number of full-time paid employees (35 hours or more per week)

---

2016 Number of part-time paid employees (fewer than 35 hours per week)

---

2016 Number of independent contractors (1099s)

---

**Jobs Saved is defined as the number of jobs that were at possible risk of loss and were saved or retained as a result of the SBDC's assistance.**

**Please estimate the number of jobs saved as a result of the SBDC assisting you in improving your business strategy or operations. Enter '0' (zero) if none.**

---

Existing Full-time jobs saved

---

Existing Part-time jobs saved

---

Existing Independent Contractors jobs saved (1099s)

---

**What was the approximate gross sales revenue of your business (before costs) during the following calendar years? If you were not operating enter N/A.**

**Please use whole dollars only. No \$, commas, decimals, K or M. Enter '0' (zero) if none.**

---

2017 \$

---

2016 \$

---

Did the SBDC assist you in obtaining debt or equity financing?

- ☐ No
- ☐ Yes

---

Which of the following debt or equity financing did you receive:

- ☐ SBA Loans
- ☐ Commercial Bank Loans
- ☐ Owner Equity Investment (cash, credit cards, property)
- ☐ Other Equity Investment (venture capital, stock, grant)

---

What was the estimated total amount of SBA Loans your business obtained in 2016-2017. Please use whole dollars only. No \$, commas, decimals, K or M. \$

---

What was the estimated total amount of Commercial Bank Loans your business obtained in 2016- 2017. Please use whole dollars only. No \$, commas, decimals, K or M. \$

---

What was the estimated total amount of Owner Equity Investment your business obtained in 2016- 2017. Please use whole dollars only. No \$, commas, decimals, K or M. \$

---

What was the estimated total amount of Other Equity Investment your business obtained in 2016-2017. Please use whole dollars only. No \$, commas, decimals, K or M. \$

---

Did the SBDC assist you in acquiring or securing a government contract?

- ☐ No
- ☐ Yes

---

**Please use whole dollars only. No \$, commas, decimals, K or M. Enter '0' (zero) if none.**

---

FEDERAL GOVERNMENT DOD PRIME Contracts - Number of Contracts (#)

---

FEDERAL GOVERNMENT DOD PRIME Contracts - Value of Contracts (\$)

---

FEDERAL GOVERNMENT DOD SUB Contracts - Number of Contracts (#)

---

FEDERAL GOVERNMENT DOD SUB Contracts - Value of Contracts (\$)

---

Other FEDERAL GOVERNMENT PRIME Contracts - Number of Contracts (#)

---

Other FEDERAL GOVERNMENT PRIME Contracts - Value of Contracts (\$)

---

Other FEDERAL GOVERNMENT SUB Contracts - Number of Contracts (#)

---

Other FEDERAL GOVERNMENT SUB Contracts - Value of Contracts (\$)

---

**Please use whole dollars only. No \$, commas, decimals, K or M. Enter '0' (zero) if none.**

---

STATE GOVERNMENT PRIME Contracts - Number of Contracts (#)

---

STATE GOVERNMENT PRIME Contracts - Value of Contracts (\$)

---

STATE GOVERNMENT SUB Contracts - Number of Contracts (#)

---

STATE GOVERNMENT SUB Contracts - Value of Contracts (\$)

---

LOCAL GOVERNMENT PRIME Contracts - Number of Contracts (#)

---

LOCAL GOVERNMENT PRIME Contracts - Value of Contracts (\$)

---

LOCAL GOVERNMENT SUB Contracts - Number of Contracts (#)

---

LOCAL GOVERNMENT SUB Contracts - Value of Contracts (\$)

---

PRIVATE SECTOR Contracts - Number of Contracts (#)

---

PRIVATE SECTOR Contracts - Value of Contracts (\$)

---

**Florida SBDCs, and our network of partners and professionals, strive to provide high quality professional business consulting and training services that have meaningful results for its business clients. Our funding partners that allow us to make our consulting services available at no-cost would like to hear what you have to say about your experience.**

---

Please provide a TESTIMONIAL about your experience and the impact your SBDC professional had on your business. (Optional)

---

May the Florida SBDC have your PERMISSION TO USE your testimonial statement in marketing and stakeholder correspondence?

- ☐ No
- ☐ Yes

---

**In 2018, please rank the TOP THREE issues, challenges or barriers facing your businesses growth?**



- Select ☒ Accessing Business Intelligence and Information (professional advisors, res ...
- Select ☒ Accessing Capital or Financing (identifying sources of capital, applying or ...
- Select ☒ Economic Uncertainty (political or economic instability, unknown, uncontrol ...
- Select ☒ Financial Management (understanding financial statements, financial analysis ...
- Select ☒ Workforce and Human Resources (managing, recruiting, retaining qualified wo
- Select ☒ Market Growth Development (expanding new or existing markets, doing business
- Select ☒ Operations Management (process and workflow management)
- Select ☒ Regulations/Taxes (health care reform, changes in taxes/regulation, permits ...
- Select ☒ Strategic Planning (long-term strategy development, exit strategy, succession)
- Select ☒ Technology (make the most of technology in your business, utilizing social ...

---

In 2018, do you plan to increase, decrease or maintain the same number of EMPLOYEES?

- ☐ Decrease substantially
- ☐ Decrease moderately
- ☐ Stay the same
- ☐ Increase moderately
- ☐ Increase substantially

---

In 2018, do you expect your total SALES REVENUES to increase, decrease or stay the same?

- ☐ Decrease substantially
- ☐ Decrease moderately
- ☐ Stay the same
- ☐ Increase moderately
- ☐ Increase substantially

---

In 2018, do you expect your INTERNATIONAL SALES REVENUES to increase, decrease or stay the same?

- ☐ Decrease substantially
- ☐ Decrease moderately
- ☐ Stay the same
- ☐ Increase moderately
- ☐ Increase substantially

---

Would you like assistance in helping expand your business internationally?

- ☐ No
- ☐ Yes

---

In 2017, was your ability to access the capital you needed harder easier or as expected to acquire?

- ☐ More difficult than expected
- ☐ Less difficult than expected
- ☐ As expected

---

In 2018, if needed, do you expect to find it harder, easier or about the same to obtain the financing you need to grow or support your business?

- ☐ Harder
- ☐ Easier

---

**Florida SBDC personnel are strictly prohibited from making a personal investment in client businesses, or soliciting outside paid consultant agreements which may result in personal gain from our customers.**

---

Did your SBDC consultant ask that you contract for personal or professional services with him or her on a fee-for-service basis?

- ☐ No
- ☐ Yes

---

Please explain the offer of assistance made.

---

Have you ever attended or graduated from a State University in Florida?

- ☐ No
- ☐ Yes

---

Which university(s) have you attended or graduated from?

- ☐ Florida Agricultural and Mechanical University (FAMU)
- ☐ Florida Gulf Coast University (FGCU)
- ☐ Florida Polytechnic University
- ☐ New College of Florida
- ☐ University of Florida (UF)
- ☐ University of South Florida (USF)
- ☐ Florida Atlantic University (FAU)
- ☐ Florida International University (FIU)
- ☐ Florida State University (FSU)
- ☐ University of Central Florida (UCF)
- ☐ University of North Florida (UNF)
- ☐ University of West Florida (UWF)

---

Do you have other suggestions that will assist us to improve our services?

## Appendix C. The Florida SBDC Network List of Regional Identification Codes

	Appendix B: Florida SBDC Network Regional Identification						
Number County	University/ College	County		Number County	University/ College	County	
1	U W F	Escambia		37	U C F	Orange	
2		Okaloosa		38		Brevard	
3		Santa Rosa		39		Seminole	
4		Walton		40		Volusia	
5		Bay		41		Lake	
6		Jackson		42		Osceola	
7		Washington		43		Flagler	
8		Holmes		44		Sumter	
9		Gulf		45		U S F	Hillsborough
10		Calhoun		46			Pinellas
11	F A M U	Leon		47	Sarasota		
12		Gadsden		48	Polk		
13		Wakulla		49	Pasco		
14		Franklin		50	Manatee		
15		Taylor		51	Hernando		
16		Jefferson		52	Highlands		
17		Madison		53	Desoto		
18		Liberty		54	Hardee		
19	U N F	Duval		55	I R S C	St. Lucie	
20		Marion		56		Martin	
21		Alachua		57		Indian River	
22		St. Johns		58		Okeechobee	
23		Clay		59	F G C U	Lee	
24		Citrus		60		Collier	
25		Nassau		61		Charlotte	
26		Putnam		62		Hendry	
27		Columbia		63		Glades	
28		Levy		64	FAU	Palm Beach	
29		Suwannee		65		Broward	
30		Bradford		66	F I U	Miami-Dade	
31		Baker		67		Monroe	
32		Gilchrist					
33		Dixie					
34		Hamilton					
35		Union					
36		Lafayette					

## Appendix D. Number of Survey and Estimated Jobs by Industry, by Region

**Table 15. Number of Survey (highlights) Jobs and Estimated Jobs, by Industry, by Region for 2017**

REGION		SECTOR	of which (NAICS 3-digit):		Sectorial Employment Change *	IMPLAN Input **	
						Created	Saved
UWF	1	Retail				112	16
	2	Service				781	276
			485	Transit and Ground Passenger Transportation	56		
			541	Professional, Scientific, and Technical Services	-24		
			811	Repair and Maintenance	26		
	3	Wholesale				-29	23
	4	Manufacturing				271	60
FAMU	5	Construction				56	17
			236	Construction of Buildings	50		
	1	Retail				71	6
	2	Service				407	111
	3	Wholesale				-48	9
	4	Manufacturing				271	24
	5	Construction				56	17
UNF	1	Retail				114	34
	2	Service				854	586
			541	Professional, Scientific, and Technical Services	628		
			722	Food Services and Drinking Places	101		
			812	Personal and Laundry Services	70		
	3	Wholesale				-37	50
	4	Manufacturing				114	128
			112	Animal Production and Aquaculture	25		
			321	Wood Product Manufacturing	24		
	5	Construction				10	36
UCF			238	Specialty Trade Contractors	31		
	1	Retail				248	27
			442	Furniture and Home Furnishings Stores	28		
	2	Service				1,756	471
			541	Professional, Scientific, and Technical Services	266		
			561	Administrative and Support Services	105		
			624	Social Assistance	32		
			711	Performing Arts, Spectator Sports, and Related Industries	77		
	3	Wholesale				22	40
	4	Manufacturing				338	103
			311	Food Manufacturing	64		
			325	Chemical Manufacturing	21		
			326	Plastics and Rubber Products Manufacturing	47		
			332	Fabricated Metal Product Manufacturing	142		
			334	Computer and Electronic Product Manufacturing	-26		
	5	Construction				107	29
			238	Specialty Trade Contractors	64		

\*Sectorial Employment Change is based on the raw survey data created plus retained. Breakout NAICS codes were selected based on an outside bound of 20 +/- employees.

\*\* IMPLAN® input data is the reweighted data created (above normal or EMSI) and retained.

**Table 15. Number of Survey (highlights) Jobs and Estimated Jobs, by Industry, by Region for 2017, Cont.**

REGION		SECTOR	of which (NAICS 3-digit):		Sectorial Employment Change *	IMPLAN Input **	
						Created	Saved
USF	1	Retail				187	21
	2	Service				1,331	358
			541	Professional, Scientific, and Technical Services	100		
			722	Food Services and Drinking Places	148		
			812	Personal and Laundry Services	49		
	3	Wholesale				16	30
	4	Manufacturing				327	78
			326	Plastics and Rubber Products Manufacturing	29		
IRSC	5	Construction				106	22
			237	Heavy and Civil Engineering Construction	54		
	1	Retail				95	11
	2	Service				597	195
			713	Amusement, Gambling, and Recreation Industries	33		
	3	Wholesale				-14	17
	4	Manufacturing				127	43
			111	Crop Production	26		
FGCU	5	Construction				24	12
	1	Retail				147	26
			446	Health and Personal Care Stores	75		
	2	Service				1,074	450
			485	Transit and Ground Passenger Transportation	41		
			541	Professional, Scientific, and Technical Services	26		
			611	Educational Services	33		
			722	Food Services and Drinking Places	22		
FAU	3	Wholesale				29	38
	4	Manufacturing				332	99
			314	Textile Product Mills	351		
	5	Construction				93	28
	1	Retail				125	45
	2	Service				858	783
			541	Professional, Scientific, and Technical Services	1715		
			711	Performing Arts, Spectator Sports, and Related	-20		
FIU			722	Food Services and Drinking Places	43		
	3	Wholesale				8	67
			423	Merchant Wholesalers, Durable Goods	34		
	4	Manufacturing				206	172
	5	Construction				62	49
	1	Retail				110	24
			441	Motor Vehicle and Parts Dealers	32		
	2	Service				655	415
			488	Support Activities for Transportation	38		
			541	Professional, Scientific, and Technical Services	24		
			561	Administrative and Support Services	38		
			621	Ambulatory Health Care Services	39		
	3	Wholesale				-62	35
			424	Merchant Wholesalers, Nondurable Goods	155		
	4	Manufacturing				73	91
	5	Construction				25	26