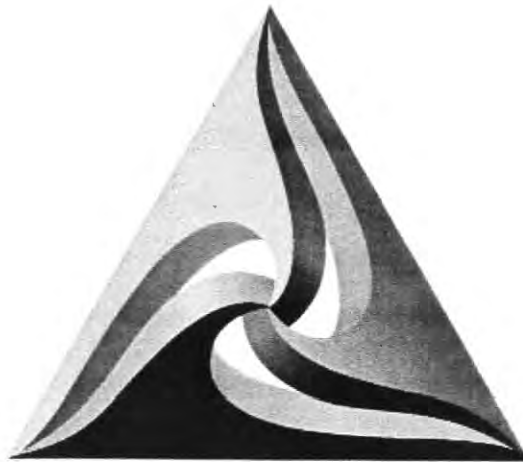


**Florida Community College at Jacksonville**

**Economic Impact Report**



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C O M M U N I T Y  
C O L L E G E  
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A T J A C K S O N V I L L E

**Danielle McGuire, Rhonda Freeny, Ray Zenisek, Russ Harville,**

**Don Massenzio, Eric Linden and Michael Rowley**

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## Executive Summary

Florida Community College at Jacksonville (FCCJ) is an important component of the education system in Northeast Florida. FCCJ does not compete with traditional local universities such as the University of North Florida (UNF) and Jacksonville University (JU). It complements them in several ways.

First, FCCJ offers a variety of vocational programs that are not available at the other institutions. In addition, FCCJ establishes partnerships with employers to tailor programs and initiatives to their needs. Third, FCCJ provides a lower-cost entry point to further education for lower-income families. Many students, after initially attending FCCJ, enroll in four-year degree programs. Without the opportunities afforded by FCCJ, they would probably have not pursued higher education at all.

Additional education, beyond the high-school level, has been shown to have a significant effect on the future earning power of students and on their prospects for employment. This phenomenon is likely to increase as business and society become more dependent on technology. For those having difficulty coming to this realization, FCCJ provides services that focus on career education and advice for finding jobs.

The value provided by a community college such as FCCJ is not restricted to those actually receiving an education. The expenditures by FCCJ are largely spent within the local community. This provides a source of revenue for many forms of local business.

Furthermore, the labor pool is strengthened through the work of FCCJ, to the benefit of local employers. Those employers with a specific need work closely with the FCCJ to develop programs that are tailored to the employer's skill needs.



The higher incomes achieved by those who attended FCCJ raise the tax base as they flow back into the community. This larger tax base, along with the reduced social costs, lower unemployment, and a lower crime rate, assist in reducing taxes.

It costs approximately \$126 million annually to operate FCCJ. Funds come primarily from tuition, state appropriations, federal grants, state grants, and gifts. The dollars brought in by FCCJ's operating expenses, operating revenues and non-operating revenues total \$290.4 million.

This includes the Foundation's financial activity of \$10.9 million. The Foundation, although a separate legal entity, is closely related to FCCJ. FCCJ is financially accountable for the Foundation's performance. The operating revenues brought in by the Foundation are primarily from the FCCJ Artist Series theater offerings, various athletic events and an annual teaching and learning conference. It is conservatively estimated, however, that the aggregate impact of FCCJ upon the economy of Jacksonville is nearly \$725 million.

This total economic impact is derived from actual dollars spent by FCCJ in the local economy with an adjustment allowing for the recycling of money. This is measured using a basic economic concept referred to as the "multiplier effect."

With the magnitude of money brought in to operate and maintain FCCJ, another direct benefit to the community emerges in the form of job opportunities. The total employment effect FCCJ has in Jacksonville results in the generation of approximately 3,713 jobs.

When examining individual student benefit, the difference in potential earnings between a high school graduate and one who has an associate's degree is \$7,500 per year.



It is important to determine if the cost of education and deferred earnings for the two years it requires to achieve an associate's degree is worth the investment. Studies have shown that students earning an associates degree will earn, on average, an additional \$277,500 in their work lifetime. The Net Present Value of this amount is \$41,455.62 with a return on investment of 17.2%. Essentially, for every dollar invested, the students are realizing a return of \$17.20.

To be successful, FCCJ must closely examine emerging external threats. Recent legislation passed in the State of Florida will put an additional burden on an education budget that is already stretched to the limit. FCCJ must continue to come up with innovative, cutting-edge programs that not only maximize resource usage, but bring demonstrated value to Jacksonville and the surrounding area. The administration at FCCJ has already demonstrated significant savvy in managing funds and reducing expenses. This must continue so that funding dollars are maximized during a time when there is a great deal of competition for them.



## Introduction

Florida Community College at Jacksonville was established in August of 1966, as Florida Junior College (FJC). The school's charter class of 2,610 students was reportedly the largest inaugural class for any institution in the nation according to The Florida Times-Union. In 1968, FJC expanded its mission with the addition of vocational and adult education programs. These programs were previously administered by the Duval County School Board.

Today, FCCJ's five campuses and central administration building, employ 1,300 full-time and 370 part-time staff in the education of 55,000 students drawn from all over North Florida. The number of students represents an average yearly growth of ten percent since FCCJ's creation in 1966.

The District Board of Trustees operates FCCJ. Currently this nine member Board consists of four women and five men from various academic and business backgrounds. In fulfilling this function, the Board has the authority and responsibility to establish rules and standards upon the recommendation of the President. The board also has the responsibility of holding the President accountable for the implementation of these rules.

The purpose of this paper is to answer the following questions:

- *How do the Career Programs offered at FCCJ meet the needs of the community?*
- *What is the Social Impact of FCCJ, specifically upon different members of society?*
  - *Students and Potential Students?*
  - *Businesses and Prospective Employers?*
  - *State and Local Government?*
  - *Citizens and their Quality of Life?*
- *What is the Economic Impact of FCCJ?*
- *What Conclusions can we draw about FCCJ and its Effectiveness?*



## **Career Programs**

FCCJ does not compete with traditional universities, such as the University of North Florida (UNF) and Jacksonville University (JU), which offer four-year degree courses, rather it complements them. Along with the Associate in Arts (A.A.) degree program, FCCJ offers associate in science (A.S.) and associate in applied science (A.A.S.) degree programs for in-depth training in more than 75 fields to prepare students for employment after two years of study. Specifically, FCCJ offers services in three areas that are outside the scope of the traditional universities:

- Vocational Training
- Business Start-up Services
- Employer Services

### ***Vocational Training***

The vocational training programs offered at FCCJ help to fill gaps for employers in Jacksonville and the surrounding area. Traditional universities typically do not offer programs such as these due to the specialization of the skills presented. The niche that is filled by these programs is invaluable to the community and the local economy. Severe shortages in these skill areas can limit the attractiveness of the area to potential businesses that are looking to relocate. Vocations such as nursing, mechanics, technology and others have been identified as skill sets that are facing shortages. Through its vocational programs, FCCJ is helping to fill these voids.



## Nursing

Florida Community College at Jacksonville offers several programs that provide hands on, one-to-one care that is so essential to the health profession.



FCCJ's health care opportunities include patient care, diagnostic and treatment specialists, emergency medical services, dietary specialists, addictions counseling and the business side of health care. This includes health information management, medical record transcribing, medical coding and funeral services.

The Registered Nursing (RN), Licensed Practical Nursing (LPN) and Surgical Technology programs help fill the demand in the current nursing shortage. In Northeast Florida and Southeast Georgia, the general population is growing in both age and number. Conversely the number of nurses is shrinking as they are retiring or leaving the demands of the profession. The numbers currently enlisted in the nursing programs are far below the expected demand.

According to the Florida Hospital Association (FHA), it is estimated that demand for RNs will exceed the supply in the United States by an estimated 1.1 million by 2020. The American Hospital Association (AHA) believes that these shortages will force patients to wait longer for surgeries and other procedures. Florida will need 30 percent more nurses in 2006 than in 1996. According to an FHA survey, 16 percent of RN positions in Florida hospitals are vacant in 2002.





The healthcare need is continually expanding. FCCJ is in an excellent position to fulfill this need. Presently, FCCJ's RN associate's degree program is the second largest in the state, with 330 slots.

### **Aviation Center**

Opened in January of 2002, the Aviation Center for Excellence at the Cecil Commerce Center is a state-of-the-art facility. This center was created to meet the critical needs of employers in the aviation industry in Northeast



Florida. More than \$14 million in state and federal funds have enabled the remodeling of the facilities at the former Cecil Field Naval Air Station site, as well as for personnel, equipment, curriculum development and operating expenses.

FCCJ offers Associate in Science Degree Programs in Aviation Operations, Aviation Maintenance Management and Professional Pilot Technology. FCCJ also offers a career certificate in aircraft airframe and power plant technology. The Federal Aviation Administration regulates and supports these programs.

Remodeling of the classroom building and hangar are completed. The \$927,000 federal grant, effective until February, 2003, is still in effect and an additional \$885,000 federal earmark grant will be received this fall and will be effective for two years. Projections show employment in the aviation field will grow by more 14 percent for the period 1998 to 2008.



When the center opened, in October of 2002, politicians and educators turned out for the dedication. The Chamber of Commerce was a key participant in the work which led to the reality of this center. Congresswoman Corrine Brown, who was at the dedication said, "I'm even prouder because I was an employee of FCCJ for 16 years. I know what can be done through the college. This facility will give us the technology to train people in aviation; with the military presence here, we're going to find jobs for a lot of people."



## Technology

Recent studies underscore the importance of bolstering technology in Jacksonville. Despite the city's rapid growth, Jacksonville remains behind other similarly sized metropolitan areas when it comes to the high-tech revolution; according to last year's Progressive Policy Institute report. This report ranked the Jacksonville metropolitan area 48th out of 50. In a similar finding, Forbes-Milken Institute Best Places Ranking put Jacksonville 94<sup>th</sup> out of 200 metropolitan areas for businesses and careers, and 190<sup>th</sup> in high-tech growth.



Florida Community College at Jacksonville recently opened a \$25 million Advanced Technology Center (ATC). In May of 2002, Governor Jeb Bush, with Secretary of Education Jim Horne and Jacksonville Mayor John Delaney dedicated the ATC to provide for the workforce need of the region. Phases I and II have been open



since January, and Phase III is scheduled for completion by the end of the 2002. This center is a significant step toward turning the findings of these studies around.

The demand for skilled high-tech workers cuts across manufacturing and services, transportation, health care, education and government. Despite leading the world into the Information Age, there is substantial evidence that the United States is having trouble keeping up with the demand for new information technology workers.

A recent survey of mid- and large-size US companies by the Information Technology Association of America (ITAA) concluded that there are about 190,000 unfilled information technology jobs in the United States. In another study, conducted by Coopers and Lybrand, nearly half the CEOs of America's fastest growing companies reported that they had inadequate numbers of information technology workers to staff their operations.

Evidence suggests that job growth in information technology fields now exceeds the production of talent. Between 1994 and 2005, more than a million new computer scientists and engineers, systems analysts, and computer programmers will be required in the United States -- an average of 95,000 per year.

One difficulty is that the formal, four-year education system is producing a small proportion of the workers required. Only 24,553 US students earned bachelor's degrees in computer and information sciences in 1994. While many IT workers acquire the needed skills through less formal training paths, it is difficult to determine whether such training can be adequately expanded to meet the demand for IT skills.



FCCJ is striving to meet the demand for workers who can create, apply and use information technology. The ATC houses training programs in four key areas: information technology advanced manufacturing, biotechnology and transportation technology. These disciplines are in synch with the shortages that were previously identified.

In addition to the new technology center, FCCJ spent nearly \$10.2 million on technology during the 2001 fiscal year. This includes \$4.3 million for technology personnel, \$2.3 million for equipment purchases and \$3.5 million for services, supplies and other technology-related expenses.

FCCJ has worked to ensure that every piece of its state-of-the-art computer-related equipment is no more than three years old and is made by the same manufacturer across all campuses. FCCJ ensures that the latest versions of all software are available so that departing students have relevant technological experience in the workplace. Every student and faculty member gets a free e-mail account, computer account and Internet access.

When Phase III of the ATC opens, the additional 45,000 square feet will house the Bio-informatics program, expanded transportation technology programs, 7500 square feet of flex labs for employer use and engineering programs.

Bioinformatics will be at the core of biology in the 21st century. In fields ranging from structural biology to genomics to biomedical imaging, ready access to data and analytical tools are fundamentally changing the way investigators in the life sciences



conduct research and approach problems. Complex biological problems are now being addressed and promise to significantly advance our understanding of biology and medicine. No biological discipline will be unaffected by these technological breakthroughs.

Florida Community College at Jacksonville is the second-most "wired" two-year college in the nation, according to the online magazine Yahoo Internet Life. Yahoo listed the top 20 two-year institutions in its recent issue after assessing each institution's infrastructure (equipment, speed, access and reliability); student resources (online registration, drop/add and other administrative services accessible via the Web); and Web site, e-learning, technical support and wireless access.



## Mechanics

Recent advances in technology have resulted in a shortage of well-trained mechanical technicians. These individuals are now required to be highly-skilled critical thinkers able to work with the computerized mechanisms of modern automobiles.



FCCJ's Downtown Campus is in partnership with area automobile dealers and repair shops. A program, started in the fall of 2001, is designed to prepare students to meet the expanding needs of the industry.

The Coalition for Automotive and Truck Technician Training, a two-year program, provides students with the training and work experience that will ready them to recognize automotive problems and repair increasingly complicated car components and systems. This program includes an internship and guaranteed employment after graduation. The program is structured on an eight week rotational schedule. Students



spend eight weeks in a classroom setting at FCCJ. They then spend the next eight weeks applying what they have learned by working for one of the sponsoring businesses.

Other Associate Degree programs include Automotive Service Management Technology and Dealer Specific Automotive Technology (GM-ASEP). Career Certificate Programs include Automotive Collision Repair and Finishing, Automotive Service Technology, Automotive Machine Shop, Heavy Duty Truck and Bus Mechanics (Diesel Technology) and Marine Service Technology.

### **Criminal Justice, Fire and Emergency Medical Services**

By the end of 2004, at least 300 vacant positions in the Jacksonville Sheriff's Office must be filled due to the projected retirement of several officers. Of course, all law enforcement positions are not on the beat. Much crime-fighting and public protection is orchestrated from behind the desk or one-on-one with the community's unlawful members. These positions require individuals that receive specialized training. In an effort to provide this training, the Corrections and Criminal Justice programs develop professionals in the areas of probation, juvenile delinquency, pardon, parole, criminal evidence ethics and other related topics.



Florida Community College at Jacksonville offers a number of programs in public safety and public service. This unique service fills an important need in the community. The absence of this program would make it very difficult for local law enforcement and protection agencies to recruit qualified individuals.



FCCJ also offers programs in Fire Science and Fire Fighting as well as Emergency Medical Service (EMS). In a growing metropolitan area such as Jacksonville there must be a strong public safety system and a source to fulfill its needs. FCCJ is stepping up to provide the trained professionals.



### **Culinary Arts, Hospitality and Travel**

According to the Florida Department of Labor and Employment Security, food and beverage service occupations are estimated to increase by 25.4 percent through the year 2005.



The Culinary Management program provides training on production line and supervisory positions such as station chef, sauce chef, second or first cook, and lead cook.

The Hospitality Management program offers training in restaurant management, marketing, sales, front office and convention management in preparation for positions in the hotel, motel, lodging and tourism industries.

### ***Business Startup Services***

FCCJ is the State of Florida's local training provider to new and expanding area businesses that qualify for a state grant. FCCJ works closely with other economic development entities such as the Jacksonville Chamber of Commerce, Jacksonville Economic Development Corporation, Enterprise Florida, Nassau County Economic Development Board, and Work Source.

FCCJ has established itself as the lead education institution in preparing the workforce for Super Bowl XXXIX. This program also assists the Super Bowl Host Committee and the city in planning, preparing, and producing the event scheduled for



2005. FCCJ will also provide training in event planning and management, customer service, entrepreneurship, and many other areas of business.

FCCJ has been instrumental providing the Chamber of Commerce a resource when attempting to attract new businesses to Jacksonville. Working with the Chamber, FCCJ has put together training program plans and production lines for interested new businesses considering locating to Jacksonville demonstrating their ability to adapt training to various industry requirements. This ability to adapt to the needs of the community has proven to be a positive factor in bringing new jobs to Jacksonville.

### ***Employer Services***

One of FCCJ's initiatives is to respond quickly and effectively to the human resource needs of employers. FCCJ, in collaboration with Blue Cross and Blue Shield of Florida and Andrew Jackson High School, are preparing students with the necessary skills for both workforce entry and post secondary education. The program provides on-the-job training for students and offers the opportunity to complete the first two occupational completion points in the FCCJ customer assistance program. Four college credit courses, offered as dual enrollment, now make up the program with Blue Cross and Blue Shield of Florida providing the instructors.

FCCJ has also forged relationships with more than 200 companies in the region as part of its Employee Partnership Program. Through this program, FCCJ tailors training for individual partner companies, ask members to join advisory councils, and invites company employees to teach as visiting lecturers.

Each council comprises members from the relevant industry's local business community and FCCJ faculty. The 50 industry councils organized thus far span a wide





variety of industries such as financial services, automotive, aviation, electronics, computer engineering, and information technology. These councils meet at least twice a year to review FCCJ's curriculum, ensuring student preparation for current jobs, assisting in the development of student internships, identifying equipment needs, donating equipment, and connecting students with jobs.

FCCJ has also worked with partner companies to create three workforce development centers. These centers involve continuous employer participation and focus on training in relevant skills and cutting-edge technologies. They also engage companies in customizing skills assessment and training for their incumbent and prospective employees. As they engage with a large number of employers, these institutes become potent knowledge centers that can react faster to workforce changes and trends. Combined, the Jacksonville workforce development centers trained 10,000 full-time equivalent students during the 2000-2001 school year.

The Coggin Automotive Group is a member of the FCCJ employer community. As a member, the company is assigned an administrative contact that ensures the college's responsiveness to Coggin's needs. A Coggin leader participates on advisory councils, provides student internships and has established a new scholarship program at FCCJ. The company also sponsors career fairs for its many dealerships to recruit and encourage students training for automotive careers.



## **Social Impact**

This section describes the ways in which FCCJ has an impact on most sectors of the community including:

- **Students and Potential Students**
- **Businesses and Prospective Employers**
- **State and Local Government**
- **Citizens – Quality of Life**

### ***Students and Potential Students***

The makeup of the student population at FCCJ is quite diverse. Graduating high-school students attend FCCJ as an alternative to moving away from home to the culture-shock of a large university. Parents who may not have completed degree programs due to family and work commitments utilize FCCJ as an entry point back into the intimidating world of education. The shifting work environment necessitates training and retraining of those wishing to enhance or begin a new career.

Three categories of student have been identified – tentative and first-time students, career changers and career enhancers. FCCJ recognizes this diversity and has put programs in place that meet their needs.

### **Tentative and First-time Students**

Tentative students are those that for whatever reason lack confidence or are too intimidated to further their education. Potential students may actually fill out the paperwork but not return to attend classes. Without the opportunities that FCCJ offers, these potential students might not pursue higher education. FCCJ realizes the need to target these students early and offers programs to address this issue.



One such program, "CROP" (College Reach-Out Program), is designed for sixth through ninth grade students. FCCJ provides guidance and counseling to help students set career goals and to remind them of their potential, both socially and academically. CROP exposes students to the importance of excelling in academics. The program includes university tours, a career day, a youth rally, cultural events, field trips and workshops designed to improve test taking skills, study skills and time management.

Another program is "GRADS" (Gaining Resources and Developing Skills). This program includes S.A.T. preparation, career preparation workshops, resume writing, interviewing skills and techniques, career and personal counseling, finance management and college tours. GRADS is a cooperative program with the Florida Department of Education, the Duval County School Board and local businesses. It helps students discover the value of education, assists them in preparing to enter the workforce, and offers support and motivation to pursue their personal and educational goals.

FCCJ also offers Adult High School and GED programs with opportunities for receiving scholarships as well as offering English as a second language. There are over 7,000 adult students enrolled in these programs.

The most tangible benefit to students is that their potential income level will increase as they improve their educational standard. Studies have shown that in the first year after they complete training, students entering the workforce will earn \$3,500 more than they would have without completing college credits. Students who complete from ten credits to two years of training earn an average of \$4,400 more than they would have without this education. Over a working lifetime, their income increases by \$171,600 in today's dollars.



Approximately half of the transfer students who initially enroll at two-year institutions go on to four-year institutions. Nationwide, about 70% of students who transfer from two- to four-year colleges after taking at least a semester's worth of credits graduate with a baccalaureate degree.



*"I knew that I would transfer to a four year university when I started at FCCJ. Prior to enrolling at FCCJ, I'd been out of school for about ten years. FCCJ afforded me the opportunity to acclimate back to a college environment. I felt comfortable at FCCJ. The classes are small and the teachers are always willing to help. FCCJ was also affordable. I saved quite a bit of money by starting at FCCJ before transferring to a four year university"*

**-- Lezita Davis, former student, age 35**

Individuals with bachelor's degrees earn an average of \$16,250 per year more than they would have earned with only a high school diploma, according to federal data. Over a working life of 39 years, their income increases by \$633,750 in today's dollars.

The problem with assessments of income projections is that they are based on data collected over many years. They also tend to underestimate the demand for education in today's workplace. With the pervasive impact of technology, the attainment of a good education can make the difference between the ability to take on a well-paid position and being virtually unemployable.

Forecasts show that those occupations with the highest growth rates typically require some education beyond high school but less than a baccalaureate degree. These jobs include health technicians and related support occupations, marketing, sales and some administrative occupations, including computer operators.



Thirty years ago only 13% of the labor force had “some college” – currently about 27% of the labor force has more than a high school diploma but less than a baccalaureate degree.



*Medtronic Xomed employee, Gilberto (Gil) Carrizales, attended FCCJ classes at his place of work. His company offers employees the opportunity to bolster their English speaking, reading, and math skills at no cost to them, even paying for half the time spent while in classes. In the last three years, over three hundred Medtronic Xomed employees have attended classes at work to reinforce their basic skills through a partnership with FCCJ.*

*Gil attended classes in Reading Comprehension and Math for about seven months in the last two years. “The classes helped me to reinforce what I learned in high school. At first I thought I was going backwards in my job, having to attend classes at work; then I realized that this was better for me, that I was able to refresh the math and English skills that help me in my job.” Gil Carrizales*

In the study, *Improving Career Outcomes for Youth: Lessons from the U.S. and OECD Experience* (2001), research indicated that low skills contribute to the problem of unemployment among young people. Nearly 25 percent of 16 to 25 year-old youth in the US scored in the lowest literacy group. This rate was several times higher than that of Germany (5 percent), Belgium (6 percent), Netherlands (6 percent), Sweden (3 percent), and Australia (10 percent).

Young people in the US, however, are also more likely to attend school and complete some college. The proportion of 18 to 24 years attending institutions of higher education rose from 32 percent in 1990 to 37 percent in 1998.

A study by USA Today indicated that the current business climate is rewarding educational attainment. According to the Department of Labor and a report by John Burns Real Estate Consulting in Irvine, California, employment among college graduates



increased by more than 1.1 million jobs in the last year, even as less-educated peers saw 2 million jobs lost

The unemployment rate among college graduates in July was 2.9%, far below the national average of 5.9%. The unemployment rate among workers without a high school degree is at 8.7%. Currently, the unemployment rate for the Jacksonville Metropolitan area is at 4.9% lower than the national average.



*Medtronic Xomed Team Leader, Lenni Jowers, has worked at Medtronic Xomed since 1986. Several years ago, her employer partnered with FCCJ to create an educational baseline for their workers that would promote an increased ability to function at the reading comprehension levels required by a medical device manufacturer. Lenni attended classes to help her strengthen both her English speaking and math skills. "I realized that [what I was learning] was very important, that I must share it with my children so they could be successful, too." – Lenni Jowers*

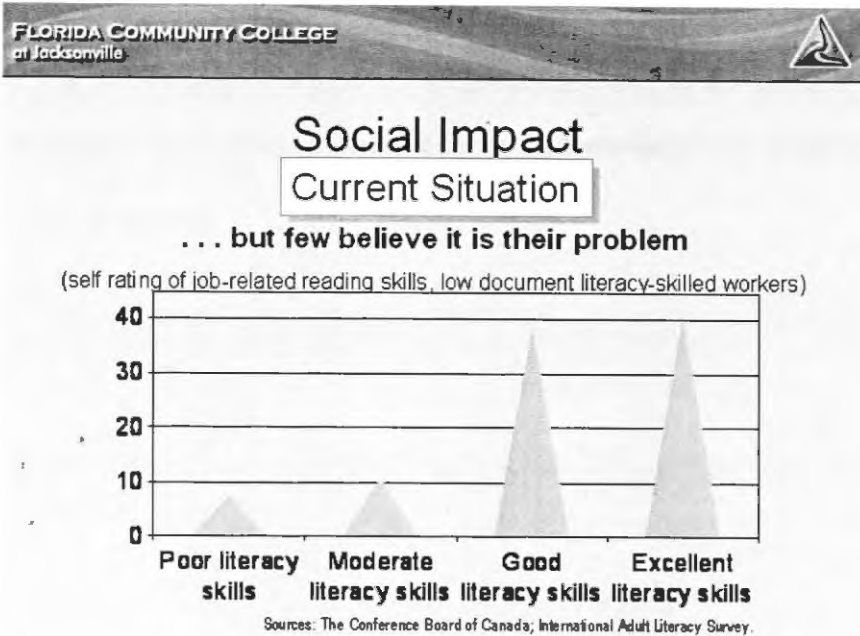
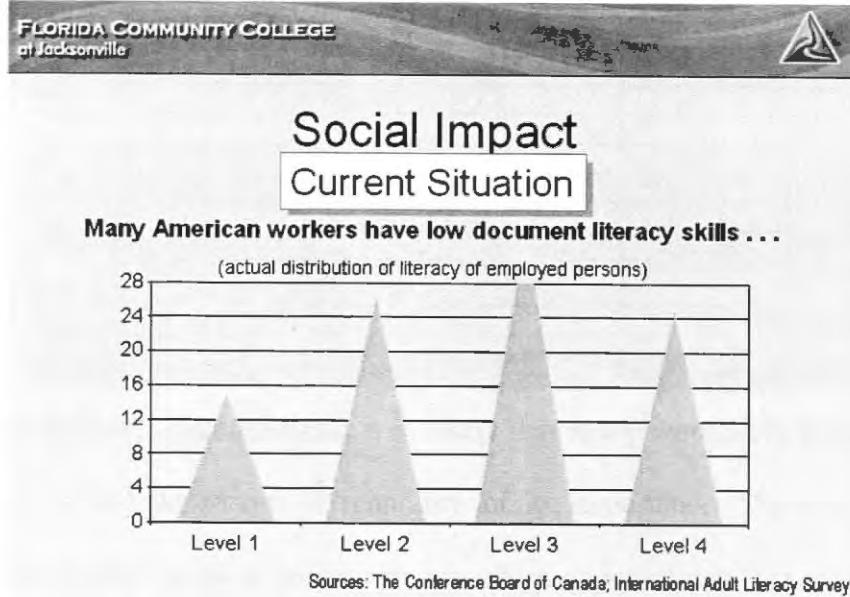
The International Adult Literacy Survey found that only 2.9% of men with high literacy skills were unemployed, compared with 6.7% of those with low literacy skills. Of all men who had been out of work for longer than one year, 42% had low literacy skills, while only 8% had high literacy skills. The patterns for women were similar.

While these facts should be compelling to potential students, many US workers with inadequate skills are unaware of the fact. The same survey found that 41% of the population rated poor or moderate on literacy skills, while their self-assessments were only 19%.



Furthermore, only 20% of those with low document literacy skills considered it greatly or somewhat limiting their ability to find job opportunities. Figure 1 illustrates the findings of this survey graphically.

**Figure 1 – Adult Literacy Survey Findings**

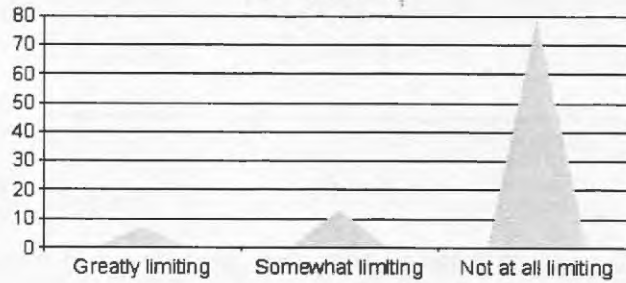




## Social Impact Current Situation

**... and even fewer believe that it matters.**

(perceived impact of reading skills on job opportunities of low document literacy skilled workers)



Sources: The Conference Board of Canada; International Adult Literacy Survey

Under such circumstances, it is likely that many who could benefit from further education do not do so out of ignorance of its importance. The very presence of a community college helps to raise awareness about opportunities for further education and to provide advice on careers and on finding jobs.

In the absence of the FCCJ, these individuals would probably not have pursued further education. The success stories of these students motivates marginal candidates to improve their prospects.





*Kim Richardson is one of two vocational evaluators at the Career Development Center at FCCJ's branch in Yulee. People using the service can get help finding out about jobs.*

## **Career Changers**

There are those that will lose their jobs because of changing technology. Many also find declining demand in their field. Yet others, due to downsizing, have seen their jobs simply disappear. There are also those that seek to change their career due to burnout or other forces such as boredom or dissatisfaction with their profession. This group usually ranges in age between 22 and 35. This group will typically have the desire to strike a balance between educational and family commitments.

FCCJ offers a unique value, the utility of time, price and flexibility. As was mentioned at the beginning of this document, FCCJ has five campuses and five facilities at various locations. These multiple locations, along with web-based distance learning opportunities, provide flexibility in accommodating students as they strive to achieve their education while supporting themselves and their families. In a recent study of students in this category, the average distance to an FCCJ location was eight miles and 15 minutes commuting time. Many of these campuses offer extended hours to meet the needs of students that work full time during the day.

FCCJ offers a low cost option to higher education as the tuition for four-year institutions have risen. The \$54 per credit hour cost is certainly affordable in view of the



potential return. This cost is significantly less than that of four-year state and private universities.

### **Career Enhancers**

Career enhancers are those individuals that may have already attained college degrees but, due to changes in their work environment, need additional training. These changes might include new technology, new theories or changes in processes. An established architect, for example, may find it necessary to take a course on CADD (Computer Aided Drafting and Design) to contemporize his/her skills. With the new training, the already successful architect can utilize the new technology to achieve and maintain a competitive edge.

### ***Businesses and Potential Employers***

One of FCCJ's major contributions to businesses is in providing quality resources to the labor pool. A college education tends to improve communication, team, and new technology skills. As a consequence, better educated individuals can provide the following advantages to an employer:

- Improved quality of work;
- Improved capacity to cope with change in the workplace;
- Greater ability to learn more challenging tasks and become high performers
- Higher output and productivity;
- Reduced error rate;
- Better health and safety record;
- Increased customer retention;
- Increased employee retention.



The extent to which local commerce, industry and public services are dependent on colleges for a competent available work force is immeasurable. Training for entry-level skilled positions such as clerical, data-processing, and health care is readily available at minimal costs. Many of those who need more advance post-secondary education are dependent on community colleges for lower-division course requirements.

As was previously mentioned Jacksonville falls behind other cities in the area of high-technology. Without high tech jobs, metropolitan areas will find it hard to sustain strong economic times, particularly in attracting high-paying jobs. City officials acknowledge that to compete in the high-tech world, Jacksonville needs to focus more intensely on what makes cities attractive to these types of businesses.

The FCCJ Career Development Center provides free career planning assistance. The center's library and computers have information about hundreds of careers, including typical salaries, job prospects, work conditions and educational requirements. They also provide services like skill assessments, resume writing, interviewing and job-hunting techniques.

Most of FCCJ's annual budget is spent in the local community, providing revenue to a variety of local businesses from book retailers to caterers. The campus directly purchases more than \$14 million a year from Jacksonville-based businesses, many of which are small and owned by women and minorities. FCCJ's purchasing department encourages minority participation in the procurement process. It has also implemented a minority outreach plan which includes opportunities available through:

- A Community Service Television Channel
- Solicitations advertised in local minority newspapers



- Copies of bid solicitations distributed to local Chamber of Commerce and Minority Business Enterprise Bureaus (MBE)
- Plan holders list to assist potential subcontractors
- MBE database list provided to local general contractors to assist
- Pre-proposal conferences to assist small business and MBE/WBE to navigate through bid documents
- Vendor Bid Systems to make bids available 24 hours a day
- Participation in the annual MED Week programs.

When prospective employers consider the respective merits of alternate locations, the average educational standard of the labor pool is typically one of the most important factors considered. In a recent Conference Board study of 550 US CEOs, 25% identified shortages of key skills as a top challenge.

### ***State and Local Government***

Nationally, average tuition adjusted for inflation more than doubled between 1981 and 2000 at public and private not-for-profit four-year colleges and universities (The College Board 2001a). Like colleges and universities in the four-year sector, community colleges saw an increase in the average cost of tuition for full-time students between 1992-93 and 1999-2000. This increase amounted to about \$1,400 to \$1,600 after adjusting for inflation.

Unlike the pattern for four-year institutions, however, when federal grants were subtracted from net tuition, no change in tuition could be detected for community colleges. It appears that federal grants increased enough to cover the increase in tuition



between 1992–93 and 1999–2000 for full-time students at community colleges. When all grants were subtracted, net tuition at community colleges was roughly \$900 for both years. Each transfer student saves more than \$4,000 in tuition alone by spending the first two years in the community and technical college system rather than in a university.

The prevalence of these grants coupled with the affordable cost of attending a community college attracts many individuals that would previously have not considered furthering their education. A more educated population results in higher-paid workers which benefits the state in the form of increased tax revenues and spending rates.

In addition, the increase in employment reduces social costs such as unemployment, crime and subsidies for health and housing. The combination of these effects should lead to lower tax rates. An improved social climate with lower taxation attracts new employers and residents to the city, raising the tax base. According to the Jacksonville Sheriff's Office, during the past 10 years, Jacksonville has experienced a 26.6 percent decrease in number of crimes. The crime rate also dropped by 35 percent over the past 10 years.

### ***Citizens – Quality of Life***

Education enables Americans to be better mothers, fathers, children, voters, and citizens. Investment in education generates a positive “neighborhood effect” that yields significant gains to others. In his 1962 classic, *Capitalism and Freedom*, Nobel Laureate Milton Friedman described some the neighborhood effects associated with education:

*“A stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of the citizens and without widespread acceptance of some common set of values. Education can contribute to both.”*



Education attainment correlates well with those items associated with a stable and democratic society—that is, informed and interested voters. Educated people read more about the issues; watch more news programs to stay informed, and take a more active interest in public affairs.

Peter Drucker, the respected authority on business and management also has strong feelings about the importance of community colleges. He stated that:

*“The United States is the only country that has actually developed this advantage- through its so far unique nationwide systems of community colleges. The community college was actually designed (beginning in the 1920s) to educate technologists who have both the needed theoretical knowledge and the manual skill. On this, I am convinced, rests both the still huge productivity advantage of the American economy and the-so far unique-American ability to create, almost overnight, new and different industries”.*

Data from the *Condition of Education* 1996, published by the U.S. Department of Education, finds that 57 percent of Americans with four or more years of college voted during the 1994 congressional elections. Individuals with four or more years of high school voted at a rate of 30.6 percent. Other studies show that the level of education influences voting more than any other socioeconomic factor.

To that end, FCCJ has also partnered with the Duval County Supervisor of Elections John Stafford to train 3,000 poll workers. Officials believe this is the most cost-effective way to provide the facilities and technology needed to teach all Duval County precinct workers how to use a new voting system. The results of the recent 2002



election resulted in fewer polling place problems. This can be partly attributed to the training that was conducted.

In evaluating the effect of educational levels on criminal activity, emphasis was placed on the overall level of education in society. For example, a 1994 study by two researchers at the National Bureau for Economic Research found that youths that work and attend school have a decreased likelihood of engaging in criminal activities. Additionally, their findings suggest that the acquisition of education has a greater effect on crime reduction than the higher income that is associated with superior education attainment.

Other researchers, analyzing crime rates, found that convicts with low levels of education had a higher probability of recidivism than convicts with high levels of education.

Data suggest that there is also a reduction in the dependence on welfare and public assistance programs among those with higher levels of education. In 1996, for example, 25-34 year olds who were high school graduates were ten times as likely as college graduates to have received income from Aid to Families with Dependent Children or public assistance income. These data are consistent with empirical work by Chong-Bum An, Robert Haveman, and Barbara Wolfe in *The Review of Economics and Statistics* that showed less reliance on income transfers among those with increased education.

Other evidence confirms the link between education and illegitimacy. The probability of a woman who has never married having a child decreases dramatically as she acquires more schooling. According to a recent Census Bureau release, the



probability that an unmarried woman between 25-34 years of age who is not a high school graduate will have an unwanted pregnancy is 68.9 percent. For unmarried women with a bachelor's degree the illegitimacy rate is 7.8 percent.

Many community college students are the first ones in their families to attend college. Thirty percent of community college enrollment is composed of minorities. Phenomenally, 61 percent of community college students are over 21 years of age. Many of these students would never have pursued higher education if it had not been for community college.

As a broad category of benefits, there is evidence that education increases social cohesion. Indeed, this is one of its purposes. In addition, social altruism increases. More educated individuals donate more time and money to activities to aid others in society outside of their immediate families.

FCCJ has had a long history of supporting cultural events in Jacksonville. The FCCJ Famous Artist Series offers Broadway spectaculars that have dazzled New York audiences. These touring companies come to Jacksonville through this program. Professionally produced national and international touring attractions, such as "CATS," "Evita," "Les Miserables," "The Phantom of the Opera," "Jesus Christ Superstar" and "Man of La Mancha," have been presented at the Times Union Center for The Arts and the Florida Theatre.

Professional dance companies, symphonies, musical and comedy troupes known throughout the world have entertained FCCJ students. Other internationally known talents who have performed include Dolly Parton, George Benson, the Smothers Brothers, Dionne Warwick and Wynton Marsalis.





Not all of the benefits of FCCJ to Jacksonville's residents are intangible. The higher level of employment that it brings about helps to keep down taxes. The enhanced social climate also reduces costs such as household insurance premiums and makes residents feel secure about bringing up their children. It is factors such as these that help to maintain an influx of new residents to Jacksonville,



families seeking the appeal of the Florida climate without the stigma of poor social conditions. The higher incomes that result from a better-educated population lead to increased spending that improves the availability of services for all residents.

The future growth in Jacksonville will amplify the need for the services of FCCJ. Population in the Jacksonville Metropolitan area has increased by 21.4 percent from 1990 to 2000 with an additional growth of nine percent by 2006.



## Economic Impact

To determine what the economic impact Florida Community College at Jacksonville has on Northeast Florida, we will look at four economic concepts.

- The *multiplier effect*, which adjusts the total economic impact for the recycling effect of money – for example, the fact that some of the expenses of a service provider such as FCCJ go back into the community and drive additional spending.
- The *output effect*, a measure of the gross receipts in dollars;
- The *income effect*, a measure of income in dollars; and
- The *employment effect*, a measure of employment in number of jobs;

## Multiplier Effect

The greater part of the cost of a facility such as FCCJ is spent within the community in the form of salaries to faculty and support staff and with the purchase of goods and services. These expenditures, in turn, drive further economic activity as the employees and service providers themselves buy goods and services with the accompanying sales taxes.

For example, suppose that the payroll is \$1,000,000, which is provided to employees as wages. The employees will spend a portion of their wages and save part of it. Assuming employees will spend 60 percent of their wages, the employees will spend \$600,000 to purchase goods and services from businesses and households. Assuming that the local businesses and households also spend 60 percent of their income, they will spend \$360,000 on goods and services. Again assume that the recipients of this income will spend 60 percent, they will in turn spend \$216,000. The cumulative amount of the additional spending attributable to the original payroll amount is \$2,500,000 after



examining four rounds of spending. In this example, a multiplier of 2.5 has been achieved.

Economists call this the multiplier effect, and conservatively estimate that every dollar directly spent on the facility can be multiplied by 2.5 to simulate the aggregate effect of this repeat spending pattern. In other words, for each \$1.00 spent in the fiscal year by FCCJ, \$2.50 is generated in the local economy. This includes the original \$1.00 spent and an additional \$1.50 activity generated in the region as a result of the original dollar spent.

### ***Output Effect***

The direct *output effect* generated by the Florida Community College at Jacksonville is **\$211,261,160**. This figure is derived from the total revenues and operating expense, which includes the Foundation, of \$290,321,445 less personnel expenses of \$79,060,285. Using the multiplier of 2.5, we achieve an *indirect output effect* of \$316,891,740 generating the *total output effect* to the community **\$528,152,900**.

### ***Income Effect***

The *income effect* measures the amount of income generated within the community from the income FCCJ employees receive. The total payroll including benefits is **\$79,060,285**. Using the multiplier of 2.5, we achieve an *indirect income effect* of \$118,590,428. The *total income effect*, including direct and indirect effects, is raised to **\$197,650,713**.

### ***Total Economic Impact***

The combination of the output economic impact and the income impact result in a *total economic impact*, direct and indirect, of **\$725,803,613**.



## **Employment Effect**

The *employment effect* measures the number of jobs generated in the region by the employment of FCCJ. FCCJ employs 1,300 full-time and 370 part-time workers. Although the United States Bureau of Labor Statistics counts part-time workers as fully employed for their statistics, the high proportion of part-time workers employed by FCCJ seems to artificially inflate the employment effect FCCJ has on the community. In order to address this issue, a more conservative approach is used. This study assumes that two part-time workers create the equivalent of one full-time employee. Using this assumption, FCCJ is responsible for 1485 direct full-time equivalent employees (1,300 full-time plus one-half of 370 part-time workers).

Using an employment multiplier of 2.5, The Florida Community College at Jacksonville is responsible for generating 2,228 indirect jobs and for a total of 3,713 jobs, both direct and indirect within the community.

The indirect employment effect is a concept showing the relationship that an employee earning wages creates other job opportunities. For example, in buying a car the original employee has to work with sales people, financial institutions, and insurance agents. Each person gainfully employed has an indirect effect on creating jobs in support of their spending.

## **Conclusions**

The facts indicate that a community college is a tremendous asset to a city – to its residents and businesses as well as students. FCCJ has made a good start in filling the void that existed previously. In particular, its attention to technology and the shortage of skills in technology-related fields is directly relevant to the needs of Jacksonville as a growing community.



FCCJ has done an excellent job of making sure the money allocated for all their programs is spent effectively and efficiently by using a review process called CPR. In this process all programs are reviewed and if they have become outdated, do not have a demand or have become ineffective, FCCJ either revises the program or eliminates it in favor of a new program.

If it is to be successful, FCCJ must closely examine emerging external threats. Recent legislation passed in the State of Florida will put an additional burden on an education budget that is already stretched to the limit. FCCJ must continue to come up with innovative, cutting-edge programs that not only maximize resource usage, but bring demonstrated value to Jacksonville and the surrounding area. The administration at FCCJ has already demonstrated significant savvy in managing funds and reducing expenses. This must continue so that funding dollars are maximized during a time when there is a great deal of competition for them.



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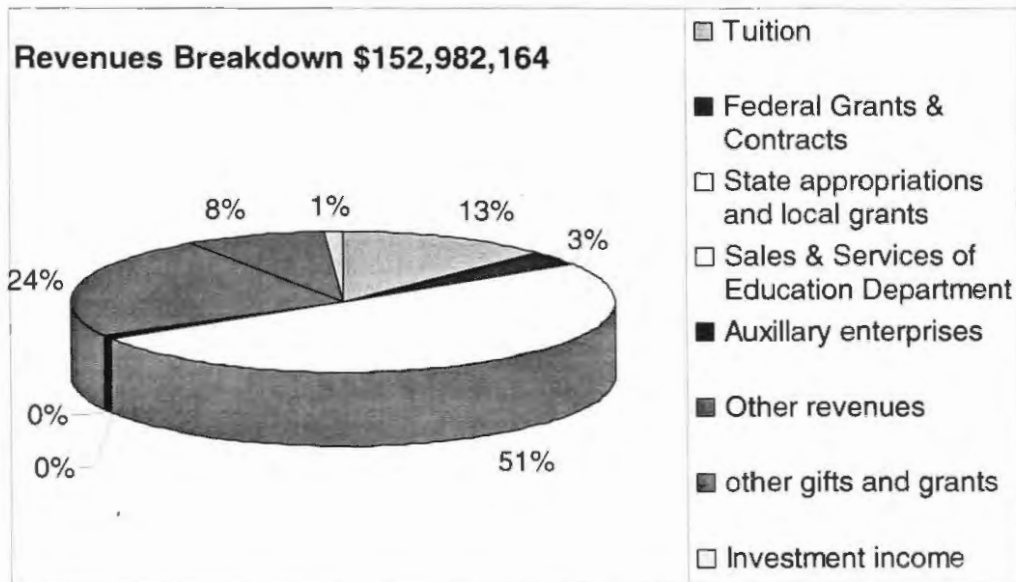
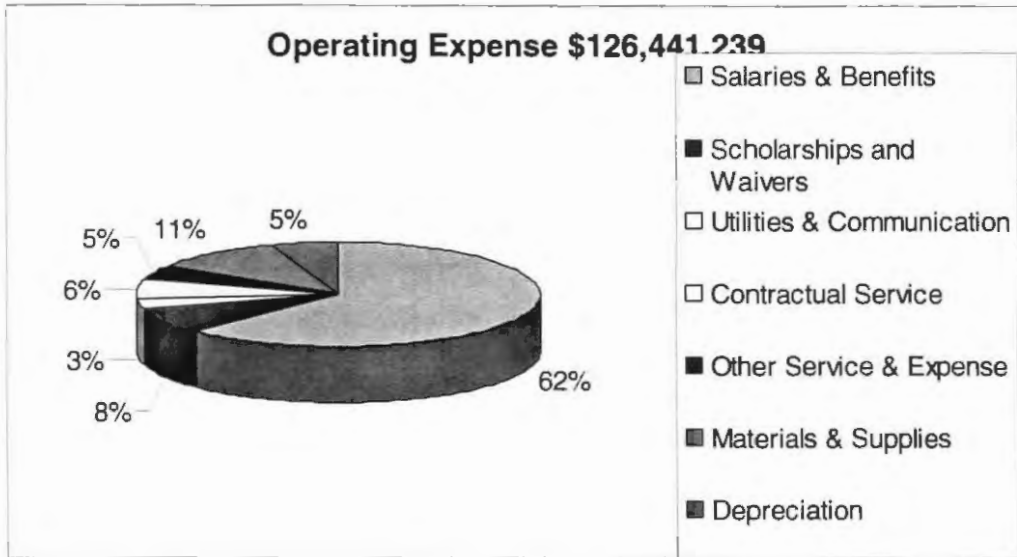
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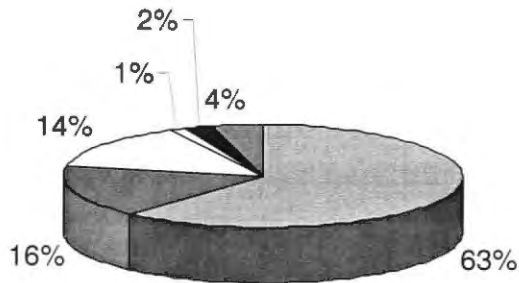
## Appendices

### Appendix A – FCCJ Operating Revenue, Expenses and Foundation Breakdown



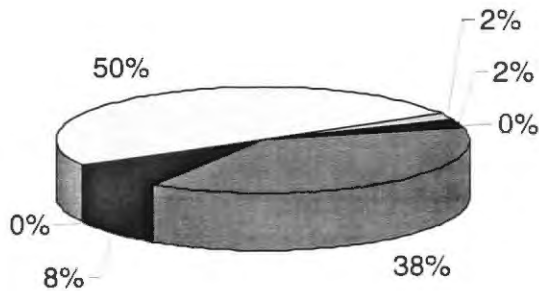


### Operating Revenue Breakdown \$31,619,627



- Tuition
- Federal Grants & Contracts
- State and local grants
- Sales & Services of Education Department
- Auxillary enterprises
- Other operating revenues

### Foundation - Total Activity OE & Revenue \$10,898,042



- Salaries & Benefits
- Scholarships and Waivers
- Utilities & Communication
- Contractual Service
- Other Service & Expense
- Materials & Supplies
- Revenues





**Appendix B – Economic Benefit of a Student Attaining an Associates Degree**

Year	Cash Flows	Comments
1	\$ (37,000)	Cost of education + Lost wages Attending School
2	\$ -	
3	\$ 7,500	Cash Flows of Additional Income after Degree
4	\$ 7,500	
5	\$ 7,500	
6	\$ 7,500	
7	\$ 7,500	
8	\$ 7,500	
9	\$ 7,500	
10	\$ 7,500	
11	\$ 7,500	
12	\$ 7,500	
13	\$ 7,500	
14	\$ 7,500	
15	\$ 7,500	
16	\$ 7,500	
17	\$ 7,500	
18	\$ 7,500	
19	\$ 7,500	
20	\$ 7,500	
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22	\$ 7,500	
23	\$ 7,500	
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25	\$ 7,500	
26	\$ 7,500	
27	\$ 7,500	
28	\$ 7,500	
29	\$ 7,500	
30	\$ 7,500	
31	\$ 7,500	
32	\$ 7,500	
33	\$ 7,500	
34	\$ 7,500	
35	\$ 7,500	
36	\$ 7,500	
37	\$ 7,500	
38	\$ 7,500	
39	\$ 7,500	
	<b>\$41,455.62</b>	<b>Net Present Value</b>
	<b>17.24%</b>	<b>IRR</b>



### Appendix C – Explanation of Economic Impact

Output Effect	
Total Revenues Institution	\$152,982,164
Operating Expense Institution	\$126,441,239
Foundation Operating Exp & Revenues	10,898,042.0
<b>Total</b>	<b>\$290,321,445</b>
Less Wages & Benefits	\$ (79,060,285)
<b>Direct Output Effect</b>	<b>\$211,261,160</b>
Multiplier =	2.5
Indirect Effect	\$316,891,740
<b>Total Output Effect</b>	<b>\$528,152,900</b>

Income Effect	
Direct Income Effect	\$ 79,060,285
Multiplier =	2.5
Indirect Income Effect	\$118,590,428
<b>Total Income Effect</b>	<b>\$197,650,713</b>
<b>Total Economic Impact</b>	<b>\$725,803,613</b>

Employment Effect (jobs)	
Full-time employees	1,300
Part-time employees*	370
<b>Total Employees</b>	<b>1,485</b>
Multiplier =	2.5
Indirect Employment Effect	2,228
<b>Total Employment effect (jobs)</b>	<b>3,713</b>

\* Count 1 FTE for every 2 employees



### Total Economic Impact \$725,803,613

