



**2015 Strategic Report Card
Tampa Bay Regional
“Taking the Next Step”
Business and Education Summit**

TAKING THE NEXT STEP
**BUSINESS &
EDUCATION SUMMIT**

Table of Contents

| | |
|--|----|
| Introduction..... | 3 |
| Who We are and What We Do..... | 4 |
| Message From The Chairmen..... | 5 |
| 2015 Industry Survey Data..... | 6 |
| Manufacturing/Aviation | 11 |
| Construction..... | 21 |
| Financial / Professional Services..... | 27 |
| Healthcare..... | 33 |
| Information Technology | 37 |
| General-Economy Overview..... | 42 |
| Conclusion..... | 50 |
| References..... | 51 |

Introduction

CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Annual “Taking the Next Step” Tampa Bay Regional Business & Education Summit on September 18, 2015. This regional event brought together more than 180 business and educational leaders from both sides of Tampa Bay in one setting to focus on regional - specific industry needs. Together, we have developed a report card to measure data on key indicators which will be used as a baseline to monitor trends for the Tampa Bay region. CareerSource Pinellas and CareerSource Tampa Bay are committed to creating a high skilled and competitive workforce to meet the demands of businesses in order to keep our region competitive.

Florida’s leading industry clusters play a key role in the state’s continued economic success and competitiveness. To align ourselves with the Regional Business Plan for Economic Development and CareerSource Florida, Inc., CareerSource Pinellas and CareerSource Tampa Bay chose the following targeted industries sectors as a priority:

- **Aviation /Manufacturing**
- **Construction**
- **Financial / Professional Services**
- **Healthcare**
- **Information Technology**

Labor Market Information (LMI) from all of these industry sectors was presented in breakout sessions during the 2015 Business & Education Summit. Top business and educational leaders within each industry were given the opportunity to provide input and expand on the information collected throughout the year.

This strategic report card is a tool for CareerSource Pinellas’ and CareerSource Tampa Bay’s Board of Directors to frame issues related to business and economic development. We will continue to build upon this report card through 2016.

Who We Are and What We Do

CareerSource Pinellas and CareerSource Tampa Bay serve as the regional workforce development boards under the Workforce Investment Act and are a driving force in delivering workforce solutions that support economic development in Pinellas and Hillsborough Counties.

CareerSource Pinellas and CareerSource Tampa Bay offer a full range of career planning services for professional and entry-level candidates, including career orientation; turnkey resource centers that assist in the candidate's job search; career fairs; workshops on interviewing techniques; labor market information specific to occupations and industries in demand, as well as resume building tips, salary and wage information; and professional networking.

CareerSource Pinellas and CareerSource Tampa Bay strengthen the competitive edge of local businesses in measurable ways that lead to the economic vitality of the region. Our staff works in partnership with local businesses to provide innovative, value-added workforce solutions. CareerSource Pinellas and CareerSource Tampa Bay provide businesses with a wide range of professional services, including: employee referral and recruitment, training and retraining, workshops and business seminars on a variety of human resource and workforce topics, labor market statistics, targeted career fairs, downsizing and retention support strategies, tax credit information and other customized support for a well-trained workforce.

CareerSource Pinellas offers full-service center locations in Clearwater, St. Petersburg and Tarpon Springs. CareerSource Tampa Bay offers full-service center locations in Tampa, Brandon and Plant City; and satellite centers in Ruskin and MacDill Air Force Base. The centers provide services for employers and employment candidates, including turnkey business centers for copying, faxing, and internet access.



www.careersourcepinellas.com



www.careersourcetampabay.com

\

Message From the Chairmen

“Taking the Next Step” Business & Education Summit mission is to bring the education and business communities together in an effort to achieve the following goals:

- Enhance, develop and promote partnerships between education and business to present a united front for the needs of industry
- Attract, further develop and retain a quality workforce
- Involve students of all ages in diverse career opportunities
- Involve business in educational funding issues and legislative mandates

More than 170 business and educational leaders from both sides of Tampa Bay attended the event, which focuses on regional specific industry needs. CareerSource Pinellas and CareersSource Tampa Bay are committed to creating a highly skilled and competitive workforce to meet the demands of business to keep our region competitive. Our keynote speaker, Soraya Darabi, is an authority on digital consumerism and how to apply new technologies to faster efficiency, visibility and growth. She is considered an expert on digital business strategies and how the latest technologies impact industries. In the afternoon Bernie Lynch addressed the group to discuss why the Tampa Bay area is emerging as lead area for digital growth.

Florida’s leading industry clusters play a key role in the state’s continued economic success and competitiveness. To align ourselves with the Regional Business Plan for Economic Development and CareerSource Florida, Inc., CareerSource Pinellas and CareersSource Tampa Bay chose the following five targeted industries sectors as a priority:

- Aviation / Manufacturing
- Construction
- Financial / Professional Services
- Healthcare
- Information Technology

This is an exciting time for our region, and we thank each of you for your involvement and support.



Mr. William E. Price, CPA
CareerSource Pinellas
PDR Certified Public Accountants



Mr. John Kearney, Sr.
CareerSource Tampa Bay
Career Path Training Corporation

Business & Education Summit Survey Data: 2015

| Responses | 2014 | 2015 |
|----------------------------------|-----------|------------|
| Aviation & Manufacturing | 10 | 18 |
| Construction | 5 | 17 |
| Financial/ Professional Services | 14 | 25 |
| Healthcare | 19 | 16 |
| Information Technology | 10 | 6 |
| Other/General | 26 | 62 |
| Total | 84 | 144 |

1. When hiring for entry-level and unskilled positions how important are basic workplace (ex. communication, teamwork, and attitude) skills?

1 2 3 4 5
 Not Important Very Important

| Year | Response Average |
|------|------------------|
| 2015 | 4.8 |
| 2014 | 4.2 |

2. When hiring for technical and professional positions how important are basic workplace skills?

1 2 3 4 5
 Not Important Very Important

| Year | Response Average |
|------|------------------|
| 2015 | 4.7 |
| 2014 | 4.4 |

3. When hiring for entry-level and unskilled positions how important are technical skills?

1 2 3 4 5
 Not Important Very Important

| Year | Response Average |
|------|------------------|
| 2015 | 3.5 |
| 2014 | 3.9 |

4. When hiring for technical and professional positions how important are technical skills?

- 1 2 3 4 5
 Not Important Very Important

| Year | Response Average |
|------|------------------|
| 2015 | 4.7 |
| 2014 | 4.4 |

5. Do you agree that the Tampa Bay region has a labor force that meets your demands for qualified employees in entry-level positions?

- 1 2 3 4 5
 Strongly Disagree Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.5 |
| 2014 | 4.1 |

6. Do you agree that the Tampa Bay region has a labor force that meets your demands for qualified employees in technical and professional positions?

- 1 2 3 4 5
 Strongly Disagree Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.2 |
| 2014 | 3.8 |

7. Over the last 5 years, has it been easier to find people with the appropriate skills?

- 1 2 3 4 5
 Extremely Difficult Extremely Easy

| Year | Response Average |
|------|------------------|
| 2015 | 2.8 |
| 2014 | 3.7 |

12. How often do you use apprentices or On the Job Training (OJT) programs?

1 2 3 4 5
 Not Often Frequently

| Year | Response Average |
|------|------------------|
| 2015 | 2.5 |
| 2014 | 3.0 |

13. Do you agree that the post-secondary education system in the Tampa Bay Region is meeting your labor needs?

1 2 3 4 5
 Strongly Disagree Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.2 |
| 2014 | 3.8 |

14. Do you agree that your regions Economic Development assist in retaining and growing your organization?

1 2 3 4 5
 Strongly Disagree Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.1 |
| 2014 | 4.1 |

15. Do you agree that CareerSource Pinellas and CareerSource Tampa Bay are helpful in meeting your workforce needs?

1 2 3 4 5
 Strongly Disagree Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.4 |
| 2014 | 4.1 |

16. Do you agree that career academies (Centers of Excellence) prepare students for college and careers?

1
 2
 3
 4
 5

Strongly Disagree

Strongly Agree

| Year | Response Average |
|------|------------------|
| 2015 | 3.5 |
| 2014 | 4.0 |

17. When hiring for entry-level positions, how important are 21st century skills, such as critical thinking, problem-solving, global awareness, and creativity?

1
 2
 3
 4
 5

Not Important

Very Important

| Year | Response Average |
|------|------------------|
| 2015 | 4.3 |
| 2014 | 4.1 |

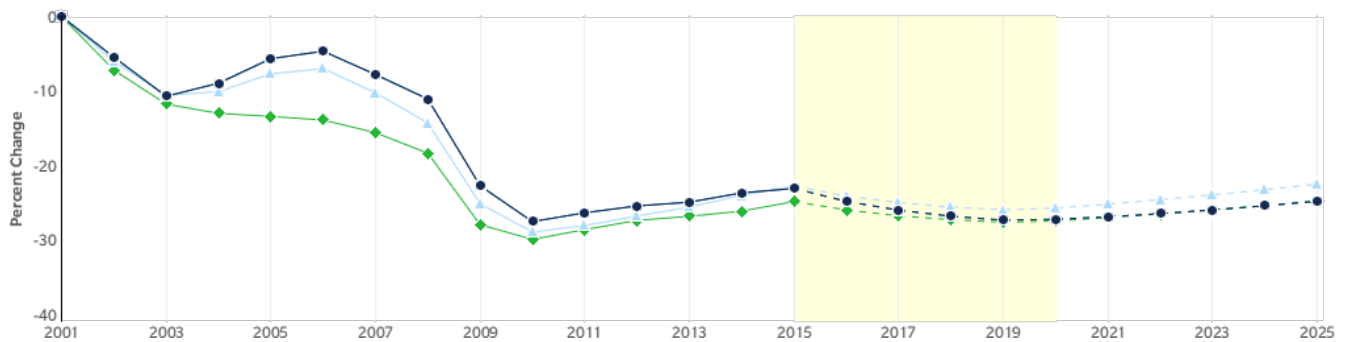
Industry Summary for Manufacturing

| | | |
|---|--|--|
| 60,773 Jobs (2015) 42% below National average | -5.4% % Change (2015-2020) Nation: -3.5% | \$68,420 Avg. Earnings Per Job (2015) Nation: \$77,612 |
|---|--|--|

Industry Detail

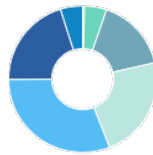
| | |
|-----------------------|----------------------------|
| Establishments (2014) | 2852 |
| Jobs Multiplier | Only Available for 6-Digit |
| Unemployed (4/2015) | 3,574 |

Regional Trends



| | Region | 2015 Jobs | 2020 Jobs | Change | % Change |
|---|---------------------------------------|------------|------------|----------|----------|
| ● | Region | 60,773 | 57,508 | -3,265 | -5.4% |
| ● | Tampa St.Petersburg Clearwater MSA | 60,773 | 57,508 | -3,265 | -5.4% |
| ● | Florida | 334,113 | 321,319 | -12,794 | -3.8% |
| ● | United States | 12,319,808 | 11,891,894 | -427,914 | -3.5% |

Industry Age Breakdown



| | Age | 2015 Jobs | 2015 Percent |
|---|-------|-----------|--------------|
| ● | 14-18 | 252 | 0.4% |
| ● | 19-24 | 2,939 | 4.8% ■ |
| ● | 25-34 | 9,815 | 16.1% ■■ |
| ● | 35-44 | 13,776 | 22.7% ■■■ |
| ● | 45-54 | 18,731 | 30.8% ■■■■ |
| ● | 55-64 | 12,287 | 20.2% ■■■ |
| ● | 65+ | 2,973 | 4.9% ■ |

Occupations Employed by this Industry

| Description | Employed in Industry (2015) | % of Total Jobs in Industry (2015) |
|--|-----------------------------|------------------------------------|
| Team Assemblers | 4,344 | 7.1% |
| First-Line Supervisors of Production and Operating Workers | 2,497 | 4.1% |
| Electrical and Electronic Equipment Assemblers | 2,262 | 3.7% |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 1,821 | 3.0% |
| Machinists | 1,739 | 2.9% |

| SOC | Description | Employed in Industry (2015) | Employed in Industry (2015) | Employed in Industry (2020) | Change (2015 - 2020) | % Change (2015 - 2020) | Median Hourly Earnings | Typical Entry Level Education |
|---------|--|-----------------------------|-----------------------------|-----------------------------|----------------------|------------------------|------------------------|-----------------------------------|
| 51-2092 | Team Assemblers | 4,344 | 4,344 | 4,070 | (274) | (6%) | \$12.89 | High school diploma or equivalent |
| 51-1011 | First-Line Supervisors of Production and Operating Workers | 2,497 | 2,497 | 2,340 | (157) | (6%) | \$25.89 | Postsecondary non-degree award |
| 51-2022 | Electrical and Electronic Equipment Assemblers | 2,262 | 2,262 | 1,950 | (312) | (14%) | \$17.27 | High school diploma or equivalent |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 1,821 | 1,821 | 1,706 | (115) | (6%) | \$26.38 | High school diploma or equivalent |
| 51-4041 | Machinists | 1,739 | 1,739 | 1,764 | 25 | 1% | \$18.47 | High school diploma or equivalent |
| 51-9061 | Inspectors, Testers, Sorters, Samplers, and Weighers | 1,465 | 1,465 | 1,404 | (61) | (4%) | \$15.47 | High school diploma or equivalent |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 1,453 | 1,453 | 1,376 | (77) | (5%) | \$10.63 | Less than high school |
| 51-9111 | Packaging and Filing Machine Operators and Tenders | 1,393 | 1,393 | 1,342 | (51) | (4%) | \$11.93 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 1,316 | 1,316 | 1,213 | (103) | (8%) | \$14.46 | High school diploma or equivalent |
| 51-5112 | Printing Press Operators | 1,208 | 1,208 | 1,066 | (142) | (12%) | \$16.23 | High school diploma or equivalent |
| 17-2112 | Industrial Engineers | 1,084 | 1,084 | 1,014 | (70) | (6%) | \$34.81 | Bachelor's degree |
| 43-5071 | Shipping, Receiving, and Traffic Clerks | 1,033 | 1,033 | 972 | (61) | (6%) | \$13.24 | High school diploma or equivalent |
| 51-4121 | Welders, Cutters, Solderers, and Brazers | 1,024 | 1,024 | 1,006 | (18) | (2%) | \$16.09 | High school diploma or equivalent |
| 53-3032 | Heavy and Tractor-Trailer Truck Drivers | 1,013 | 1,013 | 1,025 | 12 | 1% | \$16.36 | Postsecondary non-degree award |
| 51-9023 | Mixing and Blending Machine Setters, Operators, and Tenders | 924 | 924 | 885 | (39) | (4%) | \$15.59 | High school diploma or equivalent |
| 51-9198 | Helpers--Production Workers | 894 | 894 | 857 | (37) | (4%) | \$10.08 | Less than high school |
| 49-9071 | Maintenance and Repair Workers, General | 865 | 865 | 820 | (45) | (5%) | \$14.76 | High school diploma or equivalent |
| 11-1021 | General and Operations Managers | 803 | 803 | 772 | (31) | (4%) | \$55.86 | Bachelor's degree |

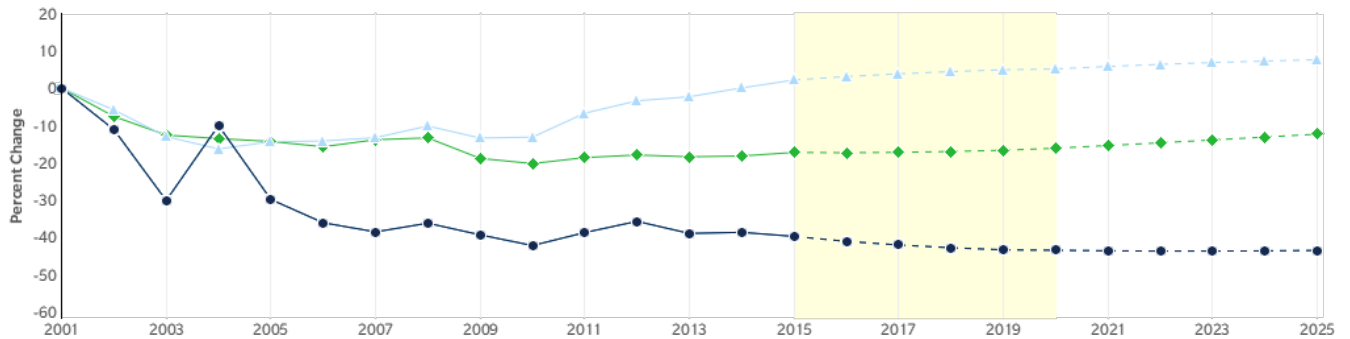
Industry Summary for Aerospace

| | | |
|--|---|--|
| 4,314 Jobs (2015) 19% below National average | -6.2% % Change (2015-2020) Nation: 1.4% | \$60,823 Avg. Earnings Per Job (2015) Nation: \$85,880 |
|--|---|--|

Industry Detail

| | |
|-----------------------|----------------------------|
| Establishments (2014) | 91 |
| Jobs Multiplier | Only Available for 6-Digit |
| Unemployed (4/2015) | Only Available for 2-Digit |

Regional Trends



| | Region | 2015 Jobs | 2020 Jobs | Change | % Change |
|---|---------------------------------------|-----------|-----------|--------|----------|
| ● | Region | 4,314 | 4,047 | -267 | -6.2% |
| ● | Tampa St.Petersburg Clearwater MSA | 4,314 | 4,047 | -267 | -6.2% |
| ● | Florida | 55,047 | 56,652 | 1,605 | 2.9% |
| ● | United States | 625,380 | 633,996 | 8,616 | 1.4% |

Occupations Employed by these Industries

| Description | Employed in Industry Group (2015) | % of Total Jobs in Industry Group (2015) |
|--|-----------------------------------|--|
| Reservation and Transportation Ticket Agents and Travel Clerks | 1,499 | 34.8% |
| Aircraft Mechanics and Service Technicians | 404 | 9.4% |
| Flight Attendants | 257 | 6.0% |
| Laborers and Freight, Stock, and Material Movers, Hand | 257 | 5.9% |
| Transportation Workers, All Other | 224 | 5.2% |

| SOC | Description | Employed in Industry Group (2015) | Employed in Industry Group (2019) | Employed in Industry Group (2020) | Change (2015 - 2020) | % Change (2015 - 2020) | % of Total Jobs in Industry Group (2015) | Median Hourly Earnings | Typical Entry Level Education |
|---------|---|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|------------------------|--|------------------------|-----------------------------------|
| 43-4181 | Reservation and Transportation Ticket Agents and Travel Clerks | 1,499 | 1,499 | 1,274 | (225) | (15%) | 34.8% | \$17.05 | High school diploma or equivalent |
| 49-3011 | Aircraft Mechanics and Service Technicians | 404 | 404 | 403 | (1) | (0%) | 9.4% | \$25.37 | Postsecondary non-degree award |
| 53-2031 | Flight Attendants | 257 | 257 | 258 | 1 | 0% | 6.0% | \$23.44 | High school diploma or equivalent |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 257 | 257 | 245 | (12) | (5%) | 5.9% | \$10.63 | Less than high school |
| 53-6099 | Transportation Workers, All Other | 224 | 224 | 215 | (9) | (4%) | 5.2% | \$16.05 | High school diploma or equivalent |
| 43-5011 | Cargo and Freight Agents | 157 | 157 | 144 | (13) | (8%) | 3.6% | \$20.32 | High school diploma or equivalent |
| 53-2011 | Airline Pilots, Copilots, and Flight Engineers | 138 | 138 | 144 | 6 | 4% | 3.2% | \$62.92 | Bachelor's degree |
| 39-6011 | Baggage Porters and Bellhops | 129 | 129 | 129 | 0 | 0% | 3.0% | \$9.45 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 107 | 107 | 102 | (5) | (5%) | 2.5% | \$14.46 | High school diploma or equivalent |
| 43-1011 | First-Line Supervisors of Office and Administrative Support Workers | 65 | 65 | 61 | (4) | (6%) | 1.5% | \$24.12 | High school diploma or equivalent |
| 53-2012 | Commercial Pilots | 61 | 61 | 66 | 7 | 11% | 1.4% | \$26.26 | High school diploma or equivalent |
| 49-1011 | First-Line Supervisors of Mechanics, Installers, and Repairers | 55 | 55 | 54 | (1) | (2%) | 1.3% | \$27.63 | High school diploma or equivalent |
| 49-2091 | Avionics Technicians | 47 | 47 | 47 | 0 | 0% | 1.1% | \$25.06 | Associate's degree |
| 53-7061 | Cleaners of Vehicles and Equipment | 38 | 38 | 39 | 1 | 3% | 0.9% | \$9.31 | Less than high school |
| 41-3099 | Sales Representatives, Services, All Other | 32 | 32 | 31 | (1) | (3%) | 0.7% | \$24.56 | High school diploma or equivalent |
| 53-1011 | Aircraft Cargo Handling Supervisors | 30 | 30 | 28 | (2) | (7%) | 0.7% | \$23.85 | High school diploma or equivalent |
| 49-9071 | Maintenance and Repair Workers, General | 28 | 28 | 27 | (1) | (4%) | 0.6% | \$14.76 | High school diploma or equivalent |
| 43-5081 | Stock Clerks and Order Fillers | 27 | 27 | 25 | (2) | (7%) | 0.6% | \$10.88 | Less than high school |
| 11-1021 | General and Operations Managers | 24 | 24 | 25 | 1 | 4% | 0.6% | \$55.66 | Bachelor's degree |

Data Sources

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit Manufacturing/Aviation Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Manufacturing/Aviation community gathered to discuss and share industry specific information. Highlights included:

- Technical skills that keep business competitive are experience with reading blue prints, computer skills in excel in order to manage inventory. These are basic skills needed prior to being hired at a manufacturing plant. Math skills are a big must.
- Future needs will be individuals that can learn not only how to run the machines but trouble-shoot them as well. CNC machinists.
- Retention issues are individuals who can't work late shifts, adhere to safety issues, or those that can't pick up quickly on the technical training are a problem. We need workforce that are more mechanically inclined and can pass a test.
- The industry needs to see more institutions specialize in welding, machining etc.

The Tampa Bay Manufacturing Gap Analysis was discussed.

For the full report, please visit <http://tampabaygapanalysis.com/manufacturing.html>

The United States Department of Labor High Growth Industry profile on Aviation/Aerospace states:

Industry Snapshots

- The aerospace industry comprises of companies producing aircraft, guided missiles, space vehicles, aircraft engines, propulsion units and related parts. Aircraft overhaul, rebuilding and parts are also included (U.S. Bureau of Labor Statistics, www.bls.gov/oco/cg/cgs006.htm).
- Other sectors of the economy depend on aerospace businesses and related disciplines for technical skills and technologies that are critical elements of our security infrastructure and to improve America's position in the global marketplace (Commission on the Future of the United States Aerospace Industry).
- Former Aerospace Industries Association President and CEO, John Douglass, stated “U.S. aerospace is a strategic industry in the nation's economy, homeland security and national defense.”

Workforce Issues

Aging Workforce

- Among the issues facing the Aerospace workforce is the impending retirement of many mature workers, who possess experience and intellectual capital. Employers in the industry must protect the skills base, including improving the basic employability skills of entry level workers.

Loss of Technical Talent

- Additionally, to compensate for a loss of technical talent, Aerospace employers must rely on youthful and diverse workers, found in non-traditional labor pools. Efforts must also be increased in improving public perceptions of the industry in order to retain talent and generate interest in aerospace careers. Also, reducing turnover, improving retention and improving high-tech skills in existing workers are key objectives in bolstering Aerospace's workforce system.

Skill Sets

(Source: U.S. Bureau of Labor Statistics, 2006-07 Career Guide to Industries and 2006-07 Occupational Outlook Handbook)

- Employers need well-informed, knowledgeable employees who can keep up with the rapid technological advancements in aerospace manufacturing. The industry provides substantial support for the education and training of its workers. Firms provide on-site, job-related training to upgrade the skills of technicians, production workers and engineers. Classes teaching computer skills and blueprint reading are common. Some firms reimburse employees for educational expenses at colleges and universities, emphasizing four-year degrees and postgraduate studies.
- To enter some of the more highly skilled production occupations, workers must go through a formal apprenticeship. Machinists and electricians complete apprenticeships that can last up to four years. Apprenticeships usually include classroom instruction and shop training.
- Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer applicants with a minimum two-year associate degree in engineering technology. Training is available at technical institutes, community colleges, extension divisions of colleges and universities and public and private vocational-technical schools and in the Armed Forces.
- Many engineering technicians assist in design work, therefore creativity is desirable. Because these workers often are part of a team of engineers and other technicians, good communication skills and the ability to work well with others also are important.
- The National Institute for Certification in Engineering Technologies (NICET) has established a voluntary certification program for engineering technicians. Certification is available at various levels, each level combining a written examination in one of about 30 specialties with a certain amount of job-related experience, a supervisory evaluation and a recommendation.

ETA in Action

In June 2003, ETA announced the High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce. ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

These initiatives reinforce ETA's commitment to transform the workforce system through engaging business, education, state and local governments and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.

Investments

ETA has invested \$12,475,953.00 in the aerospace industry. This includes seven High Growth Job Training Initiative grants totaling \$8,856,453, two Community-Based Job Training Grants totaling \$3,619,500. Leverage resources from all of grantees total \$17,729,384.00.

(United States Department of Labor- Aerospace -2010)

The United States Department of Labor High Growth Industry profile on Manufacturing states:

Industry Snapshots

- The manufacturing sector continues to account for 14 percent of U.S. GDP and 11 percent of total U.S. employment. Moreover, manufacturing firms fund 60 percent of the \$193 billion that the U.S. private sector invests annually in R&D. (U.S. Department of Commerce)
- Manufacturing salaries and benefits average \$65,000, higher than the average for the total private sector. Two factors in particular attract workers to manufacturing: higher pay and benefits and opportunities for advanced education and training. (National Association of Manufacturers)
- A 2005 survey of U.S. manufacturing employers found that 80 percent of respondents said that they had a serious problem finding qualified candidates for the highly technical world of modern manufacturing. (National Association of Manufacturers)

Workforce Issues

Training for Innovation

The capacity for innovation is the primary competitive advantage for U.S. manufacturers in the global marketplace. Therefore, manufacturers need workers who are continually focused on innovating products and services, as well as production and business processes. Workers need the basic academic, workplace and technical skills that will enable them to support the innovation requirements of an advanced manufacturing environment.

Pipeline

Too few young people consider the possibility of manufacturing careers and do not know what skills they need to succeed. Similarly, students do not always graduate from high school equipped with the necessary skills or knowledgeable about manufacturing career opportunities.

Capacity Building

Education providers need the curriculum, equipment, qualified instructors and other tools necessary to train the highly skilled workforce that advanced manufacturers need. Educators need to define the specific competencies and implement the career ladder and lattice models that will enable workers to continually enhance their skills.

Skill Sets

National Association of Manufacturers "2005 Skills Gap Report - A Survey of the American Manufacturing Workforce" Technical skills are essential to the future of Advanced Manufacturing. According to a 2005 NAM survey on the advanced manufacturing workforce, 53 percent of respondents listed technical skills as the greatest need over the next three years. Additional skill sets include the ability to work in teams (47 percent), strong computer skills (40 percent), and the ability to read and translate diagrams and flow charts (39 percent) and strong supervisory and managerial skills (37 percent).

Jobs in the Advanced Manufacturing industry require a complete understanding and mastery of a variety of skill sets. Workers need the *production* skills to set up, operate, monitor and control the manufacturing process. They need the *process design and development* skills to continuously improve production processes. They need skills in health and safety to maintain a safe work environment. They need skills in *maintenance, installation and repair* to maintain and optimize complex equipment and systems. They need knowledge of *supply chain logistics* in order to plan and monitor the movement and storage of materials and products. Finally, manufacturing workers need skills in *quality assurance and continuous improvement* to ensure that products and processes meet quality requirements.

ETA in Action

In June 2003, ETA announced the High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce.

ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

These initiatives reinforce ETA's commitment to transform the workforce system through engaging business, education, state and local governments and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.

Investments

ETA has invested \$117,540,137 in the advanced manufacturing industry. This includes 31 High Growth Job Training Initiative grants totaling \$74,944,990 and 23 Community-Based Job Training Grants totaling \$42,595,147. Leveraged resources from all of the grantees total \$178,268,67.00.

(United States Department of Manufacturing -2010)

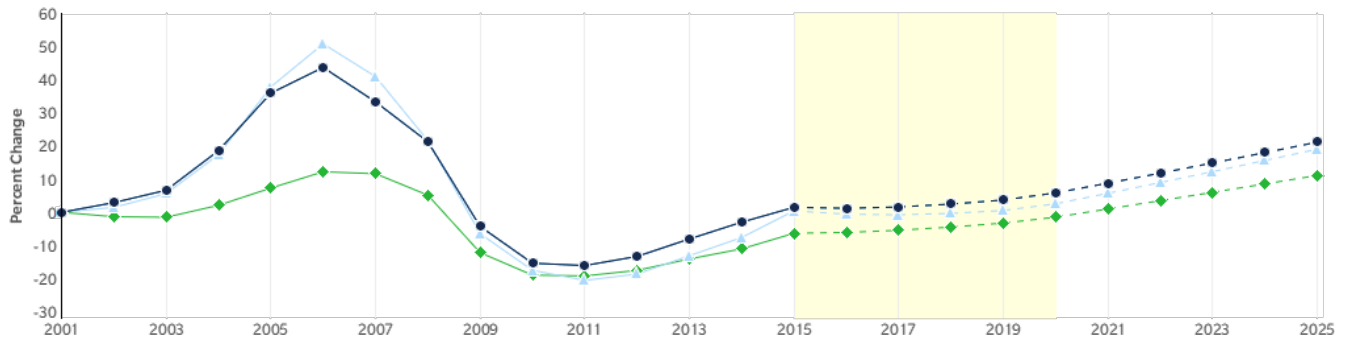
Industry Summary for Construction

| | | |
|---|--|--|
| 61,094 Jobs (2015) 13% above National average | 4.3% % Change (2015-2020) Nation: 5.2% | \$51,992 Avg. Earnings Per Job (2015) Nation: \$65,042 |
|---|--|--|

Industry Detail

| | |
|-----------------------|----------------------------|
| Establishments (2014) | 8150 |
| Jobs Multiplier | Only Available for 6-Digit |
| Unemployed (4/2015) | 3,426 |

Regional Trends



| | Region | 2015 Jobs | 2020 Jobs | Change | % Change |
|---|---------------------------------------|-----------|-----------|---------|----------|
| ● | Region | 61,094 | 63,715 | 2,621 | 4.3% |
| ● | Tampa St.Petersburg Clearwater MSA | 61,094 | 63,715 | 2,621 | 4.3% |
| ● | Florida | 422,671 | 431,584 | 8,913 | 2.1% |
| ● | United States | 6,345,279 | 6,673,927 | 328,648 | 5.2% |

Occupations Employed by this Industry

| Description | Employed in Industry (2015) | % of Total Jobs in Industry (2015) |
|---|-----------------------------|------------------------------------|
| Construction Laborers | 6,306 | 10.3% |
| First-Line Supervisors of Construction Trades and Extraction Workers | 4,125 | 6.8% |
| Carpenters | 3,996 | 6.5% |
| Electricians | 3,695 | 6.0% |
| Heating, Air Conditioning, and Refrigeration Mechanics and Installers | 2,841 | 4.6% |

| SOC | Description | Employed in Industry (2015) | Employed in Industry (2015) | Employed in Industry (2020) | Change (2015 - 2020) | % Change (2015 - 2020) | % of Total Jobs in Industry (2015) | Median Hourly Earnings | Typical Entry Level Education |
|---------|---|-----------------------------|-----------------------------|-----------------------------|----------------------|------------------------|------------------------------------|------------------------|-----------------------------------|
| 47-2061 | Construction Laborers | 6,306 | 6,306 | 6,354 | 48 | 1% | 10.3% | \$12.90 | Less than high school |
| 47-1011 | First-Line Supervisors of Construction Trades and Extraction Workers | 4,125 | 4,125 | 4,275 | 150 | 4% | 6.8% | \$25.05 | High school diploma or equivalent |
| 47-2031 | Carpenters | 3,996 | 3,996 | 4,114 | 118 | 3% | 6.5% | \$16.45 | High school diploma or equivalent |
| 47-2111 | Electricians | 3,695 | 3,695 | 3,957 | 262 | 7% | 6.0% | \$18.49 | High school diploma or equivalent |
| 49-9021 | Heating, Air Conditioning, and Refrigeration Mechanics and Installers | 2,841 | 2,841 | 3,272 | 431 | 15% | 4.6% | \$18.31 | Postsecondary non-degree award |
| 47-2152 | Plumbers, Pipefitters, and Steamfitters | 2,705 | 2,705 | 3,187 | 482 | 18% | 4.4% | \$18.21 | High school diploma or equivalent |
| 47-2181 | Roofers | 2,151 | 2,151 | 2,550 | 399 | 19% | 3.5% | \$15.59 | Less than high school |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 1,988 | 1,988 | 2,095 | 107 | 5% | 3.3% | \$14.76 | High school diploma or equivalent |
| 47-2141 | Painters, Construction and Maintenance | 1,855 | 1,855 | 1,978 | 123 | 7% | 3.0% | \$14.66 | Less than high school |
| 47-2051 | Cement Masons and Concrete Finishers | 1,698 | 1,698 | 1,616 | (82) | (5%) | 2.8% | \$14.68 | Less than high school |
| 11-9021 | Construction Managers | 1,649 | 1,649 | 1,726 | 77 | 5% | 2.7% | \$37.54 | Bachelor's degree |
| 43-9061 | Office Clerks, General | 1,635 | 1,635 | 1,681 | 46 | 3% | 2.7% | \$12.56 | High school diploma or equivalent |
| 47-2073 | Operating Engineers and Other Construction Equipment Operators | 1,502 | 1,502 | 1,536 | 34 | 2% | 2.5% | \$16.38 | High school diploma or equivalent |
| 13-1051 | Cost Estimators | 1,405 | 1,405 | 1,495 | 90 | 6% | 2.3% | \$25.82 | Bachelor's degree |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 1,156 | 1,156 | 1,197 | 41 | 4% | 1.9% | \$16.03 | High school diploma or equivalent |
| 41-3099 | Sales Representatives, Services, All Other | 1,049 | 1,049 | 1,091 | 42 | 4% | 1.7% | \$24.56 | High school diploma or equivalent |
| 53-3032 | Heavy and Tractor-Trailer Truck Drivers | 1,020 | 1,020 | 1,015 | (5) | (0%) | 1.7% | \$16.36 | Postsecondary non-degree award |
| 11-1021 | General and Operations Managers | 958 | 958 | 1,024 | 66 | 7% | 1.6% | \$55.86 | Bachelor's degree |
| 47-2211 | Sheet Metal Workers | 898 | 898 | 1,026 | 128 | 14% | 1.5% | \$14.34 | High school diploma or equivalent |

Data Sources

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit Construction Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Construction community gathered to discuss and share industry specific information. Highlights included:

- High need for entry level welders, construction trades. One of the employers present stated that he pays \$14/hr to start, but there is difficulty in getting folks to come to work once hired (lack of quality candidates with work ethic)
- High need for experienced (1 yr or more) CDL drivers-suggestion was made to utilize OJT or Internship oriented training program to augment their staffing-through Internship: offer a lower wage and train them to your business needs
- Craigslist is the primary source for a majority of the companies present
- CareerSource is not their first choice for recruiting Construction roles
- Perhaps a Construction oriented recruiting event featuring such companies could be helpful
- Retention is a huge issue-pay being the culprit, employees find a role paying as little as a \$1/hr more, and they jump ship.

The United States Department of Labor High Growth Industry profile on Construction states:

Industry Snapshots

- Total employment in the construction industry is projected to raise from approximately 6.9 million jobs in 2004 to 7.7 million jobs in 2014, an increase of nearly 800,000 new jobs.
- Projected employment growth between 2004 and 2014 is substantial for a wide range of construction-related occupations, including:
 - Electricians: 77,000 new jobs
 - Carpenters: 186,000 new jobs
 - Construction managers: 45,000 new jobs
- Earnings in construction are higher than the average for all industries. In 2004, production or nonsupervisory workers in construction averaged \$19.23 an hour, or about \$736 a week.
- Construction offers more opportunities than most other industries for individuals who want to own and run their own business.

Workforce Issues

Image and Outreach to the Public

- The image of the industry could be improved in a variety of areas and especially among key audiences including youth, parents, educators and guidance counselors. For example, youth are not familiar with the various job choices and career ladders the industry offers and guidance counselors are not aware of the skills required for many of the occupations in the construction trades.

Recruitment

- Lack of awareness of job opportunities and a poor industry image have contributed to the decline in the number of people from traditional labor pools willing to enter and remain in the construction industry. The industry has difficulty recruiting youth and individuals from non-traditional labor pools. Though the industry has made extensive efforts to target youth, it remains a challenge recruiting them. At the same time, women and other representatives of non-traditional labor pools are not as prevalent in the industry as they could be.
- Construction offers a variety of career opportunities. People with many different talents and educational backgrounds—managers, clerical workers, engineers, truck drivers, trades workers and construction helpers—find job opportunities in the construction industry. (U.S. Bureau of Labor Statistics)

Skill Development and Education and Training Capacity: Youth

- Some youth lack math and language academic skills needed for work in the construction industry. Also, the capacity and capability of some education and training providers that serve youth could be improved. For example, some vocational-technical high schools lack key resources, such as books and curriculum and secondary school teachers could benefit from spending time in apprenticeship programs. In addition, partnerships and information sharing among key stakeholders are vital for success.

Skill Development and Education and Training Capacity: Entry-level Workers and Incumbent Workers

- Developing the skills of entry-level and incumbent workers is another challenge facing the construction industry. For example, some entry-level workers lack the skills to effectively use the increasingly complex technology being utilized in the construction industry, and many incumbent workers need to improve their leadership and management skills. Further, the capacity of some education and training providers that serve entry-level and incumbent workers could also be improved. For example, some community colleges lack the capacity to accommodate additional students.

Skill Sets

(Source: U.S. Bureau of Labor Statistics, 2006-07 Career Guide to Industries)

- People can enter the construction industry with a variety of educational backgrounds. Those entering the industry right out of high school often start as laborers, helpers, or apprentices. Technical or vocational school graduates entering the industry may also go through apprenticeship training and, therefore, may progress at a somewhat faster pace because they already have had courses such as mathematics, mechanical drawing and woodworking.
- Many people enter the construction trades through apprenticeship programs. These programs offer on-the-job training under the close supervision of an experienced craft worker and formal classroom instruction. Apprenticeships are administered by local employers, trade associations and trade unions.
- Most skilled craft jobs require proficiency in reading and mathematics, while safety training is required for most jobs.

- Skilled workers such as carpenters, bricklayers, plumbers and other construction trade specialists need either several years of informal on-the-job experience or apprenticeship training.

ETA in Action

In June 2003, ETA announced the High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce.

ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

These initiatives reinforce ETA's commitment to transform the workforce system through engaging business, education, state and local governments and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.

Investments

ETA has invested \$51,779,207 in the construction industry. This includes nine High Growth Job Training Initiative grants totaling \$35,134,804 and 10 Community-Based Job Training grants totaling \$16,644,403. Leveraged resources from all of the grantees total \$19,280,811.

(United States Department of Labor- Construction -2010)

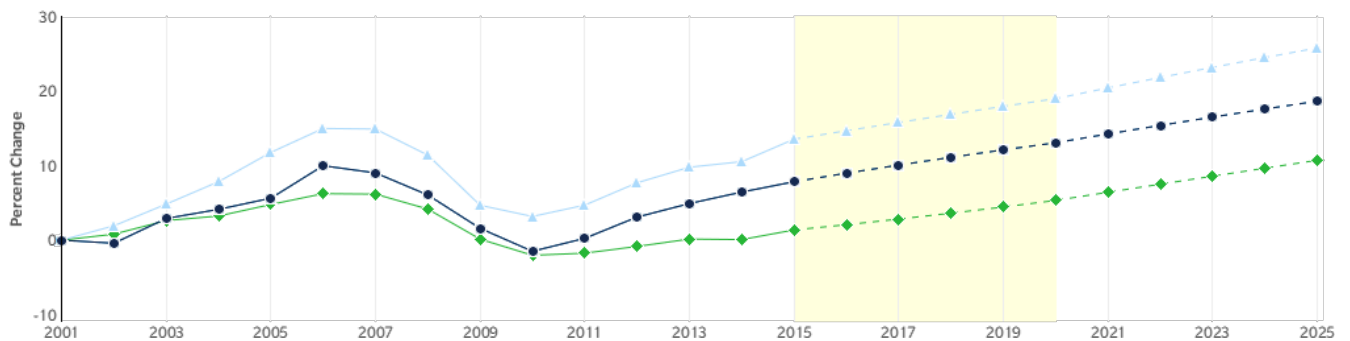
Industry Summary for Finance Professional Services

| | | |
|---|--|---|
| 86,474 Jobs (2015) 50% above National average | 4.8% % Change (2015-2020) Nation: 3.9% | \$84,042 Avg. Earnings Per Job (2015) Nation: \$111,377 |
|---|--|---|

Industry Detail

| | |
|-----------------------|----------------------------|
| Establishments (2014) | 7143 |
| Jobs Multiplier | Only Available for 6-Digit |
| Unemployed (4/2015) | Only Available for 2-Digit |

Regional Trends



| Region | 2015 Jobs | 2020 Jobs | Change | % Change |
|---------------------------------------|-----------|-----------|---------|----------|
| ● Region | 86,474 | 90,666 | 4,192 | 4.8% |
| ● Tampa St. Petersburg Clearwater MSA | 86,474 | 90,666 | 4,192 | 4.8% |
| ● Florida | 443,249 | 464,482 | 21,233 | 4.8% |
| ● United States | 6,758,096 | 7,022,422 | 264,326 | 3.9% |

Occupations Employed by these Industries

| Description | Employed in Industry Group (2015) | % of Total Jobs in Industry Group (2015) |
|--|-----------------------------------|--|
| Customer Service Representatives | 9,074 | 10.5% |
| Insurance Sales Agents | 6,263 | 7.2% |
| Lawyers | 4,852 | 5.6% |
| Tellers | 4,608 | 5.3% |
| Claims Adjusters, Examiners, and Investigators | 4,446 | 5.1% |

| SOC | Description | Employed in Industry Group | Employed in Industry Group (2015) | Employed in Industry Group | Change (2015 - 2020) | % Change (2015 - 2020) | % of Total Jobs in Industry Group (2015) | Median Hourly Earnings | Typical Entry Level Education |
|---------|---|----------------------------|-----------------------------------|----------------------------|----------------------|------------------------|--|------------------------|-----------------------------------|
| 43-4051 | Customer Service Representatives | 9,074 | 9,074 | 9,444 | 370 | 4% | 10.5% | \$14.46 | High school diploma or equivalent |
| 41-3021 | Insurance Sales Agents | 6,263 | 6,263 | 6,527 | 264 | 4% | 7.2% | \$26.49 | High school diploma or equivalent |
| 23-1011 | Lawyers | 4,852 | 4,852 | 5,585 | 733 | 15% | 5.6% | \$45.01 | Doctoral or professional degree |
| 43-3071 | Tellers | 4,608 | 4,608 | 4,672 | 64 | 1% | 5.3% | \$14.63 | High school diploma or equivalent |
| 13-1031 | Claims Adjusters, Examiners, and Investigators | 4,446 | 4,446 | 4,636 | 190 | 4% | 5.1% | \$27.76 | High school diploma or equivalent |
| 13-2072 | Loan Officers | 4,069 | 4,069 | 4,160 | 91 | 2% | 4.7% | \$33.88 | Bachelor's degree |
| 41-3031 | Securities, Commodities, and Financial Services Sales Agents | 3,202 | 3,202 | 3,195 | (7) | (0%) | 3.7% | \$26.13 | Bachelor's degree |
| 43-9041 | Insurance Claims and Policy Processing Clerks | 3,193 | 3,193 | 3,339 | 146 | 5% | 3.7% | \$16.67 | High school diploma or equivalent |
| 43-1011 | First-Line Supervisors of Office and Administrative Support Workers | 3,080 | 3,080 | 3,212 | 132 | 4% | 3.6% | \$24.12 | High school diploma or equivalent |
| 23-2011 | Paralegals and Legal Assistants | 3,053 | 3,053 | 3,604 | 551 | 18% | 3.5% | \$19.67 | Associate's degree |
| 43-4131 | Loan Interviewers and Clerks | 2,998 | 2,998 | 3,064 | 66 | 2% | 3.5% | \$19.20 | High school diploma or equivalent |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 2,284 | 2,284 | 2,409 | 125 | 5% | 2.6% | \$14.76 | High school diploma or equivalent |
| 13-2052 | Personal Financial Advisors | 1,832 | 1,832 | 1,958 | 126 | 7% | 2.1% | \$34.46 | Bachelor's degree |
| 43-9061 | Office Clerks, General | 1,751 | 1,751 | 1,859 | 108 | 6% | 2.0% | \$12.56 | High school diploma or equivalent |
| 43-6012 | Legal Secretaries | 1,460 | 1,460 | 1,621 | 161 | 11% | 1.7% | \$18.55 | High school diploma or equivalent |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 1,446 | 1,446 | 1,547 | 101 | 7% | 1.7% | \$16.03 | High school diploma or equivalent |
| 43-3011 | Bill and Account Collectors | 1,247 | 1,247 | 1,234 | (13) | (1%) | 1.4% | \$16.06 | High school diploma or equivalent |
| 13-2011 | Accountants and Auditors | 1,169 | 1,169 | 1,226 | 57 | 5% | 1.4% | \$29.94 | Bachelor's degree |
| 11-3031 | Financial Managers | 1,082 | 1,082 | 1,110 | 28 | 3% | 1.3% | \$55.64 | Bachelor's degree |

Data Sources

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit Financial/Professional Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Financial/Professional community gathered to discuss and share industry specific information. Highlights included:

- Soft skills are the biggest marker that will separate job seekers during recruitment, and help them during the interview process. Work ethic is the main area that is the hardest to teach new employees. For these reasons, if the new employees come in with these soft skills it is easier to train them in all other areas of their operation; even if they are starting from the basics.
- Computer and basic math skills are a must. Having some basic email and phone etiquette experience will also assist with getting hired.
- Mentoring/Internship programs are the biggest areas that the financial industry could benefit from. This would solve the issues of the first two questions, allowing entry level employees to obtain corporate experience before entering the work place
- Making good hiring decisions from the recruitment to the onboarding process is key for long term retention of the workforce. The other is ensuring that there are sufficient training opportunities for professional growth, whether that training comes inside the company or outside educational institutions.
- Suggestions also included more corporate/real world training for students so that they entire the workplace with more soft skills.
- One company has a mentorship program which they feel is really assisting new employees get acclimated to corporate environment. Other than this initial training, employees consistently have online training through each company's continuing education and training programs.

The Tampa Bay Financial and Shared Services Gap Analysis was discussed. For the full report, please visit <http://tampabaygapanalysis.com/finance.html>

The United States Department of Labor High Growth Industry profile on Financial /Professional Services states:

Industry Snapshots

- The financial services industry is comprised of three primary sectors: banking, securities and commodities, and insurance. (U.S. Bureau of Labor Statistics)
- Overall employment of financial analysts and personal financial advisors is expected to increase faster than average for all occupations through 2014, resulting from increased investment by businesses and individuals. (Occupational Outlook Handbook 2006-07).
- The number of jobs within management, business and financial occupations is projected to grow by 2.2 million from 2004 to 2014. ("Occupational employment projections to 2014" by Daniel E. Hecker)

Workforce Issues

Recruitment: Pipeline and Diversity

- Among the challenges facing the financial services industry is a lack of a worker pipeline. Currently, industry employers often recruit workers from competing employers, failing to bring new workers into the industry. Additionally, the industry is faced with a lack of diversity among available workers. A diverse group of workers is especially important in service-oriented professions including retail, banking and insurance, where consumers often prefer employees with which they can relate.

Retention

- Stemming from intense competition and high turnover rates, the financial services industry also faces low retention rates among workers. A lack of an industry-wide competency model makes it difficult for new workers to enter and navigate the career ladder in the industry.

Technical Talent Development

- The financial services industry is heavily dependent on continuous skill development because workers must keep up with the rapidly changing array of products and services offered to customers. This reality requires employers to think more creatively about how to deliver on-demand training that can be accessed 24/7 and refreshed with new information as needed.

Skill Sets

(Source: U.S. Bureau of Labor Statistics, 2006-07 Career Guide to Industries)

- Office and administrative occupations in insurance typically require a high school education, but many institutions make educational opportunities available to encourage in-house advancement. Managerial, sales and professional occupations typically require at least a bachelor's degree. Bank tellers and other clerks usually need only a high school education. Most banks seek people who have good basic math and customer service skills. Financial services sales agents usually need a college degree; a major or courses in finance, accounting, economics, marketing, or related fields serve as excellent preparation. Sales agents selling securities need to be licensed by the National Association of Securities Dealers, and agents selling insurance also must obtain licensure by state.

ETA in Action

In June 2003, ETA announced the High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce.

ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

These initiatives reinforce ETA's commitment to transform the workforce system by engaging business, education, state and local governments, and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.

Investments

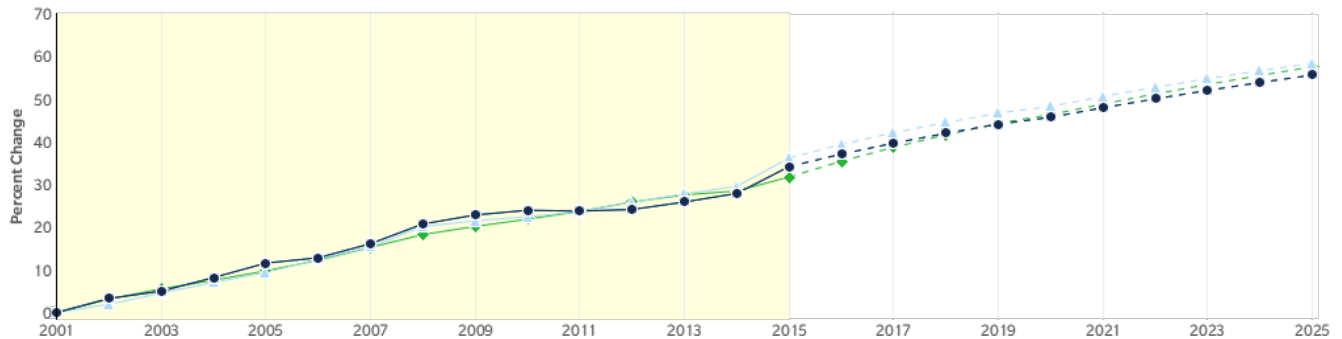
ETA has invested \$7,249,023 in the financial services industry. This includes five High Growth Job Training Initiative grants totaling \$5,989,023 and one Community-Based Job Training Grant totaling \$1,260,000. Leveraged resources from all of the grantees total \$3,782,024.

(United States Department of Labor- Financial -2010)

Industry Summary for Healthcare

| | | |
|---|--|--|
| 107,442 Jobs (2015) 3% above National average | 34.2% % Change (2001-2015) Nation: 31.7% | \$68,474 Avg. Earnings Per Job (2015) Nation: \$69,367 |
|---|--|--|

Regional Trends



| Region | 2001 Jobs | 2015 Jobs | Change | % Change |
|---------------------------------------|-----------|------------|-----------|----------|
| ● Region | 80,076 | 107,442 | 27,366 | 34.2% |
| ● Tampa St. Petersburg Clearwater MSA | 80,076 | 107,442 | 27,366 | 34.2% |
| ● Florida | 537,535 | 732,004 | 194,469 | 36.2% |
| ● United States | 9,312,469 | 12,268,314 | 2,955,845 | 31.7% |

Occupations Employed by these Industries

| Description | Employed in Industry Group (2015) | % of Total Jobs in Industry Group (2015) |
|---|-----------------------------------|--|
| Registered Nurses | 19,341 | 18.0% |
| Medical Assistants | 5,042 | 4.7% |
| Nursing Assistants | 4,821 | 4.5% |
| Receptionists and Information Clerks | 4,765 | 4.4% |
| Licensed Practical and Licensed Vocational Nurses | 3,498 | 3.3% |

| SOC | Description | Employed in Industry Group (2001) | Employed in Industry Group (2015) | Change (2001 - 2015) | % Change (2001 - 2015) | % of Total Jobs in Industry Group (2015) | Median Hourly Earnings |
|---------|---|-----------------------------------|-----------------------------------|----------------------|------------------------|--|------------------------|
| 29-1141 | Registered Nurses | 14,110 | 19,341 | 5,231 | 37% | 18.0% | \$29.61 |
| 31-9092 | Medical Assistants | 3,582 | 5,042 | 1,460 | 41% | 4.7% | \$13.84 |
| 31-1014 | Nursing Assistants | 3,317 | 4,821 | 1,504 | 45% | 4.5% | \$11.12 |
| 43-4171 | Receptionists and Information Clerks | 3,304 | 4,765 | 1,461 | 44% | 4.4% | \$12.72 |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 2,451 | 3,498 | 1,047 | 43% | 3.3% | \$19.98 |
| 31-9091 | Dental Assistants | 2,185 | 2,821 | 636 | 29% | 2.6% | \$17.00 |
| 31-1011 | Home Health Aides | 1,762 | 2,525 | 763 | 43% | 2.4% | \$10.11 |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 1,780 | 2,156 | 376 | 21% | 2.0% | \$14.76 |
| 43-6013 | Medical Secretaries | 1,584 | 2,121 | 537 | 34% | 2.0% | \$14.22 |
| 43-9061 | Office Clerks, General | 1,824 | 2,112 | 288 | 16% | 2.0% | \$12.56 |
| 43-3021 | Billing and Posting Clerks | 1,374 | 1,945 | 571 | 42% | 1.8% | \$15.79 |
| 43-1011 | First-Line Supervisors of Office and Administrative Support Workers | 1,355 | 1,902 | 547 | 40% | 1.8% | \$24.12 |
| 29-1062 | Family and General Practitioners | 1,266 | 1,687 | 421 | 33% | 1.6% | \$94.25 |
| 29-1069 | Physicians and Surgeons, All Other | 1,286 | 1,679 | 393 | 31% | 1.6% | \$100.45 |
| 29-2021 | Dental Hygienists | 1,180 | 1,620 | 440 | 37% | 1.5% | \$33.51 |
| 29-2034 | Radiologic Technologists | 1,019 | 1,347 | 328 | 32% | 1.3% | \$26.37 |
| 39-9021 | Personal Care Aides | 1,235 | 1,337 | 102 | 8% | 1.2% | \$9.45 |
| 29-1123 | Physical Therapists | 897 | 1,332 | 435 | 48% | 1.2% | \$38.83 |
| 43-4051 | Customer Service Representatives | 900 | 1,302 | 402 | 45% | 1.2% | \$14.46 |

Data Sources

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit HealthCare Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Healthcare community gathered to discuss and share industry specific information. Highlights included:

- The healthcare breakout had representation from: BayCare, Moffit Cancer Centers, LabCorps, Prime Medical Apparel, Senior Connections, Area Agency on Aging and St.Petersburg College (SPC).
- Technical skills and future needs: Coding (ICD 10), Medical Technologists, BSN's & Specialized Nurses. Healthcare IT (Sequel), Ophthalmic Techs.
- Biggest retention problems: Large number of retirements, competition, sign-on bonuses, flexible work schedules.
- Employers feel it is important that students make the right choice when seeking training in healthcare. There are some schools that employers prefer hiring from.
- Returning veterans were discussed. If non-credentialed employers will bring in military Paramedics as PCT's. SPC has a specialized RN, ALF training and Orthotic Fitter programs for veterans.

The United States Department of Labor High Growth Industry profile on Healthcare states:

Healthcare Initiatives-The health care industry has grown rapidly and is projected to grow in the future due to advances in medical knowledge and the increased need for medical services required by an aging population. Moreover, the growing complexity of health care delivery, including changing technologies, will require both incumbent workers and new entrants to continuously upgrade their skills. Although job opportunities exist for workers without extensive specialized training, most health care occupations require training leading to a vocational license, certificate, or degree.

ETA's COMPETITIVE GRANTS PROVIDE TRAINING FOR THE HEALTHCARE SECTOR

Across a number of our grant programs, ETA has made significant investments in education and training for the health care workforce. Through the American Recovery and Reinvestment Act (Recovery Act) Healthcare Sector and Other High-Growth and Emerging Industries Solicitation for Grant Applications, ETA awarded 39 grants totaling over \$157 million supporting projects to deliver training that leads to employment in a range of health care fields. In addition, ETA awarded \$14.7 million in healthcare-focused grants to develop and launch the Healthcare Virtual Career Platform and related capacity building grants. These grants will support projects designed to provide health care training and virtual service-delivery models (i.e., Web-based services) to promote career opportunities in the health care sector.

The Community Based Job training Grants (CBJTG) program was designed to support workforce training for high-growth/high-demand industries through the national system of community and technical colleges. Grants under this program fund projects that provide workers with education/training that will prepare them to enter and advance in high-growth and emerging industries, including those in the health care sector. Grantees have addressed a number of challenges faced by the health care industry in acute care, long term care, and an array of allied health care professions. These grantees have focused on specific, as well as the broader range of challenges in the health care arena, including:

- expanding the pipeline of youth entering the health care profession
- identifying alternative labor pools such as new American immigrants, veterans, and older workers that can be tapped and trained
- developing alternative training strategies for educating and training health care professionals, such as apprenticeship, distance learning, and accelerated training
- developing tools and curriculum for enhancing the skills of health care professionals for nationwide distribution
- enhancing the capacity of educational institutions through increased numbers of qualified faculty and new models for clinical training
- developing strategies to retain and help current health care workers move into higher level positions in shortage areas
- helping workers in declining industries build on existing skills and train for health care professions

Long-term Healthcare Grants

On June 26, 2007, the U.S. Department of Labor announced the award of \$3 million in grants to six organizations to prepare workers for careers in long-term care.

COMPETENCY MODELS

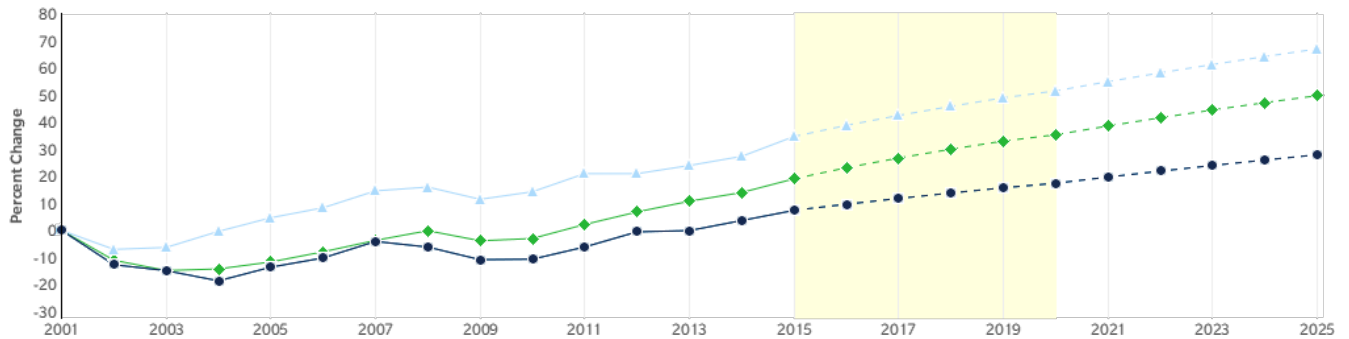
ETA supports the creation and use of competency models across multiple industries. Competency models serve as a starting point for the design and implementation of workforce and talent development programs. To learn more about industry-validated models visit the Competency Model Clearinghouse. For example, the Long-term Care Supports, and Services (LTCSS) Competency Model contains information that can be applied to occupations across a variety of related fields within healthcare industry sub-sectors, and helps to show more complete career pathways across these fields. The LTCSS model describes academic and workplace skills, including the key behaviors that enable workers in these roles to progress along well-articulated career pathways.

(United States Department of Labor- Healthcare-2014)

Industry Summary for Information Technology 2015

| | | |
|--|---|---|
| 18,702 Jobs (2015) 5% below National average | 9.3% % Change (2015-2020) Nation: 13.7% | \$98,889 Avg. Earnings Per Job (2015) Nation: \$124,677 |
|--|---|---|

Regional Trends



| Region | 2015 Jobs | 2020 Jobs | Change | % Change |
|--------------------------------------|-----------|-----------|---------|----------|
| ● Region | 18,702 | 20,448 | 1,746 | 9.3% |
| ● Tampa St.Petersburg Clearwater MSA | 18,702 | 20,448 | 1,746 | 9.3% |
| ● Florida | 98,445 | 110,746 | 12,301 | 12.5% |
| ● United States | 2,299,986 | 2,613,970 | 313,984 | 13.7% |

Occupations Employed by these Industries

| Description | Employed in Industry Group (2015) | % of Total Jobs in Industry Group (2015) |
|-----------------------------------|-----------------------------------|--|
| Software Developers, Applications | 2,055 | 11.0% |
| Computer User Support Specialists | 1,273 | 6.8% |
| Computer Programmers | 1,227 | 6.6% |
| Computer Systems Analysts | 1,004 | 5.4% |
| Customer Service Representatives | 847 | 4.5% |

| SOC | Description | Employed in Industry Group (2015) | Employed in Industry Group (2015) | Employed in Industry Group (2020) | % Change (2015 - 2020) | % of Total Jobs in Industry Group (2015) | Median Hourly Earnings |
|---------|--|-----------------------------------|-----------------------------------|-----------------------------------|------------------------|--|------------------------|
| 15-1132 | Software Developers, Applications | 2,055 | 2,055 | 2,346 | 14% | 11.0% | \$43.63 |
| 15-1151 | Computer User Support Specialists | 1,273 | 1,273 | 1,472 | 16% | 6.8% | \$21.16 |
| 15-1131 | Computer Programmers | 1,227 | 1,227 | 1,287 | 5% | 6.6% | \$36.84 |
| 15-1121 | Computer Systems Analysts | 1,004 | 1,004 | 1,135 | 13% | 5.4% | \$38.90 |
| 43-4051 | Customer Service Representatives | 847 | 847 | 897 | 6% | 4.5% | \$14.46 |
| 15-1133 | Software Developers, Systems Software | 718 | 718 | 834 | 16% | 3.8% | \$42.60 |
| 41-3099 | Sales Representatives, Services, All Other | 704 | 704 | 758 | 8% | 3.8% | \$24.56 |
| 15-1143 | Computer Network Architects | 701 | 701 | 750 | 7% | 3.7% | \$36.11 |
| 41-4011 | Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | 519 | 519 | 555 | 7% | 2.8% | \$28.04 |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 465 | 465 | 481 | 3% | 2.5% | \$26.38 |
| 11-3021 | Computer and Information Systems Managers | 421 | 421 | 476 | 13% | 2.3% | \$65.06 |
| 15-1142 | Network and Computer Systems Administrators | 410 | 410 | 461 | 12% | 2.2% | \$39.95 |
| 15-1152 | Computer Network Support Specialists | 382 | 382 | 413 | 8% | 2.0% | \$26.99 |
| 13-1111 | Management Analysts | 350 | 350 | 383 | 9% | 1.9% | \$35.55 |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 335 | 335 | 365 | 9% | 1.8% | \$14.76 |
| 11-1021 | General and Operations Managers | 310 | 310 | 348 | 12% | 1.7% | \$55.86 |
| 43-9061 | Office Clerks, General | 288 | 288 | 308 | 7% | 1.5% | \$12.56 |
| 13-1199 | Business Operations Specialists, All Other | 287 | 287 | 310 | 8% | 1.5% | \$30.13 |
| 15-1134 | Web Developers | 283 | 283 | 325 | 15% | 1.5% | \$28.87 |

Data Sources

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit Information Technology Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Information Technology community gathered to discuss and share industry specific information. Highlights included:

- Employers stated they have recruited workers from the DC area to move to Tampa in order to hire individuals with the skills they need. New hires may agree to move to the area for the lifestyle and older workers may be looking to retire in Florida.
- Technical hard to find skills: business intelligence, Java, enterprise, data warehousing, specialized skills (including older software skill sets such as COBOL), data administration, web programming, system and network engineers.
- Employers stated there is a lack of communication between colleges and businesses.
- Employers stated certifications are good, but they are looking for work experience as well. Internships could provide this experience. Prefer prior technical experience – at least 2 years. Customer service skills and real world experience are also preferred. Most employers offer paid internships and felt they were successful.
- Employers stated job seekers need help with resumes and interview skills and feel this is education's role.
- Employers expect work readiness and educators expect employers to deliver this skills training. Employers need to hire individuals who are productive the first day.
- SPC – Stated the college has the supply if employers have the demand. Employers suggested educators have students create meaningful projects for portfolios to show skill level.
- Employers stated technical colleges do not prepare students for employment as well as four-year institutions.
- Retention is IT culture-based. 1.75-3.5 years average employment and compensation is a factor as employees often leave for a higher salary.

The Tampa Bay IT Gap Analysis was discussed. For the full report, please visit <http://tampabaygapanalysis.com/it.html>

The United States Department of Labor High Growth Industry profile on Information Technology states:

Industry Snapshots

- The computer systems design and related services industry is among the economy's largest and fastest sources of employment growth. Employment increased by 616,000 over the 1994-2004 period, posting a staggering 8.0-percent annual growth rate. The projected 2004-14 employment increase of 453,000 translates into 1.6 million jobs, and represents a relatively slower annual growth rate of 3.4 percent as productivity increases and offshore outsourcing take their toll. ("Industry output and employment projections to 2014" by Jay M. Berman, Bureau of Labor Statistics)
- However, the main growth catalyst for this industry is expected to be the persistent evolution of technology and business' constant effort to absorb and integrate these resources to enhance their productivity and expand their market opportunities.
- Employment of computer and information systems managers is expected to grow between 18 to 26 percent for all occupations through the year 2014. (Career Guide to Industries 2006-07)

Workforce Issues

Outsourcing

There is concern about federal, state and local government policy proposals that may restrict overseas outsourcing where labor costs are lower. Some companies move jobs overseas to remain competitive by managing labor costs. Others are opening new markets overseas for their products and hiring local employees as an incentive and an accommodation.

Government resources

Some stakeholders believe that the government can offer tax relief to small businesses for training their incumbent workers toward IT certification.

Role of government in industry's workforce initiatives

Stakeholders also believe that government could serve as an honest broker for specific issues such as promotion and image, forecasting the future of the workforce and training needs. This could be a task for the public education system, where children could be introduced to the new, dynamic global workplace and learn more about the current business culture.

Skills and training

Over 90 percent of IT workers are employed outside the IT industry, which makes it necessary for them to have complementary training in their respective business sectors such as health care, manufacturing or financial services. Employers are also looking for well-developed soft skills, transferable IT skills and adaptability in their workforce. Incumbent training programs may help in this respect, as could community colleges.

Skill Sets

(Source: U.S. Bureau of Labor Statistics, 2006-07 Career Guide to Industries)

- For all IT-related occupations, technical and professional certifications are growing more popular and increasingly important.
- IT workers must continually update and acquire new skills to remain qualified in this dynamic field. Completion of vocational training also is an asset. According to a May 2000 report by the Urban Institute, community colleges play a critical role in training new workers and in retraining both veteran workers and workers from other fields.
- People interested in becoming computer support specialists generally need only an Associate degree in a computer-related field, as well as significant hands-on experience with computers. They also must possess strong problem-solving and analytical skills as well as excellent communication skills because troubleshooting and helping others

are such vital aspects of the job. And because there is constant interaction on the job with other computer personnel, customers, and employees, computer support specialists must be able to communicate effectively on paper, using e-mail, and in person. They also must possess strong writing skills when preparing manuals for employees and customers.

ETA in Action

In June 2003, ETA announced the High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce.

ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

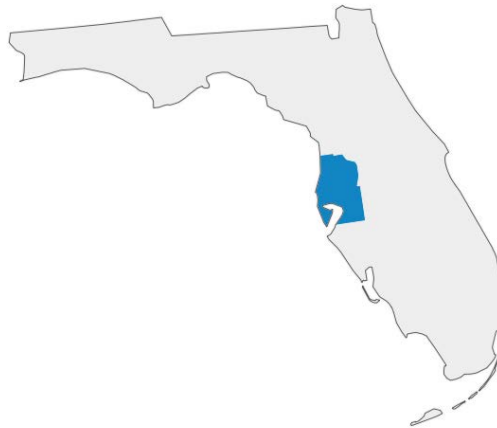
These initiatives reinforce ETA's commitment to transform the workforce system through engaging business, education, state and local governments, and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.

Investments

ETA has invested over \$8,525,458 in the information technology industry. This includes three High Growth Job Training Initiative grants totaling \$7,816,982 and one multi-industry Community-Based Job Training Grant totaling \$708,476. Leveraged resources from all of the grantees total \$7,346,592.

(United States Department of Labor- Information Technology-2010)



















General- Economy Overview



| | |
|-------------------------|-------------------|
| Population (2015) | 2,926,281 |
| Jobs (2015) | 1,186,792 |
| Average Earnings (2015) | \$55,194 |
| Unemployed (4/2015) | 71,304 |
| Completions (2014) | 49,386 |
| GRP (2013) | \$123,624,636,937 |
| Exports (2013) | \$108,704,476,504 |
| Imports (2013) | \$110,111,237,547 |

Population


















| | |
|--|---|
| 2,926,281 2015 Population 14.7% of State | 4.9% Population Growth for the Last 5 Years State Growth 5.9% |
|--|---|

| Age Group | 2015 Population | % of Population | |
|-------------------|-----------------|-----------------|---|
| Under 5 years | 164,033 | 5.6% |  |
| 5 to 9 years | 161,345 | 5.5% |  |
| 10 to 14 years | 171,447 | 5.9% |  |
| 15 to 19 years | 161,040 | 5.5% |  |
| 20 to 24 years | 189,308 | 6.5% |  |
| 25 to 29 years | 187,192 | 6.4% |  |
| 30 to 34 years | 184,963 | 6.3% |  |
| 35 to 39 years | 173,818 | 5.9% |  |
| 40 to 44 years | 181,479 | 6.2% |  |
| 45 to 49 years | 201,333 | 6.9% |  |
| 50 to 54 years | 209,777 | 7.2% |  |
| 55 to 59 years | 206,676 | 7.1% |  |
| 60 to 64 years | 194,594 | 6.6% |  |
| 65 to 69 years | 173,208 | 5.9% |  |
| 70 to 74 years | 132,740 | 4.5% |  |
| 75 to 79 years | 93,386 | 3.2% |  |
| 80 to 84 years | 69,788 | 2.4% |  |
| 85 years and over | 70,153 | 2.4% |  |

Unemployment by Industry











71,304

Total Unemployment (4/2015)

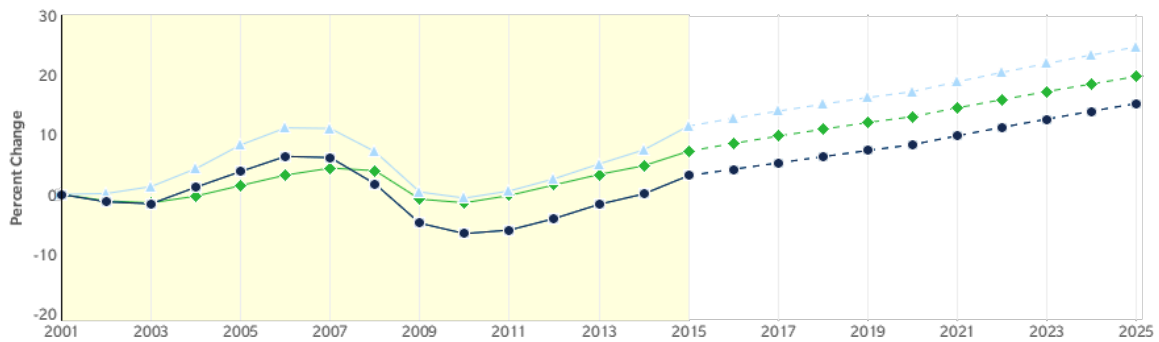
| NAICS | Industry | Unemployed (4/2015) | % of Regional Unemployment | |
|-------|--|------------------------|----------------------------------|---|
| 11 | Crop and Animal Production | 243 | 0% | |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 102 | 0% | |
| 22 | Utilities | 135 | 0% | |
| 23 | Construction | 3,426 | 5% |  |
| 31 | Manufacturing | 3,574 | 5% |  |
| 42 | Wholesale Trade | 1,069 | 1% |  |
| 44 | Retail Trade | 10,699 | 15% |  |
| 48 | Transportation and Warehousing | 1,143 | 2% |  |
| 51 | Information | 838 | 1% |  |
| 52 | Finance and Insurance | 3,542 | 5% |  |
| 53 | Real Estate and Rental and Leasing | 1,469 | 2% |  |
| 54 | Professional, Scientific, and Technical Services | 3,973 | 6% |  |
| 55 | Management of Companies and Enterprises | 125 | 0% | |
| 56 | Administrative and Support and Waste Management and Remediation Services | 5,449 | 8% |  |
| 61 | Educational Services | 1,019 | 1% |  |
| 62 | Health Care and Social Assistance | 5,386 | 8% |  |
| 71 | Arts, Entertainment, and Recreation | 1,122 | 2% |  |
| 72 | Accommodation and Food Services | 7,365 | 10% |  |
| 81 | Other Services (except Public Administration) | 2,889 | 4% |  |
| 90 | Government | 4,764 | 7% |  |
| 99 | No Previous Work Experience/Unspecified | 12,972 | 18% |  |

| NAICS | Industry | Unemployed (4/2015) | % of Regional Unemployment |
|-------|----------|------------------------|----------------------------------|
|-------|----------|------------------------|----------------------------------|

Top Program Completions

| CIP | Program | Completions (2014) | |
|-----|--|--------------------|---|
| 51 | Health professions and related programs | 15,905 |  |
| 24 | Liberal arts and sciences, general studies and humanities | 7,998 |  |
| 52 | Business, management, marketing, and related support services | 6,592 |  |
| 43 | Homeland security, law enforcement, firefighting and related protective services | 2,367 |  |
| 13 | Education | 2,064 |  |
| 45 | Social sciences | 1,796 |  |
| 12 | Personal and culinary services | 1,503 |  |
| 11 | Computer and information sciences and support services | 1,405 |  |
| 42 | Psychology | 1,396 |  |
| 26 | Biological and biomedical sciences | 1,356 |  |

Regional Trends




| | Region | 2001 Jobs | 2015 Jobs | Change | % Change |
|---|---------------------------------------|-------------|-------------|-----------|----------|
| ● | Region | 1,150,574 | 1,186,792 | 36,218 | 3.1% |
| ● | Tampa St.Petersburg Clearwater MSA | 1,150,574 | 1,186,792 | 36,218 | 3.1% |
| ● | Florida | 7,153,678 | 7,973,717 | 820,039 | 11.5% |
| ● | United States | 129,637,685 | 139,026,175 | 9,388,490 | 7.2% |

Growing & Declining Occupations








| Occupation | Change in Jobs (2001-2015) |
|--|----------------------------|
| Combined Food Preparation and Serving Workers, Including Fast Food | 11,153 |
| Waiters and Waitresses | 8,445 |
| Registered Nurses | 5,808 |
| Office Clerks, General | -5,065 |
| Team Assemblers | -6,936 |
| Laborers and Freight, Stock, and Material Movers, Hand | -14,248 |

Growing & Declining Industries

| Industry | Change in Jobs (2001-2015) | |
|--|----------------------------|---|
| Full-Service Restaurants | 17,300 |  |
| Corporate, Subsidiary, and Regional Managing Offices | 12,124 |  |
| Limited-Service Restaurants | 11,354 |  |
| Credit Card Issuing | -5,196 |  |
| Temporary Help Services | -8,399 |  |
| Professional Employer Organizations | -94,035 |  |

2015 Educational Attainment



| | Education Level | 2015 Population | 2015 Percent | |
|---|----------------------------|-----------------|--------------|---|
| ● | Less Than 9th Grade | 92,188 | 4.4% |  |
| ● | 9th Grade to 12th Grade | 162,681 | 7.8% |  |
| ● | High School Diploma | 644,129 | 31.0% |  |
| ● | Some College | 436,318 | 21.0% |  |
| ● | Associate's Degree | 198,146 | 9.5% |  |
| ● | Bachelor's Degree | 357,539 | 17.2% |  |
| ● | Graduate Degree and Higher | 188,106 | 9.0% |  |

2015 Age Cohort Demographics



| | Age Cohort | 2015 Population | 2015 Percent |
|---|-------------------|-----------------|--------------|
| ● | Under 20 years | 657,865 | 22.5% |
| ● | 20 to 39 years | 735,281 | 25.1% |
| ● | 40 to 59 years | 799,265 | 27.3% |
| ● | 60 to 79 years | 593,928 | 20.3% |
| ● | 80 years and over | 139,941 | 4.8% |

Data Sources

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Demographic Data

The demographic data in this report is compiled from several sources using a specialized process. Sources include annual population estimates and population projections from the US Census Bureau, birth and mortality rates from the US Health Department, and projected regional job growth.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Unemployment Data

The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Educational Attainment Data

EMSI's educational attainment numbers are based on EMSI's demographic data and the American Community Survey. By combining these sources, EMSI interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

Infogroup Business-Level Data

Data for individual businesses is provided by Infogroup, which maintains a database of more than 16 million U.S. business entities. Note that in aggregate it will not be consistent with EMSI labor market data due to differences in definitions, methodology, coverage, and industry/geographic classification.

State Data Sources

This report uses state data from the following agencies: Florida Department of Economic Opportunity

Business and Education Summit General Breakout Session Recap

On September 18, 2015, CareerSource Pinellas and CareerSource Tampa Bay hosted the 9th Regional “Taking the Next Step” Business and Education Summit. Industry Leaders gathered to discuss and share industry specific information. Highlights included:

- Needs include verbal Communication. Computer skills – Navigating the computer and Microsoft Office. Security Lock Systems also stated that more Locksmiths are needed.
- Creativity – Innovation. LinkedIn Training. Troubleshooting problems. Skillset Translation. Sentry Event Services also suggested that we needed talent with the right customer services skills and verbal skills.
- Convergys stated that basic life skills are shortages they are facing. Independence is lacking. Comprehension of instructions. Organized communication. Interpersonal Skills. Work ethic.
- Sometimes only part time positions are available and employers are not able to bring on bring on FT positions at company. Higher pay at other companies causing employees to change companies. Employees are not willing to work hard. Problems with attendance. Good workers are taken quickly. Some resolutions offered were employee engagement and implement a career path. Grow internal entry level employees to management positions.
- Employers willing to train new employers but they feel they can’t train/teach them soft skills such as coming in to work on time and work ethic.

Conclusion

One of the principal goals of CareerSource Pinellas and CareerSource Tampa is to build long-term economic vitality for the Tampa Bay community through the attraction and retention of jobs that pay above average wages in targeted primary industries.

Attracting and retaining jobs that pay an above-average salary in targeted primary industries is a necessary component of economic development. High-wage jobs fuel research projects, foster high-tech industry growth, support a high quality of life and contribute to the counties overall economy. Strategic partnerships are essential in meeting the challenges of the 21st century economy. A comprehensive workforce development program must engage a broad array of human capital and economic development stakeholders in order to support continued state and regional economic growth.

A population of highly-skilled workers is a prerequisite for many employers who consider relocating or expanding into a given area. Florida continues to lead the nation in job growth, emphasizing on better educated and higher-skilled workers. This will intensify as the labor market continues to become more knowledge-based versus production-based. Many of the most advanced and lucrative industries, such as computer manufacturing and biotechnology, rely on the research capabilities of universities to assist in the development of new technologies. In order to successfully compete with other regions to attract and retain high-wage primary employers, both CareerSource Pinellas and CareerSource Tampa have established long-term working relationships with local, public and private education providers to identify educational opportunities that meet the needs of the business community.

CareerSource Pinellas and CareerSource Tampa Bay, in partnership with industry and education, will continue to host the Tampa Bay Regional Business & Education Summit. It is our goal that the information shared in this 2015 Report Card, Tampa Bay Regional “Taking the Next Step” Business & Education Summit will assist all partners with the information needed to provide a skilled workforce and a viable economy.

References

- Economic Modeling Systems, Inc. (2015). Economic forecaster: Industry reports. Retrieved from <http://www.economicmodeling.com/>
- Tampa Bay Gap Analysis Council. (2014). Tampa Bay Skills Gap Analyses. Retrieved from <http://tampabaygapanalysis.com/>
- United States Department of Labor- Aerospace. (2010). High growth industry profile: Aerospace. Retrieved from <http://www.doleta.gov/BRG/Indprof/Aerospace.cfm>
- United States Department of Labor- Manufacturing. (2010). High growth industry profile: Manufacturing. Retrieved from http://www.doleta.gov/BRG/Indprof/Manufacturing_profile.cfm
- United States Department of Labor- Construction. (2010). High growth industry profile: Construction. Retrieved from http://www.doleta.gov/BRG/Indprof/construction_profile.cfm
- United States Department of Labor- Financial Services (2010). High growth industry profile: Financial Services. Retrieved from http://www.doleta.gov/BRG/Indprof/Financial_profile.cfm
- United States Department of Labor- Health Care. (2010). High growth industry profile: Health care. Retrieved from <http://www.doleta.gov/BRG/Indprof/Health.cfm>
- United States Department of Labor- Information Technology. (2010). High growth industry profile: Information Technology. Retrieved from http://www.doleta.gov/BRG/Indprof/IT_profile.cfm