2013 Strategic Report Card
Tampa Bay Regional
Taking the Next Step
Business and Education Summit

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Quotes from Industry Leaders

St. Luke's Cataract and Laser Institute was pleased to have had the opportunity to sponsor the 2013 Business and Education Summit. As a participant I found the keynote speaker, Theresa Payton, to be an engaging speaker who ensured that all present left with a greater awareness of the need to protect both our businesses and our personal data from cyber threats. The format of the program also allowed adequate time for brainstorming with others within industry-specific breakout sessions, as well as an update related to resources that are available to employers through WorkNet Pinellas. I found the meeting to be very worthwhile, and look forward to future WorkNet events. **Linda Austin, P.H.R.- Human Resources Manager-St. Luke's Cataract and Laser Institute**

"The Business and Education summit was an excellent event to discuss the challenges and opportunities for aligning our education and workforce systems with the needs and goals of the local businesses. I especially enjoyed the conversations in the breakout sessions as it was good to hear multiple perspectives on how we can leverage each other for the good of the community**." Dwayne Ingram, Partner Avasant Management Consulting and Chairman of the Board of Workforce Florida.**

"The Business and Education Summit gives St. Petersburg College valuable insight into the business needs of our community, allowing the college to develop educational programs and initiatives that serve the local workforce effectively such as our *Learn to Earn* program. This collaboration helps create a skilled and competitive workforce that keeps local businesses healthy, but also attracts potential new businesses". **Dr. Bill Law, President, St. Petersburg College.**

"Work Net strikes gold, they have brought business / education together in a positive mode to share their ideas and goals. Everyone got to contribute, the shame was our lack of time. I learned a lot and now we need to take this to the next step and expand to more than once a year and give us more time." **Dick Peck, President, QTM, Inc.**

This year's WorkNet Business & Education Summit was a real eye-opener. The keynote presentation on cyber security and identity theft provided information that every person should know. We're definitely taking a much closer look at how we share and receive data within our organization thanks to what I learned! And the education panel and breakout sessions were enlightening as well. A great event! **Tom Morrissette, President-Central Pinellas Chamber of Commerce**

The Summit was an outstanding opportunity for Business and Education to navigate and collaborate on the complexities of Human Capital Management. **Charles Daye, SVP Human Resources, Ceridian**

"Theresa Payton's keynote address gave us a lot to consider, think about and was very action oriented. We appreciate the immediacy of the topic, as well as the opportunity to spend time with colleagues around the Tampa Bay area." **- Kevin Lothridge- CEO, National Forensic Science Technology Center**

"I always look forward to the Summit and have never been disappointed. The combination of keynote speaker, small group breakouts, panel and large group discussion is a very good approach for community engagement. I was especially interested in this year's panel that focused on career and technical education in K-12. My hats off to the WorkNet Board and Staff." **Terry Boehm, President, Pinellas Education Foundation**

"BayCare both supports and participates in the Annual Business & Education Summit because it allows us to communicate our workforce needs within the health care industry and seek educational support." **Craig Brethauer, Vice President, Team Resources, BayCare Health System**

It is encouraging to know that WorkNet Pinellas and the Tampa Bay Workforce Alliance are actively seeking input from employers in the region in an effort to support employers' needs. The keynote speakers are always intelligent and entertaining. The Summit is a great event for networking and we look forward to attending every year. **Michele Schrotter, Corporate Education Specialist, Bouchard Insurance**

The Business and Education Summit was a terrific way to spend the morning, and I mean that. While I'm often hesitant to commit to that amount of time, I felt it was more than well spent. Being a part of shaping the future of the Tampa Bay community by helping to make the connection from education to business, and how we REALLY get there, was invaluable. I learned that indeed there is a disconnect and that through serious dialogue we can begin to shape the education system to better serve our local employers needs. **Bridgette Mill, President and Publisher, Tampa Bay Business Journal**

"The Business & Education Summit is superb. It's a great expenditure of time linking together the essential players – businesses, employers, education providers and elected leadership - to ensure strategic action takes place in one of the top priority issues for businesses – preparing a skilled and ready-to-work talent supply. Our state as a whole benefits from the collaboration that takes place during this summit and subsequent actions thereafter." **Jessica R. Eilerman, Market Manager - Gulf Coast/Southwest -Representing CFO Jeff Atwater**

Introduction

Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted the 7th Annual "Taking the Next Step" Business & Education Summit on September 6, 2013. This regional event brought together more than 180 business and educational leaders from both sides of the Tampa Bay in one setting to focus on regional specific industry needs. WorkNet Pinellas has developed a report card to measure data on key indicators which will be used as a baseline to monitor trends in for the Tampa Bay region. Tampa Bay WorkForce Alliance and WorkNet Pinellas are committed to create a highly skilled and competitive workforce to meet the demands of business 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 2007-2012 State Strategic Plan for Economic Development and the Workforce Florida, Inc. Strategic Plan. Tampa Bay WorkForce Alliance and WorkNet Pinellas chose the following targeted industries sectors to survey prior to the Summit.

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

Labor Market Information (LMI) from all of these industry sectors were presented in breakout sessions during the 2013 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 Tampa Bay WorkForce Alliance and WorkNet Pinellas Board of Directors to frame issues related to business and economic development. We will continue to build upon this report card through 2014.

This year our guests were polled during the Summit on the topic cybersecrity and how it affects them and their industries. Below are the polling results.

Have you ever been a victim of a data breach (i.e. your personal data has been compromised or the company you work for had a data breach)?

 54% -YES
46% - No

Where do you see the biggest growth occurring?

1. Social Networking platforms for customer loyalty and retention - 31%
2. Moving data and applications to the cloud - 36%
3. Implementing bring your own device - 12%
4. Leveraging Big Data - 21%

3

Regarding cyber security, what's your biggest nightmare?
1. A lawsuit -8%
2. Being splashed on the front pages of the newspaper - 12%
3. Theft of intellectual property - 20%
4. Theft of customer data – 59%

Business & Education Summit Electronic Survey Data: 2013

Industry	# Responding	# Sent	% Responding
Financial & Professional Services	17	35	48.6%
HealthCare	8	21	38.1%
Construction	7	9	77.8%
IT	8	16	50.0%
Aviation & Manufacturing	11	24	45.8%
Other*	36	102	35.3%
Total	87	207	42.0%

Other	# Sent
Education	29
WorkNet/TBWA Staff	8
Community Organizations	34
Government, Law, Staffing, etc.	31
Other Total	102

2007-2012 historical survey data is available on www.worknetpinellas.org

Sample-7th Regional Business & Education Summit Electronic Survey

In order to develop a report card to meet the needs of your business, we are requesting that you complete the following questionnaire.

1. **Which of the following best describes your company's industry?**

☐ Aviation

☐ Construction

☐ Financial & Professional Services

☐ HealthCare

☐ IT

☐ Manufacturing

☐ Other

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

☐ Do you agree that the Tampa Bay Community has a labor force that meets your demands for qualified employees in entry-level positions? 1 Strongly Disagree

☐ 2

☐ 3 Agree

☐ 4

☐ 5 Strongly Agree

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

☐ 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 Strongly Disagree

☐ 2

- ☐ 3 Agree
- ☐ 4
- ☐ 5 Strongly Agree

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

- ☐ Over the last 5 years, has it been easier to find people with the appropriate skills? 1 Extremely Difficult
- ☐ 2
- ☐ 3 Satisfied
- ☐ 4
- ☐ 5 Extremely Easy

5. Over the last 5 years, has retention in your organization improved?

- ☐ Over the last 5 years, has retention in your organization improved? 1 Not improved
- ☐ 2
- ☐ 3 Improved
- ☐ 4
- ☐ 5 Greatly Improved

6. How helpful is pre-screening skill testing (assessments) to your organization?

- ☐ How helpful is pre-screening skill testing (assessments) to your organization? 1 Not Done
- ☐ 2
- ☐ 3 Helpful
- ☐ 4
- ☐ 5 Very Helpful

7. How often are your employees promoted from within?

- ☐ How often are your employees promoted from within? 1 Not Often
- ☐ 2
- ☐ 3 Often
- ☐ 4
- ☐ 5 Frequently

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

- How often do you use apprentices or On the Job Training (OJT) programs? 1 Not Often
- 2
- 3 Often
- 4
- 5 Frequently

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

- 1 Strongly Disagree
- 2
- 3 Agree
- 4
- 5 Strongly Agree

10. Do you agree that County Economic Development assists in retaining and growing your organization?

- 1 Strongly Disagree
- 2
- 3 Agree
- 4
- 5 Strongly Agree

11. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

- 1 Strongly Disagree
- 2
- 3 Agree
- 4
- 5 Strongly Agree

12. Do you agree that career academies prepare students for college and careers?

- 1 Strongly Disagree
- 2
- 3 Agree

○ 4

○ 5 Strongly Agree

13. Any additional comments:

[text area]

Any additional comments:

[Done]

Aviation

2013 Aviation Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 2,443 jobs in Aviation with a growth rate of 15.8% over the next 10 years and a median earning at $26.75 hr.

Occupation Group

Aerospace Engineers (17-2011)

Aerospace Engineering and Operations Technicians (17-3021)

Cargo and Freight Agents (43-5011)

Avionics Technicians (49-2091)

Aircraft Mechanics and Service Technicians (49-3011)

Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)

Aircraft Cargo Handling Supervisors (53-1011)

Airline Pilots, Copilots, and Flight Engineers (53-2011)

Commercial Pilots (53-2012)

Air Traffic Controllers (53-2021)

Airfield Operations Specialists (53-2022)

Overview

Annual Openings Estimate (2013)	102
Related Completions (2012)	295
Current Job Postings	N/A for Multiple Codes

Gender		
Male	81%	
Female	19%	

Age		
14-18	0%	
19-24	4%	
25-44	42%	
45-64	50%	
65+	3%	

2,443	15.8%	$26.75/hr
Jobs (2013)	**% Change (2013-2023)**	**Median Earnings**
National Location Quotient: 0.66	Nation: 11.4%	Nation: $34.10/hr

Pinellas Hillsborough | Growth

2,443	2,829	386	15.8%
2013 Jobs	**2023 Jobs**	**Change (2013-2023)**	**% Change (2013-2023)**

Occupation	2013 Jobs	2023 Jobs	Change	% Change
Air Traffic Controllers (53-2021)	119	144	25	21%
Aerospace Engineers (17-2011)	352	441	89	25%

Occupation	2013 Jobs	2023 Jobs	Change	% Change
Cargo and Freight Agents (43-5011)	725	816	91	13%
Aircraft Mechanics and Service Technicians (49-3011)	614	677	63	10%
Airline Pilots, Copilots, and Flight Engineers (53-2011)	171	173	2	1%
Airfield Operations Specialists (53-2022)	12	15	3	25%
Avionics Technicians (49-2091)	114	131	17	15%
Aircraft Cargo Handling Supervisors (53-1011)	39	41	2	5%
Commercial Pilots (53-2012)	216	279	63	29%
Aerospace Engineering and Operations Technicians (17-3021)	73	69	-4	-5%
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)	7	42	35	500%

Pinellas Hillsborough | Percentile Earnings

$17.10/hr	$26.75/hr	$39.69/hr
10th Percentile Earnings	Median Earnings	90th Percentile Earnings
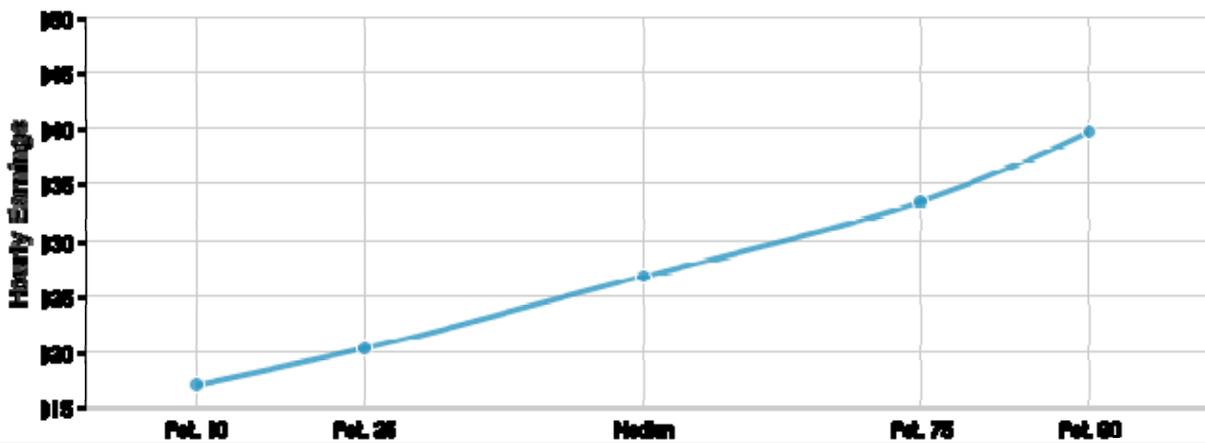
Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Air Traffic Controllers (53-2021)	$21.24	$36.70	$54.57
Aerospace Engineers (17-2011)	$27.65	$41.72	$58.57

Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Cargo and Freight Agents (43-5011)	$12.50	$19.96	$29.15
Aircraft Mechanics and Service Technicians (49-3011)	$14.49	$22.05	$34.23
Airline Pilots, Copilots, and Flight Engineers (53-2011)	$31.30	$43.75	$64.56
Airfield Operations Specialists (53-2022)	$12.08	$20.57	$31.01
Avionics Technicians (49-2091)	$14.02	$19.57	$24.41
Aircraft Cargo Handling Supervisors (53-1011)	$12.39	$16.21	$40.02
Commercial Pilots (53-2012)	$10.70	$27.64	$42.09
Aerospace Engineering and Operations Technicians (17-3021)	$13.93	$17.98	$30.68
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)	$13.57	$21.91	$33.68

Regional Trends
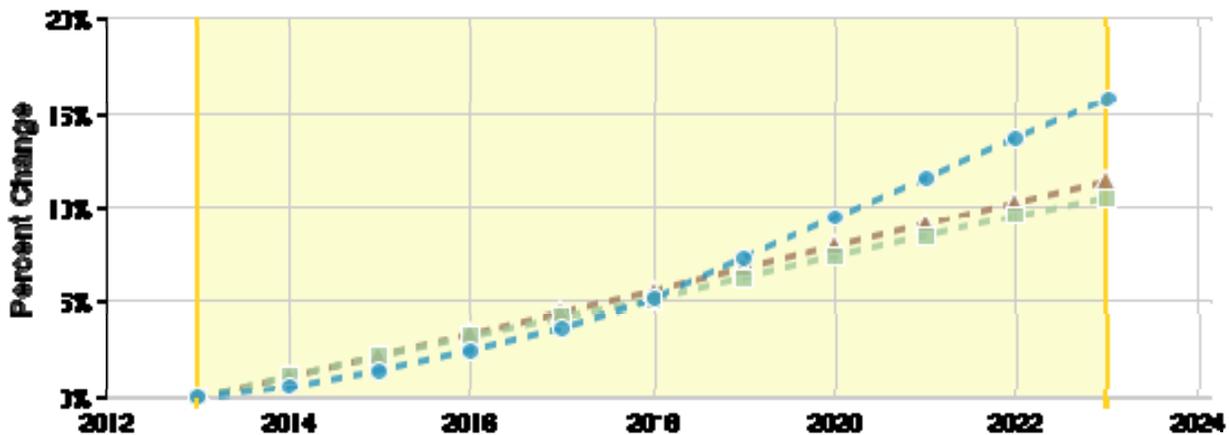
	Region	2013 Jobs	2023 Jobs	% Change
●	Pinellas Hillsborough	2,443	2,829	15.8%
●	State	35,814	39,595	10.6%
●	Nation	504,137	561,750	11.4%

Region	2013 Jobs	2023 Jobs	% Change

Data Sources and Calculations

State Data Sources

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

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 completer's 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.

Manufacturing

2013 Manufacturing Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 53,903 jobs in Manufacturing with a growth rate of -2.0% over the next 10 years with average earnings of $68,040.00

NAICS 31

Overview

Establishments (2012)	2357
Jobs Multiplier	Only Available for 6-Digit
Unemployed (3/2013)	5,219

Gender		
Male	68%	

Female	32%	▬

Age		
14-18	0%	▮
19-24	5%	▪
25-44	40%	▬▬
45-64	51%	▬▬▬
65+	4%	▪

	-2.0%	**$68,040**
53,903		
Jobs (2013)	**% Change (2013-2023)**	**Average Earnings Per Job (2013)**
National Location Quotient: 0.61	Nation: 0.4%	Nation: $76,861

Regional Trends
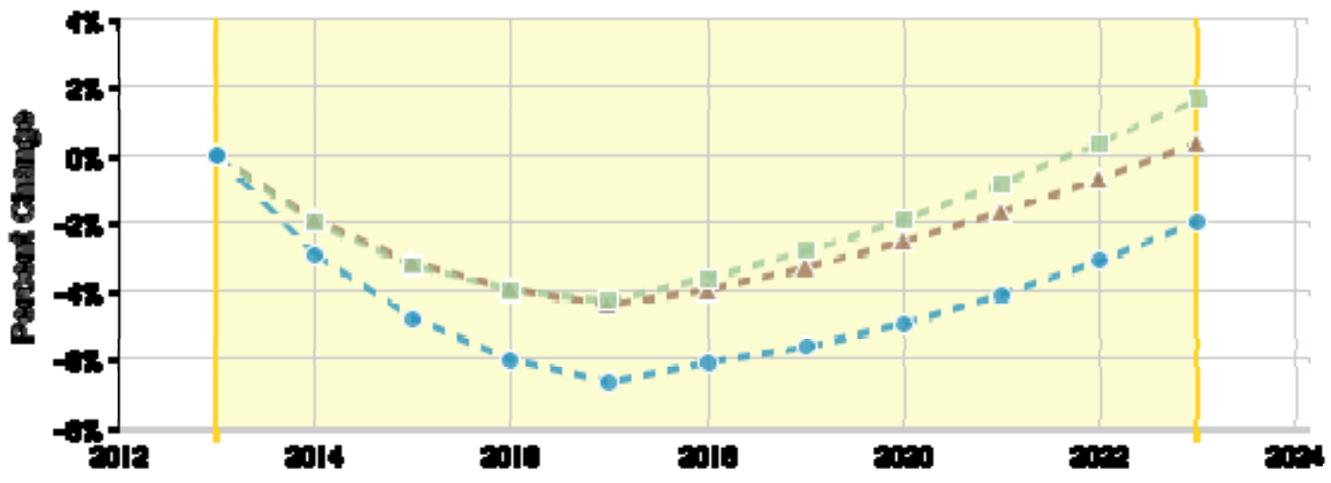
Region	2013 Jobs	2023 Jobs	% Change

Region	2013 Jobs	2023 Jobs	% Change
● Pinellas Hillsborough	53,903	52,845	-2.0%
● State	317,461	322,740	1.7%
● Nation	11,994,049	12,037,443	0.4%

Staffing Patterns

Occupation	Employed in Industry (2013)	% of the Total Jobs in Industry (2013)
Team Assemblers (51-2092)	3,081	5.7%
First-Line Supervisors of Production and Operating Workers (51-1011)	1,911	3.5%
Electrical and Electronic Equipment Assemblers (51-2022)	1,892	3.5%
Packaging and Filling Machine Operators and Tenders (51-9111)	1,564	2.9%
Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)	1,562	2.9%

State Data Sources

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

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.

Input-Output Data

The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts.

Equifax Business-Level Data

Data for individual businesses is provided by Equifax (http://www.equifax.com/commercial/), which maintains a database of more than 20 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 classificati

2013 Regional Business & Education Summit survey results for Aviation -Manufacturing

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

Strongly Disagree	9.1%
Disagree	9.1%
Agree	63.6%
Somewhat Strongly Agree	18.2%
Strongly Agree	0.0%

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

Strongly Disagree	9.1%
Disagree	54.5%
Agree	18.2%
Somewhat Strongly Agree	9.1%
Strongly Agree	9.1%

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

Extremely Difficult	18.2%
Difficult	27.3%
Satisfied	36.4%
Easy	18.2%
Extremely Easy	0.0%

4. Over the last 5 years, has retention in your organization improved?

Not improved	0.00%
Somewhat Improved	9.1%
Improved	54.5%
Somewhat Greatly Improved	27.3%
Greatly Improved	9.1%

5. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	9.1%
Somewhat Helpful	0.0%
Helpful	36.4%
Somewhat Very Helpful	27.3%
Very Helpful	27.3%

6. How often are employees promoted from within?

Not Often	0.00%
Somewhat Often	27.3%
Often	54.5%
Somewhat Frequently	9.1%
Frequently	9.1%

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

Not Often	45.5%
Somewhat Often	18.2%
Often	9.1%
Somewhat Frequently	0.0%
Frequently	27.3%

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

Strongly Disagree	9.1%
Disagree	45.5%
Agree	36.4%
Somewhat Strongly Agree	9.1%
Strongly Agree	0.0%

9. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	0.0%
Disagree	36.4%
Agree	54.5%
Somewhat Strongly Agree	9.1%
Strongly Agree	0.0%

10. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	9.1%
Disagree	18.2%
Agree	63.6%
Somewhat Strongly Agree	9.1%
Strongly Agree	0.0%

11. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	9.1%
Disagree	27.3%
Agree	45.5%
Somewhat Strongly Agree	9.1%
Strongly Agree	9.1%

12. Additional Comments:
   - I feel that more needs to be done at the middle or high school level to better prepare young adults for careers, and making them aware of their options after high school.
   - Several of these questions were difficult to answer because we have two very different employee populations - our manufacturing hourly population and our technical salaried population. I would have answered the questions differently for each employee group. Please let me know if you need further clarification. Thanks for all that you are doing.
   - Educational institutions seem to focus too much on providing education (degrees) that suit the interests of younger high school graduates, rather than on providing training that focuses on the real needs of businesses today. I understand schools need to make money, but it's too bad that so

many students graduate with degrees that really don't help them in the real world, nor do they really support the needs of the bulk of local industries. We need to find ways of encouraging students to study for careers that may not look so glamorous but can help them attain real success and prosperity. This will also better serve the reputation of learning institutions in the long run.

Business and Education Summit Aviation- Manufacturing Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Annual "Taking the Next Step" Business and Education Summit. Industry leaders from the Aviation & Manufacturing community gathered to discuss and share the following information. The session was led by Michael Wisniewski, President of National Aviation Academy and Dick Peck, President of QTM, Inc.

1. Currently, what technical skills are you seeking?
   a. Computer/Software skills
   b. Mechanical skills
   c. Soft skills to work within a team and with customers
   d. Ability to read blueprints
   e. Ability to use hand tools

2. What technical skills do you think you will need in the future?
   a. Soft skills to work within a team and with customers
   b. Ability to read blueprints
   c. Ability to use hand tools
   d. Leaders forecast the need for reduced headcount due to manufacturing automation

3. What are the three or four occupational shortages that you face?
   Not seeing a shortage but more of a retention issue. It is felt that the following are the reasons for retention issues which account for shortages:
   a. Today's youth don't do a lot of work with their hands. They are used to technology and apps for everything.
   b. Lack of soft skills taught in the school and at home.
   c. Lack of motivation and work ethics.
   d. Lack of social skills.

4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?
   With the job market's slight improvement, retention problems stem from lack of reliability and work ethic in today's generation of workers. Employees are not showing concern about not having employment, missing a lot of work and easily leave a job if it seems that it is too much work. Solutions needed to help improve retention are:
   a. Work readiness training with students from middle school (8th grade) through high school teaching reliability, positive attitudes, eye contact, social skills, problem solving, and that work is hard work, that you may not like what you do every day or if you are corrected by a superior but you persevere. With this technology age everyone is plugged into their smart phones and disengaged with the world around them.
   b. Companies need to mentor and partner with schools
   c. Internships
   d. Summer Jobs
   e. 2nd shift is a high rate of no shows. Start using college students for 2nd shift jobs for 20 hr/wk shifts.
   f. Teaching people with disabilities for manufacturing positions.

g. Provide employee value program such as flexibility with work schedules and employer paid training to get and keep employees excited and motivated.
h. On the Job Training

5. Are post-secondary institutions meeting the demands of your industry? Is there any training you feel is inadequate or inappropriate? What would you like to see changed in those areas?
   a. School curriculums need to keep up with the ever moving technology age. Work with educators on what they need in an employee. Attendees felt that the currently curriculum is running about 3 years behind manufacturing technology.
   b. Schools are not meeting the demands of manufacturing as they do not promote manufacturing as a good career choice. Companies need to educate on the benefits of the career and get involved in school open house with students and parents.

6. What is your current training system for incumbent workers? Do you have any gaps in that training? Currently doing cross training. Need 3 paths of training for new and incumbent workers for success:
   a. Leadership
   b. Technical
   c. Marketing

Additional Information
- Oldsmar Chamber 25% of the states manufacturing is located in the Tampa Bay metropolitan area.
- Manufacturing does not advertise their jobs or their company in a large capacity. Therefore people do not think of manufacturing as a career option.
- Both Aviation - Manufacturing are not highly explored career choice by school counselors.
- Companies are shy to share information and have people come in due to keeping privacy as to who their customer base is and what their costs are to keep competitors out.
- Hiring signs are usually outside their unassuming buildings in industrial areas.
- Need to inform middle and high school students of their job opportunities by going out to the school and bringing them for field trips.
- Need to also market more through the manufacturing association.

Leaders also reviewed the **Hillsborough-Pinellas Manufacturing Gap Analysis** from August 2013

Executive Summary

Hillsborough and Pinellas counties' leading economic and workforce development organizations have joined together to quantify the area's difficult to fill manufacturing skill sets. The analysis was designed to be comprehensive enough to reach the granular level at which manufacturers must make decisions, and also to account for the unique strengths the area has in component, medical, and aerospace manufacturing. In total, 107 skill sets across 16 job type categories were surveyed. The survey asked for current, 12 month, and 12-36 month vacancies. There were 109 responding companies, representing 14,715 employees, or 28.9% of the entire manufacturing employee population in the two county area.

The widening manufacturing skills gap has been monitored by local economic and workforce development organizations, but recent discussions of increased hiring challenges led to a more detailed analysis. Two professional staff were hired to conduct the analysis, with the economic and workforce development organizations providing oversight. In addition to the comprehensive

manufacturer survey, research of existing data sources, interviews, and industry group discussions were conducted.

Data from the analysis showed an increasing shift from traditional manufacturing methods to more advanced methods. The highest12-month vacancies were for production solderers, which work predominately in the areas component manufacturers. CNC machining positions were ranked as having the second and fourth highest vacancies, underscoring the shift from traditional to advanced methods. Maintenance mechanics had the third highest 12-month vacancies. They are demanded across every manufacturing cluster. Mig and Tig welders were tied as having the fifth highest 12-month vacancies.

Based on the interviews, the organizations determined three action areas, where they believed they could make an impact to improve the manufacturing talent pipeline.

Areas for improvement:

1. A lack of interest in manufacturing is causing a shortage of skilled workers.
2. Workers lack knowledge of industry.
3. There needs to be a greater connection between industry and education.

Solutions:

1. Organize manufacturing job opportunities public relations campaign.
2. Increase internship and apprenticeship offerings.
3. Improve coordination between industry, education, and government.

For the full report, please visit www.manufacturingskillsgap.com

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 that "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 to 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 -2013)

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

High Growth Industry Profile -Advanced Manufacturing

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), 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 -2013)

Construction

2013 Construction Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 44,360 jobs in Construction with a growth rate of 22.5% over the next 10 years and average earnings per job $54,064

Report Info

Dataset Version	2013.2 Class of Worker
Class of Worker Categories	QCEW Employees
Timeframe	2012
Dataset Category	EMSI Complete
Region Name	Pinellas Hillsborough

Counties

Hillsborough, FL (12057)	Pinellas, FL (12103)

Construction

NAICS 23

Overview

Establishments (2012)	6126
Jobs Multiplier	Only Available for 6-Digit
Unemployed (3/2013)	4,215

Gender		
Male	80%	

Female	20%	▬

Age

14-18	1%	▪
19-24	7%	▪
25-44	45%	▬▬▬
45-64	43%	▬▬▬
65+	4%	▪

44,360	**22.5%**	**$54,064**
Jobs (2013)	% Change (2013-2023)	Average Earnings Per Job (2013)
National Location Quotient: 1.06	Nation: 20.6%	Nation: $63,474

Regional Trends
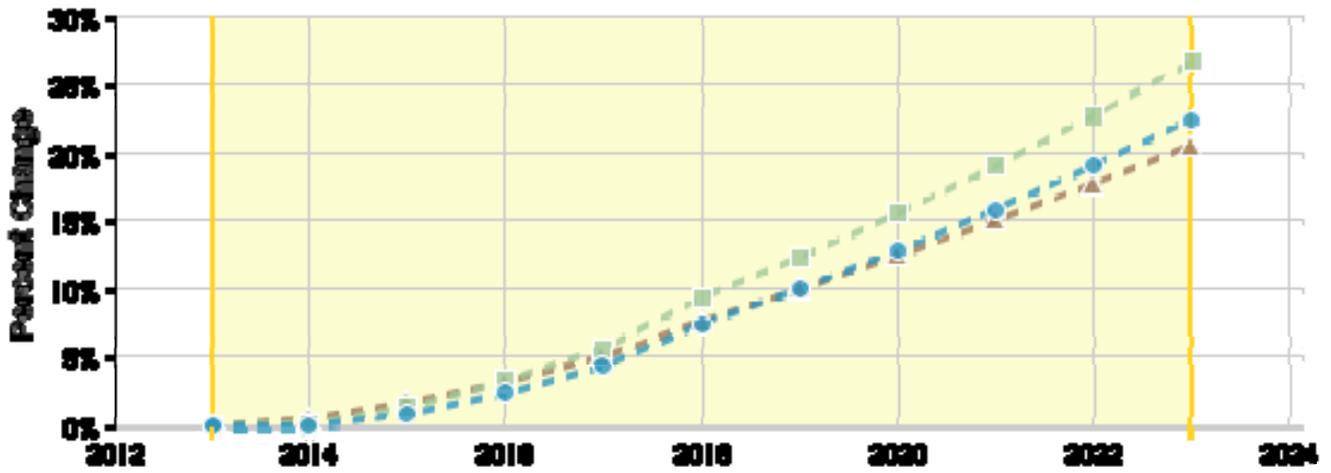
	Region	2013 Jobs	2023 Jobs	% Change
●	Pinellas Hillsborough	44,360	54,352	22.5%
●	State	347,533	440,562	26.8%
●	Nation	5,671,018	6,838,355	20.6%

Staffing Patterns

Occupation	Employed in Industry (2013)	% of the Total Jobs in Industry (2013)
Construction Laborers (47-2061)	3,903	8.8%
Electricians (47-2111)	3,296	7.4%
Carpenters (47-2031)	3,250	7.3%
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	3,004	6.8%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	2,075	4.7%

State Data Sources

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

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.

Input-Output Data

The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts.

Equifax Business-Level Data

Data for individual businesses is provided by Equifax (http://www.equifax.com/commercial/), which maintains a database of more than 20 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.

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

Strongly Disagree	0.0%
Disagree	42.9%
Agree	42.9%
Somewhat Strongly Agree	0.0%
Strongly Agree	14.3%

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

Strongly Disagree	14.3%
Disagree	42.9%
Agree	42.9%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

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

Extremely Difficult	14.3%
Difficult	42.9%
Satisfied	28.6%
Easy	14.3%
Extremely Easy	0.0%

4. Over the last 5 years, has retention in your organization improved?

Not improved	33.3%
Somewhat Improved	16.7%
Improved	16.7%
Somewhat Greatly Improved	33.3%
Greatly Improved	0.0%

5. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	14.3%
Somewhat Helpful	14.3%
Helpful	14.3%
Somewhat Very Helpful	0.0%
Very Helpful	57.1%

6. How often are employees promoted from within?

Not Often	0.0%
Somewhat Often	0.0%
Often	57.1%
Somewhat Frequently	14.3%
Frequently	28.6%

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

Not Often	0.0%
Somewhat Often	0.0%
Often	50.0%
Somewhat Frequently	16.7%
Frequently	33.3%

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

Strongly Disagree	14.3%
Disagree	14.3%
Agree	57.1%
Somewhat Strongly Agree	14.3%
Strongly Agree	0.0%

9. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	0.0%
Disagree	57.1%
Agree	28.6%
Somewhat Strongly Agree	14.3%
Strongly Agree	0.0%

10. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	0.0%
Disagree	0.0%
Agree	33.3%
Somewhat Strongly Agree	0.0%
Strongly Agree	66.7%

11. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	16.7%
Disagree	16.7%
Agree	50.0%
Somewhat Strongly Agree	16.7%
Strongly Agree	0.0%

12. Additional Comments:
    "NCCER is not the best curriculum for the construction industry!"

Business and Education Summit Construction Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Construction industry

gathered to discuss and share the following information. The session was led by Tom Bedwell, Assistant Training Director, International Brotherhood of Electrical Workers, Local 915

1. What technical skills are you seeking?

In addition to Mechanical aptitude, ability to learn new information, willingness to work hard, identifying and using tools and equipment, willingness to participate in an OJT environment and basic technology skills; it is becoming apparent that the growing population of youth has no exposure to manual labor or use of tools during their formative years. The introduction to the construction trades basic equipment should begin in elementary and middle school. Exposure to Educational trade opportunities, industry mentoring related training will create a pathway toward technical careers prior to preapprenticeship in high school.

With computer driven systems entering the construction market, the current technical skills must be supplemented by additional technology skills.

Challenges:
- Competing with independent government funded training
- Educating parents and students of the benefits of apprenticeship training over no fee schools
- Recognition that a certificate with no OJT training is of no value to employers
- Low voltage and voice data cabling is evolving and changing the construction industry training needs
- Acknowledgement of training for Wireless Security systems, Automation and Control System technology
- Segregation of the trades job functions; Crews do different segments of the building process

 The basics have not changed, however the process is becoming more specialized in many of the trades.

2. What technical skills will you need in the future?

In addition to Technology for problem solving, use of Tablets, OSHA certification, smart phone, web usage blueprint reading, electronic plan review, basic & construction math, read a rule; BIM is the future coupled with retrofitting and wireless. Technology and design is becoming more aesthetic in nature. Data is now transmitted through light making Cameras able to transmit data. In addition to the past basics skills individuals will prepare through STEM training to be capable of integrating technology into the construction processes. Permitting will change resultant of no inspection required.

3. What are three or four occupational shortages that you face?

- Continued lack of individuals with hands-on skills
- Individuals choosing alternate careers
- Limited employment of the past 5 years creating severe shortage
- Skilled workers who have turned to other interests and career paths
- Apprenticeship drops
- Underemployed degreed professionals who are returning to school

2013 brings a shortage of qualified construction Trainers. There is a method to teaching and the trades are struggling to find capable trainers for the first time. Train the trainers are needed to teach fundamental instructional skills to emerging young leaders.   Some former workers no longer possess the computer skills although they possess the hands-on to teach.   Everyone is wearing multiple hats so

finding the right individuals to do your training is challenging. Also the pay to teach vs the money to work is not always comparable.   Weekend training does offset some challenges. Training costs money. Industries that are supported by members are successful.

Preapprenticeship continues to an integral component to mentor youth and create awareness of the trades and build apprenticeship programs. Eventually the fear is that it will be necessary to go overseas to solicit qualified individuals and leave American youth under and unemployed.

Construction is supply and demand including training of qualified workers. Apprenticeship is training and working conjunctively. Government needs to support marketing of construction. We are moving to a certified society which assesses your skill level. State of Florida is getting funding for completers of industry recognized certification. HVAC currently is the only trade in Pinellas County that is recognized by PCSB.

4. What are your biggest retention problems?

Although the construction trades are showing growth; stagnated and sporadic employment unrelated to skills along with stifled economic trends have created the need for individuals to be multi-faceted in their skillset.

Currently neither Electric nor welding report retention problems.   There are retention cycles with open shop programs depending on the trade. Union contractors and training associations do not have retention issues. Small and mid-size business owners explain that providing adequate health care does impact their ability to maintain and retain employees.

The work ethic and loyalty of the new generation is not equivalent to past generations. The dilemma is not knowing whether employees might or might not show up for work. People are leaving the trades to go to training programs that are paid for by the government in some trades.

5. What solutions have been developed to try and solve your retention problems?

The economy continues to slowly create more construction and design jobs. Associations are working diligently to build partnerships and preapprenticeship promotes the trades as a bonafide career, not a job. All affiliations report cross training and licensure as paramount to retention.

Manpower share program in Open Shop trades helps to keep people employed, particularly apprentices. Union contractors do not report absenteeism. Hard to incentivize non-performing employees. How Manpower share may be affected by healthcare changes and requirements to insure 50+ employees could affect future retention.

6. Are post-secondary institution meetings the demands of your industry?

Many Bachelor's degrees professionals are reentering Apprenticeship for industry certifications and training.   OJT continues to be highly valued by employers. Untrained personnel are hazardous and unprofitable. Journeyman upgrade training is very important in today's work environment.

Is there any training you feel is inadequate or inappropriate? Infiltration of low grade training

What would you like to see changed in those areas?
Take money and give to apprenticeship programs. Trend to flexibility in training times to serve through evening classes and online or weekends.   Accomodation for Hands-on which cannot be taught on-line. Web based training is suitable for crews that travel and cannot come to class. Apprenticeship funding has

dwindled. Colleges are now funding 1/2 of previous. As the economy increases. Apprentices cannot be charged tuition. Apprenticeship is funded by members and supplemented by DOE through either the technical schools. Some programs would rather see training take place at the college.

What is your current training system for incumbent workers?

1. Math & mechanical drawing
2. Apprenticeship
3. OJT training
4. OSHA l safety training
5. Workforce – Energy l Green related training
6. CEU's
7. Preapprenticeship

 Do you have any gaps in that training?

An enhanced need for Refresher courses - trade specific, leadership, licensure requirements.

Note: Incumbent workers training through workforce has been very helpful. Needing to mentor 'next gen' training to develop leadership training for current labor staff. Create more supervisory training which will escalate to dynamic emerging leaders. Recommended by owners. Development of camaraderie. Cross industry monthly training. Visit projects. Tour and learn more about other trades. Panels from different trades. Enhanced project supervision training.

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 -2013)

Financial/Professional Services

2013 Financial /Professional Services Occupation Report-Hillsborough-Pinellas
Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 137,147 jobs in Financial /Professional Services with a growth rate of 14.7% over the next 10 years with average earnings of $80,507.

Industry Group

Monetary Authorities-Central Bank (521110)
Commercial Banking (522110)
Savings Institutions (522120)
Credit Unions (522130)
Other Depository Credit Intermediation (522190)

Credit Card Issuing (522210)

Sales Financing (522220)

Consumer Lending (522291)

Real Estate Credit (522292)

International Trade Financing (522293)

Secondary Market Financing (522294)

All Other Nondepository Credit Intermediation (522298)

Mortgage and Nonmortgage Loan Brokers (522310)

Financial Transactions Processing, Reserve, and Clearinghouse Activities (522320)

Other Activities Related to Credit Intermediation (522390)

Investment Banking and Securities Dealing (523110)

Securities Brokerage (523120)

Commodity Contracts Dealing (523130)

Commodity Contracts Brokerage (523140)

Securities and Commodity Exchanges (523210)

Miscellaneous Intermediation (523910)

Portfolio Management (523920)

Investment Advice (523930)

Trust, Fiduciary, and Custody Activities (523991)

Miscellaneous Financial Investment Activities (523999)

Direct Life Insurance Carriers (524113)

Direct Health and Medical Insurance Carriers (524114)

Direct Property and Casualty Insurance Carriers (524126)

Direct Title Insurance Carriers (524127)

Other Direct Insurance (except Life, Health, and Medical) Carriers (524128)

Reinsurance Carriers (524130)

Insurance Agencies and Brokerages (524210)

Claims Adjusting (524291)

Third Party Administration of Insurance and Pension Funds (524292)

All Other Insurance Related Activities (524298)

Pension Funds (525110)

Health and Welfare Funds (525120)

Other Insurance Funds (525190)

Open-End Investment Funds (525910)

Trusts, Estates, and Agency Accounts (525920)

Other Financial Vehicles (525990)

Offices of Lawyers (541110)

Title Abstract and Settlement Offices (541191)

All Other Legal Services (541199)

Offices of Certified Public Accountants (541211)

Tax Preparation Services (541213)

Payroll Services (541214)

Other Accounting Services (541219)

Architectural Services (541310)

Landscape Architectural Services (541320)

Engineering Services (541330)

Drafting Services (541340)

Building Inspection Services (541350)

Geophysical Surveying and Mapping Services (541360)

Surveying and Mapping (except Geophysical) Services (541370)

Testing Laboratories (541380)

Interior Design Services (541410)

Industrial Design Services (541420)

Graphic Design Services (541430)

Other Specialized Design Services (541490)

Custom Computer Programming Services (541511)

Computer Systems Design Services (541512)

Computer Facilities Management Services (541513)

Other Computer Related Services (541519)

Administrative Management and General Management Consulting Services (541611)

Human Resources Consulting Services (541612)

Marketing Consulting Services (541613)

Process, Physical Distribution, and Logistics Consulting Services (541614)

Other Management Consulting Services (541618)

Environmental Consulting Services (541620)

Other Scientific and Technical Consulting Services (541690)

Research and Development in the Social Sciences and Humanities (541720)

Advertising Agencies (541810)

Public Relations Agencies (541820)

Media Buying Agencies (541830)

Media Representatives (541840)

Display Advertising (541850)

Direct Mail Advertising (541860)

Advertising Material Distribution Services (541870)

Other Services Related to Advertising (541890)

Marketing Research and Public Opinion Polling (541910)

Translation and Interpretation Services (541930)

All Other Professional, Scientific, and Technical Services (541990)

Overview

Establishments (2012)	14174
Jobs Multiplier	3.27
Unemployed (3/2013)	Only Available for 2-Digit

Gender		
Male	45%	
Female	55%	

Age		
14-18	0%	
19-24	6%	
25-44	50%	
45-64	41%	

65+		4%		

137,147	14.7%	$80,507
Jobs (2013)	**% Change (2013-2023)**	**Average Earnings Per Job (2013)**
National Location Quotient: 1.46	Nation: 17.5%	Nation: $99,659

Regional Trends
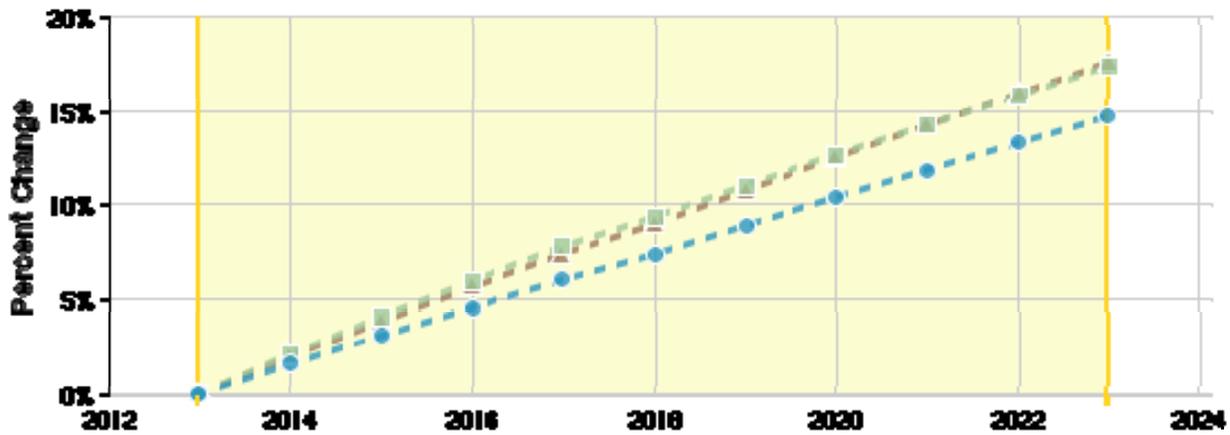
	Region	2013 Jobs	2023 Jobs	% Change
●	Pinellas Hillsborough	137,147	157,325	14.7%
●	State	754,064	884,741	17.3%
●	Nation	12,722,644	14,952,548	17.5%

Staffing Patterns

Occupation	Employed in Industry Group (2013)	% of the Total Jobs in Industry Group (2013)
Customer Service Representatives (43-4051)	9,202	6.7%
Accountants and Auditors (13-2011)	5,976	4.4%
Lawyers (23-1011)	5,849	4.3%
Insurance Sales Agents (41-3021)	4,097	3.0%
Claims Adjusters, Examiners, and Investigators (13-1031)	4,055	3.0%

State Data Sources

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

Input-Output Data

The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts.

Equifax Business-Level Data

Data for individual businesses is provided by Equifax (http://www.equifax.com/commercial/), which maintains a database of more than 20 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.

2013 Regional Business & Education Summit survey results for Financial/Professional Services

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

Strongly Disagree	5.9%
Disagree	17.6%
Agree	41.2%
Somewhat Strongly Agree	23.5%
Strongly Agree	11.8%

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

Strongly Disagree	5.9%
Disagree	11.8%
Agree	52.9%
Somewhat Strongly Agree	17.6%
Strongly Agree	11.8%

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

Extremely Difficult	0.0%
Difficult	23.5%
Satisfied	52.9%
Easy	23.5%
Extremely Easy	0.0%

4. Over the last 5 years, has retention in your organization improved?

Not improved	5.9%
Somewhat Improved	17.6%
Improved	41.2%
Somewhat Greatly Improved	29.4%
Greatly Improved	5.9%

5. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	5.9%
Somewhat Helpful	5.9%
Helpful	17.6%
Somewhat Very Helpful	23.5%
Very Helpful	47.1%

6. How often are employees promoted from within?

Not Often	0.0%
Somewhat Often	5.9%
Often	41.2%
Somewhat Frequently	29.4%
Frequently	23.5%

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

Not Often	17.6%
Somewhat Often	17.6%
Often	35.3%
Somewhat Frequently	5.9%
Frequently	23.5%

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

Strongly Disagree	0.0%
Disagree	35.3%
Agree	41.2%
Somewhat Strongly Agree	23.5%
Strongly Agree	0.0%

9. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	5.9%
Disagree	35.3%
Agree	41.2%
Somewhat Strongly Agree	17.6%
Strongly Agree	0.0%

10. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	0.0%
Disagree	11.8%
Agree	64.7%
Somewhat Strongly Agree	17.6%
Strongly Agree	5.9%

11. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	11.8%
Disagree	23.5%
Agree	47.1%
Somewhat Strongly Agree	17.6%
Strongly Agree	0.0%

12. Additional Comments: None

Business and Education Summit Financial/Professional Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from the Financial/Professional community gathered to discuss and share the following information. The session was led by Bill Price, Shareholder and Certified Public Accountant with PDR Certified Public Accountants.

1. Currently, what technical skills are you seeking**?**
   - Microsoft Office Suite with emphasis on PowerPoint.
   - Database and Infrastructure Management
   - Two and four year Accounting Degrees
   - Better screening tools for the hiring process.

2. What technical skills do you think you will need in the future?
   - Business Analysts

- Cloud Computing
- Cyber Security Advisors
- Open Source Code Writers
- Predictive Behavioral Analytics Specialists
- Data Managers

3. What are the three or four occupational shortages that you face?
   - Younger Financial Planners and Advisors. Some concern that the industry will lose talent to industries that are viewed as more exciting.
   - CPAs

4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?
   - Lack of company loyalty, job hopping. Many new hires leave after 3 or 4 years.
   - Attempts to solve include mentoring programs and increased internal training and advancement opportunities.

5. Are post-secondary institutions meeting the demands of your industry? Is there any training you feel is inadequate or inappropriate? What would you like to see changed in those areas?
   - Most agreed that the current college curriculum is meeting the need on the technical side. However, the same issues remain with new grads displaying a lack of "soft" skills and general business etiquette.
   - Additionally, it was discussed that secondary schools need to put more emphasis on allowing our youth to explore their skill set prior to picking an occupation/ degree at the college level.
   - Increase Networking opportunities with Industry Leaders, Guidance Counseling, Career Track and Future Planning at the High School level so that students are better prepared when entering college.

6. What is your current training system for incumbent workers? Do you have any gaps in that training?
   - Gaps discussed were new hires not getting enough one on one attention during their first year.
   - Current systems included Train the Trainer and increased mentoring programs.
   - Success reported with the 70/20/10 Training Model. 70% On the Job Training, 20% work with tools of the trade, 10% in classroom training

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 -2013)

HealthCare

2013 HealthCare Occupation Report-Hillsborough-Pinellas
Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 85,211 jobs in HealthCare with a growth rate of 15.3% over the next 10 years with an average earning per job $67,813.00

Hillsborough, FL (12057)	Pinellas, FL (12103)

Industry Group

Offices of Physicians (except Mental Health Specialists) (621111)
Offices of Physicians, Mental Health Specialists (621112)

Offices of Dentists (621210)

Offices of Mental Health Practitioners (except Physicians) (621330)

Offices of Physical, Occupational and Speech Therapists, and Audiologists (621340)

Offices of All Other Miscellaneous Health Practitioners (621399)

Outpatient Mental Health and Substance Abuse Centers (621420)

HMO Medical Centers (621491)

Home Health Care Services (621610)

All Other Miscellaneous Ambulatory Health Care Services (621999)

General Medical and Surgical Hospitals (Private) (622110)

Psychiatric and Substance Abuse Hospitals (Private) (622210)

Specialty (except Psychiatric and Substance Abuse) Hospitals (Private) (622310)

Residential Mental Retardation Facilities (623210)

Residential Mental Health and Substance Abuse Facilities (623220)

Other Residential Care Facilities (623990)

Voluntary Health Organizations (813212)

Hospitals (State Government) (902622)

Hospitals (Local Government) (903622)

Overview

Establishments (2012)	4581
Jobs Multiplier	2.11
Unemployed (3/2013)	Only Available for 2-Digit

Gender		
Male	24%	
Female	76%	

Age

Age	%	
14-18	0%	
19-24	6%	
25-44	46%	
45-64	43%	
65+	4%	

85,211	15.3%	$67,819
Jobs (2013)	**% Change (2013-2023)**	**Average Earnings Per Job (2013)**
National Location Quotient: 0.97	Nation: 21.6%	Nation: $66,411

Regional Trends
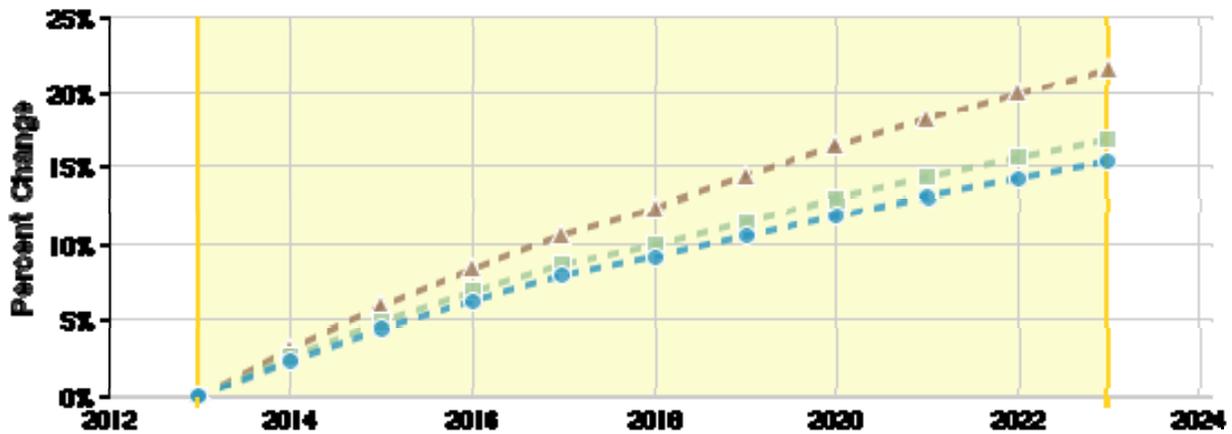
	Region	2013 Jobs	2023 Jobs	% Change
●	Pinellas Hillsborough	85,211	98,290	15.3%
●	State	689,317	805,094	16.8%
●	Nation	11,934,287	14,516,776	21.6%

Staffing Patterns

Occupation	Employed in Industry Group (2013)	% of the Total Jobs in Industry Group (2013)
Registered Nurses (29-1111)	16,942	19.9%

Region	2013 Jobs	2023 Jobs	% Change
Medical Assistants (31-9092)		4,192	4.9%
Nursing Aides, Orderlies, and Attendants (31-1012)		3,979	4.7%
Receptionists and Information Clerks (43-4171)		3,534	4.1%
Licensed Practical and Licensed Vocational Nurses (29-2061)		3,078	3.6%

Data Sources and Calculations

State Data Sources

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

Input-Output Data

The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts.

Equifax Business-Level Data

Data for individual businesses is provided by Equifax (http://www.equifax.com/commercial/), which maintains a database of more than 20 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.

2013 Regional Business & Education Summit survey results for Healthcare

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

Strongly Disagree	0.0%
Disagree	0.0%
Agree	87.5%
Somewhat Strongly Agree	0.0%
Strongly Agree	12.5%

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

Strongly Disagree	5.9%
Disagree	11.8%
Agree	52.9%
Somewhat Strongly Agree	17.6%
Strongly Agree	11.8%

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

Extremely Difficult	0.0%
Difficult	42.9%
Satisfied	57.1%
Easy	0.0%
Extremely Easy	0.0%

4. Over the last 5 years, has retention in your organization improved?

Not improved	12.5%
Somewhat Improved	12.5%
Improved	62.5%
Somewhat Greatly Improved	12.5%
Greatly Improved	0.0%

5. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	12.5%
Somewhat Helpful	12.5%
Helpful	50.0%
Somewhat Very Helpful	12.5%
Very Helpful	12.5%

6. How often are employees promoted from within?

Not Often	0.00%
Somewhat Often	25.0%
Often	37.5%
Somewhat Frequently	25.0%
Frequently	12.5%

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

Not Often	75.0%
Somewhat Often	12.5%
Often	0.00%
Somewhat Frequently	0.00%
Frequently	12.5%

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

Strongly Disagree	0.0%
Disagree	50.0%
Agree	37.5%
Somewhat Strongly Agree	0.0%
Strongly Agree	12.5%

9. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	0.0%
Disagree	50.0%
Agree	50.0%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

10. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	0.0%
Disagree	25.0%
Agree	25.0%
Somewhat Strongly Agree	12.5%
Strongly Agree	37.5%

11. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	0.0%
Disagree	37.5%
Agree	25.0%
Somewhat Strongly Agree	12.5%
Strongly Agree	25.0%

12. Additional Comments: None

Business and Education Summit HealthCare Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Regional Annual "Taking the Next Step" Business and Education Summit. Industry Leaders from the HealthCare community gathered to discuss and share the following information. The session was led by Sandra Cassity, Team Resources with BayCare Health Systems.

1. Currently, what technical skills are you seeking?
   • Experienced Med Lab Techs

- SharePoint development for I.T. staff
- Electronic Medical Records skills
- Nurses whom possess leadership skills
- Microbiologists
- Chemists
- Mechanical Technicians
- Lean Manufacturing Skills
- Six Sigma Certifications
- Customer service

2.   What technical skills do you think you will need in the future?
- Same as #1 above.

3.   What are the three or four occupational shortages that you face?
- Experienced Med Lab Techs
- Experienced Critical Nurses
- Physical Therapists (particularly for the home care environment)
- Occupational Therapists (particularly for the home care environment)
- IT staff
- Behavioral Health and Psychiatric RNs (particularly for child psychiatry)
- Health Care Practitioners whom also would consider becoming Instructors
- Clinical Social Workers (particularly for youth)

4.   Where are your biggest retention problems**?**
- Positions which demand long hours and those which are located in certain areas create environments which make leaving appealing.
- Lower skilled and lower paying jobs

    What solutions have been developed to try and solve your retention problems?
- Utilization of "Stay Interviewing" techniques
- Detailed interview process and a close working relationship with immediate supervisor
- Utilization of buddy, preceptor systems
- Compassion Fatigue training
- Screening through the use of temp agencies
- Creating a company culture which embraces work-life balance
- Embrace corporate accountability for the emerging young workforce
- Growth of own workforce through tuition reimbursement programs

5. Are post-secondary institutions meeting the demands of your industry? Is there training you feel is inadequate or inappropriate? What would you like to see changed in those areas?
- No, with regards to programs for Med Lab Techs.
    However, it was discussed that the educational institutions may not be to blame for any shortages. There are thoughts that it could be due to workforce and academic expectations (i.e. the current requirement for a doctorate degree for physical therapists).

There was also discussion with regards to the conflict with the cost of training and the eventual salary, which may make positions unattractive.

- There seems to be a lack of understanding of what it means to be employed (i.e. lack of appropriate social and work etiquette and skills, job readiness and appreciation for a work environment and culture

6. What is your current training system for incumbent workers? Do you have any gaps in that training?
   - Provision of orientation opportunities throughout employment (leadership training, succession training, accountability training, for example)
   - In-house trainers
   - Promoting from within with the utilization of in-house career development

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 HEALTH CARE 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) Health Care 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 Health Care 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.

Information Technology

2013 Information Technology Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 44,168 jobs in IT with a growth rate of 12.5% over the next 10 years with a median earning of $23.59

Report Info

Dataset Version	2013.2 Class of Worker
Class of Worker Categories	QCEW Employees
Timeframe	2013 - 2023
Region Name	Pinellas Hillsborough
Counties	
Hillsborough, FL (12057)	Pinellas, FL (12103)

Occupation Group

Computer and Information Systems Managers (11-3020)

Computer and Information Research Scientists (15-1110)

Computer and Information Analysts (15-1120)

Database and Systems Administrators and Network Architects (15-1140)

Computer Support Specialists (15-1150)

Information Security Analysts, Web Developers, and Computer Network Architects (15-1170)

Computer Occupations, All Other (15-1790)

Computer Hardware Engineers (17-2060)

Miscellaneous Media and Communication Workers (27-3090)

Miscellaneous Media and Communication Equipment Workers (27-4090)

Medical Records and Health Information Technicians (29-2070)

Receptionists and Information Clerks (43-4170)

Miscellaneous Information and Record Clerks (43-4190)

Computer Operators (43-9010)

Data Entry and Information Processing Workers (43-9020)

Computer, Automated Teller, and Office Machine Repairers (49-2010)

Radio and Telecommunications Equipment Installers and Repairers (49-2020)

Line Installers and Repairers (49-9050)

Computer Control Programmers and Operators (51-4010)

Overview

Annual Openings Estimate (2013)	1,589
Related Completions (2012)	1,622
Current Job Postings	Only Available for 5-Digit

Gender		
Male	49%	
Female	51%	

Age		
14-18	1%	
19-24	8%	
25-44	47%	
45-64	41%	
65+	4%	

44,168	12.5%	$23.59/hr
Jobs (2013)	**% Change (2013-2023)**	**Median Earnings**
National Location Quotient: 1.15	Nation: 14.8%	Nation: $26.41/hr

Pinellas Hillsborough | Growth

44,168	49,676	5,508	12.5%
2013 Jobs	**2023 Jobs**	**Change (2013-2023)**	**% Change (2013-2023)**

Occupation	2013 Jobs	2023 Jobs	Change	% Change
Interpreters and Translators (27-3091)	165	213	48	29%
Computer Systems Analysts (15-1121)	4,304	5,229	925	21%
Information Security Analysts, Web Developers, and Computer Network Architects (15-1179)	3,866	4,390	524	14%
Computer Occupations, All Other (15-1799)	992	1,165	173	17%
Media and Communication Equipment Workers, All Other (27-4099)	189	188	-1	-1%
Radio, Cellular, and Tower Equipment Installers and Repairs (49-2021)	138	155	17	12%
Computer and Information Systems Managers (11-3021)	1,668	2,118	450	27%
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	2,164	2,104	-60	-3%
Media and Communication Workers, All Other (27-3099)	216	219	3	1%
Computer Operators (43-9011)	494	476	-18	-4%
Computer-Controlled Machine Tool Operators, Metal and Plastic (51-4011)	464	545	81	17%
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)	62	65	3	5%
Computer Support Specialists (15-1159)	5,023	5,938	915	18%
Information and Record Clerks, All Other (43-4199)	1,971	2,082	111	6%
Receptionists and	10,048	11,689	1,641	16%

Occupation	2013 Jobs	2023 Jobs	Change	% Change
Information Clerks (43-4171)				
Data Entry Keyers (43-9021)	3,176	2,714	-462	-15%
Word Processors and Typists (43-9022)	488	467	-21	-4%
Computer and Information Research Scientists (15-1111)	50	79	29	58%
Medical Records and Health Information Technicians (29-2071)	1,764	2,045	281	16%
Database Administrators (15-1141)	964	1,250	286	30%
Network and Computer Systems Administrators (15-1142)	2,206	2,841	635	29%
Electrical Power-Line Installers and Repairers (49-9051)	434	497	63	15%
Computer Hardware Engineers (17-2061)	169	230	61	36%
Computer, Automated Teller, and Office Machine Repairers (49-2011)	1,148	1,128	-20	-2%
Telecommunications Line Installers and Repairers (49-9052)	2,007	1,848	-159	-8%

Pinellas Hillsborough | Percentile Earnings

$14.55/hr	$23.59/hr	$35.40/hr
10th Percentile Earnings	**Median Earnings**	**90th Percentile Earnings**
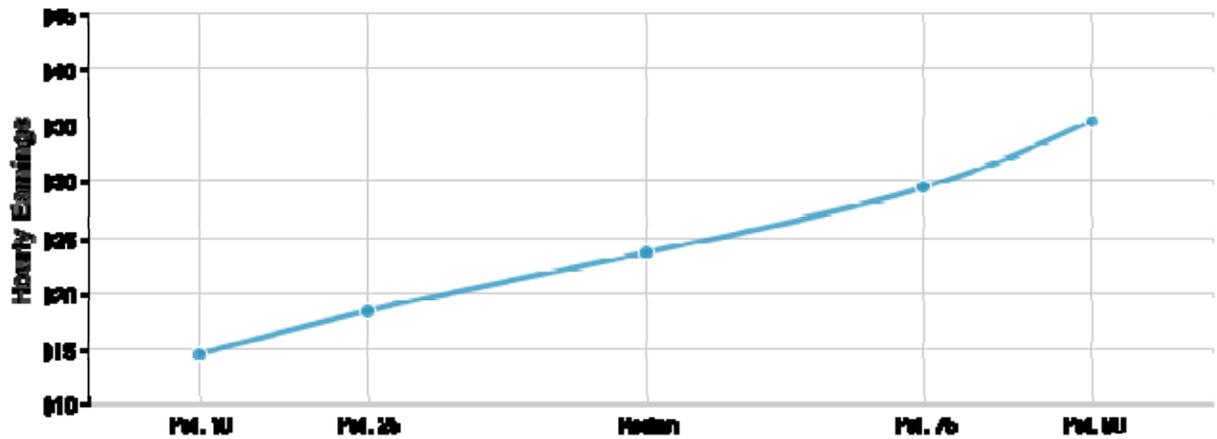
Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Miscellaneous Media and Communication Workers (27-3090)	$11.26	$15.69	$43.49
Computer and Information Analysts (15-1120)	$23.98	$39.77	$58.32
Computer Support Specialists (15-1150)	$11.75	$20.44	$33.88
Computer and Information Systems Managers (11-3020)	$39.51	$56.80	$90.16
Radio and Telecommunications Equipment Installers and Repairers (49-2020)	$13.98	$20.99	$30.71
Computer Operators (43-9010)	$12.15	$17.49	$26.57
Miscellaneous Information and Record Clerks (43-4190)	$11.50	$17.87	$24.13
Computer Control Programmers and Operators (51-4010)	$12.43	$18.59	$24.63
Data Entry and Information Processing Workers (43-9020)	$9.33	$12.52	$18.48
Receptionists and Information Clerks (43-4170)	$8.68	$12.54	$17.37
Computer and Information Research Scientists (15-1110)	$24.58	$43.73	$65.62
Database and Systems Administrators and Network Architects (15-1140)	$20.96	$36.16	$54.21

Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Medical Records and Health Information Technicians (29-2070)	$9.78	$14.90	$26.11
Information Security Analysts, Web Developers, and Computer Network Architects (15-1170)	$17.60	$32.27	$52.56
Line Installers and Repairers (49-9050)	$14.22	$26.16	$30.86
Computer Hardware Engineers (17-2060)	$21.92	$40.98	$53.15
Computer, Automated Teller, and Office Machine Repairers (49-2010)	$10.44	$16.56	$27.22
Miscellaneous Media and Communication Equipment Workers (27-4090)	$9.90	$34.87	$48.16
Computer Occupations, All Other (15-1790)	$20.47	$36.90	$51.85
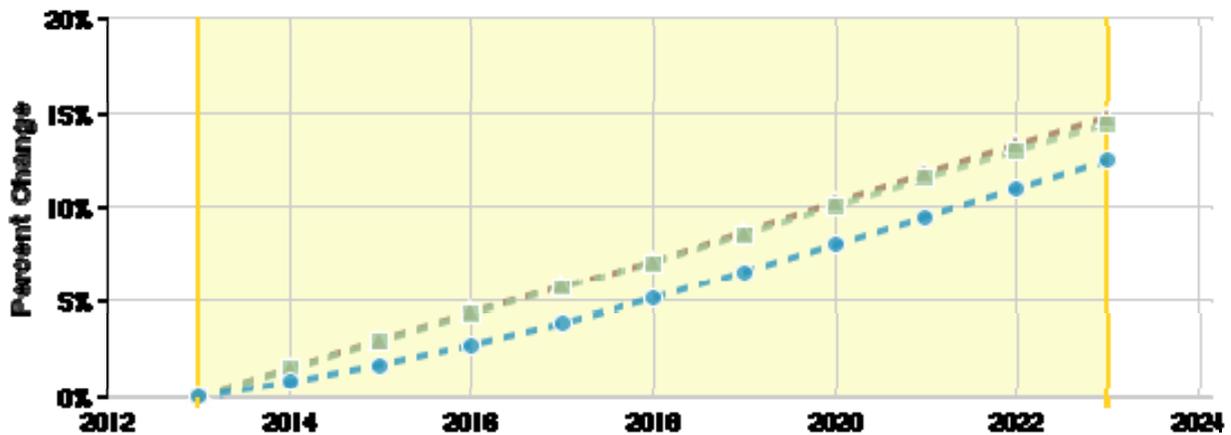
Region	2013 Jobs	2023 Jobs	% Change
Pinellas Hillsborough	44,168	49,676	12.5%
State	283,720	324,625	14.4%
Nation	5,180,608	5,945,890	14.8%

Educational Programs

	39 Programs (2012)		1,622 Completions (2012)		
Program	**2008**	**2009**	**2010**	**2011**	**2012**
Medical Insurance Coding Specialist/Coder (51.0713)	244	418	668	1,516	328
Computer and Information Sciences, General (11.0101)	105	108	152	164	216
Management Information Systems, General (52.1201)	203	233	212	209	196
Health Information/Medical Records Technology/Technician (51.0707)	61	39	177	148	149
Computer Systems Networking and Telecommunications (11.0901)	80	107	163	135	111

Inverse Staffing Patterns

Industry	Occupation Group Jobs in Industry (2013)	% of Occupation Group in Industry (2013)	% of Total Jobs in Industry (2013)
Wired Telecommunications Carriers (517110)	3,683	8.3%	46.3%
Offices of Physicians (except Mental Health Specialists) (621111)	2,945	6.7%	12.7%
Computer Systems Design Services (541512)	2,088	4.7%	32.7%
Custom Computer Programming Services (541511)	1,951	4.4%	32.7%
Corporate, Subsidiary, and Regional Managing Offices (551114)	1,843	4.2%	9.7%

Data Sources and Calculations

State Data Sources

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

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.

2013 Regional Business & Education Summit survey results for Information Technology

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

Strongly Disagree	0.0%
Disagree	12.5%
Agree	87.5%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

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

Strongly Disagree	12.5%
Disagree	37.5%
Agree	50.0%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

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

Extremely Difficult	12.5%
Difficult	62.5%
Satisfied	25.0%
Easy	0.0%
Extremely Easy	0.0%

4. Over the last 5 years, has retention in your organization improved?

Not Imporved	25.0%
Somewhat Improved	12.5%
Improved	62.5%
Somewhat Greatly Improved	0.0%
Greatly Improved	0.0%

5. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	0.0%
Somewhat Helpful	12.5%
Helpful	25.0%
Somewhat Very Helpful	25.0%
Very Helpful	37.5%

6. How often are employees promoted from within?

Not Often	12.5%
Somewhat Often	25.0%
Often	50.0%
Somewhat Frequently	12.5%
Frequently	0.0%

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

Not Often	25.0%
Somewhat Often	50.0%
Often	12.5%
Somewhat Frequently	12.5%
Frequently	0.0%

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

Strongly Disagree	12.5%
Disagree	37.5%
Agree	25.0%
Somewhat Strongly Agree	25.0%
Strongly Agree	0.0%

9. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	12.5%
Disagree	25.0%
Agree	62.5%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

10. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	0.0%
Disagree	37.5%
Agree	25.0%
Somewhat Strongly Agree	0.0%
Strongly Agree	37.5%

11. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	12.5%
Disagree	37.5%
Agree	50.0%
Somewhat Strongly Agree	0.0%
Strongly Agree	0.0%

12. Additional Comments: None

Business and Education Summit Information Technology Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Regional "Taking the Next Step" Business and Education Summit. Industry Leaders from Information Technology community gathered to discuss and share the following information. The session was led by Paul Toomey, President Geographic Solutions, Inc.

1. Currently, what technical skills are you seeking?
   - Data analytics: bringing in data from a variety of sources, analyzing it, and translating it into something a business can use
   - Also looking for people who understand business requirements and can write specifications for that business (the reverse of the above)
   - It is hard to find people with experience and skills in .Net development and Sequel

2. What technical skills do you think you will need in the future?
   - People with IT skills who can also collaborate and communicate well. Part of the challenge is the new generation and its focus on instant messaging and texting.

3. What are the three or four occupational shortages that you face?
   - The group discussed trying to train people in multiple areas. While it's important for people to have multiple skills businesses still need employees with specialties, who are experts in particular fields.

- The group ranked ease of trying to find IT talent in the region on a scale of 1-10; the average score was 5. The region has good entry-level talent but there is a shortage of people with mid-high level of experience in the skill sets needed.

4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?
    - About ½ of the attendees said their company had an issue with retention. Participants who didn't have a problem talked about developing team-based environment to increase retention, and that having a high-growth business encourages retention because it provides a career path for employees.

5. Are post-secondary institutions meeting the demands of your industry? Is there any training you feel is inadequate or inappropriate? What would you like to see changed in those areas?
    - None of the industry attendees stated that education was meeting their demands.
    - One of the challenges of finding qualified employees is due to the lack of experience among the local talent. Small and mid-size businesses can't afford to do a lot of on the job training required when hiring an entry-level people, even if someone has a lot of potential.
    - There needs to be closer collaboration between business and education.
    - In Florida the degrees most acquired by post-secondary students are psychology and sociology. Those students need to learn more STEM skills. Participants discussed the benefits of training in psychology and sociology, which teach research/data analysis skills, and how those students need to learn technical skills and the opportunities available in STEM fields.

6. What is your current training system for incumbent workers? Do you have any gaps in that training?
    - Smaller businesses do not have a system for training incumbent workers, which makes having a relationship with the workforce board all the more important.

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.

total $17,729,384.00.

(United States Department of Labor- Information Technoglogy-2013)

2013 Economy Overview Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 985,519 jobs in General Services with average earnings of $55,227.

Report Info

Dataset Version	2013.2 Class of Worker
Class of Worker Categories	QCEW Employees
Timeframe	2013 - 2023
Dataset Category	EMSI Complete
Region Name	Pinellas Hillsborough
Counties	

Hillsborough, FL (12057)	Pinellas, FL (12103)

Population (2013)	2,226,891
Jobs (2013)	985,519
Average Earnings (2013)	$55,227
Unemployed (3/2013)	77,838
Completions (2012)	42,408
GRP (2012)	$111,097,771,494
Exports (2012)	$97,171,844,027
Imports (2012)	$89,564,139,987

Pinellas Hillsborough | Population

2,226,891	5.4%
2013 Population	**Population Growth for the Last 5 Years**
11.4% of State	State Growth 5.1%

Age Group	2013 Population	% of Population	
Under 5 years	126,513	5.7%	
5 to 9 years	123,686	5.6%	
10 to 14 years	130,060	5.8%	
15 to 19 years	134,585	6.0%	
20 to 24 years	145,494	6.5%	
25 to 29 years	151,521	6.8%	
30 to 34 years	143,855	6.5%	
35 to 39 years	134,811	6.1%	
40 to 44 years	144,110	6.5%	
45 to 49 years	161,113	7.2%	
50 to 54 years	167,357	7.5%	
55 to 59 years	154,587	6.9%	
60 to 64 years	146,672	6.6%	
65 to 69 years	113,089	5.1%	
70 to 74 years	81,832	3.7%	
75 to 79 years	63,154	2.8%	
80 to 84 years	51,889	2.3%	
85 years and over	52,565	2.4%	

Pinellas Hillsborough | Jobs by Industry

985,519	49.2%	50.8%
Total Jobs (2013)	**Male**	**Female**
	(National: 50.1%)	(National: 49.9%)

NAICS	Industry	2013 Jobs

NAICS	Industry	2013 Jobs	
11	Agriculture, Forestry, Fishing and Hunting	9,777	▪
21	Mining, Quarrying, and Oil and Gas Extraction	308	|
22	Utilities	2,914	▪
23	Construction	44,360	▬
31	Manufacturing	53,903	▬
42	Wholesale Trade	39,136	▬
44	Retail Trade	121,670	▬▬▬
48	Transportation and Warehousing	18,666	▪
51	Information	23,142	▪
52	Finance and Insurance	65,855	▬
53	Real Estate and Rental and Leasing	19,260	▪
54	Professional, Scientific, and Technical Services	77,390	▬
55	Management of Companies and Enterprises	19,735	▪
56	Administrative and Support and Waste Management and Remediation Services	72,782	▬
61	Educational Services (Private)	18,590	▪
62	Health Care and Social Assistance	138,440	▬▬▬
71	Arts, Entertainment, and Recreation	22,122	▪
72	Accommodation and Food Services	91,202	▬▬
81	Other Services (except Public Administration)	29,062	▬
90	Government	116,777	▬▬▬
99	Unclassified Industry	427	|

Pinellas Hillsborough | Average Earnings by Industry

$55,227	$65,901	$44,869
Avg. Earnings (2013)	**Male Avg. Earnings (2013)**	**Female Avg. Earnings (2013)**
92% of Nation Avg.	90% of Nation Avg.	96% of Nation Avg.

NAICS	Industry	Avg. Earnings (2013)

NAICS	Industry	Avg. Earnings (2013)	
11	Agriculture, Forestry, Fishing and Hunting	$20,010	▬
21	Mining, Quarrying, and Oil and Gas Extraction	$97,547	▬▬▬▬▬
22	Utilities	$109,815	▬▬▬▬▬▬
23	Construction	$54,064	▬▬▬
31	Manufacturing	$68,040	▬▬▬▬
42	Wholesale Trade	$70,950	▬▬▬▬
44	Retail Trade	$35,098	▬▬
48	Transportation and Warehousing	$55,733	▬▬▬
51	Information	$89,443	▬▬▬▬▬
52	Finance and Insurance	$80,986	▬▬▬▬
53	Real Estate and Rental and Leasing	$50,041	▬▬▬
54	Professional, Scientific, and Technical Services	$77,902	▬▬▬▬
55	Management of Companies and Enterprises	$111,722	▬▬▬▬▬▬
56	Administrative and Support and Waste Management and Remediation Services	$38,795	▬▬
61	Educational Services (Private)	$45,952	▬▬
62	Health Care and Social Assistance	$56,390	▬▬▬
71	Arts, Entertainment, and Recreation	$45,013	▬▬
72	Accommodation and Food Services	$20,491	▬
81	Other Services (except Public Administration)	$35,120	▬▬
90	Government	$66,302	▬▬▬▬
99	Unclassified Industry	$34,965	▬▬

Pinellas Hillsborough | Unemployment by Industry

77,838
Total Unemployment (3/2013)

NAICS	Industry	Unemployed (3/2013)	% of Unemployed

NAICS	Industry	Unemployed (3/2013)	% of Unemployed	
11	Agriculture, Forestry, Fishing and Hunting	300	0%	
21	Mining, Quarrying, and Oil and Gas Extraction	34	0%	
22	Utilities	224	0%	
23	Construction	4,215	5%	
31	Manufacturing	5,219	7%	
42	Wholesale Trade	1,704	2%	
44	Retail Trade	10,643	14%	
48	Transportation and Warehousing	1,178	2%	
51	Information	1,085	1%	
52	Finance and Insurance	5,174	7%	
53	Real Estate and Rental and Leasing	1,516	2%	
54	Professional, Scientific, and Technical Services	4,484	6%	
55	Management of Companies and Enterprises	137	0%	
56	Administrative and Support and Waste Management and Remediation Services	7,716	10%	
61	Educational Services (Private)	858	1%	
62	Health Care and Social Assistance	5,921	8%	
71	Arts, Entertainment, and Recreation	1,404	2%	
72	Accommodation and Food Services	6,644	9%	
81	Other Services (except Public Administration)	3,170	4%	
90	Government	3,934	5%	
99	No Previous Work Experience/Unspecified	12,279	16%	

Pinellas Hillsborough | Top Program Completions

CIP	Program	Completions (2012)

NAICS	Industry		
51	Health professions and related programs	14,612	
24	Liberal arts and sciences, general studies and humanities	6,563	
52	Business, management, marketing, and related support services	4,909	
13	Education	1,864	
12	Personal and culinary services	1,718	
45	Social sciences	1,650	
43	Homeland security, law enforcement, firefighting and related protective services	1,358	
26	Biological and biomedical sciences	1,124	
42	Psychology	1,037	
11	Computer and information sciences and support services	883	

Pinellas Hillsborough | Gross Regional Product (GRP)

$64,362,076,035	$36,549,282,522	$10,186,412,937	$111,097,771,494
Earnings (2012)	Property Income (2012)	Taxes on Production (2012)	Total GRP (2012)

NAICS	Industry	GRP (2012)	% of Total	
11	Agriculture, Forestry, Fishing and Hunting	$418,628,851	0%	
21	Mining, Quarrying, and Oil and Gas Extraction	$118,472,547	0%	
22	Utilities	$1,477,708,227	1%	
23	Construction	$3,090,361,208	3%	
31	Manufacturing	$7,058,785,121	6%	
42	Wholesale Trade	$6,851,683,651	6%	
44	Retail Trade	$7,817,929,675	7%	
48	Transportation and Warehousing	$2,071,322,355	2%	
51	Information	$5,861,901,954	5%	
52	Finance and Insurance	$13,532,966,100	12%	

NAICS	Industry	GRP (2012)	% of Total	
53	Real Estate and Rental and Leasing	$12,004,152,612	11%	
54	Professional, Scientific, and Technical Services	$9,323,059,349	8%	
55	Management of Companies and Enterprises	$2,812,101,131	3%	
56	Administrative and Support and Waste Management and Remediation Services	$4,351,227,179	4%	
61	Educational Services (Private)	$1,045,596,570	1%	
62	Health Care and Social Assistance	$9,216,031,849	8%	
71	Arts, Entertainment, and Recreation	$1,682,042,567	2%	
72	Accommodation and Food Services	$3,377,257,807	3%	
81	Other Services (except Public Administration)	$2,168,236,294	2%	
90	Government	$10,033,087,633	9%	
	Other non-industries	$6,785,218,814	6%	

Pinellas Hillsborough | Region Exports

$97,171,844,027.39

Exports (2012)

49% of Supply

NAICS	Industry	Exports (2012)	
11	Agriculture, Forestry, Fishing and Hunting	$798,268,024	
21	Mining, Quarrying, and Oil and Gas Extraction	$145,822,688	
22	Utilities	$1,041,839,949	
23	Construction	$1,644,793,901	
31	Manufacturing	$12,083,913,647	
42	Wholesale Trade	$5,529,563,408	
44	Retail Trade	$3,947,439,156	
48	Transportation and Warehousing	$1,862,150,289	
51	Information	$4,957,190,891	

| NAICS	Industry	Exports (2012)	
52	Finance and Insurance	$10,733,264,458	
53	Real Estate and Rental and Leasing	$7,286,328,734	
54	Professional, Scientific, and Technical Services	$4,208,126,283	
55	Management of Companies and Enterprises	$2,551,643,740	
56	Administrative and Support and Waste Management and Remediation Services	$2,553,873,550	
61	Educational Services (Private)	$436,348,833	
62	Health Care and Social Assistance	$4,816,391,204	
71	Arts, Entertainment, and Recreation	$1,365,318,658	
72	Accommodation and Food Services	$1,767,455,261	
81	Other Services (except Public Administration)	$1,039,422,935	
90	Government	$28,402,688,417	

Pinellas Hillsborough | Region Imports

$89,564,139,987	$99,590,831,938
Imports (2012)	**Locally Produced & Consumed (2012)**
47% of Demand	53% of Demand

NAICS	Industry	Imports (2012)	
11	Agriculture, Forestry, Fishing and Hunting	$705,147,873	
21	Mining, Quarrying, and Oil and Gas Extraction	$1,668,743,117	
22	Utilities	$1,715,093,971	
23	Construction	$1,598,692,642	
31	Manufacturing	$20,695,739,807	
42	Wholesale Trade	$2,704,103,950	
44	Retail Trade	$1,717,519,111	
48	Transportation and Warehousing	$2,363,510,231	
51	Information	$2,633,084,925	

NAICS	Industry	Imports (2012)	
52	Finance and Insurance	$4,885,666,167	▮
53	Real Estate and Rental and Leasing	$1,916,011,282	▮
54	Professional, Scientific, and Technical Services	$2,587,839,805	▮
55	Management of Companies and Enterprises	$606,424,723	▏
56	Administrative and Support and Waste Management and Remediation Services	$1,093,924,082	▮
61	Educational Services (Private)	$657,100,332	▏
62	Health Care and Social Assistance	$2,124,095,736	▮
71	Arts, Entertainment, and Recreation	$505,879,948	▏
72	Accommodation and Food Services	$1,156,830,811	▮
81	Other Services (except Public Administration)	$947,463,840	▏
90	Government	$37,281,267,635	▬▬▬▬

Regional Trends
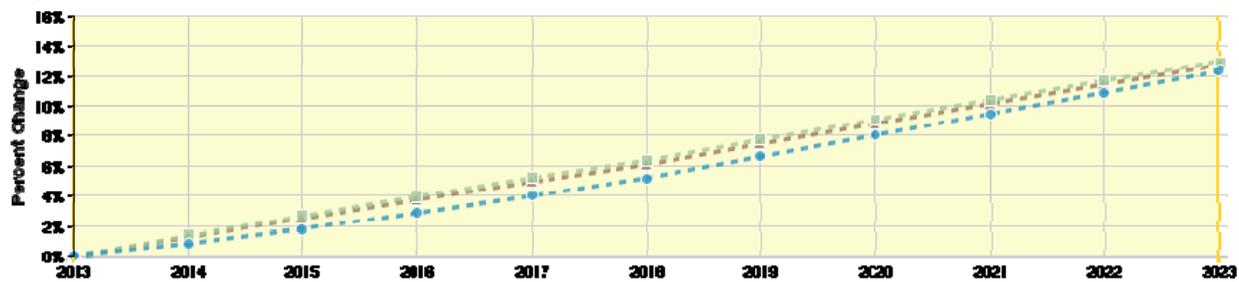
	Region	2013 Jobs	2023 Jobs	% Change
●	Pinellas Hillsborough	985,519	1,106,793	12.3%
●	State	7,435,439	8,397,790	12.9%
●	Nation	133,252,253	150,194,954	12.7%

2013 Educational Attainment

Legend:
- High School Diploma (26.6%)
- Some College (21.2%)
- Bachelor's Degree (16.1%)
- 9th Grade to 12th Grade (10.7%)
- Graduate Degree and Higher (9.0%)
- Associate's Degree (8.6%)
- Less Than 9th Grade (3.4%)

2013 Age Demographics

Legend:
- Under 20 years (23.1%)
- 20 to 39 years (25.9%)
- 40 to 59 years (20.2%)
- 60 to 79 years (10.2%)
- 80 years and over (4.7%)
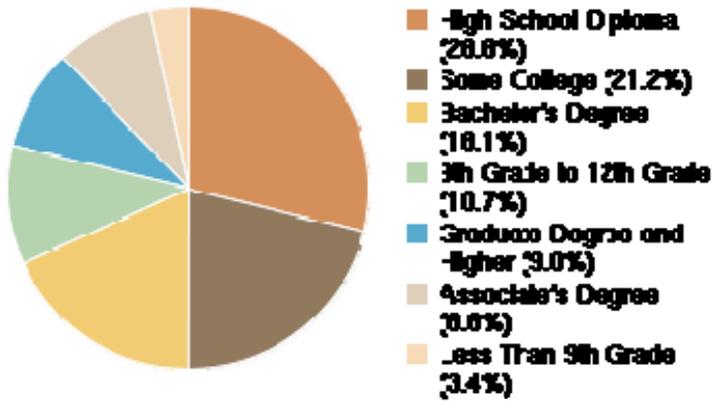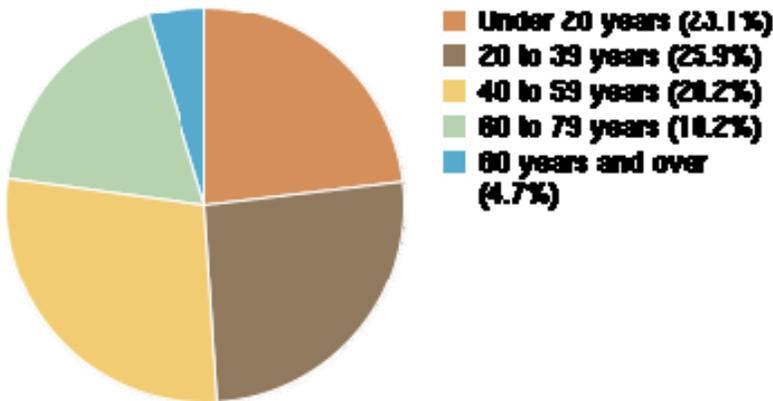
Growing/Declining Occupations

Occupation	Change in Jobs (2013-2023)
Customer Service Representatives (43-4051)	6,939
Janitors and Cleaners, Except Maids and Housekeeping Cleaners (37-2011)	5,631
Security Guards (33-9032)	4,216

Postal Service Mail Sorters, Processors, and Processing Machine Operators (43-5053)	-399
Data Entry Keyers (43-9021)	-462
Team Assemblers (51-2092)	-544

Growing/Declining Industries

Industry	Change in Jobs (2013-2023)
Telemarketing Bureaus and Other Contact Centers (561422)	8,486
Offices of Physicians (except Mental Health Specialists) (621111)	6,397
Janitorial Services (561720)	5,844
Department Stores (except Discount Department Stores) (452111)	-1,859
Professional Employer Organizations (561330)	-3,708
Temporary Help Services (561320)	-6,972

Data Sources and Calculations

Input-Output Data
The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts.

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.

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.

State Data Sources

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

Educational Attainment Data

EMSI's educational attainment numbers are based on Census 1990, Census 2000, the Current Population Survey, and EMSI's demographic data. 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.

Equifax Business-Level Data

Data for individual businesses is provided by Equifax (http://www.equifax.com/commercial/), which maintains a database of more than 20 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.

2013 Regional Business & Education Summit survey results for General /Other Industrys

1. Which of the following best describes your company's industry?

Aviation	3.4%
Construction	8.0%
Financial & Professional Services	19.5%
HealthCare	9.2%
IT	9.2%
Manufacturing	9.2%
Other	41.4%

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

Strongly Disagree	3.4%
Disagree	20.7%
Agree	56.3%
Somewhat Strongly Agree	10.3%
Strongly Agree	9.2%

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

Strongly Disagree	5.7%
Disagree	39.1%
Agree	42.5%
Somewhat Strongly Agree	5.7%
Strongly Agree	6.9%

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

Extremely Difficult	8.2%
Difficult	34.1%
Satisfied	42.4%
Easy	14.1%
Extremely Easy	1.2%

5. Over the last 5 years, has retention in your organization improved?

Not improved	11.6%
Somewhat Improved	16.3%
Improved	52.3%
Somewhat Greatly Improved	17.4%
Greatly Improved	2.3%

6. How helpful is pre-screening skill testing (assessments) to your organization?

Not Done	16.1%
Somewhat Helpful	8.0%
Helpful	36.8%
Somewhat Very Helpful	13.8%
Very Helpful	25.3%

7. How often are employees promoted from within?

Not Often	8.0%
Somewhat Often	14.9%
Often	44.8%
Somewhat Frequently	14.9%
Frequently	17.2%

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

Not Often	36.0%
Somewhat Often	20.9%
Often	25.6%
Somewhat Frequently	4.7%
Frequently	12.8%

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

Strongly Disagree	4.6%
Disagree	34.5%
Agree	42.5%
Somewhat Strongly Agree	13.8%
Strongly Agree	4.6%

10. Do you agree that County Economic Development assists in retaining and growing your organization?

Strongly Disagree	4.7%
Disagree	36.0%
Agree	47.7%
Somewhat Strongly Agree	9.3%
Strongly Agree	2.3%

11. Do you agree that WorkNet Pinellas/Tampa Bay WorkForce Alliance is helpful in meeting your workforce needs?

Strongly Disagree	2.4%
Disagree	17.6%
Agree	48.2%
Somewhat Strongly Agree	9.4%
Strongly Agree	22.4%

12. Do you agree that career academies prepare students for college and careers?

Strongly Disagree	8.1%
Disagree	26.7%
Agree	43.0%
Somewhat Strongly Agree	11.6%
Strongly Agree	10.5%

13. Additional Comments:

"Educational institutions seem to focus too much on providing education (degrees) that suit the interests of younger high school graduates, rather than on providing training that focuses on the real needs of businesses today. I understand schools need to make money, but it's too bad that so many students graduate with degrees that really don't help them in the real world, nor do they really support the needs of the bulk of local industries. We need to find ways of encouraging students to study for careers that may not look so glamorous but can help them attain real success and prosperity. This will also better serve the reputation of learning institutions in the long run."
"Several of these questions were difficult to answer because we have two very different employee populations - our manufacturing hourly population and our technical salaried population. I would have answered the questions differently for each employee group. Please let me know if you need further clarification. Thanks for all that you are doing."
"I feel that more needs to be done at the middle or high school level to better prepare young adults for careers, and making them aware of their options after high school."
"NCCER is not the best curriculum for the construction industry!"

Business and Education Summit General Breakout Session Recap

On September 6, 2013 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 7th Regional "Taking the Next Step" Business and Education Summit. General Industry Leaders from the community

gathered to discuss and share the following economic overview. The session was led by Dr. Bill Law, President of St. Petersburg College & Bill Protz, President, Catalina Marketing Charitable Foundation.

1. Currently, what technical skills are you seeking?
   Current skills included entry level technology skills, Healthcare-Informatics, C++, LED Lighting Techs, Insurance degreed professionals, Degreed Teachers, Sr. Project Managers, and Software Engineers.

2. What technical skills do you think you will need in the future?
   Electrical skills, Project management skills, Communication skills, Science, technology and mathematic skills.

3. What are the three or four occupational shortages that you face?
   Bouchard Insurance responded "Insurance degreed professionals." Bouchard recruits out of the area, Jacksonville, and Orlando to be exact because the local institutions do not have that curriculum in place. Bill Protz stated that he wants to see more IT skilled, project managers, software engineers, etc. Bill gave a list of all of his needs.

4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems? Salary, advancement opportunities, and benefits
   Solutions that have been developed are mentoring programs, internships, creating a better work environment, etc.

5. Are post-secondary institutions meeting the demands of your industry? Is there any training you feel is inadequate or inappropriate? What would you like to see changed in those areas?
   Tim Harding of the University of Tampa stated that we are relying on faculty that are not experts in the industry. Career centers have been taken out of the schools so as an institution we have to be more proactive in making sure students stay current on their field. Identifying skills early in high school would help in developing students at an early stage. Bridgette from TBBJ felt that Sales is a field that needs to be developed more through training.

6. What is your current training system for incumbent workers? Do you have any gaps in that training?
   Solar Source has a huge need for experience in LED Lighting. LED lighting is a big thing, with tremendous opportunity. There is a huge need with less than 2 percent of commercial lighting currently LED right now there is room for growth."

Conclusion

One of the principal goals of Tampa Bay WorkForce Alliance and WorkNet Pinellas is to build long-term economic vitality for 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 county's 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 Tampa Bay WorkForce Alliance and WorkNet 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. The Tampa region holds targeted industry forums and shares comprehensive labor market information to identify current and future labor market.

Tampa Bay WorkForce Alliance and WorkNet Pinellas 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 2013 Strategic 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.

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