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**2012 Strategic Report Card  
Tampa Bay Regional  
Taking the Next Step  
Business and Education Summit**

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## Quotes from Industry Leaders

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“As we all know from the political talking points educating prospective employees for the “new” workplace should be a high priority. This seminar introduces and combines business leaders and educators who are moving it from rhetoric to reality. Join us next year for this important event.” **Bill Price, Shareholder, Certified Public Accountant, PDR Certified Public Accountants.**

“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.**

"Tampa Bay's Regional Business Plan – a regional effort to grow jobs in four targeted industry sectors to 500,000 jobs - emphasizes the need for industry and education partners to work together in order to achieve this goal. **The Regional Business & Education Summit** provided an ideal forum to do just that.” **Stuart Rogel, President & CEO, Tampa Bay Partnership.**

“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. Adam Davidson was exceptional as a keynote at this year's Summit. 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**

“Excellent Summit, going to cause me some work – but hopefully the good kind”. **Jerry Custin, President/CEO Upper Tampa Bay Chamber of Commerce.**

“As a board member it's great to see the two regional workforce boards and their community groups get together to network, learn and collaborate on ways to impact our business and educational economic needs. We love to provide the conference mugs each year and always appreciate the class and professionalism of those working behind the scenes to make the summit a wonderful investment of our time.” **Sondra Lloyd Cranford, Health Education Director, Central Florida Institute of Palm Harbor.**

“The 2012 6<sup>th</sup> Annual Business & Education Summit was the best Summit yet. The Keynote Speakers have always been right on track and entertaining to listen to. The breakout sessions are a great way to share best practices and hear from others in our industry about topics not often discussed in other forums. The Education Panel offers real local insight from the leaders in K-12 through Post-Secondary Ed. As a business leader and educational leader we consistently take away great things from the summit and it's easy to see why it's growing and improving.” **Michael Wisniewski, President, National Aviation Academy.**

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## Introduction

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Tampa Bay WorkForce Alliance and WorkNet Pinellas cohosted the 6<sup>th</sup> Annual “Taking the Next Step” Business & Education Summit on September 21, 2012. For the 1st time this event brought together 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. The summit along with industry specific forums are held throughout the year allowing us the opportunity to survey regional businesses and create an unbiased snapshot of employer needs and our response to those needs. 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 and hold individual forums throughout the year.

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

Data from all of these Collaborative Industry Forums were presented in breakout sessions during the 2012 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 targeted industry forums in 2013.

## Business & Education Summit Survey Data: 2007-2012

2007-85 Total Responses		2008-95 Total Responses		2009-92 Total Responses	
Automotive & Transportation	N/C	Automotive /Transportation	17	Automotive /Transportation	N/C
Manufacturing	11	Manufacturing & Aviation	20	Manufacturing	13
Construction	9	Construction	13	Construction	10
Financial/ Professional Services	20	Financial/ Professional Services	20	Financial/ Professional Services	28
Healthcare	12	Healthcare	15	Healthcare	13
Hospitality/ Retail	16	Hospitality/ Retail	10	Hospitality/ Retail	2
Information Technology	8	Information Technology	N/C	Information Technology	N/C
Other/General	N/C	Other/General	N/C	Other/General	16
<b>Total</b>	<b>85</b>	<b>Total</b>	<b>95</b>	<b>Total</b>	<b>82</b>
2010-97 Total Responses		2011-104 Total Responses		2012-85 Total Responses	
Automotive /Aviation & Manufacturing	19	Automotive /Aviation & Manufacturing	17	Automotive /Aviation & Manufacturing	N/C
				Aviation	11
				Manufacturing	11
Construction	13	Construction	7	Construction	11
Financial/ Professional Services	15	Financial/ Professional Services	16	Financial/ Professional Services	7
Healthcare	19	Healthcare	18	Healthcare	15
Hospitality/ Retail	6	Hospitality/ Retail	N/C	Hospitality/ Retail	N/C
Information Technology	12	Information Technology	24	Information Technology	5
Other/General	13	Other/General	22	Other/General	25
<b>Total</b>	<b>97</b>	<b>Total</b>	<b>104</b>	<b>Total</b>	<b>85</b>

### Notes

- N/C = not calculated
- IT combined with Financial/Professional Services in 2009
- Added Manufacturing/Aviation to Automotive & Transportation in 2010 & 2011
- IT separated in 2010
- Hospitality/Retail cancelled due to lack of participation 2011
- Manufacturing separated in 2012
- Aviation separated in 2012



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

	<input type="radio"/>					
	1	2	3	4	5	
	Not Important			Very Important		
	2007	2008	2009	2010	2011	2012
Automotive/Aviation & Transportation/ Manufacturing	3.4	3.1	3.4	3.3	2.8	N/C
Aviation	N/C	N/C	N/C	N/C	N/C	3.5
Manufacturing	N/C	N/C	N/C	N/C	N/C	2.9
Construction	3.2	3.2	3.2	3.5	3.7	3.4
Financial/ Professional Services	3.6	3.1	3.6	3.0	3.4	2.9
Healthcare	3.5	3.6	3.6	3.5	3.4	3.4
Hospitality/ Retail	3.1	3.3	3.0	3.0	N/C	N/C
Information Technology	N/C	N/C	N/C	3.5	3.3	3.4
<u>Other/General</u>	<u>N/C</u>	<u>N/C</u>	<u>3.9</u>	<u>3.3</u>	<u>3.6</u>	<u>3.2</u>
<b>Average</b>	3.4	3.3	3.5	3.3	3.4	<b>3.2</b>

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

	<input type="radio"/>					
	1	2	3	4	5	
	Not Important			Very Important		
	2007	2008	2009	2010	2011	2012
Automotive/Aviation & Transportation/ Manufacturing	4.3	4.6	4.3	4.5	3.9	N/C
Aviation	N/C	N/C	N/C	N/C	N/C	4.1
Manufacturing	N/C	N/C	N/C	N/C	N/C	4.6
Construction	4.7	4.6	4.6	4.5	4.6	4.2
Financial/ Professional Services	4.6	4.5	4.8	4.4	4.6	4.9
Healthcare	4.6	4.3	4.2	4.6	4.8	5.3
Hospitality/ Retail	4.7	4.8	3.5	4.0	N/C	N/C
Information Technology	N/C	N/C	N/C	4.6	4.3	4.4
<u>Other/General</u>	<u>N/C</u>	<u>N/C</u>	<u>4.6</u>	<u>4.5</u>	<u>4.5</u>	<u>4.6</u>
<b>Average</b>	4.6	4.6	4.3	4.4	4.5	<b>4.6</b>















## Aviation

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### 2012 Aviation Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 1,545 jobs in Aviation with a growth rate of 17.8% over the next 10 years.

#### Occupation Group

Aerospace Engineers (17-2011)
Aerospace Engineering and Operations Technicians (17-3021)
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)
Air Traffic Controllers (53-2021)
Airfield Operations Specialists (53-2022)

#### Occupation Facts

Annual Openings Estimate (2011)	70
Related Completions (2010)	287
Current Job Postings	N/A for Multiple Occupations

#### Gender

Male	84%	
Female	16%	

#### Age

14-18	0%	
19-24	13%	
25-44	33%	
45-64	50%	
65+	5%	

1,513 Jobs (2011) Location Quotient: 0.52	17.8% % Change (2012-2021) National: 7.1%	\$38.87/hr Median Earnings National: \$36.85/hr
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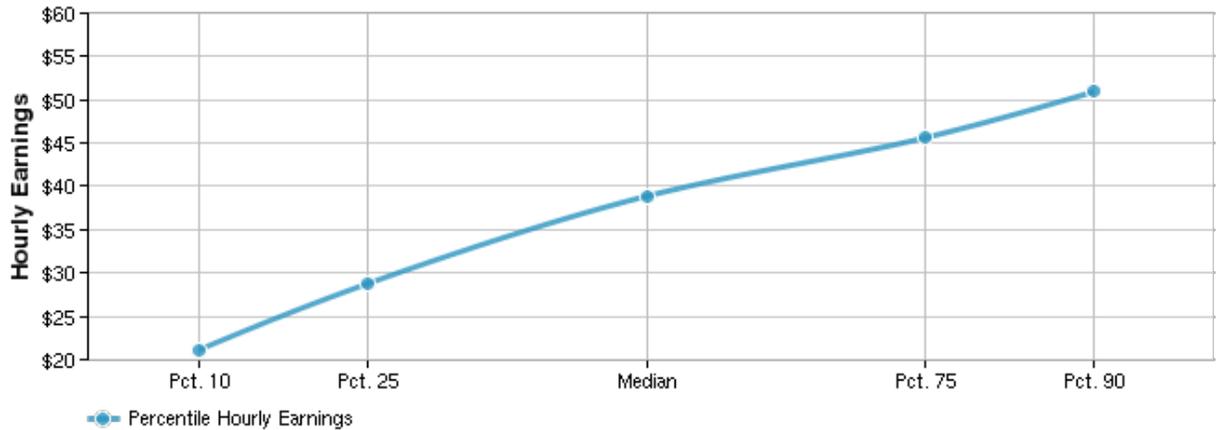
Hillsborough Pinellas | Growth for Target Occupations

1,545 2012 Jobs	1,819 2021 Jobs	275 Change (2012-2021)	17.8% % Change (2012-2021)
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Occupation	2012 Jobs	2021 Jobs	Change	% Change
Aerospace Engineers (17-2011)	370	447	77	21%
Aerospace Engineering and Operations Technicians (17-3021)	34	40	6	18%
Aircraft Mechanics and Service Technicians (49-3011)	478	571	93	19%
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)	86	146	60	70%
Aircraft Cargo Handling Supervisors (53-1011)	32	37	5	16%
Airline Pilots, Copilots, and Flight Engineers (53-2011)	146	151	5	3%
Air Traffic Controllers (53-2021)	359	380	21	6%
Airfield Operations Specialists (53-2022)	40	47	7	18%

### Hillsborough Pinellas | Percentile Earnings

\$21.16/hr 10th Percentile Earnings	\$38.87/hr Median Earnings	\$50.91/hr 90th Percentile Earnings
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Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Aerospace Engineers (17-2011)	\$30.36	\$46.82	\$58.50
Aerospace Engineering and Operations Technicians (17-3021)	\$14.46	\$20.61	\$31.72
Aircraft Mechanics and Service Technicians (49-3011)	\$12.38	\$21.02	\$30.54
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)	\$9.60	\$14.76	\$19.15
Aircraft Cargo Handling Supervisors (53-1011)	\$12.02	\$18.23	\$34.43
Airline Pilots, Copilots, and Flight Engineers (53-2011)	\$29.52	\$41.57	\$49.69
Air Traffic Controllers (53-2021)	\$25.44	\$64.63	\$83.40
Airfield Operations Specialists (53-2022)	\$9.62	\$18.51	\$30.48

## Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
 Hillsborough Pinellas	1,545	1,819	17.8%
 Florida	23,812	26,505	11.3%
 United States	394,593	422,561	7.1%

## Educational Programs

	5 Programs (2010)		287 Completions (2010)		
Program	2006	2007	2008	2009	2010
Airframe Mechanics and Aircraft Maintenance Technology/Techn ician (47.0607)	172	143	117	136	190
Avionics Maintenance Technology/Techn ician (47.0609)	0	15	9	51	61
Operations Management and Supervision (52.0205)	21	28	24	19	28
Engineering Technology, General (15.0000)	58	0	0	0	8
Airline/Commercia l/Professional Pilot and Flight Crew (49.0102)	0	0	0	0	0

## **Business and Education Summit Aviation Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “Taking the Next Step” Business and Education Summit. Industry leaders from the Aviation community gathered to discuss and share the following information. The session was led by Michael Wisniewski, President of National Aviation Academy.

1. Currently, what technical skills are you seeking?  
Mechanical and electrical skills for engineers on a local level  
Software/Computer Skills  
Managers with the technical and soft skills to supervise front-line staff  
Effective communication skills to develop and train the current staff  
Software, Mechanical and electrical engineers continue to be a hard find for many employers.
2. What technical skills do you think you will need in the future?  
Mechanics  
Mechanical/Software/Technical Engineers
3. What are three or four occupational shortages do you face?  
Mechanical Engineers  
Technical Engineers  
Aviation Training Instructors  
Technical Training Instructors
4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?  
Employers/Schools currently have little to no retention problems due to the bad economy this year. They understand that this may be reversed but they have provided current solutions (provided below) that will help sustain any retention issues.
  - On the Job Training
  - Profit-sharing
  - Employee-value programs/providing flexibility work schedules
  - Opportunity to grow within the organization
  - Adding new employees to the department
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?  
The general consensus was that post-secondary institutions have continued to outreach to the community, especially with high school and middle school students to facilitate an interest in the industry. Employers have seen an increase in the institutions’ effort to incorporate soft skills (behavior skills, social skills, team building skills, and interview skills) with the students to prepare for the workforce.
6. What is your current training system for incumbent workers? Do you have any gaps in training?  
The majority of the employers’ current training system is on-the-job training/cross training within the department. Also, employers, specifically in the aviation, are working with the older adult employees to provide additional technical skills training to help fill the gaps that are currently in the mechanic/machining department.

## **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](http://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 -2012)

## **Aviation-Collaborative Industry Forum- February 28, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit an Aviation Industry Forum was held on February 28, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

Welcome and Introductions - Michael Wisniewski, President of the National Aviation Academy (NAA) of Tampa Bay and Boston, welcomed everyone and introductions were made. 35 representatives from aviation institutions, training and education providers and other industry related corporations and employers attended the meeting.

LMI Industry Data - The group was presented with specific Industry and Occupational Labor Market Reports for the Tampa St. Petersburg- Clearwater MSA. These reports offered ten year occupational and statistical projections. The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Kristin Dailey, Director of Economic Development Services at WorkNet Pinellas. Kristin can be reached at 727-608-2444.

Discussion Topics - Notes were taken as the discussion took place. The information below is an abbreviated summary of the discussion.

Recruiting and Hiring -

### 1. Occupational shortages: Current and Anticipated.

The biggest challenge for the aviation industry in today's economic climate and tight labor market is finding, attracting and keeping talented professionals. The industry is growing in leaps and bounds with a projected growth of 15.5% in the Tampa Bay area alone. At the same time there are current personnel shortages, which will be further aggravated by the baby-boomer employees who are moving closer to retirement.

The current local occupational shortages include:

- Software Engineers
- Hardware Engineers
- Avionic Engineers
- Mechanical Engineers
- Technicians (especially in the fields of avionics and sheet metal composites)
- Maintenance
- Shop Personnel
- Store Keepers
- HR positions
- Assembly and Production Workers

### 2. Human Resource Challenges.

Due to the varied pool of employers across the industry, HR challenges are different from employer to employer and every case has its own particularities. There is no single solution from a curriculum perspective. In general terms, what the industry needs at this point is a workforce with better technical and soft skills to include attitude, team work and customer service skills. The easy part is asking the questions and identifying the problem areas; the difficult part is finding the solutions and implementing the remedial measures. Michael Wisniewski gave the following example: At the NAA attitude, team work and customer services skills are part of the curriculum for all disciplines. In his opinion, which was also

shared by all attendees, these valuable skills are crucial for all current and future employees of the aviation industry as a whole, from the baggage handlers to the top executives.

Education and Industry- The current personnel shortages can be partially resolved by augmenting and enhancing the skills of incumbent employees within the local industry. Another solution of the current shortages is to keep recruiting niche specialists out of state. The future personnel shortages can be resolved by investing in local training providers such as schools, colleges and universities, which investment will materialize in a future constant and continuous supply of adequately trained local work professionals. The industry needs to reach out to the local youth and promote a career development within the aviation industry. The aviation industry is a unique niche, which is constantly changing and evolving. Michael Wisniewski gave as an example the fields of avionics and metal sheet composites, where the technology is so complex and advanced that every employer has their own selection criteria, which is tailor made to its specific needs, which in itself is a challenge for the training providers. The educational institutions need to partner with local businesses to open doors for communication and collaboration in order to shape the curriculum and ensure that the students will have the required skills to fill occupational shortage gaps. In addition, local businesses need to consider funding the educational institutions to develop niche courses, which will be tailored to satisfy the specific requirements of the local industry. The problem that educational institutions currently face is the lack of job openings locally to justify the accreditation of niche courses without the financial assistance of local businesses.

1. Are post-secondary institutions meeting the demands of your industry?

The overall opinion of all participants is that in general secondary institutions are currently meeting the demands of the industry with one exception: they need to introduce into their curriculum soft skills that include attitude, team work and customer service skills.

2. Is there any training you feel is inadequate or inappropriate? What would you like to see changed in those areas?

Representatives from local schools pointed out that there needs to be more collaboration between local schools and businesses either by getting the students to visit local organizations, or by bringing the aviation professionals to the schools. The teachers explained that students do not know about a number of career development opportunities that lie at arm's length from the schools that they already attend, and that they need to know the names and areas of work of local aviation businesses, as well as how they can start pursuing a career in the desired field as early as 8<sup>th</sup> grade. One of the participants pointed out that there is a really helpful web resource called the Great American Teaching Forum, which can be used by the teachers to promote opportunities in the aviation field to their students. Another area which is growing in leaps and bounds is technology. As Michael Wisniewski pointed out, the NAA is investing in iPads and other new technology. The NAA is designing its programs to be in tune with the latest technology. Furthermore, Michael Wisniewski opined that "More education is better than less," but that not every single student needs to go to college. In his view, parents have to change their attitude and encourage their children to choose a profession, in which they will be happy and fulfilled and that both parents and educators need to instill real life skills such as a positive attitude, effective team work and successful customer service. Another member of the audience pointed out that there was a national report, which

revealed that there is currently a shortage of middle skilled<sup>1</sup> manpower on a national level and that according to this report the current labor market is oversaturated with highly skilled college graduates. Another major problem area of new graduates at all levels is interview preparation. Students do not understand that a good resume is not enough to secure a desired placement. A number of employers voiced their concerns that students do not research the company which they are applying to and do not prepare for the actual interview. HR attendees pointed out that interview preparation requires dedication and advanced planning and that educational institutions should consider including career advisers, mock interviews and specialized seminars in their curriculums to better prepare future graduates for real life job interviews

3. Local employers concerns:

- Technical Skills and Aviation Exposure.
- The Aviation Structure is unique and as such has specific niche needs.
- There are enough people to fill the positions; the problem is that their skills are not adequate to enable them to retain their jobs.
- Employees are not reporting the mistakes that they make and are not correcting them on time thus affecting quality and the overall productivity.
- Employees are not eager to learn and are not being proactive by asking the right questions.
- Quality is very important for employers.
- Accountability.
- Loyalty.
- Lack of customer services, attitude and team work skills.
- Punctuality.
- The curriculum is regulated by the Federal Government, and due to this regulation it is outdated and the future workforce is not in tune with evolving technologies in the aviation field. The examples that were given by members of the audience included the fields of avionics and sheet metal composites.
- Feasibility and financial burdens related to keeping the training in tune with the technical evolution in the varied aviation fields.

4. What trends or potential events do you see impacting your industry and workforce over the next 5-10 years?

The next five to ten years will bring a wave of retiring baby-boomers with a lack of generation X to fill the gaps. There will be more of a demand for companies to go outside the state for qualified/experienced employees to fill the openings that will be created by the retiring baby boomers unless they implement a new strategy to reach out to the local youth. Local businesses and educational providers need to open the eyes of the local youth and promote to them the rich spectrum of career paths that are available locally within the aviation industry. The new strategy is a long term collaborative measure, which will not resolve the present local recruiting and hiring needs but will provide a long term realistic solution to these problems.

What do we take away from today's collaborative meeting?

1. Youth outreach as early as middle school and consequently at college level, focusing on aviation career exploration and workforce readiness.
2. Using internship programs as an eye opener for current students by allowing them to gain cross functional responsibility, offering them the opportunity to train at different sites, teaching them valuable skills, and offering them experience in a real life work environment.
3. The local High School Advisory Boards need the input of local businesses to shape their curriculum.
4. The potential of future economic development and the opening of new aviation facilities in the area are being obstructed by the shortage of skilled workforce.

## Construction

### 2012 Construction Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 13,328 jobs in Construction with a growth rate of 5.7% over the next 10 years.

#### Industry Group

Construction Sand and Gravel Mining (212321)
New Single-Family Housing Construction (except Operative Builders) (236115)
New Multifamily Housing Construction (except Operative Builders) (236116)
Industrial Building Construction (236210)
Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing (532412)
Commercial and Institutional Building Construction (236220)
Water and Sewer Line and Related Structures Construction (237110)
Oil and Gas Pipeline and Related Structures Construction (237120)
Power and Communication Line and Related Structures Construction (237130)
Other Heavy and Civil Engineering Construction (237990)
Highway, Street, and Bridge Construction (237310)
Construction Machinery Manufacturing (333120)
Brick, Stone, and Related Construction Material Merchant Wholesalers (423320)
Other Construction Material Merchant Wholesalers (423390)
Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers (423810)

#### Industry Facts

Establishments (2011)	1428
Jobs Multiplier	2.31
Unemployed (2/2012)	Available for 2-Digit Only

#### Gender

Male	81%	
Female	19%	

Age		
14-18	1%	<div style="width: 1%;"></div>
19-24	7%	<div style="width: 7%;"></div>
25-44	49%	<div style="width: 49%;"></div>
45-64	39%	<div style="width: 39%;"></div>
65+	4%	<div style="width: 4%;"></div>

13,419 Jobs (2011) Location Quotient: 0.70	5.7% % Change (2012-2021) National: 3.3%	\$60,418 Average Earnings Per Job (2011) National: \$64,585
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### Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
<span style="color: blue;">■</span> Hillsborough Pinellas	13,328	14,083	5.7%
<span style="color: green;">■</span> Florida	124,946	137,996	10.4%
<span style="color: brown;">■</span> United States	2,566,195	2,651,555	3.3%

Occupation	Employed in Industry Group (2011)	% of the Total Jobs in Industry Group (2011)
Construction Laborers (47-2061)	1,891	14.1%
Carpenters (47-2031)	1,439	10.7%
First-Line Supervisors/Managers of Construction Trades and Extraction Workers (47-1011)	1,307	9.7%
Operating Engineers and Other Construction Equipment Operators (47-2073)	706	5.3%
Construction Managers (11-9021)	667	5.0%

### **Business and Education Summit Construction Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “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 Patrick McLaughlin, Executive Director of Masonry Association of Florida, Inc.

1. Currently what technical skills are you seeking?
  - Mechanical aptitude
  - Ability to learn new information
  - Willingness to work hard
  - Identify and use tools and equipment
  - Knowledge gained in OJT environment
  - Basic technology skills
  
2. What technical skills do you think you will need in the future?
  - Technology for problem solving
  - Less paper - more technic
  - Tablets - OSHA - PDF document to prove training
  - Smart phone
  - Basic web browsing
  - Blueprint reading
  - Electronic plan review
  - Basic & Construction Math
  - Read a rule
  - BIM - future of construction - industry practice
  
3. What technical skills do you think you will need in the future?
  - Technology for problem solving
  - Less paper - more technic
  - Tablets - OSHA - PDF document to prove training
  - Smart phone
  - Basic web browsing
  - Blueprint reading
  - Electronic plan review

## Basic & Construction Math

Read a rule

BIM - future of construction - industry practice

4. What are the three or four occupational shortages that you face?  
Lack of individuals with hands-on skills for new generation of workforce  
Future workforce created by individuals choosing alternate careers  
Limited employment creating severe shortage of skilled workers  
Apprenticeship dropping due to lack of employment opportunities  
Individuals selecting college in lieu of apprenticeship  
Underemployed degreed professionals are continuing education and returning to school
5. What are your biggest retention problems?  
Lack of jobs continues as major retention issue - Employees face sporadic employment not related to lack of skills. Economic trends have created industry wide unemployment. Trade positions now require individuals to be multi-faceted in their skillset.
6. What solutions have been developed to try and solve your retention problems?  
Create more jobs  
Build partnerships  
Continue to promote the trades as a bonafide career, not a job  
Cross train for real world employment  
Educate employers of benefits to training  
Licensure  
Alternative training options
7. Are post-secondary institutions meeting the demands of your industry?  
More than 1/2 of technical students seeking additional training possess Bachelor's degrees  
Certifications and OJT continue to have a high value  
Untrained personnel are a hazard and unprofitable in today's work environment  
Trades have Journeyman upgrade training
8. Is there any training you feel is inadequate or inappropriate?  
Training on new materials  
Training on new energy materials  
Welding being replaced with alternate methods such a shooting a pin into steel with pneumatics
9. What would you like to see changed in those areas?  
Training on new technology to replace old craft skills  
Keep current with codes  
Blended learning
10. What is your current training for incumbent workers?  
Technical and Vocational school - Mathematics, mechanical drawing  
Apprenticeship - administered by employers, trade associations and trade unions  
OJT training - administered by proficient supervisors with a variety of educational backgrounds  
OSHA/Safety training - to avoid job loss compensation  
Workforce - Energy related training  
CEU's  
BOAF (Building officials) – reduced due to budget cuts.

11. Are there any gaps in incumbent worker training?

- Shortage of time need to make \$
- Online training to get certificates
- Complacency of existing workforce
- Enrollments cut in half- Reduced demand - OJT reduced
- Apprenticeship model is challenged by lack of employment
- Students registering for specific certificates
- Registered apprenticeship program to AA degree
- 2 year construction model at community college will incorporate technical skill demand
- Journeyman to college
- Alternative hours – CEU
- Industry certifications - green building
- Lacking hands - on skills
- Cancelled apprenticeship programs because of shortage of students

Narrative Summary and additional comments:

Previously the Construction trades focused on technical skills which included employability, teamwork, initiative, motivation, customer service and general Soft skill development. Additional importance was placed on safety/code, introductory trade knowledge and company roles in a business environment.

Previous occupational shortages included welders, solar, energy related workers electricians, repair and maintenance due to the economic challenges and lack of new construction.

New trends focus on industry resurgence from the economic slowdown. Although job opportunities remain scarce and the past history of poor industry image continues, the additional challenge of competing with technology for the attention of the emerging younger workforce plays an increasing important role.

The construction industry continues to extend efforts to target the youth population through pre-apprenticeship, locally PTCPP. The trades remain challenged to recruit them and additionally retain them through a full apprenticeship. Non-traditional labor pools are not prevalent. Industry requires strong math and blueprint reading skills. Technology and the introduction of BIM will play an integral role in the upcoming generation of construction.

Many incumbent workers lack complex technology, leadership and management skills, although the emerging workforce will possess the required technological skills.

Construction industry employees will be required to be diverse and increasingly educated in addition to the willingness to work hard and have multifaceted backgrounds. Often individuals entering the industry will be second and third generation family. Some will enter the workforce as laborers, helpers or apprentices from high school. Most are encouraged to take advantage of Apprenticeship, OJT and OSHA certifications to supplement their skill level.

Duly noted is a lack of time to train due to budget constraints and of equal importance is the necessity of development of true Craftsmanship beyond certifications. The next generation of Fathers have been raised with technology and children who previously learned how to use their hands in the home environment to fix and repair may not have that benefit.

Certifications and hands on skills developed in a controlled classroom career academy environment will require learning advanced skills on the jobsite and will require supervision. Construction trades are currently supported by Pre – Apprenticeship acknowledge the need for additional OJT training hours referencing Apprenticeship with annual 144 classroom 2000 hours OJT - per year. Job Corps, DOL

funded is requesting industry to come and assist with development of work based learning community with entrepreneurship components.

The current economic climate recognizes architecture firms downsized – less design – less construction and cancelled apprenticeship programs because of shortage of students. The industry needs educational support to allow classes with less than 15 students to continue without cancellation in addition to Bridge the gap - support for programs. Some programs have in place Trust funds from existing employees to fund training- union model. Non-union model is lacking funding.

Industry statistics reference most workers are between 25 - 44 years old. Florida construction ‘disaster’ shows Forecast of Housing permits peaked in 2005. Permits dropped from 200,000 to present of 20,000. This year predicted to be 40,000 - goal 100,000. Projects designed 3 years ago are currently being financed.

The Construction cycle is roads, housing and then commercial. In order to properly address workplace issues, provide better products and meet the needs of the business community more employers must participate.

An additional focus should be placed on recruiting local diverse companies including but not limited to day labor - specialty, masonry, electrical, erection, HVAC, General Contractor, Architect and Engineering firms who will mentor and employ students. These employers must be involved and should be encouraged to have a voice in curriculum, training, employment and participate as an active collaborative group.

An additional challenge is out of the area construction companies supplying their own workforce; caused primarily by the winning bidder not being local and either through loyalty or necessity provide their existing employees. The construction industry has become more specialized and most positions have extensive learning curves.

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

#### **Industry Snapshots**

- Total employment in the construction industry is projected to rise 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.

### 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.

*(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 craftworker 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 -2012)

## **Construction -Collaborative Industry Forum- March 27, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit a Construction Industry Forum was held on March 27, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

### I. Welcome and Introductions

Patrick J. McLaughlin, Executive Director of the Masonry Association of Florida, welcomed everyone and introductions were made. Thirty-one representatives of industry related institutions, employers, training and education providers attended the forum.

### II. LMI Industry Data

The group was presented with specific Industry and Occupational Labor Market Reports for Pinellas County. These reports offered ten years occupational and statistical projections.

The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Kristin Dailey, Director of Economic Development Services at WorkNet Pinellas, Inc.

### III. Regional, economic and construction industry forecasts focusing on current and forthcoming workforce needs for the Tampa Bay area

Patrick J. McLaughlin presented a detailed forecast and analysis on the current and emerging workforce needs for the Tampa Bay area and Florida. A copy of the presentation is available on our website <https://www.worknetpinellas.org>.

### IV. Finding, training and retaining skilled workforce in today's challenging economic climate

The current economic climate and aging workforce creates challenges for local employers who are having problems with finding, training and retaining skilled employees.

All participants agreed that what the industry needs is more jobs. Without the job openings people are reluctant to pursue a career in the construction field or alternatively to augment their current skills.

Employers are not currently hiring and investing in training, which will create a shortage of skilled workers in the future. The lack of work will push people who are currently trained in the construction field to pursue a career change and ultimately shift to a different work area. Many attendees voiced a similar concern: when the construction industry recovers in a couple of years, there will be a significant shortage of skilled workers.

Education providers are having difficulty promoting the construction courses in their curriculum to the local youth. Many parents and students fear that there are not enough job openings at present to ensure placement following the completion of the training course/s.

There is an imminent need for internship programs and other forms of collaboration between local employers and education providers with the aim of opening the eyes of the local youth to the career paths and job opportunities that are available locally.

1. Current occupational shortages.

- Welders
- Electrical Contractors
- Entry Level Electricians

2. 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?

One of the participants in the discussion wanted to know more about the “Academies for Pinellas.” Patrick J. McLaughlin clarified that this initiative is part of SB 1844 Relating to Career and Professional Academies, which was introduced by Senator Don Gaetz last year. The Academies main focus is on trades and workforce development. It was also mentioned that it is important for students to graduate from High School with an industry credential. In addition, there appears to be a problem with the pre-apprenticeship FCAT testing which needs to be addressed. Local education providers voiced their concerns that according to current statistics, 60% local of students do not graduate from high school in Pinellas County, which further aggravates their efforts to promote and encourage students to pursue career development within the construction field.

Education Providers face difficulty recruiting students into electric and carpentry courses as there is very little building activity in the region. The education providers feel there is a need to partner with local employers in order for the students to work on meaningful projects. Training providers and employers agreed that more jobs are needed as it is difficult to recruit students into construction programs without the existence of future job openings. Currently, trained workers are being let down by not finding a placement on completion of their certification courses.

All participants agreed that parents and career counselors need to change their attitude and encourage students to pursue apprenticeship programs in middle skilled career paths. As an example, the starting salary of an electrician is in the range of \$35,000 - \$38,000, with no student loans and a two year apprenticeship program.

3. What is your current training system for incumbent workers? Do you have any gaps in that system?

Due to the economic climate, most employers are no longer investing in incumbent worker training. A number of the employers that were present are using the EWT and OJT training programs that are managed and administrated by WorkNet Pinellas. The possibility of loaning and exchanging skilled electrical contractors was presented as an alternative

4. What trends or potential events do you see impacting your industry and workforce over the next 5-10 years?

- We are at the bottom of an economic cycle.
- The forecasted rebound of the population in the Tampa Bay Area will in turn affect the job openings and the need for more single family dwellings and commercial construction.
- Lack of trained and skilled workforce when the industry recovers.
- Existing construction workforce has been significantly reduced and needs to be rebuilt.
- Aging population and its effects on aging workforce.
- The key will be in PRE and Apprenticeship.
- Change the mindset and encourage people to start their own business

## Financial/Professional Services

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### **2012 Financial /Professional Services Occupation Report-Hillsborough-Pinellas**

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 214,722 jobs in Financial /Professional Services with a growth rate of 21.8% over the next 10 years.

#### Industry Group

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Monetary Authorities-Central Bank (521110)

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Commercial Banking (522110)

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Savings Institutions (522120)

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Credit Unions (522130)

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Other Depository Credit Intermediation (522190)

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Credit Card Issuing (522210)

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Sales Financing (522220)

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Consumer Lending (522291)

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Real Estate Credit (522292)

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International Trade Financing (522293)

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Secondary Market Financing (522294)

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All Other Nondepository Credit Intermediation (522298)

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Mortgage and Nonmortgage Loan Brokers (522310)

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

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Other Activities Related to Credit Intermediation (522390)

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Investment Banking and Securities Dealing (523110)

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Securities Brokerage (523120)

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Commodity Contracts Dealing (523130)

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Commodity Contracts Brokerage (523140)

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Securities and Commodity Exchanges (523210)

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Miscellaneous Intermediation (523910)

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Portfolio Management (523920)

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Investment Advice (523930)

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Trust, Fiduciary, and Custody Activities (523991)

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Miscellaneous Financial Investment Activities (523999)

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Direct Life Insurance Carriers (524113)

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Direct Health and Medical Insurance Carriers (524114)

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Direct Property and Casualty Insurance Carriers (524126)

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Direct Title Insurance Carriers (524127)

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

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Reinsurance Carriers (524130)

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Insurance Agencies and Brokerages (524210)

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Claims Adjusting (524291)

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Third Party Administration of Insurance and Pension Funds (524292)

---

All Other Insurance Related Activities (524298)

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Pension Funds (525110)

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Health and Welfare Funds (525120)

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Other Insurance Funds (525190)

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Open-End Investment Funds (525910)

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Trusts, Estates, and Agency Accounts (525920)

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Other Financial Vehicles (525990)

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Offices of Lawyers (541110)

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Title Abstract and Settlement Offices (541191)

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All Other Legal Services (541199)

---

Offices of Certified Public Accountants (541211)

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Tax Preparation Services (541213)

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Payroll Services (541214)

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Other Accounting Services (541219)

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Architectural Services (541310)

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Landscape Architectural Services (541320)

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Engineering Services (541330)

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Drafting Services (541340)

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Building Inspection Services (541350)

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Geophysical Surveying and Mapping Services (541360)

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Surveying and Mapping (except Geophysical) Services (541370)

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Testing Laboratories (541380)

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Interior Design Services (541410)

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Industrial Design Services (541420)

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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)	

Industry Facts

Establishments (2011)	14031
Jobs Multiplier	3.66
Unemployed (2/2012)	Available for 2-Digit Only

Gender

Male	51%	<div style="width: 51%; height: 10px; background-color: #0070C0;"></div>
Female	49%	<div style="width: 49%; height: 10px; background-color: #0070C0;"></div>

Age

14-18	0%	<div style="width: 0%; height: 10px; background-color: #0070C0;"></div>
19-24	6%	<div style="width: 6%; height: 10px; background-color: #0070C0;"></div>
25-44	46%	<div style="width: 46%; height: 10px; background-color: #0070C0;"></div>
45-64	41%	<div style="width: 41%; height: 10px; background-color: #0070C0;"></div>
65+	7%	<div style="width: 7%; height: 10px; background-color: #0070C0;"></div>

206,434 Jobs (2011) Location Quotient: 1.36	21.8% % Change (2012-2021) National: 17.6%	\$62,985 Average Earnings Per Job (2011) National: \$73,924
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Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
<span style="color: #0070C0;">■</span> Hillsborough Pinellas	214,722	261,438	21.8%
<span style="color: #70AD47;">■</span> Florida	1,301,229	1,585,183	21.8%
<span style="color: #8B4513;">■</span> United States	21,336,982	25,087,634	17.6%

## Staffing Patterns

Occupation	Employed in Industry Group (2011)	% of the Total Jobs in Industry Group (2011)
Personal Financial Advisors (13-2052)	14,994	7.3%
Securities, Commodities, and Financial Services Sales Agents (41-3031)	12,644	6.1%
Insurance Sales Agents (41-3021)	11,485	5.6%
Accountants and Auditors (13-2011)	9,196	4.5%
Customer Service Representatives (43-4051)	8,118	3.9%

### **Business and Education Summit Financial/Professional Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “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?
  - Discussion consisted primarily of soft skill needs to include: communication, email etiquette, professionalism, reliability, flexibility in learning for both younger and older workers, interviewing skills.
  - A few technical skills thrown out included: social media aptitude, professional etiquette on social media, consulting skills, JAVA language, software development.
  - There was great discussion in regards to the need for more internships to enhance these technical needs. Many participants think that there is a greater need to create a linkage between youth and the professional business community.
2. What technical skills do you think you will need in the future?
  - IT languages (no particular languages specified); software developers, Business Analytics; Computer Securities
3. What are three or four occupational shortages that you face?
  - none identified
4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?
  - Retention is an ongoing problem as there is a lack of loyalty in employees now. Employees are hired on and will leave for like positions that are paying a little more or have more competitive benefits; even for better growth opportunities.
  - Attempting to tackle retention problems by being more competitive in pay; better benefit; offering more career tracts; focusing on increased training that will open internal job options

5. Are post-secondary institutions meeting the demands of your industry? Is there any training that you feel is inadequate or inappropriate? What would you like to see changed in those areas?

- Overall, general consensus of group is that post-secondary is not meeting the needs of their industries from a non-technical stand point. Participants expressed the need for more career prep from a soft skill stand point by institutions.
- It was discussed that post-secondary institutions need to have a greater focus on developing relationships with local businesses to offer internships to graduates to get "real world" exposure into industry.
- Ongoing discussion about professional etiquette and customer focused training

6. What is your current training system for incumbent workers? Do you have any gaps in that training?

- unable to discuss due to time

### **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 -2012)

## **Financial/Professional Services-Collaborative Industry Forum- March 27, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit a Financial/Professional Industry Forum was held on May 29, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

### **I. Welcome and Introductions**

Kristin Dailey, Director of Economic Development Services of WorkNet Pinellas welcomed everyone and introductions were made. 53 representatives of industry related institutions, employers, training and education providers attended the forum.

### **II. LMI Industry Data**

The group was presented with specific Industry and Workforce Emerging Markets Reports. These reports offered ten year occupational and statistical projections. The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Kristin Dailey of WorkNet Pinellas.

### **III. Discussion Topics**

Michele Schrotter, Corporate Education Specialist with Bouchard Insurance led the discussion. Notes were taken as the discussion took place. The information below is an abbreviated summary of the discussion.

What personality and other psychometric tests do you use in your interviewing process?

- Caliper- the test provides the employer with a detailed picture of an applicant's behavioral tendencies and strengths. Bouchard Insurance have tailored the test to best suit their needs in the search of employees with a balance of behavioral traits in between sales and service.
- Wonderlic Cognitive Ability Test (formerly known as Wonderlic Personnel Test)- is a group intelligence and critical thinking test used to assess the aptitude of prospective employees for learning and problem-solving in a wide range of occupations.
- Group Interviews –Bouchard uses group interviews to evaluate how a potential employee will interact with his/hers co-workers, trying to solve real life/work problems.

What are the most important characteristics and qualities of your ideal employee?

- Team Player/ Want to see co-workers succeed./ Us/We attitude rather than I/Me attitude
- Good communicator / Well spoken
- Advisor / Listener
- Cross-selling / No compensation for referrals
- Connecting effectively with customers from different cultural backgrounds
- Connecting effectively with customers from different generations
- Adapting the sale style to meet customer's needs
- Engaging customers instead of impressing them
- Develop a personal relationship with customers
- Personal service
- Self-motivated
- Flexible
- Teachable
- Connecting
- Professional Experience is not essential

What is your hiring quota and your current retention rate?

- 670 people were interviewed last year of which 25 were hired.
- The current retention rate is 9 years per employee.
- Competitors head hunt and love to hire Bouchard's ex-employees.

Cost of replacement v. Cost of retaining an employee.

- The cost of replacement is lower than the cost of retention.
- Bouchard has its own retention formula which is a combination of monetary compensation, benefits and training.
- Work-Life Balance.
- "Work smarter not harder."

Do you pay for incumbent worker training?

- Bouchard pays up front for books and exams with the only caveat that the employee has to pass the exam/s.

Are you having success competing with the fast evolving technology? Do you have an app?

- Karen from Bouchard pointed out that insurance is getting more and more complicated and in her professional opinion some people buy online without understanding what exactly they are buying.
- It is advisable to speak to an expert/advisor to better understand the product/service rather than purchase online.
- Bouchard is in the process of developing an app.

How do you attract the youth?

- Career Fairs
- Florida State University on campus visits
- Visits to local schools
- CPCU Organizations
- Summer internship programs

Health Insurance Portability?

- New law will come into effect in 2016 which will allow individuals to buy portable Health Insurance.
- If states do not create insurance exchange, the federal government will step in.
- Massachusetts is the only state at the moment with insurance exchange.

Will the electronic medical coding have effect on the speed and cost of claims processing

- Yes it will reduce administrative costs.

## HealthCare

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### 2012 HealthCare Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 100,446 jobs in HealthCare with a growth rate of 15.4% over the next 10 years.

#### Industry Group

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HMO Medical Centers (621491)

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General Medical and Surgical Hospitals (Private) (622110)

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Offices of Physicians, Mental Health Specialists (621112)

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Voluntary Health Organizations (813212)

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Residential Mental Health and Substance Abuse Facilities (623220)

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All Other Miscellaneous Ambulatory Health Care Services (621999)

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Home Health Care Services (621610)

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Outpatient Mental Health and Substance Abuse Centers (621420)

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

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Offices of All Other Miscellaneous Health Practitioners (621399)

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

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Offices of Dentists (621210)

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Other Residential Care Facilities (623990)

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Residential Mental Retardation Facilities (623210)

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Psychiatric and Substance Abuse Hospitals (Private) (622210)

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

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Hospitals (State Government) (902622)

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Hospitals (Local Government) (903622)

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

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#### Industry Facts

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Establishments (2011) 4475

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Jobs Multiplier 2.06

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Unemployed (2/2012) Available for 2-Digit Only

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Gender

Male	20%	<div style="width: 20%; height: 10px; background-color: #0070C0;"></div>
Female	80%	<div style="width: 80%; height: 10px; background-color: #0070C0;"></div>

Age

14-18	0%	<div style="width: 0%; height: 10px; background-color: #0070C0;"></div>
19-24	6%	<div style="width: 6%; height: 10px; background-color: #0070C0;"></div>
25-44	46%	<div style="width: 46%; height: 10px; background-color: #0070C0;"></div>
45-64	43%	<div style="width: 43%; height: 10px; background-color: #0070C0;"></div>
65+	5%	<div style="width: 5%; height: 10px; background-color: #0070C0;"></div>

97,506 Jobs (2011) Location Quotient: 1.02	15.4% % Change (2012-2021) National: 16.8%	\$62,842 Average Earnings Per Job (2011) National: \$63,384
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Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
<div style="width: 10px; height: 10px; background-color: #0070C0; display: inline-block;"></div> Hillsborough Pinellas	100,446	115,958	15.4%
<div style="width: 10px; height: 10px; background-color: #70AD47; display: inline-block;"></div> Florida	816,717	948,594	16.1%
<div style="width: 10px; height: 10px; background-color: #8B4513; display: inline-block;"></div> United States	13,363,844	15,605,870	16.8%

## Staffing Patterns

Occupation	Employed in Industry Group (2011)	% of the Total Jobs in Industry Group (2011)
Registered Nurses (29-1111)	16,204	16.6%
Home Health Aides (31-1011)	5,676	5.8%
Nursing Aides, Orderlies, and Attendants (31-1012)	4,156	4.3%
Physicians and Surgeons, All Other (29-1069)	3,567	3.7%
Receptionists and Information Clerks (43-4171)	3,555	3.6%

### **Business and Education Summit HealthCare Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th 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 Craig Brethauer Vice President, Team Resources with BayCare Health Systems.

1. Currently, what technical skills are you seeking?
  - EMR (Electronic Medical Records) training at the pre-service level.
  - Basic documentation and written communication skills. Suggested course material to include: Articulating the patient’s story and plan of care and/or effectively documenting a diagnosis and prognosis to properly convey the patient’s entire medical picture.
  - IT skills to include: Data Analytics and Data Mining programming and coding using SAS and SQL.
  - Healthcare Support/ Admin skills such as professional Medical/ Healthcare workers with advanced degrees for Accounting and Marketing roles.
  - Highly skilled Medical Assistants
  - Specialized Lab Techs in fields such as Histology and Cytology.
  - Clinical Pharmacists
  - Clinically trained individuals with the appropriate “soft skills” to be successful in the healthcare industry.
2. What technical skills do you think you will need in the future?
  - Same as above
3. What are the three or four occupational shortages that you face?
  - Lab Techs
  - Clinical Pharmacists
  - Certified and Licensed individuals with the appropriate “soft skills” for the healthcare industry.
4. Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?
  - Agreed that Retention is not a substantial issue at this time.

Retention solutions discussed were:

- A. A longer orientation phase and mentoring for new hires.
  - B. Ensuring that incumbent workers maintain a healthy work/ life balance to include in house exercise programs and intervention techniques for managing stress in the workplace.
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?
- Post-Secondary institutions are currently meeting the demand for numbers of individuals licensed and certified in clinical healthcare occupations. However it was agreed that this may change as schools begin to apply (per request) tougher screening of an individual's "appropriateness" for the medical field going forward.
  - Request for more Pre- Service Healthcare Training which implements the reality of work in the healthcare industry.
  - Need to expand the number and scope of medical internship programs.
  - Continue and expand work with Career Centers at the High School level.
  - Request for training geared to career occupations within the HMO Industry.
6. What is your current training system for incumbent workers? Do you have any gaps in that training?
- No gaps in incumbent worker training were reported.
  - Current best practice incumbent worker training in the healthcare field consists of a multipronged approach that offers career ladder opportunities, Leadership Development training and programs to ensure that incumbent workers are able to manage stress and maintain a healthy work/life balance.

Summary:

Technical skills needed in the medical field continue to reflect the growing use of Electronic Medical Records and specialty fields requiring advanced training or degrees in the Clinical, Lab and Pharmacy settings. Current practices of employee value programs and mentoring have yielded higher retention rates and decreased turnover in most areas of nursing.

There is continued concern over the lack of soft, basic, communication and documentation skills in new graduates in all areas. Industry leaders forecast an increased screening and career development protocols at the high school and pre-service levels in all clinical areas.

Much information was provided and new contacts were made for ongoing partnerships and communication of needs between all the educators and employers in attendance to include invitations to advisory board meetings and facility tours.

### **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.

## **HealthCare -Collaborative Industry Forum- January 24, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit a HealthCare Industry Forum was held on January 24, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

### Welcome and Introductions

Dr. Sandra Cassity with BayCare Health Systems led the discussion. 57 Healthcare Industry Leaders attended from the Tampa Bay community.

### LMI Industry Data

The group was presented with specific Industry and Workforce Emerging Markets Reports. These reports offered 5 year occupational and statistical projections. The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Dr. Kristin Daily, Director of Economic Development at WorkNet Pinellas.

### Discussion Topics

Notes were taken as the discussion took place. The information below is an abbreviated summary of the discussion.

#### Hot topics

- Current Economic Climate and its effect on increased retirement age.
- Aging workforce and aging population. How to tackle both problems?
- In today's electronic era, people have higher expectations of the healthcare industry. An area that is developing in leaps and bounds is Medical Records.
- Shifting the risk. The provider and the patient need to work in a team. The care starts in the physician's office, which is a new way of thinking. More resources are allocated to outpatient and home care, following customer needs and preferences.
- Shared resources, less funding for all of the participants, different payment mechanisms and the need to strengthen and continue the current partnership, as well as the need to bring more partners together in order to be able to compete successfully in the current grants market.
- Efficiency and effectiveness. How to work more closely with the patient?

#### Occupational shortages: Current and Anticipated

- Critical Care Nurses
- Lab and Radiology Techs
- Medical Records Administrators
- Specialty Areas Nurses and Techs
- Home care
- Behavioral Health, Psychiatric Health, Depression and Substance Abuse Physicians, Nurses and Techs
- Outpatient rehabilitation.
- Outpatient Physical/Occupational Therapists
- Lab techs
- Surgical services including Surgical Techs, Surgical Nurses, Anesthesia Techs
- Pharmacy Techs

### Human Resource Challenges

- Unrealistic expectations of future graduates. As per Dr. Cassity, it is not wise for new graduates to pick and choose and wait for their dream job opportunity. They should take the first job that has been offered to them and they will have a better chance to develop their career in the desired field, once they have gathered the necessary exposure and practice in a real medical environment.
  - Customer Service and Empathy a major problem area for new generations. Initiative training, coaching, working with people at all levels from the cleaners, caterers, the nurses, the doctors and all other employees that have direct or indirect contact with the clients.
  - Facial Piercing and tattoos (particularly in senior care environments).
  - Cultural and generational barriers.
  - Strict legislative rules for background checks and screening. Employers feel the need for more flexibility and discretion in the screening process, specifically in cases of long term employees with impeccable work records and history.
  - College graduates unable to pass state licensing and employer's practical tests and exams. The need to combine certification with the actual degree curriculum.
  - College graduates with not enough practical experience.
  - Quicker, more cost effective and easier for employers to bring specialists from out of state with relevant work experience, rather than rely on new graduates and on the job training.
  - Retention problems of specialists with experience due to higher paid and more attractive jobs elsewhere.
- Dr. Cassity gave as an example that over the last two weeks Bay Care has hired over 200 new employees and that this is not due to new job openings but to shifting workforce.

### Education and Industry

Are post–post-secondary institutions meeting the demands of your industry?

- There is a need for more practical experience.
- Simulation to replace or augment clinical experience.
- Employers need to provide training institutions with feedback about current and future employee shortage forecasts.

Training that you would like to see changed

- Stimulation to replace or augment clinical experience.
- Risk assessment, implementation and cost.
- Need for a new simulation center.
- Long term partnership of private and public profit and nonprofit organizations with the aim of sharing future and current grants and funding resources and opening a new simulation center that will be utilized by all participants for the benefit of all, including the organizations themselves and the patients.
- The State Board has to take the lead by implementing a new system of delivering not by changing the standards.
- More practical and on the job training.
- Lack of niche specialists.

Problems for education providers

- Employers would not consider hiring new graduates without practical experience, and as a result tend to give preference to out of state applicants with practical experience.
- Rigid selection criteria and the need for more flexibility and discretion.
- The problem, which many education providers face, is that the specialized fields do not have enough job openings in order for the training provider to be able to justify future accreditation and inclusion into the curriculum of the niche field training.

- Training providers would like to have a closer relationship with employers', especially in the field of internships and cross training. In addition, they would like to know from employers if they are flexible on their recruitment and eligibility criteria for new graduates. Will employers consider hiring new graduates with internship or cross training experience?

#### Questions and Topics for future discussion

- Availability of online courses and distance learning, webinars, current trends.
- Tampa Bay Healthcare Consortium and its mission.
- Updated Technology and nanotechnology: Is this on the radar of education institutions for the future?
- On the job training and practical experience of new graduates.
- Private business partners able to help with efficiency.
- Private business partners able to help with internship strategies.

## Information Technology

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### **2012 Information Technology Occupation Report-Hillsborough-Pinellas**

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 56,396 jobs in IT with a growth rate of 12.5% over the next 10 years.

#### Occupation Group

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Computer and Information Systems Managers (11-3020)

---

Computer and Information Scientists, Research (15-1010)

---

Computer Programmers (15-1020)

---

Computer Software Engineers (15-1030)

---

Computer Support Specialists (15-1040)

---

Computer Systems Analysts (15-1050)

---

Network and Computer Systems Administrators (15-1070)

---

Network Systems and Data Communications Analysts (15-1080)

---

Miscellaneous Computer Specialists (15-1090)

---

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)

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Miscellaneous Information and Record Clerks (43-4190)

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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)

---

Computer Control Programmers and Operators (51-4010)

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#### Occupation Facts

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Annual Openings Estimate (2011)	1,946
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Related Completions (2010)	2,171
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Current Job Postings	Only Available for 5-Digit
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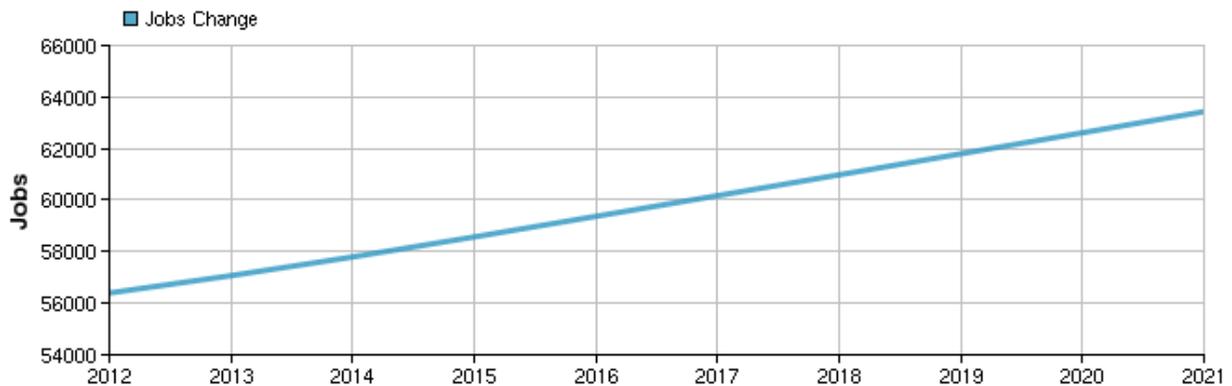
Gender	
Male	51% 
Female	49% 

Age	
14-18	1% 
19-24	6% 
25-44	52% 
45-64	38% 
65+	4% 

55,821 Jobs (2011) Location Quotient: 1.07	12.5% % Change (2012-2021) National: 11.6%	\$24.15/hr Median Earnings National: \$27.26/hr
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Hillsborough Pinellas | Growth for Target Occupations

56,396 2012 Jobs	63,433 2021 Jobs	7,036 Change (2012-2021)	12.5% % Change (2012-2021)
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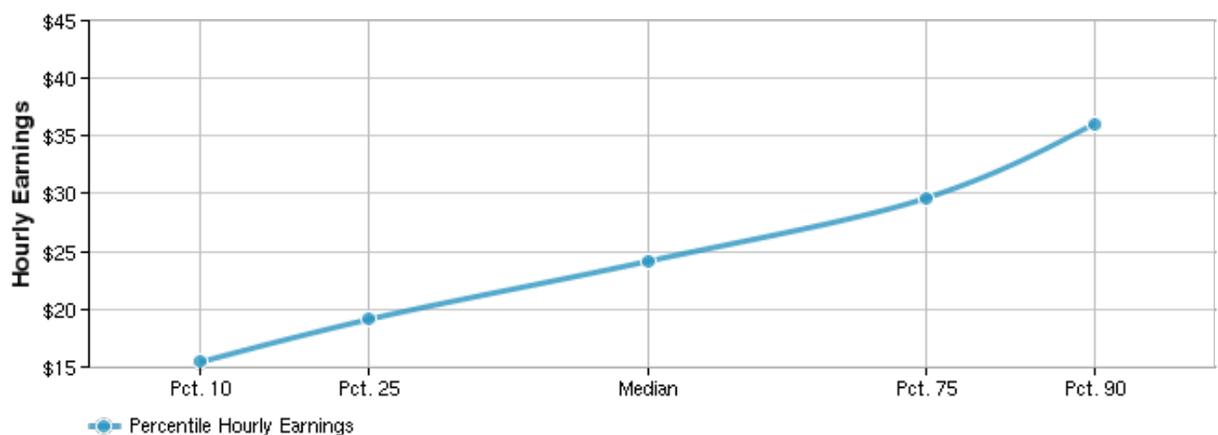
Occupation	2012 Jobs	2021 Jobs	Change	% Change
Computer and Information Systems Managers (11-3021)	1,661	2,013	352	21%
Computer and Information Scientists, Research (15-	145	183	38	26%

Occupation	2012 Jobs	2021 Jobs	Change	% Change
1011)				
Computer Programmers (15-1021)	3,769	3,618	-151	-4%
Computer Software Engineers, Applications (15-1031)	4,145	5,217	1,072	26%
Computer Software Engineers, Systems Software (15-1032)	2,225	2,883	658	30%
Computer Support Specialists (15-1041)	4,580	5,181	601	13%
Computer Systems Analysts (15-1051)	5,403	6,211	808	15%
Network and Computer Systems Administrators (15-1071)	2,323	2,818	495	21%
Network Systems and Data Communications Analysts (15-1081)	3,859	5,190	1,331	34%
Computer Specialists, All Other (15-1099)	942	1,093	151	16%
Computer Hardware Engineers (17-2061)	224	261	37	17%
Interpreters and Translators (27-3091)	2,181	2,547	366	17%
Media and Communication Workers, All Other (27-3099)	523	592	69	13%
Media and Communication Equipment Workers, All Other (27-4099)	245	269	24	10%
Medical Records and Health Information Technicians (29-2071)	1,617	1,886	269	17%
Receptionists and Information Clerks (43-4171)	11,573	12,690	1,117	10%
Information and Record Clerks, All Other (43-4199)	2,147	1,836	-311	-14%

Occupation	2012 Jobs	2021 Jobs	Change	% Change
Computer Operators (43-9011)	749	602	-147	-20%
Data Entry Keyers (43-9021)	3,216	3,110	-106	-3%
Word Processors and Typists (43-9022)	1,279	1,365	86	7%
Computer, Automated Teller, and Office Machine Repairers (49-2011)	1,225	1,261	36	3%
Radio Mechanics (49-2021)	38	41	3	8%
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	1,741	1,826	85	5%
Computer-Controlled Machine Tool Operators, Metal and Plastic (51-4011)	558	707	149	27%
Numerical Tool and Process Control Programmers (51-4012)	30	33	3	10%

#### Hillsborough Pinellas | Percentile Earnings

\$15.43/hr 10th Percentile Earnings	\$24.15/hr Median Earnings	\$36.06/hr 90th Percentile Earnings
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Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Computer and Information Systems Managers (11-3020)	\$34.71	\$51.55	\$98.75
Computer and Information Scientists, Research (15-1010)	\$33.11	\$46.22	\$59.01
Computer Programmers (15-1020)	\$18.30	\$32.03	\$48.28
Computer Software Engineers (15-1030)	\$24.04	\$38.66	\$58.23
Computer Support Specialists (15-1040)	\$12.94	\$19.95	\$33.09
Computer Systems Analysts (15-1050)	\$21.93	\$34.59	\$49.86
Network and Computer Systems Administrators (15-1070)	\$20.03	\$31.63	\$49.79
Network Systems and Data Communications Analysts (15-1080)	\$17.55	\$29.44	\$42.70
Miscellaneous Computer Specialists (15-1090)	\$19.23	\$32.55	\$45.99
Computer Hardware Engineers (17-2060)	\$22.86	\$41.41	\$55.42
Miscellaneous Media and Communication Workers (27-3090)	\$11.33	\$17.85	\$27.47
Miscellaneous Media and Communication Equipment Workers (27-4090)	\$10.04	\$33.02	\$48.66
Medical Records and Health Information Technicians (29-2070)	\$8.88	\$13.41	\$24.31
Receptionists and Information Clerks (43-4170)	\$8.63	\$12.41	\$16.23
Miscellaneous Information and Record Clerks (43-4190)	\$11.50	\$16.99	\$23.72
Computer Operators (43-9010)	\$12.88	\$17.59	\$24.88
Data Entry and Information Processing Workers (43-9020)	\$11.12	\$13.50	\$17.79
Computer, Automated Teller, and	\$11.41	\$17.98	\$24.06

Occupation	10th Percentile Earnings	Median Earnings	90th Percentile Earnings
Office Machine Repairers (49-2010)			
Radio and Telecommunications Equipment Installers and Repairers (49-2020)	\$11.93	\$21.49	\$29.91
Computer Control Programmers and Operators (51-4010)	\$10.51	\$15.87	\$22.40

### Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
Hillsborough Pinellas	56,396	63,433	12.5%
Florida	375,835	428,234	13.9%
United States	7,163,783	7,995,062	11.6%

Program	2006	2007	2008	2009	2010
Medical Insurance Coding Specialist/Coder (51.0713)	218	344	316	433	771
Management Information Systems, General	262	239	212	240	212

Program	2006	2007	2008	2009	2010
(52.1201)					
Computer Systems Networking and Telecommunication s (11.0901)	109	75	80	107	183
Health Information/Medical Records Technology/Technician (51.0707)	84	57	61	39	177
Computer and Information Sciences, General (11.0101)	188	100	105	108	152

### **Business and Education Summit Information Technology Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “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 Patricia Gehant, Director of Hillsborough/Pinellas Workforce Project.

Currently, what technical skills are you seeking?

Mobile (apps) skills, Cloud Computing based skills, Java and SharePoint.

What technical skills do you think you will need in the future?

Security, Programmers and Applications, C+, SharePoint, Java, Web Based technical skills, Project management, Help Desk/Technical Skills, Networking, Business Intelligence, Data Center, Web 2.0, Telecommunications (voice-over IP) Interestingly enough some of what was stated were the hot future skill last year to come and are now technical skills being sought out such as Virtualization, Enterprise Architects, Mobile platforming, Java, SharePoint, and data mining. Shows how on point the future is with technology. Apple is a great example of the cloud computing! USF has converted from their old service system to a canvas cloud based system! WOW!

What are the three or four occupational shortages that you face?

Security, Programming, Java, applicants with web-based technologies, and SharePoint

Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?

Lack of interest or time vested in the employees, or training. After doing studies and internal surveys in-house, results have shown employees will go where they can to learn more. So in order to solve retention problems there has to be investment in the employees which means training and advancement where it can be applied.

What is your current training system for incumbent workers? Do you have any gaps in that training?

Cross training, benefits that offer additional training through an accredited institution. The gaps are not enough funding or time for training.

Additional comments:

- Schools that are accredited require teachers with masters and sometimes doctorates. These teachers are difficult to find in which we consider good skilled teachers. (USF)
- When looking for applicants to hire we need them with critical thinking skills, creativity etc.
- When it comes to solutions for producing skilled applicants in IT we need to figure out how we can incorporate certification courses in grade schools and high school levels. (STEM TEC) discussed. Also mentioned was IT internships.

### **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.

## **IT-Collaborative Industry Forum- April 24, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit an Information Technology Industry Forum was held on April 24, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

### Welcome and Introductions

Ms. Cindy Brown, CEO of Pratt, Brown & Associates, LLC, a comprehensive IT Solutions firm located in Clearwater, Florida, welcomed everyone and introductions were made. 65 representatives from information technology corporations, training and education providers and other industry related institutions attended the meeting.

### LMI Industry Data

The group was presented with specific Industry and Occupational Labor Market Reports for Tampa Clearwater MSA. These reports offered ten year occupational and statistical projections. The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Kristin Dailey, Director of Economic Development Services at WorkNet Pinellas.

### Discussion Topics

Notes were taken as the discussion took place. The information below is an abbreviated summary of the discussion. Cindy Brown opened the collaborative discussion by pointing out that her vision for today's forum is a collaborative lunch where all the participants would share and discuss what is happening in the IT field, exchange ideas and compare best practices.

Currently, what technical skills are you seeking?

### PHP Programmers

St. Petersburg College is presently offering two programs in the above field at both introductory and advanced level. The programs are offered once or twice a year and the average number of students attending the programs is 10.

Florida Technical College is offering a combined program, which consists of web design, graphics and information technology. The combination of all three disciplines has proved a successful technique in increasing student enrollment.

### Project Managers/ Developers

There is a shortage of experienced candidates. The required experience by most employers is 2 years. Employers are dealing with the problem by recruiting entry level candidates who are then being shadowed and mentored by experienced professionals. In addition, employers are forced to recruit out of state. A number of local employers are introducing referral programs with attached bonuses. The rationale behind this new recruitment method is that if you keep your current workforce content and incentivized they will in turn repay the favor with loyalty and good publicity.

### Network Engineers

#### System Administrators

Local employers are faced with a twofold challenge. They are looking for people with current clearance and certification at the same time.

Are there any other skills you are seeking?

People that have been in the workforce for twenty years and have the required experience are not keeping up to date with the latest technology development.

How is the above problem addressed by local educational providers and workforce boards?

- OJT Programs
- Employed Worker Training Programs
- Kaplan Educational Foundation

Cindy Brown presented the audience with a successful OJT scenario of one of her employees. She recommends the OJT program for small businesses who can claim 50% of the employee's wages for up to ten weeks. She pointed out that there are tons of grant money that goes unused every year.

Cindy Brown continued her presentation with the hottest IT jobs as per current national statistics:

- Mobile Application Developers
- User Experience Designers
- IT Security engineers
- Network Engineers ( Cisco)

What technical skills do you think you will need in the future?

One of the participants shared that they are working with the maritime community and that the IT skills required for employees working on a ship are different and she wanted to know what could be done to improve the quality of the candidates.

Another participant said that the main challenge is finding and hiring instructors that are up to date with the latest technology. She explained that the instructors that they are hiring have to have a masters degree coupled with IT training and experience. According to her it takes up to a year to set up a course by navigating through all the bureaucracy, licensing and necessary training. As a result by the time the course is up and running, the technology has evolved and there is a need for an updated course curriculum.

A solution to the above problem was proposed by another audience member whose opinion was that businesses need to partner with education providers. He gave an example how industries were brought to the teaching institutions by a series of workshops, which in time turned into a more formal training. A further solution was presented by HCC. They have a building in Ybor City on two levels. The first level offers corporate training and the second level provides services to 1100 faculty members by training them on how to integrate technology into their teaching. The first and the second level coming together allowing HCC to get faculty members up to date with the latest technology developments and integrate those into the teaching process.

Another participant opined that what needs to be taken into account is a broader perspective. A perspective that concentrates on investing in STEM programs and opening the eyes of the local youth as early as elementary level. This will then serve as a foundation for a future career path into the IT field. Local businesses need to step up and partner with educational institutions to address the current IT needs. Two companies in the audience announced that they are currently partnering and collaborating with local educational institutions. A member of the audience voiced his concern that old technology needs to be supported as well, especially cobol, java etc. According to him the shortages in these areas will be aggravated further by the fast approaching retirement of baby boomers. None of the present educational institutions are currently offering programs or courses in the above mentioned fields.

How do you recruit and retain your employees?

- Networking
- Partnering with schools
- Books
- Social Media such as Linked In / Employ Florida / Facebook and Twitter.

All participants agreed that in today's ever changing economic climate it is hard to find, attract and retain skilled workforce and that employees need to be incentivized in order to keep their loyalty and productivity. Various participants shared that apart from bonuses and other monetary incentives, the other two top incentives are flexibility and the ability to work remotely. According to various members of the audience this in turn improves productivity and effectiveness. A point was also raised that these incentives are probably suitable for managerial level positions where self-discipline would not be an issue.

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 local employer opined that it would be helpful if educational institutions had a published inventory, which could be reviewed from time to time by local industries. According to a member from a local educational institution, in general the major challenge for local educational institutions is the decreasing number of students. Most students decide to take easier courses and do not see the long term benefit of taking the hard courses and increasing their earning potential. Currently there are endless opportunities for college students graduating with communication degrees.

Cindy Brown explained that she is surprised that the national unemployment rate is at 8.2% when there is so much hiring. She is actively helping people with their resumes and coaching them how to market and sell their services. In her opinion, companies need to introduce both a retention budget and a recruitment budget. None of the employers in the audience had the above line items in their current budgets. She further opined that employers are usually concerned with the direct hiring cost and are overlooking the indirect cost implications, such as loss of productivity, training, loss of management time for the interviewing process and subsequently for supervision and shadowing.

Cindy pointed out that in the current economic climate there is no stability, longevity and loyalty. According to her there is a constant shift of workforce in pursuit of better working conditions, better remuneration and more flexibility. Employers need to be creative and invent and implement new retention strategies.

What is your current training system for incumbent workers? Do you have any gaps in that training?

- Conferences
- Certification
- OJT

How could the high school you attended have better prepared you for the career you have chosen?

Local businesses need to partner and collaborate with educational institutions in order to help students gather real life work experiences through workshops, presentations, internships or any other methods, which can help students make the necessary transition from the class room to a real work environment. Members from the audience shared their success stories from fruitful partnerships between local businesses and educational institutions.

- “Clearwater High School” - Kindle Project
- TBTA- 52 Scholarships
- University of Tampa- Internship Programs

## Manufacturing

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### 2012 Manufacturing Occupation Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 56,514 jobs in Manufacturing with a growth rate of 9.4% over the next 10 years.

#### Industry Facts

Establishments (2011)	2302
Jobs Multiplier	Available for 6-Digit Only
Unemployed (2/2012)	5,163

Gender		
Male	67%	
Female	33%	
Age		
14-18	1%	
19-24	4%	
25-44	38%	
45-64	51%	
65+	7%	

57,701 Jobs (2011) Location Quotient: 0.63	9.4% % Change (2012-2021) National: -2.5%	\$64,336 Average Earnings Per Job (2011) National: \$73,698
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## Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
 Hillsborough Pinellas	56,514	61,804	9.4%
 Florida	337,571	367,799	9.0%
 United States	11,976,590	11,673,733	-2.5%

## Staffing Patterns

Occupation	Employed in Industry (2011)	% of the Total Jobs in Industry (2011)
Team Assemblers (51-2092)	2,785	4.8%
Electrical and Electronic Equipment Assemblers (51-2022)	2,365	4.1%
First-Line Supervisors/Managers of Production and Operating Workers (51-1011)	2,011	3.5%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	1,417	2.5%
Printing Machine Operators (51-5023)	1,236	2.1%

## **Business and Education Summit Manufacturing Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “Taking the Next Step” Business and Education Summit. Manufacturing Leaders from the community gathered to discuss and share the following information. The session was led by Richard Peck, President of QTM, Inc.

Currently, what technical skills are you seeking?

- CNC machinist. Majority of workers are over 40. According to Richard Peck 51% is on their way out for retirement and not getting new CNC machinist coming in.

What technical skills do you think you will need in the future?

- CNC Machinist

What are the three or four occupational shortages that you face?

- Certified CNC Machinists

Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?

- With a lack of soft skills people are not staying committed to their job. They are leaving without notice, not coming in to work on a regular basis or state they are leaving to get a slightly higher pay though they are giving up a bigger benefit package. Getting the immediate financial gratification. One example given was a person that went to another employer that was slightly higher in pay and gave up a large benefit package stating he wanted to buy something for his truck and can do it quicker with the other job even though the employer tried to explain what he was giving up in the long run.
- Employers feel there is a lack of work ethic in employees today.
- Employers have tried exit interviews when there has been notice given but most leave without notice. They have tried anonymous surveys but have not had any luck.
- GE Aviation states they have no retention problems. They have a careful hiring selection process that includes a test period as part of the application process working in a team environment and looking at the group dynamics. They are big on situational based questions in the interview. They also pay up to 8 hours for each employee to go do community service which they feel brings a sense of community as well as loyalty to the company. They have 470 employees. Other employers stated they feel it is more the GE Aviation name than those items that really get people wanting to stay and the smaller companies have a hard time competing with that.
- Suggested to do Employee Referral Programs. Some state they have and do not see any difference.
- Bay Area Distributors is one employer that is having a lot of trouble with retention.

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?

- Some attendees feel that the programs currently offered are too long and with a “now” generation people do not want to go to school that long. Example was given for PTEC proving a 4 year program.
- PTEC states they also offer Apprenticeship Programs and Competency Programs.
- Suggested to do more COOP programs. GE states they have a problem that the COOPS want some kind of engineering degree. Needs to be more inclusive of a basic level.
- Suggested for shorter certificate and accelerated training options.
- Suggested to do more Apprenticeship programs.
- Some attendees feel there should be more involvement on the institutions to get the students jobs after graduation.
- Offer more training that accommodate people currently employed so they can work and go to school.
- SPC received a \$15 million grant recently from the Department of Labor for displaced workers that have been affected by company downsizing or outsourcing. It is to upgrade

or add new skills to become more marketable. Looking at a training time table of 4 months. Their goal is to bring educators, economic development and businesses together in this process and want to change how they train people such as offering certificates and accelerated programs.

- Both employers and educators feel there is a lack of communication between each other and would like to see that improved.

What is your current training system for incumbent workers? Do you have any gaps in that training?

- The larger companies have company programs in place for training of incumbent workers but smaller companies do not have any current training in place.
- Need performance training
- Need soft skills training
- Need short term training programs for workers in other areas of the company to become CNC machinists.

### **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.

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 \$178,268,678.

## **Manufacturing -Collaborative Industry Forum - June 6, 2012**

Prior to the 6<sup>th</sup> Annual Business and Education Summit a Manufacturing Industry Forum was held on June 6, 2012. Tampa Bay WorkForce Alliance and WorkNet Pinellas hosted this event. Below is a recap of information discussed from this Collaborative Industry Forum.

### Welcome and Introductions

Richard Peck, President and owner QTM, Inc. welcomed everyone and introductions were made. 83 representatives of industry related institutions, employers, training and education providers attended the forum

### LMI Industry Data

The group was presented with specific Industry and Regional Market Reports. These reports offered regional (Tampa Clearwater MSA) information about the Manufacturing industry. These reports offered ten year occupational and statistical projections. The group was advised that specialized reports could be run for specific sub group NAICS codes by contacting Kristin Dailey, Director of Economic Development Services at WorkNet Pinellas.

### Discussion Topics

Notes were taken as the discussion took place. The information below is an abbreviated summary of the discussion.

Currently, what technical skills are you seeking?

He didn't specify a technical skill, but rather they are looking for people with a manufacturing education.

What technical skills do you think you will need in the future?

Cyber security will be the most vital technical skill needed in the future of manufacturing.

What are the three or four occupational shortages that you face?

We have an unskilled workforce. 50% have only a high school diploma or less. Technical schools are not filling up to full capacity. Unemployment insurance has risen dramatically which makes employers hesitant to hire on more employees. Regulations can hold a project back from starting or completing in a more timely fashion.

Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?

Technology is moving faster than man. Someone who has been a CNC Machinist most likely will be obsolete in the near future. The new technology will replace them, as it already has in Germany. The workers within the manufacturing industry must keep up with the technology by gaining more education at technical schools. After reviewing the pay on the Labor Report, Florida wages are very competitive compared to the wages up north.

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?

Post-secondary institutions are not meeting the demands of the manufacturing industry. Richard found that most of the graduating seniors have never even been in a manufacturing building. Training in a real manufacturing setting is crucial. There are so many resources for the graduates that they are not aware of. Technical schools, such as PTEC are not filling up to full capacity. We need to have more advertising for such schools to gain more students for this industry. He also offered a suggestion of a student can go to class for free and if he/she passes, then he/she can take another class for free, as long as the classes aren't full.

What is your current training system for incumbent workers? Do you have any gaps in that training?

Current training has taken a downfall because of how bad the market has been. They had to stop on the job training to cut costs. Once the market gets better, then they will be able to start that training program again.

How could the high school you attended have better prepared you for the career you have chosen?

He did not mention his high school, but spoke about there should be programs for young individuals to study the manufacturing industry in the public school systems in high school and even in middle school.

## General- Economy Overview

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### 2012 Economy Overview Report-Hillsborough-Pinellas

Current labor market data indicates that the Hillsborough-Pinellas-MSA has approximately 1,325,451 jobs in General Services with a growth rate of 14.4% over the next 10 years.

#### Region Info

Name: Hillsborough Pinellas	
County Areas: Hillsborough, Florida (12057), Pinellas, Florida (12103)	
Population (2011)	2,171,637
Jobs (2011)	1,303,121
Average Earnings (2011)	\$46,039
Unemployed (2/2012)	94,431
Completions (2010)	34,366
GRP (2011)	\$97,243,523,280
Exports (2011)	\$93,521,087,791
Imports (2011)	\$87,058,314,464

#### Hillsborough Pinellas | Population

2,171,637 2011 Population 11.4% of State	3.6% Population Growth for the Last 5 Years National Growth 4.7%
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Age Group	2011 Population	% of Population	
Under 5 years	121,942	5.6%	
5 to 9 years	121,546	5.6%	
10 to 14 years	128,655	5.9%	
15 to 19 years	135,373	6.2%	
20 to 24 years	143,198	6.6%	
25 to 29 years	142,818	6.6%	
30 to 34 years	136,847	6.3%	
35 to 39 years	134,810	6.2%	
40 to 44 years	149,050	6.9%	

Age Group	2011 Population	% of Population	
45 to 49 years	163,590	7.5%	
50 to 54 years	163,891	7.5%	
55 to 59 years	146,009	6.7%	
60 to 64 years	135,275	6.2%	
65 to 69 years	104,397	4.8%	
70 to 74 years	78,984	3.6%	
75 to 79 years	62,746	2.9%	
80 to 84 years	50,965	2.3%	
85 years and over	51,541	2.4%	

#### Hillsborough Pinellas | Jobs by Industry

1,303,121 Total Jobs (2011)	49.8% Male (National: 52.1%)	50.2% Female (National: 47.9%)
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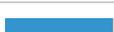
NAICS	Industry	2011 Jobs	
11	Agriculture, Forestry, Fishing and Hunting	17,488	
21	Mining, Quarrying, and Oil and Gas Extraction	677	
22	Utilities	3,095	
23	Construction	57,421	
31-33	Manufacturing	57,701	
42	Wholesale Trade	43,652	
44-45	Retail Trade	134,282	
48-49	Transportation and Warehousing	27,611	
51	Information	27,710	
52	Finance and Insurance	107,292	
53	Real Estate and Rental and Leasing	66,591	
54	Professional, Scientific, and Technical Services	106,544	
55	Management of Companies and Enterprises	22,066	
56	Administrative and Support and Waste Management and Remediation Services	104,847	

NAICS	Industry	2011 Jobs
61	Educational Services (Private)	23,328 
62	Health Care and Social Assistance	150,905 
71	Arts, Entertainment, and Recreation	38,801 
72	Accommodation and Food Services	93,848 
81	Other Services (except Public Administration)	82,259 
90	Government	136,715 
99	Unclassified Industry	288 

#### Hillsborough Pinellas | Average Earnings by Industry

\$46,039	\$55,796	\$36,390
Avg. Earnings (2011)	Male Avg. Earnings (2011)	Female Avg. Earnings (2011)
92% of National Avg.	93% of National Avg.	94% of National Avg.

NAICS	Industry	Avg. Earnings (2011)
11	Agriculture, Forestry, Fishing and Hunting	\$17,818 
21	Mining, Quarrying, and Oil and Gas Extraction	\$52,917 
22	Utilities	\$111,215 
23	Construction	\$43,887 
31-33	Manufacturing	\$64,336 
42	Wholesale Trade	\$65,529 
44-45	Retail Trade	\$31,919 
48-49	Transportation and Warehousing	\$45,242 
51	Information	\$75,471 
52	Finance and Insurance	\$61,949 
53	Real Estate and Rental and Leasing	\$23,488 
54	Professional, Scientific, and Technical Services	\$62,676 
55	Management of Companies and Enterprises	\$81,960 
56	Administrative and Support and Waste Management and Remediation Services	\$31,360 
61	Educational Services (Private)	\$31,874 
62	Health Care and Social Assistance	\$53,440 

NAICS	Industry	Avg. Earnings (2011)	
71	Arts, Entertainment, and Recreation	\$33,434	
72	Accommodation and Food Services	\$20,551	
81	Other Services (except Public Administration)	\$20,875	
90	Government	\$64,630	
99	Unclassified Industry	\$38,935	

### Hillsborough Pinellas | Unemployment by Industry

#### Total Unemployment (2/2012)

94,431

NAICS	Industry	Unemployed (2/2012)	% of Unemployed	
11	Agriculture, Forestry, Fishing and Hunting	268	0%	
21	Mining, Quarrying, and Oil and Gas Extraction	35	0%	
22	Utilities	237	0%	
23	Construction	14,609	15%	
31-33	Manufacturing	5,163	5%	
42	Wholesale Trade	1,555	2%	
44-45	Retail Trade	10,294	11%	
48-49	Transportation and Warehousing	1,183	1%	
51	Information	1,158	1%	
52	Finance and Insurance	4,383	5%	
53	Real Estate and Rental and Leasing	1,450	2%	
54	Professional, Scientific, and Technical Services	4,582	5%	
55	Management of Companies and Enterprises	140	0%	
56	Administrative and Support and Waste Management and Remediation Services	8,746	9%	
61	Educational Services (Private)	1,343	1%	

62	Health Care and Social Assistance	5,903	6%	
71	Arts, Entertainment, and Recreation	1,536	2%	
72	Accommodation and Food Services	7,858	8%	
81	Other Services (except Public Administration)	3,106	3%	
90	Government	5,971	6%	
99	No Previous Work Experience/Unspecified	14,911	16%	

#### Hillsborough Pinellas | Top Program Completions

CIP	Program	Completions (2010)	
51	Health professions and related programs	9,855	
24	Liberal arts and sciences, general studies and humanities	4,827	
52	Business, management, marketing, and related support services	4,788	
13	Education	1,825	
45	Social sciences	1,505	
12	Personal and culinary services	1,415	
43	Homeland security, law enforcement, firefighting and related protective services	1,260	
26	Biological and biomedical sciences	1,080	
42	Psychology	832	
50	Visual and performing arts	753	

#### Hillsborough Pinellas | Gross Regional Product (GRP)

Earnings (2011)	Property Income (2011)	Taxes on Production (2011)	Total GRP (2011)
\$62,756,734,607	\$25,453,285,747	\$9,509,110,955	\$97,243,523,280

NAICS	Industry	GRP (2011)	% of Total
11	Agriculture, Forestry, Fishing and Hunting	\$408,628,756	0%
21	Mining, Quarrying, and Oil and Gas Extraction	\$93,532,153	0%
22	Utilities	\$1,412,109,204	1% 
23	Construction	\$2,787,484,017	3% 
31-33	Manufacturing	\$6,214,981,736	6% 
42	Wholesale Trade	\$6,438,537,950	7% 
44-45	Retail Trade	\$7,431,873,920	8% 
48-49	Transportation and Warehousing	\$1,899,432,748	2% 
51	Information	\$5,339,545,562	5% 
52	Finance and Insurance	\$13,274,293,681	14% 
53	Real Estate and Rental and Leasing	\$9,179,600,392	9% 
54	Professional, Scientific, and Technical Services	\$9,120,652,482	9% 
55	Management of Companies and Enterprises	\$2,271,205,222	2% 
56	Administrative and Support and Waste Management and Remediation Services	\$4,347,255,926	4% 
61	Educational Services (Private)	\$869,472,857	1% 
62	Health Care and Social Assistance	\$9,030,512,719	9% 
71	Arts, Entertainment, and Recreation	\$1,831,770,688	2% 
72	Accommodation and Food Services	\$3,088,485,493	3% 
81	Other Services (except Public Administration)	\$1,978,881,071	2% 

NAICS	Industry	GRP (2011)	% of Total
90	Government	\$10,225,266,705	11%

Hillsborough/ Pinellas | Region Exports

\$93,521,087,790.61  
Exports (2011)  
49% of Supply

NAICS	Industry	Exports (2011)
11	Agriculture, Forestry, Fishing and Hunting	\$760,181,975
21	Mining, Quarrying, and Oil and Gas Extraction	\$116,720,477
22	Utilities	\$1,126,475,619
23	Construction	\$1,399,885,769
31-33	Manufacturing	\$11,092,741,555
42	Wholesale Trade	\$5,260,183,123
44-45	Retail Trade	\$3,963,947,414
48-49	Transportation and Warehousing	\$1,785,351,053
51	Information	\$4,800,329,750
52	Finance and Insurance	\$10,269,753,277
53	Real Estate and Rental and Leasing	\$4,241,544,567
54	Professional, Scientific, and Technical Services	\$4,280,243,790
55	Management of Companies and Enterprises	\$1,980,946,300
56	Administrative and Support and Waste Management and Remediation Services	\$2,743,604,489
61	Educational Services (Private)	\$346,988,277

NAICS	Industry	Exports (2011)
62	Health Care and Social Assistance	\$4,613,536,930 
71	Arts, Entertainment, and Recreation	\$1,741,185,329 
72	Accommodation and Food Services	\$1,853,567,165 
81	Other Services (except Public Administration)	\$912,253,270 
90	Government	\$30,231,647,661 

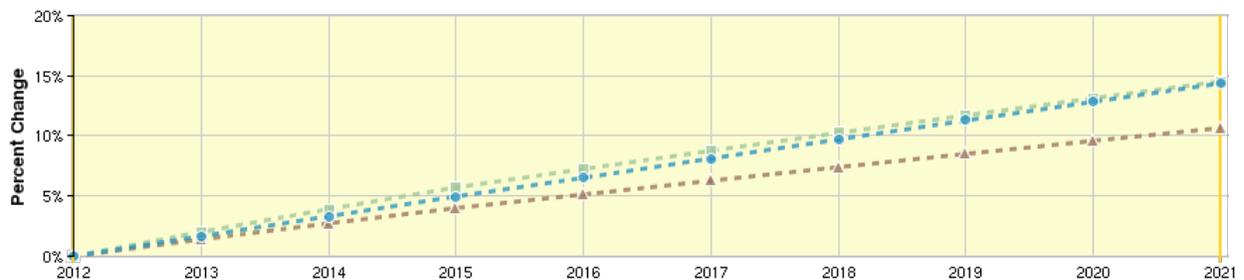
Hillsborough Pinellas | Region Imports

\$87,058,314,464 Imports (2011) 47% of Demand	\$97,879,597,097 Locally Produced & Consumed (2011) 53% of Demand
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NAICS	Industry	Imports (2011)
11	Agriculture, Forestry, Fishing and Hunting	\$620,137,838 
21	Mining, Quarrying, and Oil and Gas Extraction	\$1,608,499,818 
22	Utilities	\$1,717,733,989 
23	Construction	\$1,755,778,298 
31-33	Manufacturing	\$18,466,950,239 
42	Wholesale Trade	\$2,562,334,887 
44-45	Retail Trade	\$1,745,173,794 
48-49	Transportation and Warehousing	\$2,109,980,239 
51	Information	\$2,715,576,197 
52	Finance and Insurance	\$4,446,470,23 

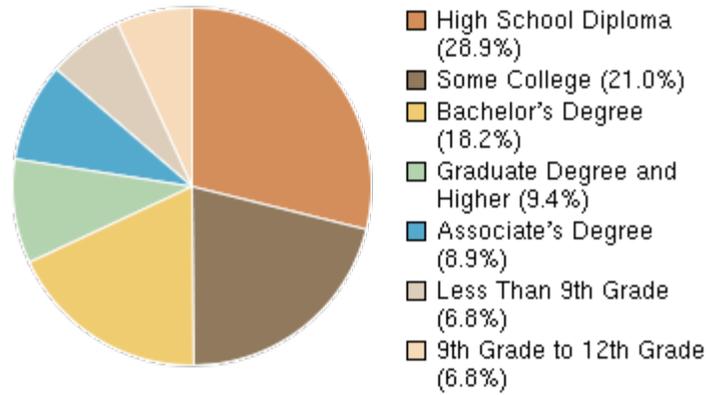
NAICS	Industry	Imports (2011)
		1
53	Real Estate and Rental and Leasing	\$1,708,843,040
54	Professional, Scientific, and Technical Services	\$2,512,167,636
55	Management of Companies and Enterprises	\$636,919,654
56	Administrative and Support and Waste Management and Remediation Services	\$1,001,837,016
61	Educational Services (Private)	\$692,000,621
62	Health Care and Social Assistance	\$2,029,482,111
71	Arts, Entertainment, and Recreation	\$443,570,946
72	Accommodation and Food Services	\$1,129,289,804
81	Other Services (except Public Administration)	\$953,591,876
90	Government	\$38,201,976,229

### Regional Trends



Region	2012 Jobs	2021 Jobs	% Change
 Hillsborough Pinellas	1,325,451	1,515,999	14.4%
 Florida	10,360,079	11,866,032	14.5%
 United States	179,496,284	198,634,125	10.7%

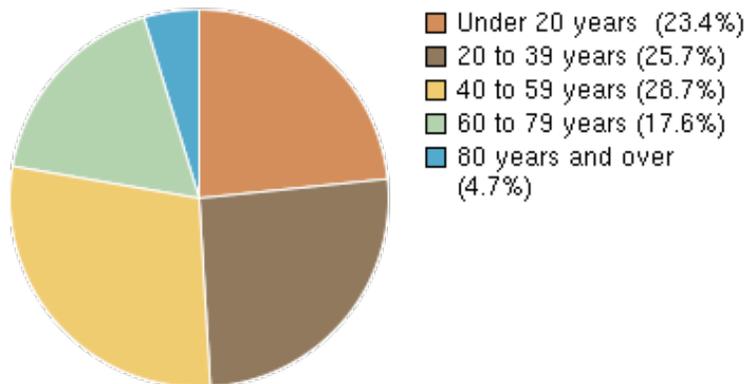
### Educational Attainment



### Largest Openings to Completions Gaps

Occupation	Related Completions (2010)	Annual Openings (2011)
Securities, Commodities, and Financial Services Sales Agents (41-3031)	0	1,483
Personal Financial Advisors (13-2052)	505	1,697
Property, Real Estate, and Community Association Managers (11-9141)	1	567
Unclassified Occupation (99-9999)	0	455
Lawyers (23-1011)	10	446

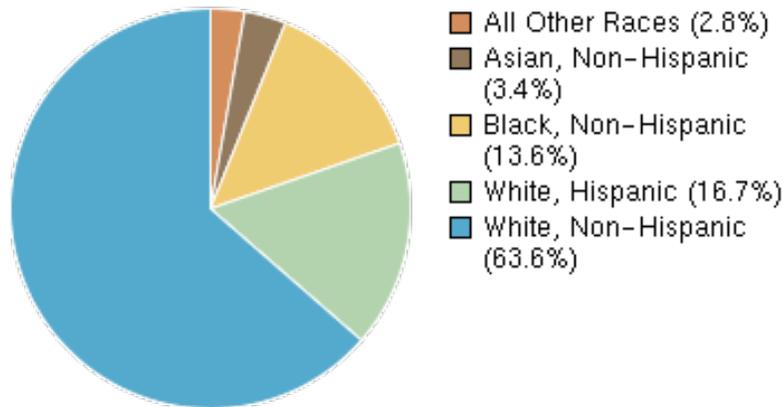
### Age Demographics



### Growing/Declining Occupations

Occupation	Change in Jobs (2012-2021)
Personal Financial Advisors (13-2052)	7,836
Customer Service Representatives (43-4051)	6,838
Real Estate Sales Agents (41-9022)	6,032
Postal Service Mail Sorters, Processors, and Processing Machine Operators (43-5053)	-375
Order Clerks (43-4151)	-531
File Clerks (43-4071)	-650

### Race Demographics



### Growing/Declining Industries

Industry	Change in Jobs (2012-2021)
Janitorial Services (561720)	7,871
Offices of Physicians (except Mental Health Specialists) (621111)	5,712
Landscaping Services (561730)	5,536
Department Stores (except Discount Department Stores) (452111)	-1,927
Temporary Help Services (561320)	-3,005
Professional Employer Organizations (561330)	-5,818

## **Business and Education Summit General Breakout Session Recap**

On September 21, 2012 Tampa Bay WorkForce Alliance and Working Pinellas hosted the 6th Annual “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 Cesar Ruiz, President and CEO at Knowledge Quest Education Solutions, Inc.

Currently, what technical skills are you seeking?

Specific needs: RN, Medical Assistant, Call Center staff and management, Call Center professionals rather than Call Center “dialers.” Computer Service Professionals; Networking, IT professionals (Apex – Shannon Evans – TBWA Board Member). It was also mentioned that there may be a need for 3<sup>rd</sup> party training and possibly certifications; customer service and/or call center.

The conversation turned toward a need for soft skills rather than technical skills.

What technical skills do you think you will need in the future?

(Division of VOC rehab attendee) (Carlos) Proper education needed for Tech skills, SharePoint Drop Box. Counselors are needed for Medical Assistants. Web Data Entry skills are needed as well. The discussion turned toward Technical skills vs. Technology, the need for soft skills training – communication and critical thinking skills are lacking.

What are the three or four occupational shortages that you face?

IT, Oracle workers, there are always positions open for workers with those skills. Sales professionals and candidates with solid communication skills are needed. (Carlos) Millennials in particular communicate using technology rather than face to face or voice to voice. There is a need to reinvent careers to meet and maximize these skills/tendencies. Older workers need training to communicate more effectively using technology rather than face to face/voice to voice in order to be competitive as careers and various communication techniques evolve.

Where are your biggest retention problems? What solutions have been developed to try and solve your retention problems?

(USF attendee) USF is mindful of the corporate culture and the leadership works to create an environment that is responsive to the changing needs and expectations of workers of various skills levels and career points. (Carlos) The Gen-X generation is focused on money while Baby Boomers are focused on education. Millennials are interested in obtaining a suitable work environment and company culture and are not afraid to make changes if those qualities are not present. They are leaning more toward the Baby Boomer mind-set, however. General discussion – smaller companies cannot offer career paths to their workers. They are willing to invest in their staff but cannot offer career paths and future growths as the larger corporations are able to offer. Smaller companies understand that the higher educated staff who are looking for work will be temporary hires because of this career path issue.

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?

There is a need for Vocational Training. Not every candidate is, or should be, college bound. The “College or Bust” mentality is out of synch with our local market’s needs. Unfortunately schools are graded on the number of college-bound graduates. There are jobs and worthy careers

for those coming out of Vocational Training institutions. Skills-training programs are needed and corresponding certifications are overlooked as the schools continue to drive all students toward college.

What is your current training system for incumbent workers? Do you have any gaps in that training?

(Pinellas Educational Foundation) There is a value in the Big Academy setting. Some companies are using e-learning tools. Lunch-n-learns are utilized. All employees must attend one session or another and the training is used as a measurement tool. The payoff for the company the staff is engaged and learn specific skills in short sessions. (Carlos) This is valuable as it provides an opportunity for experiential learning; hands-on experience.

Skills training at the high school level was revisited. This type of training can help the students' make career path decisions and can help prepare those students who are college bound. St. Augustine High School was discussed. St. Augustine High School involves 70% of its students in career-specific programs such as Aviation, Finance and Engineering. Students have the opportunity to work side-by-side with professionals. These academies are valuable because the content is developed by industry leaders. Amex for example provided the Finance programmatic content for North East High School. The goal is to energize "Lifelong learners and lifelong earners." The discussion included talk about the communication skills gap.

## Conclusion

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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 2012 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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