

Hillsborough-Pinellas Manufacturing Gap Analysis:

Implementation Update, September 12, 2014

The Tampa Bay Manufacturing Gap Analysis, published in August 2013, quantified the demand for 107 manufacturing skill sets and positions. The Analysis also identified three primary workforce gaps, based on interviews and written responses to the survey. The gaps were:

1. A lack of interest in manufacturing is causing a shortage of skilled workers
2. Workers lack knowledge of industry fundamentals
3. Disconnect between industry and education. Recommendations were then developed to close the gaps.

Below are a list of activities that have been initiated within the past year.

- **Hillsborough County Manufacturing Academy, Apprenticeship/Internship Program (MAAIP)** incorporates a three pronged approach to building a pipeline of manufacturing talent: the Manufacturing Academy, an Apprenticeship and Internship Incentive Program, and marketing of the two to potential private sector partners, students and their families. The Manufacturing Academy will highlight manufacturing as a viable career path for middle and high school students and military veterans, and then package together existing resources through Hillsborough County Public Schools and Hillsborough Community College into new training opportunities for students of many ages. The program has also allocated monies to reimburse manufacturing companies for wages paid to apprentices and interns. Hillsborough County has pledged \$1 million toward the program. CareerSource Tampa Bay will receive \$350,000 to help implement MAAIP. The program was formalized in May 2014. The Hillsborough County Manufacturers Association was formed, now comprised of 21 manufacturers, to help launch the Academy. Outreach began on June 15, 2014, and the educational opportunities are scheduled to begin October 1, 2014. The Academy will focus on the demands from the Gap Analysis, with a special focus on machinists, soldering, blueprint reading, and basic manufacturing skill sets.

- **Career Prep Center** will provide welding training in conjunction with GED preparation to youth residing in Hillsborough County. Hillsborough County will provide instructors at no cost to students. Students will take two semesters of training. The students will be able to move through the program at their own pace and exit the program when they locate employment, so that there will be a gradual stream of welding talent entering the market. The Prep Center will be executed by a partnership between Hillsborough County, CareerSource Tampa Bay, and Tampa Ship. Students will learn arc, mig, tig, and flux core welding. Mig and Tig Welders were in the top-five in-demand skills in the survey, and the region's ship builders and ship repair companies projected a high need for Flux Core Welders. The combination of GED preparation with technical skills training is important for reaching students who do not succeed in the traditional school system and to address the lack of basic reading, writing, and math skills that employers have identified. The lack of basic skills was a top reason potential hires were not qualified for manufacturing positions, second only to a lack of technical skills. The Career Prep Center has a goal of placing 80 graduates into jobs per year.

- **Tampa Bay Advanced Manufacturing Skills Initiative in Pinellas, Pasco, and Hernando Counties** will create a minimum of three Industry Certification Training Centers to be fully equipped and tooled for advanced manufacturing training. The Initiative will partner with manufacturers to place students in apprenticeships. The State of Florida is contributing \$1.2 Million, in addition to \$400,000 from each of Pinellas, Pasco, and Hernando Counties. The program has a goal of training 890 students over the grant's three year pilot period and then continuing as an ongoing partnership between the public schools and community colleges. Training will be based on the Apprenticeship 2000 Model used in Charlotte, NC. The focus of the training will be on advanced manufacturing, which covers many of the top position identified in the Gap Analysis. The program began its rollout in August 2014 and is targeting enrolling students in the summer of 2015.

- **The Florida TRADE Consortium** is a group of 12 colleges throughout the state of Florida, including St. Petersburg College and Hillsborough Community College, that have received a federal Department of Labor grant. Florida TRADE is working to put into place short-term training in advanced manufacturing, followed by national certifications, paid internships, and employment. Although some of the training programs will not be in place until 2015, students will be prepared for production technician, CNC operator, mechatronics, programmable logic controller, robotics technician positions, Solidworks, and quality assurance.

- **Florida Advanced Technological Education (FLATE)** promotes manufacturing as a career and educates youth about manufacturing career pathways. FLATE organizes the "Made in Florida" outreach campaign that aims to change community perception about manufacturing. Each year they also facilitate students visiting manufacturers on Manufacturing Day. Last year 376 students and 15 manufacturers participated in Hillsborough and Pinellas Counties. The 2014 Manufacturing Day, scheduled for October 3, 2014, is expected to be even larger.

- **Science Center of Pinellas: Education Innovation Center** focuses on STEM career exploration and education. The center will focus on both education for youth and adults. Training is focused on in-demand skill sets, including CNC, milling lathe, virtual welding, virtual soldering, Solidworks (3D), and machining.

- **TampaBayIntern.com** connects students to internship opportunities to help retain skilled talent to the area. The intern site was launched in March 2014. As of August 2014, 48 manufacturing or manufacturing related interns have registered on the site, and 11 manufacturing companies had registered on the site.

The next page illustrates the gap that each initiative addresses.

Gap 1: A lack of interest in manufacturing is causing a shortage of skilled workers.

1. Organize a public relations campaign targeted at attracting young adults to manufacturing careers.
2. Expand recruitment of returning veterans. Increase information about career pathways.
3. Conduct parent/manufacturing event(s) that will explain manufacturing pathways to parents.
4. Increase the capacity of career centers to provide students with information about manufacturing career pathways.

Gap 2: Workers lack knowledge of industry fundamentals.

5. Explore opportunities to increase apprenticeship programs.
6. Explore opportunities to increase internship programs.

Gap 3: Disconnect between industry and education.

7. Conduct internship fairs to connect students with employers.
8. Facilitate coordination between manufacturers and educational institutions.
9. Explore opportunities to increase the number of manufacturing career academies. Facilitate coordination between manufacturers and career academies.

Science Center of Pinellas

FLATE

Manufacturing Academy, Apprenticeship/ Internship Program

TampaBayIntern.com

Florida TRADE Grant

Tampa Bay Advanced Manufacturing Skills

Career Prep Center