

Pasadena Citizens' Advisory Council

Summary of March 27, 2014 Meeting

DEVELOPING THE FUTURE INDUSTRY WORKFORCE

Two things are increasing the need for workers in the petrochemical manufacturing industry according to Roy Watson, Chair of the East Harris County Manufacturers Association (EHCMA) Workforce Development Committee and a human resources manager for Chevron Phillips in Baytown. Joining him to explain what industry is doing to develop the future workforce was Noltex Human Resources Manager Dani Grant, who also serves on the EHCMA committee that is making students, parents, and teachers aware of the career opportunities in local industry and what it takes to get those jobs. EHCMA Chair Todd Monette of PCAC's LyondellBasell Houston Refinery added his comments to the presentation. To show how Pasadena Independent School District (PISD) is responding to these workforce development needs, Steve Fleming, Principal of the new Career and Technical High School under construction at Beltway 8 and Genoa-Red Bluff, talked about the new school and its approach to education.

East Harris County Manufacturers Association Workforce Development

The two changes creating job opportunities in the petrochemical industry are the availability of cheaper natural gas and a surge of retirements among baby boomers. The discovery of new technology to recover gas and liquids from shale formations has allowed exploration companies to reach resources they previously could not tap. Cheaper raw materials have led to domestic growth for the chemical manufacturing industry. At the same time, improvements in the economy are allowing baby boomers to retire. There was little domestic manufacturing growth for a long time, so a large number of longtime plant workers will retire around the same time. These two changes mean that plants are expanding and new plants are being built in the US rather than abroad, which is creating construction jobs. After construction, those workers will have the opportunity to work in plants as openings occur both from expansion and retirements.

EHCMA's Workforce Committee is making people aware of these workforce needs in several ways. Watson and Grant have talked to more than 60,000 students, teachers, and parents this year as well as PCAC and similar groups. The "Careers in Manufacturing" brochure was developed to help students understand good, well-paying jobs are available and learn what plants are looking for when they hire. EHCMA also developed "Careers in Manufacturing and Their Education Requirements," which has brief descriptions of the jobs. Watson emphasized that the opportunity is for a career, not just a job.

While there is a need for engineers and other positions requiring a 4-year degree, there is an even greater need for operators, maintenance crafts, construction, and other workers. Many of these jobs require a one-year certificate or two-year degree such as those available at San

Jacinto College, Lee College, and other local community colleges in order to be hired in some cases or at least to be competitive. In PISD, only 20% of the graduates are aiming for a 4-year degree; In Crosby ISD, only 15% do so. This means that there are large numbers of graduates who could benefit from some mid-skill training in programs like San Jac's Process Technology 2-year degree or certificate programs like Welding. Plant jobs are for women as well as men.

Community college degrees are far less expensive than university degrees, and scholarships are available. One of EHCMA's other steps to develop the future manufacturing workforce was to fund six \$1 thousand scholarships at San Jac and 6 at Lee College. Scholarship information is available at each college, both of which have told Watson and Grant that there are many scholarships for which no students apply. They feel that financial help is available for students who look for it.

Asked about some of the factors plants weigh when considering an applicant, speakers said education, prior experience, being drug-free, willingness to work hard, ability to work in teams, and eagerness to learn. They really look for mechanical aptitude, which anyone may have, and good math and science skills. Grant said applicants must remember that they have one chance to make a good impression, so the way you present yourself counts. Being well-groomed and in a clean, pressed shirt makes a better impression. Speakers also emphasized the importance of revealing that you are safety minded because the expectations for safe behavior are so important in the petrochemical industry. You may also have to pass a background check to be hired.

Pasadena ISD Career and Technical High School

PISD's new Career and Technical High School (CTHS) will open in August 2014. Principal Steve Fleming thanked taxpayers and bond supporters for making it possible for the district to allow students to be educated all day in a facility where they choose one of 24 career pathways leading to graduation with a high school diploma, industry-recognized certification in their field, and college credit. The CTHS mission is to "empower students to successfully transition to the global community through unique educational experiences." Their goals for students are to graduate with a diploma, leave with an industry-recognized certification, gain college hours, and learn to give back to the community. Some will be job-ready when the graduate, such as those with a welding certificate. Others will need education beyond high school to work in their field but already will have earned credits toward a degree at San Jacinto College, with which CTHS is in partnership.

HB5, passed by the 2013 Texas Legislature, is making it easier for students to choose a graduation plan that includes a career path endorsement. It still allows students to achieve a Distinguished Level of Achievement by taking Algebra II and more science, which are needed for some but not all fields.

When PISD developed its strategic plan a few years ago, they found that about 50% of its high school graduates go directly to work upon graduation, but often to jobs such as fast food and

retail rather than careers. CTHS is designed to help them find a career, not just a job. The career pathways fall into six general categories: agriculture, business and human services, health services, manufacturing and construction, technology and engineering, and transportation and shipping.

The new school looks more like a business than of a school. It includes an outdoor teaching area, a Windows tablet for each student and teacher, collaborative space for teambuilding, many kinds of shops, a maritime area with a pond, forklift training, and open ceilings and walls to view electrical wiring and piping. Instead of gyms they have fitness centers for aerobics, Zumba and other programs. A large lobby can seat 500 for a banquet, which will allow culinary arts students to practice what they are learning. Classrooms have windows open to the hallways because students must learn to work with other people around them as they will do during their careers. The front wall is a writable surface and students will be expected “to go to the board” as PCAC members did when they were in school. The back wall is a tack-able surface so students may pin exhibits to it. The entire facility will have wireless Internet access.

The school opens in August for 1200 students in grades 9-11. Grade 12 will be added next year. Career and technical education (CTE) is a full day program, different from the career center concept in which students left their high school part of the day to take CTE courses. This means core subjects such as English and history are taught at CTHS. Though 1200 places are available, 2400 students applied. The seats were distributed among the PISD high schools by a formula based on their student enrollment numbers. Thirteen parent information meetings were held between October 2013 and January 2014 to recruit students. Staff is currently being selected. Business partnerships are being developed. Bus service will be available to take students from home to school and back.

Students choose their pathway in 9th grade or no later than 10th grade. Students and parents sign off on it in 10th grade, committing to graduate in that pathway. They are exposed to all pathways in 9th grade, knowing that it is hard for students to know what they want to do even when older.

Additional Resources

Local community colleges are working with industry to help educate the future workforce. Jacinto College website has revamped its website as a resource to “find your path.” Go to www.sanjac.edu. Click on *Apply and Register*. The first item on the list is *Find Your Path*. By going through that link and its options, you can see the entry requirements, degree plan and a description of many differ career options. ExxonMobil funded Lee College to develop a program called the Community College Petrochemical Initiative. Nine community colleges in the region are part of it. Their website is a good resource: www.houstonnaturalgas.com It shows the jobs in highest demand, a video about that field, wage ranges, etc.

Assistance is also available from Texas Workforce Solutions and the Neighborhood Center.