

**Prepared Testimony of
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Pasadena, Texas**

**House Energy and Commerce Committee
Subcommittee on Energy and Power**

Hearing: “State of the Nation’s Energy Infrastructure”

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Chairman Upton, Ranking Member Rush, and Members of the Subcommittee, Chancellor Brenda Hellyer of the San Jacinto Community College District, located in Pasadena, Texas is pleased to present this testimony to you regarding the nation’s energy infrastructure and the role that community colleges, and San Jacinto College specifically, plays in contributing to the workforce needs related to it.

Describing San Jacinto College

Surrounded by monuments of history, industry and maritime enterprises of today, and the space age of tomorrow, San Jacinto College has been serving the citizens of East Harris County, Texas, since 1961. The College District incorporates the cities of Houston (east side), Pasadena, La Porte, Deer Park, Galena Park, Jacinto City, Channelview, Shoreacres, Morgan’s Point, South Houston, Seabrook, El Lago, Taylor Lake Village, Nassau Bay, Webster, and portions of Humble and Pearland. A fiscally sound institution, the College currently holds bond ratings of AA and Aa2 by Standard & Poor’s and Moody’s, respectively. San Jacinto College was awarded the 2017 Aspen Prize Rising Star Award for Community College Excellence, making it a top five community college in the country out of 1,108 community and technical colleges. Approximately 45,000 credit and non-credit students each year benefit from a support system that maps out a pathway for success. More than three fourths of the students who attend San

Jacinto College do so part-time while working, and / or raising a family. More than 85 percent of the students intend to achieve an associate degree, or general academic credits, and either transfer to a university, or move directly into the workforce, or improve their job skills. Five percent attend for other reasons such as personal enrichment.

San Jacinto College is diverse and has been designated as a Hispanic Serving Institution. The ethnicity of the College student body is 56.9 percent Hispanic, 23.5 percent Caucasian, 10.1 percent African American, 5.6 percent Asian, and 2 percent other or did not report. The remaining 1.9 percent of the enrollment is comprised of international students.

The average age of the San Jacinto College student body is 23 years old, down from 26 years old 10 years ago. This is due to enrollment growth in the area of dual credit, a classification for high school students who are concurrently enrolled in high school and college courses. The College collaborates with eight early college high school programs, designed so that high school students in the region may take College courses on campus while in high school. This program enables participants to earn an associate's degree while earning their high school diploma. Additionally, The College works with 11 area school districts to offer dual credit programs, separate from the early college high schools. The College offers eight career pathways that prepare students to transfer to a four-year college or university or directly enter the workforce with the skills needed to support the growing industries along the Texas Gulf Coast. San Jacinto College graduates contribute nearly \$690 million each year to the Texas workforce.

San Jacinto College is focused on student success and making college education affordable and attainable to the citizens in our service area. Some relevant points include:

- 167.4 percent increase in the number of degrees and certificates awarded since 2007
- 30,941 credentials awarded over the last five years
- Ranked as the #6 community college for Hispanic students by *Hispanic Outlook on Education Magazine*
- Process technology program is ranked #1 by Texas Association of College Technical Educators
- The only maritime technology associate degree in the State of Texas
- Ranked 15th overall by the Brookings Institute for the number of degrees and certificates awarded
- Ranked in the top 5 of all community and technical colleges for excellence by the Aspen Institute for Community College Excellence
- Open Educational Resources – have saved students \$1.2 million over the last year in textbook costs.

San Jacinto College is one of nine community colleges serving the Gulf Coast region. The College's service area, defined by Texas legislation, incorporates the Houston Ship Channel; home to the nation's largest petrochemical complex, which is expected to surpass Rotterdam in production by 2020, thus becoming the largest in the world. The area also includes the NASA-Johnson Space Center and Port Houston, the first ranked U.S. port in foreign tonnage. The Gulf Coast region also hosts one of the largest medical centers in the world, the Texas Medical

Center. Currently, there are 11 health care facilities along the I-45 corridor on the south side of Houston.

In Texas, community colleges fund buildings by requesting permission from taxpayers to issue tax-backed bonds to build and renovate college facilities. San Jacinto College is currently in a building program after successfully passing a \$425 million bond referendum by 68 percent in 2015. The last bond referendum of \$295 million was passed in 2008. With these building projects, the College continues to update facilities, some of which are 50 to 55 years old, to meet the educational needs of today's students. San Jacinto College is also partnering with petrochemical and maritime companies, and the NASA-Johnson Space Center to create facilities that specifically meet the workforce needs of the community.

San Jacinto College's Maritime Training and Technology Center opened in 2016 as a premier maritime training center on the Gulf Coast. Both the maritime program and the new facility were created and constructed at the request of the maritime industry. Port Houston and the businesses directly supporting and working on the Houston ship channel saw that the state and federal maritime academies trained the unlimited tonnage officers for commercial sailing as well as Military Sealift Command. However, the lack of entry-level workers, 100 and 200-ton masters, and engineers created a gap in the workforce. Maritime industry partners along the Houston Ship Channel requested workforce training assistance to build a pipeline of workers due to pending retirements for tugs, push-boats, and barges.

Similarly, the first project in the 2015 bond referendum building program is a Center for Petrochemical, Energy, and Technology. The 145,000-square foot facility is being constructed in partnership with the nearly 130 chemical plants within the 10-mile radius of the facility. As the College was forming plans for this facility, the Chancellor created the Chancellor's Petrochemical Advisory Council with a membership of nearly 20 plant managers and major construction contractors in the area. This Advisory Council provides input on the curriculum, equipment, and image of the industry in the aesthetics of the building. The facility is scheduled to open in Fall 2019. This is a facility created to replicate a day in the life of an operator in the industry; it was designed by industry for industry.

In both projects, industry did more than just advise and counsel. They also contributed funding through millions of dollars of equipment donations, monetary donations to the facilities and scholarships; and provided their valuable time to meet with faculty and College administration in all stages of the facilities development.

Understanding the Workforce Challenge

Throughout the Gulf Coast region, there are a number of economic development, education, businesses and municipalities working together to address the region's skills gap. The Houston region has experienced incredible growth over the last several years. Led by a resurgence in energy, petrochemicals, manufacturing, life sciences and construction, the region's economy has been widely acclaimed as one of opportunity. However, leaders from across the business community have identified one of the region's most pressing issues — finding qualified workers for good jobs.

Houston's skills gap has reached critical proportions among middle-skill jobs — those that require more education and training than a high school diploma but less than a four-year degree. Of Houston's 3.6 million jobs, 1.4 million — or approximately 40 percent — are considered middle-skill positions.

The Greater Houston Partnership formed a program called “UpSkill Houston.” This initiative pulls business and education leaders and partners together to identify and address the sectors of our region where workers are retiring, expansion is happening, and the workforce pipeline is not robust enough to fill existing and future jobs. The Greater Houston Partnership has identified seven industry sectors, widely considered drivers of the regional economy, that are experiencing steady expansion. The sectors are:

- Port and Maritime
- Industrial and Commercial Construction
- Health care
- Petrochemical
- Manufacturing
- Oil and Gas
- Utilities

Quick Facts about workforce in the region and across the nation:

- Beyond than the Houston area, 46 percent of U.S. employers report difficulty filling jobs.
- Of all U.S. jobs, 53 percent require some training beyond high school but less than a four-year college degree.

- By 2020, two out of every three jobs in the U.S. will require meaningful post-secondary education and training.
- Affordable natural gas and natural gas liquids have created a competitive advantage for U.S. chemical manufacturers leading to greater investment, industry growth and new jobs.
- According to the American Chemical Council, as of December 2017, 317 projects cumulatively valued at \$185 billion in capital investment have been announced.
- Much of the investment is geared toward export markets for chemical and plastics products.
- The American Chemical Council believes the \$185 billion in capital investments will lead to \$26 billion in permanent new federal, state and local tax revenues by 2025.
- 63 percent of the announced investment is by firms based outside the U.S.
- Middle-skill petrochemical jobs in Houston can pay a median wage of \$30.61 per hour.
- Starting salaries for middle-skills careers in the Gulf Coast region are as high as \$60,000 per year and have the potential to go higher with overtime.
- Houston area community colleges have experienced a 42 percent increase in the completion of degrees as well as credit-bearing and non-credit continuing education certificates for technical (workforce) programs since June 2014.
- The Houston Ship Channel is home to the nation's largest petrochemical complex, and second largest in the world, second only to Rotterdam. The American Chemical Council believes the Texas Gulf Coast will surpass Rotterdam production by 2020.
- The Economic Alliance Houston Port Region is tracking 28 projects (of the 317) totaling \$6.1 billion in capital investment in the upper Houston Ship Channel area.

- One out of every eight jobs in the Houston region is in health care.
- More than 7,000 new construction jobs open per year in Houston.
- Houston is the nation's 6th best city for engineers.
- Houston is ranked 2nd for maritime jobs in the United States.
- Houston is the 8th best metro area for STEM professionals.
- More than 145 languages are spoken in Houston.

Leveraging the Strength of Community Colleges in Energy Workforce Development

Community and technical colleges can help secure the talent pipeline for our nation's energy workforce. Energy sector jobs require well-trained, skilled technicians – yet, many of those workforce positions do not require a baccalaureate degree.

Two-year, public community and technical colleges offering robust and affordable programs in energy workforce training prepare students for workforce positions that are open today, and also serve as the “on-ramp” to further degrees.

Since taking office on January 20, 2017, President Donald J. Trump has identified an “America First Energy Plan” as a top White House priority. In order to advance that goal and grow the nation's energy infrastructure, a well educated, technically trained energy workforce is essential. San Jacinto College is uniquely positioned to produce a technically trained energy workforce in the Houston Port region, in collaboration with petrochemical and other energy industry partners. We partner with other colleges and universities along the Texas Gulf Coast, and throughout the

nation. All San Jacinto College energy workforce programs are designed based on energy industry input.

Community and technical colleges in the shale play regions of the United States also play an important role in oil and gas industry workforce development. This includes colleges in the Marcellus and Utica shale play areas of in the Appalachian Basin, the San Juan shale play in northern New Mexico, the Permian Basin shale play in western Texas, and the Bakken shale play in North Dakota, as examples. In each of these regions, colleges have used investments by government and industry to expand their capabilities to educate and train workers for upstream, midstream and downstream energy workforce positions.

During the 114th Congress significant progress was made in developing a new program of federal investments in energy industry workforce development. A House-Senate conference committee came to agreement on comprehensive energy modernization and workforce legislation, combining provisions developed by the House Energy and Commerce Committee and the Senate Energy and Natural Resources Committee. The North American Energy Security and Infrastructure Act (H.R. 8/S. 2012) nearly became law during the fourth quarter of 2016. That legislation would have authorized new investments in community and technical college energy workforce training “centers of excellence.” We encourage the enactment and funding of this key legislation.

It would be beneficial for American energy production if the Committee would work with the White House and the Department of Energy to focus on new opportunities for energy workforce

development and training, and consider harnessing the power of community and technical colleges in energy workforce development.

Addressing the Challenge are Community Colleges, America's Partner

San Jacinto College takes seriously its mission to ensure student success, create seamless transitions and enrich the quality of life in the communities it serves. To do this, San Jacinto College, like most community colleges, serves as a hub of collaboration. The College collaborates with its students, with K-12 educators and students, four-year colleges and universities, business and industry, economic development groups, municipalities and non-profits.

Partnering with Students: First, the College collaborates with its own students. The philosophy of the San Jacinto College Board of Trustees and reaching throughout the organization is the concept that when students succeed, the College succeeds. For that reason, San Jacinto College has gone through transformational change in the last 10 years. Initiatives that focus employees on a strategic plan with student success as the focal point vary, from performance-based differentiated compensation for employees to faculty-led open educational resources to reduce the cost of textbooks. The College has initiated several student success best practices such as prohibiting students from registering for a class after it has started; mandating student orientation before the student can register; requiring a learning frameworks course so students understand the time commitment, accountability, and ownership they must possess to succeed; and even creating welcome week activities that showcase resources in tutoring, student groups and other assistance available to foster student success.

The San Jacinto College Board of Trustees charged faculty with solving the problem of escalating book costs. The College entered into a grant to implement Open Educational Resources (OER). The faculty labeled the initiative “Open Books” and the program is catching on. From spring 2017 to spring 2018, the number of Open Books courses increased from 185 courses to 307 or by 923 percent. The number of students taking those courses to save on the cost of textbooks increased from 768 students to 7,166 or 833 percent. In this same time period, students saved more than \$1.2 million in textbook costs.

San Jacinto College also entered into a grant to evaluate financial aid distribution. In this grant, the College offered multiple disbursements of financial aid, similar to how one might receive a paycheck. After payment of the tuition, fees and books, the remaining aid is disbursed in multiple payments, rather than one payment after the 12th class day. The results included less student debt at the end of the semester and higher retention in the following term. In addition, the College offers financial literacy seminars and coaching for students receiving loans. This resulted in a three-year reduction in student loan default rates from 17.3 percent to 9.1 percent.

Finally, to ensure students complete their educational goals, the College maps out pathways to complete a degree or certificate. Mapping includes removing courses that will not transfer to a four-year degree or fit into the needs of the region’s workforce. This allows alignment between what in Texas is called “Endorsement Tracks” at K-12 institutions, and with the main transfer universities for students. The College implemented this work into the computer systems (Banner is the ERP) and called it “My San Jac GPS” so students understand their academic pathway and have a guided pathway system to get them there. Through this student success focused

transformation, the College has seen an increase of 167.4 percent in the number of degrees and certificates awarded since 2007. San Jacinto College has issued 30,941 credentials in the last five years.

Partnering with K-12 Education: Part of San Jacinto College's mission is to begin science, technology, engineering, and math (STEM); and maritime and petrochemical education outreach early, by partnering with industry and education institutions.

For seven years, the San Jacinto College maritime program has hosted the Maritime Youth Expo, most recently at the College's Maritime Campus. This event invites K-12 students for a day of interactive displays featuring equipment used in the industry, such as trucks, forklifts, cranes, response trailers, small boats and diving equipment. Past sponsors have included the Houston Pilots, the U.S. Coast Guard Auxiliary, Harris County Precinct 2 and Port Houston. The 2017 Maritime Youth Expo saw more than 400 K-12 student visitors.

The College established a STEM Council to increase awareness of education and career opportunities related to the STEM fields. Each year the STEM Council partners with colleges and universities, local and national organizations, and K-12 schools to bring science, technology, engineering and mathematics (STEM) to more people. This also provides San Jacinto College students opportunities to apply what they've learned in the classroom.

Outreach STEM events have exposed more than 18,000 pre-college age students to the world of STEM by partnering with MindTrekks from Michigan Technological University for a two-day

STEM festival that brings experiments to local elementary schools and the community, and invites students to serve as judges for local school science fairs. The festival is sponsored by numerous industry partners including Dow Chemical Company, INEOS, Chevron Phillips, Austin Industries, LyondellBasell and PetrochemWorks. Dow has also donated \$10,000 for San Jacinto College to create STEM kits for area schools that lost classrooms due to Hurricane Harvey.

The College hosts STEM Expos at its Central, North and South Campuses for Communities in Schools' Afterschool Centers on Education participants in addition to hosting the Pasadena Independent School District's annual regional science fair each year.

Due to collaborative efforts, San Jacinto College students have been accepted to prestigious university internship programs for undergraduate research. These include the Research Experience for Undergraduates (REU) program at Rice University, the University of Iowa's Continuing Umbrella of Research Experiences (CURE) program, and NASA.

The College invites special guest STEM speakers from industry and universities each semester to provide internship information and insight on trending topics to students. San Jacinto College faculty and students serve a large role in bringing robotics and virtual reality activities to the community and participating in research with the University of Houston-Clear Lake and assisting with the FIRST Robotics Competition Championship in Houston. The College will soon introduce a drone training course through the its Aerospace Academy.

To introduce K-12 students to the petrochemical industry, San Jacinto Colleges hosts the Energy Venture camp each summer for kids ages 12-15. Approaching its 10th year, the camp is sponsored by Shell and has hosted 1,600 students to date, many of whom attend free of charge due to the Shell sponsorship. The College also hosts Energize Your Destiny, sponsored by Shell, for high school and college women and serves as a sponsor for the Women in Industry conference through the Community College Petrochemical Initiative.

Partnering with business and industry: San Jacinto College collaborates with business and industry partners to ensure students are receiving the exact training they need to move into these middle-skills jobs. The College has established programs in nearly every industry sector addressed by the Greater Houston Partnership “UpSkill Houston” initiative. However, below are three specific industry sectors that are driving the East Harris County workforce need.

Petrochemical –

San Jacinto College's upcoming Center for Petrochemical, Energy, and Technology (CPET) will lead the way in training for a more advanced workforce to meet the growing demands of the industry. From a 2011 research study conducted by the East Harris County Manufacturer’s Association, it was determined that the petrochemical industry in our region needs approximately 11,000 skilled workers.

San Jacinto College has served as the training leader for the petrochemical, energy and technology workforce in the greater Houston area for more than 50 years. The College is a training hub to the largest petrochemical manufacturing complex in the United States, and

second largest in the world, with 90 industries and 130 plants – all within a 10-mile radius from the College’s Central Campus.

The College broke ground on the \$60 million Center for Petrochemical, Energy, and Technology in September 2017 with plans for completion in 2019. The College relies on industry partner feedback in many of its training programs, and invited leaders from the petrochemical industry, along with plant managers, to be a part of its Petrochemical Advisory Council. The Council is tasked with assessing the curriculum, equipment and planning for the Center. The technologically advanced Center will house skills labs in process technology, instrumentation and analyzer technology, and non-destructive testing and electrical technology; a craft training center; a control room; a process simulator lab; a glass pilot plant lab; an exterior glycol distillation unit; and corporate training and event space.

In October 2017, Jim Griffin joined San Jacinto College as associate vice chancellor / senior vice president for the petrochemical training division. In his new position, Griffin oversees the curriculum and instruction of the College’s petrochemical-related training programs, as well as the development of the Center for Petrochemical, Energy, and Technology. It was important to industry partners to invite someone of Griffin’s caliber and experience in plant leadership -- more than 30 years – to lead the College’s petrochemical training division.

Currently, more than 3,600 students train annually in multiple programs that support the petrochemical industry, including electrical technology, non-destructive training, instrumentation, analyzer technician, process technology and other craft trades. Each of the programs are experiencing increases in enrollment. The new facility will allow the College to expand capacity in these needed areas, create a “day in the life” environment so students

understand what the job entails, and will allow the College to focus on the continuing education of current workers in the craft trades. Each program will have a renewed focus on the safety culture, which is critical to the success of any industry. The facility will also expand laboratory capabilities to provide students with more hands-on training. Industry partners are requesting this so students will leave the program with a greater ability to problem solve.

As with the maritime program, industry partners are investing in the Center for Petrochemical, Energy, and Technology. In addition to working with the College on curriculum updates and career pathways, industry is also looking at what are called “externships,” where faculty members spend time at the plants to see new processes, new technology, and experience the same “day in the life” so that they may teach it to students. Already, several million dollars of donations – both monetary and in equipment -- have been given and pledged to the College. The equipment donations will ensure that students are training on the same equipment they will encounter when leaving the College with their degree. The monetary donations give naming opportunities in the Center to industry partners and further aligns the program with industry leaders.

The College has an apprenticeship partnership with Dow, in which Dow selects students for process operator and instrumentation apprenticeships. In the program’s first year, the students work about 10 hours per week in the plant while they attend classes at San Jacinto College full time. In the second year the work week is increased while class time decreases. At the end of the fourth year, students have completed an associate degree and have four years experience in their

skilled trade. The College will continue to seek these types of partnerships through internships or other apprenticeships.

Maritime –

The Port of Houston is a 25-mile-long complex of 150-plus private and public industrial terminals along the 52-mile-long Houston Ship Channel. Each year, more than 241 million tons of cargo move through the greater Port of Houston, carried by more than 8,200 vessels and 223,000 barges. The port is consistently ranked 1st in the United States in foreign waterborne tonnage; 1st in U.S. imports; 1st in U.S. export tonnage and 2nd in the U.S. in total tonnage. It is also the nation's leading breakbulk port, handling 41 percent of project cargo at Gulf Coast ports.

With this activity combined with a retiring workforce, San Jacinto College partnered with maritime businesses, starting with continuing education to offer U.S. Coast Guard-approved certified courses for mariners who were needing to maintain their maritime license or to train to move into the next level in their mariner pathway. In working with Port Houston and other maritime industry partners, the College was asked to develop a certificate and associate degree program. As vessels in the Port Houston region have become more advanced, businesses need a more skilled workforce that included training that emphasizes the soft skills of arriving to work on time, collaboration and team work, and consistently passing routine drug screenings. The College introduced the state of Texas's first associate degree in maritime transportation, housed in the 45,000-square foot Maritime Technology and Training Center that is prominently and strategically positioned on the Houston Ship Channel so as to best serve the mariners working in the industry.

The program currently offers more than 75 U.S. Coast Guard (USCG)-approved deck and engine courses ranging from entry-level training for new mariners, to management-level training for Unlimited Tonnage Master and Unlimited Horsepower Chief Engineers on the world's largest ships, and everything in between. The College has issued approximately 6,000 USCG certificates to professional mariners since the 2010-2011 academic year. The 60-credit hour associate degree program merges math, science and English classes with USCG-approved training allowing students to be more prepared for a maritime career. Currently, there are more than 70 students in the associate degree program which is in its fifth year of existence. To date, 38 students have graduated with an Associate of Applied Science in Maritime Transportation.

To ensure program success, the Houston Pilots donated a state-of-the-art full-mission bridge simulation system. The simulator houses a main vessel and also incorporates simulation of the bridge of a tug boat and a barge. The three simulators can interact as if they are working together on the waterways of our region. The simulation is realistic and has been used by the Houston Pilots and the Corps of Engineers to study the impacts of Hurricane Harvey along Port Houston. The College invested in an engine room simulator to satisfy new regulations that have been implemented for existing mariners. The engine room and bridge simulators are fully integrated to provide a realistic shipboard training experience.

The San Jacinto College Maritime Center is also equipped with a training pool, lifeboat, firefighting equipment and life rafts which are all used to reinforce learning by doing. All

students enrolled in the associate degree program are required to participate in at-sea internships working on commercial vessels to gain actual work experience in the maritime industry.

To further ensure success of the program, the College hired a consultant in RADM William Pickavance, Jr. (Ret. Navy). RADM Pickavance is a graduate of Texas A&M Galveston's Maritime Academy and had served as the Superintendent of the Academy. After getting the facility completed and partnerships in place, RADM Pickavance assisted with the hiring of John Stauffer (Ret. Army) who ran the Army's maritime program at Ft. Lee.

Health care –

The supply of nurses in Texas is low compared to national numbers, according to the Texas Department of State Health Services. Currently, more than 135,000 Texas nurses hold a Bachelor of Science in Nursing (BSN), accounting for about half of all licensed Registered Nurses (RN) in the state. Many of the nation's hospitals have moved – or are moving - to require that all nurse managers and nurse leaders hold baccalaureate or graduate degrees in nursing. They are also requiring that 80 percent of staff nurses hold a BSN. With the world's largest medical center in the heart of Houston, and expansion of hospitals on the southeast side of Houston where San Jacinto College is located, the need is evident.

In collaboration with hospital administrators in our region, the College listened to the needs being described and the focus of area hospitals to achieve the 80 percent threshold of all RNs holding a BSN.

San Jacinto College has a robust training program for many areas of health care and is known for its quality nursing program. To help meet this workforce need for the BSN, the College sought authorization from the Texas Legislature to offer bachelor degrees in nursing and applied technology. The authorization was created in Texas' 85th Legislative Session. Once the authorization was issued, this gave the College the go-ahead to start the application process and, if approved, seek accreditation from its regional accreditor to offer baccalaureate degree programs to address the workforce needs of the region.

The San Jacinto College Certified Nursing Assistant (CNA)-to-BSN pathway provides an entry level program that can lead to a Licensed Vocational Nurse (LVN) and RN progressing quickly through to the BSN program. Community college CNA-to-BSN pathways allow students to complete the core course work for the BSN at a lower cost, providing a more affordable option for meeting the BSN workforce need in Texas. It also allows students to earn a license and work while continually upgrading their licenses to stay current in the field. In many cases, the hospital will pay for the courses for the students.



Working with the Federal Government:

San Jacinto College is working with the federal government to provide workforce training through grants with federal agencies. Grants include:

- Department of Labor Ready to Work Grant. The H-1B Ready to Work Petrochem Grant program is designed to provide education, training, and job placement assistance in the occupations and industries for which employers are using H-1B visas to hire foreign

workers, and the related activities necessary to support such training. The program is intended to raise the technical skill levels of American workers so they can obtain or upgrade employment in high growth industries and occupations as well as help businesses reduce their use of skilled foreign professionals permitted to work in the U.S on a temporary basis under the H-1B visa program.

- Carl. D. Perkins grant. The Department of Education Carl D. Perkins grant program supports awarded applicants in educating students who enroll in CTE (Career and Technical Education) courses and programs in preparation for high-skill, high-wage, or high-demand occupations.
- Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant. The purpose of this Department of Labor grant is to use LINCS (Leveraging, Integrating, Networking and Coordinating Supplies) consortium to develop and deliver an innovative, latticed and laddered supply chain education and training program for entry and middle-level workers, enabling upward mobility from entry-level certifications all the way to the PhD with SCM specialization.
- National Science Foundation STEM Talent Expansion Program – Bridges to STEM grant. The purpose of the National Science Foundation (NSF) STEP (STEM Talent Expansion Program) project is to increase attainment of science, technology, engineering, and math (STEM) associate and baccalaureate degrees, as well as to facilitate and increase transfer of STEM students across institutions.

- Department of Education TRIO Upward Bound for Math and Science grant. The Upward Bound Math and Science program is designed to strengthen the math and science skills of participating students. The goal of the program is to help students recognize and develop their potential to excel in math and science and to encourage them to acquire postsecondary degrees in these areas, ultimately pursuing careers in the math and science profession. This grant is part of the federal TRIO programs that are federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds.
- Department of Education TRIO Upward Bound grant. The purpose of the Upward Bound program is to generate in program participants the skills and motivation necessary to complete a program of secondary education and to enter and succeed in a program of postsecondary education. This grant is part of the federal TRIO programs which are federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds.
- Department of Education TRIO Talent Search grant. The Talent Search program identifies and assists individuals from disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career and financial counseling to its participants, and encourages them to graduate from high school and continue on to complete their postsecondary education. This grant is part of the federal

TRIO programs, which are federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds.

To continue to meet the needs of East Harris County citizens, these grants are critical to provide the College with resources to meet the students in our area high schools. The majority of the school districts in the San Jacinto College District are minority majority, as is San Jacinto College. These programs provide access to a high-quality education, with industry support, and leads to the solution of the middle-skills gap in our region.

Another way in which San Jacinto College partners with the federal government is through the Department of Education Pell grant program. Roughly one-third of San Jacinto College students receive Pell grants to help pay for college expenses totaling just under \$30 million. Over the last five years, nearly 50,000 students have received PELL awards totaling more than \$155 million. San Jacinto College distributes financial aid like a paycheck and has seen significant decreases in its Return to Title IV requirement. In addition, financial counseling with students taking out loans has decreased the default rate from 16.8 percent to 9.1 percent. While the College is aware that there is still work to do, this is a definite step in the right direction.

In conclusion, San Jacinto College is working collaboratively in the Gulf Coast region to increase the number of students in workforce training and STEM education. Communities and businesses across the nation will benefit from continued partnership with the federal government through the funding of these important programs. These programs change the lives of constituents in the Gulf Coast region. They also benefit the diversity of workforce needs in every

region in the country where community colleges are working as hard as San Jacinto College to meet the needs of the communities they serve.