

Testimony to the Senate Hearing
October 20, 2008

I am honored to bring this testimony to you today.

My name is Dan Barrow, a native Texan from Pleasanton. I have been employed by Zachry Construction Corp. for the past 18 years. My current assignment is Manager of Craft and Craft Supervision for the Industrial Construction Group. I am responsible for the development of our craft workers and their supervisors. At this time, Zachry is the largest non-union contractor in the United States, employing approximately 18,000 workers from our Home Office in San Antonio to our numerous work sites across Texas the country.

I am here today to represent both the Construction Industry and the Career and Technology Education that is taught in most Texas High Schools. The Construction Industry is the largest employer of any industry in the United States. This equates to an industry that affords the most citizens of this country and state the ability to support themselves and their families and to make a positive impact on our country's economy and infrastructure. At this time, the average age of a person coming into the construction industry is 26 to 27 years old and the average age of the employed construction craft worker is 47 years old. By these statistics, it is easy to see that the builders of tomorrow need an infusion of young, skilled crafts men and women.

As a college graduate, I am in total agreement with the need for our High School students to be prepared for college. Even more so, I agree that today's students need an avenue through which each individual student can experience and learn the curriculums that they find interesting, engaging, and financially rewarding. When students are allowed to

pursue the subjects and topics of their choice, they are happier and more productive students and will ultimately become happier and more productive employees.

The Career and Technology students coming out of our schools are some of the most highly recruited employees with or without college degrees. And there is a real need for both. At this time, there are a few High School CTE teachers who have incorporated a construction core competency curriculum into their classes. These modules are administered through the National Center for Construction Education and Research (NCCER), an affiliate of the University of Florida. Through these modules, the students are learning skills in Safety, Math, Hand Tools, Power Tools, Blueprint Reading, Communication, and Employability. This curriculum is perfectly aligned with and satisfies the Essential Knowledge and Skills currently required by the TEA. With these basics and NCCER Level 1 craft modules, the students earn an **industry recognized certification** that makes them highly desirable to every major contractor in the country. Once employed, these young people are given the opportunity to continue their education by taking NCCER craft modules offered by their employers or at local Associations of General Contractors and Associations of Building Contractors. These craft modules teach the skills necessary for a Journey level position in crafts such as Electrical, Pipefitting, Welding, HVAC, and Plumbing, to name a few. Through this educational opportunity, a High School graduate entering into the Construction Industry can earn \$60,000 to \$100,000 annually after two to four years in their chosen trade.

About 15 years ago, every major open shop contractor in the US came together to create NCCER as the sole source of educational materials to be used by all. The curriculum is written by subject matter experts from these companies under the guidance of NCCER.

In this manner, the curriculum teaches the exact skills that the industry currently agrees are necessary for productive performance of the construction tasks. Within the NCCER modules is same rigor and relevance that the TEA is looking for in today's curriculums. As an example, the Math taught in the Core and Craft modules is very detailed and to the point. Students in all of the trades have to be able to use the Pythagorean Theorem to find the leg lengths of right triangles as well as know the difference between and isosceles and an equilateral triangle. They learn how to compute the areas and volumes of different shapes and vessels as well as what kind of metals have the highest tensile strength and what properties they possess. These modules take the technical aspects of science and math and show how it is used by the skilled worker. By these examples, I hope that you can see that the NCCER curriculum certainly has the rigor, relevance, and flexibility that is needed by the TEA to satisfy the 4by4 program outlined and passed in HB-1. The Construction Industry has already done the work, the curriculum is written. All that is needed is for the Texas Education Agency to adopt the NCCER curriculum to be perfectly in line with our industry needs.

Also, there are a number of community and junior colleges in the U.S. that will give credits for NCCER module completion that can be used towards a degree in Construction Management and Construction Technology. By this path, those High School graduates who are not interested in pursuing a college degree at 18 years of age can actually continue working in that direction until they desire that accomplishment and degree. All the while, they are earning a good wage and making a valuable contribution to our state and country.

It is important that today's students are not only college ready but employment ready. According the Texas Workforce Commission, almost 30,000 new construction jobs were added last year in Texas. By next year, the Construction Industry alone will add another 40,000 jobs. Who will rebuild the Texas Gulf Coast in the aftermath of Hurricanes Dolly and Ike? It will be a skilled craft person. Who will build the new coal, gas and nuclear power plants that will keep our state energized? It will be a skilled craft person. Who will build the next generation and roads and highways to relieve today's congestion? It will be a skilled craft person. By the year 2030, Texas will have another 13.6 million residents. Who will build their houses and work places? It will be done by a skilled craft person. The need is here. The need is now.

Thank you for the opportunity to speak with you today.