Texas
Workforce
Commission

Texas Interagency Literacy Council Report

Texas Workforce Commission Mission

To promote and support an effective workforce system that offers employers, individuals, and communities the opportunity to achieve and sustain economic prosperity.

TEXAS
WORKFORCE SOLUTIONS

Texas Interagency Literacy Council Report

Presented to

The Texas Legislature
Governor Rick Perry
The Texas Workforce Investment Council

Texas Workforce Commission
November 1, 2012

Texas Interagency Literacy Council Members

Larry E. Temple, Texas Workforce Commission
Texas Interagency Literacy Council Chair

Linda Muñoz, Texas Higher Education Coordinating Board
Agency Representative

Joanie Rethlake, Texas Education Agency
Agency Representative

Lester Meriwether, Literacy Texas
Nonprofit Community Representative

Pamela Toman, San Antonio Literacy Council
Nonprofit Community Representative

Maile Broccoli-Hickey, English at Work
Nonprofit Community Representative

David Russell, Verizon
Business Community Representative

Katrina Kersch, Marek Family of Companies
Business Community Representative

Geronimo Rodriguez, Jr., Seton Healthcare Family
Business Community Representative

Texas Interagency Literacy Council Report to the 83rd Texas Legislature

Table of Contents

1. Executive Summary p. 4

2. Background p. 6

3. Literacy Barriers and Action Items p. 26

4. Appendices p. 59

   Appendix A: Interagency Literacy Council Members Fall 2009 to Fall 2012

   Appendix B: Summary of Texas Interagency Literacy Council Meetings

   Appendix C: Texans Eligible for Adult Education by Local Workforce Development Area

   Appendix D: Alamo Colleges I-BEST Career Pathways

   Appendix E: Number of Texas GED Test Sites by Type of Site, 2004-2012

   Appendix F: NCCER Pre-Requisite and Career Path Options

   Appendix G: Texas NCCER Curriculum Level Completions, 2009 to August 1, 2012

   Appendix H: Maps—Broadband Service Inventory and Density of Households Unserved by a Broadband Provider

   Appendix I: Statewide Action Plan

   Appendix J: House Bill 4328, 81st Texas Legislature Regular Session (2009)

Executive Summary
Texas Interagency Literacy Council Report

In 2009, House Bill (HB) 4328, authored by state Representative Mark Strama and sponsored by state Senator Carlos Uresti, created the Interagency Literacy Council for "the study, promotion and enhancement of literacy in the state." The Texas Interagency Literacy Council (Council) was instructed to provide a written report to the Texas Legislature, the Office of the Governor, and the Texas Workforce Investment Council (TWIC) on November 1 of each even-numbered year beginning in 2012, until the Council expires in 2019.

Texas' literacy rate is a large and growing problem.

In 2010, the U.S. Census Bureau reported that Texas tied with California for the lowest percentage of its population 25 or older who has a high school diploma or a GED credential.

According to TWIC, some 4.3 million Texans met the federal requirements of qualifying for adult education in 2011—they were over age 16, not in school, did not have a high school degree or a GED credential, or could not speak, read, or write English well.

Almost half of Texans who qualify for adult education services live in the Gulf Coast (Houston), Dallas, and Alamo (San Antonio) local workforce development areas (workforce areas), based on a TWIC study.

According to projections by Texas' Office of the State Demographer in a 2010 TWIC study, *Identifying the Current and Future Populations in Need of Adult Education,* almost eight million Texans will be eligible for adult education services by 2040, almost double the need in 2008.

Based on the first comprehensive survey of adult education in Texas, TWIC estimates that nonprofits and volunteer groups served about 80,000 students in 2011. Texas Education Agency (TEA)–funded adult education classes served approximately 100,000 in the same year. This means that approximately 180,000 students, or 4.2 percent of the eligible Texas population, received adult education services in 2011 from these sources.

TWIC's survey found more than 26,000 names were on waiting lists for adult education classes—more than 11,000 for TEA-funded programs and more than 15,000 for those funded by other sources.

Increasing literacy raises wages, increases Texans' ability to get and keep jobs, and improves the capacity of the Texas workforce to compete with other states and countries. According to the U.S. Department of Labor, on a yearly basis the median income for a U.S. citizen with less than a high school diploma who worked the entire year was $23,452. Individuals with a high school diploma made $9,724 more; individuals with some college, $13,936 more; individuals with an associate degree, $16,484 more; and individuals with a bachelor's degree, $31,305 more.

The Texas Legislature created the Texas Interagency Literacy Council to increase and improve adult literacy.

Texas' current adult education system is fragmented among state agencies, nonprofit and volunteer organizations, and employers. Coordinating and leveraging existing and potential resources for adult education is essential to providing adult education to a greater number of Texans and to improving the Texas workforce. HB 4328 charged the Council with identifying barriers to literacy in Texas and developing action items to address them. They are listed below.

Literacy Barrier: Lack of Information about Community-Based Adult Education Services

1. *Action Item:* Develop an Ongoing Method for Identifying Adult Education Providers
2. *Action Item:* Encourage Local Literacy Collaborative Efforts in Texas

Literacy Barrier: Lack of Career Paths for Adult Education Students

3. *Action Item:* Integrate Adult Education and Employment Training, Placing Adult Learners on Career Paths for More Rapid and Consistent Advancement
4. *Action Item:* Enable the Exchange of Adult Education Student Information for Career Path Planning and To Support Career Counseling

Literacy Barrier: Texas Employers Face Obstacles to Finding Job-Ready Employees

5. *Action Item:* Increase the Completion of High School Equivalency Certificates in Texas as New System is Implemented
6. *Action Item:* Increase Community College Recognition of Standardized Industry Certification and Credentials
7. *Action Item:* Provide Employers Information to Showcase Exemplary Literacy/Skills Training Programs and Curriculum

Literacy Barrier: Lack of Information on the Use of Current Technology to Enhance Adult Education Services

8. *Action Item:* Identify Best Use of Technology, Especially Electronic Tablets and Smartphones, for Literacy Training
9. *Action Item:* Encourage the Use of Distance Learning, Especially in Rural Areas and for English as Second Language Adult Learners

Literacy Barrier: Need for Changes in TEA's Federal and State-Funded Adult Basic Education (ABE) System

10. *Action Item:* Include Relevant Recommendations from Report in Rebid of TEA's ABE Contracts
11. *Action Item:* Expand Nonprofit Literacy Programs through Texas Libraries and Increased State Training of Train-the-Trainer Nonprofit Volunteers and Texas Libraries
12. *Action Item:* Eliminate or Reduce Legal Barriers and Practices to Give Community Colleges Greater Flexibility in Setting Fees for TEA's ABE Services

Background

The 81st Texas Legislature Regular Session (2009) enacted House Bill (HB) 4328, which created the Interagency Literacy Council for "the study, promotion, and enhancement of literacy in the state."[1] HB 4328 instructed the Texas Interagency Literacy Council (Council) to provide a written report to the Legislature, the governor, and the Texas Workforce Investment Council (TWIC) on November 1 of each even-numbered year beginning in 2012 until the Council expires in 2019.

In response to the legislative charge, this report includes the following:

- Description of the Council and its responsibilities and meetings;
- Assessment of adult literacy needs in Texas;
- Status of programs and services administered by each agency or entity on the Council;
- Description of efforts by these entities to coordinate efforts and align services, reduce redundancies, implement best practices, integrate services, and improve accountability;
- Identification of barriers in Texas to improving literacy and action items to address those barriers;
- A state plan for the next two years to implement action items; and
- Discussion of an approach to building existing funding streams and identifying additional state and federal funding sources available for promotion of literacy in Texas.

Subsequent reports after this initial report will document:

- actions taken in furtherance of the plan;
- areas that need improvement in implementing the plan;
- any changes to the plan; and
- programs and services that address Texas' literacy needs.

The Council

The nine-member Council is composed of a representative from the Texas Workforce Commission (TWC), the Texas Education Agency (TEA), and the Texas Higher Education Coordinating Board (THECB); three representatives from nonprofit literacy providers; and three representatives from employers. The six public members are appointed by TWC's executive director. Council members serve two-year terms and may be reappointed. TWC appointed Council members in fall 2009. Current Council members are listed at the beginning of this report. Appendix A lists all the Council members who have served since the Council was created and the length of their appointments.

HB 4328 also requires the Council to meet three times a year and to invite stakeholders to participate and provide testimony before the Council at least once a year. The Council has complied with these requirements as documented in the brief summaries of each meeting in Appendix B.

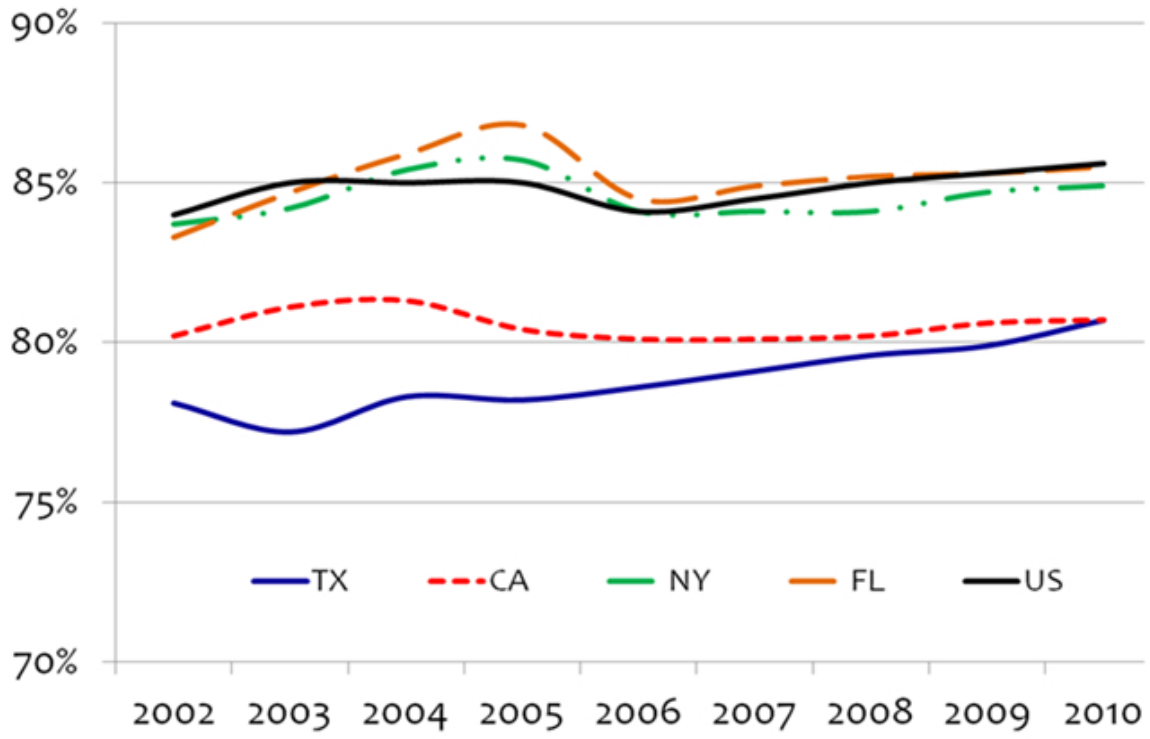
Texas Adult Literacy Needs

HB 4328 mandated that the Council "assess Texas adult literacy needs." According to the federal Workforce Investment Act (WIA) of 1998, individuals are eligible for federal adult education services if they are at least 16 years old; not enrolled or required by state law to enroll in secondary school; do not have a high school diploma or an equivalent certificate; and/or are unable to speak, read, or write English well.[2]

Low Percentage of Texas High School Graduates

In 2010, Texas tied with California for the lowest percentage of its population 25 years or older who were high school graduates (including equivalency credentials). Only 80.7 percent of Texans have completed high school compared with 85.6 percent of U.S. residents 25 years or older, 85.5 percent in Florida, or 84.9 percent in New York.[3] (See Figure 1)

Figure 1: Percent of Age 25 and Older High School Graduates or More in the Four Largest States and the United States 2002–2010

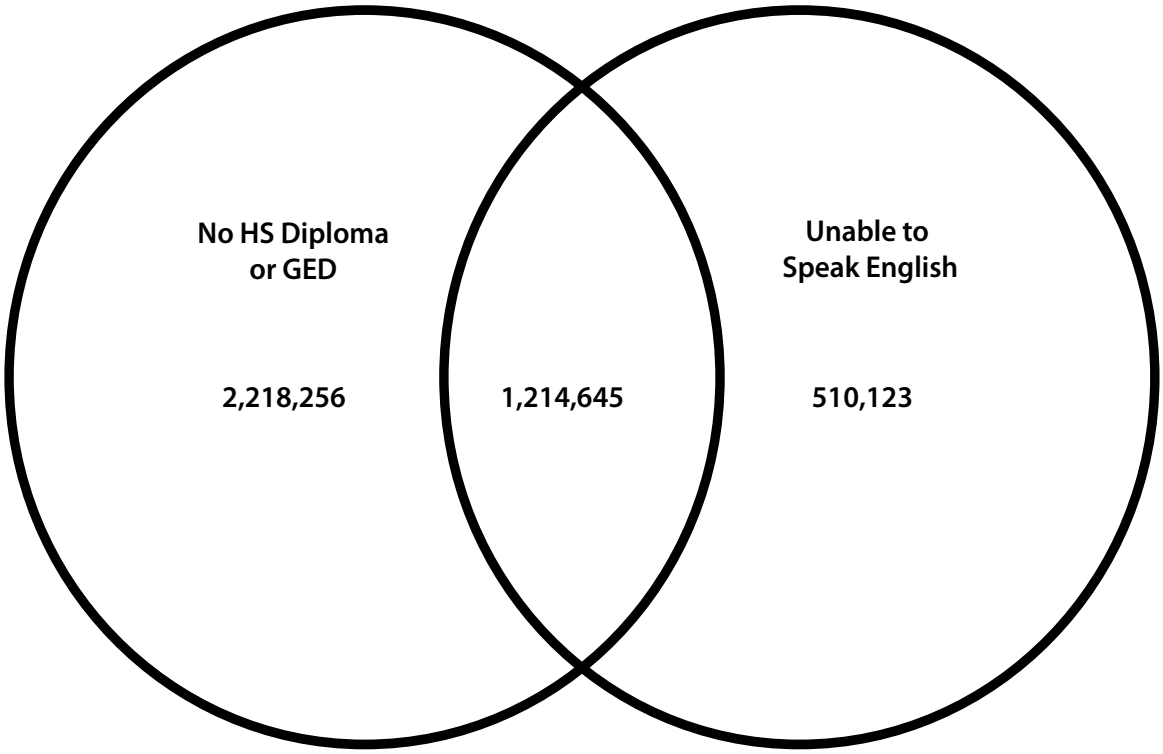


Source: U.S. Census Bureau, American Community Survey[4]

Many Texans Eligible for Adult Education

Some 4.3 million Texans met the federal requirements to be eligible for adult education services in 2011.[5] Of the 3.9 million who met the definition in 2007, 2.2 million, or 56 percent, had no high school diploma or GED credential; 1.2 million, or 31 percent, lacked a diploma or GED credential and were unable to speak English; and some 0.5 million, or 13 percent, possessed a diploma or GED credential, but were unable to speak English.[6] (See Figure 2)

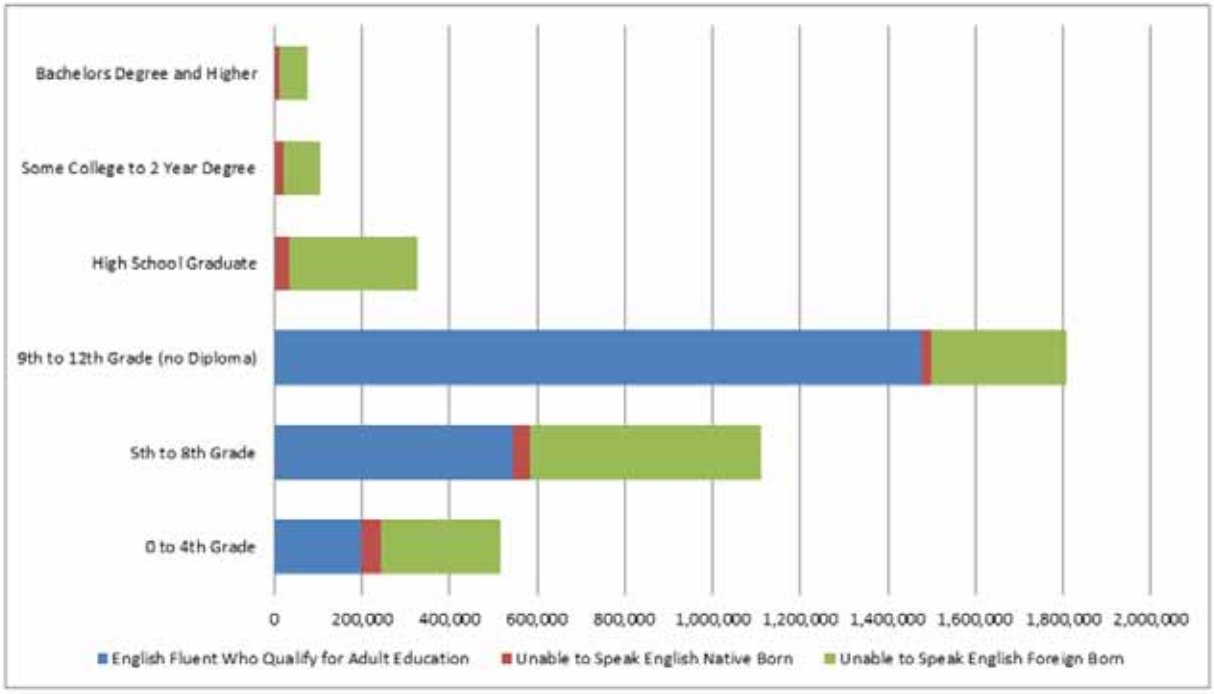
Figure 2: Millions of Texans Eligible for Adult Education Services in 2007



Source: TWIC[7]

Another way to view the 3.9 million Texans eligible for adult education services in 2007 is by their educational attainment level and need for English as a Second Language (ESL) training. A little over half a million Texans eligible for adult education had an educational level at fourth grade or below, and most of them required ESL training. There were over one million Texans whose educational levels ranged from fifth to eighth grade, about half of whom required ESL. (See Figure 3)

Figure 3: Number of Texans Eligible for Adult Education Services in Texas by Educational Attainment and English Fluency in 2007



Source: TWIC[8]

This means some 1.6 million Texans were functioning at an eighth-grade or lower level in 2007. These Texans are likely to have found it very difficult to obtain a job, since eighth grade reading and math competencies are often a minimum requirement for employment.

Some 1.8 million Texans had a ninth- to 12th-grade education, but no diploma. Most of them, 1.5 million, were fluent in English, but qualified for adult education services because they did not have a GED credential or high school diploma. The approximately half million Texans with a high school diploma or above were eligible for adult education services because they required ESL.

Almost half of Texans qualifying for adult education in 2007 lived in the Gulf Coast (Houston), Dallas, and Alamo (San Antonio) workforce areas. Appendix C provides a list of the estimated number of Texans eligible for adult education services in each workforce area.[9]

Importance of Family Literacy for Children

This report focuses on adult literacy. However, the Council recognizes that raising the literacy levels of families and children is important to ending an anticipated future increase in the number of Texans who are not functionally literate. According to projections made by Texas' Office of the State Demographer in a 2010 TWIC study, almost eight million Texans will be eligible for adult education services by 2040, almost double the estimate for 2008.[10]

Encouraging parents to read to their children can help increase literacy in the next generation. A significant predictor of a child's academic success is the literacy level of the child's mother.[11] Adult education can give parents the skills to help their children with schoolwork and to communicate with their children's teachers. Family literacy programs teach parents about the importance of early childhood education.[12]

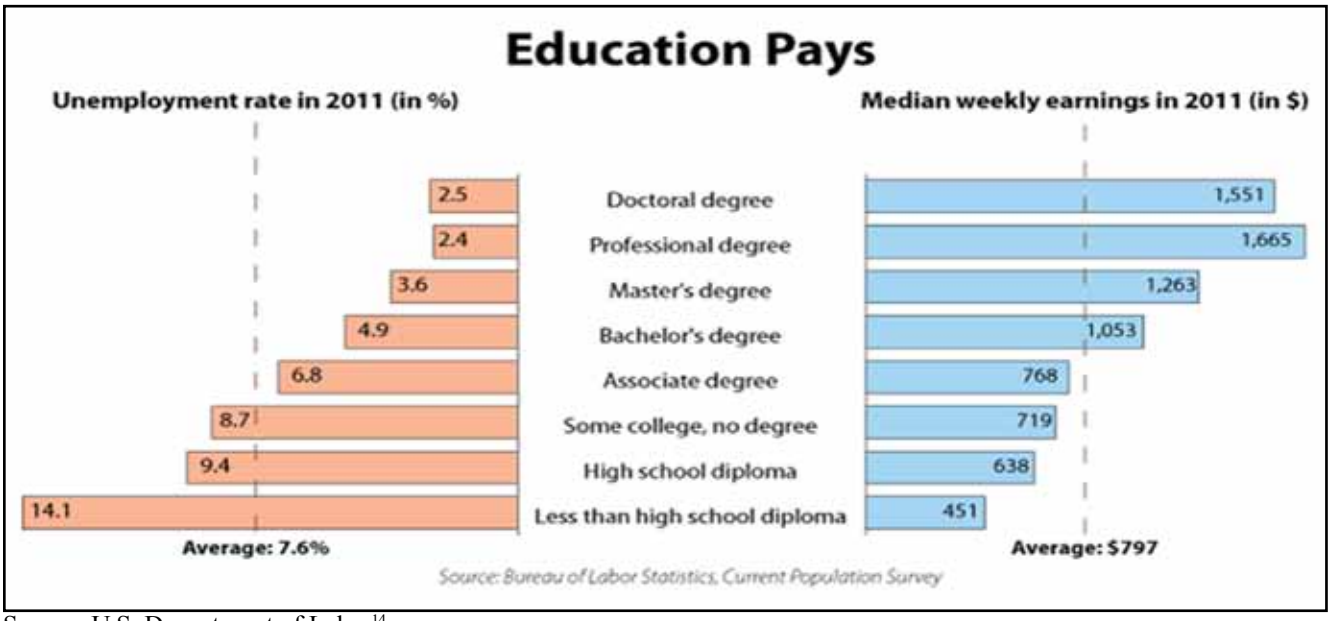
Benefits of Improving Texas Adult Literacy

Higher levels of literacy and additional education lead to higher wages and less unemployment, a better prepared and more competitive workforce, and myriad other benefits that derive from having a more educated population.

Increased Adult Literacy Means Less Unemployment and Higher Salaries

In general, higher levels of education mean lower unemployment rates and higher salaries. Data from the U.S. Department of Labor's (DOL) Bureau of Labor Statistics demonstrates this pattern for 2011, in a chart that shows how median weekly earnings rise as education levels increase and the unemployment rate falls.[13] (See Figure 4)

Figure 4: Education Pays in Higher Earnings and Lower Unemployment Rates in the United States, 2011



Source: U.S. Department of Labor[14]

Individuals with less than a high school diploma earned a median weekly income of $451 and had an unemployment rate of 14.1 percent. Individuals with a high school diploma earned $638 and had an unemployment rate of 9.4 percent. Individuals with some college, but no degree, earned $719 and had an unemployment rate of 8.7 percent. Individuals with an associate degree earned $768 and had an unemployment rate of 6.8 percent. Individuals with a bachelor's degree earned $1,053 and had an unemployment rate of 4.9 percent.

This means that on a yearly basis, the median income of someone in the United States with less than a high school diploma who worked the entire year was $23,452. Those with a high school diploma made $9,724 more; those with some college, but no degree, $13,936 more; those with an associate degree, $16,484 more; and those with a bachelor's degree, $31,305 more.

Increased Literacy Means a More Competitive Texas Workforce

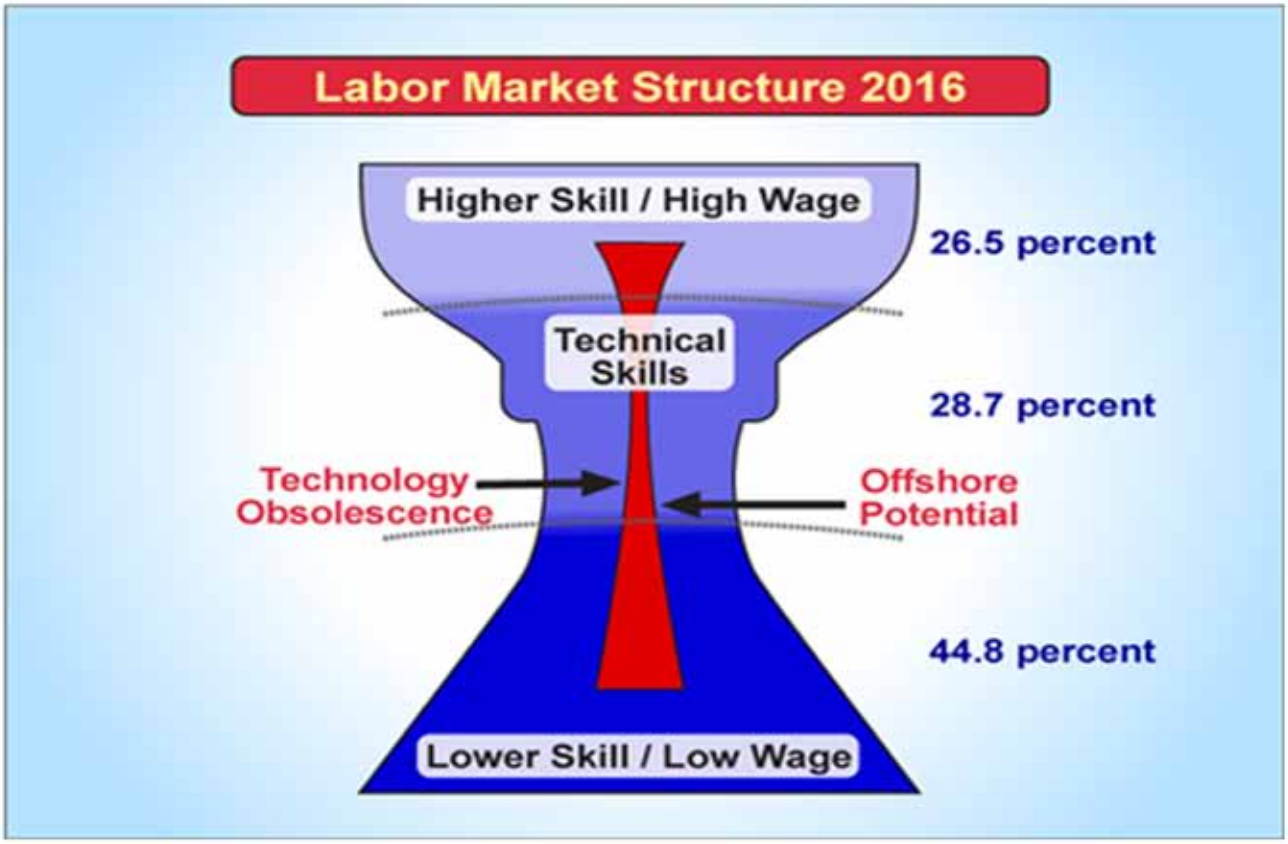
Texas misses significant opportunities to build and prepare the Texas workforce for the challenges of the future when hundreds of thousands of people cannot read and write. It is more difficult for Texas to compete with other states and countries for businesses to locate in Texas.

According to the Center of Education and the Workforce at Georgetown University, two-thirds of the job openings created from 2008 to 2018 will require postsecondary education. About half of these will be filled by people with an associate degree or occupational certificate, such as an electrician, construction manager, dental hygienist, paralegal, or police officer. Some 27 percent of people with postsecondary licenses or certificates—credentials short of an associate degree—earn more than the average bachelor's degree recipient.[15] Texas needs to get individuals with low-level skills up to a level where they are employable and to place them on a career track where they can progress over time to higher wages.

Figure 5 illustrates the projected job market for 2016. About 45 percent of the labor market will require short-term, on-the-job training of 30 days or less. About 26.5 percent of the jobs will be high-skill, high-wage jobs that require a bachelor's degree or more. Almost 29 percent are the jobs requiring technical skills, like trade construction, health care occupations, robotics, and instrumentation technicians, among others. These areas offer higher paid jobs with an associate degree or less.

Jobs requiring technical skills are also above the line of technology obsolescence and are less likely to be shipped offshore. The more high-skill or technical jobs Texas retains and fills, the more competitive Texas is. (See Figure 5)

Figure 5: Projected Labor Market Structure for 2016



Source: TWC

Other Literacy Benefits

Increasing the literacy levels and employment of more Texans leads to additional benefits. A study by the Ray Marshall Center on return on investments from Capital IDEA suggests that increasing occupational skills training and support services to low-income residents to improve education increases return on investment to taxpayers. The cost-benefit analysis finds increased returns to taxpayers from reductions in public assistance and Supplemental Nutrition Assistance Program benefits and increased tax receipts.[16] Another study from the Friedman Foundation for Educational Choice on the cost of school dropouts contends that Texas spends more on dropouts each year after they leave school than it spent when the individuals were in school. The identified costs are related to lost revenue from taxes and fees and increased Medicaid and incarceration costs.[17] Additional benefits of increasing literacy levels for families and children are discussed in a later section.

Texas Literacy System

Texas organizations that administer or provide adult education services include:

- Texas state and local government (state agencies, community colleges, and independent school districts);
- Texas volunteer and nonprofit organizations (community- and faith-based organizations); and
- Texas employers.

Texas' current literacy system is fractured and uncoordinated and its components do not interact with each other in a coherent fashion. Part of the mandate of the Council is to identify ways to integrate—in a voluntary manner—community- and faith-based literacy programs with federally funded adult education programs, postsecondary education, and industry-led occupational training and certification programs.[18]

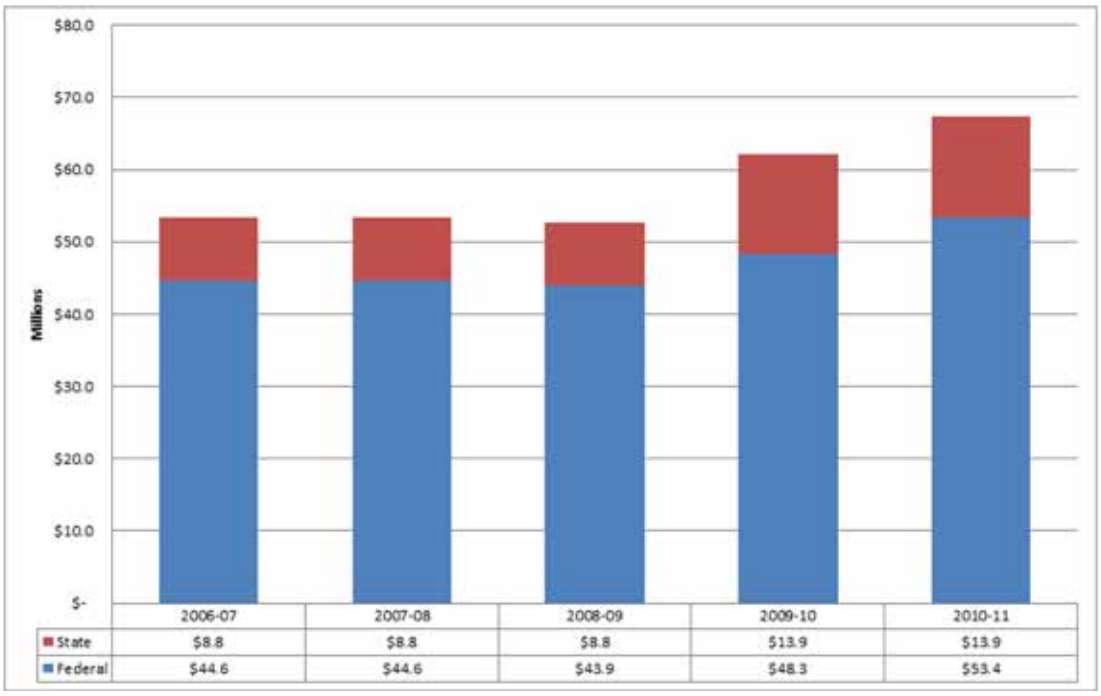
State Administered Programs

TEA, TWC, and THECB are the three state agencies involved in delivering literacy programs.
TWIC coordinates and provides strategic planning for all the agencies involved with the Texas workforce.

Texas Education Agency

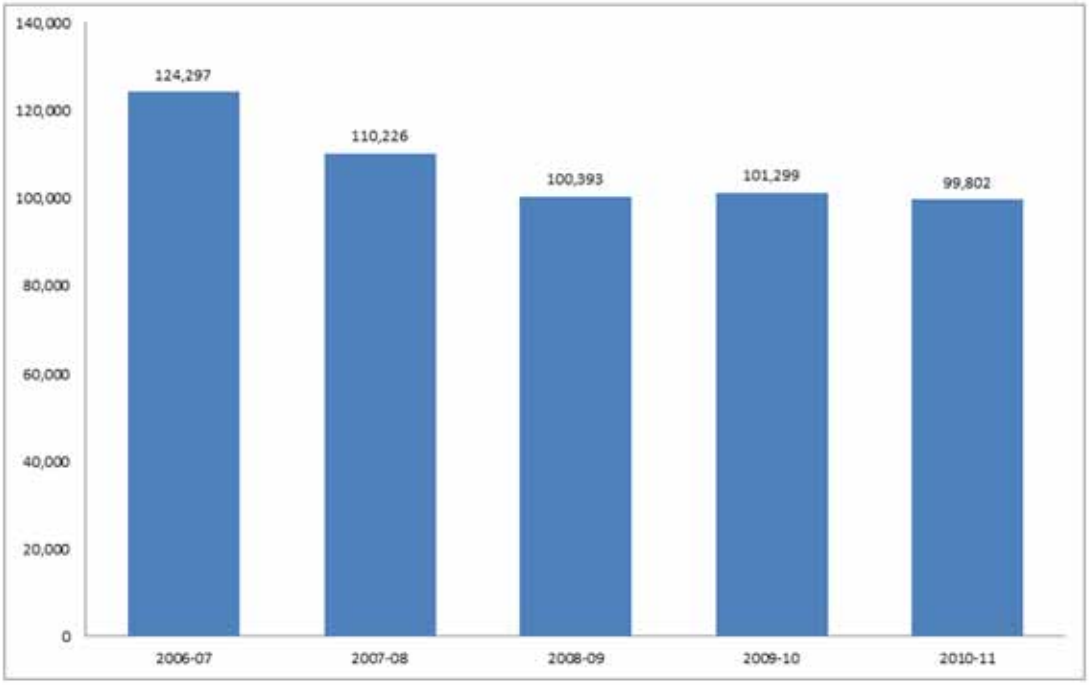
TEA administers WIA Title II federal funds for Texans who are eligible for adult education. TEA provided adult education services to 99,802 Texans in the 2010–2011 school year (not including incarcerated adults in the Windham Independent School District [ISD]). This represents a decline from the 124,297 students served in 2006–2007 and the 110,226 students served in 2007–2008. However, student retention and program quality, according to federal measures, has improved as a result of changes that decreased student enrollment.[19]
The number of contact hours per student increased from 76 hours in 2001 to 133 hours in 2011. The percent of students completing a level increased from 28 percent in 2001 to 60 percent in 2011 (See Figures 6, 7, 8, and 9). Adult Education providers implemented managed enrollment instead of open enrollment, participated in data-driven decision making, and put into action program improvement plans, teacher credentialing, a multiplicity of teacher and administrator trainings, and leadership activities.

Figure 6: TEA Adult Basic Education Funding 2006–2011



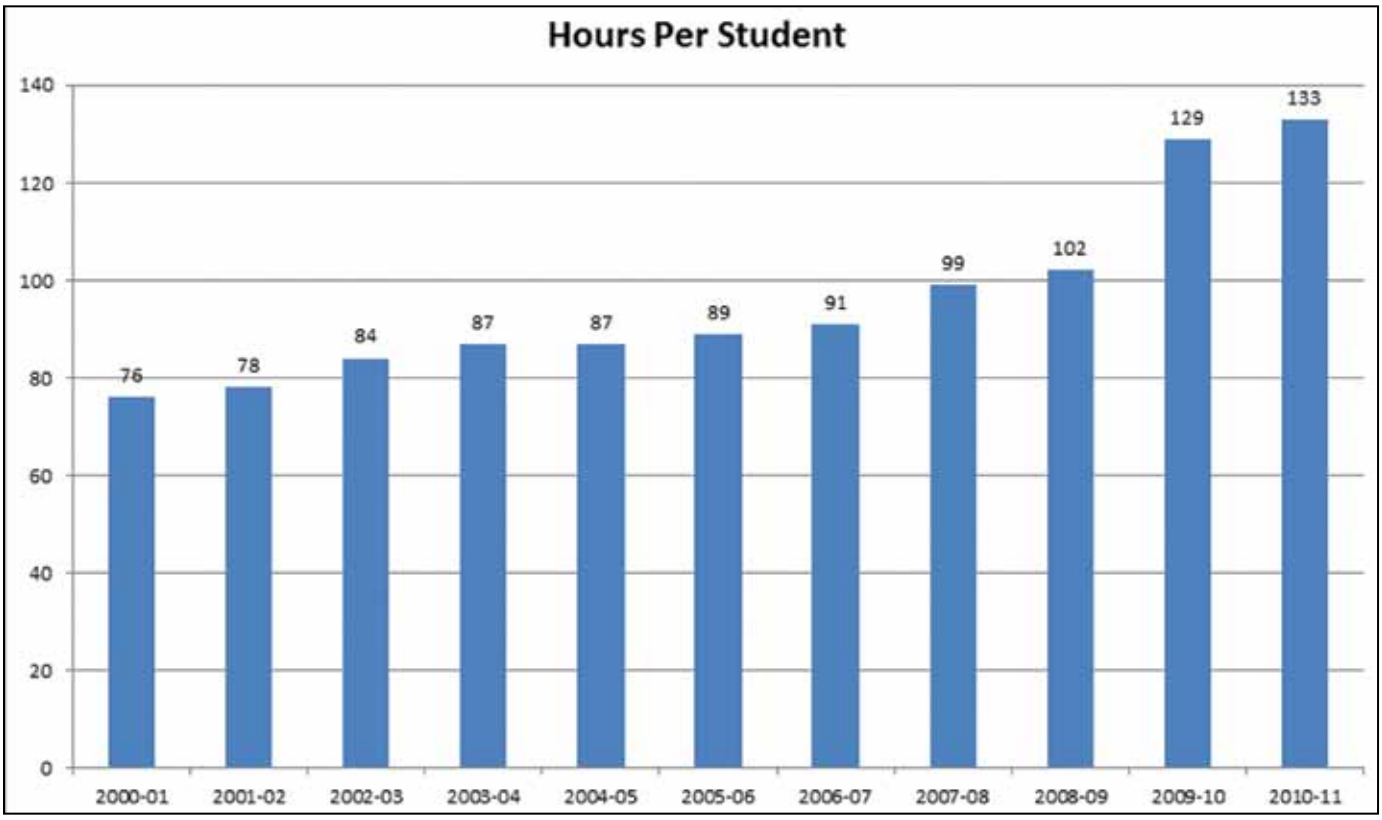
Source: THECB[20]

Figure 7: TEA Adult Education Students Served 2006–2011



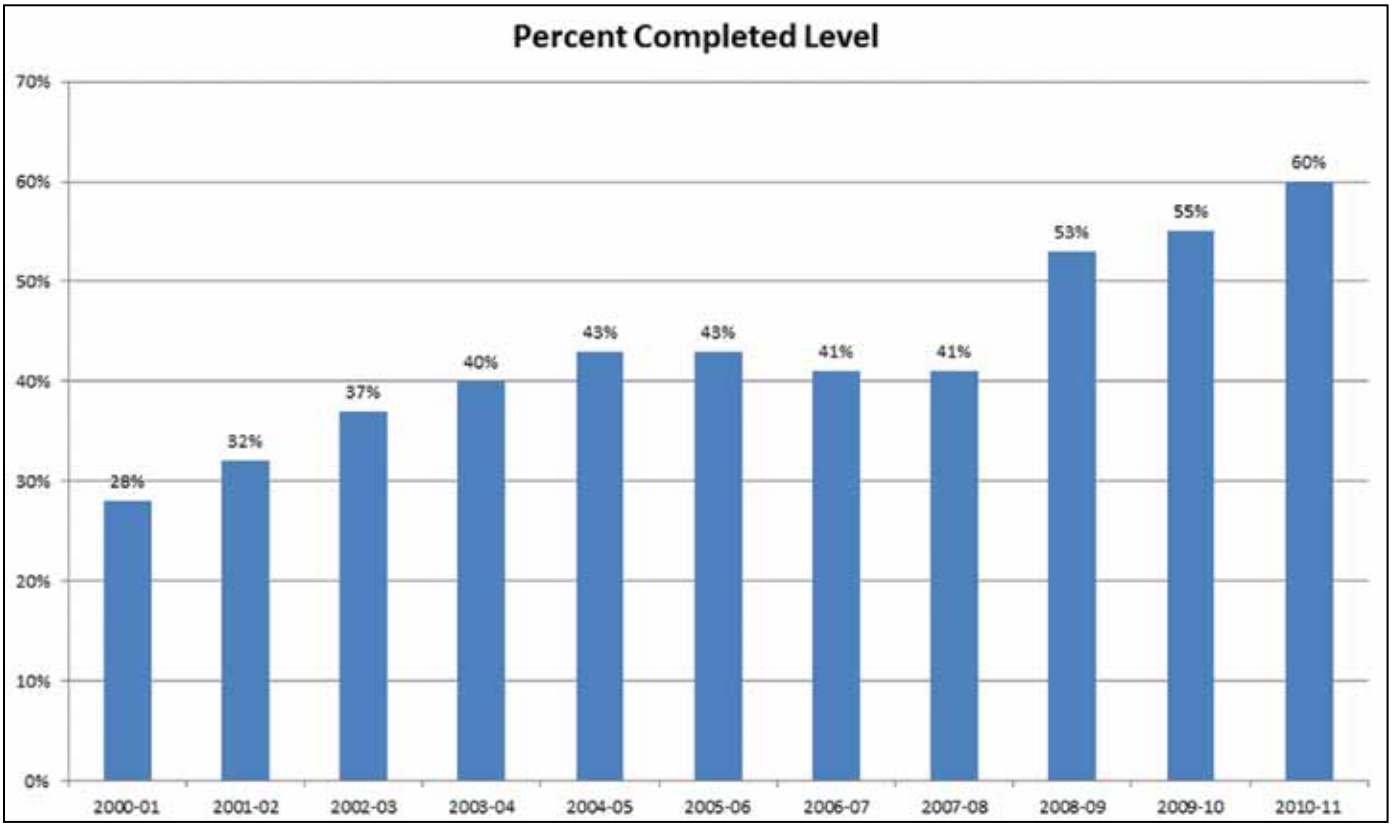
Source: THECB[21]

Figure 8: Hours per Student Served 2000-2011



Source: Texas LEARNS

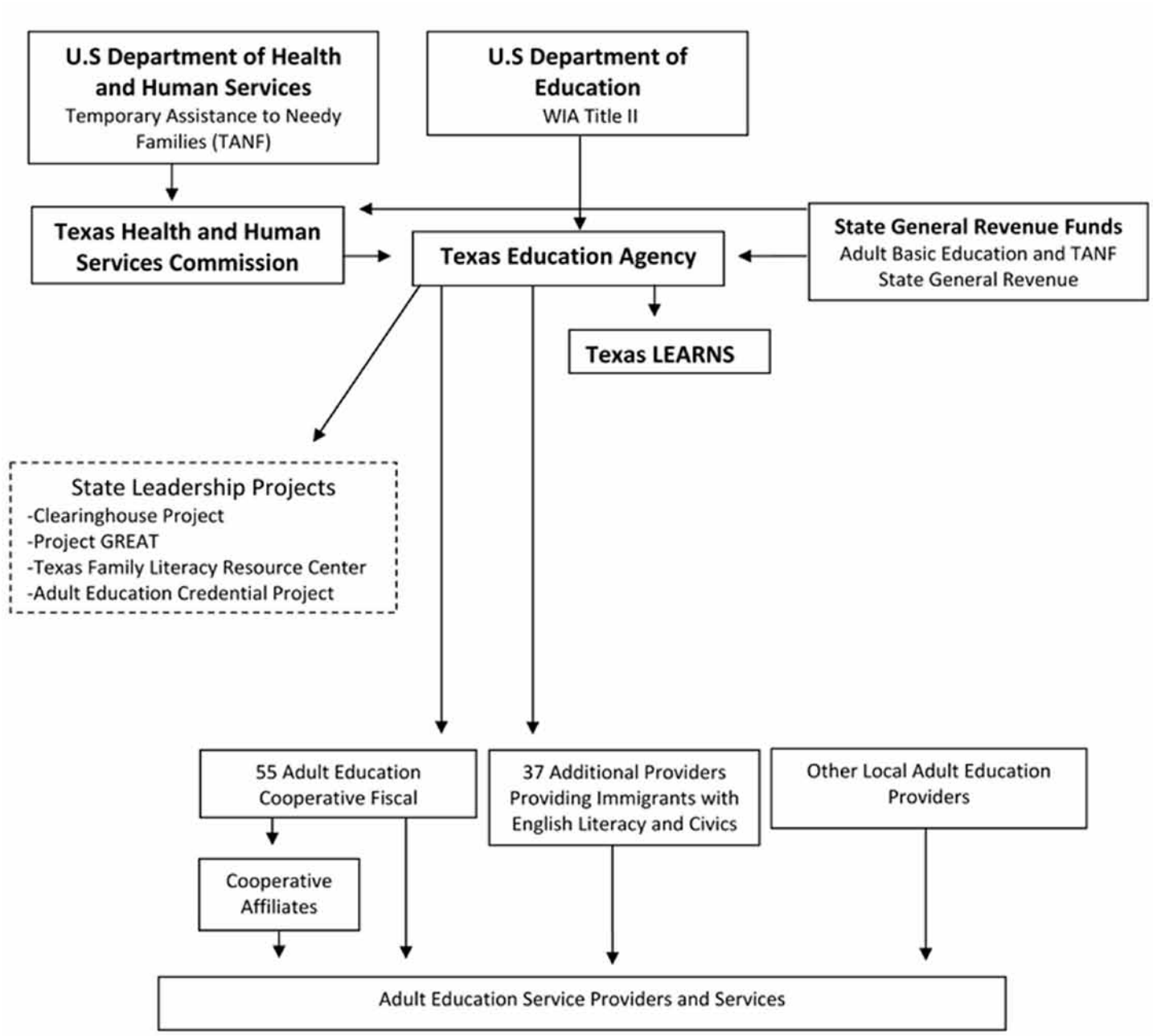
Figure 9: Percent Students Who Completed Level 2000-2011



Source: Texas LEARNS

TEA, in collaboration with a subdivision of the Harris County Department of Education called Texas LEARNS, contracts with cooperatives and consortiums for adult education.[22] Texas LEARNS provides nondiscretionary grant management, program assistance, and other support services to Texas adult education providers. TEA also administers WIA funds for the adult education of incarcerated Texans in federal and private prisons and in city, county, and state jails. (See Figure 10)

Figure 10: Flow of Federal and State Literacy Funds



Source: TWIC[23] and TWC

TEA also provides funding to the statewide projects that:

- allow potential adult education students to locate adult education providers and other resources including the Texas Center for the Advancement of Literacy and Learning (TCALL) at Texas A&M; and

- provide training to adult literacy teachers through eight regional professional development centers called Project GREAT (Getting Results Educating Adults in Texas) Centers.[24]

TEA has contracts with 55 fiscal agents for adult education cooperatives who in turn contract with additional affiliate providers.[25] TEA also funds 37 additional providers of English literacy and civics to immigrants. These providers may include public school districts, public community colleges, public universities, nonprofit agencies, and approved community-based organizations.

TEA last issued bids for contracts for its adult education program in 2003. This means that the same service providers in the same geographic areas have continued to receive funds since then. TEA has revised the program rules and has discussed rebidding the contracts based on the new rules.

Texas Workforce Commission

TWC provides funding for adult education services that are less than six months in duration as part of its federally funded program for job training.[26] TWC may use its funding to participate in joint adult education projects with TEA and THECB. Local Workforce Development Boards (Boards) are also expected to have a relationship with ABE providers in their workforce areas.[27]

TWC approved some $699,989 to fund four Adult Technology Training Projects aimed at integrating workplace literacy training with occupational skills training for individuals with limited English proficiency or in need of adult education to help them compete in the workforce. The four projects involved the Alamo Community College District, the Capital Area Workforce Development Board and Austin Community College (ACC), the Harris County Department of Education, and San Jacinto College. The section entitled "Adult Education Best Practices" describes the Capital Area Workforce Development Board project. These projects combined ESL and basic education training with skills training and job placement.[28]

Typically, TWC requires grantees to uses discretionary dollars to fund demonstration projects and often requires a business partner at the table, along with Boards and an educational institution or training provider.[29] TWC training-dollar allocations are driven by employer-hiring needs and Board-identified areas of economic growth. The intent is to enable demonstration projects to generate best practices for replication with other dollars.[30]

Texas Higher Education Coordinating Board

THECB provides policy orientation to the community college system that offers adult education classes. Some community college adult education classes are part of TEA contracts. The Texas Legislature has appropriated state funds to THECB to award competitive grants to community colleges and public technical institutions to increase participation in ABE. THECB received $5 million for both State Fiscal Year (SFY) 2010 and SFY 2011 in Rider 56 of the appropriations bill and $2 million for both SFY 2012 and SFY 2013 in Rider 40.[31]

The Legislature has designated THECB as the lead agency in achieving adult education goals in coordination with TWC and TEA in riders to THECB in the last three appropriations bills. Rider 29 directs that THECB, TEA, and TWC work together to align ABE and postsecondary education in the appropriations bill for SFY 2012 and 2013 and reduce the time it takes for students to transition to postsecondary education.[32] Similar provisions can be found in Rider 45 in the appropriations bill for SFY 2010 and 2011 and in Rider 50 to the appropriations bill for SFY 2009 and 2010.[33]

Texas Workforce Investment Council

TWIC is charged with promoting the development of a highly skilled and well-educated Texas workforce and assisting the Office of the Governor and the Legislature in strategic planning for the evaluation of the Texas workforce system.[34] TWIC oversees the work of state agencies facilitating the efficient delivery of integrated adult education and literacy services.[35] TWIC has been working on integrating ABE with occupational skills training so Texas can serve more people more quickly by providing both training components concurrently rather than one after another.[36]

Texas Nonprofits and Volunteers

Some community-and faith-based organizations provide adult education, among them local literacy councils and faith-based volunteer groups across the state. Many of these classes meet in libraries, schools, churches, and similar settings. Local nonprofits may receive money from private foundations, corporations, and individual donors.[37] Some nonprofits may have contracts with TEA to deliver adult education services. Additionally, literacy programs also receive in-kind donations of resources, labor, or supplies from volunteers. Churches, for example, may provide classrooms, child care facilities, and volunteer child care providers and teachers from within congregations.

San Antonio is unusual among Texas communities in that its literacy program receives city and county funds and has a unique system of community centers built with bonds that provide literacy and other services.

Some nonprofits are members of Literacy Texas, the statewide literacy coalition that offers resources, training, networking opportunities, and advocacy for literacy programs. Literacy Texas and the Texas Association for Literacy and Adult Education hold annual conferences and provide professional development opportunities for adult education teachers and administrators. The Texas Council for Adult Basic Education and the Texas Family Literacy Organization are also advocacy groups for adult education.[38] Limited trainer fees and travel reimbursements for some volunteers who work with Literacy Texas are available from TCALL through federal WIA leadership funds provided by TEA.

Some local adult education providers may be members of regional literacy coalitions already in existence or emerging in the major urban areas of the state.[39] (See Figure 11)

Figure 11: Texas Regional Literacy Coalitions

Existing Coalitions	Coalition Name
Austin	Literacy Coalition of Central Texas
Fort Bend	Achieve Fort Bend County
Fort Worth	Tarrant Literacy Coalition
Houston	Houston READ Commission
Rio Grande Valley	South Texas Literacy Coalition
San Antonio	LITERACY San Antonio
Matagorda, Colorado, and Wharton Counties	Tri-County Coalition for Literacy & Community Services
Greater Dallas/Ft. Worth Area	DFW International Community Alliance

Emerging Coalitions	Coalition Name
Corpus Christi	Literacy Coalition of the Coastal Bend
Dallas	Literacy Coalition of Greater Dallas
El Paso	Paso de Norte Literacy Council
Eagle Pass	No formal name
Huntsville	No formal name
Lubbock	Literacy Lubbock
Tyler	Literacy Council
Odessa	No formal name

Source: Literacy Texas

These literacy coalitions are located largely in urban areas of the state. Texas rural areas do not have literacy coalitions and have fewer resources and nonprofits to provide services.

TWIC Survey of Adult Education Providers

Because of the lack of information about the adult education services nonprofits and other entities provide that

are not funded by TEA, TWIC surveyed adult education providers to determine how many individuals in need of adult education received services in 2011.

As of January 2012, there were 426 adult education providers listed on TCALL's website. This website is the best source of information on adult education providers in Texas, though organizations not receiving TEA funds, such as community- and faith-based organizations, may not be listed. However, some of the volunteer and professional associations maintain their own directories.

TWIC went through an exhaustive process to identify adult education providers in the state:

> *In order to create a comprehensive list of adult education providers, the numerous adult education provider registries maintained by numerous literacy coalitions and councils throughout the state were identified and combined. Samples from the combined registry were then surveyed to identify any additional providers that were not listed in the registries. The provider information was then carefully reconciled and verified to ensure that multiple entries did not exist for the same provider and combined into a comprehensive list. Following the development of this comprehensive list, providers on the list were surveyed to gather additional information.*[40]

TWIC's additional survey efforts identified a total of 715 adult education providers—an additional 289 adult education providers.[41] TWIC surveyed the expanded provider list and from the results estimated the number of adult education students served in 2011.

Based on the first comprehensive survey of adult education in Texas, TWIC estimates that nonprofits and volunteer groups served about 80,000 students. Add this to the approximately 100,000 adult education students served by TEA-funded classes and approximately 180,000 students, or 4.2 percent, of the eligible Texas population received adult education services in 2011. This number does not include the approximately 20,000 incarcerated Texans who receive adult education services. (See Figure 12)

Figure 12: Aggregated Estimates of Adult Education Students Served in 2011

Number of Students	Total	TEA Funded	Not TEA Funded
Adult Basic Education (8th grade and below)	42,971	35,693	7,278
Adult Secondary Education /GED (9th grade and above)	21,809	6,936	14,873
English as a Second Language	117,604	57,814	59,790
Total Estimated	182,384	100,443	81,941

Source: TWIC[42]

Note: The "Not TEA Funded" adult education programs serving these students received funds from other sources such as counties, cities, grants from foundations, donations, or federal funds from non-TEA sources.

TWIC's survey found that more than 26,000 individuals were on waiting lists for adult education classes—more than 11,000 for TEA-funded programs and more than 15,000 for those funded by other sources.

Employers
Some Texas employers provide adult education for their employees as part of job training. The construction, health, and hospitality industries often provide adult education training for employees as it relates to job requirements. The volume of the adult education services provided by employers is unknown.

One Council member polled 20 major construction contractors in Texas to obtain information about the adult education services they provide; 70 percent reported they offer adult education opportunities of some form to employees, 75 percent stated they offer ESL and GED credential courses, and 25 percent advised they provide civics education.[43]

Around 60 percent of those who offer these services do so in-house with a private instructor, while 33 percent partner with a community college or ISD. The remaining, approximately 7 percent, partner with a nonprofit or association to provide training.

Those contractors partnering with a public entity named the following as partners: Houston Community College, Lone Star College (Houston), ACC, San Antonio Community College, South San Antonio ISD, and Community Action Inc. (a nonprofit located in San Marcos).

Adult Education Best Practices

Council members and those attending Council meetings provided the following examples of adult education best practices they had experienced:

- *Concurrent Adult Education and Workforce Training:*
  - Have an adult education instructor and a vocational instructor who coordinate training;
  - Invite potential employers in the vocational area to explain how to get a job; and
  - Provide internships for certain students.
- *Adult Education While at Work:*
  - Permit on-site training;
  - Provide incentives related to job retention and advancement;
  - Provide vocational ESL training directly related to employment;
  - Train managers and supervisors in Spanish;
  - Train coworkers to be tutors;
  - Provide incentives to remain in class; and
  - Support distance learning for higher-level adult education.
- *Increase Coordination among Local Agencies and Community Organizations:*
  - Establish a robust relationship between Board and adult education providers by regularly sharing information;
  - Communicate suggestions for improving adult education; and
  - Share resources such as classroom space.

Concurrent Adult Education and Workforce Training
One of the models that the Council discussed was the I-BEST (Integrated Basic Education and Skills Training) program developed by the Washington State Board for Community and Technical Colleges. Traditional adult education programs require participants to progress to a certain point in their language ability before workforce training begins. This has the effect of keeping them out of the workforce.[44] The I-BEST model allows for concurrent adult education and workforce training.

Case Study: I-BEST Model Linked to Potential Employer Internships
The Capital Area Workforce Development Board implemented a version of the I-BEST model in a TWC-funded pilot program that lasted 15 months, concluding at the end of January 2009. Its Vocational English as a Second Language (VESL) program offered ESL and workforce training at the same time. While the I-BEST program had two instructors (one for adult education and one for workforce training) in the room together, this version had them coordinate instead and remain in separate classrooms on different days. The ESL training previewed and then reinforced the concepts and language of the vocational coursework.

The project's business partners included Seton Family of Hospitals (Seton), St. David's HealthCare (St. David's), and the Austin Capital Area Dental Society. As the students were in training, Seton and St. David's sent recruiters to the classrooms to talk to the students about how to get a job. The Austin Capital Area Dental Society provided internships for dental assistant students. Project leaders recommended recruiting a cohort of students who support each other to come to class, incorporating internships into courses to instill confidence in students, and include planning for continuing education.[45]

This pilot was one of four funded by TWC. Information from the pilots was later used by THECB to develop 14 pilot programs at community colleges. Additional descriptions of the TWC and THECB pilots are in the section entitled "Actions Already Taken by State Agency Council Members."

The adult students in these concurrent training programs make progress and stay motivated because they see the relevance of what they are learning. They can take smaller steps through the training to obtain employment that increases their wages sooner and provide more for their families, rather than feel they are only reaching for a distant degree.

Adult Education While at Work
Adult education at work has the advantage of requiring no travel time and providing incentives for participation in the form of job retention and advancement.

Case Study: A Hospital System Providing Adult Education While Employees Are at Work
Seton in Austin has paid a part of the cost for the nonprofit organization English at Work to provide a work-based literacy program. This alleviated employees' worries about transportation to classes. Seton started a class with 18 associates and ended up with 21. This is unusual because literacy classes often have problems with decreasing attendance over time. Seton paid for one hour of the employee's time there and the employees donated an hour of their time to a two-hour class. Seton also added training from the nonprofit Spanish at Work which provides training to managers and supervisors to teach them approximately 100 action verbs that are specific to health care to improve their communication with employees.[46]

Case Study: Hotel and Health Care Industries Train Employees to Be Adult Literacy Tutors
North Texas has targeted the hotel industry and the health care industry for adult education projects because these were growing industries in the area that needed employees. Texas Health Resources and the Gaylord Hotel agreed to be pilot sites for adult literacy classes. Dallas and Tarrant County community colleges trained literacy tutors from those work locations who would volunteer to teach their fellow employees.[47]

Many companies need employees with basic literacy skills that can be built upon later. They need an employee who, for example, can do fractions and read a blueprint. Employers need "just-in-time literacy." After employees are hired, they can work on GED credentials.[48]

Employer-led approaches can ensure that employers support literacy efforts economically, for example, by paying for one hour of a two–hour literacy training program.[49] This strategy can be incorporated into traditional adult literacy programs.[50] Working with industry associations, such as retail, manufacturing, and hospitality, can help in recruiting employers to participate.[51]

Case Study: A Construction Company Offers Incentives and Family Member Participation
The Marek Family of Companies (Marek), a commercial construction company with almost 3,000 employees, partnered with Community Action Inc., in Austin and the Harris County Department of Education in Houston to provide ESL and adult basic education training. Marek provided incentives for employees to remain in class and to cover the cost of gas. Students can bring another family member to the class.
The intent is to encourage English speaking at home as well as on the jobsite. To reach the first level of supervision, Marek field employees must be able to speak English. With higher-level learners, Marek uses distance learning allowing them to go online and use Aztec software for self-paced learning.[52]

Increase Coordination among Local Agencies and Community Organizations
A TWC survey required by TWIC identified the Alamo, Capital Area, and Gulf Coast Workforce Development Boards as having most of the characteristics of a robust relationship with literacy providers. Robust Boards had similar service goals: systematic, regular reporting of the number of individuals served, sharing of information, and communication between the Board and adult education providers, as well as joint planning and training, standardized referral process, and shared resources.[53]

Case Study: Local State Agency and Community Collaboration
Alamo Workforce Development Board (Alamo) began its collaboration in 2002 when it approached Education Service Center (ESC) Region 20 and requested suggestions and improvements for its adult education efforts. In 2004, Region 20 staff approached Alamo and offered staff and requested space in the Workforce Solutions Offices to provide adult literacy training. This allowed clients to be served by Region 20 and workforce staff and to ensure that clients completed their career plans with TWC.

Alamo extended this arrangement to the San Antonio ISD and North East ISD since Region 20 did not cover the entire area. Alamo set up annual conferences to invite frontline staff from all the agencies to find common ground. Alamo invited local community colleges to help extend services, such as adult education and workforce training, and transition them to certifications or two-year degrees. In the last several years, Alamo used a small amount of TANF funds to contract with Region 20 to do work-based literacy pilots that address needs in local industries.[54]

Actions Already Taken by State Agency Council Members

Since the Council's inception, the state agencies represented on the Council have taken a number of actions to address barriers to adult education.

TEA, THECB, and TWC Participate in Federal Initiative

TEA, THECB, and TWC participated in the federal Policy to Performance initiative. The U.S. Department of Education selected and funded Texas to be one of eight states to participate in the 25-month project. The goals developed include:

- aligning the curriculum—particularly the ABE content standards—to the college-readiness standards, and infusing these with workforce readiness;
- closing the gaps between existing services and delivery systems; and
- aligning data systems to track students from intake into adult education through graduation and college or employment.[55]

TEA Revised Rules to Rebid ABE Programs

TEA adopted new rules for contracts with ABE providers effective September 20, 2012. The new rules require TEA to select adult education provid ers through a competitive procurement process every two years.[56] The rules delineate the use of funds, essential program components, allocation of funds beginning with school year 2013–2014, application process, and match requirements. Additionally, the method for funding adult education programs has been changed from the current allocation method specified in State Board of Education rules to a competitive procurement process specified in TEA's new rules.

TEA Revised Rules for GED Chief Examiner to Comply with Federal Requirements

TEA rules previously required the chief examiner at a GED testing site to have a master's degree in measurement and evaluation—a requirement that exceeded the GED Testing Service rules and made it more difficult to find examiners. Currently, tests are scored electronically and will continue to be under the new exam. Under TEA's new rules, there is no need for chief examiners to have graduate-level expertise. Finding examiners to administer the tests will be easier without this requirement.

TWC-Funded Grants to Integrate ABE and Workforce Skills

TWC set aside $699,989 in federal funds from its discretionary funding to more closely integrate basic literacy and workforce skills training at the local level. TWC developed these projects in conjunction with TEA and THECB. The first goal was to align these programs with postsecondary and workforce readiness so the programs lead to further training, college, or jobs. The second goal was to make sure that there is an explicit link between ABE and postsecondary education that includes short-term skills and technical training and employment goals that meet Texas' need for skilled workers.

TWC's four pilot programs integrated workplace and adult education and/or English proficiency training that lasted from the end of 2010 to the end of 2011. Additional information about the projects is provided in the section describing TWC and in the case study of the Capital Area Workforce Development Board's best practices.

THECB Progressed in Aligning Adult Education and Postsecondary Education

As noted in a report to the Legislature on Rider 29 in the appropriations bill, THECB has made progress in aligning the requirements of adult education and postsecondary education. The THECB Developmental

Education Demonstration Projects (DEDP) and Adult Basic Education Innovation Grantees (ABE-IG) have made progress in aligning the two systems by:

- creating developmental education councils with members from the adult education community;
- providing college orientation and college-for-a-day opportunities to adult education students from the college and the community; and
- identifying lower-skilled adults who are unsuccessful in developmental education and providing them with alternative pathways into college through technical training.[57]

THECB issued a $10 million Request for Applications (RFA) for ABE-IG. These projects incorporated aspects of the TWC grants, which included providing adult education and workforce training simultaneously. The RFA required that the fiscal agent be a community college or community college district. The grants funded projects for approximately half a million dollars each for two years. The grants required community colleges or districts to have strong partnership requirements with community-based organizations, employers, and the Boards.

As a result, 14 public two-year institutions are implementing integrated basic education and skills training programs funded by THECB on their campuses. Each institution has sustainability plans that they follow as it enters the second or third year of funding. THECB expects the institutions to have at least two integrated programs established when grant funding is complete. All of the programs are moving beyond the pilot phase.

THECB and TEA Developed New Minimum College-Readiness Tests

If adults functioning below a postsecondary level receive no preparation, or if a GED preparation program or an adult secondary-education transition program has not adequately prepared students for college-level coursework, these students may be placed into Developmental Education (DE) classes at community colleges. Depending on the level in which they are placed, students may find themselves continuing in these remedial education courses for several years. Because of their lengthy stay in DE, a number of these students expend Pell Grant funds as they take remedial coursework that does not count toward a degree plan (adults are eligible for federal financial aid if they possess a high school diploma or an equivalency, or were enrolled in college before July 1, 2012, if they don't possess a high school equivalency).[58] The majority of these students become discouraged, drop out, and never reach their academic goals.

While the state has provided institutions with minimum college-readiness test scores to guide them in the determination of the students' abilities to undertake college-level coursework, colleges and universities have had the freedom to increase the state minimum score. With the new Texas Success Initiative (TSI) assessment that will be implemented in 2013–2014, institutions will no longer have this freedom. THECB contracted with Texas State University in San Marcos to conduct a gap analysis of the Texas Adult Education Content Standards (TAECS) and the Texas College and Career Readiness Standards (TCCRS). The results provided TEA and THECB with a better understanding of the skill level of students graduating from an adult education program and entering postsecondary education. HB 3468 (82nd Texas Legislature) requires TEA to align adult education assessments with TCCRS.

According to the Office of Vocational and Adult Education (OVAE), the approved adult education assessments used by federally funded adult education providers cannot be changed and are based on the National Reporting Systems (NRS), Educational Functioning Levels Descriptors (EFLD) 1–6 for ABE and secondary education. To address this alignment and to support TEA under HB 3468, THECB, in consultation with Texas LEARNS

and TEA, required the vendor of the TSI assessment to provide an assessment that aligns with the U.S. Department of Education national standards and TCCRS.

THECB-Funded Grants for GED Student Transitions

THECB intends to increase the number of students with GED credentials transitioning toward postsecondary education, putting $1.5 million toward funding 13 grants to serve almost 1,000 students who have GED credentials or are reentering adult learners. One million goes to community colleges and another half million to fund community-based organizations. This is the first time THECB has funded community-based organizations.[59]

In 2010, 12 community colleges partnering with federally funded adult education programs began offering 120-hour, eight-week, intensive college-readiness programs designed to prepare recent GED credential recipients or traditional high school graduates more than three years out of school for college coursework.

Although these programs are still in progress, preliminary results show that they effectively prepare recent GED graduates to enroll and succeed in college. Of the 1,260 adults served over the last 24 months, 87 percent of the participants completed the programs. Thirty-four percent of the 479 students completing the programs in 2010–2011 improved enough on the mathematics portion of the Texas Higher Education Assessment (THEA) to pass the state's minimum college-readiness score of 230, and 37 percent improved enough on the reading portion of THEA to pass the state-minimum college-readiness score of 230.

TWIC Estimated Illiteracy Rates Present and Future and Surveyed Nonprofit Adult Education Services

Planning for the best use of literacy services is difficult when information on the number of Texans with literacy problems—and the degree of their problems and future trends in different areas of the state—are limited. As documented elsewhere in this report, TWIC worked with Texas' Office of the State Demographer to improve data on projections of illiteracy rates, looking forward to see where the populations with need will be in 2040. TWIC also completed a survey of adult education programs funded by TEA and nonprofit and volunteer groups providing adult education services.

Texas Literacy Funding

One of the Council's charges in HB 4328 was to examine the possibility of building existing funding streams and to identify additional state and federal funding sources available for promotion of literacy in Texas. Agency representatives from TWIC, THECB, and TWC discussed this mandate and sought initiatives, especially those related to federal funding, and plan to meet with Jobs for the Future consultants currently working with THECB to review aspects of federal funding that create problems for Texas recipients. Additionally, several of the items listed in this report for action in the coming biennium will examine better ways to integrate funding, such as Action Item 2, which seeks to identify best practices in optimizing wraparound services for adult education students. The Council will continue to examine this issue in light of changes in multiple funding sources.

Literacy Barriers and Action Items

This section identifies barriers and action items to address for the next two years, as required by the legislation. In two years, the Council will provide another report on the status of current initiatives, add new steps, and identify additional barriers or action items.

The first set of action items are largely initial steps toward the accomplishment of broader goals, and may take more than one biennium to achieve.

Literacy Barrier: Lack of Information about Community-Based Adult Education Services

Currently, there is very little information about community-based adult education services offered by nonprofit organizations and employers. The absence of information hinders efforts for coordinating services at the local and state level.

Action Item 1: Develop an Ongoing Method for Identifying Adult Education Providers.

The first step in coordinating resources is to identify them. Information is available for the federally funded TEA adult education programs. However, information about non-federally funded adult education services is not available because non-TEA-funded literacy organizations currently do not have access to TEA's Texas Educating Adults Management System (TEAMS). Even if these organizations were given access to TEAMS, the system is too cumbersome for small community- and faith-based organizations to comply with its requirements. As described above, TWIC collected some information on a onetime basis to estimate the volume of adult education services provided by literacy organizations in Texas. However, the summary data produced was not intended for regional adult education planning.

Information about Nonprofit Adult Education

The TCALL directory maintains the only statewide list of adult literacy training providers. One of TCALL's primary purposes is to allow potential students to find providers in their city or county.[60] The directory has approximately 430 providers on its website. However, many providers do not enter their data into this database. The TWIC survey of adult education providers in Texas found at least 289 adult education providers that were not in the database. Moreover, TCALL does not provide the type of information that funders or planners use to best allocate literacy resources. For example, it does not provide information on services delivered over a period of time.

TEA requires organizations that receive federal ABE funding to enter their information into TCALL. All other adult education provider groups enter their data into TCALL voluntarily. TWIC has determined that the literacy providers that are most often missing from this directory are nonprofit and volunteer groups. TWIC's *2012 Survey of Adult Education Providers in Texas* indicated that there are at least 2,336 adult education provider sites—1,291 of which do not receive TEA funding.

Having a clearer initial inventory of provider and need data will have positive consequences for optimizing statewide and regional funding and adult education service delivery. For example, when Texas state agencies,

higher education entities, communities, or literacy coalitions apply for grants to expand their capacity, they can report only the services provided by TEA-funded programs, and not those provided by other community- or faith-based organizations. In an attempt to address this issue, the Houston Center for Literacy (HCL) has developed a comprehensive adult education data collection system: the Texas Online Learner Database (TOLD).

HCL already collects information on the approximately 15,000 TEA students served by 13 Houston providers through reports from TEAMS. TEA requires providers that receive adult education funding from them to enter data on the students they teach into TEAMS.

HCL developed TOLD in order to collect information from all centers in the greater Houston area not required to use TEAMS. The program pilot began in August 2012. As the leader of the Mayor of Houston's Coalition for Literacy, HCL supports both TEA-funded centers and those that do not receive TEA support. To be an effective advocate and efficient steward of funds, HCL needs to be able to collect data on both types of organizations in real time.

In 2009, HCL obtained a $20,000 grant in seed funding to develop a web-based database for adult education programs that do not report data to TEAMS—there are at least 60 in Houston. To be eligible for funding from HCL, coalition member agencies must report learner data so HCL can generate quarterly reports for its supporters.[61]

The Literacy Coalition of Central Texas in Austin, the Tarrant Literacy Coalition, and other members of the Volunteer Training Initiative Advisory Committee have expressed interest in adopting HCL's TOLD.[62] Literacy coalitions and agencies in other states have also expressed interest in TOLD.

HCL has explained in Council meetings that they designed TOLD so that its data and reports are compatible with TEAMS. HCL and nonprofits in other areas of the state have met with TEA in the past and reviewed the TEAMS system. Nonprofits do not want to enter their non-ABE students into TEAMS because of its cumbersome nature and the limited capacity of many of these community- and faith-based organizations.

HCL and the Literacy Coalition of Central Texas have expressed the need for a database system that has some of the same data items and reports as TEAMS so that key data is comparable across both TEA and non-TEA providers and services.

Other software systems exist to produce data for nonprofits to improve their operations. However, the focus of this action item is the need to create a summary data system for Texas regions and the state as a whole that has comparable data on adult education services and providers, and is compatible with the current TEAMS reporting that many providers are required to use.

Information about Employers' Adult Education Programs

Texas employers provide many hours of in-house adult education as part of job training for their employees. Certain industries, such as construction, auto repair, health, and hospitality have a long track record of

providing adult education. However, information about the services they provide is strictly anecdotal about the efforts of individual firms.

Increasingly, jobs that used to require little education have become more complex as computers and machinery merge and information pertinent to even simple functions is stored on computers. Factor in a large number of workers whose first language is not English, and more businesses find themselves involved in adult education in order to meet their workforce needs.

The best way to obtain information on the adult education efforts of Texas employers is currently unclear.

The Adult Education Challenge

As described in this report, one of Texas' problems with regard to adult education is how to obtain regular, ongoing reports about the state's adult education services without placing unnecessary costs, duplication, and administrative burdens on literacy providers and state agencies. Different approaches must be used for nonprofits and for employers.

Action Item 1.1: **Texas should assist in the expansion of Houston's TOLD or other software solutions to collect data on nonprofit adult education services in other Texas communities.** The Council should create a workgroup to review and update Houston's proposal for expanding TOLD in light of the pilot experience, evaluate other software options, and gauge the interest of other communities in the system. The proposal would briefly document options for: 1) expanding TOLD or other web-based software to literacy coalitions; 2) how the data could be of most benefit to the state and to potential funders; and 3) options for implementation, timelines, costs, and benefits. The workgroup's proposal would be presented to the Council for review.

The president and chief executive officer of HCL stated in its previous proposal that HCL identified the major costs for rolling out the system. Expenses include writing the manual, providing training, and travel. HCL's president also indicated that the TOLD pilot would not be completed for a year.[63]

A workgroup developing a proposal would help solidify a time frame and strategy for expanding data collection by nonprofits, and provide assistance in identifying potential grants or other funding sources and the information needed to successfully obtain financial support. The workgroup could also help to raise awareness about the delivery of adult education services among nonprofit providers and their funders.

Action Item 1.2: **Texas should define a way to aggregate basic statistical information on nonprofit adult education services into data for regional and statewide reports.** From the state's perspective, the database discussed in a May 2012 meeting would be able to generate reports on the names and contact information for all literacy providers that use the system, where they are located, how many people they serve, what kind of services they provide, and general demographic information on students served. The data elements and reports of the new system would be compatible with some of the similar information and reports required by TEAMS to minimize duplicative reporting requirements.[64] With an easy-to-use system, nonprofits will be able to run real-time reports on their learners (by class or for an entire center) and print sign-in sheets whenever needed. Who should collect the data and how this information could be best aggregated into periodic reports would be another task for the workgroup to address.

Action Item 2: Encourage Local Literacy Collaborative Efforts in Texas.

As described in case studies in this report, some state agencies have come together to work on particular projects, some nonprofits—especially in literacy coalitions—have done the same, and some business and community efforts have encompassed all these groups. These collaborations exist at the state and local levels through the literacy coalitions. The question is how to publicize and increase model collaborative efforts to leverage resources in Texas communities.

Historically, the nonprofit sector has more often worked on literacy projects involving only an individual nonprofit organization. In this traditional model, each organization tries to invent its own unique solution to a problem and competes with the other, neighboring nonprofits for funds.[65] Meanwhile, Texas state agencies and employers also often follow their own paths in addressing literacy issues. If a community can gather a spectrum of community leaders encompassing all these groups to work toward improving levels of adult education, then there is a greater chance of impacting the problem.

Increasingly, funders look at the level of collaboration among different adult education providers when awarding grants. They often prefer a project that coordinates efforts across community groups, avoiding unnecessary duplication of effort and wasting of resources and truly reflecting what the community wants and needs.[66]

One article suggested five conditions for making this approach successful: (1) a common agenda among all participants so they share an understanding of the problem and the approach to solving it; (2) shared measurement systems; (3) each member group contributing its own set of expert activities in its different roles; (4) continuous communication; and (5) a backbone support organization.[67]

Literacy Coalitions

Literacy coalitions are one type of community collaboration related to adult education. Literacy coalitions are collectives of many organizations and stakeholders to facilitate change and to act on behalf of its members. They provide the overarching coordination necessary for system-wide change and can be the backbone organization for region-wide efforts.[68]

Texas has been a leader in the literacy coalition movement across the United States. In the 1980s, Houston, San Antonio, El Paso, and Dallas all had thriving coalitions bringing together multiple stakeholders and developing community plans for improved literacy services.

The newer literacy coalitions formed in the past 10 years in Central Texas (Austin), South Texas (Rio Grande Valley), and Tarrant County (Fort Worth), and the newer rural coalition movement developed by the Rio Colorado Tri-County Literacy Coalition, also exemplify this approach. The coalitions work to bring multiple stakeholders together and develop plans for improving community services. (See Figure 11, which lists current Texas literacy coalitions.)

The coalitions integrate adult education, children's education, family education, and lifelong learning services. Additionally, literacy coalitions help communities think outside the box to identify available resources. Literacy coalitions in Texas face several obstacles, however. First, they are voluntary associations and depend on the ability and willingness of the community to support them. Second, there are many areas of the state where viable, established coalitions do not exist. These include rural areas of Texas that lack resources, as well

as cities where coalitions have never been established or where once-viable literacy coalitions are in need of rejuvenation.

Literacy Texas is the statewide literacy coalition for Texas. It supports and equips existing regional literacy coalitions and individual organizations to build capacity and improve literacy levels in Texas.[69] It assists communities in establishing new coalitions and also acts as a voice for areas of the state that lack literacy coalitions.

Texas Community Centers

Texas community centers are another example of collaboration. Community centers offer adult education services as part of a lifetime spectrum of services, delivering services from birth to old age. They rely on blending and braiding state, local, and federal funding, both public and private. They can also be located in any type of facility—a nonprofit, a school, a library (if a designated space is available), a church, or other facility.

The Northside Education Center in El Campo (a member of the rural Rio Colorado Tri-County Literacy Coalition) and Community Family Services (a member of the HCL coalition) offer two examples of Texas community centers.

The Northside Education Center is a nonprofit facility providing educational resources to El Campo and the surrounding communities. It partners with other community institutions, including El Campo ISD, Wharton County Junior College, and the University of Houston–Victoria. Northside offers college credit courses, continuing education courses, workforce development training, and tutoring assistance.[70]

Community Family Services offers a network of services to care for all ages in Houston's East End. It provides counseling, food, ESL and GED classes, HIV prevention education, early childhood education, dropout prevention programs, and other services to the disadvantaged in the community.[71]

Promise Neighborhoods

Promise neighborhoods, another model of community collaboration, was identified in a federal grant program to improve cradle-to-career learning. San Antonio was one of five communities in the United States to win an implementation grant in 2011.

> *The Promise Neighborhoods program aims to address significant challenges faced by students and families living in high-poverty communities by providing resources to plan and implement a continuum of services from early learning to college and career. Plans include a range of services from improving a neighborhood's health, safety, and stability to expanding access to learning technology and Internet connectivity, and boosting family engagement in student learning.*[72]

Unique Community Literacy Projects

Unique community literacy projects are also examples of community collaborations. The Seeking Opportunities Achieving Results (SOAR) project in San Marcos has focused on getting children kindergarten-ready. It involves a community-wide effort with nonprofit organizations, the Chamber of Commerce, Texas State University, and government entities such as Early Childhood Intervention, WIC, and Head Start. [73]

Systems for Identifying Wraparound Services

Meeting the literacy needs of communities can be supported by improving the ability to identify wraparound services. An individual needing literacy services also may require transportation, health care, food, child care, housing, or other services, as well as ESL, job training, GED classes, or other directly related literacy services.

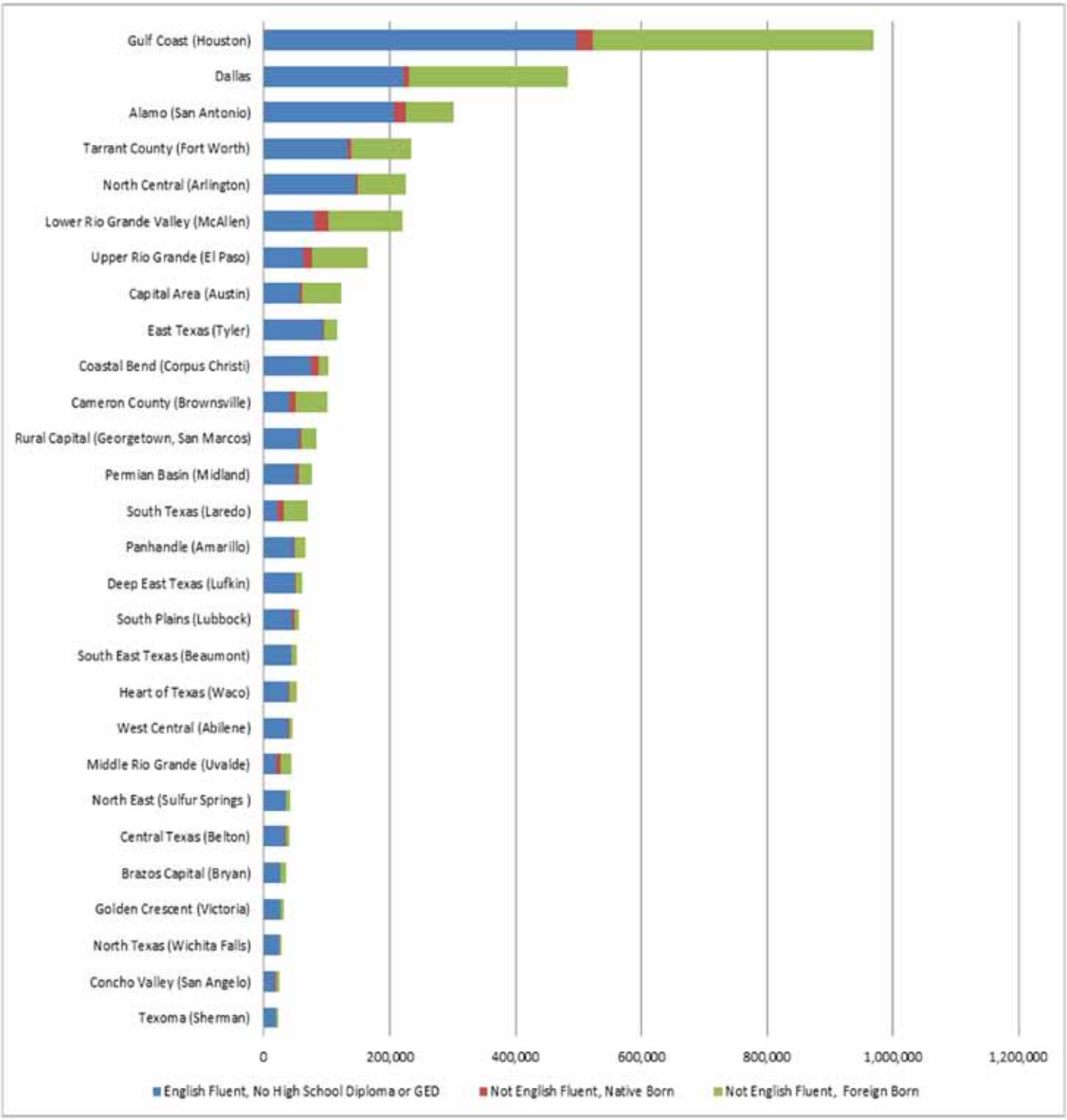
Texas has developed some computer applications to identify available resources in given areas for Texas 2-1-1 phone queries and for state agency screening. In particular, the Texas Connector sponsored by the OneStar Foundation began rollout in summer 2012. This geo-mapping tool could help build literacy and other community coalitions in Texas.

Texas Regional Needs—Urban, Border, Rural

Texas is a large, diverse state where the regional needs and resources for collaborations to provide literacy services may differ and require varying approaches. A simple way to categorize these differences is to briefly examine urban, border, and rural literacy populations.

Texas has urban areas where a large number of Texans have no high school diplomas or GED credentials. The Gulf Coast workforce area, which includes Houston, has almost a million Texans who have not attained this educational level and the Dallas and Tarrant County workforce areas have more than 700,000 combined. However, these urban communities also have nonprofits and other resources, established community ties, and leaders who are concerned about literacy and interested in pursuing greater collaboration. (See Figure 13 and Appendix C)

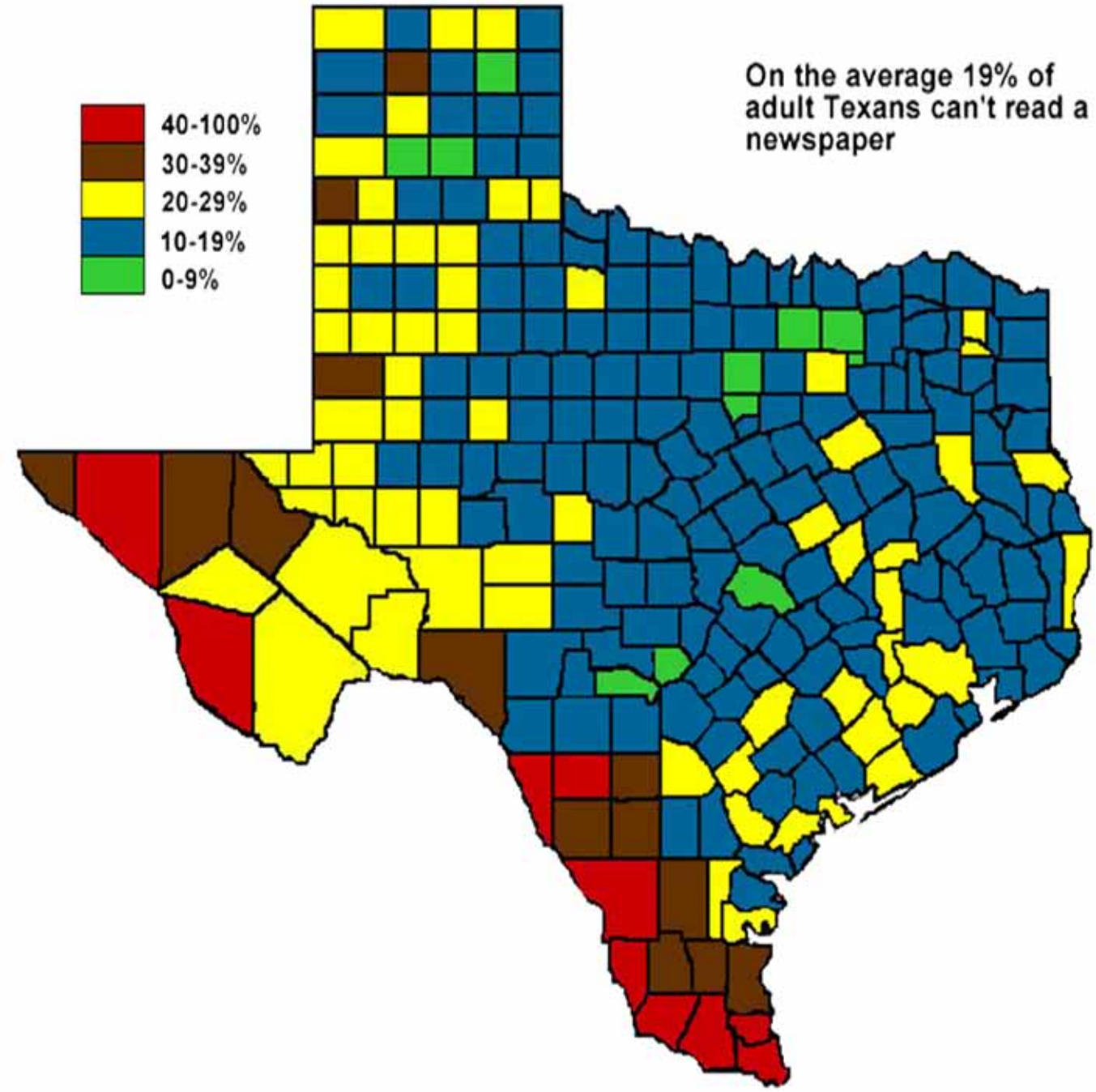
Figure 13: Total Number of Texans Eligible for Adult Education by Local Workforce Development Area



Source: TWIC[74]

Texas also has border communities that offer unique opportunities to pursue literacy initiatives. For example, the Northside Education Center and Texas A&M have a network of community centers through the colonias that provide a variety of community services. Urban Texas border areas have their own unique problems, but share high rates of ESL speakers and populations with low graduation rates from high school. This combination of factors means that border areas have the lowest literacy levels as measured by the U.S. Department of Education survey and shown on a TCALL map of Texas in Figure 14. This 2009 survey measured the ability of sampled residents to read English at a newspaper level.

Figure 14: Texas Map of Percentage of Illiteracy by County



Source: TCALL[75]

Texas rural areas, with sparse populations and a lack of community resources, present special challenges to literacy initiatives. The Rio Colorado Tri-County Coalition is a good example of rural service collaboration. The coalition was formed by the county judges to address low literacy issues, and both public and private partners collaborate on rural education planning with community colleges, schools, and nonprofits.

Approaches that focus on distance learning and available resources, like community libraries, might expand literacy opportunities. (See Action Item 9 – Encourage the Use of Distance Learning, Especially in Rural Areas and to ESL Adult Learners)

Collaboration in Funding
Currently, TEA contractors who provide adult education services funded with federal money put up no matching money. If federally funded programs were required to collaborate with nonprofit organizations in communities, more students could be served. This would require a TEA rule change, but is worth consideration. Much of the burden of literacy instruction falls to the nonprofit community. It is appropriate that funding follow as well.

> *Action Item 2.1:* **Literacy Texas and others should provide information to the Council on how to improve collaboration among community organizations in Texas to advance literacy.** This includes providing information on all the action items under this issue (2.2., 2.3, and 2.4). It might include surveys or other means of obtaining information. Given the diversity of the state and the variety of ways that communities are organized, a cookie-cutter approach will not work for all providers.
>
> *Action Item 2.2:* **The Council should identify additional techniques and models for increasing collaboration in Texas communities.**
>
> *Action Item 2.3:* **Texas should identify exemplary practices for providing a spectrum of wraparound and literacy services in response to existing barriers.**
>
> *Action Item 2.4:* **The Council should examine additional types of literacy services that are part of the spectrum of services that can be provided through collaboration.** The bill creating the Council also required that it look at health, financial, and civics literacy as well as adult education.

Literacy Barrier: Lack of Career Paths for Adult Education Students

Traditional adult education programs require students to go through years of courses before their education relates to employment in careers leading to higher salaries and family-sustaining wages. This lengthy process discourages students who may discontinue their education to address immediate family and financial concerns.

Texas should provide adult learners a *contextualized* educational curriculum linked to work-training programs or academic programs offered by employers or postsecondary institutions. A contextualized curriculum gives academic instruction in the context of a particular type of employment, e.g., in the setting of health care employment or a construction worksite.

Action Item 3: Integrate Adult Education and Employment Training, Placing Adult Learners on Career Paths for More Rapid and Consistent Advancement.

Many current adult education programs take too long, leading students to "stop out or drop out." The programs also do not provide sufficient incentives for adult students to complete them.

Current Adult Education Program Disincentives
Historically, adult education programs assumed that adults would progress through a long line of adult education classes. The sequence might include ABE, Adult Secondary Education, GED credential preparation, college transition classes, developmental education coursework, and then entrance into college-

level coursework or certificate training courses. If an adult learner started in ESL and went through to earn a GED credential, the process could take four to six years. If the adult learner continued and entered a community college, there would likely be another two years of developmental education, for a total of six to eight years before being able to take a for-credit class, whether academic or work training.[76]

This linear approach to adult education does not serve individuals requiring gainful employment well. As many as 40 percent of adult education students drop out before completing an adult literacy course. The percentage of students transitioning from federally funded adult education programs to postsecondary education after receiving a GED credential has fallen even lower over the past four years. In 2010, fewer than 6 percent of Texas adult learners (3,677) in federally funded programs transitioned into postsecondary education.[77]

As explained by THECB's commissioner at a Council meeting, one problem is that many individuals who qualify for adult education are single women with multiple children. These individuals are often in their mid-to-late twenties and need jobs to support their families and to have a sense of self-respect. Many may be reading at only third-, fourth-, or fifth-grade level. Getting many of these lower-skilled people through the first steps of the process can take up to six years—a fact that discourages many and causes them to never enter adult education programs or to drop out of additional training.

One researcher noted that the life-skills focus of many immigrant English language learner programs does not address the needs of those who want a more rigorous academic or job-training curriculum and that it discourages participants from continuing in the programs.[78]

TWC and THECB Pilots Integrating Adult Education and Employment Training

Including career training, where appropriate, shortening overall training time and aiming toward a concrete result such as a certificate, employment, increase in salary, or entrance into community college gives the adult student a reason to complete adult education coursework. For a working adult student, one year to complete a work-training certificate may be as long as the student can realistically attend classes.[79]

Programs that integrate adult education and employment training offer students the financial incentive of improving their academic skills and obtaining employment at the same time. This helps keep adult education students in school. Lower-skilled adult learners are often employed part time or full time while attending class, and have academic, financial, and personal barriers that do not allow them to remain in a long-term degree program. Short-term certificates obtained along a career path can support these learners who stop out in order to work.

TWC's initial four pilots were followed by THECB's 14 pilots initiated over the last two biennium in the ABE-IG grants. The TWC and THECB pilots that examined and adapted the I-BEST model of combining adult education and employment training are described under the following in this report:

- "Adult Education Best Practices": *Case Study: I-BEST Model Linked to Potential Employer Internships*
- "Actions Already Taken by State Agency Council Members"

In nine of THECB's 14 adult basic education innovation grant institutions, adult learners attend integrated basic skills and workforce training classes and GED support classes. The GED credential is a co-requisite to beginning the training rather than a prerequisite. The average length of these programs is nine months (or two

semesters); however, some short-term certificate programs are eight to 10 weeks. Depending on the length of the program, learners earn a GED credential within the first or second semester they are enrolled in the certificate training and basic-skills support class.

THECB has hired Jobs for the Future (JFF), a nationally recognized consulting firm focused on moving lower-skilled adults into careers that offer family-sustaining wages, to support the 14 community colleges in scaling the integrated basic skills and workforce training programs on their campuses. THECB contracted with JFF to provide technical assistance on the existing ABE-IG grants, to evaluate each project, and to make recommendations for adjustments.[80] JFF worked with THECB to identify ways to improve the ABE-IG.[81]

Action Item 3.1: **Texas should further implement programs that integrate adult education and work skills.** Texas has tested this model in pilot programs at TWC and THECB. Texas adult educators should use the results of the TWC and THECB integration pilots to refine their programs. TEA could encourage its contractors to implement the model in their new rebid contracts. It is time to implement these tested models wherever appropriate. Communities could work to provide integrated programs with career paths, thus linking employers, nonprofits, and adult education educators.

Action Item 3.2: **Texas should increase the number of GED graduates successfully transitioning to college education through bridging programs.** Approximately 8.7 percent of Texas' 2008 GED graduates went on to some postsecondary education, compared to the national average of about 9.7 percent.[82]

As reported by THECB, it funded college-readiness bridging programs that provide short-term, intense preparation at 10 postsecondary institutions. These eight-week, 120-hour intensive programs successfully transitioned 479 recent GED graduates or returning adult learners who had been out of school more than three years into college programs while providing them academic support to reduce the time spent in developmental education.[83] Some were able to bypass at least one developmental education course sequence. One program reported that the 50 students it served over the course of the year saved $30,000 in developmental education coursework tuition because they either placed in the highest level of developmental education or skipped it altogether.[84]

Action Item 4: Enable the Exchange of Adult Education Student Information for Career Path Planning and to Support Career Counseling.

Adult education students often lack an easy-to-reference record of their tests, coursework, and certificates to provide to instructors, programs, counselors, employers, and others who need this information over time and in various locations. This lack inhibits the ability of providers and others to assist students with identifying or progressing on career pathways.

Career Pathways

A career pathway is a series of educational and job-training programs and services that enables students, while they are working, to advance to higher levels of education and employment in a given industry or occupational sector. Each step on a career pathway is designed to prepare students to progress to the next level of employment and education. Career pathways target jobs in industries of importance to local economies.[85]

Career pathways often have road maps of potential careers that are developed by educators, workforce professionals, and employers. Career pathways show the connections between education and training programs and employment and industry salaries. An example of a career pathway is one in which a learner moves from certified nursing assistant to medication aide to medical assistant, to licensed vocational nurse (LVN), moving from $9.45 to $17.50 an hour, which is the case in the Alamo Colleges Career Pathways.[86] This particular pathway has the ability to extend further upward in salary to nurse and then nurse practitioner.

Another example from Alamo Colleges is the progression for an automotive manufacturing technical education career. Appendix D provides a sample career and technology education pathway.

Exchange of Information for Students on a Career Pathway

The exchange of student information is complicated by the often erratic pattern of adult education. Students may have multiple transitions to different programs and providers, with gaps in their educational progress and physical moves to different locations.

In a longitudinal study of adult learning, researchers found that adult learners have academic and occupational goals, but often do not have realistic plans for reaching them. Services for adult learners such as adult education, social service agencies, and workforce training or occupational preparation programs are often not coordinated in one easily accessible place so learners are constantly navigating very different systems to determine their eligibility. Adult learners may have educational or occupational goals but lack realistic plans based on an understanding of their options to reach them.[87]

Expediting the transfer of information can help individual students and providers navigate a route along uninterrupted career paths. It can straighten the path and avoid unnecessary course or training requirements. Additionally, it can help identify eligibility for support services or funding.

Putting the student in control of his or her career from the beginning also can be empowering to the student. If, on first enrollment with an organization, students learn how to enter and maintain their information, then they are in charge of their own future and in possession of their own records.[88]

This approach also can make educational programs more efficient. For example, at present different providers of adult education might pay for the Test of Adult Basic Education (TABE) for the same student because they do not know that the test has been given by another provider and or the results of the test.

All transfers of student information require the permission of the student as set forth by the Family Education Rights and Privacy Act.

Encourage Expansion of Web-Based Student Portfolios

The Learner Web developed by Portland State University helps give adult students access to continued learning support when they move in and out of programs. Students' information belongs to them in an electronic portfolio that they can authorize to be shared with tutors, teachers, and counselors as they progress through adult education and employment. The Learner Web integrates support services from existing local education programs and community-based organizations. It also stores links to web-based exercises, reference materials, practice tests, or interactive sites. It is a customizable platform that can be modified for different uses.

Portland State University won a grant for a Learner Web Partnership project.[89] Two of their partners in this grant are the Central Texas Literacy Coalition and South Texas College. The project, which began in 2010 and lasts 30 months, develops materials and recruits and trains students and trainers in using the Internet and the Learner Web software.[90]

The intent of the project is to develop and implement learning plans in English and Spanish focused on digital literacy at home, at work, and in the community; being an informed consumer of broadband technology; and providing orientation to career pathways. Two additional learning plans will be developed to train volunteer and paid tutors and computer lab assistants to support new broadband users.[91]

The executive director of the Central Texas Literacy Coalition (Coalition) noted in a Council meeting that it serves as the regional coordinator required by Learner Web.[92] The Learner Web software license costs about $1,000 and the Coalition currently manages sites in five counties. Sites can include TWC Workforce Solutions Offices, libraries, adult literacy coalitions, and others willing to work with the Coalition. With a two-hour average to set up a site, the Coalition used one of its employees half-time for six months to set up sites for a region. Employers with literacy programs might also use Learner Web.

Learner Web has been recognized by the U.S. Department of Education Office of Vocational and Adult Education as a Noteworthy Practice in Technology and Distance Learning.[93] It offers one option for providing a web-based portfolio for adult education students.

TWC Provides Career Information to Students

TWC website provides Labor Market and Career Information (LMCI) to give individuals information about careers, educational training options, and jobs.[94] The website also provides self-serve information for individuals about different careers through the Texas Cares online system. TWC sends school counselors copies of Texas Cares on CDs.

THECB Makes Labor Market Information Available to Strengthen Programs

Working with JFF, THECB has developed a Labor Market Information (LMI) Working Group that is engaging ABE-IG grantees in understanding and using labor market information to refine programs and provide greater career guidance to adult learners. The working group is also helping colleges to access TWC's free LMCI as well as other websites that they can use in programs.

Texas LEARNS and THECB Contextualize ABE Programs and Provide Career Counseling Training

Federal regulations on WIA funds for adult education provided through TEA prohibit skills training. However, adult education teachers can teach basic educational subjects using the vocabulary of a particular occupation. For example, they can teach an ESL class using vocabulary that helps students interested in entering health professions, such as an LVN. This is known as contextualizing adult education materials.[95]

TEA developed Texas Industry Specific English as a Second Language (TISESL) curriculum for low- and intermediate-level ESL students and provided the 200-hour curriculum to the Boards in each region, to volunteer programs, and to the community colleges. By exceeding federal performance measures, TEA and TWC

qualified for and won the WIA Incentive Grant, part of which will provide training and tools for teachers on how to contextualize instruction, which will allow teachers to focus on specific occupations and/or academic courses. Texas LEARNS is working with JFF and THECB to lead trainers in Project GREAT Center projects to help adult education providers throughout the state to bridge the current workforce curriculum with the TISESL curriculum at the lower levels intermediate ABE, and GED curriculum.

Additionally, THECB is working with JFF to provide access to training around contextualizing instruction for basic-skills faculty involved in ABE-IG programs. This contextualization helps to better align this instruction to particular career pathways, while accelerating learning for lower-skilled adults.

Texas LEARNS Providing Career Counseling Training

Texas LEARNS is working to ensure that TEA's ABE programs get access to resources that can help their students with career exploration and counseling. Working with World Education, Texas LEARNS is offering *Integrating Career Awareness into ABE/ESOL (English for Speakers of Other Languages) Classrooms* curriculum. Several pilot projects have already been conducted with ABE providers, and Texas LEARNS is now preparing instructors as master trainers who can help to increase the use of this curriculum in every classroom across the state.

Additionally, Texas LEARNS is working with JFF to engage Project GREAT Centers in learning to provide training on its Counseling to Careers toolkit. Counseling to Careers uses regional labor market information to identify high-demand career pathways and associated postsecondary programs or "best bets" that can lead to family-sustaining careers. Furthermore, it helps adult education providers to develop stronger relationships with community college career and technical programs and employers. A group of TEA adult education providers will pilot the use of the toolkit, with support from the Project GREAT Centers. It will then be made available to all TEA providers across the state.

To date, however, these career counseling and contextualization resources are not being made available to nonprofit adult education providers that are not TEA adult providers or part of the THECB ABE-IG program.

> *Action 4.1:* **Encourage use of adult education web-based software to share individual student information with student permission.** This can be accomplished in a variety of ways. THECB may test the use of a software system such as Learner Web, and have some of its current ABE-IG grantees share data and referral information on adult education among providers serving the same student. THECB has funded grants to integrate adult education and workforce skills. (This option depends on the outcome of the evaluation of pilot programs currently underway.)
>
> Texas should provide information on Learner Web or other similar web-based computer programs to state, nonprofit, and employer adult literacy programs. The learning plans developed by the Central Texas Literacy Coalition and South Texas College could be distributed on the web and through other mediums. Information about best practices and experiences on establishing a web-based system could also be shared.

Action 4.2: **Increase availability of career counseling services through Texas LEARNS and nonprofits.** Project GREAT Centers could provide career counseling training to selected nonprofit volunteers for them to become train-the-trainer career counselors. There is a similar action item under Action Item 11 to expand capacity of nonprofits by providing train-the-trainer training on adult education to nonprofits. Additional funding may be needed to accomplish or expand this task if it goes beyond the resources of the Project GREAT Centers.

TWC could survey providers trained in career counseling by Texas LEARNS to identify any additional information. Survey questions would identify if there are any additional or ongoing labor market information or training materials from TWC or other career counseling materials or information that would be helpful.

Literacy Barrier: Texas Employers Face Obstacles to Finding Job-Ready Employees

Many employers use the GED as an inexpensive way to screen potential employees. This makes enabling as many Texans as possible to obtain a GED credential a major benefit to both potential employers and employees. Unfortunately, the reality is that too many applicants do not have this basic proof of job readiness. Other obstacles include community colleges not recognizing standardized certificates and a lack of information on exemplary adult education programs for industries.

Action Item 5: Increase the Completion of High School Equivalency Certificates in Texas as New System is Implemented.

The GED has been the high school equivalency test in America since it was created after World War II to provide returning veterans with certificates. The test measures skills and knowledge similar to a high school course of study.

The current GED test has five subject area tests—mathematics; language arts and reading; language arts and writing (including essay); science; and social studies.[96] Adult education students have the most trouble making a passing grade on the mathematics test.

In 2010, 33,411, or 0.9 percent, of the approximately 3.6 million Texans lacking a high school diploma obtained a GED credential.[97] Only 23 percent of Texas' GED-test candidates in 2010 were 16 to 18 years old and presumably taking the GED as an alternative to high school graduation. Three-fourths were adults for whom getting a GED credential related directly to employment and educational advancement.

Most jobs require at least a GED credential or a high school diploma for employment. The Council's business representative from a major health care system noted that 99.9 percent of their jobs require a GED credential or a high school diploma as a way to make sure employees are literate.[98] The Council's business representative from the construction industry reported that GED credentials and high school diplomas serve a similar screening function for them. The Council member also noted that her employer did not have the time, resources, or expertise to perform separate testing to determine literacy levels for their large volume of applicants.[99]

Both business representatives agreed that with potentially hundreds of applicants for a job, a diploma or GED credential offer the only practical, readily available measure of literacy.

New GED Testing and Administrator in 2014

The GED Testing Service (GEDTS) currently develops and delivers the GED test. GEDTS is a nonprofit program of the American Council on Education (ACE). GEDTS establishes the test administration procedures and passing standard. GEDTS now partners with jurisdictions that administer GED tests, such as the 50 United States, the District of Columbia, and other areas.

ACE has entered into a public-private partnership with Pearson Vue, a large education and testing company. GEDTS will be releasing a new version of the GED test in 2014, which will involve changes in the administrative process.[100]

TEA has been negotiating changes in the GED test. TEA also issued a Request for Information (RFI) for *Development of a Texas High School Equivalency Examination* on May 31, 2012.[101] New York State has also issued an RFI and other states are examining alternatives to the GED test. These states cite concern over costs as one of the primary reasons to examine alternatives. TEA may choose to contract with an entity other than Pearson Vue for high school equivalency examinations other than the GED test.

Regardless of who eventually provides high school equivalency testing services in Texas, several issues will need to be addressed.

Need for Career-Ready and College Exams

The need for at least two levels of exams in Texas—college and career-readiness exams—has been much discussed. Career ready can be considered the equivalent of an eighth-grade education while college ready equals 12th grade. It is often the mathematics test that separates these levels.[102]

Recent GED Students Face Different Exam in 2014

The Texas high school equivalency test will be different in 2014, whether it is the GED or another test. In the past, many Texas students who have taken the GED test were youth who had completed 10th grade or higher. In 2010, 23 percent of Texas candidates taking the GED test were age 18 or younger and 34.2 percent were age 19 to 24.[103] Some 64.4 percent of the Texas candidates taking the GED test had completed the 10th, 11th, or 12th grade.[104]

For Texans who have passed a section of the GED test, that completion will expire in January 2014, requiring them to retake the entire test. Additionally, the new test will be completely computer based and will include new response types in a format that may be unfamiliar to students who have not studied for the new test. Finding ways to encourage individuals who have already started the current GED process to complete it before 2014 would save many individuals from having to begin the entire process over again.

State Testing Fee Policies

Many GED students have extremely low incomes but need the GED credential to obtain employment. Currently, fees are collected by the testing center and the testing center pays testing expenses and scoring services to the GED provider. Under the new GED testing process, examinees will pay testing fees directly to

the new GED provider, Pearson Vue, which then gives a modest rebate to the testing center for registering examinees and providing computers for the test.

Many states now have policies regarding GED testing fees charged by testing centers. A 50-state survey of GED testing fees and tuition policies found that 26 states charge a uniform fee for the GED test. Of the 26 states, seven charge $50 or less, 13 states charge $51–$75, six states charge $76–$100, and one state charges more than $100.[105]

Sixteen states, including Texas, allow local programs to determine GED testing fees, and two states do not charge a fee, choosing to subsidize the GED testing process.[106]

In other states, the state funds all or part of the GED testing fee, or primarily uses community-based organizations (CBOs) as testing centers, and they in turn pay for all or part of GED testing costs. Texas does not provide state subsidies for GED testing fees or use CBOs as testing centers.

States that provide a full or partial subsidy often require students to pass a GED pretest before they take the regular GED test. This ensures that students who take the GED test have a reasonable chance of passing, and the state does not waste money paying for partial or entire testing.

The five 2014 GED tests would cost $24 apiece and a total of $120 for the entire test. This is likely to be a substantial increase for most GED test-takers in Texas. The wide variety of current local charges does not allow for a more precise estimate of local impact.

Currently, Texas GED testing fees are paid by the test-takers. Sometimes they are partially subsidized by testing centers, especially community colleges. A few communities in Texas offer partial, donor-funded scholarships for some individuals taking the GED test. For example, Houston Community College and ACC operate testing centers as a public service and as an avenue of community college recruitment, charging $41 and $95, respectively, for the GED test.

If, under the new system, a state or other entity wants to subsidize GED testing fees, they must send a voucher to Pearson Vue. In a National Governor's Association webinar, a Pearson Vue GED spokesperson recommended that states provide a subsidy or a voucher to help students pay for GED testing. The GED process has been automated to encourage donor payments for tests.[107]

Some Communities Provide Donor-Funded GED Scholarships

Several communities in other states have established scholarships for students who need help paying the GED testing fee and, in some instances, a portion of transportation costs to the testing site and child care costs for the day of testing.

Communities establish criteria for receiving GED assistance. The Literacy Council in Birmingham, Alabama, established the Jackie Wuska Hurt GED Scholarship Fund. It requires the applicant to have completed all parts of the official GED practice exam, live in one of the designated counties, and demonstrate financial need.[108] The Portland Literacy Council started a scholarship program that requires eligible applicants to take the first GED test section within two months of receiving the award, and not be in a traditional high school program.[109]

In Texas, Hays County Literacy Action offered 46 partial GED testing scholarships in 2011 administered by a voucher system through ACC and Lockhart GED testing centers.

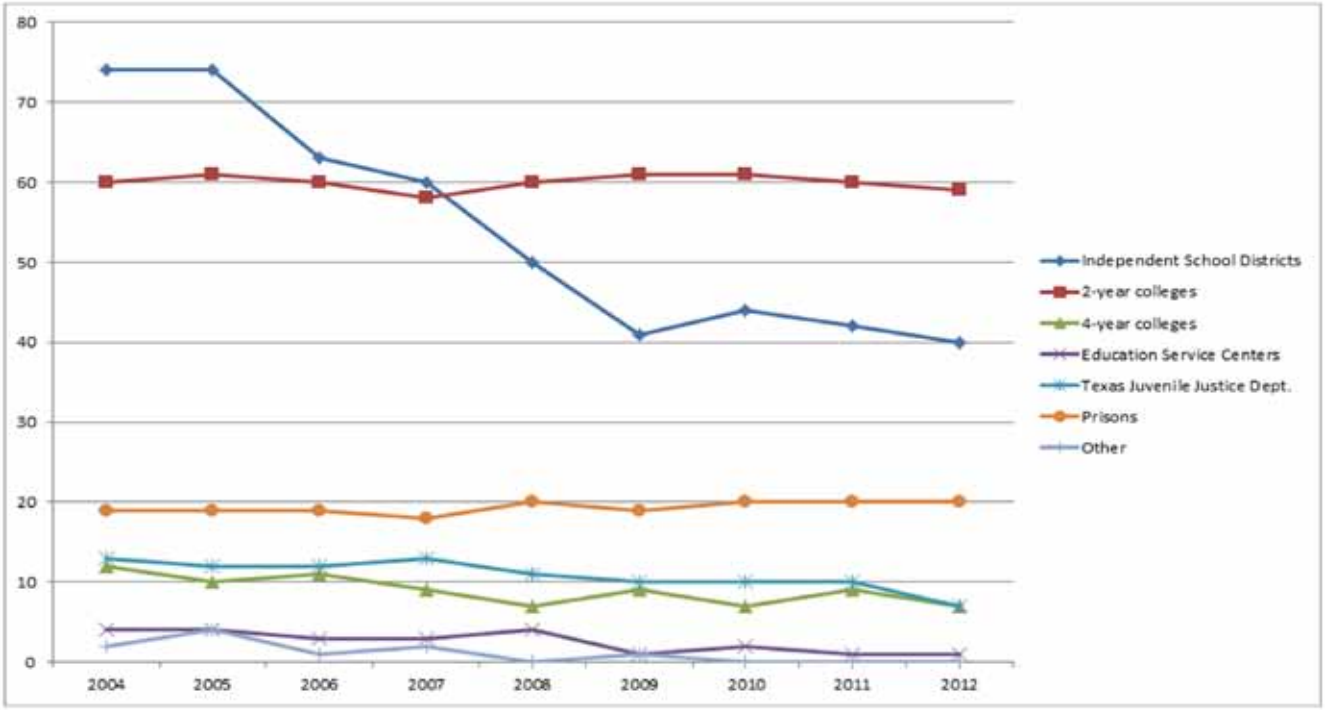
ACC vouchers are for $59, which covers registration fee and two tests. Students must pay $36 for the remaining tests. The total testing fee at ACC is $95. Tests are $30 each in Lockhart for a total of $150. Students testing in Lockhart are provided a voucher in the amount of $60 and they must pay the remaining $90. Lockhart allows students to pay for one test at a time. ACC requires the $95 up front.

Scholarships are funded by local groups, Hastings book stores, and the Friends of San Marcos Public Library.[110] One nonprofit in Fort Worth has obtained a grant of $10,000 to pay for GED testing.[111]

Shortage of GED Testing Sites

In 2004, there were 184 GED testing sites in Texas. Today, there are only 134 sites in the state, a decline of 50 sites, or 27 percent. The GED test must be taken in person at an official GED testing center. The independent school districts (ISDs) had the greatest decline, losing 34 sites, followed by the loss of six in the Texas Juvenile Justice Department (TJJD), five in four-year universities, three in Education Service Centers (ESCs), two in unspecified entities, and one in a two-year college. Prisons added one more GED testing site. Anecdotally, attendees at Council meetings have reported ISDs have discontinued as GED testing sites because they no longer receive credit against dropout numbers for students who receive a GED credential since the implementation of the 2002 federal No Child Left Behind Act. (See Figure 15 and Appendix E)

Figure 15: Number of Texas GED Test Sites by Type, 2004–2012



Source: TEA[112]

The lack of GED testing sites is particularly problematic in rural areas, where there are fewer locations that can serve as official GED testing centers. This problem also may exist in inner-city areas.

Currently, many GED testing centers can still administer paper tests. As of 2014, new centers will exclusively use computerized GED tests. This means all GED testing locations must have the equivalent of a computer lab.[113] Although test centers do not have to pay a fee to become an official site, they do have to meet technical specifications. One education service center spent an estimated $30,000 to meet Pearson Vue's technical specifications. The money was spent for an individual server, staff training, and information technology support.[114]

As a consequence, Texans taking GED tests may have to travel to more-distant sites multiple times. The battery of five GED test sections takes seven hours and five minutes to complete.[115] At some testing sites, the applicant may take the entire battery of tests in one or two sittings. However, many applicants prefer or need to take only one or two tests at a time, either to improve their performance or because of work or family commitments. Traveling far repeatedly to take GED tests discourages students from completing the process.

Texas has narrower requirements for GED testing sites than those allowed by the GEDTS. Texas authorizes only school districts and colleges as GED testing sites, although under the current system, other types of facilities such as Boards, National Guard armories, and nonprofits can qualify as testing sites.[116]

TWC has 201 Workforce Solutions Offices across the state. Most have rooms with computers that could be used for GED testing.

Exploring Alternatives to the GED Test

Some states have explored alternatives to the GED test. The National External Diploma Program (NEDP) is one program some states use for high school equivalency.

NEDP awards a traditional high school diploma to adults who have acquired many of their high school-level abilities through work, family, and community experiences. NEDP provides the opportunity for participants to demonstrate their skills and knowledge. Participants complete parts of the program at home and the other parts in a series of meetings on-site with a trained NEDP advisor and assessor. An NEDP advisor evaluates the participant's basic skills in reading, writing, and mathematics, and completes a survey of prior life experiences. NEDP locations are currently active in Connecticut, Maryland, New York, Rhode Island, Virginia, Washington, and the District of Columbia.[117]

A representative from Goodwill Industries of Central Texas suggested identifying and removing the barriers that prevent adults over 25 from obtaining a regular high school diploma, rather than having them test for a GED credential. Several states have programs that assist adults in earning a high school diploma.[118]

> *Action Item 5.1:* **Texas should negotiate for at least two types of certificates in any new high school equivalency testing system—one indicating readiness for college and another indicating readiness for employment.**

Action Item 5.2: **Texas should increase the number of Texans completing the GED test before the current test expires.** Since the GED test will change in 2014, Texas should encourage individuals who left school in the 10th, 11th, or 12th grades or who have begun the GED testing process but not completed it, to take and pass the GED test before the changes take effect. Reducing or eliminating the cost of an online pretest would further incentivize students. Students would take a free pretest online at home, local libraries, or Workforce Solutions Offices to gauge their readiness. The pretest would also alert them to the sections of the GED test requiring further study in order to pass.

Action Item 5.3: **Texas should have policies regarding high school equivalency fees to ensure that they are as low as possible for students while being adequate for testing sites.** Other states have:

- established policies for charging fees; and
- provided support for all or part of testing costs for students in need.

Without knowing the nature of the new high school equivalency exam contract that will be signed, it is difficult to know what provisions will affect charges to students and reimbursement to testing sites. The issue must be raised, however, since it will affect the ability of low-income students to take the test and of test centers to provide it.

Action Item 5.4: **Texas should encourage Texas communities to provide more high school equivalency test scholarships.** Communities in Texas and other states have provided partial scholarships for students with limited funds. Texas communities could be encouraged to provide more GED scholarships by:

- providing case study information on how communities raise funds and administer GED scholarship programs;
- providing contact names in communities that have done it; and
- obtaining more information on how many students, and from which Texas communities, do not take the GED test because of cost.

Action Item 5.5: **Texas should authorize more high school equivalency test sites, including Workforce Solutions Offices.** This step can be implemented before the new system is in place.

Action Item 6: Increase Community College Recognition of Standardized Industry Certification and Credentials.

Some Texas employees have earned certifications or credentials from national organizations in the construction and automotive industries. These accomplishments may not be readily acknowledged by Texas institutions of higher education even though they offer the same courses for academic credit.

Simplifying the acceptance of these national standards can advance Texans more quickly through their educational requirements and into better, higher-paying jobs. It can also reduce the administrative burden on colleges that would no longer have to assess each individual student's credit in these areas. Finally, it would provide Texas with a more highly skilled workforce.

Voluntary Transfer/Articulation Agreements
Colleges and other adult education institutions may draft agreements, called voluntary transfer/articulation agreements, which outline how schools will handle academic credit earned at another institution. These agreements attempt to match coursework between schools and are designed to prevent students from having to repeat unnecessary coursework when transferring from one educational setting to another.

A recent U.S. Department of Education Office of Vocational and Adult Education publication recommended developing such agreements among local education agencies and community colleges:

> *When successfully implemented, articulation agreements provide opportunities for students to earn dual or concurrent credit, putting them on a fast track to an industry-recognized certification or licensure and postsecondary certificate or degree. By accelerating the pace at which they complete their studies, students can reach high-quality career goals with significantly less debt.*[119]

Agreements for the Construction and Auto Industries
Two nationally recognized training entities for construction and automotive training have developed a draft voluntary transfer compact agreement reviewed by THECB. The draft agreement is entitled "Memorandum of Understanding and Course Transfer Agreement Pertaining to the Articulation of the National Center for Construction Education and Research (NCCER) Certification/National Automotive Student Skills Standards Assessment (NA3SA) Credential."

The purpose of the draft agreement is to increase the number and preparedness of students in the construction and automotive industries by improving transfer or placement processes between and across secondary and postsecondary institutions that offer NCCER coursework or NA3SA credentials.

Texas community colleges offering courses in these areas must sign an individual agreement in order for the NCCER and NA3SA certificates to be consistently recognized by their institutions. Community colleges have the option of accepting the work as credits or accepting it as prerequisites for additional courses.

The objectives and advantages of having community colleges sign articulation agreements are to:
- provide students better opportunities to acquire portable and transferable nationally recognized industry certificates and credentials;
- reduce the need for and cost of duplicative instructional effort;
- reduce college administrative and faculty time incurred in evaluating individual coursework;
- reduce the cost of postsecondary education by aligning those courses offered by or tested through nationally recognized standards and postsecondary levels that carry end-of-course competencies and skills that are clearly duplicative;
- improve communication and partnerships between instructors and faculties within the same discipline(s);
- provide a more standardized and consistent award of postsecondary credit for craft and technician training courses; and
- allow for working students to be mobile across the state while continuing their education.

Approximately 15 other states have implemented similar voluntary transfer compacts with NCCER.

NCCER

NCCER is a nonprofit organization created to develop standardized construction and maintenance curricula and assessments with portable, industry-recognized credentials. The credentials include transcripts, certificates, and wallet cards tracked through NCCER's National Registry.

NCCER Curriculum and Testing

NCCER has training in over 60 craft areas and offers more than 70 assessment exams. NCCER covers curriculum for segments of the construction industry, including:

- construction and maintenance;
- energy power;
- oil and gas pipeline;
- safety; and
- management.

Appendix F provides a flowchart showing the curriculum progression along a career path from an introductory core curriculum to technical education to crew leader to manager/company owner.[120] Different curriculums are available for each industry, e.g., carpentry, sheet metal, and mobile crane operations for construction and maintenance; steam and gas turbine maintenance mechanic for energy, power, and gas; and liquid pipeline operations in the pipeline segment of the industry.

The National Construction Career Tests (NCCT) was created for secondary career and technical education. The tests are aligned to industry skill standards and include both knowledge-based tests and skills demonstrations based on NCCER's curriculum.[121] Over 60,000 assessments are given each year in the 70 craft areas.[122]

NCCER Texas Sponsors

NCCER has over 4,000 certified training locations in the United States as well as online training. Locations include high schools, colleges, private schools, and companies.

Texas' NCCER private school and company sponsors include trade associations such as Associated Builders & Contractors Inc., career and technical education schools providing services to the public, and individual companies providing in-house training and/or testing for their employees.

Texas high schools and community colleges offer NCCER training and testing. Some 227 Texas high schools, ISDs and ESCs have offered training.

NCCER Texas Student Level and Module Completions

Since 2009, approximately 37,106 Texans have completed the core curricula, which is required for all individuals beginning the NCCER curriculum to select the craft they want to study. Some 137,000 levels were completed. Examples of highest-completion rates include the following:

- Electrical Level One: 4,572
- Pipefitting Level One: 2,528
- Carpentry Level One: 2,267
- Plumbing Level One: 1,670

Appendix G shows completions in the different levels.

NA3SA
The NA3SA tests are designed to measure student knowledge of course content and student learning outcomes within an automotive training program. The tests are available to all secondary and postsecondary vocational and technical schools throughout the United States.[123] Students earn an industry-recognized NA3SA certificate for each test passed. Tests integrate directly into postsecondary and apprenticeship programs.[124]

Advantages
Knowledge of practical career path options can provide the motivation and incentive for adult learners to persist in attaining the education and training necessary to succeed in today's competitive workplace. From a workforce perspective, strong career and technical education programs are necessary for safety, environmental, and quality purposes in many industries.[125]

Current Activity
NCCER and NA3SA representatives are currently in the process of approaching community colleges and community business leaders to support the implementation of voluntary transfer compacts. They are working with San Jacinto Community College in Houston to implement such an agreement.

> *Action Item 6.1:* **Texas should encourage all community colleges and other adult education institutions to become familiar with voluntary transfer compact agreements in order to accept successfully completed NCCER coursework and NA3SA tests from compact participants, if these institutions offer coursework in relevant areas.**
>
> *Action Item 6.2:* **Texas should identify other industry/workforce certifications or testing programs appropriate for the development of voluntary transfer/articulation agreements.**

Action Item 7: Provide Employers Information to Showcase Exemplary Literacy/Skills Training Programs and Curriculum.

Some Texas employers pay for training for employees, and even potential employees, which includes both adult education and skills training, and possibly ESL training for employees.

Past Texas State Industry Curriculum Efforts
The Texas Legislature has often urged the development of industry-specific curriculum for ESL. A TEA appropriations bill rider in 2005 recommended the creation of a demand-driven workplace literacy and basic skills curriculum.[126] TEA created TISESL, designed to introduce beginning and intermediate English language learners to vocabulary in three industry sectors—health care, sales and service, and manufacturing—in addition to general employability skills.[127] Lessons contain training on ESL, math, employability, and technology.[128]

In 2009, the federal government funded the *Sed de Saber (Thirst for Knowledge)* program in the Dallas area. Participants were provided hand-held electronic readers programmed for self-paced ESL. The project goal was to improve the retention and wages of participants from the hospitality and food service industries. Some of the firms involved wanted to promote from within, but their workers needed to learn English in order to move into assistant manager positions and other higher-paying jobs requiring customer interaction. The project had implementation issues, but still offers information on this type of effort.[129]

When training employees, Texas employers may pay for trainers, training curriculum, employee time, or transportation costs, or may provide financial incentives. Employers may also provide valuable in-kind support such as classroom space or computers. Most importantly, being trained by one's employer provides a valuable motivation to attend and complete adult education programs.

A recent DOL report on ESL training by businesses indicated employers often do not have sufficient training resources and tools to help them.[130] Among the findings are the following:

- Employers are more willing to pay for proven sector-specific training than ad hoc solutions for their Spanish-speaking workforce.
- Employers see incentives as vehicles to encourage industry to train employees.
- Employers would value a business-to-business web-based portal for employers of Spanish-speaking employees to share best practices and provide opportunities to network with other businesses in their executive sectors about solutions and models that work.[131]

Action Item 7.1: **Boards should continue to expand efforts to provide free copies of Texas industry-specific ESL curriculum to employers.**

Action Item 7.2: **TWC should continue to expand collaboration with the Texas Association of Businesses and other trade associations (manufacturing, retail, etc.) to publicize examples of best practices on their websites.**

Action Item 7.3: **Texas should examine the ESL industry-related curriculums previously developed by state and federal government to determine if they can be made more available to employers.** For example, information about TISESL is not readily available online in a format that allows employers to determine how appropriate the curriculum may be for them. TISESL, while free to nonprofits, is copyrighted, and TEA charges employers for its use, but information about charges is not readily available on the Internet.

Action Item 7.4: **Texas should identify incentives and supplemental resources used in other states to encourage employers to provide employees with adult education.**

Literacy Barrier: Lack of Information on the Use of Current Technology to Enhance Adult Education Services

New wireless technology and expanded use of more traditional technology can extend adult education resources. It is especially helpful for hard-to-reach communities in rural areas or for adult students who lack the resources or time for more conventional studies.

Action Item 8: Identify Best Use of Technology, Especially Electronic Tablets and Smartphones, for Literacy Training.

Educational resources for adult learning should be adapted to take advantage of the emerging technology of mobile communications, specifically electronic tablets and smartphones. As these devices become increasingly ubiquitous in American society, they offer a potential learning platform of the future.[132]

New Technology

Today's adult education providers have an advantage over their predecessors of 20, 10, and even five years ago. With so many advancements in personal computing devices in the last five years, namely smartphones and tablets, basic education instruction can be only a download and a finger swipe away for adult learners. Mobile Wi-Fi hotspots can be carried in a pocket or purse; 3G and 4G mobile connections are built into our devices or are a USB connection away. An internet connection is where ever we open our iPad or other device. BYOD (Bring Your Own Device) is the new reality and enable individuals to connect almost anywhere.

The iPhone was first released to the public in January 2007. Just five years later, more than 37 million iPhones were sold in the first quarter of 2012.[133] Nationally, 46 percent of all American adults are smartphone owners.[134] In Texas, 48 percent of adults use mobile broadband and a portable device to access the Internet.[135] This means Texans are using their mobile phones or another mobile device to get online.

In January 2012, The Pew Research Center found that 19 percent of Americans own electronic tablets, up from 10 percent in December 2011.[136] As sales continue to increase, Americans use tablets not only to surf the Internet and engage in social media, but are using the ever-growing number of "apps" for business needs, for enhancing productivity, and as education tools. Educational entities at all levels have recognized the power of this tool and are quickly adopting electronic tablets for classroom use.

In 2011, McAllen ISD announced it would be providing all of its students with an iPad or iPod Touch, a total of 25,000 devices.[137] This put McAllen ISD out front and center as a leader of instructional technology.[138] *Forbes'* website even listed McAllen ISD in its Top 50 iPad rollouts by enterprises and schools.[139]

Texas A&M University–San Antonio is serving veterans, taking advantage of the post-9/11 GI Bill by providing free iPad2 loaners for educational purposes.[140]

Digital Literacy

Digital technology is here and is becoming more accessible, less expensive, and easier to use. However, digital technology may present Texans challenges on two levels:

- A workplace that, while higher paying, requires basic to advanced skills and knowledge in computers; and
- Adults with low to no digital and computer literacy entering adult education programs.

Jobs that may have required an employee to pull a lever or push a button may now require that same employee to use a computer to conduct and monitor the task or to troubleshoot machinery. Moving into high-wage jobs typically requires even higher degrees of computer and digital literacy.

Unfortunately, many Texans are uncomfortable using a computer, much less a smartphone or tablet. They may lack a basic understanding of how to use the Internet, not know what broadband is, and believe both are too complicated to understand. Connected Texas confirmed these issues in a survey conducted in summer 2011 (www.connectedtx.org).

Connected Texas

Connected Texas is an independent, public and private initiative working to ensure that all individuals can experience the benefits of broadband. Technology, especially widespread access, use, and adoption of broadband,

improves all areas of life.[141] Connected Texas has been mapping broadband coverage throughout the state in order to identify the gaps in availability (See Appendix H). It has found that 38 percent of Texans, or 6.9 million, do not subscribe to broadband service at home.[142] And, of this group, approximately 20 percent, or 1.4 million, cite a lack of digital literacy as the main barrier to subscribing.[143] Age plays a factor in nonsubscribers; 51 is the median age of the 1.4 million who cite a lack of digital literacy as their main barrier to adopting broadband services.[144]

To improve digital literacy skills among Texans, Connected Texas launched the Every Community Online (ECO) program, which offers free training in computer and Internet basics and the applied use of both. ECO provides computers for program participants at a low cost, and through partnerships with broadband providers, broadband services starting as low as $10 per month. Connected Texas also works with libraries and other nonprofits to bring digital literacy to all Texans.

ABE Providers and Technology

Adult education providers face their own digital literacy barriers, mainly identifying the best use of all of this technology to provide services to the very diverse adult education population. Many providers learn about new and best practices at their professional development meetings and conferences. Some hire technical support staff, while others work it out with available resources. The North Texas Consortium (NTC) in the Fort Worth ISD Office of Adult Education has found unique solutions to keeping connected in their classrooms and has adopted the tablet as a teaching tool.

NTC provides adult education services throughout Tarrant County. Classes are held in borrowed space in churches, schools, libraries, community centers, and Workforce Solutions Offices. While Internet service may be available in these locations, it might not be available to NTC due to security concerns or spotty reception, or it is too costly to connect service for a temporary classroom. As a solution, NTC carries its own service into each location via mobile hotspots. Mobile hotspots can be purchased for a onetime cost or are leased and included in the cost of the monthly mobile broadband service. This service is approximately $50 per month depending on the broadband service provider. NTC uses a mobile router to create a network and an instant computer lab. All of these devices can be carried to the next location so an Internet connection is always available.

NTC also purchased iPads for its teachers. They are more affordable than laptops, battery life is around 10 hours, and they can be connected to a projector. NTC identified several online sites and apps for use in the classroom including Ventures Arcade, Futaba, Show Me, and the Khan Academy.

NTC students bring their own computers, or if they do not have one, they can borrow one from the White Settlement public library.

The future will only bring newer, faster, and better technology. It would serve all of Texas' adult education providers well if the state would provide these types of technical solutions and identify the best apps, online teaching tools, and adapted curriculum. Increasing digital literacy is the number one priority to bridging the digital divide, a divide that means fewer jobs, poorer health care, less-effective education, and higher susceptibility to poverty.[145]

Action Item 8.1: **Texas should expand Connected Texas' ECO digital and computer literacy education programs through partnerships with ABE providers.**

Action Item 8.2: **TWC, TEA, and THECB should work together to identify instructional materials adapted for use on electronic tablets and smartphones.** The Council will appoint a workgroup to research and identify materials.

Action Item 8.3: **On their respective websites, TWC, TEA, and THECB should provide access to state-approved adapted curriculum and post specifications for best use of current technology.** Include contact information of entities using technology to enhance adult education services as a resource for other adult education providers in need of assistance.

Action Item 8.4: **Texas should consider expanding Connected Texas' ECO program to provide adult education participants with tablets for rent or at a reduced purchase price, with preloaded education apps and curriculum during adult education programs.** The Council will explore potential use of state contracts for purchases by literacy providers, including appropriateness, limitations, and benefits, particularly with regard to purchase.

Action Item 8.5: **Texas should negotiate basic/limited mobile broadband services at a reduced cost to adult education program participants who meet certain eligibility.**

Action Item 9: Encourage Use of Distance Learning, Especially in Rural Areas and for ESL Adult Learners.

Distance learning approaches can provide an effective alternative for adult learners, particularly adult learners in rural areas and many who need ESL training.

Distance Learning as an Alternative to Classroom-Only Adult Education

Providing classroom education to adult learners can be difficult. Adults may have jobs, transportation issues, child care, and other circumstances that make it more difficult to regularly attend classes than it is for school-age children.

Distance learning is a solution to this problem. It can be particularly helpful for shift workers, oilfield workers, truck drivers, students traveling to other countries, pregnant and postoperative students, and students encouraged to use a work computer for training.[146]

Distance learning can include online or in-person conferences with a teacher. Studies have shown that supporting distance learning with teacher contact provides the best results.

In addition to resolving scheduling, transportation, and child care issues, distance learning can provide courses more tailored to a student's deficiencies. Students receive the exact class they need rather than sitting through a more generalized, longer class covering redundant material. Distance learning also can allow students to accrue contact hours and do assessment testing faster and prevent them from stopping out before they finish their coursework.[147]

Distance learning is not free, but its costs can be lower than classroom instruction, which has caused states to

require their education systems to provide more distance learning for K-12 students. In the past year, Idaho and Florida passed laws requiring high school students to take at least one course online.[148]

Texas LEARNS expanded its distance learning program to 3,951 students in the 2009–2010 school year. [149]

Distance Learning as an Alternative Form of Adult Education in Rural Areas

An estimated 17 percent of Texas' illiterate population, or almost 800,000 people, live in rural areas, assuming the illiterate population is proportional to the rest of Texas' population. These areas often lack the resources found in urban areas to provide adult education programs.

It is difficult to create classes in rural areas that meet student needs and are cost effective, because the number of students in a given geographic area is relatively small and the students' needs are diverse. As one adult education administrator at Victoria College reported, a rural class may have 10 students one week and three the next, and the three may be different students than the three who attended the previous week. In any single class, students tend to need instruction in different subject areas and at different levels.[150]

Think of the example of the one-room schoolhouse in rural 19th century America, where first graders and 10th graders might be in the same classroom. Adult education in rural areas is a contemporary equivalent, only the students do not come to every class and the composition of the classroom changes from day to day.

To address these problems, Victoria College turned to distance learning using computers and web-based instruction, which includes online or in-person conferences with a teacher. The college partnered with libraries in rural areas that have online computer access, and the libraries in turn benefited from increased patronage, which helped with their usage statistics. It also partnered with the area Board to access online learning curriculum before purchasing it. Many of the college's low-income students already had computer and Internet access. [151]

Distance Learning as an Alternative Form of ESL Adult Education

The nonprofit MATT (Mexicans and Americans Thinking Together) uses a combination of Spanish-language radio broadcasts of ESL lessons and free workbooks requested by students to provide basic ESL instruction in Texas, Colorado, and California.[152] The program is called *Maestro en Casa*.

Distance Learning and Libraries

In rural areas in particular, high-speed DSL is not available, and this impacts distance learning programs.[153] However, many public libraries do have broadband Internet connections and even offer free Wi-Fi. On many a weekend morning, rural Texans sit in their pickup trucks and cars, on their laptops and other devices, in order to pick up the free signal.

The Texas State Library and Archives Commission currently has a program called Technology Expertise, Access and Learning for All Texans (TEAL). The program gives Texans access to 38 public computer centers around the state for workforce development programs and digital literacy training. Centers are located in libraries, community colleges, public schools, recreation centers, and even health care facilities.

Expanding these centers to more public libraries, especially in rural areas, would provide another venue for training, as Victoria College has done with its local libraries.

Action Item 9.1: **When contracts are rebid, TEA should encourage ABE contractors to expand the use of distance learning in rural areas.** TEA should provide case histories of successful transitions to distance learning in rural areas, which face different issues than more urban environments.

Action Item 9.2: **Texas should explore financing libraries as public computer centers and TEA should encourage ABE contractors to partner with libraries in rural areas to provide locations where computers with Internet access are available.** The state library system should also provide its members with information and case studies relevant to participation in adult education.

Action Item 9.3: **Project GREAT Centers, or AmeriCorps members trained by Project GREAT Centers, should provide information on distance learning in rural areas to literacy coalitions and nonprofits.**

Action Item 9.4: **Texas should help nonprofits expand ESL distance learning program participation through radio, television, or DVD-based programs.** These programs enable fewer teachers to train more students. Assistance could include providing links to services on websites, encouraging presentations of such options at literacy conferences, and other strategies to be identified by the Council.

Action Item 9.5: **Texas should set up free Wi-Fi hotspots in all libraries serving rural areas to facilitate distance learning for adult education participants.**

Literacy Barrier: Need for Changes in TEA's Federal and State-Funded ABE System

The rebidding of TEA's federally and state-funded contracts for adult education contracts offers an opportunity to incorporate some of the action items identified in this report. The system could provide additional training to nonprofit providers of adult education services. Revisions in TEA rules could also provide adult education contractors with greater flexibility in determining whether to charge fees for adult education classes.

Action Item 10: Include Relevant Recommendations from Report in Rebid of TEA's ABE Contracts. (Issue and Option depend on actions taken in 2012.)

TEA last issued bids in 2003 for WIA-funded contracts for its adult education program. The same service providers in the same geographic areas, whether they have performed well or not, have continued to receive funds since then.

TEA contracts with 55 fiscal agents for ABE cooperatives who in turn contract with additional affiliate providers. An ABE cooperative is a community partnership of educational, workforce development, human service, and other organizations that agree to collaborate for the provision of ABE and literacy services.[154] TEA has a contract with Texas LEARNS, housed in the Harris County Department of Education, to manage grants to these fiscal agents and provide program assistance and other statewide services for Texas ABE providers.

One organization becomes the fiscal agent for each ABE cooperative. Fiscal agents for the cooperatives are located in 24 community colleges, 29 local education agencies, and two community-based organizations. The use of fiscal agents is intended to minimize administrative costs and better leverage related services.

ABE cooperatives hold classes in schools, colleges, churches, Workforce Solutions Offices, community buildings, businesses, libraries, and other public or private facilities. The cooperatives are the primary providers of federal and state matching funds for ABE in their areas.

Several action items in this report could be implemented in part by including these requirements in the rebid contracts.

Action Item 10.1: **Texas' rebid adult education contracts should include action items from this report.** See recommendations under the following action items:

- *Action Item 3.1:* **Texas should further implement programs that integrate adult education and work skills.**

- *Action Item 9.1:* **When contracts are rebid, TEA should encourage ABE contractors to expand the use of distance learning in rural areas.**

- *Action Item 9.2:* **Texas should explore the financing of libraries as public computer centers and TEA should encourage ABE contractors to partner with libraries in rural areas to provide locations where computers with Internet access are available.** The state library system should also provide its members with information and case studies relevant to participating in adult education.

Action Item 11: Expand Nonprofit Literacy Programs Through Texas Libraries and Increased State Training of Train-the-Trainer Nonprofit Volunteers.

TEA provides services to roughly 100,000 Texans and TWIC's survey revealed that nonprofits provide adult education to an additional estimated 82,000 Texans. While the number of Texans who receive adult education services from their employers is unknown, it is not likely to cover this gap between services offered and individuals in need of services.

Communities in North Texas provide one example of how to expand the existing network of providers in a workforce area. Literacy groups in the workforce area identified half a million Texans in and around Ft. Worth and Dallas who needed adult literacy education. The extent of the need required serious expansion of the system, rather than ad hoc additions. In keeping with that approach, and because employers had facilities for training, employees who could volunteer to assist with training, and motivated potential learners, North Texas increased work-based training in the health care and hospitality industries. It also expanded the use of faith-based sites with access to resources such as classrooms, volunteers, and sometimes child care. Additionally, the initiative accessed free website curriculum.[155]

Texas public libraries are currently an underused resource. There are 560 public libraries in the state.[156] Public libraries are positioned to assist adult literacy education programs in the following ways:

- Libraries are used by all members of the community and adult education participants do not have to be identified as other than library users.
- Libraries are usually centrally located and accessible by public transportation.
- Libraries have easy access to the resources needed to run an adult literacy program, including printed and spoken word books, magazines, videos, and newspapers.
- Most libraries can provide space for students and tutors, either during the day or after business hours.[157]

Action Item 11.1: **Texas should assist nonprofits to provide additional adult education services and to recruit volunteers through training in the Project GREAT Centers.** Expand the capacity of Project GREAT Centers to provide training to nonprofit volunteers. Project GREAT Centers can train volunteers to train other volunteers. TEA and the literacy coalitions should provide links to free web-based curricula on their websites, which are publicized to the nonprofit community.

Action Item 12: Eliminate or Reduce Legal Barriers and Practices to Give Community Colleges Greater Flexibility in Setting Fees for TEA's ABE Services.

There are a number of changes in TEA rules that could increase the flexibility community colleges have in charging for ABE. This would allow community colleges to determine if charging or waiving fees is appropriate for certain ABE classes or individuals.

No Fees Allowed For Lower-Level ABE Services
There is no federal prohibition against charging ABE students a fee to cover part of the cost of registration as well as for books and supplies. TEA administrative rules require free adult education for those with an eighth-grade education or lower. State law allows some charges for Adult Secondary Education, which is ninth grade or higher.

Charging fees in some instances for individuals with less than an eighth-grade education may increase funds for class expenses or give students "skin in the game" to increase their commitment to a program in which they have invested even a nominal amount.[158] However, collecting such charges may present logistical problems to a program. Currently, only one program is charging for higher-level ABE services.[159]

No Reduction in Fees and Tuition for Students Taking ABE in College
Some high school dropouts are enrolled concurrently in ABE classes and college courses at community colleges. These students pay full tuition and fees while becoming qualified to attend the community college.[160]

Other States
A survey of state adult education programs by the Center for Law and Social Policy (CLASP) and the National Council for State Directors of Adult Education included questions on state tuition or fee policies. They defined tuition/fees as costs beyond class materials. (Students are often responsible for buying their own textbooks or materials according to the survey's authors.) They also excluded the cost of taking the GED test.

The survey found that two states require local programs to charge fees and set the tuition/fee level, 22 states allow programs to charge tuition/fees but do not set the amount, and 20 states prohibit local programs from charging tuition/fees. Texas, Maryland, Illinois, and New Hampshire were the only states among the 22 that

allow programs to charge tuition/fees for students with skills at the ninth-grade level or above, and/or ESL students. These states, however, prohibited charging tuition/fees for students at lower levels. Students at the ninth-grade level or above are often studying for the GED.[161]

TEA Revised Rules on Charging Fees

TEA recently amended its tuition and fee rules as stated below.

Repealed rule:

> *(1) No student tuition or fees shall be charged for adult basic education as a condition for membership and participation in a class.*
>
> *(2) Tuition and fees for adult secondary education may be charged and be established by local fiscal agent board policy. Funds generated by such tuition and fees shall be used for the adult education instructional program.*

New, adopted rule:

> *Tuition and fees may not be charged unless the entity charging them is statutorily authorized to do so. Funds generated by such tuition and fees shall be used for the adult education instructional programs.*[162]

Public comments on proposed rule changes included the following:

> The Gulf Coast Workforce Board, Association of the Advancement of Mexican Americans, AVANCE-Houston, and Houston Community College commented in support of charging modest tuition and fees for adult basic education students who are financially able to contribute their own education. The commenters stated that the option to charge tuition and fees would increase the capacity of the adult education system to train more adults while continuing to serve low-income students.[163]

There has been some confusion about the interpretation of the rule change. Some understand it to mean that community colleges can charge fees only if the Legislature specifically gives them authority to do so.

The intent of the action items is to allow community colleges greater flexibility in either choosing to impose fees for lower level adult education students or in relaxing requirements for higher level adult education students.

> *Action Item 12.1:* **Texas should consider whether to change its rules to allow fees to be charged to those with less than an eighth-grade education.**
>
> *Action Item 12.2:* **Texas should consider whether to change TEA's rules to allow community colleges to waive or reduce tuition and fees for school-age dropouts who enroll concurrently in ABE classes and college courses.**

Statewide Action Plan

HB 4328 states that the Council is to develop a statewide plan for the improvement of literacy that includes a recommended timeline for implementation. Appendix I is a copy of the statewide plan, which begins in June 2013, following the legislative session. The Council will revise the plan as required by legislative action or other developments.

Acknowledgements

TWC and the Interagency Literacy Council extend thanks to many people across the state of Texas for their dedicated work on behalf of all Texans. We are most grateful to all of the literacy coalitions, adult education providers, and literacy volunteers and the businesses and community leaders who contributed to this report. We also extend thanks to the Office of the Governor, the Texas Workforce Investment Council, the Texas Education Agency, the Texas Higher Education Coordinating Board, and many other organizations for sharing their knowledge and expertise in adult basic education.

APPENDICES

Appendix A

Interagency Literacy Council Members Fall 2009 to Fall 2012

Name	Length of Service	Representing	Position
Larry Temple	Fall 2009 to Fall 2012	TWC	Executive Director and Council Chair
Kerry Ballast	Fall 2009 to Fall 2011	TEA	Director of Special Projects in the Department of Standards and Programs
Jenny Jacob	Fall 2011 to Spring 2012	TEA	GED State Administrator and Adult Education Policy Coordinator
Joanie Rethlake	Spring 2012 to Fall 2012	TEA	Director Texas LEARNS
Tamara Clunis, Ph.D.	Fall 2009 to Fall 2011	THECB	Director of Developmental and Adult Education for the P-16 Division
Linda Muñoz	Fall 2011 to Fall 2012	THECB	Senior Program Director of Developmental and Adult Education
Lester Meriwether, Doctor of Divinity	Fall 2009 to Fall 2012	Nonprofit Community	Executive Director, Literacy ConneXus and Immediate Past President, Literacy Texas
Maile Broccoli-Hickey	Fall 2009 to Fall 2012	Nonprofit Community	Executive Director, English at Work, Austin
Pamela Toman	Fall 2009 to Fall 2012	Nonprofit Community	Chair, LITERACY San Antonio
Katrina Kersch	Fall 2009 to Fall 2012	Business Community	Corporate Director of Workforce Development Marek Family of Companies
Geronimo Rodriguez, Jr.	Fall 2009 to Fall 2012	Business Community	Vice President, Diversity & Community Outreach, Seton Family of Hospitals
David Russell	Fall 2009 to Fall 2012	Business Community	Vice President of External Affairs, Verizon Communications

Appendix B

Summary of Texas Interagency Literacy Council Meetings

In general, comments by individual members of the Texas Interagency Literacy Council (Council) are cited in the endnotes of the Texas Interagency Literacy Council Report (Report). This description of the Council's meetings demonstrates compliance with the legislative meeting requirement, which specifies at least three meetings a year, at least one of which being a public meeting, and sets forth the process followed in developing the Report's action items, with input from other education and business professionals in Texas.

1. December 14, 2009

The Council met at Texas Workforce Commission (TWC) offices in Austin. State Representative Mark Strama, author of House Bill 4328, spoke about the purpose of the legislation. Council representatives from TWC, the Texas Education Agency (TEA), and the Texas Higher Education Coordinating Board (THECB) spoke about their adult literacy programs. Cheryl Fuller, executive director of the Texas Workforce Investment Council (TWIC), described TWIC's role and projects related to adult literacy. Council members addressed organizational issues, such as meeting schedules.

2. April 1, 2010

The Council met at the TWC offices in Austin. Raymund Paredes, commissioner of THECB, spoke about THECB's initiatives in Adult Basic Education (ABE), Adult Secondary Education, and ESL training. Commissioner Paredes also co-chairs the P-16 Council and included information from that effort in his remarks. (The P-16 Council is responsible for ensuring that Texas educational plans and programs from early childhood education through postgraduate study are coordinated.) TWC's Richard Froeschle spoke about the labor market and career paths in Texas. Tamara Atkinson from the Capital Area Workforce Development Board (Board) described the Vocational English as a Second Language (VESL) program implemented with grant funds from TWC. Dr. Enzy Atarod from St. David's Foundation Mobile Dental Vans reported on VESL projects in the Austin and surrounding areas that exemplify best practices. Council members provided updates on their efforts related to the Council.

3. June 30, 2010

The Council met at TWC offices in Austin. Dr. Kurt Gore from TWIC spoke about the statistics on literacy in three reports he has authored: *A Primer on Adult Education, Identifying the Current and Future Populations in Need of Adult Education, and Adult Education Providers: Instructional Approaches and Service Delivery.* Jennifer Jacob, policy coordinator for Adult Education, TEA, provided an overview of the relationship between TEA and Texas LEARNS. Joanie Rethlake, state director, Texas LEARNS, reviewed the program she administers for TEA, providing adult education statewide.

4. September 15, 2010

The Council met at TWC offices in Austin. Chakib Chehadi, director of operations for the Alamo Workforce Development Board, spoke about its experience with adult education and collaboration with the Education Service Center, independent school districts, and TEA. Al Lopez and Jenny Akridge of the Rural Capital Area Workforce Development Board (Rural Capital Area) spoke about their experience with adult education in a rural area. Dr. Michelle Pope, director of the Center for P-16 Initiatives, Texas State University, and Margaret

Lindsey, chair of Rural Capital Area, spoke about their collaborative efforts in San Marcos. Lester Meriwether spoke about the Literacy Texas State Conference and GED training issues and challenges. State agencies provided updates on their initiatives.

5. December 8, 2010—Public Hearing

The Council met at TWC offices in Austin. The Council solicited public testimony and input regarding the state of ABE in Texas, with particular interest in the use and effectiveness of technology and distance learning in its provision. The Council considered the next steps in the process of developing action plans to meet statutory requirements.

State Librarian Peggy Rudd explained the role of libraries in literacy, noting there are 560 libraries in the Texas public library network. Larry Temple, executive director, TWC, said that TWC sent Boards information and a list of libraries, and suggested they work together since budgets are slim. Rural areas rely on library resource rooms for accessing workforce services. Adam Wright, executive director, North Texas Library Partners, spoke about the literacy services it provides. Stacey Weaver, director, Victoria College Adult Education Program, reported that the college implemented distance learning in January 2008, and detailed its benefits to the program. Simon Hernandez and Tracy Lopez, adult education students at Victoria College, reported on their experience. Jessica Smith, director of outreach and Alice Marcel, director of education at the Scottish Rite Learning Center of Austin, described the center's afterschool program for children diagnosed with dyslexia.

Denise Guckert, project coordinator for the Central Region GREAT Center; Dr. Glenda Rose, consultant at the Central Region GREAT Center; and Ann Marie Molinari, distance learning coordinator for Texas LEARNS, discussed their evaluation of distance learning among TEA providers, undertaken to discover if the program was being used for transitions. Findings included distance learning reaching new populations, using teachers and distance learning to retain students, and more teaching options. Meg Poag, executive director, Literacy Coalition of Central Texas, described how her program makes students ready for community college. Kathryn Thompson, executive director, Tarrant Literacy Coalition, reported that her coalition improves the quality and quantity of adult literacy services by providing training and technical support to about 200 instructors and program directors in her area, and raised questions about identifying other job-related benchmarks beyond the GED test. Carol Peters, a certified private adult education teacher in Caldwell County, discussed providing additional support to GED students. Julie Maffei, Austin Area Interreligious Ministries, discussed its English and job preparation classes for refugee students, and the resource shortages it faces. David Joost, director of Adult Education Programs, Houston Community College, recommended several changes in TEA rules that would permit greater flexibility for community colleges and enable them to charge or waive fees, as appropriate, and be beneficial to programs and students. Debbie Johnson, executive director, Literacy Texas, described her organization's role in providing statewide leadership for Texas' regional coalitions to build capacity and serve more learners through community- and faith-based organizations. Jon Engel, adult education director for Community Action, Inc. of Central Texas and past chair of the Literacy Coalition of Central Texas, advocated building a Career Pathways System for Texas that leads to college, occupational training, or gainful employment.

Written testimony was submitted by the following individuals: Dr. Eduardo Honold, director of the Adult Education Division, Harris County Department of Education; Janie Bates, executive director of Workforce Solutions Texoma; Joy Sanders, adult literacy coordinator for the Technology and Education Institute; Kathy Tracey, Center for the Application of Information Technologies; Dr. Mary S. Spangler, chancellor, Houston

Community College; Rachel Allemand, Family Education program manager, Any Baby Can; Robert M. Pinhero, social entrepreneur/education and training consultant; Susan Gusler, data management coordinator, Austin Community College Adult Education Program; and Tom Wilkinson, executive director, Brazos Valley Council of Government.

6. March 9, 2011—Board Retreat

The Council met at the Lady Bird Johnson Wildflower Center in Austin. Council members worked with a facilitator to identify issues and create subcommittees on (1) developing an adult education system and leveraging resources, (2) developing a more efficient system, and (3) building funding streams and identifying additional funding resources. The retreat produced a list of potential action items.

7. August 9, 2011

The Council met at the Literacy Texas 2011 Annual Conference at the Westin Austin. Subcommittees reported on the ideas discussed in their groups. Lee Rector, director, and Kurt Gore, planner, TWIC, reported on the start of a project to create an inclusive list of adult education providers in Texas in order to put together a comprehensive picture of all adult education and services in the state. Business members on the Council described their perceptions of the needs and expectations of businesses for publicly funded adult education.

8. December 14, 2011—Public Hearing

The Council met at TWC offices in Austin. Dr. Gore from TWIC presented information about progress made on a Texas adult education provider survey. Larry Temple, TWC, spoke about the diminishing number of GED testing sites reported by Boards. Based on experience identifying new providers gained through a survey she conducted in 2009, Meg Poag, executive director, Central Texas Literacy Coalition, spoke about the difficulties of surveying providers around the state. Sherry Foreman, executive director of Houston Center for Literacy (formerly Houston READS), agreed with Meg Poag's comments and described her development of a web database to report on adult education services that are not TEA-funded.

9. May 2, 2012

The Council met at TWC offices in Austin. Council members reviewed a draft report on barriers to literacy and action items to address them, organized by the subcommittees on (1) developing an adult education system and leveraging resources, (2) developing a more efficient system, and (3) building funding streams and identifying additional funding resources based on the results of their retreat. The Council recommended changes to the organization and substance of the action items in the report.

10. August 7, 2012—Public Hearing

The Council met at the Literacy Texas 2012 Annual Conference at the Westin Austin at the Domain. Kurt Gore, TWIC, presented the results of TWIC's comprehensive survey of adult education providers. Clint Winters, TWC, described the process used to complete the report. The Council addressed questions regarding the creation and review of proposed action items. Larry Temple, TWC, described the process that followed submission of reports to the Legislature. David Lindsey, National Center for Construction Education and Research (NCCER) Ambassador, spoke about the need to encourage individual community colleges to accept NCCER's nationally standardized coursework for credit or as prerequisites for the colleges' own NCCER courses, both to expedite the education of employees in the construction industry and to encourage employees to advance their educations. Margaret Doughty, founder of Literacy Powerline, expressed concern that the Council

focused solely on adult literacy. Celina Montoya, director of programs for San Antonio Literacy, also expressed concern that the Council focused on adult literacy rather than children or family literacy. Dr. Ida Acuña-Garza, executive director of South Texas Literacy Coalition, spoke about the difficulties of delivering adult education services in a largely rural, high-poverty area that faces transportation issues, and where public schools form the hub of services, requiring them to be open after hours for adult education. Tom Berger, an adult education teacher, spoke about the need for open enrollment to permit adult education students to enter programs as their lives require and to be linked to career paths and online learning. Ellen Arnold, Arnold Public Affairs, representing Goodwill Industries of Central Texas, addressed a need to reduce the barriers preventing individuals over 26 years of age from getting high school diplomas. She also recommended that TEA adult education programs focus on adult secondary education.

11. October 3, 2012

The Council met, reviewed the draft report and approved it.

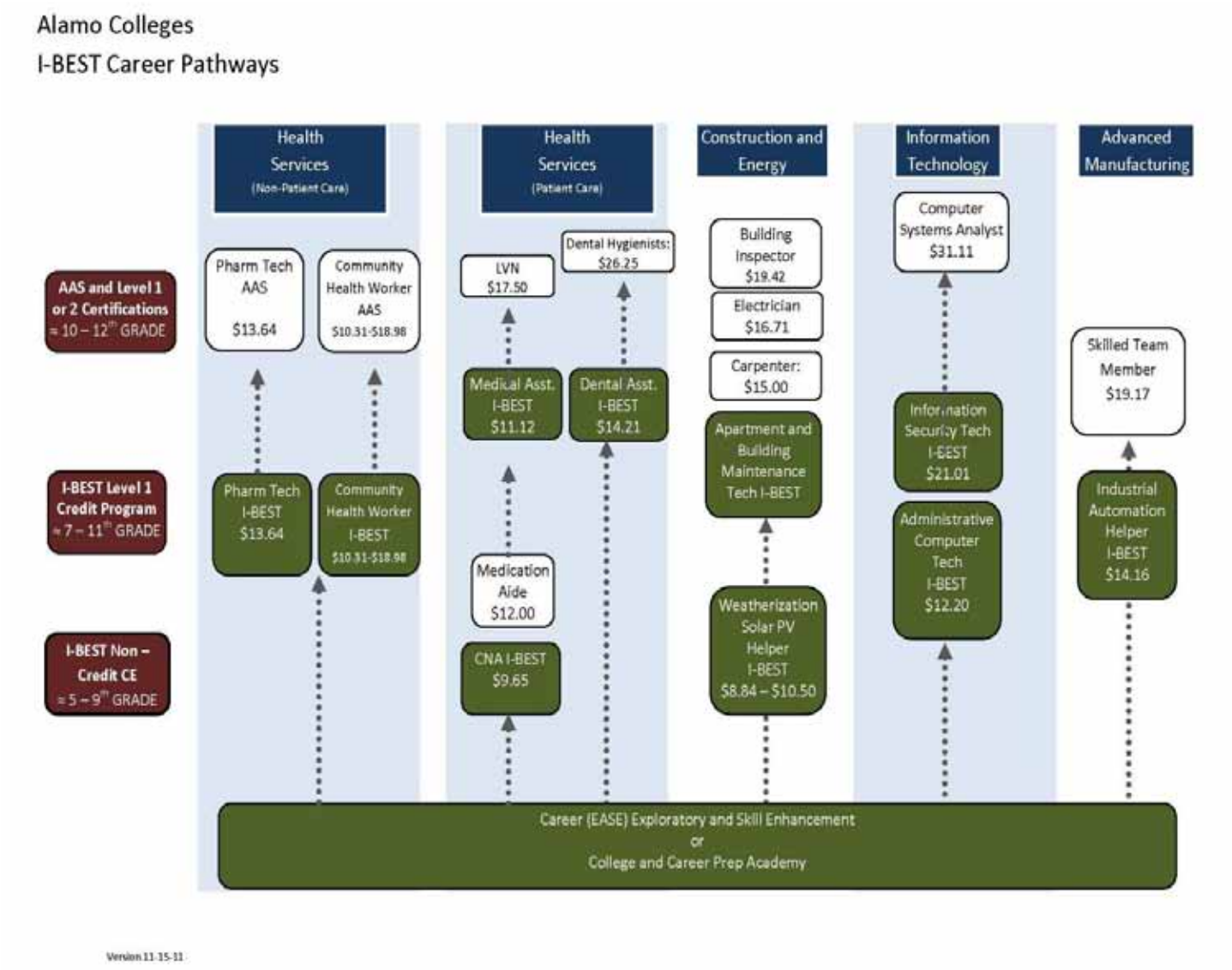
Appendix C

Texans Eligible for Adult Education by Local Workforce Development Area

LWDA	English Fluent	Not English Fluent, Native Born	Not English Fluent, Foreign Born	Total
1. Panhandle	47,338	1,837	16,093	65,269
2. South Plains	44,570	3,989	7,083	55,642
3. North Texas	24,636	542	3,579	28,757
4. North Central	145,488	4,223	75,570	225,281
5. Tarrant County	133,891	5,520	94,801	234,211
6. Dallas	221,708	9,561	250,948	482,217
7. North East	34,352	409	7,773	42,534
8. East Texas	93,761	1,511	20,758	116,030
9. West Central	39,017	1,526	4,949	45,492
10. Upper Rio Grande	62,501	13,335	89,343	165,179
11. Permian Basin	50,908	4,057	21,080	76,044
12. Concho Valley	18,361	1,407	4,249	24,018
13. Heart of Texas	38,874	1,170	11,856	51,900
14. Capital Area	56,794	4,588	61,045	122,428
15. Rural Capital	55,101	3,523	25,546	84,170
16. Brazos Capital	26,267	481	8,901	35,648
17. Deep East Texas	49,484	848	9,902	60,234
18. South East Texas	42,854	397	8,735	51,986
19. Golden Crescent	25,479	1,400	4,820	31,700
20. Alamo	206,170	19,536	76,316	302,022
21. South Texas	21,215	10,024	38,072	69,311
22. Coastal Bend	75,431	11,737	15,624	102,793
23. Lower Rio Grande Valley	80,391	21,304	118,630	220,325
24. Cameron County	40,339	9,622	50,454	100,415
25. Texoma	18,841	320	4,184	23,345
26. Central Texas	32,455	2,044	6,001	40,500
27. Middle Rio Grande	19,910	5,917	18,458	44,285
28. Gulf Coast	496,700	26,337	446,377	969,414
Total	2,202,836	167,165	1,501,147	3,871,150

Source: TWC

Appendix D


Alamo Colleges
I-BEST Career Pathways
Health Services (Non-Patient Care)
Health Services (Patient Care)
Construction and Energy
Information Technology
Advanced Manufacturing
AAS and Level 1 or 2 Certifications ≈ 10 – 12th GRADE
I-BEST Level 1 Credit Program ≈ 7 – 11th GRADE
I-BEST Non – Credit CE ≈ 5 – 9th GRADE
Pharm Tech AAS $13.64
Community Health Worker AAS $10.31-$18.98
Pharm Tech I-BEST $13.64
Community Health Worker I-BEST $10.31-$18.98
LVN $17.50
Dental Hygienists: $26.25
Medical Asst. I-BEST $11.12
Dental Asst. I-BEST $14.21
Medication Aide $12.00
CNA I-BEST $9.65
Building Inspector $19.42
Electrician $16.71
Carpenter: $15.00
Apartment and Building Maintenance Tech I-BEST
Weatherization Solar PV Helper I-BEST $8.84 – $10.50
Computer Systems Analyst $31.11
Information Security Tech I-BEST $21.01
Administrative Computer Tech I-BEST $12.20
Skilled Team Member $19.17
Industrial Automation Helper I-BEST $14.16
Career (EASE) Exploratory and Skill Enhancement
or
College and Career Prep Academy
Version 11-15-11

Appendix E

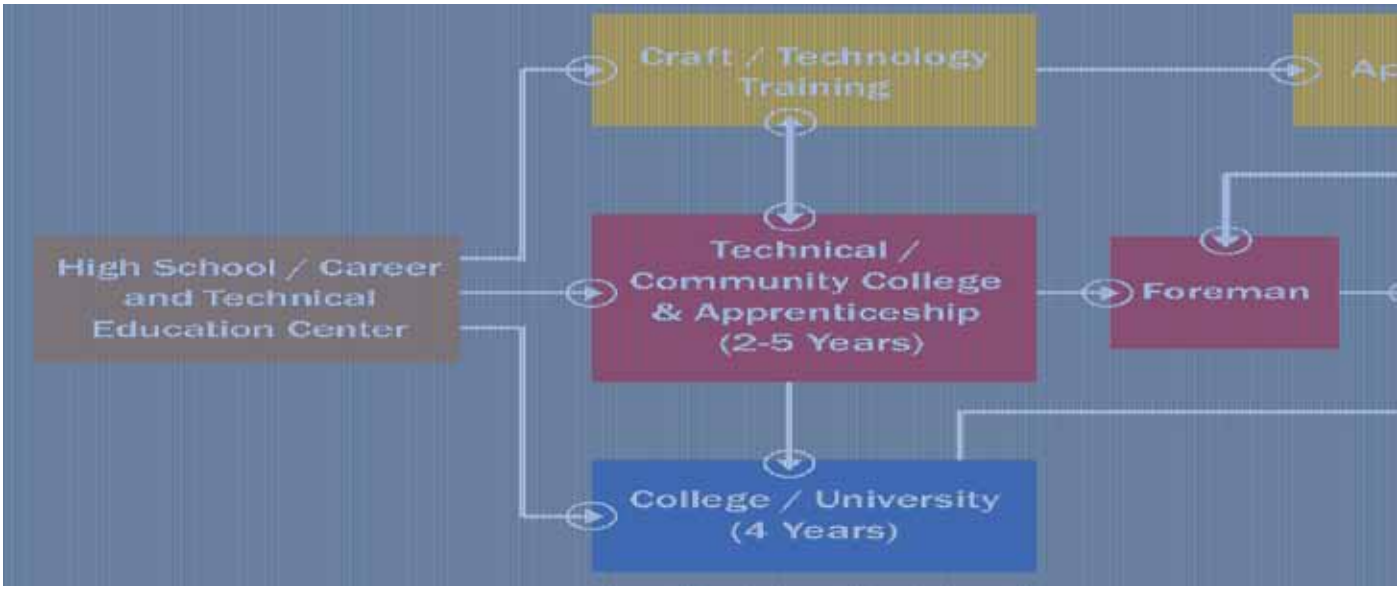
Number of Texas GED Test Sites by Type of Site, 2004-2012

Type of Site	2004	2005	2006	2007	2008	2009	2010	2011	2012
Independent School Districts	74	74	63	60	50	41	44	42	40
Two-year colleges	60	61	60	58	60	61	61	60	59
Four-year colleges	12	10	11	9	7	9	7	9	7
Education Service Centers	4	4	3	3	4	1	2	1	1
Texas Juvenile Justice Department	13	12	12	13	11	10	10	10	7
Prisons	19	19	19	18	20	19	20	20	20
Other	2	4	1	2	0	1	0	0	0
Total	184	184	169	163	152	142	144	142	134

Source: TEA

Appendix F

NCCER Pre-Requisite and Career Path Options



Appendix G

Texas NCCER Curriculum Level Completions
2009 to August 1, 2012

Level Completions	Count
Rigging	218
Rigging Fundamentals	935
Basic Rigger	73
Advanced Rigger	2
Boilermaking Level One	14
Boilermaking Level Two	17
Boilermaking Level Three	9
Boilermaking Level Four	1
Carpentry Level One	2,267
Carpentry Level Two	35
Carpentry Level Three	75
Carpentry Level Four	5
Carpentry Level One: Fundamentals	556
Carpentry Framing & Finishing	199
Carpentry Level Three: Forms	164
Advanced Carpentry	123
Commercial Construction Methods	117
Residential Carpentry I	10
Residential Carpentry II	7
Residential Construction Methods	197
Concrete Finishing Level One	7
Concrete Finishing Level Two	4
Construction Craft Laborer Level One	63
Construction Craft Laborer One	22
Construction Technology	554
Core Curricula	37,106
Electrical Level Three	906
Electrical Level Four	523
Residential Electrical I	52
Residential Electrical II	32
High Voltage Terminations/Splices	18
Electronic Systems Technician Level One	2,016
Electronic Systems Technician Level Two	1,422
Electronic System Tech Level Two	387

Level Completions	Count
Electronic Systems Technician Level Three	1,810
Electronic Systems Technician Level Four	686
Heavy Equipment Operations Level One	85
Heavy Equipment Operations Level Two	25
Heavy Equipment Operations Level Three	21
Heavy Equipment Tech-Bulldozer	3
Heavy Equipment Tech-Excavator	5
HVAC Level One	1,957
HVAC Level Two	477
HVAC Level Three	364
HVAC Level Four	305
Hydroblasting	1
Industrial Insulation Technician	3
Industrial Maintenance Level One	303
Industrial Maintenance Level Two	35
Industrial Maintenance Level Three	35
Industrial Maintenance Mechanic Level One	81
Industrial Maintenance Mechanic Level Two	4
Industrial Maintenance Mechanic Level Three	47
Industrial Maintenance Mechanic Level Four	44
Industrial Painting	50
Instrument Fitter	20
Instrumentation Level One	317
Instrumentation Level Two	150
Instrumentation Level Three	243
Instrumentation Level Four	185
Insulating Level One	19
Insulating Level Two	13
Insulating Level Three	1
Masonry Level One	395
Masonry Level Two	99
Masonry Level Three	12
Millwright Level One	467
Millwright Level Two	172
Millwright Level Three	264
Millwright Level Four	195
Millwright Level Five	155
Mobile Crane Operations Level One	70

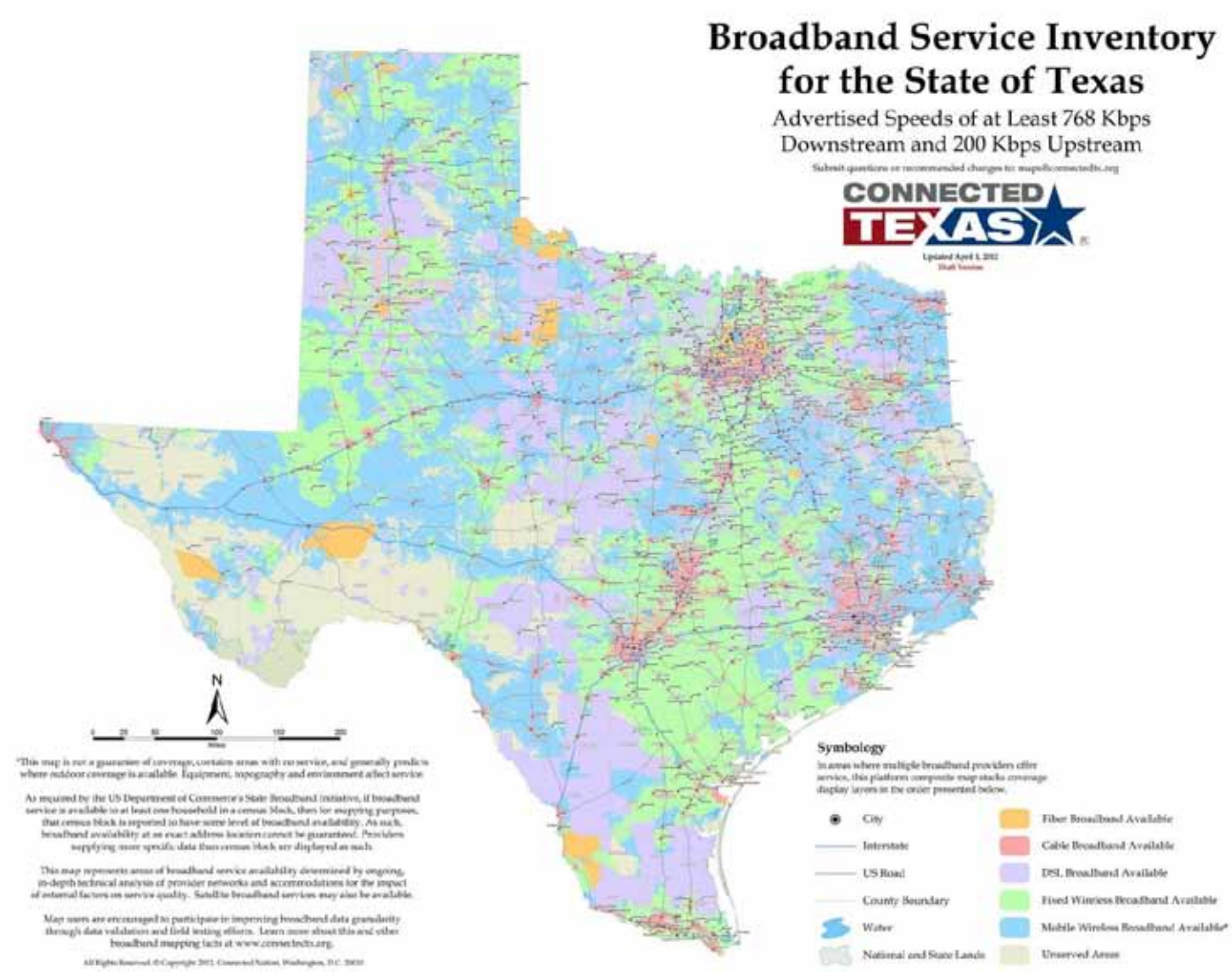
Level Completions	Count
Mobile Crane Operations Level Two	75
Mobile Crane Operations Level Three	63
Painting Level One	529
Painting Level Two	47
Painting Level Three	10
Pipefitting Level One	2,528
Pipefitting Level Two	986
Pipefitting Level Three	687
Pipefitting Level Four	576
Pipeline Core	713
Pipeline Corrosion Control Level One	2
Pipeline Corrosion Control Level Two	82
Pipeline Maintenance Level Two	109
Pipeline Maintenance Level Three	45
Pipeline Mechanical Level One	40
Pipeline Mechanical Level Two	51
Pipeline Mechanical Level Three	51
Plumbing Level One	1,670
Plumbing Level Two	322
Plumbing Level Three	99
Plumbing Level Four	84
Project Management	279
Project Supervision	121
Introductory Skills for Crew Leader	70
Fundamentals of Crew Leadership	120
Construction Site Safety Orientation	13,262
Construction Site Safety Supervisor	7,732
Construction Site Safety Technician	7,914
Field Safety	8,909
Safety Technology	7,797
Scaffolding	673
Sheet Metal Level One	371
Sheet Metal Level Two	214
Sheet Metal Level Three	118
Sheet Metal Level Four	133
Signal Person	4
Site Layout Level Two	14
Sprinkler Fitting Level One	41

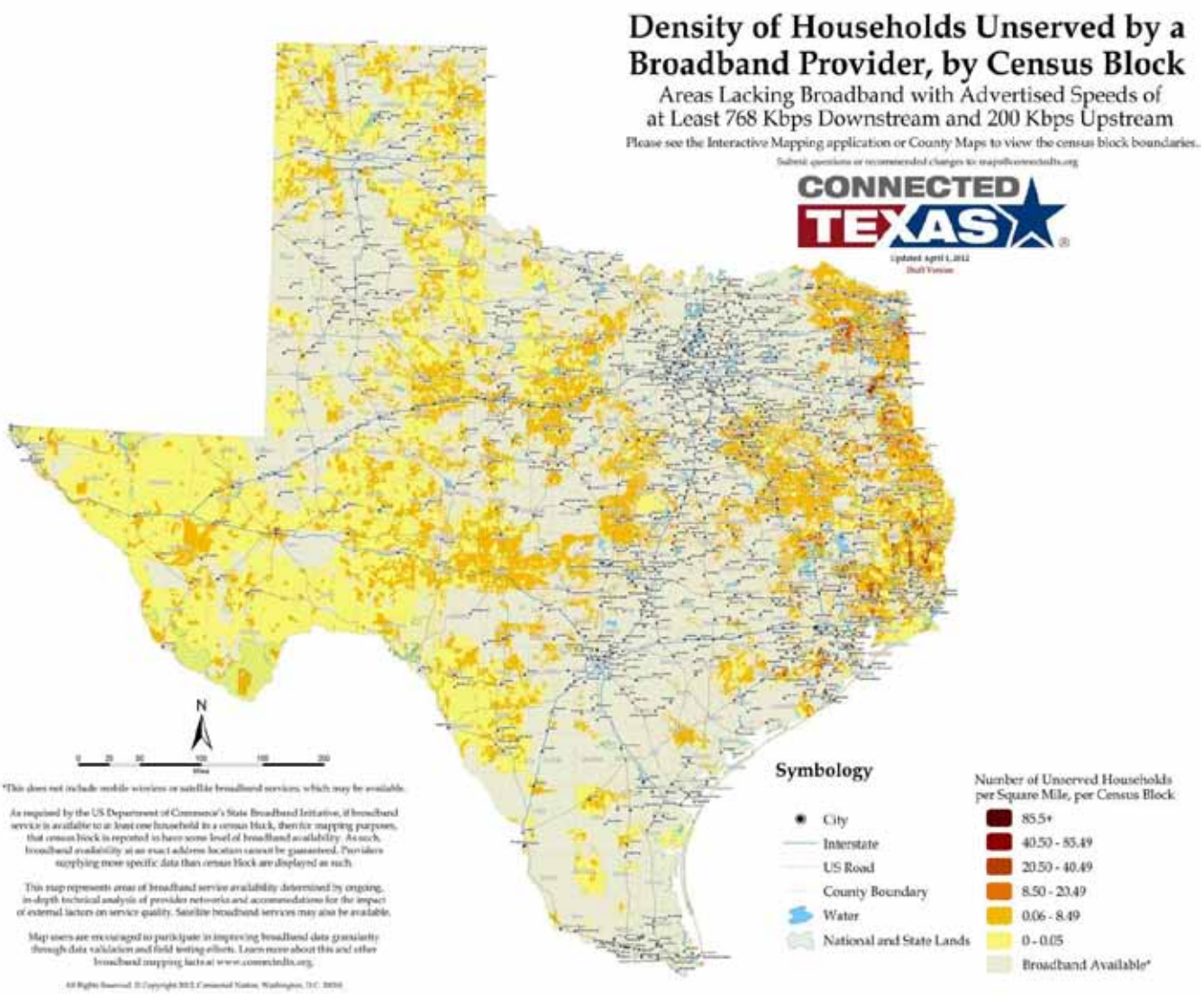
Level Completions	Count
Sprinkler Fitting Level Two	36
Sprinkler Fitting Level Three	43
Sprinkler Fitting Level Four	45
Welding Level One	5,571
Welding Level 1: AWS-SENSE EG2.0 Compliant	1,244
Welding Level Two	2,065
Welding Level Three	1,809
Welding Advanced Topics: Aluminum	984
AWS Entry Level Welder Phase One	4,259
AWS Welder Level One	8
Your Role in the Green Environment	999
Total	13,0858

Source: Results Provided by NCCER from National Registry Database covering 2009 to August 1, 2012.

Note: Results include Completions from All Sources (Secondary, College, Private and Company)

Appendix H


Broadband Service Inventory
for the State of Texas
Advertised Speeds of at Least 768 Kbps
Downstream and 200 Kbps Upstream
CONNECTED
TEXAS
N
Symbology
City
Interstate
US Road
County Boundary
Water
National and State Lands
Fiber Broadband Available
Cable Broadband Available
DSL Broadband Available
Fixed Wireless Broadband Available
Mobile Wireless Broadband Available*
Unserved Areas


Density of Households Unserved by a Broadband Provider, by Census Block
Areas Lacking Broadband with Advertised Speeds of at Least 768 Kbps Downstream and 200 Kbps Upstream
Please see the Interactive Mapping application or County Maps to view the census block boundaries.
CONNECTED TEXAS
Updated April 1, 2012
Draft Version
N
*This does not include mobile wireless or satellite broadband services, which may be available.
As required by the US Department of Commerce's State Broadband Initiative, if broadband service is available to at least one household in a census block, then for mapping purposes, that census block is reported to have some level of broadband availability. As such, broadband availability at an exact address location cannot be guaranteed. Providers supplying more specific data than census block are displayed as such.
This map represents areas of broadband service availability determined by ongoing, in-depth technical analysis of provider networks and accommodations for the impact of external factors on service quality. Satellite broadband services may also be available.
Map users are encouraged to participate in improving broadband data granularity through data validation and field testing efforts. Learn more about this and other broadband mapping facts at www.connectdfw.org.
Symbology
City
Interstate
US Road
County Boundary
Water
National and State Lands
Number of Unserved Households per Square Mile, per Census Block
85.5+
40.50 - 85.49
20.50 - 40.49
8.50 - 20.49
0.06 - 8.49
0 - 0.05
Broadband Available*

Appendix I

Statewide Action Plan

Literacy Barrier: Lack of Information about Community-Based Adult Education Services

Action Item 1: **Develop an Ongoing Method for Identifying Adult Education Providers.**

Action Item 1.1: **Texas should assist in the expansion of the Houston Literacy Center's (HLC) Texas Online Learner Database (TOLD) or other software solutions to collect data on nonprofit adult education services in other Texas communities.**

Steps	Schedule
1. Texas Interagency Literacy Council (Council) appoints workgroup to create a proposal describing and estimating costs of TOLD and other web-based systems.	June 2013
2. Workgroup develops proposal.	July–November 2013
3. Proposal presented to Council for review; HLC updates Council on pilot program; Council makes recommendations on nonprofit data collection.	December 2013
4. Depending on results, Council members provide assistance in identifying grants, along with other efforts to support additional data collection.	January–March 2014
5. Depending on completion of TOLD pilot and proposal results, rollout of TOLD/other databases begins.	April–December 2014

Action Item 1.2: **Texas should define a way to aggregate basic statistical information on nonprofit adult education services into data for regional and statewide reports.**

Steps	Schedule
1. Workgroup appointed in Action Item 1.1 also identifies options for state aggregating information.	June–November 2013
2. Options for aggregating information presented to Council for Council to make recommendations.	December 2013
3. Depending on recommendations, those responsible for aggregating data communicate needs to participating literacy coalitions/nonprofits.	January–December 2014

Action Item 2: **Encourage Local Literacy Collaborative Efforts in Texas.**

Action Item 2.1: **Literacy Texas and others should provide information to the Council on how to improve collaboration among community organizations in Texas to advance literacy.**

Action Item 2.2: **The Council should identify additional techniques and models for increasing collaboration in Texas communities.**

Action Item 2.3: **Texas should identify exemplary practices for providing a spectrum of wraparound and literacy services in response to existing barriers.**

Action Item 2.4: **The Council should examine additional types of literacy services that are part of the spectrum of services that can be provided through collaboration.**

Steps	Schedule
1. Council creates a workgroup to identify (2.1) community factors that favor collaboratives; (2.2) different ways collaboratives have been implemented; (2.3) additional techniques for increasing planning and coordination; and (2.4) what structured adult community collaboration agreements look like in other states.	June–November 2013
2. Workgroup delivers a report to the Council (date may vary depending on meeting schedule).	December 2013
3. Workgroup revises report based on Council recommendations and identifies relevant Texas community leaders and experts to interview about implementation of collaborative techniques in Texas.	January–May 2014
4. Workgroup delivers a report to the Council and invites community leaders interested in other forms of collaboration to speak. Public hearing should request suggestions on improving local collaboration. (Date may vary depending on meeting schedule.)	June 2014
5. Council publicizes exemplary collaborative practices from literacy websites or conferences, such as the Literacy Conference.	July 2014
6. Council includes findings in report to Legislature and develops further recommendations for actions as appropriate.	July–December 2014

Literacy Barrier: **Lack of Career Paths for Adult Education Students**

Action Item 3: **Integrate Adult Education and Employment Training, Placing Adult Learners on Career Paths for More Rapid and Consistent Advancement.**

Action Item 3.1: **Texas should further implement programs that integrate adult education and work skills.**

Steps	Schedule
1. Identify ways to improve the robustness of the relationships between Workforce Solutions Offices and adult literacy providers.	June 2013–June 2014
2. Identify best uses of funds to support and expand integrated programs (recommend to the Legislature possible additional funding sources to continue to build and expand existing pilots).	June 2013–June 2014
3. Request the Texas Education Agency (TEA) to encourage its contractors to implement integrated programs in new rebid contracts.	June 2013–June 2014

Action Item 3.2: **Texas should increase the number of GED graduates successfully transitioning to college education through bridging programs.**

Steps	Schedule
1. Support bridging programs.	June 2013–June 2014

Action Item 4: **Enable the Exchange of Adult Education Student Information for Career Path Planning and to Support Career Counseling.**

Action Item 4.1: **Encourage use of adult education web-based software to share individual student information with student permission.**

Steps	Schedule
1. Texas adult education programs test use of Learner Web system (programs to be identified).	June 2013–June 2014
2. Provide learning plans and other information from Learner Web grantees to other adult education providers.	September 2013–December 2014

Action 4.2: **Increase availability of career counseling services through Texas LEARNS and nonprofits.**

Steps	Schedule
1. Interview or survey 100 adult education providers that have been trained by Texas LEARNS; to implement the curriculum and assist with writing a local program development plan, to identify labor market, career, and other information needs.	July 2013–September 2013
2. Project GREAT Centers provide train-the-trainer career counseling training to selected nonprofit volunteers, who in turn provide training as volunteers for nonprofits.	February–December 2014

Literacy Barrier: Texas Employers Face Obstacles to Finding Job-Ready Employees

Action Item 5: **Increase the Completion of High School Equivalency Certificates in Texas as New System Is Implemented**

Action Item 5.1: **Texas should negotiate for at least two types of certificates in any new high school equivalency testing system—one indicating readiness for college and another indicating readiness for employment.**

Steps	Schedule
1. Texas negotiates for job-ready and college-ready certificates in new contract.	June 2013–June 2014

Action Item 5.2: **Texas should increase the number of Texans completing the GED test before the current test expires.**

Steps	Schedule
1. State agencies and nonprofits make recent high school dropouts and GED students aware of the advantages of completing the GED process before a new test is instituted.	June 2013–June 2014

Action Item 5.3: **Texas should have policies regarding high school equivalency fees to ensure that they are as low as possible for students while being adequate for testing sites.**

Steps	Schedule
1. Texas negotiates for reasonable fees in the new contract, beginning in 2014, and establishes a fee policy.	June 2013–June 2014
2. Texas provides support for at least part of testing costs for qualifying students, as other states have done.	June 2013–June 2014

Action Item 5.4: **Texas should encourage Texas communities to provide more high school equivalency test scholarships.**

Steps	Schedule
1. Texas state agencies and nonprofits provide case study and contact information on how communities raise funds and administer GED scholarship programs.	June 2013–December 2014
2. Council obtains more information on how many students, in what communities, fail to take the GED test due to cost.	June 2013–December 2014

Action Item 5.5: **Texas should authorize more high school equivalency test sites, including Workforce Solutions Offices.**

Steps	Schedule
1. TEA authorizes additional testing sites.	June 2013–June 2014

Action Item 6: **Increase Community College Recognition of Standardized Industry Certification and Credentials**

Action Item 6.1: **Texas should encourage all community colleges and other adult education institutions to become familiar with voluntary transfer compact agreements in order to accept successfully completed NCCER coursework and NA3SA tests from compact participants, if these institutions offer coursework in relevant areas.**

Steps	Schedule
1. Council identifies Texas community colleges currently offering NCCER or using NA3SA tests.	June–August 2013
2. Council encourages Texas colleges affiliated with NCCER or using NA3SA tests to contact other community colleges to develop articulation agreements between the colleges or to encourage them to sign the draft NCCER and NA3SA articulation agreements.	June–December 2013
3. Local Workforce Development Boards (Boards) in areas where articulation agreements have been signed should inform local construction and automotive businesses about the agreements.	January–December 2014

Action Item 6.2: **Texas should identify other industry/workforce certifications or testing programs appropriate for the development of voluntary transfer/articulation agreements.**

Steps	Schedule
1. Council coordinates with industry groups and high schools to identify any other appropriate certification or credential programs.	February–December 2014

Action Item 7: **Provide Employers Information To Showcase Exemplary Literacy/Skills Training Programs and Curriculum.**

Action Item 7.1: **Boards should continue to expand on efforts to provide free copies of Texas industry-specific English as a Second Language (ESL) curriculum to employers.**

Steps	Schedule
1. Workgroup reviews industry-specific ESL curriculum and identifies low-cost or no-cost ESL curriculum for different industries.	June 2013
2. TWC reviews curriculum suggestions and determines how best to distribute information in conjunction with Boards.	September–November 2014

Action Item 7.2: **TWC should continue to expand collaboration with the Texas Association of Businesses and other trade associations (manufacturing, retail, etc.) to publicize examples of best practices on their websites.**

Steps	Schedule
1. Workgroup identifies examples of best practices and reviews them with Council.	June–September 2013
2. TWC meets with business associations to discuss providing links to exemplary curriculum and other best practice information on their websites.	November 2013–February 2014

Action Item 7.3: **Texas should examine the ESL industry-related curriculums previously developed by state and federal government to determine if they can be made more available to employers.**

Steps	Schedule
1. Workgroup on industry-specific curriculum examines other states' and federal government industry-related ESL curriculums.	November 2013–February 2014

Action Item 7.4: **Texas should identify incentives and supplemental resources used in other states to encourage employers to provide employees with adult education.**

Steps	Schedule
1. Council appoints workgroup.	June 2013
2. Workgroup identifies incentives and resources in other states and reviews findings at Council meeting.	July–October 2013

Literacy Barrier: Lack of Information on the Use of Current Technology to Enhance Adult Education Services

Action Item 8: **Identify Best Use of Technology, Especially Electronic Tablets and Smartphones, for Literacy Training.**

Action Item 8.1: **Texas should expand Connected Texas' Every Community Online (ECO) digital and computer literacy education programs through partnerships with Adult Basic Education (ABE) providers.**

Action Item 8.2: **TWC, TEA, and THECB should work together to identify instructional materials adapted for use on electronic tablets and smartphones.**

Action Item 8.3: **On their respective websites, TWC, TEA, and THECB should provide access to state-approved adapted curriculum and post specifications for best use of current technology.**

Action Item 8.4: **Texas should consider expanding Connected Texas' ECO program to provide adult education participants with tablets for rent or at a reduced purchase price, with preloaded education apps and curriculum during adult education programs.**

Action Item 8.5: **Texas should negotiate basic/limited mobile broadband services at a reduced cost to adult education program participants who meet certain eligibility.**

Steps	Schedule
1. Council appoints a technology workgroup to focus on Action Items 8.1-8.5.	June–July 2013
2. Workgroup explores use of interns for research.	August–September 2013
3. Workgroup, with representatives from the three agencies, researches curriculum and develops specifications for posting on agency websites.	October 2013–January 2014
4. Workgroup identifies entities willing to be used as resources exemplifying best use of technology.	October 2013–January 2014
5. Workgroup researches and explores potential sources of devices or funds for devices, including use of state contract funds.	February–May 2014
6. Workgroup researches existing low-cost mobile broadband providers.	February–May 2014
7. Workgroup may invite Texas mobile broadband providers to discuss other solutions.	May–June 2014
8. Workgroup presents findings to Council for approval.	August 2014

Action Item 9: **Encourage Use of Distance Learning, Especially in Rural Areas and for ESL Adult Learners.**

Action Item 9.1: **When contracts are rebid, TEA should encourage ABE contractors to expand the use of distance learning in rural areas.**

Steps	Schedule
1. Work on expanding the use of distance learning as part of rebid provider contracts.	June–August 2013

Action Item 9.2: **Texas should explore financing libraries as public computer centers and TEA should encourage ABE contractors to partner with libraries in rural areas to provide locations where computers with Internet access are available**.

Steps	Schedule
1. Explore partnering with local libraries as part of provider contracts, including requiring an MOU with local libraries. (Date depends on rebidding schedule.)	June–August 2013

Action Item 9.3: **Project GREAT Centers, or AmeriCorps members trained by Project GREAT Centers, should provide information on distance learning in rural areas to literacy coalitions and nonprofits.**

Steps	Schedule
1. Texas GREAT Centers provide training on how to best implement distance learning.	June 2013–December 2014
2. Texas GREAT Centers provide links to exemplary case studies, information on distance learning, and distance learning curriculum.	October 2013–January 2014

Action Item 9.4: **Texas should help nonprofits expand ESL distance learning program participation through radio, television, or DVD-based programs.**

Steps	Schedule
1. Identify Texas websites to include links to relevant online sites.	June 2013–December 2014

Action Item 9.5: **Texas should set up free Wi-Fi hotspots in all libraries serving rural areas to facilitate distance learning for adult education participants.**

Steps	Schedule
1. Technology workgroup works with TEAL and Connected Texas to survey rural area libraries and assess where hot spots are needed.	June–August 2013
2. Workgroup researches possible funding sources with TEAL and Connected Texas.	June–August 2013
3. Workgroup presents findings to the Council for action.	August 2013

Literacy Barrier: Need for Changes in TEA's Federal and State-Funded ABE System

Action Item 10: **Include Relevant Recommendations from Report in Rebid of TEA's ABE Contracts. (Issue and option depend on actions taken in 2012.)**

Action Item 10.1: **Texas' rebid adult education contracts should include action items from this report. See recommendations under the following action items:**

Steps	Schedule
1. Include *Action Items 3.1, 9.1,* and *9.2* in the contracts.	TBD

Action Item 11: **Expand Nonprofit Literacy Programs through Texas Libraries and Increased State Training of Train-the-Trainer Nonprofit Volunteers**

Action Item 11.1: **Texas should assist nonprofits to provide additional adult education services and to recruit volunteers through training in the Project GREAT Centers.**

Steps	Schedule
1. Literacy coalitions and Project GREAT Centers develop plan.	June–August 2013
2. Literacy coalitions and others provide information on training to nonprofits.	June–August 2013
3. Project GREAT Centers train nonprofit participants.	September 2013–December 2014
4. Project GREAT Centers document completed and scheduled training, notes suggestions for changes, and reports to Council.	December 2013 & September 2014
5. TWC includes numbers trained and Council suggestions in report to the Legislature.	October 2014

Action Item 12: **Eliminate or Reduce Legal Barriers and Practices to Give Community Colleges Greater Flexibility in Setting Fees for TEA's ABE Services**

Action Item 12.1: **Texas should consider whether to change its rules to allow fees to be charged to those with less than an eighth-grade education.**

Action Item 12.2: **Texas should consider whether to change TEA's rules to allow community colleges to waive or reduce tuition and fees for school-age dropouts who enroll concurrently in ABE classes and college courses.**

Appendix J
House Bill 4328, 81st Texas Legislature

H.B. No. 4328

AN ACT

relating to the establishment of the Interagency Literacy Council for the study, promotion, and enhancement of literacy in this state.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subtitle B, Title 4, Labor Code, is amended by adding Chapter 312 to read as follows:

CHAPTER 312. INTERAGENCY LITERACY COUNCIL

Sec. 312.001. DEFINITION. In this chapter, "council" means the Interagency Literacy Council established under this chapter.

Sec. 312.002. APPLICATION OF SUNSET ACT. The Interagency Literacy Council is subject to Chapter 325, Government Code (Texas Sunset Act). Unless continued in existence as provided by that chapter, the council is abolished and this chapter expires September 1, 2019.

Sec. 312.003. ESTABLISHMENT AND COMPOSITION. (a) The commission shall establish the Interagency Literacy Council. The council is composed of nine members as follows:

(1) a representative of the commission, appointed by the executive director;

(2) a representative of the Texas Education Agency, appointed by the commissioner of education;

(3) a representative of the Texas Higher Education Coordinating Board, appointed by the commissioner of higher education; and

(4) six public members who are leaders of the business or nonprofit community engaged in literacy promotion efforts, appointed by the executive director of the commission.

(b) The representative appointed under Subsection (a)(1) shall serve as the presiding officer of the council.

Sec. 312.004. COMMISSION DUTIES. The commission shall provide staff and resources as necessary for the operation of the council.

Sec. 312.005. TERMS; VACANCY. (a) Members of the council serve two-year terms, with the terms expiring February 1 of each odd-numbered year.

(b) A member may be reappointed.

(c) A vacancy on the council shall be filled for the remainder of the unexpired term in the same manner as provided by Section 312.003(a).

Sec. 312.006. MEETINGS. (a) The council shall meet in person at least three times each year and may hold meetings by conference call if necessary. The council shall invite stakeholders to participate in at least one council meeting each year and provide an opportunity for submission of oral or written testimony.

(b) Section 551.125, Government Code, applies to a meeting held by conference call under this section, except that Section 551.125(b), Government Code, does not apply.

Sec. 312.007. COMPENSATION; REIMBURSEMENT. (a) A member of the council may not receive compensation for service on the council.

(b) A public member may be reimbursed for the member's actual and necessary expenses for meals, lodging, and transportation incurred while performing council business, subject to any applicable limitation on reimbursement prescribed by the General Appropriations Act.

Sec. 312.008. COUNCIL POWERS AND DUTIES. The council shall:

(1) study current research to assess the adult literacy needs in this state, including literacy needs relating to business and finance, workforce and technology, civics, and health and wellness;

(2) consult with key stakeholders to identify:

(A) barriers to improving literacy; and

(B) evidence-based best practices for improving literacy;

(3) review the status of the programs and services administered by each agency or entity represented on the council that promote literacy in an effort to coordinate efforts, align services, reduce redundancies, implement best practices, integrate support services, and improve accountability;

(4) build existing funding streams and identify additional state and federal funding sources available for the promotion of literacy in this state; and

(5) raise literacy awareness and engage community leaders in creative solution building for improving literacy in this state.

Sec. 312.009. STATEWIDE LITERACY PLAN; REPORT. (a) The council shall develop a comprehensive statewide action plan for the improvement of literacy in this state, including a recommended timeline for implementation.

(b) The council shall submit to both houses of the legislature, the governor, and the Texas Workforce Investment Council on or before November 1 of each even-numbered year a written report on:

(1) the development of the council's statewide action plan;

(2) the actions taken in furtherance of the plan;

(3) the areas that need improvement in implementing the plan;

(4) any change to the plan; and

(5) the programs and services that address literacy needs in this state.

Sec. 312.010. GIFTS, GRANTS, AND DONATIONS. The commission may accept for the council a gift, grant, or donation from any source to carry out the purposes of this chapter.

Sec. 312.011. RULES. The commission may adopt rules necessary to implement this chapter.

SECTION 2. (a) The Interagency Literacy Council shall submit the initial report required under Section 312.009(b), Labor Code, as added by this Act, not later than November 1, 2012.

(b) As soon as practicable after the effective date of this Act, the designated appointing officials shall appoint the members to the Interagency Literacy Council established under Chapter 312, Labor Code, as added by this Act.

SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2009.

_____ _____

President of the Senate Speaker of the House

I certify that H.B. No. 4328 was passed by the House on May 6, 2009, by the following vote: Yeas 123, Nays 21, 1 present, not voting; and that the House concurred in Senate amendments to H.B. No. 4328 on May 23, 2009, by the following vote: Yeas 141, Nays 2, 1 present, not voting.

_____

Chief Clerk of the House

I certify that H.B. No. 4328 was passed by the Senate, with amendments, on May 21, 2009, by the following vote: Yeas 31, Nays 0.

_____

Secretary of the Senate

APPROVED: _____

Date

_____

Governor

[1] House Bill 4328, 81st Texas Legislature, Regular Session (2009), http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=81R&Bill=HB4328 (last visited August 21, 2012).
[2] Workforce Investment Act of 1998 (Public Law 105-220).

SEC. 203. DEFINITIONS.

In this subtitle:

(1) ADULT EDUCATION.—The term ''adult education'' means services or instruction below the postsecondary level for individuals—

(A) who have attained 16 years of age;

(B) who are not enrolled or required to be enrolled in secondary school under State law; and

(C) who—

(i) lack sufficient mastery of basic educational skills to enable the individuals to function effectively in society;

(ii) do not have a secondary school diploma or its recognized equivalent, and have not achieved an equivalent level of education; or

(iii) are unable to speak, read, or write the English language

[3] United States Census Bureau, American FactFinder, *Educational Attainment, 2010 American Community Survey 1-Year Estimates*.
[4] ibid.
[5] Texas Workforce Investment Council, *Results of the 2012 Research and Survey of Adult Education Providers in Texas* (Austin, Texas, June 2012), p. 2, http://governor.state.tx.us/files/twic/Results_of_the_2012_Ad_Ed_Providers_in_Texas.pdf (last visited August 21, 2012).
[6] Texas Workforce Investment Council, *Identifying the Current and Future Population in Need of Adult Education*, (Austin, Texas, March 2010), p. 4, http://governor.state.tx.us/files/twic/Primer_Comp_1.pdf.
[7] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 24, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[8] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 25, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[9] Texas Workforce Investment Council, *Identifying the Current and Future Populations in Need of Adult Education*, (Austin, Texas, March 2010), pp. 17–59, http://governor.state.tx.us/files/twic/Primer_Comp_1.pdf.
[10] Dr. Kurt Gore, Texas Workforce Investment Council, June 30, 2010, Interagency Literacy Council Meeting reporting on data from *Identifying the Current and Future Populations in Need of Adult Education*, (Austin, Texas, March 2010), http://governor.state.tx.us/files/twic/Primer_Comp_1.pdf (last visited August 22, 2012).
[11] United States Department of Education, Reading is Fundamental, Families and Literacy, Raising Readers, *Start Early: The First Three Years*, http://www.rif.org/us/literacy-resources/articles/raising-readers.htm (last visited September 22, 2012).
[12] Jon Engel, Final Comments to the State Interagency Literacy Council, From the August 7th Crafting an Advocacy Agenda Session of the Literacy Texas Conference in Austin, Texas and the Developing Recommendations for a Legislative Session Summary of the TEX-BEST Workforce Literacy Summit, August 10, 2012 San Antonio Texas, pp. 1–2.
[13] United States Department of Labor, Bureau of Labor Statistics Current Population Survey, *Education Pays*, (Washington, D.C., March 23, 2012), http://www.bls.gov/emp/ep_chart_001.htm/ (last visited August 22, 2012).
[14] ibid.
[15] Harvard Graduate School of Education, *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*, (February 201l), pp. 2–3. http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperity_Feb2011.pdf (last visited September 22, 2012).
[16] Ray Marshall Center for the Study of Human Resources, *Return on Investment from Capital IDEA*, Research Brief, August 2011, http://www.capitalidea.org/downloads/RayMarshall_Brief_May2011.pdf.
[17] Brian J. Gottlob, *The High Cost of Failing to Reform Public Education in Texas*, (January 2008), Milton and Rose D. Friedman Foundation and the National Center for Policy Analysis, http://www.ncpa.org/pdfs/sp20070101.pdf.

[18] Jon Engel, Final Comments to the State Interagency Literacy Council, From the August 7th Crafting an Advocacy Agenda Session of the Literacy Texas Conference in Austin, Texas, and the Developing Recommendations for a Legislative Session Summary of the TEX-BEST Workforce Literacy Summit, August 10, 2012 San Antonio Texas, p. 2.
[19] Texas Higher Education Coordinating Board, *Adult Basic and Secondary Education*, handout at Texas Cross Agency Summer Institute, (June 4-6, 2012, Austin, Texas).
[20] ibid.
[21] ibid.
[22] Kerry Ballast, TEA Representative, December 14, 2009, Interagency Literacy Council Meeting. Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 12, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[23] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 8, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[24] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 12, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[25] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), pp. 12–13, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[26] Texas Workforce Commission Workforce Development Letter 136-99, Change 2, issued August 24, 2000, and entitled *Sequence of Services under the Workforce Investment Act: Addition of Assisted Core Services*, "Short-term prevocational services not tied to a specific occupation may include course-like services such as Literacy and Adult Basic Education, Workforce Literacy, Introductory Computer classes, as well as development of learning skills, communication skills, interviewing skills, punctuality, personal maintenance skills and professional conduct to prepare individuals for unsubsidized employment or training," http://www.twc.state.tx.us/boards/wdletters/letters/136-99c2.pdf (last visited August 22, 2012).
[27] Texas Workforce Investment Council, *Advancing Texas: Strategic Plan for the Texas Workforce System FY2010-FY2015*, p. 18, (Long Term Objective C4, required the Texas Workforce Commission to assess how many Boards have robust ABE relationships.), http://governor.state.tx.us/files/twic/Advancing_Texas.pdf (last visited August 22, 2012).
[28] Cindy Geisman, Texas Workforce Commission, December 14, 2009, Interagency Literacy Council Meeting.
[29] ibid.
[30] Larry Temple, Texas Workforce Commission Representative, December 14, 2009, Interagency Literacy Council Meeting.
[31] Senate Bill 1, 81st Texas Legislature, Regular Session (2009) Text of Conference Committee Report, *Senate Bill No. 1, Regular Session (General Appropriations Act)*, (Austin, Texas, May 26, 2009), p. III-63, http://www.lbb.state.tx.us/Bill_81/6_FSU/Bill-81-6_FSU_0909.pdf (last visited August 22, 2012); and State of Texas, *Conference Committee Report 3rd Printing, H.B. No. 1 Final Appropriations Bill*, (Austin, Texas, May 25, 2011), p. III-50, http://www.lbb.state.tx.us/Bill_82/4_Conference/prtHB1_Conference_2011_SIG_Engross.pdf (last visited August 22, 2012).
[32] State of Texas, *Conference Committee Report 3rd Printing, H.B. No. 1 Final Appropriations Bill*, (Austin, Texas, May 25, 2011), p. III-47-48, http://www.lbb.state.tx.us/Bill_82/4_Conference/prtHB1_Conference_2011_SIG_Engross.pdf (last visited August 22, 2012).
[33] Senate Bill 1, 81st Texas Legislature, Regular Session (2009), Text of Conference Committee Report, *House Bill No. 1, Regular Session (General Appropriations Act)*, (Austin, Texas, May 26, 2009), pp. III, 60–61, http://www.lbb.state.tx.us/Bill_81/6_FSU/Bill-81-6_FSU_0909.pdf (last visited August 22, 2012); and State of Texas, Eightieth Legislature, Text of Conference Committee Report, *Senate Bill No. 1, Regular Session (General Appropriations Act)*, (Austin, Texas, May 25, 2007), pp. III–57, http://www.lbb.state.tx.us/Bill_80/8_FSU/80-8_FSU_1007.pdf (last visited August 22, 2012).
[34] Texas Workforce Investment Council, *Advancing Texas: Strategic Plan for the Texas Workforce System FY2010-FY2015*, p. 1, http://governor.state.tx.us/files/twic/Advancing_Texas.pdf.
[35] Senate Bill 280, 78th Texas Legislature, Regular Session (2003), *Title 10 Texas Government Code, Section 2308.1016.*

[36] Cheryl Fuller, Texas Workforce Investment Council, December 14, 2009, Interagency Literacy Council Meeting. http://www.statutes.legis.state.tx.us/Docs/GV/htm/GV.2308.htm#2308.1016.
[37] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), p. 15, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 22, 2012).
[38] Texas Workforce Investment Council, *Adult Education Providers: Instructional Approaches and Service Delivery Methods*, (Austin, Texas, June 2010), p. 5 http://governor.state.tx.us/files/twic/Adult_Education_Providers.pdf (last visited August 22, 2012).
[39] Literacy Texas, *Texas Literacy Coalitions*, http://www.literacytexas.org/index.php/partners/texas_literacy_coalitions/ (last visited September 23, 2012).
[40] Texas Workforce Investment Council, *Results of the 2012 Research and Survey of Adult Education Providers in Texas* (Austin, Texas, June 2012), p. 1, http://governor.state.tx.us/files/twic/Results_of_the_2012_Ad_Ed_Providers_in_Texas.pdf (last visited August 23, 2012).
[41] Texas Workforce Investment Council, *Results of the 2012 Research and Survey of Adult Education Providers in Texas* (Austin, Texas, June 2012), pp. 13–15, http://governor.state.tx.us/files/twic/Results_of_the_2012_Ad_Ed_Providers_in_Texas.pdf (last visited August 23, 2012).
[42] Texas Workforce Investment Council, *Results of the 2012 Research and Survey of Adult Education Providers in Texas* (Austin, Texas, June 2012), p. 31, http://governor.state.tx.us/files/twic/Results_of_the_2012_Ad_Ed_Providers_in_Texas.pdf (last visited August 23, 2012).
[43] Katrina Kersch, Business Community Representative, e-mail.
[44] Tamara Clunis, Texas Higher Education Coordinating Board Representative, April 1, 2010, Interagency Literacy Council Meeting.
[45] Tamara Atkinson, Deputy Director Rural Capital Area Workforce Development Board, April 1, 2010, Interagency Literacy Council Meeting.
[46] Geronimo Rodriguez, Business Community Representative, April 1, 2010, Interagency Literacy Council Meeting.
[47] David Russell, Business Community Representative, April 1, 2010, Interagency Literacy Council Meeting.
[48] Larry Temple, Texas Workforce Commission Representative, December 14, 2009, Interagency Literacy Council Meeting.
[49] Geronimo Rodriguez, Business Community Representative, December 14, 2009, Interagency Literacy Council Meeting.
[50] Larry Temple, Texas Workforce Commission Representative, December 14, 2009, Interagency Literacy Council Meeting.
[51] Larry Temple, Texas Workforce Commission Representative, December 14, 2009, Interagency Literacy Council Meeting.
[52] Katrina Kersch, Business Community Representative, April 1, 2010, Interagency Literacy Council Meeting.
[53] Clint Winters, Texas Workforce Commission, September 15, 2010, Interagency Literacy Council Meeting.
[54] Chakib Chehadi, Director of Operations, Alamo Workforce Development Board, September 15, 2010, Interagency Literacy Council Meeting.
[55] Jennifer Jacob, Texas Education Agency Representative, April 1, 2010, Interagency Literacy Council Meeting.
[56] Texas Education Agency, "12_08 Adopted New 19 TAC §89.1301." http://www.tea.state.tx.us/index4.aspx
[57] Texas Higher Education Coordinating Board, *Building Bridges to Success: An Update on the Action Plan to Transition Adult Basic Education Students Into Postsecondary Education and Training*, (Austin, Texas, January 2012) p. vii, http://www.thecb.state.tx.us/files/dmfile/ABERider29ReportJanuary2012.pdf (last visited August 23, 2012).
[58] United States Department of Education, Federal Student Aid, *Who Gets Aid: Basic Eligibility Criteria*, https://studentaid.ed.gov/eligibility/basic-criteria (last visited October 10, 2012).

[59] Tamara Clunis, Texas Higher Education Coordinating Board Representative, April 1, 2010, Interagency Literacy Council Meeting.

[60] Texas A&M University, Texas Center for the Advancement of Literacy & Learning, http://www-tcall.tamu.edu/provider/search.htm (last visited August 24, 2012).
[61] Sheri Foreman, President and CEO of Houston Center for Literacy, December 14, 2011, Texas Interagency Literacy Council Meeting.
[62] Meg Poag, Executive Director of Central Texas Literacy Coalition, December 14, 2011, Texas Interagency Literacy Council Meeting.
[63] Sheri Foreman, President and CEO of Houston Center for Literacy, May 2, 2012, Texas Interagency Literacy Council Meeting.
[64] Joanie Rethlake, Texas Education Agency Representative, May 2, 2012, Texas Interagency Literacy Council Meeting.
[65] John Kania and Mark Kramer, *Nonprofit Management: Collective Impact, Stanford Social Innovation Review*, (Winter 2011), pp. 1–2, http://www.ssireview.org/articles/entry/collective_impact.
[66] Katrina Kersch, Business Community Representative, May 10, 2012, Interagency Literacy Council Meeting.
[67] John Kania and Mark Kramer, *Nonprofit Management: Collective Impact, Stanford Social Innovation Review*, (Winter 2011), pp. 3–4, http://www.ssireview.org/articles/entry/collective_impact.
[68] Margaret Doughty, Literacy Powerline, *Coalition Building: A Tool for Improved Community Literacy, Adult Great Cities Summit*, U.S. Department of Education, Office of Vocational and Adult Education, March 2012, http://lincs.ed.gov/publications/pdf/EDVAE09C0042ImpLiteracy.pdf.
[69] Literacy Texas, *About Literacy Texas*, http://www.literacytexas.org/index.php/about/.
[70] Northside Education Center, *Home* page, http://www.northsidecenter.com/index.php.
[71] Community Family Centers, *Home* page, http://www.communityfamilycenters.org/cfc_home.html.
[72] United States Department of Education, *Obama Administration Announces 2011 Promise Grant Winners*, Washington, D.C., December 19, 2011 (press release) http://www.ed.gov/news/press-releases/obama-administration-announces-2011-promise-neighborhoods-grant-winners (last visited August 23, 2012).
[73] Dr. Michelle Pope, Director of Center for P-16 Initiatives, and Margaret Lindsey, San Marcos Chamber of Commerce, Sealing Opportunities Achieving Results (SOAR), September 15, 2010, Texas Interagency Literacy Council Meeting.
[74] Texas Workforce Investment Council, A Companion Paper to *A Primer on Adult Education: Identifying the Current and Future Population in Need of Adult Education*, (Austin, Texas, March 2010), pp. 17–44, http://governor.state.tx.us/files/twic/Primer_Comp_1.pdf (last visited September 19, 2012).
[75] Texas Center for the Advancement of Literacy and Learning, *Percentage by County of Illiterate Adult Texans*, http://www-tcall.tamu.edu/docs/09illitmap.html.
[76] Linda Munoz, Texas Higher Education Coordinating Board Representative, August e-mail in response to Review of Action Items.
[77] Texas Higher Education Coordinating Board, *Building Bridges to Success: An Update on the Action Plan to Transition Adult Basic Education Students Into Postsecondary Education and Training*, (Austin, Texas, January 2012) p. 8, http://www.thecb.state.tx.us/files/dmfile/ABERider29ReportJanuary2012.pdf (last visited August 23, 2012).
[78] Heide Spruck Wrigley, From Survival to Thriving: Toward a More Articulated System for Adult English Language Learners, Published in *Low Educated Adult Second Language Literacy Acquisition: Proceedings of the 4th Symposium, Antwerp 2008* (Ivan de Craatas and Jeanne Kurvers eds.) Netherlands Graduate School of Linguistics; Utrecht, Netherlands, http://www.literacywork.com/Literacywork.com/Resources_files/From%20Survival%20to%20Thriving.pdf .
[79] Linda Munoz, Texas Higher Education Coordinating Board Representative, May 2, 2012, Interagency Literacy Council Meeting.
[80] Jobs for the Future, *About Us*, http://jff.org/about-us (last visited August 23, 2012).
[81] Texas Higher Education Coordinating Board, *Building Bridges to Success: An Update on the Action Plan to Transition Adult Basic Education Students Into Postsecondary Education and Training*, (Austin, Texas, January 2012) p. vii, http://www.thecb.state.tx.us/files/dmfile/ABERider29ReportJanuary2012.pdf (last visited August 23, 2012).
[82] Richard Froeschle, Texas Workforce Commission, Handout from April 1, 2010, Interagency Literacy Council Meeting.
[83] Texas Higher Education Coordinating Board, *Building Bridges to Success: An Update on the Action Plan to Transition Adult Basic Education Students Into Postsecondary Education and Training*, (Austin, Texas, January

2012) p. vii, http://www.thecb.state.tx.us/files/dmfile/ABERider29ReportJanuary2012.pdf (last visited August 23, 2012).

[84] Linda Munoz, Texas Higher Education Coordinating Board Representative, August Action Item Notes.

[85] Workforce Strategy, Inc., Career Pathway, (Oregon's definition of a career pathway), (April 2005), http://www.pcc.edu/career/pathways/documents/career-pathways-definition.pdf (last visited August 23, 2012); Portland Community College, *Why Career Pathways?* http://www.pcc.edu/career/pathways/why-pathways.html (last visited August 23, 2012); and A Designing Instruction for Career Pathways initiative was recently launched by the United States Department of Education Office of Vocational and Adult Education Division of Adult Education and Literacy, *Adult Career Pathways News*, (vol. 1, issue 1) http://acp-sc.org/vol1issue1.html (last visited August 23, 2012).

[86] Texas Higher Education Coordinating Board, *Building Bridges to Success: An Update on the Action Plan to Transition Adult Basic Education Students Into Postsecondary Education and Training*, Appendix C: Career Pathways, Alamo Colleges I-BEST Career Pathways, (Austin, Texas, January 2012), p. 40, http://www.thecb.state.tx.us/files/dmfile/ABERider29ReportJanuary2012.pdf (last visited August 23, 2012).

[87] Linda Munoz, Texas Higher Education Coordinating Board Representative, reporting on webinar for THECB grantees, held December 7, 2011, hosted by Steve Reder and others.

[88] Katrina Kersch, Business Community Representative, May 2, 2012, Interagency Literacy Council Meeting.

[89] The grant was from the Sustainable Broadband Adoption-Broadband Technologies Opportunities Program stimulus funding through the U.S. Department of Commerce. South Texas University, *Annual Grant Report*, January 2011, http://admin.southtexascollege.edu/accountability/plans/pdf/Annual%20Grant%20Report%20January%202011%20-%20FINAL%20Draft%20-%2002-02-2011.pdf (last visited August 23, 2012).

[90] Literacy Coalition of Central Texas, *Learner Web*, http://www.willread.org/Learner-Web.html (last visited August 23, 2012).

[91] Portland State University, Learner Web, *The Learner Web Partnership: A Multi-State Support System for Broadband Adoption by Digitally Marginalized Adults*, http://www.learnerweb.org/btop/index.html (last visited August 23, 2012).

[92] Meg Poag, Executive Director, Central Texas Literacy Coalition, May 2, 2012, Interagency Literacy Council Meeting.

[93] United States Department of Education, Office of Vocational and Adult Education, *Noteworthy Practice*, http://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/tdlearn.html#2 (last visited August 23, 2012).

[94] Texas Workforce Commission, *Labor Market & Career Information*, http://www.lmci.state.tx.us/ (last visited August 23, 2012).

[95] Joanie Rethlake, TEA Representative, May 2, 2012, Interagency Literacy Council Meeting.

[96] GED Testing Service, *Prepare for your GED Test*, http://www.gedtestingservice.com/testers/prepare.

[97] American Council on Education and GED Testing Service, *2010 GED Testing Program Statistical Report*, 2011, pp. 7, 14. http://www.gedtestingservice.com/uploads/files/4176ab251366d3ccfb4e94a9a888e67a.pdf (download).

[98] Geronimo Rodriguez, Business Community Representative, May 2, 2012, Texas Interagency Literacy Council Meeting.

[99] Katrina Kersch, Business Community Representative, May 2, 2012, Interagency Literacy Council Meeting.

[100] GED Testing Service, *Frequently Asked Questions About the GED 21st Century Initiative*, http://gedcbt.org/gedts/21stcenturyfaq.html (last visited August 23, 2012).

[101] Texas Education Agency, Window on State Government, *Request for Information RFI 701-12-011 for Development of a Texas High School Equivalency Examination*, http://esbd.cpa.state.tx.us/bid_show.cfm?bidid=100060 (last visited August 23, 2012).

[102] Council Members and Jon Engel, Adult Education Director, Community Action, Inc., of Central Texas, December 14, 2011, Texas Interagency Literacy Council Meeting.

[103] American Council on Education and GED Testing Service, *2010 GED Testing Program Statistical Report*, (2011), p. 23. http://www.iccb.state.il.us/pdf/ged/GEDTS%20Report%202010.pdf (last visited September 2, 2012).

[104] American Council on Education and GED Testing Service, *2010 GED Testing Program Statistical Report*, (2011), p. 29. http://www.iccb.state.il.us/pdf/ged/GEDTS%20Report%202010.pdf (last visited September 2, 2012).

[105] Marcie Foster with Lennox McLendon, CLASP and National Council of State Directors of Adult Education, *Sinking or Swimming: Findings from a Survey of State Adult Education Tuition and Financing Policies*, (June 2012), p. 16, http://www.clasp.org/admin/site/publications/files/Sinking-or-Swimming-State-Adult-Education-Tuition-and-Financing-Policies.pdf.

[106] Marcie Foster with Lennox McLendon, CLASP and National Council of State Directors of Adult Education, *Sinking or Swimming: Findings from a Survey of State Adult Education Tuition and Financing Policies*, (June 2012), p. 15, http://www.clasp.org/admin/site/publications/files/Sinking-or-Swimming-State-Adult-Education-Tuition-and-Financing-Policies.pdf (last visited August 23, 2012).
[107] National Governor's Association Webinar, June 2012, http://www.nga.org/cms/home/nga-center-for-best-practices/meeting--webcast-materials.html (last visited August 23, 2012).
[108] The Jackie Wuska Hurt GED Scholarship (Birmingham, Alabama), http://www.literacy-council.org/GEDscholarship.html (last visited August 23, 2012).
[109] Portland Literacy Council, GED Test Scholarship Fund, http://www.portlandliteracy.org/ged.html (last visited August 23, 2012).
[110] Phone interview with Jon Engel, Adult Education Director, Community Action, Inc. of Central Texas, April 13, 2012.
[111] Lester Meriwether, Nonprofit Representative, March 9, 2011, Texas Interagency Literacy Council Meeting.
[112] Texas Education Agency, Number Type of GED Test Centers, September 7, 2012, e-mail.
[113] GED Testing Service, *Frequently Asked Questions About the GED 21st Century Initiative*, http://gedcbt.org/gedts/21stcenturyfaq.html (last visited August 23, 2012).
[114] GED Chief Examiner, Education Service Center, Region 6, e-mail response to listserv request for information on GED centers.
[115] American Council on Education, GED Testing Service, *Frequently Asked Questions*, http://www.gedtestingservice.com/testers/faqs-test-taker (last visited August 23, 2012).
[116] Jenny Jacob, Texas Education Agency Representative, December 14, 2011, Texas Interagency Literacy Council Meeting.
[117] National External Development Program, http://www2.casas.org/home/?fuseaction=nedp.welcome (last visited August 23, 2012).
[118] Ellen Arnold, Arnold Public Affairs, (representing Goodwill Industries of Central Texas), August 22, 2012, e-mail following August 7, 2012, public hearing.
[119] United States Department of Education, Office of Vocational and Adult Education, *Investing in America's Future: A Blueprint for Transforming Career and Technical Education*, (Washington, D.C., April 2012) http://www2.ed.gov/about/offices/list/ovae/pi/cte/transforming-career-technical-education.pdf (last visited August 24, 2012).
[120] National Center for Construction Education and Research, ANNEX A, June 4, 2012.
[121] National Center for Construction Education and Research, Academic Career Tests, http://www.nccer.org/academic?mID=540 (last visited August 24, 2012).
[122] Ed Prevatt, Director of Workforce Development for NCCER, as reported in May 8, 2012, e-mail from David Lindsey.
[123] National Automotive Skills Standard Assessment, http://www.natef.org/career/pdfs/Medim_Res_NA3SA_brochure.pdf (last visited August 24, 2012).
[124] National Automotive Student Skills Assessment, *Frequently Asked Questions*, http://na3sa.com/pdfs/faq_na3sa.pdf (last visited August 24, 2012).
[125] David Lindsay, Ambassador for Texas—National Center for Construction Education and Research Statement Submitted following August 7, 2012, public meeting.
[126] Texas LEARNS, Texas Industry Specific English as a Second Language Curricula (TISESL) 79th legislative session of 2005. Education Rider 82 states: *Out of federal funds appropriated in Strategy A 2.5, Adult Education and Family Literacy, the Commissioner (Texas Education Agency) shall allocate an amount not to exceed $850,000 in fiscal year 2006 for the development of a demand driven workplace literacy and basic skills curriculum. The Texas Workforce Commission shall provide resources, industry-specific information, and expertise identified as necessary by the Texas Education Agency to support the development and implementation of the curriculum.*
[127] Texas Education Agency, Texas Industry Specific English Second Language Curriculum (TISESL), http://www.tea.state.tx.us/index2.aspx?id=7234.
[128] Texas Education Agency, Texas Industry Specific English Second Language Curriculum (TISESL), http://www-tcall.tamu.edu/texaslearns/st/pdf/st31.pdf (last visited August 24, 2012).
[129] United States Department of Labor, Coffey Consulting LLC and Excelencia in Education, *The Limited English Proficiency and Hispanic Worker Initiative Evaluation Report*, (Bethesda, MD, December 2009), http://wdr.doleta.gov/research/FullText_Documents/Evaluation%20of%20the%20Limited%20English%20Proficiency%20and%20Hispanic%20Worker%20Initiative%20Final%20Report.pdf (last visited August 24, 2012).

[130] United States Department of Labor, Employment and Training Administration, United States-Mexico Cultural and Educational Foundation and Harrison Maldonado Associates, Inc., *English Proficiency: What Employers Need for their Spanish-Speaking Workforces*, p. 2, *http://www.doleta.gov/reports/pdf/English_Proficiency_Report.pdf* (last visited August 24, 2012).
[131] United States Department of Labor, Employment and Training Administration, United States-Mexico Cultural and Educational Foundation and Harrison Maldonado Associates, Inc., *English Proficiency: What Employers Need for their Spanish-Speaking Workforces*, pp. 32-33, *http://www.doleta.gov/reports/pdf/English_Proficiency_Report.pdf* (last visited August 29, 2012).
[132] David Russell, Business Representative, December 8, 2010, Interagency Literacy Council Meeting
[133] Steve Dowling, Press Contact, Apple Press Info, (January 24, 2012), http://www.apple.com/pr/library/2012/01/24Apple-Reports-First-Quarter-Results.html (last visited August 29, 2012).
[134] Aaron Smith, Senior Research Specialist, Pew Research Center's Internet and American Life Project, *Nearly half of American Adults are Smartphone Owners*, (March 1, 2012), http://pewinternet.org/Reports/2012/Smartphone-Update-2012.aspx (last visited September 26, 2012).
[135] Connected Texas, *Texas Goes Mobile: Mobile Broadband Adoption and Satisfaction across Texas*, (March 20, 2012), http://www.connectedtx.org/sites/default/files/connected-nation/Texas/files/tx_mobile_usage.pdf (last visited September 27, 2012).
[136] Lee Rainie, Pew Research Center's Internet and American Life Project, *Tablet and E-book reader Ownership Nearly Double Over the Holiday Gift-Giving Period*, (January 23, 2012), http://libraries.pewinternet.org/2012/01/23/tablet-and-e-book-reader-ownership-nearly-double-over-the-holiday-gift-giving-period/ (last visited August 29, 2012).
[137] McAllen Independent School District, *Cutting-Edge Move Makes McAllen ISD a Leader in Instructional Technology*, (October 2011), http://mcallenisd.schoolfusion.us/modules/cms/pages.phtml?sessionid=8ff3ab788ff812db9ebb2f7a89b8ec80&pageid=251381 (last visited August 29, 2012).
[138] McAllen Independent School District, *Cutting-Edge Move Makes McAllen ISD a Leader in Instructional Technology*, (October 2011), http://mcallenisd.schoolfusion.us/modules/cms/pages.phtml?sessionid=8ff3ab788ff812db9ebb2f7a89b8ec80&pageid=251381 (last visited August 29, 2012).
[139] Eric Lai, *Forbes, Top 50 iPad Rollouts by Enterprises & Schools (Updated April 25, 2012)*, (March 2, 2012), http://www.forbes.com/sites/sap/2012/03/02/top-50-ipad-rollouts-by-enterprises-schools/ (last visited August 29, 2012).
[140] Jillian Reddish, A&M University-San Antonio, *Texas A&M University-San Antonio Launches Post-9/11 GI Bill Incentive Program*, (Press Release, July 3, 2012).
[141] Connected Texas, *Who We Are*, http://www.connectedtx.org/about (last visited September 24, 2012).
[142] Connected Texas, *Making the Connection through Digital Literacy*, (August 2012), http://www.connectedtx.org/sites/default/files/connected-nation/Texas/files/tx_digital_literacy_final.pdf (last visited August 29, 2012).
[143] ibid.
[144] ibid.
[145] Don Shirley, Executive Director, Connected Texas, (Interview with TWC Staff, July 27, 2012).
[146] Stacey Weaver, Director, Victoria College Adult Program, December 8, 2010, Texas Interagency Literacy Council Meeting.
[147] ibid.
[148]Associated Press, *Virtual Schools Booming as States Mull Warnings*, December 16, 2011. http://www.edweek.org/dd/articles/2011/12/16/479823usonlineschools_ap.html?tkn=VZLFj7Ml9ZuMoqyu7hdNdvfr8s7Gn2bGiXNA&cmp=ENL-DD-NEWS1 (last visited August 24, 2012).
[149] Ann Marie Molinari, Distance Learning Manager, Texas LEARNS, December 8, 2010, Texas Interagency Literacy Council Meeting.
[150] Stacey Weaver, Director, Victoria College Adult Program, December 8, 2010, Texas Interagency Literacy Council Meeting.
[151] ibid.
[152] *Half a million people can learn English for free with the continuation of the program MATT Maestro en casa*, http://www.matt.org/english/media/press_releases_1/77_half_a_million_people_can_learn_english_for_free_with_t

he_continuation_of_the_program_matt_maestro_en_casa__.html, *Denver Public Schools launches radio program to teach English to Spanish Speakers*, http://blogs.westword.com/latestword/2010/08/tom_boasberg_speaking_at_kepne.php (last visited January 12, 2012).

[153] Jenna Akridge, Rural Capital Area Workforce Development Board, September 15, 2010, Interagency Literacy Council.

[154] Texas Workforce Investment Council, *A Primer on Adult Education in Texas*, (Austin, Texas, January 2010), pp. 14–15, http://governor.state.tx.us/files/twic/A_Primer_on_Adult_Education_in_Texas.pdf (last visited August 29, 2012).

[155] David Russell, Business Community Representative, March 19, 2011, Texas Interagency Literacy Council Meeting.

[156] State Librarian Peggy Rudd, December 8, 2010, Interagency Literacy Council.

[157] Adam Wright, North Texas Regional Library System, Inc., *Libraries for Literacy Program*, (February 2008), http://www.ntrls.org/libraries_for_literacy/LiteracyConceptualPaper.pdf (last visited August 29, 2012).

[158] Geronimo Rodriguez, Business Community Representative, May 2, 2012, Texas Interagency Literacy Council Meeting.

[159] Joanie Rethlake, TEA Representative, May 2, 2012, Texas Interagency Literacy Council Meeting.

[160] David Joost, Director of Adult Education Programs, Houston Community College, December 8, 2010, Texas Interagency Literacy Council Meeting.

[161] Marcie Foster with Lennox McLendon, CLASP and National Council of State Directors of Adult Education, *Sinking or Swimming: Findings from a Survey of State Adult Education Tuition and Financing Policies*, (June 2012), p. 13, http://www.clasp.org/admin/site/publications/files/Sinking-or-Swimming-State-Adult-Education-Tuition-and-Financing-Policies.pdf (last visited August 29, 2012).

[162] Texas Education Agency, 12_09 Adopted New 19 TAC §89.1301, II, http://www.tea.state.tx.us/index4.aspx?id=2147508757.

[163] ibid.

Texas Workforce Commission
101 East 15th Street
Austin, Texas 78778-0001
(512) 463-2222

http://www.texasworkforce.org

Equal Opportunity Employer/Program

Auxiliary aids and services are available upon request to individuals with disabilities.

Relay Texas: 800-735-2989 (TTY) and 711 (Voice).

Copies of this publication (10/2012) have been distributed in compliance with the State Depository Law, and are available for public use through the Texas State Publication Depository Program at the Texas State Library and other state depository libraries.

ALAMO • BRAZOS VALLEY • CAMERON COUNTY • CAPITAL AREA • CENTRAL TEXAS • COASTAL BEND • CONCHO VALLEY • GREATER DALLAS • DEEP EAST TEXAS • EAST TEXAS • GOLDEN CRESCENT • GULF COAST • HEART OF TEXAS • LOWER RIO GRANDE VALLEY • MIDDLE RIO GRANDE • NORTH CENTRAL • NORTHEAST TEXAS • NORTH TEXAS • PANHANDLE • PERMIAN BASIN • RURAL CAPITAL AREA • SOUTHEAST TEXAS • SOUTH PLAINS • SOUTH TEXAS • TARRANT COUNTY • TEXOMA • UPPER RIO GRANDE • WEST CENTRAL

TEXAS WORKFORCE COMMISSION

06635-002 (1012)