



Health Care

Health care is directly connected with economic development and growth. High-quality health care options attract potential employers, create a healthy work force and increase productivity. Occupations in the health care field contribute to the economic health of a region through generally high-paying jobs for doctors, nurses, technicians and administrators.

Health care professionals have developed innovative solutions to meet the needs of the region's large rural population. The size and largely rural character of the High Plains region

means that many area residents live at a considerable distance from health care facilities, while the region also faces a general shortage of health care providers. The region, like the rest of the state, also has high rates of uninsured residents. According to the Texas State Office of Rural Health's March 2007 *Rural Health Work Plan*:

Rural areas have higher percentages of the elderly than urban areas. [A] higher number of uninsured also is apparent in these areas. The combination of these factors, plus the limited number of providers in many areas, can strain some already overburdened health care systems.¹

Innovation will be the key to meeting the health care needs of the people of this region.

The High Plains region is home to 36 acute care and psychiatric hospitals.



Surgical instrumentation class at South Plains College in Levelland, Texas

PHOTO: South Plains College

Hospitals

The High Plains region is home to 36 acute care and psychiatric hospitals, including 20 public, 10 for-profit and six non-profit institutions (**Exhibit 37**). Of the 36 hospitals, six are in Lubbock and six are in Amarillo; the remaining 24 are located in rural areas.

The largest hospital in the region is Lubbock’s Covenant Medical Center, which has more than 850 staffed beds and more than 30,000 admissions in 2005. Also in Lubbock, the University Medical Center admitted more than 20,000 patients in 2005. Amarillo’s Baptist St. Anthony’s and Northwest Texas Hospital had nearly 20,000 admissions in the same year.²

Fifteen High Plains counties have neither an acute care nor a psychiatric hospital (**Exhibit 38**).³

In 2005 (most recent data available), the region’s hospitals had 3,207 staffed beds and 124,385 admissions.⁴

The High Plains region also has 33 hospital districts (**Exhibit 39**).

Health Insurance

All Texans bear the cost of health care for the uninsured. Uninsured Texans include moderate- and low-income wage earners, younger Texans and children in low-income families.⁵

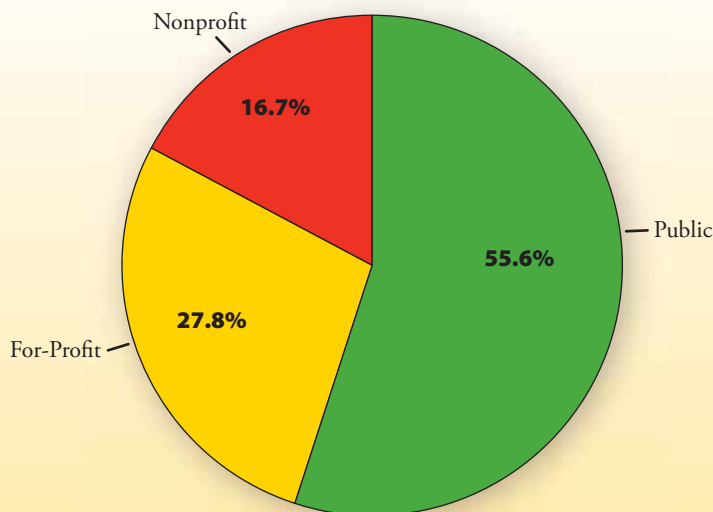
Texas leads the nation in its share of the total population without health insurance. More than 5.7 million Texans, or 24.5 percent of the state’s population, were uninsured in 2006. This figure included nearly 1.4 million children, or about 21.2 percent of all Texans under the age of 18.⁶

Determining the rate of uninsured in counties and economic regions is difficult. Estimates are limited by the information collected and provided by the U.S. Census Bureau. The Census Bureau did, however, provide county-level estimates for 2000. These indicated that the High Plains had slightly higher rates of uninsured than the state as a whole. Nearly one in five High Plains residents (19.8 percent) were uninsured, compared to 19 percent of all Texans. Similarly, 20.7 percent of those under the age of 18 in the region were uninsured, compared to 19.9 percent of all young Texans.⁷ From 2000 to 2006, the share of uninsured Texas residents increased by 9.4 percent.⁸

In 2005, the Texas Comptroller’s office and the U.S. Census Bureau reported estimates of the uninsured in various Texas metropolitan areas including Lubbock. At that time, 22.1 percent of the residents of the Lubbock metro

Exhibit 37

High Plains Acute and Psychiatric Hospital Ownership, 2005



Note: Numbers may not total due to rounding.
Source: Texas Department of State Health Services.



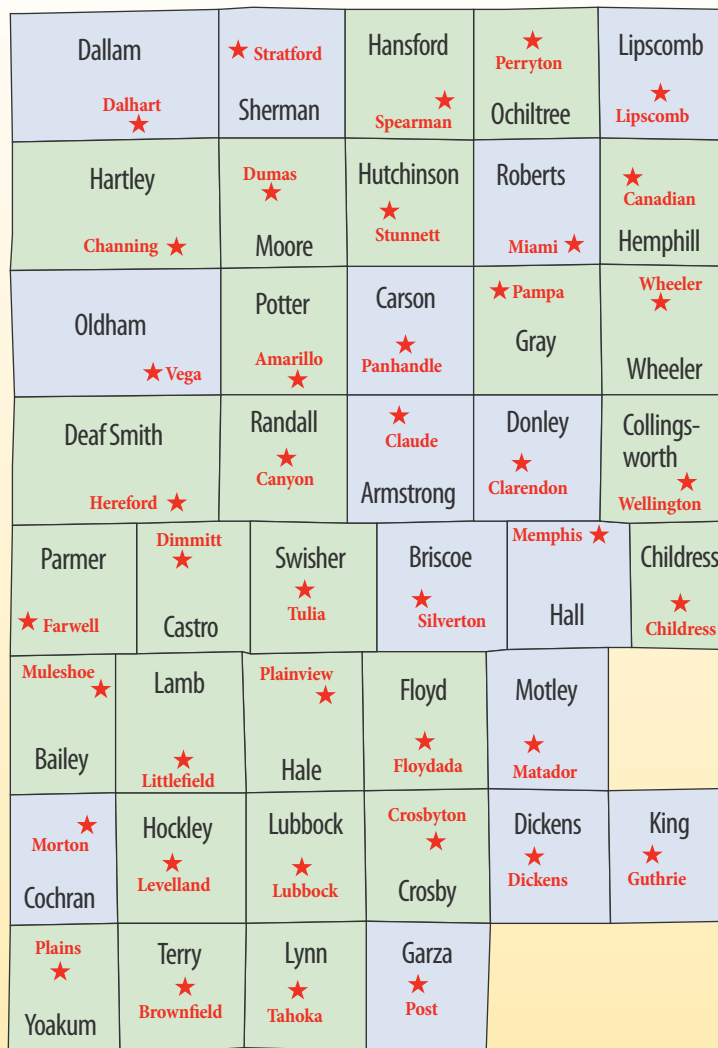
area were uninsured at some time between 2001 and 2003. The Texas-wide uninsured rate was 24.7 percent over the same period.⁹

Nationally, the uninsured cite cost as the most common reason for lacking coverage.¹⁰

According to the Kaiser Family Foundation, health premium costs for family coverage rose by an average of 6.1 percent from 2006 to 2007, with the average family premium reaching \$12,106 annually. Workers were

Exhibit 38

High Plains Counties Without an Acute Care or Psychiatric Hospital



★ = County Seat

□ = Counties with No Hospitals

Source: Texas Department of State Health Services.



Exhibit 39

High Plains Region Hospital Districts

District Name
Amarillo Hospital District
Booker Hospital District
Caprock Hospital District
Castro County Hospital Districts
Childress County Hospital District
Cochran Memorial Hospital District
Collingsworth County General Hospital District
Dallam-Hartley County Hospital District
Darrouzett Hospital District
Deaf Smith Hospital District
Donley County Hospital District
Farwell Hospital District
Follett Hospital District
Garza Hospital District
Hall County Hospital District
Hansford County Hospital District
Hemphill County Hospital District
Higgins-Lipscomb Hospital District
Hutchinson County Hospital District
Lockney General Hospital District
Lubbock County Hospital District
Lynn County Hospital District
Moore County Hospital District
Motley County Hospital District
Muleshoe Area Hospital District
North Wheeler County Hospital District
Ochiltree Hospital District
Parmer County Hospital District
South Wheeler County Hospital District
Stratford Hospital District
Swisher Memorial Hospital District
Terry County Memorial Hospital District
Texhoma Hospital District

Source: Texas Legislative Council.

expected to contribute \$3,281 or 27.1 percent toward that coverage. Since 2001, health insurance premiums have outpaced other economic measures by increasing 78 percent, while inflation rose by just 17 percent and worker’s earnings by 19 percent.¹¹

The Comptroller’s 2005 report found that 59 percent of the uninsured population had incomes below 200 percent of the federal poverty line.¹² Poverty rates for the High Plains region were similar to that for Texas as a whole. In 2005, 17.6 percent of the region’s residents lived in poverty, compared to 17.5 percent of all Texans; 24.3 percent of the region’s residents under the age of 18 lived in poverty, compared to 24.7 percent of the state’s children (**Exhibit 40**).

Access

As noted above, the largely rural character of the High Plains region and its dispersed population mean that many area residents live great distances from health care facilities. Access to health care also is hampered by shortages of various health care providers. To overcome these obstacles, the region uses telemedicine and telepharmacy to shorten distances and offer preventative care.

Telemedicine

Telemedicine — the provision of medical consultations and other services through telecommunications equipment — can be used to bridge distances and increase access to health care for persons living in Medically Underserved Areas (MUAs) and other underserved areas.

MUAs are those having a shortage of personal health services based on a formula that

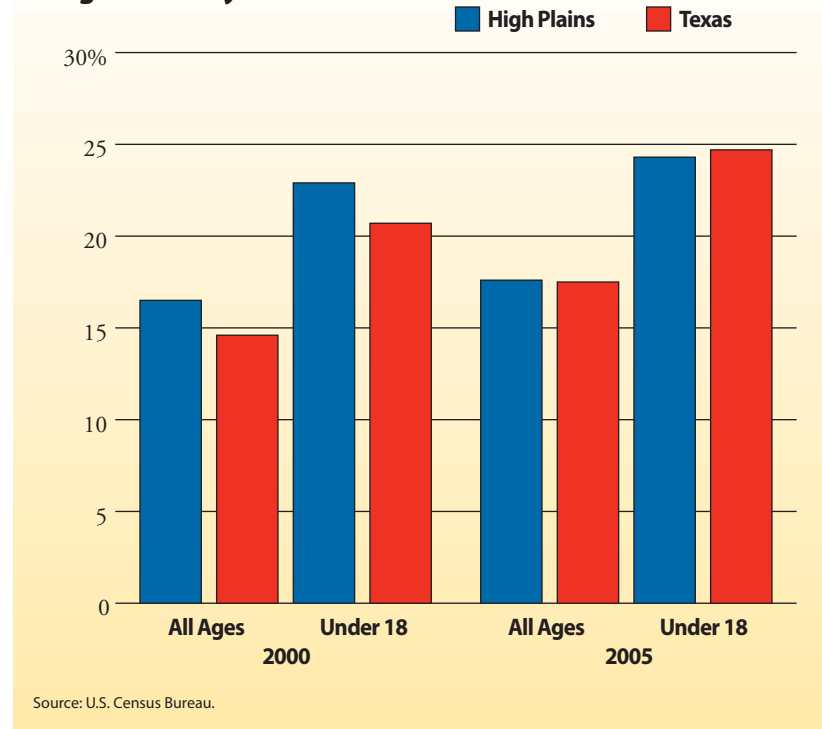


considers population, poverty rate, health-care indicators and the number of primary-care physicians per 1,000 residents. In the High Plains, 27 of the region's 41 counties meet the requirements for federal designation as MUAs; 23 counties qualify as Health Professional Shortage Areas (HPSAs).¹³ The U.S. Department of Health and Human Services defines HPSAs as geographic areas with a ratio of at least 3,500 residents per physician and offering limited access to primary health care resources in surrounding areas. In 2004, 10 High Plains counties had no doctor at all.¹⁴

Telemedicine reduces travel costs for patients and doctors and removes a barrier for patients who have trouble traveling, such as persons with disabilities and the elderly. Telemedicine has been particularly useful in improving access to specialty care, since rural areas mainly face shortages of medical

Exhibit 40

Percent of High Plains and Texas Populations Living in Poverty



Telemedicine and Medical Care for the Children of Hart ISD

Hart has a population of about 1,200. Hart Independent School District serves about 440 students. The lone medical professional in town is the school nurse. To obtain medical care for the children of Hart, TTUHSC and Hart ISD have partnered to offer weekly on-site visits by medical professionals at the school clinic, as well as a weekly pediatric telemedicine clinic. In January 2007, TTUHSC began providing dietician services through telemedicine, offering obesity counseling to 14 Hart ISD students.¹⁵

specialists. Telemedicine also has made it easier for patients to receive follow-up care for burn injuries and chronic diseases.¹⁶

The Texas Tech University Health Sciences Center (TTUHSC) provides medical services to rural areas in the High Plains region using 'TeleDoc,' a portable integrated unit that provides live interactive video consultations with doctors for patients at remote sites. Recent versions of 'TeleDoc' use desktop computer technology to provide face-to-face links between patients and doctors.¹⁷

TTUHSC telemedicine serves about 300 patients a month in rural west Texas and at west Texas prison sites. Patients can access telemedicine at rural clinics, small rural hospitals, school clinics and at a geriatric center.

Telemedicine has made it easier for patients to receive follow-up care for burn injuries and chronic diseases.



Telepharmacy

Telepharmacy allows pharmacists to dispense prescriptions and provide patient consultations to underserved or remote areas. In the High Plains, one program does this through video links.

Lubbock's Texas Tech School of Pharmacy operates a telepharmacy project in tiny Turkey, Texas (population 494), 75 miles away. The program operates similarly to Texas Tech's telemedicine program, with university pharmacists counseling patients and supervising the dispensing of prescriptions through video links. The project saves its patients, many of whom are elderly, travel time to the nearest retail pharmacy, some 35 miles away. In January 2008, the project expanded to include Earth, Texas (population 1,109).¹⁸

Preventative Health Care

While traditional medical care focuses on identifying and treating health problems, preventative care focuses on *preventing* health problems from occurring. Preventative care can identify existing health problems early enough to treat them effectively. It can also include smoking cessation and wellness programs.

The TTUHSC School of Nursing operates a smoking cessation informational kiosk at the Larry Combest Community Health and Wellness Center in Lubbock. The kiosk provides an interactive tutorial on smoking cessation in both English and Spanish.¹⁹

Using a National Institute of Health grant, the nursing school instituted a program to combat childhood obesity at Harwell Elementary in Lubbock. The program edu-

Senior House Calls

The TTUHSC School of Nursing operates a nurse practitioner clinic in Lubbock. The clinic serves the entire community and provides a safety net for residents of limited means or without insurance. It provides primary care, a diabetes education center and "Senior House Calls."

The "Senior House Calls" program provides primary health care services at home to senior citizens. These services include the treatment and management of acute and chronic illnesses including: hypertension, heart failure, diabetes, dementia, Alzheimer's and depression. The "Senior House Calls" team establishes and coordinates care between families, community services, home health and hospice services.²⁰

cates students and parents on the benefits of healthy eating. It provides school exercises as well as food tastings to help students broaden their view of healthy food.²¹

"Healthy Lubbock," a communitywide initiative of TTUHSC's Garrison Institute on Aging (GIA), sponsored a "Get Fit Lubbock" program in September 2007. "Healthy Lubbock" is intended to help families become healthy by eating nutritious food and exercising together.

"Get Fit Lubbock" is a 12-week competitive team program designed to help promote fitness and weight-loss. Its mission is to promote healthy lifestyles in the community and improve participants' health and fitness. The program includes exercise and weight-loss

Preventative care can identify existing health problems early enough to treat them effectively.



Meals and Smiles Delivered to Seniors

A state agency, a city department and national and local charities are working together to bring hot meals and a smile to homebound senior citizens in the Amarillo area. The United Way, the Panhandle Area Agency of Aging, the city of Amarillo and the Lee Bivins Foundation of Amarillo worked together to create FoodNet, a service that delivers meals to lower-income senior citizens. Begun in October 2005, FoodNet provides hot, nutritious meals for people who are unable to leave their homes or prepare food by themselves. On many days, these deliverers are the only visitors the homebound seniors may see. The program serves more than 100 people in Potter and Randall counties and continues to expand. The meals are delivered at no cost to seniors.²²

activities, including support from local health and fitness professionals.

More than 1,200 people throughout Lubbock have participated in “Get Fit Lubbock,” chalking up a total weight loss of about 5,700 pounds and a total of 43,000 hours of activity.

GIA is working to expand the program by September 2008 to include more of the community by preparing bilingual materials for its events. GIA also is developing a system to provide local restaurants with “Get Fit” designations, to help residents make healthy food choices while dining out.

GIA also sponsors an annual “Healthy Lubbock” day at a local park with activities and health information for the entire family including blood pressure, diabetes and cholesterol screenings.²³

Nursing Shortage

According to the Texas Center for Nursing Workforce Studies, Texas will have an estimated nursing shortage of almost 22,000 in 2008, increasing to about 71,000 by 2020.²⁴ The center also has cited a lack of nursing

faculty as one cause of the shortage of nurses in the state.²⁵

In an effort to increase the number of nurses and nursing educators, the TTUHSC School of Nursing is beginning a Doctorate of Nursing Practice program in 2008. The program will build a career path for nurses to achieve leadership positions in health care administration, clinical practice and research, and expand the base of professionals available to teach nursing.²⁶

Brain Bank

In 2007, the TTUHSC’s Garrison Institute on Aging established a unique health research project, the “Brain Bank Program,” to provide tissue samples for current and future research into dementia and related studies.

The Brain Bank provides free brain autopsies to confirm clinical diagnoses of dementia, and collects, banks and provides brain tissue to qualified scientific researchers studying dementia-related disease. GIA Brain Bank researchers hope to understand the origins of neurodegenerative disease and improve the treatment and care of dementia.²⁷



Restoration of Crosby for Landmark

Stop by the visitor's center at the Prairie Ladies Multi-Cultural Center in Crosbyton and enjoy a malt or milkshake while planning your tour of the town. Opened in 2006, the Cultural Center has a lunch counter and soda fountain, a visitor's center, a bus terminal, conference rooms, offices and a stage for performances. The center's building was constructed in 1908; as the Crosbyton Inn, it was the area's first hotel. Over the next 50 years, it housed a drugstore, doctors' offices and apartments. In the 1990s, the city of Crosbyton and the Prairie Ladies Club launched a fund-raising campaign to renovate the building and bring more jobs and businesses to the downtown area. Working with the Rio Blanco Heritage Foundation, and with money from the Texas Department of Transportation Enhancement Grant program, the city dedicated the new center in 2006.²⁸ The restoration was aided by more than \$450,000 in grants.²⁹

Endnotes

- ¹ Office of Rural Community Affairs, Texas State Office of Rural Health, *Rural Health Work Plan* (Austin, Texas, March 2007), p. 21, http://www.orca.state.tx.us/pdfs/07_rhsorh_workdoc.pdf. (Last visited January 15, 2008.)
- ² Data provided by Texas Department of State Health Services.
- ³ Data provided by Texas Department of State Health Services.
- ⁴ Data provided by Texas Department of State Health Services.
- ⁵ Texas Comptroller of Public Accounts, *The Uninsured: A Hidden Burden on Texas Employers and Communities* (Austin, Texas, April 2005), p. 3, <http://www.window.state.tx.us/specialrpt/uninsured05/>. (Last visited April 2, 2008.)
- ⁶ U.S. Census Bureau, "2007 Annual Social and Economic Supplement, Table HI05: Health Insurance Coverage Status and Type of Coverage by State and Age for All People, 2006," http://pubdb3.census.gov/macro/032007/health/h05_000.htm. (Last visited April 2, 2008.)
- ⁷ U.S. Census Bureau, "Model-based Small Area Health Insurance Estimates for Counties and States," <http://www.census.gov/hehs/www/sahie/county.html>. (Last visited April 2, 2008.) Custom query created.
- ⁸ U.S. Census Bureau, "Table HIA-4: Health Insurance Coverage Status and Type of Coverage by State, All People, 1999 to 2006," <http://www.census.gov/hhes/www/hlthins/historic/hihist4.html>. (Last visited April 2, 2008.)
- ⁹ Texas Comptroller of Public Accounts, *The Uninsured: A Hidden Burden on Texas Employers and Communities*, p. 8.
- ¹⁰ Kaiser Family Foundation, *Kaiser Public Opinion Spotlight: The Public on Health Care Costs* (Menlo Park, California, December 2005), p. 2, http://www.kff.org/spotlight/healthcosts/upload/Spotlight_Dec05_healthcosts.pdf. (Last visited April 2, 2008.)
- ¹¹ Kaiser Family Foundation, *Employer Health Benefits 2007: Annual Survey* (Menlo Park, California, September 2007), pp. 1 and 68, <http://www.kff.org/insurance/7672/upload/76723.pdf>. (last visited April 2, 2008); and Gary Claxton, Jon Gabel, Bianca DiJulio, Jeremy Pickreigh, Heidi Whitmore, Benjamin Finder, Paul Jacobs and Samantha Hawkins, "Health Benefits In 2007: Premium Increases Fall To An Eight-Year Low, While Offer Rates and Enrollment Remain Stable," *Health Affairs*, September/October 2007, pp. 1407-1416.
- ¹² Texas Comptroller of Public Accounts, *The Uninsured: A Hidden Burden on Texas Employers and Communities*, p. 3.
- ¹³ Office of Rural Community Affairs, Texas State Office of Rural Health, "Medically Underserved Areas," <http://www.orca.state.tx.us/pdfs/MUAs.pdf>; and Office of Rural Community Affairs, Texas State Office of Rural Health, "Health Professional Shortage Areas," <http://www.orca.state.tx.us/pdfs/HPSAs.pdf>. (Last visited April 2, 2008.)
- ¹⁴ Texas Tech University Health Sciences Center, "Number of Doctors by County in Texas, 2004," <http://www.gis.ttu.edu/arch/PDFs/CountiesNoOrFewDoctors.pdf>. (Last visited April 2, 2008.)
- ¹⁵ Interview with Deborah Voyles, director of Telemedicine, Texas Tech University Health Sciences Center, December 4, 2007; and Texas Tech University Health Sciences Center, "Other Texas Tech Projects," <http://www.ttuhsu.edu/telemedicine/projects.aspx>. (Last visited April 9, 2008.)



- ¹⁶ Texas Tech University Health Sciences Center, “Center for Telemedicine,” <http://www.ttuhsc.edu/telemedicine/>. (Last visited April 9, 2008.)
- ¹⁷ Texas Tech University, “The Medical Miracle of Telemedicine,” by Sally Logue Post, <http://www.depts.ttu.edu/communications/vistas/archive/02-summer/stories/miracle-of-telemedicine.php>. (Last visited April 2, 2008.)
- ¹⁸ Interview with Deborah Voyles; and Texas Tech University Health Sciences Center, “Other Texas Tech Projects.”
- ¹⁹ Interview with Christy Meriwether, director of Marketing, School of Nursing, Texas Tech University Health Sciences Center, December 7, 2007; and Texas Tech University Health Sciences Center, “Patients & Healthcare,” <http://www.ttuhsc.edu/son/patient/primary.aspx>. (Last visited April 8, 2008.)
- ²⁰ Interview with Christy Meriwether; and Texas Tech University Health Sciences Center, “Patients & Healthcare, Senior House Calls—Primary Care for Seniors,” <http://www.ttuhsc.edu/son/patient/shc.aspx>. (Last visited April 8, 2008.)
- ²¹ Interview with Christy Meriwether.
- ²² City of Amarillo Office of Community Development, *2007-2008 Annual Action Plan of the Consolidated Plan for Housing and Community Development* (Amarillo, Texas, December 2006), p. 23; and Mary E. Bivins Foundation, “FoodNet,” <http://www.bivinsfoundations.org/services/foodnet.php>. (Last visited April 10, 2008.)
- ²³ Interview with Christy Meriwether; and Texas Tech University Health Sciences Center, “Community Teams Up to Get Fit,” <http://www.ttuhsc.edu/newsevents/search/Default.aspx?id=2365-4>; and Texas Tech University Health Sciences Center, “Texas Tech University Health Sciences Center Get Fit Program Receives State Honor,” <http://www.ttuhsc.edu/newsevents/search/Default.aspx?id=2798-4>. (Last visited April 9, 2008.)
- ²⁴ Texas Center for Nursing Workforce Studies, Texas Department of State Health Services, Center for Health Statistics and the Statewide Health Coordinating Council, Texas Center for Nursing Workforce Studies Advisory Committee, *The Supply of and Demand for Registered Nurses and Nurse Graduates in Texas, Report to the Texas Legislature* (Austin, Texas, November 1, 2006), p. 8, <http://www.dshs.state.tx.us/chs/cnws/SB132rep.pdf>. (Last visited April 9, 2008.)
- ²⁵ Texas Center for Nursing Workforce Studies, Texas Department of State Health Services Center for Health Statistics and the Statewide Health Coordinating Council, Texas Center for Nursing Workforce Studies Advisory Committee, *Professional Nursing Education in Texas, Demographics and Trends: 2006* (Austin, Texas, October 2007), p. 39, <http://www.dshs.state.tx.us/chs/cnws/2006ProfNrgEdRpt.pdf>. (Last visited April 9, 2008.)
- ²⁶ Interview with Christy Meriwether; and Texas Tech University Health Sciences Center, “Doctorate of Nursing Practice,” <http://www.ttuhsc.edu/son/doctorate/>. (Last visited April 9, 2008.)
- ²⁷ Interview with Christy Meriwether; and Texas Tech University Health Sciences Center, “GIA Brain Bank Program,” <http://www.ttuhsc.edu/centers/aging/giabrainbank.aspx>. (Last visited April 9, 2008.)
- ²⁸ Preserve America, “Preserve America Community: Crosbyton, Texas,” <http://www.preserveamerica.gov/09-09-07PAcommunity-crosbytonTX.html>. (Last visited April 1, 2008.)
- ²⁹ Texas Escapes, “Crosbyton’s Prairie Ladies Inn,” <http://www.texasescapes.com/Preservation/Crosbyton-Texas-Prairie-Ladies-Inn.htm>. (Last visited April 1, 2008.)