
RHP 17 REGIONAL HEALTH ASSESSMENT 2013

SUPPLEMENTAL REPORT: BRAZOS VALLEY REGION

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BRAZOS VALLEY SURVEY DEVELOPMENT COMMITTEE ORGANIZATIONS:

Brazos County Health Department
Brazos Valley Area Agency on Aging
Brazos Valley Affordable Housing Corporation
Brazos Valley Community Action Agency
Brazos Valley Council of Governments
Brazos Valley Council on Alcohol and Substance Abuse
Brazos Valley Food Bank
Brazos Valley Health Partnership
Burleson County Health Resource Commission
Center on Disability and Development at Texas A&M University
City of Bryan
City of College Station
College Station Medical Center
Grimes County Health Resource Commission
Health For All
Hospice Brazos Valley
Leon County Health Resource Commission
Madison County Health Resource Commission
MHMR Authority of Brazos Valley
The Prenatal Clinic
Project Unity
Scott and White Health System
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Workforce Solutions Brazos Valley

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INTRODUCTION

The 2013 Regional Health Assessment, conducted by the Center for Community Health Development (CCHD) at the Texas A&M Health Science Center School of Rural Public Health (SRPH), covers the nine-county region of south-central Texas consisting of Brazos, Burleson, Grimes, Leon, Madison, Montgomery, Robertson, Walker, and Washington Counties. The *Executive Report* provides comprehensive descriptions of methodology, as well as regional findings. The supplemental reports are intended to provide specific regional and county-level data.

This report presents the health status assessment findings for the seven-county region most commonly known as the Brazos Valley. Most data and comparisons given will be compared to the state or the nation. For specific RHP 17 regional-level data, please refer to the regional *Executive Report*. Unless otherwise noted, the data presented are for Brazos Valley respondents.

Many regional health and human service providers and organizations provided non-financial support through assistance in planning and organizing community discussion groups and developing the final survey instrument.

This is the fourth comprehensive regional health assessment conducted in the past eleven years. The previous three assessments focused on the seven-county Brazos Valley region: Brazos, Burleson, Grimes, Leon, Madison, Robertson, and Washington Counties.

The objectives of the first assessment, completed in 2002, were to identify factors influencing health status, to recognize issues and unmet needs of the local community, to inventory resources within the region, and to produce a source of reliable information that may be utilized in developing effective solutions. That process brought together a variety of institutions and increased their ability to work collaboratively to catalyze constructive changes in the Brazos Valley, leading to the creation of the Brazos Valley Health Partnership.

The Brazos Valley Health Partnership (BVHP) is a non-profit corporation with a mission to *support the health resource commissions and their communities in improving health and well-being*. The partnership is focused on developing collective strategies that, implemented locally, will leverage and cultivate resources to improve access to services in the Brazos Valley. The BVHP is a community-owned organization whose board is comprised of county health resource commission representatives.

The second assessment, conducted in 2006, aimed to track progress in some specific areas of health and to reassess local health priorities. The results of the assessment provided information for local strategic planning and contributed to the acquisition of substantial grant funding for the region targeting health improvement activities.

The third assessment, conducted between January and July 2010, had objectives similar to the previous two and allowed for comparison of health status and various indicators across time. This process was intended to highlight progress, as well as continuing and emerging needs, concerns, issues, and opportunities for community health improvement.

The 2013 Regional Health Assessment expanded the assessment from the seven-county Brazos Valley region to include Montgomery and Walker Counties as well. The nine-county Regional Healthcare Partnership 17 Regional Health Assessment also started a new triennial assessment schedule. Survey planning began in November 2012 and data collection and analysis concluded in August 2013. The process shared the objectives of earlier assessments, with the added goals of acquiring data from Walker and Montgomery Counties to serve as a baseline for future assessments.

FINDINGS

This report presents the health assessment findings for the seven-county Brazos Valley as a region. Some data will be presented as “Brazos Valley,” or “Brazos vs. rural Brazos Valley counties (Burleson, Grimes, Leon, Madison, Robertson, and Washington),” but comparisons across counties will also be given where appropriate.

Community Discussion Groups

Community discussion groups (CDGs) were conducted in all nine counties of RHP 17 with individuals representing various sectors of the community: clinicians, social service providers, community leaders, and the general population. Across the seven-county Brazos Valley region, 56 CDGs were conducted with a total of 716 participants. Those participating represented the diversity of the region’s population; attendees were 32.8 percent male and 67.2 percent female, and 75.1 percent White/Caucasian, 18.2 percent Black/African American, and 15.4 percent Hispanic/Latino. The discussion groups also allowed access to sectors of the population that are underrepresented in the household survey. Each discussion group was guided by the following prompts:

- Describe your community.
- What are the most important issues or challenges your community is facing?
- What are the key resources in your community?
- How has your community come together in the past to address important issues?
- If a group were to try to address the issues you have identified, what advice would you have to help them be successful?

These meetings served to gain perspective on the health status of the community and to provide context for analysis of the survey data. Extensive notes were taken by multiple observers at each meeting, and these notes were then compiled. Multi-stage thematic analysis was conducted that identified broad themes from each community and then sub-themes. The consolidated findings for the region are offered here.

Community

Throughout the Brazos Valley, community discussion group participants acknowledged that their community is friendly with giving and generous attitudes and a close knit atmosphere. Residents enjoy the centrally-located region that has easy access to the larger cities of Austin, Houston, Dallas, and San Antonio. Participants described this quality as being able to live in a rural or small town with access to large city amenities. The Brazos Valley continues to grow and with this growth there is an influx of older adults, particularly retirees. The region is also becoming more diverse with a growing Hispanic population. With growth comes change, and for many Brazos Valley communities with deep-rooted histories and traditions, change can be challenging.

Community Issues

Throughout all the discussion groups, transportation was mentioned as a major issue in the Brazos Valley. Participants cited the lack of reliable and affordable transportation options as the main barriers. Participants in the rural areas of the Brazos Valley region voiced that there is a lack of resources in their area. Most of the region's major employers and social and health care services are centralized in Brazos County, which is a challenge for rural residents who must travel for employment or care considering that transportation is such a pervasive issue. In addition to transportation, the lingering effects of the recession are affecting residents due to the job shortage and lack of new business development. Participants in a majority of the discussion groups stated that there is a shortage of affordable rental and overall housing options in the region.

The lack of recreation activities for all age groups is a concern for residents, but more importantly the lack of available youth programs is an issue within the community. Additionally, with the growing population of older adults, the resources available for them cannot keep up with the demand. The lack of health care services such as home health and respite care is an expanding issue for the aging community. Substance abuse, such as alcohol and illegal and prescription drugs, is becoming a major issue within the Brazos Valley, and the need for resources to address this problem is increasing as well.

Health Concerns

In addition to the broad concerns expressed in the community discussion groups, participants identified a range of health-specific issues facing the region. Participants described a great need in every community for additional mental health services that are accessible and affordable. Furthermore, the rising rate of obesity and the prevalence of chronic diseases associated with obesity were a leading concern amongst participants as well. Rural participants were also very concerned with the lack of access to health care services—particularly access to specialty care such as dental services—throughout the rural areas.

Resources

Participants at every community discussion group across the region were eager to highlight their community's resources. Social services and civic organizations within the community were mentioned as valuable resources that help the underserved. Additionally, health care organizations were listed as vital resources that assist the uninsured and indigent. The Health Resource Centers in the rural counties were praised for their efforts to bring services to the residents who cannot travel to Brazos County to access them. Faith-based organizations were credited with working together to help during times of need and in any capacity needed, and a majority of the community discussion groups also praised the volunteers within the community as being willing and available to help in any and every circumstance. The schools located in the community, including universities and junior colleges, were cited as resources to the community. City and county officials, along with local law enforcement, were also considered assets to the community. Economic development agents in the form of local businesses and tourism opportunities serve as resources that help build the community's economy.

Household Survey

The household survey was developed and pilot tested by the Survey Committee (see Regional Report for details). As typical in survey research, those who actually responded to the survey disproportionately represented older residents, Caucasians, and those more educated and affluent. To account for some of this bias, the analysis was performed on scientifically weighted data by weighting the responses to match the age and gender distribution by county based on current Census estimates. Even with the weighting, however, we know by comparison to those Census estimates that the current sample underrepresents low-income and minority residents. This should be considered when interpreting the results; the survey

analysis likely indicates a more positive reflection of the community than actually exists. Regardless, the data provides us a useful snapshot of what residents are currently experiencing. This survey was used to collect comprehensive information regarding factors affecting health status from a random sample of RHP 17 residents, with 3,312 surveys completed in the Brazos Valley. What follows are the results from those Brazos Valley surveys.

Demographics

When possible, demographic comparisons are made to 2012 Census estimates. However, for certain counties and categories, only earlier data were available. In these cases, actual 2010 Census data or multiple year averages were used. The data sources are noted where appropriate.

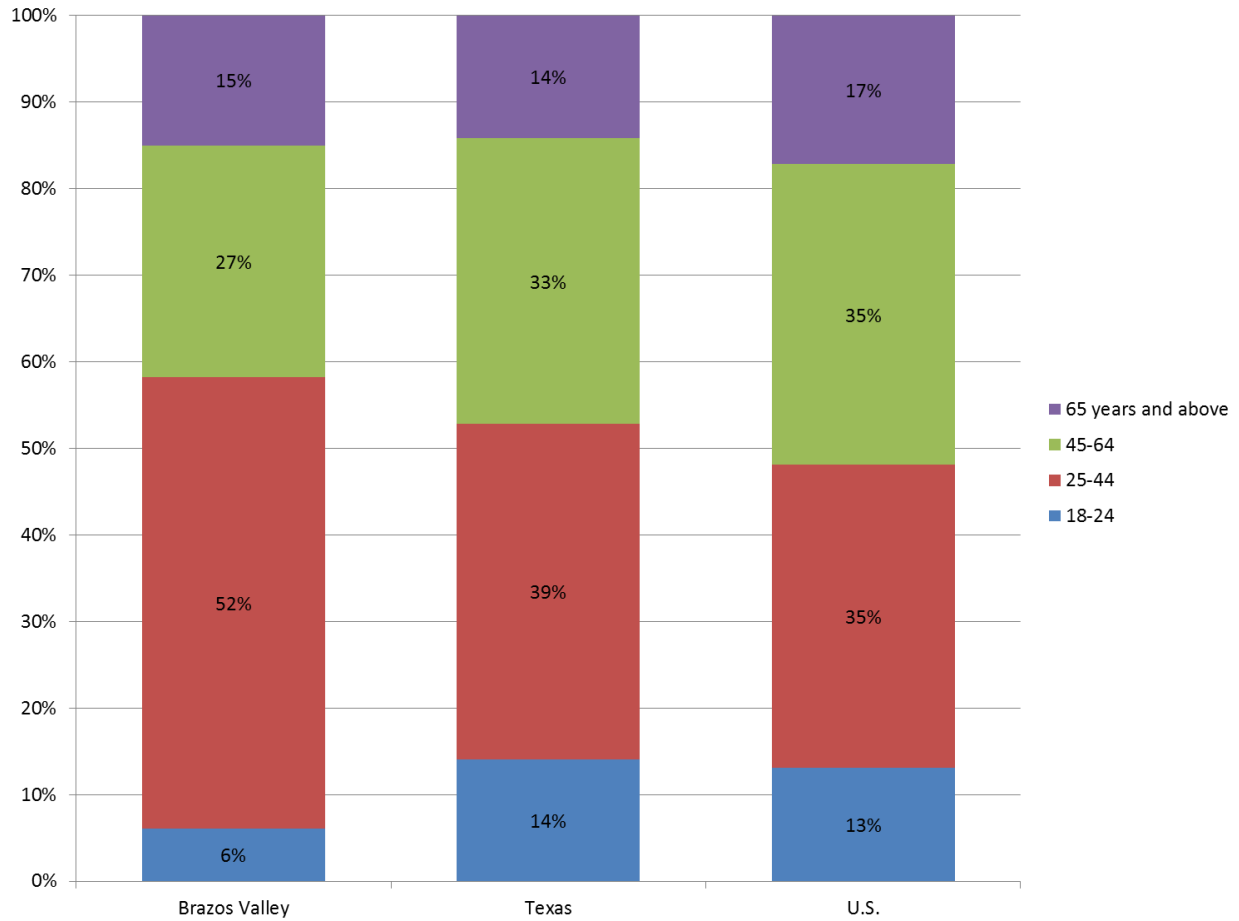
The total population of the Brazos Valley at the time of the last census (2010) was 319,447. The 2012 population estimates indicate a population increase of 1.02 percent to 325,857. The age distribution continues to shift towards a greater population of older adults as the baby boomers age and as an increasing number of retirees move into the region.

Age and Gender

Because the data are weighted by age and gender, the gender and age distributions of respondents match closely the actual population characteristics, with 50 percent male and 50 percent female.

The mean age of survey respondents was 44.5 years - 40.5 years in Brazos County and 51.4 years in the rural counties combined. Figure 1 illustrates the age distribution of Brazos Valley respondents compared to Texas and the U.S.

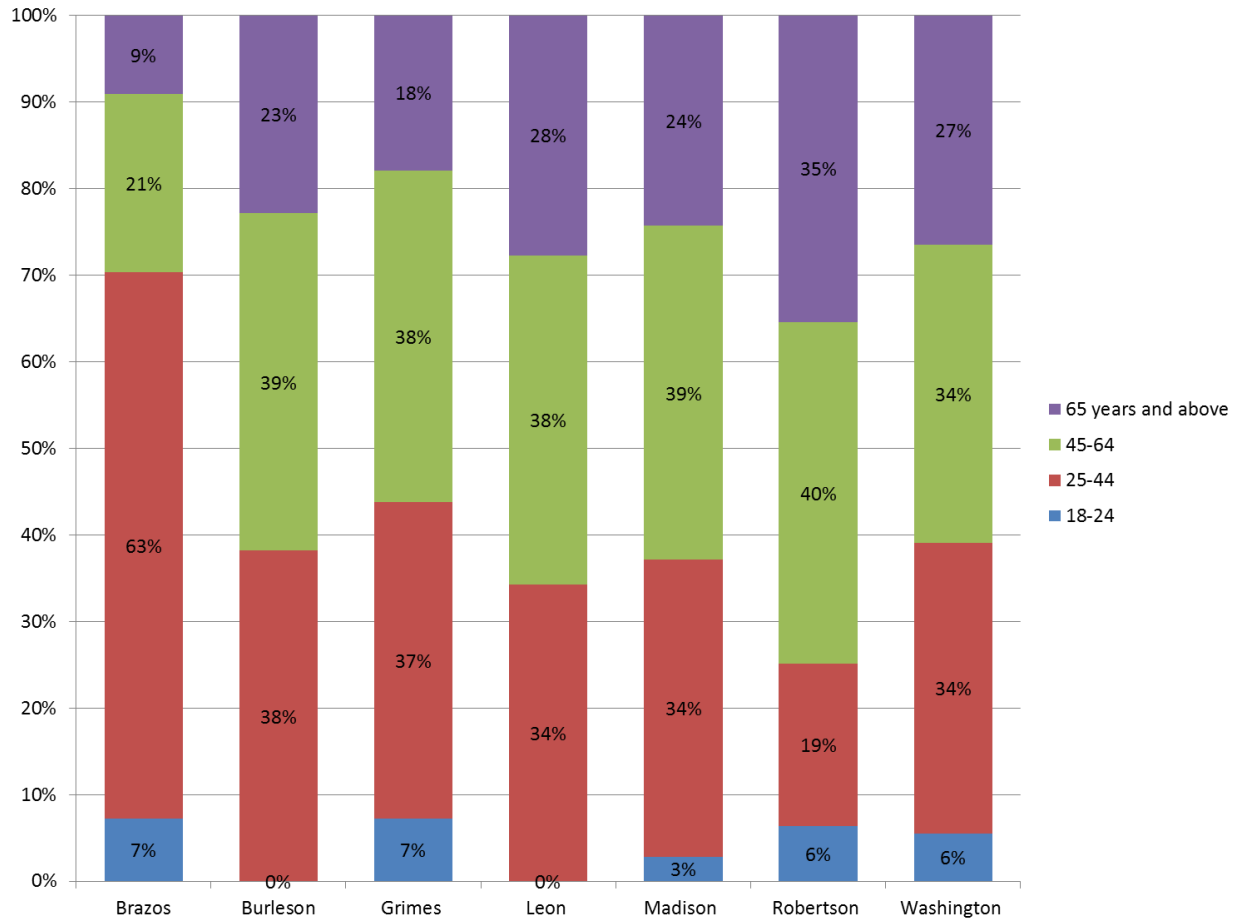
Figure 1. Age distribution of Brazos Valley, Texas, and the U.S.¹



Brazos County has nearly twice the proportion of those 18 to 44 years of age (70.3%) compared to the rural counties (37.7%). Some of this can be attributed to the presence of Texas A&M University and Blinn College’s Bryan Campus in Brazos County. Nevertheless, this is an important difference. In addition, Brazos County has a smaller proportion of residents over the age of 65, with 9.1 percent compared to 25 percent in the rural counties; Robertson County reports the highest proportion of adults over 65 at 35.4 percent. Understanding that older populations generally have more chronic disease and also face more barriers in accessing care, the concentration of the aging population in the rural counties where there are fewer services is cause for concern. Figure 2 shows the age distribution of respondents across each of the Brazos Valley counties.

¹ <http://quickfacts.census.gov/qfd/states/48000.html>

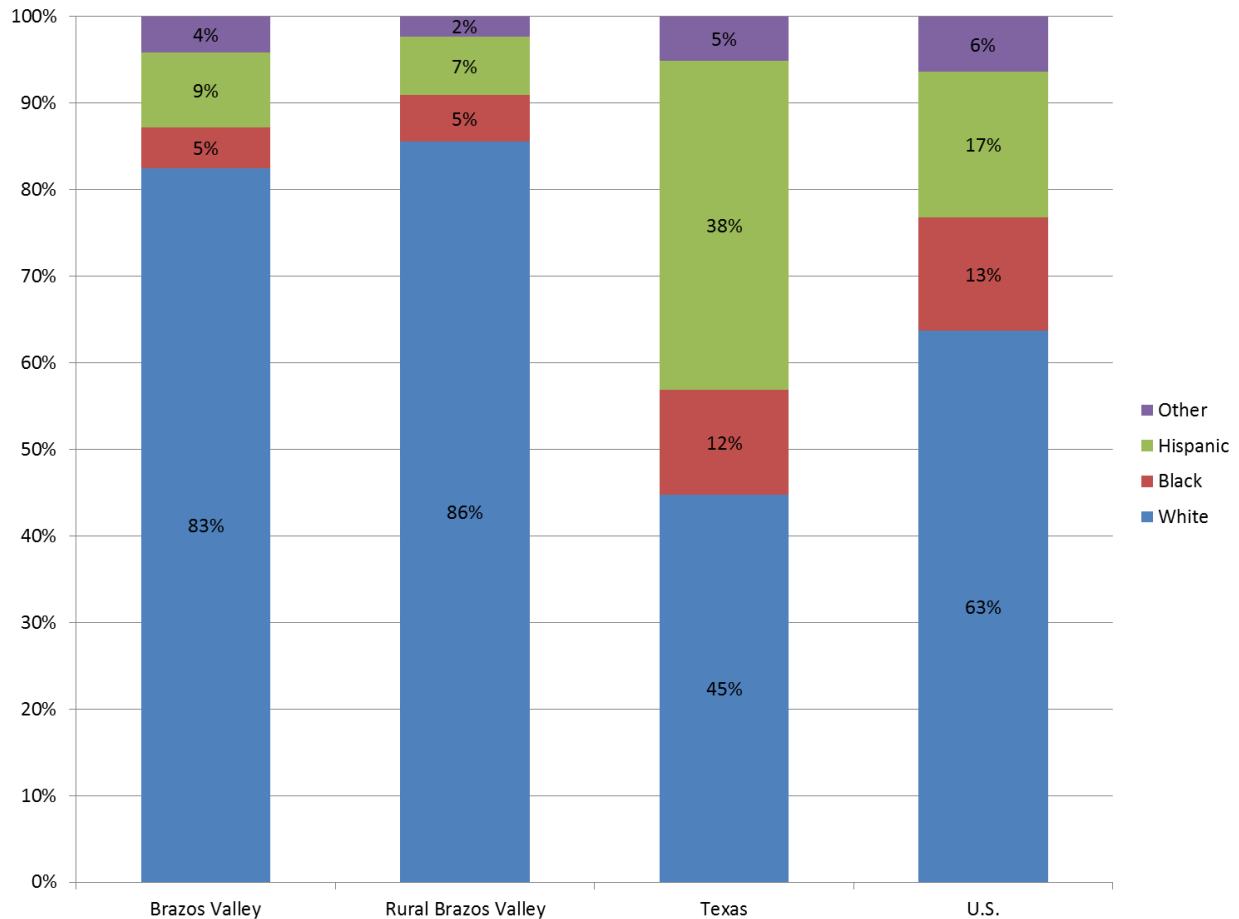
Figure 2. Age distribution of Brazos Valley survey respondents by county



Race and Ethnicity

Respondents were asked to indicate what race best described them and to indicate whether they were of Hispanic ethnicity. A majority of survey respondents identified themselves as White/Caucasian (82.5%), 4.7 percent indicated Black/African American, and 8.6 percent Hispanic/Latino. The percent of those identifying as other races was very small (4.2%); thus, these categories have been combined as “All Other Races” for the purpose of analysis. Figure 3 shows the racial/ethnic distribution of Brazos Valley survey respondents.

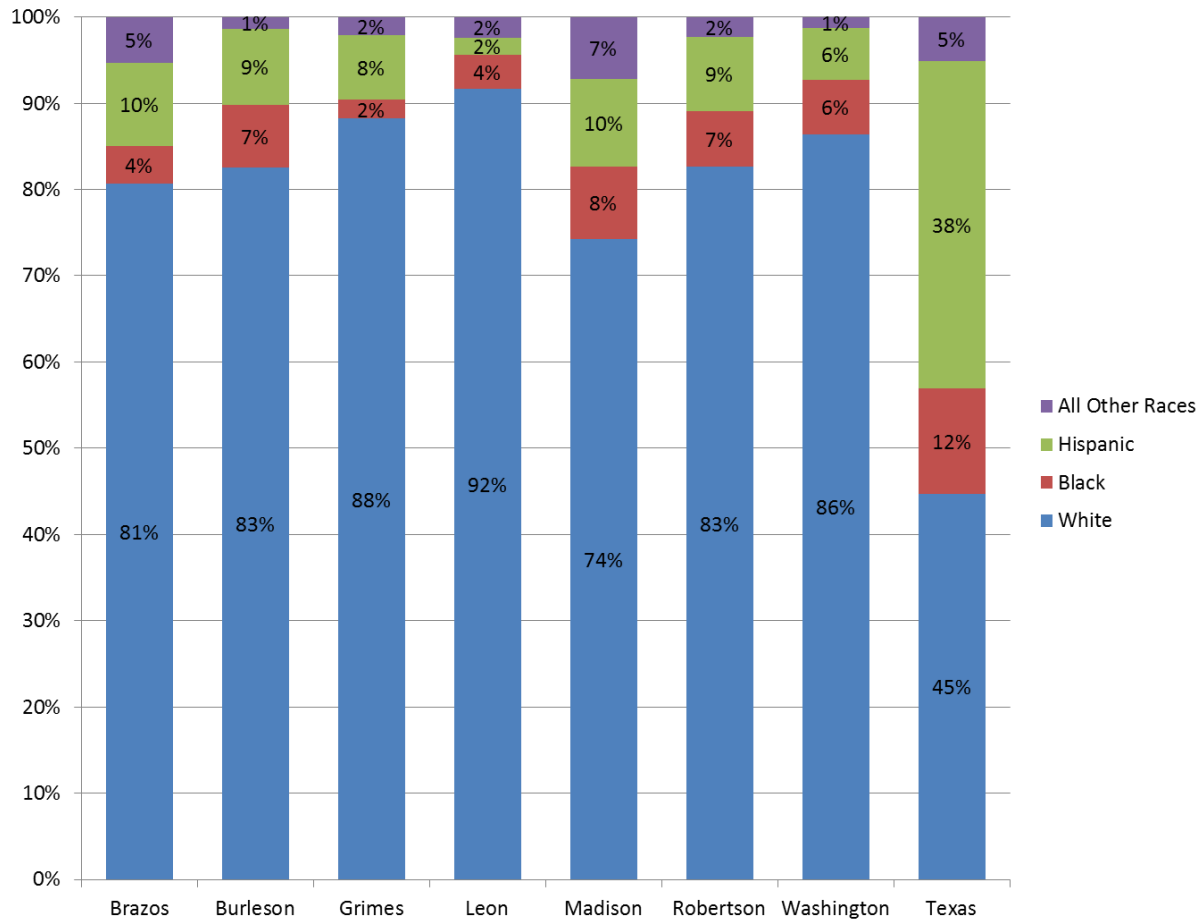
Figure 3. Racial/ethnic distribution of Brazos Valley and rural Brazos Valley survey respondents, Texas, and the U.S.²



In the 2006 assessment, significant variation was found among the seven counties in that a larger proportion of respondents reporting their race/ethnicity as Black/African American lived in the rural counties, while a larger proportion of those indicating they were Hispanic resided in Brazos County. In 2010, however, the survey indicated more minority respondents in Brazos County than anywhere else in the Brazos Valley. In 2013, the survey indicates more minority respondents live in Brazos and Madison Counties (19.3% and 25.7%, respectively) than any other county in the region. This should be interpreted with caution, however, as racial/ethnic minorities are often underrepresented in survey research. For example, census data shows Robertson County with the greatest proportion of minorities (41.5%), compared to 17.4 percent in the 2013 survey. Figure 4 compares the racial/ethnic distribution of Brazos Valley respondents in each county as well as all Texas residents.

² <http://quickfacts.census.gov/qfd/states/48000.html>

Figure 4. Comparison of racial/ethnic distribution by county



Marital Status

Across the Brazos Valley, the majority of survey respondents reported being married (72.7%), while 13.2 percent indicated that they were single (never married), 6.4 percent separated or divorced, 3.7 percent widowed, and 4.1 percent not married and living with their partner. In comparison, 49.6 percent of Texas residents and 48.3 percent of U.S. residents are married; a third (31.4% in Texas and 32.5% in the U.S.) of residents are single, while 13.7 percent of Texas residents and 13.2 percent of U.S. residents are separated or divorced. The remaining proportion of residents in Texas and the U.S. are widowed (5.2% and 6%, respectively).

Household Composition

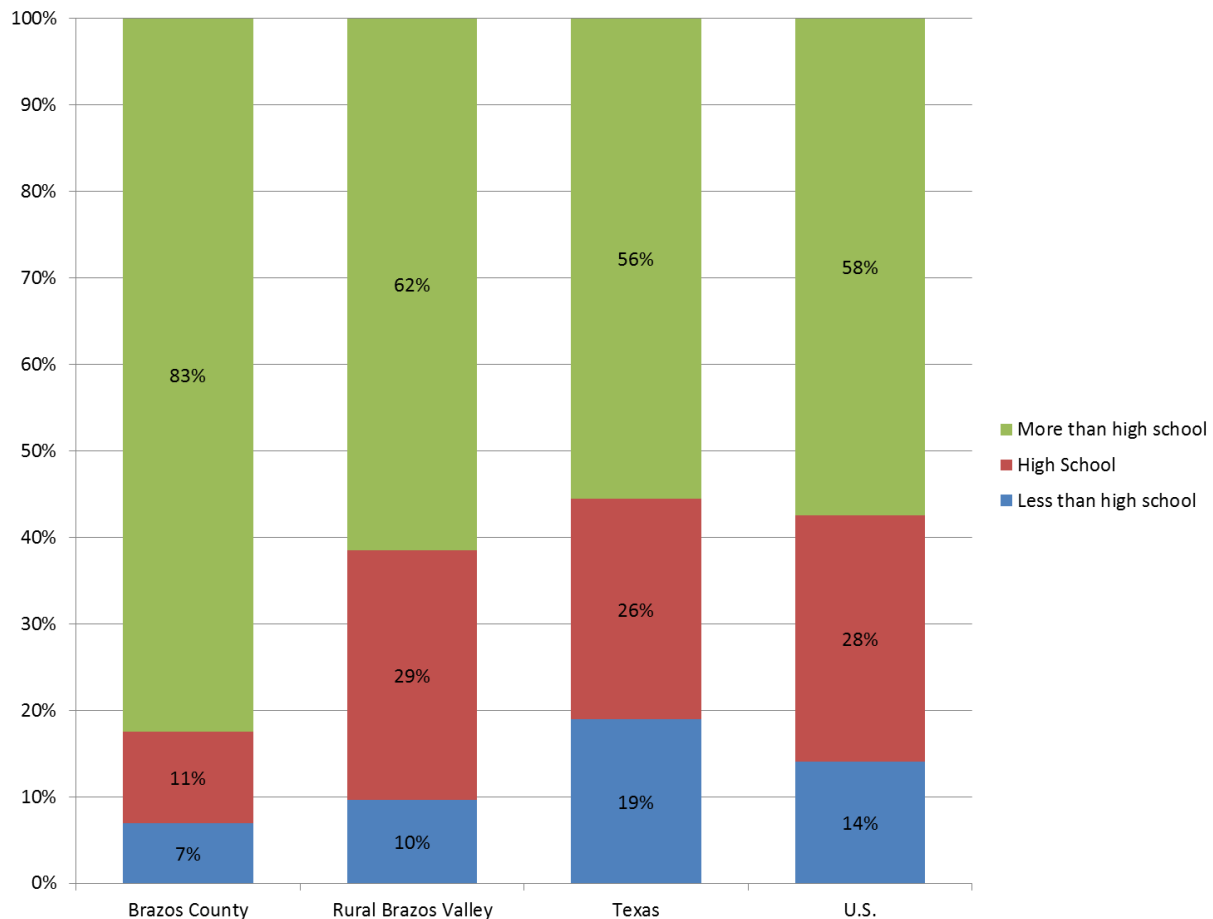
The mean household size in the Brazos Valley is 3.1 persons, ranging from 2.5 in Leon County to 3.3 in Brazos County. This is larger than the average household size both in Texas (2.8) and the U.S. (2.6). Regionally, 50.7 percent of households do not have children, compared to 35.7 percent in the rural counties. Statewide, 61.1 percent of households do not have children, and nationally, 64.4 households are childless.

Education

Education is a social factor that influences health. The mean educational attainment in the Brazos Valley is 14.7 years, which is equivalent to a high school diploma, plus over two years of college. In all seven counties, the mean educational attainment is more than a high school diploma.

Ninety-two percent of respondents reported having completed some higher education, but this varies across Brazos County and rural Brazos Valley counties, as illustrated in Figure 5. The proportion of residents who did not complete high school also varies by county, ranging from 6.9 percent in Brazos County to 20.2 percent in Madison County. Across Texas, 19.6 percent of Texans over the age of 25 did not complete high school. Nationally, this figure is 14.6 percent.

Figure 5. Educational attainment of survey respondents across the Brazos County, rural Brazos Valley counties, Texas, and the U.S.³



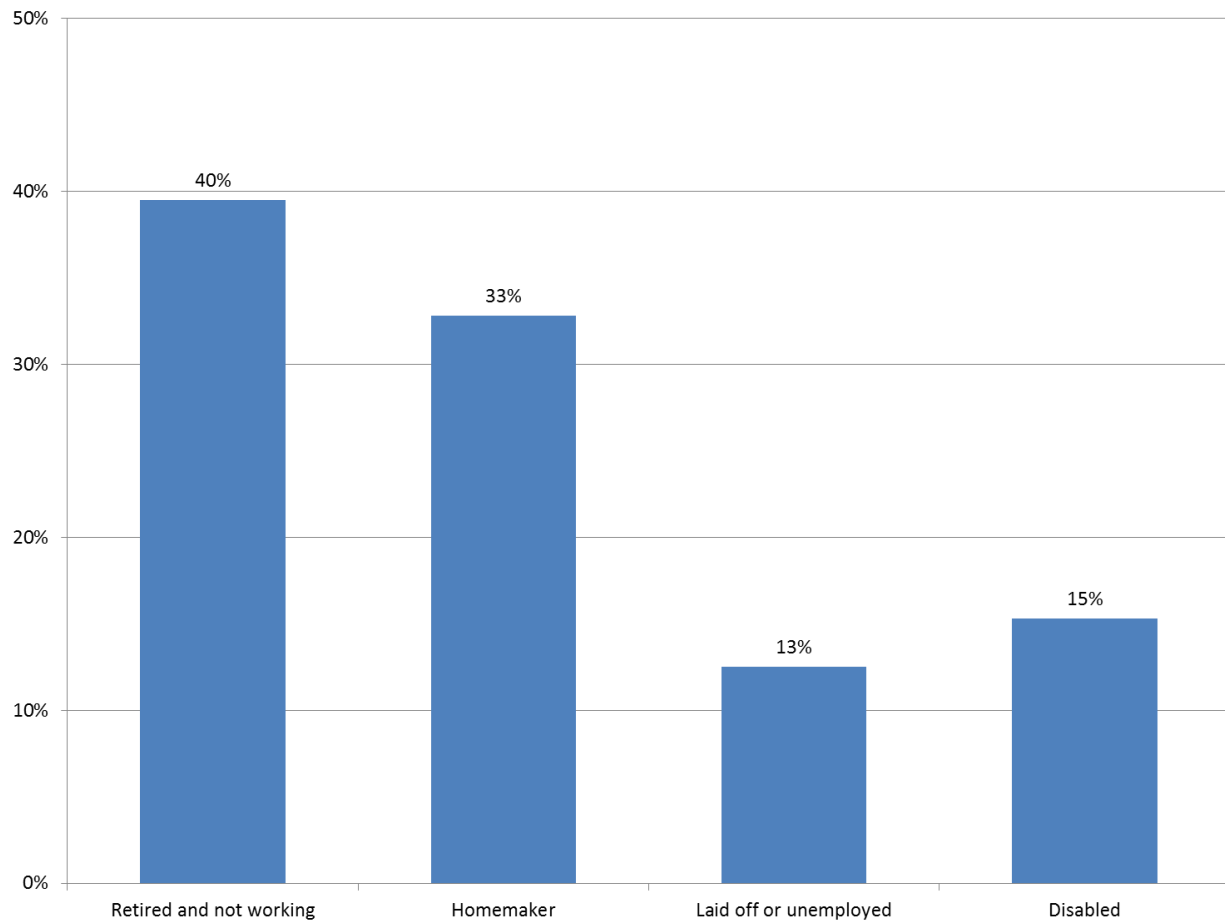
³ <http://quickfacts.census.gov/qfd/states/48000.html>

Employment

Employment emerged as a key issue in this assessment. Many of the community discussion group attendees expressed concerns over unemployment and the impact it was having on families throughout their communities.

Among Brazos Valley survey respondents, 61.9 percent reported being employed. Of those currently employed, 26.9 percent reported working part-time. The survey also asked how many employers individuals had; results varied significantly by county. The majority of those employed reported only having one employer—88.9 percent across the region, ranging from 66.2 percent in Burleson County to 91.4 percent in Brazos County. Figure 6 illustrates the breakdown of all regional respondents' status if currently not employed.

Figure 6. Percentage of responses regarding work situation if not currently employed



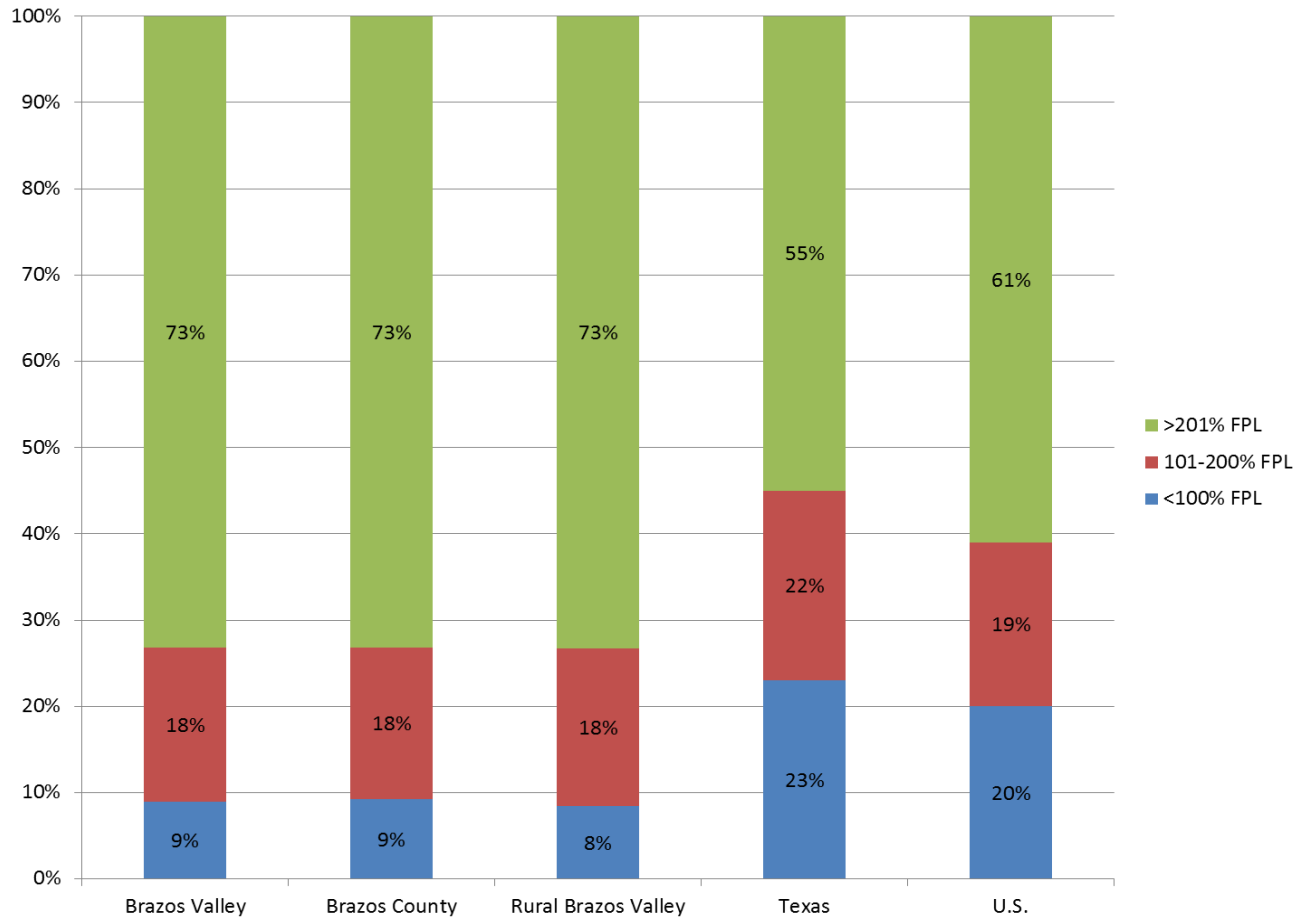
Across the region, only 9.3 percent of respondents reported being enrolled as a college student, ranging from none in Leon County to 12.9 percent in Brazos County. In line with the age distribution across the region, Brazos County had the smallest proportion of retirees at 30.1 percent, while the rural counties had nearly twice that at 51.2 percent.

Household Income

Closely related to education and employment is household income. Survey respondents were asked to write in their total household income before taxes for 2012. The median household income for survey respondents across the Brazos Valley region was \$70,000; this is much higher than census estimates for Texas (\$50,920) and the U.S. (\$52,762), which is likely a reflection of the overall survey sample as more educated and more affluent (see discussion in the RHP 17 report for more information).

The federal poverty level (FPL) for 2012 is \$23,050 for a family of four. Across the Brazos Valley, 8.9 percent of survey respondents were living at or below the poverty level, with another 17.9 percent in the low-income category (between 101 and 200 percent of FPL). Census data indicate poverty rates in the region range from 14.6 percent in Washington County to 29 percent in Brazos County. Families in this low-income category are typically the ones who earn too much to qualify for assistance programs but earn too little to be able to afford to pay for services out-of-pocket. Given the state of the economy, this group is growing. Figure 7 presents income and poverty distributions for Brazos Valley respondents compared to the U.S.

Figure 7. Income and poverty among Brazos Valley, Brazos County, rural Brazos Valley counties survey respondents, Texas, and the U.S. ⁴



Military Service

With a growing number of veterans and their unique health needs, the Survey Committee thought it wise to ask about military service. Across the Brazos Valley, 11.3 percent of survey respondents identified themselves as ever having served in the United States Armed Forces, ranging from 10.3 percent in Brazos County to 22.2 percent in Robertson County. The proportion for the rural counties combined was higher than that of Brazos County at 12.9 percent.

Nearly half of Brazos Valley respondents who had ever served in the United States Armed Forces reported having served in an active duty war zone (53.4%). Across the Brazos Valley region, Brazos County had the largest proportion reporting so, with a rate of 63.4 percent of those who had served in the U.S. Armed Forces compared to the rural counties where only 39.7 percent reported serving in an active duty war zone. There are 1,618,413 veterans in Texas, representing approximately six percent of the population.

⁴ <http://quickfacts.census.gov/qfd/states/48000.html>

Health Status

The first four questions in the survey are taken from the Health Related Quality of Life scale developed and tested by the Centers for Disease Control and Prevention (CDC). These are simple but powerful indicators of functional health status and its impact on daily life.

The first question simply asked respondents to rate their health; the possible responses were *excellent*, *very good*, *good*, *fair*, and *poor*. In the Brazos Valley, 21.9 percent of respondents indicated their health was *excellent*—higher than the 2010 assessment by 5.9 percent—and 40.4 percent said their health was *very good*. In contrast, 9.9 percent indicated their health was *fair*, and two percent said their health was *poor*. Figure 8 compares self-reported health status for Brazos Valley, Texas, and the U.S.

Figure 8. Self-reported health status in Brazos Valley, Texas and U.S. ⁵

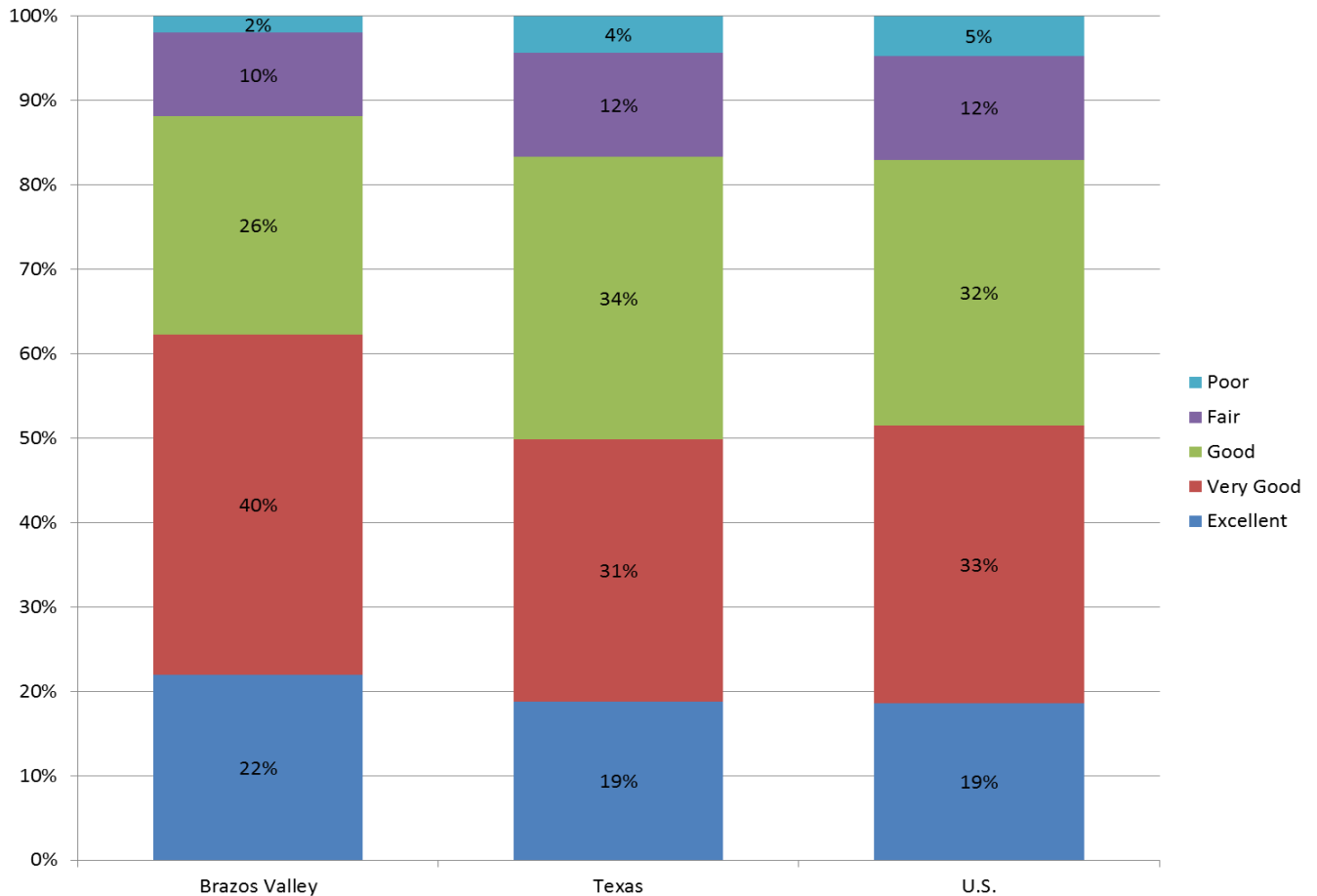
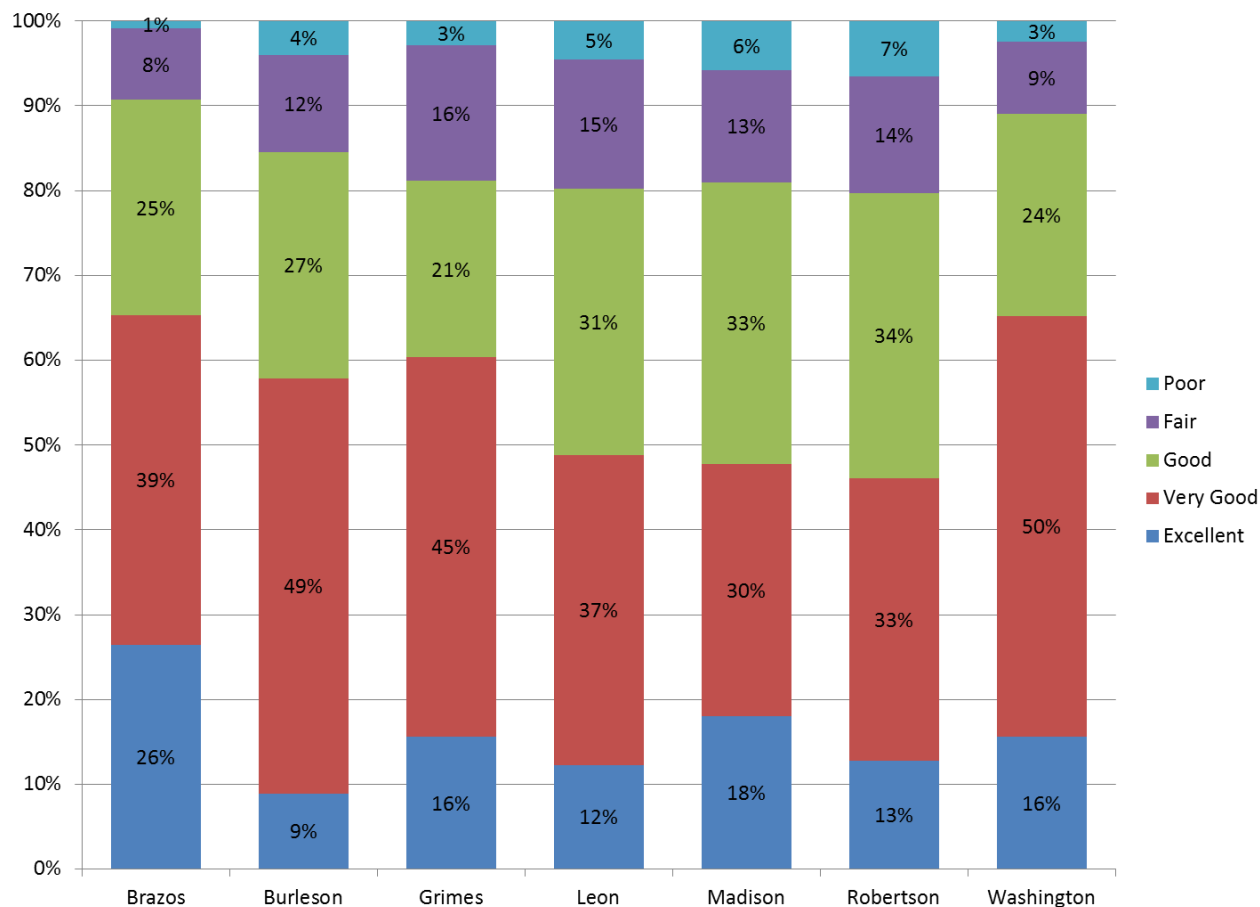


Figure 9 illustrates the self-reported health status of the region by county.

⁵ <http://apps.nccd.cdc.gov/brfss/display.asp?cat=HS&yr=2011&qkey=8001&state=UB>

Figure 9. Self-reported health status in the Brazos Valley by county



The second question asked how many days of the past 30 days was the respondent’s physical health not good. Among Brazos Valley respondents, the mean number of poor physical health days was 3.7, ranging from 3.2 days in Brazos County to 6.0 days in Burleson County. The mean for the rural counties combined was 4.6 days. Nearly one-third of respondents (29.0%) reported between one and five days of poor physical health in the past month. One in 10 respondents (10.4%) indicated *more than 10 days* of poor physical health. In comparison, 63.3 percent of Texans reported no days of poor physical health, with 19.5 percent reporting more than five days of poor physical health each month.

Similar to the previous question, the next question asked how many days of the past 30 days was the respondent’s mental health not good. Among Brazos Valley respondents, the mean number of poor mental health days was 3.9, ranging from 2.7 days in Washington County to 5.0 days in Burleson County. The mean for the rural counties combined was 3.8 days, a slight increase from the 2010 assessment. One in five respondents (19.6%) reported between one and five days of poor mental health in the past month. Alarming, the number reporting *more than 10 days* of poor mental health increased to 12.6 percent. In addition, 24.6 percent report having been diagnosed with depression and 23.7 percent with anxiety. These numbers

continue to be higher than the overall rates for Texas. Among Texans, 66.3 percent reported no days of poor mental health, and 14.4 percent reported experiencing between one and five days of poor mental health. Given the persistent lack of mental health services available in the region, these numbers are cause for concern.

Feelings of anxiety and depression also affect residents’ mental health. Table 1 shows common problems that residents reported bothering them over the past two weeks.

Table 1. Mental health problem experienced by respondents

Type of Mental Health Problem	Percentage of Brazos Valley respondents
Becoming easily annoyed or irritable	42.2%
Trouble relaxing	41.7%
Worrying too much about different things	41.6%
Feeling nervous, anxious, or on edge	37.2%
Not being able to stop or control worrying	31.1%
Little interest or pleasure in doing things	25.8%
Feeling down, depressed, or hopeless	25.1%
Being so restless that it is hard to sit still	23.7%
Feeling afraid, as if something awful might happen	19.7%

The fourth question in this set sought to understand the extent to which physical and mental health limited one’s daily activities. It asked respondents how many days of the past 30 days did poor physical or mental health keep them from their usual activities. In the Brazos Valley, the mean number of days in which usual activities were limited by poor physical or mental health was 2.9, and was varied across the Brazos Valley counties, ranging from 2.3 in Washington County to 4.7 in Burleson County. Nearly one-third of respondents reported some interruption of their usual activities, with 16.7 indicating between one and five days, 3.7 percent reporting six to 10 days, and 8.7 percent reporting more than 10 days. In comparison, 27.7 percent of Texans reported between one and five days of limited activities and 12.2 percent reported six or more days of limited activities due to poor physical or mental health.

Many residents reported being limited in their activities due to an impairment and/or health problem. Commonly reported issues are listed in Table 2. Participants could identify more than one impairment; therefore, percentages here represent percentages of the total number of *responses* instead of the percentage of respondents who reported the impairment.

Table 2. Major impairments or problems experienced by residents

Major Impairment or Health Problem	Percentage of responses
Back or neck problems	14.4%
Arthritis/rheumatism	13.1%
Cardiovascular issues (heart problems, hypertension, high blood pressure)	11.6%
Depression/anxiety/emotional problems	11.5%
Lung or breathing problems	7.8%
Fractures, bone/joint injury	7.4%
Diabetes	6.5%

The most commonly reported impairment or health problems were related to joint and bone health issues - back or neck problems comprised 14.4 percent of the responses, followed by arthritis/rheumatism (13.1%) and fractures (7.4%). More than one in 10 responses was related to heart health (cardiovascular issues in the table above). Mental health issues were also one of the most reported issues impacting daily activities; these issues were more pronounced in Brazos County compared to the rural Brazos Valley counties with rates of 17.3 and 5.2 percent, respectively. Lung and breathing problems also were reported to have greater impact in Brazos County (9.8%) compared to the rural Brazos Valley counties (6%).

For the given impairments and health problems, the duration of having limited activities varied among survey respondents. Most survey participants (66.1%) did not experience pain that impacted their daily activities during the past 30 days. These percentages varied across the Brazos Valley counties, ranging from 49.4 percent of respondents in Leon County to 70.1 percent in Washington County who reported that pain did not limit their activities. Of those who did experience pain that impacted activity during the past 30 days, 18.7 percent reported pain between one and five days, 4.1 percent had pain between six to 10 days, and 11.1 percent reported more than 10 days of pain. One in five participants (21.7%) reported their daily activities were limited for less than one year. Daily activities were reported as limited for one to five years by over one-third of respondents (37.4%). Another 15.9 percent reported limitations for the past six to 10 years and 24.8 percent had limitations to their daily activities for more than 10 years.

In the final question about residents' overall health, respondents listed a range days in the past month that they got a sufficient amount of sleep and felt very healthy and full of energy. Less than one-quarter of participants (21.9%) reported feeling as if they had enough rest or sleep. Over one-third (34.7%) reported they did not feel rested between one and five days in the past month, 19.4 percent reported the same for between six to 10 days, and 6.5 percent reported

not having enough rest or sleep for between 11 and 15 days. One in five participants in the Brazos Valley region (17.5%) reported not feeling rested for at least half of the days in the past month.

Forty-three percent of participants reporting feeling healthy and full of energy for at least 21 days of the past month and one in five participants (21.7%) reported feeling good for 11 to 20 days of the past month. One in 10 participants (21.4%) did not feel very healthy and full of energy for at least one-third of the month, and an additional 14.1 percent reported never feeling healthy or full of energy. Rates were similar across nearly every county, with the exception of Madison County where nearly one-quarter of respondents reported never feeling very healthy and full of energy.

Risk Factors

Several sets of survey questions asked about health behaviors or characteristics that often place individuals at greater risk of disease or injury. The risk factors of interest are those that individuals can sometimes control or manage to prevent development of related illnesses or complications.

Obesity

Being overweight or obese increases an individual's risk for developing many chronic diseases and other conditions such as depression and chronic pain. The way that overweight and obesity is typically assessed is through the calculation of the body mass index (BMI), which is a simple ratio of weight to height (kg/m^2). This measure does not account for individual variations in bone or muscle mass, but are a good general indicator of weight status for the population.

The National Institutes of Health have published the following guidelines:

Underweight = BMI score < 18.5

Normal weight = BMI score between 18.5 – 24.9

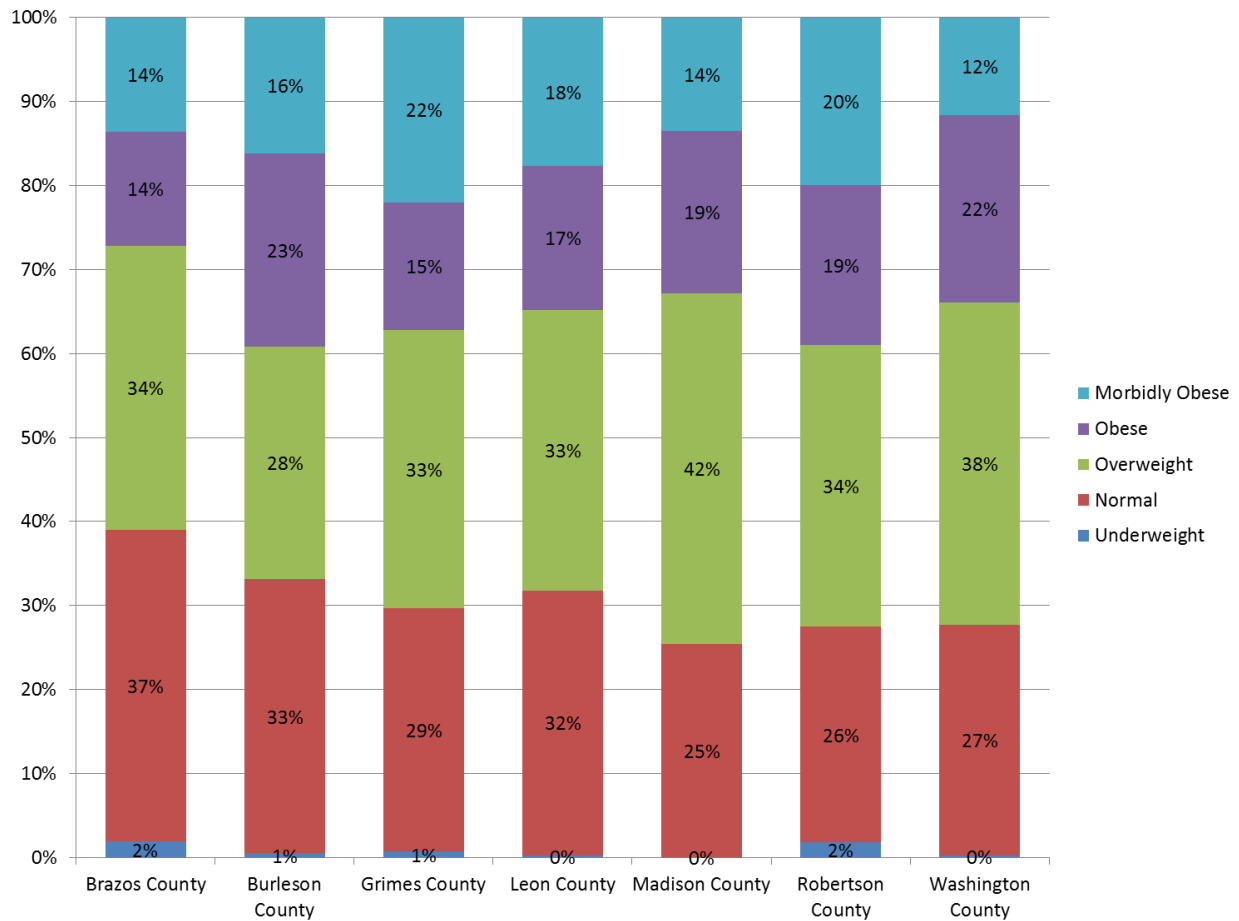
Overweight = BMI score between 25 – 29.9

Obese = BMI score between 30 and 34.9

Morbidly Obese = BMI score \geq 35

Across the Brazos Valley, the rate of overweight and obesity is cause for concern. Regionally, only 34.1 percent of the adult population is within the normal weight range for their height. One-third of the population is overweight (34.1%), one in six residents is obese (15.7%), and 14.7 percent are morbidly obese. Figure 10 illustrates the BMI status for respondents in each county of the Brazos Valley.

Figure 10. BMI status of survey respondents by county



Individuals who are overweight or obese are at a higher risk for developing a variety of chronic diseases, including type 2 diabetes, hypertension, and heart disease. Table 3 illustrates the differences in disease state for those at a healthy weight compared to those who are obese/morbidly obese.

Table 3. Chronic disease in the Brazos Valley by BMI status

Disease/Condition	Healthy Weight	Obese/Morbidly Obese
Arthritis	23.7%	43.5%
Congestive heart failure	10.3%	55.1%
Depression	28.3%	44.3%
Diabetes	13.8%	59.1%
High cholesterol	19.5%	44.5%
Hypertension	18.1%	46.9%

For the chronic diseases listed, respondents in the obese and morbidly obese BMI categories report substantially higher rates of disease than those in the healthy weight category.

Since the first regional health assessment in 2002, respondents' BMI have shown a pronounced increase. This trend of increasing obesity over time mirrors state and national increases (see Table 4).

Table 4. Change in BMI since the 2006 health assessment^{6, 7}

Location	2006			2010			2013		
	Over-weight	Obese	Morbidly Obese	Over-weight	Obese	Morbidly Obese	Over-weight	Obese	Morbidly Obese
U.S.	36.5%	25.1%		36.2%	27.5%		35.8%	28.1%	
Texas	36.3%	26.1%		34.8%	31.7%		35.9%	29.2%	
Brazos Valley		65.0%		32.0%	22.0%	14.4%	34.1%	15.7%	14.7%
Brazos		61.0%		31.9%	23.8%	14.7%	33.8%	13.6%	13.6%
Burleson		72.0%		32.6%	21.2%	11.8%	27.7%	22.9%	16.2%
Grimes		74.0%		42.7%	24.9%	14.1%	33.1%	15.2%	22.0%
Leon		73.0%		35.1%	18.0%	14.2%	33.4%	17.1%	17.7%
Madison		72.0%		42.8%	8.8%	12.5%	41.8%	19.3%	13.5%
Robertson		68.0%		34.1%	14.9%	17.5%	33.6%	19.0%	20.0%
Washington		69.0%		31.6%	23.0%	16.7%	38.4%	22.3%	11.6%

Nutrition

Nutrition is an important aspect of achieving and maintaining a healthy weight and overall health. Accordingly, the survey asked questions about individuals' grocery shopping and eating habits.

In Brazos County, 94.6 percent of survey respondents do their grocery shopping within 10 miles of the community where they live; in the rural counties, only 47 percent grocery shop within 10 miles of their community. The mean distance Brazos County residents travel to buy groceries is 4.3 miles, compared to an average of 16.6 miles for rural county residents (ranging from 1.3 miles in Madison County to 28.8 miles in Leon County).

As mentioned, concerns about the economy have a pronounced impact on residents' overall nutrition. Across the Brazos Valley, 10.4 percent of respondents said that *sometimes* or *often*, the food they bought just did not last and they did not have money to get more. Also, eight percent reported eating less and 5.5 percent did not eat when they were hungry during the past year because of financial concerns. These figures fluctuate across the Brazos Valley region, ranging from on 6.2 percent of Washington County respondents' food not lasting and not having enough money to get more to 23.2 percent of Burleson County respondents reporting the same.

⁶ <http://apps.nccd.cdc.gov/brfss/display.asp?cat=OB&yr=2006&qkey=4409&state=UB>

⁷ <http://apps.nccd.cdc.gov/brfss/display.asp?cat=OB&yr=2010&qkey=4409&state=UB>

Fewer than five percent of the Brazos Valley region survey respondents reported receiving food from a food pantry or food bank in the past six months. However, as many as 12.4 percent of Leon County and 10 percent of Madison County respondents reported receiving food from a food pantry or food bank in the past six months. Mobile food pantries were used mostly by residents of Madison (5.3%) and Grimes (3.4%) Counties.

Physical Activity

Physical activity is also a key aspect of maintaining a healthy weight and good health. The National Institutes of Health recommends 150 minutes of moderate or 75 minutes of vigorous physical activity each week, in addition to engaging in strengthening exercises twice weekly. Across the Brazos Valley region, only one-quarter of respondents meet this recommendation (26.6%), while 17.9 percent reported that they do not exercise at all. Residents were more likely to meet physical activity guidelines *without* strength training – 41.9 percent of Brazos Valley residents met guidelines for moderate physical activity each week and 34.7 percent met guidelines for vigorous physical activity. However, without strength training, fewer residents meet the overall physical activity guidelines.

Specific community characteristics can influence perceptions of safety and the likelihood for community members to engage in physical activities outside their home. Table 5 summarizes these perceived characteristics for each county of the Brazos Valley.

Table 5. Community characteristics related to physical activity by county

County	I see many people being physically active around my neighborhood	If I were to fall, there would be someone in my neighborhood to help	Problems in my neighborhood make it hard to go outside and walk	Concerned that I may be victim of crime if walked/biked in neighborhood
Brazos	81.3%	81.8%	16.7%	6.5%
Burleson	41.4%	57.3%	35.6%	11.3%
Grimes	43.0%	63.7%	40.0%	6.9%
Leon	23.3%	51.4%	45.5%	13.4%
Madison	26.0%	61.3%	34.2%	12.4%
Robertson	49.3%	62.7%	33.7%	13.7%
Washington	60.5%	80.1%	23.3%	7.3%

Across the Brazos Valley region, residents described their community as a safe place, reporting that their neighborhood is a place where others are physically active (67.8%) and that someone would help them if they were to fall or get hurt in their neighborhood while walking (75.9%).

Many disagreed that their neighborhood has problems that make it hard to walk or go outside (77%) and nearly all reported they did not feel as if they would be a victim of crime in their neighborhood (92.3%).

The survey also sought to assess residents' sedentary time. In a seven day period, Brazos Valley respondents reported sitting an average of 368 minutes (6.1 hours) on weekdays and 315 minutes (5.3 hours) on weekends. Across the Brazos Valley region, Madison County residents reported the smallest amount of time spent sitting on a *weekday* (285 minutes/4.75 hours) and Grimes, Madison, and Washington Counties all reported less than 300 minutes of sitting on a *weekend* – 283, 292, and 285 minutes, respectively.

In addition to obesity, several other behavioral risk factors are key determinants of subsequent health and safety issues.

Cigarette Smoking

In comparison to the rest of the nation, Brazos Valley respondents reported a smaller proportion of those who smoke. While 19.3 percent of Americans smoke, two-thirds of adults in the Brazos Valley report having never smoked (66.2%), while another 21.9 percent used to smoke but have quit. Only 11.8 percent of adult respondents said that they currently smoke, ranging from 8.3 percent in Washington County to 24.7 percent in Madison County. Among those who smoke, half say they smoke half a pack or less per day. Among all current smokers in Texas, 9.7 percent smoke every day and 6.2 percent smoke some days. Nearly one-quarter of Texans are former smokers (22.5%) and 61.6 percent of Texans have never smoked. Smoking rates in Brazos Valley rural counties were higher than that of residents of Brazos County (13.5% compared to 10.8%).

Less than three percent of Brazos Valley residents reported using other tobacco products, including chewing tobacco, snuff, or dip some days or every day. Other tobacco products were most commonly used in the rural Brazos Valley counties (5.3%) compared to Brazos County (1.2%).

Substance Use and Abuse

Among Brazos Valley survey respondents, the average number of alcoholic drinks consumed in a typical week was 3.3, ranging from 2.4 in Leon County to 5.7 in Madison County. While only 5.9 percent of respondents reported driving after drinking at least two drinks, the rate in Madison and Washington Counties was considerably higher at 9.5 and eight percent, respectively.

In the past 30 days and in the past year, 1.2 and 3.5 percent (respectively) of Brazos Valley residents reported using prescription medications for nonmedical reasons or not as prescribed. Reported rates of consumption of marijuana and other illegal drugs were less than two percent in the past 30 days across the region.

Chronic Diseases and Conditions

The survey asked residents to report if they had ever been diagnosed by a health care provider with a list of 16 common diseases/conditions. The six most frequently reported conditions across the Brazos Valley are:

1) Hypertension	37.7%
2) High Cholesterol	30.3%
3) Overweight/Obesity	29.4%
4) Depression	24.6%
5) Anxiety	23.7%
6) Arthritis/Rheumatism	19.9%

Only 29.4 percent of respondents reported being told by a health care professional that they were overweight or obese, yet when calculating BMI from reported heights and weights of respondents who had not been diagnosed as such, 51.5 percent of respondents are overweight or obese. Over one-third of undiagnosed respondents were overweight (38.7%), 10.3 percent were obese, and 2.5 percent were morbidly obese. The proportions of those undiagnosed and overweight or obese were higher in the rural Brazos Valley counties than the region (57.6%). This raises serious concern regarding doctor-patient communication with respect to healthy weight, overweight, and obesity.

Table 6 summarizes the rates for 12 chronic conditions where substantial differences exist between Brazos County, the rural counties, and the nation. As found in all three previous assessments, the rural counties reported higher rates of most chronic diseases compared to Brazos County, with the exception of anxiety, asthma, and depression.

Table 6. Chronic condition rates, comparisons by population

Disease/Condition	Brazos Valley	Brazos County	Rural Brazos Valley Counties	U.S. ^{8, 9, 10}
Anxiety	23.7%	24.7%	21.9%	17%
Arthritis/Rheumatism	19.9%	14.6%	28.8%	22%
Asthma	17.3%	27.3%	13.3%	13%
Cancer (all kinds)	6.0%	4.8%	8.1%	8%
Congestive Heart Failure	2.9%	1.9%	4.7%	2%
Depression	24.6%	27.3%	20.0%	12%
Diabetes (type 2)	8.4%	5.4%	13.4%	9%
Emphysema/COPD	5.4%	4.2%	7.5%	2%
High Cholesterol	30.3%	26.3%	37.0%	13%
Hypertension	33.9%	29.5%	41.5%	24%
Overweight/ Obesity ¹¹	64.5%	61.0%	70.7%	62%
Stroke	1.8%	1.2%	2.9%	3%

The survey also asked residents if their health care providers had ever referred them to a chronic disease management programs. Seven percent said yes, and another eight percent reported attending a program to prevent or manage a chronic illness.

The following points regarding chronic conditions in the Brazos Valley are worth noting:

- The rate of obesity continues to be higher than the national rate.
- High cholesterol and hypertension rates are also substantially higher than the national rate. In addition, these rates are higher for the rural counties compared to Brazos County.
- Regionally, the rate of depression and anxiety is higher than the nation. Depression and anxiety affect nearly one in four residents, and mental health is among the most significant unmet needs.

⁸ http://www.cdc.gov/nchs/data/series/sr_10/sr10_242.pdf.

⁹ <http://www.cdc.gov/nchs/data/databriefs/db92.pdf>

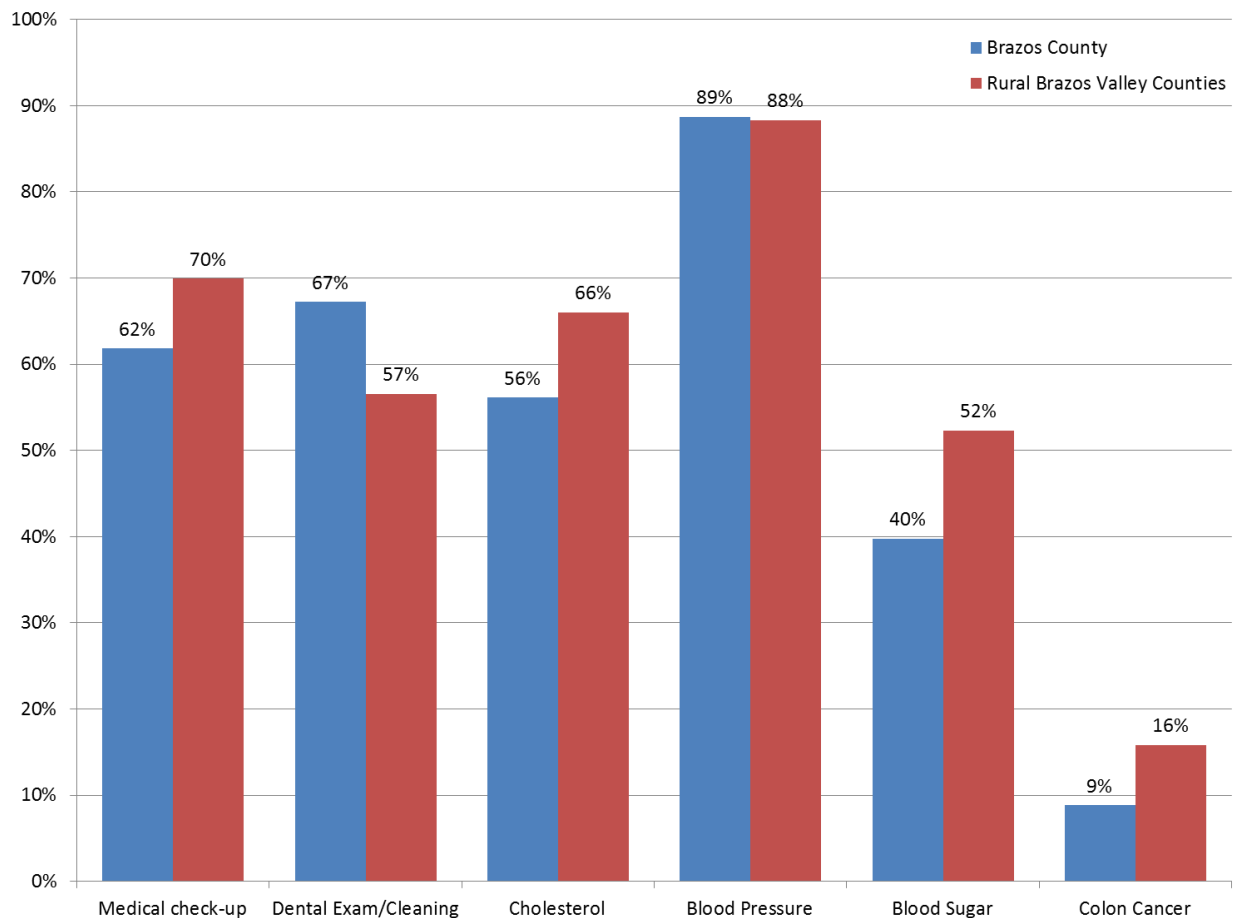
¹⁰ http://apps.nccd.cdc.gov/NCVDSS_DTM/LocationSummary.aspx?state=United+States

¹¹ Overweight/obesity percentages reported in Table 6 are calculated from reported height and weight of survey participants.

Preventive Screenings

This assessment also collected information regarding preventive screenings in addition to the previously reported information about risk factors and disease. Preventive screenings include medical tests or other services that are used to detect and possibly prevent onset of certain diseases. Screenings can catch conditions early and limit long-term impacts of certain conditions. The U.S. Preventive Screening Guidelines Task Force has established specific age and gender groups for a variety of screening activities. Figure 11 illustrates use of recommended preventive screenings by Brazos Valley survey respondents.

Figure 11. Percent of survey respondents receiving recommended screening in the Brazos Valley



The rate of those participating in routine medical screenings was slightly better in 2013 compared to the 2010 survey. In 2010, for screening activities like check-ups, cholesterol, and blood pressure, the majority of respondents (40-60%) fell within the national guidelines. In 2013, 64.8 percent of Brazos Valley residents reported having a medical check-up in the past year; 63.3 percent reported having a dental check-up/cleaning in the past year; 59.8 percent had a cholesterol check in the past year; and 44.4 percent had their blood sugar tested in the past year. Nearly nine out of 10 respondents (88.6%) indicated they had a blood pressure check

in the past year. In all but two screenings in the above figure, rural Brazos Valley counties had a higher rate of compliance with screenings than Brazos County.

Screening for cancer among women is a significant opportunity to reduce morbidity and mortality. Clinical guidelines for preventive screenings among women suggest that women aged 50 years or over obtain a mammogram every one to two years. In the Brazos Valley region, 35.3 percent of women 40 and older reported having a mammogram in the past year. Women 21 years of age or older should also receive a pap test at least every three years. Across the region, 52.1 percent of women reported their last pap test was within the past year, and another 28.5 percent said it was between one and three years ago.

Prenatal Care

Adequate prenatal care has been a concern in the region for several years, prompting the establishment of multiple neonatal intensive care units (NICUs) in the region. The Kessner Index guidelines establish the criteria for adequate prenatal care as having received care before the 14th week of pregnancy (i.e. during the first trimester).

Among Brazos Valley survey respondents, 16.5 percent reported having given birth within the past two years. Of those, 96.6 percent reported receiving prenatal care by the 14th week of pregnancy. The *Healthy People 2020* goal for adequate prenatal care was 90 percent, which the Brazos Valley has attained.

Health Insurance

The *Healthy People 2020* goal for health insurance was that by 2020, every resident would have some type of health insurance. The 2010 Patient Protection and Affordable Care Act¹² was intended to advance this goal, but currently, many residents are still uninsured. Eighteen percent of Americans under the age of 65 lack health insurance¹³, and Texas ranks last among the 50 states in access to care, with a 24 percent overall uninsurance rate¹⁴.

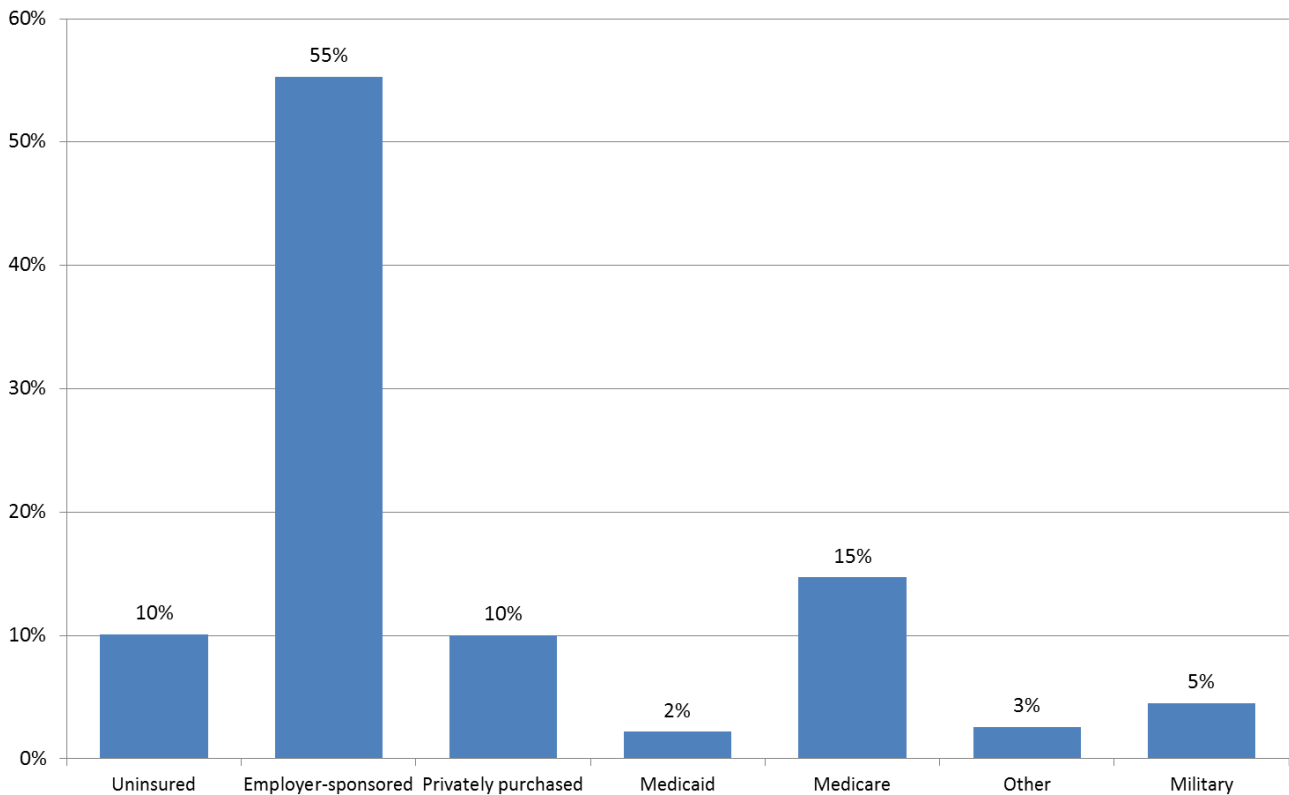
Among Brazos Valley survey respondents, 10.1 percent reported not having health insurance of any kind, varying widely across counties from 5.3 percent in Robertson County to 17.4 percent in Brazos County. Fourteen percent indicated that they had been uninsured at least one month in the past three years. Figure 12 displays the distribution of health insurance coverage in the Brazos Valley.

¹² *Patient Protection and Affordable Care Act* (HR 3590) signed into law on March 22, 2010

¹³ <http://kff.org/state-category/health-coverage-uninsured/>

¹⁴ <http://kff.org/other/state-indicator/total-population/>

Figure 12. Health insurance coverage of Brazos Valley survey respondents



As illustrated in Figure 12, 55.3 percent of survey respondents reported being covered by a health insurance plan through a current or former employer or union. Medicare and Medicare Plus cover 14.7 percent of the population, and 10 percent purchase their own coverage. Relatively small proportions of the population report other sources of coverage.

Health Resources and Medical Home

Availability of health resources and services is an important factor influencing health status. The overall health of the seven Brazos Valley counties is closely tied to resources in Bryan/College Station—the metropolitan hub of the region. In the past several years, though, local efforts in several of the rural counties have focused on developing health resources locally as well. New services are being offered in some rural communities, including additional primary care, prenatal care, case management, substance abuse counseling, transportation, and others. As reported in CDGs, access to specialty care continues to be a persistent issue for rural residents, particularly the uninsured and underinsured.

Every county of the Brazos Valley is designated by the federal Health Resources and Services Administration (HRSA) as a Health Professional Shortage Area (HPSA) wholly or in part. Table 7 outlines designations in the region.

Table 7. HPSA designations for Brazos Valley by county¹⁵

County	Primary Care HPSA	Mental Health HPSA	Dental Care HPSA
Brazos	Partial	Yes	No
Burleson	Yes	Yes	Yes
Grimes	Yes	Yes	No
Leon	Yes	Yes	No
Madison	Yes	Yes	No
Robertson	Yes	Yes	Yes
Washington	Yes	Yes	No

Survey participants were asked about their ability to get care when they needed it. Across the region, 70.9 percent said that their access to health care was *excellent* or *very good*, while 5.3 percent said their access was *poor* or *very poor*. Brazos County reports the best perceived access with 74.5 percent indicating access is *excellent* or *very good*, and Leon County reports the worst perceived access with only 45.4 percent saying *excellent* or *very good* and 20.2 percent saying *poor* or *very poor*.

Outpatient Care

In terms of having a regular place for care, three-quarters of Brazos Valley respondents (74.8%) reported having a provider they considered their regular health care provider—up from 67.7 percent in 2010. Although some did not indicate having a person they considered their regular health care provider, 77.7 percent named a private doctor’s office as a place they usually go for medical care. For outpatient care, 4.7 percent said a community health center and 1.1 percent named the emergency room of a hospital as the place they usually go for medical care. In all Brazos Valley counties, a private doctor’s office or clinic was the most referenced “medical home” for respondents. However, other places reported as a medical home varied across counties between community health centers, free clinics, urgent care clinics and Veterans Affairs clinics (see supplemental county reports for more specific information on each county).

Of those respondents without health insurance, the number of respondents having a regular place for outpatient care drops to 44.9 percent. Nationwide, 53 percent of uninsured adults had no usual source of care.

¹⁵ <http://hpsafind.hrsa.gov/HPSASearch.aspx>

Health Care Utilization

During the past 12 months, Brazos Valley residents accessed a range of venues for their own health care. A majority of residents (83.1%) reported using a doctor's office or clinic for their health care. In the same time frame, 16.8 percent of respondents reported visiting a hospital emergency room for their own medical care. Reasons stated for visiting an emergency room included medical reasons such as heart attack, pregnancy/labor, and accidents or injury; because their doctor's office was closed (i.e., nighttime or weekend); or because it was convenient. Rates across the counties were similar to those of the region regarding the different venues through which they accessed health care. Reasons given for visiting an emergency room across the region included medical reasons such as pregnancy/labor, accidents or injuries, heart attack/chest pains, because their doctor's office was closed (i.e., nighttime or weekend), or for a variety of medical-related reasons.

The survey also asked about residents' health literacy and preparation for medical visits. Among Brazos Valley respondents, only 24.9 percent *fairly often, very often, or always* prepare a list of questions for their health care provider. Most residents appear to communicate well with their health care providers, asking questions about medications (67.9%) and treatment (68.8%), and discussing personal problems (58.9%).

Nearly 60 percent of Brazos Valley residents perceived *very good or excellent* communication between themselves and their health care provider. However, this number varied substantially across counties, ranging from 32.8 percent in Leon County to 62.8 percent in Grimes County. Table 8 displays health communication behaviors by Brazos Valley survey respondents.

Table 8. Communication with health care providers

Behaviors	Never/Almost Never	Sometimes	Fairly often/Very Often/Always
Ask questions about medications	14.9%	17.3%	67.9%
Ask questions about treatment	10.3%	21.0%	68.8%
Discuss personal problems	19.1%	23.0%	58.0%
Prepare a list of questions	44.7%	30.2%	24.9%

Delayed Care

The survey included questions related to delaying care because of cost and found that 16.1 percent of all survey respondents put off seeking medical care because of cost. This information should be considered in light of survey demographics—survey respondents had a higher median income than the population. Table 9 compares overall survey respondents to those who reported having no health insurance in delaying different types of care.

Table 9. Percentage of residents delaying care for any reason

Type of Service Delayed	Brazos Valley
Medical Care	41.0%
Dental Care	38.2%
Medication/treatment	18.8%
Mental health care	13.9%

Since the 2010 assessment, a higher proportion of Brazos Valley residents appear to be delaying medical care, medications and treatment, but fewer are delaying dental care and mental health services. Given the growth of generic and \$4 prescriptions at many retailers, this provides one option for residents to get the medications they need. However, some medications are not covered or are still cost-prohibitive even with assistance. Throughout the region, 9.9 percent of residents said that in the past six months, they have experienced days when they had to choose between buying food, paying rent, and paying for medications. However, this rate varies widely across the Brazos Valley counties ranging from 7.9 percent in Washington County to 20.7 percent in Leon County. This continues to be an issue for many residents.

Caregiving

Over 10 percent of Brazos Valley residents act as caregivers, providing regular care or assistance to a friend or family member at home who has a long-term health problem or disability. During the past months, 11.9 percent of residents reported providing care for at least one person. Across the region, one in five residents in Madison (21.9%) and Robertson (23.9%) County reported providing care or assistance to someone in the past month, while Brazos had the lowest percentage (8.8%).

The majority of the people being cared for were aged 65 or older (57.5%) and another 20.9 percent reported caring for someone between the ages of 45 and 64. Eleven percent of respondents reported caregiving for a child between the ages of one and 17. The most commonly reported relationships between caregiver and the person they cared for was a parent/parent-in-law (45.3%) and spouse (18%). Other relationships reported included caring for a child (12.8%), non-relative (9.8%), and other relative (6.4%). Across the Brazos Valley, caring for a parent/parent-in-law was the most commonly reported relationship, however, the proportions varied widely across counties. As many as 68.7 percent of Grimes County caregivers reported caring for a parent/parent-in-law compared to 29 percent in Madison County. Similarly, rates of caring for a spouse varied, ranging from 12.3 percent in Burleson County to 29.4 percent in Madison County.

The survey also asked caregivers how many hours they provided care weekly, how long they had provided care, the areas in which the person they're caring for most requires help, and how much difficulty they faced in caregiving. Two-thirds of caregivers in the Brazos Valley (67.9%) reported providing care between one and two days (1-47 hours) per week while 21.4 percent

care for charges between three and six days and 8.6 percent care for charges for seven days per week. Nearly three-quarters of participants had cared for their charge for less than five years (45.1% reported one to five years; 29.2% reported less than one year). Less than five percent of caregivers (4.3%) reporting caring for someone for more than 20 years. Rates were similar across all Brazos Valley counties.

Caregivers most commonly reported their charge needing assistance in taking care of themselves (29.6%) with respect to activities of daily living (for example, bathing, eating, and getting dressed), with mobility (23.8%), and because of learning, memory or confusion problems (14.1%). Grimes and Madison Counties were the exception. Both counties reported assistance needed in taking care of themselves and mobility; however, instead of memory issues, Grimes County caregivers reported persons that they cared for need assistance due to feeling anxious or depressed (39.1%) and Madison County caregivers' charges needed assistance communicating with others (17.1%).

Caregiving for another person affects residents of Brazos Valley in a variety of areas. Table 10 displays the reported impact of caregiving on the life of Brazos Valley resident caregivers.

Table 10. Reported difficulties associated with caregiving in the Brazos Valley

Difficulties associated with caregiving	A lot	Some	A little
Affects family relationships	17.3%	27.1%	55.6%
Creates/aggravates health problems	13.6%	17.1%	69.2%
Creates stress	29.8%	28.3%	41.9%
Financial burden	26.2%	20.1%	53.7%
Interferes with work	24.4%	19.1%	56.5%
Not enough time for family	13.2%	26.8%	60.0%
Not enough time for self	17.4%	33.4%	49.2%
Other difficulty	23.7%	16.9%	59.4%

Transportation

Poor transportation can be a formidable barrier to accessing health care services for many residents of RHP 17, Brazos Valley, and in each county. This issue was repeatedly discussed in community discussion groups across the region and is highlighted in the survey findings. The average distance traveled by Brazos Valley residents for medical services is 15.4 miles (21.8 minutes). The average distance traveled varied widely across the region ranging from 10.5 miles in Brazos County to 42.0 miles in Leon County. The median distances were seven miles (15 minutes) for Brazos Valley residents and 18 miles (20 minutes) for residents of the rural counties. Similar distances were reported for dental care, and shorter distances were indicated

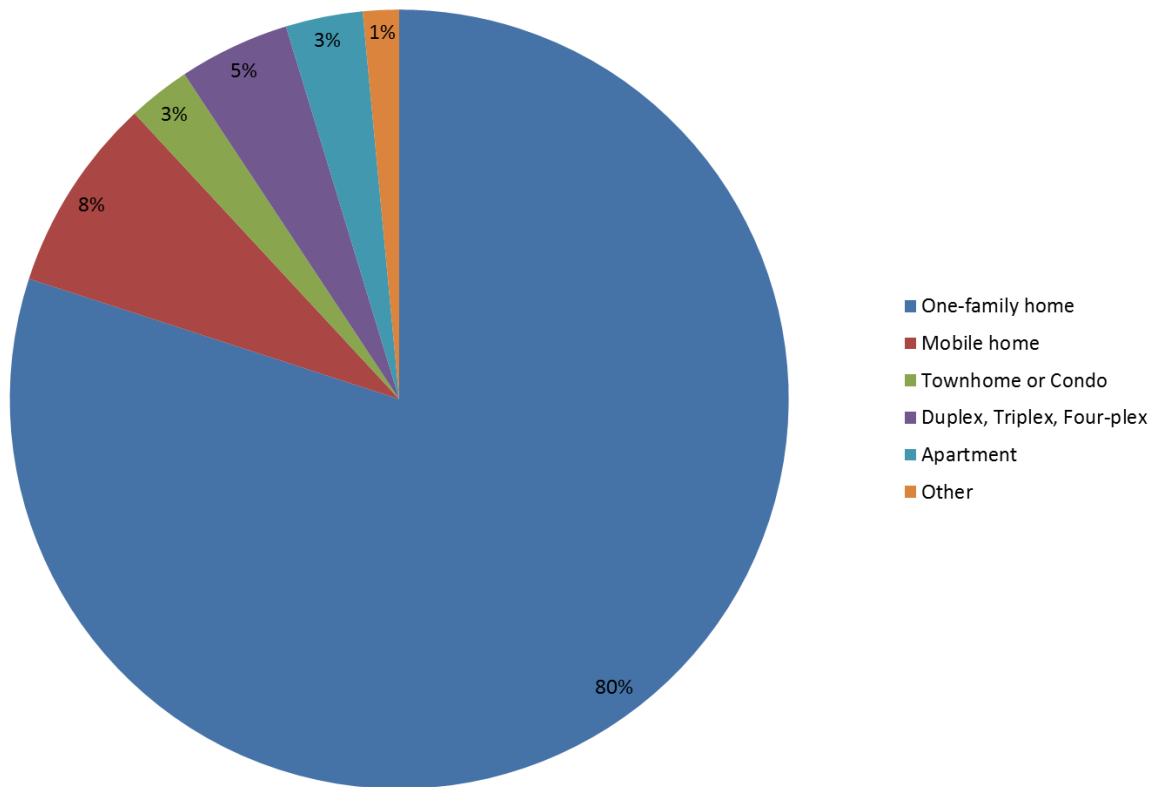
for groceries and pharmacy; rural counties reported similar distances, except for dental care where residents reported traveling a median distance of 25.3 miles.

Other transportation issues were also raised during the community discussion groups, including poor roads, increasing traffic, and the need for more affordable and reliable public transportation options.

Housing

For the first time, the 2013 survey asked residents about their housing conditions. Respondents across the Brazos Valley reported primarily living in a one-family home (80%) or a mobile home (8.1%). Figure 13 illustrates housing situations for each county.

Figure 13. Type of residential housing for Brazos Valley residents



A greater proportion of rural Brazos Valley residents reported living in mobile homes than Brazos County residents – 14.9 percent compared to four percent. Leon (28.6%) and Madison (24.1%) Counties had the highest proportions living in mobile homes.

Residents reported their building’s estimated age, as well as how long they had lived there. Most residents (38%) lived in a building built since 2000; 21 percent of residents reported their residence as being constructed prior to 1980. Rural Brazos Valley counties reported slightly older residences when compared to Brazos County. Regionally, over half of residents (58.7%) have lived in their current home for less than 10 years.

When asked about severe problems in their residence during the past 12 months, survey respondents listed a range of issues. Table 11 shows the types of problems experienced by respondents, indicating a higher proportion of rural county residents experienced problems than those in Brazos County. Across the region, the most reported problem with residents’ homes was related to plumbing, heating/cooling, or electricity (going more than 24 hours without service) during the past 12 months.

Table 11. Severe housing problems reported in Brazos County and rural Brazos Valley counties

Housing problems	Brazos County	Rural Brazos Valley Counties
Broken plaster or peeling paint (interior)	10.6%	11.3%
Broken windows	2.4%	5.6%
Holes in the floor	2.7%	3.8%
Mice, rats, or cockroaches	8.7%	13.2%
Mold	5.7%	5.7%
Plumbing, heating/cooling, electricity	20.2%	22.0%
Roof problems (such as holes, leaks, or sagging)	12.4%	11.3%

Community Issues

Survey respondents were asked to rate a list of issues based on their perception of the seriousness of the issues in their community. The top five issues rated a *serious problem* or *very serious* problem across the region were as follows:

- 1) Poor or inconvenient public transportation (36.8%)
- 2) Illegal drug use (34.9%)
- 3) Alcohol abuse (32.2%)
- 4) Risky youth behaviors (such as alcohol use, drug use, truancy, etc.) (31.7%)
- 5) Teen pregnancy (28.4%)

These results represent a shift from previous assessment results. In 2010, the top five issues in order were illegal drug use, teen pregnancy, unemployment, lack of jobs for unskilled workers, and poor or inconvenient public transportation.

An interesting contrast can be seen when comparing the top five issues for respondents from Brazos County to those of the rural counties. In 2002, several of the issues were the same but prioritized in a different order; in 2006 and 2010, different issues emerged between Brazos and the rural counties. In the current assessment, even more changes are evident in the issues perceived as most critical in the community. Table 12 shows the top five issues rated by Brazos County respondents versus those of the rural counties. In nearly every community issue listed in the survey, rural county respondents rated each issue as a more severe problem than those in Brazos County.

Table 12. Top community issues for Brazos County and Rural Brazos Valley Counties

Brazos County	Rural Brazos Valley Counties
Illegal Drug Use (30.7%)	Transportation (52.9%)
Alcohol Abuse (29.3%)	Illegal Drug Use (42.3%)
Transportation (27.4%)	Risky Youth Behaviors (40.0%)
Risky Youth Behaviors (26.9%)	Lack of jobs for unskilled workers (38.9%)
Teen Pregnancy (24.4%)	Employment/Teen Pregnancy (34.9%, each)

It is important to recognize the percentages of respondents ranking these issues, as the percentages indicate the perceived degree of seriousness. Several of the common issues may hold potential for regional strategies to address those issues.

Community Information and Services

Discussion regarding the health of a community should never be limited to only medical services or health insurance. Numerous social and community issues impact health, and various organizations exist in the community to address these issues.

The current survey included a set of questions asking about individuals' need for and utilization of a broad range of services with response options of did not need, needed and used, and needed but did not use. Closely mirroring RHP 17's needs, the top 10 community services needed (this included *needed and used* and *needed but did not use*) as reported by Brazos Valley region survey respondents were:

- 1) Care of a medical specialist (37.6%);
- 2) Financial assistance or welfare (13.5%);
- 3) Work-related or employment services (13.2%);
- 4) Mental health services (11.2%);
- 5) Financial assistance for auto, appliance, or home repair (9.5%);
- 6) Utility assistance (8.9%);
- 7) Affordable after school or summer day programs (7.8%);
- 8) Early childhood programs (7.2%);
- 9) Literacy training, GED, or ESL courses (7.2%);, and
- 10) Information and referral services (5.5%).

Needed services were similar to the region for both Brazos County and the rural Brazos Valley Counties. Across the region, the top needed services were specialty care and financial assistance programs such as financial assistance/welfare, utility and auto/appliance/home repair assistance. Brazos County respondents reported needs specific to child care such as early childhood programs, affordable child care services and summer/after school programs. Rural Brazos Valley counties had a lower proportion of residents needing child related services, indicating different needs from Brazos County. The rural counties top 10 needs included home health/hospice/homemaker services, food/meal/nutrition services (such as Meals-on-Wheels), and services for the disabled and their families.

While identifying the services most in demand is important, examining the differences between what services people said they needed and used and needed but did not use shows gaps in service delivery. These data offer a clearer picture of **unmet needs** in the Brazos Valley. Table 13 presents the significant gaps identified and how they have changed from the 2010 assessment.

Table 13. Gaps in service delivery in Brazos Valley

Service Category	Percent Who Needed and <u>DID NOT</u> Get
Childcare services	70.9% (21.4% worse than 2010)
Nutrition services (food/meals)	69.1% (26.2% worse than 2010)
Utility assistance	67.4% (13.6% worse than 2010)
Information and referral services	61.8% (30.9% worse than 2010)
Financial assistance for auto, appliance, or home repair or weatherization	60.2% (6.4% worse than 2010)
Literacy training, GED, or ESL courses	57.0% (2.7% worse than 2010)
Affordable after school/summer day programs for children	52.9% (1.2% worse than 2010)
Respite care	46.8% (32.3% better than 2010)
Services for children with emotional problems or delinquent behavior	46.8% (11.7% worse than 2010)
Services for the disabled and their families	43.7% (2.2% better than 2010)

Additionally, the survey asked questions about community capacity including community trust, characteristics, and feelings of relative success. When asked about trusting people in general, there was an overall reserved feeling indicated by residents' responses. Forty percent reported most people can be trusted, 41.2 percent reported it depends, and 18.2 percent said one can't be too careful. However, when asked about their community, 88.4 percent of respondents in the Brazos Valley agreed that people in their community are willing to help their neighbors. Similarly, people in the community were reported that their neighbors were trustworthy (81.1%) and that it was a close-knit community (72.3%). Two-thirds of residents (64.1%) felt that people in their community shared the same values as them. Half of the participants felt they were better off than others in their community (51.9%) and 40.7 percent felt they were about the same as others in the community. Rates were similar for all of the community questions across the region, with the exception of the rural Brazos Valley counties in which a higher proportion of residents reported they felt as if they lived in a close-knit community than those living in Brazos County.

Given the data provided through the analysis of secondary data, the community discussion groups and interviews, and the household survey, several key findings are clear for the Brazos Valley region.

SUMMARY OF KEY FINDINGS

The findings of this assessment emphasize the impact of the current economic situation on residents and families in the Brazos Valley region, conditions related to the environment and risk behaviors, and population changes. Many of these issues are persistent issues that have been building in the Brazos Valley's communities over time.

➤ **Transportation is a significant barrier to access to care for residents and to economic growth for communities.**

- In every community, the public transportation system was described as unreliable, unaffordable, and inadequate.
- Forty-three percent of rural residents travel more than 20 miles to obtain medical care.
- The mean distance to medical care is 13.7 miles—ranging from 10.5 miles in Brazos County compared to 42 miles in Leon County.

➤ **Communities throughout the Brazos Valley are recognizing rapid population growth without the infrastructure and capacity necessary to accommodate it.**

- Many residents say that the infrastructure (roads, buildings, utilities) in their community is aging or does not have the capacity to accommodate the growing population.
- Growth in some communities is within the population, but not necessarily in the business sector to provide jobs and local resources for the increased population. This is causing increased socioeconomic disparities, particularly in rural communities that are close to more metropolitan areas.

➤ **The state of the economy is making it difficult for families to maintain financial stability.**

- Many communities are recognizing the need for more local opportunities for vocational training to enable residents to find employment.
- Unemployment and underemployment places families in situations where they cannot afford to meet their basic needs.

➤ **Although the obesity rate in the Brazos Valley appears to be leveling off, the existing rate of obesity is cause for concern, as well as the prevalence of chronic diseases related to obesity.**

- Across the Brazos Valley, 64.5 percent of adult residents are overweight or obese. The rate of morbid obesity is 14.7 percent.
- In the rural communities, many residents travel great distances (up to an average of 30 miles) to purchase healthy foods, which may increase the disparities for those who do not have reliable transportation.
- Only 26.6 percent of respondents meet national physical activity recommendations (down from 43.9 percent in 2010), while 17.9 percent reported that they rarely do any physical activity.
- Across the Brazos Valley, respondents reported spending an average of 6.1 hours per day sitting on weekdays and 5.3 hours per day on weekends.
- Across the Brazos Valley, the rates of several chronic diseases far exceed the national rates.

Table 14. Chronic disease rates, Brazos Valley vs. U.S.

Disease	RHP 17 (Rural Rate)	U.S.¹⁶
Anxiety	23.7% (21.9%)	17%
Asthma	17.3% (13.3%)	13%
Congestive Heart Failure	2.9% (4.7%)	2%
Depression	24.6% (20.0%)	12%
Emphysema/COPD	5.4% (7.5%)	2%
High Cholesterol	30.3% (37.0%)	13%
Hypertension	33.9% (41.5%)	24%

¹⁶ Data taken from the National Center for Health Statistics at the Center for Disease Control and Prevention.

➤ **Mental health needs continue to exceed the resources and services currently available, and many communities lack local mental health services altogether. Often accompanying mental health issues, alcohol and substance abuse are significant concerns that many residents feel are unacknowledged and unaddressed.**

- Across the Brazos Valley, 24.6 percent report being diagnosed with depression, and 23.7 percent report being diagnosed with anxiety.
- A third of all residents report having at least one poor mental health day in the past month; 12.6 percent reported more than 10 poor mental health days in the past month.
- One-third of residents in the Brazos Valley (32.2%) feel that alcohol abuse is a *serious problem* or a *very serious problem*.
- Over one-third of those surveyed (34.9%) feel that illegal drug use in the Brazos Valley is a *serious problem* or a *very serious problem*.

➤ **Residents are concerned about the risky behaviors of young people in their communities.**

- Across the Brazos Valley, residents indicated that there is a lack of recreational opportunities for youth and adolescents.
- Residents feel that having few organized recreational activities leaves youth with idle time that contributes to participation in risky behaviors and crime.

➤ **As the population grows, the proportion of older adults is increasing, and the current resources and services available for the older adult population and their caregivers are insufficient.**

- In community discussion group in EVERY county, residents, community leaders, and service providers expressed concern for the unmet needs of older adults:
 - Gaps in coverage/services
 - Transportation services
 - Cost of available services
 - Lack of adult day care and respite care for caretakers
 - Inadequate financial resources forcing a choice among basic needs

- **The rural communities, the low-income, and those of a minority population continue to face substantial disparities in access to resources and services, as well as in health outcomes.**

Table 15. Disparities in the Brazos Valley

	Brazos Valley	Rural Counties	Minority	<High School Education	Uninsured	<Poverty
<i>Fair or Poor health status</i>	11.9%	16.3%	14.4%	23.0%	22.3%	25.2%
No regular health provider	31.1%	15.2%	32.7%	47.5%	67.2%	33.3%
Delayed medical care because of cost	16.5 %	15.5%	19.0%	26.7%	58.9%	41.7%
<i>Fair/Poor/Very Poor access to medical care</i>	10.6%	14.3%	22.2%	36.6%	53.7%	33.2%

- Every community expressed concern with communication and outreach, particularly in its inability to reach the growing Hispanic community.
- Residents feel that there is not enough communication between them and the decision-makers in their communities—either to obtain input or to inform them about decisions that have been made.
- Communication among organizations that provide services is not organized; many do not know what other organizations provide.
- Community leaders see a need for better information distribution about available services to those who may need them.

COMMUNITY ADVICE

In light of the issues identified through the assessment process, substantial resources were identified and the community provided valuable advice to guide efforts aimed at addressing these issues. Across the region, the repeated recommendations included the following:

- **Get to know the community.** Across all seven counties, participants explained how important it is to get to know the community and learn the history of the community. Learn what the community values and the culture that is embodied by the residents. Become involved in local organizations and be visible before you implement your project. Build trust and relationships and talk to local leaders, be it city and county officials or community leaders who know how to make things happen.
- **Communication.** Communicate efforts early and update the community often. The best form of communication throughout the region is word of mouth. In every discussion group, participants emphasized word of mouth as the main mode of communication. Local media and churches are two methods to disseminate information to reach a great amount of people. Make sure to be inclusive in your efforts and share results to residents.
- **Collaborate and leverage resources.** Get to know what is going on in the community and collaborate where suitable. Do not duplicate services, instead expand the services available and leverage resources. Survey existing resources in the community and use what is already present, while bringing more resources. Throughout the entire process, make sure to focus on sustainability. Ensure that if and once you leave, the service and resources will still be available to the community.

These findings and recommendations are intended to provide accurate, timely local data that communities and organizations can use for planning and resource development to improve the health and quality of life for residents of RHP 17.

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