

The 2012 Texas Rural Survey

Public Services and Community Amenities



Colter Ellis, Karen M. Douglas, Gene L. Theodori, and Cheryl L. Hudac

The Rural Reality

Rural areas are home to many of the industrial, agricultural, cultural, and natural resources that make Texas a great state. Rural areas are also home to one of our greatest resources – *people*.

Data from the United States Census Bureau suggest that nearly 3.8 million people live in rural areas throughout the Lone Star State.¹ In other words, the population of rural Texas is greater than or roughly equal to the resident populations of 24 other individual states.

In Texas, rural people and communities face certain challenges that differ from their urban and suburban counterparts. It is important to keep in mind, however, that Texas is not alone in this respect. Research indicates that the social and economic fabric of rural areas throughout the United States has been progressively weakened by a number of regional, national, and global changes over the past few decades. Transformations in economic, demographic, social, and spatial organization have had profound effects on rural areas all across this country.²

As in most other states, rural areas in Texas have been, and continue to be, impacted by these structural-level occurrences. An examination of county-level data shows that between 2000 and 2010, 39% of the nonmetropolitan counties in Texas experienced a reduction in their resident populations. Further, nonmetropolitan counties within Texas maintain, on average, lower per capita incomes, higher poverty rates, greater levels of aged-

dependency ratios with fewer workers to support those over age 65, and lower labor force participation rates than do urban areas.

U.S. Census Bureau data affirm that Texas residents living in nonmetropolitan counties are *older, less educated, and poorer* than their metropolitan counterparts. In addition, the quantity and quality of many amenities and public services are frequently inadequate to meet the needs of rural Texans. In rural Texas, pressing needs exist for job creation, increased incomes, economic growth, modernization, improved service delivery, and business recruitment, retention and expansion activities.

The Texas Rural Survey

Between July 2012 and October 2012, a random sample of 4,111 individuals living in 22 rural places in Texas were contacted and asked to participate in the Texas Rural Survey. This report explains the methodology and summarizes the findings of that study.

Methodology

Study Site Selection

The first step of this research required the selection of case study sites. According to the Texas State Data Center, there were a total of 1,752 places in the state of Texas in 2010. This total includes both incorporated places (concentrations of populations having legally defined boundaries) and census designated places (concentrations of population that are locally identifiable by name but not legally incorporated).

Of those 1,752 places, 1,511 (86%) had a population of 10,000 or fewer in 2010. Upon examination of the 1,511 places with populations under 10,000, we noticed what

¹ U.S. Census Bureau, 2010 Census.

² Brown, David L. and Kai A. Schafft. 2011. *Rural People and Communities in the 21st Century: Resilience and Transformation*. Cambridge, UK: Polity Press.

appeared to be “natural breaks” in the sizes of population. About one-third of the 1,511 places had populations of 499 or fewer. Another one-third had populations between 500 and 1,999 residents. The remaining one-third had populations between 2,000 and 10,000. As of the 2010 Census, these 1,511 places represented roughly 11% of the total population of Texas, or approximately 2.7 million people. To use the previous analogy, the number of Texans living in these 1,511 places was greater than or roughly equal to the resident populations of about 16 other states.

In accordance with the research design of the project, one place within each of the three population categories (499 or fewer, 500-1,999, and 2,000-10,000) was selected as a study site within each of the seven Texas Department of Agriculture’s Rural Economic Development Regions (see Appendix A). Due to the large percentage of places with populations of 499 or fewer in the West Region, an additional place in the population category was selected as a study site. Hence, the total number of places included as study sites was 22. The 22 randomly selected places chosen to serve as study sites are shown in Appendix A.

Data Collection

A standard self-administered mail survey following the methodological procedures espoused by the tailored design method (TDM), which incorporates repeated mailings to sampled individuals, was used to gather the data.³ The TDM uses a multiple-contact approach to increase response rates from the sample population.

In July of 2012, an informational letter was first mailed to a stratified random sample of 4,124 households across the 22 study sites. The

informational letter, which was printed in English on one side and Spanish on the other side, informed residents that their household was randomly selected for participation in an upcoming study on rural Texas. Included with the letter was a pre-paid addressed postcard. Residents were instructed to return the postcard if they preferred to receive a copy of the questionnaire printed in Spanish. Instructions on the postcard were printed in both English and Spanish. Thirteen households requested that the survey questionnaire not be sent. Those 13 addresses were not replaced. Hence, the final sample size was 4,111.

In August of 2012, the survey questionnaire was mailed to the sampled households. To obtain a representative sample of individuals within households, a response from the adult who most recently celebrated his/her birthday was requested in the cover letter. The survey questionnaire, organized as a self-completion booklet, contained 46 questions and required approximately 50 minutes to complete. After the initial survey mailing and two follow-up mailings during September and October of 2012, a total of 712 completed questionnaires were returned.

Public Services and Community Amenities Availability of Services and Amenities

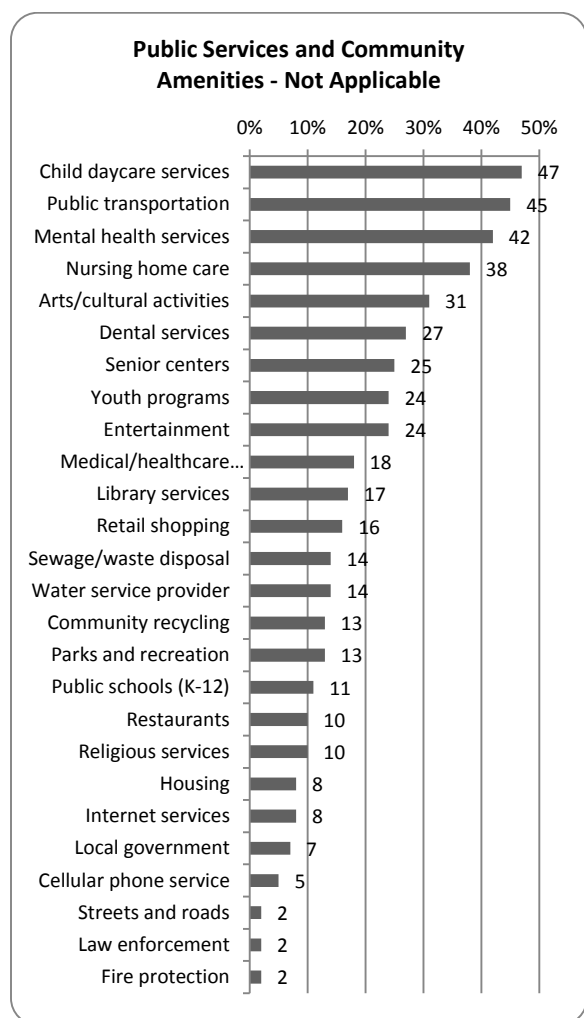
Public services and community amenities are of critical importance for the livability of a community. Many of the services and amenities that provide for the needs of citizens in rural Texas operate at the local level. Data from the Texas Rural Survey show considerable variation in the applicability and quality of these community services and amenities between places of difference populations.

Respondents were presented with a list of 26 public services and community amenities and asked to think about availability, cost, quality, and any other considerations they deemed important. They were then asked to indicate how satisfied or dissatisfied they were with each item.

³ Dillman, Don A., Jolene D. Smyth, and Leah Melani Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. Hoboken, NJ: John Wiley & Sons, Inc.

Responses were measured on a 5-point scale from “very dissatisfied” to “very satisfied.” There was also a response category labeled “not applicable” (indicating that the service/amenity did not exist in the respondent’s community).

The following chart shows the percentage of respondents who indicated that a particular service or amenity *was not available* in their community.



Findings show that more than 4 of every 10 respondents indicated their rural communities did not have child daycare services, public transportation, or mental health services. These are critical services for at risk populations. The absence of child care services limit many

people’s access to the workforce. Not having daycare services makes it especially hard for women, single parents, and those with young children to work. The lack of public transportation limits the mobility of the poor, disabled, and elderly.

According to the American Psychological Association,⁴ rural Americans are at greater risk of suicide, stress, depression, and anxiety disorders than their urban counterparts. This is a troubling trend, especially given that 42% of rural respondents reported to not have access to mental health services.

Moving down the list, the low availability of services for seniors continued. Just under 40% of respondents noted their rural communities lacked nursing home care and 25% did not have access to senior centers.

It is also important to note that several important cultural amenities are largely missing in rural areas. Over 30% of those surveyed reported not having access to arts and cultural activities. Additionally, roughly 1 in 4 respondents reported their rural communities did not have entertainment and youth programs.

While rural communities appear to be lacking in some areas, they are strong in others. For example, 90% or more of the respondents indicated they had access to restaurants, religious services, housing, internet services, local government, cellular phone services, streets and roads. Basic services such as law enforcement and fire protection services were also reported to be present in rural communities.

These data show important differences in the presence and absence of services and amenities in rural areas. There are also important

⁴ “The Critical Need for Psychologists in Rural America” Advanced Suicide Prevention. 2005. American Psychological Association.

differences among rural communities of various sizes. Analysis shows considerable variation among the three population categories sampled. Several categories show statistically significant differences in the availability of the services. These statistical differences are highlighted in grey on the following chart.

The smallest communities in the study had the lowest access to the measured amenities and services. In all cases where a statistically significant difference existed, residents of communities with populations of 499 or fewer were most likely to report not having that particular amenity or service in their community.

Of the 26 amenities and services measured, 19 were statistically less likely to be available in communities with 499 or fewer people. It is understandable that these small communities would have less access to amenities such as retail shopping and restaurants, but the data show that these communities were also statistically less likely to have mental health services, nursing home care, and senior centers. This is a troubling trend, given the aging population in rural Texas.

Table 1. Public Services and Community Amenities - Applicability

Public Services/Amenities	≤ 499		500 to 1,999		2,000 to 10,000		Sig.
	Rank	%NA	Rank	%NA	Rank	%NA	
Child daycare services	2	55	1	50	2	43	
Public transportation	3	53	3	41	1	45	
Mental health services	4	51	2	45	3	36	**
Nursing home care	1	58	6	34	4	33	***
Arts/cultural activities	6	45	4 ^T	35	5	22	***
Dental services	12	36	4 ^T	35	8	18	***
Senior centers	5	50	10 ^T	21	6	20	***
Youth programs	9	40	7 ^T	24	7	19	***
Entertainment	7	43	7 ^T	24	9	17	***
Medical/healthcare services	13	34	9	23	12 ^T	8	***
Library services	10 ^T	39	10 ^T	21	18 ^T	5	***
Retail shopping	10 ^T	39	12	19	18 ^T	5	***
Sewage/waste disposal	15	26	13	17	12 ^T	8	***
Water service provider	14	32	14 ^T	13	12 ^T	8	***
Community recycling	17 ^T	19	14 ^T	13	10	11	
Parks and recreation	8	41	19	9	18 ^T	5	***
Public schools (K-12)	17 ^T	19	16	12	16	7	**
Restaurants	16	23	17	11	22 ^T	4	***
Religious services	21	15	20	8	11	9	
Housing	19	17	18	10	22 ^T	4	***
Internet services	22	10	21 ^T	6	12 ^T	8	
Local government	20	16	21 ^T	6	18 ^T	5	***
Cellular phone service	23 ^T	6	23	4	17	6	
Streets and roads	25	5	24 ^T	2	24 ^T	1	**
Law enforcement	23 ^T	6	24 ^T	2	24 ^T	1	**
Fire protection	26	2	24 ^T	2	24 ^T	1	

** p < 0.01; *** p < 0.001.

Note: % NA refers to percentage of respondents who answered "Not Applicable" for that particular item.

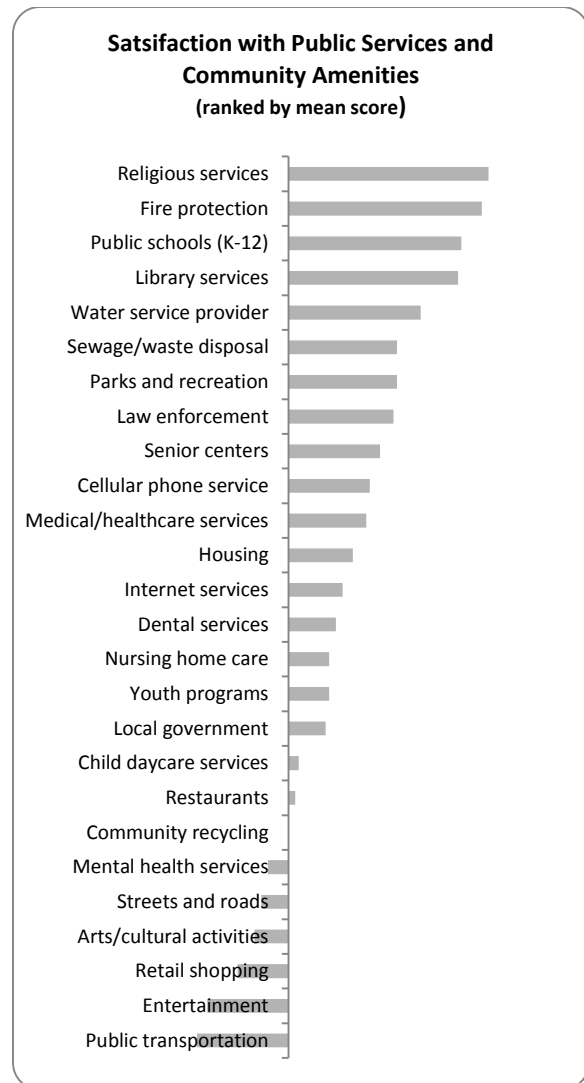
Satisfaction with Services and Amenities

The survey also asked respondents to indicate their level of satisfaction with the amenities and services they did have access to. Responses were recoded into the following categories: -1 = “dissatisfied;” 0 = “neither dissatisfied nor satisfied;” 1 = “satisfied.” Therefore, the higher the mean value, the more satisfied respondents were with that particular service or amenity.

The following chart shows services and amenities ranked by level of satisfaction using mean scores.

The data show respondents were quite satisfied with a number of services. Religious services, fire protection, public schools, library services, water service providers, sewage/waste disposal, parks and recreation, and law enforcement had the highest levels of satisfaction. Lower levels of satisfaction were found with senior centers, cellular phone service, medical/healthcare services, housing, internet services, dental service, nursing home care, youth programs, local government, child daycare services, and community recycling. While community members were less satisfied with these services, more people were satisfied than dissatisfied.

Community members were most dissatisfied with mental health services, streets and roads, arts/cultural activities, retail shopping, entertainment, and public transportation.



The next table takes a closer look at these same variables by distinguishing between the three population categories included in the sample. After testing for statistically significant differences between population size categories it is clear residents of communities with populations of 499 or fewer are the least satisfied with their current services and amenities, with just a few notable exceptions.

Table 2. Satisfaction with Public Services and Community Amenities

Public Services/Amenities	≤ 499		500 to 1,999		2,000 to 10,000		Sig.
	Rank	Mean	Rank	Mean	Rank	Mean	
Religious services	3	0.37	1	0.63	1 ^T	0.62	**
Fire protection	2	0.40	2	0.59	1 ^T	0.62	
Public schools	1	0.44	3	0.52	4	0.52	
Library services	9	0.20	4	0.42	3	0.60	***
Water service provider	4	0.32	5	0.37	6	0.41	
Sewage/waste disposal	6	0.29	7	0.33	9	0.32	
Parks and recreation	19	-0.08	10	0.24	5	0.46	***
Law enforcement	5	0.30	11	0.22	7	0.38	
Senior centers	24	-0.15	6	0.34	11	0.30	***
Cellular phone service	16 ^T	-0.02	9	0.27	10	0.31	***
Medical/healthcare services	15	0.01	13	0.14	8	0.34	**
Housing	7 ^T	0.23	14	0.11	14	0.23	
Internet services	13 ^T	0.02	16	0.06	12 ^T	0.29	**
Dental services	7 ^T	0.23	21	-0.14	12 ^T	0.29	***
Nursing home care	18	-0.04	8	0.3	20 ^T	0.01	***
Youth program	10	0.13	12	0.15	17	0.09	
Local government	11	0.11	15	0.1	16	0.12	
Child daycare services	22 ^T	-0.12	19 ^T	-0.09	15	0.15	**
Restaurants	13 ^T	0.02	17	0.04	20 ^T	0.01	
Community recycling	21	-0.10	18	-0.04	18	0.06	
Mental health services	16 ^T	-0.02	22	-0.16	22	-0.01	*
Streets and roads	12	0.08	19 ^T	-0.09	24	-0.12	
Arts/cultural activities	22 ^T	-0.12	25	-0.27	19	0.02	**
Retail shopping	25	-0.17	24	-0.22	23	-0.09	
Entertainment	20	-0.09	26	-0.32	25	-0.22	
Public transportation	26	-0.42	23	-0.21	26	-0.28	

* p < 0.05; ** p < 0.01; *** p < 0.001.

Coding: -1= Dissatisfied (very/somewhat); 0 = Neither; 1 = Satisfied (very/somewhat).

As shown by total satisfaction rates, rural community members were generally most satisfied with their religious services. Although, parsing out the data by population category shows that those in the smallest areas are significantly less satisfied with religious services than their counterparts in more populous areas. The same is true for library services, internet, medical/healthcare, and cellular phone service.

In a few cases, those residents living in communities of 499 or fewer gave negative scores for categories perceived as positive by the sample as a whole. People in communities with 499 or fewer people were generally dissatisfied with senior centers, parks and recreation, nursing home care, and internet services. In contrast, those in larger communities were generally satisfied with these same services.

This shows that while satisfaction with a service might be reasonably high, residents in smaller areas tend to be less satisfied with some services compared to those in larger areas.

Community Issues

In addition to questions about amenities and services, respondents were asked about issues they were concerned about in their communities. The survey presented respondents with a list of 35 issues that may or may not be problems in their communities. They were asked to indicate whether they believed each issue was “no problem at all,” “a slight problem,” “a moderate problem,” or “a serious problem.”

Responses were coded 1 = “no problem at all” to 4 = “a serious problem.” Therefore, the higher the mean value, the more serious the issue was deemed by respondents.

Table 3. Issues in Respondents' Communities by Level of Seriousness

Issues	Overall Sample		≤ 499		500 to 1,999		2,000 to 10,000		Sig.
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
Use of illegal drugs	1	3.10	3	2.78	4	3.08	1	3.21	***
Availability of good jobs	2	3.07	1	2.99	1	3.35	2	2.89	***
Public transportation	3	2.82	2	2.84	6	2.86	4	2.79	
Lack of commercial development	4	2.78	7	2.59	2	3.14	6	2.58	***
Poverty	5	2.77	4	2.72	8 ^T	2.8	5	2.76	
Lack of industrial development	6	2.74	11	2.47	3	3.12	8	2.54	***
Conditions of streets and roads	7	2.72	12	2.45	11 ^T	2.72	3	2.82	**
Recruitment/retention of health care professionals	8	2.68	6	2.6	5	2.93	9	2.52	***
Outmigration of youth	9	2.65	10	2.48	7	2.84	7	2.55	**
Increased aging of the population	10	2.54	14	2.35	10	2.73	10 ^T	2.45	**
Availability of medical and healthcare services	11	2.50	5	2.68	8 ^T	2.80	18 ^T	2.23	***
Affordable housing	12	2.47	17	2.27	13	2.56	10 ^T	2.45	
Effectiveness of city government	13	2.44	15	2.33	15	2.51	12	2.42	
Enforcement of zoning regulations	14	2.40	16	2.32	16	2.5	14 ^T	2.34	
Lack of residential development	15	2.36	18	2.25	11 ^T	2.72	21	2.12	***
Crime	16	2.34	19	2.22	20	2.32	13	2.39	
Quality of medical and healthcare services	17	2.33	8	2.52	14	2.54	20	2.14	***
High Property tax rates	18	2.32	21	2.10	17	2.39	14 ^T	2.34	
Absence of zoning regulations	19	2.31	13	2.41	18	2.37	18 ^T	2.23	
Effectiveness of county government	20	2.27	20	2.18	21	2.28	16	2.3	
Respect for law and order	21 ^T	2.24	23	2.05	22	2.27	17	2.29	
Availability of high-speed internet services	21 ^T	2.24	9	2.50	19	2.35	22	2.06	***
Recruitment/retention of public school teachers	23	2.03	26	1.91	23	2.22	25	1.93	**
Disagreements among local residents	24	2.02	27	1.89	25	2.05	23	2.05	
Public water supply	25	2.01	29	1.85	24	2.1	24	1.99	
Local police protection	26	1.88	28	1.88	26	1.97	26 ^T	1.82	
Preservation of natural environment	27	1.86	24	1.99	28	1.87	26 ^T	1.82	
Ambulance services	28	1.79	22	2.08	27	1.9	34	1.62	***
Sewage collection/disposal	29	1.78	30	1.83	29 ^T	1.83	30	1.74	
Garbage collection/disposal	30	1.75	31	1.80	29 ^T	1.83	33	1.67	
Quality of local schools	31	1.74	34	1.65	31	1.8	31 ^T	1.73	
Noise pollution	32 ^T	1.72	33	1.71	34	1.59	28	1.82	*
Water pollution	32 ^T	1.72	32	1.75	33	1.68	31 ^T	1.73	
Fire protection services	34	1.71	25	1.93	32	1.72	35	1.61	**
Air pollution	35	1.65	35	1.63	35	1.49	29	1.77	*

* p < 0.05; ** p < 0.01; *** p < 0.001.

Coding: 1= No Problem at All; 4 = Serious Problem.

When looking at the sample as a whole the issues respondents considered most serious included: use of illegal drugs, availability of good jobs, public transportation, lack of commercial development, poverty, lack of industrial development, conditions of streets and roads, recruitment/retention of health care professionals, outmigration of youth, availability of medical and healthcare services, and affordable housing.

Least serious issues included: local police protection, preservation of natural environment, ambulance services, sewage collection/disposal, garbage collection/disposal, quality of local schools, noise pollution, water pollution, fire protection services, and air pollution.

As before, differences emerged between population size categories. Respondents from communities between 500 and 1,999 in

population viewed the issues as being “more serious,” with some exceptions. These statistical differences are highlighted in grey in Table 3.

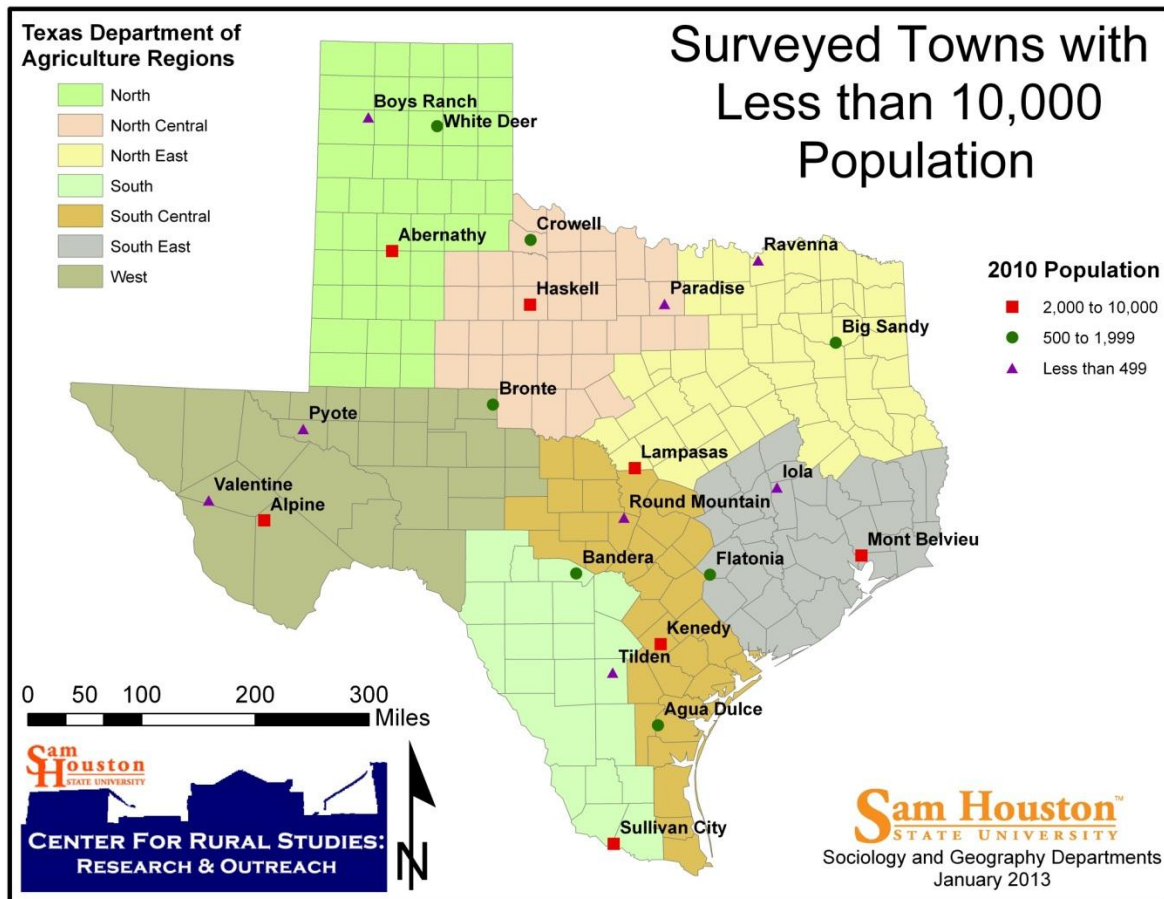
Concluding Comments

These findings suggest that significant differences exist among rural communities’ access to amenities and services. Although satisfaction with services and amenities is generally high when they are available, over 40% of rural communities do not have access to daycare services, public transportation, or mental health services. This problem is significantly worse in communities with 499 or fewer people. More than half of respondents in these smallest communities do not have access to nursing homes or mental health services. Respondents from these areas also had the lowest satisfaction levels in nearly all categories.

Residents’ levels of satisfaction were lowest for mental health services, streets and roads, arts/cultural activities, retail shopping, entertainment, and public transportation. It is important to highlight that rural Americans are at greater risk of suicide, stress, depression, and anxiety disorders than their urban counterparts. This makes both the low levels of access to mental health services, and the low levels of satisfaction when services are available, especially troubling and an important issue for policy makers.

Respondents also reported serious levels of concern with regard to illegal drugs, availability of good jobs, public transportation, lack of commercial development, poverty, lack of industrial development, conditions of streets and roads, recruitment/retention of health care professionals, outmigration of youth, availability of medical and healthcare services, and affordable housing. These problems are most notable in communities between 500 and 1,999 people.

Appendix A



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