

# The 2013 Texas Rural Survey: Public Services and Community Amenities



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## Rural Texas

Of the 25.1 million people living in Texas, 3.8 million (15.3%) live in rural areas.<sup>1</sup> According to the Census Bureau, the land area of Texas is approximately 261,232 square miles, which approaches the area covered by New Mexico, Oklahoma, Arkansas, and Louisiana combined. With such a large geographic expanse, much of the population is concentrated in dense urban areas, whereas the 15.3 percent of the population residing in rural areas is spread across 96.7 percent of the state.<sup>2</sup> Located throughout these rural spaces are a majority of the industrial, agricultural, cultural, and natural resources that drive the state's development and ultimately link urban and rural people and places. While the demographic, social, environmental, and economic landscape of Texas continues to change, one thing that remains constant is the significant interrelationships between urban and rural. As rural places face the significant social and economic challenges that accompany population decline, it is imperative that researchers work to understand, strengthen, and maintain rural areas.

In 2012, the Center for Rural Studies at Sam Houston State University conducted the first Texas Rural Survey. Between August and October 2012, Texas residents from 22 rural places<sup>3</sup> were randomly selected to complete a questionnaire. The findings from the study were used to develop a series of summary reports regarding public services and community

amenities, public perceptions of urban and rural living, economic development strategies and efforts, medical and healthcare services, and natural disaster issues.

The results from the 2012 survey prompted an interest in an additional study. In 2013, the Texas Rural Survey was revised and sent to residents of 22 additional rural Texas places. This report contains a snapshot of the findings from the 2013 Texas Rural Survey specifically regarding economic development strategies and efforts.

## The 2013 Texas Rural Survey

Between June and August 2013, a random sample of 5,608 individuals living in 22 Texas rural places were contacted and asked to participate in the 2013 Texas Rural Survey. This report explains the methodology and summarizes the findings from one topical section of the study.

## Methodology

### Study Site Selection

Following the methodology used with the 2012 Texas Rural Survey, case study sites were selected. Study sites included both incorporated places (concentrations of population having legally defined boundaries) and census designated places (concentrations of population that are locally identifiable by name but not legally incorporated).<sup>4</sup> In 2010, according to the Texas State Data Center, there were 1,752 places

<sup>1</sup> U.S. Census Bureau. 2010a. "2010 Census Urban Lists Record Layouts."  
[http://www.census.gov/geo/reference/ua/ualists\\_la\\_yout.html](http://www.census.gov/geo/reference/ua/ualists_la_yout.html)

<sup>2</sup> U.S. Census Bureau. 2010a. "2010 Census Urban Lists Record Layouts."

[http://www.census.gov/geo/reference/ua/ualists\\_la\\_yout.html](http://www.census.gov/geo/reference/ua/ualists_la_yout.html)

<sup>3</sup> For our purposes, the term "places" refers to incorporated places and census designated places.

<sup>4</sup> U.S. Census Bureau, 2012. "Geography."  
<http://www.census.gov/geo/index.html>

in Texas with 1,511 (86%) of those places having a population of 10,000 or less.

For this study, 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 Rural Economic Development Regions as classified by the Texas Department of Agriculture (see Appendix). In addition, because there are a large number of places in the 499 or fewer population category in the West Region, an additional case study site was added to the sample. Therefore, 22 places were randomly selected as study sites (see Appendix).

### **Data collection**

Following the multiple contact approach of the tailored design method,<sup>5</sup> a standard self-administered mail survey was distributed. Sampled households received repeated mailings with the aim of increasing the response rate. The first mailing, which also contained an informational letter, was mailed in June 2013 to a stratified random sample of 5,608 households across the 22 study sites. The informational letter, printed in English on one side and Spanish on the other, notified residents that their household had been randomly selected to participate in an upcoming study focused on rural Texas. The letter contained instructions for completing the questionnaire in one of two ways: (1) online at the provided URL, or (2) by returning the mailed questionnaire they would soon receive. Of the selected households, no rejections to participation in the study nor mistaken addresses were identified. Therefore, the final sample size remained at 5,608.

Later in June 2013, the survey questionnaire was mailed to the sampled households. In the cover letter, in order to obtain a representative sample of individuals within the households, we requested that the adult in the household who

had most recently celebrated his or her birthday would be the one to complete and return the survey. The 52-item survey questionnaire was offered in English and Spanish as a self-completion booklet and online, and it required approximately 50 minutes to complete. After the initial survey mailing and two follow-up mailings during July and August, 757 completed questionnaires<sup>6</sup> were returned for a response rate of 13.5 percent.

### **Public Services and Community Amenities**

Public services and community amenities make living in a place more convenient and comfortable. 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 different populations. The following report presents data on local availability of and satisfaction with specific public services and community amenities. Additionally, data concerning related community-wide issues are also offered.

### **Availability of Services and Amenities**

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.

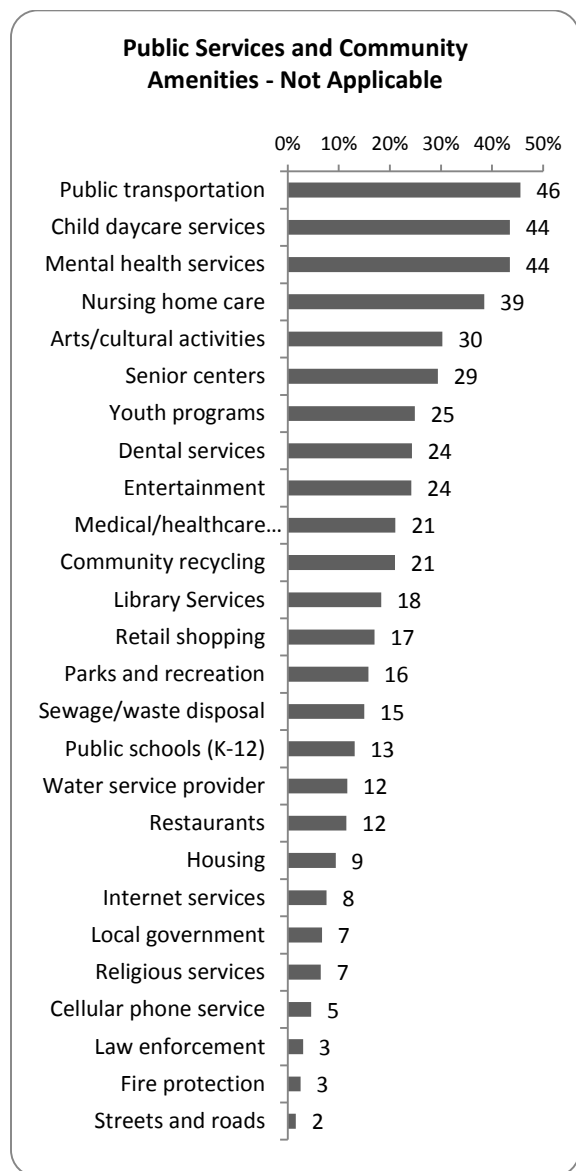
Responses were measured on a 5-point scale from “very dissatisfied” to “very satisfied.” There was also a response category labeled “not applicable” (indicating that the service/amenity did not exist in the respondent’s community).

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<sup>5</sup> 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.

<sup>6</sup> One household requested a Spanish mail survey, and one completed the Spanish version online. In total, 701 completed the mail survey and 56 completed the online survey.

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 in 10 respondents indicated their rural communities did not have public transportation, child daycare services, and mental health services.

Certain services that cater to the elderly were largely absent. Thirty-nine percent of respondents said that their communities lacked nursing home care and 29 percent said the community lacked senior centers.

Several important cultural amenities including arts and cultural activities, youth programs, and entertainment were reported unavailable by about a quarter of respondents.

In addition to mental health services, other healthcare amenities also ranked at the top of the list for unavailability. Twenty-one percent of respondents indicated that medical and healthcare services overall were not available to them in their communities. Furthermore, nearly a quarter of respondents indicated that dental services were also not present.

In contrast, over 90% of respondents reported that certain services and amenities including housing, internet services, local government, religious services, cellular phone service, law enforcement, fire protection, and streets and roads were available in their communities.

These data show important differences in the presence and absence of services and amenities in rural areas. Important differences among rural communities of different sizes also exist. Analysis shows considerable variation in the availability of services between the three population categories sampled. These statistical differences are highlighted in grey in Table 1.

**Table 1. Public Services and Community Amenities – Applicability**

Services/Amenities	≤499		500-1,999		2,000-10,000		Sig.
	Rank	%NA	Rank	%NA	Rank	%NA	
Public transportation	1	56%	2	44%	1	40%	**
Child daycare services	3	51%	3	43%	2	39%	
Mental health services	4	50%	1	45%	3	36%	*
Nursing home care	2	52%	4	36%	4	31%	***
Arts/cultural activities	5	41%	5	31%	6	21%	***
Senior centers	6	41%	9	24%	5	28%	**
Youth programs	10	32%	10	24%	7	21%	*
Entertainment	8	36%	7	25%	9	13%	***
Dental services	7	36%	6	28%	12	10%	***
Community recycling	13	28%	11	19%	8	18%	*
Medical/healthcare services	9	32%	8	24%	13	9%	***
Library Services	11	31%	12	18%	14	9%	***
Retail shopping	12	28%	13	18%	17	7%	***
Parks and recreation	14	23%	14	17%	16	8%	***
Sewage/waste disposal	15	21%	15	14%	11	12%	*
Public schools (K-12)	16	18%	18	10%	10	13%	
Water service provider	17	18%	17	12%	18	6%	**
Restaurants	18	18%	16	13%	22	5%	***
Housing	19	15%	19	9%	20	6%	**
Internet services	23	8%	20	9%	21	5%	
Religious services	22	8%	23	5%	15	8%	
Local government	20	10%	21	6%	19	6%	
Cellular phone service	21	8%	22	5%	24	2%	*
Fire protection	26	4%	25	2%	23	2%	
Law enforcement	24	5%	24	3%	25	1%	*
Streets and roads	25	4%	26	1%	26	1%	*

\*p < 0.05, \*\* p < 0.01; \*\*\* p < 0.001

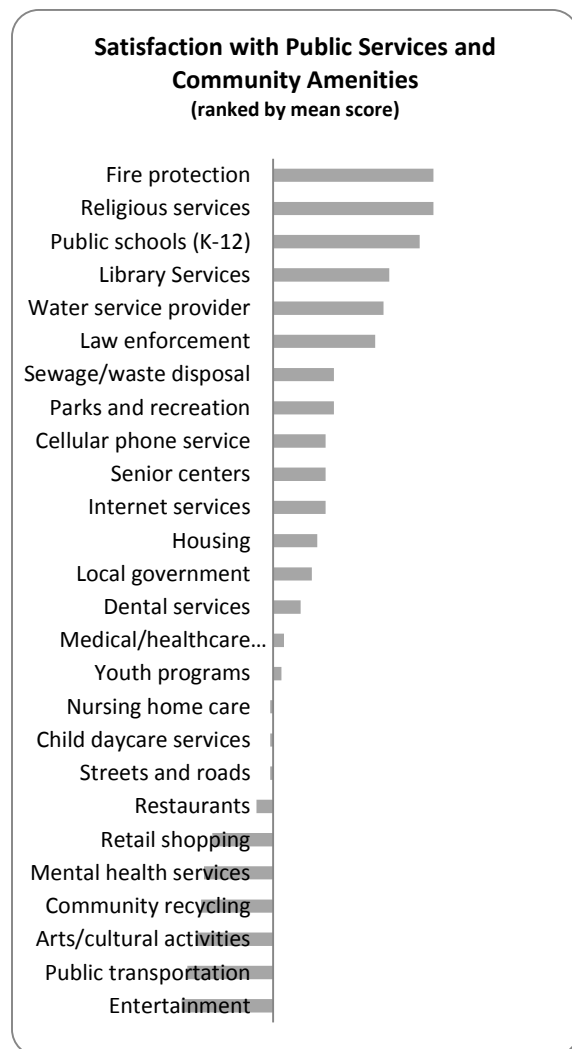
The smallest communities in the study had the lowest access to the measured amenities and services. In all cases where a statistically significant difference existed, residents of communities with populations of 499 or fewer were most likely to report not having that particular amenity or service in their community. Of the 26 amenities and services measured, 20 were statistically less likely to be available in

communities with 499 or fewer people. At the top of the list, the smallest communities were most likely to not have public transportation, nursing home care, mental health services, arts/cultural activities, senior centers, dental services, entertainment, medical/healthcare services, youth programs, and library services. Over 30 percent of respondents from those communities indicated these services were not available to them locally.

### ***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.



Respondents were most satisfied with fire protection, religious services, public schools (K-12), library services, water service providers, and law enforcement in their communities. Lower levels of satisfaction were found with sewage/waste disposal, parks and recreation, cellular phone service, senior centers, internet services, housing, local government, dental services, medical/healthcare services, and youth programs.

There were several services and amenities that respondents were dissatisfied with. These included: entertainment, public transportation, arts/cultural activities, community recycling, mental health services, retail shopping, restaurants, streets and roads, child daycare services, and nursing home care.

**Table 2. Satisfaction with Public Services and Community Amenities**

Services/Amenities	≤499		500-1,999		2,000-10,000		Sig.
	Rank	Mean	Rank	Mean	Rank	Mean	
Fire protection	3	.43	1	.58	1	.70	**
Religious services	1	.54	2	.58	2	.63	
Public schools (K-12)	2	.45	3	.56	4	.55	
Library Services	5	.28	6	.31	3	.62	***
Water service provider	4	.36	4	.39	7	.43	
Law enforcement	7	.20	5	.34	5	.52	**
Sewage/waste disposal	17	-.07	7	.23	8	.40	***
Parks and recreation	10	.10	11	.09	6	.44	***
Cellular phone service	13	.03	8	.18	11	.33	**
Senior centers	8	.14	9	.14	13	.31	
Internet services	6	.24	13	.02	10	.35	***
Housing	14	.01	12	.09	12	.33	***
Local government	9	.14	10	.10	14	.20	
Dental services	15	-.04	18	-.08	9	.36	***
Medical/healthcare services	16	-.04	15	-.04	18	.17	*
Youth programs	11	.06	14	-.01	20	.06	
Nursing home care	22	-.28	16	-.05	16	.18	***
Child daycare services	21	-.26	17	-.06	15	.19	***
Streets and roads	18	-.07	19	-.14	17	.18	***
Restaurants	12	.04	20	-.24	19	.09	***
Retail shopping	19	-.14	24	-.39	22	-.08	***
Mental health services	24	-.36	22	-.34	21	-.08	**
Community recycling	25	-.38	21	-.25	24	-.20	
Arts/cultural activities	23	-.29	26	-.46	23	-.08	***
Public transportation	26	-.38	23	-.36	25	-.21	
Entertainment	20	-.25	25	-.43	26	-.26	

\*p < 0.05, \*\* p < 0.01; \*\*\* p < 0.001

Table 2 on the previous page takes a closer look at these same services by distinguishing between the three population categories included in the sample. After testing for statistically significant differences between population size categories it was evident that residents of the small and medium-sized communities (499 or fewer and 500 to 1,999) were the least satisfied with their current services and amenities.

As shown by satisfaction rates, rural community members were generally most satisfied with fire protection services in their communities. However, these data also show that those in the smallest communities are significantly less satisfied with their fire protection services than their counterparts in more populous areas. The same is true for library services, law enforcement, cellular phone services, and housing. Those in the smallest communities reported levels of dissatisfaction for sewage and waste disposal, whereas residents of the larger communities were generally satisfied with this service.

Significant differences in satisfaction levels also existed for residents of the medium-sized communities with populations of 500 to 1,999. People from these communities were significantly less satisfied with parks and

recreation and internet services than those residents in the communities of the other population categories. When looking at restaurants as a community amenity, residents of these medium-sized communities indicated a level of dissatisfaction, whereas their counterparts in both smaller and larger communities were more satisfied with this amenity. Additionally, residents of the medium-sized communities reported significantly higher levels of dissatisfaction for retail shopping, arts and cultural activities, and streets and roads than residents of the other sized communities.

### **Community Issues**

In addition to questions about amenities and services, respondents were asked about issues in their communities that they were concerned about. The survey presented respondents with a list of 34 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		500-1,999		2,000-10,000		Sig.
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
Availability of good jobs	1	3.33	1	3.39	1	3.47	2	3.12	***
Use of illegal drugs	2	3.20	2	3.22	2	3.14	1	3.25	
Poverty	3	2.92	3	2.96	5	2.95	3	2.84	
Lack of industrial development	4	2.90	4	2.94	3	3.04	5	2.72	*
Public transportation	5	2.87	5	2.90	6	2.93	4	2.78	
Lack of commercial development	6	2.85	6	2.90	4	2.99	6	2.65	**
Conditions of streets and roads	7	2.75	7	2.85	8	2.88	9	2.50	***
Recruitment/retention health care providers	8	2.73	9	2.78	7	2.93	10	2.48	***
Availability of medical and healthcare services	9	2.64	8	2.85	10	2.79	14	2.31	***
Quality of medical and healthcare services	10	2.63	12	2.71	9	2.82	13	2.37	***
Outmigration of youth	11	2.60	14	2.67	11	2.72	12	2.39	**
Affordable housing	12	2.53	10	2.74	17	2.48	11	2.42	*
Crime	13	2.50	17	2.48	19	2.46	8	2.55	
Lack of residential development	14	2.49	13	2.71	12	2.57	19	2.22	***
High property tax rates	15	2.49	21	2.35	18	2.47	7	2.63	*
Enforcement of zoning regulations	16	2.48	15	2.65	13	2.57	15	2.28	*
Increased aging of the population	17	2.47	11	2.73	15	2.54	22	2.18	***
Absence of zoning regulations	18	2.45	16	2.60	14	2.56	21	2.21	**
Effectiveness of city government	19	2.37	19	2.43	20	2.42	17	2.27	
Availability of high-speed internet service	20	2.34	26	2.24	16	2.50	20	2.22	*
Respect for law and order	21	2.33	18	2.45	22	2.30	16	2.28	
Effectiveness of county government	22	2.30	24	2.31	21	2.33	18	2.24	
Recruitment/retention public school teachers	23	2.18	22	2.33	25	2.11	24	2.16	
Public water supply	24	2.14	20	2.38	23	2.12	25	1.99	**
Preservation of natural environment	25	2.14	29	2.13	24	2.12	23	2.16	
Disagreements among local residents	26	2.02	30	2.11	28	2.01	26	1.95	
Ambulance services	27	1.97	27	2.21	27	2.07	32	1.68	***
Local police protection	28	1.96	25	2.31	29	1.99	33	1.65	***
Traffic	29	1.96	33	1.74	26	2.10	27	1.94	**
Sewage collection/disposal	30	1.94	23	2.32	30	1.85	29	1.82	***
Quality of local schools	31	1.88	31	1.97	31	1.85	28	1.83	
Fire protection services	32	1.84	28	2.21	34	1.78	34	1.64	***
Garbage collection/disposal	33	1.80	32	1.77	33	1.82	31	1.80	
Noise pollution	34	1.78	34	1.63	32	1.84	30	1.80	

\*p &lt; 0.05, \*\* p &lt; 0.01; \*\*\* p &lt; 0.001



When looking at the sample as a whole, the issues respondents considered most serious included: availability of good jobs, use of illegal drugs, poverty, lack of industrial development, public transportation, lack of commercial development, conditions of streets and roads, recruitment/retention of health care providers, availability of medical and healthcare services, quality of medical and healthcare services, outmigration of youth, and affordable housing. Least serious issues included: noise pollution, garbage collection/disposal, fire protection services, quality of local schools, sewage collection/disposal, traffic, local police protection, and ambulance services.

As before, differences emerged between population categories. Respondents from communities in the smaller population categories (499 or fewer and 500-1,999) generally viewed the issues as being “more serious.” These statistical differences are highlighted in grey in Table 3.

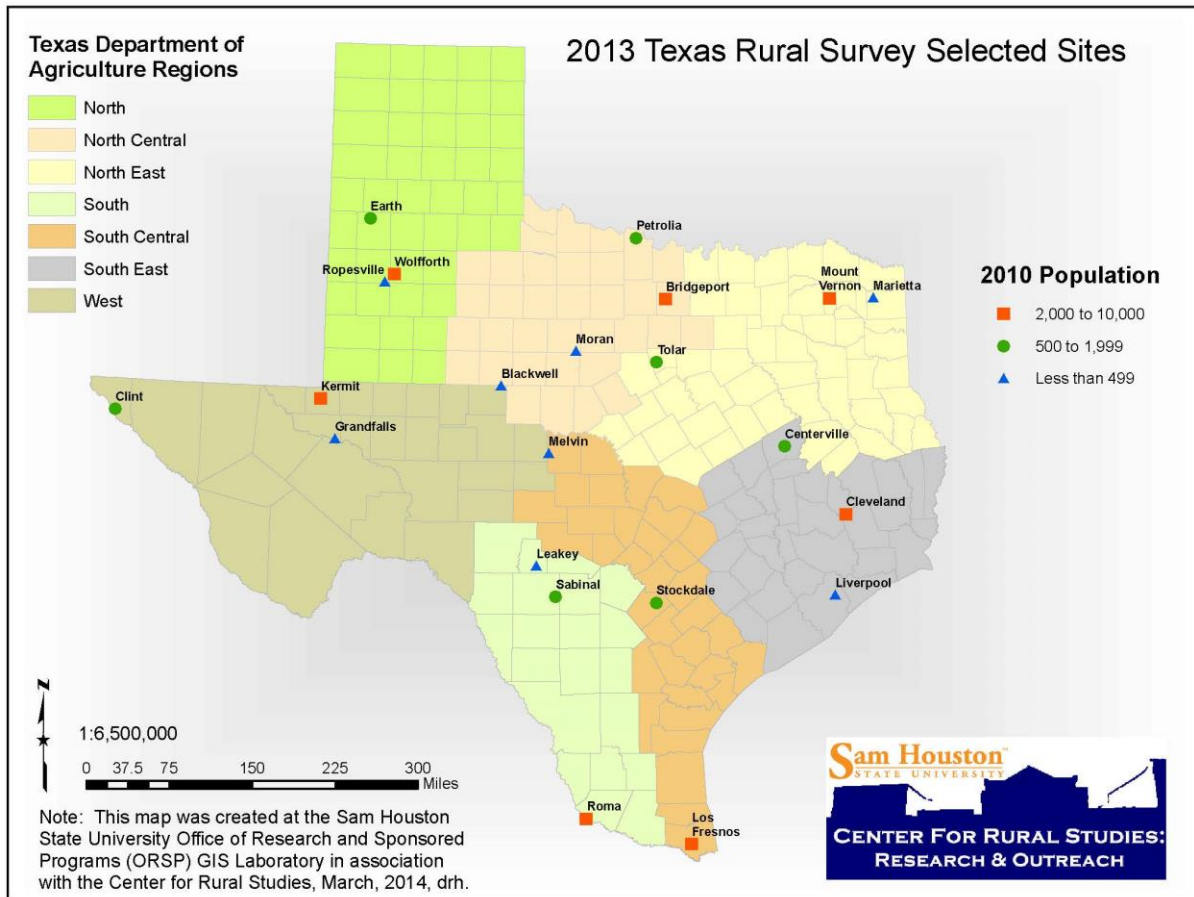
### **Concluding Comments**

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 public transportation, daycare services, 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 public transportation, mental health services, or nursing homes. Respondents from these areas also had the lowest satisfaction levels in nearly all categories.

Respondents’ levels of satisfaction were lowest for entertainment, public transportation, arts/cultural activities, community recycling, mental health services, retail shopping, restaurants, streets and roads, child daycare services, and nursing home care.

Respondents reported serious levels of concern with the availability of good jobs, use of illegal drugs, poverty, lack of industrial development, public transportation, lack of commercial development, conditions of streets and roads, recruitment/retention of health care providers, availability of medical and healthcare services, quality of medical and healthcare services, outmigration of youth, and affordable housing. These problems are most notable in communities with smaller populations.

## Appendix



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