

Vulnerability Assessment for Hood County, TX

Prepared By:

Faisal Aldalbahi
Tiffany Cousins
Kristie Franks
Nur Hamidah
Kalen Herring
Ridvan Kirimli
Ricardo Maga Rojas
Robert McCharen
William Paiz-Tabash
Ellen Phillips
Jeewasmi Thapa
Andrew Wallick
Wenqian Yan
Yixun Zhang

Edited by: Maria Watson

Instructor: Yu Xiao, Ph.D., AICP

*PLAN 647- Disaster Recovery and Hazard Mitigation
Department of Landscape Architecture & Urban Planning
Texas A&M University*

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Executive Summary

One year after the Tornado of 2013, Hood County is now among the recovery and mitigation stages of the four-stage disaster cycle. In the Fall of 2014, fourteen Master's of Urban Planning students at Texas A&M University created this assessment report as part of the graduate course "Disaster Recovery and Hazard Mitigation" instructed by Yu Xiao, Ph.D., AICP. The purpose of this assessment is to understand the potential threats for Hood County that will support the County to improve post-disaster mitigation and planning.

The assessment contains three parts, analyzed for each Hood County and Granbury.

- Hazard Risk Assessment
 - a. Based on the available data, we conducted an analysis of historic and predicted disaster risk in the area including natural disasters such as tornados, drought, flooding, storms, hail, winter weather, and man-made hazard such as potential oil leak or nuclear explosion, etc.
- Social Vulnerability Assessment
 - a. We focus on: 1) population growth; 2) race and gender; 3) employment, per capita income, and poverty levels; 4) educational attainment; 5) household status; and 6) physical housing characteristics.
- Business and Economic Vulnerability Assessment
 - a. Utilizing resources available to the Texas A&M Library System indicated that the majority of businesses within Hood County were located within the city of Granbury. The business and economic vulnerability of Hood County and Granbury were addressed in terms of both tornadoes and potential flooding.

Geographic Information System mapping is the main analysis method based on the data from the U.S. Census, local governmental, and commercial records.

Hazard Risk Assessment

The probability for future disasters in Hood County and Granbury is fairly low. Sever storms were the most frequently occurring disaster historically, followed by winter weather, flooding, and drought. But, drought has had the largest total property loss in the County from 1960 to 2008 at nearly \$8 million in losses. Hail has had the highest average dollar loss per event at nearly \$1.2 million in losses on average.

Looking forward, we mapped the 100-year and 500-year floodplains in the County. A 100-year floodplain indicates areas that have a 1% chance each year of flooding. The majority of the floodplain follows the Brazos River, as would be expected, and its small tributaries and creeks. This floodplain does flow through the historic area of downtown Granbury and along the Lake. We also mapped potential sources of technological disaster or spills including known Superfund sites (areas the EPA has identified in need of hazardous waste clean-up) and areas that host tanks or can have spills of toxic substances. There are two Superfund sites, one in downtown Granbury along the River and one to the north-east of town.

Social Vulnerability Assessment

Hazard risk analysis is only one component of understanding a community's vulnerability to disaster. The next is what researchers call "social vulnerability." Social vulnerability describes how some portions of the population may have more difficulty preparing for, coping with, and recovering from a disaster. For example, research shows that those with less income, less education, and language barriers often lack the resources to prepare and recover from a disaster and have greater difficulty accessing community resources and the elderly are at increased risk due to physical and mental health decline. Research has shown that women, racial minorities, non-English speakers, the elderly and children, and those living in poverty face more damages from disasters and have longer recovery times.

The 2013 tornado raised the concern of non-English speaking populations in Hood County who required translators to access community services. Thus, we analyzed the demographics of Hood County and Granbury to understand what other populations would be of most concern during a future event.

Age is the most striking vulnerability concern for the County and Granbury. Twenty-six percent of the population of Granbury and 21 percent of Hood County are over 65 years of age compared to only 11 percent of the Texas population as a whole. Mitigation and recovery plans should take into account the addition needs of elderly persons in terms of physical or mental health. In terms of poverty, overall Granbury and Hood County have lower poverty rates and unemployment rates than the rest of Texas and the U.S. This make poverty less of an overall concern for disaster in the County, but as the 2013 tornado showed, poverty and thus social vulnerability can be concentrated in pockets that are affected by disaster. We provide maps that show where these populations are more concentrated in the County.

Housing is also a concern for the County and Granbury. Large percentages of the population live in rental properties, which are the slowest to be rebuilt and repaired following disasters. Based on GIS mapping, renters are more concentrated near downtown Granbury and the floodplain. This result implies a potential need for longer temporary housing following a disaster.

Business and Economic Vulnerability Assessment

Businesses most at risk for disaster are those who lie within the projected flood plains *and* have comparatively few resources. Small businesses with few employees fit this profile, provided their location is at risk. Maps contained in the report show the location of different types of businesses as they relate to the floodplain. According to these flood maps, less than four percent of businesses in Granbury are within the 500-year floodplain, which account for about five percent of employees. These at-risk businesses are most commonly in the service sector or retail trade and their sales value is near \$91 million. These jobs are often the first lost in a disaster and the slowest to recovery. Further, a majority of all businesses in the area have fewer than 10 employees, and small businesses often have greater difficulty recovering from disaster. Ensuring the resiliency of service industry and small businesses become important to ensuring their continuation in the aftermath of a flooding incident.

RECOMMENDATIONS

- Establish a variety of educational resources about government assistance in the low-income areas of the county.
- Establish mentorship/vocational programs in the areas with higher unemployment rates.
- Offer employment opportunities to the unemployed population in the work force during the recovery period.
- Keep future development away from floodplain.
- Support small businesses and service sector industries to prepare for disaster.
- Educate the public about the methods to mitigate negative influence of disasters and strategies to recover from the disasters.
- Prepare for elderly and renter's needs in disaster recovery.

Questions or comments?

Contact:

Michelle A. Meyer, Ph.D.

Research Project Principal Investigator

mmeyer@lsu.edu

218-791-8621

Physical Hazard Assessment

Part 1: General Information

This section serves to establish a baseline of information for the report. It includes basic information about the location, geography, climate, and transportation network of Granbury and Hood County. In addition, there is a discussion about the methodology used for this physical hazard assessment.

Location and Geography

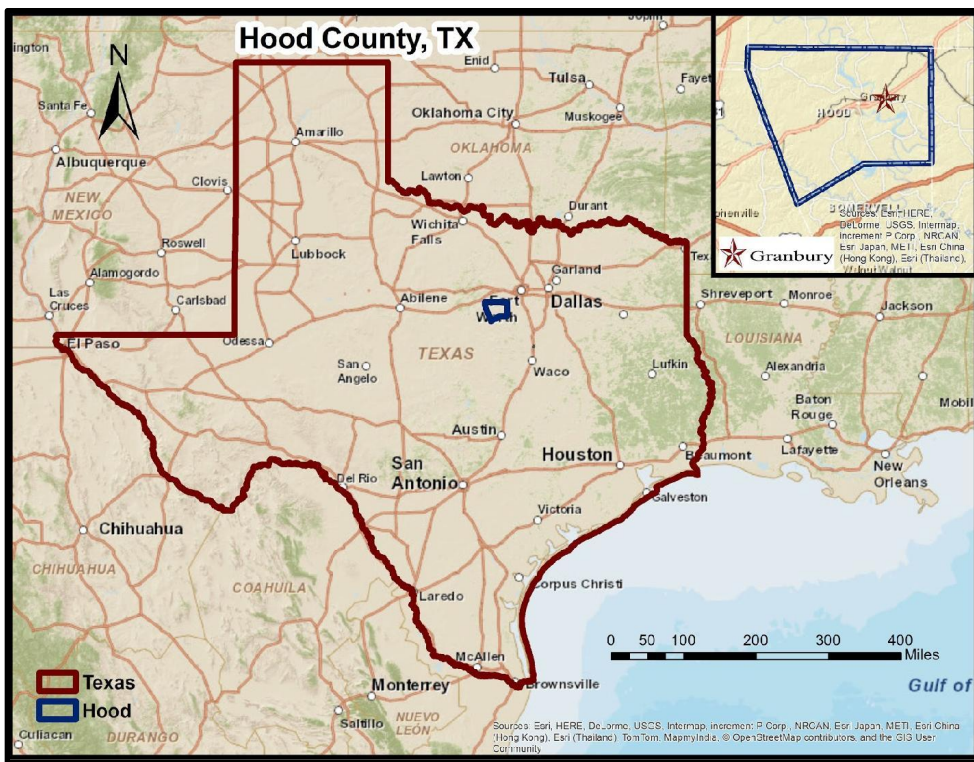


Figure 1. Study Area

Granbury is the county seat for Hood County, Texas (See Figure 1). Granbury is 35 miles southwest of Fort Worth, Texas and 87 miles northwest of Waco, Texas. It sits on either side of the Brazos River, with Lake Granbury a part of that river. Figure 2 shows the topography of Hood County and Granbury, with the major streams, lakes, and rivers in blue.

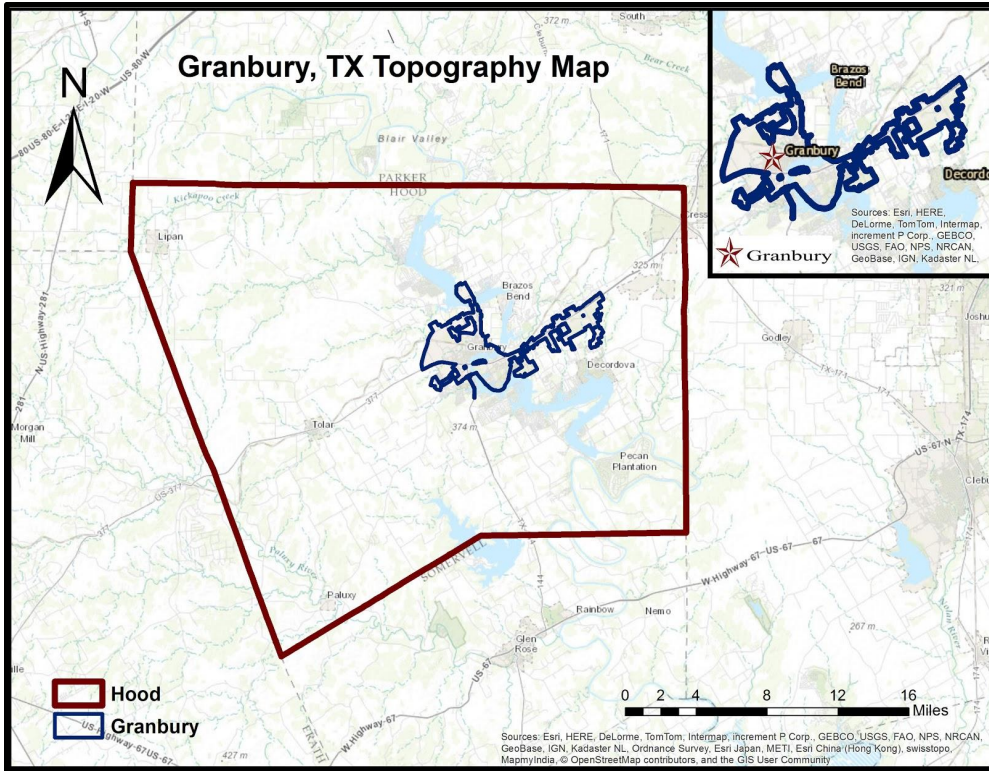


Figure 2. Topographic map for Granbury

Climate

Granbury, TX Rainfall and Snowfall Average		
Month	Average Rainfall	Average Snowfall
January	2.1 Inches	0 Inches
February	1.28 Inches	0 Inches
March	2.89 Inches	0 Inches
April	2.24 Inches	0 Inches
May	2.94 Inches	0 Inches
June	2.34 Inches	0 Inches
July	2.52 Inches	0 Inches
August	2.24 Inches	0 Inches
September	3.95 Inches	0 Inches
October	2.79 Inches	0 Inches
November	0.69 Inches	0 Inches
December	1.82 Inches	0.57 Inches

Figure 3: Average Rainfall and Snowfall in Granbury. Source: <http://www.homefacts.com/weather/Texas/Hood-County/Granbury.html>

The rainfall generally is at a low level, but has 3 peaks in March, May, and September, which could be the main periods that floods and storms would happen. One note: Homefacts.com does not specify the years that this data was averaged from.

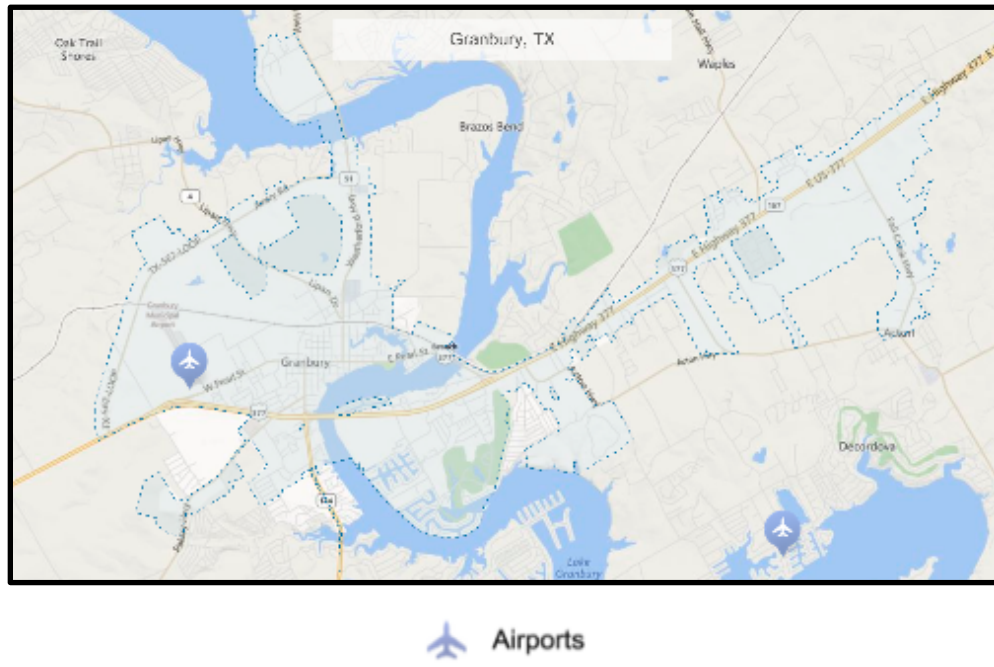


Figure 4: Airports. Source: <http://www.homefacts.com/interactivemap/Texas/Hood-County/Granbury.html>

Highway 377 travels east and west through Granbury, and the city has connections to US 51 and US 144 within the city. Also, Granbury Regional Airport (GDJ) operates flights to Fort Worth Airport and other specific flights.

Methodology and Limitations

For this physical vulnerability assessment, we have taken three major steps. First, we collected maps and data of historic hazards. For these, we had two data sources: The Spatial Hazard Events and Losses Database for the United States (SHELDUS), and Homefacts.com. Second, we have made comparisons between the different hazard types to determine which were most relevant to Granbury and Hood County. Last, we collected and mapped floodplain data for the city and the county. This data is from the Federal Emergency Management Agency.

A few limitations of our data exist. The first we noticed was that the two sources did not always match, especially in the historical records. The SHELDUS data (portrayed later in chart form) only covers the years 1960 to 2008, but the earlier years have much fewer recorded incidents compared to the later years. This could be for two reasons: one, incidents are noticed more now because of technological improvements, or two, human expansion has caused more people to be affected by disaster incidents. Another limitation of our analysis is the lack of mappable data. The data from Homefacts.com is not available for download, so we were not able to layer it with other maps for a more robust analysis. So keep these limitations in mind as you read the report.

Part 2: Frequency Analysis

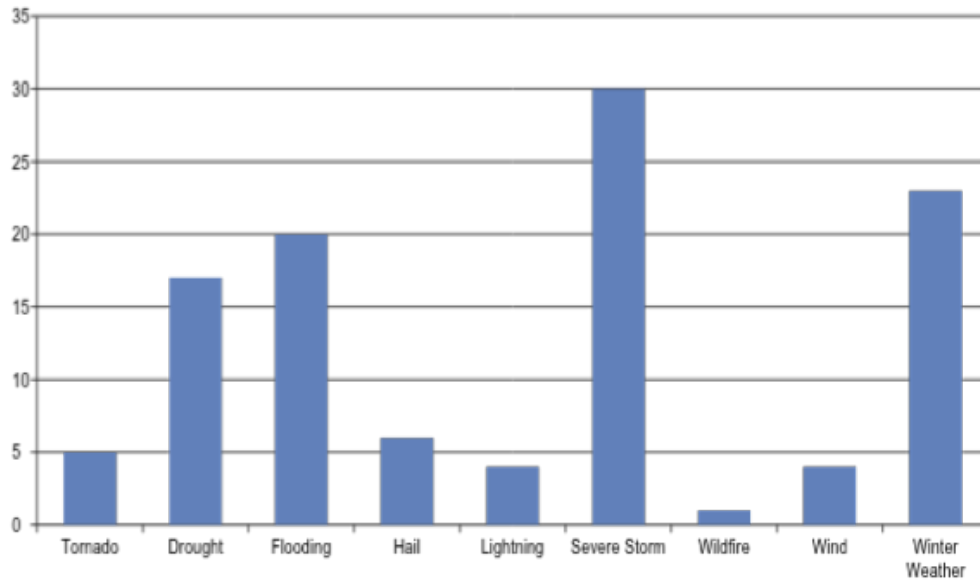


Figure 5: Number of Recorded Hazards in Hood County: 1960-2008. Source: Hazards & Vulnerability Research Institute (2008). *The Spatial Hazard Events and Losses Database for the United States, Version 6.2*

As can be seen in Figure 5, Hood County has experienced more severe storms than any other hazard. Winter weather comes in second, with drought and flooding close behind. The other hazards listed are less common, but can sometimes be more severe, as we will see in the next few charts.

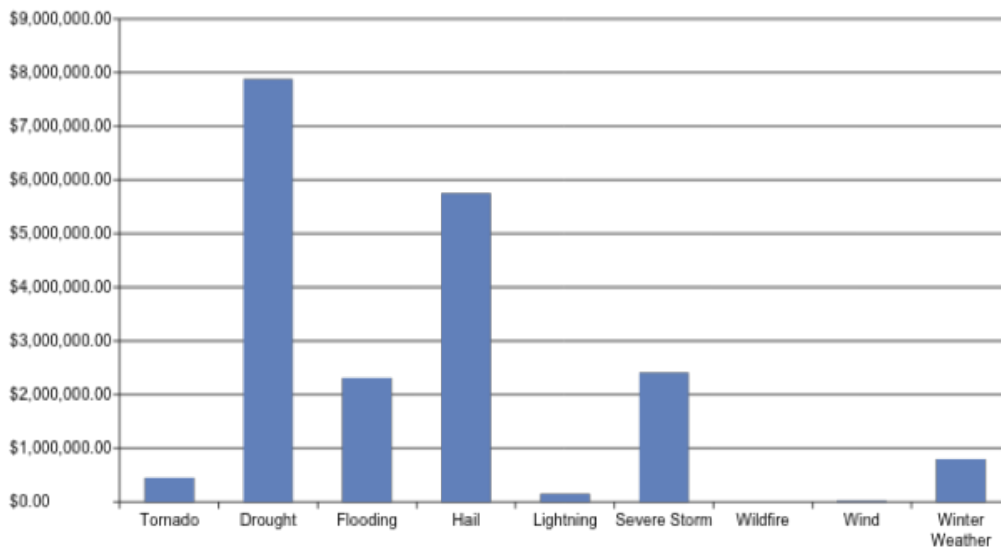


Figure 6: Sum of Property Damage in Hood County by Hazard: 1960-2008. Source: Hazards & Vulnerability Research Institute (2008). *The Spatial Hazard Events and Losses Database for the United States, Version 6.2*

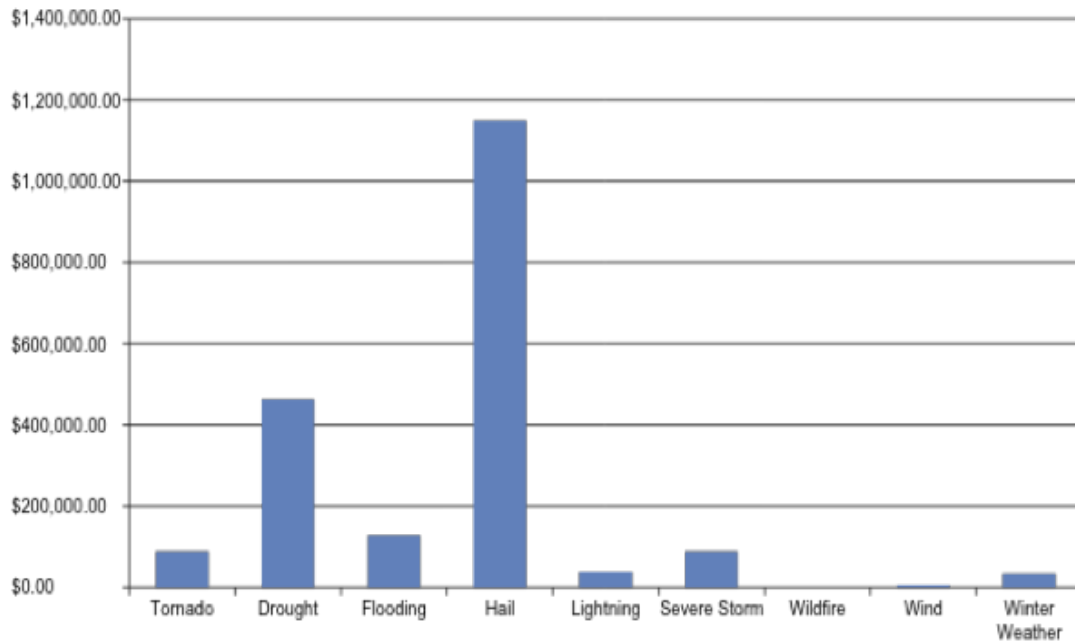


Figure 7: Average Property Damage in Hood County by Hazard: 1960-2008. Source: Hazards & Vulnerability Research Institute (2008). *The Spatial Hazard Events and Losses Database for the United States, Version 6.2*

Figures 6 and 7 show property damage in Hood County for each disaster, but Figure 6 shows the total (sum) damage done, while Figure 7 shows the average damage done per event. Droughts have caused the most total damage, but hail has caused by far the most damage per event. Table 1 has the numbers from all three charts listed. Note: drought, for this dataset, is listed as 1 event per month. So if a drought lasted for 5 months, it would count as 5 individual events. Flooding, while having much lower total and average damage than hail and drought, still is the third most damaging disaster in average property damage and fourth in total damage.

Hazard Type	Sum of Frequency	Sum of Property Damage	Average of Property Damage
Tornado	5	\$448,695.65	\$89,739.13
Drought	17	\$7,878,560.15	\$463,444.71
Flooding	20	\$2,314,200.29	\$128,566.68
Hail	6	\$5,750,000.00	\$1,150,000.00
Lightning	4	\$153,000.00	\$38,250.00
Severe Storm	30	\$2,406,379.83	\$89,125.18
Wildfire	1	\$ -	\$ -
Wind	4	\$24,461.86	\$6,115.47
Winter Weather	23	\$794,444.59	\$34,541.07

Table 1: Loss Summary in Hood County. Source: Hazards & Vulnerability Research Institute (2008). *The Spatial Hazard Events and Losses Database for the United States, Version 6.2*

Part 3: Historic Hazards

Tornados

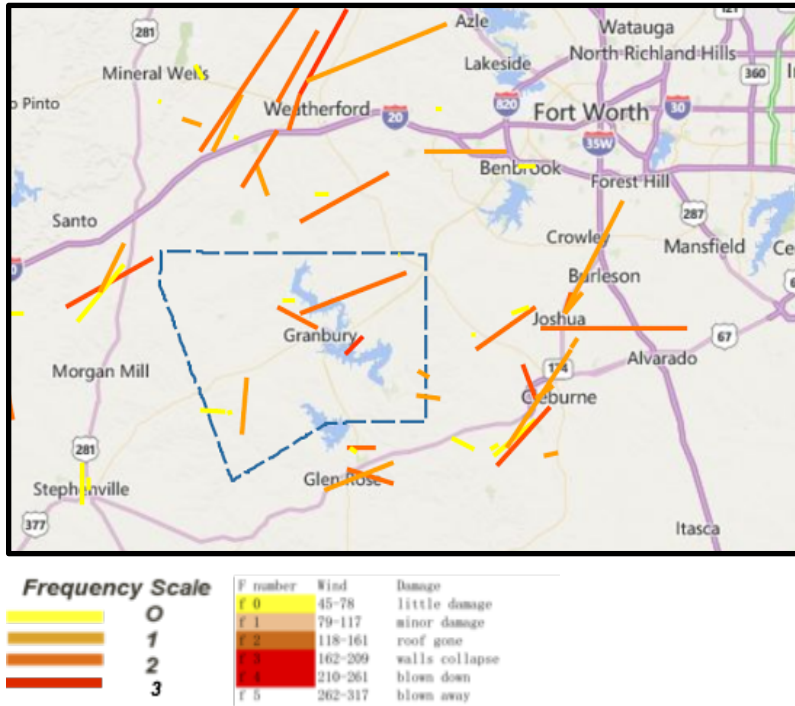


Figure 8: Tornado Paths in Hood County: 1951-2013. Source: <http://www.homefacts.com/tornadoes/Texas/Hood-County.html>

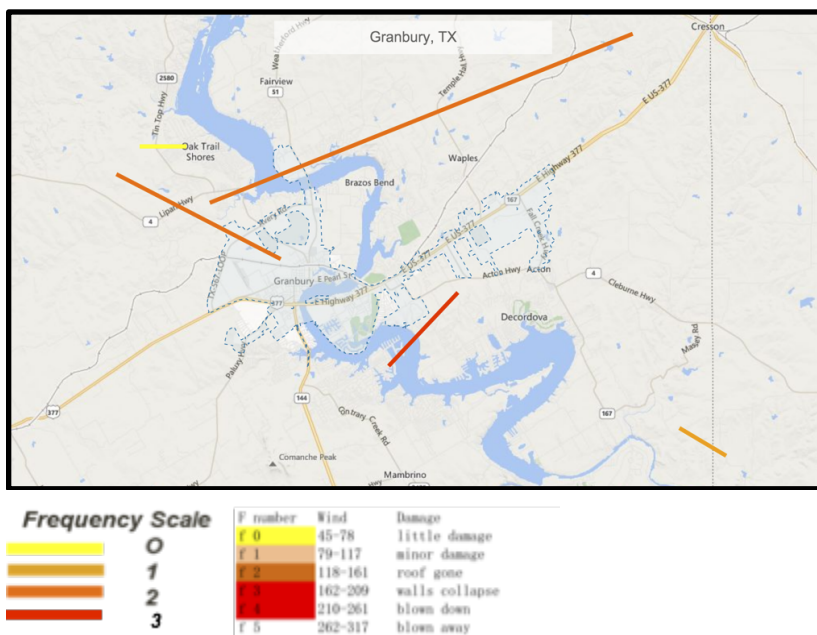


Figure 9: Tornado Paths in Granbury: 1951-2013. Source: <http://www.homefacts.com/tornadoes/Texas/Hood-County/Granbury.html>

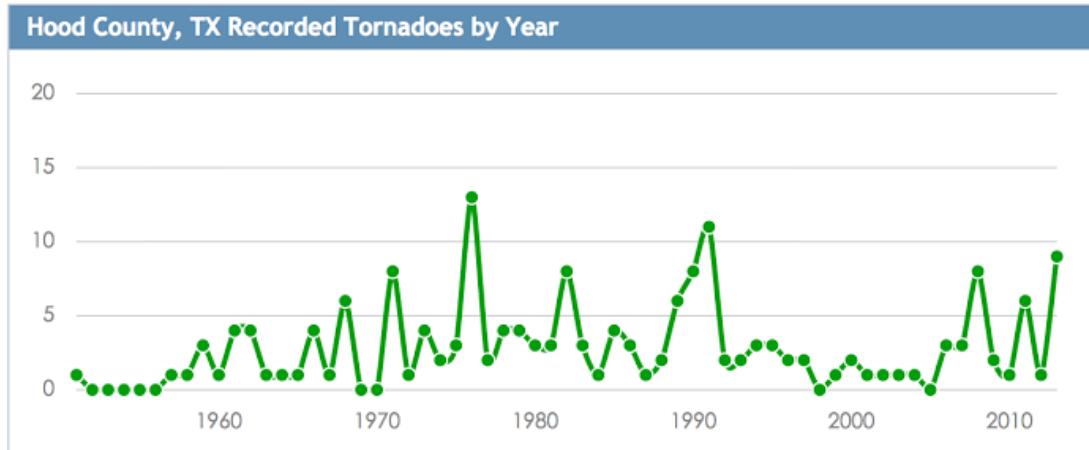


Figure 10: Tornado Records in Hood County: 1951-2013 Source: <http://www.homefacts.com/tornadoes/Texas/Hood-County.html>

There have been several tornadoes in Hood County over the past 60 years. In Figure 8 you can see tornado paths in Hood County and the surrounding areas, with color denoting intensity of the tornado. Figure 9 shows the same for the area around Granbury. Figure 10 shows the number of recorded tornadoes by year from 1951 to 2013. There were some peaks throughout the years, and a series of years around the year 2000 with only one or two recorded tornadoes.

Hail

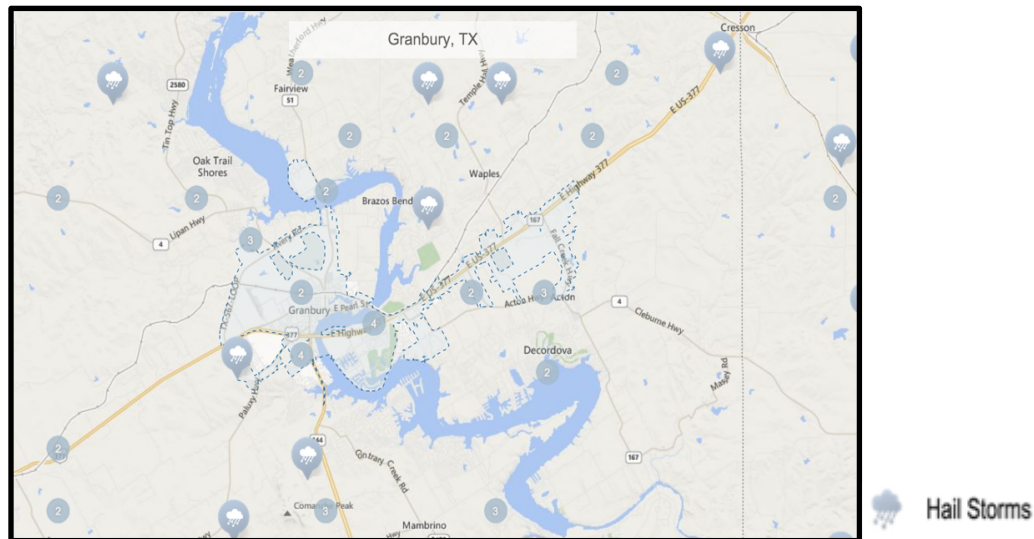


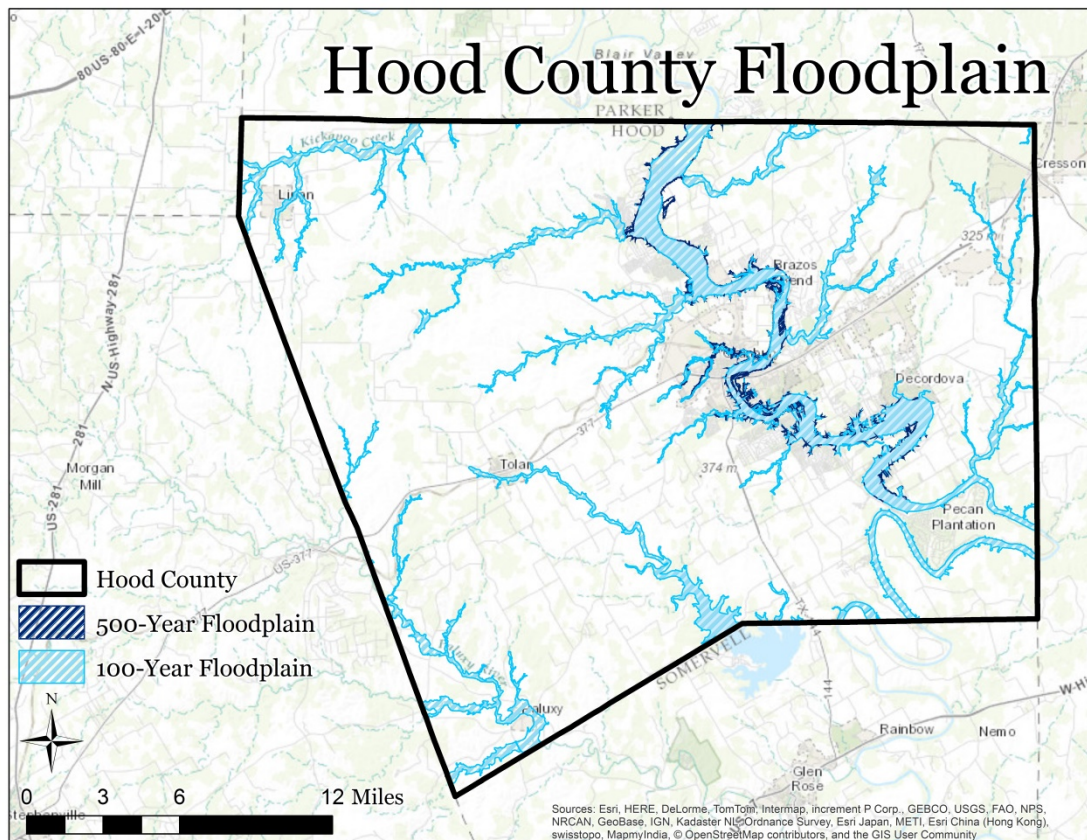
Figure 11: Hail Storms in Granbury: 1951-2013. <http://www.homefacts.com/interactivemap/Texas/Hood-County/Granbury.html>

Figure 11 shows hail storms in Granbury from 1951 to 2013. The numbers with circles mean that many storms happened around that area. Granbury has been hit by many hail storms over the years, and as Figure 7 showed, they have been on average the most damaging storms.

Part 4: Risk Assessment

The later sections of this report will analyze social and economic vulnerability in Hood County and Granbury, but for now we will look at physical risk and vulnerability to disasters. Many of the area's disasters do not have specific areas of higher risk due to the nature of the disasters (tornados, storms, hail, winter weather, etc.). But flooding and man-made hazards do have significant areas of risk, so we will look at those in this document.

Floodplain Maps



Figure

12: Floodplain in Hood County. Source: FEMA Flood Map Service Center

Figure 12 shows the floodplain in Hood County, while Figure 13 shows it in the city of Granbury. There is not a huge amount of floodplain in the county, but the Brazos River does have significant impact. In the city there are small, almost street-like areas of floodplain that should be monitored. There is not much 500-year floodplain (dark blue), just a few sections along the river.

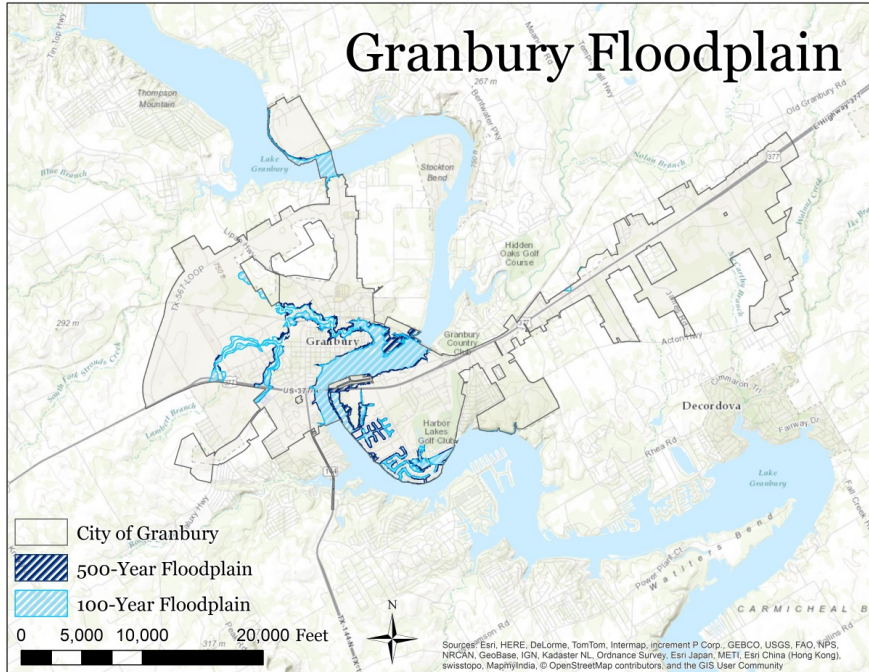


Figure 13: Floodplain in Granbury. Source: FEMA Flood Map Service Center

Hazardous Materials Maps

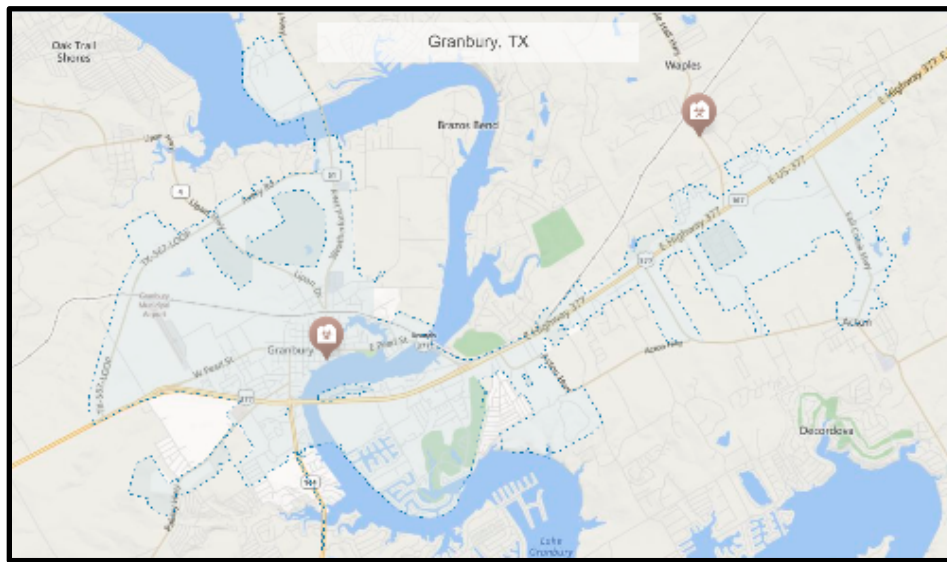
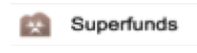
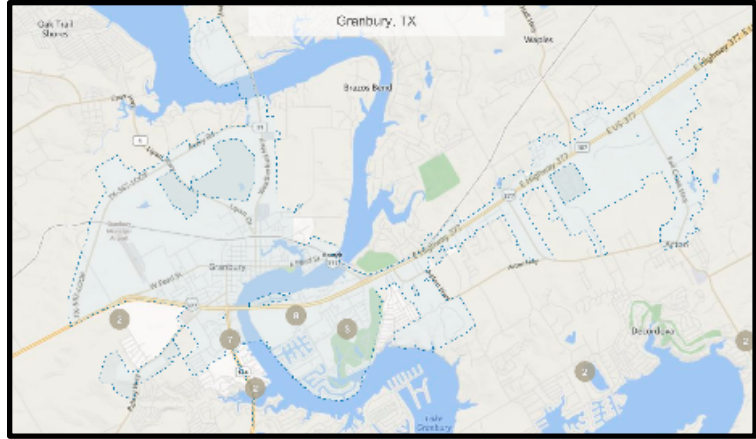


Figure 14: Superfunds. Source: <http://www.homefacts.com/County/Granbury.html>



Superfunds are sites identified by the Environmental Protection Agency as contaminated by hazardous waste and targets for cleanup. As seen in Figure 14, there is one superfund in Granbury and another not far away from the east part of the city.




 Tanks and Spills

Figure 15: Tanks and Spills. Source: <http://www.homefacts.com/interactivemap/Texas/Hood-County/Granbury.html>

Figure 15 shows the containment of hazardous materials, storage tanks, containment areas, and other structures. They are designed to hold chemicals and prevent unwanted releases into the environment. The numbers encircled on the map represent that many sites in that general area. These sites include many common places, such as grocery stores and gas stations. They are mostly gathered in the south part of Granbury, which is where most of the development is.

Summary

Granbury and Hood County have certainly experienced their fair share of disasters, but, as seen in Figure 16, the probability for future disasters is fairly low. Both data sets analyzed in this report have shown that hail storms are the biggest concern, and drought seems to be a close second. Flooding still has a decently high risk, especially near the Brazos River and Lake Granbury. Severe storms tend to occur often, but do not usually cause that much damage. Tornadoes are rare and hard to predict, and although preparedness and mitigation should certainly be done, the recent disastrous tornado is not likely to happen again.

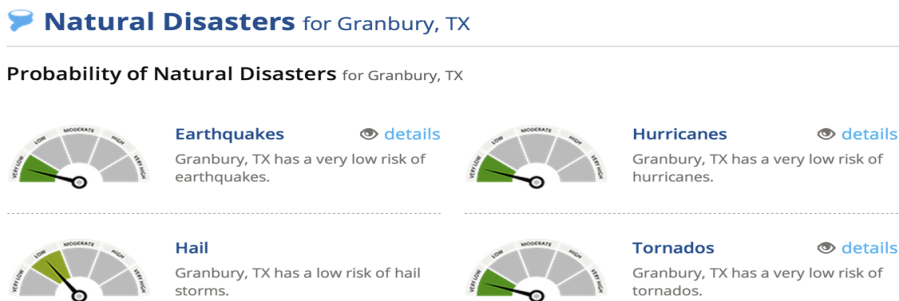


Figure 16: Probability of Natural Disasters by Homefacts.com:1951-2013 Source: <http://www.homefacts.com/city/Texas/Hood-County/Granbury.html>

Social Vulnerability Assessment

For every city, there are particular populations that are considered vulnerable. However, it can be difficult to narrow down the many demographics of social vulnerability. For this reason, we have narrowed down the vulnerability factors for residents of Granbury, Texas to six: population growth; race and gender; employment, per capita income, and poverty levels; educational attainment; household status; and physical housing characteristics. In order for these numbers to be put into perspective, we have compared them with findings from Hood County, as well as the State of Texas. This will help the planning committee of Granbury to understand where the social vulnerability of the city stands in relation to their County and to the State overall. For each vulnerability factor, there is a table that compares the numbers for visual simplicity, and an analysis of each factor is provided for each section. After all of the vulnerability factors have been analyzed and explained, the final section contains a Social Vulnerability Map of Granbury. This map has been created using ARCGIS and overlays each vulnerability factor in layers so that the Granbury planning committee is able to see the most vulnerable areas of their community and therefore better able to build their mitigation plans to protect the greatest number of people. The final section of this document contains conclusions and recommendations for Granbury based on our findings throughout the duration of this project.

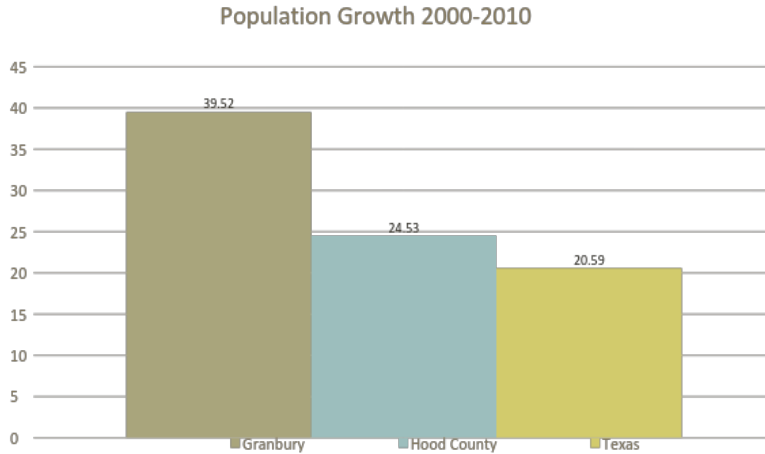
Part 1: Vulnerability Factors

Population Growth

This section serves to establish a baseline of information for the report. It includes basic information about the location, geography, climate, and transportation network of Granbury and Hood County. In addition, there is a discussion about the methodology used for this physical hazard assessment.

Population Growth

As is evidenced across the entire nation, the population has been growing in the past decade. As a planning committee, it is important to understand the rate at which your city and your county are growing. Understanding, to some extent, the population growth rate of your community will allow you to better enhance your mitigation plans, thus helping you recover quicker from a disaster. If the planning committee only takes into account the current population, and does not allow or make plans for a larger population in the future, the plan will not be efficient. A plan needs to be flexible to accommodate population fluctuations, and it needs to be updated frequently in order to make these accommodations. If the population far exceeds that which the planning committee is prepared for, the plan will not be sufficient. However, if the plan is constructed to accommodate a number that far exceeds that of the community, the plan will require an abundance of wasted time and resources.



Poverty, Employment and Income

The poverty rates in all three categories are significantly lower than the United States rate of 14.5%. Granbury alone has a poverty rate of 9.3% which, as can be seen in Appendix B, consists primarily of minority residents. The population living in poverty, which has already been mentioned above, is more vulnerable to a disaster and will have a more difficult time recovering from a disaster than those not living in poverty.

In the “Employment” table below, it is demonstrated that the Unemployment rates in Granbury are about 1% lower than the State of Texas unemployment rates (around 7.7%). The unemployed population is at more risk during a disaster and post-disaster time period than those who have been able to retain a job. Although this table does not provide information as to the average time that jobs have been held, it is still helpful to see the unemployed population in Granbury and Hood County. Those who are unemployed may be receiving benefits from the government, or they may not be receiving any funding at all. This makes the unemployed population particularly vulnerable because they have no means with which to prepare for or to recover from a disaster. It is important to keep these people in mind when constructing a mitigation plan because shelters, food, and possibly clothing will need to be included in the plan that are available to all citizens of the community in the immediate aftermath of a disaster striking. This population is also important to keep in mind because they will need more assistance than those who have obtained and maintained some job security.

On another note, just because someone has a job, does not mean that they are necessarily prepared to or able to recover from a disaster. In reference to the “Income” table, those living on less than \$10,000 a year are going to be the more vulnerable population when a disaster strikes because they are likely to not be able to afford construction costs if their home is demolished or damaged by the disaster. Similarly, those living on the next level of income (from \$10,000 - \$24,999) may have some difficulty recovering as well. Although they may be able to meet some requirements that the recovery process would demand, they may have difficulty meeting those demands, as well as their own familial needs – including injuries, illness, food, clothing, meantime shelter, and the like. The lower income households and individuals will prove to be more vulnerable because they will not have the same financial support that those earning higher wages will have.

Poverty

Subject	Granbury City	Hood County	Texas State
Below poverty level	748 (9.3%)	5,525 (10.8%)	4,386,348 (17.4%)

Employment Rates

Subject	Granbury City	Hood County	Texas State
Employed	3,242 (93.2%)	22,363 (92.9%)	11,440,956 (92.6%)
Unemployed	236 (6.8%)	1,716 (7.1%)	951,176 (7.7%)
Civilian Labor Force >16 y.o.	3,478	24,079	12,357,518

Income

Subject	Granbury City	Hood County	Texas State
<\$10,000	182 (5.2%)	919 (4.5%)	653,830 (7.4%)
\$10,000 to \$24,999	799 (23.0%)	2,856 (13.8%)	1,444,369 (16.4%)
\$25,000 to \$49,999	916 (26.4%)	5,604 (27.2%)	2,173,827 (24.8%)
\$50,000 to \$99,999	1,030 (29.7%)	6,475 (31.4%)	2,611,771 (29.7%)
\$100,000 to \$199,999	412 (11.9%)	3,990 (19.3%)	1,500,344 (17.1%)
>\$200,000	132 (3.8%)	787 (3.8%)	398,457 (4.5%)
Total Households	3,471	20,631	8,782,598

Age

The planning committee needs to take into account the age of the population in the community. The very young are more susceptible because of their age and inability to know how to react in an emergency situation, as well as their physical inability to withstand trauma should it occur. The elderly population, similarly, is at risk as well. They may not be able to move quickly, understand what is going on, or be able to withstand the trauma of a disaster. They are more susceptible to injury and illnesses. These populations need to be taken into account when a mitigation plan is being assembled.

Children and Elderly Population

Subject	Granbury City	Hood County	Texas State
Under 5 Years	560 (7%)	2,844 (5.6%)	1,941,085 (7.7%)
5- 17 Years	1,878 (23.4%)	7,183 (14.1%)	4,940,944 (19.6%)
18-64 Years	3,548 (44%)	29,572 (57.8%)	15,679,934 (62.2%)
65 and above	2,061(25.6%)	10,917(21.3%)	2,646,934 (10.5%)
Total	8,047	51,161	25,208,897

Race

As can be seen in the table below, the white population far exceeds that of any other population across all three categories, constituting 85.7% of the Granbury population. Even when added together, the other races in Granbury make up about 1/6 of the entire white

population. The Hispanic population is next in line to the white population, constituting only 9.6% of the entire Granbury population. The race distribution only goes down from there. In all of the literature that we have analyzed through the duration of this project, it is the minority populations that suffer the most after a disaster. This is so because their voices will not be as strong or as easily heard as the majority population. It is common that the minority populations have a tendency to have less education, less income, and therefore fewer resources available to them in a post-disaster situation. It is crucial that the planning committee take into account these populations and the possibility that there may be several factors affecting their ability to reach out or to communicate with the committee, with the community as a whole, and even with the various financial aid institutions that could help in their recovery.

Race

Subject	Granbury City	Hood County	Texas State
White	6,895 (85.7%)	44,291(86.6%)	11,415,017 (45.3%)
Hispanic	775 (9.6 %)	5,299 (10.4%)	9,479,670 (37.6%)
African-American	122 (1.5%)	291 (0.5 %)	2,903,204 (11.5%)
American Indian and Alaska Native	97 (1.2%)	371 (0.7%)	67,134 (0.3%)
Asian	76 (1.0 %)	248 (0.5%)	966,343 (4.0%)
Other	82 (1.0 %)	661 (1.3 %)	377,592 (1.5%)
Total Population	8,047	51,161	25,208,897

Education

The education of the population is, to some extent, related to the income levels of the residents. The school-age children, simply because of their age are going to be more vulnerable than those who are older. Being enrolled in school, and attending each day will make the young students less vulnerable to a disaster because schools are required to take safety measures in their construction, as well as evacuation plans and drills in case a disaster does strike during school hours. Those who have obtained a high school diploma, or equivalent, are more likely to obtain a better paying job than those who did not graduate high school, and those who have gone on to receive a higher education of some sort are going to have a better opportunity to obtain a job than those who did not do so. So, the focus needs to be on those who do not have an education equivalent to or above that of a high school education. These people are more vulnerable because they are less likely to have adequate income that will support recovery after a disaster, and they are less likely to understand the various options available to them for funding or other resources. Although this population is miniscule in Granbury, as well as across the state, they are the ones that will need particular attention when a mitigation and recovery plan is being constructed because their voices may not be heard clearly, if at all.

Education

Subject	Granbury City	Hood County	Texas State
Population 3 y.o. and over enrolled in school	1,267 (15.8%)	9,825 (19.2%)	7,135,279 (28.3%)
Population >25 y.o.	5,748 (71.4%)	36,741 (71.8%)	15,434,524 (61.2%)
Less than high school graduate	604 (7.5%)	5,070 (9.9%)	2,913,412 (11.6%)
High school graduate	1,742 (21.7%)	10,508 (20.5%)	3,870,287 (15.4%)
Some college or Associate's degree	2,259 (28.1%)	12,713 (24.9%)	4,530,948 (18%)
Bachelor's Degree or higher	1,150 (14.3%)	8,450 (16.5%)	4,119,877 (16.3%)

Household Type

Looking at the “Household Status” table, we see in Granbury that the married couple households are more likely to own their home than single parent families, especially female homeowners with no husband present. This trend is also true for the State of Texas, but not for Hood County. It is important to note the fact that single parent families have a tendency to rent, rather than to own, because those who rent their residence are at more risk for prolonged or inadequate recovery after a disaster than those who own their homes. This is due in part because a landlord or property manager may negate certain repairs, use a “do it yourself” tactic resulting in shoddy or unsafe repairs to save money, or may not be able to repair if multiple properties have been damaged. The possibility of the property owner selling the property is greater than a home owner selling because repairs are needed. This leaves the renters at a greater risk than homeowners. Also, a single parent family is more vulnerable than a married couple or just a single person or unmarried couple living together because there may be no combined income, which could put that household at risk for mitigation and recovery difficulties. Also, single parent families must consider the possibility that a child, or the head of the household, may get injured in the disaster, or may become ill after the disaster due to unsafe or unsanitary conditions depending upon the type and magnitude of the disaster. If the single parent is unable to work, the household income will suffer, if not disappear. These populations are vulnerable for these reasons and there needs to be some provisions for such households in a mitigation and recovery plan.

Household Type

Subject	Granbury City			Hood County			Texas State		
	Occupied housing units	Owner-occupied housing units	Renter-occupied housing units	Occupied housing units	Owner-occupied housing units	Renter-occupied housing units	Occupied housing units	Owner-occupied housing units	Renter-occupied housing units
Married-couple family	1,548 (44.6%)	988 (28.5%)	560 (16.1%)	12,461 (60.4%)	10,787 (52.2%)	1,687 (8.2%)	4,452,777 (50.7%)	3,539,283 (40.3%)	910,820 (10.4%)
Male householder, no wife present	125 (3.6%)	44 (1.3%)	81 (2.3%)	557 (2.7%)	303 (1.5%)	252 (1.2%)	439,129 (4.8%)	229,969 (2.6%)	206,283 (2.2%)
Female householder, no husband present	375 (10.8%)	87 (2.5%)	288 (8.3%)	1,754 (8.5%)	1,040 (5%)	713 (3.5%)	1,247,129 (14.2%)	594,555 (6.8%)	660,107 (7.4%)
Nonfamily households	1,423 (41%)	380 (10.9%)	1,043 (30.1%)	5,859 (28.4%)	3,930 (19.1%)	1,919 (9.3%)	2,643,561 (30%)	1,245,199 (14.2%)	1,399,553 (15.8%)
Total	3,471	1,499 (43.2%)	1,972 (56.8%)	20,631	16,060 (77.8%)	4,571 (22.2%)	8,782,598	5,609,007 (63.9%)	3,173,591 (36.1%)

Housing Characteristics

Housing characteristics are here because it is important to look into the physical condition of the homes within the community in order to better protect residents from flooding and other disasters. When constructing mitigation, evacuation, and recovery plans, it is important to keep all of these factors in mind. The planning committee will need to know who can evacuate efficiently and safely with a vehicle, and whether they can take someone without a vehicle with them (and if they would be willing to). The committee also needs to keep in mind the age of certain homes and structures while drafting a mitigation plan. They need to ask themselves whether the home can accommodate certain mitigation measures, and if not, what a safe and equivalent alternative would look like.

Vehicle Availability

Subject	Granbury City	Hood County	Texas State
No vehicle available	306 (8.8%)	700 (3.4%)	520,304 (5.2%)
1 vehicle available	1573 (45.3%)	6148 (29.8%)	3,032,086 (30.4%)
2 vehicles available	1156 (33.3%)	9532 (46.2%)	3,563,093 (35.7%)
3 or more vehicles available	437 (12.6)	4271 (20.7%)	1,667,115 (16.7%)

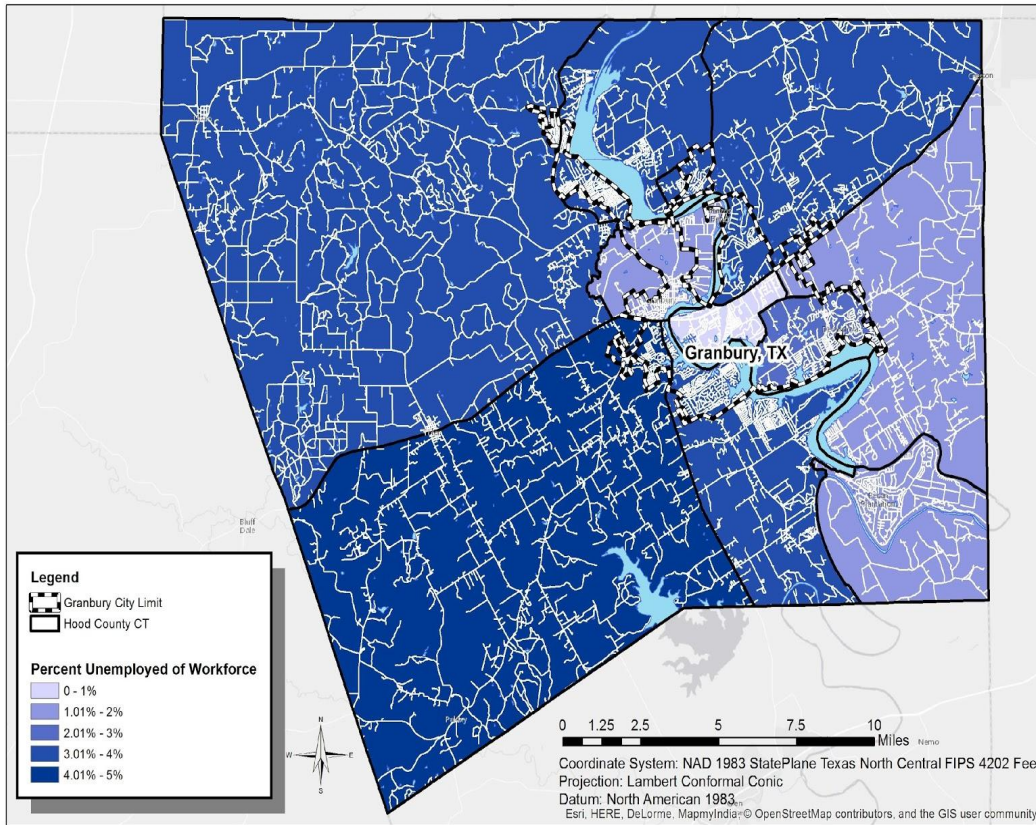
Age of Housing Stock

Subject		Granbury City	Hood County	Texas State
House less than 15 years old		795 (22.9%)	5735 (27.8%)	2166040 (21.7%)
15 – 35 years old house		1454 (41.9%)	9181 (44.5%)	3329398 (33.4%)
35+ years old house	1219 (35.1%)	5715 (27.7%)	4482699 (44.9%)	
Total Occupied Housing Units	3,471	20,631	9,978,137	

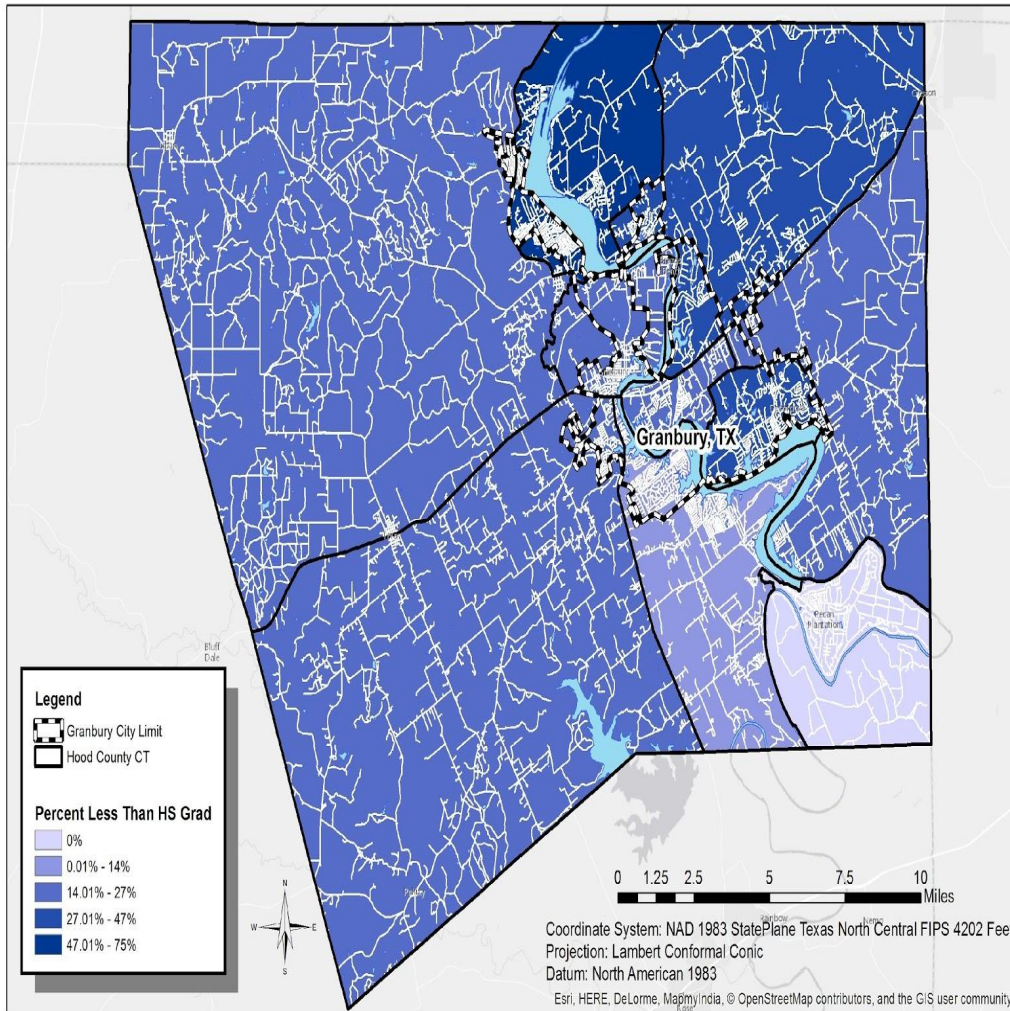
Social Vulnerability Mapping

The following are all of the GIS maps for Granbury, Texas. These maps give a visual representation of the vulnerability factors discussed throughout this report.

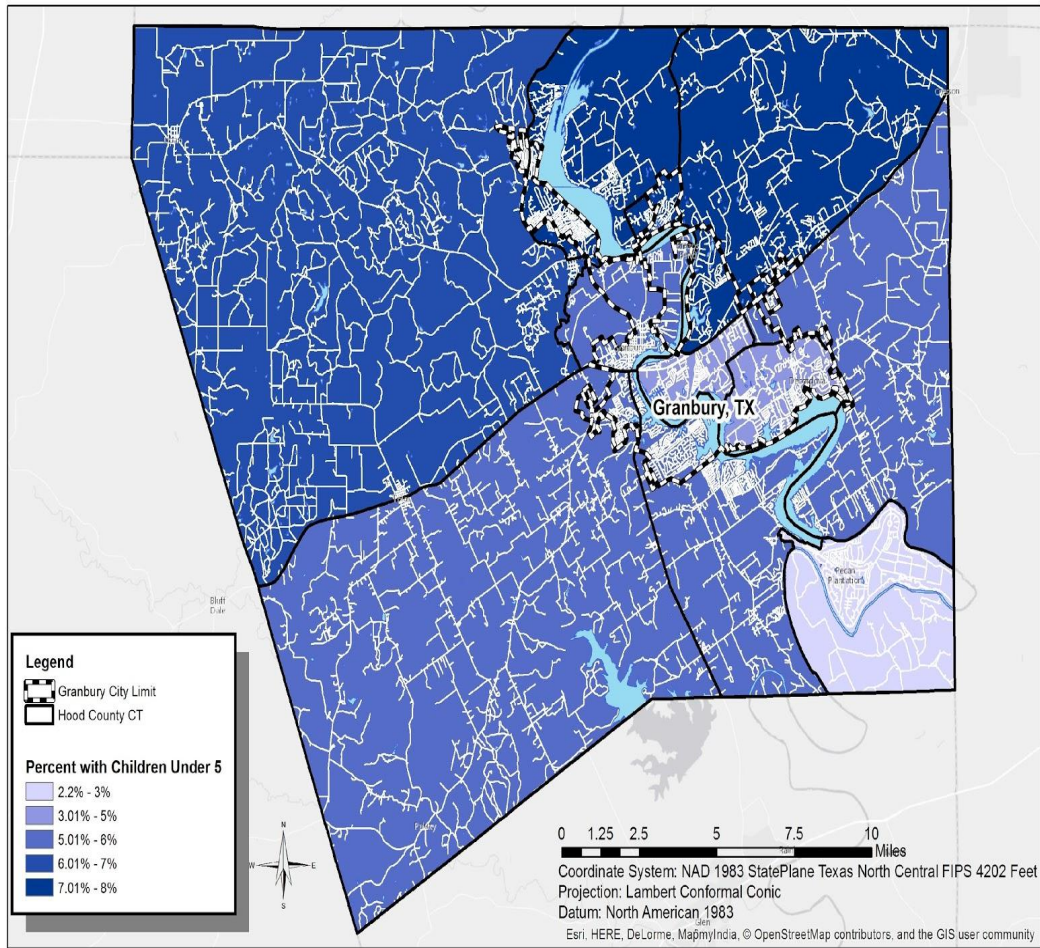
**Hood County Percent Unemployed of Wokforce
2010 Census**



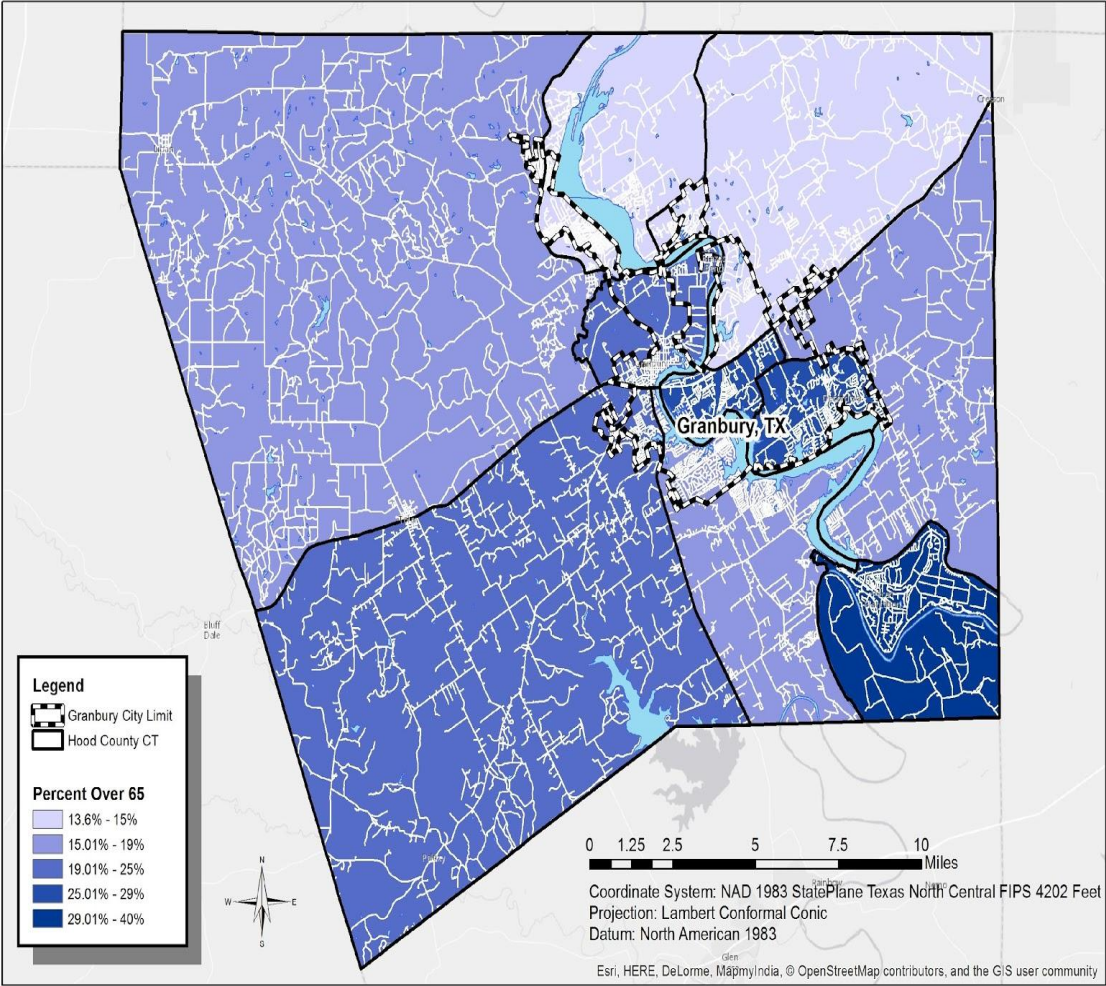
Hood County Percent Less Than HS Graduate 2010 Census



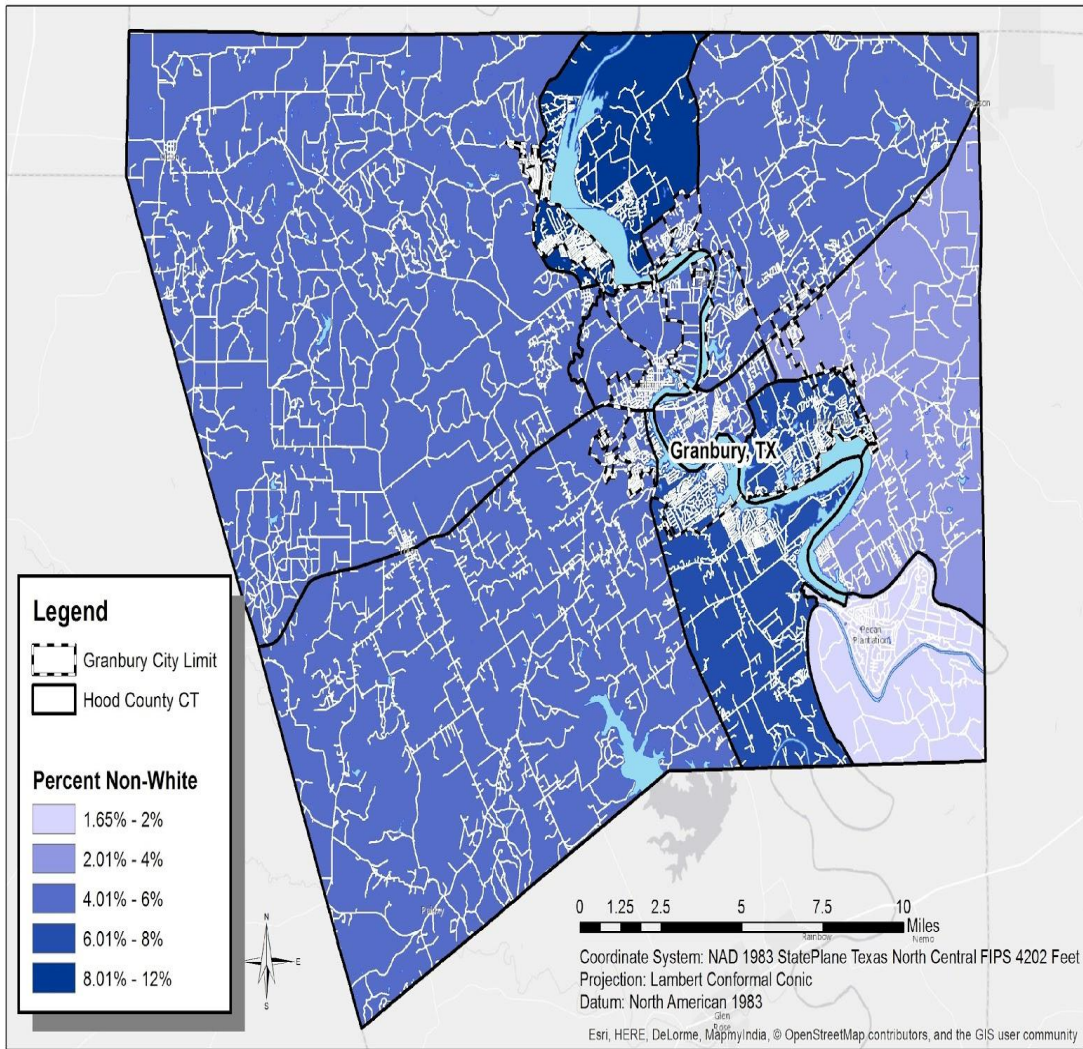
Hood County Percent with Children Under 5 2010 Census



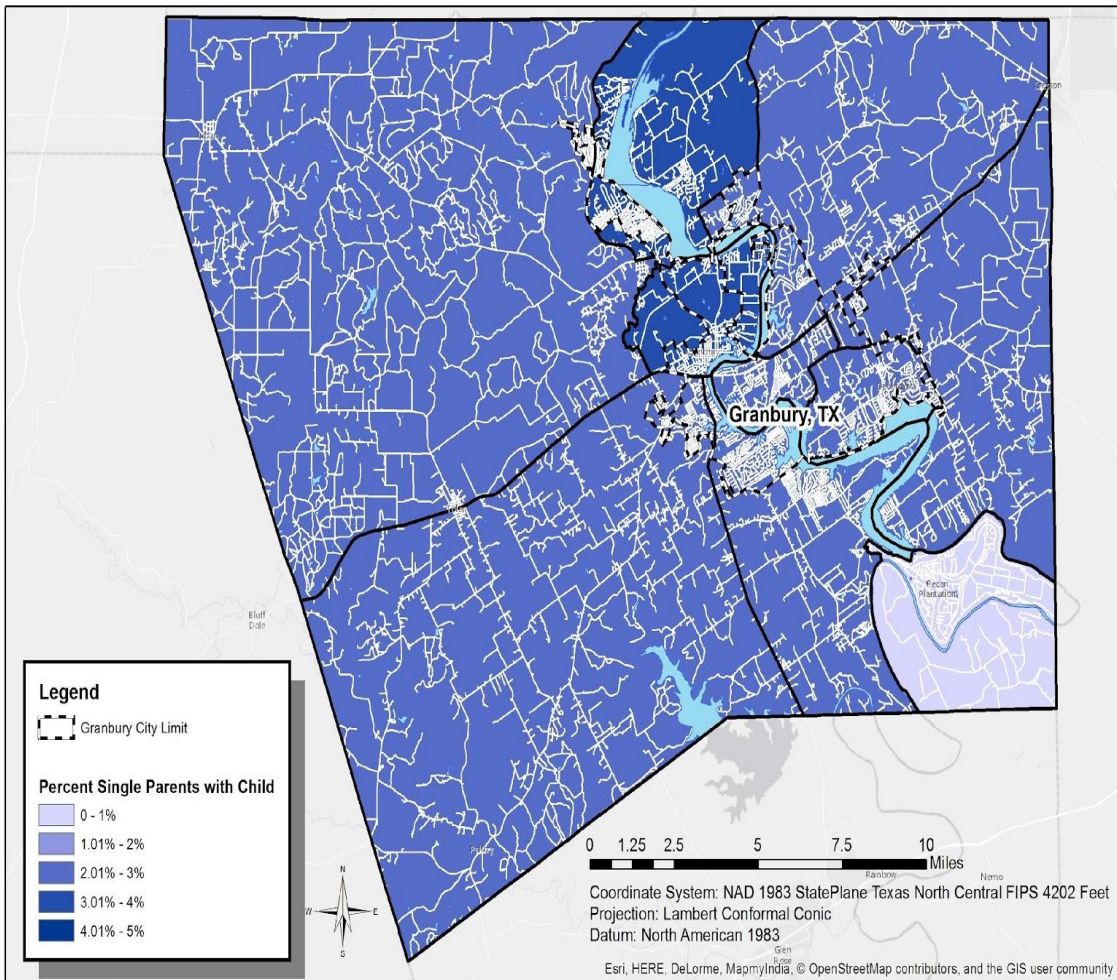
Hood County Percent Over 65 2010 Census



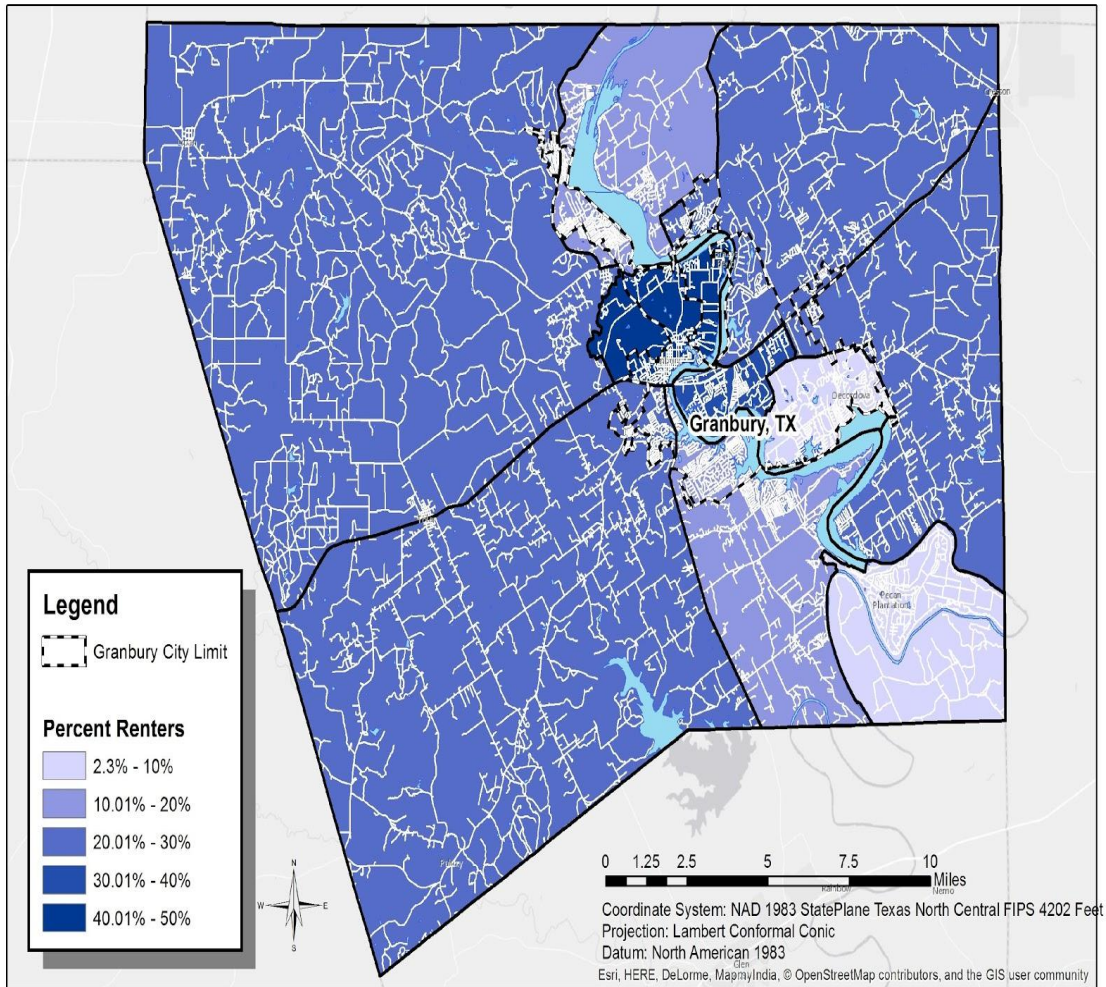
Hood County Minorities, 2010 Census



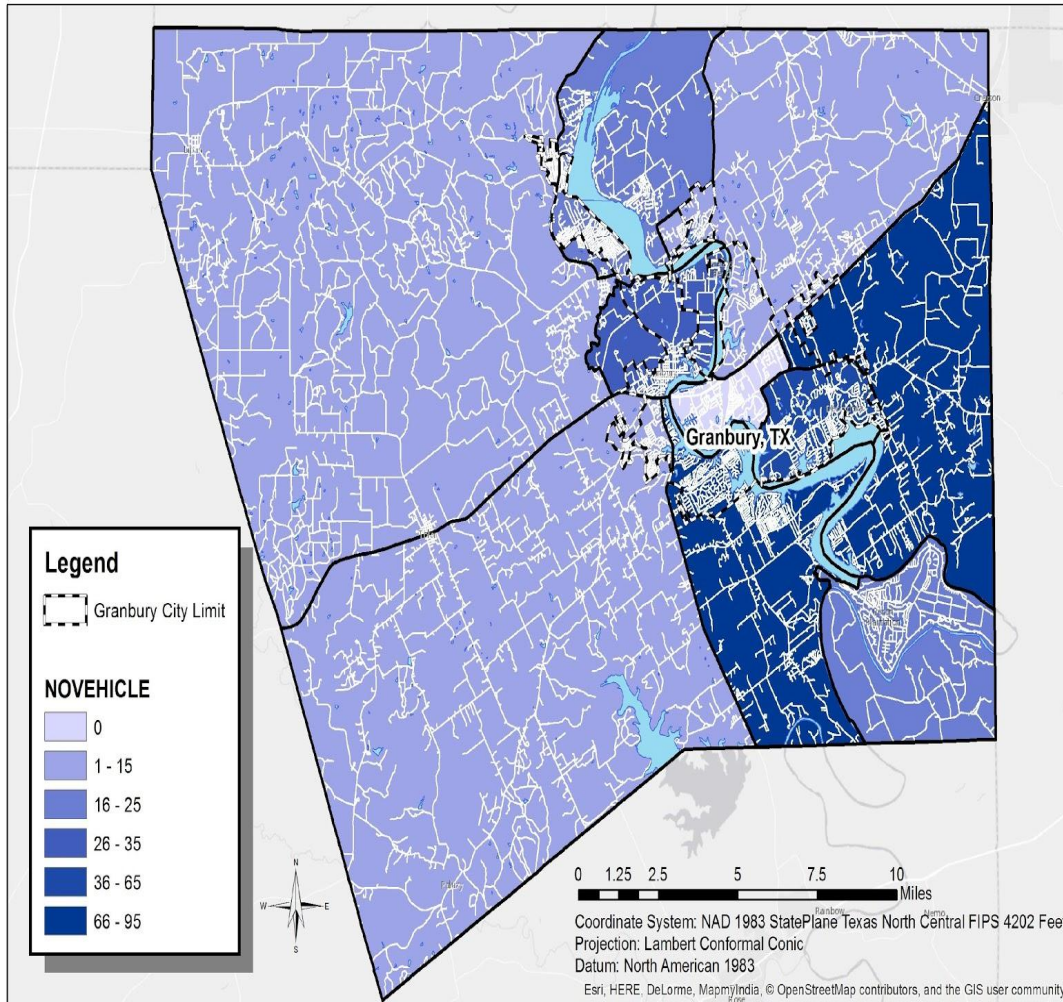
Hood County Single Parents with Child under 18, 2010 Census



Hood County Percent Renters 2010 Census



Hood County Number of People without a Vehicle 2010 Census



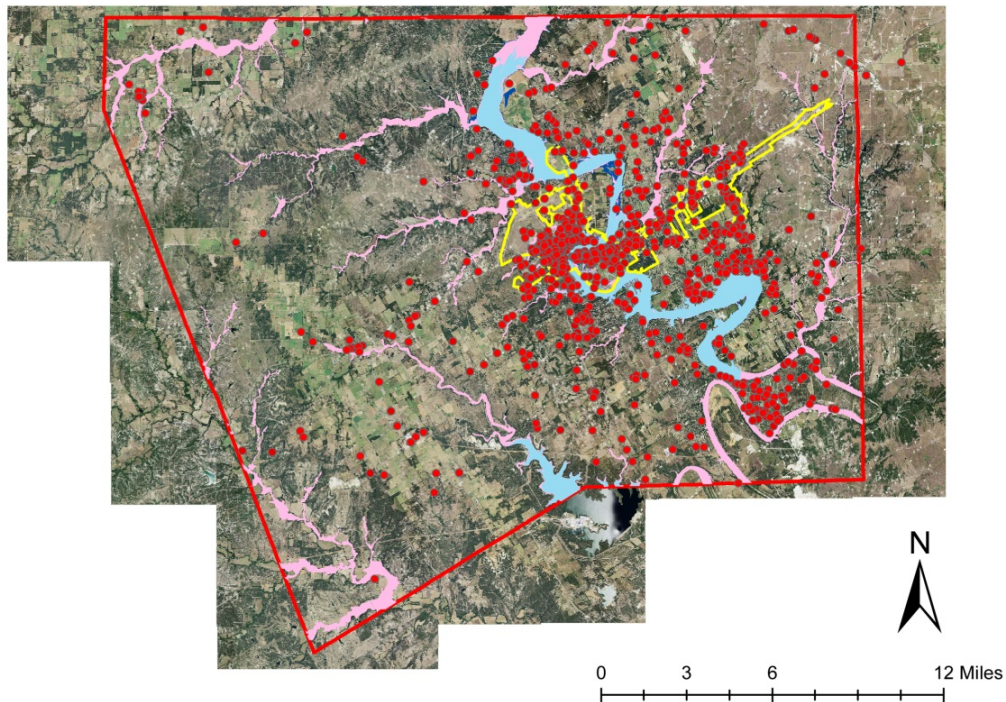
Conclusions and Recommendations

It is clear by the above information and mapping that any part of a population can be vulnerable in the various aspects of disaster mitigation and recovery. Planning committees need to take into account the vulnerable populations of their community in order to better protect and assist everyone, rather than just the few or the outspoken. Those with fewer resources, less education, language barriers, and any other factors that make them a vulnerable resident need to be paid particular attention to. Throughout the process of this project, and through the research that we have come across, we have given various recommendations regarding what should be included in the Long-Term Community Recovery Plan, and we now recommend that the Granbury Long-Term Recovery Committee take into account the various vulnerability factors that we have listed above: population growth rates, race and gender, employment, per capita income, poverty rates, educational attainment levels, household status (including single-parent families, owners, and renters), and the physical housing characteristics of the homes within the community. Each of these factors presents a new challenge for the planning committee to work around, and although it is important to try to accommodate all of the vulnerable populations, it is also important to do the most possible good for the largest number of people. If that means that certain factors need to be set aside in order to help the largest number of people, the prioritization of such factors will prove more efficient and less time-consuming for the planning committee to tackle. We recommend that the planning committee establish a variety of educational resources about government assistance in the low-income areas of the county. We also recommend, alongside the educational resources, that the planning committee establish mentorship/vocational programs in the areas with higher unemployment rates. Another resource that the vulnerable populations will need is workshops on home renovation techniques, and contractor research. We also recommend that employment opportunities be offered to the unemployed population in the work force during the recovery period. These jobs can be working at the temporary shelters serving food or washing laundry, to contracting with the local businesses to rebuild houses and other buildings within the community.

Business and Economic Vulnerability Assessment

In Hood county, a GIS analysis of the area utilizing resources available to the Texas A&M Library System, yielded maps that indicated that the majority of businesses within Hood county were located within the city of Granbury.

Total Businesses Distribution, Hood County, Tx



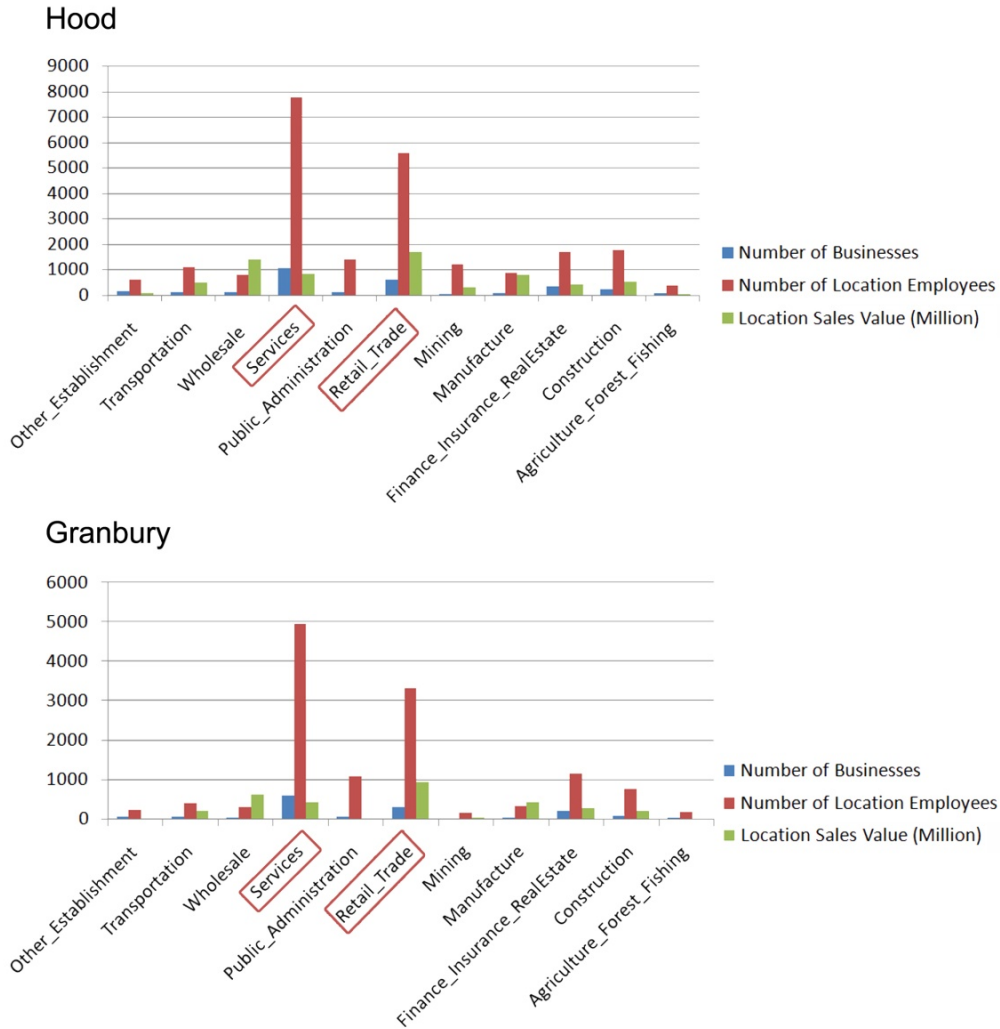
Legend

- Business Locations
- ▭ Granbury_City_Boundary
- ▭ Water_Body
- ▭ 100_Flood
- ▭ 500_Flood
- ▭ Hood_Boundary

Hood	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	2907	23084	\$6,575,474,000	—————
Influenced by 100 year flood	46 (1.6%)	526 (2.3%)	\$37,503,000 (0.6%)	\$41,579,050
Influenced by 500 year flood	80 (2.8%)	757 (3.3%)	\$100,801,000 (1.5%)	\$48,130,170
Granbury	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	1377	12997	\$3,253,409,000	—————
Influenced by 100 year flood	25 (1.8%)	471 (3.6%)	\$31,692,000 (1.0%)	\$36,521,910
Influenced by 500 year flood	49 (3.7%)	670 (5.2%)	\$90,860,000 (2.3%)	\$40,586,170

This assessment will be divided between Hood County and Granbury, as each has a slightly different economic assessment of vulnerability. Further, the two regions will be addressed in terms of both tornadoes and potential flooding.

Business Comparison



At the county level the predominant industry is mining/drilling/extraction, and the second largest is pipeline services¹. These forms of industry have been traditionally resilient in the face of disaster, with minimal to no damage posed by localized flooding, and damage within the realm of repair posed by tornadoes. NOAA had reported a tornado damaging a pipeline in Hood county in 2013, which also damaged a horse stable. No persons had been injured as a result of disastrous weather acting upon pipelines in the area in that instance. According to the flood map charts, there are zero individual businesses within either of these industries that are at risk from either 100 or 500 year flood plains. Therefore, as a matter of planning, it becomes important to not only seek out representatives of these predominant industries of Hood county, but to seek out the perspectives of those most at risk. The service industry, though lower on the location quotient, has the largest number of businesses at risk from both 100 and 500 year floods. These businesses represent ~\$22 million in property values and ~\$13 million in business in the county².

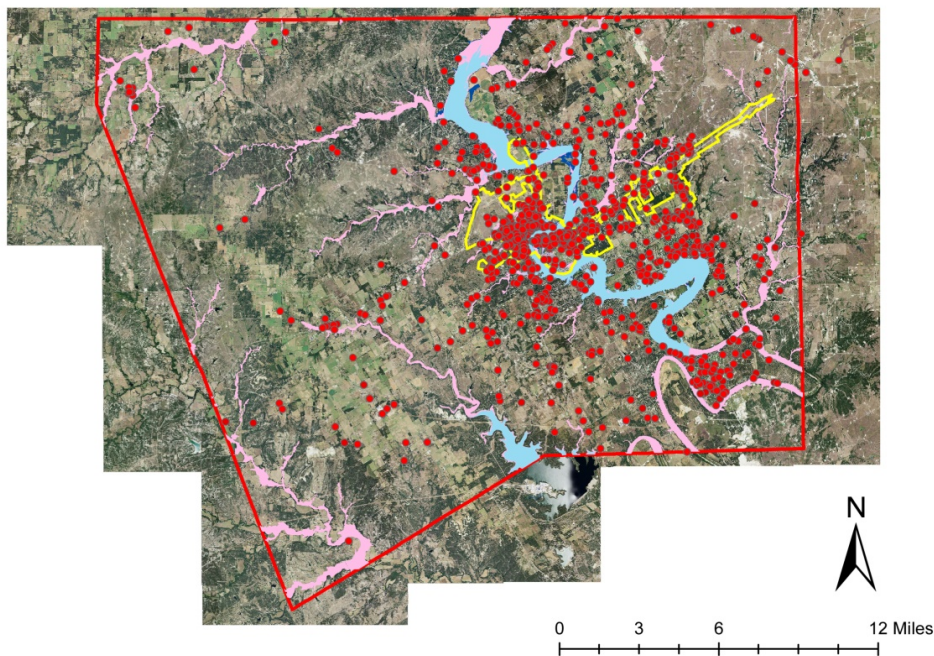
¹ Bureau for Labor Statistics: Location Quotient

² See Excel tables - Summary List

As such, ensuring the resiliency of these businesses becomes important to ensuring their continuation in the aftermath of a flooding incident. Mitigation grants can be applied to shore up flood mitigation measures, which may also help assuage flood insurance premiums. As always, the businesses most at risk will be those who both lie within the projected flood plains and have comparatively fewer resources. Small businesses with few employees fit this profile, provided their location is at risk. According to Business Analysis Online report, there are 2907 verified businesses in Hood County and 84.7% of them only have less than 10 employees.

Businesses and the Floodplain (figures)

Total Businesses Distribution, Hood County, Tx

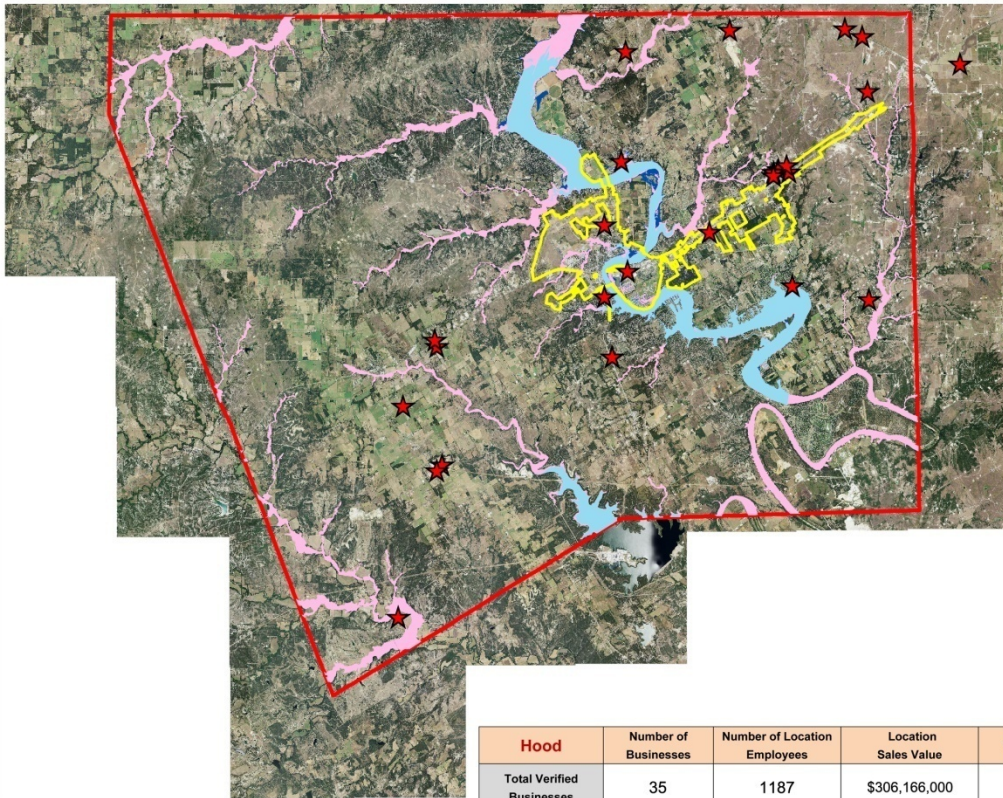


Legend

- Business Locations
- Granbury_City_Boundary
- Water_Body
- 100_Flood
- 500_Flood
- Hood_Boundary

Hood	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
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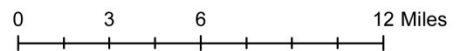
Mining Businesses Distribution, Hood County



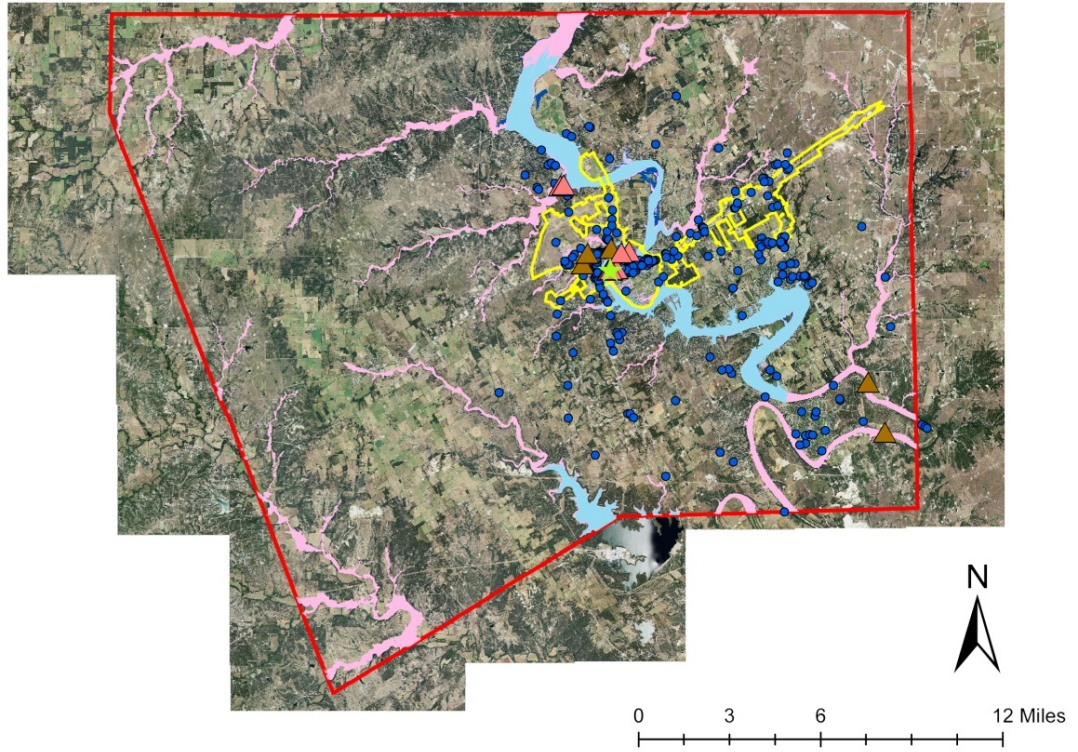
Hood	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	35	1187	\$306,166,000	—————
Influenced by 100 year flood	0	0	0	0
Influenced by 500 year flood	0	0	0	0
Granbury	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	5	166	\$35,888,000	—————
Influenced by 100 year flood	0	0	0	0
Influenced by 500 year flood	0	0	0	0

Legend

- ★ Mining_Hood
- Granbury_City_Boundary
- Water_Body
- 100_Flood
- 500_Flood
- Hood_Boundary



Retail/Trade Distribution, Hood County, Tx



Legend

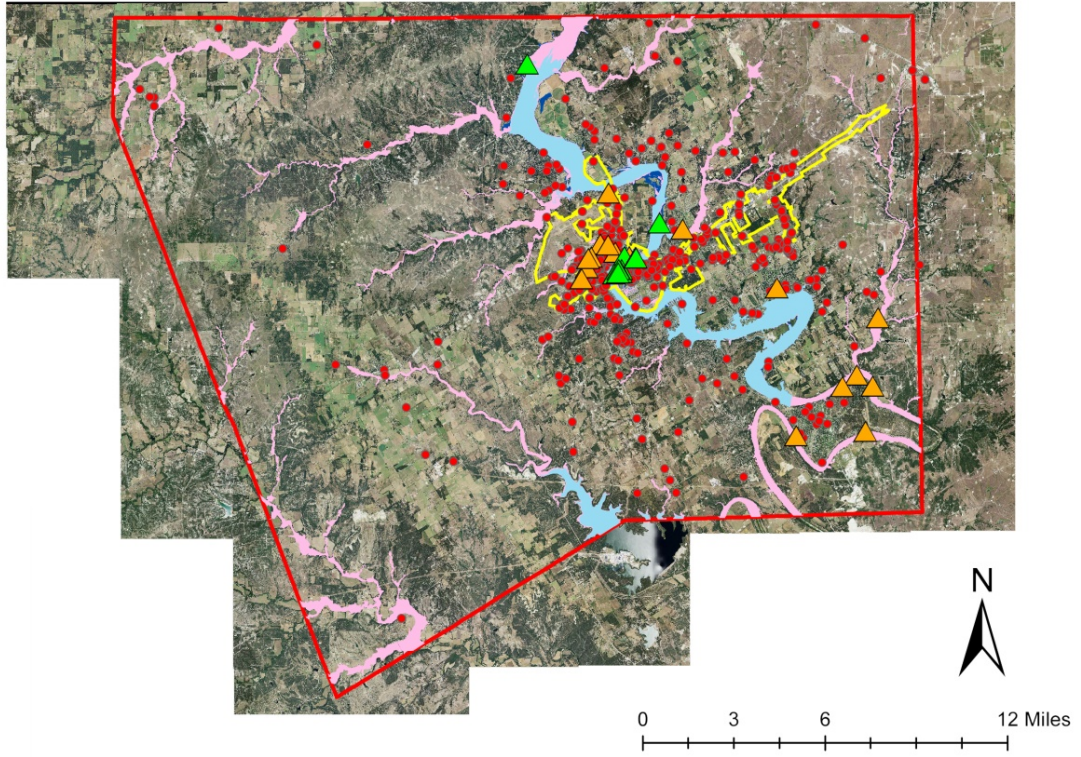
- ▲ Retail_Trade_100
- ▲ Retail_Trade_500
- Retail_Trade
- ▭ Granbury_City_Boundary
- ▭ Water_Body
- ▭ 100_Flood
- ▭ 500_Flood
- ▭ Hood_Boundary
- ★ Diesel Depot Company

Hood	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	593	5571	\$1,706,222,000	—————
Influenced by 100 year flood	6 (0.1%)	311 (5.6%)	\$1,924,000 (0.1%)	\$2,777,070
Influenced by 500 year flood	18 (0.3%)	377 (6.8%)	\$28,908,000 (1.7%)	\$3,828,790
Granbury	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	289	3337	\$949,087,000	—————
Influenced by 100 year flood	4 (1.4%)	307 (9.2%)	\$1,654,000 (0.2%)	\$2,255,710
Influenced by 500 year flood	13 (4.5%)	358 (10.7%)	\$26,350,000 (2.8%)	\$3,089,360

There is a diesel depot company in a 500 year flood zone which sales value is 18,144,000, which is the main reason the loss of sales value increased from 0.1% to 1.7%

Figure 1

Services Distribution, Hood County, Tx

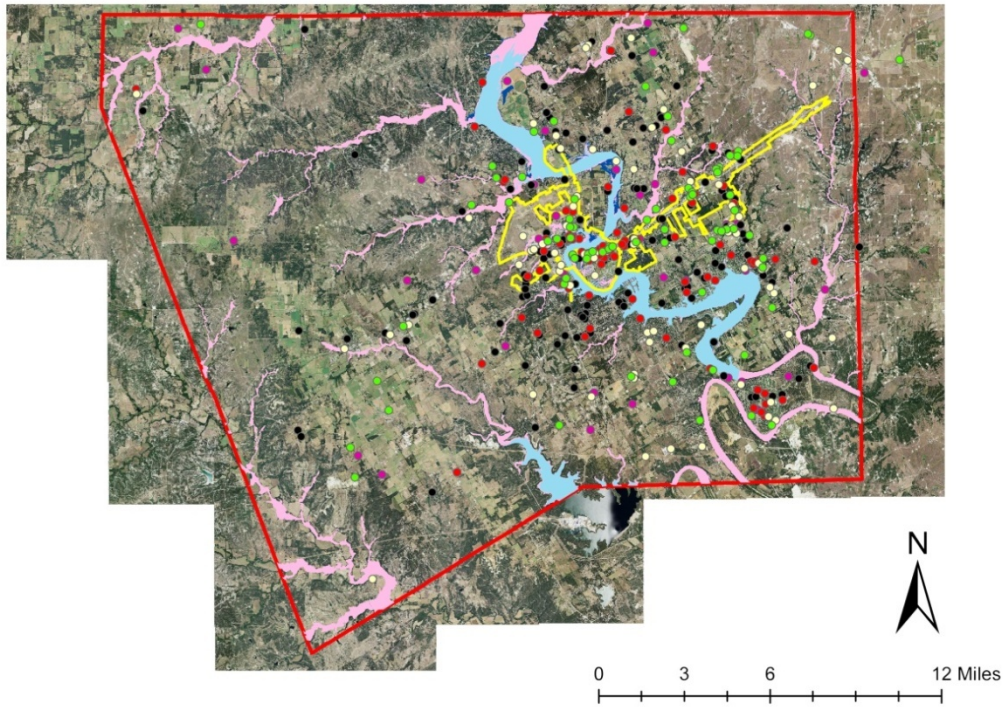


Legend

- ▲ Service _100
- ▲ Service _500
- Service
- Granbury_City_Boundary
- Water_Body
- 100_Flood
- 500_Flood
- Hood_Boundary

Hood	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	1064	7758	\$832,480,000	—————
Influenced by 100 year flood	23 (2.2%)	159 (2.0%)	\$12,977,000 (1.6%)	\$21,864,580
Influenced by 500 year flood	35 (3.3%)	296 (3.8%)	\$24,840,000 (3.0%)	\$24,683,750
Granbury	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value
Total Verified Businesses	584	4962	\$436,915,000	—————
Influenced by 100 year flood	14 (2.4%)	127 (2.6%)	\$10,767,000 (2.5%)	\$19,149,890
Influenced by 500 year flood	22 (3.8%)	254 (5.1%)	\$21,311,000 (4.9%)	\$20,958,280

Other Businesses Distribution, Hood County, Tx



Legend

- Wholesale_Distributor
- Transportation
- Other_Establishment
- Construction
- Agriculture_Forest_Fishing
- Granbury_City_Boundary
- Water_Body
- 100_Flood
- 500_Flood
- Hood_Boundary

	Types of Business	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value	
Hood	Other Establishment	131	592	\$70,615,000		
	Transportation	120	1083	\$506,328,000		
	Wholesale Distributor	117	780	\$1,381,861,000		
	Construction	234	1765	\$523,944,000		
	Agriculture Forest Fishing	81	388	\$55,601,000		
	Influenced by 100 Year Flood					
	Other Establishment	2	4	\$332,000	\$321,590	
	Transportation	2	3	\$651,000	\$392,870	
	Wholesale Distributor	1	7	\$16,497,000	\$11,140	
	Construction	2	3	\$1,210,000	\$186,980	
	Agriculture Forest Fishing	3	9	\$711,000	\$381,540	
	Influenced by 500 Year Flood					
Other Establishment	4	10	\$332,000	\$609,440		
Transportation	4	8	\$2,505,000	\$728,270		
Wholesale Distributor	2	12	\$34,641,000	\$11,140		
Construction	2	3	\$1,210,000	\$186,980		
Agriculture Forest Fishing	4	10	\$756,000	\$1,123,970		
Granbury	Types of Business	Number of Businesses	Number of Location Employees	Location Sales Value	Property Value	
	Other Establishment	42	255	\$29,943,000		
	Transportation	43	417	\$222,337,000		
	Wholesale Distributor	36	312	\$620,157,000		
	Construction	79	769	\$224,473,000		
	Agriculture Forest Fishing	23	190	\$17,819,000		
	Influenced by 100 year flood					
	Other Establishment	0	0	\$0	\$0	
	Transportation	0	0	\$0	\$0	
	Wholesale Distributor	1	7	\$16,497,000	\$11,140	
	Construction	0	0	\$0	\$0	
	Agriculture Forest Fishing	1	2	\$90,000	\$55,670	
Influenced by 500 year flood						
Other Establishment	1	3	\$0	\$99,010		
Transportation	1	2	\$1,376,000	\$8,660		
Wholesale Distributor	2	12	\$34,641,000	\$11,140		
Construction	0	0	\$0	\$0		
Agriculture Forest Fishing	1	2	\$90,000	\$55,670		

From the perspective of tornadoes, there is much less predictability and no specific map from which to analyze risk. As such, the only recommendation would be to prepare through structural mitigation and drills to create the best possibilities regarding loss of human life and property. Planning offices can request tornado drills and reinforced rooms (safe rooms) as part of building permits and codes, or other means of incentivizing can be explored by the community as a unit. Businesses at greatest risk tend to be those with fewer resources for mitigation or planning, as a function of economics rather than geography. Thus, small business planning becomes important, as they can better apply for mitigation funding as a bloc, rather than as

individuals, as well as coordinate distribution of these funds.

Coordination of a LEPC (Local Emergency Planning Committee) should therefore include and accept the perspective of those at-risk small businesses, as their economic impact will be disproportionately greater than those larger businesses with well diversified client bases and means of supply.

At the city level, Granbury's primary industries are service and retail, with nearly one billion dollars in sales being conducted within city limits each year. As the city is built upon the Brazos river and Lake Granbury, one would expect dire flooding risks from the 100 and 500 year flood maps. In actuality, there are only a few industry types, and a few individual businesses that are at risk within the city limits of Granbury. These industries at risk are the service and retail industries³, and both face the same recourses as the county level data above. Businesses with few employees and few resources tend to be the ones to close their doors permanently as a consequence of any disaster, and these will be the same businesses who cannot afford flood mitigating measures or practices. As such, they're considered most vulnerable. The property at risk values at approximately \$24 million dollars. There are 1377 verified businesses in Granbury City, 83.4% of them only have less than 10 employees and 97.47% of those businesses have less than 60 employees, which indicates Granbury city is dominant by small businesses.

For tornado recovery, the same practices as the county level will apply. Tornadoes are random event, with only short forewarning and no reliable means of predicting where one will touch down. As such, the only recommendation would be to prepare through structural mitigation and drills to create the best possibilities regarding loss of human life and property. Planning offices can request tornado drills and reinforced rooms (safe rooms) as part of building permits and codes, or other means of incentivizing can be explored by the community as a unit. Businesses at greatest risk tend to be those with fewer resources for mitigation or planning, as a function of economics rather than geography. Thus, small business planning becomes important, as the majority of such businesses in the area can be considered small, and thus vulnerable.

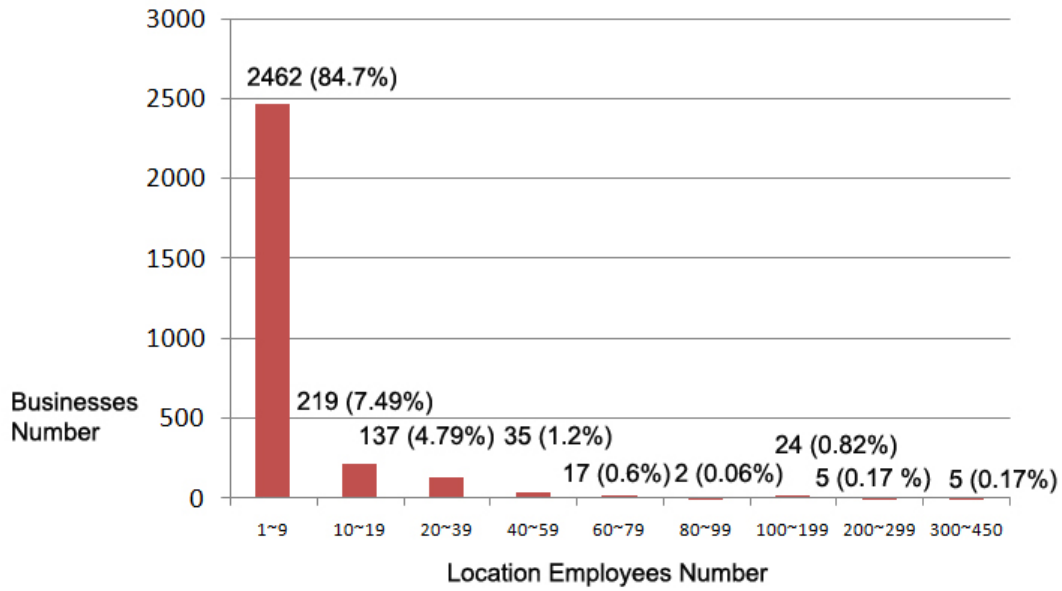
Summary and Recommendations

In summary, based on the research, Granbury city and Hood County are dominated by small businesses. Additionally, most businesses are not in either the 100 nor the 500 flood plains. The predominant industry is mining/drilling/extraction in Hood County which is resistant to disaster. At the city level the predominant industries are retail/trade and services which tend to be small businesses and more vulnerable to disasters. Tornado and Flood are not great threats to business in the area. As always, businesses operating on thin margins will suffer disproportionately in the event of disaster, but given the locality, basic mitigation practices will suffice. Ready.gov provides basic outlines for flood and tornado mitigation practices.

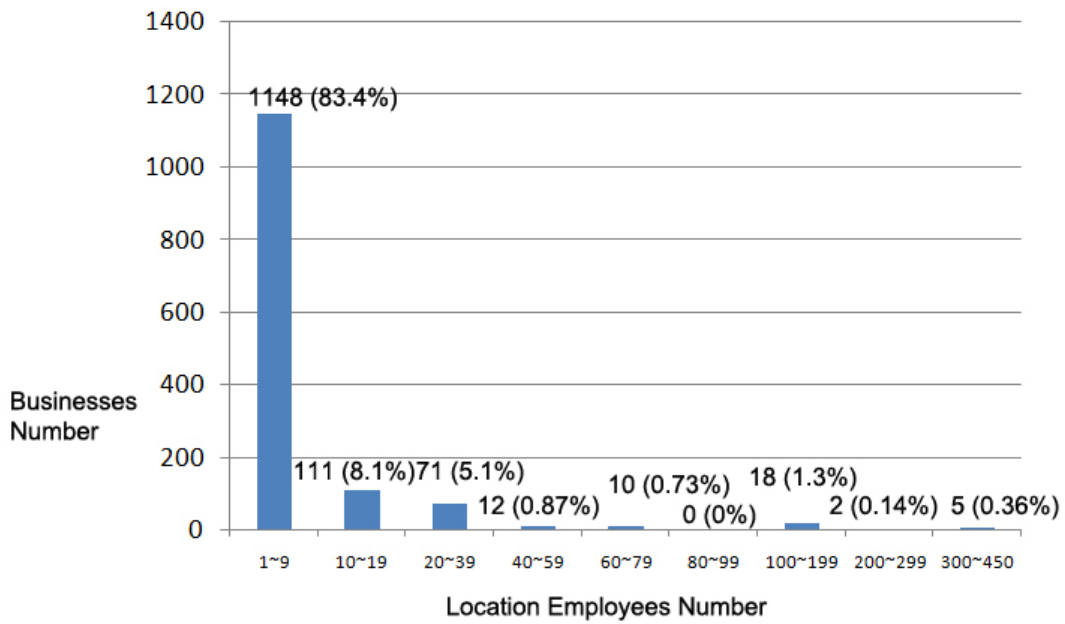
³ See Excel Table in Appendix

Number of Employees:

Hood County



Granbury City



There are some limitations in the research. The Bureau of Labor Statistics and Business Analysis Online have different methods for calculating business and employment, which creates two different results in our findings. Specifically, BAO and Reference USA put the employed population at 23K + while BLS puts the employed population at 13K. Reference USA includes “unverified” businesses in their calculations, while BLS does not. In our calculations, unverified businesses were not included in our recommendations, so the actual number of businesses at risk may be higher.

Some recommendations for Granbury including the establishment of liaison with nuclear power plant and conduct drills, keeping future development away from flood zone, diversifying the types of businesses especially the large one, as well as educating the public about the methods to mitigate negative influence of disasters and strategies to recover from the disasters.

Business Vulnerability Summary List

Hood	Types of Business	Vertical Businesses			Influenced by 100 year Flood			Influenced by 300 year Flood				
		Number of Businesses	Number of Location Employees	Number of Location Sales Value	Number of Businesses	Number of Location Employees	Number of Location Sales Value	Property Value	Number of Businesses	Number of Location Employees	Number of Location Sales Value	Property Value
	Other Establishment	131	592	\$70,615,000	2	4	\$322,000	\$221,500	4	10	\$322,000	\$89,440
	Transportation	129	1083	\$586,328,000	2	3	\$651,000	\$392,870	4	8	\$2,365,000	\$728,270
	Wholesale Distributor	117	780	\$1,301,861,000	1	7	\$16,997,000	\$11,140	2	12	\$3,641,000	\$11,140
	Services	1084	7738	\$822,881,000	23	159	\$12,977,000	\$21,864,500	35	296	\$21,864,000	\$24,683,760
	Public Administration	94	1441	\$0	1	22	\$0	\$7,429,610	1	22	\$0	\$7,429,610
	Retail Trade	382	5571	\$1,706,222,000	6	311	\$1,291,000	\$2,777,070	18	377	\$28,998,000	\$1,828,790
	Mining	35	1187	\$506,165,000	0	0	\$0	\$0	0	0	\$0	\$0
	Manufacture	83	861	\$719,472,000	1	1	\$332,000	\$120,090	1	1	\$332,000	\$120,090
	Finance Insurance RealEstate	355	1888	\$412,785,000	5	7	\$2,880,000	\$8,093,560	9	18	\$7,277,000	\$9,408,130
	Construction	294	1765	\$524,941,000	2	3	\$1,201,000	\$186,890	2	3	\$1,201,000	\$186,890
	Agriculture Forest Fishing	81	388	\$53,601,000	3	9	\$711,000	\$301,540	4	10	\$536,000	\$1,129,970
	Total	2907	20894	\$6,376,474,000	46	326	\$57,380,000	\$41,379,650	80	757	\$108,801,000	\$48,120,770
Industry	Types of Business	Vertical Businesses			Influenced by 100 year Flood			Influenced by 300 year Flood				
		Number of Businesses	Number of Location Employees	Number of Location Sales Value	Number of Businesses	Number of Location Employees	Number of Location Sales Value	Property Value	Number of Businesses	Number of Location Employees	Number of Location Sales Value	Property Value
	Other Establishment	42	255	\$29,945,000	0	0	\$0	\$0	1	3	\$0	\$99,010
	Transportation	43	417	\$222,327,000	0	0	\$0	\$0	1	2	\$1,376,000	\$8,660
	Wholesale Distributor	36	312	\$820,157,000	1	7	\$16,997,000	\$11,140	2	12	\$3,641,000	\$11,140
	Services	384	4482	\$456,915,000	14	127	\$10,767,000	\$19,199,980	22	254	\$21,311,000	\$20,958,280
	Public Administration	38	1084	\$0	1	22	\$0	\$7,429,610	1	22	\$0	\$7,429,610
	Retail Trade	298	3387	\$894,087,000	4	307	\$1,651,000	\$2,255,710	13	358	\$26,350,000	\$3,081,380
	Mining	5	186	\$35,888,000	0	0	\$0	\$0	0	0	\$0	\$0
	Manufacture	23	330	\$458,082,000	0	0	\$0	\$0	0	0	\$0	\$0
	Finance Insurance RealEstate	185	1175	\$301,726,000	4	6	\$2,881,000	\$7,019,990	8	17	\$7,092,000	\$8,934,440
	Construction	79	789	\$291,473,000	0	0	\$0	\$0	0	0	\$0	\$0
	Agriculture Forest Fishing	23	190	\$17,802,000	1	2	\$90,000	\$55,670	1	2	\$90,000	\$55,670
	Total	1877	12987	\$6,250,402,000	25	471	\$31,682,000	\$28,321,910	49	670	\$29,880,000	\$40,386,770

Bureau for Labor Statistics: Location Quotient


UNITED STATES DEPARTMENT OF LABOR

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Quarterly Census of Employment and Wages

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Location Quotient Calculator

Employment, [Percentage](#) and [Location Quotients](#) calculated from Quarterly Census of Employment and Wages Data

Data Year:	2013
Data Period:	Annual Average
Datatype:	All Employees
Ownership:	Local/State/Federal Government and Private
Establishment Sizes:	All establishment sizes
Base Industry:	Base Industry: Total, all industries
Base Area:	U.S. TOTAL

Employment calculated from Quarterly Census of Employment and Wages Data

Industry	U.S. TOTAL	Hood County, Texas	McLennan County, Texas
Base Industry: Total, all industries	112,958,334	13,621	85,906
Natural resources and mining	2,023,732	2,586	337
Construction	5,819,950	947	6,016
Manufacturing	11,994,922	671	14,659
Trade, transportation, and utilities	25,606,723	3,185	18,015
Information	2,703,250	216	1,281
Financial activities	7,616,922	802	5,987
Professional and business services	18,478,164	1,118	9,538
Education and health services	20,204,352	1,593	16,556
Leisure and hospitality	14,195,179	1,904	10,741
Other services	4,149,819	596	2,755
Unclassified	165,321	5	23
NAICS 11 Agriculture, forestry, fishing and hunting	1,210,474	154	157
NAICS 21 Mining, quarrying, and oil and gas extraction	813,258	2,432	179
NAICS 22 Utilities	547,807	96	458
NAICS 23 Construction	5,819,950	947	6,016
NAICS 31-33 Manufacturing	11,994,922	671	14,659
NAICS 42 Wholesale trade	5,739,082	487	4,071
NAICS 44-45 Retail trade	15,073,504	2,401	11,068
NAICS 54 Professional and technical services	8,122,350	626	ND
NAICS 55 Management of companies and enterprises	2,087,081	ND	ND
NAICS 56 Administrative and waste services	8,268,733	ND	6,419
NAICS 61 Educational services	2,629,459	46	4,024
NAICS 62 Health care and social assistance	17,574,893	1,546	12,532
NAICS 48-49 Transportation and warehousing	4,246,329	202	2,417
NAICS 51 Information	2,703,250	216	1,281
NAICS 52 Finance and insurance	5,625,736	586	4,582
NAICS 53 Real estate and rental and leasing	1,991,186	217	1,405
NAICS 71 Arts, entertainment, and recreation	2,029,671	281	687
NAICS 72 Accommodation and food services	12,165,508	1,623	10,054
NAICS 81 Other services, except public administration	4,149,819	596	2,755
NAICS 99 Unclassified	165,321	5	23

NAICS 111 Crop production	550,459	79	33
NAICS 112 Animal production and aquaculture	238,480	53	83
NAICS 113 Forestry and logging	56,363	NC	NC
NAICS 114 Fishing, hunting and trapping	7,819	ND	NC
NAICS 115 Agriculture and forestry support activities	357,353	ND	42
NAICS 211 Oil and gas extraction	196,732	82	ND
NAICS 212 Mining, except oil and gas	210,511	263	ND
NAICS 213 Support activities for mining	406,016	2,087	21
NAICS 221 Utilities	547,807	96	458
NAICS 236 Construction of buildings	1,281,387	262	1,005
NAICS 237 Heavy and civil engineering construction	869,624	51	949
NAICS 312 Beverage and tobacco product manufacturing	199,501	ND	ND
NAICS 313 Textile mills	116,811	NC	ND
NAICS 314 Textile product mills	113,868	ND	160
NAICS 315 Apparel manufacturing	143,535	NC	ND
NAICS 316 Leather and allied product manufacturing	29,482	NC	ND
NAICS 321 Wood product manufacturing	353,610	NC	722
NAICS 322 Paper manufacturing	376,519	NC	729
NAICS 238 Specialty trade contractors	3,668,939	634	4,063
NAICS 311 Food manufacturing	1,467,238	ND	1,896
NAICS 337 Furniture and related product manufacturing	358,243	11	229
NAICS 339 Miscellaneous manufacturing	577,881	10	440
NAICS 423 Merchant wholesalers, durable goods	2,867,522	332	2,568
NAICS 424 Merchant wholesalers, nondurable goods	1,980,354	64	1,312
NAICS 425 Electronic markets and agents and brokers	891,207	91	191
NAICS 441 Motor vehicle and parts dealers	1,789,864	371	1,557
NAICS 442 Furniture and home furnishings stores	445,037	48	344
NAICS 443 Electronics and appliance stores	490,045	ND	272
NAICS 444 Building material and garden supply stores	1,199,903	331	996
NAICS 445 Food and beverage stores	2,934,003	681	2,026
NAICS 446 Health and personal care stores	1,011,394	91	491
NAICS 323 Printing and related support activities	452,531	35	442
NAICS 324 Petroleum and coal products manufacturing	111,879	ND	39
NAICS 325 Chemical manufacturing	793,240	ND	895
NAICS 326 Plastics and rubber products manufacturing	656,736	ND	619
NAICS 327 Nonmetallic mineral product manufacturing	372,376	ND	1,020
NAICS 331 Primary metal manufacturing	395,966	NC	ND
NAICS 332 Fabricated metal product manufacturing	1,421,941	144	1,084
NAICS 333 Machinery manufacturing	1,104,248	ND	1,120
NAICS 334 Computer and electronic product manufacturing	1,061,559	ND	2,468
NAICS 335 Electrical equipment and appliance mfg.	373,866	NC	100
NAICS 336 Transportation equipment manufacturing	1,513,893	49	2,141
NAICS 533 Lessors of nonfinancial intangible assets	23,797	ND	ND
NAICS 541 Professional and technical services	8,122,350	626	ND
NAICS 551 Management of companies and enterprises	2,087,081	ND	ND
NAICS 561 Administrative and support services	7,893,439	411	6,165
NAICS 562 Waste management and remediation services	375,294	ND	254
NAICS 611 Educational services	2,629,459	46	4,024
NAICS 621 Ambulatory health care services	6,462,954	562	5,433
NAICS 622 Hospitals	4,748,092	NC	ND
NAICS 623 Nursing and residential care facilities	3,219,398	726	2,218
NAICS 624 Social assistance	3,144,449	258	ND
NAICS 447 Gasoline stations	860,533	114	1,006
NAICS 448 Clothing and clothing accessories stores	1,388,530	104	873
NAICS 451 Sports, hobby, music instrument, book stores	600,085	18	535
NAICS 452 General merchandise stores	3,086,621	474	2,279
NAICS 453 Miscellaneous store retailers	806,726	140	580
NAICS 454 Nonstore retailers	460,763	ND	111
NAICS 481 Air transportation	448,618	NC	ND
NAICS 482 Rail transportation	662	NC	NC

NAICS 483 Water transportation	65,988	NC	NC
NAICS 484 Truck transportation	1,371,104	85	1,118
NAICS 485 Transit and ground passenger transportation	443,859	ND	499
NAICS 486 Pipeline transportation	43,740	16	ND
NAICS 487 Scenic and sightseeing transportation	29,634	NC	NC
NAICS 488 Support activities for transportation	592,501	23	100
NAICS 491 Postal service	5,528	NC	ND
NAICS 492 Couriers and messengers	536,626	ND	282
NAICS 493 Warehousing and storage	708,067	ND	396
NAICS 511 Publishing industries, except Internet	728,215	59	290
NAICS 512 Motion picture and sound recording industries	380,048	ND	160
NAICS 515 Broadcasting, except Internet	285,202	ND	346
NAICS 516 Internet publishing and broadcasting	NC	NC	NC
NAICS 517 Telecommunications	849,782	ND	411
NAICS 518 Data processing, hosting and related services	265,564	ND	259
NAICS 519 Other information services	194,440	ND	15
NAICS 521 Monetary authorities - central bank	17,940	NC	NC
NAICS 522 Credit intermediation and related activities	2,608,712	451	1,860
NAICS 523 Securities, commodity contracts, investments	864,943	29	ND
NAICS 524 Insurance carriers and related activities	2,130,569	106	2,489
NAICS 525 Funds, trusts, and other financial vehicles	3,572	NC	ND
NAICS 531 Real estate	1,449,906	ND	838
NAICS 532 Rental and leasing services	517,482	119	ND
NAICS 711 Performing arts and spectator sports	426,482	12	12
NAICS 712 Museums, historical sites, zoos, and parks	141,242	NC	74
NAICS 713 Amusements, gambling, and recreation	1,461,948	269	601
NAICS 721 Accommodation	1,849,249	138	983
NAICS 722 Food services and drinking places	10,316,259	1,485	9,071
NAICS 811 Repair and maintenance	1,207,796	196	1,042
NAICS 812 Personal and laundry services	1,339,327	120	820
NAICS 813 Membership associations and organizations	1,331,923	257	719
NAICS 814 Private households	270,773	23	175
NAICS 999 Unclassified	165,321	5	23

Footnotes:
 (ND) Not Disclosable
 (NC) Not Calculable, the data does not exist or it is zero

Percentage of Employment calculated from Quarterly Census of Employment and Wages Data

Industry	U.S. TOTAL	Hood County, Texas	McLennan County, Texas
Base Industry: Total, all industries	100.00%	100.00%	100.00%
Natural resources and mining	1.79%	18.99%	0.39%
Construction	5.15%	6.95%	7.00%
Manufacturing	10.62%	4.93%	17.06%
Trade, transportation, and utilities	22.67%	23.38%	20.97%
Information	2.39%	1.59%	1.49%
Financial activities	6.74%	5.89%	6.97%
Professional and business services	16.36%	8.21%	11.10%
Education and health services	17.89%	11.70%	19.27%
Leisure and hospitality	12.57%	13.98%	12.50%
Other services	3.67%	4.38%	3.21%
Unclassified	0.15%	0.04%	0.03%
NAICS 11 Agriculture, forestry, fishing and hunting	1.07%	1.13%	0.18%
NAICS 21 Mining, quarrying, and oil and gas extraction	0.72%	17.85%	0.21%
NAICS 22 Utilities	0.48%	0.70%	0.53%
NAICS 23 Construction	5.15%	6.95%	7.00%
NAICS 31-33 Manufacturing	10.62%	4.93%	17.06%
NAICS 42 Wholesale trade	5.08%	3.58%	4.74%
NAICS 44-45 Retail trade	13.34%	17.63%	12.88%
NAICS 54 Professional and technical services	7.19%	4.60%	ND%

NAICS 55 Management of companies and enterprises	1.85%	ND%	ND%
NAICS 56 Administrative and waste services	7.32%	ND%	7.47%
NAICS 61 Educational services	2.33%	0.34%	4.68%
NAICS 62 Health care and social assistance	15.56%	11.35%	14.59%
NAICS 48-49 Transportation and warehousing	3.76%	1.48%	2.81%
NAICS 51 Information	2.39%	1.59%	1.49%
NAICS 52 Finance and insurance	4.98%	4.30%	5.33%
NAICS 53 Real estate and rental and leasing	1.76%	1.59%	1.64%
NAICS 71 Arts, entertainment, and recreation	1.80%	2.06%	0.80%
NAICS 72 Accommodation and food services	10.77%	11.92%	11.70%
NAICS 81 Other services, except public administration	3.67%	4.38%	3.21%
NAICS 99 Unclassified	0.15%	0.04%	0.03%
NAICS 111 Crop production	0.49%	0.58%	0.04%
NAICS 112 Animal production and aquaculture	0.21%	0.39%	0.10%
NAICS 113 Forestry and logging	0.05%	NC	NC
NAICS 114 Fishing, hunting and trapping	0.01%	ND%	NC
NAICS 115 Agriculture and forestry support activities	0.32%	ND%	0.05%
NAICS 211 Oil and gas extraction	0.17%	0.60%	ND%
NAICS 212 Mining, except oil and gas	0.19%	1.93%	ND%
NAICS 213 Support activities for mining	0.36%	15.32%	0.02%
NAICS 221 Utilities	0.48%	0.70%	0.53%
NAICS 236 Construction of buildings	1.13%	1.92%	1.17%
NAICS 237 Heavy and civil engineering construction	0.77%	0.37%	1.10%
NAICS 312 Beverage and tobacco product manufacturing	0.18%	ND%	ND%
NAICS 313 Textile mills	0.10%	NC	ND%
NAICS 314 Textile product mills	0.10%	ND%	0.19%
NAICS 315 Apparel manufacturing	0.13%	NC	ND%
NAICS 316 Leather and allied product manufacturing	0.03%	NC	ND%
NAICS 321 Wood product manufacturing	0.31%	NC	0.84%
NAICS 322 Paper manufacturing	0.33%	NC	0.85%
NAICS 238 Specialty trade contractors	3.25%	4.65%	4.73%
NAICS 311 Food manufacturing	1.30%	ND%	2.21%
NAICS 337 Furniture and related product manufacturing	0.32%	0.08%	0.27%
NAICS 339 Miscellaneous manufacturing	0.51%	0.07%	0.51%
NAICS 423 Merchant wholesalers, durable goods	2.54%	2.44%	2.99%
NAICS 424 Merchant wholesalers, nondurable goods	1.75%	0.47%	1.53%
NAICS 425 Electronic markets and agents and brokers	0.79%	0.67%	0.22%
NAICS 441 Motor vehicle and parts dealers	1.58%	2.72%	1.81%
NAICS 442 Furniture and home furnishings stores	0.39%	0.35%	0.40%
NAICS 443 Electronics and appliance stores	0.43%	ND%	0.32%
NAICS 444 Building material and garden supply stores	1.06%	2.43%	1.16%
NAICS 445 Food and beverage stores	2.60%	5.00%	2.36%
NAICS 446 Health and personal care stores	0.90%	0.67%	0.57%
NAICS 323 Printing and related support activities	0.40%	0.26%	0.51%
NAICS 324 Petroleum and coal products manufacturing	0.10%	ND%	0.05%
NAICS 325 Chemical manufacturing	0.70%	ND%	1.04%
NAICS 326 Plastics and rubber products manufacturing	0.58%	ND%	0.72%
NAICS 327 Nonmetallic mineral product manufacturing	0.33%	ND%	1.19%
NAICS 331 Primary metal manufacturing	0.35%	NC	ND%
NAICS 332 Fabricated metal product manufacturing	1.26%	1.06%	1.26%
NAICS 333 Machinery manufacturing	0.98%	ND%	1.30%
NAICS 334 Computer and electronic product manufacturing	0.94%	ND%	2.87%
NAICS 335 Electrical equipment and appliance mfg.	0.33%	NC	0.12%
NAICS 336 Transportation equipment manufacturing	1.34%	0.36%	2.49%
NAICS 533 Lessors of nonfinancial intangible assets	0.02%	ND%	ND%
NAICS 541 Professional and technical services	7.19%	4.60%	ND%
NAICS 551 Management of companies and enterprises	1.85%	ND%	ND%
NAICS 561 Administrative and support services	6.99%	3.02%	7.18%
NAICS 562 Waste management and remediation services	0.33%	ND%	0.30%
NAICS 611 Educational services	2.33%	0.34%	4.68%
NAICS 621 Ambulatory health care services	5.72%	4.13%	6.32%

NAICS 622 Hospitals	4.20%	NC	ND%
NAICS 623 Nursing and residential care facilities	2.85%	5.33%	2.58%
NAICS 624 Social assistance	2.78%	1.89%	ND%
NAICS 447 Gasoline stations	0.76%	0.84%	1.17%
NAICS 448 Clothing and clothing accessories stores	1.23%	0.76%	1.02%
NAICS 451 Sports, hobby, music instrument, book stores	0.53%	0.13%	0.62%
NAICS 452 General merchandise stores	2.73%	3.48%	2.65%
NAICS 453 Miscellaneous store retailers	0.71%	1.03%	0.68%
NAICS 454 Nonstore retailers	0.41%	ND%	0.13%
NAICS 481 Air transportation	0.40%	NC	ND%
NAICS 482 Rail transportation	0.00%	NC	NC
NAICS 483 Water transportation	0.06%	NC	NC
NAICS 484 Truck transportation	1.21%	0.62%	1.30%
NAICS 485 Transit and ground passenger transportation	0.39%	ND%	0.58%
NAICS 486 Pipeline transportation	0.04%	0.12%	ND%
NAICS 487 Scenic and sightseeing transportation	0.03%	NC	NC
NAICS 488 Support activities for transportation	0.52%	0.17%	0.12%
NAICS 491 Postal service	0.00%	NC	ND%
NAICS 492 Couriers and messengers	0.48%	ND%	0.33%
NAICS 493 Warehousing and storage	0.63%	ND%	0.46%
NAICS 511 Publishing industries, except Internet	0.64%	0.43%	0.34%
NAICS 512 Motion picture and sound recording industries	0.34%	ND%	0.19%
NAICS 515 Broadcasting, except Internet	0.25%	ND%	0.40%
NAICS02 516 Internet publishing and broadcasting	NC	NC	NC
NAICS 517 Telecommunications	0.75%	ND%	0.48%
NAICS 518 Data processing, hosting and related services	0.24%	ND%	0.07%
NAICS 519 Other information services	0.17%	ND%	0.02%
NAICS 521 Monetary authorities - central bank	0.02%	NC	NC
NAICS 522 Credit intermediation and related activities	2.31%	3.31%	2.17%
NAICS 523 Securities, commodity contracts, investments	0.77%	0.21%	ND%
NAICS 524 Insurance carriers and related activities	1.89%	0.78%	2.90%
NAICS 525 Funds, trusts, and other financial vehicles	0.00%	NC	ND%
NAICS 531 Real estate	1.28%	ND%	0.98%
NAICS 532 Rental and leasing services	0.46%	0.87%	ND%
NAICS 711 Performing arts and spectator sports	0.38%	0.09%	0.01%
NAICS 712 Museums, historical sites, zoos, and parks	0.13%	NC	0.09%
NAICS 713 Amusements, gambling, and recreation	1.29%	1.97%	0.70%
NAICS 721 Accommodation	1.64%	1.01%	1.14%
NAICS 722 Food services and drinking places	9.13%	10.90%	10.56%
NAICS 811 Repair and maintenance	1.07%	1.44%	1.21%
NAICS 812 Personal and laundry services	1.19%	0.88%	0.95%
NAICS 813 Membership associations and organizations	1.18%	1.89%	0.84%
NAICS 814 Private households	0.24%	0.17%	0.20%
NAICS 999 Unclassified	0.15%	0.04%	0.03%

Footnotes:
 (ND) Not Disclosable
 (NC) Not Calculable, the data does not exist or it is zero

Percentage of Employment: Ratio of industry employment to base-industry employment times 100.

Location Quotients calculated from **Quarterly Census of Employment and Wages Data**

Industry	Hood County, Texas	McLennan County, Texas
Base Industry: Total, all industries	1.00	1.00
Natural resources and mining	10.60	0.22
Construction	1.35	1.36
Manufacturing	0.46	1.61
Trade, transportation, and utilities	1.03	0.93
Information	0.66	0.62
Financial activities	0.87	1.03
Professional and business services	0.50	0.68

Education and health services	0.65	1.08
Leisure and hospitality	1.11	0.99
Other services	1.19	0.87
Unclassified	0.25	0.18
NAICS 11 Agriculture, forestry, fishing and hunting	1.06	0.17
NAICS 21 Mining, quarrying, and oil and gas extraction	24.80	0.29
NAICS 22 Utilities	1.45	1.10
NAICS 23 Construction	1.35	1.36
NAICS 31-33 Manufacturing	0.46	1.61
NAICS 42 Wholesale trade	0.70	0.93
NAICS 44-45 Retail trade	1.32	0.97
NAICS 54 Professional and technical services	0.64	ND
NAICS 55 Management of companies and enterprises	ND	ND
NAICS 56 Administrative and waste services	ND	1.02
NAICS 61 Educational services	0.15	2.01
NAICS 62 Health care and social assistance	0.73	0.94
NAICS 48-49 Transportation and warehousing	0.39	0.75
NAICS 51 Information	0.66	0.62
NAICS 52 Finance and insurance	0.86	1.07
NAICS 53 Real estate and rental and leasing	0.90	0.93
NAICS 71 Arts, entertainment, and recreation	1.15	0.45
NAICS 72 Accommodation and food services	1.11	1.09
NAICS 81 Other services, except public administration	1.19	0.87
NAICS 99 Unclassified	0.25	0.18
NAICS 111 Crop production	1.19	0.08
NAICS 112 Animal production and aquaculture	1.84	0.46
NAICS 113 Forestry and logging	NC	NC
NAICS 114 Fishing, hunting and trapping	ND	NC
NAICS 115 Agriculture and forestry support activities	ND	0.15
NAICS 211 Oil and gas extraction	3.46	ND
NAICS 212 Mining, except oil and gas	10.36	ND
NAICS 213 Support activities for mining	42.63	0.07
NAICS 221 Utilities	1.45	1.10
NAICS 236 Construction of buildings	1.70	1.03
NAICS 237 Heavy and civil engineering construction	0.49	1.43
NAICS 312 Beverage and tobacco product manufacturing	ND	ND
NAICS 313 Textile mills	NC	ND
NAICS 314 Textile product mills	ND	1.85
NAICS 315 Apparel manufacturing	NC	ND
NAICS 316 Leather and allied product manufacturing	NC	ND
NAICS 321 Wood product manufacturing	NC	2.68
NAICS 322 Paper manufacturing	NC	2.55
NAICS 238 Specialty trade contractors	1.43	1.46
NAICS 311 Food manufacturing	ND	1.70
NAICS 337 Furniture and related product manufacturing	0.25	0.84
NAICS 339 Miscellaneous manufacturing	0.14	1.00
NAICS 423 Merchant wholesalers, durable goods	0.96	1.18
NAICS 424 Merchant wholesalers, nondurable goods	0.27	0.87
NAICS 425 Electronic markets and agents and brokers	0.85	0.28
NAICS 441 Motor vehicle and parts dealers	1.72	1.14
NAICS 442 Furniture and home furnishings stores	0.89	1.02
NAICS 443 Electronics and appliance stores	ND	0.73
NAICS 444 Building material and garden supply stores	2.29	1.09
NAICS 445 Food and beverage stores	1.92	0.91
NAICS 446 Health and personal care stores	0.75	0.64
NAICS 323 Printing and related support activities	0.64	1.28
NAICS 324 Petroleum and coal products manufacturing	ND	0.46
NAICS 325 Chemical manufacturing	ND	1.48
NAICS 326 Plastics and rubber products manufacturing	ND	1.24
NAICS 327 Nonmetallic mineral product manufacturing	ND	3.60
NAICS 331 Primary metal manufacturing	NC	ND

NAICS 332 Fabricated metal product manufacturing	0.84	1.00
NAICS 333 Machinery manufacturing	ND	1.33
NAICS 334 Computer and electronic product manufacturing	ND	3.06
NAICS 335 Electrical equipment and appliance mfg.	NC	0.35
NAICS 336 Transportation equipment manufacturing	0.27	1.86
NAICS 533 Lessors of nonfinancial intangible assets	ND	ND
NAICS 541 Professional and technical services	0.64	ND
NAICS 551 Management of companies and enterprises	ND	ND
NAICS 561 Administrative and support services	0.43	1.03
NAICS 562 Waste management and remediation services	ND	0.89
NAICS 611 Educational services	0.15	2.01
NAICS 621 Ambulatory health care services	0.72	1.11
NAICS 622 Hospitals	NC	ND
NAICS 623 Nursing and residential care facilities	1.87	0.91
NAICS 624 Social assistance	0.68	ND
NAICS 447 Gasoline stations	1.10	1.54
NAICS 448 Clothing and clothing accessories stores	0.62	0.83
NAICS 451 Sports, hobby, music instrument, book stores	0.25	1.17
NAICS 452 General merchandise stores	1.27	0.97
NAICS 453 Miscellaneous store retailers	1.44	0.95
NAICS 454 Nonstore retailers	ND	0.32
NAICS 481 Air transportation	NC	ND
NAICS 482 Rail transportation	NC	NC
NAICS 483 Water transportation	NC	NC
NAICS 484 Truck transportation	0.51	1.07
NAICS 485 Transit and ground passenger transportation	ND	1.48
NAICS 486 Pipeline transportation	3.03	ND
NAICS 487 Scenic and sightseeing transportation	NC	NC
NAICS 488 Support activities for transportation	0.32	0.22
NAICS 491 Postal service	NC	ND
NAICS 492 Couriers and messengers	ND	0.69
NAICS 493 Warehousing and storage	ND	0.74
NAICS 511 Publishing industries, except Internet	0.67	0.52
NAICS 512 Motion picture and sound recording industries	ND	0.55
NAICS 515 Broadcasting, except Internet	ND	1.60
NAICS02 516 Internet publishing and broadcasting	NC	NC
NAICS 517 Telecommunications	ND	0.64
NAICS 518 Data processing, hosting and related services	ND	0.29
NAICS 519 Other information services	ND	0.10
NAICS 521 Monetary authorities - central bank	NC	NC
NAICS 522 Credit intermediation and related activities	1.43	0.94
NAICS 523 Securities, commodity contracts, investments	0.28	ND
NAICS 524 Insurance carriers and related activities	0.41	1.54
NAICS 525 Funds, trusts, and other financial vehicles	NC	ND
NAICS 531 Real estate	ND	0.76
NAICS 532 Rental and leasing services	1.91	ND
NAICS 711 Performing arts and spectator sports	0.23	0.04
NAICS 712 Museums, historical sites, zoos, and parks	NC	0.69
NAICS 713 Amusements, gambling, and recreation	1.53	0.54
NAICS 721 Accommodation	0.62	0.70
NAICS 722 Food services and drinking places	1.19	1.16
NAICS 811 Repair and maintenance	1.35	1.13
NAICS 812 Personal and laundry services	0.74	0.81
NAICS 813 Membership associations and organizations	1.60	0.71
NAICS 814 Private households	0.70	0.85
NAICS 999 Unclassified	0.25	0.18

Footnotes:

(ND) Not Disclosable

(NC) Not Calculable, the data does not exist or it is zero

Location Quotient: Ratio of analysis-industry employment in the analysis area to base-industry employment in the analysis area divided by the ratio of analysis-industry employment in the base area to base-industry employment in the base area

Business Summary: Hood County



Business Summary

Hood County, TX
Hood County, TX (48221)
Geography: County

Data for all businesses in area		Hood County, TX ...			
Total Businesses:		5,036			
Total Employees:		17,738			
Total Residential Population:		54,300			
Employee/Residential Population Ratio:		0.33:1			
by SIC Codes		Businesses		Employees	
		Number	Percent	Number	Percent
Agriculture & Mining		236	4.7%	1,065	6.0%
Construction		443	8.8%	1,603	9.0%
Manufacturing		130	2.6%	827	4.7%
Transportation		149	3.0%	501	2.8%
Communication		22	0.4%	71	0.4%
Utility		21	0.4%	284	1.6%
Wholesale Trade		183	3.6%	602	3.4%
Retail Trade Summary		692	13.7%	3,537	19.9%
Home Improvement		41	0.8%	409	2.3%
General Merchandise Stores		15	0.3%	69	0.4%
Food Stores		76	1.5%	647	3.6%
Auto Dealers, Gas Stations, Auto Aftermarket		59	1.2%	407	2.3%
Apparel & Accessory Stores		40	0.8%	120	0.7%
Furniture & Home Furnishings		43	0.9%	122	0.7%
Eating & Drinking Places		133	2.6%	1,067	6.0%
Miscellaneous Retail		285	5.7%	696	3.9%
Finance, Insurance, Real Estate Summary		420	8.3%	1,346	7.6%
Banks, Savings & Lending Institutions		45	0.9%	363	2.0%
Securities Brokers		21	0.4%	42	0.2%
Insurance Carriers & Agents		61	1.2%	176	1.0%
Real Estate, Holding, Other Investment Offices		293	5.8%	765	4.3%
Services Summary		2,066	41.0%	7,215	40.7%
Hotels & Lodging		28	0.6%	188	1.1%
Automotive Services		82	1.6%	224	1.3%
Motion Pictures & Amusements		83	1.6%	340	1.9%
Health Services		160	3.2%	1,089	6.1%
Legal Services		38	0.8%	134	0.8%
Education Institutions & Libraries		58	1.2%	1,318	7.4%
Other Services		1,617	32.1%	3,922	22.1%
Government		50	1.0%	681	3.8%
Unclassified Establishments		624	12.4%	6	0.0%
Totals		5,036	100.0%	17,738	100.0%
by NAICS Codes		Businesses		Employees	
		Number	Percent	Number	Percent
Agriculture, Forestry, Fishing & Hunting		123	2.4%	327	1.8%
Mining		32	0.6%	458	2.6%
Utilities		16	0.3%	228	1.3%
Construction		457	9.1%	1,702	9.6%
Manufacturing		133	2.6%	778	4.4%
Wholesale Trade		182	3.6%	597	3.4%
Retail Trade		549	10.9%	2,440	13.8%
Motor Vehicle & Parts Dealers		51	1.0%	360	2.0%
Furniture & Home Furnishings Stores		20	0.4%	68	0.4%
Electronics & Appliance Stores		19	0.4%	47	0.3%
Bldg Material & Garden Equipment & Supplies Dealers		34	0.7%	373	2.1%
Food & Beverage Stores		72	1.4%	649	3.7%
Health & Personal Care Stores		25	0.5%	123	0.7%
Gasoline Stations		8	0.2%	47	0.3%
Clothing & Clothing Accessories Stores		52	1.0%	138	0.8%
Sport Goods, Hobby, Book, & Music Stores		58	1.2%	129	0.7%
General Merchandise Stores		15	0.3%	69	0.4%
Miscellaneous Store Retailers		160	3.2%	374	2.1%
Nonstore Retailers		35	0.7%	63	0.4%
Transportation & Warehousing		132	2.6%	466	2.6%
Information		48	1.0%	230	1.3%
Finance & Insurance		215	4.3%	776	4.4%
Central Bank/Credit Intermediation & Related Activities		56	1.1%	387	2.2%
Securities, Commodity Contracts & Other Financial		85	1.7%	188	1.1%
Insurance Carriers & Related Activities; Funds, Trusts &		74	1.5%	201	1.1%
Real Estate, Rental & Leasing		220	4.4%	725	4.1%
Professional, Scientific & Tech Services		488	9.7%	1,104	6.2%
Legal Services		42	0.8%	161	0.9%
Management of Companies & Enterprises		12	0.2%	26	0.1%
Administrative & Support & Waste Management & Remediation		836	16.6%	1,599	9.0%
Educational Services		67	1.3%	1,328	7.5%
Health Care & Social Assistance		212	4.2%	1,405	7.9%
Arts, Entertainment & Recreation		72	1.4%	293	1.7%
Accommodation & Food Services		159	3.2%	1,248	7.0%
Accommodation		26	0.5%	181	1.0%
Food Services & Drinking Places		133	2.6%	1,067	6.0%
Other Services (except Public Administration)		408	8.1%	1,301	7.3%
Automotive Repair & Maintenance		73	1.4%	200	1.1%
Public Administration		51	1.0%	701	4.0%
Unclassified Establishments		624	12.4%	6	0.0%
Total		5,036	100.0%	17,738	100.0%

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November 24, 2014

Business Summary_Granbury City



Business Summary

Granbury City, TX
 Granbury city, TX (4830416)
 Geography: Place

Data for all businesses in area		Granbury city, T...			
Total Businesses:		1,570			
Total Employees:		8,645			
Total Residential Population:		8,650			
Employee/Residential Population Ratio:		1:1			
by SIC Codes		Businesses		Employees	
		Number	Percent	Number	Percent
Agriculture & Mining		39	2.5%	306	3.5%
Construction		81	5.2%	335	3.9%
Manufacturing		35	2.2%	220	2.5%
Transportation		24	1.5%	149	1.7%
Communication		13	0.8%	40	0.5%
Utility		2	0.1%	10	0.1%
Wholesale Trade		53	3.4%	200	2.3%
Retail Trade Summary		325	20.7%	2,408	27.9%
Home Improvement		11	0.7%	312	3.6%
General Merchandise Stores		7	0.4%	44	0.5%
Food Stores		35	2.2%	497	5.7%
Auto Dealers, Gas Stations, Auto Aftermarket		32	2.0%	247	2.9%
Apparel & Accessory Stores		22	1.4%	75	0.9%
Furniture & Home Furnishings		24	1.5%	88	1.0%
Eating & Drinking Places		78	5.0%	738	8.5%
Miscellaneous Retail		116	7.4%	407	4.7%
Finance, Insurance, Real Estate Summary		183	11.7%	786	9.1%
Banks, Savings & Lending Institutions		34	2.2%	316	3.7%
Securities Brokers		8	0.5%	18	0.2%
Insurance Carriers & Agents		30	1.9%	100	1.2%
Real Estate, Holding, Other Investment Offices		111	7.1%	352	4.1%
Services Summary		621	39.6%	3,673	42.5%
Hotels & Lodging		17	1.1%	155	1.8%
Automotive Services		28	1.8%	103	1.2%
Motion Pictures & Amusements		26	1.7%	167	1.9%
Health Services		105	6.7%	878	10.2%
Legal Services		29	1.8%	113	1.3%
Education Institutions & Libraries		22	1.4%	853	9.9%
Other Services		394	25.1%	1,404	16.2%
Government		30	1.9%	518	6.0%
Unclassified Establishments		164	10.4%	0	0.0%
Totals		1,570	100.0%	8,645	100.0%
by NAICS Codes		Businesses		Employees	
		Number	Percent	Number	Percent
Agriculture, Forestry, Fishing & Hunting		14	0.9%	67	0.8%
Mining		8	0.5%	113	1.3%
Utilities		0	0.0%	0	0.0%
Construction		89	5.7%	422	4.9%
Manufacturing		37	2.4%	168	1.9%
Wholesale Trade		53	3.4%	200	2.3%
Retail Trade		242	15.4%	1,659	19.2%
Motor Vehicle & Parts Dealers		27	1.7%	217	2.5%
Furniture & Home Furnishings Stores		11	0.7%	51	0.6%
Electronics & Appliance Stores		12	0.8%	35	0.4%
Bldg Material & Garden Equipment & Supplies Dealers		9	0.6%	293	3.4%
Food & Beverage Stores		39	2.5%	518	6.0%
Health & Personal Care Stores		12	0.8%	91	1.1%
Gasoline Stations		5	0.3%	30	0.3%
Clothing & Clothing Accessories Stores		26	1.7%	80	0.9%
Sport Goods, Hobby, Book, & Music Stores		23	1.5%	74	0.9%
General Merchandise Stores		7	0.4%	44	0.5%
Miscellaneous Store Retailers		58	3.7%	201	2.3%
Nonstore Retailers		13	0.8%	25	0.3%
Transportation & Warehousing		21	1.3%	143	1.7%
Information		23	1.5%	155	1.8%
Finance & Insurance		103	6.6%	510	5.9%
Central Bank/Credit Intermediation & Related Activities		38	2.4%	325	3.8%
Securities, Commodity Contracts & Other Financial		35	2.2%	85	1.0%
Insurance Carriers & Related Activities; Funds, Trusts &		30	1.9%	100	1.2%
Real Estate, Rental & Leasing		82	5.2%	270	3.1%
Professional, Scientific & Tech Services		145	9.2%	458	5.3%
Legal Services		33	2.1%	140	1.6%
Management of Companies & Enterprises		3	0.2%	7	0.1%
Administrative & Support & Waste Management & Remediation		129	8.2%	308	3.6%
Educational Services		24	1.5%	853	9.9%
Health Care & Social Assistance		136	8.7%	1,122	13.0%
Arts, Entertainment & Recreation		18	1.1%	132	1.5%
Accommodation & Food Services		95	6.1%	893	10.3%
Accommodation		17	1.1%	155	1.8%
Food Services & Drinking Places		78	5.0%	738	8.5%
Other Services (except Public Administration)		153	9.7%	627	7.3%
Automotive Repair & Maintenance		25	1.6%	94	1.1%
Public Administration		31	2.0%	538	6.2%
Unclassified Establishments		164	10.4%	0	0.0%
Total		1,570	100.0%	8,645	100.0%

Source: Copyright 2014 Dun & Bradstreet, Inc. All rights reserved. Esri Total Residential Population forecasts for 2014.

November 12, 2014

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