

Tyler County City of Ivanhoe

# STATE OF COMMUNITY REPORT

September 16<sup>TH</sup>, 2016

## **Executive Summary**

The State of Community Report compiles information and data from a wide variety of sources to gain a clearer understanding of current conditions in Tyler County and the City of Ivanhoe.

Tyler County's rural, small-town atmosphere is close to other developed areas like Beaumont and Houston. From the 19<sup>th</sup> century until today, the County's population grew steadily in low-density development patterns. In the coming decades, the population will age, placing pressures on healthcare, affordable housing, and access to transportation.

Housing costs make Tyler County a good choice for living. No matter for owners or renters, the housing cost "overburdened" rate in Tyler County is lower than the Texas average. Tyler County residents have lower education levels and health outcomes compared to the Texas average.

Agriculture is an established "basic" economic activity in Tyler County. Extracting and Processing Natural Resources also supports the local economy. Based on a multiplier analysis, the County could invest in both Health Care and Education Services industries. Many residents travel outside of the County for work, health care, and for other goods and services. There are a number of retail "leakages" in the County and City that may be opportunities for economic development.

Wetlands make up a large portion of land cover in Tyler County, which could be a refuge for migratory birds and a buffer for wildfire, storm, flood, or other hazards.

Three major highways enable the movement of people and goods. The County expects more development opportunities due to the change of US 190 to Interstate 14. Additionally, the City of Ivanhoe anticipates the repair of a number of roadways in the coming years.

Texas Target Communities at Texas A&M University prepared the report as follows.

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## 1.Introduction

## 1.1 Tyler County

Tyler County is located in southeastern Texas near the Louisiana border. The land is gently rolling, with an elevation ranging from 100 to 400 feet above sea level. Tyler County is bounded on the north and east by the Neches River. The southwestern part of the county contains numerous springs. The county comprises 908 square miles of the East Texas timberlands, an area densely forested with pine and a great variety of hardwoods.

The county was named after John Tyler, the tenth President of the United States, the first vice president to succeed to the presidency, after President William Henry Harrison's death. Woodville, the largest town and county seat, was named in honor of George T. Wood who was the second governor of the state of Texas. Woodville lies fifty-six miles north of Beaumont and ninety miles northeast of Houston. Other cities and large towns are Colmesneil, Ivanhoe, and Chester.

Tyler County is part of the Deep East Texas Council of Governments (DETCOG), along with 11 other counties. Angelina, Jasper, and Polk counties are members of the COG and also neighbor Tyler County to the east, north, and west, respectively. Hardin County borders Tyler to the south.

## 1.2 Ivanhoe City

The City of Ivanhoe, located in Tyler County, Texas, is a unique city nestled in the piney woods of East Texas. Ivanhoe is approximately 7 miles south of Woodville and 45 miles north of Beaumont on Texas Hwy 69/287. Lufkin, to its north on Hwy 69, is about 60 miles; and Livingston, to its west and Jasper to its east, are about 40 miles away.<sup>1</sup>

Although Ivanhoe was established in the early 1960s, it did not incorporate until November of 2009. The City has a population of 1,825 full-time residents. It is comprised of approximately 3900 lots, has 5 lakes, 12 parks and almost 60 miles of roads.

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<sup>&</sup>lt;sup>1</sup> Reference: http://cityofivanhoetx.com/?page\_id=63

## 2.Government

## Deep East Texas Council of Governments

The Deep East Texas Council of Governments (DETCOG) was established as the State Planning Region No. 14 in 1969, and is a voluntary association of local governments for 12 counties regionally known as Deep East Texas. It consists of 12 counties, 36 cities, 50 school districts, 7 soil and water conservation districts, 4 river authorities and 4 hospital districts. DETCOG covers 9,905 square miles, with an estimated population of 378,477.

The region is primarily rural, with only two counties (San Jacinto and Angelina) meeting the Metropolitan or Micropolitan Statistical Area (MMSA) Standards.

Programs and Agencies involved in DETCOG:

- East Texas Regional Water Planning Group (ETRWPG)
- Emergency preparedness/ Homeland Security
- Regional Housing Authority
- Area Agency on Aging
- Retired Senior Volunteer Program (RSVP)
- Service To At Risk youth (STAR program)
- DETCOG "Honors" program

## 3. History

## 3.1 Tyler County

Caddoan and possibly Atakapan Indians occupied the area of Tyler County for centuries. White settlers encountered both Caddoan-related Cherokees and groups of Alabama and Coushatta Indians, who were recently uprooted from areas east of Texas. Cherokees were driven from the state by order of Mirabeau B. Lamar, but the Alabamas and Coushattas cooperated with Sam Houston and other settlers. These groups survived and make up one of only two Indian groups living on their own reservations in Texas. The Alabama-Coushatta Reservation is just across the western Tyler County line in Polk County.

Three Americans received land grants from Mexican authorities in 1834, and thirty-four more men and one woman, Jane Taylor, received grants during 1835. The area was originally settled under the name of Menard District, taken from a part of Liberty County. Tyler County was officially established by the Texas legislature on April 3, 1846 and was named in honor of President John Tyler.

Tyler County was predominantly settled by people from the southern United States. The forests and loamy sand were not suited to growing cotton, so many of those who stayed were poor white farmers who owned no slaves. Farmers produced mainly corn, sweet potatoes, molasses, and home-slaughtered animals.

In 1861, 99 percent of the citizens supported secession. The area was not invaded during the Civil War, but hundreds of men fought. During Reconstruction federal troops were stationed in Woodville for a time in 1868.

Tyler County remained overwhelmingly agricultural and rural through 1900, but the economy shifted with the coming of the railroads in the 1880s. Railroads improved the economic status of the county because they facilitated the lumber industry. In the early 1900s, skilled workers in the lumber industry were paid one of the highest wages in the state.

The Great Depression, however, hit the county hard. In the 1930s, the unemployment rate rose sharply, reaching a high of 18 percent in 1940. World War II ended the economic downturn, but the 1940s saw a decline in the White population and only a slight gain in the African-American population. The declining population trend continued into the 1960s. Oil and gas production started in the late 1930s and experienced a slight increase during the 1970s and 80s. Improvement in transportation was brought about by the automobile. U.S. Highway 190 was proposed by a group of citizens in 1938, and was completed in 1948. It became a major artery through deep East Texas, where travel had always been difficult. Agriculture lost many of its workers and the cotton industry almost disappeared. In the 1980s Tyler County was second to

Polk County in timber production, followed by farming, lumbering, poultry processing, manufacturing, tourism, and catfish production.

Woodville had electricity as early as 1925, and the rural areas were electrified during the 1940s. After the depression there were also significant advances in education, with half the population graduating from high school by the 1980s. Religious life is strong, as in much of East Texas. Tyler County is known for its quiet beauty that encourages family tourism.

## 3.2 Ivanhoe City

The City of Ivanhoe is located among the tall pine and hardwood forest of East Texas on U.S. Highway 69/287, seven miles south of Woodville. Development of Ivanhoe began in the early 1960s as a family recreational community for camping, horseback riding, hunting and fishing. Situated on 2,500 acres of gently rolling hills, Ivanhoe has five private lakes and twelve parks.

In November 2009 residents voted to incorporate the community as a "Class C" municipality. Today the City of Ivanhoe has a population of 1,825 full-time residents and is Tyler County's second largest city.

Logging was an active industry in this heavily forested area of Tyler County in the late 1800's and early 1900's. Tram tracks travelled across or alongside three of the spring-fed lakes, taking logs to the nearby mills that were common to Tyler County in that era.

The oldest home site in Ivanhoe is thought to date back to the mid- to late-1800s. This site includes a house with a water well, a barn, and a log smoke house. The site is referred to by locals as "The Settler's Place" or "The Stage Coach Stop." While it is unproven that this site was an actual stage coach stop, in 1857 a stage line ran from Cheneyville, Louisiana, to Huntsville, Texas. The stage coach came through Newton, Jasper, and Woodville, and on to Huntsville. Due to rough roads and terrain, stage coach routes often had brief stops every 15 to 30 miles to allow passengers to stretch and get a drink of water, and to provide for a change of horses if needed. By the early 1880s the stagecoach era was essentially over, its services replaced by railroads.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Reference: http://tylercountyhc.org/ivanhoe

## 4. Demographics

## 4.1 Population

#### 4.1.1 Population Total

The population of Tyler County in 2010 was 21,766, and the population of Ivanhoe City (including Ivanhoe North) was 1,425.<sup>3</sup> The population of the 6 main places in Tyler County is shown in Table 1.

Table 1 Most Recent Population Record and Estimation of Places in Tyler County<sup>4</sup>

	Woodville Town	Ivanhoe City	Wildwood 5	Warren <sup>2</sup>	Colmesneil City	Chester Town
Recorded Population in 2010	2,586	1,425	1,235	757	596	312
Estimated Population in 2014 by ACS <sup>6</sup>	2,680	1,177 <sup>7</sup>	805	706	582	341

As of 2010, the total population of the six main cities/towns in the county account for 6,911 of the county's total population of 21,766. In other words, only 31.8% of the total county's population is located within these six places.

#### 4.1.2 Population Density

The population density in Tyler County is 23.54 people per square mile, versus 96.3 people per square mile in Texas.<sup>1</sup> The average family size is 2.9 people in Tyler County, versus 2.75 people in Texas.<sup>1</sup> The population density per square mile of the 6 main places in Tyler County is shown in Table 2.

<sup>&</sup>lt;sup>3</sup> U.S. Census 2010

<sup>&</sup>lt;sup>4</sup> Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

<sup>&</sup>lt;sup>5</sup> This is a Census Designated Place (CDP)

<sup>&</sup>lt;sup>6</sup> ACS refers to the U.S. Census Bureau's American Community Survey

<sup>&</sup>lt;sup>7</sup> This estimation is based on the data of 2009, so Ivanhoe North City is not included. If apply the same growth rate to Ivanhoe North, the total estimated population could be 1,891 in 2014.

Table 2 Population Density per square mile of Places in Tyler County<sup>8</sup>

	Woodville Town	Ivanhoe City	Colmesneil City	Chester Town	Wildwood	Warren 5
Population Density per square mile	835	358	291	217	178	145

#### 4.1.3 Population Growth

The population growth rates for Tyler County, Ivanhoe City, Woodville, and Texas from 2000 to 2010 are shown below (Table 3). The 2010 population for Tyler County was 21,766 or a 4.29% increase from its 2000 population of 20,871. The population for Woodville was 2,415 in 2000 and 2,586 in 2010, or a 7.08% increase. Compared to Tyler County, the population of the state of Texas grew at a higher rate at 20.59%.

Table 3 Population Growth Rate from 2000 to 2010 for Tyler County, Woodville Town, Ivanhoe City, and Texas9

	Tyler County	Ivanhoe City	Woodville Town	Texas
Population 2000	20,871	No Record <sup>10</sup>	2,415	20,851,820
Population 2010	21,766	1,425	2,586	25,145,561
Growth Rate	4.29%	N/A	7.08%	20.59%

#### 4.1.4 Population Projection

The projected population of Tyler County from 2020 to 2050<sup>11</sup> is calculated by 3 migration scenarios: no migration, 50% migration and 100% migration (Figure 1). If we analyze the population with migration trends, the population would be anywhere from 20,772 to 21,376 people by the year 2050 in Tyler County. The population trend is projected to decrease from 2020-2030. Compared with Tyler County, the projected population growth of Texas is at a higher rate (Figure 2).

<sup>&</sup>lt;sup>8</sup> Retrieved from http://www.towncharts.com/Texas/Texas-city-index-Housing-data.html

<sup>&</sup>lt;sup>9</sup> United States Census Bureau, 2000 & 2010

<sup>&</sup>lt;sup>10</sup> There is no population record for Ivanhoe because it was not incorporated until 2009.

<sup>&</sup>lt;sup>11</sup> Texas Population Projections Program from the Office of the State Demographer produces biennial projections of the population of the state and all Counties in the state.

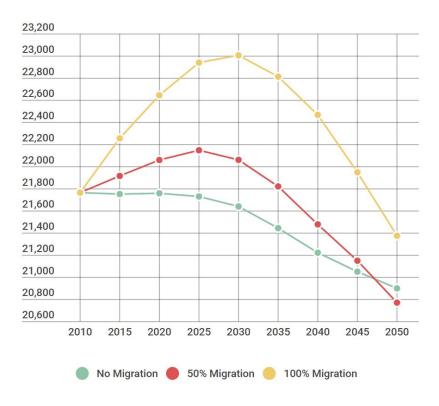


Figure 1 Population Projections: 2010 through 2050 based on the migration scenarios, Tyler County 12

Table 4 Population Projections: 2010 through 2050 based on the migration scenarios, Tyler<sup>7</sup>

Tyler	No Migration	50% Migration	100% Migration
2010	21,766	21,766	21,766
2015	21,753	21,917	22,257
2020	21,760	22,061	22,646
2025	21,731	22,149	22,941
2030	21,641	22,062	23,007
2035	21,445	21,822	22,814
2040	21,223	21,479	22,469
2045	21,052	21,151	21,950
2050	20,901	20,772	21,376

 $<sup>^{12}\</sup> Retrieved\ from\ http://osd.texas.gov/Data/TPEPP/Projections/$ 

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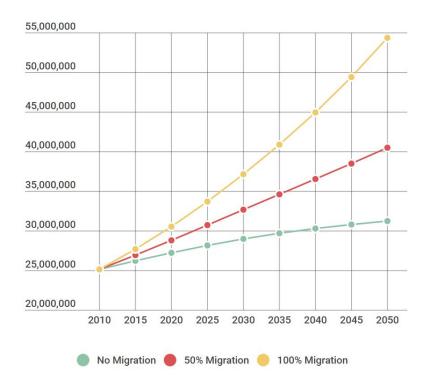


Figure 2 Population Projections: 2010 through 2050 based on the migration scenarios, Texas 13

#### 4.1.5 Migration

Since 2006, the inbound migration has been slightly higher than the outbound migration. In 2010, the inbound migration and outbound migration were almost the same (Figure 3). As of 2010, most inbound migrations to Tyler County were from Jefferson County, while most outbound migrations from Tyler County were to Hardin County (Figure 4).

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<sup>&</sup>lt;sup>13</sup> Retrieved from http://osd.texas.gov/Data/TPEPP/Projections/

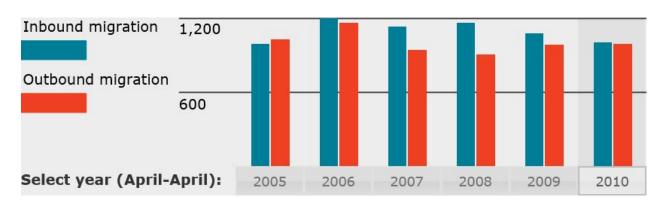


Figure 3 Inbound and Outbound Migration in Tyler County  $(2005-2010)^{14}$ 



Figure 4 Inbound and Outbound Migration in Tyler County (2010)<sup>9</sup>

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 $<sup>^{14}\</sup> Retrieved\ from\ http://www.forbes.com/special-report/2011/migration.html$ 

## 4.2 Age Distribution

According to U.S. Census 2010, Figure 5 shows the age distribution of State-, County- and Citylevel. Tyler County and Ivanhoe City have slightly older populations than that of the state.

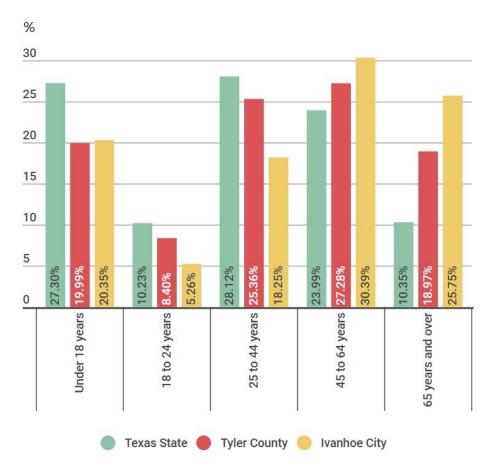


Figure 5 Age Distributions in Texas State, Tyler County and Ivanhoe City, 2010<sup>15</sup>

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<sup>&</sup>lt;sup>15</sup> United States Census Bureau, 2010

#### 4.3 Race Distribution

In terms of racial composition, Tyler County and the City of Ivanhoe are predominately White (80.43% & 89.85%), with roughly 10% African American population in the county and 3.6% in the city. As of the year 2010, in Tyler County, the populations of American Indians or Alaska Natives, Asians, Hawaiians and Pacific Islanders together were less than 1%. Compared to Texas, there are significantly fewer people of Hispanic ethnicity in the County and City. Table 5 shows the growth rate of the Hispanic or Latino population, which is experiencing a faster growth and has doubled from 2000 to 2010.

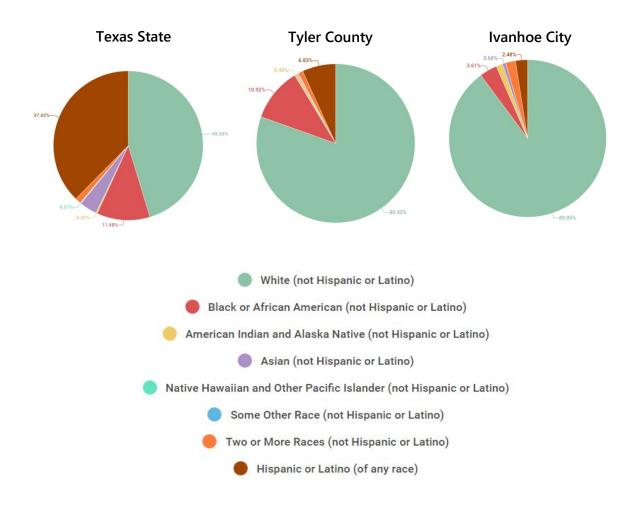


Figure 6 Race Distributions in Texas, Tyler County and Ivanhoe City, 2010<sup>16</sup>

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<sup>&</sup>lt;sup>16</sup> United States Census Bureau, 2010

Table 5 Growth Rate of Hispanic or Latino Population in Texas and Tyler County from 2000 to 2010

	Hispanic or Latino population in 2000	Hispanic or Latino population in 2010	Growth Rate
Texas	6,669,666	9,460,921	48.85%
Tyler	742	1,487	100.40%

### 4.4 Educational Attainment

The graph below shows the educational attainment of the population 25 years and over in Texas, Tyler County, and Ivanhoe City. The county and city have a larger percentage of people that are High school graduates, but that may be primarily due to the fewer number of people that have attained a Bachelor's degree and Graduate/Professional degree. There is an opportunity to increase the education level of residents in Tyler County.

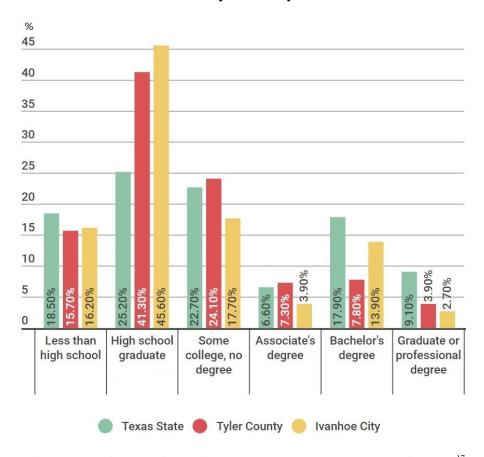


Figure 7 Educational Attainment in Texas, Tyler County and Ivanhoe City, 2014<sup>17</sup>

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 $<sup>^{17}\</sup> Retrieved\ from\ http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml$ 

## 4.5 Youth Disconnection

Disconnected youth are young people between the ages of 16 and 24 who are neither working nor in school. Young people in this age range who are working or in school part-time or who are in the military are not considered disconnected. The rate of youth disconnection in Tyler County ranges between 17.4% and 25.6% which is the highest category.

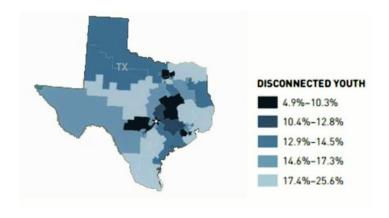


Figure 8 Youth Disconnection by Jurisdiction, 2015<sup>18</sup>

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<sup>&</sup>lt;sup>18</sup> Mapping Where America Is Failing Its Youth Report. June 16. 2015. Richard Florida and Aarian Marshall. Retrieved from http://www.citylab.com/work/2015/06/mapping-where-america-is-failing-its-youth/395927/?utm\_source=psTW

#### 4.6 Causes of Death

The life expectancy in Tyler County is 72.5 for male and 78.9 for female, lower than the state average of 76.01 for male and 80.84 for female. Figure 9 shows the death rate and primary causes of death in Texas and Tyler County, including the top three causes of death in Texas—Heart Disease, Stroke, and Cancer. Tyler County has higher death rates among these categories compared to Texas.

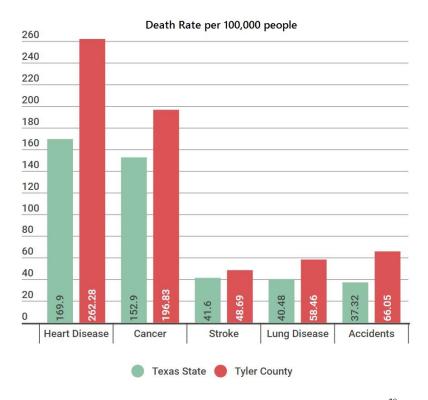


Figure 9 Major Causes of Death in Texas and Tyler County, 2014<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Institute for Health Metrics and Evaluation, 2009

 $<sup>^{20}</sup>$  Retrieved from http://www.worldlifeexpectancy.com

## 4.7 Population Economics

#### 4.7.1 Income

The median earning of the working population in Tyler County in 2014 was \$27,828 (lower than the statewide average of \$29,817).<sup>21</sup> In the city of Ivanhoe, the median earning was \$18,852. The following graph shows the distribution of estimated individual income in Texas, Tyler County, and Ivanhoe City (Figure 10). Additionally, the data also indicated a gender wage gap between male and female in Tyler County. The median earning of female in Tyler County (\$19,206) is just less than half of the median earning of male (\$40,028) (Table 6).

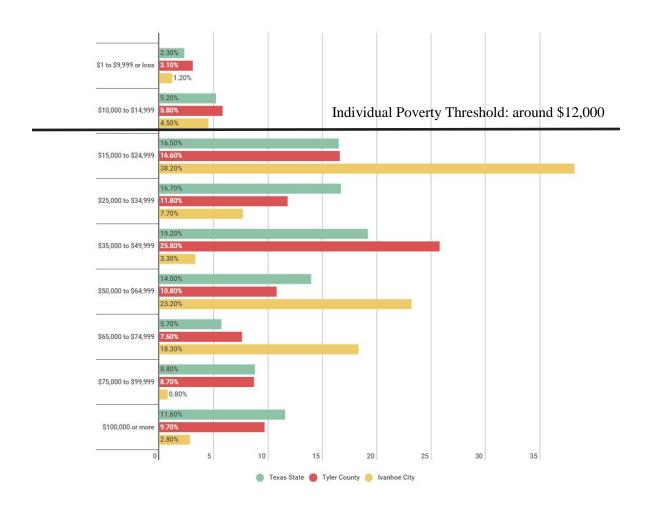


Figure 10 Individual Income Distribution in Texas, Tyler County and Ivanhoe City, 2014<sup>22</sup>

ates Census Bureau, 2014

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<sup>&</sup>lt;sup>21</sup> U.S. Census Bureau American Community Survey 2014

<sup>&</sup>lt;sup>22</sup> United States Census Bureau, 2014

Table 6 Gender Wage Gap in Texas, Tyler County and Ivanhoe City, 2014<sup>23</sup>

	Median Individual	Median Earning	Median Earning
	Earning	rning (Male) (Female)	
Texas	\$29,817	\$34,774	\$24,325
Tyler County	\$27,828	\$40,028	\$19,206
Ivanhoe City	\$18,852	\$30,625	\$17,130

#### 4.7.2 Unemployment Rate

The estimated unemployment rate was 7.7% in Texas, 11.2% in Tyler County, and 18.1% in Ivanhoe City (Figure 11). The unemployment rate can also be broken down by age, which is displayed in Figure 12 for Texas, Tyler County, and Ivanhoe. The county-level unemployment rate is slightly higher than the state rate from 20 to 74 years, while the city-level rate is much higher than others from 16 to 44 years.

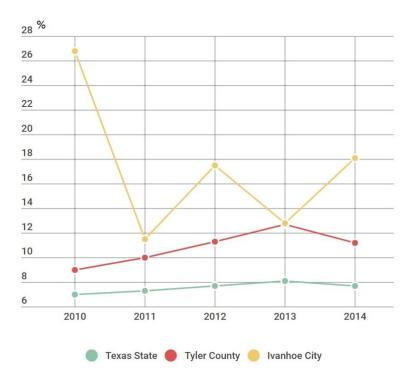


Figure 11 Unemployment Rate Change in Texas, Tyler County and Ivanhoe City, 2010-2014

<sup>&</sup>lt;sup>23</sup> Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

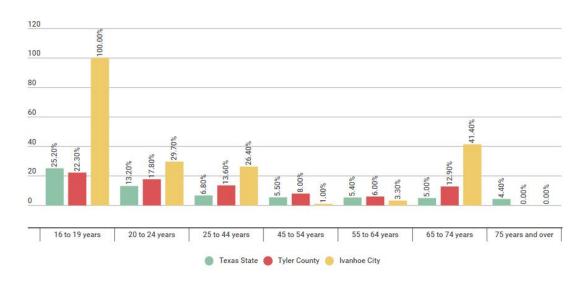


Figure 12 Unemployment Rate by Age in Texas, Tyler County and Ivanhoe City, 2014<sup>24</sup>

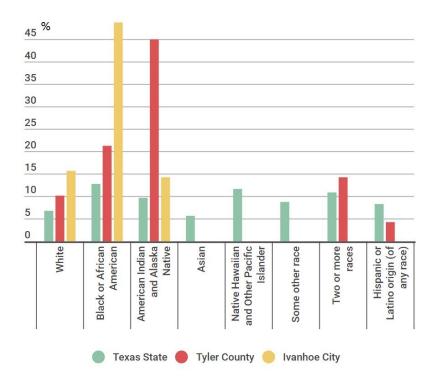


Figure 13 Unemployment Rate by Race in Texas, Tyler County and Ivanhoe City, 2014<sup>17</sup>

When it comes to unemployment by race in Tyler County, African American and American Indian/Alaska Native have a higher percentage of unemployment. The county-level unemployment rate of the Hispanic or Latino population is lower than the state-level.

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<sup>&</sup>lt;sup>24</sup> Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

#### 4.7.3 Poverty Rate

From 2010 to 2014, the state-level poverty rate has grown steadily from 17% to 18%, while the county-level poverty rate reached a peak at 19.6% in 2012 and has decrease since then. <sup>25</sup> From 2010 to 2014, the recorded poverty rate in Ivanhoe City has been increasing sharply from 2.4% to 27.8%.

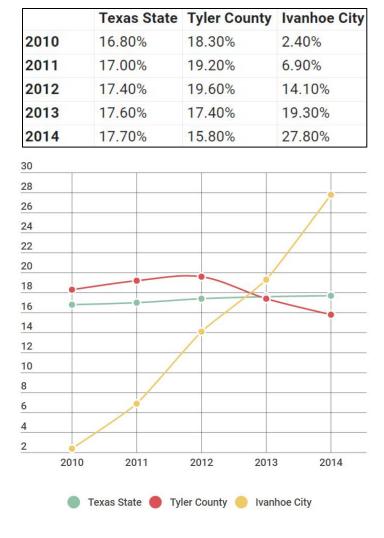


Figure 14 Poverty Rate by Age in Texas, Tyler County and Ivanhoe City, 2010-2014<sup>26</sup>

<sup>26</sup> Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

<sup>&</sup>lt;sup>25</sup> U.S. Census Bureau American Community Survey 2014

## 5. Housing

## 5.1 Housing Stock Growth

#### 5.1.1 Rate of Growth/Housing Age

Generally, the housing stock growth follows the path of population growth. As shown below, the growth of housing stock in Tyler County and Ivanhoe City peaked in the 1970s (Figure 15).

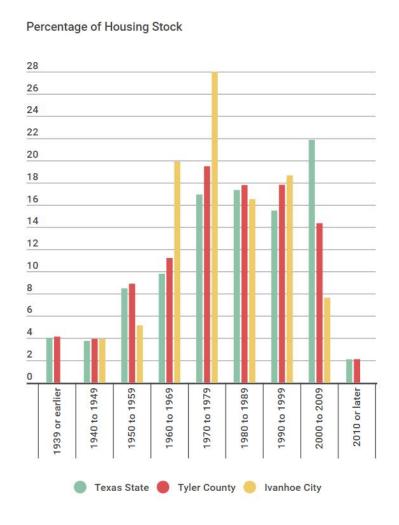


Figure 15 Housing Age in Texas, Tyler County and Ivanhoe City, 2014<sup>27</sup>

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<sup>&</sup>lt;sup>27</sup> Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

#### 5.1.2 Growth by Jurisdiction

In Tyler County, about 50% of the county's housing stock has been built since 1980. As of the growth by "year housing occupant moved in", the following graphs show that the state, county and city have a similar pattern (Figure 16). Most occupants moved in to housing units during the 2000s.

Percentage of Occupied Housing Stock

## 45 40 35 30 25 20 15 10 5 Moved in 1969 or earlier in 1970 to 1979 Moved in 1980 to 1989 Moved in 2000 to 2009 Moved in 1990 to 1999 Moved in 2010 or later Moved Texas State Tyler County Ivanhoe City

Figure 16 "Year Housing Occupant Moved in" in Texas, Tyler County, and Ivanhoe City, 2014<sup>28</sup>

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 $<sup>^{28}\</sup> Retrieved\ from\ http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml$ 

## 5.2 Housing Unit Density

As of 2014, the estimated housing units in Tyler County were 10,593, with a housing density of 11.45 housing units per square mile.<sup>29</sup> Compared to the state-level housing density of 39.26, the housing unit density in Tyler County is very low and highly compact in those main cities or towns. City-level housing density is shown below (Table 7).

	Woodville Town	Ivanhoe City	Colmesneil City	Chester Town	Wildwood <sup>31</sup>	Warren <sup>24</sup>
Total Housing Units	1,328	888	338	164	446	310
Houses per square mile	414	270	169	104	99	74

Table 7 Housing Density per square mile of Major Cities/Towns in Tyler County<sup>30</sup>

## 5.3 Housing Types

Housing types in Texas, Tyler County, and Ivanhoe City differ a lot from each other. There is a significantly larger proportion (23.4%) of 'mobile homes and other types of units' in Tyler County, which is common for rural areas throughout Texas. There are limited options for multifamily housing throughout the county as well.

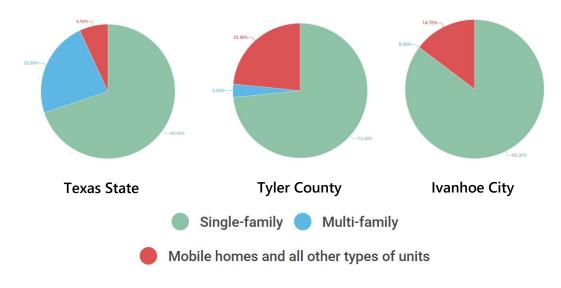


Figure 17 Housing Types in Texas, Tyler County and Ivanhoe City, 2014<sup>32</sup>

<sup>&</sup>lt;sup>29</sup> United States Census Bureau, 2014

<sup>&</sup>lt;sup>30</sup> Retrieved from http://www.towncharts.com/Texas/Texas-city-index-Housing-data.html

<sup>&</sup>lt;sup>31</sup> This is a Census Designated Place (CDP)

## 5.4 Households

The majority (56.36%) of households in Tyler County are married-couple families, which is higher than that of Texas (Figure 18). Additionally, the proportion of nonfamily households in Ivanhoe (37.31%) is much higher than that of Texas.

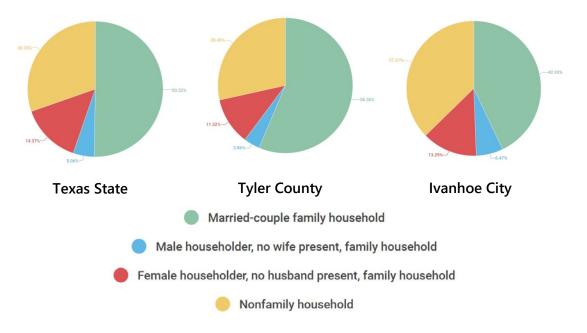


Figure 18 Types of Households in Texas, Tyler County and Ivanhoe City, 2014<sup>33</sup>

<sup>32</sup> United States Census Bureau, 2014

<sup>&</sup>lt;sup>33</sup> United States Census Bureau, 2014

### 5.5 House Value

The median house value is about \$77,800 in Tyler County and \$62,700 in Ivanhoe City, which is almost half of the state (\$131,400) (Figure 19). There is a sharper drop once the value reaches \$100,000 in the county and city, while the percentage of houses in Texas declines more gradually as the value increases. The lower housing value may be due to the percentage of mobile homes in county and city.

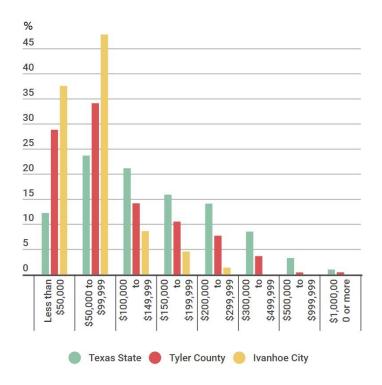


Figure 19 Percentage of House Value in Texas, Tyler County and Ivanhoe, 2014<sup>34</sup>

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<sup>&</sup>lt;sup>34</sup> United States Census Bureau, 2014

## 5.6 Affordable Housing

#### 5.6.1 Percentage of Income Spent on Mortgage

The US Department of Housing and Urban Development defines a household as "housing cost burdened" when 30% or more of the monthly total household income is spent on housing costs. In 2014, 20.90% of the owners and 31.79% of the renters in Tyler County spent 30% or more of their income on housing (Figures 20-23). The majority of housing cost overburdened households are mainly those whose income below \$35,000.

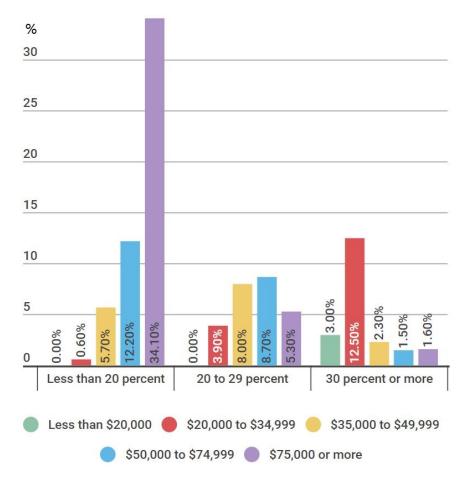


Figure 20 Monthly Owner Occupied Housing Costs as a % of Household Income in 2014, Tyler<sup>35</sup>

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<sup>35</sup> United States Census Bureau, 2014

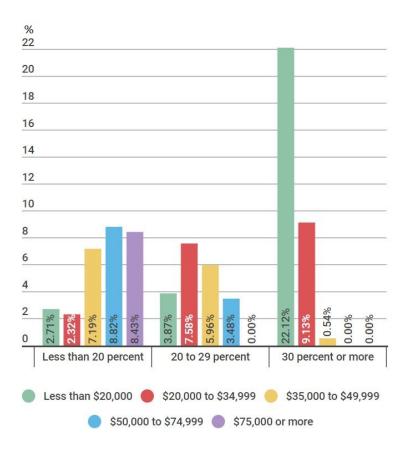


Figure 21 Monthly Renter Occupied Housing Costs as a % of Household Income in 2014, Tyler

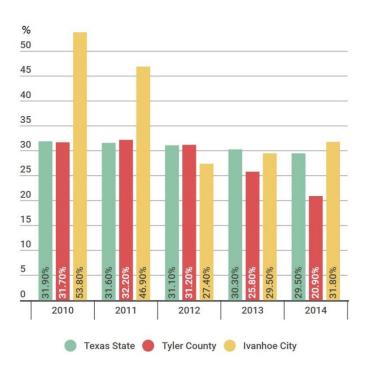


Figure 22 Percentage of Housing Cost Overburdened Owners in Texas, Tyler County and Ivanhoe City, 2014

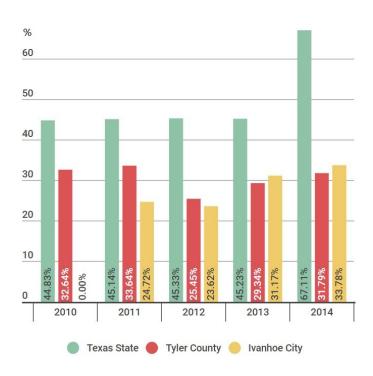


Figure 23 Percentage of Housing Cost Overburdened Renters in Texas, Tyler County and Ivanhoe City, 2014

### 5.6.2 Affordable Housing Programs

There is only one federally assisted affordable rental community in Tyler County – the Terracewood Apartments with 40 units in Woodville. This property is financed through HUD Section 515 projects.  $^{36}$ 

 $<sup>^{36}\</sup> Retrieved\ from\ http://affordablehousingonline.com/housing-search/Texas/Tyler-County/$ 

## 5.7 Occupancy vs. Vacancy Rate

The percentage of renter-occupied units in Tyler County (12.21%) or Ivanhoe City (16.67%) is lower than the state-level of 32.99%; however, the housing vacancy rate (neither owner-occupied nor renter-occupied) in Tyler County (23.02%) or Ivanhoe City (33.90%) is much higher than the state average (11.52%) (Figure 24). It also shows obviously that, In Tyler County and Ivanhoe City, the percentage of vacant housing units for seasonal, recreational, or occasional is as high as 10.35% & 20.38%, much higher than the state-average of 2.37%.

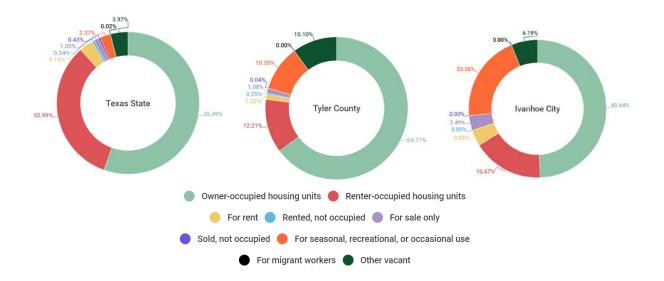


Figure 24 Housing Occupancy Status Distribution in Texas, Tyler County and Ivanhoe City, 2014<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> United States Census Bureau, 2014

## 6.Economy

#### 6.1 Industries

#### 6.1.1 Industry Specialization by Employment Share

To better understand the economic characteristics of Tyler County/Ivanhoe City, the employment share data is explored to examine the strengths and weaknesses of different industries (Figure 25). In general, the top 3 industries with a higher percentage of the employment share in Tyler County are:

- Health care and social assistance (12.71%)
- Construction (10.59%)
- Educational services (10.53%)

In comparison with Texas State, Tyler County has a higher percentage of workers employed in:

- Agriculture, forestry, fishing and hunting (7.21% vs. 0.95%)
- Public administration (7.88% vs. 4.43%)
- Mining, quarrying, and oil and gas extraction (3.47% vs. 2.33%)

On the other end of the spectrum, there is a smaller proportion of workers employed in:

- Management of companies and enterprises (0.00% vs. 0.09%)
- Arts, entertainment, and recreation (0.64% vs. 1.46%)
- Wholesale trade (1.35% vs. 2.99%)

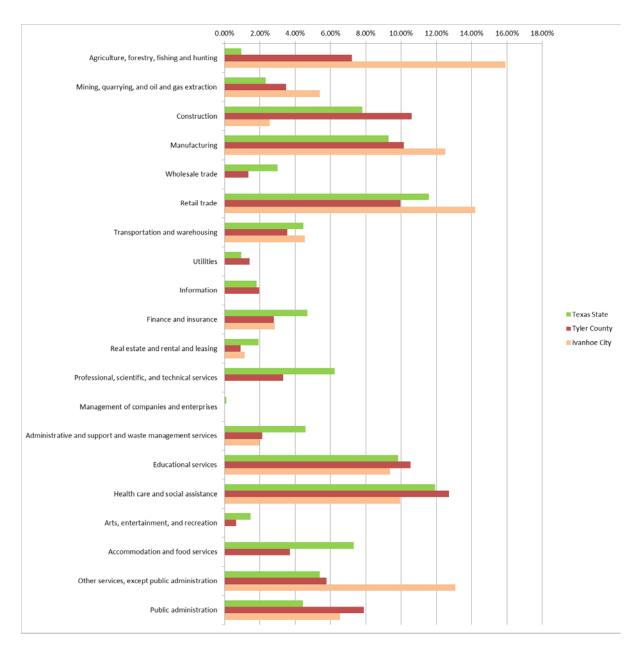


Figure 25 Employment Share by Industry in Texas, Tyler County and Ivanhoe City, 2014<sup>38</sup>

<sup>&</sup>lt;sup>38</sup> United States Census Bureau, 2014

#### 6.1.2 Economic/Employment Growth

To identify the trend of economic growth in Tyler County, it is important to examine the growth rate of different industries. Data over a 5-year period is analyzed to provide insight into how these industries are developing (Figure 26). Over the 5-year period from 2009 to 2014, the fastest-growing industries in Tyler County by increase rate in employment share are:

- Finance and insurance (69.50%)
- Information (58.87%)
- Arts, entertainment, and recreation (52.17%)

In comparison with Texas State, Tyler County has a faster growth rate in:

- Information (58.87% vs. -14.40%)
- Finance and insurance (69.50% vs. 5.98%)
- Wholesale trade (42.27% vs. -6.91%)

On the other hand, the fastest-shrinking industries are:

- Real estate and rental and leasing (-73.44%)
- Utilities (-42.57%)
- Educational services (-25.96%)

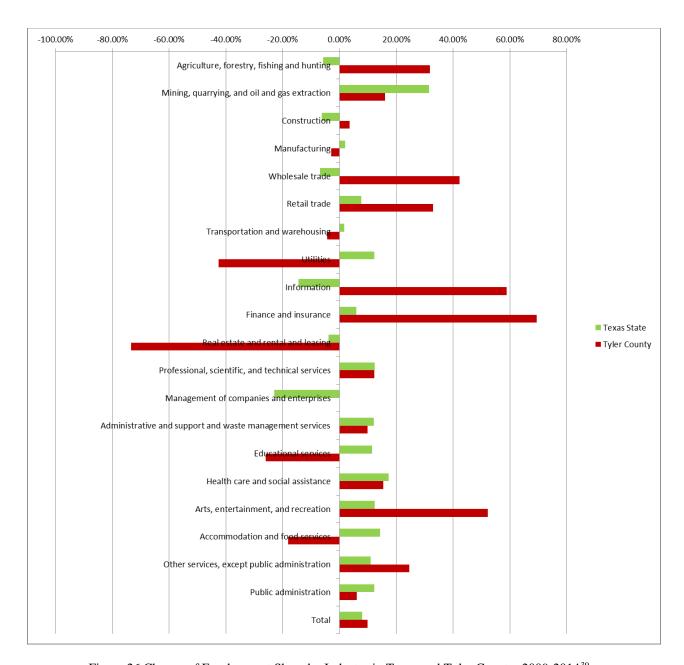


Figure 26 Change of Employment Share by Industry in Texas, and Tyler County, 2009-2014<sup>39</sup>

<sup>&</sup>lt;sup>39</sup> United States Census Bureau, 2014

### 6.1.3 Location Quotient Analysis

The Location Quotient is another way to consider industry specialization other than looking at the employment share directly. The Location Quotient (LQ) reveals the local employment share compared to a benchmark, such as another region or state (in this case Texas). The LQ identifies the local region's value and regional competitiveness. <sup>40</sup>. If the value of LQ is greater than 1, it indicates that the local region, Tyler County, has a specialization in that particular industry. Table 8 shows the calculation outcome of Location Quotients in Tyler County, 2014. There are 10 out of 20 industries whose LQ is higher than 1. According to the LQ value, in 2014, the top five most specialized industries are:

- Agriculture, forestry, fishing and hunting,
- Mining, quarrying, and oil and gas extraction,
- Construction,
- Utilities,
- Public administration.

Table 8 Location Quotients, Tyler County, 2014

Industry Title	ei, 2014	E <sub>i</sub> , 2014	LQ			
ei: Regional employment in industry i; Ei: Benchmark region employment in industry i						
Agriculture, forestry, fishing and hunting	517	112,130	7.59			
Mining, quarrying, and oil and gas extraction	249	274,648	1.49			
Construction	759	921,062	1.36			
Manufacturing	728	1,095,393	1.09			
Wholesale trade	97	352,721	0.45			
Retail trade	714	1,365,482	0.86			
Transportation and warehousing	254	527,057	0.79			
Utilities	101	112,322	1.48			
Information	141	212,915	1.09			
Finance and insurance	200	553,076	0.60			
Real estate and rental and leasing	64	226,689	0.47			
Professional, scientific, and technical services	237	736,154	0.53			
Management of companies and enterprises	0	10,335	0.00			
Administrative and support and waste management services	152	541,652	0.46			
Educational services	755	1,161,308	1.07			
Health care and social assistance	911	1,408,079	1.07			
Arts, entertainment, and recreation	46	172,898	0.44			

<sup>&</sup>lt;sup>40</sup> The local employment share is divided by the benchmark employment share.

Accommodation and food services	265	865,125	0.50
Other services, except public administration	414	636,462	1.07
Public administration	565	523,502	1.78
Total	7,169	11,809,010	

### 6.1.4 Economic Base Multiplier Analysis

Another analysis is the Economic Base Multiplier, which calculates the percentages of employment that are:

- Export-producing--Basic employment or
- Serving local markets--Non-basic employment.

The Economic Base Multiplier indicates the total number of jobs that will be created by an increase in one job in a given basic industry. Table 9 shows the calculation outcome of the basic & non-basic employment for each industry sector in Tyler County, 2014. The total basic employment is 1,220. So the economic base multiplier in 2014 can be calculated by,

$$BM=e/b=7,169/1,220=5.88$$

The calculation suggests an increase in basic activities of 1 person would lead to a total increase in regional employment (Tyler County) of 5.88 persons.

Table 9 Basic I	Employment.	Tyler	County.	2014
-----------------	-------------	-------	---------	------

Industry Title	ei, 2014	E <sub>i</sub> , 2014	LQ	bi	ni			
ei: Regional employment in industry i; Ei: Benchmark region employment in industry i								
b <sub>i</sub> : Regional basic employment in industry i; n <sub>i</sub> : Regional non-basic employment in industry i								
Agriculture, forestry, fishing and hunting	517	112,130	7.59	449	68			
Mining, quarrying, and oil and gas extraction	249	274,648	1.49	82	167			
Construction	759	921,062	1.36	200	559			
Manufacturing	728	1,095,393	1.09	63	665			
Wholesale trade	97	352,721	0.45	0	97			
Retail trade	714	1,365,482	0.86	0	714			
Transportation and warehousing	254	527,057	0.79	0	254			
Utilities	101	112,322	1.48	33	68			
Information	141	212,915	1.09	12	129			
Finance and insurance	200	553,076	0.60	0	200			
Real estate and rental and leasing	64	226,689	0.47	0	64			
Professional, scientific, and technical services	237	736,154	0.53	0	237			
Management of companies and enterprises	0	10,335	0.00	0	0			
Administrative and support and waste	152	541,652	0.46	0	152			
management services								
Educational services	755	1,161,308	1.07	50	705			
Health care and social assistance	911	1,408,079	1.07	56	855			
Arts, entertainment, and recreation	46	172,898	0.44	0	46			
Accommodation and food services	265	865,125	0.50	0	265			
Other services, except public administration	414	636,462	1.07	28	386			
Public administration	565	523,502	1.78	247	318			

Total	7,169	11,809,010	1,220	5,949

Table 10 shows the employment multipliers for the basic industries in Tyler County. These multipliers indicate the industries in which it would be most fruitful to stimulate economic growth via local policy and investment programs. Therefore, it is highly advisable to invest in both health care and education services in Tyler County.

Table 10 Economic Base Multiplier in Tyler County, 2014

Industry Tile	Multiplier 2014
Health care and social assistance	16.27
Educational services	15.10
Other services, except public administration	14.79
Information	11.75
Manufacturing	11.56
Construction	3.80
Utilities	3.06
Mining, quarrying, and oil and gas extraction	3.04
Public administration	2.29
Agriculture, forestry, fishing and hunting	1.15

# 6.2 Employment Status

## 6.2.1 Job Density

As of 2014, there are 3,413 jobs located in the Tyler County, including 2,004 (58.7%) female workers and 1,409 (41.3%) male workers and only 22 jobs are located within Ivanhoe City. The map below demonstrates the job density in Tyler County. As shown in the map, Woodville is the major employment center of Tyler County (Figure 27).

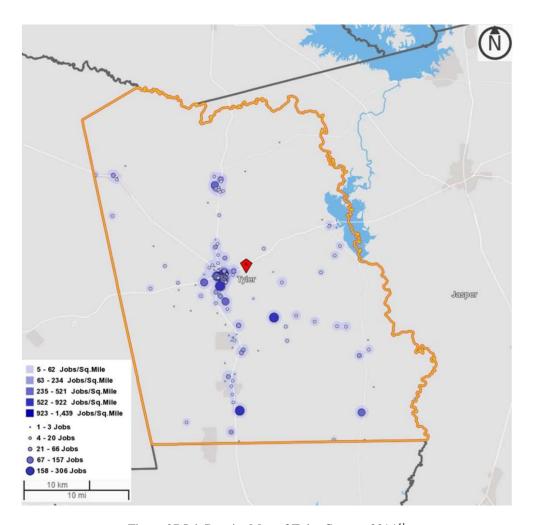


Figure 27 Job Density Map of Tyler County, 2014<sup>41</sup>

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<sup>&</sup>lt;sup>41</sup> United States Census Bureau

### 6.2.2 Employment Inflows and Outflows

According to the U.S. Census Bureau:

- 1,527 workers live and are employed in Tyler County,
- 1,886 workers live outside but work in Tyler County, and
- 5,651 workers live in Tyler County but work outside its borders (Figure 28).

Over the past 10 years, workers living in Tyler County, but working outside the county has experienced faster growth. In Ivanhoe City, the Census estimates 2 workers live and are employed within its borders, 20 workers live outside but work in the city, and 885 workers live in Ivanhoe City but work outside its borders (Figure 29).

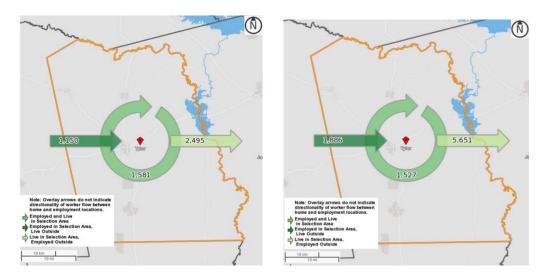


Figure 28 Job Flow Map of Tyler County, 2004&2014

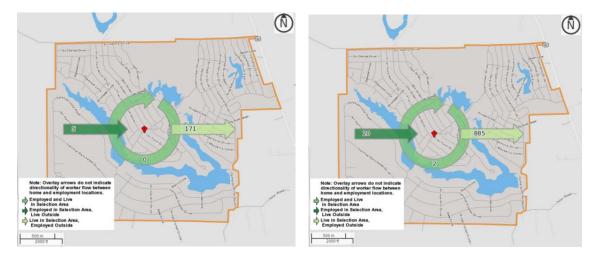


Figure 29 Job Flow Map of Ivanhoe City, 2004&2014

### 6.2.3 Job Counts by Distance/Direction

Workers in Tyler County who work outside the count commute towards the South and Southwest (Figure 30). From 2004 to 2014, the proportion of workers whose commute distance is greater than 50 miles increased from 32.5% to 45%. In 2004, the commute time of most workers in Ivanhoe City was less than 10 miles to the north in Woodville (Figure 31). However in 2014, the commute distance and jobs count in Ivanhoe City increased towards Southwest. The proportion of workers whose commute distance is greater than 50 miles increased from 24.0% to 77.6%.

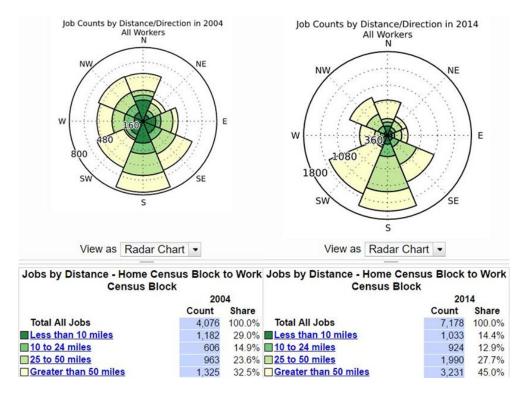


Figure 30 Job Counts by Distance/Direction in Tyler County, 2004&2014

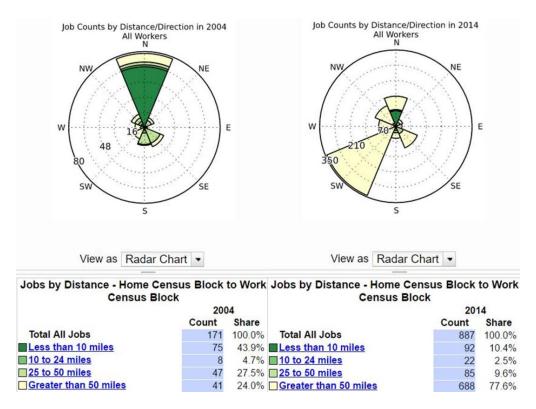


Figure 29 Job Counts by Distance/Direction in Ivanhoe City, 2004&2014

### 6.2.4 Leakage/Surplus Factor

The Leakage/Surplus Factor measures the balance between the supply generated by retail business and the demand produced by household spending on retail goods within the same industry (Figure 32 and 33). All the positive factors indicate that the existing retailers in the market can't meet the household demand, and therefore there is an opportunity for investment.

#### Leakage/Surplus Factor by Industry Subsector Motor Vehicle & Parts Dealers Furniture & Home Furnishings Stores Electronics & Appliance Stores Bldg Materials, Garden Equip. & Supply Stores Food & Beverage Stores Health & Personal Care Stores Gasoline Stations Clothing and Clothing Accessories Stores Sporting Goods, Hobby, Book, and Music Stores General Merchandise Stores Miscellaneous Store Retailers Nonstore Retailers Food Services & Drinking Places -40 -20 20 40 60 80 Leakage/Surplus Factor

Figure 30 Leakage/Surplus Factor by Industry Subsector, Tyler County, 2015<sup>42</sup>

<sup>&</sup>lt;sup>42</sup> Retrieved from Esri. Retail Market Place Profile

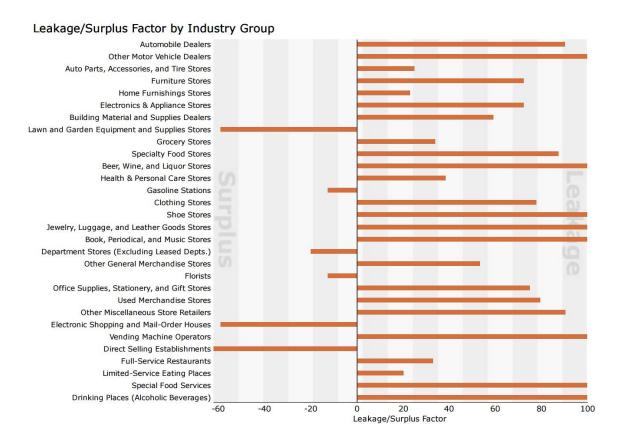


Figure 31 Leakage/Surplus Factor by Industry Group, Tyler County, 2015<sup>32</sup>

# 7.Environment

### 7.1 Land Cover

A large portion of the county is evergreen forest with areas for pasture and grasslands (Figure 34). There are some open water features (Ba Steinhagen Lake) on the northeast edge and large areas of woody wetlands along the north and east edge of the county. Table 11 shows the distribution of different land cover types in Tyler County. About 70% of the land is covered by green features, including deciduous forest, evergreen forest, mixed forest, shrub/scrub, grassland/herbaceous and pasture/hay. There is also about 19% of the land covered by wetlands, which could be a refuge for migrating birds and a buffer for wildfire, storm, flood or other hazards.

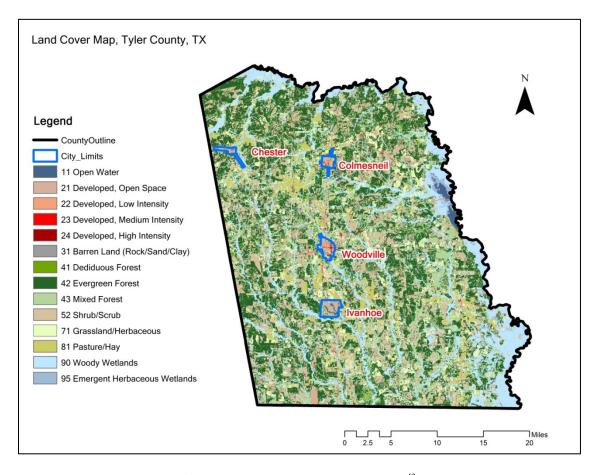


Figure 32 Land Cover Map, Tyler County<sup>43</sup>

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<sup>&</sup>lt;sup>43</sup> National Land Cover Database, 2011

Table 11 Land Cover Distribution, Tyler County

Code	Land Cover Type	Percentage
11	Open Water	0.98%
21	Developed, Open Space	4.72%
22	Developed, Low Intensity	1.09%
23	Developed, Medium Intensity	0.11%
24	Developed, High Intensity	0.04%
31	Barren Land (Rock/Sand/Clay)	0.09%
41	Deciduous Forest	1.70%
42	Evergreen Forest	30.67%
43	Mixed Forest	11.14%
52	Shrub/Scrub	18.92%
71	Grassland/Herbaceous	7.73%
81	Pasture/Hay	3.78%
90	Woody Wetlands	18.19%
95	Emergent Herbaceous Wetlands	0.85%

# 7.2 Climate & Water

Tyler County, receives 53 inches of rain per year compared to the US average of 37 in. On average, there are 211 sunny days per year in Tyler County, where an opportunity for solar energy industry may exist. The July high is around 93 degrees, while the January low is 37 degrees. The total area covered by water is about 11.1 square miles in Tyler County. Although Tyler County has abundant water resources, the water quality may be vulnerable to oil/gas drilling or forestry industry. The Gulf Coast Aquifer, one of Texas' 9 major aquifers, provides groundwater for Tyler County. The annual usage of water in Tyler County is approximately 4,000 acre feet.<sup>44</sup>

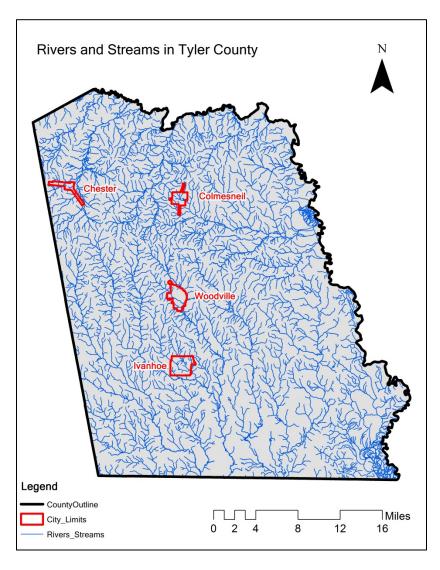


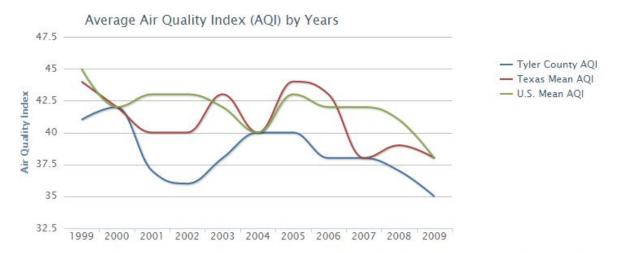
Figure 33 Rivers and Streams Map, Tyler County

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<sup>&</sup>lt;sup>44</sup> More information concerning water issues in Tyler County could be found here: http://tcforest.org/downloads/Water13Apr2013.pdf

# 7.3 Air

The following graph shows the trend of air quality change in Tyler County/Texas/United States. According to Environment Protection Agency, a lower Air Quality Index value stands for less adverse health effects, and any AQI value lower than 50 is considered as the best in the air quality hierarchy. As shown in Figure 36, the average air quality in Tyler County is Good and performing better than the state average and country average from 1999 to 2009. Thanks to its large green cover, the overall trend of AQI value of Tyler County is decreasing, which means the overall air quality is getting better.



Air quality indices (AQI) are numbers used by government agencies to characterize the quality of the air at a given location. As the AQI increases, an increasingly large percentage of the population is likely to experience increasingly severe adverse health effects. Air quality index values are divided into ranges, and each range is assigned a descriptor and a color code. Standardized public health advisories are associated with each AQI range. The United States Environmental Protection Agency (EPA) uses the following AQI:



Figure 34 Air Quality Trend in Tyler County

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<sup>&</sup>lt;sup>45</sup> Retrieved from http://www.usa.com/tyler-county-tx-air-quality.htm#epaaqi

# 7.4 Agricultural and Natural Resources

Soil is one of the most important resources in Tyler County, along with oil, gas, and timber. The land in Tyler County is characterized by light sandy, rich black soil, which is suitable for fruit growing and farming. Tyler County lies between the East Texas Embayment to the north and the Houston Salt Dome Region to the south. The Houston Salt Dome Region reaches into the southern part of Tyler County, where both oil and gas have been found. Oil and gas from the Houston Salt Dome structure are primarily produced from the Cenozoic rocks of the Wilcox group, which alternate from shale to sands. In Tyler County the average oil well depth ranges from 7,000 to 10,000 feet, though there are exceptions. In recent years a new area of natural gas and oil in the Woodbine Formation has been developed in the northern part of Tyler County. Additional mineral resources are volcanic ash and miscellaneous stones. Some gravel is available from river floodplains and the Goliad-Lissie sands in the southern part of the county. 46

<sup>&</sup>lt;sup>46</sup> Retrieved from Soil Survey of Tyler County, Natural Resources Conservation Service

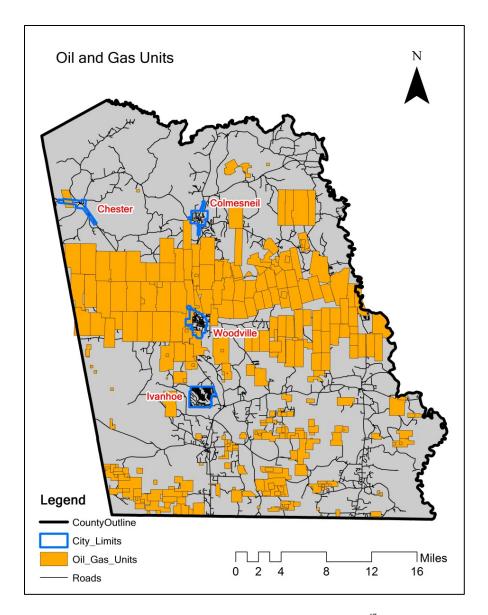


Figure 35 Oil and Gas Units Map, Tyler County<sup>47</sup>

<sup>&</sup>lt;sup>47</sup> Data source: Tyler County Appraisal District

# 7.5 Hazard Vulnerability

#### 7.5.1 Flood

Flood is one of the most common natural disasters Tyler County has experienced over the past decades. Almost every year, riverine flooding poses a threat to Tyler County. In March, 2016 and May, 2015, Tyler County was added to Texas' state emergency/disaster declaration due to dangers from flooding caused by heavy rainfall. <sup>48</sup>

The Federal Emergency Management Agency (FEMA) has mapped the flood zones by different levels of flood risk (Figure 38 & Figure 39). Most flood zones in Tyler County and Ivanhoe City are classified as Zone A (blue areas of Figure 38 and 39), which have a 1% annual chance of annual flooding and a 26% chance of flooding over the life of a 30-year mortgage. <sup>49</sup> In communities that participate in National Flood Insurance Program, mandatory flood insurance purchase requirements apply to Zone A areas. Any future development should consider the flood zone map to avoid casualties and economic losses.

<sup>&</sup>lt;sup>48</sup> Retrieved from http://gov.texas.gov/news/proclamation/20960

<sup>&</sup>lt;sup>49</sup> FEMA Flood Zone Definitions: http://snmapmod.snco.us/fmm/document/fema-flood-zone-definitions.pdf



Figure 36 Tyler County Flood Zone Map, FEMA<sup>50</sup>

 $<sup>^{50}</sup>$ Retrieved from Tyler County Appraisal District



Figure 39 Ivanhoe City Flood Zone Map, FEMA<sup>51</sup>

### 7.5.2 Tornado & Hurricane

From 1950 to 2010, a total of 63 historical tornado events that had recorded magnitude of 2 or above were found in or near Tyler County, and 3 of them moved across Tyler County, tearing up trees and damaging buildings (Table 12). The worst one in 1983 caused a total property damage of \$2.5 million in Tyler County at that time. <sup>52</sup>

Table 12 Tornado Events Record, Tyler County (1950-2010)<sup>50</sup>

Distance (miles)	Date	Magnitude	Start Lat/Log	End Lat/Log	Length	Width	Fatalities	Injuries	Property Damage	Crop Damage	Affected County
4.6	1967- 02-20	2	30°49'N / 94°26'W		0.50 Mile	100 Yards	0	0	250K	0	Tyler
16.4	1999- 01-29	2	30°37'N / 94°11'W	30°41'N / 94°06'W	6.00 Miles	400 Yards	0	0	20K	0	Tyler
	Brief Description: A strong tornado moved across rural sections of eastern Tyler County, tearing up a large swath of trees and damaging a few out buildings. Some trees were as wide as 15 feet across and 100 feet tall. This tornado moved into rural sections of Jasper County.										
16.6	1983- 12-10	2	30°30'N / 94°33'W	30°34'N / 94°06'W	26.00 Miles	700 Yards	0	4	2.5M	0	Tyler

<sup>&</sup>lt;sup>51</sup> Retrieved from Tyler County Appraisal District

<sup>&</sup>lt;sup>52</sup> Retrieved from http://www.usa.com/tyler-county-tx-natural-disasters-extremes.htm#OtherWeatherExtremes

Tyler County experienced a variety of hurricanes over the three year spam from 2005 to 2008, including Kartina, Rita, Gustav and Ike. In 2008, Tyler County is more than 150 miles northeast of where Hurricane Ike made landfall and is located 90 miles inland from the Texas Gulf Coast. However, the storm's strong winds and heavy rains still tore through the county, laying over trees and telephone poles along the way. Wind from Hurricane Ike damaged an estimated 21,000 acres of Tyler County's forest lands. Debris was a major problem following the storm and the cost of debris removal for Tyler County exceeded \$2 million.<sup>53</sup>

According to the Disaster Impact Model developed by Texas A&M AgriLife, the total economic loss to Tyler County from Hurricane Ike is estimated to be \$79.9 million in the 12 month period following Ike. Among the 29 industry sectors evaluated in Tyler County, the real estate sector suffered the greatest loss at \$50.4 million. Figure 40 shows that, after Hurricane Ike, Tyler County experienced on average a 28% per quarter reduction in gross sales during the four quarters following Ike.<sup>51</sup>

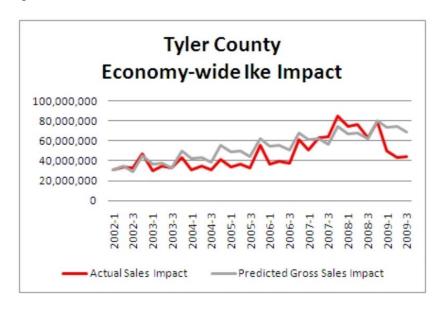


Figure 40 Tyler County Economy-wide Ike Impact<sup>51</sup>

Although Tyler County is not a coastal county, the economic losses caused by hurricane activities are increasing. For local governments, it is important to restore and protect wetlands, lowlands, and barrier islands that can provide a vital first line of defense in buffering communities from hurricane-related flooding and other dangers.

#### 7.5.3 Wildfire

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<sup>&</sup>lt;sup>53</sup> Retrieved from http://www.thestormresource.com/Resources/DocRepository/county\_reports/Tyler\_County\_Impact\_Report.pdf

Wildfires occur predominantly in forested and woody wetland areas and damage many natural resources or even cause causalities. Wildfire risk varies throughout Tyler County's geography. Figure 41 shows the distribution of wildfire ignition density in Tyler County, which stands for the likelihood of a wildfire starting based on historical ignition patterns. <sup>54</sup> Southern Tyler County, especially Ivanhoe City and Warren are at higher risk to wildfires.

On October, 2015, several highways and back roads were shut down due to a wildfire in Chester, Tyler County. The aerial photographs show roughly 800 acres burned. Firefighters from all over southeast Texas were deployed to the wildfire in the Chester and Barnum area. All Tyler County volunteer fire departments responded directly to the fire.

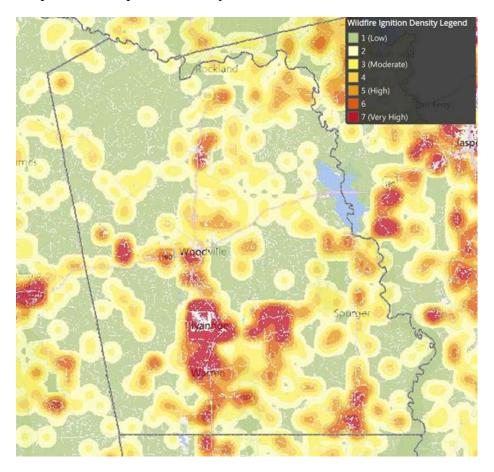


Figure 41 Tyler County Wildfire Ignition Density Map<sup>52</sup>

#### 7.5.4 Evacuation Routes

<sup>&</sup>lt;sup>54</sup> Retrieved from https://www.texaswildfirerisk.com/map

As an important part of adaptation process for hazards, Tyler County provides hurricane evacuation routes for its residents (Figure 42). The main emergency evacuation route goes along US 69, connecting Colmesneil, Woodville and Ivanhoe, and there is also another evaculane starting from Colmesneil, connecting Spurger and Fred. However, some parts of these routes are located within the flood zones, which means that they might not be accessible in case of a flood event.

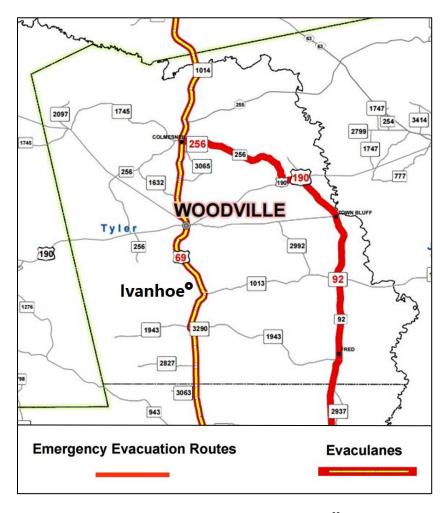


Figure 37 Evacuation Map, Tyler County<sup>55</sup>

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<sup>&</sup>lt;sup>55</sup> Retrieved from http://www.co.tyler.tx.us/default.aspx?Tyler\_County/HurricaneEvacuation

# 8. Transportation

# 8.1 Mode Networks

### 8.1.1 Highways

US 69, US 190, and US 287 are the three major highways located in Tyler County (Figure 43). US 69 and US 287 both run north-south and continue through the state to Oklahoma. US 190 runs east-west, out of Louisiana but ends before it reaches Mexico. According to the Fixing America's Surface Transportation (FAST) Act, signed by President Obama on December 14, 2015, U.S. 190 will be renamed Interstate 14 and added to the national interstate highway system, part of a plan to connect Texas' major U.S. Army installations to major Gulf Coast ports.

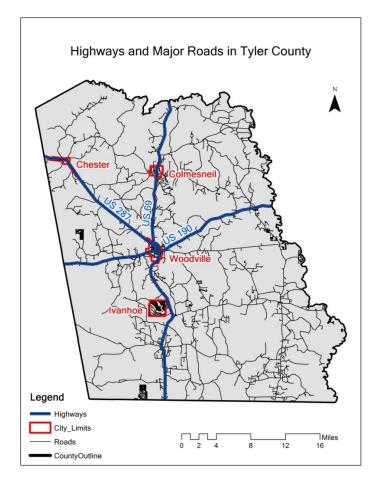


Figure 38 Highways and Major Roads Map, Tyler County<sup>56</sup>

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<sup>&</sup>lt;sup>56</sup> Data source: http://tnris.org/

## 8.1.2 Railroads and Airports

The only railroad through Tyler County is run by Union Pacific. It runs north-south and in a line through/around Colmesneil, Woodville, and Ivanhoe. The Tyler County Airport is located near Woodville. Although it's open to the public, it's mainly for military use.

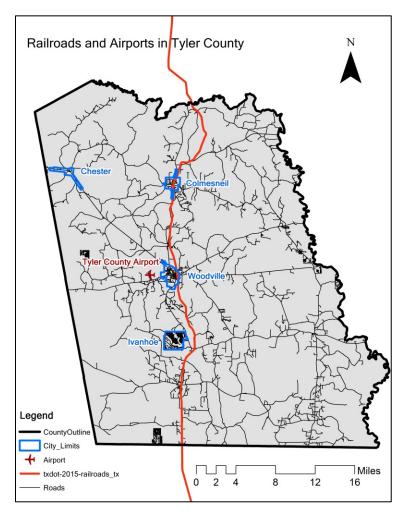


Figure 39 Railroads and Airports Map, Tyler County<sup>57</sup>

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<sup>&</sup>lt;sup>57</sup> Data source: http://tnris.org/

# 8.2 Commuting

The proportion of residents who drove alone to work in Tyler County and Ivanhoe City is lower than that of the state and the proportion of those who carpooled is relatively higher than that of the state (Figure 45). It is notable that the proportion of public transportation users in Ivanhoe City is as high as 4%. The distribution of commute time is polarized in Tyler County with 22.9% residents whose commute is less than 10 minutes and 21.7% whose commute is 60 or more minutes (Figure 46). In Ivanhoe City, over half of the residents commute less than 25 minutes, while about 40% commute more than 45 minutes. The mean commute time is 39 minutes in Ivanhoe City, 34.9 minutes in Tyler County and 25.2 minutes in Texas.

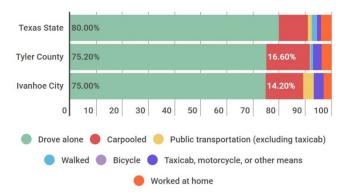


Figure 40 Mode of Commute Distribution in Texas, Tyler County and Ivanhoe City, 2014<sup>58</sup>

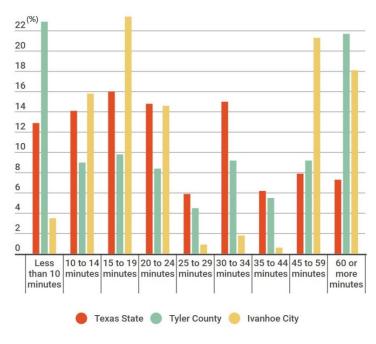


Figure 41 Commute Time in Texas, Tyler County and Ivanhoe City, 2014<sup>34</sup>

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<sup>&</sup>lt;sup>58</sup> United States Census Bureau, 2010

# 8.3 Road Condition

### 8.3.1 Road Types

To examine the road condition in Ivanhoe City, TTC conducted an on-site windshield survey and classified all the roads into three categories: Asphalt, Dirt and Gravel. As shown in Figure 47, 46% of the roads are asphalt, 18% are dirt and 37% are gravel. Basically, all the main roads from the main entrance are asphalt roads.

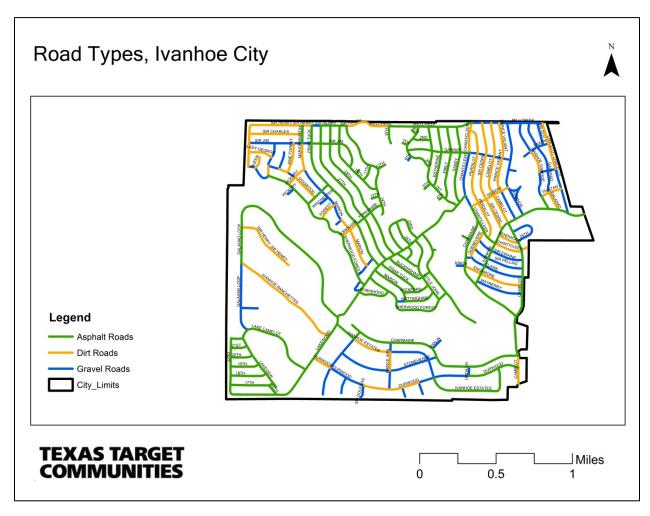


Figure 42 Road Types Map, Ivanhoe City

### 8.3.2 Road Rating

Based on a series of criteria, TTC rated all the roads in Ivanhoe City through the on-site windshield survey. Asphalt roads are mainly rated by the frequency and severity of cracks, holes

or other damages on the road, while gravel and dirt roads are rated by visible distresses and overall roadway condition in each segment.

Figure 48 shows the final result of the road condition assessment. Road maintenance work is highly recommended to be performed in those low score areas, especially on the west-southern corner of the city, and all the intersections marked as in bad condition.

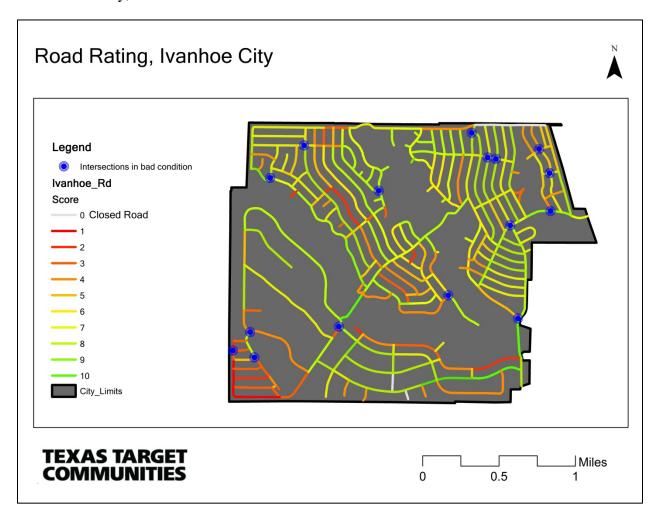


Figure 43 Road Rating Map, Ivanhoe City

# 9. Community Facilities

#### 9.1 **Schools**

Tyler County has 5 Independent School Districts (ISDs): Chester ISD, Colmesneil ISD, Spurger ISD, Warren ISD, and Woodville ISD (Figure 49). The student-teacher ratio is 12:1, which is better than the state average of 16:1. Ivanhoe City is a part of two school districts, Woodville and Warren ISD. The list of schools in Tyler County is described in Table 13.

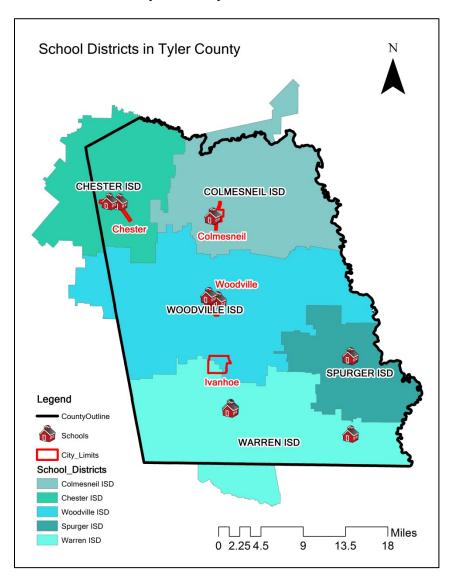


Figure 44 School Districts Map, Tyler County<sup>59</sup>

<sup>&</sup>lt;sup>59</sup> Data Source: Texas Education Agency

Table 13 Public School List, Tyler County<sup>60</sup>

ISD	Name	Type	Rating (2015)
	Woodville Elementary School	Primary	Met Standard
We admille ICD	Woodville Intermediate School	Primary	Met Standard
Woodville ISD	Woodville Middle School	Middle	Met Standard
	Woodville High School	High	Met Standard
	Fred Elementary School	Primary	Met Standard
Wannan ICD	Warren Elementary School	Primary	Met Standard
Warren ISD	Warren Junior High School	Middle	Met Standard
	Warren High School	High	Met Standard
C IGD	Spurger Elementary School	Primary	Met Standard
Spurger ISD	Spurger High School	High	Met Standard
Colmesneil ISD	Colmesneil Elementary School	Primary	Met Standard
	Colmesneil High School	High	Met Standard
Chester ISD	Chester Elementary School	Primary	Met Standard
	Chester High School	High	Improvement Required

According to the school reports issued by Texas Education Agency, all the schools in Tyler County, except Chester High School, are doing well in all the four performance indexes: Student Achievement, Student Progress, Closing Performance Gaps, and Postsecondary Readiness.

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 $<sup>^{60}</sup>$  Retrieved from http://tea.texas.gov/perfreport/src/index.html

# 9.2 Hospitals

The only hospital in Tyler County, located in Woodville, is the Tyler County Hospital, which is a general medical and surgical hospital with 25 beds (Figure 50). Roughly 10,005 patients visited the hospital's emergency room in 2015.<sup>61</sup>

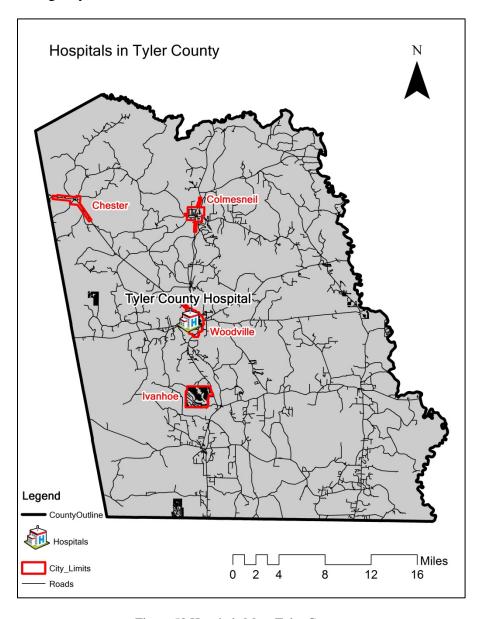


Figure 50 Hospitals Map, Tyler County

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<sup>&</sup>lt;sup>61</sup> Retrieved from http://health.usnews.com/best-hospitals/area/tx/tyler-county-hospital-6743799

# 9.3 Fire Departments

Tyler County has two fire departments which are located in Woodville and Spurger (Figure 51). Wildwood has one fire department out of the boundary of Tyler County, in Hardin County. Also, some cities/towns (including Woodville Town, Ivanhoe City, Colmesneil City and Chester Town) have their own volunteer fire departments (Figure 52).

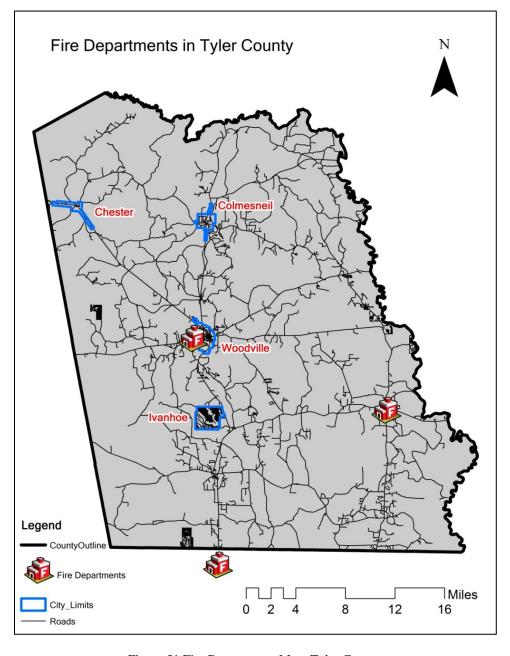


Figure 51 Fire Departments Map, Tyler County

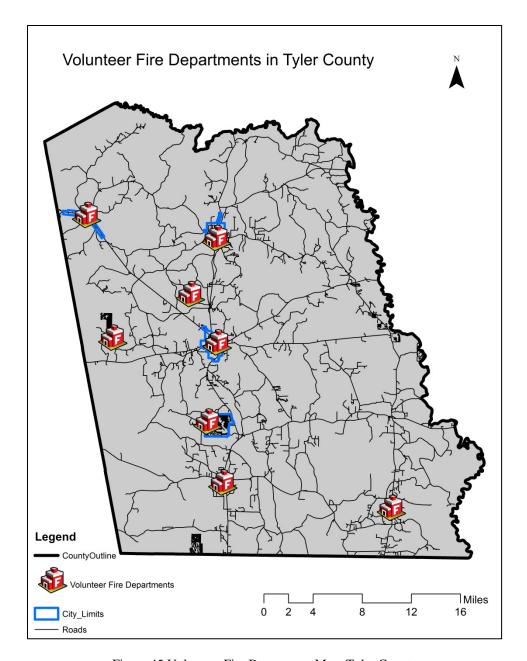


Figure 45 Volunteer Fire Department Map, Tyler County

All the fire departments and fire service areas serving Tyler County are shown in Figure 53. The green zones refer to closer access to the fire department, while the red zones refer to far distance to fire department. The white circles show the 5-mile range which is accessible by the fire service. This range is about 8 minutes' driving with an average speed of 58 mph through highways and community roads.

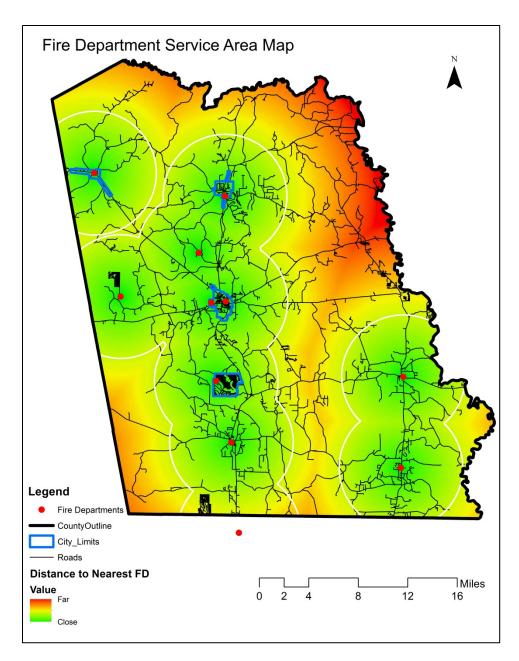


Figure 46 Fire Department Service Map

# 9.4 Parks and Wildlife Refuge

Tyler County has 43 rare, threatened, and endangered species in total (Birds: 11; Fishes: 5; Mammals: 6; Mollusks: 6; Reptiles: 4; Plants: 11). The map below shows the recorded preserve area or other resources for wildlife refuge (Figure 54).

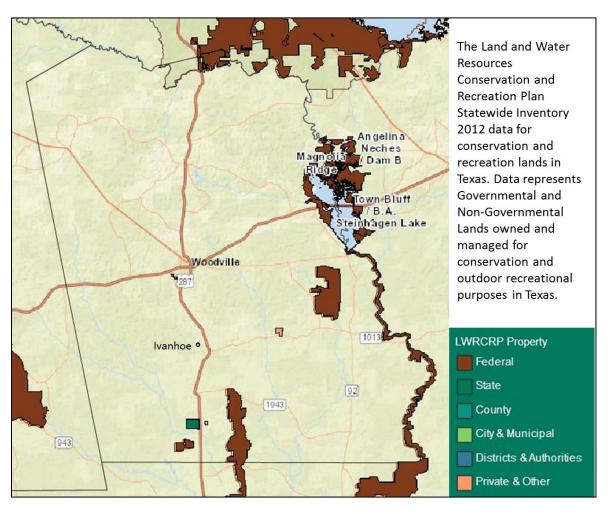


Figure 47 Parks and Wildlife Refuge Map, Tyler County<sup>62</sup>

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<sup>62</sup> Retrieved from Texas Parks and Wildlife Department

# 10. Strengths & Opportunities

# 10.1 Tyler County

#### **Strengths:**

- Beautiful and rich natural environment
- Rural, small-town atmosphere
- Abundant natural resources oil, gas, and water
- Highway access through major cities
- Steady population through the future

#### **Opportunities**

- Continued cooperation with other counties in DETCOG
- Future development of highways, such as I-14 could bring in more business and military access to ports
- Support basic industry to increase jobs in the region
- For more retail establishments to support buying patterns
- To maintain current housing stock into the future
- To connect youth to educational and work opportunities
- To plan for aging populations and access to medical services

# 10.2 Ivanhoe City

#### **Strengths:**

- Beautiful scenery around the lake
- Peaceful, harmony atmosphere
- Convenient access to the highway
- Adequate green spaces
- City of second largest population in Tyler County

#### **Opportunities**

- Future development of leisure industry
- To build some local businesses, such as restaurants, retail markets and so on
- To plan for aging populations and access to medical services

The compilation of information and data from a wide variety of sources helps communities understand existing conditions, and reveals strengths and potential opportunities for the County and the City of Ivanhoe. The information in the State of Community report will input into the County Strategic Plan and the City Comprehensive Plan. The prevailing issues, prospects, and community's vision will yield goals, objectives, and action steps, to serve the community's future growth and development.