## La Grange, Texas HOUSING NEEDS ASSESSMENT

Prepared by Texas Target Communities at Texas A&M University, in partnership with the City of La Grange, Texas

June 2015

#### FOREWORD

The City of La Grange has been experiencing growth at a higher rate than expected in the City's comprehensive plan. Due to this, the City is nearing build out capacity and housing has become limited. Local real estate agents and developers have expressed concern to the City in regards to the limited housing options for their clients. In response, the City contacted Texas Target Communities at Texas A&M University to conduct a Housing Needs Assessment. The purpose of this assessment is to provide an inventory of current housing, identify future demand, and explore other possible housing related issues and, or concerns for the area.

#### **Texas Target Communities**

For a quarter-century, the Texas Target Communities (TTC) program from the College of Architecture at Texas A&M University has provided technical assistance on land use planning and design to small, lower-resourced communities across the state.

Today, communities face complex challenges that require access to more specialized information from a variety of disciplines. Unfortunately, few small communities are able to employ a cadre of experts able to conduct the kind of tailored analyses a community needs in order to make sound choices regarding the future.

Therefore, since June 2013, TTC has been expanded to diversify the scope of technical support offered. The program has transitioned from short-term, independent projects focused on land use planning and design to more long-term, integrated efforts addressing the full spectrum of challenges (i.e. civic, environmental, economic, etc.) encountered by communities today.

#### **Project Team**

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#### **EXECUTIVE SUMMARY**

The City of La Grange is located in Fayette County, along the Colorado River. The City is experiencing population growth at a faster rate than was expected by the City's *Comprehensive Plan 2020*. In 2013, the City has a population of 4,656, with a median age of 37 years.

A housing quality study was conducted to evaluate the current housing stock in the City of La Grange. It was found that the majority of housing is maintained or well maintained and that although the City has an older housing stock, it is very well taken care of. There has been no new residential construction since 2010 and the vacancy rate for owner occupied households is at zero percent. Housing tenure patterns show that many residents moved into their homes during the period of 2000 to 2009 and growth has continued since then. Housing is affordable within the City, especially for owner occupied households. The City is however, lacking in housing options for renters and the elderly.

Zoning was adopted into the City's *Code of Ordinances* in 1971 and is updated regularly. The City has an extraterritorial jurisdiction (ETJ) of one half a mile radius surrounding the City boundaries. The City has minimal control of this land, but can apply its subdivision ordinance to the area. The area is eligible for annexation in the future. The Special Flood Hazard Area was evaluated within the City and it was found that about 12 percent of the City's total land area falls within this category. The majority of the City, 65 percent, has a minimal chance of flooding.

Land use patterns were evaluated within the City and ETJ. It was found that about 34 of the City is used for residential purposes. 92 percent of that land is for single family homes and only two percent are for multi-family housing, with the remaining for manufactured housing.

Due to limited vacant land and the current land use patterns, the City's current available land and housing stock is not sufficient to meet the future housing needs. In order to meet the growing population, there needs to be an increase in overall density, smaller lot sizes for single family residential, increased multi-family duplexes and apartments. It is also important for the City to consider annexation of the current ETJ, and then the expansion of the ETJ.

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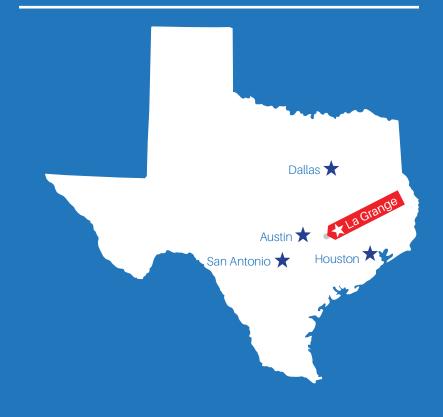
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### Introduction



La Grange is located in Fayette County, about halfway between Austin and Houston, with the Colorado River serving as the natural southern border. The City is the county seat for Fayette County and the largest city within the county. As of 2013, almost one quarter of the County's total population lives either within the City of La Grange or within a one miles radius of the City. The City's current comprehensive plan was developed in 1998 and was designed to guide the City's growth through 2020. However, the City has already exceeded population projections from the Plan. The Purpose of this report is to update the demographic analysis, so that the City can have a current picture of the fabric of their population and to evaluate the housing trends and needs of this growing population.

#### **DRIVING FORCES**

A major push for this report has come from the real estate industry in La Grange. Local real estate agents have been feeling pressure from a housing market that is in demand, but has a limited number of vacancies. As part of this report, four real estate agents were met with to discuses the current real estate market and help identify trends.

The following are the major points of concern identified by the panel of local real estate agents.

- Market is in high demand
- Variety in demographics of clients (families with kids, middle-aged, retirees)
- Single family housing under \$200,000 is very limited
- Homes in deed restricted subdivisions, like *The Bluff*, are of the highest demand
- City does not offer incentives to developers, which may be an obstacle to new residential development
- Limited housing options for the elderly

A summary from this meeting can be found in *Appendix A* on page 47.

## Section I POPULATION ANALYSIS AND TRENDS

Population analysis is the foundation for many city decisions. It allows a decision makers to understand the composition of the community, so that they can better make decisions to meet the needs of their community. Analysis of characteristics of the population can also help a community look to the future and determine future land use needs. The following section outlines characteristics of the current population for the City of La Grange. Where appropriate, the City is compared to Fayette County and the State of Texas, to highlight important trends. Also where appropriate, certain statistics are compared over time to show recent trends.

#### **POPULATION CHARACTERISTICS**

The City of La Grange has a total population of 4,656, as of the 2013 American Community Survey (ACS). About 55 percent of the population is female and 45 percent male. The City has a sex ratio (number of males per 100 females) of 80.8, compared to 97.1 for the County and 98.6 for the State.

The median age for a resident of La Grange is 37 years. This number is slightly higher for males within the City at 37.5 years and lower for females at 33.9 years. Median age for Fayette County is 47.4 years and is 33.8 for Texas. In both the County and State, females have a higher median age than the total median and males have a lower than the total median, reverse of the trend in La Grange. Median age has been rising for the City since 2009 when it was at 33.9 years. It was slightly higher in 2011 and 2012, at 38, but has remained relatively consistent over the past three years.

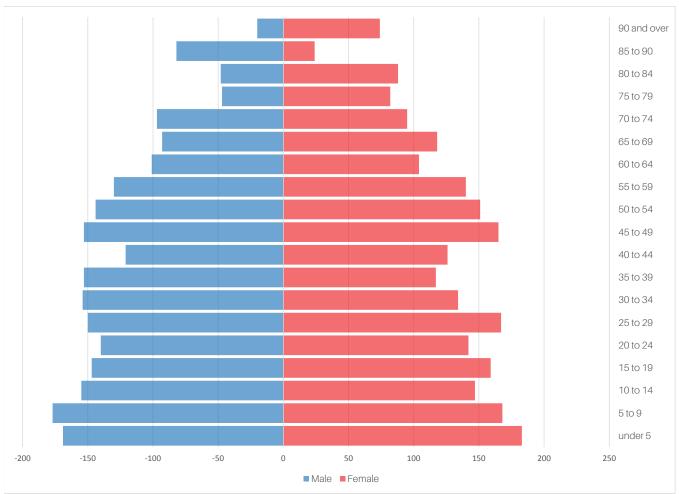
The age dependency ratio (total number of people under 18 and over 65 divided by total number of people between 18 and 65, then multiplied by 100) is used to determine how much pressure is put on the working portion of the population. Within La Grange, the ratio is 103.3, higher than the County's ratio of 78.8 and much higher than the State's ratio of 60.5. This can also be split into old-age dependency (total number of people over 65 divided by total number of people between 18 and 65, then multiplied by 100) and child dependency ratios (total number of people under 18 divided by total number of people between 18 and 65, then multiplied by 100). The old age dependency ratio is 36.6 and the child dependency rate is 66.8. This signifies a large number of children under 18 within the City. Fayette County has a similar old age dependency (Table 1.1).

Figure 1.1 shows the population pyramid for the City in 2010. When a City is experiencing growth, it is normal for the lower age groups to be largest, with group sizes becoming smaller as they move higher. La Grange's population pyramid follows this pattern, signifying that it is experiencing growth.

| Ratio                | La Grange | Fayette County | Texas |  |  |  |  |
|----------------------|-----------|----------------|-------|--|--|--|--|
| Total Age Dependency | 103.3     | 78.8           | 60.5  |  |  |  |  |
| Old Age Dependency   | 36.6      | 39.8           | 17.1  |  |  |  |  |
| Child Dependency     | 66.8      | 38.9           | 43.3  |  |  |  |  |

#### **TABLE 1.1 AGE DEPENDENCY RATIO**

American Community Survey, 2013



#### FIGURE 1.1 POPULATION PYRAMID

United States Decennial Census, 2010

#### **Household Composition**

Average household size for the City of La Grange is 2.64, as of 2013, as can be seen in Table 1.2. This number is very similar to the size for the County, 2.41, and the State, 2.82. Average household size is slightly smaller for renter occupied households at 2.42 and owner occupied households at 3.0. This trend is reflected by the County, but is reversed at the State level. Overall, average household size has varied for the City since 2009, going both up and down, while the County and State's rates have stayed somewhat stable. This is something that must be closely monitored, because the projected number of future housing units and acreage needed to meet growth in *Section II*, is dependent of this statistic.

There are a total of 1,703 households within La Grange, about 68 percent of which are family households. Of the total number of family households, about 58 percent have at least one child under the age of 18. This equates to about 40 percent of the total number of family households have at least one child under the age of 18. There is another four percent of households which are nonfamily and have at least one child under 18, for a total of about 44 percent of total households. This signifies that there is a large portion of households with at least one child. These numbers are very similar to both the County and State for total number of family and nonfamily households, but La Grange has higher rates for total (both family and nonfamily) households with at least one child under the age of 18.

About half of all households, 48 percent, are composed of a married couple. The rate is just below the State rate of 50 percent and significantly lower the County rate of 58 percent.

|                                                                                   | La Grange | Fayette County | Texas     |
|-----------------------------------------------------------------------------------|-----------|----------------|-----------|
| Total Households                                                                  | 1,703     | 9,999          | 8,886,471 |
| Family Households                                                                 | 68.58%    | 67.63%         | 69.84%    |
| with at least one child under 18 (portion of total)                               | 39.58%    | 26.85%         | 34.11%    |
| with at least one child under 18 (portion of Family House holds)                  | 57.71%    | 39.71%         | 48.84%    |
| Married Couple Family Households                                                  | 48.09%    | 58.47%         | 50.48%    |
| with at least one child under 18 (portion of total)                               | 26.54%    | 22.23%         | 23.23%    |
| with at least one child under 18 (portion of Married Couple<br>Family Households) | 55.19%    | 38.03%         | 46.03%    |
| Nonfamily Households                                                              | 31.42%    | 32.37%         | 30.16%    |

#### **TABLE 1.2 HOUSEHOLD COMPOSITION**

American Community Survey, 2013

#### **Household Income**

Median household income for the City is \$41,913, as of 2013. This is about \$7,000 lower than the median household income for the County, and about \$10,000 below the State level. Median household income for families is higher at \$52,845, but still lower than both the County and State level. Married family households have the highest median household income of \$61,466 and nonfamily households have the lowest at \$19,317, as can be seen in Table 1.3.

Comparing median household income for La Grange since 2009 (in inflation adjusted dollars), the current median household income is the highest it has been since 2009. Overall median household income has risen about 13 percent, family household income about 24 percent, and married family household income about 26 percent since 2009. Median household income for nonfamily households has remained about the same.

|                |                         | 2013   | 2012   | 2011   | 2010   | 2009   |
|----------------|-------------------------|--------|--------|--------|--------|--------|
| La Grange      | Total                   | 41,913 | 33,237 | 36,912 | 32,114 | 37,143 |
|                | Families                | 52,845 | 43,226 | 44,219 | 40,710 | 42,656 |
|                | Married Couple Families | 61,466 | 46,978 | 50,471 | 48,309 | 48,914 |
|                | Nonfamily               | 19,317 | 18,655 | 18,971 | 20,455 | 19,694 |
| Fayette County | Total                   | 48,015 | 45,478 | 47,285 | 45,450 | 44,031 |
|                | Families                | 60,929 | 57,277 | 57,423 | 56,157 | 54,735 |
|                | Married Couple Families | 65,569 | 63,379 | 63,039 | 61,512 | 60,757 |
|                | Nonfamily               | 21,499 | 22,103 | 24,171 | 24,512 | 21,681 |
| Texas          | Total                   | 51,900 | 51,563 | 50,920 | 49,646 | 48,199 |
|                | Families                | 61,066 | 60,621 | 60,004 | 58,142 | 56,650 |
|                | Married Couple Families | 75,302 | 74,512 | 73,319 | 70,916 | 68,935 |
|                | Nonfamily               | 32,354 | 31,973 | 31,812 | 31,155 | 30,692 |

#### TABLE 1.3 MEDIAN HOUSEHOLD INCOME IN DOLLARS

American Community Survey, 2009-13

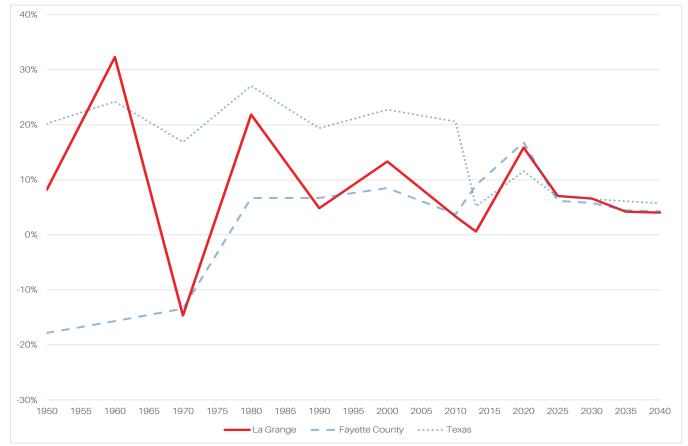
#### Comprehensive Plan 2020

The La Grange *Comprehensive Plan 2020* predicted that in 2010 the City would have a population of 4,051 and 2,048 housing units. According to the US Census in 2010, the City has a population of 4,628 and 2,255 housing units, see Table 1.4 (population only). These numbers are significantly higher than the predictions. *Section III* of this report identifies land use requirements for the City through 2035, based upon current population projects from the Texas Water Development Board.

#### **Population Projections**

The Texas Water Development Board (TWDB) data was used to determine population projects for the year 2035. Information from the TWDB was analyzed for the City of La Grange, as well as Fayette County and the State. As you can see in Figure 1.2 and Tables 1.4A and B, La Grange is expected to have a very similar growth pattern to both the County and the State looking towards the future. By year 2035, the City is expected to have an increase of 1,722 people, or about 37 percent from 2013 until then.

As part this analysis, the City's growth trends were applied to the City's extraterritorial jurisdiction (ETJ). This is the area within one half mile radius of the City. It is important to examine this area when looking at population projections, but the City has minimal control and it is possible to annex the land in the future. Following La Grange's growth rate, the ETJ is expected to expand from 5,657 in 2013 (this includes the City's population) to 7,313 in 2035.



**FIGURE 1.2 GROWTH TRENDS** 

American Community Survey, 2013

|      | La Gr         | ange        | Fayette    | e County    | -          | Texas       |
|------|---------------|-------------|------------|-------------|------------|-------------|
| Year | Population (  | Growth Rate | Population | Growth Rate | Population | Growth Rate |
| 2040 | 6635          | 4.04%       | 35,259     | 4.28%       | 37,736,338 | 3 5.76%     |
| 2035 | 6378          | 4.21%       | 33,811     | 4.47%       | 35,682,496 | 6.11%       |
| 2030 | <b>)</b> 6120 | 6.60%       | 32,363     | 5.81%       | 33,628,653 | 6.52%       |
| 2025 | 5 5741        | 7.07%       | 30,586     | 6.17%       | 31,569,419 | 6.98%       |
| 2020 | 5362          | 15.86%      | 28,808     | 16.81%      | 29,510,184 | 11.58%      |
| 2013 | <b>3</b> 4656 | 0.61%       | 24,662     | 9.03%       | 26,448,193 | 5.18%       |
| 2010 | <b>)</b> 4628 | 3.35%       | 22,620     | 3.74%       | 25,145,561 | 20.59%      |
| 2000 | ) 4478        | 13.34%      | 21,804     | 8.50%       | 20,851,820 | ) 22.76%    |
| 1990 | <b>)</b> 3951 | 4.86%       | 20,095     | 6.71%       | 16,986,335 | 5 19.38%    |
| 1980 | ) 3768        | 21.86%      | 18,832     | 6.70%       | 14,229,191 | 27.08%      |
| 1970 | 3092          | -14.66%     | 17,650     | -13.41%     | 11,196,730 | ) 16.88%    |
| 1960 | 3623          | 32.32%      | 20,384     | -15.68%     | 9,579,677  | 24.23%      |
| 1950 | ) 2738        | 8.18%       | 24,176     | -17.82%     | 7,711,194  | 20.21%      |
| 1940 | 2531          |             | 29,420     |             | 6,414,824  |             |

#### **TABLE 1.4A GROWTH PROJECTIONS**

Texas Water Development Board, 2015

#### **TABLE 1.4B GROWTH PROJECTIONS**

|      | La Grange and ETJ |             | La Grange and ' | 1.0 Mile Radius |
|------|-------------------|-------------|-----------------|-----------------|
| Year | Population        | Growth Rate | Population      | Growth Rate     |
| 2040 | 7269              | 4.04%       | 8,304           | 4.04%           |
| 2035 | 7313              | 4.21%       | 7,982           | 4.21%           |
| 2030 | 6987              | 6.60%       | 7,659           | 6.60%           |
| 2025 | 7017              | 7.07%       | 7,185           | 7.07%           |
| 2020 | 6554              | 15.86%      | 6,711           | 15.86%          |
| 2013 | 5657              |             | 5,792           |                 |

Texas Water Development Board, 2015

# Section 11 CURRENT HOUSING TRENDS

The following section describes housing trends and the current housing market within the City of La Grange. Similar to the previous section, comparisons are made where appropriate to Fayette County and the State of Texas, as well as to the City over time. Overall, the City's owner occupied housing units are in very high demand and growing in housing value. Construction rates for new housing units has slowed and there is an aging housing stock, but this older housing stock has been well maintained by the community.

#### HOUSING QUALITY STUDY

As part of this report, a study was conducted to determine the quality of La Grange's housing stock. Because all 2,052 housing units could not be evaluated, a random selection of 200 housing units was selected and evaluated.

To evaluate the quality of the selected residential parcels, each parcel was viewed from the street and given a rating from one to five based off of criteria that can be seen in Table 2.1. Of the 180 residential parcels included in the study, 66.7 percent rated four or better, as can be seen in Table 2.2 and Figure 2.1. One quarter were rated three and about 8 percent were rated one or two. This shows that the majority of the housing stock in La Grange is well maintained.

A similar study was completed in 1998, as part of the 2020 comprehensive planning process. The results of this study showed that 68.6 percent of all housing units were in good conditions, consistent with the results of this study. This study can be found on page 4-1 of the *La Grange Comprehensive Plan 2020*.

Appendix B on page 50 contains the methodology of the study.

#### TABLE 2.1 2015 HOUSING STUDY RESULTS

| Rating                                 | Count | Percent | Mean   |
|----------------------------------------|-------|---------|--------|
| Abandoned                              | 2     | 1.1%    | 3.78   |
| Severely Dilapidated                   | 13    | 7.2%    | Median |
| Minor/Moderate Structural Improvements | 45    | 25.0%   | 4.00   |
| Maintained                             | 83    | 46.1%   |        |
| Well Maintained                        | 37    | 20.6%   |        |
| Total                                  | 180   |         |        |
| Excluded                               | 20    |         |        |

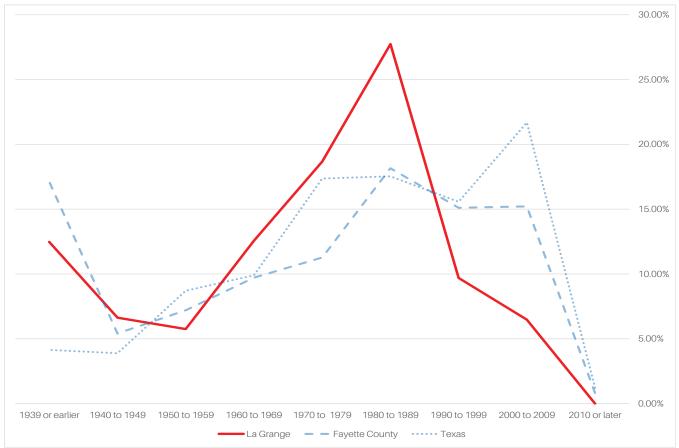
#### TABLE 2.2 2020 COMPREHENSIVE PLAN STUDY RESULTS

| Rating       | Percent |
|--------------|---------|
| Good         | 68.60%  |
| Deteriorated | 25.80%  |
| Severely     |         |
| Deteriorated | 5.70%   |

#### **CONSTRUCTION PATTERNS**

Almost half of the City's total number of housing units were built during the 1970's and 1980's. Only 332 housing units have been constructed since 1990, or about 15 percent of the total housing stock, as can be seen in Figure 2.1. According to the 2013 American Community Survey, no new homes have been constructed since 2010. When compared to the County and State, it can be seen that La Grange has much lower construction rates for the 1990's and 2000's. This signifies an older housing stock, but as can be seen from the Housing Quality Study, it has been well maintained by the community.

Almost 80 percent of housing units within the City have either two or three bedrooms. This is a similar trend to both the County and State.



#### **FIGURE 2.1 CONSTRUCTION PATTERNS**

American Community Survey, 2013

#### HOUSING VACANCY PATTERNS

Vacancy rates for owner occupied housing units has been at zero since 2009. It is important to note that this does not mean that there is never any housing units for sale within the City, but that they sell too quickly to be reported as part of the American Community Survey (yearly net sales and resales is equal). In 2013, Fayette County had a homeowner vacancy rate of 2.6 percent and the State was at two percent.

The vacancy rate for renter occupied housing units is much higher, at 11.6 percent in 2013. This is above both the County and State rates of 9.2 and 9, respectively. Going back to 2009, this number has consistently been higher than both the County and State, reaching as high as 18.1 percent in 2011.

|                |                 | 2013  | 2012  | 2011  | 2010  | 2009  |
|----------------|-----------------|-------|-------|-------|-------|-------|
| La Grange      | Owner Occupied  | 0%    | 0%    | 0%    | 0%    | 0%    |
|                | Renter Occupied | 11.6% | 11.9% | 18.1% | 14.1% | 16.7% |
| Fayette County | Owner Occupied  | 2.6%  | 2.2%  | 2.3%  | 1.4%  | 0.9%  |
|                | Renter Occupied | 9%    | 9.3%  | 11.6% | 9%    | 10.5% |
| Texas          | Owner Occupied  | 2%    | 2.1%  | 2.3%  | 2.3%  | 2.3%  |
|                | Renter Occupied | 9.2%  | 9.6%  | 10%   | 10.2% | 10.4% |
|                |                 |       |       |       |       |       |

TABLE 2.3 VACANCY RATES

American Community Survey, 2009-13

#### HOW DOES LA GRANGE COMPARE: BURNET

Burnet is located in central Texas and also serves as the County seat for its County. Also similar to La Grange, Burnet is a city that developed along a river, as it is located one mile west of the divide between the Brazos and Colorado Rivers. Burnet has a population of just over 6,000, about 1,500 more residents more than La Grange. The median monthly housing costs are about \$875 in Burnet, compared to only about \$600 in La Grange. Median housing value is also higher in Burnet, about \$30,000 higher than in La Grange. Neither cities have had any new residential construction from 2010, but Burnet had about four to five times more new homes built between the period of 2000 to 2009. Burnet does, however, have a higher owner occupied household vacancy rate at 1.5 percent, compared to zero percent in La Grange. Renter occupied household vacancy is about one percent lower in Burnet. Both the age median and the portion of the population which identifies as Hispanic are also lower than in La Grange. Moving forward, higher growth is expected in Burnet, just over 20 percent for the next two decades, whereas La Grange is closer to 15 percent.

American Community Survey, 2013 Texas State Historical Association Texas Water Development Board, 2015

#### **HOUSING TENURE PATTERNS**

The majority of owner occupied housing units in the City were moved into by the household in 2000 or later, at about 63 percent. This rate is higher than the County's by about nine percent, but lower than the State's by about eight percent. La Grange saw its highest period of householders moving in from 2000 to 2009, with almost 53 percent of householders moving in during that time period, as can be seen in Figure 2.2.

90.00% 80.00% 70.00% 60.00% 50.00% 40.00% 30.00% 20.00% 10.00% 0.00% 1970 to 1979 1980 to 1989 1990 to 1999 2000 to 2009 2010 or later 1969 or earlier La Grange — — Fayette County ..... Texas

#### **FIGURE 2.2 HOUSING TENURE PATTERNS**

American Community Survey, 2013

#### **RENTAL COST PATTERNS**

The median monthly rent for within the City of La Grange is \$807, much higher than the County's median of \$658, but lower that the State (\$851). Just over six percent of renters do not pay rent, compared to about 23 percent for the County and six percent for the State. The majority of renters (62.5 percent) pay between \$300 and \$999 a month, as can be seen in Table 2.4.

|                            | La Grange Fay | yette County | Texas |
|----------------------------|---------------|--------------|-------|
| Occupied Units Paying Rent | 93.7%         | 77.3%        | 94.3% |
| No Rent Paid               | 6.3%          | 22.7%        | 5.7%  |
| Less than \$200            | 0.0%          | 0.8%         | 1.3%  |
| \$200 to \$299             | 7.6%          | 4.4%         | 2.1%  |
| \$300 to \$499             | 22.4%         | 15.2%        | 6.5%  |
| \$500 to \$749             | 16.0%         | 23.8%        | 25.3% |
| \$750 to \$999             | 24.1%         | 19.3%        | 27.3% |
| \$1,000 to \$1,499         | 15.1%         | 8.0%         | 23.5% |
| \$1,500 or More            | 8.5%          | 5.8%         | 8.2%  |
| Median                     | \$807         | \$658        | \$851 |

#### **TABLE 2.4 MONTHLY RENTAL COSTS**

American Community Survey, 2013

#### **HOUSING VALUE PATTERNS**

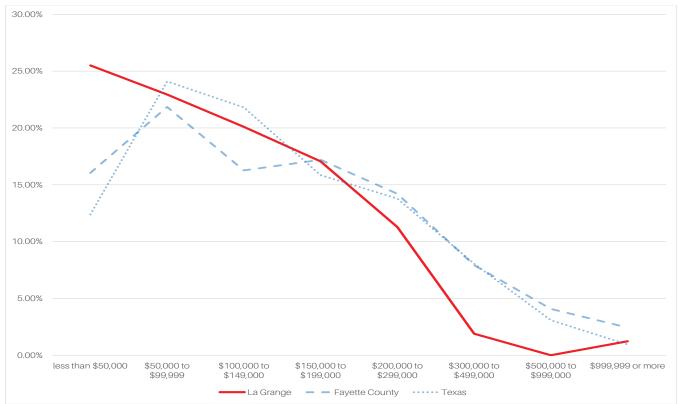
In 2013, the median value for owner occupied housing units was \$104,000. This figure has risen about 25 percent since 2009, when the median value was \$83,400. While the City's median housing value is still about \$20,000 below the County and State medians, it is rising at a much faster rate (10 percent from 2009 to 2013 for the County and eight percent for the State). About 45 percent of owner occupied households have a mortgage, slightly higher than the County, but considerably lower than the State's rate of 62 percent.

The housing value patterns, combined with the housing vacancy patterns for owner occupied housing units, signifies a housing market in very high demand for homeowners.

#### HOW DOES LA GRANGE COMPARE: LLANO

Llano is another county seat and located on the Llano River. The City has a smaller population of about 3,250 residents and is growing at about half the rate of La Grange. Median housing costs are only \$545, the lowest of all the communities compared in this report. Median housing value is also lower at about \$80,000. Llano had no new homes built after 2010 and a similar number of homes built in the two previous decades. The owner occupied household vacancy rate is just under three percent (La Grange is at zero) and the renter occupied household vacancy rate is just under five percent, much lower than La Grange's. Median age in Llano is about ten years older than in La Grange at 48 years and there is a much smaller portion of the population which identifies as Hispanic, at 15 percent compared to La Grange's 36 percent.

American Community Survey, 2013 Texas State Historical Association Texas Water Development Board, 2015



#### **FIGURE 2.3 HOUSING VALUE PATTERNS**

American Community Survey, 2013

#### HOUSING AFFORDABILITY

In order to determine if housing costs are affordable for the household, monthly housing costs are compared to monthly household income. According to the Department of Housing and Urban Development (HUD), if a household is spending more than 30 percent of its monthly household income on housing costs, than it is considered to be housing cost burdened. It is a common trend in the United States for renter occupied households to have higher rates of housing cost burdened households than for owner occupied households. Three categories were examined within La Grange: owner occupied households with a mortgage, owner occupied households without a mortgage, and renter occupied households.

70 percent of owner occupied household with a mortgage are not housing cost burdened. This is very similar to the rate for the County and State. For owner occupied households without a mortgage, an even larger portion of the group pays 30 percent or less of their total monthly household income towards housing costs, at 80.2 percent. This is about five percent higher than the State rate and 2.5 percent above the County. Renter occupied households have the highest portion of households which are housing costs burdened at about 45 percent, as expected. This is about five percent higher than for the County and about five percent lower than the State.

Overall, housing costs are affordable in La Grange. This is especially true for owner occupied households. When constructing new renter occupied units, it is particularly important that these units are cost appropriate.

|                                   |                     | La Grange | Fayette County | Texas     |
|-----------------------------------|---------------------|-----------|----------------|-----------|
| Owner Occupied with a Mortgage    | Total Housing Units | 466       | 3,084          | 3,441,117 |
|                                   | less than 20%       | 55.8%     | 52.5%          | 41.5%     |
|                                   | 20 to 24.9%         | 0%        | 12%            | 16.7%     |
|                                   | 25 to 29.9%         | 14.8%     | 7.6%           | 11.4%     |
|                                   | 30 to 34.9%         | 3.6%      | 7.5%           | 7.6%      |
|                                   | 35% or more         | 25.8%     | 20.5%          | 22.9%     |
|                                   | Under 30%           | 70.6%     | 72.1%          | 69.6%     |
| Owner Occupied without a Mortgage | Total Housing Units | 576       | 4,459          | 2,136,382 |
|                                   | less than 20%       | 29.3%     | 38%            | 41.5%     |
|                                   | 20 to 24.9%         | 37.5%     | 24.4%          | 20.9%     |
|                                   | 25 to 29.9%         | 13.4%     | 15%            | 12.1%     |
|                                   | 30 to 34.9%         | 3.1%      | 6.7%           | 7.3%      |
|                                   | 35% or more         | 7.1%      | 4%             | 4.8%      |
|                                   | Under 30%           | 80.2%     | 77.4%          | 74.5%     |
| Renter Occupied                   | Total Housing Units | 607       | 1,787          | 3,007,664 |
|                                   | less than 15%       | 34.8%     | 28.7%          | 13%       |
|                                   | 15 to 19.9%         | 9.9%      | 13%            | 13.2%     |
|                                   | 20 to 24.9%         | 9.7%      | 13.3%          | 13.3%     |
|                                   | 25 to 29.9%         | 0%        | 4.4%           | 11.4%     |
|                                   | 30 to 34.9%         | 7.4%      | 5.8%           | 9%        |
|                                   | 35% or more         | 38.2%     | 34.8%          | 40.1%     |
|                                   | Under 30%           | 54.4%     | 59.4%          | 50.9%     |

#### **TABLE 2.5 HOUSING AFFORDABILITY**

American Community Survey, 2013

#### HOUSING FOR THE ELDERLY

Just under 20 percent of the City's population is 65 years or older. The elderly portion of the population have different housing needs than other portions, so it is important to consider these as part of a housing analysis. The City's *Comprehensive Plan 2020* identified a need for increased elderly housing, including nursing homes, assisted living facilities, retirement communities, and independent living (City of La Grange, 1998). This need has still not been met and should be considered when making decisions about future housing options.

#### HOUSING ASSISTANCE PROGRAMS

The City of La Grange has multiple types of assistance that is offered to assist its residents with the costs of housing. The two most notable programs within the City are the La Grange Housing Authority and Fayette County Habitat for Humanity.

The La Grange Housing Authority acts as the local administrator to the Section 8 Housing program, from the Department of Housing and Urban Development. The Authority offers both public housing and Section 8 housing vouchers for very low income households, the elderly, and the disabled. Currently, the Authority manages one public housing project with 82 affordable rental units and administrators 91 Section 8 housing vouchers (Affordable Housing Online, 2015).

Fayette County Habitat for Humanity is a non-profit organization within the community that has been very successful in rehabilitating dilapidated homes. The organization was established in 2005 and builds affordable homes for low income households. The organization has built four homes within La Grange since its founding (Fayette County Habitat for Humanity, 2013).

### Section 111 LAND USE

The following section evaluates the City's current land use patterns. The patterns are then combined with demographic characteristics about the population from Sections I and II to predict future land use needs.

#### ZONING

The City's zoning ordinance was first adopted in La Grange in 1971. This ordinance designates areas of the city into zones and then defines what is appropriate within each zone. The most recent update to the zoning map was made in March 2013. There are six general zones: Industrial, Commercial, Administrative Professional, Public, Residential, and Multi-Family Residential. Just under 40 percent of the City is zoned as Residential (38.6 percent). The second largest zoning category is Commercial at 35.3 percent. The smallest zoning category is Multi-Family Residential (R1) at only 0.28%.

A full description of each zone can be seen in Chapter 14 of the City's Code of Ordinances.

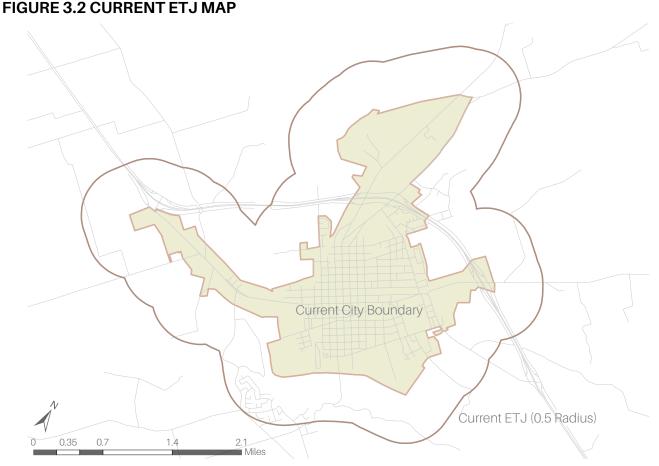
### LEGEND Favette County Roads City Boundry ZONE Administrative Professtiona Commercial Industrial Public Residentia 0.25 0.5 R1 (Residential) Miles

#### **FIGURE 3.1 CURRENT ZONING MAP**

Based off zoning map prepared by Absolute Geomatics, last updated March 2013

#### **EXTRATERRITORIAL JURISDICTION**

According to Texas State law, home rule cities within the State which have a population less than 5,000 may have an extraterritorial jurisdiction (ETJ) of one half a mile around its city. For land to be included as part of the ETJ, it must be unincorporated and the general responsibility of the City is "...to promote and protect the general health, safety, and welfare of persons residing in and adjacent to the municipalities" (Tex. Loc. Gov.'t Code Ann. §42.021). Figure 3.2 shows La Grange and its ETJ. The main way the City has authority over this land is through enforcement of the City's subdivision ordinance.



Based off zoning map prepared by Absolute Geomatics, last updated March 2013

#### SUBDIVISION ORDINANCE

Similar to the City's zoning ordinance, the subdivision ordinance also guides development within the city. The purpose of this ordinance is to regulate the division of land with the City and ETJ. This ensures a consistent quality of development throughout the area. The City's subdivision ordinance covers: reserve strips, construction of improvements, connection to sanitary sewers, use of septic tank and individual sewage treatment plants, water lines, utility lines, design of lines, setbacks, lot dimensions, corner lots, double and reverse frontage, side lot lines, access to streets, grades of streets, base of streets, street widths, surfacing of streets, intersections, radius of streets, continuity of streets, dead ends, street posts and markets, alleys, blocks, curb and gutter, sidewalks, drainage, ditches, storm sewers, utility connections, maintenance of dedicated areas, and replatting. The ordinance is very specific and has been a good tool for the City to use in the regulation of land subdivision.

A full copy of the subdivision ordinance can be found in Chapter 10 of the City's Code of Ordinances.

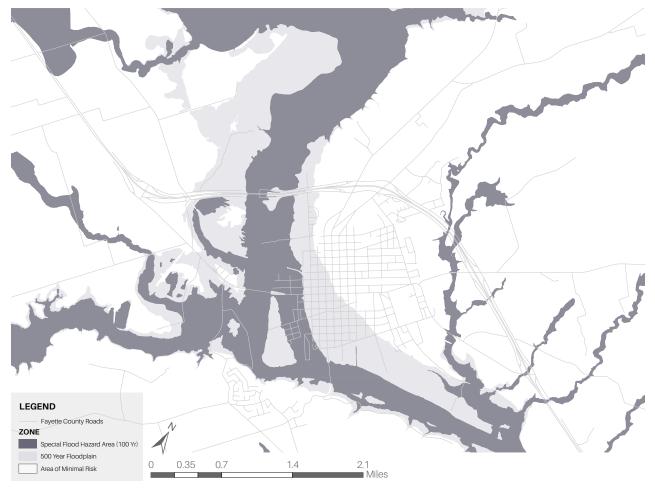
#### **SPECIAL FLOOD HAZARD AREA**

Land that is designated to part of the Special Flood Hazard Area (SFHA) by the Federal Emergency Management Agency (FEMA) is the area where there is purchase of flood insurance from the National Flood Insurance Program (NFIP) is required. La Grange has two areas that fall into this category, Zone A and Zone AE. These are 100 year floodplains, with the only difference being that a base flood elevation has been established for Zone AE. A parcel within the 100 year floodplain has a 1% chance of being inundated by a flood in any given year. Figure 3.3 shows the areas that are part of the SFHA in dark gray. These areas account for about 12 percent of the City's total land area.

FEMA also identifies areas that have 0.2% percent chance of being inundated by a flood in any given year, also known as the 500 year floodplain. These areas are not part of the SFHA and are not required to purchase flood insurance from the NFIP, but it is still important to identify this areas. 23 percent of the City has been identified by FEMA to be part of the 500 year floodplain and can be seen in light gray in Figure 3.3.

65 percent of the City has a minimal chance of flood hazard, according to FEMA.

#### **FIGURE 3.3 FLOODPLAIN MAP**



Federal Emergency Management Agency, 2014

#### HOW DOES LA GRANGE COMPARE: SMITHVILLE

Smithville is located east of La Grange, also off of State Highway 71 and along the Colorado River. The City has a population just under 4,000 and is expected to experience growth about twice as fast as La Grange, with its population more than doubling by 2040. Median monthly housing costs are almost \$200 higher, but the median housing value is very similar at \$107,000 compared to La Grange's \$104,000. Smithville has had a few homes built since 2010, and similar construction patterns in the decades before to La Grange. Smithville has a much higher owner occupied household vacancy rate at almost eight percent and about 18 percent for renter occupied households. 37 percent of households have at least one child under the age of 18, compared to 40 percent in La Grange. Only 14 percent of the population identifies as Hispanic, compared to 36 percent in La Grange.

#### **RESIDENTIAL LAND USE PATTERNS**

Data from Fayette County Appraisal District (FCAD) was used to evaluate current land use patterns. FCAD designates each parcel within the County one of 26 land use types. Only 17 of these types are currently found within the City:

• Non-Agriculture Land (0) Non-Homesite Land (0)

Homesite (1)

٠

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- Native Pastureland (7)
  - Wildlife Native Pasture (7)
- - Utility (8)
  - Commercial Vacant (9) •
- Multi-Family Apartment (3) Manufactured Homes (4)

Multi-Family Duplex (2)

- Commercial Improved (5)
- Industrial Improved (6)
- Cemetery (7)
- Improved Pasture (7)

These FCAD land use designations were group into nine simplified categories for analysis. The list above shows each land use within the City along with its group number. The simplified land use categories are as follows:

- Other (0)
- Single Family (1) •
- Multi-Family Duplex (2)
- Multi-Family Apartment (3) •
- Manufacture Homes (4)
- Commercial (5)
- Industrial (6) •
- Designated Open Space (7)
- Civic (8) •
- Vacant (9)

Residential of all four types make up about 34 percent of the City. Single family residential is the largest portion of this, composing 31.5 percent of the total land area and 92 percent of residential land area. The second highest residential use is manufactured homes at just under two percent of the total land area and 5.7 percent of the residential land area. Multi-family housing is very limited within the City. Multi-family duplexes are only 0.6 percent of the residential land area and multi-family apartments are slightly higher at 1.4 percent. There are about 70 acres are vacant residential land within the City.

The median parcel size of a Homesite (1) was 0.31 acres and the mean is 0.46 acres within the City.

- Church (8)

- Residential Vacant (9) •
- Vacant Lot (9) •

These patterns were also analyzed within the City's ETJ. Overall, patterns were very similar, as to be expected. When evaluating the City combined with the ETJ, more parcels are designated as homesite at 96 percent, with lower rates for multi-family duplex, multi-family apartment, and manufactured homes all about half of La Grange alone. There are about 150 acres are vacant residential land within the City and ETJ.

The median parcel size of a Homesite (1) was 0.33 acres and the mean is 0.92 acres for the City and ETJ combined.

| LU Code      | FCAD Land Use           | Acreage | Percent | LU Code L    | _and Use                | Acreage | Percent |
|--------------|-------------------------|---------|---------|--------------|-------------------------|---------|---------|
| 0 <b>N</b> o | on-Agriculture Land     | 36.64   | 1.70%   | 0 Other      |                         | 46.82   | 2.17%   |
| 0 No         | on-Homesite Land        | 10.18   | 27.79%  | 1 Single-Fa  | mily                    | 678.20  | 31.46%  |
| 1He          | omesite                 | 678.20  | 31.46%  | 2 Multi-Fan  | nily Duplex             | 4.81    | 0.22%   |
| 2 M          | lulti-Family Duplex     | 4.81    | 0.22%   | 3 Multi-Fan  | nily Apartment          | 9.91    | 0.46%   |
| 3 M          | lulti-Family Apartment  | 9.91    | 0.46%   | 4 Mobile H   | ome Park                | 41.77   | 1.94%   |
| 4 M          | lobile Home Park        | 41.77   | 1.94%   | 5 Commerc    | cial                    | 624.06  | 28.95%  |
| 5 <b>C</b> 0 | ommercial Improved      | 624.06  | 28.95%  | 6 Industrial |                         | 30.93   | 1.43%   |
| 61 <b>n</b>  | dustrial Improved       | 30.93   | 1.43%   | 7 Designate  | ed Open Space           | 493.97  | 22.92%  |
| 7Ce          | emetery                 | 25.27   | 1.17%   | 8Civic       |                         | 34.68   | 1.61%   |
| 7 Im         | nproved Pasture         | 80.19   | 3.72%   | 9 Vacant     |                         | 190.48  | 8.84%   |
| 7 Na         | ative Pastureland       | 346.44  | 16.07%  |              |                         |         |         |
| 7 W          | /ildlife Native Pasture | 42.07   | 1.95%   | Median H     | Median Homesite Acreage |         |         |
| 8CI          | hurch                   | 20.65   | 0.96%   | Mean Ho      | mesite Acreage          | 0.46    |         |
| 8Ut          | tility                  | 14.03   | 0.65%   |              |                         |         |         |
| 900          | ommercial Vacant        | 110.47  | 5.12%   |              |                         |         |         |
| 9 <b>R</b> e | esidential Vacant       | 69.93   | 3.24%   |              |                         |         |         |
| 9 Va         | acant Lot               | 10.07   | 0.47%   |              |                         |         |         |
| Тс           | otal                    | 2155.62 |         | Total Res    | idential                | 734.69  |         |

#### TABLE 3.1A LAND USE CALCULATIONS FOR LA GRANGE

Fayette County Appraisal District, 2015

| LU Code      | FCAD Land Use           | Acreage | Percent LU | Code Land Use            | Acreage | Percent |
|--------------|-------------------------|---------|------------|--------------------------|---------|---------|
| 0 <b>N</b>   | on-Agriculture Land     | 253.44  | 4.14%      | 0 Other                  | 268.33  | 4.38%   |
| 0 <b>N</b>   | on-Homesite Land        | 14.89   | 0.24%      | 1 Single-Family          | 1730.26 | 28.24%  |
| 1H           | omesite                 | 1730.26 | 28.24%     | 2 Multi-Family Duplex    | 4.81    | 0.08%   |
| 2 M          | ulti-Family Duplex      | 4.81    | 0.08%      | 3 Multi-Family Apartment | 10.41   | 0.17%   |
| 3 <b>M</b>   | ulti-Family Apartment   | 10.41   | 0.17%      | 4 Mobile Home Park       | 41.77   | 0.68%   |
| 4 M          | obile Home Park         | 41.77   | 0.68%      | 5 Commercial             | 729.94  | 11.91%  |
| 5 <b>C</b>   | ommercial Improved      | 729.94  | 11.91%     | 6 Industrial             | 30.93   | 0.50%   |
| 6In          | dustrial Improved       | 30.93   | 0.50%      | 7 Designated Open Space  | 2989.72 | 48.80%  |
| 7 <b>C</b> e | emetery                 | 25.27   | 0.41%      | 8Civic                   | 40.26   | 0.66%   |
| 7 Di         | ryland Cropland         | 236.89  | 3.87%      | 9 Vacant                 | 280.28  | 4.57%   |
| 7 Im         | nproved Pasture         | 691.01  | 11.28%     |                          |         |         |
| 7 N          | ative Pastureland       | 1933.59 | 31.56%     | Median Homesite Acreage  | 0.33    |         |
| 70           | rchards                 | 3.90    | 0.06%      | Mean Homesite Acreage    | 0.92    |         |
| 7W           | /ildlife Native Pasture | 99.06   | 1.62%      |                          |         |         |
| 8Cl          | hurch                   | 23.64   | 0.39%      |                          |         |         |
| 8U1          | tility                  | 16.62   | 0.27%      |                          |         |         |
| 9 <b>C</b>   | ommercial Vacant        | 115.28  | 1.88%      |                          |         |         |
| 9 <b>R</b> e | esidential Vacant       | 150.80  | 2.46%      |                          |         |         |
| 9 <b>V</b> a | acant Lot               | 14.20   | 0.23%      |                          |         |         |
| Тс           | otal                    | 6126.70 |            | Total Residential        | 1787.24 |         |

#### TABLE 3.1B LAND USE CALCULATIONS FOR LA GRANGE AND ETJ

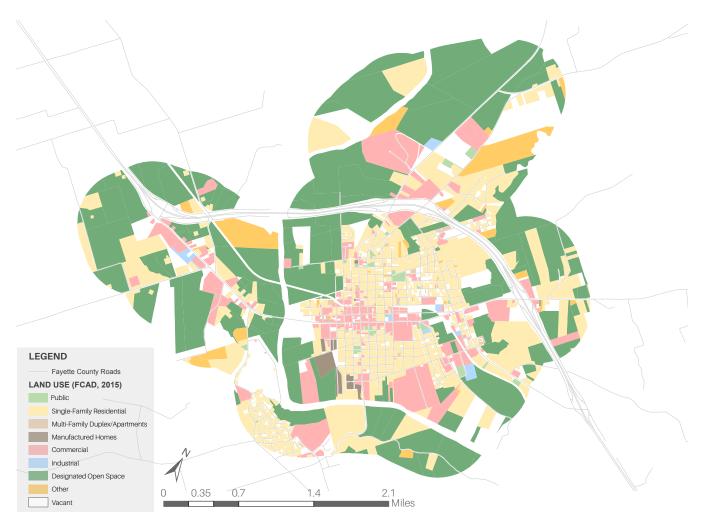
Fayette County Appraisal District, 2015

# HOW DOES LA GRANGE COMPARE: HALLETTSVILLE

The City of Hallettsville is the county seat of Lavaca County and on the Lavaca River. The City has a population just over 2,500 residents, about half of La Grange. The median monthly housing costs are very similar, only about \$20 less and the median housing value is about \$20,000 lower. The vacancy rate for owner occupied households is 0.8 percents (La Grange is at zero) and renter occupied is at 20.4 percent (La Grange is at 11.6). Hallettsville has had eight homes built since 2010, but only half as many built in the two preceding decades. The City is not expected to experience growth in the next few decades. About 34 percent of households have at least one child under the age of 18, compared to 40 percent in La Grange. Hallettsville has a much lower potion of the population which identifies as Hispanic at nine percent, compared to La Grange's 36 percent.

American Community Survey, 2013 Texas State Historical Association Texas Water Development Board, 2015

#### FIGURE 3.4 LAND USE MAP



Fayette County Appraisal District, 2015

### LAND CAPACITY ANALYSIS

To determine future land use needs, land supply and capacity calculations were done for the City and for the City combined with its ETJ. This was done two ways: determining how many new residents the current amount of vacant land can support and determine how many acres of land are need to meet the projected population increase.

#### Vacant Land Analysis

Nine scenarios were conducted as part of this analysis, three for the City, three for the City and its ETJ, and three for the City plus a one mile radius. The third set is included, because if the City decides to annex part or all of the ETJ, than the ETJ could be expanded to include these areas within a one mile radius of the City. Additionally, per State law, once the City's population is over 5,000 residents, its ETJ is allowed to be a one mile radius. Each set of scenarios included one based off of current residential land use patterns, one increased multi-family duplex, and one with increased multi-family apartments. The previous section identifies 70 acres as vacant and residential within the City and 150 acres for the City and the ETJ. There are 185 acres of vacant residential within the City and a one mile radius.

Each of the three sets of sets follow the same general process, with just the percent of acreage falling into each of the residential land use categories changing. Vacant residential land was split into each of the four types of residential land uses based off of these current land use patterns. Tables 3.2A, B, and C show the breakdown of the vacant residential land into the four categories. Once the amount of acreage available is determined, a portion is removed from analysis for streets. 80 percent of the remaining acreage is then evaluated to see how many future housing units and residents it can hold. This is done by splitting the acreage into the maximum number of housing units, based upon the criteria defined in the zoning ordinance. Once the number of housing units is determined, this number is multiplied by the average household size to estimate how many residents can be accommodated.

Scenario I for each of the three areas was based off of current land use patterns. An estimated 734 and 278 housing units can be accommodated within the currently vacant residential land within the City. About 11% of these housing units are within the special flood hazard area. The estimated population increase for 2035 (see Section I) is 1,722 residents, well

above what the City's currently vacant residential land can accommodate if it follows current land use patterns. Results for the ETJ and the area within one mile radius can be seen in Tables 3.2B and C.

Scenario II for each of the three areas evaluated the effects of increased multi-family duplex acreage. By increasing the amount of acres of this land use, the City can increase its density, without adding large multi-family housing developments. Multi-family duplexes have the benefit of looking very similar to single family housing units and fitting seamlessly into the residential fabric. For this scenario, acreage is split as follows: single family apartment, 2 percent; multi-family duplex, 13 percent. This scenario can accommodate an estimated 838 new residents and 317 housing units.

Scenario III for each of the three areas evaluated the effects of increased multi-family apartments. Similar to increasing multi-family duplex acreage, an increase in this type can increase density. An advantage of apartments over duplexes is that one development can serve more residents. For this scenario, acreage is split as follows: single family residential, 80 percent; multi-family duplex, 2 percent; multi-family apartment, 13 percent; and, manufactured home, 5 percent. This scenario can accommodate an estimated 1,084 new residents and 411 housing units.

|              | Category               | Percent of Land Supply | Acreage | Housing Units | Residents | in Floodplain |
|--------------|------------------------|------------------------|---------|---------------|-----------|---------------|
| Scenario I   | Single Family          | 92.3%                  | 64.5    | 241           | 636       | 10.5%         |
|              | Multi-Family Duplex    | 0.7%                   | 0.5     | 3             | 9         | 0.1%          |
|              | Multi-Family Apartment | 1.3%                   | 0.9     | 19            | 49        | 0.1%          |
|              | Manufactured Home      | 5.7%                   | 4.0     | 15            | 39        | 0.7%          |
|              | Total                  |                        | 69.9    | 278           | 733       | 11.4%         |
| Scenario II  | Single Family          | 80.0%                  | 55.9    | 209           | 551       | 9.1%          |
|              | Multi-Family Duplex    | 13.0%                  | 9.1     | 68            | 179       | 1.5%          |
|              | Multi-Family Apartment | 2.0%                   | 1.4     | 27            | 72        | 0.2%          |
|              | Manufactured Home      | 5.0%                   | 3.5     | 13            | 34        | 0.6%          |
|              | Total                  |                        | 69.9    | 317           | 838       | 11.4%         |
| Scenario III | Single Family          | 80.0%                  | 55.9    | 209           | 551       | 9.1%          |
|              | Multi-Family Duplex    | 2.0%                   | 1.4     | 10            | 28        | 0.2%          |
|              | Multi-Family Apartment | 13.0%                  | 9.1     | 178           | 470       | 1.5%          |
|              | Manufactured Home      | 5.0%                   | 3.5     | 13            | 34        | 0.6%          |
|              | Total                  |                        | 69.9    | 411           | 1,084     | 11.4%         |

#### TABLE 3.2A LA GRANGE VACANT LAND ANALYSIS

|              | Category               | Percent of Land Supply | Acreage | Housing Units | Residents | in Floodplain |
|--------------|------------------------|------------------------|---------|---------------|-----------|---------------|
| Scenario I   | Single Family          | 96.8%                  | 146.0   | 545           | 1,330     | 22.8%         |
|              | Multi-Family Duplex    | 0.3%                   | 0.4     | 3             | 7         | 0.1%          |
|              | Multi-Family Apartment | 0.6%                   | 0.9     | 17            | 42        | 0.1%          |
|              | Manufactured Home      | 2.3%                   | 3.5     | 13            | 32        | 0.6%          |
|              | Total                  |                        | 150.8   | 578           | 1,411     | 23.5%         |
| Scenario II  | Single Family          | 80.0%                  | 120.6   | 450           | 1,099     | 18.8%         |
|              | Multi-Family Duplex    | 13.0%                  | 19.6    | 146           | 357       | 3.1%          |
|              | Multi-Family Apartment | 2.0%                   | 3.0     | 59            | 144       | 0.5%          |
|              | Manufactured Home      | 5.0%                   | 7.5     | 28            | 69        | 1.2%          |
|              | Total                  |                        | 150.8   | 684           | 1,669     | 23.5%         |
| Scenario III | Single Family          | 80.0%                  | 120.6   | 450           | 1,099     | 18.8%         |
|              | Multi-Family Duplex    | 2.0%                   | 3.0     | 23            | 55        | 0.5%          |
|              | Multi-Family Apartment | 13.0%                  | 19.6    | 384           | 938       | 3.1%          |
|              | Manufactured Home      | 5.0%                   | 7.5     | 28            | 69        | 1.2%          |
|              | Total                  |                        | 150.8   | 885           | 2,160     | 23.5%         |

### TABLE 3.2B LA GRANGE AND ETJ VACANT LAND ANALYSIS

#### TABLE 3.2C LA GRANGE AND ONE MILE RADIUS VACANT LAND ANALYSIS

|              | Category               | Percent of Land Supply | Acreage | Housing Units | Residents | in Floodplain |
|--------------|------------------------|------------------------|---------|---------------|-----------|---------------|
| Scenario I   | Single Family          | 98.1%                  | 181.0   | 676           | 1,642     | 25.2%         |
|              | Multi-Family Duplex    | 0.2%                   | 0.3     | 2             | 5         | 0.0%          |
|              | Multi-Family Apartment | 0.3%                   | 0.6     | 11            | 27        | 0.1%          |
|              | Manufactured Home      | 1.5%                   | 2.7     | 10            | 24        | 0.4%          |
|              | Total                  |                        | 184.6   | 699           | 1,699     | 25.7%         |
| Scenario II  | Single Family          | 80.0%                  | 147.6   | 551           | 1,340     | 25.2%         |
|              | Multi-Family Duplex    | 13.0%                  | 24.0    | 179           | 435       | 0.0%          |
|              | Multi-Family Apartment | 2.0%                   | 3.7     | 72            | 176       | 0.1%          |
|              | Manufactured Home      | 5.0%                   | 9.2     | 34            | 84        | 0.4%          |
|              | Total                  |                        | 184.6   | 837           | 2,034     | 25.7%         |
| Scenario III | Single Family          | 80.0%                  | 147.6   | 551           | 1,340     | 25.2%         |
|              | Multi-Family Duplex    | 2.0%                   | 3.7     | 28            | 67        | 0.0%          |
|              | Multi-Family Apartment | 13.0%                  | 24.0    | 470           | 1,143     | 0.1%          |
|              | Manufactured Home      | 5.0%                   | 9.2     | 34            | 84        | 0.4%          |
|              | Total                  |                        | 184.6   | 1,084         | 2,633     | 25.7%         |

Fayette County Appraisal District, 2015

#### **Projected Population Analysis**

Similar to the first analysis, nine more sceneries were evaluated. Rather than begin with the amount of vacant land, this time the analysis began with the projected population increase to determine how much land would be needed to accommodate the growth. A reverse procedure was used.

Each of the three sets of sets follow the same general process, with just the percent of acreage falling into each of the residential land use categories changing (this is the same as for the first analysis). The projected increase in population was split into the four residential categories based upon current residential land use patterns. Next, the increased population for each category is divided by the average household size, to determine the number of increased housing units needed. Once this is determined, it is multiplied by minimum lot size requirements, as determined by the zoning ordinance, to determine the minimum amount of land that can be used to meet the future population. The result is acres needed for each of the four residential land use categories, as well as for residential overall.

Scenarios I, II, and III are the same as for the first analysis, they just go in reverse, as just described. See the previous section for a description of each scenario.

Scenario I is based off of current growth patterns. To accommodate the City's growth of an expected 1,722 residents by 2035, the City needs about 104 acres of land, 97 acres for single family residential alone.

Scenario II is evaluating increased multi-family duplexes. To accommodate the City's growth, the City needs about 96 acres of land, with about seven percent for multi-family duplexes.

Scenario III is evaluating increased multi-family duplexes. To accommodate the City's growth, the City needs about 93 acres of land, with about two and a half acres for multi-family apartments.

|              | Category               | Percent of Growth | Acreage | Housing Units | Residents |
|--------------|------------------------|-------------------|---------|---------------|-----------|
| Scenario I   | Single Family          | 92.3%             | 96.7    | 602           | 1,589     |
|              | Multi-Family Duplex    | 0.7%              | 0.3     | 4             | 11        |
|              | Multi-Family Apartment | 1.3%              | 0.3     | 9             | 23        |
|              | Manufactured Home      | 5.7%              | 6.0     | 37            | 98        |
|              | Total                  |                   | 103.3   | 652           | 1,722     |
| Scenario II  | Single Family          | 80.0%             | 83.9    | 522           | 1,378     |
|              | Multi-Family Duplex    | 13.0%             | 6.8     | 85            | 224       |
|              | Multi-Family Apartment | 2.0%              | 0.4     | 13            | 34        |
|              | Manufactured Home      | 5.0%              | 5.2     | 33            | 86        |
|              | Total                  |                   | 96.3    | 652           | 1,722     |
| Scenario III | Single Family          | 80.0%             | 83.9    | 522           | 1,378     |
|              | Multi-Family Duplex    | 2.0%              | 1.0     | 13            | 34        |
|              | Multi-Family Apartment | 13.0%             | 2.6     | 85            | 224       |
|              | Manufactured Home      | 5.0%              | 5.2     | 33            | 86        |
|              | Total                  |                   | 92.7    | 652           | 1,722     |

### TABLE 3.3A LA GRANGE PROJECTED POPULATION ANALYSIS

#### TABLE 3.3B LA GRANGE AND ETJ PROJECTED POPULATION ANALYSIS

|              | Category               | Percent of Growth | Acreage | Housing Units | Residents |
|--------------|------------------------|-------------------|---------|---------------|-----------|
| Scenario I   | Single Family          | 96.8%             | 105.6   | 657           | 1,603     |
|              | Multi-Family Duplex    | 0.3%              | 0.1     | 2             | 4         |
|              | Multi-Family Apartment | 0.6%              | 0.1     | 4             | 10        |
|              | Manufactured Home      | 2.3%              | 2.6     | 16            | 39        |
|              | Total                  |                   | 108.4   | 679           | 1,656     |
| Scenario II  | Single Family          | 80.0%             | 87.3    | 543           | 1,325     |
|              | Multi-Family Duplex    | 13.0%             | 7.1     | 88            | 215       |
|              | Multi-Family Apartment | 2.0%              | 0.4     | 14            | 33        |
|              | Manufactured Home      | 5.0%              | 5.5     | 34            | 83        |
|              | Total                  |                   | 100.2   | 679           | 1,656     |
| Scenario III | Single Family          | 80.0%             | 87.3    | 543           | 1,325     |
|              | Multi-Family Duplex    | 2.0%              | 1.1     | 14            | 33        |
|              | Multi-Family Apartment | 13.0%             | 2.7     | 88            | 215       |
|              | Manufactured Home      | 5.0%              | 5.5     | 34            | 83        |
|              | Total                  |                   | 96.5    | 679           | 1,656     |

|              | Category               | Percent of Growth | Acreage | Housing Units | Residents |
|--------------|------------------------|-------------------|---------|---------------|-----------|
| Scenario I   | Single Family          | 98.1%             | 215.7   | 1,342         | 3,262     |
|              | Multi-Family Duplex    | 0.2%              | 0.2     | 2             | 5         |
|              | Multi-Family Apartment | 0.3%              | 0.1     | 4             | 10        |
|              | Manufactured Home      | 1.5%              | 3.2     | 20            | 49        |
|              | Total                  |                   | 219.2   | 1,369         | 3,326     |
| Scenario II  | Single Family          | 80.0%             | 176.0   | 1,095         | 2,661     |
|              | Multi-Family Duplex    | 13.0%             | 14.3    | 178           | 432       |
|              | Multi-Family Apartment | 2.0%              | 0.8     | 27            | 67        |
|              | Manufactured Home      | 5.0%              | 11.0    | 68            | 166       |
|              | Total                  |                   | 202.1   | 1,369         | 3,326     |
| Scenario III | Single Family          | 80.0%             | 176.0   | 1,095         | 2,661     |
|              | Multi-Family Duplex    | 2.0%              | 2.2     | 27            | 67        |
|              | Multi-Family Apartment | 13.0%             | 5.4     | 178           | 432       |
|              | Manufactured Home      | 5.0%              | 11.0    | 68            | 166       |
|              | Total                  |                   | 194.6   | 1,369         | 3,326     |

Fayette County Appraisal District, 2015



The following section combines all of the information presented in this report thus far to make recommendations for the City's future residential needs. These recommendations are based upon planning best practices and should be assessed by the City to determine which best meet the needs of the community.

# **FUTURE HOUSING NEEDS**

Based off of the Land Capacity Analysis, it is clear the City is in need of more housing to meet its population growth. It is also clear that land within the City and ETJ alone may not be enough to meet this needs, unless residential land use patterns change. The City can meet housing needs through increased overall density, smaller lot sizes for single family residential, increased multi-family duplexes, and increased multi-family apartments.

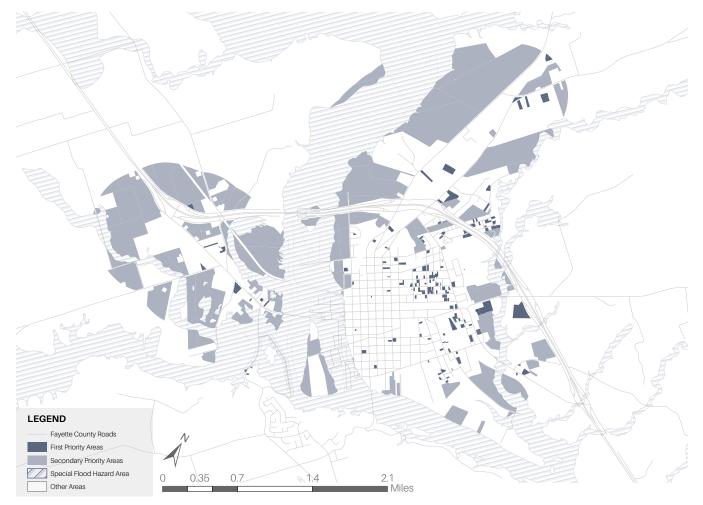


FIGURE 4.1 AREAS FOR FUTURE RESIDENTIAL DEVELOPMENT

Federal Emergency Management Agency, 2014 and Fayette County Appraisal District, 2015

Growth for the City is limited to the south by the Colorado River and to the east by Highway 71. Future growth is already expected to the infrastructure system along Highway 71 going west. New residential growth should follow this trend, first filling in gaps before expanding outwards.

Figure 4.1 highlights areas for future residential development. Darker areas are identified as vacant by the Fayette County Appraisal District. Lighter areas were also selected based off of the parcel's current land use; parcels lacking current development were selected because they are suitable for new housing and large parcels are ideal for subdivisions. This map is a guide for the City and developers, so it is important for the City to identify where they feel residential development is most appropriate.

#### RECOMMENDATIONS

The following section recognizes major housing trends identified in the report and offers suggestions based upon best planning practices. These recommendations vary from programs and policies to simple changes in existing processes and systems. Many recommendations are made, but it is important for the City to identify the ones that it feels are the best fit for the community moving forward. All recommendations are from a toolbox of housing polices developed by the Center for Housing Policy (2015).

#### Older, Well Maintained Housing Stock

*Property Improvements Programs.* Offers financial assistance to low- and middle-income households for upkeep and improvements to their home.

*Housing Preservation Program.* Offers a reduction in property taxes via a property tax abatement to property owners willing to reinvest in their property. Can be directed at entire community or reserved for low- to middle-income households, using an income eligibility limit.

Homeowner Rehabilitation Program. This type of program provides grants for low-cost loans to low- and middle-income homeowners for physical improvements to their home, encouraging that homes meet the health and safety needs of its residents. Stipulations can be set on what types of improvements get priority (immediate threat of health and safety first) and federal funding assistance for the program may be available through the Community Block Grant Program and HOME Investment Partnership Program (HOME).

Weatherization Improvement Program. Offers grants or low interest loans to homeowners to make improvements to their home which improve its energy efficiency. Many hazard mitigation techniques can also be used to reduce energy costs, serving a dual purpose. Such measures could include installing or improving installation, sealing gaps around windows and adding weather stripping to doorways, and updating older windows. This program also encourages housing affordability through the reduction of utility costs.

*Rehab Code.* Special building code designed to streamline the rehabilitation of properties by ensuring that modern building codes are enforced, while tailoring the level of compliance to the extent and type of project. This helps reduce rehabilitation costs that often come when a project is required to fully update the project to meet current building standards and elevates the appeal of these projects.

#### Lack of New Construction

*Community Benefits Agreements.* An agreement between developers and the local community on a project-by-project basis. These types of agreements help new developments gain approval in the community by having the developer agree to make specific contributions to the community, such hiring local workers or building public amenities.

*Evaluate and Update Zoning Ordinance.* To match the future needs of the City, it is important to make sure the zoning ordinances is still representative of current and future priorities. It is also important that the zoning ordinance does not discourage any zones through complex stipulations or restrictions.

Addition of Planned Unit Development (PUD) Zone. Future annexation of the current ETJ will add many large properties which have the potential to be developed by a single developer. The additional of a PUD zone to the zoning ordinance will encourage this type of cohesive and large-scale development. *Expedited Permitting.* The process of expediting the permitting and review processes to encourage efficiency. This allows new development to occur in a timely manner. Certain types of projects can be selected for expedited permitting, based upon the City's priorities.

*Tax Abatement Program*. The reduction or elimination of property taxes for a specified period of time. This type of program can be used to incentive many types of projects, such as development of rental properties, development of homes in a particular special zone, or to spur new development. The reduction or elimination can also be conducted in a number of ways, including freezing property value for a number of years, reducing the assessed property value by a percent, or reducing the rate at which property tax is assessed.

#### Moderate Flood Risk

*Community Rating System.* Program offered by the Federal Emergency Management Agency that offers a reduction in the costs of flood insurance through the National Flood Insurance Program to communities which encourage flood risk reduction and education.

*Restrict New Development in Special Flood Hazard Area* (SFHA). Limit new development in the SFHA (or 100 year floodplain) to encourage sustainable growth and limit the community's risk from flooding.

## High Demand for Home Ownership

*Shared Equity Programs.* This type of program offers assistance for the purchase of a home. The program shares in any equity gained by the homeowner, so that the homeowner and program can both benefit.

*Community Land Trust.* Type of shared equity program that ensures the long-term affordability of a property. The trust owns the land, but the structure is sold at an affordable cost to a qualifying home-buyer, along with a lease to the land. The homeowner can sell the physical structure, but the property much remain affordable.

*Limited Equity Cooperative.* Homeownership arrangement where homeowners buy one share in the cooperative and in return receive the right to occupy one unit and a share in decision making for the development. Share prices are set to keep membership affordable (see Marksdale Gardens in Boston).

*Shared Appreciation Loan*. Housing ownership assistance program which offers loans without interest. In lieu, the homeowner pays a percentage of the home price appreciation, often at time of resale.

*Silent Second Mortgage*. A secondary home loan offered by a shared equity program to supplement a household's primary mortgage. This type of loan does not have to be repaid until resale and funds can be recycled to the next homeowner. Upon repayment, homeowner must also pay a percentage of the home price appreciation.

#### Population Growth to Exceed Land Resources

Annexation of ETJ and Expansion of ETJ. Limited vacant land within the City and a growing population calls for an expansion of the City boundaries through the annexation of the City's current extra territorial jurisdiction (ETJ). Additionally, under Texas State Law (Tex. Loc. Gov.'t Code Ann. §42.021), once the City's population meets 5,000 residents, the City can extends it ETJ to a one mile radius surrounding the City.

*Land Bank Program.* Government or quasi-government entity which serves to convert vacant, abandoned, and tax-delinquent property to productive use. Land Bank programs can spend up the process of acquiring this land and repurposing it, as it is enabled be Texas State Law (Tex. Loc. Gov.'t Code Ann. §379D.004). Properties acquired through the program can then be repurposed into housing, commercial, or other local land use priorities.

## Other Programs and Tools for Consideration

*Affordability Covenant*. A legally binding clause added to the deed of the property to ensure long-term affordability through the setting of terms and conditions for its use. The affordability covenant may set restrictions about whom may rent the property or what price it may be rented at, as well as sold to and the sale cost. (Similar to Deed Restrictions, but can only be used to control property affordability, whereas Deed Restrictions have many other uses).

*Clear Title (or Marketable Title) Program.* Facilitates the marketing and selling of property by clearing the title of any old liens or claims the previous owners have to the land.

*Deed Restrictions*. Restrictions or limitations on the use of a property as noted in the property's deed. These restrictions can be used to maintain the affordability of a property built or renovated with public funds.

*Foreclosure Prevention Program.* Offers counseling and financial assistance to homeowners who are struggling to avoid foreclosure and help the homeowners retain their home.

*Housing Trust Fund*. Funds available for the production, preservation, and rehabilitation of affordable housing. These funds come without federal restrictions and can be tailored to meet local needs. This type of program can be funded through a linkage fee, real estate transfer tax, or other related program.

*Linkage Fee.* Ensures that housing needs generated by economic development is met by requiring developers of non-residential projects to pay a fee based upon project type and square footage.

*Real Estate Transfer Tax.* A tax charged based upon the assessed value of real property when ownership of the property is transferred between parties.

*Reverter Clause*. A provision set in land sale agreements that says if the land is not used as agreed upon in the agreement, it will revert back to public use.

# APPENDIX A Real Estate Panel Discussion

February 11, 2015

Answers are summarized based off of notes and an audio recording of the meeting.

# Can you give an overview of residential conditions and trends that you have noticed in La Grange?

There is a short supply of housing, but there is a great demand. Prices are high. Dated homes are selling for up to \$100 per square foot. The area is in need of more subdivisions. We do receive inquires about rentals, but they are not the focus. Rentals are full and overpriced. Some people just cannot get a mortgage, because they are unqualified.

We are at 15 year lows in terms of number of listings and our housing inventory. People go to places like Katy and Bastrop to get better and cheaper housing (\$120,000 verse \$175,000 in La Grange) and quality can be a turnoff for some buyers here.

Have you noticed a change in the demographics in the City's population, such as an increase in young families or a growing elderly population?

New population estimates for the County are higher, up to 26-27,000 residents. We are seeing an increase in both full time and weekend residents. We are also seeing an increase in both ends of the age spectrum, people with kids and retirees. There are also people in their 40s and 50s buying vacation property, with the intention of retiring here later. Because of this, we see the potential for garden home type of housing with low maintenance minimal landscaping.

There is a lack of vacant lots within the City and most lots have existing structures and, or legal issues. Cost of construction is hindering to development, because it raises the price and forces buyers out.

Single family homes under \$200,000 area lacking in supply, as is a nice apartment complex. Management for a new apartment complex is key, though, because we have had bad management issues in the past. We have had success with duplexes. Are certain demographics associated with certain housing types, such as multifamily housing, single family housing, and/or duplexes?

(Question omitted due to similarity of previous answers.)

# Are there certain areas in La Grange where you see higher levels of residential turnover?

"The Bluff" [just outside southern city limits] is a heavily deed restricted area, but also most successful. It is a more mature area, with a higher quality of construction. New subdivisions tend to be lacking trees.

There is a demand for subdivisions with larger tracts of two to five acres, but also just new deed restricted subdivisions in general. Starter homes for first time home buyers are also need, possibility with help for financing.

In general, people want to live anywhere. Within walking distance of the downtown square is prime, or anywhere within the bypass, but the area in general is in high demand.

In your opinion, does the current stock meet the needs of the City? If no, what types of housing stock are in need and for what types of people?

No, and developers are interested, but when they come they do not receive any assistance from the City. The City or the Economic Development Corporation do not offer any assistance or deals to them and they are turned off. Developers have become spoiled by big cities, where these incentives can easily be offered.

There is a need for transitional elderly housing.

#### In your opinion, what is the primary housing concern for the city?

(Question omitted due to similarity of previous answers.)

Are oilfield workers changing the dynamics of the housing market? If yes, in what way?

The rental market is saturated. Oil money comes here mostly to buy large tracts of land and retire, but we are seeing royalty recipients looking to invest in real estate.

There are not that many oil field workers, that is primarily south of the City, but an increase in housing for land men could mean more profits for the City. The rental market has been tight since at least 1991.

Most people are looking for more land for lots for manufactured home. The County has restrictions on minimum lot sizes and financing can be difficult, but they fill a need. They are not looked on favorably in the City, due to stigma, but locals keep up their property.

#### What concerns or issues have risen since shale fracking has begun?

Water. Fracking uses a lot of water. There have been some flooding issues with the Colorado River, but most homes do not really have any issues. The ones that due tend to be mobile homes and can be moved. We had major floods in 1998, 2001, and 2008.

# **APPENDIX B** Housing Quality Study

To assess the quality of housing in the City of La Grange, 200 residential properties were randomly selected. This was done by using 2015 parcel data from Fayette County Appraisal Distrait. All parcels which were identified as homesites were eligible for selection. Then, using Microsoft Excel, a random selection of 200 was made. These parcels were then visited in the field and giving a rating of one through five, based upon the criteria below. Two visits were made to the City to complete this study: January 23 and 28, 2015.

20 parcels were excluded from the study due to the following reasons: no buildings on property, non-residential property, and, or unaccessible from the street.

#### **Rating Crieteia**

1 Abandoned: Property appears to be a public health hazard and is not suitable for inhabitation

2 Severely Dilapidated: Property appears to be in need of major structural or building improvements

3 Minor to Moderate Structural Improvements: Property is in need of slight structural or building improvements

4 Maintained: Property has no obvious structural or building issues, but minor cosmetic issues may be present

5 Well Maintained: Property has no obvious structural or building issues and appears overall well-kept

#### **APPENDIX C** References

All of the census data found in the report were collected from the United Census website. Data was collected for La Grange city, Burnet city, Hallettsville city, Llano city, and Smithville city, Fayette County, and the State of Texas. The American Community Survey five year estimates from 2013 were utilized. Full data source information follows.

U.S. Census Bureau. (2009-2013) La Grange city, Texas, B25001 Housing units [Data]. 2013 American Community Survey 5-Year Estimates. Re-trieved from http://factfinder2.census.gov

U.S. Census Bureau. (2009-2013) La Grange city, Texas, B25010 Average household size of occupied housing units by tenure [Data]. 2013 American Community Survey 5-Year Estimates. Retrieved from http://factfind-er2.census.gov

U.S. Census Bureau. (2009-2013) La Grange city, Texas, B25105 Median Monthly Housing Costs (Dollars) [Data]. 2013 American Community Survey 5-Year Estimates. Retrieved from http://factfinder2.census.gov

U.S. Census Bureau. (2009-2013) La Grange city, Texas, DP02 Selected social characteristics in the United States [Data]. 2013 American Community Survey 5-Year Estimates. Retrieved from http://factfinder2.census.gov

U.S. Census Bureau. (2009-2013) La Grange city, Texas, DP04 Selected housing characteristics [Data]. 2013 American Community Survey 5-Year Estimates. Retrieved from http://factfinder2.census.gov

U.S. Census Bureau. (2009-2013) La Grange city, Texas, DP05 ACS demographic and housing estimates [Data]. 2013 American Community Survey 5-Year Estimates. Retrieved from http://factfinder2.census.gov

\*Each source was only listed once, for data collected for La Grange city, Texas, but each source was used multiple times for each of the census designated place listed above.

#### **Other Resources**

Affordable Housing Online. (2015). La Grange Housing Authority. Retrieved from http://affordablehousingonline.com/housing-authority/Texas/La-Grange-Housing-Authority/TX381/

Center for Housing Policy. (2015). Housing Policy Toolbox. Retrieved

from http://www.housingpolicy.org/toolbox/index.html

Fayette County Appraisal District. (2015). Fayette County property information [Data].

Federal Emergency Management Agency. (2014). Flood risk database [Data]. Retrieved from http://msc.fema.gov/portal/search?AddressQue-ry=la%20grange%2C%20tx

Ferguson, T. (2010, June 15). Handbook of Texas Online: Burnet, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/hgb13

Heckert-Greene, J. (2010, June 15). Handbook of Texas Online: Llano, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/ hgl09

Leffler, J. (2010, June 15). Handbook of Texas Online: La Grange, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/hgl02

Marks, P. M. (2010, June 15). Handbook of Texas Online: Smithville, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/ hgs09

Odintz, M. (2010, June 15). Handbook of Texas Online: Schulenburg, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/ hjs11

Ramsey, M. (2010, June 15). Handbook of Texas Online: Hallettsville, TX. Retrieved from http://www.tshaonline.org/handbook/online/articles/ hgh01 Ramsey, M. (2010, June 15). Handbook of Texas Online: Hallettsville, TX. Retrieved from http://www.tshaonline.org/handbook/online/ articles/hgh01

Texas State Water Development Board. (2016) Population Projections. Retrieved from http://www.twdb.texas.gov/waterplanning/data/projections/2017/popproj.asp



