

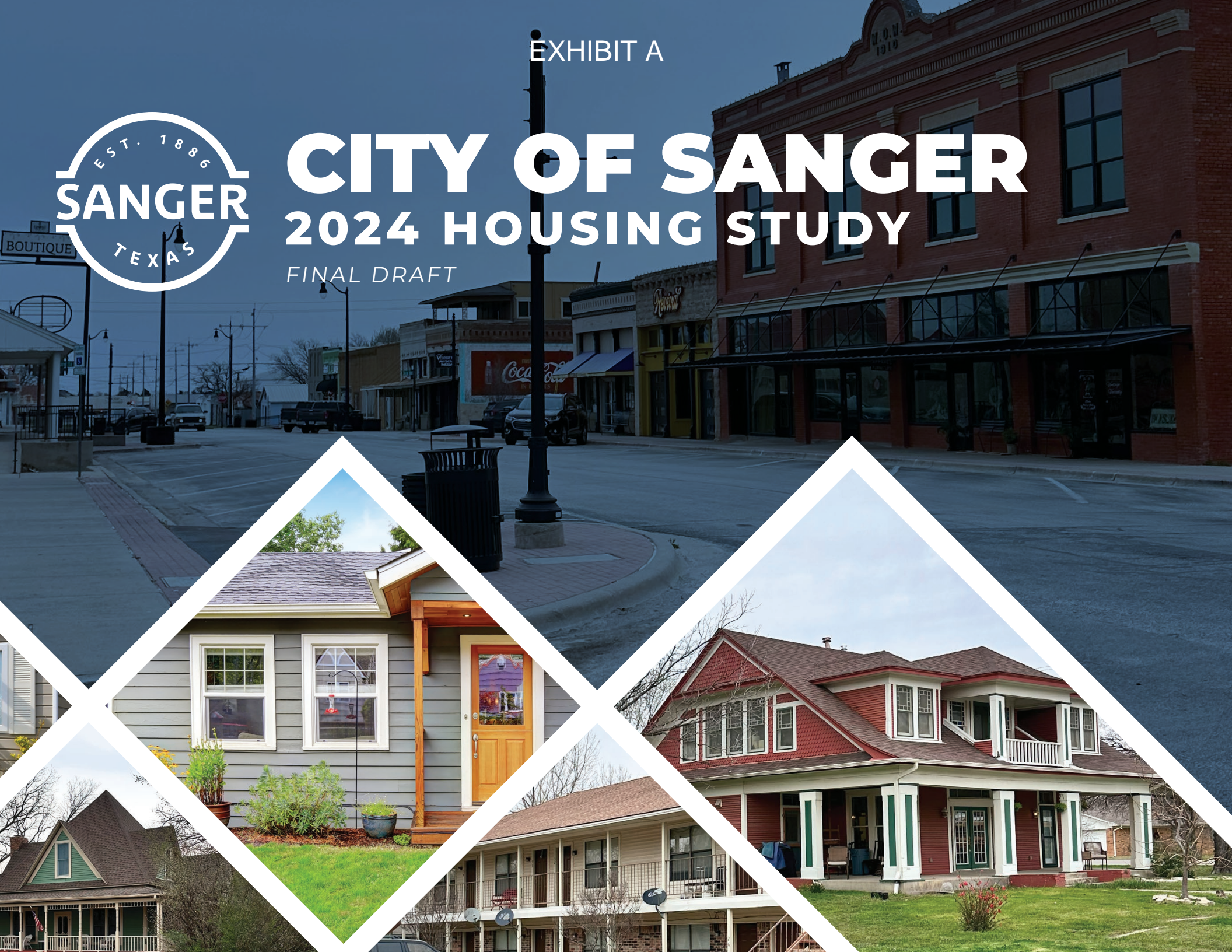
EXHIBIT A



CITY OF SANGER

2024 HOUSING STUDY

FINAL DRAFT





2024 SANGER HOUSING STUDY

PREPARED FOR:

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MAY 2024

FINAL DRAFT

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CITY OF SANGER

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- » Thomas Muir, *Mayor*
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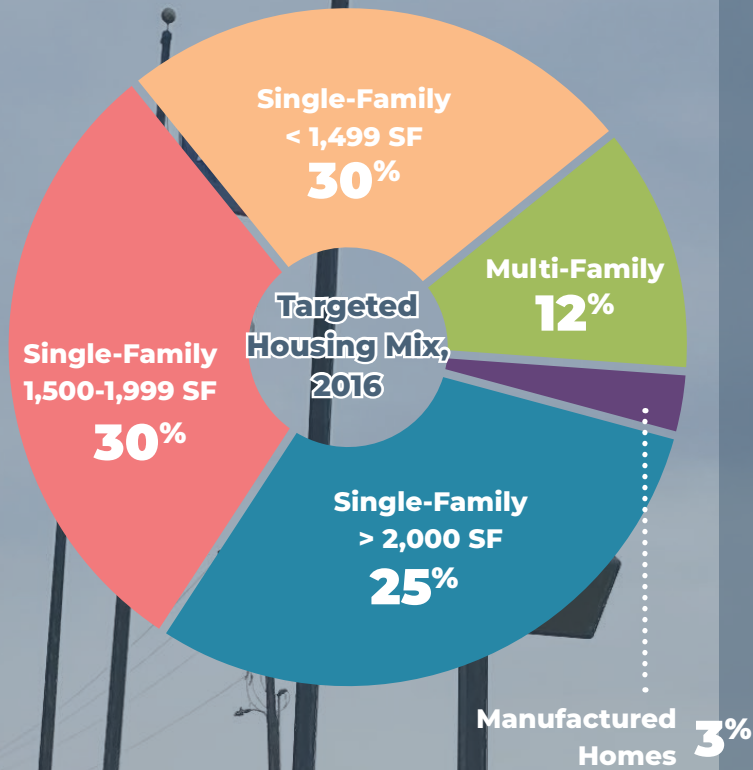
Antero Group is a holistic urban planning, civil engineering, and strategic consulting firm with offices in Chicago, South Bend, Denver, and Dallas-Fort Worth. We leverage interdisciplinary teams, creative thinking, and collaborative processes to design innovative and effective solutions. Our team believes that authentic, long-term partnerships are the best way to deliver projects that create lasting value.



EXECUTIVE SUMMARY

The City of Sanger (“Sanger”) is expected to experience significant population growth in the coming years, continuing a trend that has been evident over the past several decades. As this growth occurs, it is increasingly important to determine the capacity of Sanger’s housing inventory to accommodate the needs of a changing population.

The central aim of this study is to provide an understanding of the current and future housing landscape in Sanger, while taking into consideration the vision for growth set forth by both the 2016 housing ordinance policy and the Sanger 2040 Comprehensive Plan. Sanger’s 2016 housing ordinance policy outlined a target composition of housing categories, including single-family under 1,499 square feet, single-family between 1,500 and 1,999 square feet, single-family above 2,000 square feet, multi-family, and manufactured homes.



This current study aims to assess Sanger’s alignment with the City’s 2016 target mix and to determine if this target requires adjustments to accommodate the needs brought about by future growth.

A major component of this study is the analysis of current population and demographic characteristics that are relevant to characterizing the housing needs of Sanger’s population and predicting how those needs will shift in the coming years. The analysis of demographic characteristics considers both current conditions and observed trends to establish the trajectory of Sanger’s population. In 2022, it was estimated that the City of Sanger’s population was approximately 9,041. The city’s population grew 30.57% between 2012 and 2022.

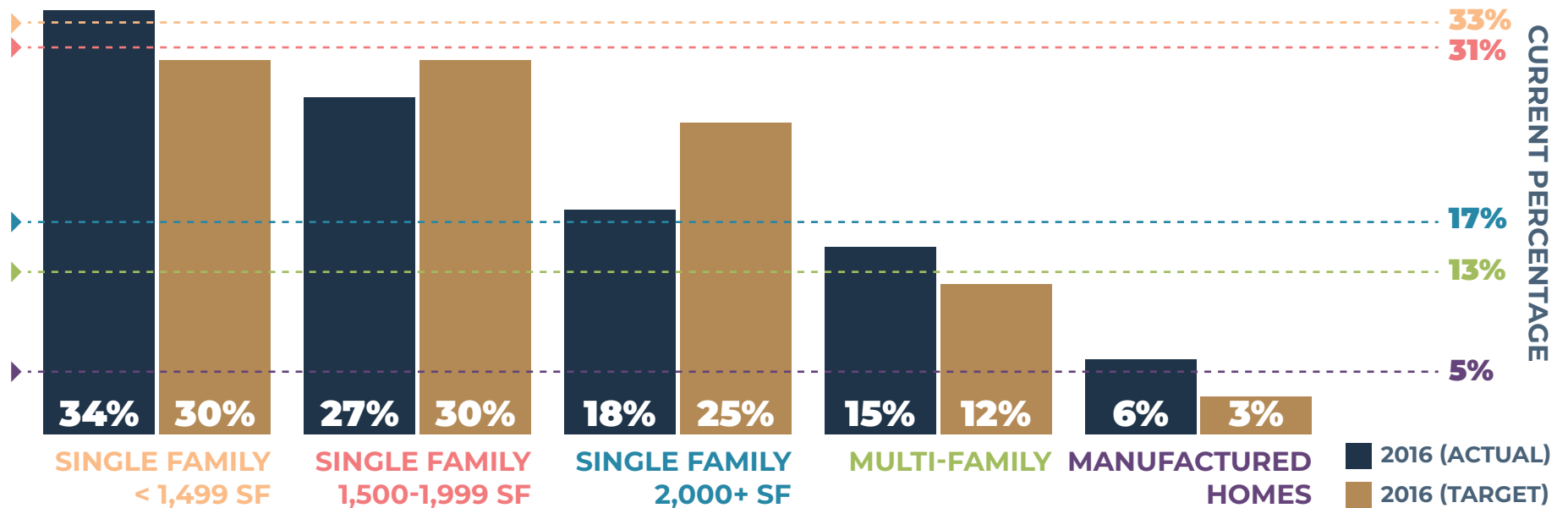
Sanger is a family-oriented city where approximately 53% of the population is married. Approximately 27% of those couples have children under the age of 18. Single adults living alone account for 26% of households in Sanger. 18% of residents are aged between 25 and 34. Sanger has a median household income of \$86,083, 15.4% higher than the national average. Most Sanger residents commute out of the city for work to many different cities within and around the Dallas-Fort Worth area, indicating an interconnection with broader regional economies.

Because of the interconnection indicated by commuting data, this study also considers the current and potential impact of both local and regional economic trends on Sanger’s housing market. According to the Bureau of Economic Analysis,

the Gross Domestic Product in Denton County has increased by 67.20% between the years 2017 and 2022. The GDP of the Dallas-Fort Worth metropolitan area has also increased by 42.41% over the same time period. In Sanger, eleven new retail establishments are opening or have recently opened and approximately 5,748,000 square feet of industrial space is currently being developed.

The economic growth observed within Sanger and the broader Dallas-Fort Worth region will have a significant impact on population growth in the coming years. In 2022, Sanger’s Water Distribution System Analysis and Capital Improvements report estimated that the city’s population will reach 17,048 by the year 2040, representing a growth rate of 87.8% from the estimated 2020 population of 9,080.

2016 ACTUAL AND TARGETED (%) COMPARED TO CURRENT (%)



The Texas Water Development Board estimates that the city’s population will reach 12,522 by the year 2040, representing a growth rate of 52.9% from the year 2020. With a strong economy and a population that is expected to experience long-term growth, Sanger’s housing policies will play a significant role in shaping the future of the city.

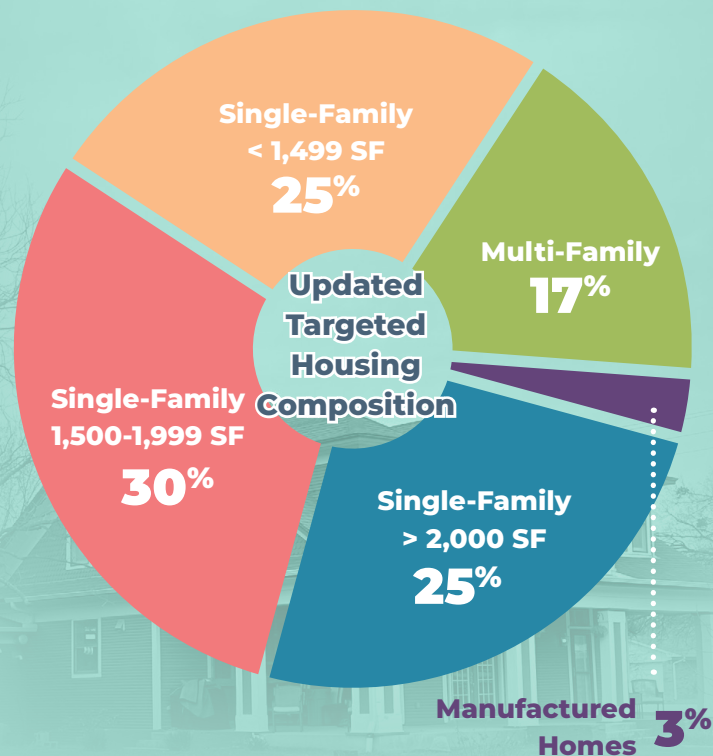
This study’s assessment of the current housing inventory offers a snapshot of the supply side of the market and provides insights into the types, conditions, and values of existing housing units. Our analysis indicates that current housing options in Sanger are not aligned with the 2016 Targeted Housing Mix. Currently, the percentages

of homes in the single-family under 1,499 square feet, single-family between 1,500 and 1,999 square feet, multi-family, and manufactured homes categories exceed the 2016 target percentages, while single-family homes above 2,000 square feet fall below the target. The study also analyzes the age, occupancy, vacancy, and market values of the existing housing units, and finds that Sanger has a relatively young and high-value housing stock, with a high occupancy rate and a low vacancy rate.

The study also evaluates the capacity for new housing development and the adequacy of existing infrastructure to support additional housing.

AN UPDATED TARGETED HOUSING COMPOSITION IS RECOMMENDED, BASED ON DATA PRESENTED THROUGHOUT THE STUDY.

The study's findings indicate that the following housing mix would best accommodate future housing needs:



It is recommended that the single-family under 1,499 square feet category be slightly reduced from the original 30% target because it was estimated that a larger market segment exists for homes in the single-family between 1,500 and 1,999 square feet category, which will fulfill many of the same housing needs. Therefore, it is recommended that the percentage for that category be maintained. It is also recommended that the percentage of homes in the single-family above 2,000 square feet category be maintained, with the demographic and economic analyses indicating a large market segment of home buyers who are likely to both prefer a more spacious residence and have the financial capacity to afford larger single-family homes. It is recommended that the percentage of multi-family housing is increased to capture the demand from young professionals, single adults, and lower-income households, as well as to support the vision of a livelier and more walkable downtown core. It is recommended that the target percentage for manufactured homes be maintained at 3%, as demand is likely to remain low.

The study also assesses the residential development capacity in Sanger, taking into account the future land use plan and infrastructure considerations. Sanger has designated several areas for future residential development, with varying levels of density. It is recommended that Sanger prioritize development in central areas of the city, where denser housing options can create a more walkable and mixed-use environment,

in alignment with the vision of the Sanger 2040 Comprehensive Plan. It is also noted that Sanger will need to plan for water distribution and wastewater treatment infrastructure improvements to accommodate the projected increase in population.

Overall, the study aims to equip Sanger with the insights and data necessary to accommodate current and future demand and to align with the vision for future development set forth by the city's strategic plans. This Housing Study represents a significant step towards realizing Sanger's ambitious and strategic vision for future development, ensuring that the city continues to thrive. ■

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City of Sanger
Targeted Housing Composition Matrix 51**



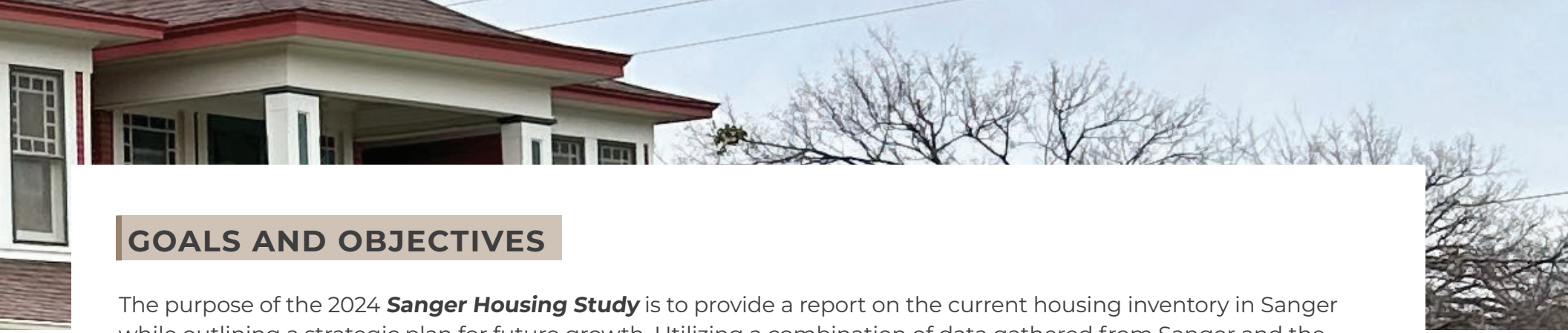
CHAPTER 1: INTRODUCTION

PROJECT BACKGROUND

Located in Denton County, Texas, the City of Sanger (“Sanger”) has historical and cultural significance. Founded in 1886 as a stop on the Santa Fe railroad, Sanger quickly developed a strong agricultural and livestock economy. The early economic success experienced by Sanger is symbolized by the historic buildings that line the streets of the city’s downtown square. Today, Sanger proudly maintains its pastoral character while offering residents access to a diverse range of modern amenities and economic opportunities.

Conveniently located on the I-35 corridor, Sanger is well connected to the major economic centers of the Dallas-Fort Worth region as well as the natural attraction of Lake Ray Roberts. Being positioned for continued population and economic growth, Sanger has identified a need for

an evaluation of its current and future housing needs. Sanger’s vision for future development, as articulated in the recently adopted Sanger 2040 Comprehensive Plan and ordinance updates, is ambitious and strategic. This vision is the driving force behind this Housing Study, which is intended to serve as a roadmap for future growth. The study is grounded in an understanding of the existing 2016 housing ordinance policy, which established Sanger’s ideal mix of housing types. Given that the conditions of housing markets evolve with the changing needs of a population, a significant consideration of this study is to ensure that recent and upcoming residential developments are aligned with the specifications of the 2016 Targeted Housing Mix. With a strong economy and a population of 9,041 that has increased significantly in recent years, it is essential to ensure that Sanger’s housing capacity can adequately meet the growing demand.



GOALS AND OBJECTIVES

The purpose of the 2024 **Sanger Housing Study** is to provide a report on the current housing inventory in Sanger while outlining a strategic plan for future growth. Utilizing a combination of data gathered from Sanger and the Denton Central Appraisal District, an analysis of the current housing inventory and projected market trends will be used to produce a snapshot of Sanger’s housing needs in the coming years. This analysis will include an inventory of current housing, an overview of new developments, and the impact of current economic and demographic trends.

THE SPECIFIC OBJECTIVES OF THIS STUDY INCLUDE:

- » **Gaining a greater understanding of Sanger’s current housing market, illustrated by a detailed Housing Inventory Matrix;**
- » **Making assessments of projected growth by analyzing current market trends and demands;**
- » **Highlighting areas of high demand through Gap Analysis;**
- » **Identifying potential areas for growth through Residential Development Capacity Analysis; and,**
- » **Equipping Sanger with the insights and data necessary to accommodate current and future demand by producing a complete Housing Toolkit.**

This data-driven approach will ensure that the study appropriately reflects Sanger’s housing market and accounts for the forces of economic growth that will influence future development. The results of this study are intended to supplement the guidelines for future growth set forth by the Sanger 2040 Comprehensive Plan and 2016 housing ordinance policy and can be utilized to ensure that Sanger is well-prepared to meet the growing demand for housing.

This Housing Study represents a significant step towards realizing Sanger’s ambitious and strategic vision for future development, ensuring that the city continues to thrive as a place of historical significance, cultural richness, and economic opportunity. Having established the purpose and motivation behind this study, the next step is to conduct a more detailed examination of Sanger’s current demographic profile and the economic trends driving growth.



CHAPTER 2: DEMOGRAPHIC AND ECONOMIC TRENDS ANALYSIS

Sanger’s current demographic characteristics, population trends, and economic trends are critical components in understanding the current and future housing needs of the city. The insights gained from this analysis will be used to characterize the pattern of growth experienced by Sanger in recent years and anticipate future housing needs as the city continues to evolve. The information presented here will establish Sanger’s potential for population and economic growth, along with the corresponding implications for housing demand.

POPULATION AND DEMOGRAPHIC CHARACTERISTICS

To understand the forces that drive housing demand in Sanger, it is useful to analyze its current population trends and how the city’s demographic characteristics have changed over time. Demographic characteristics such as age distribution, family size, income levels, and historical rates of population growth offer insights into the factors that shape Sanger’s housing market. ▶

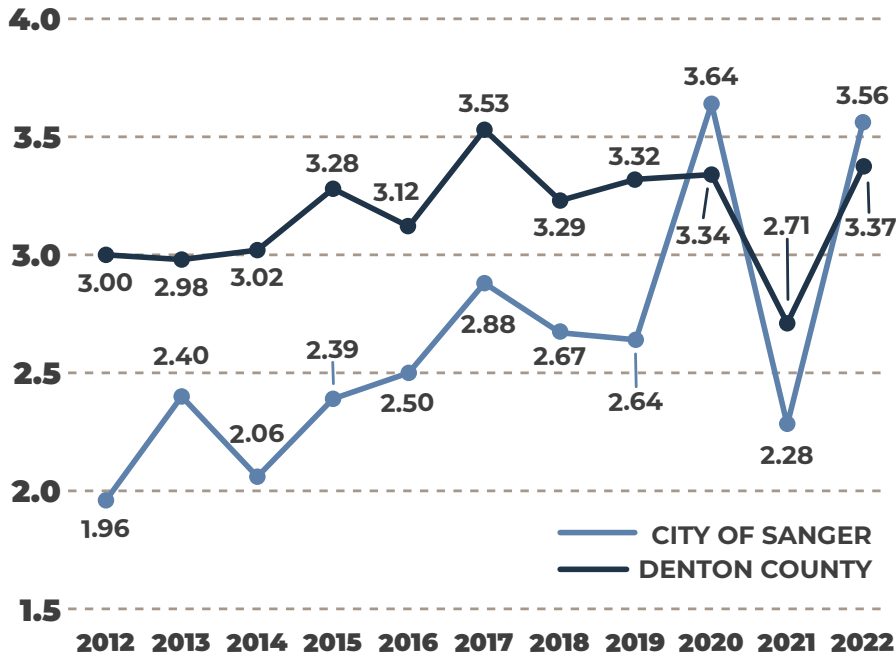
POPULATION GROWTH

One of the most significant factors influencing housing demand is an increase in total population. In 2022, it was estimated that the City of Sanger’s population was approximately 9,041. The city’s population grew 30.57% between 2012 and 2022. **Figure 2.1** shows the rate of population change for each year between 2012 and 2022 for Sanger and Denton County. In this visualization, each data point represents the percentage of population change from the preceding year, which provides some understanding of how Sanger has grown alongside

Denton County over time and highlights the most significant periods of population growth. Analyzing this data reveals the following insights:

- » **As of 2022, the rate of population growth in Sanger has surpassed that of Denton County, reflecting its increasing popularity as a place to live and work.**
- » **Sanger’s rate of population growth recovered rapidly after a noticeable downturn in 2021, likely a result of nationwide economic trends associated with the COVID-19 pandemic.**
- » **Denton County’s growth rate has remained relatively steady, while Sanger’s rate of growth continues to accelerate.**

Figure 2.1 Population Change Rate 2012 - 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

AGE DISTRIBUTION AND FAMILY SIZE

The age distribution within a community significantly impacts housing preferences. For instance, younger demographics tend to gravitate towards compact and more easily manageable living spaces, such as rental apartments or small houses. Conversely, larger, single-family homes are often the preference of older demographics, particularly those with families. While the assumed housing preferences of each age group can vary depending on the city, such preferences can be used in conjunction with specific data to gain a more complete understanding of the future housing market trends that are likely to affect Sanger in the coming years.

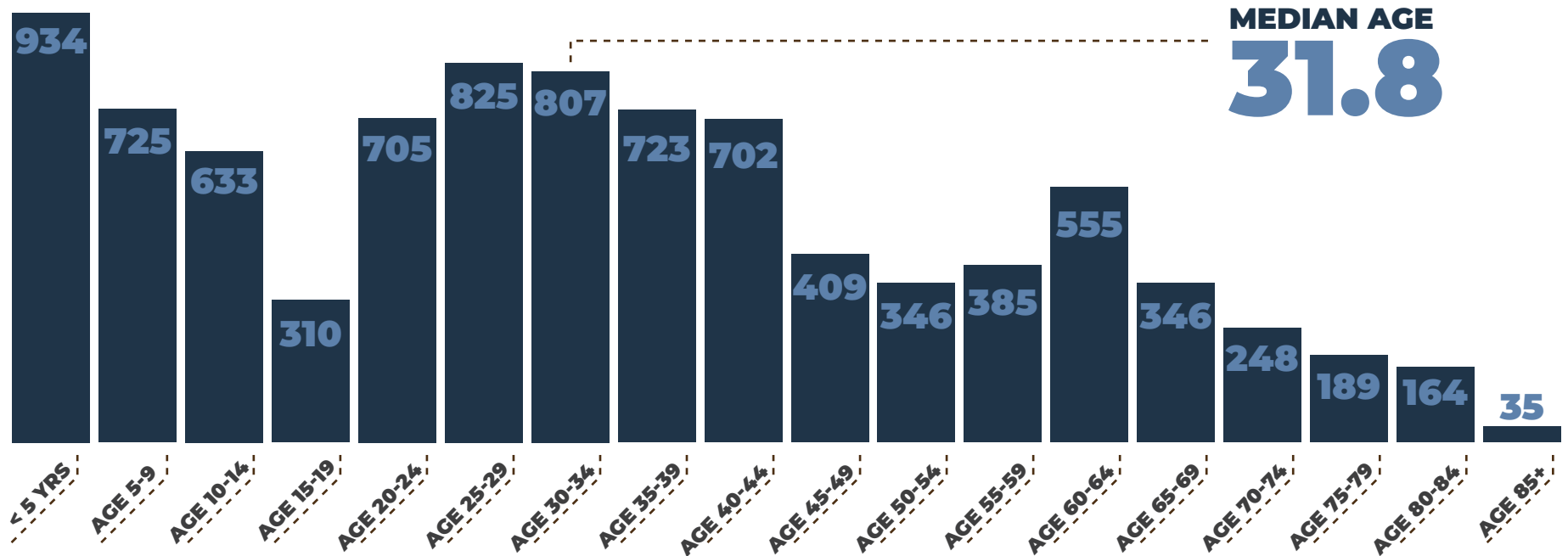
Based on an analysis of American Community Survey (ACS) 5-Year estimate data from 2022 about the age distribution of Sanger residents:

- » **The median age in Sanger was approximately 31.8 years.**
- » **26.8% of the population was under 18.**
- » **10.9% of the population was over 65.**
- » **62.3% of the population was between 18 and 65 years old.**

Figure 2.2 illustrates the age distribution of residents of Sanger. The largest age group in the city is the “Under 5 years” category, suggesting a high number of young families. This could indicate a demand for housing

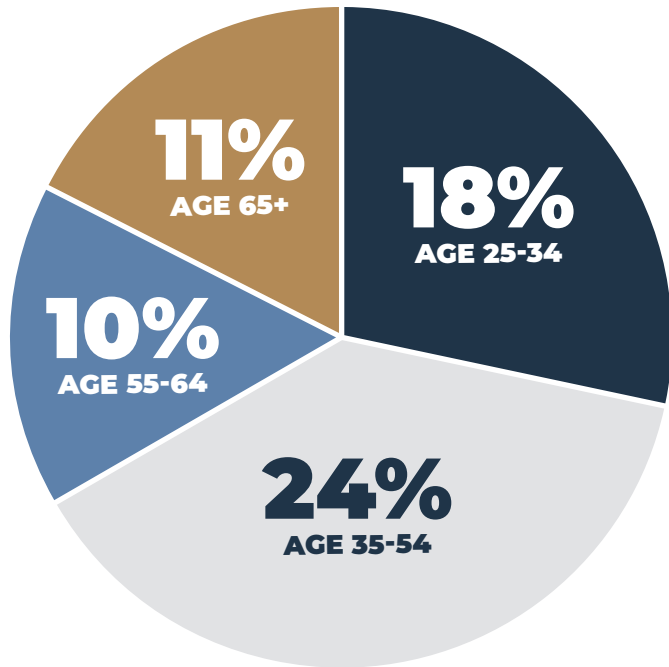
options that can best accommodate families, such as spacious single-family homes. Residents aged between 25 and 34 years represent a significant portion (18%) of the population. These are typically ages when individuals are establishing their careers and starting families, which could drive demand for smaller, more affordable, “starter” homes or more compact rental units. The lower population within the “80 to 84 years” and “85 years and over” categories suggests a smaller senior population, which might result in less demand for senior-specific housing such as retirement communities, or smaller homes that may typically be associated with a need to downsize.

Figure 2.2 Age Distribution of Sanger Residents, 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

Figure 2.3 Sanger Home-Buyers; Key Age Groups, 2022



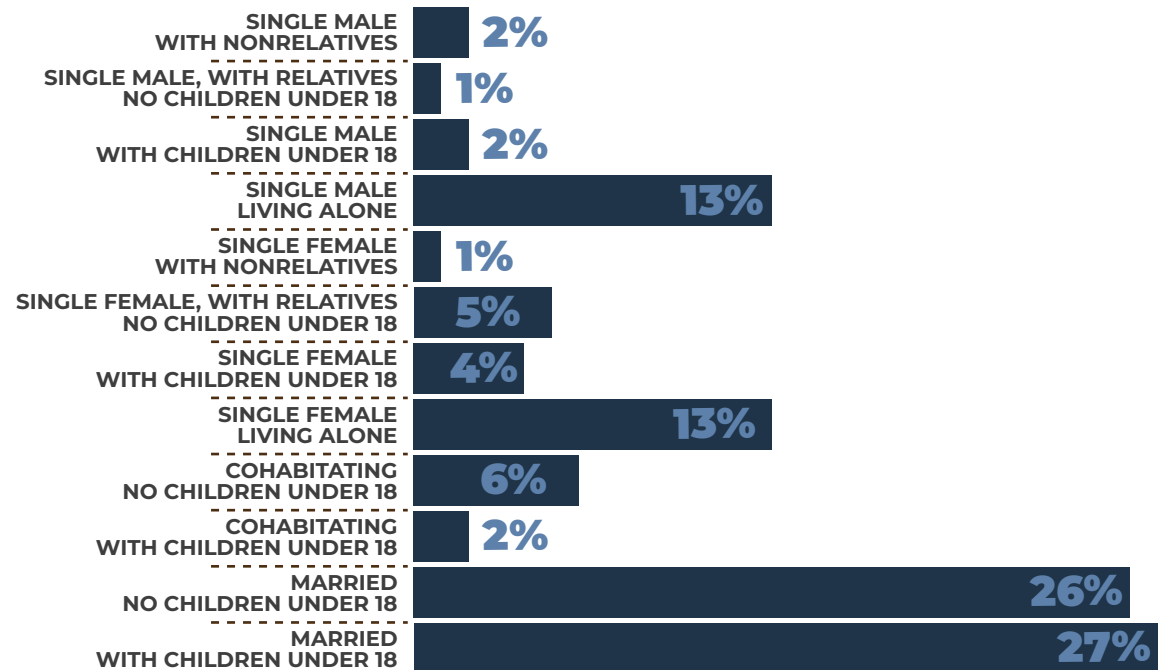
Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

Figure 2.3 illustrates the age distribution broken down into specific population groups whose presence is a key indicator of housing demand. Age groups represented in this figure are associated with home-buying preferences that indicate the demand for each type of housing in Sanger.

Household composition provides further insight into the potential housing preferences of Sanger residents. As of 2022, Sanger’s population was spread across

3,371 households, with an average household size being approximately 2.68 people, according to ACS 5-Year estimates. **Figure 2.4** presents a detailed breakdown of the household composition in the City of Sanger. Sanger is a family-oriented city, where the most significant segments of the population are married couples. Married couples with children under 18 years constitute roughly 27.20% of households, while those comprising married couples without children under 18 years account for approximately 26.25%. The high percentage of married couples with children (27.20%) indicates a demand for larger housing units that can accommodate families. The presence of a

Figure 2.4 Sanger Household Types, 2022

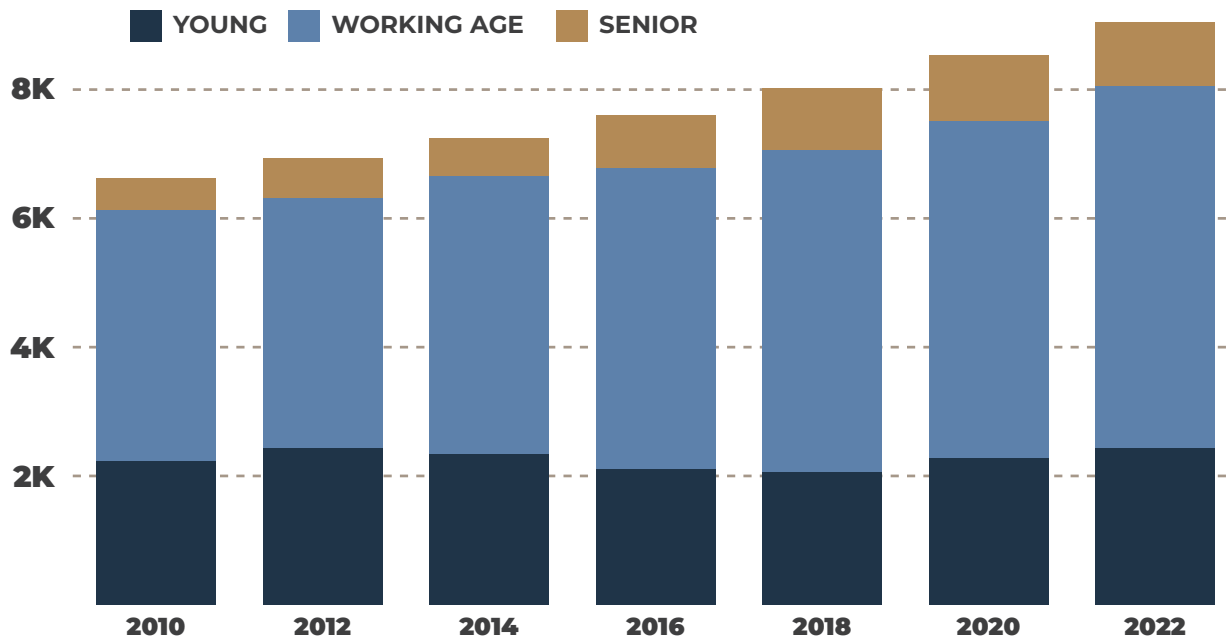


Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

substantial number of married couples without children under 18 years (26.25%) could indicate an increased demand for smaller, more manageable properties. Single male and female householders living alone constitute a significant portion of the population (13.47% and 12.70% respectively). This demographic typically requires smaller housing units, such as one-bedroom apartments or studios.

Beyond the housing preferences associated with each age range and household type, some groups, such as the working-age population, reveal trends that can have broader implications for the local housing market. A

Figure 2.5 Young, Working-Age, and Senior Age Groups, 2010-2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

robust working-age population can positively influence the workforce development efforts of Sanger and contribute to an increase in housing demand because of the employment opportunities that result from these efforts. While a growing population of working-age residents means Sanger is developing a stronger workforce, it can also indicate a greater need for housing that is affordable for working-age residents.

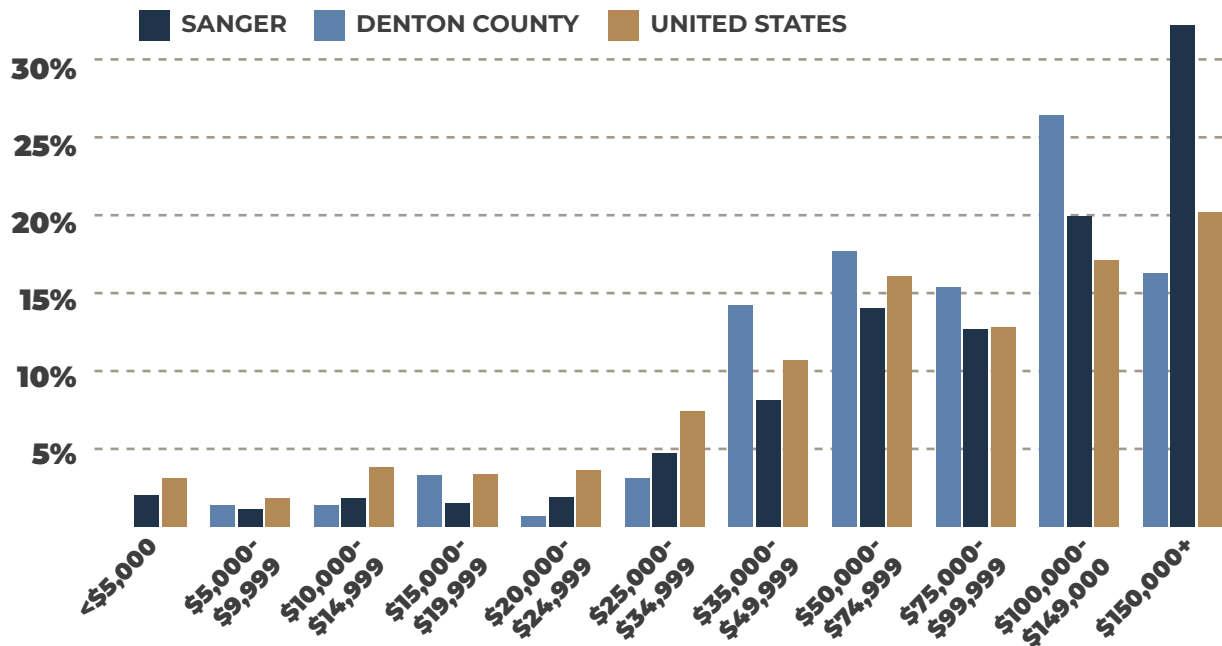
The working-age population group of those aged 18 to 64 represents the largest portion of the total population, highlighting Sanger's capacity to maintain a strong workforce. The population of work-aged individuals (18-64) in Sanger has increased by 44.83% between 2010 and 2022.

Figure 2.5 displays a comparative view of Sanger's young, working, and senior populations over time.

HOUSEHOLD INCOME

The distribution of income is among the most impactful factors to which types of housing are in demand. Higher incomes may indicate a need for luxury housing options, middle incomes may indicate a need for mid-range housing, and lower income may indicate a need for more affordable housing options.

Figure 2.6 Median Household Income, 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

The distribution of household income in Sanger is displayed by **Figure 2.6**. Sanger’s median household income is \$86,083, which is 15.4% higher than the national average. This income distribution has 24.10% of households earning less than \$50,000 annually, indicating a potential need for affordable housing options, with 33.10% earning between \$50,000 and \$99,999 and 26.40% earning between \$100,000 and \$149,999, potentially indicating a demand for mid-range housing options. 16.30% earn over \$150,000, potentially indicating a demand for higher-end or luxury housing options. The federal poverty line in 2022 was \$29,950, and Sanger has a lower percentage

of households earning less than \$25,000 compared to both Denton County and the national average. The relatively low level of low-income households in Sanger could suggest a lesser demand for attainable housing in Sanger, compared to the broader need for attainable housing. Approximately 26.4% of Sanger’s population falls within the \$100,000 to \$149,999 income bracket, which is higher than both Denton County (19.9%) and the national average (17.1%). However, only 16.3% of households in Sanger earn \$150,000 or more, which is lower than in Denton County (32.2%) and slightly lower than the national average (20.2%).

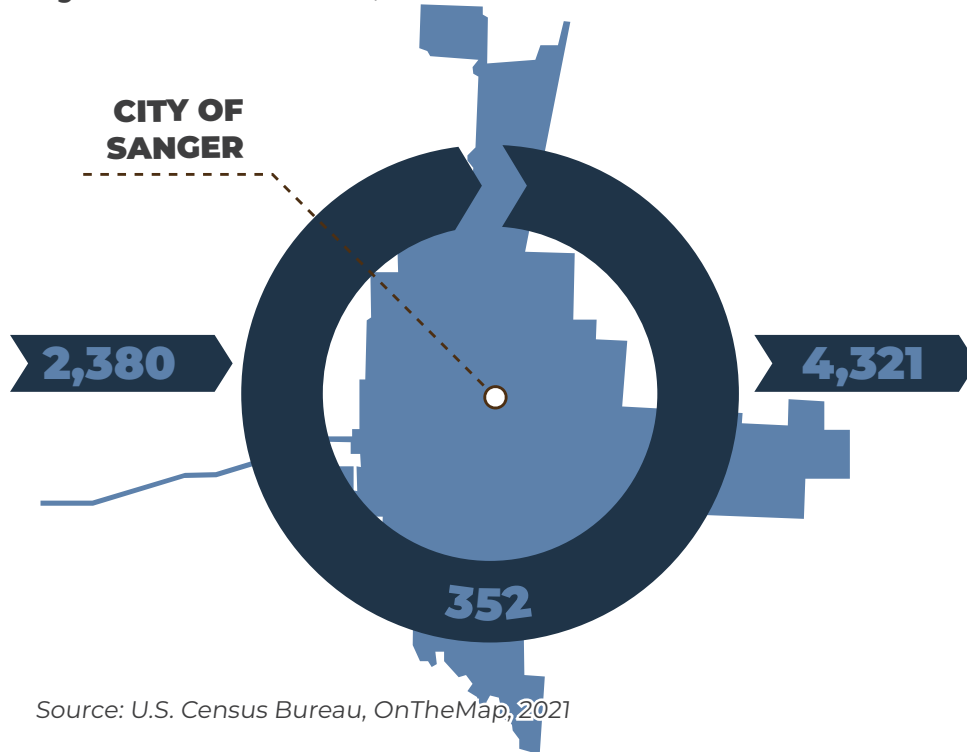
COMMUTING

The commuting patterns of Sanger residents are a significant indicator of the connection the city has with the economies of the broader Dallas-Fort Worth area. Analyzing these patterns is valuable for establishing the potential for economic growth that extends beyond Sanger’s city limits.

It is estimated that 87.3% of Sanger commuters work outside of Sanger. **Figure 2.7** highlights the inflow and outflow commuting patterns for Sanger, based on data from 2021. This commuting pattern data indicates that a majority of the city’s working-age population commute out of the city for work, which indicates Sanger’s economic interconnection with surrounding areas, offering residents a large variety of employment opportunities.

Sanger also attracts a considerable number of workers commuting from other cities, indicative of strong economic conditions and employment opportunities.

Figure 2.7 Commuter Inflow/Outflow



Source: U.S. Census Bureau, OnTheMap, 2021

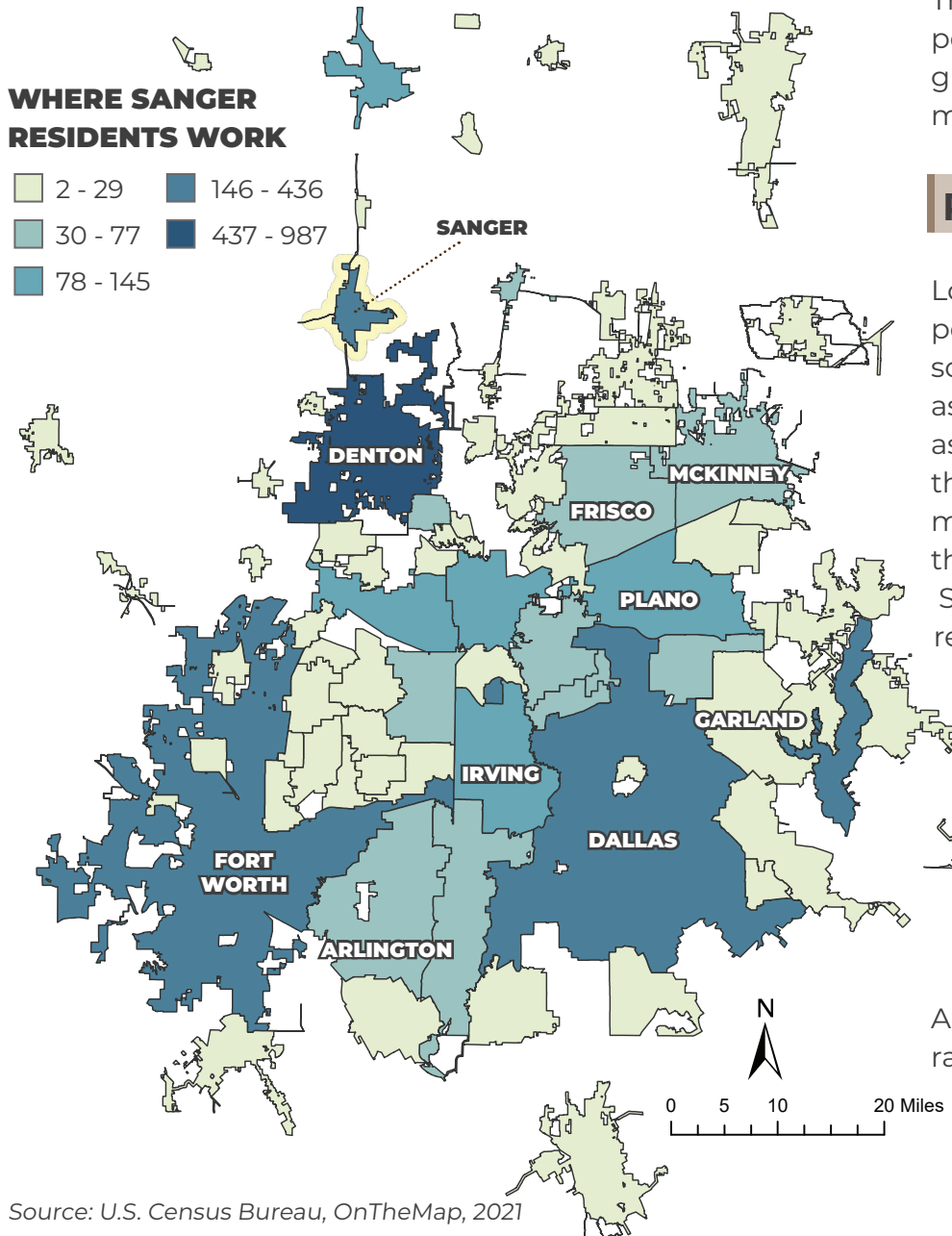
The small portion of Sanger’s workforce that is employed within the city might indicate that there is a mismatch between employment opportunities and available housing options, or between the industries present in the city and the skill sets of residents.

While Sanger’s own economy has steadily grown over the course of several decades, its connection to the broader Dallas-Fort Worth metroplex is significant, and the economic growth of surrounding cities will have an impact on Sanger’s economy and housing market. **Figure 2.8**, shown on the following page, displays a visualization of which nearby cities most Sanger residents work in. Establishing an economic connection to regional economies is useful for predicting future growth and market trends in Sanger. When many residents are employed outside of Sanger, the economic growth of the cities they commute to will have an impact on what opportunities are available to people living in Sanger. Further economic opportunities will provide Sanger residents with a financial mobility that can influence housing demand.

The City of Denton receives the largest number of Sanger commuters (987), followed by Dallas (436) and Fort Worth (252), indicating a connection with some of the region’s largest economies.

The information presented throughout this section will serve as a foundation for understanding Sanger’s present situation and envisioning its future.

Figure 2.8 *Commuting Destinations of Sanger Residents*



Source: U.S. Census Bureau, OnTheMap, 2021

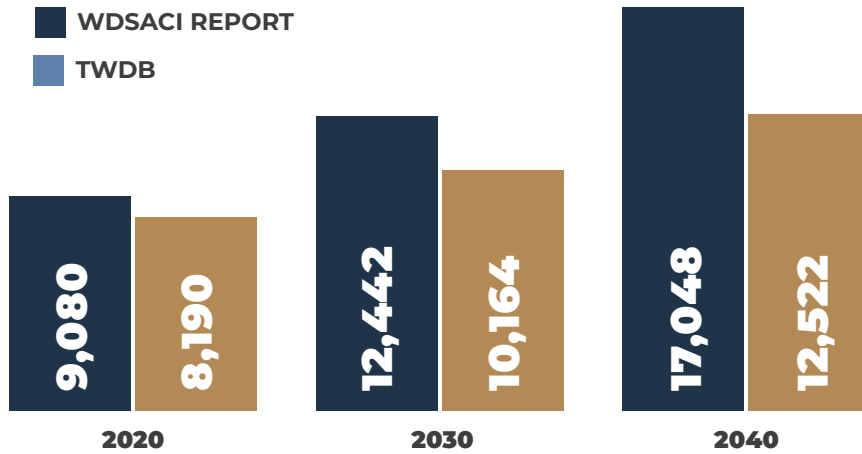
The focus of this study now shifts to anticipated population trends, utilizing projections of population growth for the City of Sanger, the Dallas-Fort Worth metroplex, and the state of Texas.

POPULATION GROWTH PROJECTIONS

Looking ahead, the City of Sanger is poised for significant population growth. It is important to consider multiple sources when examining projections of population growth, as each source may employ different methodologies, assumptions, and data sets. For example, projections from the Texas Water Development Board (TWDB) indicate a more conservative estimate for future growth, whereas the projections included in Sanger’s Water Distribution System Analysis and Capital Improvements (WDSACI) report in 2022 might be considered more aggressive. It is also important to note that each report used a different estimate of Sanger’s population in 2020, with the TWDB report estimating 8,190 and the WDSACI report estimating 9,080. While further data may confirm the legitimacy of one of these estimations, it is important both figures are maintained within this study to convey the model of growth presented originally in each report.

Although these data sources indicate differing growth rates, both indicate a steady upward trajectory in Sanger’s total population. Analyzing projections with varying levels is useful when planning for various growth scenarios.

Figure 2.9 Projected Population, 2020-2040



Source: Water Distribution System Analysis and Capital Improvements, TWDB 2021 Region C Water Plan

Figure 2.9 provides a visual comparison of the population growth as projected by Water Distribution System Analysis and Capital Improvements report and the Texas Water Development Board.

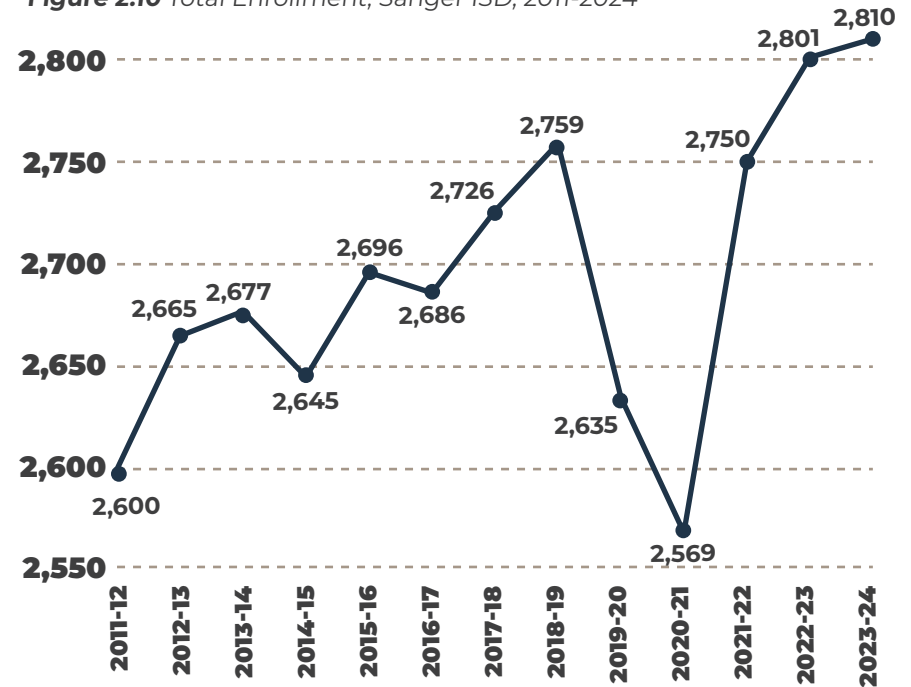
In 2022, Sanger’s Water Distribution System Analysis and Capital Improvements (WDSACI) report estimated that the city’s population will reach 17,048 by the year 2040, representing a growth rate of 87.8% from the estimated 2020 population of 9,080. The TWDB report estimated that Sanger’s population was 8,190 in 2020 and will increase by 52.9% to 12,522 by 2040.

Additionally, a useful metric of population growth is school enrollment. In 2022, Sanger Independent School District issued a bond to fund the construction of a new high school campus and the physical improvements of several existing facilities.

One of the primary goals in issuing the 2022 Bond was to address the anticipated population growth in Sanger. According to The Sanger ISD, an increase of over 1,000 students is expected, constituting approximately 40% of the current enrollment. Should the housing market experience further growth, the district’s enrollment could surpass 4,000 students within the next decade. This anticipated growth would be a continuation of the trend in school enrollment figures observed in recent years.

Figure 2.10 illustrates the historical growth of Sanger ISD from 2011 to 2024.

Figure 2.10 Total Enrollment, Sanger ISD, 2011-2024



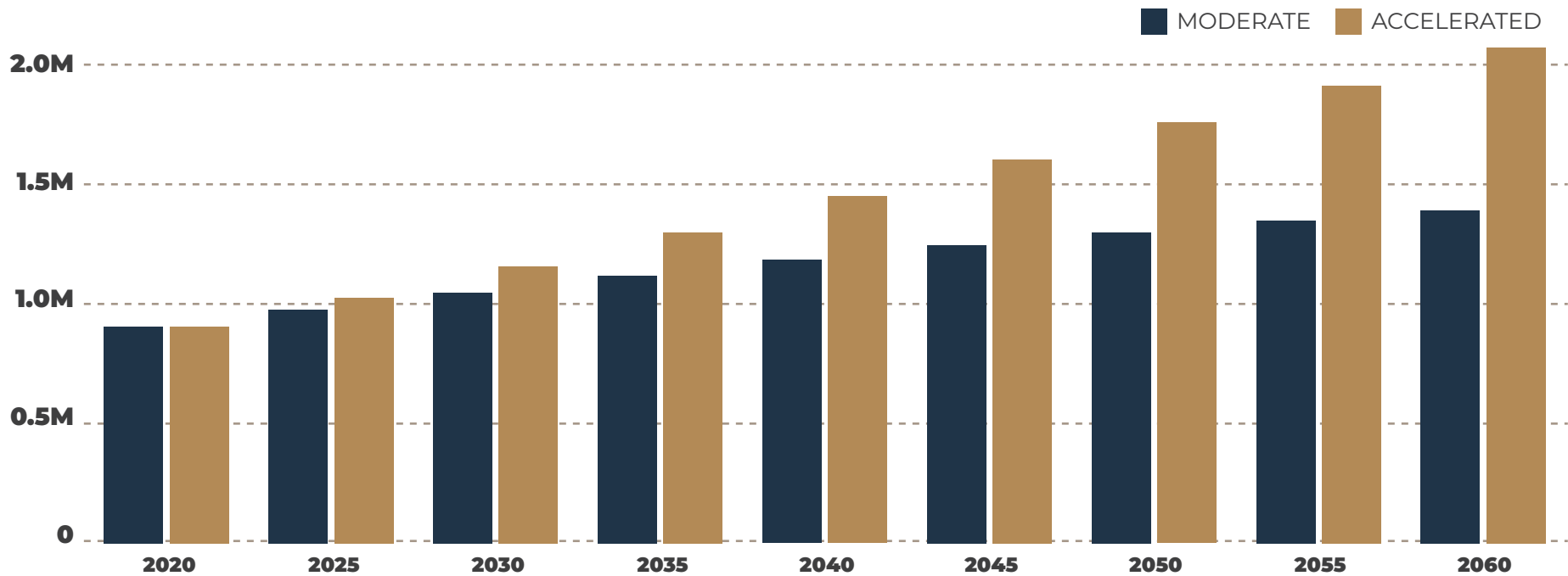
Source: Texas Education Agency

The anticipated population growth of Sanger will likely correlate with broader growth trends. The projected growth trends of Denton County provide useful regional context for the evaluation of Sanger’s expected growth. For near-term and long-term planning purposes, the Texas Demographic Center (TDC) provides useful projections for Denton’s population, which are based on the cohort component project technique and consider projected fertility, mortality, and migration rates. The long-term planning model used by the TDC assumes a migration of half the migration seen between 2010-2020. **Figure 2.11** displays projections gathered from the TDC, providing a visual comparison of the more conservative long-term

planning model with the more aggressive short-term model. These projections indicate that:

- » **The projected growth of Denton County follows an upward trajectory similar to Sanger.**
- » **The long-term model estimates an expected population increase of 53.47% between 2020 and 2060.**
- » **The near-term planning model assumes the same migration rate as 2010-2020, predicting an increase of 128.52% between 2020 and 2060.**

Figure 2.11 Projected Population Growth in Denton County, 2020 - 2060

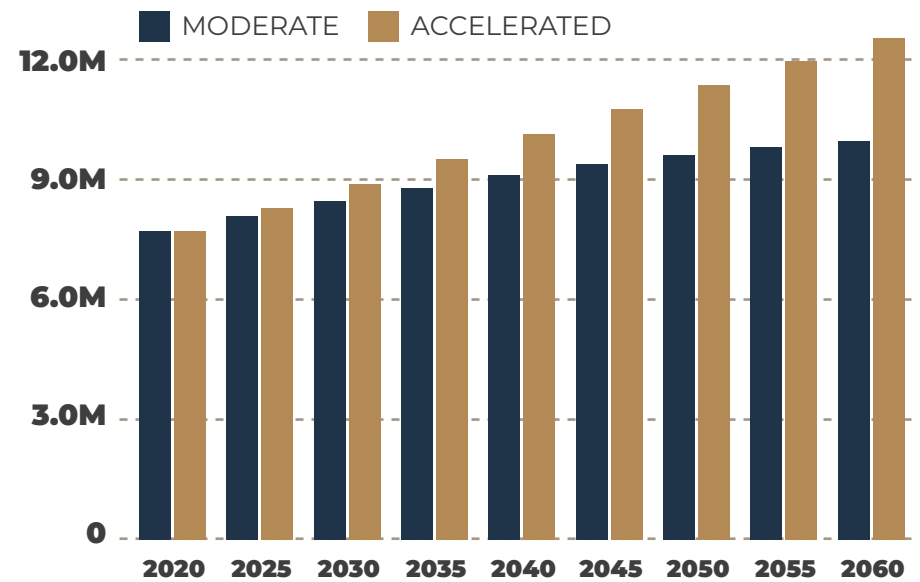


Source: Texas Demographic Center, 2022

The projected increase in Denton County's population is also expected to align with regional growth trends. The rate of population growth experienced by the Dallas-Fort Worth metropolitan area in the past several decades is expected to continue in the coming years. The TDC has estimated that the metro area's population will increase by 29.34% using the long-term planning methodology, or by 62.70% using the short-term methodology. **Figure 2.12** illustrates the comparison between the projected total populations of the Dallas-Fort Worth-Arlington MSA using the Texas Demographic Center's long-term and short-term planning methodologies.

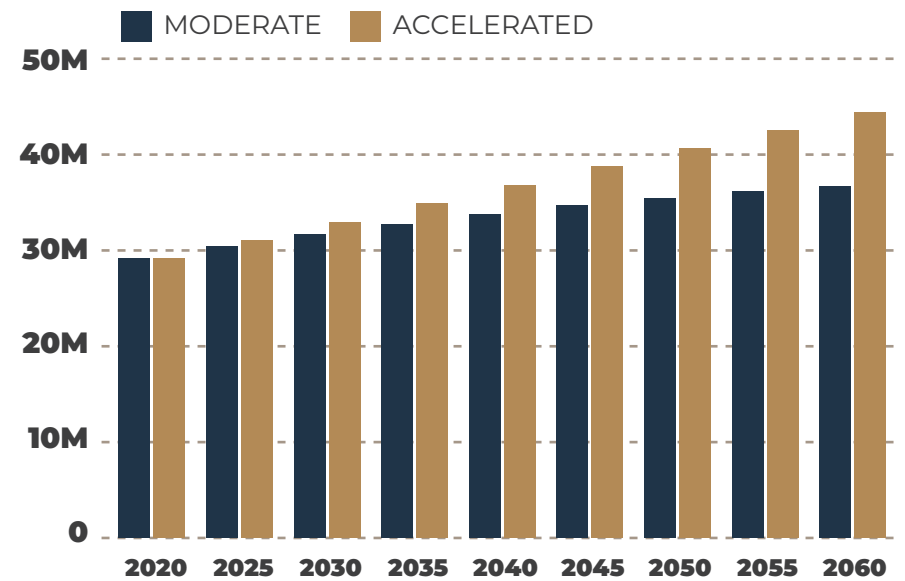
The growth in Sanger and the Dallas-Fort Worth metroplex will likely contribute to and be influenced by the population increase occurring state-wide. By the year 2060, the total population of Texas is projected to grow to between 36,722,840 and 44,391,658, representing a range of growth rates between 26% and 52.31% from the 2020 population estimate. **Figure 2.13** illustrates the projected population increase for the state of Texas. The interconnectedness between Sanger and the Dallas-Fort Worth region—one of the fastest-growing metropolitan areas in the state—suggests that planning and development strategies in Sanger should take into account these state-wide population projections.

Figure 2.12 Projected Total Population of DFW



Source: Texas Demographic Center, 2022

Figure 2.13 State of Texas Population Projections, 2020 - 2060



Source: Texas Demographic Center, 2022

Based on the projections discussed within this section, we can highlight several key takeaways:

- » **The City of Sanger is projected to experience a significant population increase, with current projections estimating between a 53% and 88% growth rate from the years 2020 to 2040.**
- » **The City of Sanger is economically connected to the broader Dallas-Fort Worth region, which is also predicted to experience significant growth.**
- » **The population growth experienced by the state of Texas in the past several decades is expected to continue at a similar rate.**
- » **A significant population increase in the Dallas-Fort Worth area could lead to increased demand for housing, infrastructure, and business services, which could stimulate economic and population growth in Sanger.**

The population projections for Sanger and the surrounding metropolitan area outlined within this section will serve as important metrics in the assessment of future housing needs. Used in conjunction with an analysis of the economic trends affecting Sanger and surrounding areas, population projections can provide an understanding of the trajectory of the city's economy and housing market. The following section will describe current and projected economic trends affecting the City of Sanger.

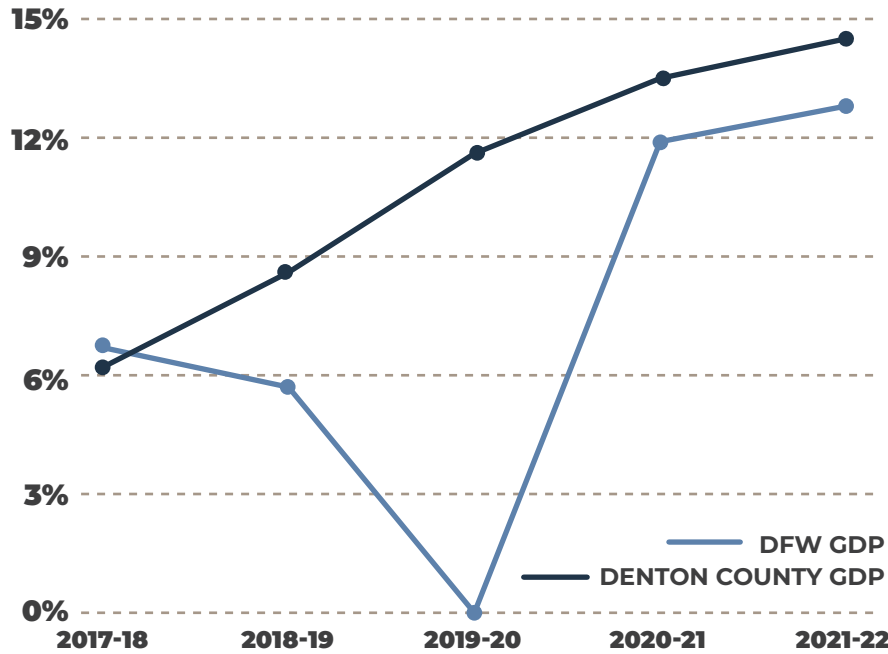
ECONOMIC TRENDS

This section presents an analysis of the economic trends influencing the housing market in the City of Sanger. While this section will detail the shifts occurring within Sanger's economy specifically, it is also important to evaluate the impact of local, regional, and state-level trends. Understanding these interconnected dynamics is key to forecasting future economic growth and housing needs in Sanger. The economic trends described within this section continue to contribute to the growth of the Dallas-Fort Worth area. With the growth of regional economies, Sanger is well-positioned to capitalize on the increased demand for housing. With its strategic proximity to the I-35 corridor, the employment opportunities of the Dallas-Fort Worth metroplex are easily accessible by Sanger residents. Within this section, several metrics will be used to measure economic growth that indicates a large potential for economic and population growth that will potentially influence housing demand in the City of Sanger.

GROSS DOMESTIC PRODUCT

The likelihood of population growth is significantly affected by local and regional economic conditions. Gross Domestic Product (GDP) is a useful metric for measuring the total market value of all goods and services produced within specific geographic levels and provides a broad snapshot of economic conditions.

Figure 2.14 Rate of GDP Increase from Preceding Period

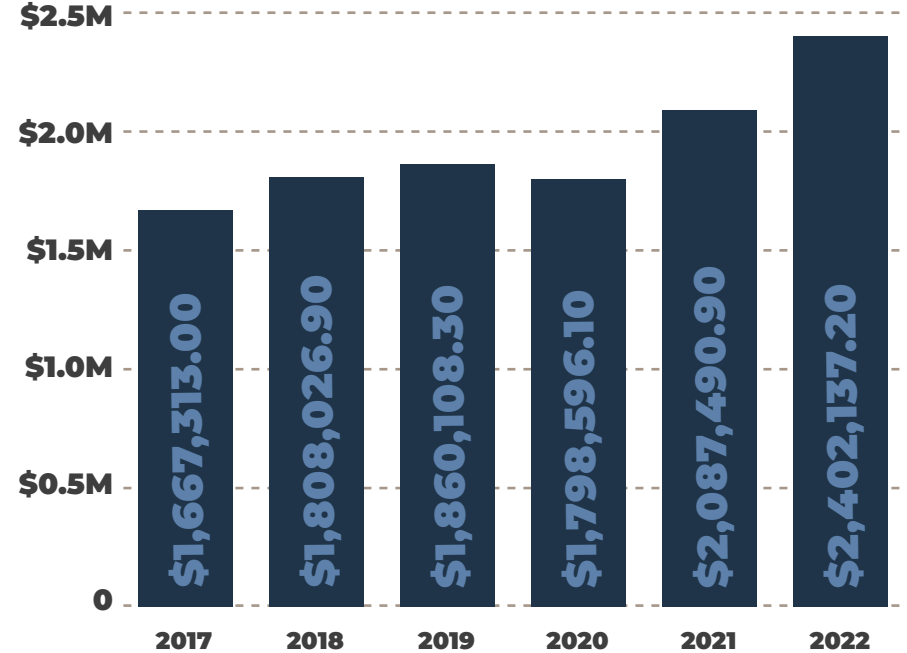


Source: Bureau of Economic Analysis

According to the Bureau of Economic Analysis, the GDP in Denton County has increased by 67.20% between the years of 2017 and 2022. The GDP of the Dallas-Fort Worth metropolitan area has also increased by 42.41% over the same period. **Figure 2.14** compares the rate of growth for the GDP measurements of Denton County, Dallas-Fort Worth, and Texas. This type of measurement is useful for gauging economic growth and acceleration. **Figure 2.15** illustrates the steady growth of the economy in Texas, measured by the GDP.

The strength of Texas' economy is a testament to the diverse industries that thrive in the state, many of which

Figure 2.15 Texas GDP, In Millions of Inflation-Adjusted Current Dollars

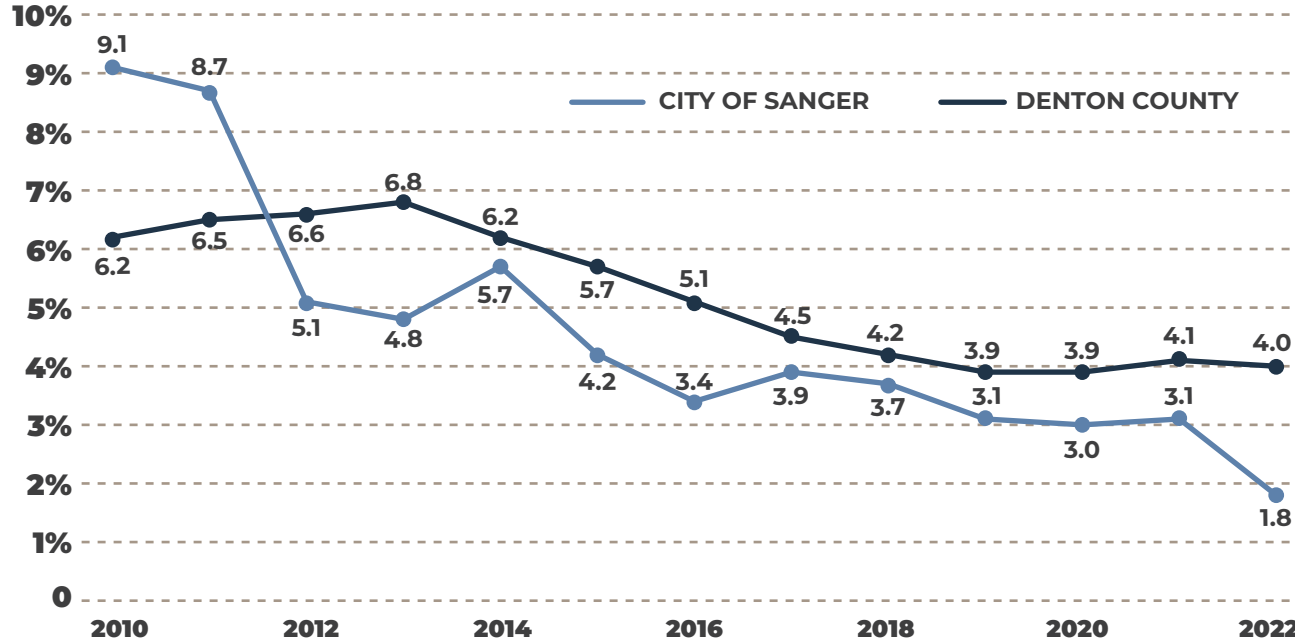


Source: Bureau of Economic Analysis

are centered in the North Texas region. Texas' economic vitality will continue to fuel high demand for housing and real estate development, solidifying its position as an attractive destination for businesses and individuals seeking growth opportunities.

As the state GDP continues to increase, the concentration of growth within Denton County will be a significant factor of economic development in Sanger. With a rate of GDP increase higher than Texas as a whole, Denton County will continue to be a center of the economic growth occurring statewide.

Figure 2.16 Sanger Unemployment Rates, 2010 - 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

EMPLOYMENT TRENDS

At 1.8%, Sanger’s unemployment rate is significantly lower than Denton County’s rate of 4%. The national unemployment rate is currently 3.7%, which further illustrates the significance of Sanger’s strong economic conditions. **Figure 2.16** displays the unemployment rates in Sanger compared to Denton County overall between 2010 and 2022.

This data indicates a robust economic environment

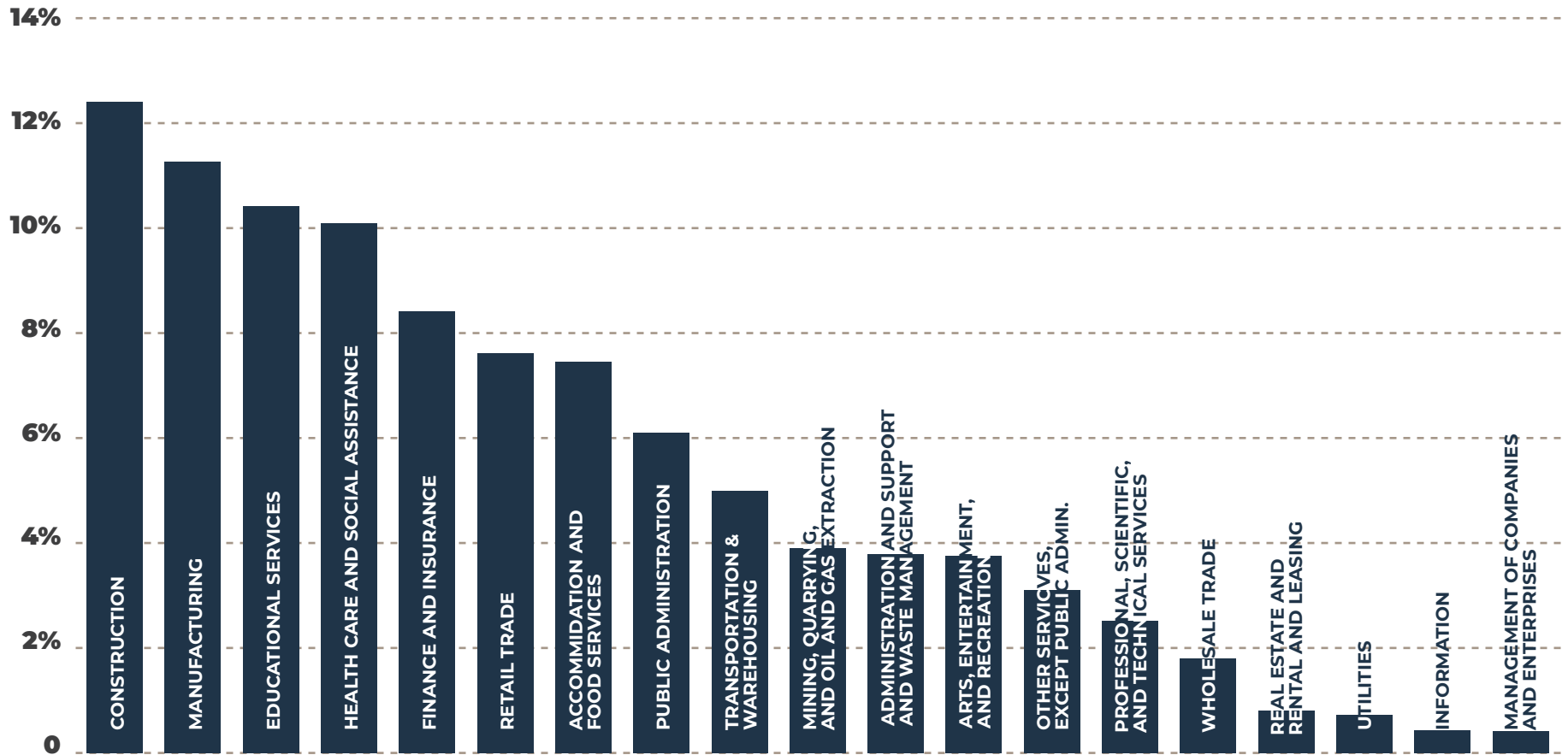
in Sanger, as evidenced by the significantly lower unemployment rate compared to both Denton County and the national average. This downward trend in unemployment from 2010 to 2022 suggests a steady growth in job opportunities and economic stability in the city.

An unemployment rate of just 1.8% indicates a strong economy and workforce. However, a low unemployment rate often correlates with higher median income levels, which could increase the

demand for housing. Strong economic conditions can also make the city more attractive to people looking for job opportunities, which could lead to an influx of new residents, further increasing demand.

Determining which industries employ residents of Sanger is useful for predicting future trends in the housing market. The size and nature of the workforce can reflect the economic health of a city or region, which in turn can impact demand for housing. Areas with a growing, well-paid workforce may see rising housing prices, while areas with a shrinking or lower-paid workforce may see stagnant or falling housing prices.

Figure 2.17 Percentage of Workforce by Industry, 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

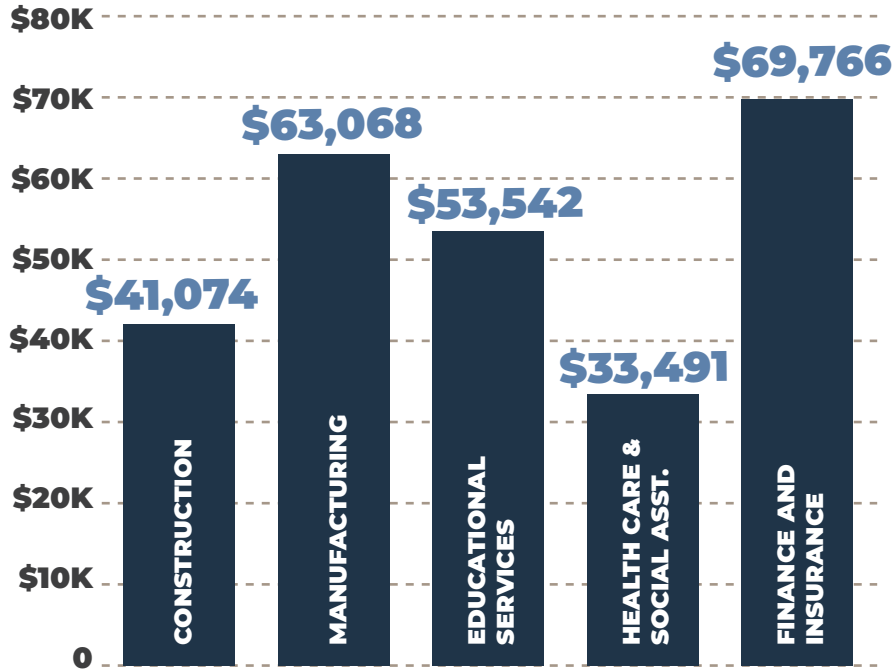
Figure 2.17 illustrates how Sanger’s workforce is divided among industry sectors.

It is useful to consider which industries most commonly employ Sanger residents. The top five industries that employ Sanger residents are construction, manufacturing, educational services, health care and social assistance,

and finance and insurance. Figure 2.18 on the next page illustrates the median earnings associated with each of these industries. Figure 2.19 on the next page shows the extent to which the number of residents employed by each of these industries has increased in recent years.

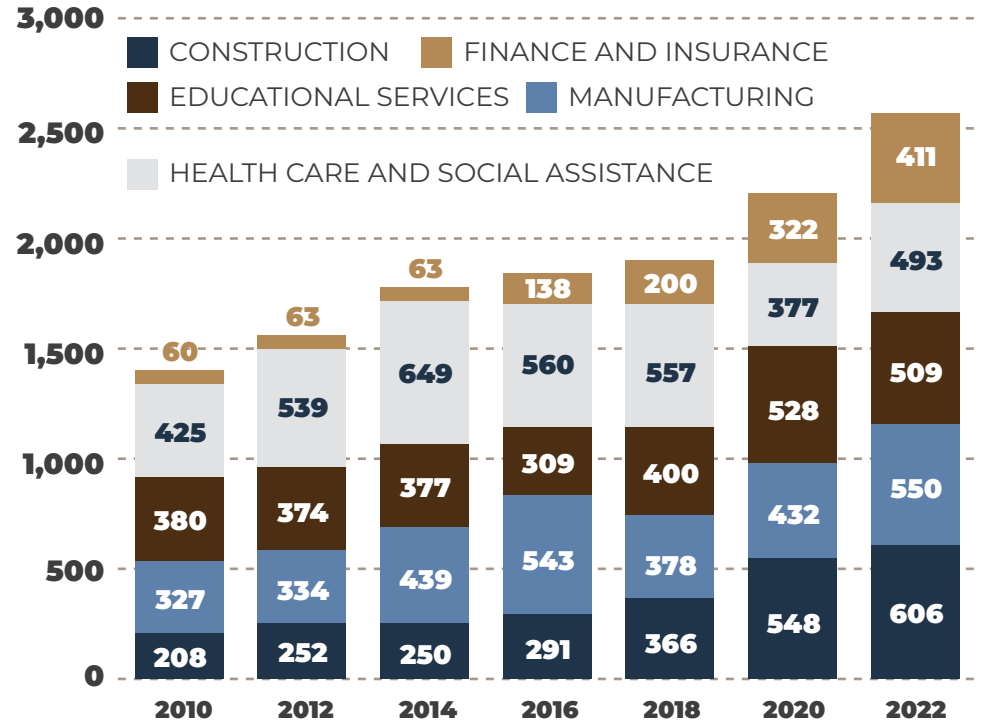
The largest employment sectors for Sanger residents are construction, manufacturing, and educational services, employing 34.09% of the workforce, and the varying median earnings of these sectors indicate different housing needs. The construction sector, which employs the largest portion of the workforce (12.41%), has median earnings of \$42,074. The number of Sanger residents employed by these industry sectors has increased by 81.96% from 2010 to 2022. The educational services and health care and social assistance sector—employing approximately 10% of the workforce—has median yearly earnings of \$33,491. The median earnings associated with these sectors may indicate a need for affordable housing

Figure 2.18 Median Earnings by Industry, 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

Figure 2.19 Industries Employing Sanger Residents



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

options in Sanger. Housing options that fall within the economic reach of these market segments may be rental units or smaller single-family homes. The manufacturing sector, on the other hand, with a higher median income of \$63,068, suggests a demand for mid-range housing options. The finance and insurance sector, with the highest median income of \$69,766, has increased by approximately 585% between 2010 and 2022, indicating a potential demand for higher-end housing options.

Figure 2.20 Major Employers in Sanger

COMPANY NAME	INDUSTRY	NUMBER OF EMPLOYEES
A&W Productions	Manufacturing	100 - 150
Babe's Chicken	Food Industries	50 - 100
City of Sanger	Government	100 - 150
Eikon Engineering	Engineering	100 - 150
North Texas Plastics	Manufacturing	1 - 50
R&L Carriers	Transportation and Logistics	150 - 200
Sam's Distribution Center	Distribution	250 - 300
Sanger Bank	Finance	1 - 50
Sanger ISD	Education	250 - 300
Wal-Mart Distribution Center	Distribution	900 - 1,000

Source: Sanger Economic Development Corporation

While many Sanger residents seek employment in nearby cities that they commute to, it is also important to consider the employment opportunities within Sanger. **Figure 2.20** lists the major employers within the city, according to the Sanger Economic Development Corporation (Sanger EDC).

Sanger's major employers play a significant role in driving the city's economic growth. These companies provide employment opportunities and contribute to

the city's economic vitality. The presence of these major employers, along with the arrival of new businesses and the development of industrial space indicates a strong and growing economy in Sanger.

The recent and upcoming arrivals of several new businesses will further influence the continuous development of Sanger's economy. By affecting employment, real estate, and consumer spending, these businesses are also likely to influence demand for housing in the Sanger area. At the time of this study, the list of retail businesses potentially establishing operations in Sanger includes:

- » **Three convenience stores/gas stations**
- » **Urgent care facility**
- » **Coffee shop**
- » **Ice cream shop**
- » **Brewery**
- » **Fast food restaurant**
- » **Retail development with dollar store and three additional retail spaces near the steakhouse restaurant**

Significant industrial space is also being developed in Sanger. At the time of this study, these spaces include:

- » **Star Business Park, which will include 5,000,000 square feet of industrial space.**
- » **Approximately 700,000 square feet of industrial space will be developed on a 90-acre plot south of the Walmart Distribution Center.**
- » **8 warehouse buildings—approximately 6,000 sq. ft. each—are under construction at 901-915 Utility Road.**

These developments are aligned with Sanger’s current economic and workforce development strategies. Targeted industries outlined in the Sanger 2040 Comprehensive Plan include professional services, retail, transportation and warehousing, and manufacturing.

The Sanger EDC has also established a Business Retention and Expansion (BRE) program that focuses on the support of Sanger’s existing business through ongoing engagement and information sharing between the EDC and local business owners. A primary function of this BRE program involves gathering information during visits to local

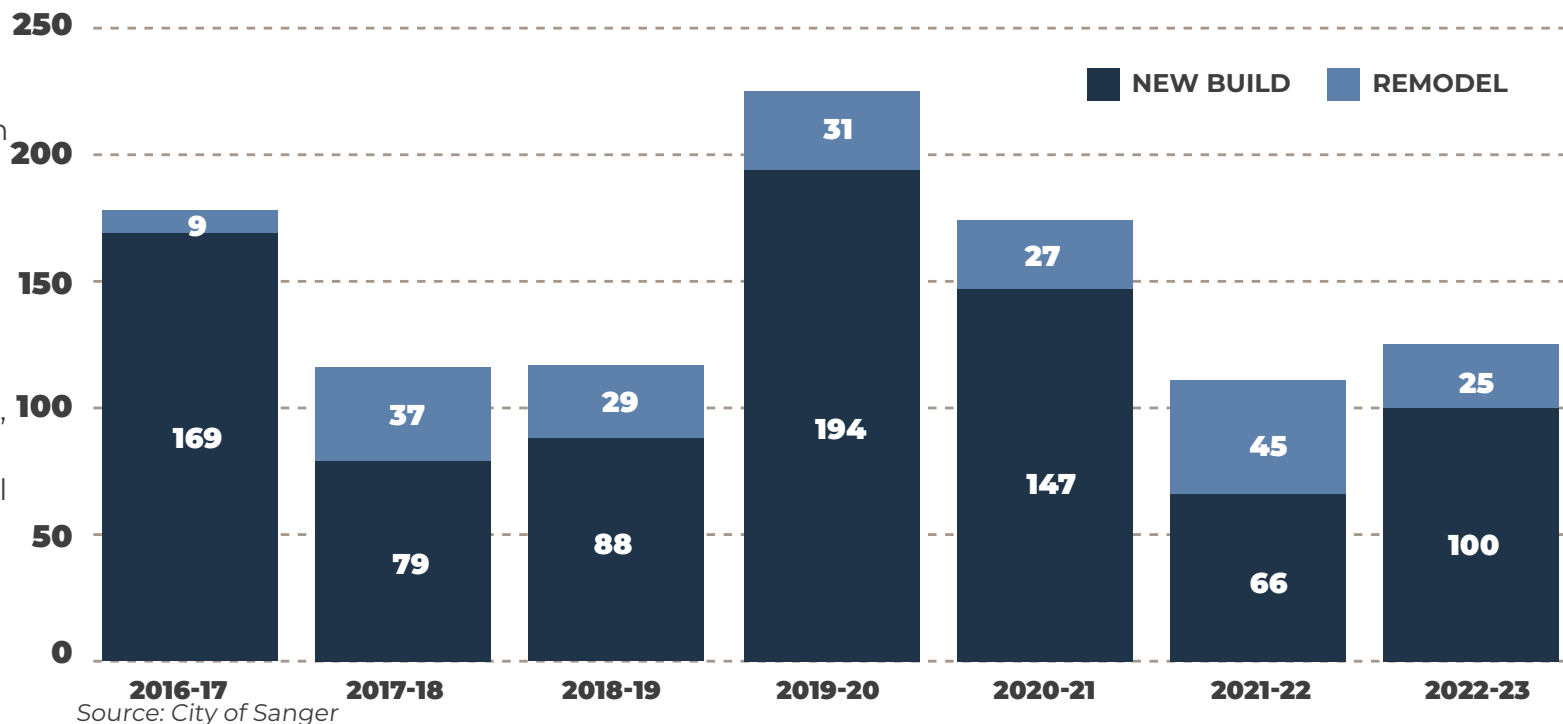
businesses that provide insight into business needs, plans for relocation or expansion, or closures. Other activities include publishing quarterly newsletters and online information, marketing videos, conducting annual business surveys, and offering networking opportunities.

The recent growth observed in top industries and the business-friendly environment supported by Sanger EDC are key indicators of an economic vitality that will play a significant role in increasing demand for housing in Sanger.

HOUSING PERMITS

The number of permits issued to produce residential properties in Sanger can indicate trends in the local housing market. **Figure 2.21** displays the number of permits issued between the fiscal years of 2017 and 2023 by type.

Figure 2.21 Residential Building Permits, Fiscal Years Ending 2017 - 2023



Source: City of Sanger

While the total number of permits issued significantly fluctuate year by year, the changing ratio of new build and remodel permits offers insight into specific trends including:

- » **The significantly higher number of new build permits may indicate that there is a greater demand for newer, modern homes, as opposed to the historic properties located near Sanger’s downtown core;**
- » **The number of remodeling permits has remained relatively steady, which could indicate that the more compact older properties remain desirable but may need updates or repairs.**

After observing the economic trends influencing development in Sanger today, there are several key findings:

- » **Unemployment in Sanger has decreased dramatically compared to Denton County and the state of Texas.**
- » **Sanger’s age demographics are shifting favorably in relation to economic growth.**
- » **Texas has one of the strongest economies in the nation as well as a rapidly increasing population.**
- » **Sanger has experienced significant growth in its top industry sectors, as well as the growth of emerging industry sectors.**
- » **Denton County and the broader Dallas-Fort Worth region have experienced significant economic growth.**
- » **11 new retail establishments are opening soon or have recently opened in Sanger.**
- » **There is approximately 5,748,000 square feet of industrial space currently being developed.**

The demographic characteristics, population projections, and economic trends in Sanger and the Dallas-Fort Worth region provide a more complete understanding of the socio-economic landscape that shapes the housing market in Texas. This information will inform the following sections, which will assess the current housing conditions in Sanger and determine future housing demand and development capacity.

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CHAPTER 3: HOUSING INVENTORY ASSESSMENT

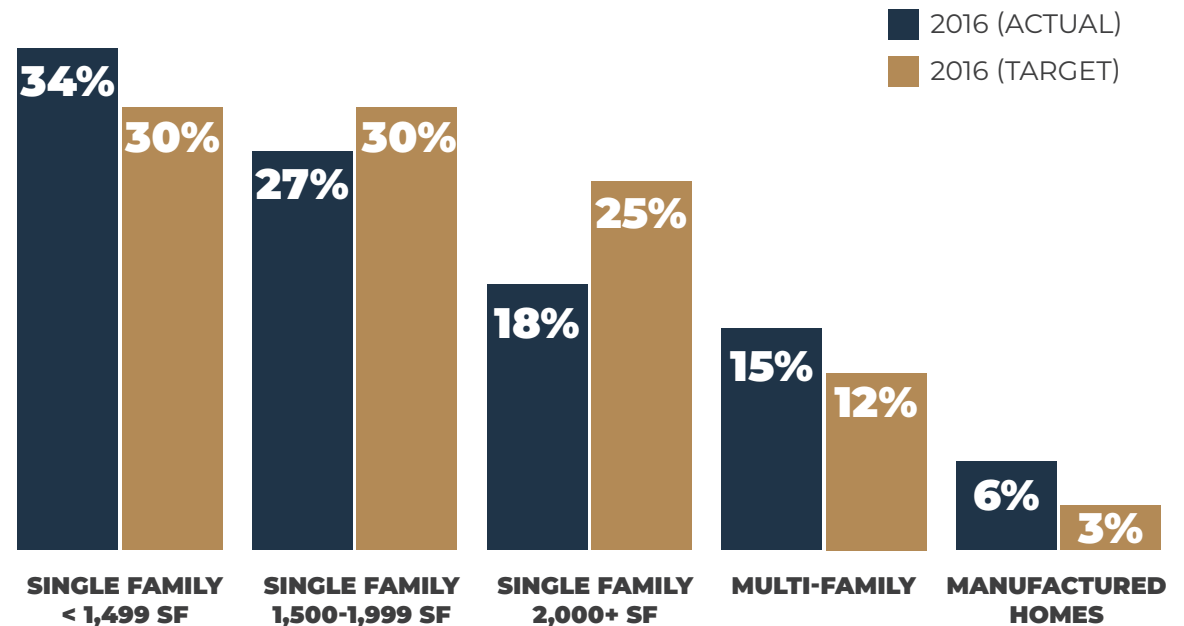
To determine Sanger’s current alignment with the vision set forth by both the Sanger 2040 Comprehensive Plan and the 2016 housing ordinance policy, it is necessary to analyze the composition of housing types currently present in the city. The following sections will provide a detailed analysis of this composition, as well as a description of relevant housing characteristics including age of housing, occupancy and vacancy rates, and an analysis of market values for residential properties in Sanger.

Since 2016, Sanger’s housing composition has shifted. However, it is also important to note methodological differences between the 2016 study and this current study. In 2016, the inventory of housing types was created from a sample of residential properties from each subdivision or area in the city. These samples were then averaged to estimate an average house size for each area. In contrast, this current study utilizes data provided by the City of Sanger and the Denton Central Appraisal District

HOUSING INVENTORY

The 2016 Housing Study aimed to document the housing stock of Sanger and provide the City Council with information that would assist it with deciding the targeted future housing mix. The study identified five categories of housing and the percentage of the total housing stock each category represented. **Figure 3.1** provides a comparison of the findings of the 2016 study alongside the targeted housing mix set forth by the housing ordinance policy.

Figure 3.1 2016 Housing Composition and Targeted Mix



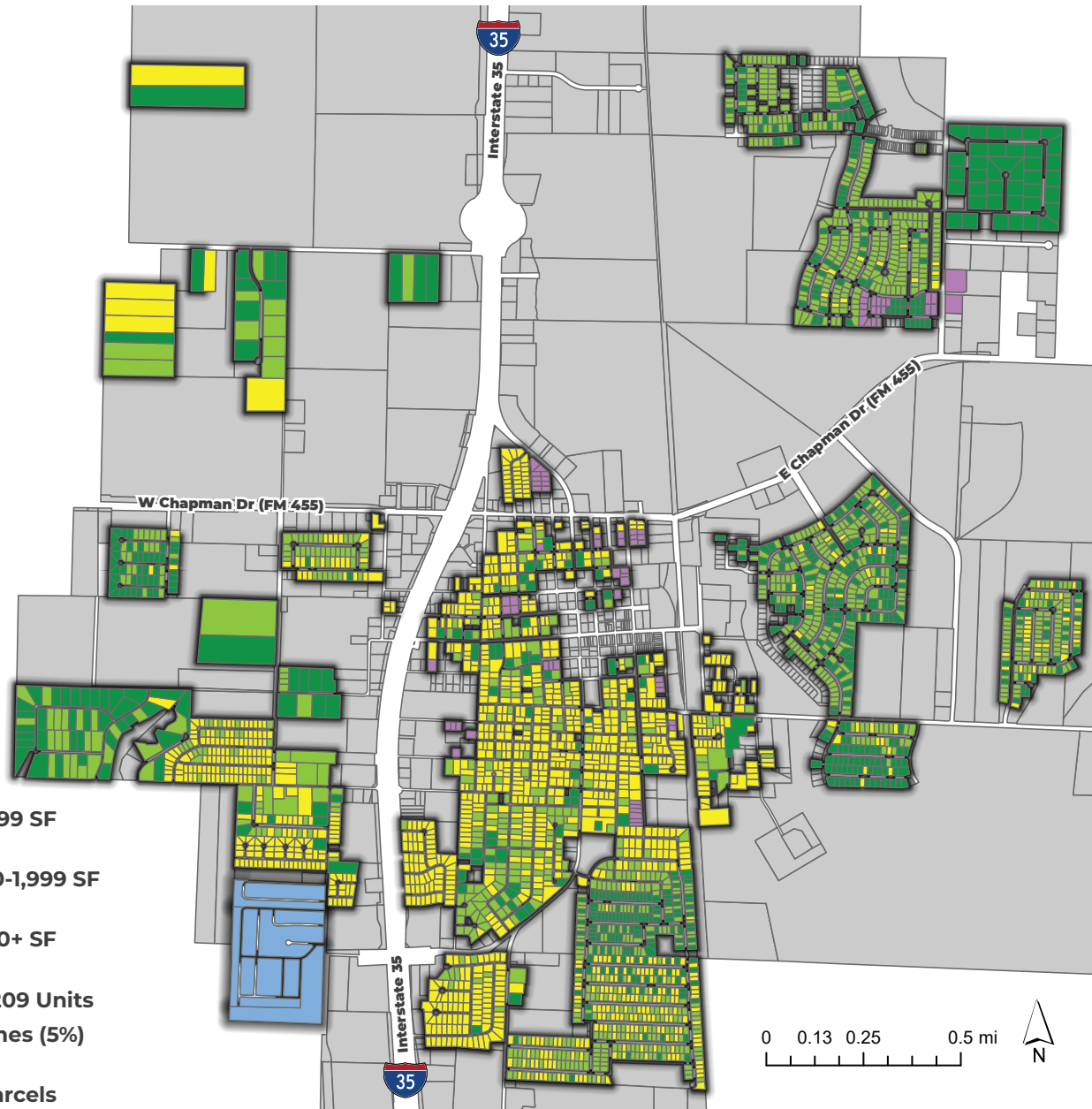
Sources: City of Sanger, 2016 Housing Study, and Resolution No. 09-08-16

Figure 3.2 Current Housing Composition

to include all residential properties within city limits. When considering the shifts in housing categories between 2016 and 2024, it is important to acknowledge that some percentage change may stem from the difference in methodologies, rather than reflecting a true increase in each category. **Figure 3.2** illustrates the current composition of housing types for all residential properties in Sanger.

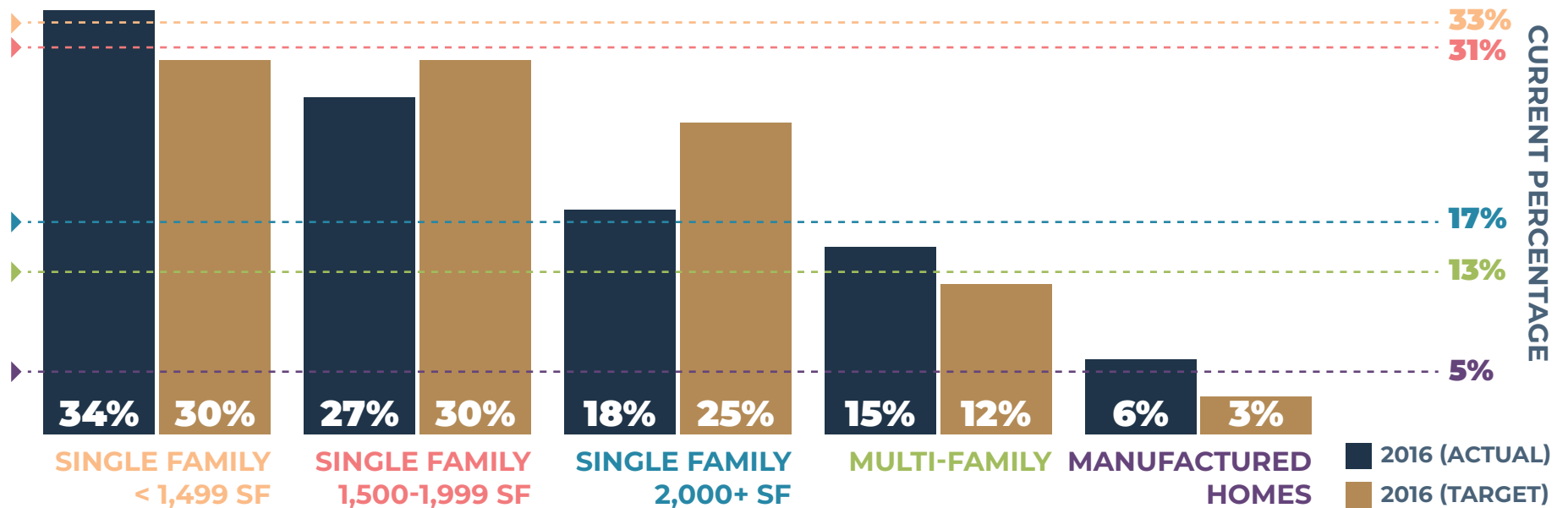
The total number of multi-family units were gathered through manual inspection of each multi-family property. The analyses within this section consider existing residential properties with vacant parcels being removed from the dataset.

- Single-Family < 1,499 SF**
(33%) 1,290 Units
- Single-Family 1,500-1,999 SF**
(31%) 1,195 Units
- Single-Family 2,000+ SF**
(17%) 665 Units
- Multi-Family (5%) 209 Units**
- Manufactured Homes (5%) 209 Units**
- Non-Residential Parcels**



Sources: City of Sanger; Denton Central Appraisal District; Antero Group

Figure 3.3 2016 Actual and Targeted Percentages Compared to Current Percentages



Sources: City of Sanger, 2016 Housing Study, and Resolution No. 09-08-16; Denton Central Appraisal District

Figure 3.3 illustrates a comparison between Sanger’s 2016 housing composition, the current housing composition, and the 2016 target.

Based on the results of this analysis:

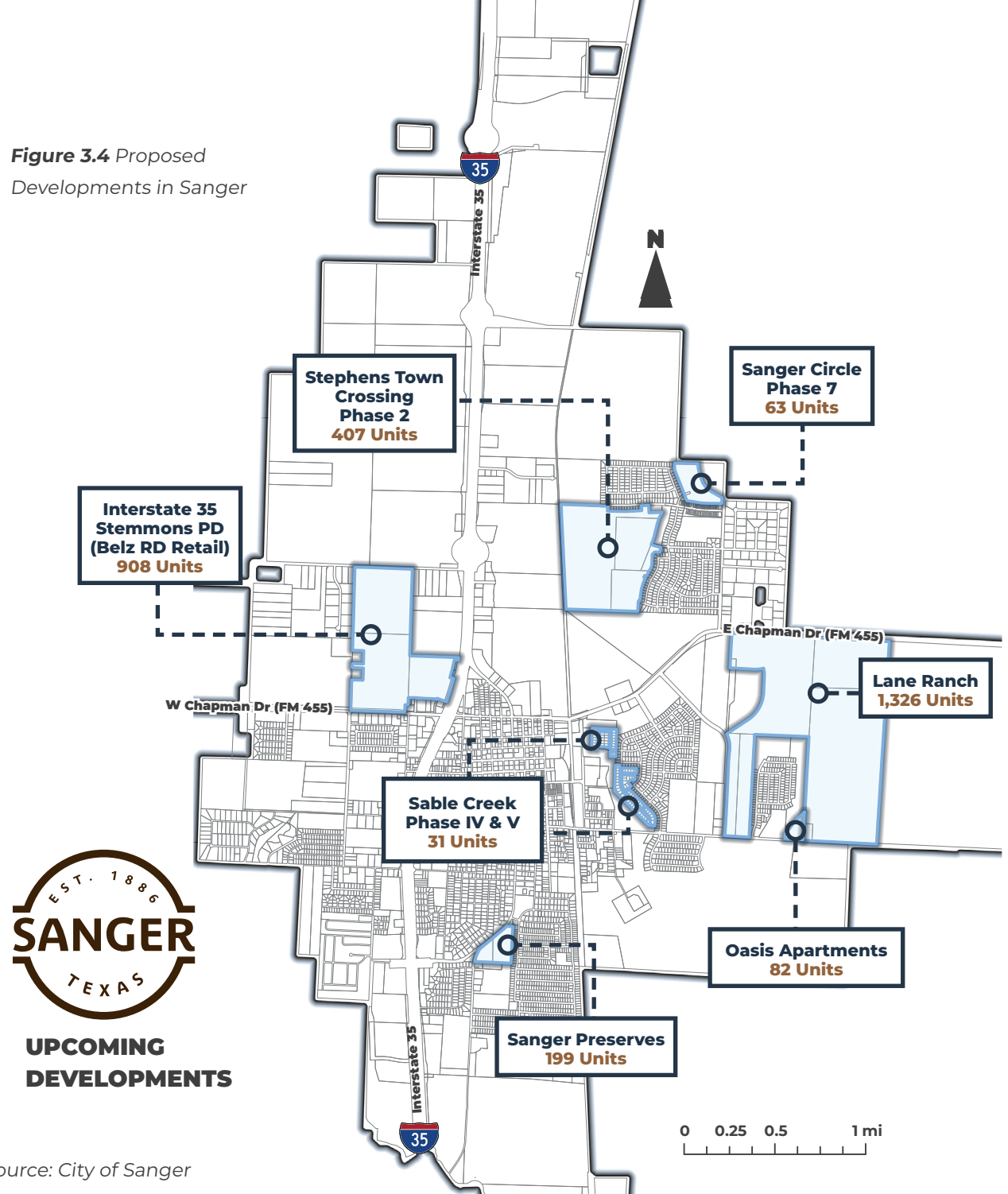
- » Most of the homes constructed since the time of the 2016 study are single-family homes between 1,500 and 1,999 square feet, represented by an increase of approximately 14.8%.
- » The single-family above 2,000 square feet housing category shows the most significant deviation from the 2016 target.
- » The multi-family category has decreased by approximately 13.3% since 2016, becoming more closely aligned with the 2016 target.

In general, the period between 2016 and 2024 represented a progression towards achieving the 2016 Target Mix. The single-family under 1,499 square feet, single-family between 1,500 and 1,999 square feet, multi-family, and manufactured homes categories have all become more aligned with the 2016 target. However, the single-family above 2,000 square feet category moved further away from the target, decreasing by approximately 5.6%.

Continuing the analysis of how Sanger’s housing composition is changing, it is useful to consider how upcoming or proposed developments will further shift each housing type category. **Figure 3.4** illustrates the location of each proposed development.

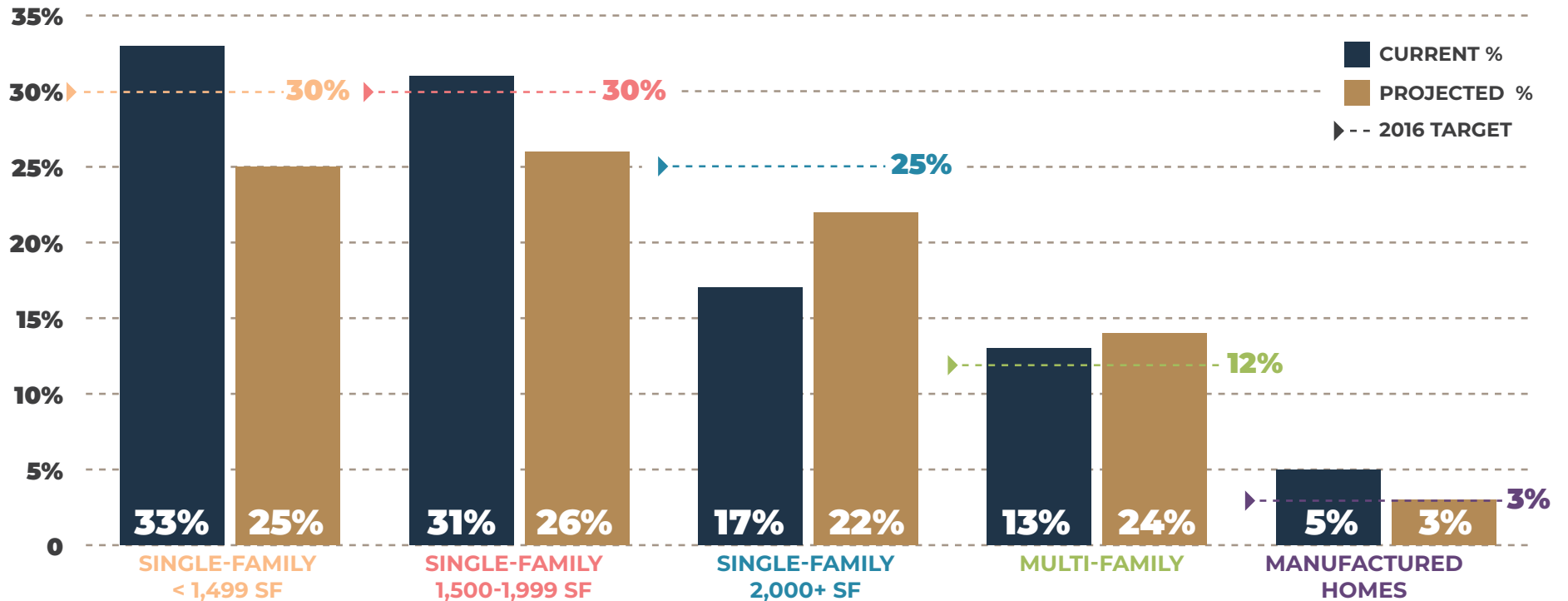
Upcoming or proposed developments will account for an additional 3,016 housing units. With an average household size of 2.68 people in 2022, these new developments will likely house 8,082 future residents of Sanger. Utilizing the data provided by Sanger,

Figure 3.4 Proposed Developments in Sanger



Source: City of Sanger

Figure 3.5 Current Composition, Composition Including Future Developments, and 2016 Target



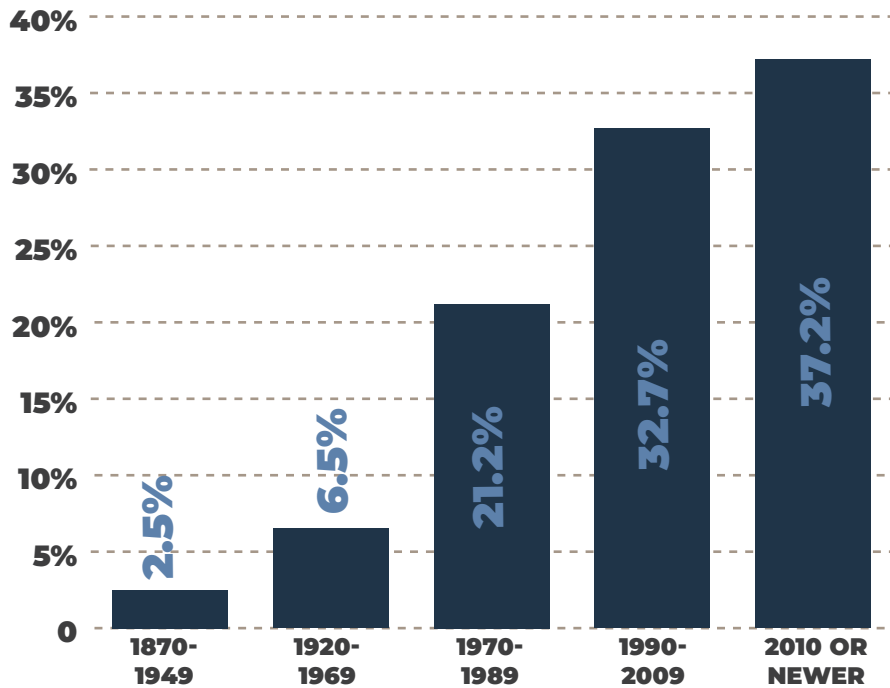
Sources: City of Sanger, Resolution No. 09-08-16; Denton Central Appraisal District; Antero Group

Figure 3.5 displays what the composition of housing in Sanger will be after the completion of these upcoming or proposed developments.

The inclusion of future developments within this analysis illustrates a significantly different picture of Sanger’s housing composition. The single-family under 1,499 square feet falls below the targeted percentage of 30% at 25%. The single-family between 1,500 and 1,999 square

feet category falls below targeted percentage of 30% at 26%. The single-family above 2,000 square feet category increases closer to the targeted percentage of 25% at 22%. The multi-family category deviates significantly from the targeted percentages by a difference of 12% at 24%. The manufactured homes category decreases to match the targeted percentage of 3%.

Figure 3.6 Distribution of Residential Property Ages



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

RESIDENTIAL PROPERTY AGES

The age of a housing inventory can provide insight into the city’s historical development patterns and its future needs and challenges. For instance, an aging housing stock might indicate a future need for more new housing or significant renovations within the existing housing stock.

AGE DISTRIBUTION

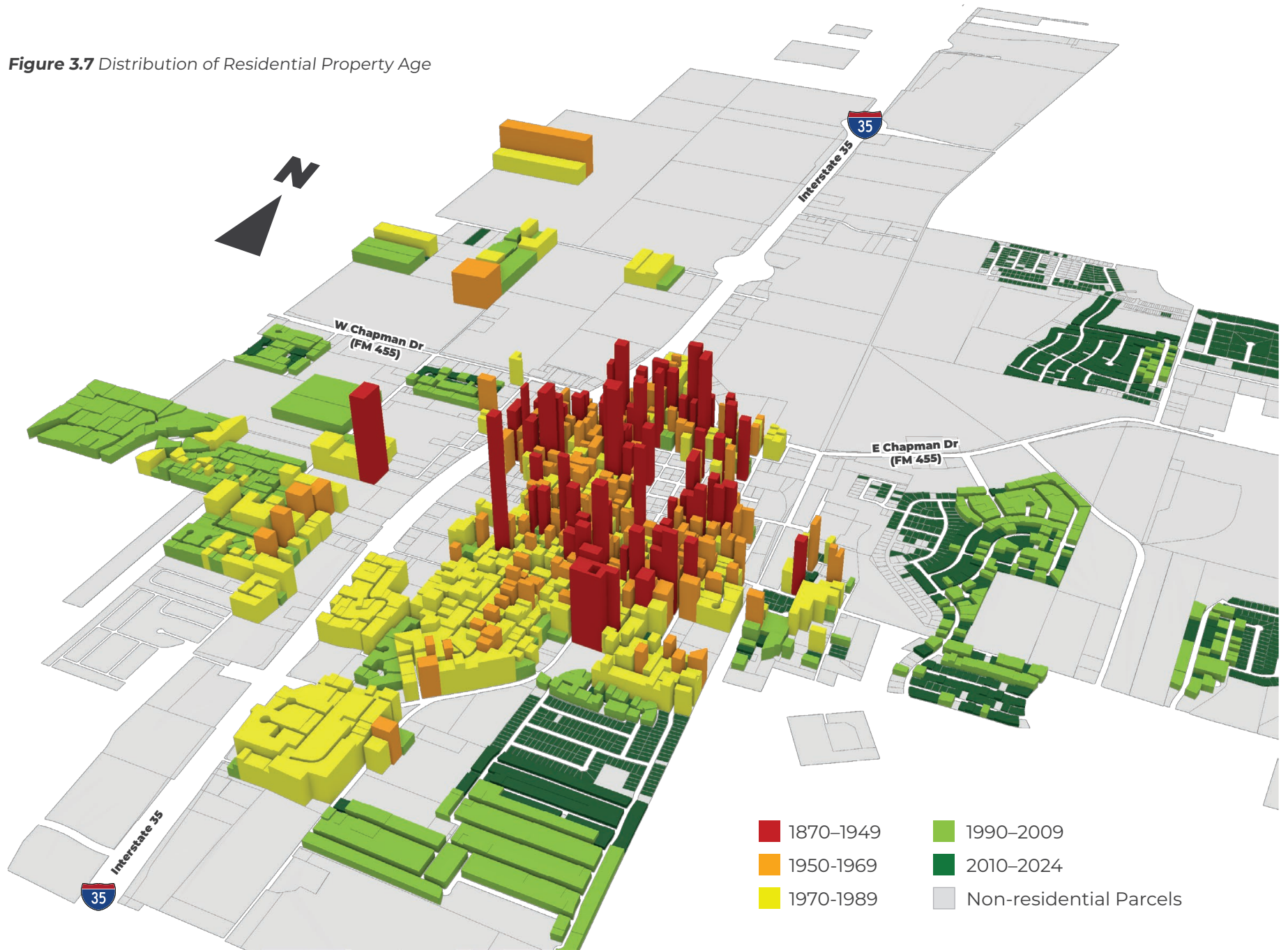
Examining the age distribution of homes in Sanger offers valuable insight into its history of development and the current state of its residential properties. **Figure 3.6** displays the distribution of ages for residential properties within Sanger, according to data from the Denton Central Appraisal District.

Sanger has a relatively young housing inventory, with 37.2% of homes built after the year 2010. It would be unlikely that the negative implications of an aging housing stock will be a major concern for Sanger in the coming years. 2004 is the median year of construction for residential properties in Sanger. **Figure 3.7** on the following page displays the spatial distribution of residential property ages in Sanger.

Examining the timeline of construction years for homes in Sanger reveals distinct periods of significant development. The ages of residential properties in Sanger follow a traditional pattern of outward growth, with older properties being located near the center of the city and newer properties being located around the edges.

A housing stock with a large range of ages is a useful asset for Sanger. The newer developments around the edges of the city offer modern, spacious homes, while the central parts of Sanger offer more compact, affordable housing options. In cities where most homes are relatively young, it is common for there to be a lack of housing options that

Figure 3.7 Distribution of Residential Property Age



Sources: Denton Central Appraisal District; Antero Group

serve as “starter” homes. In Sanger, there are a variety of housing options to capture the demand of different home buyer market segments.

OCCUPANCY AND VACANCY

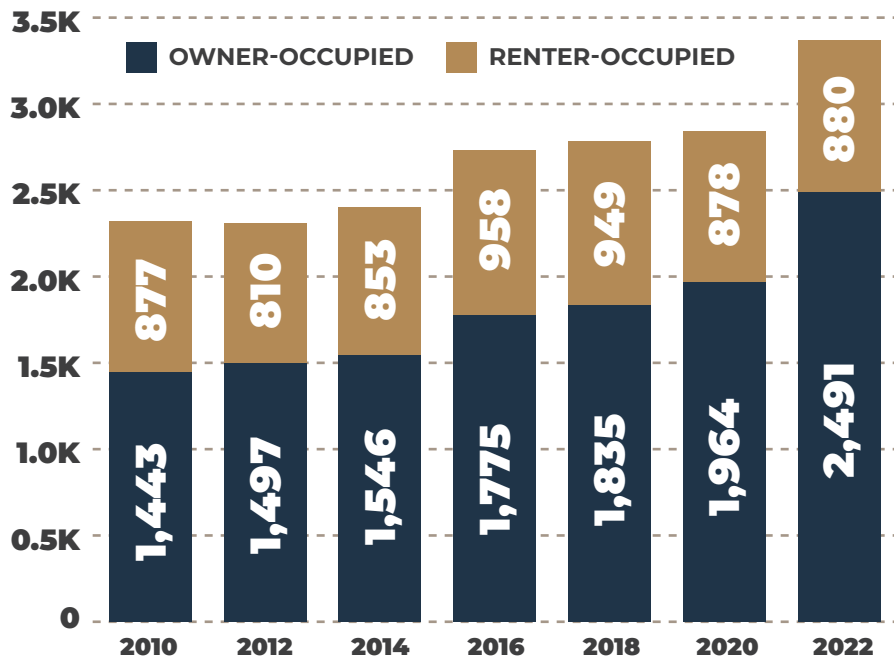
The occupancy and vacancy rates in a city’s housing inventory provide critical insights into the housing market’s dynamics. These rates are indicators of the housing market’s health, reflecting the balance between housing supply and demand. A high occupancy rate indicates a high demand for housing, suggesting a

thriving real estate market. However, an excessively high occupancy rate may also signal a shortage of housing, leading to inflated housing prices and increased cost of living. Conversely, the vacancy rate is the percentage of unoccupied or vacant units in the total housing inventory. A lower vacancy rate might indicate a robust housing market, but it could also signify a lack of available housing, potentially leading to overcrowding or inflated rental and purchase prices.

According to data from the American Community Survey, the occupancy rate in the City of Sanger was 94% in 2022, with a total of 3,371 occupied housing units. Of this total, approximately 74% of residents own their home, while approximately 26% rent. Sanger’s rate of home ownership is high compared to the national rate, which was estimated to be approximately 65% in 2022. While high demand for housing can, in some cases, produce undesirable conditions like overcrowding, only 4.4% of residents live in homes where there is more than one person per room, which means that this scenario is unlikely in Sanger. **Figure 3.8** illustrates how housing unit occupancy in Sanger shifted between 2010 and 2022.

According to data from the American Community Survey, the vacancy rate in the City of Sanger was approximately 6% in 2022. Sanger’s vacancy rate is low compared to the national rate, which was estimated to be approximately 11% in 2022. Of the properties considered to be vacant, 70.24% were listed for rent in 2022, representing an estimated 144 units out of a total of 205 vacant units.

Figure 3.8 Occupied Housing Units, 2010-2022

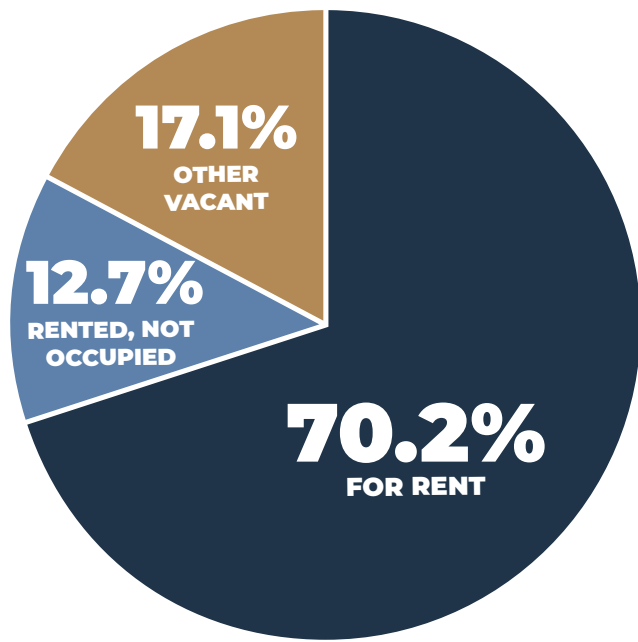


Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

Figure 3.9 illustrates the composition of housing types contributing to the city's 2022 vacancy rate.

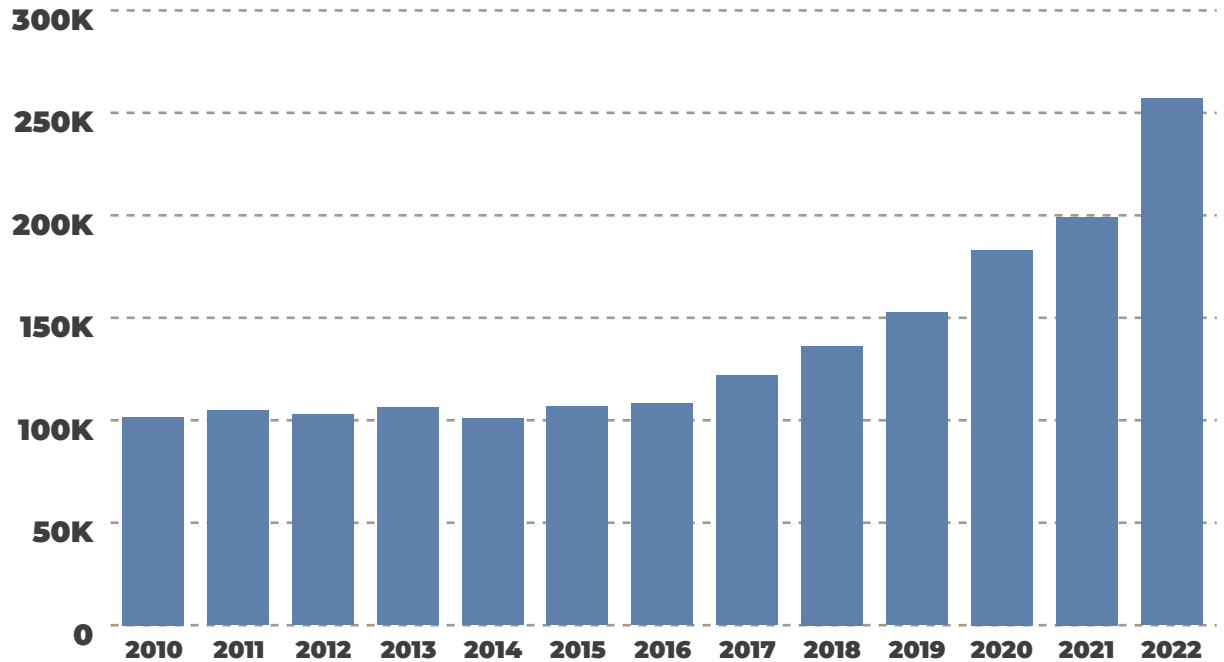
Examining the occupancy and vacancy rates of Sanger provides an understanding of the current utilization of housing in the city. This data is a useful metric of housing availability and demand. The following section provides a further examination of Sanger's housing market as it relates to the assessed values of residential properties.

Figure 3.9 Vacancy by Housing Type, 2022



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

Figure 3.10 Median Home Values, 2010-2022

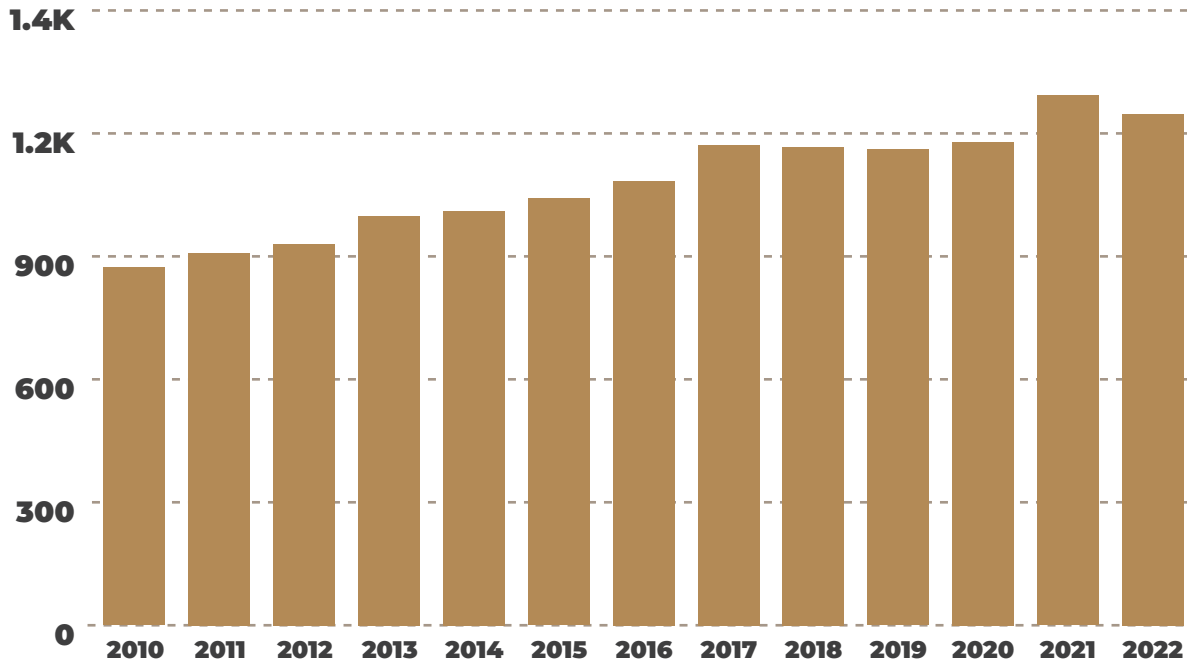


Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

HOME VALUE ANALYSIS

The range of home values in a city's housing market offers a perspective into the economic status and affordability of the city. These values provide a useful metric of the city's financial health, mirroring the financial capabilities of the residents and the cost of available housing. According to data from the American Community Survey, the median value for occupied homes in the City of Sanger was \$257,000 in 2022, representing an increase of approximately 153.2% from 101,500 in 2010. **Figure 3.10** provides an overview of the shifts in home value that have occurred over the past decade.

Figure 3.11 Median Rent Costs, 2010-2022



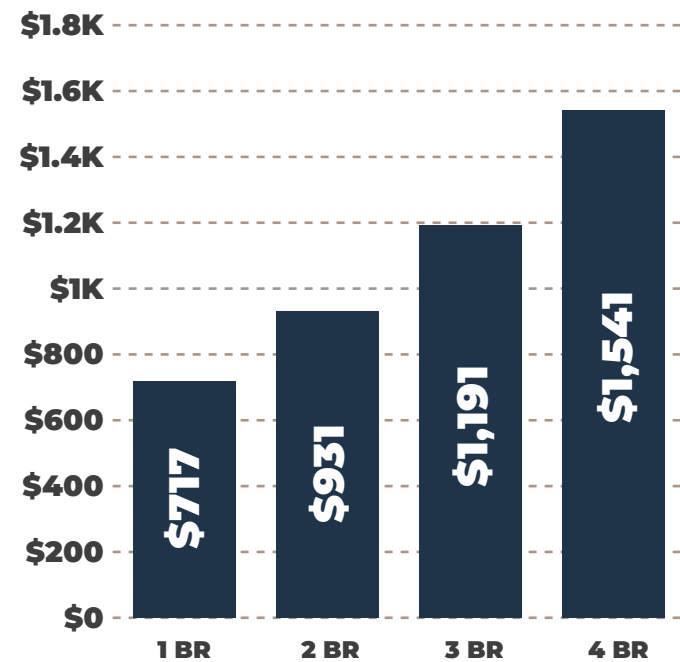
Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

The median rent was approximately \$1,247 in 2022, an increase of approximately 42.84% from 873 in 2010.

Figure 3.11 illustrates the changes in median rent costs that have occurred over the past decade. To gain a better understanding of rent costs in Sanger, it is also useful to consider the median rent by number of bedrooms in the unit. **Figure 3.12** illustrates the changes in rent costs by number of bedrooms over the past decade.

The steady increase in the median home value and rent cost is indicative of growing housing demand in Sanger. As the Dallas-Fort Worth area continues to attract new residents, communities within commuting range of major

Figure 3.12 Median Rent by Number of Bedrooms



Source: U.S. Census Bureau, 2022: ACS 5-Year Estimates

economic centers will experience a similar trajectory. Being within commuting range of Denton, Dallas, and Fort Worth, Sanger is well-positioned to capture this demand.

While high home values and rent costs are positive in the context of economic growth, they can also lead to affordability issues for many residents, especially those with lower incomes. This can result in a higher cost of living and potential displacement of long-term residents. To mitigate these issues, it is important to maintain a diverse composition of housing types that accommodate a range of income levels.

SPATIAL DISTRIBUTION OF HOME VALUES

From conveniently located historical properties in the heart of downtown to modern homes on spacious lots on the city's outer edges, Sanger has diverse home values. Spatial distribution analysis of home values provides a visual representation of the city's housing market and the geographical variations in home values.

Differentiating between single-family and multi-family homes provides a clearer understanding of residential property value distribution throughout the city. It is important to note that manufactured homes were analyzed as multi-family homes due to similar data collection methods for these types of properties in Sanger. In the same way that individual unit data for parcels with multi-family improvements is not recorded, DCAD does not individually record information about manufactured homes, but rather the lots they are located on, which house many manufactured units.

Figure 3.13 features a map that utilizes data from the Denton Central Appraisal District to illustrate the distribution of single-family home market values in 2024.

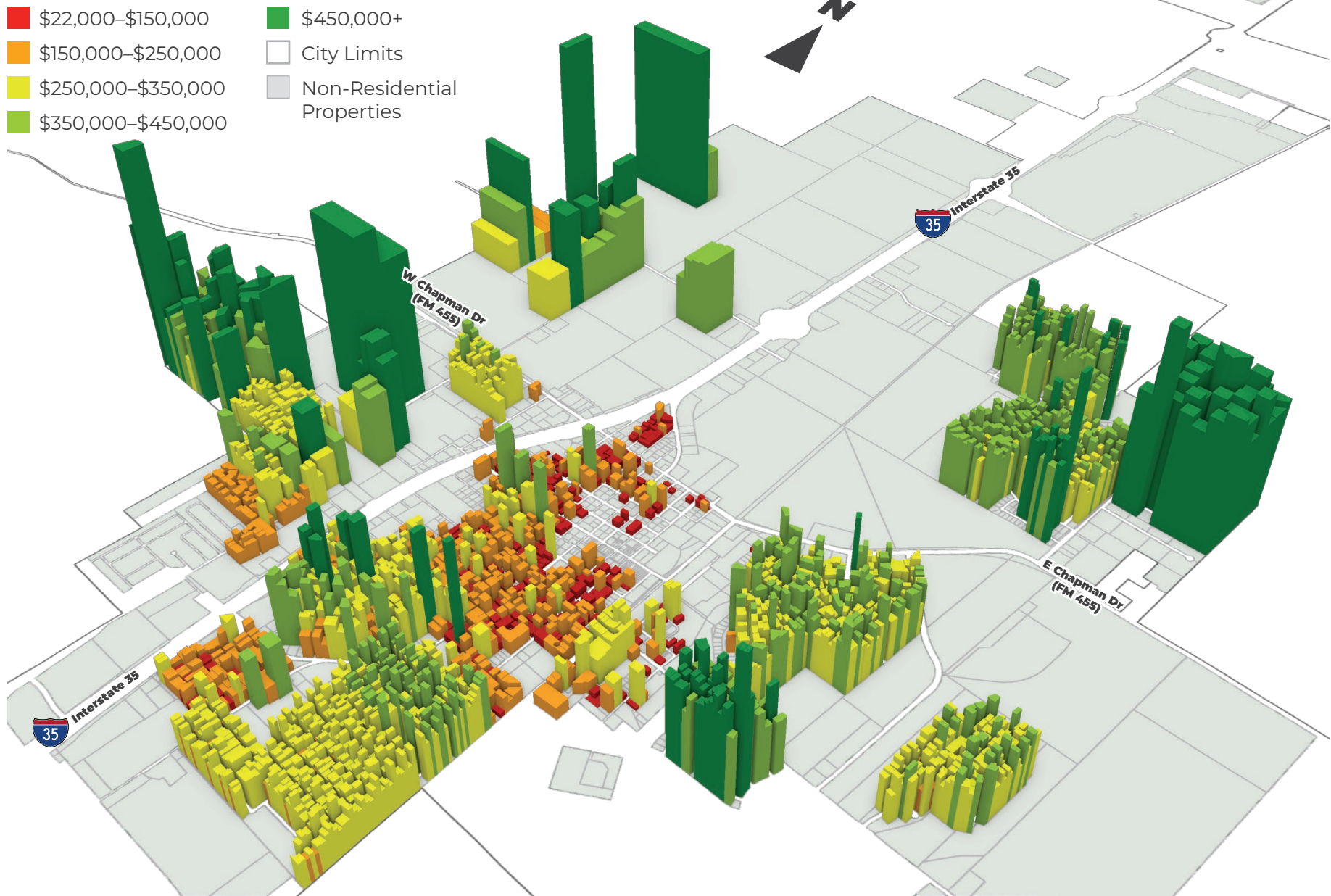
Single-family home values on the city's edges tend to be valued higher than centrally located properties, likely due to differences in square footage, lot sizes, and age. Newer homes tend to be associated with greater square footage and larger lot sizes than the homes located in the denser neighborhoods of central areas. The edges of the city tend to be where newer homes have been built in recent years.

While generally lower than the outer edges of the city, the range of values in the central core are highly varied, with some homes being valued similarly to the homes in newer developments. The range of values in the central core is likely due to the variety of homes and associated years of construction located within the central areas of the city, as opposed to the more uniform subdivisions on the outer edges where most homes were likely to have been constructed within the same time frame.

A significantly lesser portion of Sanger's housing inventory is multi-family housing. **Figure 3.14** provides a visualization of the distribution of market values in multi-family properties in Sanger. It is important to note that an inset map is used to emphasize the full extent of "The Trails of Sanger" apartment complex value, which was approximately \$39,354,375 in 2024 based on data from the DCAD. Located in the northeast corner of the city, this property is valued significantly higher than any other multi-family property. A large portion of multi-family properties are located in central areas of Sanger, indicating an alignment with the goal of creating a livelier downtown described in the Sanger 2040 Comprehensive Plan.

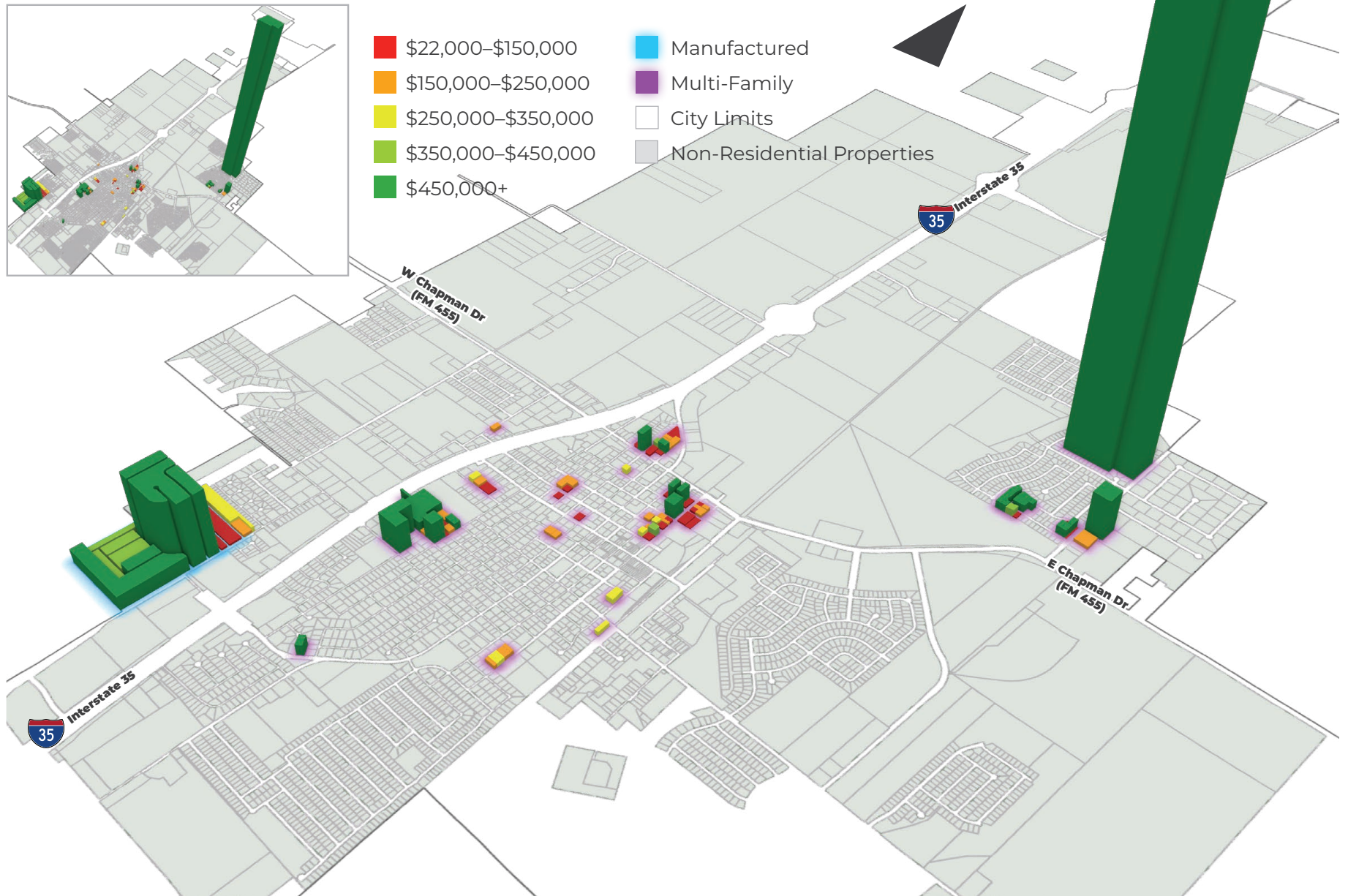
To ensure the city's housing market remains responsive to the needs of Sanger residents, the next section will focus on assessing the city's capacity to accommodate future housing needs. The section will outline potential strategies for accommodating the changes brought about by the growth patterns, demographic changes, and market trends presented within this study.

Figure 3.13 Single-Family Home Market Values, 2024



Sources: Denton Central Appraisal District; Antero Group

Figure 3.14 Multi-Family and Manufactured Home Values, 2024



Sources: Denton Central Appraisal District; Antero Group

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CHAPTER 4: FUTURE HOUSING NEEDS ASSESSMENT

This section will take into consideration the findings of the analyses presented throughout this study to determine Sanger’s housing needs and make recommendations for future housing policy.

ANALYSIS AND RECOMMENDATIONS

As Sanger continues to grow, it is important that the city is well-equipped with strategies that will ensure its housing supply can accommodate future demand. In this section, an analysis of the data presented throughout this study

will be used to determine an Updated Targeted Housing Composition that will account for the population and demographic changes Sanger is likely to experience in the coming years.

The demographic analyses presented in **Chapter 2** aimed to anticipate the nature of future housing needs. As demographic characteristics shift in Sanger, so will the demand for specific types of housing. This section will highlight the most significant indicators of demand for each housing category.

SINGLE-FAMILY UNDER 1,499 SQUARE FEET

The demand for homes in this category is determined by several factors. With single male and female householders living alone constituting a significant portion of the population (13.47% and 12.70% respectively), and the presence of a substantial population aged between 25 and 34 years representing approximately 18% of residents, there is likely to be a demand for smaller housing units. These individuals, often young professionals, are likely to seek residences that offer convenience and affordability. Smaller single-family homes, offering the right balance of space, convenience, and affordability, are likely to meet the needs of this demographic cohort.

Married couples without children under 18 years, representing 26.25% of Sanger residents, may also prefer smaller, more manageable properties. Householders in this population group may seek the benefits of home ownership but require less living space than households with children.

The income distribution of Sanger reveals that 24.10% of households earn less than \$50,000 annually, indicating a significant market segment that may find smaller single-family homes more financially accessible.

It is also important to consider factors that may reduce demand for homes in this category. A portion of the market segment that contributes to the demand for housing in this category is also likely to consider homes

in the 1,500 to 1,999 square feet category. Based on the indicators of demand described throughout this section, there is likely a convergence of preferences between single-family homes under 1,499 square feet and single-family homes between 1,500 and 1,999 square feet. Homes of medium size—situated between the categories of smaller and larger single-family residences—hold the highest appeal potential for a broad range of homebuyers whose housing preferences may span across multiple categories.

THE DEMAND FOR HOMES IN THE UNDER 1,499 SQUARE FEET CATEGORY IS INDICATED BY THESE KEY TAKEAWAYS:

- » **Householders who are young and single or have lower incomes may prefer smaller housing units that are more manageable and affordable than larger residences.**
- » **Householders married without children are less likely to require the larger living spaces offered by many modern single-family homes.**
- » **There may be overlap in the market segments that prefer housing in the single-family under 1,499 square feet and single-family between 1,500 and 1,999 categories.**

Maintaining an inventory of homes in this category is important in capturing the demand of market segments that prefer smaller single-family homes. However, maintaining a larger inventory of mid-size homes would be most likely to capture demand from multiple market segments. While an adequate supply should be maintained, it is recommended that the development of homes in this category be a lesser priority than the mid-size homes described in the following category and that the targeted percentage be lowered from 30% to 25%.

SINGLE-FAMILY BETWEEN 1,500 AND 1,999 SQUARE FEET

Multiple factors signal a demand for homes in this category. As previously discussed, homes in this category are likely to capture some of the demand from the same market segments associated with a preference for homes in the single-family under 1,499 square feet category. Young professionals and married couples without children who have the financial capacity to afford mid-size single-family homes may be equally likely to prefer homes in this category. However, there are also indicators of demand specific to this category.

Married couples with children under 18 years comprising approximately 27.20% of households indicate a demand for homes that can accommodate growing families. Mid-size single-family homes that offer multiple bedrooms and amenities suitable for family living are likely to appeal to this demographic segment.

As individuals aged between 25- and 34-years progress in their careers and personal lives, their housing needs are likely to evolve, with many aspiring to follow the common trajectory of transitioning from smaller starter homes to more spacious residences. For many buyers, mid-size single-family homes may represent a “move up” from a starter home or apartment rental.

THERE IS LIKELY TO BE A HIGH DEMAND FOR HOMES IN THIS CATEGORY, BASED ON THESE KEY TAKEAWAYS:

- » **A portion of the demand for single-family homes under 1,499 square feet can likely be captured by this category of homes.**
- » **Homes in this category may represent the next step for residents looking to upgrade from smaller starter homes.**
- » **Married couples with children may prefer more living space at a more affordable price point than larger single-family homes.**
- » **Homes in this category offer a balance between space and affordability.**

An adequate supply of homes in this category will capture the sizeable market segment of home buyers who prefer mid-size single-family homes. It is recommended that the 30% targeted percentage for this housing category be maintained.

SINGLE-FAMILY ABOVE 2,000 SQUARE FEET

The demand for homes in this category can be determined by considering several factors presented in this study. The presence of married couples with children under 18 years, comprising approximately 27.20% of households, indicates a demand for homes that can accommodate growing families. Larger families seeking more spacious layouts may gravitate towards homes that better accommodate their needs.

It is important to consider the financial capacity required to purchase homes of this size. The population group aged between 55 and 64 years, representing approximately 10% of residents, are likely to be established professionals with greater financial capacity to purchase larger homes. The median household income in Sanger is \$86,083, indicating a relatively affluent community. 26.40% of households earn between \$100,000 and \$149,999 annually and 16.30% earn over \$150,000. Additionally, the growth of the population group employed in the finance and insurance industry, associated with the highest median earnings in Sanger, could contribute to the demand for more expensive housing options. Considering these factors, there exists a market segment capable of affording larger homes.

The economic growth of surrounding areas indicates a high likelihood of new residents with high incomes contributing to the demand for higher-end housing options. As cities within commuting distance of Sanger grow, it is likely that the migration of wealth outwards from the economic centers of Dallas-Fort Worth will continue.

DEMAND FOR HOUSING IN THIS CATEGORY WILL LIKELY REMAIN HIGH, BASED ON THESE KEY TAKEAWAYS:

- » **Homes in this category offer a spacious housing option for growing families and cater to a growing population of Sanger residents with the financial capacity to afford larger single-family homes.**
- » **The portion of Sanger residents with the capacity to afford homes in this category is expected to increase in the coming years due to the economic growth of the Dallas-Fort Worth area.**

Maintaining an inventory of larger single-family homes will be necessary to accommodate the growing demand of families who require a spacious living area and those with the financial capacity to afford higher-end housing. It is recommended that the targeted percentage of 25% for this housing category from 2016 be maintained.

MULTI-FAMILY

The demand for homes in this category is indicated by multiple demographic and economic factors. The population aged between 25 and 34 years represents approximately 18% of residents. Approximately 26% of households in Sanger are adults living alone without children. These groups form a key demographic cohort driving demand for multi-family housing options. This age group, often comprised of young professionals and couples, generally seek rental properties as a shorter-term living situation that balances affordability and convenience.

Housing affordability in Sanger will likely impact the demand for multi-family units. Increasing home values, while generally indicating economic success, often lead to affordability issues. With 24.10% of households earning less than \$50,000 annually, there exists a market segment that may find multi-family housing options more financially accessible compared to single-family homes.

Multi-family housing development will also play a key role in actualizing the vision set forth by the Sanger 2040 Comprehensive Plan for creating a more walkable downtown Sanger. The plan states that downtown Sanger should be “the location of celebration and walkable activity.” It is also stated that mixed-use development with ground-floor retail and residential units above will be an important part of increasing the success of downtown Sanger. Sanger can capitalize on the demand for multi-family housing units by strategically locating new developments in central areas of the city. A higher population density in these areas would

support a greater number and wider variety of commercial uses, contributing to the overall improvement of liveliness and walkability.

IT IS INDICATED THAT THERE WILL BE A CONTINUED NEED FOR MULTI-FAMILY HOUSING IN SANGER, BASED ON THESE KEY TAKEAWAYS:

- » **Housing units in this category provide an option for the large population of young adults who may prefer a shorter-term living situation that offers both affordability and convenience.**
- » **Rental units are typically more financially accessible for those to whom the costs associated with homeownership are unaffordable.**
- » **Centrally located multi-family homes can contribute to the development of a walkable, mixed-use downtown.**

Developing multi-family housing units in Sanger will help provide a wider variety of housing options for a range of household sizes and income levels. Based on the indicators of demand emphasized in this section, it is recommended that the 2016 targeted percentage of 12% be increased to 17%.

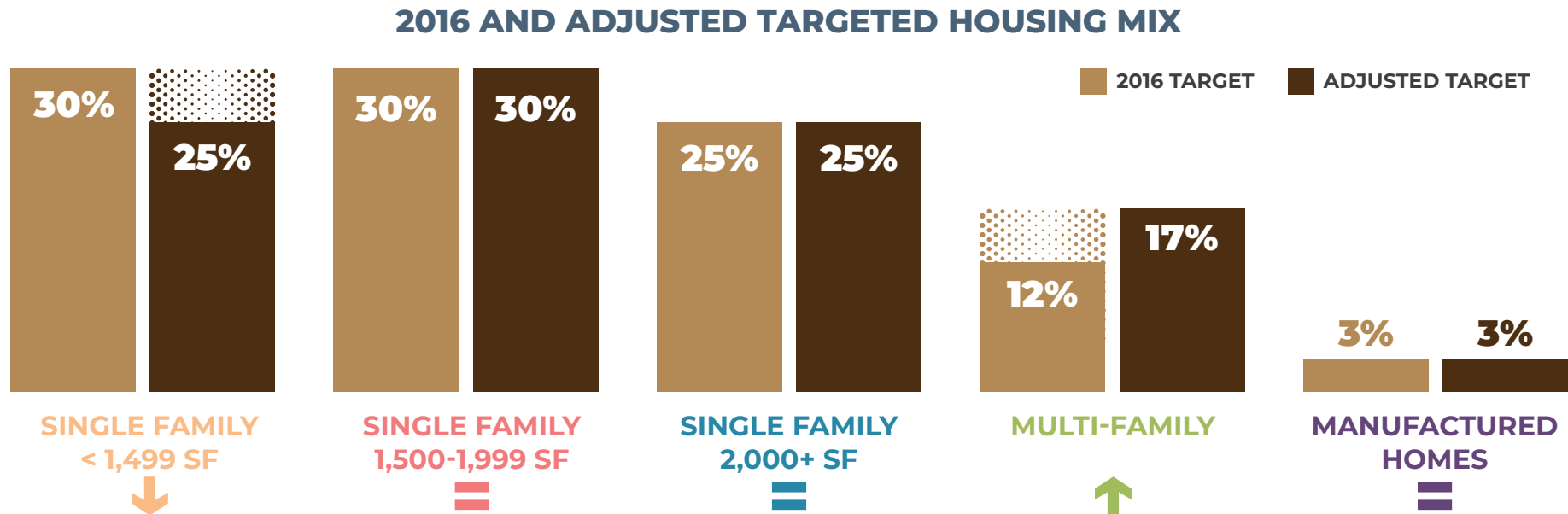
MANUFACTURED HOMES

Manufactured homes offer a balance between the benefits of detached single-family dwellings and affordability, providing an alternative option to rental units when traditional single-family homes are not financially accessible. With housing prices in Sanger continuously increasing, some residents may be financially limited. Approximately 24.10% of households earn less than \$50,000 annually. Manufactured homes are oftentimes a more affordable option for residents who may prefer the privacy of a single-family style of home or prefer not to rent.

The demand for homes in this category will likely remain low. While manufactured homes provide alternative housing options for many residents who may not prefer multi-family housing or purchasing a traditional single-family home, it is likely that the current targeted percentage of 3% would adequately capture the level of demand present in Sanger and is recommended to be maintained.

Based on these indicators of demand, an update to the 2016 Targeted Housing Mix is recommended as displayed in **Figure 4.1**.

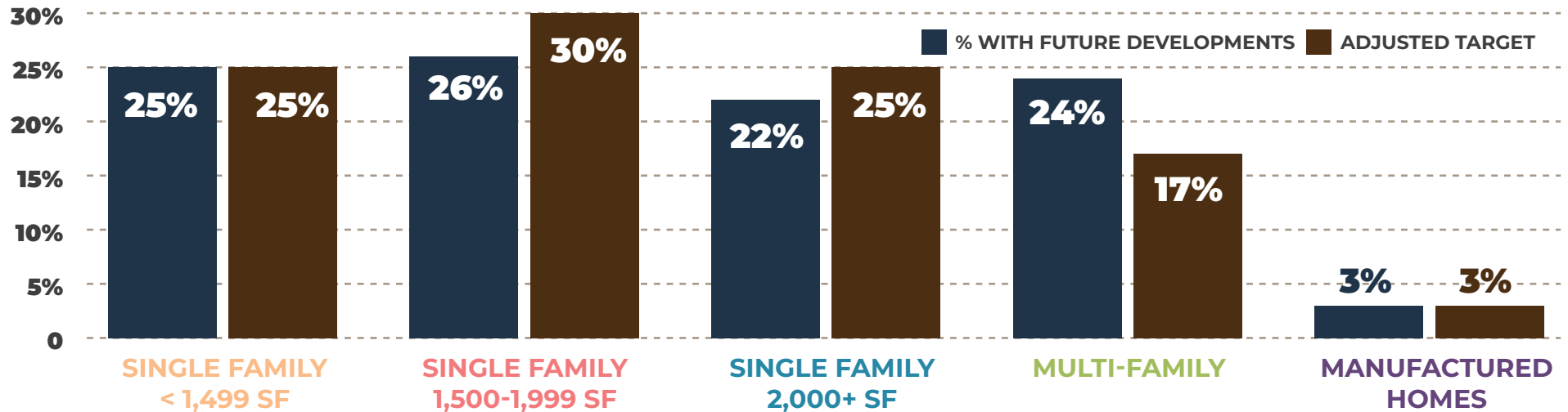
Figure 4.1 2016 and Adjusted Targeted Housing Mix



Sources: City of Sanger, Resolution No. 09-08-16; Antero Group

Figure 4.2 Housing Composition Including Future Developments and Adjusted Targets

HOUSING COMPOSITION INCLUDING FUTURE DEVELOPMENTS AND ADJUSTED TARGETS



Sources: City of Sanger; Antero Group

The 2016 target percentages for the single-family between 1,500 and 1,999 square feet, single-family above 2,000 square feet, and manufactured homes categories have been maintained, while the single-family under 1,499 square feet and multi-family categories have been updated to reflect the findings of this study. The targeted percentage of single-family homes under 1,499 square feet was reduced, while the multi-family category was increased. The indicators of demand that are present for the single-family under 1,499 category are also likely to apply to mid-size homes in the single-family between

1,500 and 1,999 category. However, due to Sanger’s high median income, growing economy, and high percentage of families with children, it is recommended that single-family homes between 1,500 and 1,999 be prioritized. The multi-family category was increased to reflect the indicators of demand described in this section.

In **Chapter 3**, the composition of Sanger’s housing inventory was compared with its potential composition if all proposed developments are completed. **Figure 4.2** makes a similar comparison of Sanger’s potential housing mix (with future developments included) and the Updated

Targeted Housing Composition. The development of the upcoming or proposed housing developments in Sanger would represent a step further towards alignment with the Recommended Housing Composition Target.

In addition to the desired composition of housing types, the total number of residential units being developed should be considered. **Figure 4.3** displays the estimated total housing units that Sanger will require in future years, based on the population projections included within WDSACI, and the estimated number of housing units in 2020 according to the ACS. These figures assume that Sanger will aim to maintain its current ratio of total residents and housing units.

Figure 4.3 Population and Housing Unit Projection

YEAR	WDSACI POPULATION ESTIMATES	TOTAL HOUSING UNITS
2020	9,080	3,117
2025	10,629	3,639
2030	12,442	4,260
2040	17,048	5,837

Source: Water Distribution System Analysis and Capital Improvements

The projected growth and associated development of new housing units highlights the importance of regular assessments of Sanger’s alignment with the Adjusted Targeted Housing Composition. It is recommended that these assessments of alignment be made annually,

utilizing the Housing Toolkit provided by this study. The toolkit will allow the city to input the total number of units of each housing type associated with current or proposed developments, which will indicate how the alignment of each category to the Targeted Composition will be impacted.

RESIDENTIAL DEVELOPMENT CONSIDERATIONS

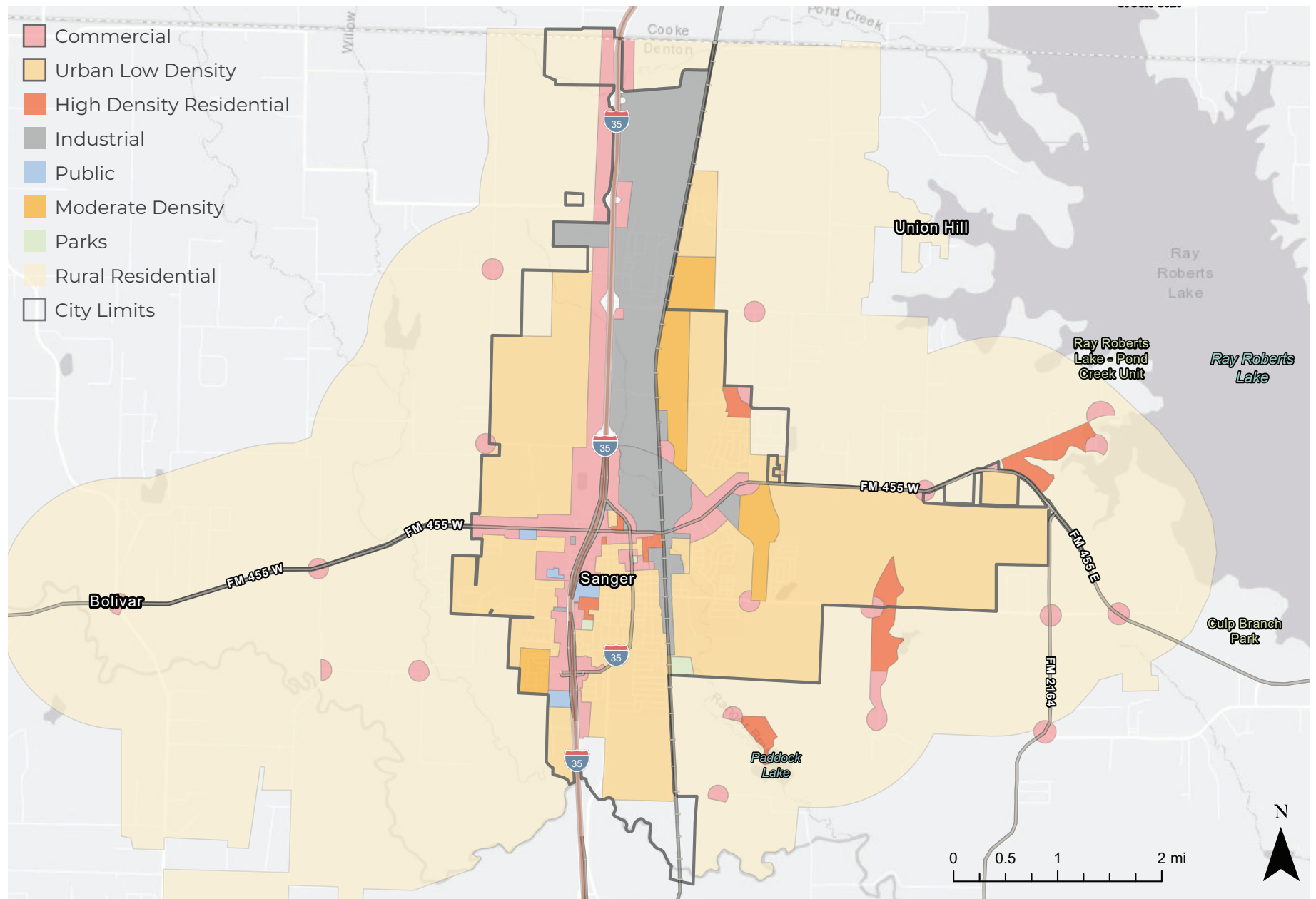
Ensuring a sustainable pattern of growth requires Sanger to consider both the location of future residential development and the limitations of current infrastructure.

FUTURE LAND USE

Through its future land use plan, Sanger has identified several areas suitable for future residential development, in varying levels of density. **Figure 4.4** on the next page displays a map of these areas, utilizing GIS data provided by the City of Sanger.

Development occurring in and around the central core of the city may be conducive to creating an environment aligned with the vision for downtown Sanger. The Sanger 2040 Comprehensive Plan sets forth the vision that downtown Sanger will serve as a “location for celebration and walkable activity for the community.” Currently, Sanger has designated most of the land within central areas of the city according to this vision as “Urban Low

Figure 4.4 Future Land Use Map



Source: City of Sanger

Density,” with some smaller areas designated “High Density Residential.” If future development occurs in these areas, there is a significant opportunity to produce a downtown population density that is sufficient to support a walkable, mixed-use environment.

Much of the land surrounding the central core is designated as “Rural Residential.” Developing these outer areas with a lower-density residential housing pattern will help Sanger maintain a balance between its modern central areas and the surrounding natural landscape.

Based on these factors, the current future land use plan is in alignment with the vision of the Sanger 2040 Comprehensive Plan and should direct future development. Future development that occurs in accordance with this land use plan will allow Sanger to grow sustainably while maintaining the character of the city.

INFRASTRUCTURE CONSIDERATIONS

As the population of Sanger increases, it is important to consider the constraints of current infrastructure. One of

the most necessary considerations will be the city’s water distribution system and wastewater treatment system capacities. In 2022, Sanger collaborated with the civil engineering firm, KSA, to produce a report on both the water distribution and the wastewater systems. Detailed within the report is Sanger’s current water distribution infrastructure including:

- » **Metered Connections**
Approximately 3,386 metered connections, mostly residential.
- » **Water Mains**
About 66 miles of water mains ranging from 20 inches to 2 inches in diameter.
- » **Groundwater Wells**
Six active groundwater wells with treatment facilities.
- » **Storage Facilities**
One elevated storage tank and one ground storage tank.
- » **Pumping Stations**
Four high pump service stations.

Figure 4.5 provided by the report highlights the current system capacity’s alignment with the requirements of the Texas Commission on Environmental Quality.

Figure 4.5 System Capacity and Requirements

MIN. SYSTEM CAP. CRITERIA	SYSTEM CAP.	TCEQ REQD. CAP.	CAPACITY (%)	MEETS TCEQ MIN. CAP. REQ.S?
Well Capacity	2,345 gpm (tested, without Well #9 in service)	3,070 gpm (tested, without Well #9 in service)	2,032 gpm (tested, without Well #9 in service), 66% (tested, with Well #9 in service)	Yes, however without Well #9 in service, system has surpassed 85% limit. It is recommended to bring Well #9 back in service.
Total Storage	2,500,000 gallons	677,200 gallons	27%	Yes
Elevated Storage	1,200,000 gallons	338,600 gallons	28%	Yes
Pumping Capacity	3,000 gpm	2,031 gpm	60%	Yes

Source: Water Distribution System Analysis and Capital Improvements

With well #9 in service, the city currently meets all of the minimum requirements.

While current requirements are met, future population growth will necessitate infrastructural improvements. The report outlined a general timeline for necessary improvements at 5, 10, and 20 years from 2022.

5-Year Improvements

1. Bring Well 9 back into service.
2. Line replacement program and looping per TCEQ guidelines and to facilitate improved fire protection.
3. Line extensions and distribution system improvements to service future development areas including areas 1, 2, 3, 4, 5, 6, 7, 8, and 9.

10-Year Improvements

1. Installation of new well(s), totaling 250 GPM to accommodate for future growth.
2. Line extensions and distribution system improvements to service future development areas including areas 5, 7, 10, and 11.

20-Year Improvements

1. Installation of new well(s), totaling 600 GPM to accommodate for future growth.
2. Line extensions and distribution system improvements to service future development areas including areas 5, 7, 10, and 11.

For wastewater treatment, the Wastewater System Analysis and Capital Improvements report provided an analysis of existing wastewater infrastructure in Sanger with recommendations for improvements. Sanger has a wastewater collection system that serves about 3,386 properties and a population of about 9,080 people. The wastewater is treated at a plant with a permitted capacity of 0.98 MGD average daily flow and 2,917 GPM peak flow. Sanger operates seven lift stations within the collection system, with a total firm capacity of 6,790 GPM. The lift stations are located at Duck Creek, Holt Road, Lake Ridge, Marion Road, Quail Run, South Bottom, and the wastewater treatment plant. The report provides a timeline of wastewater infrastructure improvements that will be necessary considerations as the city continues to develop. **Figure 4.6** shows a table from this report that compares the current and permitted effluent flow of the wastewater treatment plant.

Figure 4.6 Current and Permitted Effluent Flow

DESCRIPTION	CURRENT FLOWS (MGD)	WWTP PERMIT (2016)	PERCENTAGE OF CAPACITY
Average Daily Flow	0.78	0.98	79%
2-Hour Peak Flow	2,166 GPM	2,917 GPM	74%

Source: Wastewater System Analysis and Capital Improvements

The following list conveys the timeline of necessary improvements as recommended by KSA in 2022.

5-Year Improvements

1. Duck Creek & South Bottom lift station improvements
2. Collection system surcharge improvements
3. Line extensions and collection system improvements to service future development areas including areas 1, 2, 3, 4, 5, 6, 7, 8, and 9.

10-Year Improvements

1. New WWTP or new lift station for developments near Lake Ray Roberts
2. Line extensions and collection system improvements to service future development areas including areas 5, 7, 10, and 11.
3. Collection system surcharge improvements

20-Year Improvements

1. Line extensions and distribution system improvements to service future development areas including areas 5, 7, 10, and 11.
2. Collection system surcharge improvements

As demand for housing grows with Sanger’s continuous population increase, these considerations will be important factors for ensuring a sustainable pattern of development. With a strategic prioritization of residential development in specific areas of the city and a consideration of current infrastructure constraints and future necessary improvements, Sanger is well positioned to increase its alignment with the vision of the Sanger 2040 Comprehensive Plan.



CHAPTER 5: CONCLUSION

This Housing Study analyzes Sanger's current housing supply and forecasts market trends to identify future needs. Combining data from the City of Sanger and the Denton Central Appraisal District, this study paints a picture of Sanger's housing landscape in the coming years and outlines a strategic plan for future housing expansion.

Sanger had a population of about 9,041 in 2022, which grew by 30.57% from 2012. The city's population has a median age of 31.8 years, a median household income of \$86,083, and a low unemployment rate of 1.8%. Most residents are married couples, over half of whom have

children, and most workers commute out of the city for employment. The population is projected to increase by 53% to 88% by 2040, depending on the source of projection. Sanger's economy is driven by sectors such as construction, manufacturing, and education.

Sanger's expected population changes are driven in part by the current and projected economic situation at the local and regional levels. The Bureau of Economic Analysis reports that the Gross Domestic Product in Denton County has grown by 67.20% from 2017 to 2022. The GDP of the Dallas-Fort Worth metropolitan area has also risen

by 42.41% in the same period. In Sanger, 11 new retail businesses have recently opened or are opening soon and approximately 5,748,000 square feet of industrial space is under development.

Based on demand indicators for each housing category, the study recommends an update to Sanger's Targeted Housing Composition. The recommended housing mix includes a slight reduction in the single-family under 1,499 square feet category, from 30% to 25%, while maintaining the single-family between 1,500 and 1,999 square feet category at 30%, the single-family above 2,000 square feet category at 25%, and the manufactured homes category at 3%. Additionally, in order to capture the demand from young professionals, single adults, and lower-income households, as well as to support the vision of a livelier and more walkable downtown core, the multi-family housing category should be increased from 12% to 17%. These recommendations aim to ensure that Sanger's housing supply can accommodate future demand and align with the vision set forth by both the Sanger 2040 Comprehensive Plan and the 2016 housing ordinance policy.

As the city continues to grow, Sanger's overall alignment with the 2024 Targeted Housing Composition will be dynamic. To ensure that Sanger can determine its alignment with the 2024 Targeted Housing Composition

as the city continues to develop, a Housing Toolkit is provided. When new residential development is recorded in the provided matrix, the alignment of each housing category with its targeted percentage is automatically calculated and visualized. This interactive matrix will encourage a continuous process of assessment as the growth of Sanger results in continued residential development.

The study provides Sanger with the insights and data necessary to accommodate current and future demand and to align with the vision for future development set forth by the city's strategic plans. The study also identifies potential areas of improvement and opportunity for the city's housing market, such as increasing the diversity and attainability of housing options, enhancing the walkability and vibrancy of the downtown area, and planning for infrastructure upgrades and expansions. By implementing the recommendations of this study, Sanger can ensure that its housing supply can meet the needs of its growing and changing population while maintaining its historical and cultural character. With an annual assessment of its housing composition using the Housing Toolkit, Sanger is well-positioned to harness the increasing demand for housing into a pattern of development that is aligned with its long-term vision for future growth. ■

**APPENDIX A:
CITY OF SANGER TARGETED HOUSING
COMPOSITION MATRIX**



2024 SANGER HOUSING STUDY



Antero Group

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