



CITY OF KEENE COMPREHENSIVE PLAN



Prepared in cooperation with the City of Keene and the Institute of Urban Studies
in the College of Architecture, Planning, and Public Affairs at the University of Texas at Arlington.

Contact

Shima Hamidi, PhD| Director

 shima.hamidi@uta.edu

Amanda Kronk, LEED AP BD+C| Project Manager

 amanda.kronk@uta.edu



ACKNOWLEDGMENTS



The City of Keene

James Chapline, Mayor
City of Keene

Brian LaBorde, City Manager
City of Keene

Michael Talley, Economic Development Director
City of Keene

David Patterson, Council Member
City of Keene

Cheryl Schram, Council Member
City of Keene

Amy Lingo, Keene Branch President
Pinnacle Bank

Dr. Ken Shaw, President
Southwestern Adventist University

Ricky Stephens, Superintendent
Keene ISD



Institute of Urban Studies

Executive Director: Nan Ellin, PhD, Dean of CAPPA

Director: Shima Hamidi, PhD

Project Manager: Amanda Kronk, LEED AP BD+C

Project Team

Lead: Kaustubh Gosavi (Phase 1 &2)
Kukhyoung Kim (Phase 2, 3, &4)
Golnaz Keshavarzi (Phase 3)

Researchers (in alphabetical order)

- Phase 1: Ali Adil
Amina Taj
Golnaz Keshavarzi
Kaustubh Gosavi
Kukhyoung Kim
Yanikka Lemons

- **Phase 2:** Abber Mugharabi
Golnaz Keshavarzi
Kaustubh Gosavi
Kukhyoung Kim
Myriam Igoufe
Rama Boyapati
Reza Paziresh
Ridvan Kirimli
Somayeh Moazeni
Yalcin Yildrim
Zaid Albakhit

- **Phase 3:** Aliasghar Rahimioun
Kaustubh Gosavi
Kukhyoung Kim
Mansoor Taj Mohammed
Somayeh Moazeni
Yalcin Yildrim

- **Phase 4:** Kukhyoung Kim
Yalcin Yildrim

.....
Special Thanks to Alan Klein, Former Assistant Director
.....

KEENE COMPREHENSIVE PLAN AT A GLANCE

Phase 3. Infrastructure Development Plan

- Infrastructure Management
- City Transportation Plan

4

Phase 4. Regional Economic Growth Plan

- Regional Growth Analysis
- Economic Development Assessment for the City of Keene

3

Phase 1. Baseline Analysis

- Base Map/ Existing Land Use/ Current Conditions
- Population Statistics/Current Projections
- Economic Information
- Housing Evaluation
- Infrastructure Inventory Coordination
- Review of Previous Planning Efforts
- Steering Committee
- Online survey(s)
- Meetings with stakeholders
- Various public engagement exercises/presentations

1

2

Phase 2. City Master Plan

- Housing
- Education
- Health Care/Public Health
- Land use/ Future Land use

CONTENTS

CHAPTER 1. INTRODUCTION

- 4 1.1 What Is A Comprehensive Plan?
- 4 1.2 Why Plan?
- 5 1.3 The Basis For Planning
- 6 1.4 The Planning Process

CHAPTER 2. COMMUNITY ANALYSIS

- 10 2.1 History Of Keene
- 11 2.2 Demographics/Projection
- 14 2.3 Economics
- 17 2.4 Transportation and Infrastructure

CHAPTER 3. COMMUNITY VISION

- 22 3.1 The Planning Process
- 23 3.2 Key Projects
- 24 3.3 Public Survey
- 26 3.4 Perceived Strengths
- 26 3.5 Identified Issues
- 28 3.6 Vision Statement

CHAPTER 4. HOUSING

- 32 4.1 Introduction
- 32 4.2 Key Facts and Trends
- 36 4.3 Projected Housing Needs
- 38 4.4 Best Practices
- 40 4.5 Recommendations

CHAPTER 5. EDUCATION

- 44 5.1 Introduction
- 44 5.2 Existing Conditions
- 46 5.3 Keene ISD
- 51 5.4 Best Practices
- 53 5.5 Recommendations

CHAPTER 6. PUBLIC HEALTH

- 56 6.1 Introduction
- 56 6.2 Health Access
- 63 6.3 Natural and Built Up Environment
- 71 6.4 Green Corridor Best Practices
- 74 6.5 Recommendations

CHAPTER 7. LAND USE

82	7.1 Introduction
82	7.2 Current Land Use Analysis
84	7.3 Suitability Analysis
92	7.4 Future Land Use Scenarios
94	7.5 Future Land Use
99	7.6 Proposed Perspectives Of Land Use Class
105	7.7 Recommendations

CHAPTER 8. TRANSPORTATION

110	8.1 What Is TIA
110	8.2 Why Should Keene Utilize TIA
111	8.3 Background
112	8.4 Data Collection
112	8.5 Methodology
113	8.6 Recommendations

CHAPTER 9. INFRASTRUCTURE

124	9.1 Introduction
124	9.2 Water and Wastewater
130	9.3 Electricity
136	9.4 Telecommunication Service
143	9.5 Recommendations

CHAPTER 10. ECONOMIC DEVELOPMENT

148	10.1 Economic Landscape: Keene and Johnson County
152	10.2 Johnson County's Economic Status: DFW Region
159	10.3 City Of Keene Economic Status: Johnson County
166	10.4 Best Practices
178	10.5 Recommendations



COMPREHENSIVE PLAN

CHAPTER

1

+MIZPAH

CHAPTER

1

INTRODUCTION

1.1 What Is A Comprehensive Plan?

1.2 Why Plan?

1.3 The Basis For Planning

1.4 The Planning Process

INTRODUCTION

“A [great] city is not an accident but the result of coherent visions and aims.”

–Leon Krier

1.1

WHAT IS A COMPREHENSIVE PLAN?

Comprehensive plans are guideposts that direct attention to existing needs of a community and instruct policies toward desired goals. These goals are key and outline the recommendations made by the plan, arrived at through a planning process that is designed to suit the local contexts and broader circumstances within which planning is conducted. Comprehensive plans are never an isolated process because the plans belong to the community and have the responsibility to deliver the goals as desired by the community. As such, comprehensive plan-making entails meeting with stakeholders from within the community through steering committees, public meetings and surveys with local citizens. These collaborative meetings rely on active participation of those involved to elicit a wide range of voices, opinions and understandings in order to provide the most appropriate recommendations for the city's future. The recommendations thus provided are also based on the rigorous research and analyses of data gathered by the planning team with assistance from City officials.

1.2 WHY PLAN?

The direction that the City of Keene takes in the future is rooted in decisions that we make today. The growth occurring in the broader Dallas-Fort Worth region compels reflection and entails determining the course of Keene's progress in the context of its environs. Here is an opportunity to embrace Keene's unique potential and position its development, drawing on the city's authentic legacy and creating a vision that looks brightly into the future. This current context provides opportunities as well as challenges, which the comprehensive plan must tackle. Broadly speaking, the comprehensive plan must achieve the following goals:



BRAND THE CITY:

In order to distinguish itself to potential residents and private enterprises and communicate its spatial, economic, demographic and historic uniqueness within the broader region



CAPTURE AND ATTRACT:

In order to draw on the growth potential of the Metroplex and avail for itself a portion of this imminent growth



PREPARE AND POSITION:

In order to identify needs across housing, commercial and other infrastructure sectors and equip them for potential growth with a concerted vision, our city can evolve in a manner reflective of our core values.

1.3 THE BASIS FOR PLANNING

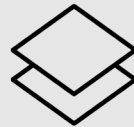
While municipalities in Texas are not mandated to prepare and maintain a city master plan, Chapter 213 of the Texas Local Government Code does grant communities the power to develop such plans “for the purpose of promoting sound development of municipalities and promoting public health, safety and welfare.” Chapter 213 gives communities such as Keene flexibility in the design of their plan, which may:

.....



Include provisions on land use, transportation and public facilities

.....



Consist of single or multiple plans, and

.....



Be used to coordinate and guide the establishment of development regulations

.....

In addition, a municipality may adopt or amend the plan into its charter or by ordinance following “a hearing at which the public is given the opportunity to give testimony and present written evidence, and review by the municipality’s planning commission or department, if one exists.” This will give Keene numerous options for continued implementation and/or modifications to their plan.

Creating a Vision

This planning process helps a community establish a vision composed of the residents’ values, norms and more. The process then transforms that vision into goals and strategies for achievement. Several plans have been authored to guide the development of Keene; such documents have also been used to inform decision making:

- Southwestern Adventist University: Campus Master Plan (2004)
- City of Keene: Economic Development & Infrastructure Strategy (2010)
- City of Keene: Master Plan (2010)
- City of Keene Strategy for the Future (Feb. 2010)
- City of Keene: Market Research Study (Sept. 2011)
- City of Keene: Community Survey (2011)

Public participation is vital to the planning process and provides tailored ideas and directions for the Future of Keene.

This plan is not exclusive to one neighborhood, subject or concern, or group. Instead, it embraces the entire city. All of our parts—the urban, the natural, the aged, the young, the religious, the historic, the new developments—together tell the story of Keene. While there may be varied preferences pertaining to the details, this plan captures the essence of the spirit of our city, our people and our future, providing us a road map to Keene 2040.

1.4

THE PLANNING PROCESS

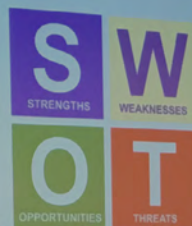
The City of Keene has witnessed a great deal of change in and around its environs. In response to these changes, this comprehensive plan is intended to guide the long-term vision for Keene's future development. The overall project includes a future regional growth analysis, land use plan and projected infrastructure demand analysis report. Therefore, the comprehensive plan is divided into four sections, with a description of these sections provided in Chapter 3.

This report covers the outcomes generated from the baseline analysis and public engagement strategy and is designed to predicate the analyses to be undertaken in the subsequent sections described in Chapter 3. It comprises data gathered for the community outlining existing conditions in the City of Keene, including the demographics and future projections of the city's population, employment, housing, transportation, education and economic conditions. The concluding section of the report offers a description of the public engagement process by way of which the community vision was elicited.

The plan is intended to be a guide for shaping policies and initiatives over the next 20-25 years; the aim is direct development of policy decisions in accordance with identified community goals and aspirations. The study is a realistic appraisal of what our community is at present, a framework for what our community aspires to become and a specific set of policies that help achieve the common community vision and ensuing goals.

SWOT Exercise

- Identification of Keene's Strengths, Weaknesses, Opportunities and Threats.



- This exercise seeks to consult stakeholders in order to draw the attention of BUS to critical concerns, cultural heritage sites to preserve, inform of any upcoming developments and difficult to develop areas.



COMPREHENSIVE PLAN

CHAPTER

2



+MIZPAH

CHAPTER

2

COMMUNITY ANALYSIS

2.1 History of Keene

2.2 Demographics/Projection

2.3 Economics

2.4 Transportation and Infrastructure

COMMUNITY ANALYSIS

2.1

HISTORY OF KEENE

The City of Keene was founded as the result of two religious denominations: Methodists traveling west and the efforts of Seventh-Day Adventists to establish a school. The first settlers to reach the area, Jeremiah Easterwood and his family, arrived in 1852. Easterwood built a Methodist church that also served as a school. The community initially was known as Elm Grove. Elm Grove, an evolving community, experienced a change in transportation infrastructure: The Gulf, Colorado and Santa Fe Railways built into the area in about 1890. In 1892, Seventh-Day Adventists living near Dallas chose a committee to locate property for a school to be opened in Johnson County. The committee personally financed the purchase of 836 acres, five miles east of Cleburne, for \$8,000.

In 1893, the first general store was opened by Charlie Moore, and the area became a home to Adventist families. On January 7, 1894, the Seventh-Day Adventists opened a school to train ministers as well as educate youth. The opening date welcomed the enrollment of 56 students in all grades.

The enrollment increased to 90 as the families

moved to the community, which had now become the town of Keene. The facility also doubled as the church, which was organized with 67 members. By 1900, Southwestern Union College, originally the 12-grade academy, added buildings. The campus' original structure became part of an industrial training complex that included a cannery, a laundry and a broom factory. Keene's population then totaled 500. In the history of Keene, 1902 was a celebratory year: The local citizens of Keene had raised \$3,000 to get a passenger train on the 10-mile stretch from Cleburne to Egan. The train, operated by a steam engine called Old Betsy, had a coal car, wooden baggage car and passenger coach. The passenger train served as the primary means of transportation for 20 years. Old Betsy is now the name of Keene's main street, which follows the route of the original railroad track.

In 1916, two years of education were added to the college's curriculum, and the institution became Southwestern Junior College.



Figure 2-1. Students and staff at Keene Industrial Academy

By 1926, the economy of the town of Keene began to blossom, with 13 businesses located within the city limits.

Keene's proximity to Cleburne and Fort Worth contributed to rapid growth. By 1960, the population had reached 1,532. In 1977, the Southwestern Junior College became Southwestern Adventist College, a four-year college and 9 years later changed its name to Southwestern Adventist University.



Figure 2-2. Library of Southwestern Adventist University

By 1967, the population reached 1,700; it totaled 2,440 residents by 1970, and 3,150 residents and 49 businesses by 1976.

In 1987, graduate-level courses were offered for the first time. The university has been accredited by the Southern Association of Colleges and Schools since 1958 and has continuously been an institution servicing the area.

2.2

DEMOGRAPHICS/ PROJECTION

Population

From 2000 to 2010, Keene's population grew from 5,003 to 6,106. The estimated 2020 population is 7,154 according to the Texas Water Board. Keene's 10-year growth rate (22 percent) was higher than that of Johnson County (18.2 percent) and marginally higher than that of Texas as a whole (20.6 percent). If Keene's population continues at the current rate of growth, the city would become home to 9,639 residents by 2040.

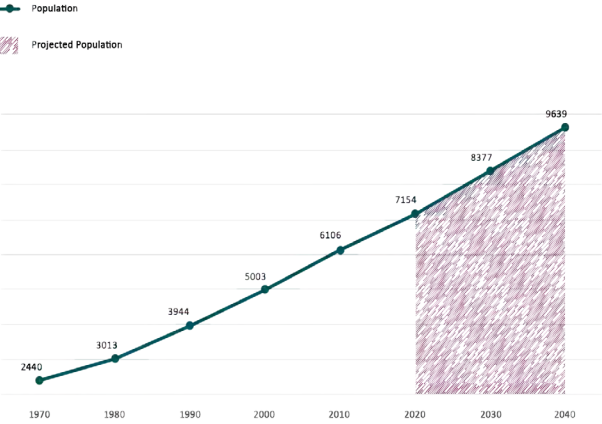


Figure 2-3. Keene's Population

Median Age

Keene's population is predominantly young; 55 percent of Keene's population in 2010 was under the age of 34. As a result, Keene has access to a sizeable native labor force, an essential need to complement the economic and development efforts of the city. In 2010, the median age of Keene residents was 30.4, compared to the Dallas-Fort Worth median age of 33.5.

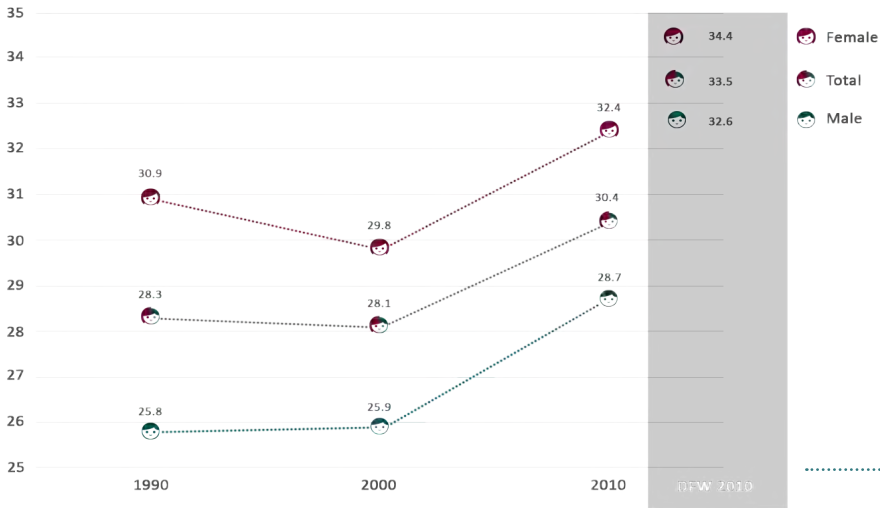


Figure 2-4.
Median Age, Keene vs. DFW

Age Cohort by Sex

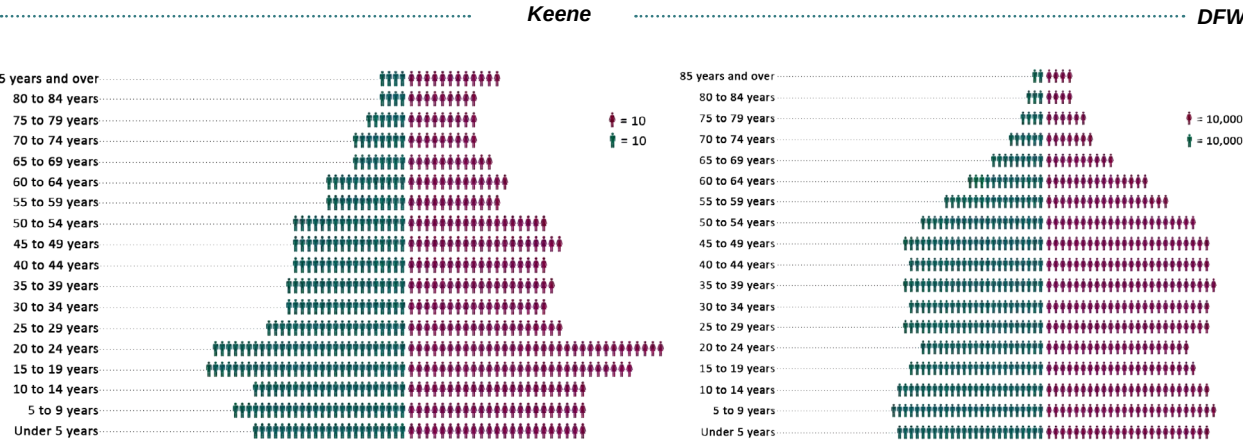


Figure 2-5. Age Cohort by Sex, Keene vs. DFW

Race & Ethnicity

Keene is growing more racially and ethnically diverse. This is particularly evident in the increase in self-identified Hispanic households, which grew to 30.3 percent of the population in 2010.

Texas' rapid population growth since 2000 has been fueled by immigration, both international and from the rest of the United States as families move to Texas for employment.

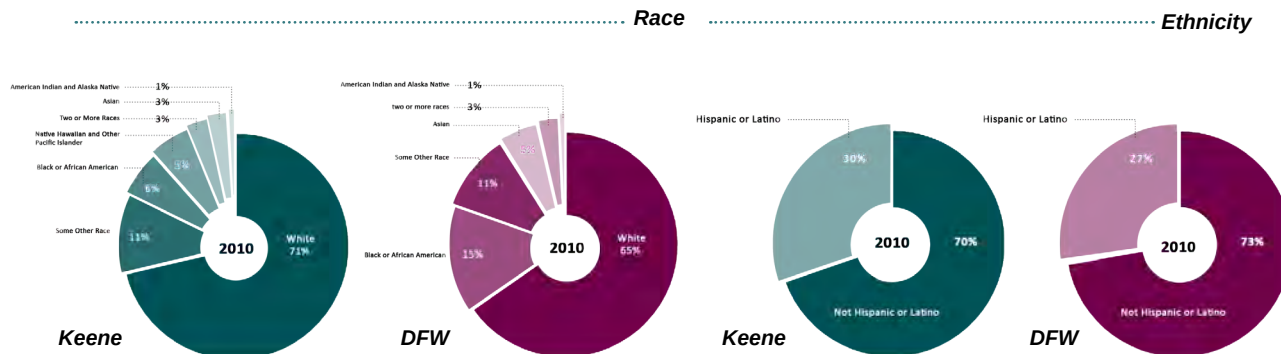


Figure 2-6. Race and Ethnicity, Keene vs. DFW

Household Type

Keene had 1,923 households in 2010, with an average household size of 2.97. This is higher than the size of the average Texas household at

2.75, which reflects the slightly higher percentage of households with children under 18 in Keene (36.9) than in the state as a whole (34.2).

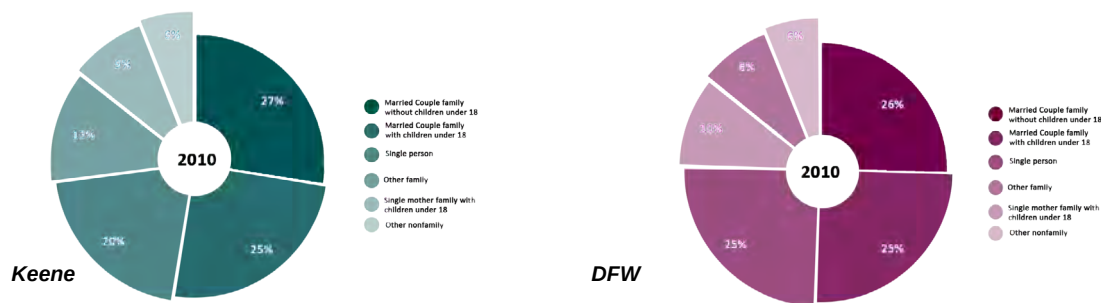


Figure 2-7. Household Type, Keene vs. DFW

Housing Occupancy

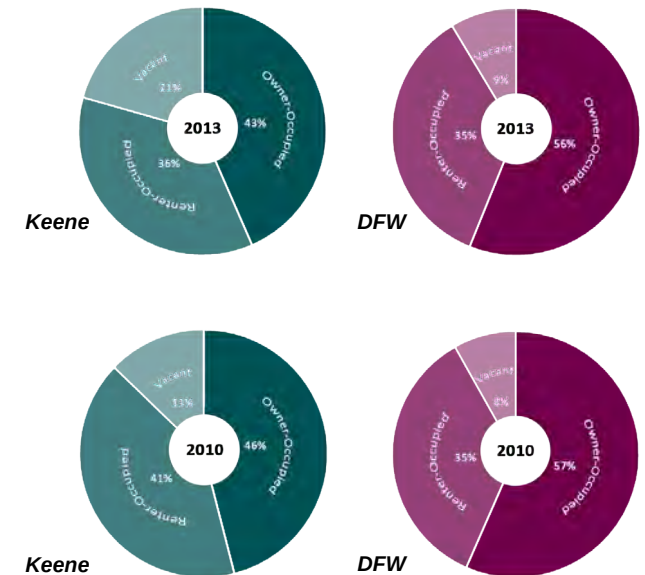


Figure 2-8. Housing Occupancy, Keene vs. DFW

Education

Educational attainment is often a determining factor to the income an individual may receive. It also may be a factor in the various businesses a city attracts. Keene residents' level of educational attainment reflects the pattern exhibited by Johnson County as a whole. The population of adults over the age of 25 is used, as opposed to ages 18-24, in order to capture the trend of a comparably less transient population (e.g. currently enrolled students). The educational attainment levels are as follows:

- Less than 9th grade education (Keene 7.4 percent) (Johnson County 6.6 percent)

- 9th-12th grade, no diploma (Keene 12.1 percent) (Johnson County 10.5 percent)
- High school diploma (Keene 27.1 percent) (Johnson County 32.5 percent)
- Some college (Keene 26 percent) (Johnson County 26.4 percent)
- Associate's degree (Keene 9 percent) (Johnson County 7.5 percent)
- Bachelor of Arts (Keene 14.6 percent) (Johnson County 11.8 percent)
- Graduate degree, professional degree (Keene 3.7 percent) (Johnson County 4.8 percent)

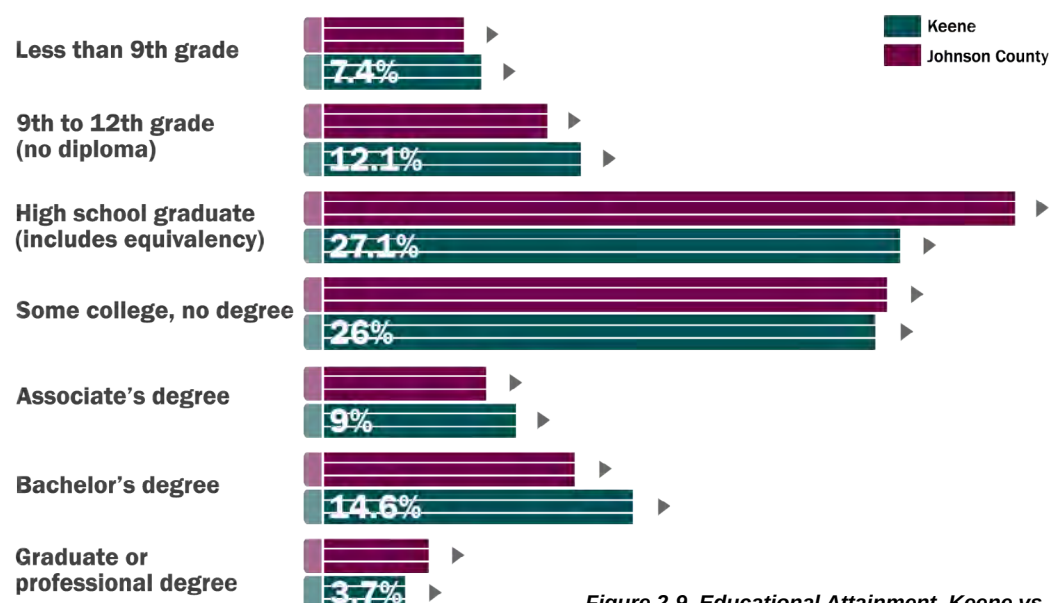


Figure 2-9. Educational Attainment, Keene vs. Johnson County

Independent School District

There are a few possibilities to contextualize the high percentage of high school-only educated workers in Keene as well as Johnson County, such as: high school graduates leave the city and county for higher education attainment and do not return; high school graduates have employment available that does not require higher education attainment; and the education level of incoming residents.

The City of Keene's students are served by four school districts: Keene Independent School District, Alvarado Independent School District, Cleburne Independent School District and Joshua Independent School District. All school districts get the net standard rating in accountability rating system. The districts' population served and the

percentage of economically disadvantaged are as follows:

- Alvarado Independent School District served 3,458 students; 66 percent were economically disadvantaged.
- Cleburne Independent School District served 6,566 students; 65 percent were economically disadvantaged.
- Joshua Independent School District served 4,989 students; 77 percent were economically disadvantaged.
- Keene Independent School District served 895 students; 76 percent were economically disadvantaged.

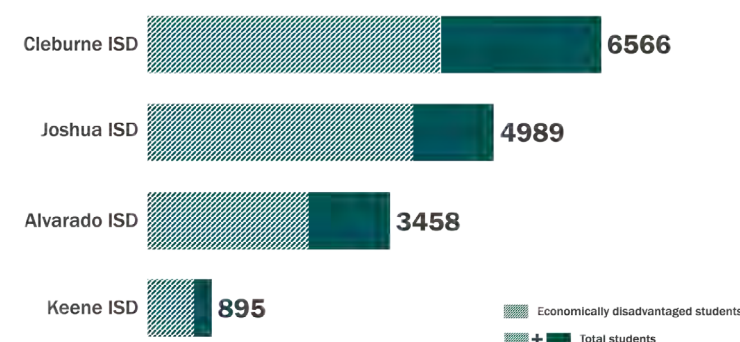


Figure 2-10. ISD Student Population in Keene

2.3 ECONOMICS

Sales Tax Revenue

Keene's sales tax rate is 8.25 cents, and its ad valorem rate is .912 of valuation. Tax revenue has been flat or increasing slowly in the last decade. From 2009-2011, Keene experienced a decline in sales tax revenue. However, in 2012, sales tax resumed an upward trend. Keene's per capita receipts from residents are significantly lower than Cleburne, a neighboring city. The analysis from 2010 to 2015 shows Cleburne receiving more than triple the per capita receipts from residents:

- In 2010, Keene sales receipts per capita were \$72.31 compared to Cleburne per capita receipts of \$287.40.
- In 2011, Keene sales receipts per capita were \$72.17 compared to Cleburne per capita receipts of \$299.32.
- In 2012, Keene sales receipts per capita were \$77.74 compared to Cleburne per capita receipts of \$273.11.

- In 2013, Keene sales receipts per capita were \$85.12 compared to Cleburne per capita receipts of \$251.88.
- In 2014, Keene sales receipts per capita were \$94.06 compared to Cleburne per capita receipts of \$286.59.
- In 2015, Keene sales receipts per capita were \$94.67 compared to Cleburne per capita receipts of \$261.55.

There are a few possibilities for lower sales tax revenue, such as: residents are unable to secure goods and services within Keene and therefore travel outside of the city; comparable cities may have a higher mix of goods and services; Keene's residents commute to other cities for employment and may consume goods near their place of

employment; and Keene's higher portion of low-income earners and low portion of high-income earners may reflect lower levels of consumption, which impact sales receipts. The key issue affecting sales tax receipts and putting upward pressure on ad valorem rates is a lack of commercial and retail outlets in Keene and residents therefore spend money in other cities.

How does Keene's tax rate compare to other cities within Johnson County? Keene's combined taxation rate of \$2.92 is the second-highest in Johnson County (\$1.46 of sales tax goes to the city's general fund. \$0.73 each goes to the Type A and Type B boards), following the City of Joshua's combined taxation rate of \$2.95.

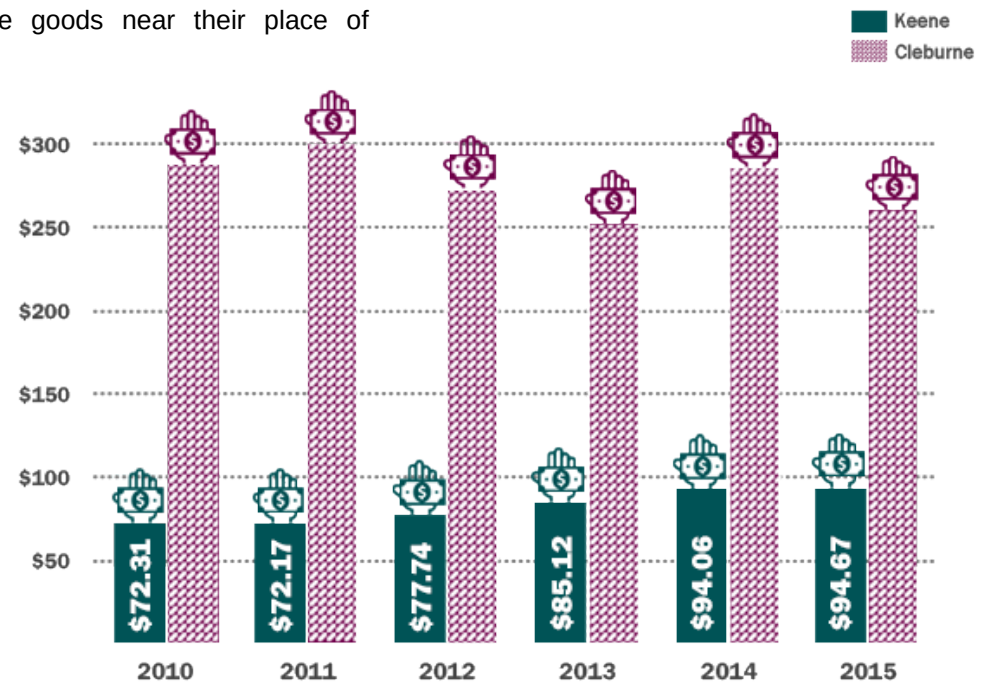


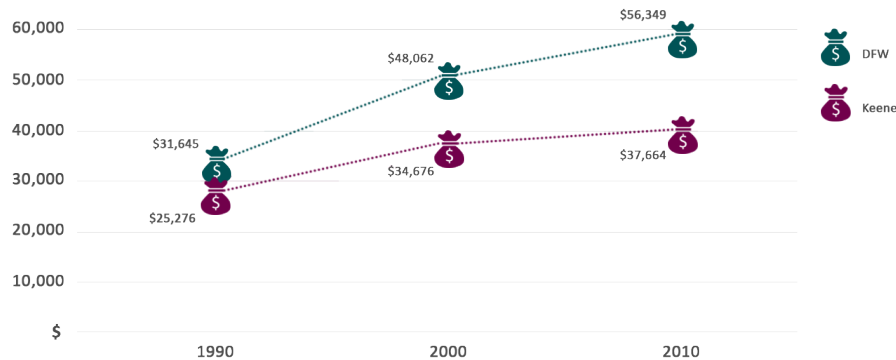
Figure 2-11. Sales Tax, Keene vs. Cleburne

Household Income

Keene's median household income level continues to increase. However, the level continues to lag relative to Johnson County as a whole. During 1990, the City of Keene's median household income was \$25,276; the median household income for Johnson County was \$30,612. The gap between the City of Keene and Johnson County's median household incomes reflects a persistent and widening gap. Subsequent decades' gaps are as follows: Keene 2000 (\$34,676) and 2010 (\$37,664) compared to Johnson County 2000 (\$44,621) and 2010 (\$54,954).

Figure 2-12.

Median Household Income, Keene vs. DFW



Keene and Johnson County have a higher percentage of lower wage earners and a lower percentage of the top categories of wage earners than does Texas as a whole. According to the 2014 American Community Survey, 40.9 percent of Keene's household income falls below \$25,000 compared to 18 percent for Johnson County. As it pertains to high-income earners, only 5 percent

Employment

There are several economic forces within Johnson County (e.g. Keene, Cleburne). However, economic activity, including employment, income, business mix and customer base, extends well beyond the borders of Keene. For this reason, economic data in this section is examined, unless noted, at the level of Johnson County as a whole in order to present a depiction of the overall economic vitality of the county. The labor force of Johnson County has remained relatively steady over the past several years at about 70,000.

Over the past 10 years, Johnson County has nearly matched the unemployment rate of the adjacent Dallas-Fort Worth Metroplex.

Over a 10-year span (2005-2014), the City of Keene experienced a fluctuating unemployment rate, with the highest rates during the economic recession, which impacted the nation as a whole. During 2005-2008, Keene maintained an average unemployment rate of 4.55 percent, quite comparable to Dallas-Fort Worth (4.8 percent).

There are a total of 139 business establishments in the City of Keene. The top shares of establishments by sector are as follows:

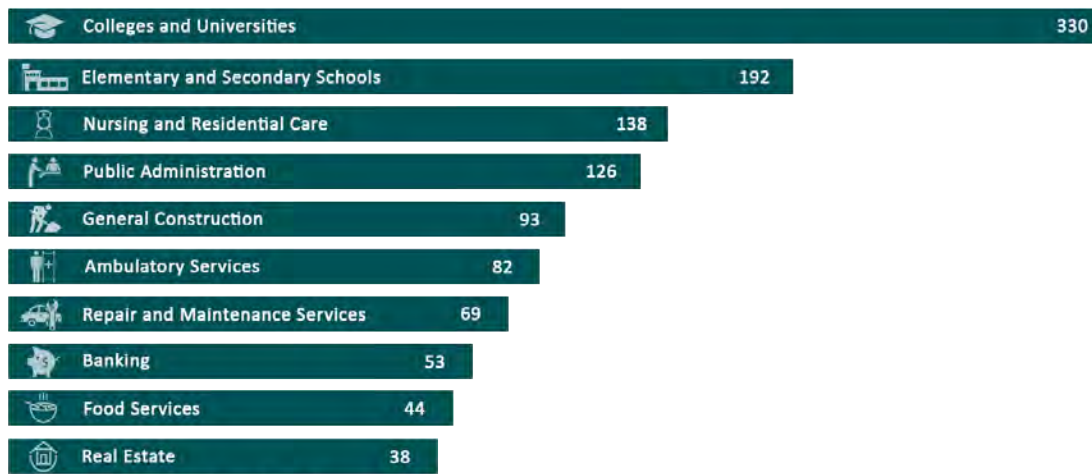
- Real Estate (7.19 percent)
- Government (5.76 percent)
- Auto Repair/Services (5.04 percent)
- Heavy Construction (5.04 percent)
- Other Business Services (4.32 percent)
- Hospitals (4.32 percent)
- Education (5.04 percent)
- Unclassified Establishments (4.32 percent)
- Insurance Agents & Brokers (3.60 percent)

of Keene's households earn \$150,000 or higher compared to Johnson County reporting 7.1 percent of the households.

The City of Keene therefore has a large percentage of households below the poverty line (33.9 percent) compared to Johnson County (10 percent).

- Miscellaneous Repair Services (3.60 percent)
- Membership Organizations (3.60 percent)
- Banks & Financial Institutions (2.88 percent)
- Computer Services (2.88 percent)
- Health & Medical Services (2.88 percent)
- Transportation (2.88 percent)
- Auto Dealers & Gas Stations (2.88 percent)

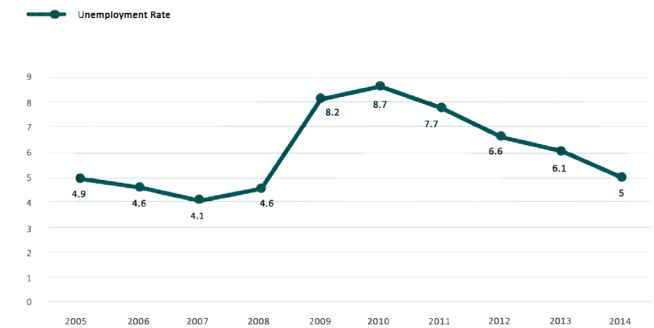
Top 10 Industries



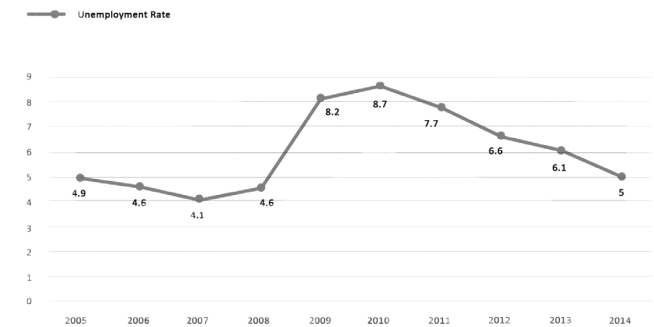
Note: + The data is from a 10 mile radius
+ The source of data: Texas Wide Open for Business

Figure 2-13. Top 10 Industries in Keene

Unemployment Rate, Keene



Unemployment Rate, Johnson County



Unemployment Rate, DFW

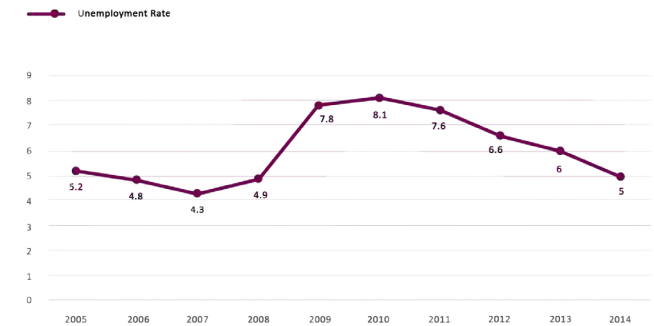


Figure 2-14. Unemployment Rate

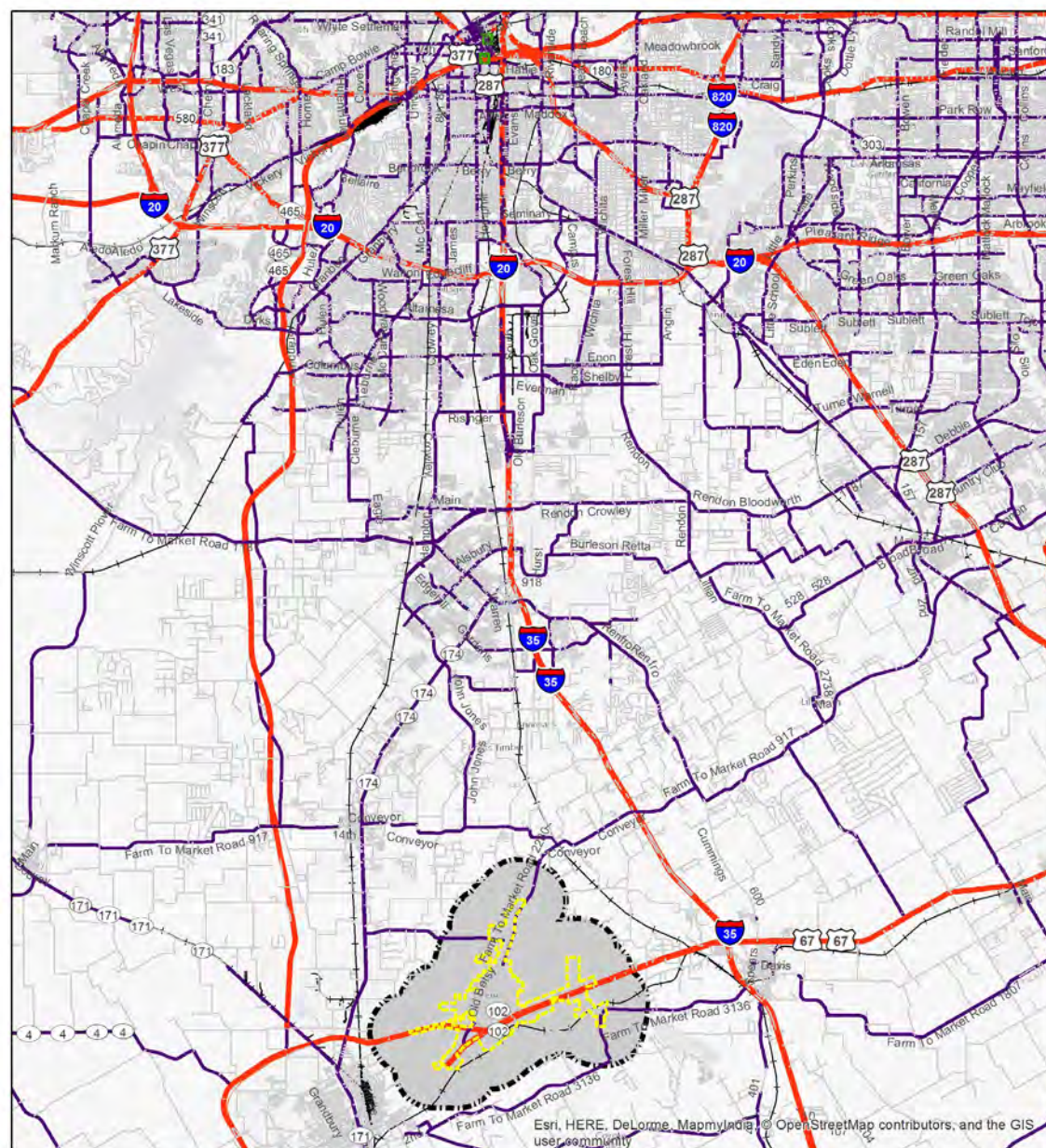
2.4

TRANSPORTATION & INFRASTRUCTURE

The City of Keene is uniquely placed. Highway 67 runs through Keene and is one of the strongest potential commercial corridors for the city. It connects Keene to I-35, which runs to I-20 on the north, giving access to Dallas and Fort Worth, and runs south to Austin and San Antonio. Keene is located under 45 minutes to the closest metropolitan city (Fort Worth).

Highway 67 is augmented with highway 174 and the historic Chisholm Trail, which gives access to the south Fort Worth region. F.M. 2280 runs north-south in the city and is the only major road that bears the highest amount of traffic in the city. F.M. 2280 connects the city to surrounding cities within the county and is an alternate route to I-35.

The closest public airport is Spinks Airport in Burleson, which is 20 minutes away. Additional airport services including international and commercial flights are located 46 miles away at the Dallas-Fort Worth International Airport. Rail services are provided by Amtrak in the neighboring City of Cleburne. Transportation access and location are the key economic strengths for Keene.

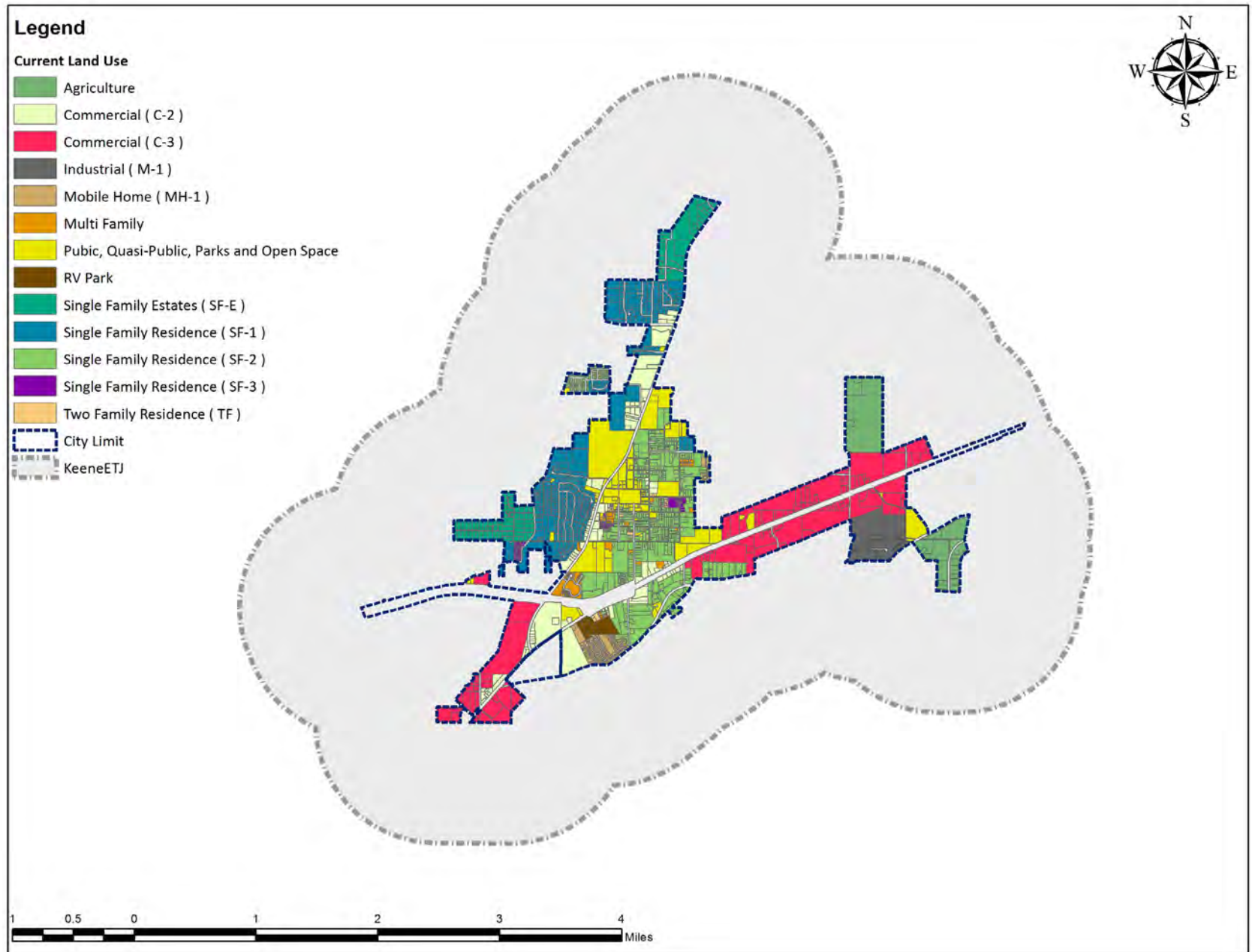


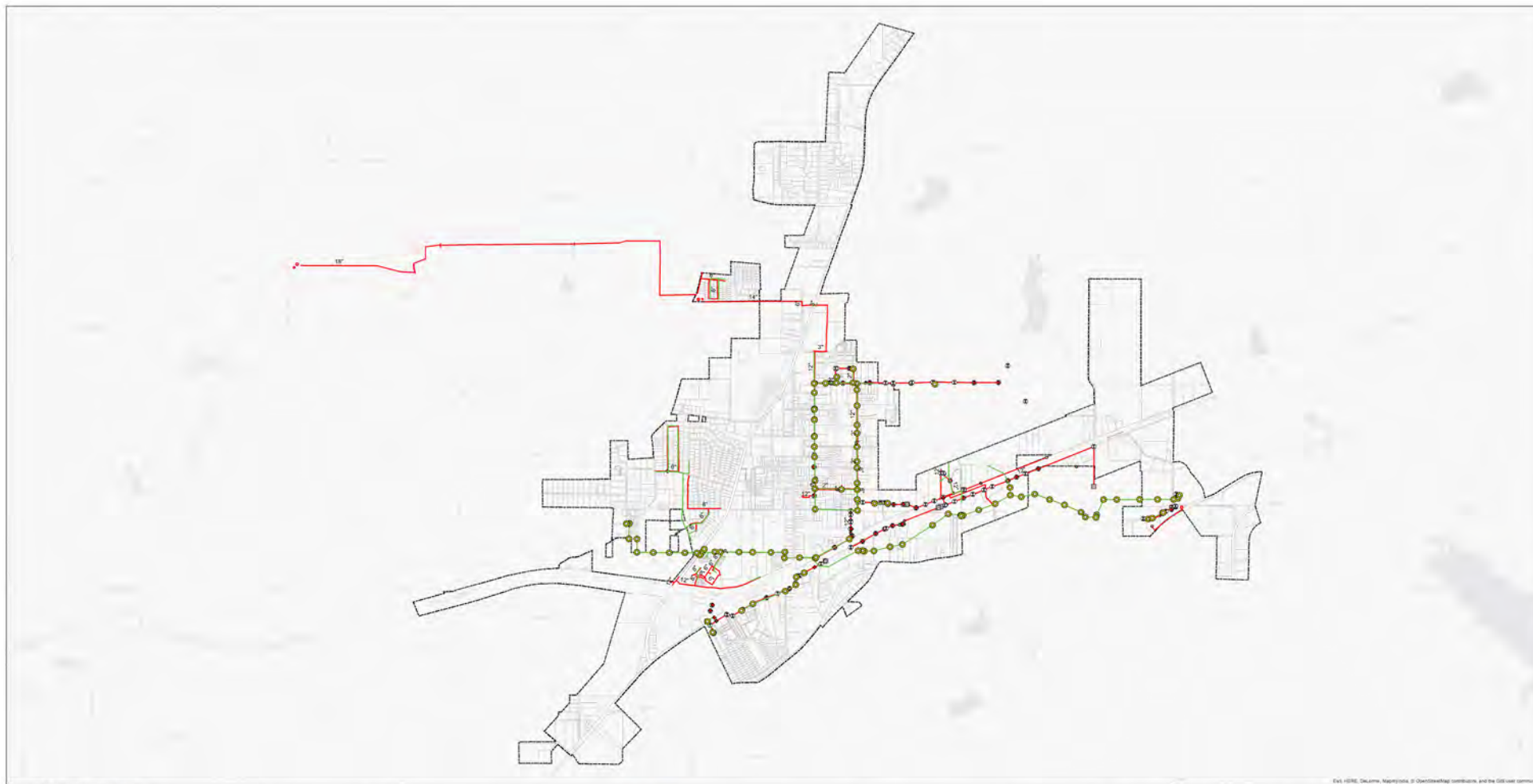
Legend: Transportation

— Highway	■ Passenger_Rail
— Major Arterial	 City Limit
— Minor Arterial	 KeeneETJ
+ + Railroads	



Land Use





Legend: Keene Infrastructure

- | | | | | | | | | | | | | | | |
|------------------------|---------------------|----------------------------|----------------------------------|------------------------|------------|----------|-------------------------------|-------------------|--------------------------|----------------|------------------------|---------------------|----------------------------------|------------------|
| • CL WATER LINE APPROX | • FH 47 | • UGW | • WV AIR RELEASE | • CL WATER LINE APPROX | • EM UGS B | • FH 227 | • MHW DEAD TO SOUTH | • SWITCH GEAR UGS | • UGS B | • UGSW SOUTH W | • WATER WELL UGW1 B | • WV 2IN S | • WV SOUTH TO WELL | • WV UGSW B |
| • CL WATER PI | • MHW | • UGW B | • WV END LINE | • CL WATER PI | • FDC | • FH 229 | • MHW E W | • TOP PIPE | • UGS CO | • UGSW W | • WELL HEAD | • WV 2IN SOUTH | • WV SOUTHEAST AND N.E. TO PECAN | • WV UGSW B EAST |
| • CL WATER PI UGW | • MHW DEAD TO SOUTH | • UGW B WV WEST EAST SOUTH | • WV N.S. | • CL WATER PI UGW | • FH 12 | • FH 14 | • MHW END LINE A | • TOP PIPE B | • UGS E CO | • UGSW UGS B | • VL AIR RELEASE VALVE | • WV AIR RELEASE | • WV TEE NORTH | • WV UGSW B |
| • CL WATER TEE NORTH | • MHW E W S | • UGW B | • WV S. FLUSH VALVE | • CL WATER TEE NORTH | • FH 13 | • FH 36 | • MHW RM | • TOP PIPE C | • UGS ENCLINE WEST | • UGSW | • WM | • WV END LINE | • WV TEE NORTH SOUTH | • WV UGSW B |
| • CO | • MHW END LINE A | • UGW E SOUTH W | • WV S. N | • CO | • FH 14 | • FH 43 | • MHW UGS | • TRANS | • UGW | • UGSW | • WM AIR RELEASE | • WV TEE SOUTH | • WV TEE NORTH TOPH | • WV UGSW B |
| • ECP | • MHW RM | • UGW E W | • WV SOUTH | • ECP | • FH 15 | • FH 46 | • MHW UGS B | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH TOPH | • WV TEE SOUTH | • WV UGSW B |
| • ECP B | • MHW UGS | • UGW UGSW B | • WV SOUTH TO WELL | • ECP | • FH 16 | • FH 47 | • MHW UGS E EASTERN AND PECAN | • UGS E ELEC BOX | • UGSW W WEST EAST SOUTH | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • ECP CLS | • MHW UGS B | • UGW W | • WV SOUTHEAST AND N.E. TO PECAN | • ECP CLS | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • EM UGS B | • MHW UGS B | • UGW W | • WV TEE NORTH | • EM UGS B | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FDC | • MHW WLN | • UGW1 E | • WV TEE NORTH SOUTH | • FDC | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH | • SWITCH GEAR UGS | • WATER PI UGW1 | • WV TEE SOUTH TOPH | • FH | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 12 | • TOP PIPE | • WATER TEE UGSW | • WV TEE SOUTH TOPH | • FH 12 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 13 | • TOP PIPE B | • WATER WELL UGW1 B | • WV TEE SOUTH TOPH | • FH 13 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 14 | • TOP PIPE E | • WELL HEAD | • WV TEE SOUTH TOPH | • FH 14 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 15 | • TRANS | • VL AIR RELEASE VALVE | • WV TEE SOUTH TOPH | • FH 15 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 16 | • UGS | • WM AIR RELEASE | • WV TEE SOUTH TOPH | • FH 16 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 227 | • UGS E ELEC BOX | • WM UGSW B | • WV TEE SOUTH TOPH | • FH 227 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 229 | • UGS | • WM UGSW B | • WV TEE SOUTH TOPH | • FH 229 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 34 | • UGS B | • WV | • WV TEE SOUTH TOPH | • FH 34 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 36 | • UGS CO | • WV 2IN E W | • WV TEE SOUTH TOPH | • FH 36 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 43 | • UGS E CO | • WV 2IN S | • WV TEE SOUTH TOPH | • FH 43 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |
| • FH 46 | • UGS ENCLINE WEST | • WV 2IN SOUTH | • WV TEE SOUTH TOPH | • FH 46 | • FH 16 | • MHW | • MHW W | • UGS | • UGSW | • UGSW | • WM UGSW B | • WV TEE SOUTH | • WV TEE SOUTH | • WV UGSW B |



COMPREHENSIVE PLAN

CHAPTER

3

+ MIZPAH

COMMUNITY VISION

3

3.1 The Planning Process

3.2 Key Projects

3.3 Public Survey

3.4 Perceived Strengths

3.5 Identified Issues

3.6 Vision Statement

COMMUNITY VISION

3.1

THE PLANNING PROCESS

The basis for a community vision is an active involvement of the citizens of Keene. An advisory committee (steering committee) consisting of experts from all fields within Keene's community were requested to provide guidance on the key issues the city has been encountering.

The planning process began with an analysis of Keene's current conditions. This section consisted of data-gathering and a trend analysis of the city's population, employment, housing, transportation, education and private sector. In order to accurately conduct a baseline analysis, the steering committee informed the researchers of community issues, assets and challenges. Additional public input was collected with the help of online surveys. The surveys were developed in order to address the concerns of all age cohorts (refer to the Appendix A-4 and A-5 for survey questions). With the results from these surveys and the input from the steering committee, the citizen's goals and aspirations for the future of Keene were identified. The rich insight provided from the citizens of Keene was instrumental to the drafted analysis.

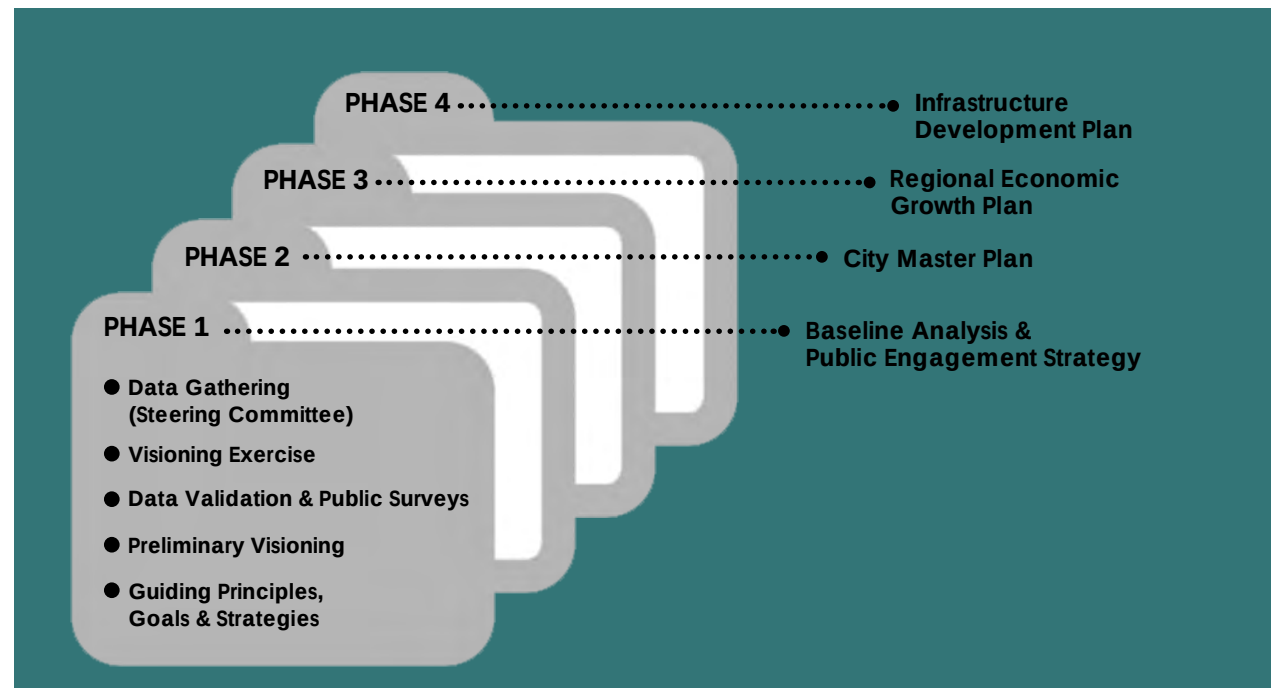


Figure 3-1. The Planning Process

3.2

KEY PROJECTS

The comprehensive plan process is projected to span a period of two years. The components of the comprehensive plan include the following sections:

BASELINE ANALYSIS/DEVELOPING PUBLIC ENGAGEMENT STRATEGY/ VISIONING

- Base Map/Existing Land Use/Current Conditions
- Population Statistics/Current Projections
- Economic Information
- Housing
- Infrastructure Inventory Coordination
- Review of Previous Planning Efforts
- Steering Committee
- Online Survey(s)
- Meetings with Stakeholders
- Various Public Engagement Exercises/ Presentations

..... CITY MASTER PLAN

- Land use
- Housing
- Health Care/Public Health
- Education



REGIONAL ECONOMIC GROWTH PLAN



- Regional Growth Analysis
- Economic Development for the City of Keene

..... INFRASTRUCTURE DEVELOPMENT PLAN

- Infrastructure Management
- City Transportation Plan



3.3 PUBLIC SURVEY

The following narratives are some examples of the insights that can be drawn from cross-tabulation of various kinds of data. In this case, the survey results from the City of Keene's comprehensive plan have been chosen. Complete survey results are shown in Appendix A-4.

Satisfaction with Overall Appearance by Residency and Respondent Age

The respondents were found to be generally satis-

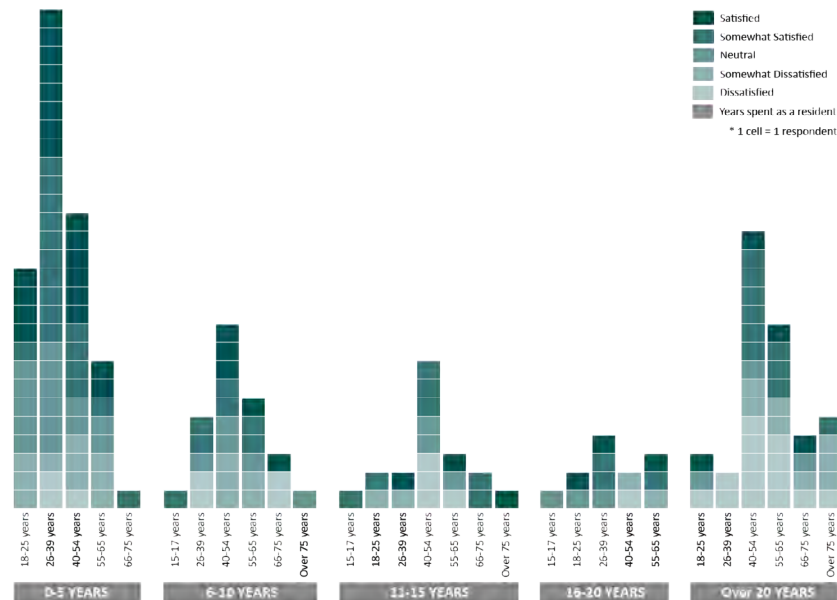


Figure 3-2. Satisfaction by residency & respondent age

fied with Keene as noted from the greater percentage of deep green in Figure 3-1. However, this varied greatly over the time of residency as well as age groups.

- New residents who had spent no more than five years in Keene were more satisfied with the overall appearance of Keene than residents who had spent more than five years.
- Residents who had spent about 20 years in Keene found the overall appearance of Keene least satisfying.
- Most responses came from those who lived in Keene for a short while and those who spent all of their lives here.

Age by Residency

While it was indicated that Keene's population is relatively young, this chart explores additional facets of the demographics in context of how long

residents have stayed in Keene. From among the sample of respondents, it was found that Keene's population of 26-39-year-olds is quite new, perhaps mainly the student population.

However, this is not the only age group that has new residents to Keene. Among the 40-54 year-olds, a sizable number of residents are new and have lived no more than 5-14 years in Keene.

Satisfaction With Housing Quality by Type

It appeared that most respondents resided in site built houses as opposed to manufactured houses. This asymmetry could be disadvantageous in interpreting the results. Among those respondents living in built houses, it was found that most were ambivalent regarding house quality with dissatisfaction and satisfaction likely being equal over the range of responses.

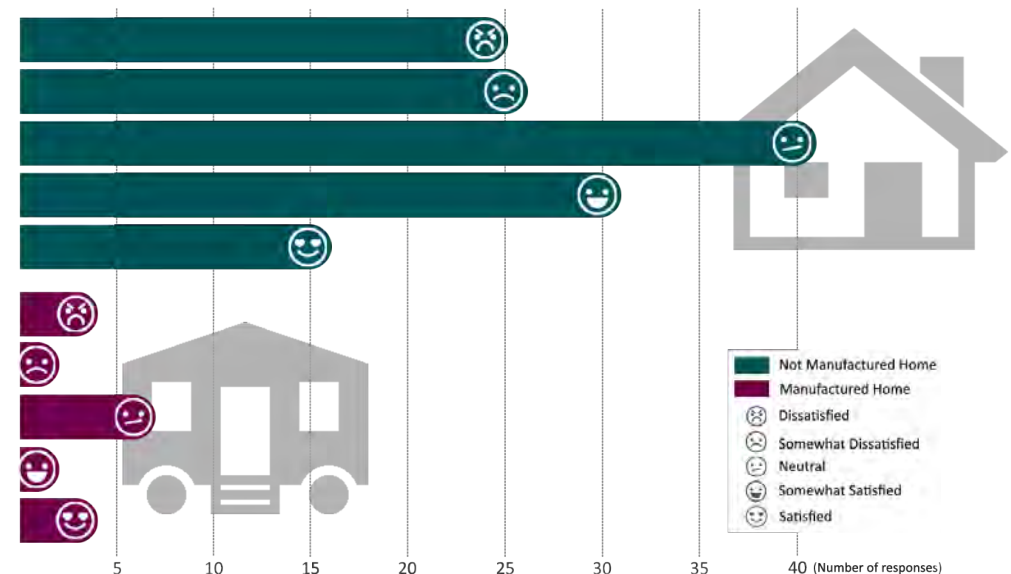


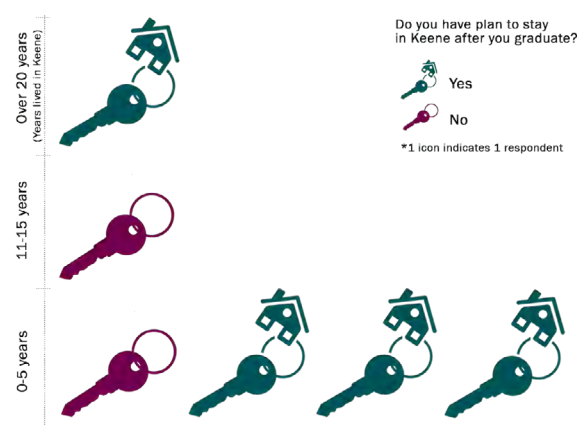
Figure 3-3. Satisfaction with housing quality by type

Satisfaction with Road Infrastructure by Work Place and Earning Capacity

In this chart, the level of satisfaction or dissatisfaction with road and street maintenance in Keene was considered in reference to where respondents worked and how much they earned.

- Overall, respondents were dissatisfied as indicated in light purple dominating the chart.
- The respondents who worked in Johnson County and earned more than \$90,000 annually were most dissatisfied with road maintenance.
- For those who worked within Keene or in another city in Johnson County, the level of dissatisfaction was greatest.

Figure 3-5. Plan to stay/own a house after graduation



Plan to Stay/Own a House after Graduation

This chart attempts to correlate the number of years an individual has lived in Keene and his/her plan to stay in Keene after graduation.

These correlations corroborate the fact that most of those who have graduated or are going to graduate have been or plan to live in Keene. This can be a continuing trend given the growth Keene will encounter and accommodate.

Shopping Pattern by Time to Travel and Work Place

Respondents were asked about their travel time to work as well as their work place and where they shopped for groceries. Assuming that work trips also doubled as shopping trips, this chart indicates that most time (more than an hour) was spent traveling to and from Cleburne as well as to Dallas County. While the former is quite expected, travel time to Cleburne was unanticipated.

The results aren't as comprehensive as expected because of low response levels to questions associated with this chart.

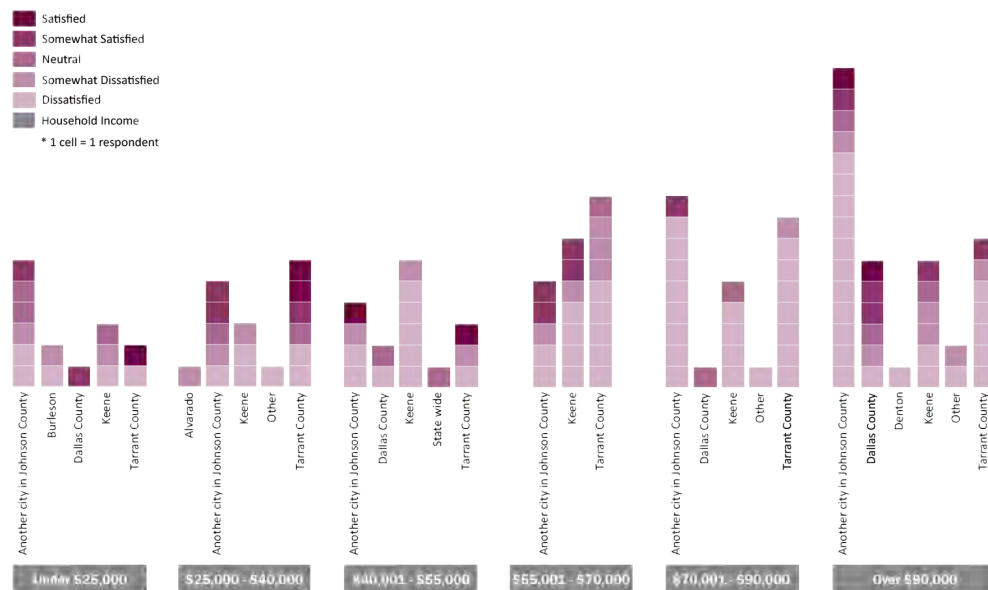


Figure 3-4. Satisfaction with road infrastructure by work place and earning capacity

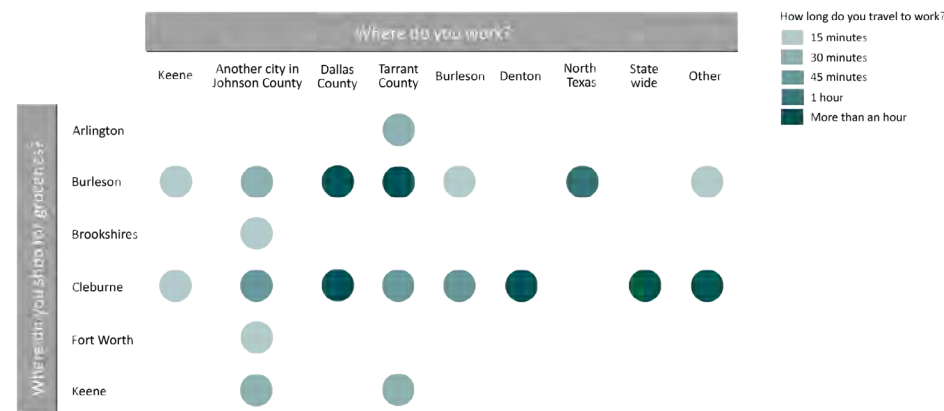


Figure 3-6. Shopping pattern by time to travel and work place

3.4

PERCEIVED STRENGTHS

The City of Keene has been developing over the years, honing its strengths and building upon its values and heritage while embracing progression. A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis exercise was carried out with the steering committee to identify the strengths and issues of Keene. The questions asked in the surveys served to validate input from the steering committee.

The following were the strengths identified by the citizens of Keene:

- The education system of Keene is its strongest attribute. The city was built around the Adventist school. Keene ISD and Southwestern Adventist University are identified amongst the better educational systems in DFW.
- Keene has a low crime rate and the citizens feel safe to walk around the city. The citizens deemed it as a peaceful and a secure community.
- The city organizes a number of events throughout the year for different strata of the community.
- The families living in the city have strong family values and strong faith.
- Keene has a very active community participating in different local events.
- The city is uniquely located between highway 67 and FM 2280, which joins into I-35W, thus giving easy connectivity to DFW, Austin, Waco, Cleburne and Burleson. DFW airport and the Amtrak in Cleburne are also easily accessible too.
- The city has a lot of open spaces available for green development like parks and trails.
- The size of the city is appropriate to sustain development for the future.

3.5

IDENTIFIED ISSUES

The city is expected to experience growth from the DFW region. In order to embrace this anticipated growth and to invite people from all over to live in Keene, the citizens and the steering committee identified issues they are currently facing that may hinder their future development.

- The city has a lot of parcels with unmaintained and dilapidated properties, which affects the overall appearance of the city.
- Keene lacks new upper-income-level and mid-income-level housing developments, which makes it less inviting to potential new residents.
- The infrastructure such as streets, sewer lines, water lines, gas lines and sidewalks needs to be updated and maintained.
- Housing ownership in Keene is low; around 40-45% are rental properties.
- There are disagreements within the community about the desired scope and speed of change.

- The city needs to better accommodate and celebrate diverse cultural communities that are driving much of the growth within the surrounding region.
- The city lacks advertising and publicity of what it can offer beyond the stereotype created by the heritage. It lacks proper branding.
- The city has not had a unified vision and planning for future developments; this has resulted in shortcomings in the infrastructure.
- Keene lacks retail and commercial activities such as groceries, cafes, hotels and restaurants.
- The lack of quality jobs leads to people working out of the city and reduces the sales tax for the city.
- Accessibility to health services such as hospitals/county hospitals, EMR response time, healthy food, sidewalks, parks and trails and bike lanes. Food desert is an issue in Keene.

3.6

VISION STATEMENT



“To be a vibrant city, embracing its unique heritage, while striving to support a superlative community to live, learn, work and play”



LIVE

- Housing Plan
- Land Use
- Infrastructure
- Transportation
- Medical Services



LEARN

- Education
- Work-Force Development



WORK

- Regional Growth Plan
- Commercial & Industrial Development
- Business Mix



PLAY

- Accessibilty to Walk/Bike
- Accessibility to Parks, Recreation and Open Space (PROS)
- Community Events & Celebrations



LIVE

Keene is a part of the fastest-growing metropolitan area in the country. Future quality of life is predicated on improving existing housing stock, and the expansion of housing choices, funding infrastructure upgrades, promoting healthy living and an efficient multi-modal transportation network throughout the city. Keene needs to invest in integrating multi-generational community interests throughout the city.



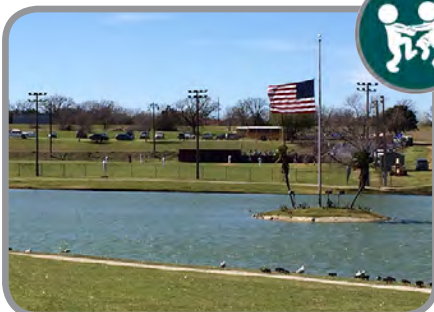
LEARN

The educational system of Keene is one of its strongest assets. The city needs to encourage cooperation and coordination between local school districts, Southwestern Adventist University, city agencies and local business to create programs to develop and maintain a high-quality workforce by providing and promoting opportunities for life-long learning.



WORK

Keene is uniquely located and has a great potential to attract different businesses and retail-commercial opportunities. Keene should focus on increasing revenue generation and circulation in order to serve the needs and demands of the local population. It should also implement policies and initiatives necessary to grow, attract and retain retail, commercial and industrial businesses to increase job opportunities and diversify the tax base.



PLAY

Keene seeks to constantly reinvent itself through creating new places and infusing vibrance. The city must have a place for people from all sections of society to come together and celebrate. There is a need to provide different facilities to accommodate the outdoor interests of the community.



COMPREHENSIVE PLAN

CHAPTER



An aerial photograph of a city, likely Columbus, Ohio, showing a mix of urban, suburban, and rural areas. A white outline highlights a specific neighborhood in the western part of the city. The background is a dark green overlay.

CHAPTER

4

HOUSING

4.1 Introduction

4.2 Key Facts and Trends

4.3 Projected Housing Needs

4.4 Best Practices

4.5 Recommendations

HOUSING

Housing is fundamental to the neighborhoods in which people chose to live, work, and play. The provision of adequate housing is not only important to the quality of life of our residents but also to the economic vitality of our city.

4.1

INTRODUCTION

Housing is fundamental to the neighborhoods in which people choose to live, work, and play. The provision of adequate housing is not only important to the quality of life of our residents but also to the economic vitality of our city. Therefore, the City of Keene is dedicated to further unlock the potential of its communities by expanding and improving living environment options. To that effect, we undertook a thorough analysis to identify housing gaps and opportunities to build more desirable, livable, and resilient communities.

Housing needs and challenges are often complex to grasp. This section identifies key facts and trends to inform the development of policies to address current and future housing needs. This comprehensive plan assesses the current state of Keene's housing stock with regard to tenure, vacancy, affordability, aging housing, and housing diversity. As a result, and in accordance with Keene's vision, we formulate housing policies to direct and inform future investments to meet resiliency, livability, and sustainability challenges.

4.2 KEY FACTS AND TRENDS

Our city is committed to provide high quality of life both today and far into the future. The health and wealth of our community is strongly linked to our ability to meet current and future housing needs. We therefore evaluate the current housing situation and identify trends and patterns to project future needs and ultimately formulate policies to address them.

Housing Units

- From 2000 to 2010, Keene experienced a significant growth of 35% with a total of housing units reaching 2,400. In 2014, Keene registered a slight decline of 11.5% for an estimated 2,124 total housing units. In sum, from 2000 to 2014, Keene's total housing units increased by almost 20%, which is aligned with the 25% overall increase for Johnson County, and 25% for the State of Texas (Figure 4-1).

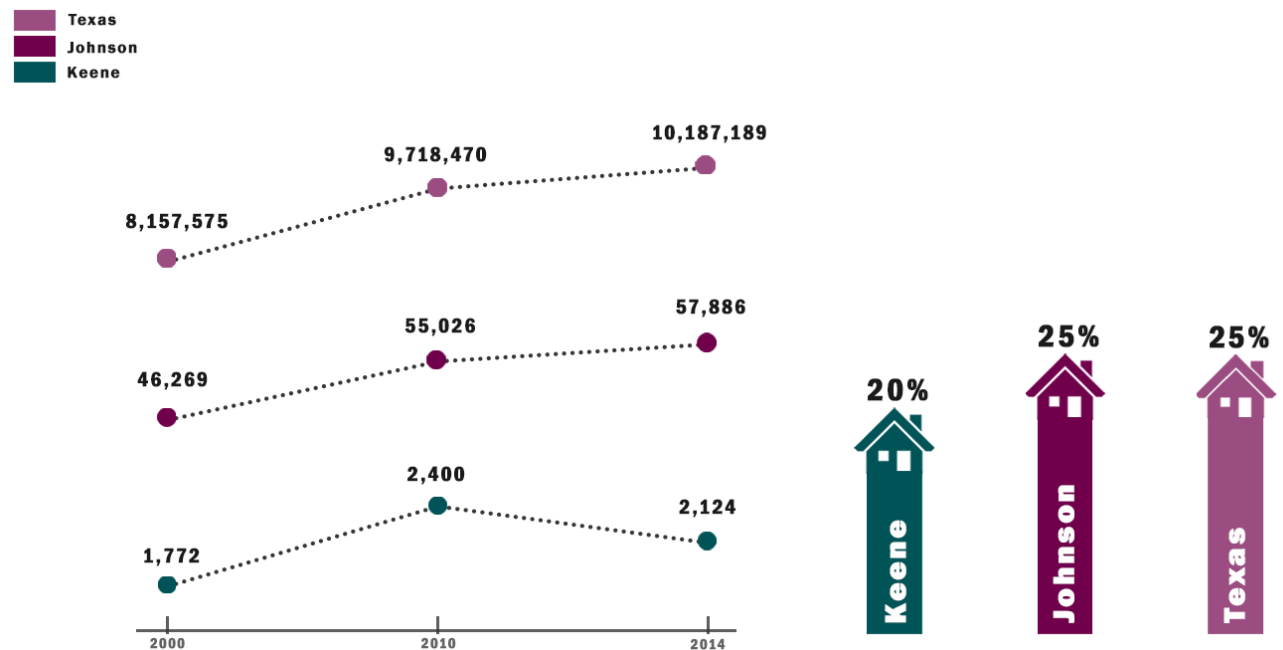


Figure 4-1. Housing Units In Keene, Johnson County, And Texas and Their Growth Comparison

- As of 2014, single-family detached housing is the dominant structure, accounting for close to 50% of Keene's total housing stock. Manufactured housing represents the second largest housing type with an estimated 22.5% share in 2014. From 2010 to 2014, single-family detached housing declined by 5.3% while mobile-homes increased by 8.8% (Figure 4-2).

Housing Tenure

- In 2014, occupied housing units in Keene were evenly distributed between owners and renters with respectively 49.6% and 50.4% (Figure 4-4).
- However, the rate of home ownership in Keene was significantly lower than the County and State averages (respectively 74.6% and 62.7%), as well as its counterparts Alvarado (62.4%) and Cleburne (59.9%).
- From 2010 to 2014, the rate of vacancy in Keene increased by almost 5% while both Johnson County and the State registered a decrease of approximately 5%.
- Vacancy in Keene has been on the rise since 2000, with a cumulative increase of 104%. As of 2014, vacancy in Keene was estimated at almost 14% (Figure 4-3).

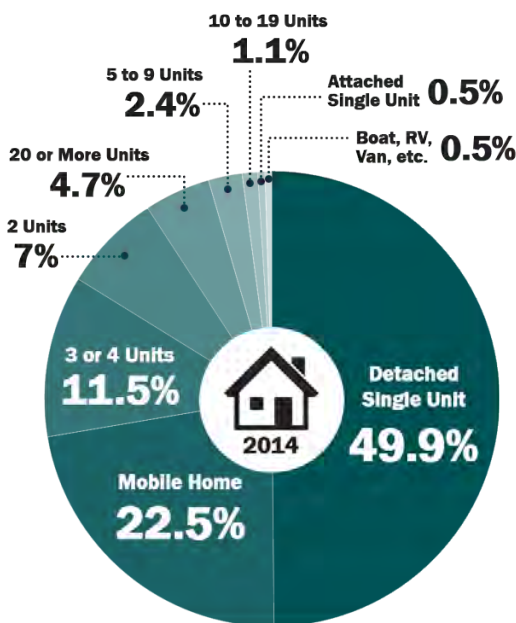
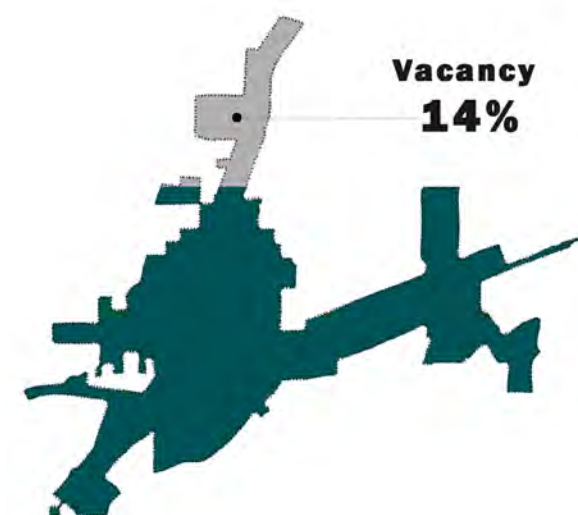


Figure 4-2. Keene's Housing Units in structure



Note: There were 296 vacant housing units in Keene in 2014.

Figure 4-3. Vacancy Rate in Keene (2014)



Figure 4-4. Owner and Renter Distribution in Keene, Johnson County, and Texas (2014)

Mortgage and Rent

- From 2000 to 2014, the median monthly mortgage in Keene increased by nearly 51%, a higher increase than registered by Johnson County (43%) and the State of Texas (46%).
- As of 2014, the median mortgage was \$1,313.
- From 2000 to 2014, the median monthly rent increased by 55% in Keene, which is a higher increase than the overall State increase (52%), yet is lower than the increase for Johnson County (63%).
- As of 2014, the median rent was \$794.

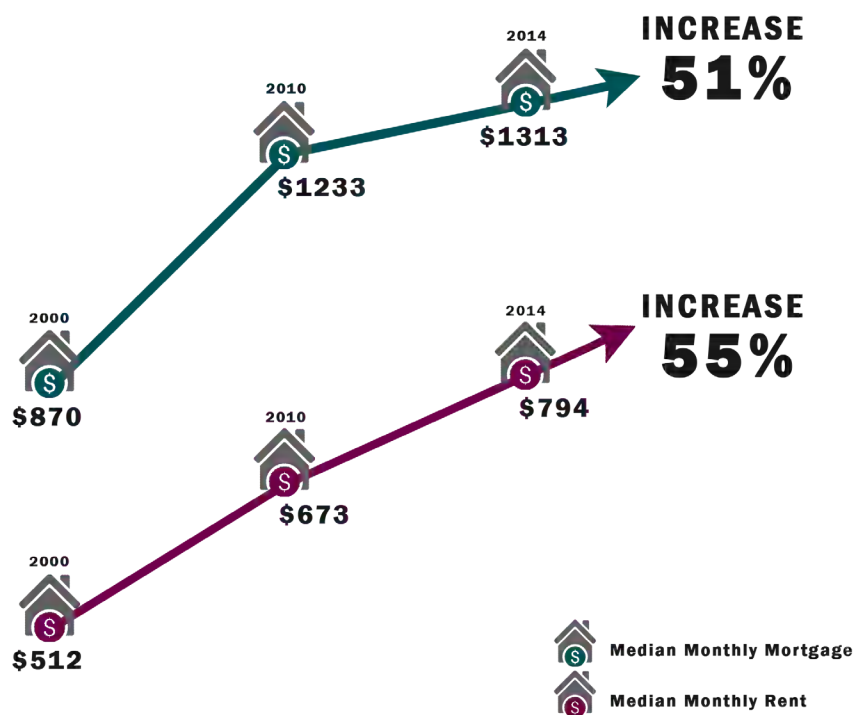


Figure 4-5. Mortgage and Rent in Keene

Housing Values

- While Keene registered a combined increase of 47% in housing values between 2000 and 2014, property values declined by 6% between 2010 and 2014. On the other hand, between 2010 and 2014 property values increased for the State of Texas (6%), Johnson County (2%) and comparable cities such as Alvarado (11%) and Cleburne (2%) (Figure 4-6).
- As of 2014, the median owner-occupied housing value was \$102,000.

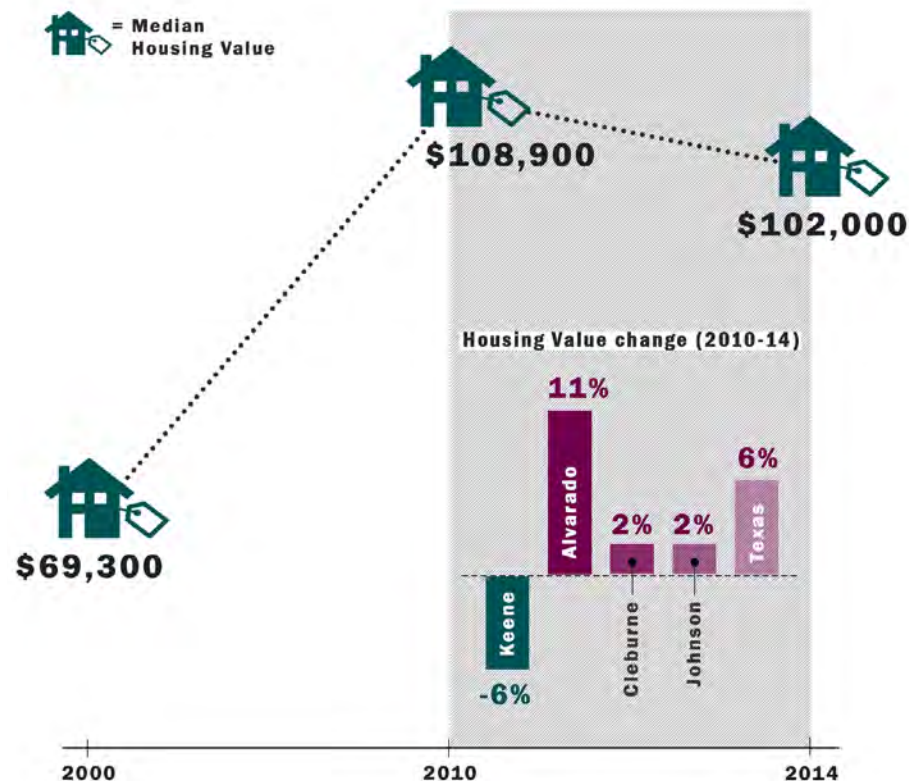


Figure 4-6. Keene's Housing Value and Housing Value Change

Housing Cost Burden

- Housing cost is the largest expenditure for a household. Typically, housing costs are considered affordable if they are less than 30% of a household's budget.
- From 2010 to 2014, the portion of households in Keene spending more than 30% of their income on housing costs increased by 16%. As of 2014, close to 50% of Keene's households spend 30% or more of their budget on housing (Figure 4-7).
- While the share of Keene's households spending 30% or more on housing continues to increase since 2000, the same share for Johnson County (-6%), and similar cities such as Alvarado (-13%) and Cleburne (-8%) declined between 2010 and 2014.

Total Units Paying Rent: 905

Median Rent: \$794 (Johnson County: \$881, Texas: \$870)

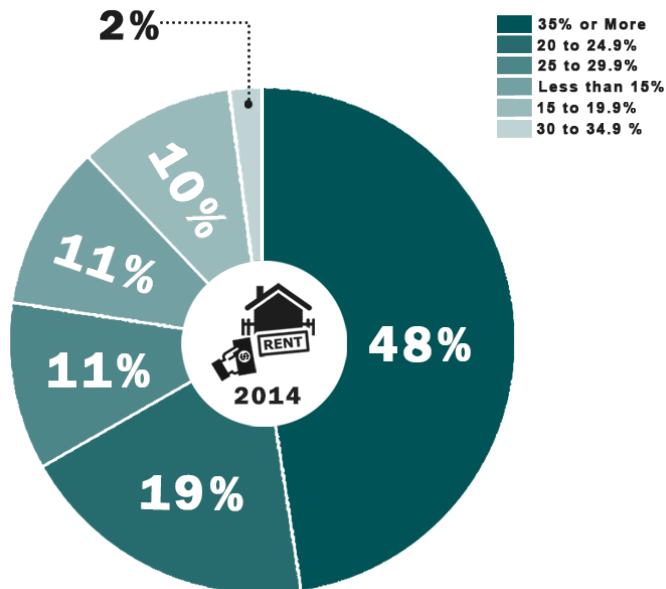
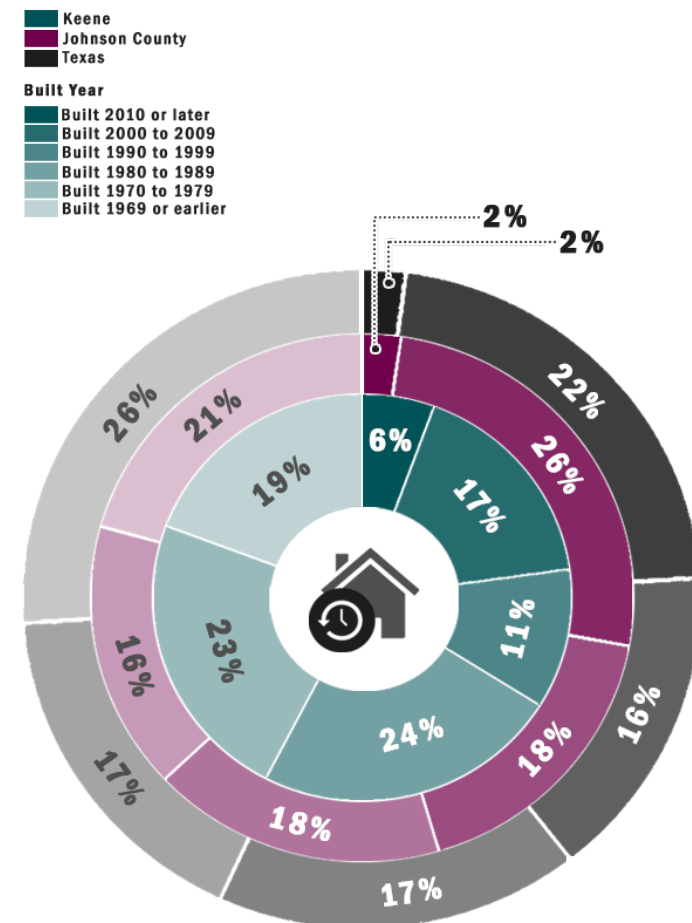


Figure 4-7. Gross Rent Percentage of Household Income

Aging Infrastructure

- Maintaining safe and good quality housing infrastructure is an important task for communities.
- As of 2014, close to 47% of Keene's housing stock was built between 1970 and 1989, which is a higher portion than Johnson County (33.90%) and the State of Texas (34.4%).

Figure 4-8. Housing Unit Portion by Built Year



Affordability

- Because of the strong relationship between housing and transportation, affordability is regarded as a matter of housing and transportation spending. The rule of thumb is that the combined costs of housing and transportation should not exceed 45% of a household income. From 2000 to 2014, the median monthly mortgage in Keene increased by nearly 51%, a higher increase than registered by Johnson County (43%) and the State of Texas (46%).
- The affordability assessment for the City of Keene reveals that portions of the city, mainly outside the city core, are not affordable, with housing and transportation consuming more than 45% of a typical household's budget (Figure 4-10).

4.3 PROJECTED HOUSING NEEDS

Relying on the demographics analysis depicted in Chapter 2.2 Demographics/Projection as well as the highlighted trends in the previous section, below are the projected housing needs for the City of Keene.

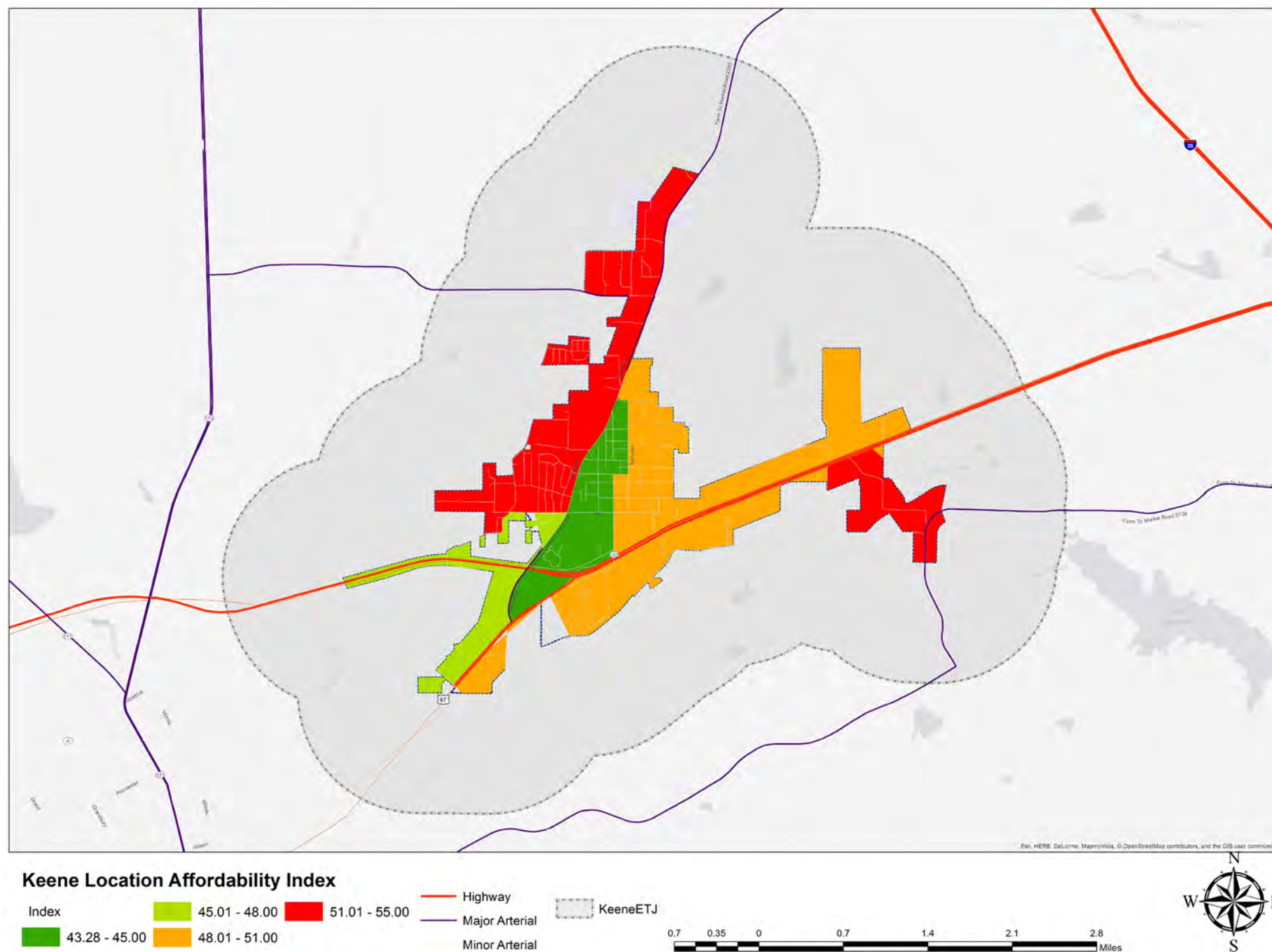
With an estimated population of 9,639 by 2040, our community will face new housing needs. To best meet those needs, it is important to lay out what will be the future housing demands.

To accommodate future growth, 3,492 housing units will be required by 2040 which represents an additional 1,368 housing units. Based on projected housing demands, the housing-type breakdown and associated acreage needed is as shown in Figure 4-9.



Figure 4-9 Keene's Projected Housing Needs in 2040

Figure 4-10. Keene Location Affordability Map



4.4 BEST PRACTICES

..... Increasing Density And Promoting Mixed-Use

- Regulatory and incentive-based efforts can be undertaken to promote median-to-high densities. As the Land Use section depicts (See Chapter 7), Keene counts considerable vacant land, which provides great latitude in land use and development. In an effort to balance land preservation and to accommodate housing needs and growth, the community of Keene can adopt and implement ‘**transfer development rights programs**’ (TDR).

This tool is designed to redirect developments in more suitable locations and ultimately preserve land. Landowners sell their right to develop their land to developers who can then use them in an area appropriate for growth.

For that matter, planners need to identify ‘sending zones’ (area to be protected) and ‘receiving zones’ (where the development can occur).

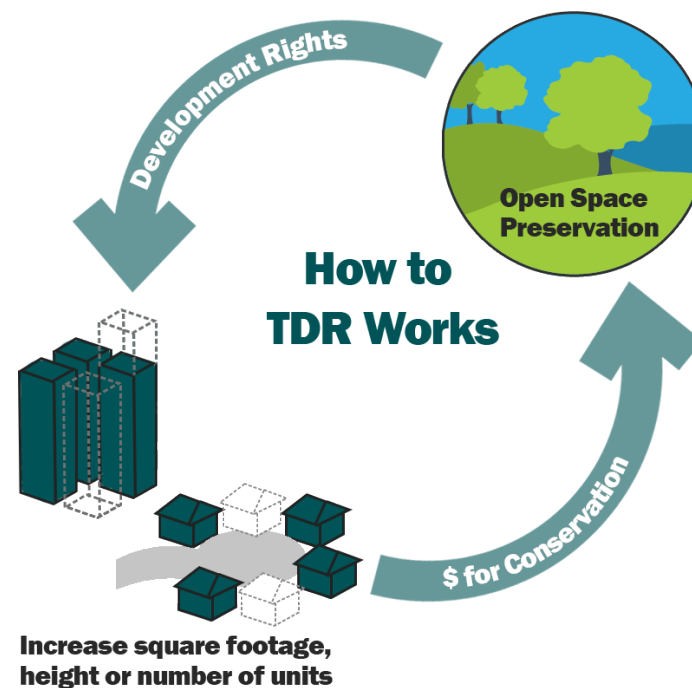
Generally, receiving zones are designated for densification or revitalization purposes. By design, TDRs seem to be useful tools to transfer density where needed.

- Another tool that the City of Keene could consider is “**density bonus**”. A density bonus is a zoning tool that functions as a means to allow higher density development than normally allowed. Also known as incentive zoning, density bonus permit developers to build more housing units or more floor space in exchange for the provision of social and environmental amenities such as parks, open-space areas, schools, or again affordable housing. The City of Keene can potentially implement and tailor density bonus requirements to fit their development strategy.

- Similarly, ‘**infill development**’ is a potential venue to achieve greater density necessary to retail establishments and to foster mixed use development. The idea is to direct development to vacant or undeveloped land that is enclosed by other types of development.

While other tools exist, in sum the idea is to identify opportunities, target desired locations (See Chapter 7) and adopt favorable **regulatory incentives** to achieve greater density, tackle vacancy, and foster mixed use development. Achieving this greater density and mixed use development can facilitate the diversification of housing stock, while tackling vacancy and facilitating alternative modes of transportation, such as walking or bicycling.

Figure 4-11. How TDR Works



..... Rehabilitating Manufactured Housing Fostering Homeownership

- Maintaining safe and adequate housing structure is an important task for communities. Often, the rehabilitation of manufactured housing appears to be particularly challenging. To that effect, federal rehab support exists. Today's primary direct subsidy programs supporting rehabilitation are the Community Development Block Grant (CDBG) and the HOME block grant. Another approach to addressing dilapidated manufactured housing is through replacement programs. Different manufactured housing replacement programs exist throughout the country.

In Texas, the City of El Paso has adopted an "Empowerment Zone" program where an 'Empowerment Zone is a federally recognized distressed area in need of sustainable community development'.

- Facilitating homeownership is important to enhance neighborhood stability and provide economic opportunities to families. A way to foster homeownership is through Homeownership Programs for First-Time Homebuyers. They are designed to assist with the purchase of a new home. The assistance is often in financial terms such as low down payment options, low closing costs, or flexible credit terms.

Another venue help achieving homeownership is through education and counseling. The Department of Housing and Urban Development has a list of approved Housing Counseling Agencies. They can provide advice on buying a home, renting, defaults, foreclosures, and credit issues. Counseling agencies are important resources for individuals seeking to buy a house.

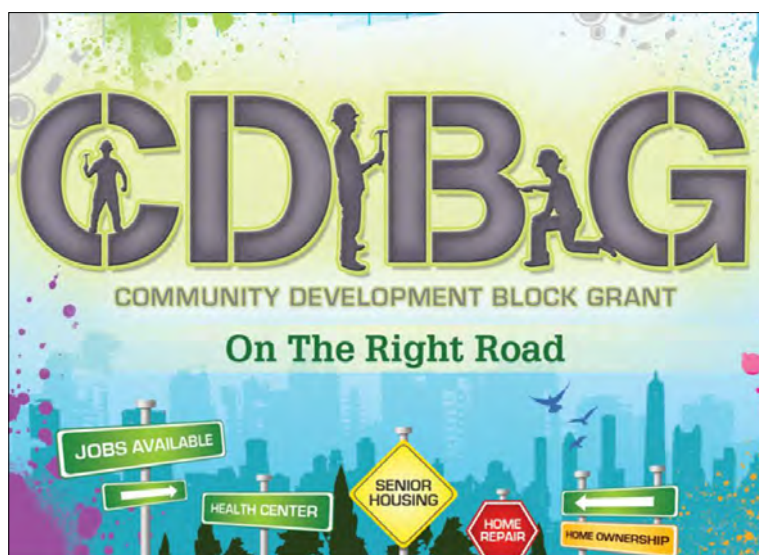


Figure 4-12. CDBG Poster from the City of Tyler Website

4.5

RECOMMENDATIONS



Goal H1: Provide sufficient diverse and affordable housing choices for residents of Keene.

Action H1a. Diversify housing stock to meet the needs of all ages and household incomes.

Action H1b. Designate adequate locations for potential housing development to accommodate growth and meet future housing demands.

Action H1c. Foster mixed use, mixed income neighborhoods.

Action H1d. Encourage more pedestrian and bicycle friendly neighborhoods to enhance livability.



Goal H2: Foster homeownership and mitigate vacancy to improve long term health and livability of Keene's neighborhoods.

Action H2a. Apply to homeowner rehabilitation programs such as the Homeowner Rehabilitation Assistance Program to provide a mechanism for homeowners to rehabilitate vacant properties.

Action H2b. Work with area, state, and federal housing agencies to implement financial assistance programs for purchase and lease/purchase programs for low income housing.



Goal H3: Facilitate and ensure the adequate maintenance of properties and neighborhoods in Keene.

Action H3a. Establish a city-led platform/agency to inform and enable homeowners to maintain and enhance their property and neighborhoods.

Action H3b. Conduct a detailed city-wide assessment of housing conditions to identify areas of priority.

Action H3c. Develop a rental registration program to assist with inspection and identification of substandard or dilapidated property.

Action H3d. Develop a Nuisance Abatement Team as a cooperative effort between the police and fire departments, code enforcement, and the city attorney to focus on nuisance and dangerous properties in the city.

Action H3e. Investigate the potential of utilizing the Urban Land Bank Program to acquire and redevelop tax delinquent properties in Keene.

Action H3f. Develop neighborhood association and Code Ranger/ Blight Buster programs to leverage city efforts and engage citizens in enhancing their own neighborhoods.





COMPREHENSIVE PLAN

CHAPTER



An aerial photograph of a rural landscape, likely in Keene, New Hampshire. The image shows a mix of green fields, some developed areas with buildings, and a large body of water in the lower center. A road or railway line runs diagonally across the upper half of the image. The overall tone is muted, with a dark green overlay on the right side where the text is located.

CHAPTER

5

EDUCATION

- 5.1 Introduction
- 5.2 Existing Conditions
- 5.3 Keene ISD
- 5.4 Best Practices
- 5.5 Recommendations

EDUCATION

Keene's schools are striving to provide quality education for all students, and to produce a skilled workforce for local business. Their efforts are shown in the community's high level of satisfaction with the quality of K-12 schools and the quality of Southwestern Adventist University.

5.1

INTRODUCTION

Keene's schools are striving to provide quality education for all students, and to produce a skilled workforce in local business. Their efforts are shown in the community's high level of satisfaction with the quality of K-12 schools and the quality of Southwestern Adventist University.

When the Institute of Urban Studies (IUS) at the University of Texas at Arlington convened the Steering Committee for the first phase of this comprehensive plan, the committee and IUS reviewed data gathered during the community wide survey. The survey results showed that around 62 percent of respondents ranked Keene's quality of K-12 schools as satisfied, and 60 percent were at least somewhat satisfied with the quality of the university.

Approximately 63 percent of this same group of respondents felt that the value of the university is significant to the community. When asked what the top priorities are for the community to address, respondents ranked the quality of K-12 schools as 9th among 29 options.

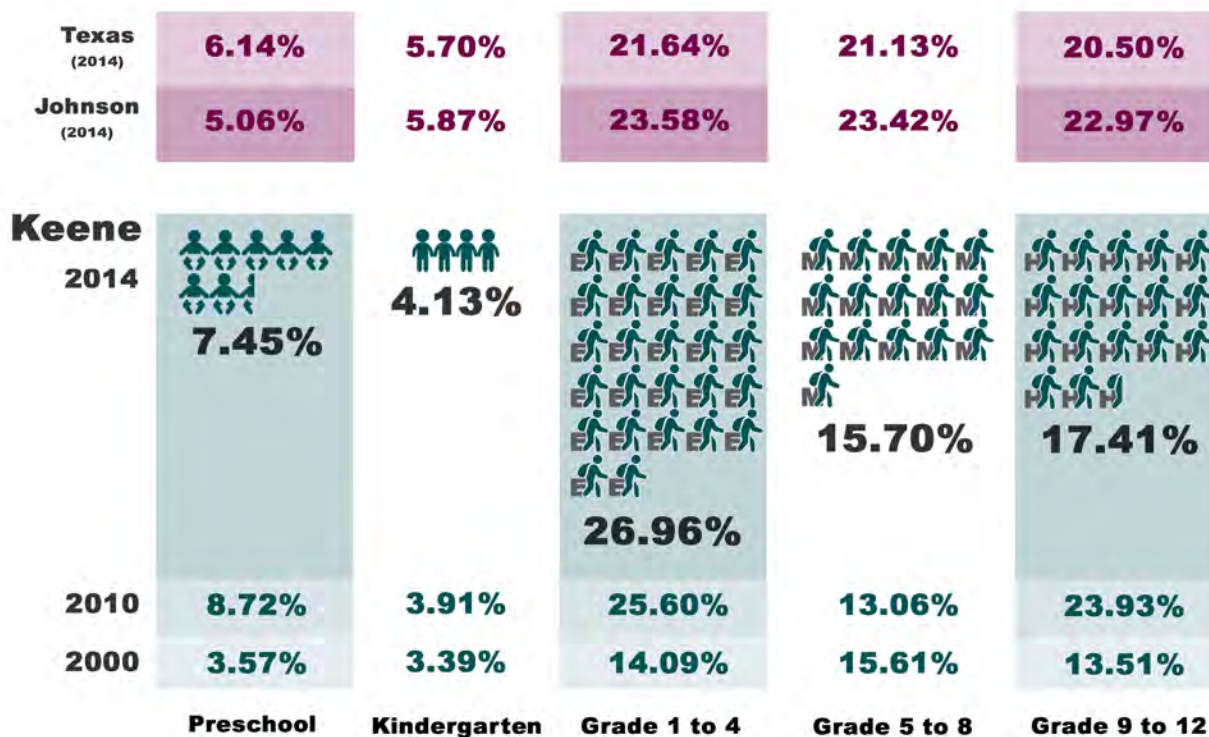
5.2

EXISTING CONDITIONS

The City of Keene is served primarily by the Keene Independent School District (ISD). The Keene ISD serves more than half (56 percent) of the city's land area and 63 percent of the city's school-aged population based on the 2014 U.S. Census and the Texas Education Agency.

Student demographics are an important component of educational facilities and services planning. Information on the identity and location of students enables the education service providers to plan for programs that best suit the needs of their clients and to place facilities in close proximity to the population being served. Figure 5-1 highlights key demographic data of students for Keene compared with Johnson County and the State of Texas.

Figure 5-1. School Enrollment By Grade In Keene, Johnson County, And Texas



Note: U.S. census provides school enrollment data in details of preschool, kindergarten, grade 1 to 4, grade 5 to 8, grade 9 to 12, undergraduate years, and graduate or professional school. This figure only shows preschool to grade 9 to 12.

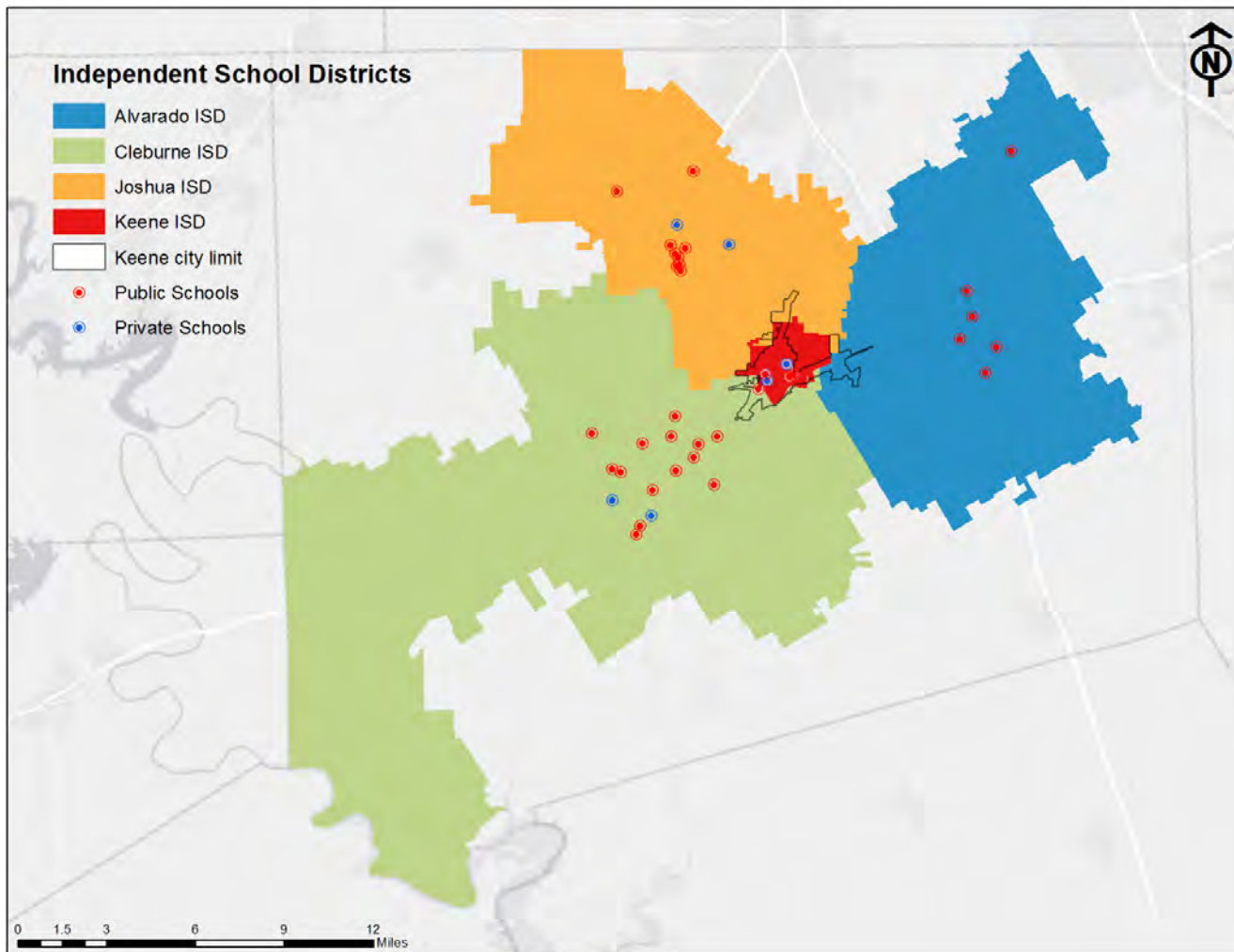


Figure 5-2. Independent School District Boundaries relative to Keene

- The biggest proportion (27%) of Keene students in 2014 were elementary students (grades 1 to 4). This is a higher share than Johnson County (23.6%) and Texas (21.6%).
- Middle school students comprised 15.7% of Keene students (grades 5-8).
- High school students comprised 17.4% of Keene students (grades 9-12).

Due to the geographic layout of Keene, three additional independent school districts provide educational facilities and services to portions of the city (Figure 5-2).

- Alvarado Independent School District (East part of Keene)
- Cleburne Independent School District (West part of Keene)
- Joshua Independent School District (North part of Keene)
- The Cleburne ISD includes approximately 16% of the total land area within the city limits, followed by Alvarado ISD with 15% of the land and Joshua ISD (13%).

- 7.45% of Keene students in 2014 were preschool age children with a higher proportion of school enrollment compared to Johnson County and Texas as a whole.
- 4.13% of Keene students were enrolled in Kindergarten.

5.3

KEENE ISD

As of the 2014- 2015 school year, 4 public schools served the students within Keene ISD with an enrollment of 940. The breakdown of facilities includes 1 elementary school, 1 middle school, and 2 high schools (Table 5-1 and Figure 5-6).

One of the important issues facing schools in the Keene ISD is growth in student enrollment. According to the Texas Education Agency (TEA), the total student enrollment in Keene ISD has increased steadily since 2009 (Figure 5-3). Keene ISD expects that enrollment will increase by 1,100 students in the 2015-2016 school year with a total classroom capacity of 1,188.

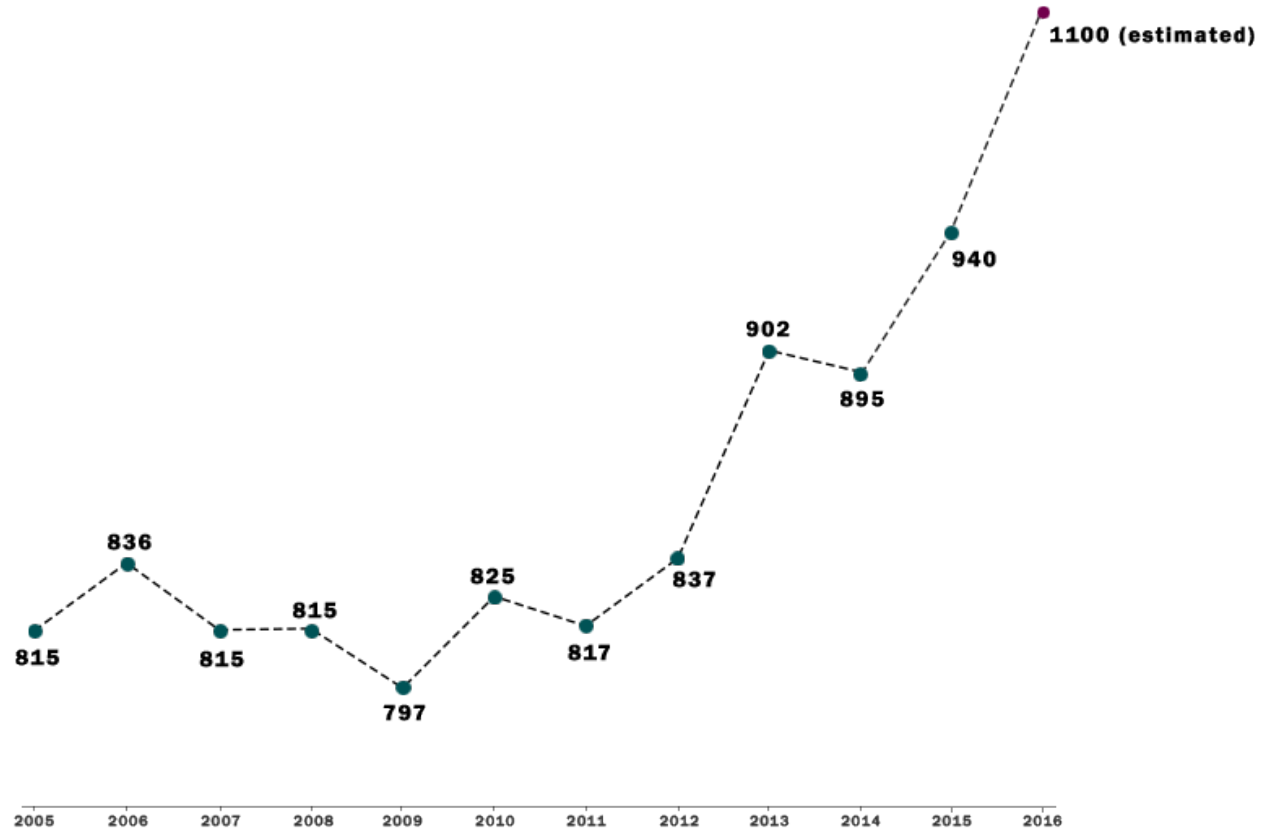


Figure 5-3. Student Enrollment Since 2006

Table 5-1. Public Schools In Keene ISD

District	School Type	School Name	Accountability Rating (2015)	Total Students (2014)
Keene ISD	Elementary School	Keene Elementary School	Met Standard	444
	Middle School	Keene Junior High School	Met Standard	212
	High School	Alter Learning CTR	Met Alternative Standard	10
	High School	Keene Wanda R. Smith High School	Met Standard	274

All of the school districts in the Keene area have increased their enrollment during the past 10 years. Particularly, Keene ISD is the fastest growing school district from 2006 to 2015 (Figure 5-4) and has great student performance output (Figure 5-5).

Texas' accountability system for public schools is one of nation's most rigorous. The Texas Education Agency (TEA) uses the Academic Excellence Indicator System (AEIS) to rate schools based on a number of factors, including the Texas Assessment of Knowledge and Skills (TAKS) scores, attendance rates, percentage of students completing an advanced course, and dropout rates.

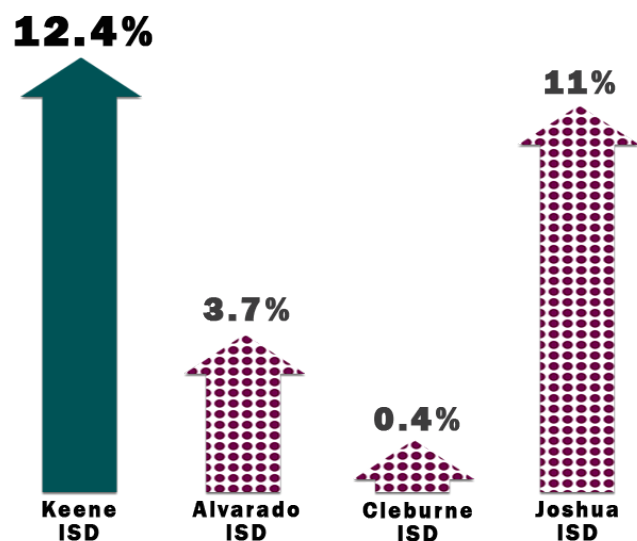


Figure 5-4. Student Enrollment Growth From 2006 To 2015

In 2015, all four public schools in the Keene ISD received an accountability rating of Met Standard eligible (Met Alternative Standard for Alternative Learning CTR). Additionally, the percentage of the State of Texas Assessments of Academic Readiness (STARR) in all subjects is higher in the Keene ISD than the Alvarado and Cleburne ISDs, and slightly lower than the Texas average.

For the 2013-2014 school year, Keene ISD had the highest attendance rate (96.6%) among neighboring ISDs and Texas, and had the second to lowest drop-out rate (1.4%) for grades 9 through 12 after Joshua ISD (0.1%).

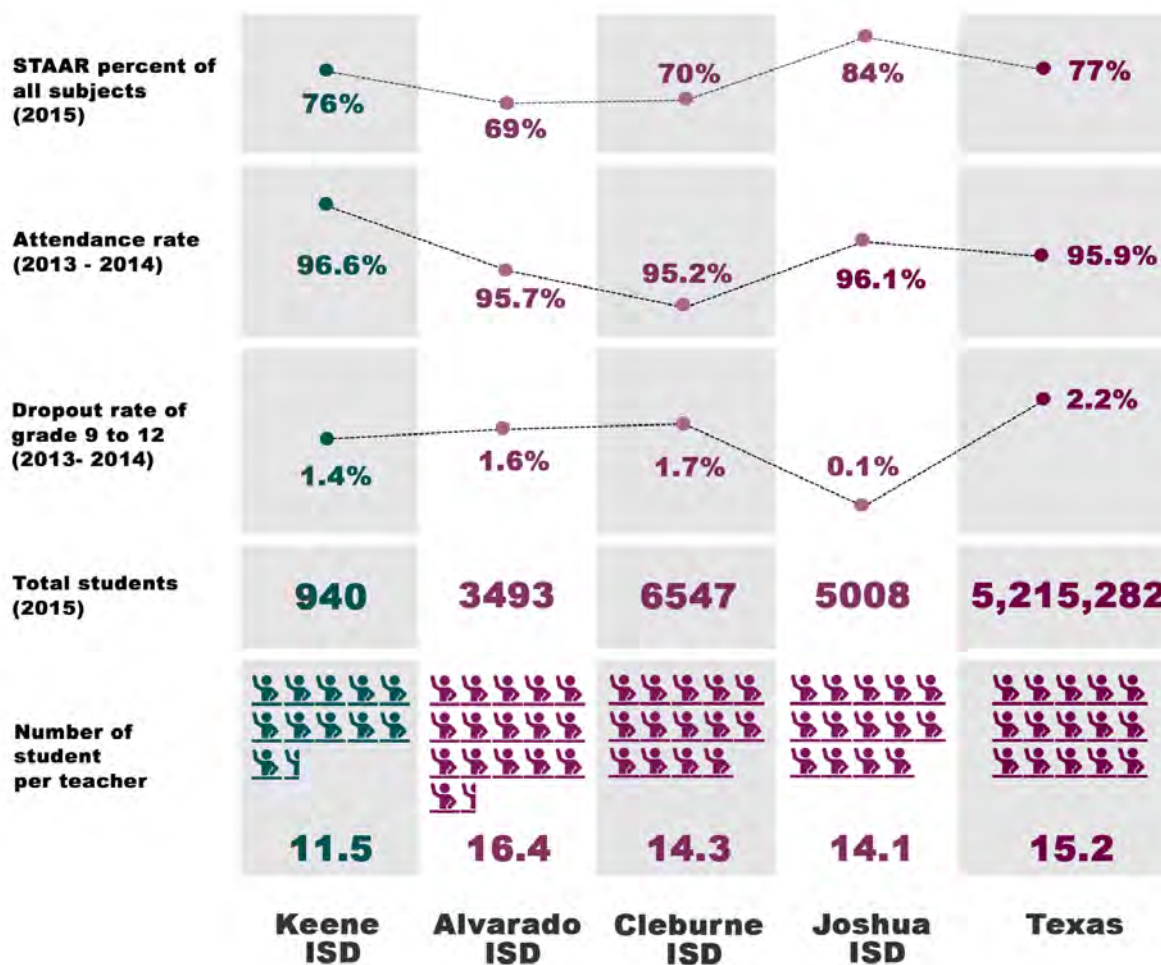
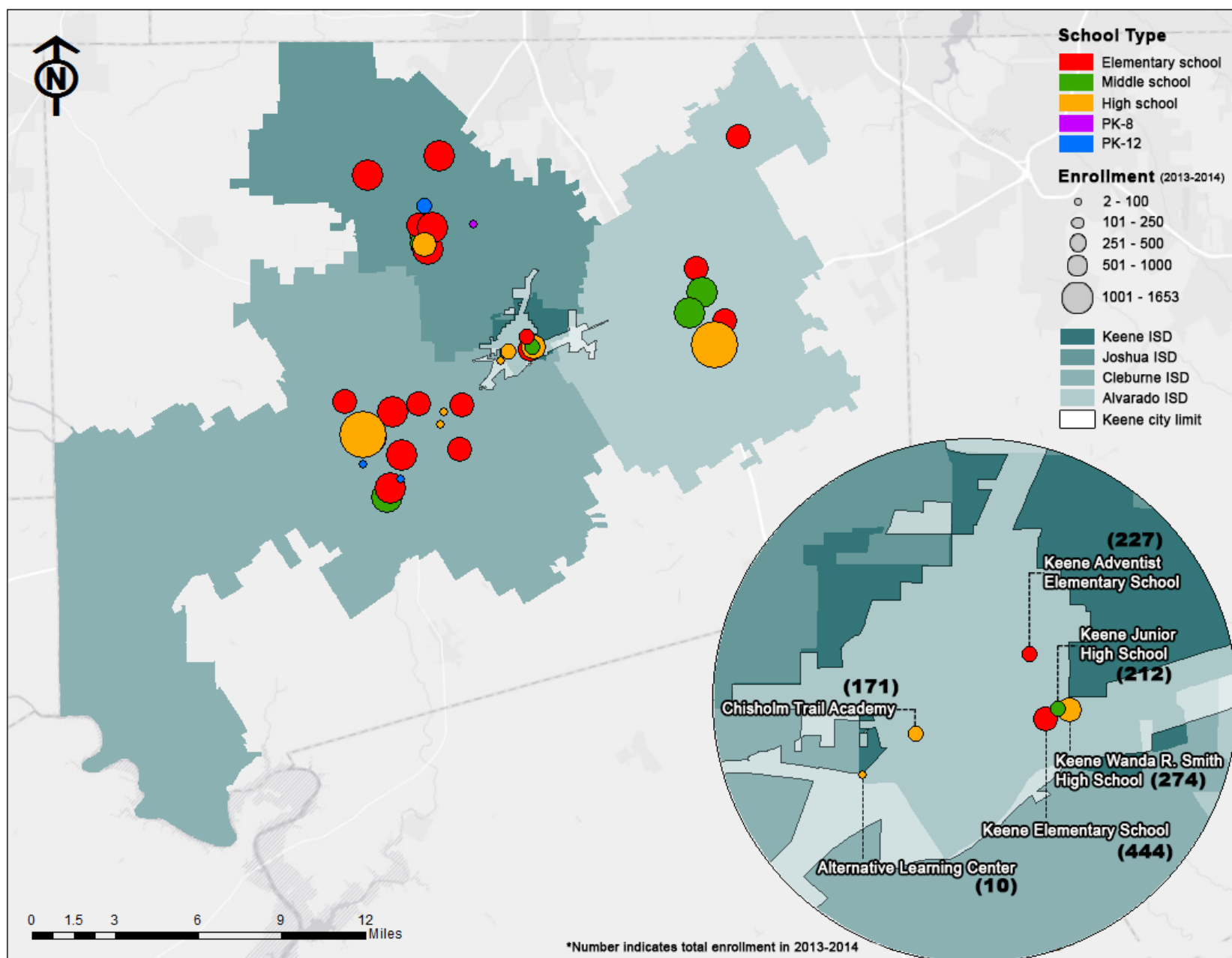


Figure 5-5. Comparison Among 4 Independent School Districts Around Keene

Figure 5-6. Schools In Keene By Type And Size



Child Care Center

Approximately 145 children enrolled in pre-kindergarten and kindergarten in 2014, and it was 11% of total enrollment for Keene ISD and two private schools. Keene Elementary School and Keene Adventist Elementary School provide child care services to the Keene community. They provide an opportunity to develop learning and social skills before children enter formal education. Child care centers perform a necessary service for working parents in today's economy and culture.

Keene Elementary School

Keene Elementary School provided educational service to 444 students in 2014 from pre-kindergarten to grade 5. The majority of students were White (41%), followed by Hispanic (33%), Pacific Island (16%), two or more races (5%), African American (4%), and Asian (1%). Approximately 371 students were economically disadvantaged. In 2014, Keene Elementary School received an accountability rating of Met Standard eligible for the two distinction designations: Academic Achievement in Reading/English Language Arts and Postsecondary Readiness.

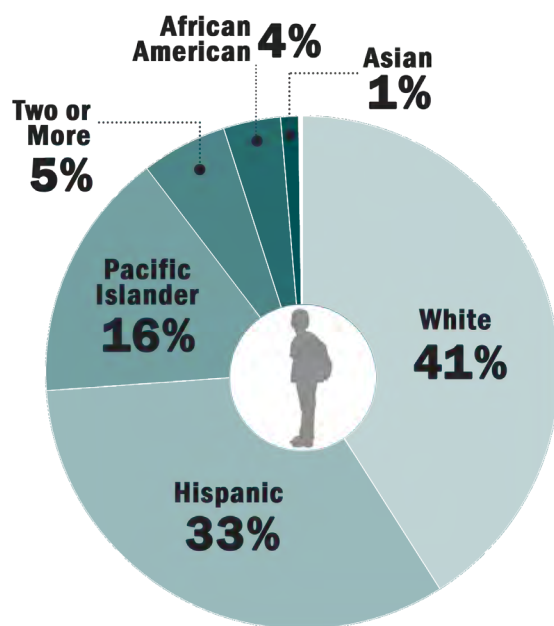


Figure 5-7. Ethnic Distribution of Keene Elementary School (2014)

Keene Junior High School

Keene Junior High School provided educational services to 212 students in 2014 from grades 6 to 8. The majority of students were Hispanic (41%), followed by White (32%), Pacific Island (17%), two or more races (5%), African American (4%), and American Indian (1%). Approximately 79% of total students were economically disadvantaged. The student STARR percentage of all subjects (78%) was higher in the Keene ISD average (76%) and the Texas average (77%).

Keene Junior High School received an accountability rating of Met Standard eligible for the following five distinction designations in 2014:

- Academic Achievement in Reading/English Language Arts
- Academic Achievement in Science
- Top 25 Percent: Student Progress
- Top 25 Percent: Closing Performance Gaps
- Postsecondary Readiness

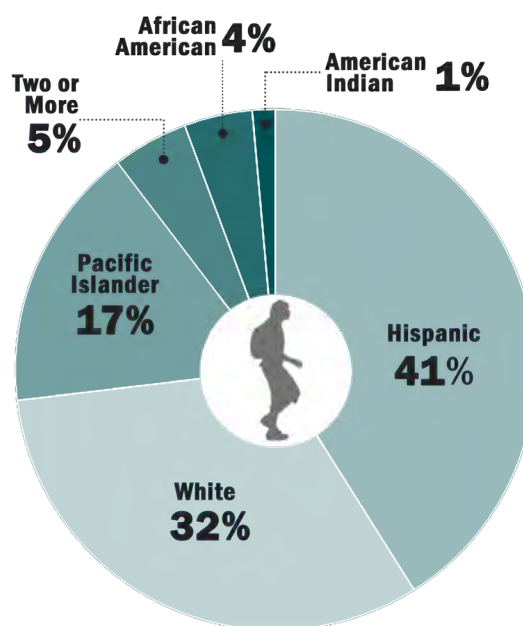


Figure 5-8. Ethnic Distribution of Keene Junior High School (2014)

Alternative Learning Center (Alter Learning CTR)

Alternative Learning Center evaluates with alternative education accountability provisions and provided educational service to 10 students in 2014 from grades 10 to 12.

This school has two programs:

- 1.The DAEP program provides an educational setting for students that have discipline problems.
- 2.The ACE program helps those students who have fallen behind in their regular program to graduate on time.

Approximately 70% of total students at the Alter Learning CTR are economically disadvantaged students.

Alter Learning CTR received an accountability rating of Met Alternative Standard eligible in 2014.

Keene Wanda R. Smith High School

Keene Wanda R. Smith High School provided educational service to 274 students in 2014 from grades 9 to 12. The majority of students were Hispanic (40%), followed by White (35%), Pacific Islander (17%), African American (4%), Asian (1%), American Indian (1%), and two or more races (1%). Approximately 70% of total students are economically disadvantaged. The STARR percentage of all students (78%) is higher than the district average (76%) and the Texas average (77%). The dropout rate for grades 9 through 12 (1%) is lower than the district average (1.4%) and the Texas average (2.2%).

Keene Wanda R. Smith High School received an accountability rating of Met Standard eligible for the following four distinction designations in 2014:

- Academic Achievement in Reading/English Language Arts
- Academic Achievement in Mathematics
- Academic Achievement in Science
- Top 25 Percent: Closing Performance Gaps

Private Schools

Private schools have also become a major provider of education for Keene residents. There are two private schools: Keene Adventist Elementary School and Chisholm Trail Academy. Keene Adventist Elementary School serves pre-school to grade 8 aged children, and Chisholm Trail Academy serves pre-school age students to grade 8, and Chisolm Trail Academy serves high school age students (grades 9 – 12).

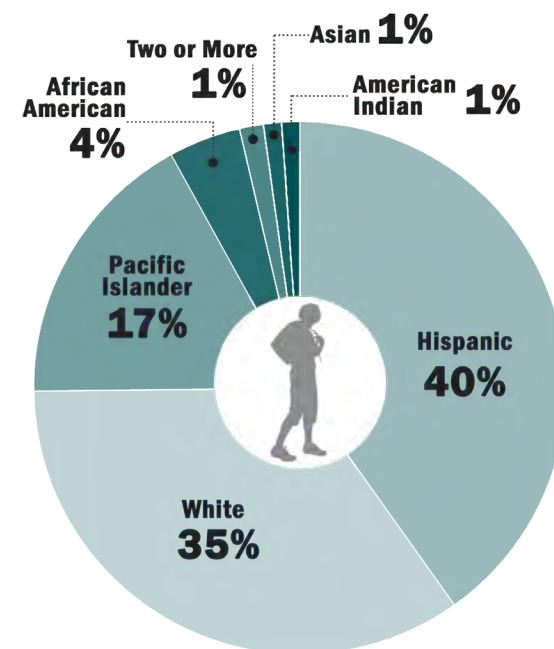


Figure 5-9. Ethnic Distribution of Keene Wanda R. Smith High School (2014)

5.4 BEST PRACTICES

..... Partners in Education, McKinney ISD

McKinney Independent School District has a special department named “Partners in Education”. To achieve education at its highest level through community involvement and civic closeness, the Partners in Education department fosters three distinctive divisions.

- **District/Business Partnership**

A District/Business Partnership is a long-term, mutually beneficial relationship created by a business and the district to provide schools and businesses an opportunity to share resources. The overall goal is to create a relationship that meets the needs of both the business and the district. In order to qualify for a district/business partnership, a business must have a storefront, employ at least three employees, and must be willing to get involved.

For example, the McKinney ISD teamed up with a major convenience store chain to raise money in 2012. At six McKinney-area Race Trac stores, customers, who said “I support McKinney ISD”, could direct 5% of their purchase cost to the school district. All funds raised through this program went to benefit students programs and subjects including math, science, and fine arts.



- **REACH**

REACH is a campus-based mentoring program designed to cultivate self-esteem and self-confidence into a child’s life while instilling a motivation to learn and improve personal and social skills.

The Partners in Education Program provides every campus with a Campus Referral form to guide them in selecting students they feel can benefit from having a mentor. Once a student is identified, the parent/guardian is contacted and informed that the child has the opportunity to participate in REACH. Permission to participate is sought from the parent/guardian. Finally, the student is contacted, and asked whether he/she would like to be part of this program.



**Figure 5-10. Business Partnership
in McKinney ISD**

(Source: NBC DFW.com)

- ***Volunteers in Public School (VIPS)***

This program is designed to further community volunteering efforts by providing support, guidance, and recognition to existing volunteering programs such as National Parent Teacher Association (PTA), Parent Teacher Student Association (PTSA), Parent Teacher Organization (PTO), or other school volunteer organizations and outlets. Each year, thousands of volunteering hours are donated by VIPS members .

Career & Technical Education, Northwest ISD

Northwest ISD provides rigorous and relevant 'Career and Technical Education (CTE)' to prepare youth and adults for a wide range of high-wage, high-skill, high demand careers. CTE programs are offered in high schools, career centers, community and technical colleges, as well as four-year universities.



Over 70% of high school students are currently taking at least one CTE course. An estimated 4,470 students are enrolled in 14 different career clusters at the high school level and occupy 5,262 seats daily. The 14 clusters consist of:

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communication
- Business Management and Administration
- Education and Training
- Finance
- Health Science
- Human service
- Information Technology
- Law
- Marketing
- Science, Technology, Engineering and Math (STEM) CTE Pathway
- Technology Applications/Information Technology
- Transportation, Distribution and Logistics



Northwest ISD also offers a wide range of highly interactive courses for adults and community education. There are 12 career clusters in which adults and community members in Northwest ISD area can develop new skills and knowledge to become life-long learners. The 12 career clusters for adults and community education are:

- Accounting and Finance
- Business
- College Readiness
- Computer Application
- Design and Composition
- Healthcare and Medical
- Language and Arts
- Law and Legal
- Personal Development
- Teaching and Education
- Technology
- Writing and Publishing

5.5

RECOMMENDATIONS



Goal E1. *Provide educational services that identify and respond to the changing demographics of Keene.*

Action E1a. Assist school districts in identifying demographic attributes that could impact educational requirements such as the demand for training programs for both students and adults.



Goal E2. *Encourage an environment of education and life-long learning in families.*

Action E2a. Collaborate to develop programs to support strong parenting skills and involvement in education.

Action E2b. Provide volunteer opportunities with local government agencies (City of Keene, Keene ISD, Southwestern Adventist University) for the city residents to develop employment skills and work experience.

Action E3c. Meet with public and private education providers (school districts in Keene, Private PK-12 Schools, and SWAU) and encourage the creation of programs that enhance job skills of city residents needed by employers.



Goal E3. *Support and partner with K-12 public schools, and universities for excellence in academic achievement.*

Action E3a. Actively support the implementation of the Keene ISD strategic plan.

Action E3b. Support programs to attract and retain talented teachers to the community.



Goal E4. *Collaborate with business entities to enhance educational efforts.*

Action E4a. Encourage businesses to grow involvement and investment in the education of Keene's students as their future labor force.

Action E4b. Support Keene ISD to build entry-level and advanced training program for Keene's youth.



Goal E5. *Work with area school districts to ensure that new school facilities are designed and located to reinforce and support the goals and policies of the City's Comprehensive Plan.*



COMPREHENSIVE PLAN

CHAPTER



An aerial photograph of a rural landscape, showing a patchwork of green fields, brown roads, and a large body of water in the lower right. The image is used as a background for the chapter header.

CHAPTER

6

PUBLIC HEALTH

- 6.1 Introduction
- 6.2 Health Access
- 6.3 Natural and Built Up Environment
- 6.4 Green Corridor Best Practices
- 6.5 Recommendations

PUBLIC HEALTH

As public health is a relatively new element in comprehensive planning, many of the data were found only at the state or county level. Data was collected from different sources including: Census Data, Youth Risk Behavioral Surveillance System, Centers for Disease Control and Prevention, Feeding America/ Map the Gap, NCTCOG, National Survey of Children's Health, and United States Department of Agriculture/ Economic Research Service.

6.1

INTRODUCTION

The goal is to “initiate a comprehensive public health system that promotes mental and physical health and well-being of the entire Keene community.”

A city is considered healthy when it recognizes health as a major factor in city planning. When a city develops strategies, policies and actions to regulate public health, it is directly influencing the quality of residents’ life. Keene’s ongoing quality of life, economic vitality, and public health are predicated on the improvement of existing housing stock, development of recreational amenities to serve the relatively dense neighborhoods in and around the center of Keene, promote an efficient and diverse circulation network, a healthy and safe community, and integrate cross-generational community interests in public health policy and the built environment throughout the City of Keene.

The World Health Organization (WHO) defines public health planning as a comprehensive approach that aims at improving the physical, mental, and social well-being of a city or region. Adequate health services such as: schools, libraries, recreational facilities, housing, income, access to healthy food and fresh water, access to open space including green areas, parks, and trails is essential to achieve this goal. This comprehensive plan will analyze the public health profile for the City of Keene and will provide goals, strategies and actions to establish a local public health plan.

6.2

HEALTH ACCESS

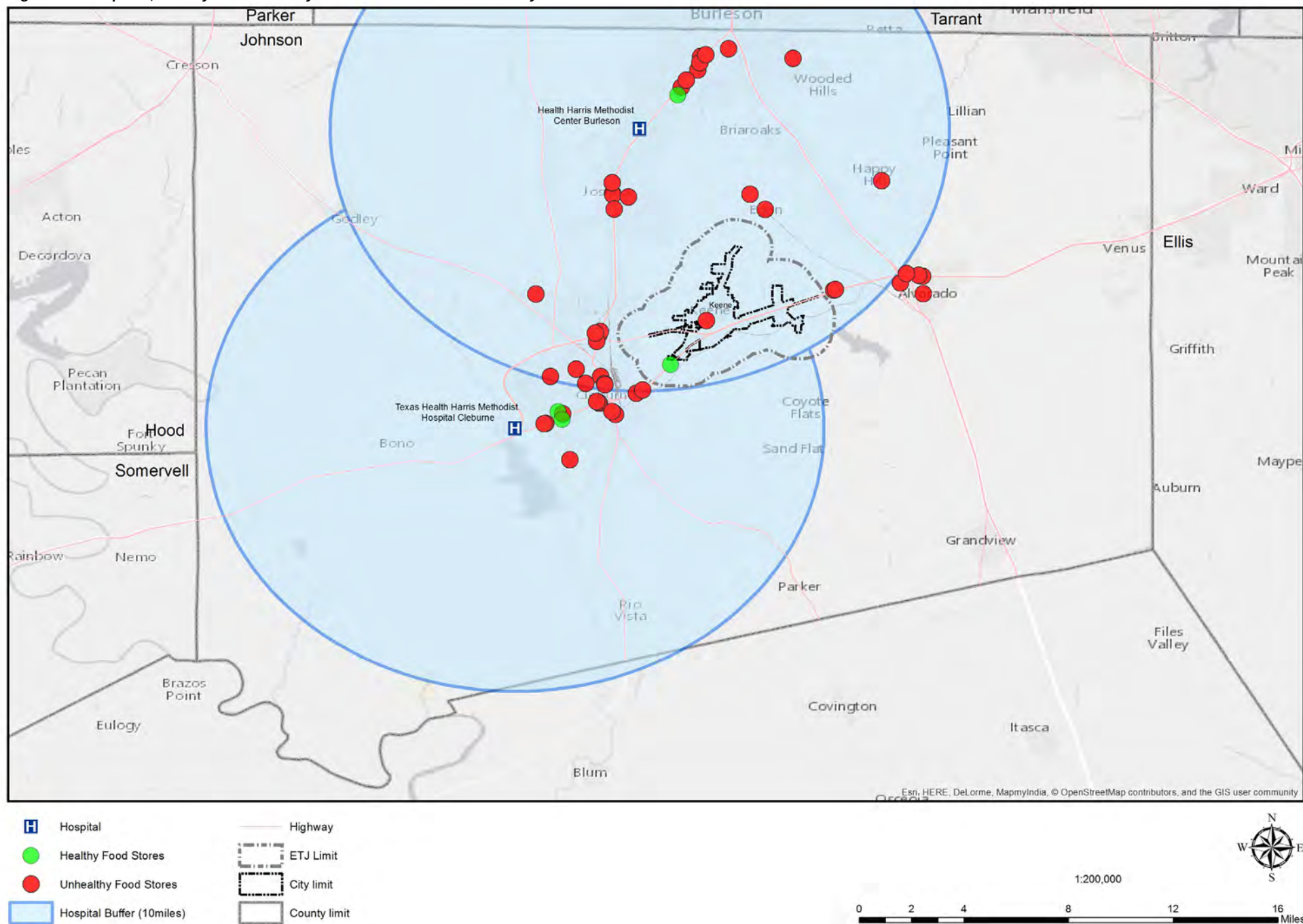
Demographics

- The current population pyramid shows that the city has a relatively youthful community with the largest portion of the population between 9 and 24 years old.
- Keene should be aware of the need to dedicate part of the infrastructure services provided by the City to serve this young community and their families such as: schools, neighborhood parks, and health facilities.
- The City of Keene should prepare for having this young population move into the labor force, requiring an emphasis on the development of employment opportunities and continuing education.

Public Health Profile

- There are two hospitals providing comprehensive services within Johnson County including Texas Health Harris Methodist Hospital (THHMH) in Cleburne and Health Harris Methodist Center (THHMH) in Burleson (Figure 6-1).

Figure 6-1. Hospitals, Healthy and Unhealthy Food Stores In Johnson County



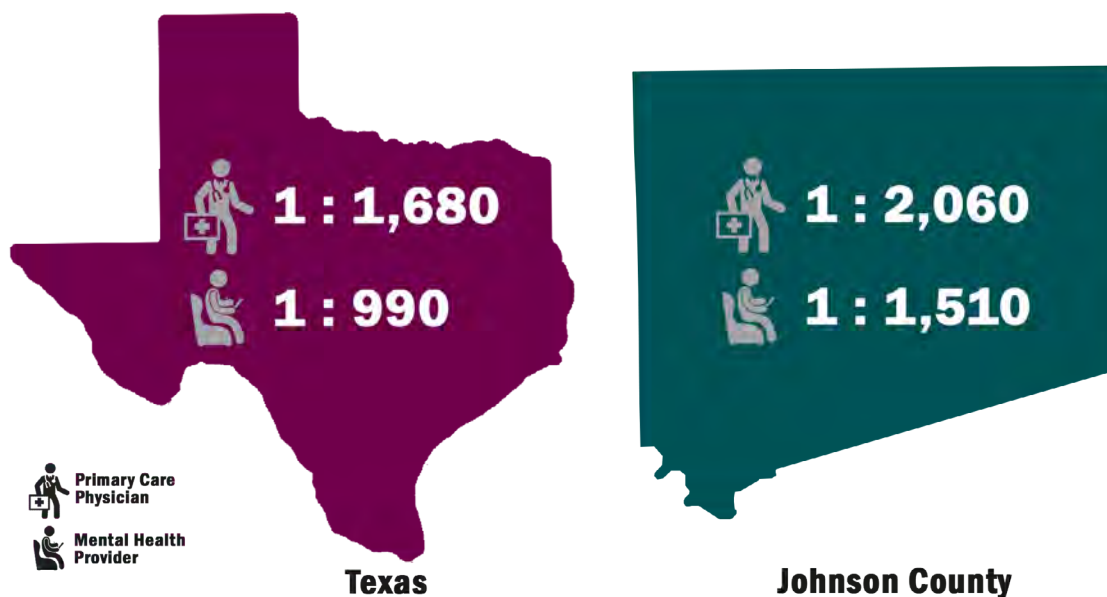


Figure 6-2. Johnson County Ratio Of Population To Primary Care Physicians and Mental Health Providers

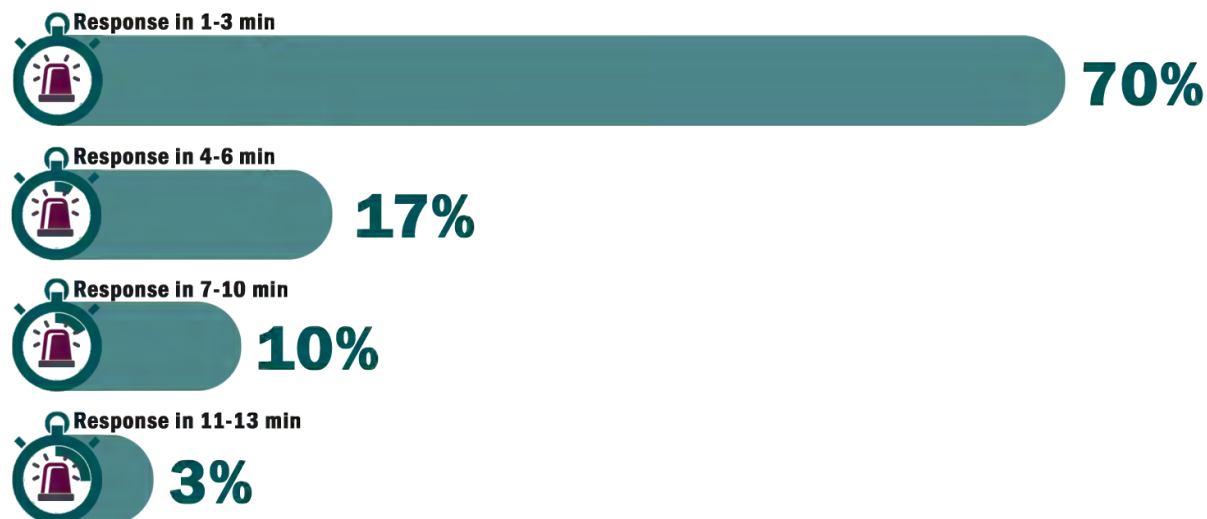


Figure 6-3. Response Time In Keene

- Other health services located within various distances from the City of Keene are: Texas Health Huguley Hospital (16.4 miles and 21 minutes away), Walls Regional Hospital (10 miles and 12 minutes away), Texas Health Neighborhood Care & Wellness (11.6 miles and 19 minutes away), Carenow Burleson (13 miles and 18 minutes away), and Baylor Emergency (16.2 miles and 21 minutes away).
- In 2016, the Johnson County ratio of population to primary care physicians was 2,060:1 which is higher than Texas that has a ratio of 1,680:1 (Figure 6-2).
- The Johnson County ratio of population to mental health providers was 1,510:1 which is again higher than Texas that has a ratio of 990:1.
- Although the county has a decent coverage for hospitals that provide services for Keene, health services employment is limited for the population of Keene. Hospitals constitute about 4.32% of the total employment in the City of Keene while health and medical service comprises 2.88%. In addition, the number of employees in nursing and residents care is 138 inhabitants.
- In 2016, the number of violent crime offenses per 100,000 residents was 242 in Johnson County, compared to 422 in Texas. The number of homicide deaths per 100,000 residents was 3, which is doubled at the state level to be 6 which indicates that Johnson County is considered a safe community.

- Just like many others, public services, medical services and facilities are concentrated in the downtown area of Keene.
- Only emergency service the City provides in addition to the police department; this includes all fire response, medical emergencies, Medical Intensive Care Unit transport, and rescue calls and covers all areas within the city boundaries to reach approximately 33 square miles and 12,000 people within the Johnson County Emergency Service District.
- While many cities have a response time between 8-12 minutes, Keene has about an 87% response time below 6 minutes. Although the centered location of fire and police facilities covers most of the City of Keene, some areas along the outer peripheries are outside of the 5 minute response time. However, the average emergency response time in the City of Keene is still 1- 3 minutes, which is considered highly adequate (Figure 6-3 and Figure 6-4).
- Injuries reported with these response times were transferred to several hospitals but mainly to Texas Health Harris Methodist in Cleburne and Harris Hospital in downtown Fort Worth.
- Since the crime rate in Keene city is below the national average and is still declining, this indicates adequate police coverage for the city.

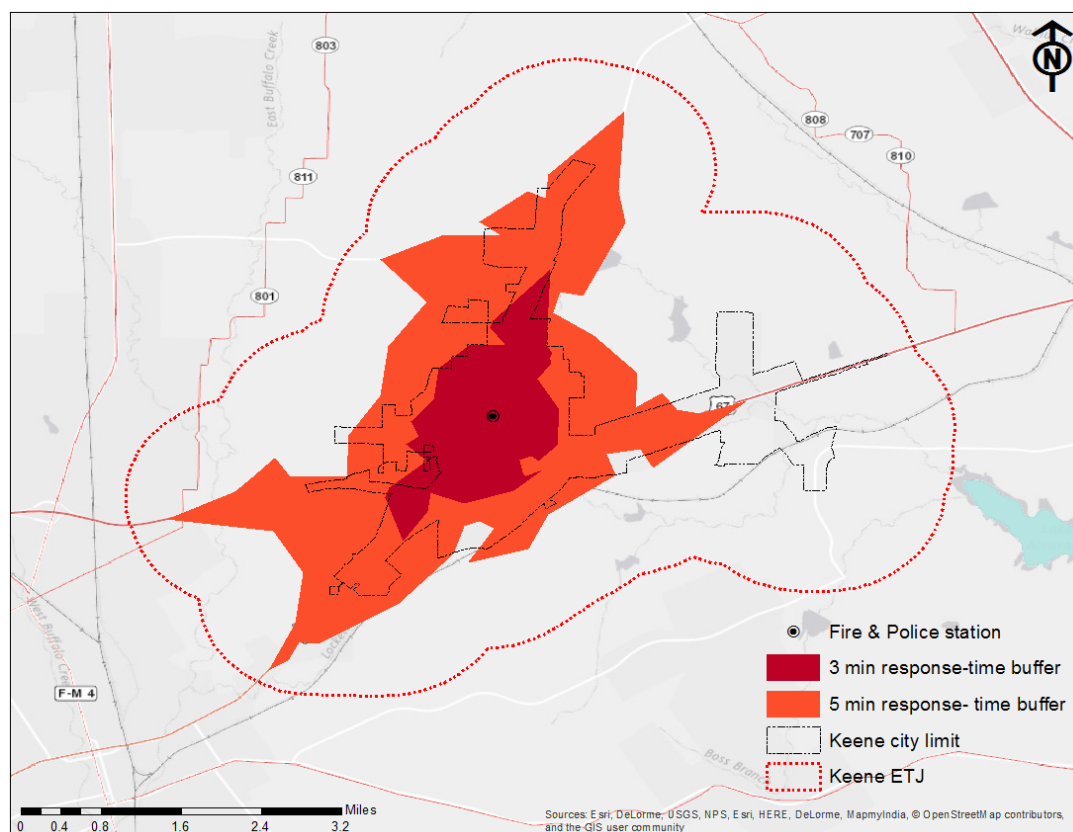


Figure 6-4. Fire And Police Station Response Time Buffer

Health Behaviors and Risks

Smoking

Smoking is one major factor that affects human health and increases risk factors for diseases such as coronary heart disease, stroke, asthma, and lung disease and cancer. In addition, smoking causes premature death in pregnant women.

- In 2016 the number of premature deaths reached about 1,913 in Johnson County.
- About 15% of the adult population smoke and about 19% indicate excessive alcohol drinking which is slightly higher than the state level at 17%.

In 2008, the number of **obese children** in Texas **DECREASED** when the **level of education** for the main household adult **INCREASED**.



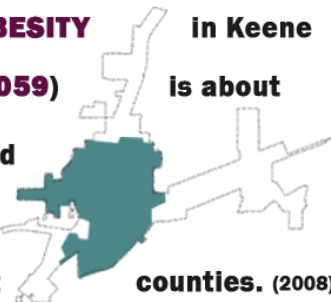
The rate of **OBESE CHILDREN** was **57%** when the **household adult** had **less than a high school degree**. (2008)



Rate of **OBESE CHILDREN** **DECREASED** to become **27%** when the **adult** had **more than high school education**. (2008)



CHILDREN OBESITY (ZIP CODE **76059**) in Keene is about **16-18%** and **LOWER** than adjacent counties. (2008)



Obesity level in male children is slightly **HIGHER** than **female children**. (2008)



OBESITY is the **HIGHEST** among **Black and Mexican** at about **21%** at the county level and about **20%** at zip code level. (2008)

Quick Facts about



Obesity in Johnson County



The **HIGHER** the household **INCOME** was in 2008, the **LOWER** the **OBESITY RATE** in Texas.

28% of **FEMALE** population is obese.



while **32%** of **MALE** population is obese. (2013)



In 2016, **OBESITY PERCENT** is **33%** in **JOHNSON COUNTY**

comparing to **28%** in **TEXAS**



In 2013 the **OBESITY PERCENT** was about

30%
in Johnson County

which is similar to or higher than adjacent counties.

1 in every 3 CHILDREN in **TEXAS** is either overweight or obese. It is the highest in the U.S. (2013)



Figure 6-5. Quick Facts About Obesity In Johnson County

Obesity

Today, sprawling communities that heavily depend on the automobile for transportation have lower levels of physical activity among residents and therefore suffer more from obesity, hypertension, heart attacks, and so on. Compact development on the other hand provides more opportunities for walking and biking as a part of everyday activity, which has a positive impact on public health.

- In 2013 the obesity percent was about 30% in Johnson County which is similar to or higher than adjacent counties.
- About 28% of the female population was obese while 32% of the male population was obese.
- More recent data from County Health Ranking shows that the obesity percentage is about 33% in Johnson County (2016) as compared to 28% in Texas.
- The obesity rate in children in Texas is considered the highest in the nation at 17.6%- 19% where 1 in every 3 children is either overweight or obese.
- In 2008, the number of obese children in Texas decreased when the level of education for the main household adult increased.

- The rate of obese children was 57% when the household adult had less than a high school degree.
- The rate of obese children decreased to 27% when the adult had more than a high school education.
- The higher the household income was in 2008, the lower the obesity rate in Texas.
- Child obesity at the county level as well as the zip code level was about 16%-18% which is lower than many adjacent counties.
- The obesity level in male children is slightly higher than female children. In addition, obesity is the highest among Black and Mexican at about 21% for each at the county level and about 20% for each on the zip code level (Figure 6-5).

Access to Healthy Food

Access to healthy food is an important element in improving health quality. However, many communities with special characteristics such as low income households and rural areas encounter challenges in securing such access for the residents. The availability and distribution of local grocery stores and farmers' markets also play a major role in providing access to healthy food. The City of Keene has several food stores concentrated within the city center area as illustrated in the social services map within which there is only one healthy food store (Table 6-1).

Table 6-1. Healthy Food Counts In Johnson County And Texas

	Johnson County	Texas
2007	• Number of farms with direct sales was 132	
2009	• Still no farmers' markets	
2012		• Number of farmers' markets per 100,000 was less than two
2013	• Only 1 farmers' market existed	• 42% and 22% of people consumed less than one fruit or vegetable, respectively
Total Change (2007-2012)	• Fast food restaurants increased by 18% • Full service restaurants increased only by 3.5%	

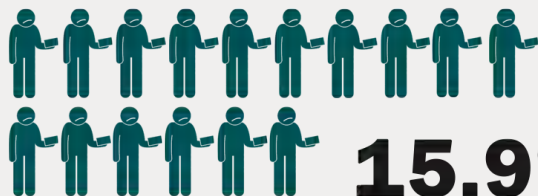
Johnson County
Texas

FOOD INSECURITY RATE

(United States: 15.4%)

FOOD INSECURE
PEOPLE

24,430

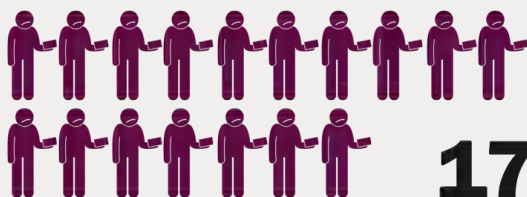


15.9%

of Johnson County

FOOD INSECURE
PEOPLE

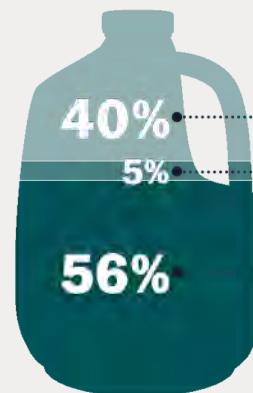
4,578,670



17%

of Texas

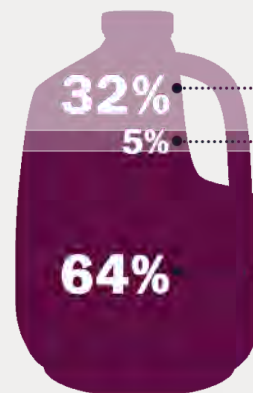
ESTIMATED PROGRAM ELIGIBILITY AMONG INSECURE PEOPLE



Above Other Nutrition Program
threshold of 185% poverty

Between
165%-185% poverty

Below SNAP
threshold of 165% poverty



Above Other Nutrition Program
threshold of 185% poverty

Between
165%-185% poverty

Below SNAP
threshold of 165% poverty

AVERAGE COST OF MEAL

(United States: \$2.89)



\$2.48



\$2.53

Figure 6-6. Food Insecurity In Johnson County and Texas (2014)

The 2014 Map the Meal Gap/ Feeding America rate explains food insecurity for income-eligible people for federal anti-hunger programs and determines food costs. It seeks to provide adequate strategies and programs to mitigate the gap which is essential for food-insecure populations at different income levels.

- The Johnson County insecurity rate included about 16% of the population which is around the national level but lower than the state level at 17% (Figure 6-6).
- Although about 56% of the food-insecure population is entitled to SNAP, WIC, free school meals, CSFP, TEFAP, about 32% of this population is above any nutrition programs and should find charitable food assistance.

6.3 NATURAL AND BUILT UP ENVIRONMENT

Existing Conditions

The analysis of the existing situation used several characteristics to understand the structure of the city. These features are important because they can affect land systems and direct new development. In some parts a certain feature can be identified as an opportunity but in others it can be a limitation. Based on the findings of analysis, an overlap of land use systems and circulation helped to determine an adequate green corridor network.

- The natural features map shows water body elements such as a river/creek, lakes, floodplain, topography, natural corridor, woodlands, and existing parks and trails. Although floodplain areas were identified as no development areas, they were considered opportunities for trail systems to help improve the health of the community. While the topography of the city varies from 750 feet in some areas to 930 feet in other areas, the highest elevation is within the downtown district. In general, the City of Keene is merely flat and suitable for having a trail system (Figure 6-7).
- The open space map shows: parks, farm lands, ranch lands, cemetery, and some water bodies. Vast land dedicated for parks, farms, and ranch land can provide an opportunity for linking the green corridor network while offering a social connection to places such as farmer's markets (Figure 6-8).
- The Road System Network Map shows: the major highway, the primary road, and the secondary roads in the City of Keene. The areas with the most arterial roads were considered as potentials for inner and outer loops of the Green Corridor Network (Figure 6-9).
- The next map illustrated the dedicated land, dedicated vacant land, and the parks. The dedicated vacant land along with park land indicated an opportunity for developing neighborhood parks on one side and a connected trail on the other side (Figure 6-10).

Figure 6-7. Natural Features Map

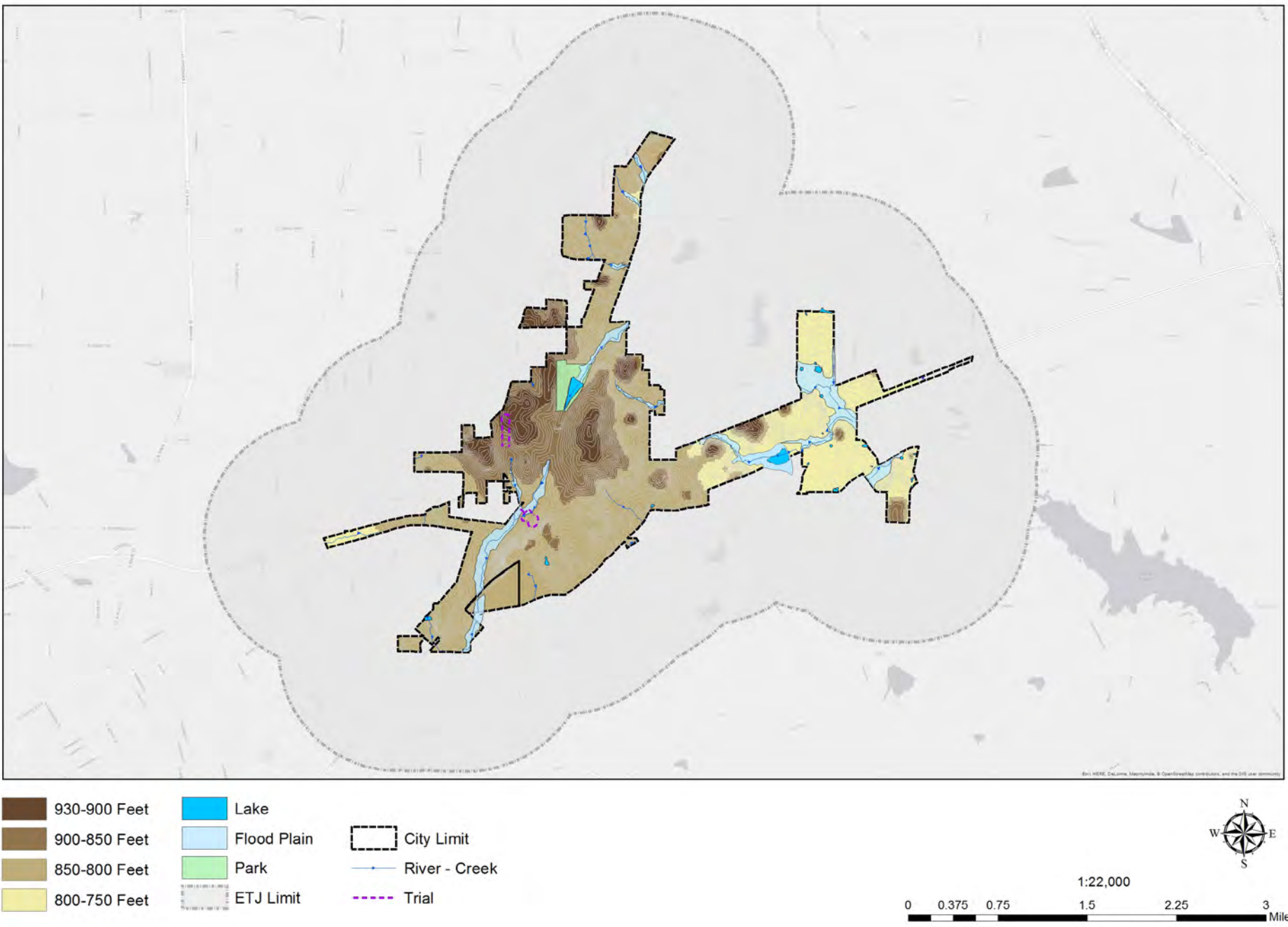


Figure 6-8. Open Space Map

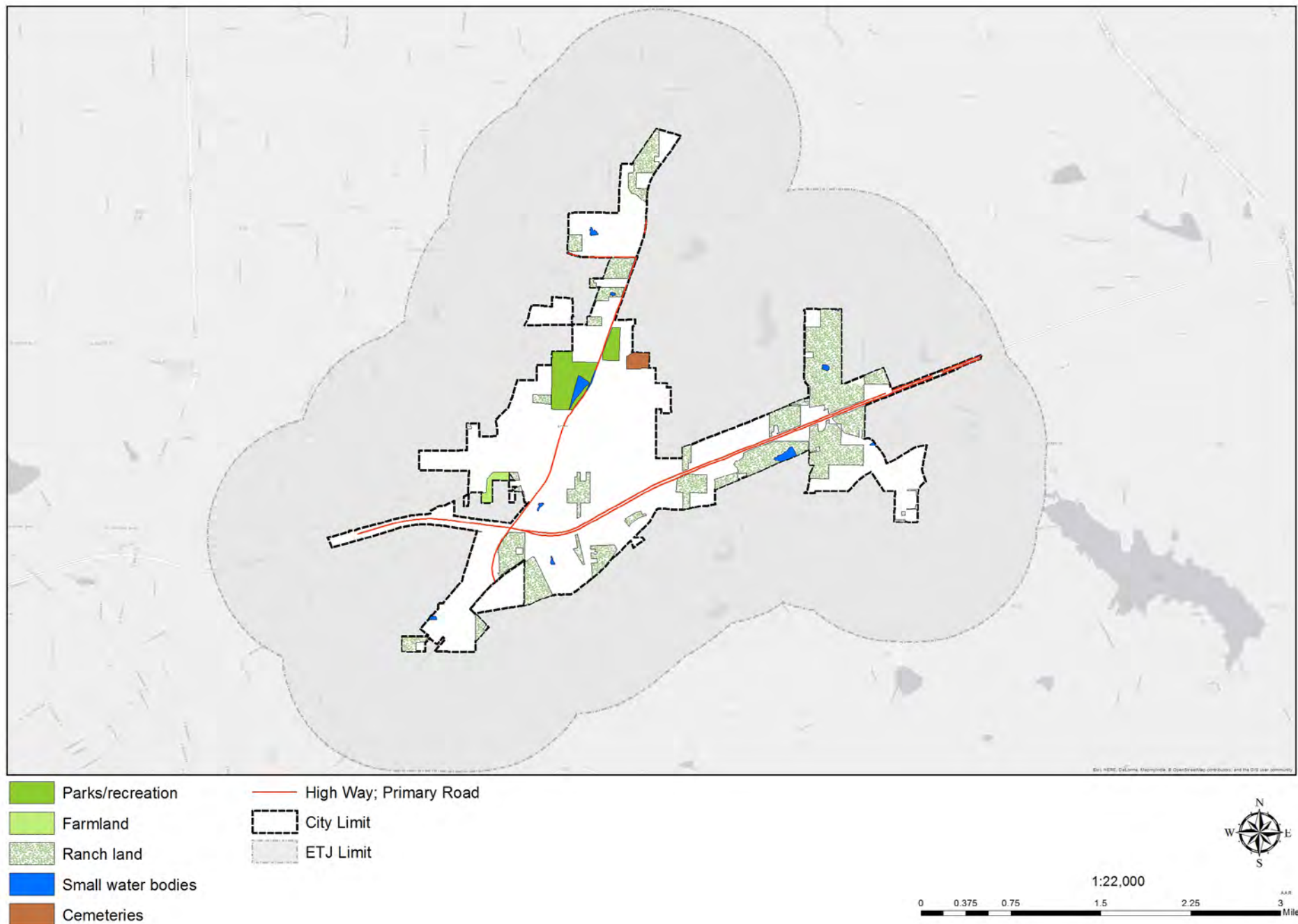
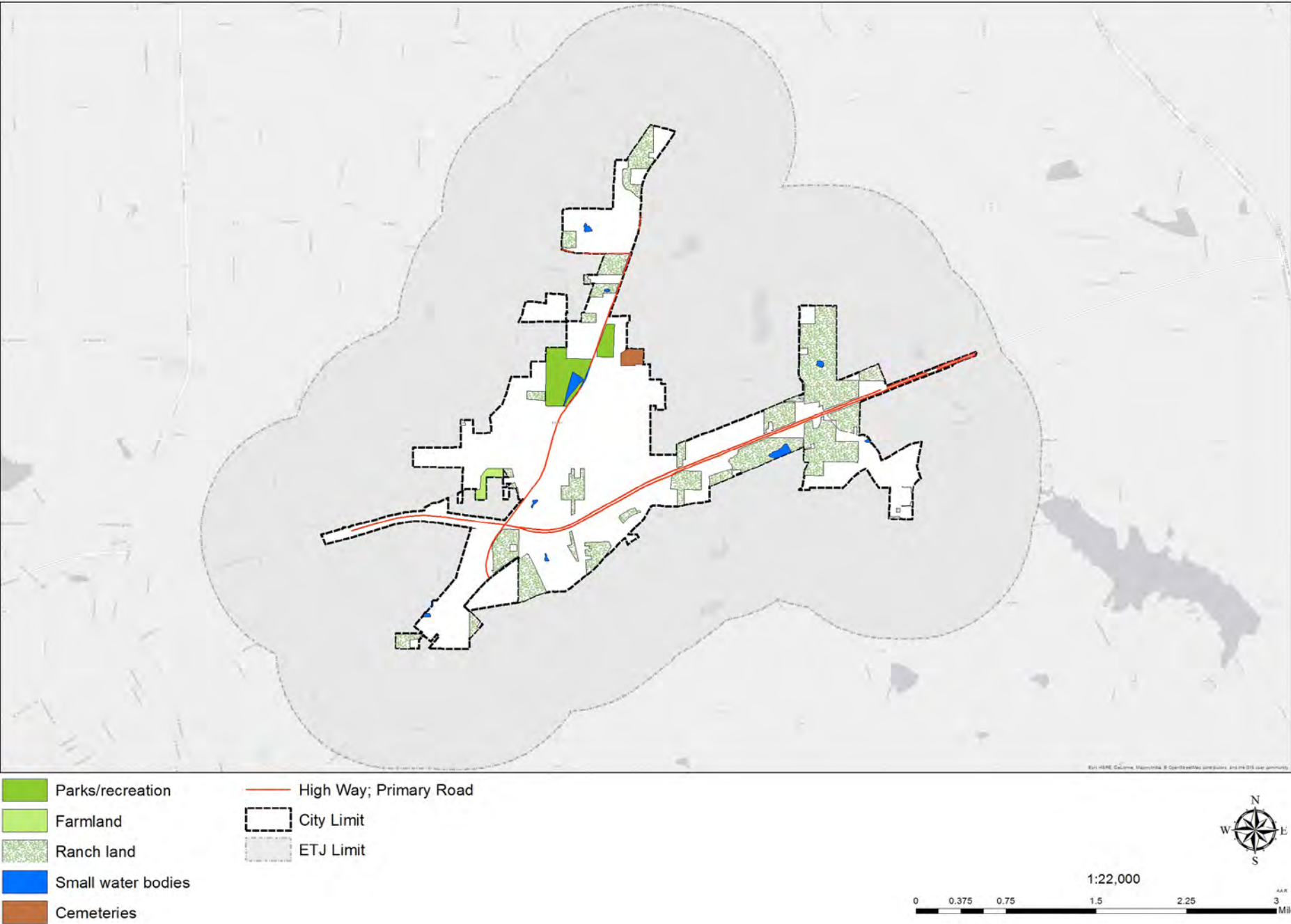


Figure 6-9. Road Network Map



Figure 6-10. Dedicated Land Map



- The social services map shows the location of public health related services such as medical services and food stores in Keene. In addition, the map shows some important features that are essential for the analysis including educational, commercial, and residential districts. These districts are identified as nodes that provide a mixed use development which will encourage walkability and enhance the Green Corridor Network connectivity and safety (See Figure 6-1 for Health care service and Figure 5-6 for schools).

Active Transportation and Physical Activity

Transportation is one main factor that influences the way people live, as it forms how communities are designed and operated. For instance, mixed use developments provide opportunity for residents to have daily physical activities including walking and bicycling that contribute to reducing risk factors for obesity and chronic diseases.

- In 2013 about 33% of the student population in grades 9-12 watched television for 3 hours or more during school days but only about 25% or less were physically active for one hour or more in The State of Texas.
- The State of Texas is one of the states that adopted some forms of a complete streets policy but only around 2% of the adult population biked or walked to work between 2009 and 2011.
- Although opportunity for access to exercise in the county is 70%, only 26% reported no leisure-time physical activity when compared to 24% on the state level.
- Between 2007 and 2012 there was a decrease in the number of recreational facilities in Johnson County with about 22% of change.
- About 61 people per 100,000 died due to injury in Johnson County compared to 54 per 100,000 for The State of Texas. Although alcohol consumption was higher than the state, the percentage of deaths from alcohol-impaired driving was lower in Johnson County (24%) than at the state level (32%) for overall traffic fatalities.
- In 2014, about 2,134 of the total employed population in Keene drove to work. Those who drove used either car, truck, or van to go to work and about 86% of them drove alone while only 14% carpooled (Figure 6-11 and 6-12).

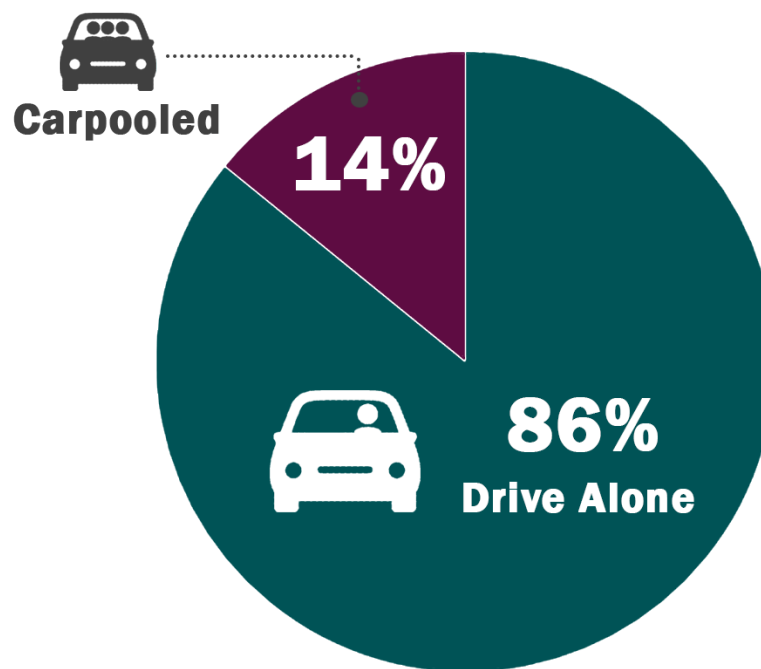


Figure 6-11. Means Of Transportation To Work In Keene (2014)

Proposed Green Corridor Network Conceptual Plan

Based on the findings of the analysis, some categories that are important including open spaces, regional park, regional center, related land use, natural features, road network, vacant land, and proposed land use based on employment were used to identify major activity nodes. These nodes created an opportunity to connect these features to proposed inner and extended loops as a unified system.

A proposed inner loop is based on creating a trail around important nodes in the downtown area including: the University District, intersecting schools, open space and parks, and mixed use city center. The inner loop provides an opportunity for walkability within the downtown area and encourages non vehicular daily trips within the loop.

In addition, the proposed extended loop would cover a range of different contexts of the city and encourage people to take the extra step to use different sorts of facilities. This loop connects the inner loop with the proposed regional center, the proposed employment center, some parts of the Highway 67 corridor, and proposed park locations.

Beyond the inner and extended loops, other main nodes are identified that provide opportunities to be connected to main loops. These nodes are either neighborhood-based, which are distributed all over the city, or regionally-based, which are located at the northeastern and southern parts of the city. Overall, the corridors connecting these nodes can make a network connection to the city loops and create a green corridor network system (Figure 6-13).

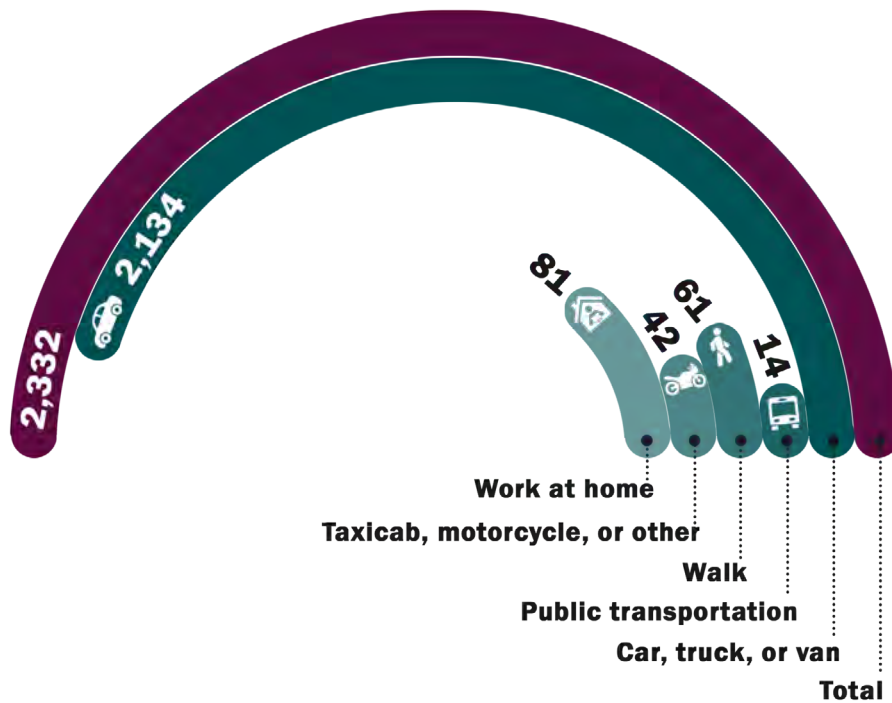
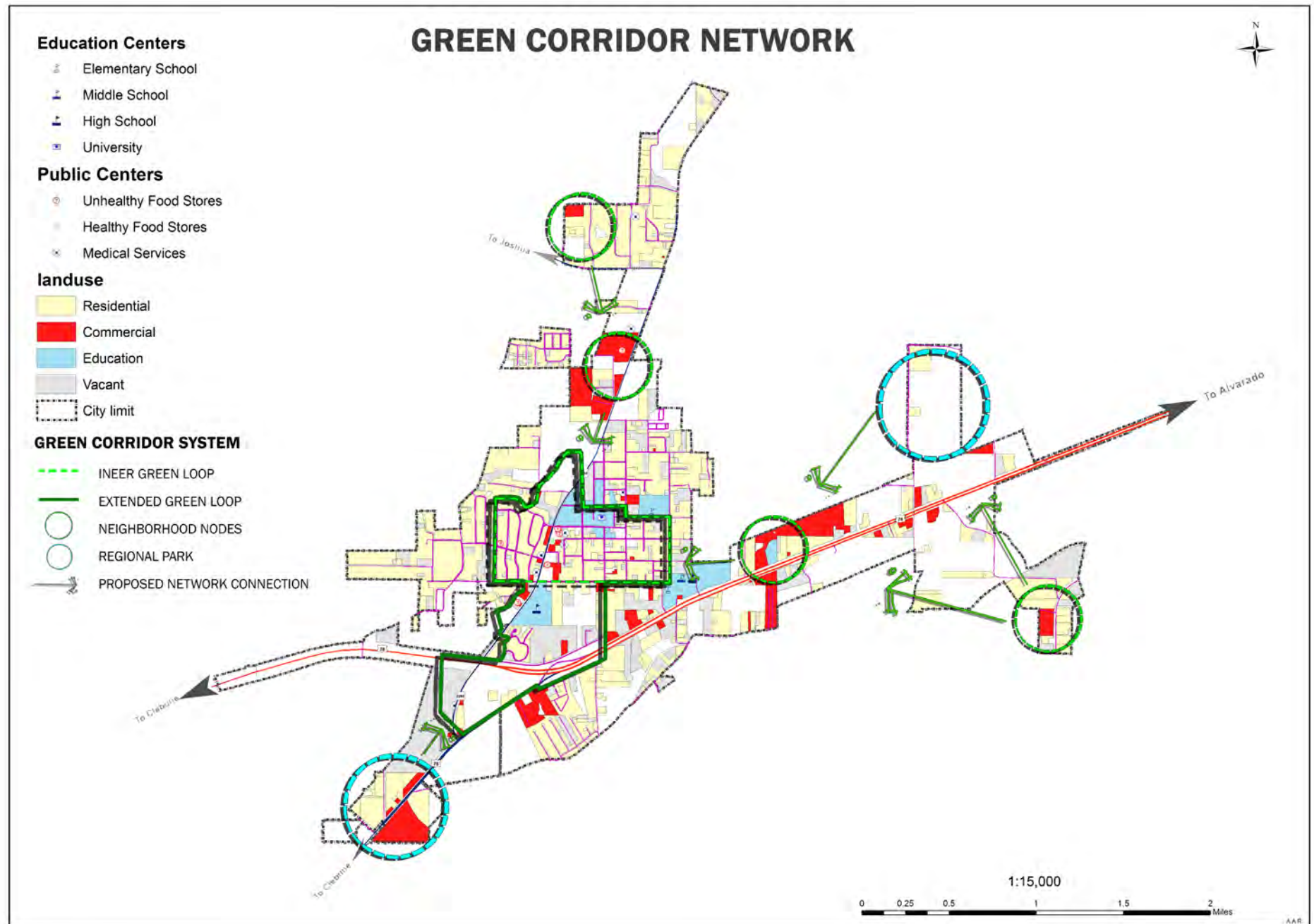


Figure 6-12. Means Of Transportation To Work In Keene (2014)

Figure 6-13. Green Corridor Network Concept Map



6.4

GREEN CORRIDOR BEST PRACTICES

A “green corridor” is defined as an area of habitat that connects wildlife populations separated by human activities or structures such as infrastructure. The purpose is to enhance urban biodiversity, reduce climate change and other environmental impacts, and promote outdoor activities. In addition, green corridors provide an opportunity for a safe and convenient environment that can be used for socioeconomic development.

Figure 6-14 shows some examples of best practices used to create a loop around important nodes. For example, downtown Portland used the green corridor concept by changing vacant land to nodes that connect the main corridors together.

The Green Corridor Network practices (Figure 6-15) show some examples of best practices used to create a network of trails around important nodes and illustrate the potential type of activities next to the green corridor network.

The concept of complete streets is used to design safe, comfortable, and convenient movement by people of all ages and abilities.

The examples in Figure 6-15 shows a transformation the city used to integrate Complete Street elements to provide a comprehensive circulation system that encourages social engagement, physical exercise, and safety.

These elements include but not are limited to:

1. Integrate transportation with land use planning.
2. Small blocks (200- 400 feet).
3. Mixed use neighborhood centers within walking distance.
4. Schools within walking and bicycling distance and along transit corridors.
5. Dense land uses served by frequent transit.
6. Different transit lanes, zones, and trails.
7. Visible retail development from major roads with storefronts toward street and increased transparency of facades at ground level.
8. Street furniture and landscape including lighting, benches, crosswalks, trees, and medians.

Figure 6-14. Green Corridor Loop Best Practices

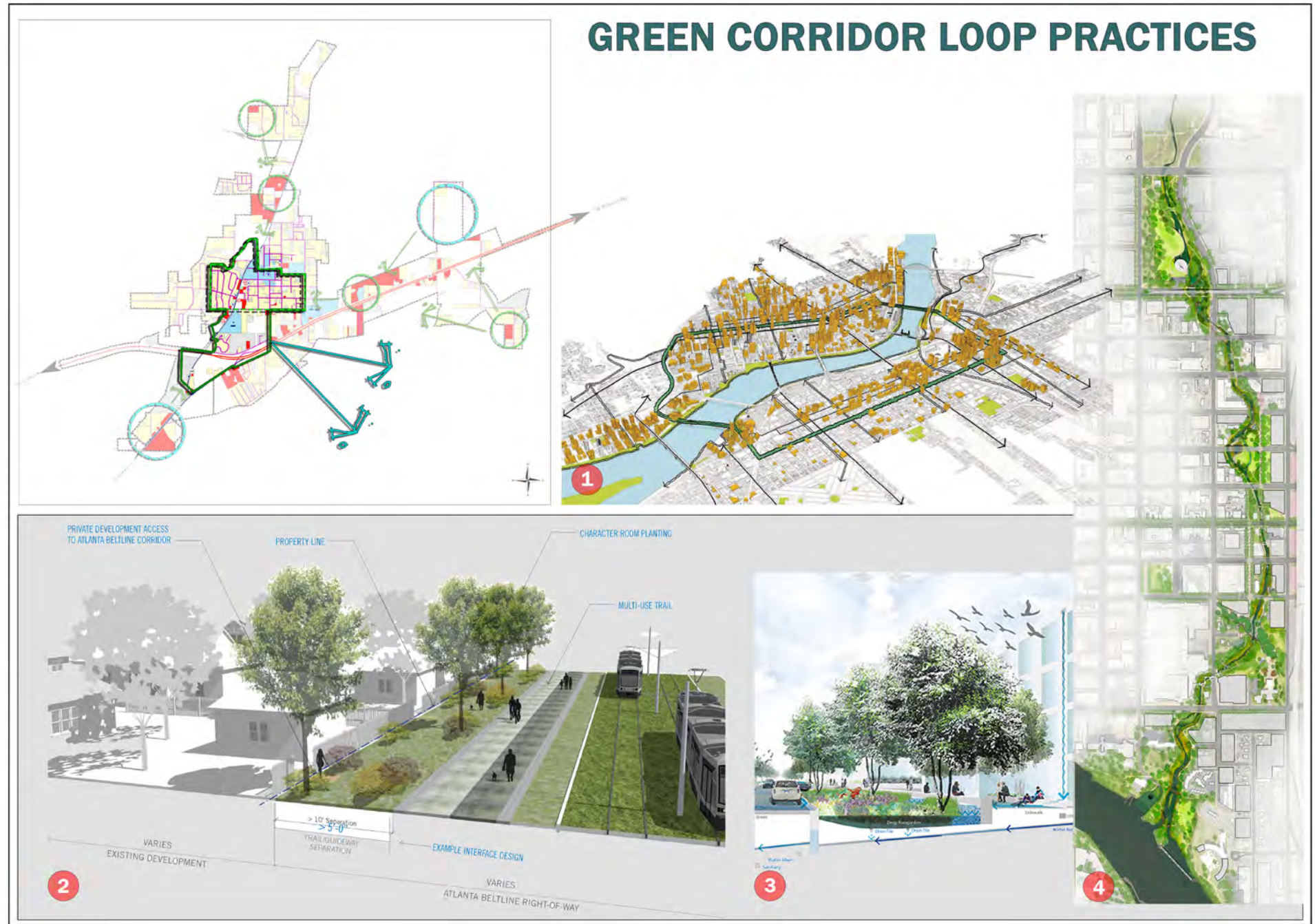
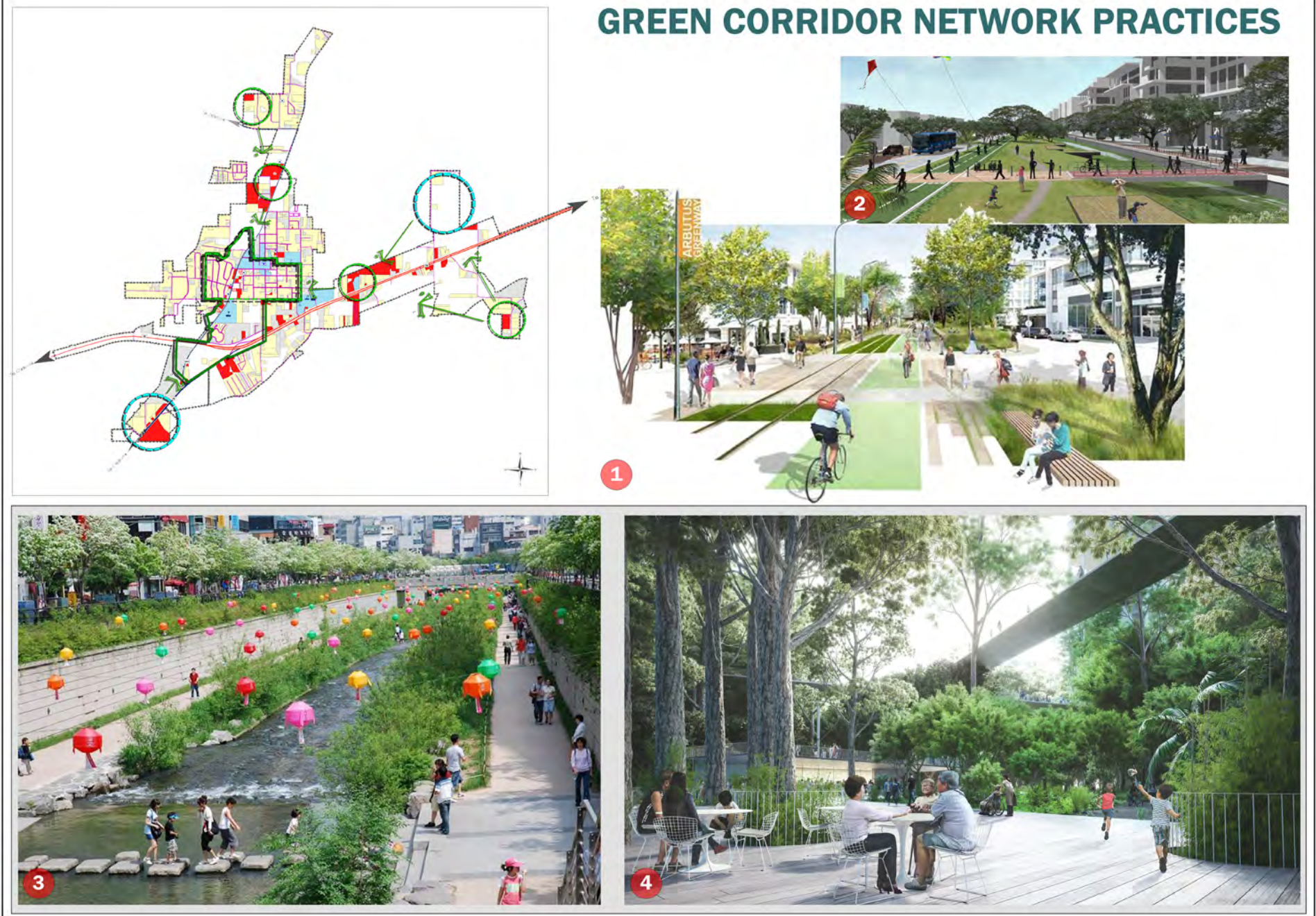


Figure 6-15. Green Corridor Network Best Practices

GREEN CORRIDOR NETWORK PRACTICES



6.5

RECOMMENDATIONS

Health Care Promotion

Health care promotion is a change in the pattern of life to achieve optimal health that guarantees a balance of physical, emotional, social, spiritual and intellectual health. This can be achieved through education to enhance awareness, providing incentives for changing behavior, and creating environments that support good health practices.



Goal PH1. Build comprehensive healthy public policy that promotes health care within and outside health care sector along with enriched civic commitment to health and equity.

Action PH1a. Prepare a public health plan that includes health promotion strategies and implementation actions and programs.

Action PH1b. Launch local initiatives for adults and children that are linked to national health care programs and promote healthy choices such as access to healthy and affordable food, physical activity, family education, and healthy food at schools.

Action PH1c. Direct health services and their resources toward health promotion and educate residents to increase positive health behavior such as: resource preservation, healthy nutrition, and physical activity.

Action PH1d. Provide protection for natural and built environments as well as conservation of natural resources.

Action PH1e. Encourage public participation among various groups of the community to share responsibility of health promotion and well-being.



Goal PH2. Enhance existing health care services and establish new ones to create a comprehensive health care network that provides coverage for the City of Keene.

Action PH2a. Ensure the percentage of health care providers and facilities accommodate the population of Keene.

Action PH2b. Enhance access to health care facilities such as: primary care, emergency, inpatient and outpatient care, physician and non-physician services.

Action PH2c. Utilize Regional Center and Employment Center land use areas to promote a health care district that connects health facilities near the center of the city to complement each other.

Action PH2d. Usage of technological advancement such as the development of online educational resources to enhance health care delivery and efficiency.

Action PH2e. Provide adequate training for administrative and professional health care providers.



Goal PH3. Improve mental and physical public health through encouraging healthy behaviors and practices among the residents.

Action PH3a. Educate community members through providing health promotion and life skills training.

Action PH3b. Provide full and continuous access to public health information.

Action PH3c. Support health care initiatives by providing adequate funding.

Action PH3d. Empower people to support public health behavior and enable them to maintain a healthy environment for their families and friends.

Action PH3e. Encourage physical activities and healthy food choices.

Action PH3f. Create a smoke free environment by enforcing indoor and outdoor no smoking policies in city property and provide awareness sessions.

Access to Food and Clean Water



Goal PH4. Support healthy nutrition options and encourage development of a sustainable food system.

Action PH4a. Recruit and promote full service neighborhood grocery stores that provide healthy food options.

Action PH4b. Generate an adaptive reuse policy for vacant or abandoned commercial spaces that provide opportunity for offering creative healthy food for sale such as food trucks.

Action PH4c. Provide incentives for healthy food retail and restaurants to promote healthier choices over traditional fast food restaurants.

Action PH4d. Accommodate an affordable farmers market that is highly visible and accessible within walkable distance from the city center of Keene.

Action PH4e. Enhance locally grown food through encouraging on site gardening and farming.



Goal PH5. Promote access to fresh drinking water.

Action PH5a. Install sufficient visible and accessible drinking fountains within recreational areas, open spaces, green corridors and trails.

Action PH5b. Take adequate measures to ensure high quality drinking water.

Action PH5c. Update Drinking Water Quality Report periodically.

Socioeconomic Development



Goal PH6. Recognize health as a major social investment and challenge that requires human interaction to create safe, joyful, and healthy communities.

Action PH6a. Enhance public participation in decision making to empower the community and enhance their ownership and pride in public health planning.

Action PH6b. Promote social engagement among individuals, community groups, health professionals, health service institutions, and government to support promotion of mental and physical health through creating a year-round community program.

Action PH6c. Create community gathering spaces, plazas, and parks to encourage social interaction and enhance opportunities for physical activity.

Action PH6d. Host large community events such as movie nights, music festivals, art fairs, and holiday events.

Action PH6e. Encourage multigenerational and multicultural activities to attract all community members including children, youth, and elderly.

Action PH6f. Educate parents about the risk factors associated with negative health behaviors and encourage them to reduce the amount of time children spend watching television.



Goal PH7. Improve the socioeconomic characteristics to meet residents' needs and promote mental and physical state that enhance public health.

Action PH7a. Work with Keene ISD and other local ISD's to ensure that new school facilities are designed and located to reinforce and support the goals and policies of the public health plan and provide accessibility to green corridor network.

Action PH7b. Provide ADA accessibility to public health services, employment centers, housing, and social activities through designing built environments that accommodate ADA needs.

Action PH7c. Support social justice principles where all people have the right to access equal opportunities to provide diverse options for housing, employment, and education.

Action PH7d. Build compact neighborhoods that provide services within walkable distances to enhance safety and reduce the crime rate, and to keep a buffer against violence.

Physical Activity



Goal PH8. Create a unified Green Corridor Network (GCN) that enhances sense of place, serves as a proxy within the city, and improves public health.

Action PH8a. Developing strong connections between existing parks and creating new ones.

Action PH8b. Upgrade existing pathways and create new safe and attractive park-like pedestrian pathways that are aesthetically pleasing to adjacent land uses and respect the natural environment.

Action PH8c. Create bike lanes to encourage bike riding throughout GCN and provide bike racks along bike paths.

Action PH8d. Offer rental bikes in different areas and set up a bike share program, Bike -n- Ride, and bicycle friendly university.

Action PH8e. Provide easy access to walking and biking trails and sidewalks that are appropriate for people of all ages and physical abilities within and close to Keene neighborhoods.

Action PH8f. Promote daily physical exercise such as walking, biking and jogging within the trail system.

Action PH8g. Support businesses through bringing people closer to local businesses, employment districts, institutions, and attractions.

Action PH8h. Increase access to nature and preserve and restore natural areas within and around the loops.

Green Corridor Design



Goal PH9. Promote community well-being by designing Keene's neighborhoods, thoroughfares and public facilities so that residents can choose an active and healthy lifestyle.

Action PH9a. Design new buildings to orient storefronts or neighborhood accessibility toward the Green Corridor Inner and Extended Loops and increase transparency of facades at ground level.

Action PH9b. Design well-connected street networks with small blocks at the human scale that provide different paths for walking.

Action PH9c. Reduce parking area to increase space for pedestrian oriented activities by providing a parking lot with sidewalk access to buildings as well as to enhance street parking opportunities.

Action PH9d. Provide street furniture such as bike racks, public art, benches, and bus shelters along the loops and within parks and green spaces

Action PH9e. Upgrade and build safe and wide sidewalks with pedestrian oriented streetscape and trees to provide shade and enhance air quality.

Action PH9f. Use proper signage and maps to attract people to use trails.

Action PH9g. Provide water features such as fountains and nozzle and spray pipes on no slip surfaces.



Goal PH10. *Provide natural and built environment within the GCN that enhances compatibility and diversity while increasing public safety and accessibility.*

Action PH10a. Design local neighborhood streets to discourage speeding and slow traffic, maximize safety, and visually highlight pedestrians through well marked crosswalks, special pavers, and curb extensions.

Action PH10b. Provide adequate lighting for public areas that will be visible over longer distances.

Action PH10c. Incorporate a mix of land uses and mixed use to encourage people to walk and bike as they have access to shops, transit, parks, schools, and other neighborhood amenities.

Action PH10d. Provide multiuse open spaces for various age groups such as playgrounds, recreation center, picnic areas, plazas, dog parks, and skate parks.

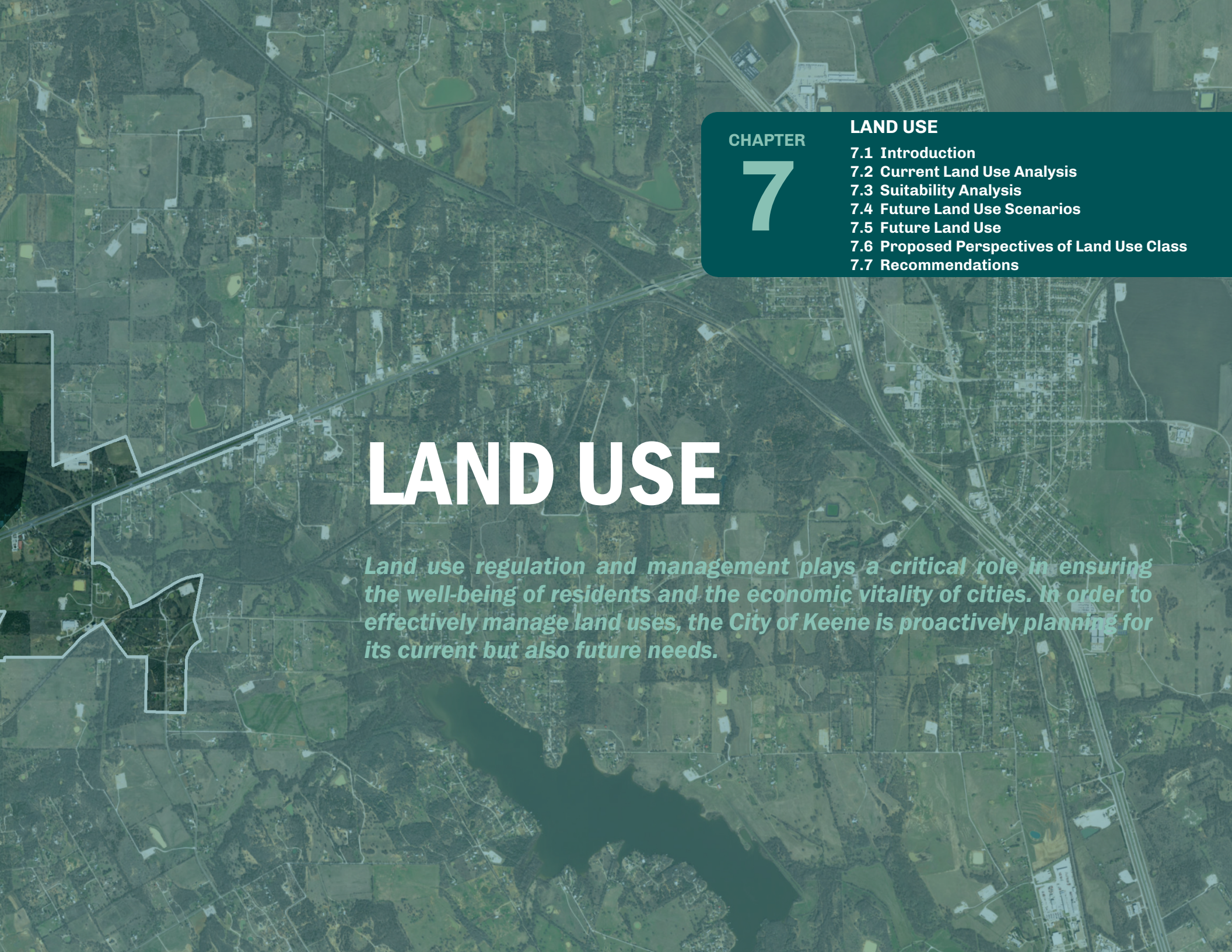
Action PH10e. Transition vacant space into complementary land uses.





COMPREHENSIVE PLAN

CHAPTER

An aerial photograph of a rural landscape, likely in the City of Keene, showing a mix of green fields, brown agricultural land, and some developed areas with buildings and roads. A large body of water, possibly a lake or reservoir, is visible in the lower-left quadrant. The overall tone is muted, with a dark green overlay on the right side where the text is located.

CHAPTER

7

LAND USE

- 7.1 Introduction
- 7.2 Current Land Use Analysis
- 7.3 Suitability Analysis
- 7.4 Future Land Use Scenarios
- 7.5 Future Land Use
- 7.6 Proposed Perspectives of Land Use Class
- 7.7 Recommendations

LAND USE

Land use regulation and management plays a critical role in ensuring the well-being of residents and the economic vitality of cities. In order to effectively manage land uses, the City of Keene is proactively planning for its current but also future needs.

7.1

INTRODUCTION

Land use regulation and management plays a critical role in ensuring the well-being of residents and the economic vitality of cities. In order to effectively manage land uses, the City of Keene is proactively planning for its current but also future needs. Determining future land uses can serve various objectives ranging from land preservation, to ensuring adequate infrastructural supply and the efficient provision of city services. To that end, the IUS study team and the City of Keene have undertaken a series of analyses to determine future land uses.

This section is organized along two axes. First, an analysis of the current land uses was performed, which was followed by a suitability analysis to determine the most favorable locations for future land uses. Second, the study team identified and described future land use districts and formulated a series of policy recommendations to guide future land use decisions.

7.2

CURRENT LAND USE ANALYSIS

Assessing the current land use situation is an important first step in planning for the future. Table 7-1 provides a summary of the current land uses for the City of Keene. The analysis reveals that 'Agricultural' is the dominant land use type representing an estimated 55 percent of the total acreage of the land area. The second greatest land use type is 'Single Family' with an estimated 1241 acres. The assessment also shows that the City of Keene counts considerable vacant land which potentially offers great latitude in directing future land uses.

Additionally, comparing Keene to other surrounding cities offers a complementary perspective on the current land use situation. Agricultural land use is the dominant land use for Cleburne, Benbrook, and Alvarado (See Table 7-2). However, the City of Keene counts almost twice more vacant land than some of its counterparts, which provides greater flexibility for future land use decisions. These future land use decisions should be made in light of housing needs, economic development strategies, and projected population growth. Most importantly, because competitive uses can arise for a given area, a suitability analysis needs to be performed to determine what would be the best use.

Table 7-1. Keene Current Land Use Analysis

Land Use Category	Counts	Area/Acre	Percentage of Total
Agriculture	44	3759.45	54.58%
Commercial	59	315.93	4.59%
Education	12	118.24	1.72%
Industrial	6	41.79	0.61%
Institutional/semi-public	37	105.63	1.53%
Mobile home	48	224.53	3.26%
Multi-family	29	30.64	0.44%
Others	22	103.80	1.51%
Parks/recreation	2	94.71	1.38%
Single family	230	1240.59	18.01%
Vacant	181	85229.12	12.37%
Total	670	688765.45	100.00%

Table 7-2. Land Use Analysis for Surrounding Cities

Cities	Cleburne		Benbrook		Alvarado	
Land Use Category	Area/Acre	Percentage of Total	Area/Acre	Percentage of Total	Area/Acre	Percentage of Total
Agriculture	52,425.85	75.07%	6,960.64	37.83%	8,989.11	78.31%
Commercial	1,742.60	2.50%	364.65	1.98%	234.15	2.04%
Education	512.20	0.73%	89.37	0.49%	301.50	2.63%
Industrial	768.89	1.10%	61.94	0.34%	155.84	1.36%
Institutional/semi-public	947.39	1.36%	103.19	0.56%	73.06	0.64%
Mobile home	358.75	0.51%	0.00	0.00%	137.31	1.20%
Multi-family	142.90	0.20%	156.43	0.85%	20.45	0.18%
Others	3,011.10	4.31%	4,205.06	22.85%	152.84	1.33%
Parks/recreation	66.94	0.10%	3,184.29	17.31%	0.00	0.00%
Single family	5,350.20	7.66%	2,458.63	13.36%	767.55	6.69%
Vacant	4,510.24	6.46%	816.76	4.44%	646.34	5.63%
Total	69,837.07	100.00%	18,400.96	100.00%	11,478.16	100.00%

Cities	Burleson		Kennedale		Joshua	
Land Use Category	Area/Acre	Percentage of Total	Area/Acre	Percentage of Total	Area/Acre	Percentage of Total
Agriculture	12,300.53	47.21%	147.16	2.79%	2,962.98	44.71%
Commercial	1,209.14	4.64%	307.23	5.82%	340.08	5.13%
Education	661.29	2.54%	80.49	1.52%	152.25	2.30%
Industrial	200.58	0.77%	574.30	10.87%	14.54	0.22%
Institutional/semi-public	494.16	1.90%	51.22	0.97%	79.93	1.21%
Mobile home	359.92	1.38%	173.84	3.29%	183.02	2.76%
Multi-family	62.16	0.24%	14.54	0.28%	14.52	0.22%
Others	837.99	3.22%	868.75	16.45%	38.91	0.59%
Parks/recreation	775.23	2.98%	264.58	5.01%	21.41	0.32%
Single family	6,046.99	23.21%	1,701.11	32.21%	1,796.41	27.10%
Vacant	3,107.46	11.93%	1,098.35	20.80%	1,023.68	15.45%
Total	26,055.44	100.00%	5,281.57	100.00%	6,627.72	100.00%

7.3 SUITABILITY ANALYSIS

A suitability analysis is designed to determine the best land use type for a given area. The analysis seeks to determine the land use type that is most suitable based on variety of factors. The suitability analysis is performed using a Geographic Information System (GIS). The GIS model accounts for a variety of physical, economic and land use factors. The resulting output shows different levels of suitability ranging from low to high.

For the purpose of this comprehensive plan, we have developed a number of land use suitability maps considering natural as well as built environment factors for several land use types. In addition, transportation network typologies were included to the analysis. Depending on the land use type, diverse rating and weightings were applied.

The results of the suitability analysis are provided in next several pages along with as the tables of factor weights. In addition, tables are provided in the Appendix B-4 that include all factors, including their rates and classification.

Figure 7-1. Suitability Analysis Process

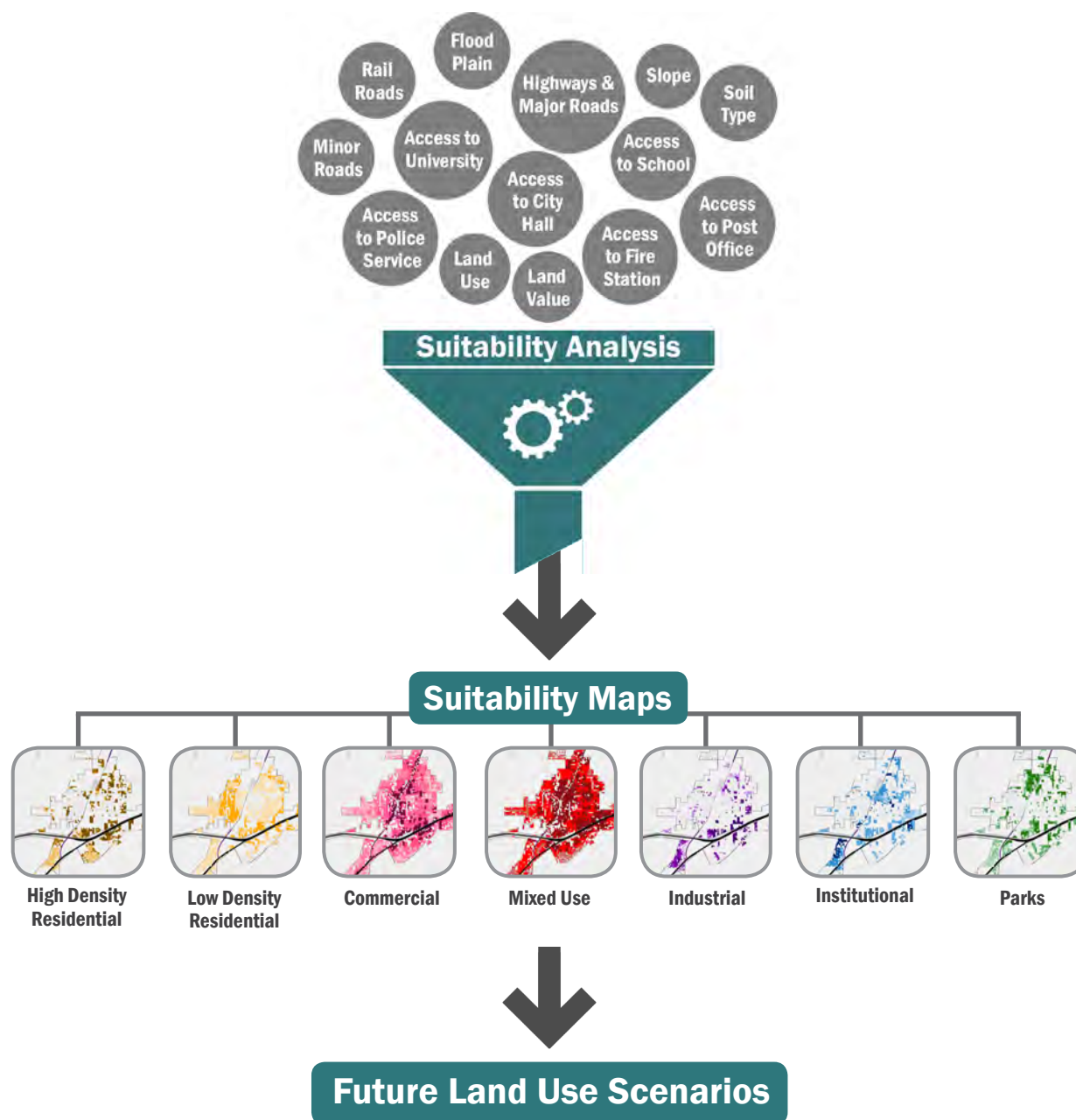


Figure 7-2. High Density Residential Suitability Result

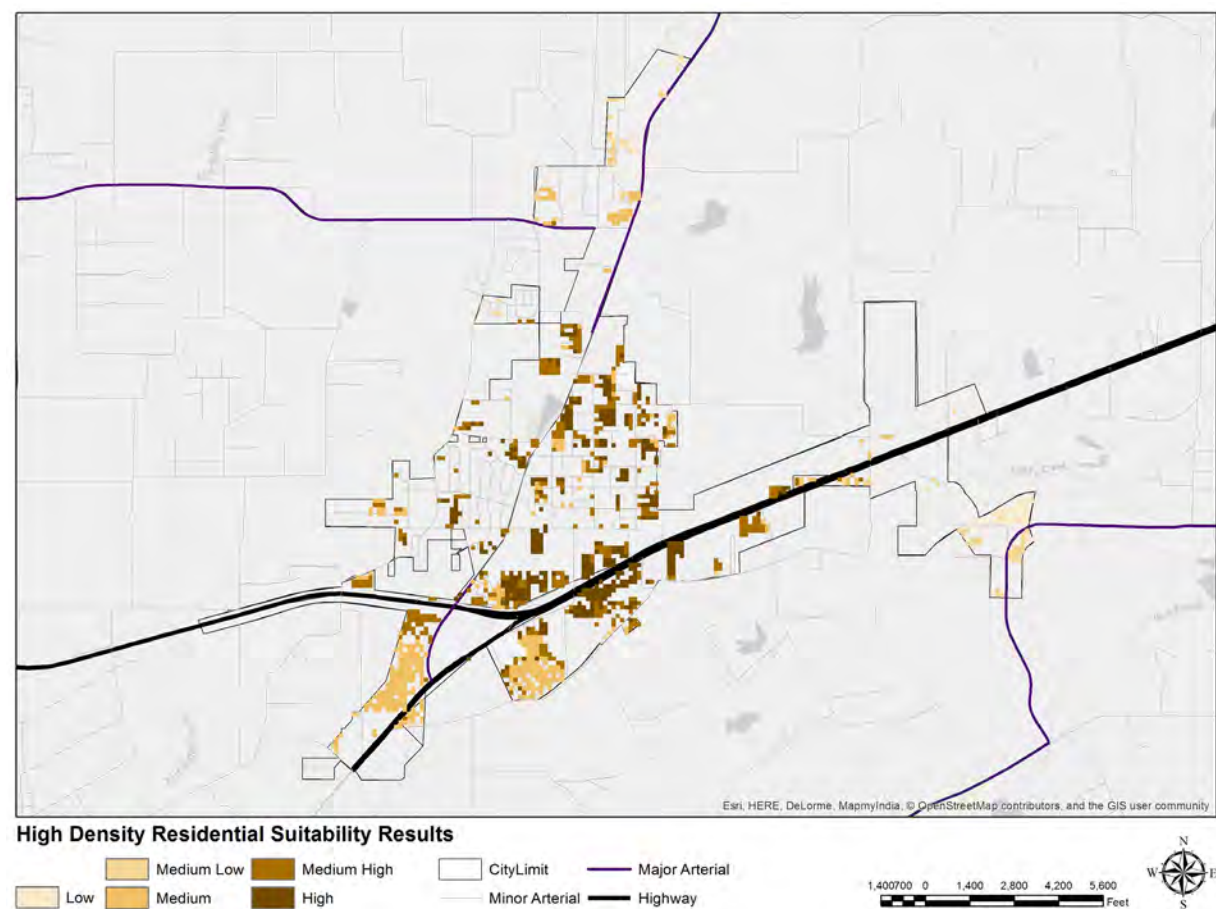


Table 7-3. High Density Residential Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	10
		Land Use	10
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	5
		Access to Schools	10
		Access to University	10
	Transportation Factors	Highways and Major Road	10
		Minor Road	10
		Rail Road	5
Natural Factors	Flood Plain		5
	Soil Type		5
	Slope		5

Figure 7-3. Low Density Residential Suitability Result

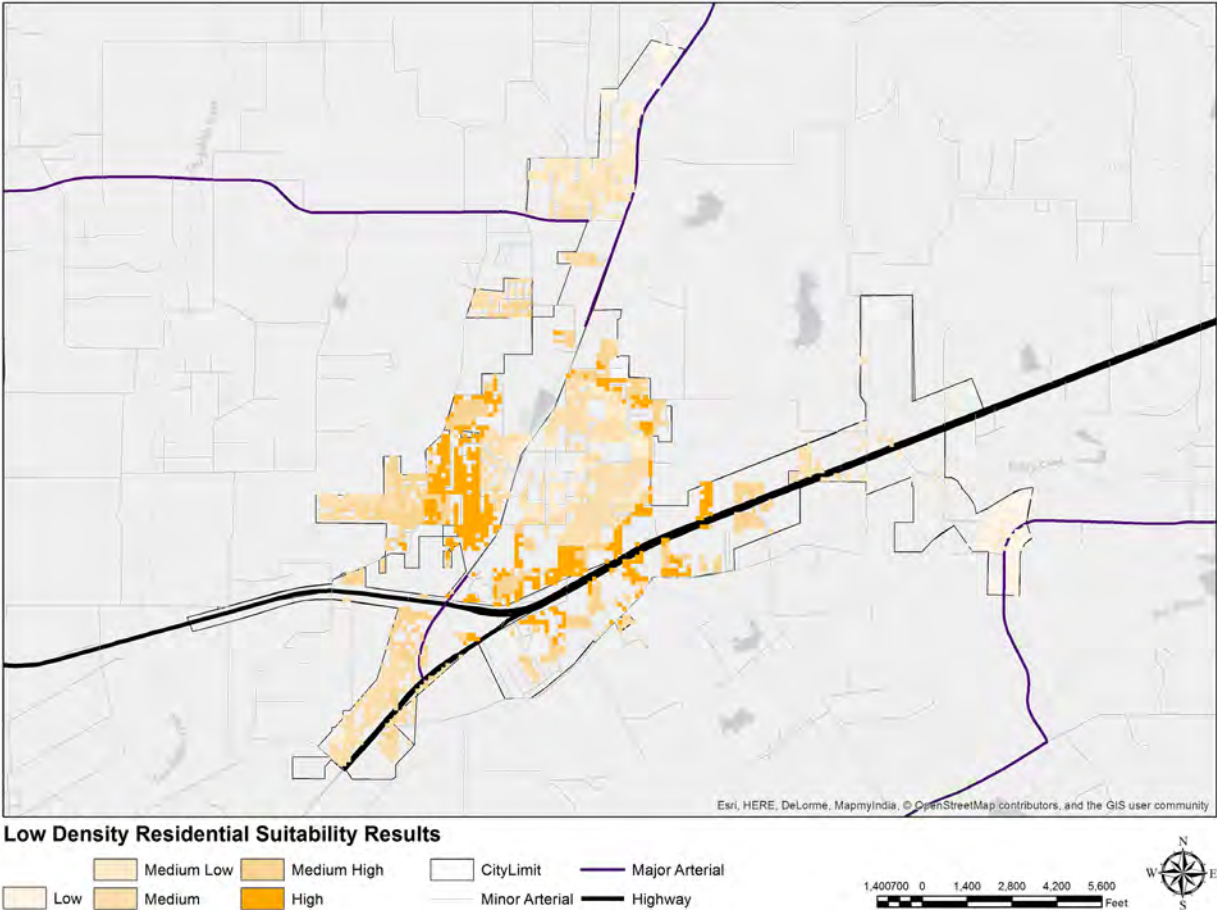


Table 7-4. Low Density Residential Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	10
		Land Use	10
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	5
		Access to Schools	10
		Access to University	10
	Transportation Factors	Highways and Major Road	10
		Minor Road	10
Rail Road		5	
Natural Factors		Flood Plain	5
		Soil Type	5
		Slope	5

Figure 7-4. Commercial Suitability Result

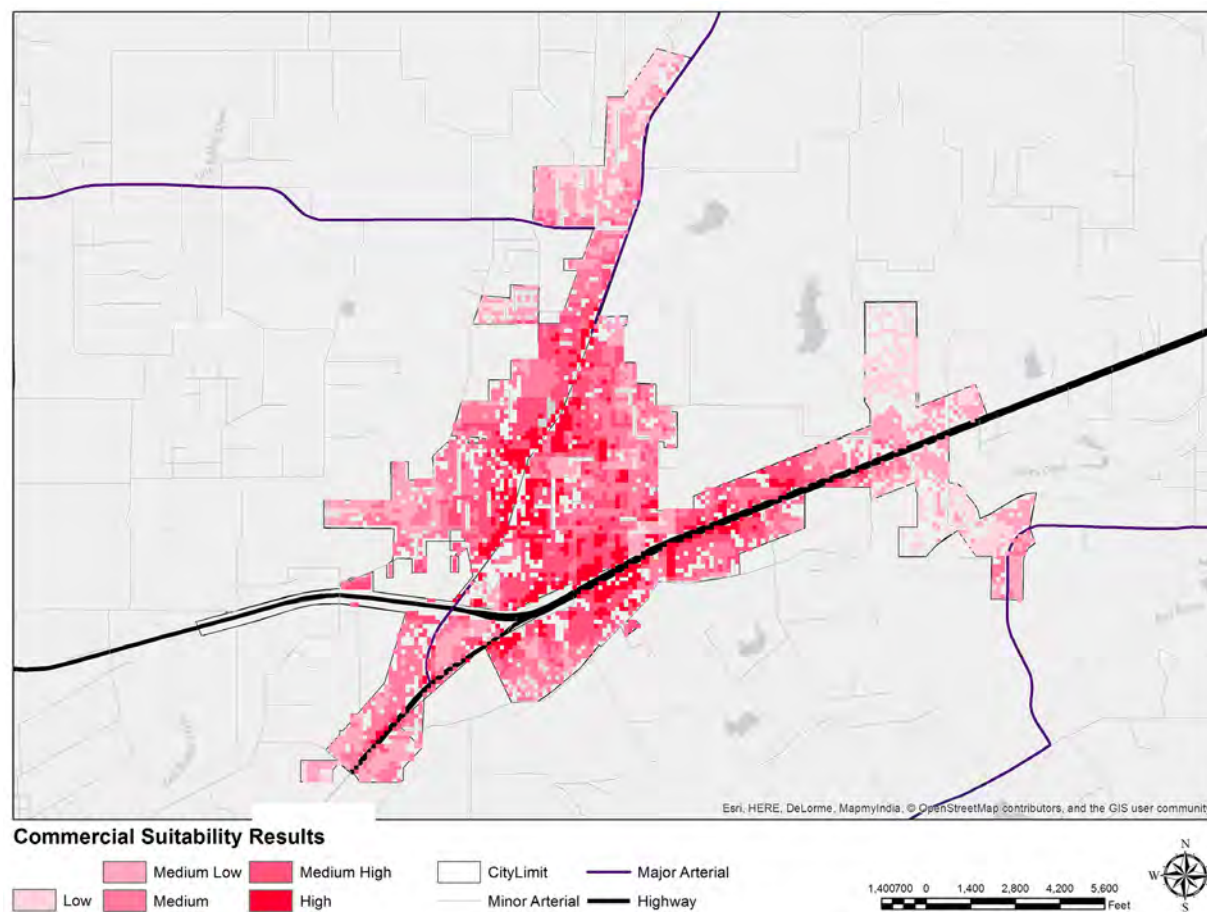


Table 7-5. Commercial Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	10
		Land Use	20
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	5
		Access to Schools	-
		Access to University	5
	Transportation Factors	Highways and Major Road	20
		Minor Road	5
Rail Road		5	
Natural Factors		Flood Plain	5
		Soil Type	5
		Slope	5

Figure 7-5. Mixed Use Suitability Result

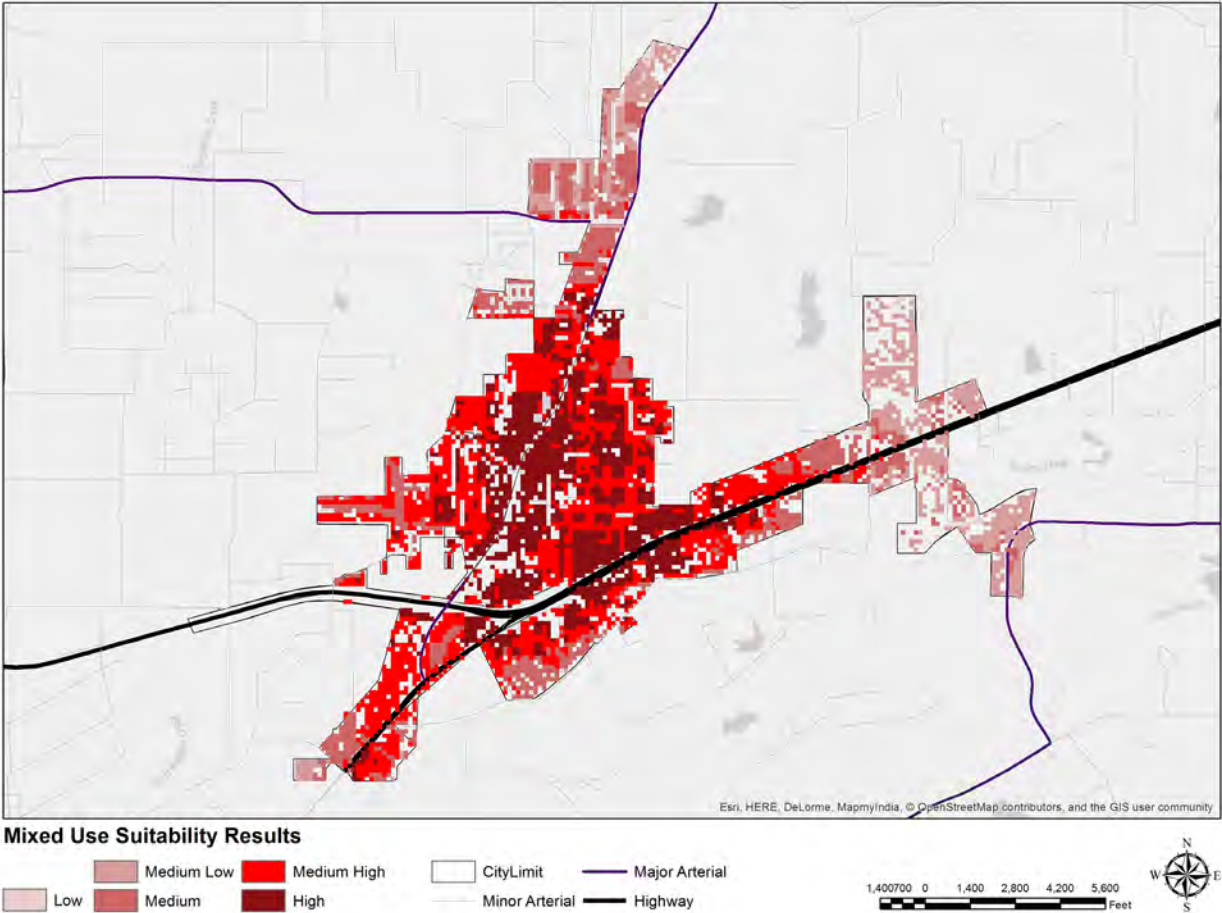


Table 7-6. Mixed Use Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	10
		Land Use	10
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	5
		Access to Schools	10
		Access to University	10
		Transportation Factors	Highways and Major Road
	Minor Road		10
	Rail Road		5
Natural Factors		Flood Plain	5
		Soil Type	5
		Slope	5

Figure 7-6. Industrial Suitability Result

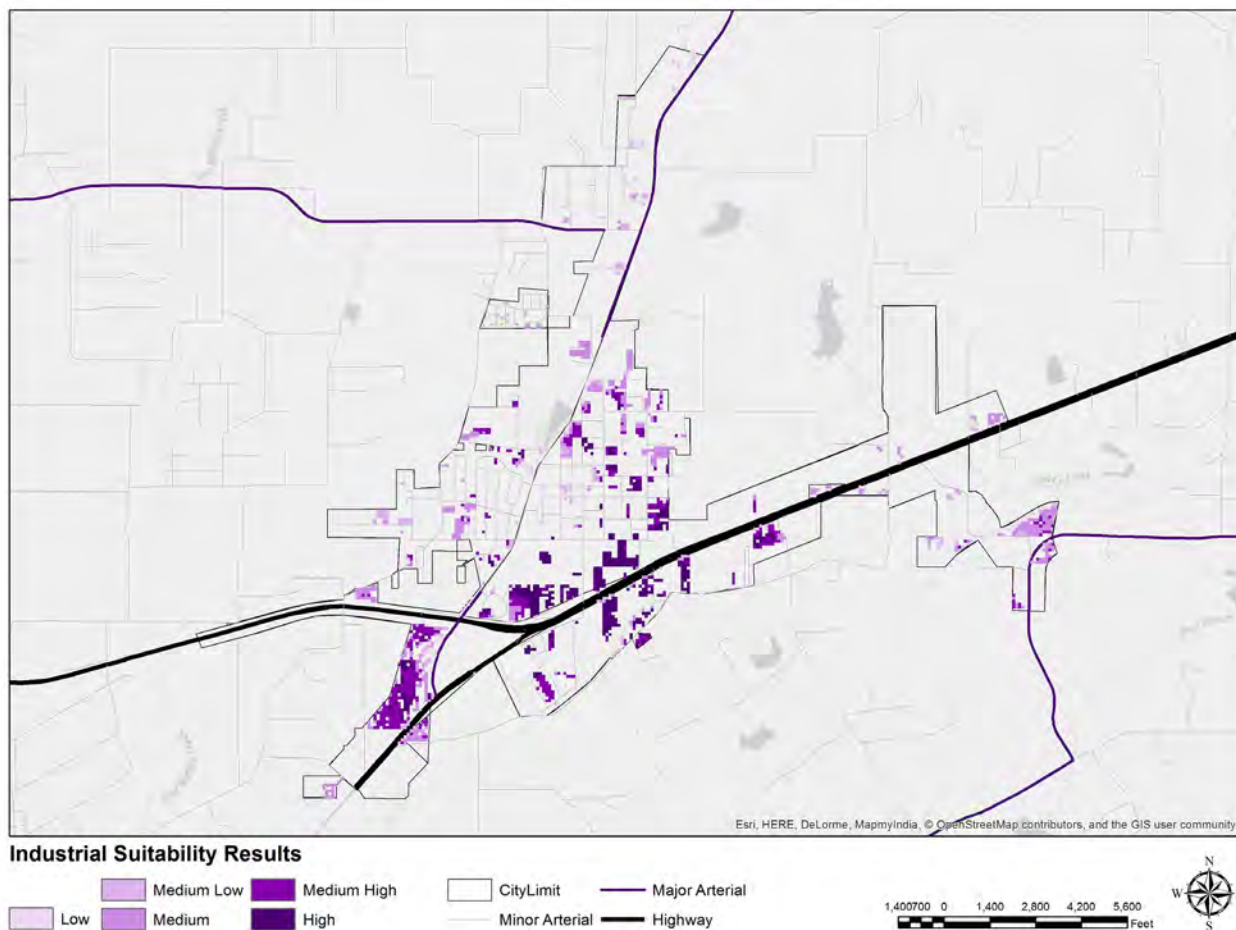


Table 7-7. Industrial Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	5
		Land Use	25
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	-
		Access to Post Office	5
		Access to Schools	-
		Access to University	-
	Transportation Factors	Highways and Major Road	10
		Minor Road	5
		Rail Road	10
Natural Factors		Flood Plain	10
		Soil Type	10
		Slope	10

Figure 7-7. Institutional Suitability Result

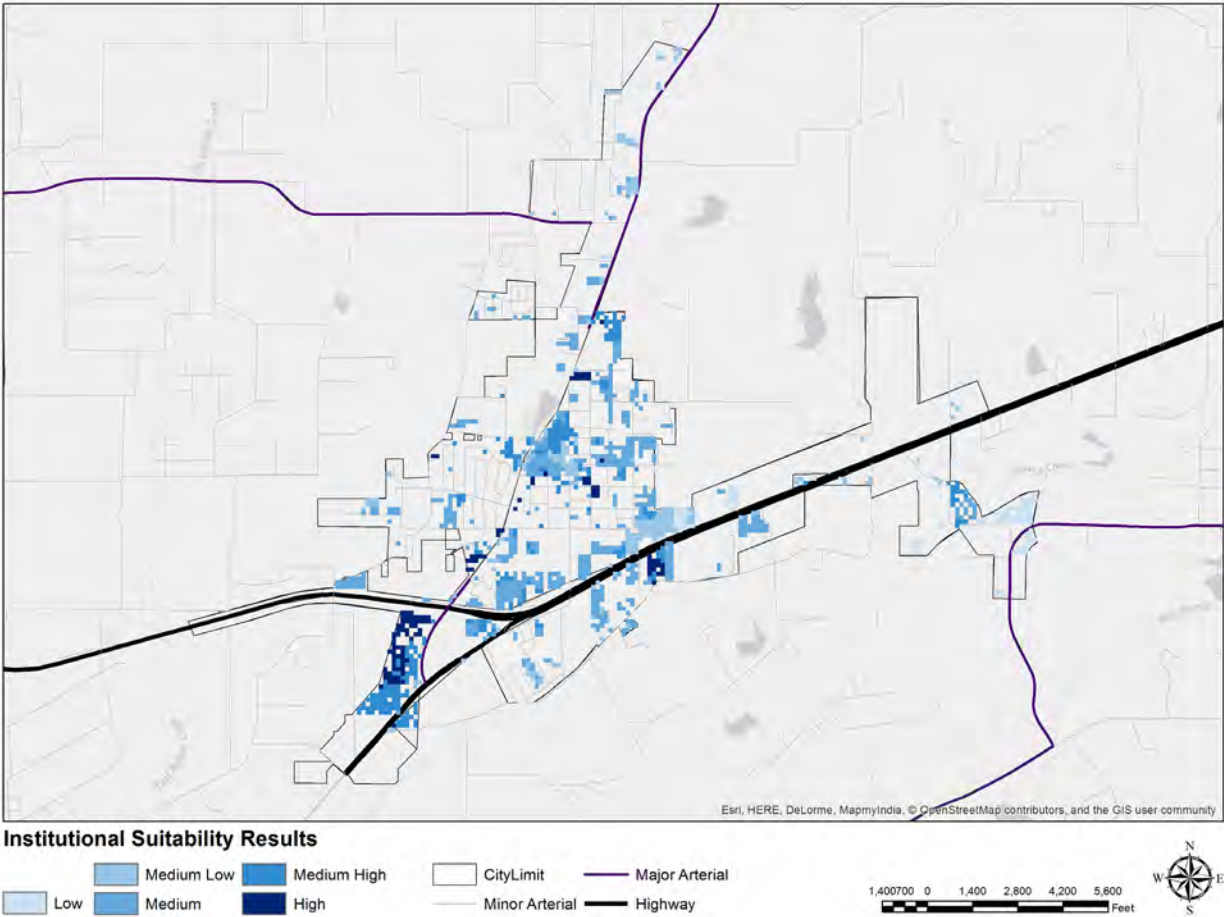


Table 7-8. Institutional Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	15
		Land Use	20
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	5
		Access to Schools	5
		Access to University	5
	Transportation Factors	Highways and Major Road	5
		Minor Road	5
Rail Road		5	
Natural Factors		Flood Plain	10
		Soil Type	5
		Slope	5

Figure 7-8. Parks Suitability Result

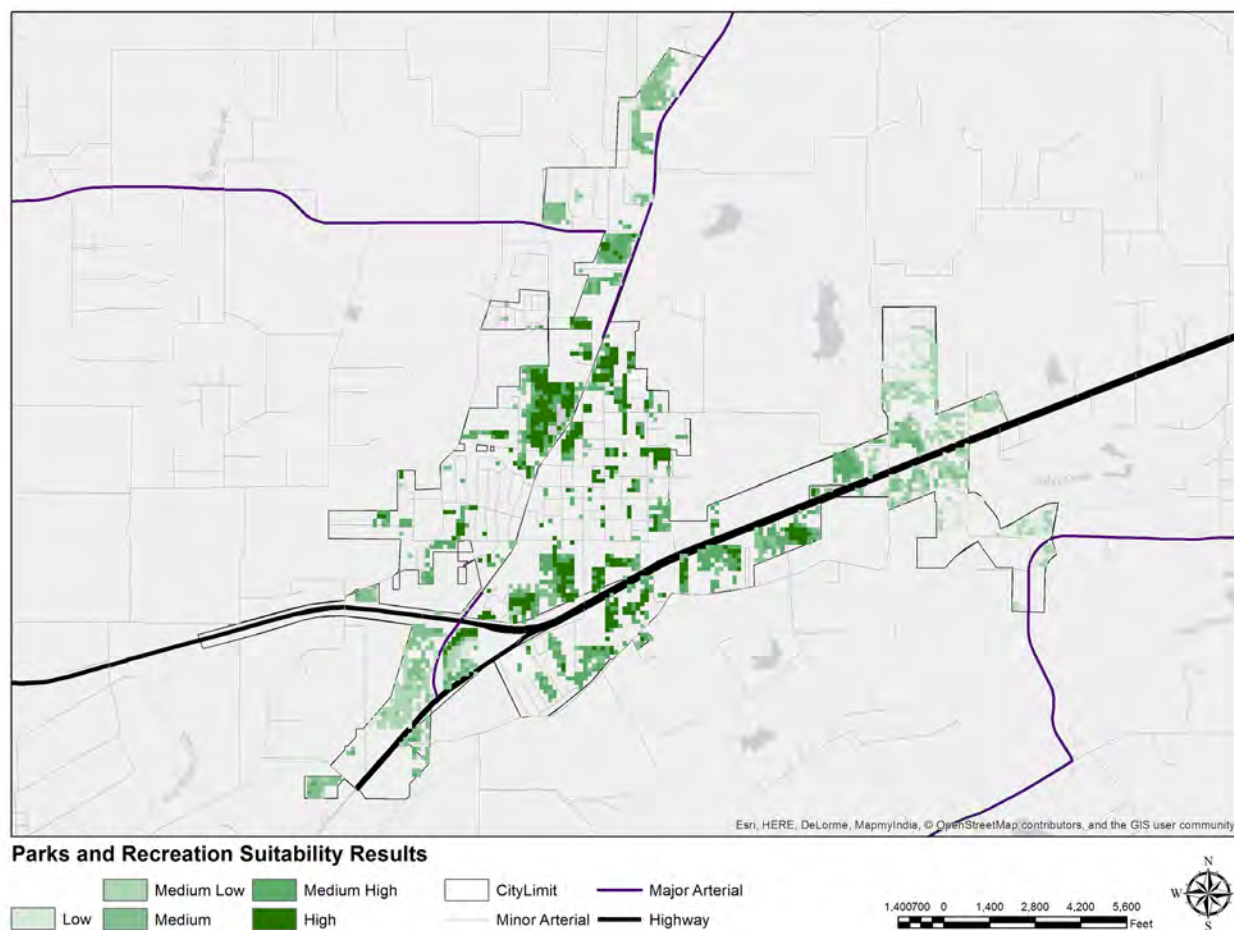
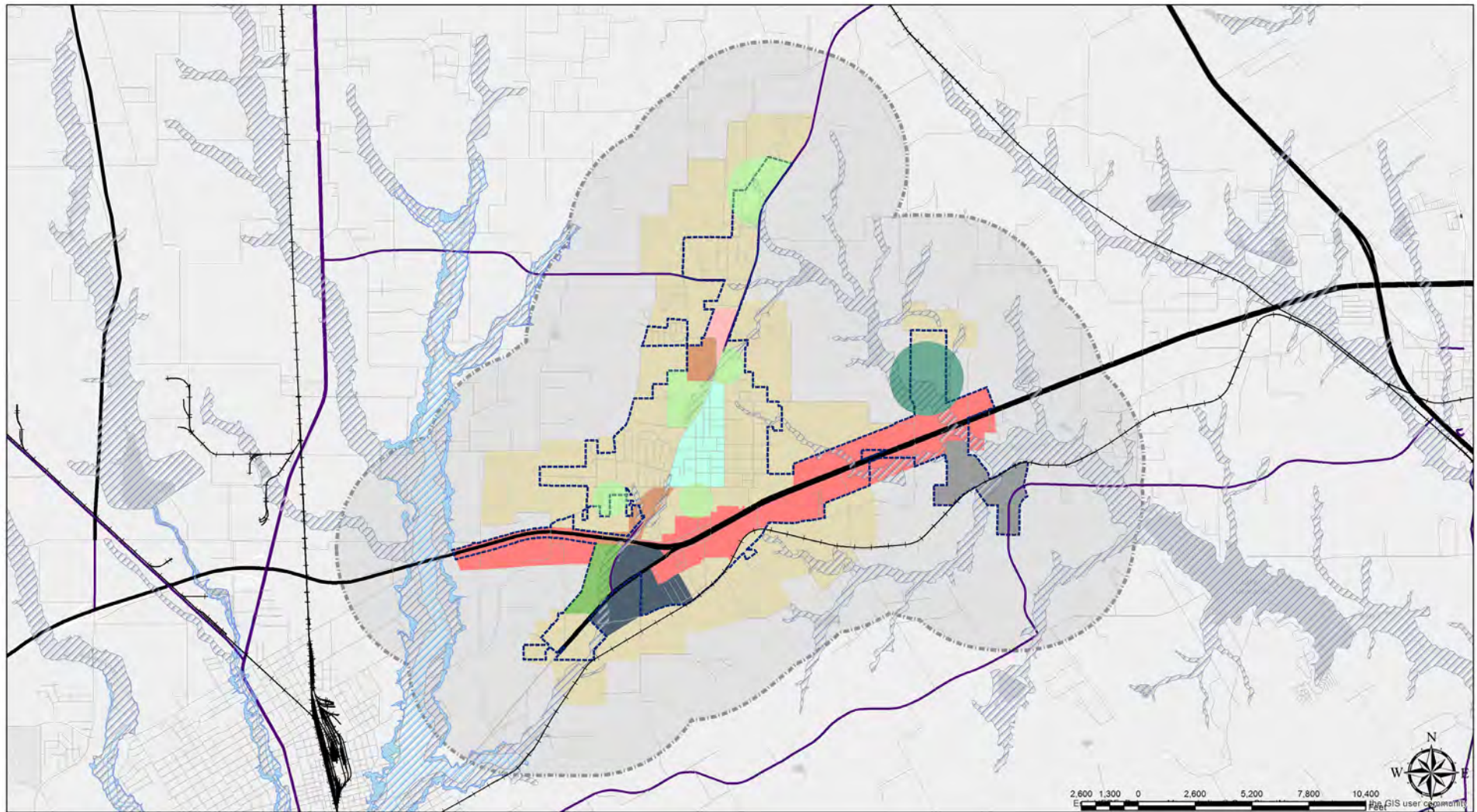


Table 7-9. Parks Suitability Weightings

Factors			Weight
Man Made factors	Policy Factors	Land Value	10
		Land Use	20
	Accessibility Factors	Access to Fire Station	5
		Access to Police Service	5
		Access to City Hall	5
		Access to Post Office	-
		Access to Schools	5
		Access to University	5
		Transportation Factors	Highways and Major Road
	Minor Road		5
	Rail Road		5
	Natural Factors		Flood Plain
Soil Type			5
Slope			5

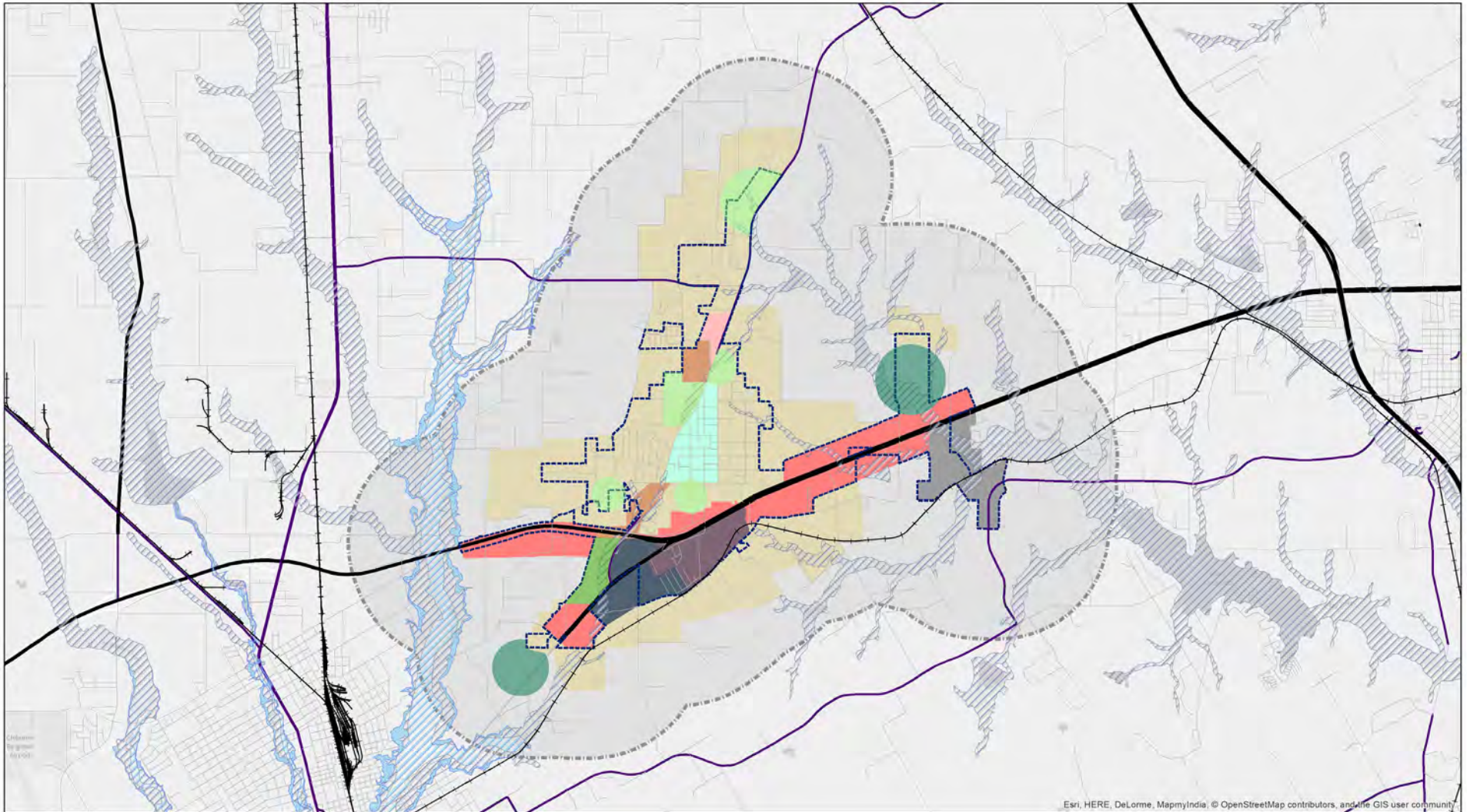
7.4 FUTURE LAND USE SCENARIOS



Retail and Commercial Based Land Use Proposal Scenario



Figure 7-9. Retail and Commercial Based Land Use Proposal Scenario



Employment Based Land Use Proposal Scenario

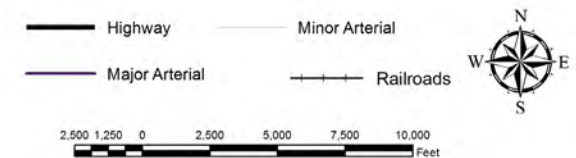
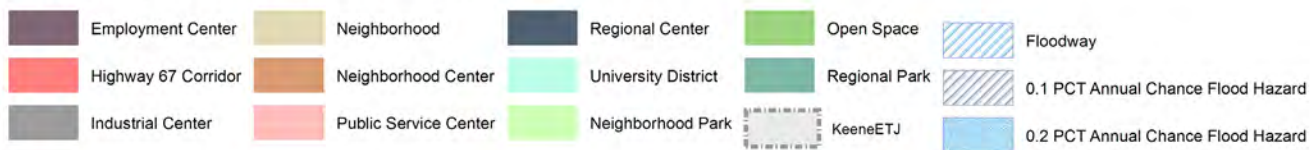


Figure 7-10. Employment Based Land Use Proposal Scenario

7.5

FUTURE LAND USE CATEGORIES

The suitability analysis helped to identify the best land uses across the city. As a result, and based on public input, survey results, and steer committee input, the following future land use map has been developed for the City of Keene. The map can be used as a guiding tool to direct and inform future land-use decisions.

Figure 7-13 shows the Keene Future Land Use Map.

Neighborhoods

The primary use in this category is single-family residential to preserve the historical characteristics of the area and to regulate the design of new residential infill development or new subdivision development. The Neighborhood land use category focuses on providing a high quality of life by well-maintained infrastructure, housing, schools, open space, and service or institutional uses. Within this area, institutional, light office, and service are secondary uses. This land use is primarily located in existing single family areas of Keene as well as areas contiguous to those locations that would be likely for new residential development. Neighborhood classification includes a range of potential density options, from lane lot residential, to zero-lot line and attached single family.



Figure 7-11. Examples of Neighborhood



Figure 7-12. Examples of Neighborhood Center

Neighborhood Center

Typically located in one or two story buildings along with retail, office and service uses, Neighborhood Center (NC) refers to corner retail developments along major arterials primarily designed to serve local neighborhoods. Single family residential uses are recommended as well as redevelopment of existing retail centers and mix of uses. Neighborhood Centers will be based on the concepts of mixed use, community design and inclusion of open spaces to create active spaces. This is mostly recommended in areas along Old Betsy Road north and south of the University area.

Sec. 213.005. NOTATION ON MAP OF COMPREHENSIVE PLAN. A map of a comprehensive plan illustrating future land use shall contain the following clearly visible statement:
 "A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries."

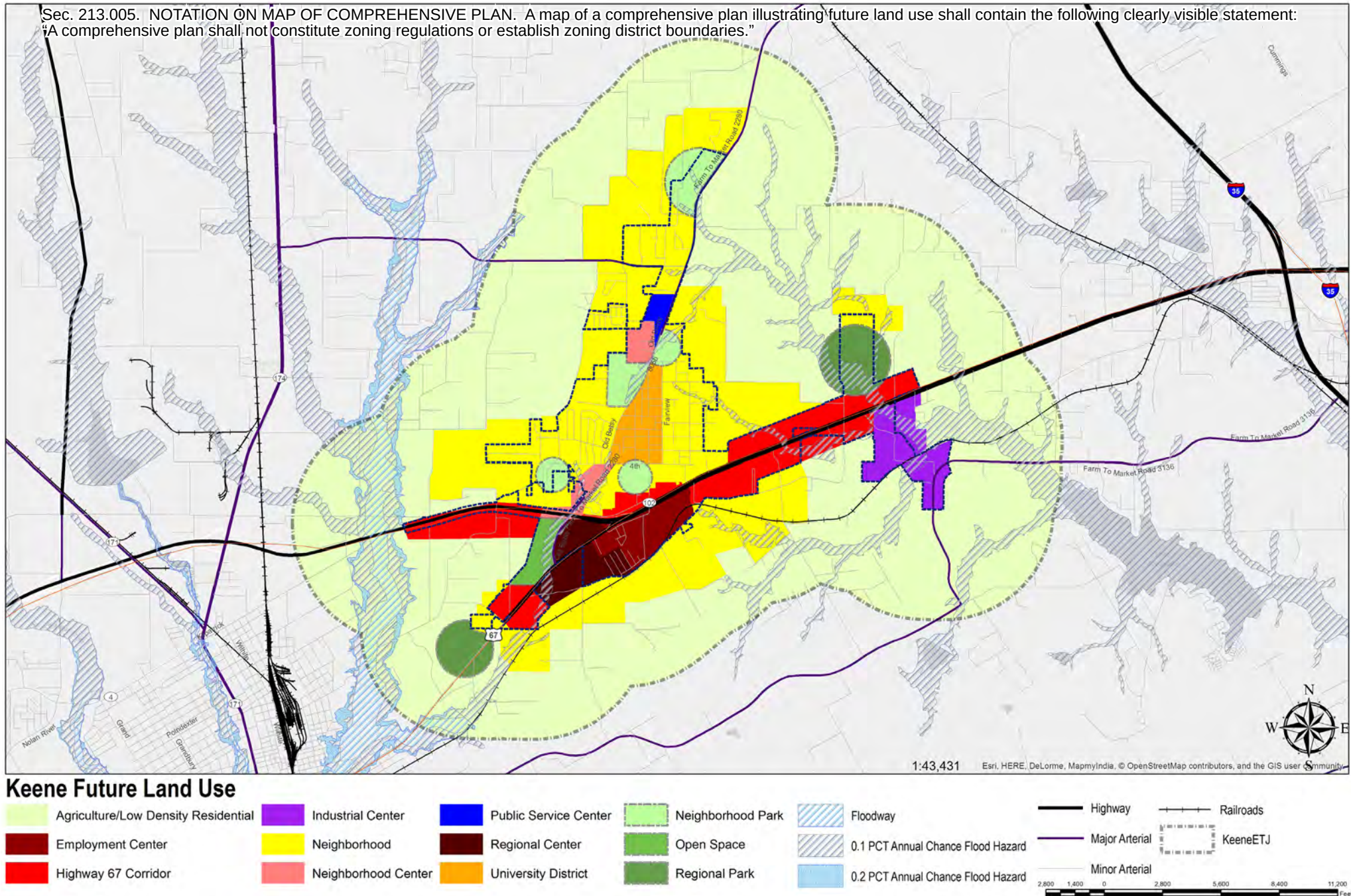


Figure 7-13. Keene Future Land Use Map



Figure 7-14. Examples of University Center

University Center

This district is designed to assist development of the university, complementary residential, commercial, retail, and public amenities. This area is appropriate for higher density development. Ideally, a mix of development including office, retail and multi-family housing would occupy this area. Sample development types include multi-tenant office, research facilities, retail, multifamily, single family town homes, restaurant and hotel.

Regional Center

This land use category focuses on development of large commercial centers with high traffic volume which include retail, service and office buildings of one to three stories to serve regionally. Regional Center mixes large shopping centers, restaurant, theaters, offices and other supporting uses. Adequate setbacks should be considered in proximity to neighborhoods as well as inclusion of “green” parking and pedestrian safety amenities. This land use is located in and around the merge of HWY 67 and 67 Business.



Figure 7-15. An example of Regional Center



Figure 7-16. Examples of Highway 67 Corridor

Highway 67 Corridor

The Highway 67 Corridor future land use category applies to development along Highway 67 designed to facilitate regional and interstate commerce. This corridor development is intended to include a mix of retail, service, office, restaurant, medical, hotel, and technology use. Due to noise and health impacts of expressways, adequate setbacks must be considered when development is near neighborhoods. Parking areas should be landscaped and pedestrian friendly.

Industrial Center

A variety of industries such as manufacturing, warehousing and distribution, research and development activities are included in this land use category, which would be available for a wide range of commercial and industrial operations and a variety of work processes and administrative activities.



Figure 7-17. An example of Industrial Center



Figure 7-18. Examples of Employment Center

Employment Center

The Employment Center future land use category is primarily used for commercial uses with corporate office campuses, educational facilities, medical service centers, technology centers, and research facilities as well as distribution activities to ensure the city's ability to attract and maintain employment. Adequate building setbacks and landscaping must be considered when proposed in proximity to neighborhoods. Residential development is not appropriate within these centers.

Public Service Center

This land use category includes institutional uses and public services such as public administrative service areas, fire, police, and emergency dispatch. The institutional types are used for a variety of uses with a specific institutional use such as an airport, city hall, and public uses such as government offices, schools, community centers, post office and other public institutions.



Figure 7-19. An example of Public Service Center



Figure 7-20. An example of Neighborhood Park

Neighborhood Park

Neighborhood Park includes existing public open space and parks, community parks, neighborhood parks, linear parks, and trails to regional recreation and leisure opportunities.

This category focuses on serving 'surrounding' neighborhoods.

Regional Park

This land use designation includes public parks and open spaces in larger scale which serve and attract regional visitors.



Figure 7-21. Examples of Regional Park

7.6

PROPOSED PERSPECTIVES OF LAND USE CLASS

PROPOSED PERSPECTIVE OF NEIGHBORHOOD



PROPOSED PERSPECTIVE OF MIXED USE



PROPOSED PERSPECTIVE OF NEIGHBORHOOD CENTER.....



PROPOSED PERSPECTIVE OF UNIVERSITY CENTER



PROPOSED PERSPECTIVE OF RESIDENCE



PROPOSED PERSPECTIVE OF OFFICE PARK



7.7

RECOMMENDATIONS



Goal LU1. Promote compact land use patterns.

Action LU1a. Encourage mixed use and high density development around activity centers such as Southwestern Adventist University.

Action LU1b. Ensure land use compatibility by grouping complementary land use activities, especially those that are mutually supportive, and continue to implement policies that minimize the impact of potentially incompatible activities.

Action LU1c. Develop development codes including policy and design regulations to facilitate implementation of future land use in high quality.

Action LU1d. Encourage compact retail, commercial, mixed use, high density and industrial land use development in accordance with future land use plan to use shared facilities.

Action LU1e. Direct housing and employment growth to activity centers such as the university while preserving and integrating existing affordable housing where possible.

Action LU1f. Develop and maintain consistent fiscal policies to direct public investments associated with growth and development to implement a new comprehensive plan.

Action LU1g. Ensure consistency of development standards and zoning with city established goals in other policy documents and make new master plans where needed.

Action LU1h. Expedite the process to rezone properties for mixed use development while restricting the use for low density development.

Action LU1i. Regularly monitor, review, and update the Comprehensive Plan, Zoning Ordinance, and related documents to ensure their effectiveness in meeting the city goals.

Action LU1j. Coordinate investment program objectives in accordance with envisioned goals and objectives.



Goal LU2. Develop a land use pattern that attracts investment, increases tax base, and increases employment opportunities

Action LU2a. Encourage local businesses to expand in order to support local economic growth.

Action LU2b. Ensure mix of local retail, employment opportunities, and residential uses.

Action LU2c. Provide for a balanced and efficient arrangement of land resources to accommodate housing, employment, shopping, entertainment, and recreation.

Action LU 2d. Increase cooperation between private and public sectors in formulation of economic development programs and plans.



Goal LU3. Encourage development and redevelopment investments in appropriate areas.

Action LU3a. Consider mixed use, infill and redevelopment in appropriate areas of the city.

Action LU3b. Encourage economic growth of the city by supporting appropriate infill and redevelopment initiatives in more affordable locations.

Action LU3c. Identify new locations for investment and provide appropriate infrastructure and development regulation for attraction of new projects.

Action LU3d. Retain land around university for high density residential to support university growth.



Goal LU4. Encourage high density retail and commercial activities to locate along major roads and highways.

Action LU4a. Develop community gathering places for specific events in specific locations to support retail services.

Action LU4b. Ensure that the provision of infrastructure, facilities and services along with development and maintenance as needed to meet the required levels of service and the demands of the population.

Action LU4c. Retain major land along city's major thoroughfare mostly for commercial activities including retail, office or commercial business.

This page intentionally left blank.



COMPREHENSIVE PLAN

CHAPTER



CHAPTER

8

TRANSPORTATION

- 8.1 What is TIA
- 8.2 Why Should Keene Utilize TIA
- 8.3 Background
- 8.4 Data Collection
- 8.5 Methodology
- 8.6 Recommendations

TRANSPORTATION

The main purpose of this section is to develop a Thoroughfare Plan for the City of Keene that will be coordinated with other locally adopted planning documents in Johnson and adjacent counties. It will also be incorporated into the NCTCOG Regional Thoroughfare Plan when it is updated.

8.1

WHAT IS TRAFFIC IMPACT ANALYSIS?

Traffic Impact Analysis (TIA) addresses the suitability of existing transportation infrastructure as impacted by new development, restoration, or parcel rezoning. These types of development may affect infrastructure within close proximity through an increased demand on current capacities. In order to continue a feasible trajectory of development and planning with user safety and security in mind, it is necessary to implement Traffic Impact Analysis. TIA categorizes concerns with traffic movement and seeks to offer solutions that can aid in resolving these conflicts.

Transportation-related expansion as a result of development may influence road capacities, postponements, air pollution, and traffic incidents which are expenditures the citizens of Keene must incur. This may result in cities needing to capitalize on transportation infrastructure when impact research is not available, which lends itself to poor decision making. Therefore, having a better understanding of traffic behavior by performing a traffic impact analysis is a necessary step in the development process.

Traffic impact analysis is comprised of several elements necessary to visualize traffic impacts including traffic data and transportation network systems, trip generation, trip distribution, and route assignment. These elements aid in forecasting traffic generation through the use of proprietary simulation software such as VISSIM, SYNCHRO, CUBE, etc. The simulations aim to define congestion patterns and conflicts within the transportation network and may launch suitable solutions. Various actions may be applied to decrease impact generated by future traffic patterns depending on the cost, safety, and efficiency of solutions.

8.2

WHY SHOULD KEENE UTILIZE TRAFFIC IMPACT ANALYSIS?

The City of Keene is progressing its comprehensive plan for predictable growth toward a third tier city goal in the Dallas-Fort Worth region. Keene is projected to have numerous commercial and residential developments. These expected developments contain commercial activities such as fast food, gas stations, office parks, shopping centers, medical clinics, government complexes, and supermarkets. It is an Institute of Transportation Engineers (ITE) recommended practice to conduct a traffic impact analysis once a development creates more than 100 trips during the peak hour (Edwards, 2016).

Therefore, the aforementioned future developments present the city with the opportunity to study the sustainability of their networks that could be investigated to define any improvements required to accommodate new development. TIA would also help the community with future land use decisions and policy recommendations for generating funds through the recognized issues in the roadway network.

TIA provides a better path for the City of Keene in regard to adding requirements to their ordinance, e.g. the number of access points required for different traffic volumes. Traffic Impact Analysis should generally achieve the following goals:

- Analyze traffic generated by new development
- Forecast traffic share throughout the city transportation infrastructure
- Define corridors and intersections with anticipated congestion if these developments are implemented
- Form delays in travel times from origin to destination
- Provide suggestions to defined issues with the help of a thoroughfare plan



Figure 8-1. Keene Road Network Map

8.3 BACKGROUND

The City of Keene is exceptionally located. Highway 67 runs through Keene and it is one of the strongest potential commercial corridors for the city.

It provides a connection to I-35, Highway 174, and the historic Chisholm Trail Parkway. Old Betsy Road (F.M. 2280) and College Street are the major entry and exit segments into the city from Highway 67. Old Betsy Road runs north-south in the city and is the only major road that bears the highest amount of traffic in the city. It connects the city to surrounding cities within the county and is also an alternate route to I-35 (Figure 8-1).

The speeds on Old Betsy Road range from 35mph to 55mph. The majority of roads within the city are local streets, typically two lanes undivided with speeds ranging from 30mph to 35mph. The city only has four signalized intersections due to low traffic volumes on local streets. All other intersections in the city are stop sign controlled. The city lacks proper east-west access.

8.4 DATA COLLECTION

The data collection phase consisted of the following components:

- Current traffic counts for Keene
- Speed limits of Keene's roadway network
- Traffic light-cycle length and location of stop sign controlled intersections
- Trips generated by anticipated developments

The traffic counts were collected from two different sources for the purpose of accuracy; these sources include TxDOT and NCTCOG. TxDOT provides historical traffic counts within the city while NCTCOG traffic counts are categorized by time of day and were used to determine peak hour traffic volumes at various intersections within the city. However, neither source provided turning movement information at intersections.

We collected turning movement data from the City based on volumes for peak hours on weekdays excluding Friday. The City of Keene provided the roadway network map with speed limits for each roadway. Traffic light-cycle lengths were observed during turning movement data collection.

8.5 METHODOLOGY

The methodology process consists of six major components listed below.



Data Collection

Peak hour turning movement counts were manually performed from 4:45pm to 5:45pm at seven locations. Average daily traffic for these locations was acquired from TxDOT and NCTCOG.



Trip Generation

An estimate of new trips generated by the proposed development was determined using the Institute of Transportation Engineers Trip Generation Handbook, 9th Edition.



Trip Distribution

The origins and destinations of trips were determined with the help of the existing land use map and the current traffic pattern in the city.



Background Traffic

A growth rate is applied to the existing traffic volumes to project traffic volumes over the next 10 years; these volumes were added with development trips for performing the analysis.



Trip Assignment

The new trips were assigned to the transportation network in Keene.



Analysis

A simulation of the model was conducted on VISSIM to identify potential congestion and delays in travel time (Figure 8-2).

8.6 RECOMMENDATIONS

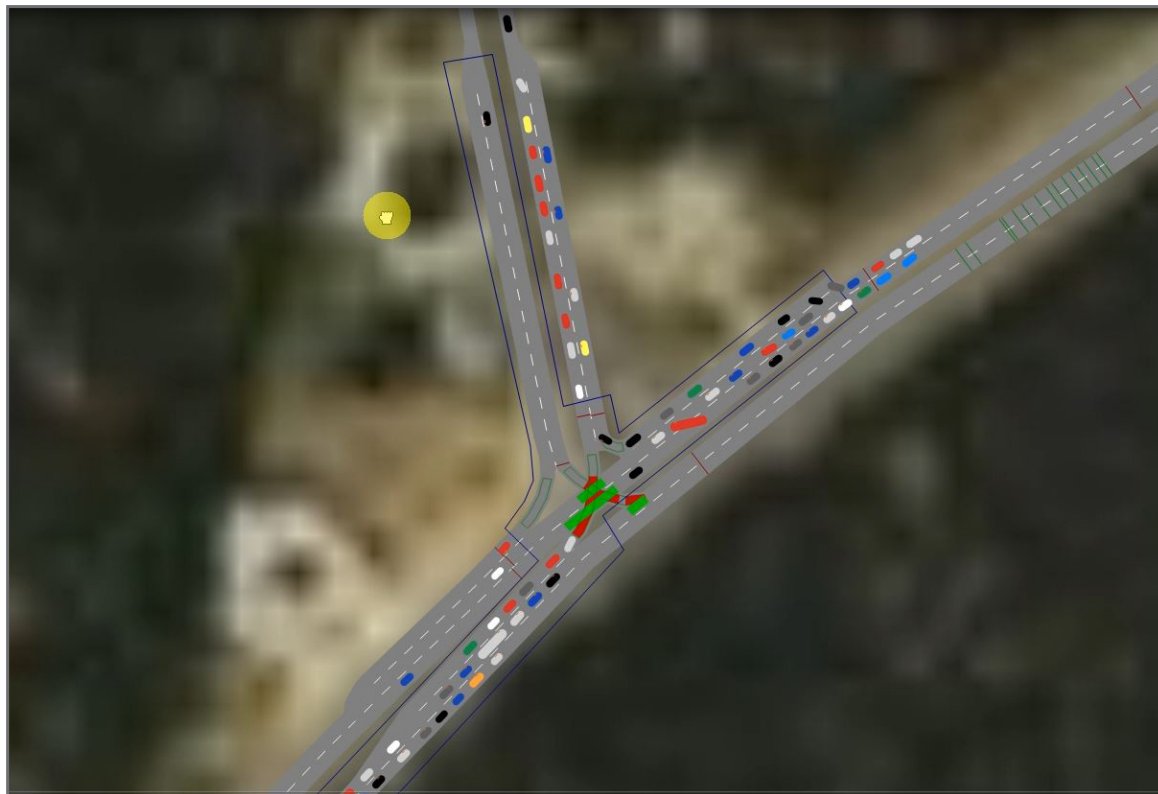


Figure 8-2. VISSIM Simulation in 2280 and US67

The City of Keene's Thoroughfare Plan identifies future needs based on making improvements to the existing thoroughfare network in coordination with other local government planning efforts. The plan will help to guide future development of a comprehensive city-wide thoroughfare system. Since the Thoroughfare Plan focuses on the preservation of rights-of-way needed for future development of long range transportation improvements, it has far-reaching implications on the growth and development of urban and rural areas. The plan may influence the pattern of movement and the desirability of areas for development.

Main purpose of this planning effort was to develop a Thoroughfare Plan for the City of Keene that will be coordinated with other locally adopted planning documents in Johnson and adjacent counties and communities and incorporate the updated NCTCOG Regional Thoroughfare Plan.

While plans typically have a 20-year time frame, thoroughfare plans show longer perspectives. Since right-of-way is typically easier to acquire when an area is undeveloped, the sooner that potential right-of-way is identified and acquired, the more likely costs will be minimized and projects can be eventually implemented.

The City of Keene therefore needs to look as far into the future as feasible to begin identifying future right-of-way needs within a 30- year period.

Recommendations for thoroughfare development include standards and criteria for the location of thoroughfares, right-of-way widths, building setbacks, horizontal curvature, angle of intersection, block length, and other geometric design standards and guidelines.

To implement the Thoroughfare Plan, special situations may arise regarding widening for planned right-of-way for which the City needs to show a degree of flexibility and adaptability. However, acceptable minimum design criteria apply where existing conditions limit the ability to meet desirable standards and guidelines.

Special roadway cross sections should be determined on a case by-case basis when a unique design is needed. Suggested roadway cross sections provided in this document are intended to serve as broad standards for right of way acquisition and roadway design. Whenever possible, standard roadway cross sections should be used in all newly developing areas. Where feasible, the existing and planned rights-of-way for thoroughfares should be maintained at the City's standard right-of-way width in order to accommodate potential thoroughfare improvements as may be needed in future years.

Existing roadway traffic conditions were evaluated to assist in determining the long-range transportation needs for the City of Keene. Physical conditions of the transportation system and characteristics of existing traffic operations were obtained through review of available information provided by Johnson County, the Texas Department of Transportation, the North Central Texas Council of Governments

(NCTCOG), Google Maps, and the U.S. Department of Transportation.

This section covers the projects planned by the Texas Department of Transportation and provides additional recommended projects for Keene. The report also covers design guidelines for each road classification.

Texas Department of Transportation Projects (Mobility 2025 Update: The Metropolitan Transportation Plan)

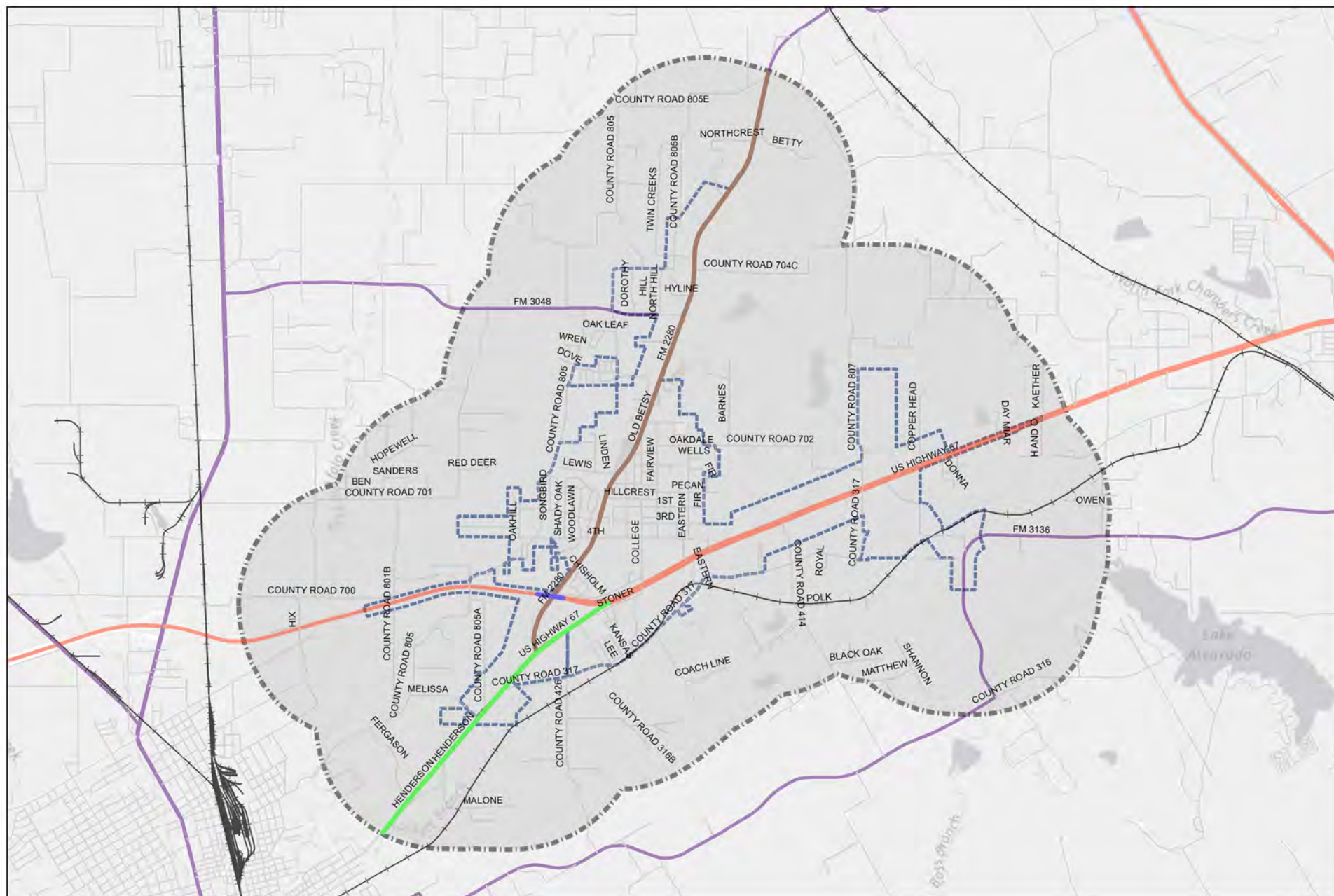
The Texas Department of Transportation identifies the following list on Table 8-1 as the projects that are under control of District Fort worth. The following roadways are within the Keene ETJ boundaries.

BU 67-M passing through the southern section of the city and connecting Keene to the City of Cleburne is currently being finalized for seal coat on the main

lanes and shoulders with a 3.430 Mile length. US 67 will be widened to 4 lane undivided with 3.860 mile from SH 174 to 0.72 miles west of spur 102. Moreover, FM 2280 is in the finalize stages for overlay maintenances in by the Texas Transportation Department. Figure 8-3 shows the location of these projects within the Keene ETJ boundary.

Table 8-1. Texas Department of Transportation Projects

Project ID	Status	Highway	From Limit	To Limit	Description	Project Length
025905074	Finalizing for Construction	BU 67-M	KOUNS ST	US 67	Seal Coat Main Lanes And Shoulders Fy 17 Seal Coat Program	3.430 (mi)
025906001	Construction Scheduled	US 67	PPROX. SH 174	0.72 MI WEST OF SPUR 102	Widen To 4 Lane Divided	3.860 (mi)
246501020	Under Development	FM 2280	BU 67	FM 917	Overlay	5.791 (mi)
246501019	Finalizing for Construction	FM 2280	BU 67M	FM 917	Seal Coat Main Lanes And Shoulders Fy 17 Seal Coat Program	5.782 (mi)



Texas Department of Transportation Projects

TX.Projects Type

- Seal coat main lanes and shoulders
- Overlay
- Widen to 4 lane divided

Highway

Minor Arterial

Major Arterial

Keene City Limit

KeeneETJ

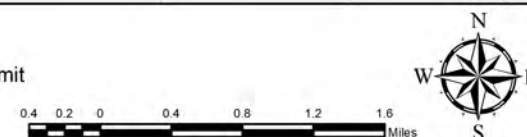


Figure 8-3. Texas Department of Transportation Projects

Keene Recommended Projects.....

This section covers transportation projects that are recommended for the City of Keene. These recommendations are based on the traffic impact analysis, current roadway status and the future land use plan. Current conditions, lane width, traffic counts, and class categories of the roads have been considered. Lane width has an effect on traffic operations and road capacity, particularly for high-speed roadways. Moreover, width of lane, interaction of lanes, as well as their geometric elements, primarily shoulder width, also affect operations.

Traffic impact analysis concluded with a list of recommendations for Keene:

- Left turn and right turn pockets at approaches with high turning movements.
- Installation of signal heads at the intersection of US 67 Service Road and FM 2280 due to high volumes.
- Dynamic utilization of the parking lane on FM 2280
- A Thoroughfare Plan to improve both north-south and east-west connectivity.
- Adding extra driveways to the developments

Aside from the analysis recommendations, the City of Keene is recommended to upgrade or add new roads to cover the gaps in the transportation system.

Moreover, College Dr. should be upgraded as a complete street, with provisions for pedestrian and bicycle transportation. Figure 8-4 represents the location of the plans within ETJ boundary.

Design Guidelines for the Keene Transportation Network

The City of Keene needs to plan to upgrade some roads as well as add more roads to potential development areas to improve connectivity through the city. The list of roads which are suggested to be upgraded are provided in Appendix C.

The width for the state, county and local roads should be in conformance with the current state and local standards: 300 feet for freeways, 90 to 120 feet for arterial streets, and 60 to 65 feet for collector streets.

These standards determine the right-of-way (ROW) widths for each classification that includes travel lane medians and travel lanes by functional classification (Table 8-2).

However, it does not allow for on-street parking. Moreover, curbs and sidewalks are not considered appropriate for the basic county roadway network, but may be considered in special situations (Beckham, 2002).

Table 8-2. Road Classification with typical right of way (ROW)

Classification	Typical ROW in feet
Major Arterial	120
Minor Arterial	90
Major Collector	70
Minor Collector	65
Local Road	50

Sec. 213.005. NOTATION ON MAP OF COMPREHENSIVE PLAN. A map of a comprehensive plan illustrating future land use shall contain the following clearly visible statement: "A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries."

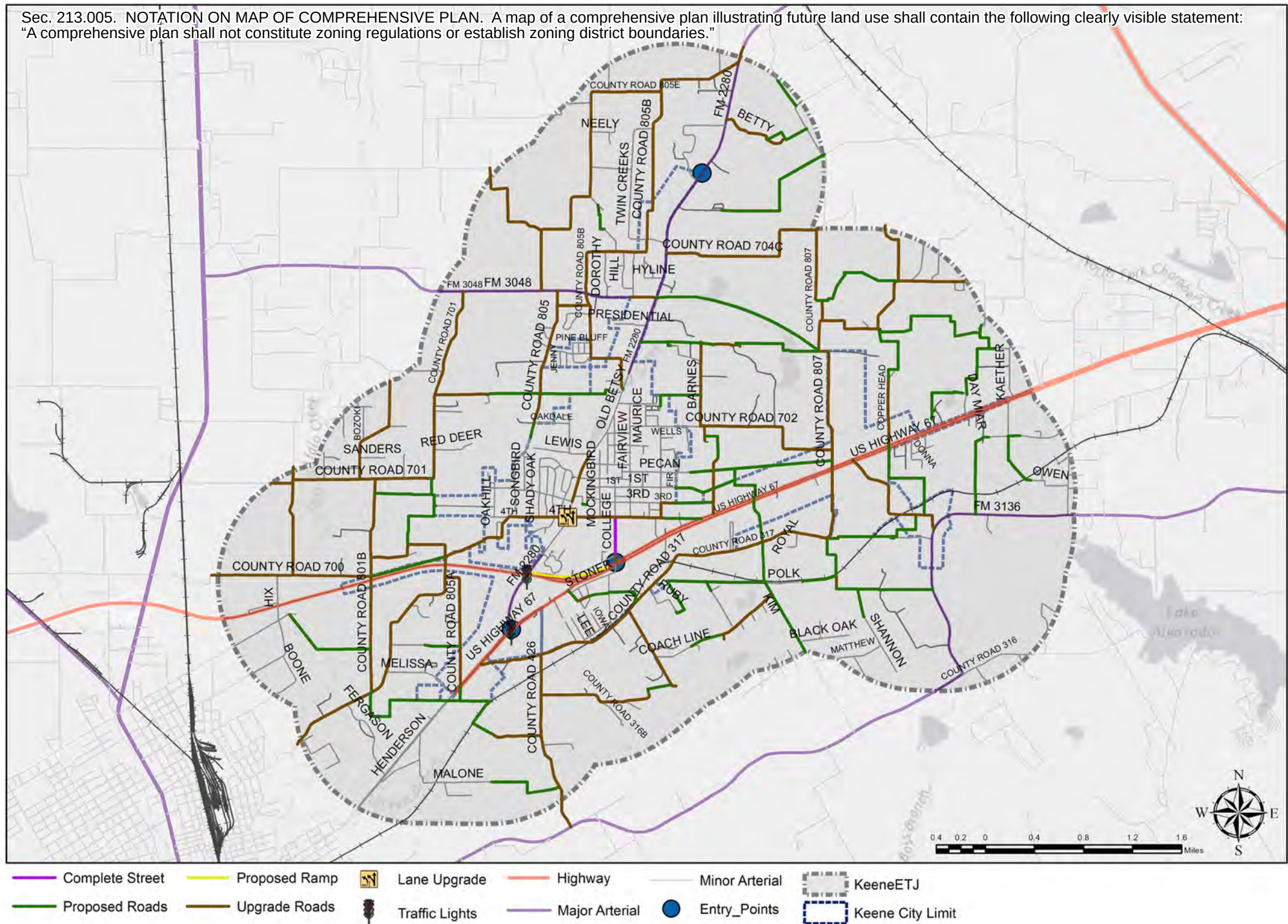


Figure 8-4. Proposed Keene Thoroughfare Plan

• Design Guidelines for Regional Arterials

Regional arterials include principal arterials and minor arterials. These guidelines preserve a 120-foot right-of-way for six travel lanes or a 90-foot right-of-way for four travel lanes. The principal and minor arterials are recommended to have a minimum of 12-foot lanes while collectors and locals are recommended to have a minimum of 10-foot lanes. Moreover, the sections consider a median or a Continuous Two-Way Left-Turn Lane (CTWLTL) (Figure 8-5).

These guidelines recommended a 90-foot right-of-way with four 12-foot travel lanes or a 12-foot median or a 12-foot continuous two-way left turn lane. A 13-foot border area can be preserved for utilities and drainage. Initially, in low traffic volume roads, a two 12-foot lane arterial with Continuous Two-Way Left-Turn Lane (CTWLTL) is appropriate. However, as the traffic volumes increase, four lane expansion should be considered as well as raised medians instead of a CTWLTL (Figure 8-6).

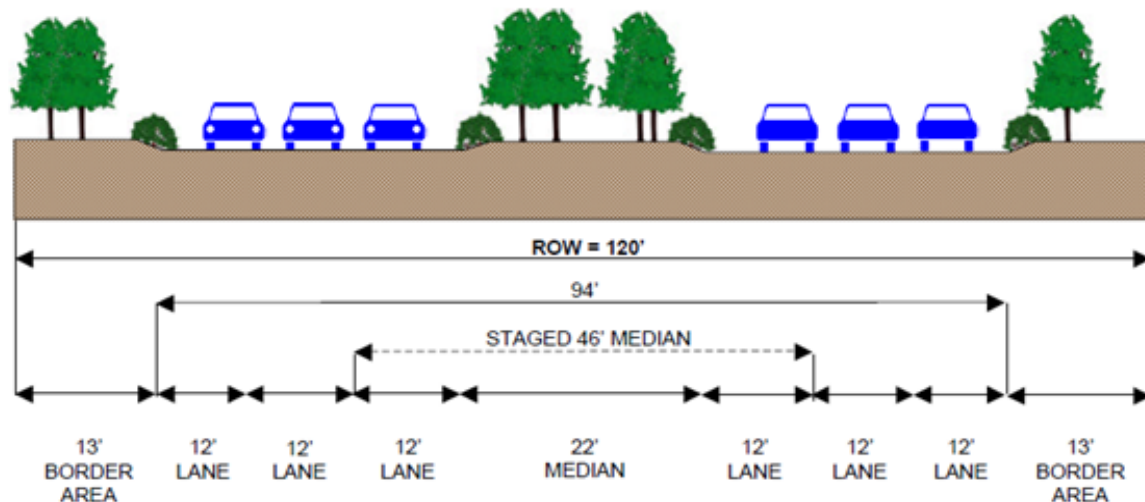


Figure 8-5. Principal Arterial Cross Section with 120' Right Of Way (Beckham, 2002)

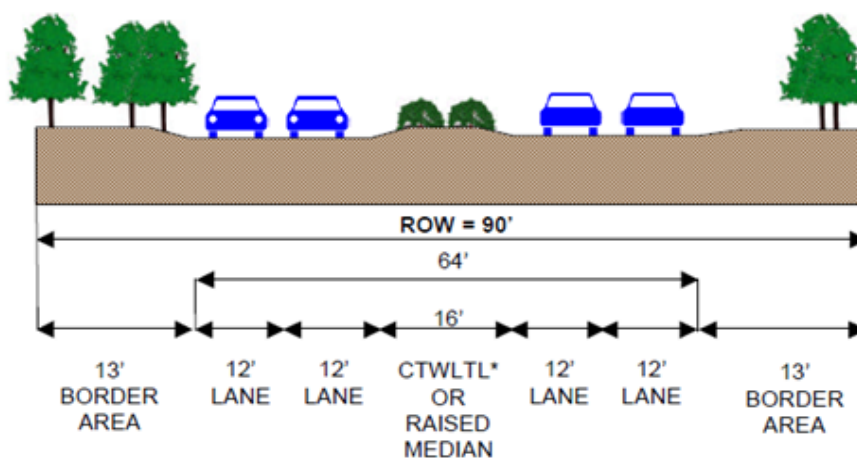


Figure 8-6. Minor Arterial Cross Section with 90' Right Of Way (Beckham, 2002)

- **Design Guidelines for Collector Streets**

Collector streets are the connectors between arterials and local streets that collect traffic and distribute it to other arterials and provide direct access to residential, commercial and other land uses. On street parking in residential areas is permitted. However, in their design, their proximity to residential neighborhoods should be considered for which roadways need to be spaced at about one-quarter to one-half mile intervals. The speed on these roads should not exceed 30 to 35 miles per hour and a higher speed differential and much closer intersection/access spacing can be used.

Collector streets are recommended to have two roadway lanes. Major collectors (mostly in multifamily residential) typically have a 70-foot right-of-way, with a 44-foot pavement width (two 12-foot travel lanes and two 10-foot parking areas). However, as traffic volumes increase, the pavement is recommended to have four 11-foot travel lanes without on-street parking (Figure 8-7).

Minor collectors (in low density of development), are recommended to include two 11-foot travel lanes and two eight-foot parking areas and a 65-foot right-of-way width (38-foot pavement width and 13.5-foot border area on each side) (Figure 8-8).

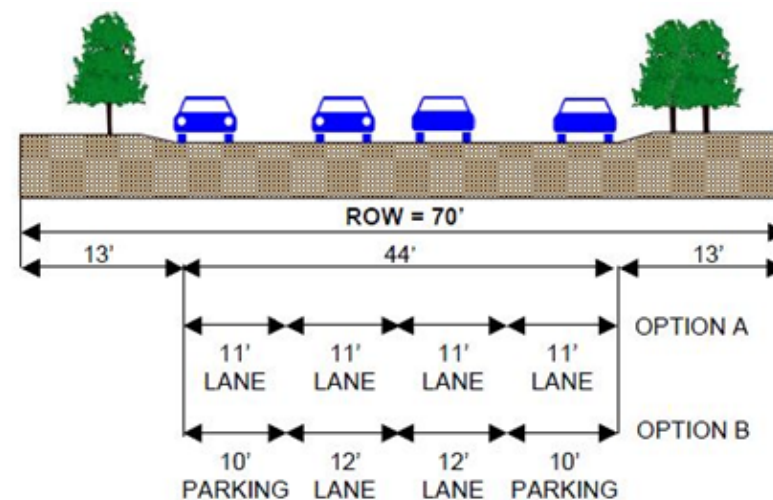


Figure 8-7. Major Collector Cross Section with 70' Right Of Way
(Beckham, 2002)

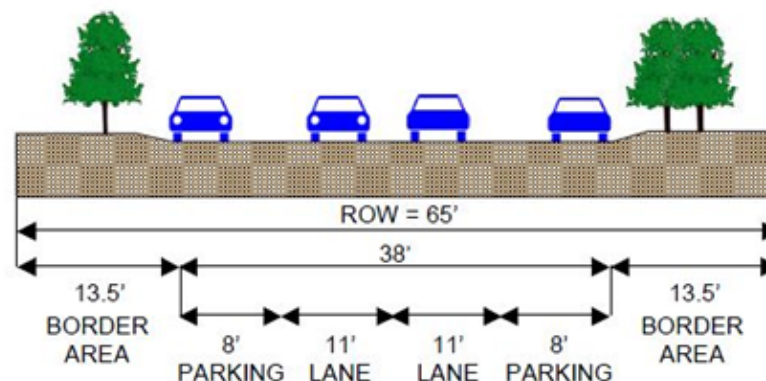


Figure 8-8. Minor Collector Cross Section with 65' Right Of Way
(Beckham, 2002)

• Design Guidelines for Local Streets

Local streets typically allow access to residential and commercial properties. O-street parking is generally permitted and speed varies from 20 to 30 miles per hour. Design guidelines include 28 to 36 feet pavement widths. Local street cross sections should include sufficient circulation for emergency vehicles. (Figure 8-9).

For minor local streets, a 55-foot right-of way (a minimum pavement width of 30 feet) is required to include minimum pavement width, curbs, sidewalks, and street utilities (Figure 8-10); however in high density developments, the width of pavement can be increased to 36 feet to provide sufficient width for on-street parking on both sides (eight feet each) and two 10-foot travel lanes and a 12-foot border area on each side of the roadway (60-foot right-of-way).

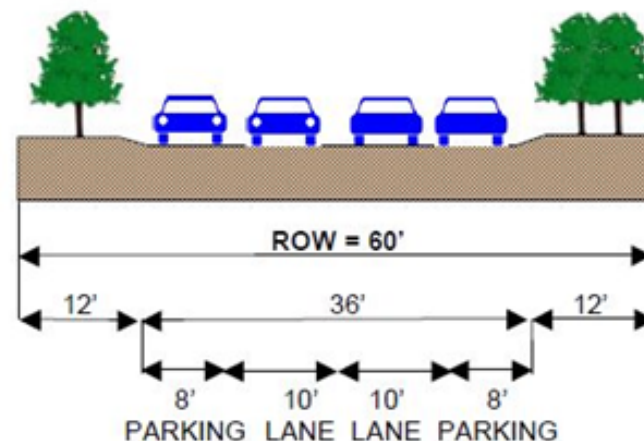


Figure 8-9. Major Local Street Cross Section with 60' Right Of Way (Beckham, 2002)

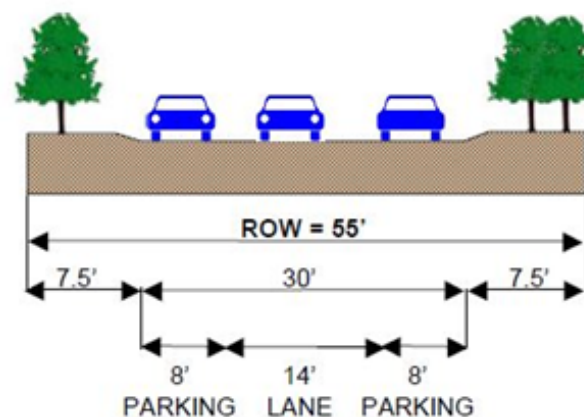


Figure 8-10. Minor Local Street Cross Section with 55' Right Of Way (Beckham, 2002)

• Design Guidelines for Rural Roadways

Rural roadways are required to have the minimum guidelines for both two-lane and four-lane to facilitate future development. Key access points demand spaces for left-turn and right-turn lanes and widening to upgrade classification (to include a four or six-lane divided highway).

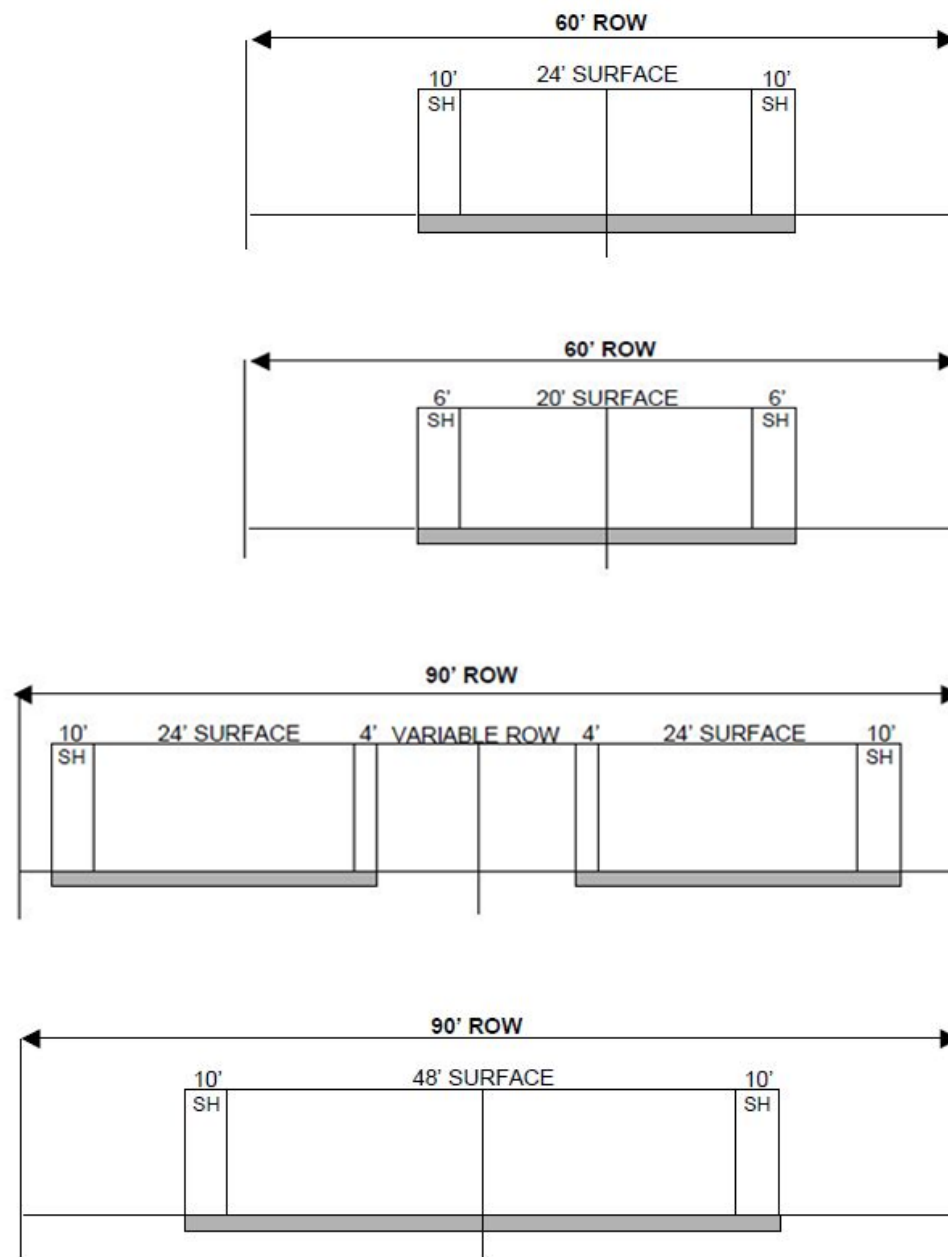


Figure 8-11. Rural Roadway Details (top to bottom)

- Desirable Two Lane Rural Road Cross Section
- Minimum Two Lane Rural Road
- Desirable Four-Lane Divided Highway
- Desirable Four-Lane Undivided Highway

(Beckham, 2002)



COMPREHENSIVE PLAN

CHAPTER



CHAPTER

9

INFRASTRUCTURE

9.1 Introduction

9.2 Water and Wastewater

9.8 Electricity

9.4 Telecommunication Service

9.5 Recommendations

INFRASTRUCTURE

This chapter evaluates the future demand on infrastructure based on the historic and current analysis for water, wastewater, electricity, trash collection, and telecommunication and seeks to provide goals for the City to aid in the accommodation of anticipated growth within the current extraterritorial jurisdiction (ETJ) boundary of Keene.

9.1

INTRODUCTION

Planning for infrastructure is one of the most important responsibilities of municipalities. Residents need to be able to rely on local government provisions for adequate and safe supply of water and other utilities both for the current population and for future growth projections.

The City of Keene needs to provide the necessary infrastructure to accommodate increased demand from projected growth. This chapter evaluates the future demand on infrastructure based on the historic and current analysis for water, wastewater, electricity, trash collection, and telecommunication

and seeks to provide goals for the City to aid in the accommodation of anticipated growth within the current extraterritorial jurisdiction (ETJ) boundary of Keene.

Keene's historic growth pattern indicates that the population has grown from 2000 to 2010 with an annual growth of 2.70%. However, Keene is expected to have less annual growth in the population from 2020 to 2070 (Table 9-1).

Based on the 2016 Brazos G Regional Water Plan, Keene's annual growth would be 1.41% for a period of 50 years. Although the city will witness less annual growth, it will face population growth for which it should plan to accommodate in addition to supporting resident demands. The remainder of this report considers infrastructure analysis based on the projected population growth.

Table 9-1. Keene Population Growth (Texas Water Development, 2016)

Year	Population	Annual Growth
2000	5,003	2.70%
2010	6,106	
2020	7,154	1.41%
2030	8,377	
2040	9,639	
2050	11,023	
2060	12,516	
2070	14,113	

9.2

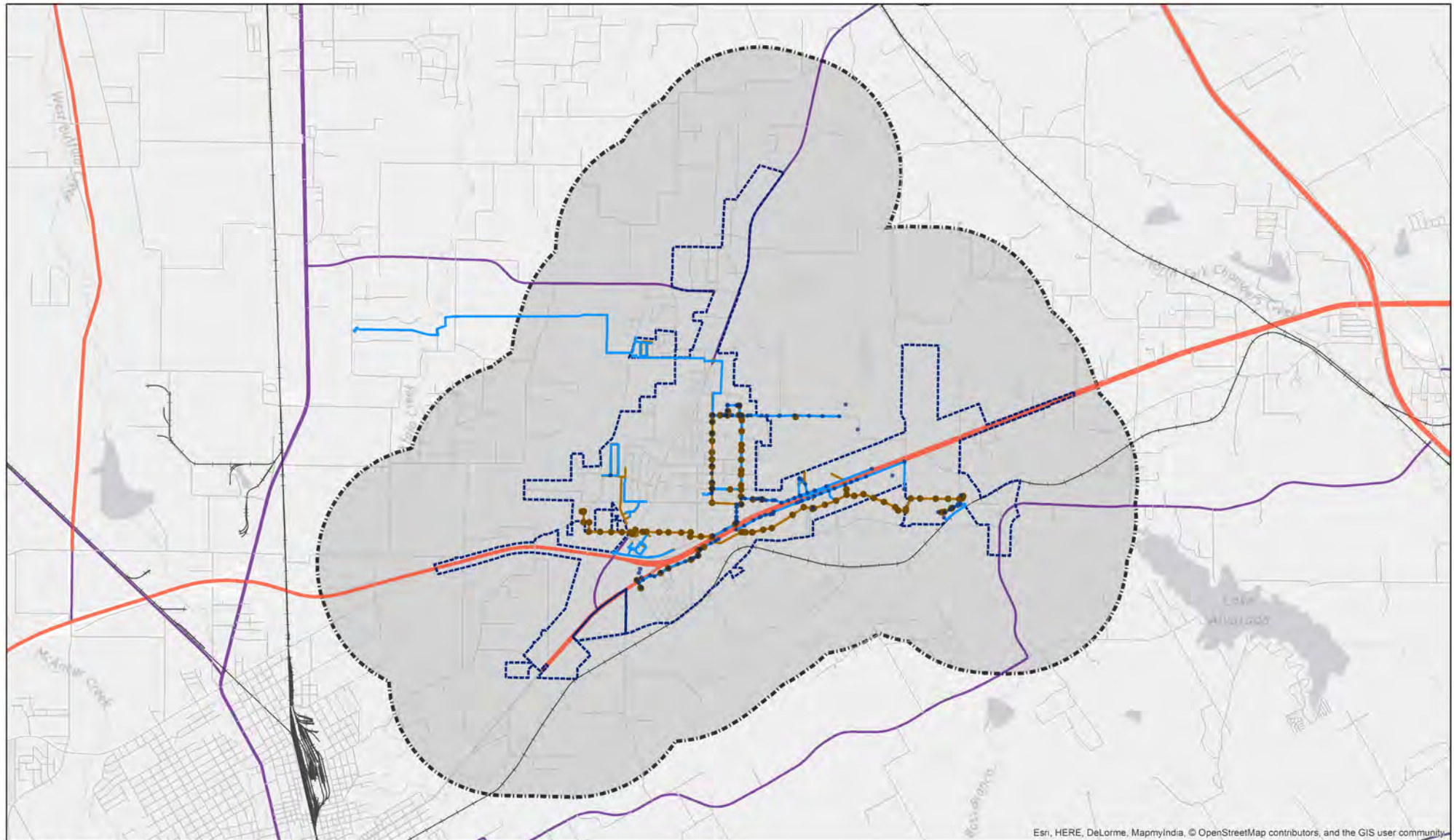
WATER AND WASTEWATER

Assessing Current Usage and Water Demand

Currently, 16 regional water planning areas have been established by the Texas Water Development Board (TWDB) with its own defined boundaries. Each region has to assess available supplies of water and projected demand and then find the means to meet the demand while maintaining current resources (Texas Water Development, 2016).

The Brazos G Regional Water Planning Area (BGRWPA) is 31,600 square miles in area under the Brazos River Basin with the City of Keene being located in this region.

Figure 9-1 shows the current water system for the City of Keene. Most water infrastructure is concentrated in downtown and around Highway 67, while the northern and western areas of the city are lacking for which the city needs to plan accordingly. If the city plans to grow toward those areas, it will require additional infrastructure to service those areas.



Keene Water System

- | | | | | |
|---------------------------|-----------------------|--------------------|------------------|------------------|
| • Water Points | — Water Line | □ Keene City Limit | — Highway | — Minor Arterial |
| • Sanitary Sewer Manholes | — Sanitary Sewer Line | □ KeeneETJ | — Major Arterial | — Railroads |

0.35 0.7 1.05 1.4
Miles

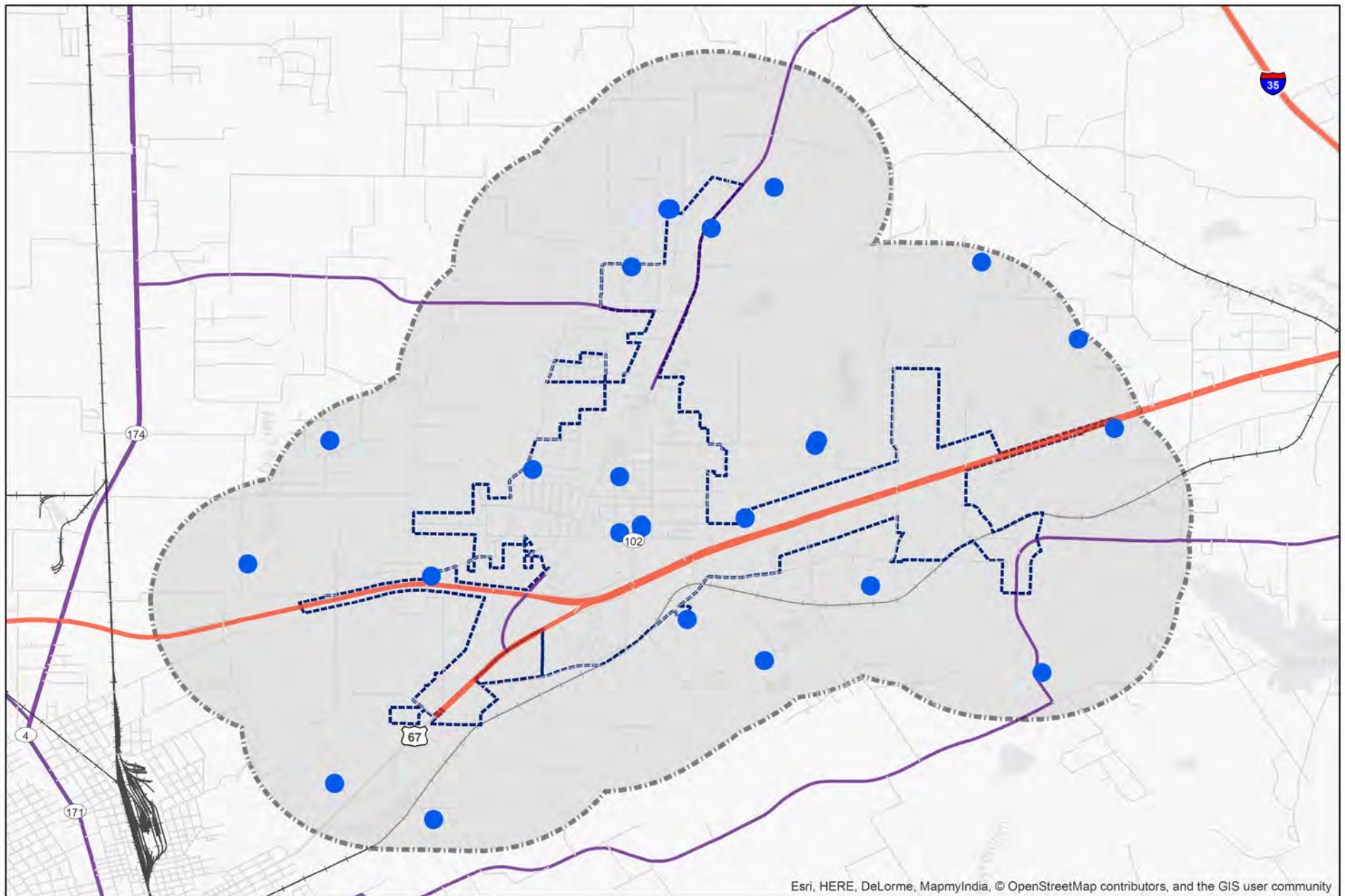


Figure 9-1. Keene Water System

Currently, there are 28 well locations for withdrawal of water. Eleven of them are used for domestic use, 1 is used for industrial purposes, 14 are used for public supply, and 2 are not used. Table 9-2 lists the wells for water withdrawal and Figure 9-2 shows the locations within Keene's ETJ.

Table 9-2. Well Location for Withdrawal of Water (Texas Water Development, 2016)

State Well Number	Owner Name	Primary Use	Elevation	Well Depth
3238514	Monarch Utilities Twin Creeks Subd. #4	Public Supply	835	1430
3238602	Ernest Adams	Unused	831	25
3238701	J.C. Seely	Domestic	790	700
3238702	City of Keene No.6	Public Supply	920	1480
3238703	H2M Utility Systems	Public Supply	825	654
3238704	City of Keene Well #14	Public Supply	840	1404
3238801	City of Keene No.4.	Public Supply	905	790
3238802	City of Keene No.3.	Public Supply	905	1508
3238803	City of Keene No.1.	Public Supply	915	1603
3238804	City of Keene No.2.	Public Supply	915	790
3238805	Arthur Ehzroth	Domestic	820	716
3238806	Gilbert Mosley	Domestic	910	767
3238807	Mrs. Louis Graves	Domestic	809	759
3246103	Mrs. Cecil Jones	Domestic	820	644
3246106	K.D. Pool	Unused	793	627
3238502	Jimmy G. Owens	Domestic	806	665
3238503	Mrs. Chester Jones	Domestic	830	732
3238505	J.D. Moore	Public Supply	832	707
3238508	Mohawk Water Corp.	Public Supply	841	710
3238509	James D. Schular	Public Supply	879	750
3238808	City of Keene No.5.	Public Supply	915	1501
3238809	Roy Baer	Domestic	810	733
3238810	Sauder	Domestic	838	115
3238811	City of Keene	Public Supply	800	1435
3238812	Odyssey Harbor	Public Supply	810	740
3238902	Joe L. Eherhart	Domestic	740	647
3238903	W.W. Spivey	Domestic	762	725
3238906	Mahaney and Walker	Industrial	800	761



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Water Wells Locations

- Water Wells
- Keene City Limit
- KeeneETJ
- Highway
- Major Arterial
- Minor Arterial
- +— Railroads

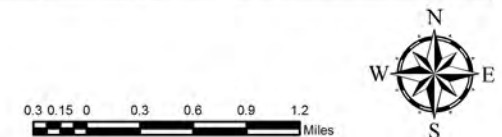


Figure 9-2. Keene Water Wells Locations

Keene's Existing Water System Facilities

Keene purchases water supply permanently from Johnson County Special Utility District (SUD) and provides treated and filtered water. Detailed information of water system facility flows are provided in Appendix C.

There are currently 6 active treatment plants in the City of Keene (Table 9-3).

Table 9-3. Active Treatment Plants for Keene
(Texas Commission, 2016)

Facility ID	Facility Name
TP19646	PS 8 - CR 318
TP8345	PS 7 - S CR 805
TP8347	PS 4 - N CR 805
TP8348	PS 5 - E US HWY 67
TP8350	PS 1 - S COLLEGE DR.
TP8353	PS 3 - BLUEBONNET DR.

Water Demand Projections

The 2016 Brazos G Regional Water Plan defines municipal water use as the water “used by households (e.g., drinking, bathing, food preparation, dish washing, laundry, flushing toilets, lawn watering and landscaping, swimming pools), commercial establishments (e.g., restaurants, car washes, hotels, laundromats, and office buildings), and for fire protection, public recreation and sanitation” (Texas Water Development, 2016 Brazos G Regional Water Plan, 2016, p. 16).

Keene's annual municipal water usage is projected to increase by 1.34 % in a period of 50 years between 2020 to 2070 (Figure 9-3).

Moreover, the 2016 Brazos G Regional Water Plan projects water demand for manufacturing uses within Johnson County to grow by 1.11 % in 50 years. However, for mining it is projected to have a reduced growth by 2.23 % followed by a constant growth pattern (Figure 9-4).

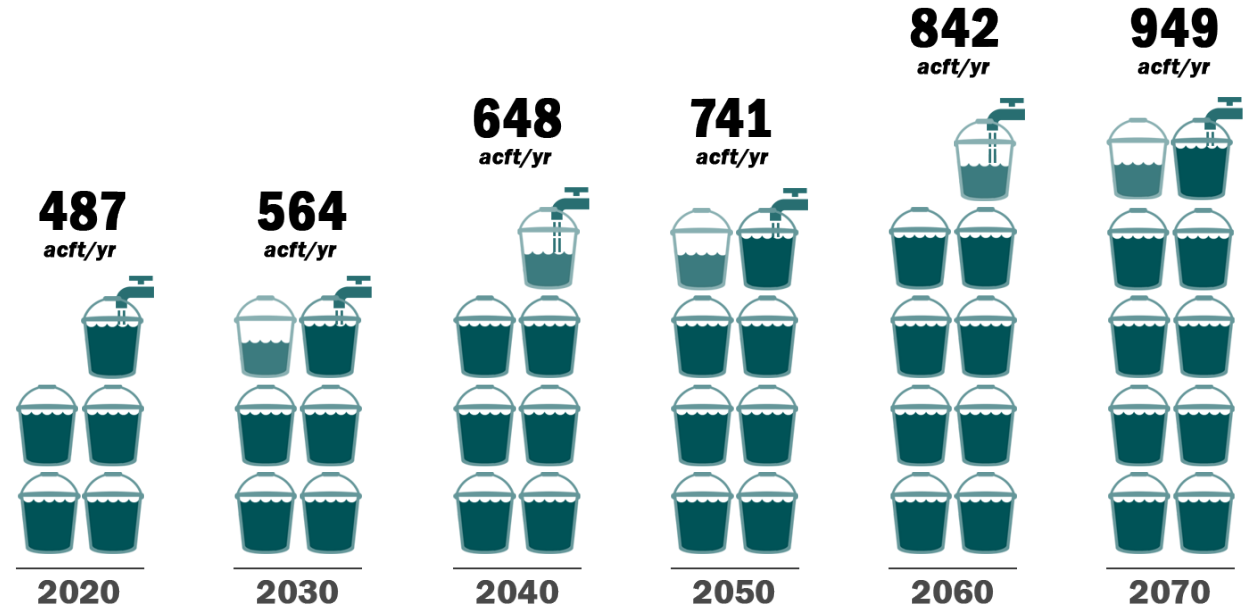


Figure 9-3. Projected Municipal Water Demand (Texas Water Development, 2016 Brazos G Regional Water Plan, 2016)



Use	2020	2030	2040	2050	2060	2070	Annual Growth Rate
Manufacturing	2,517	2,903	3,295	3,646	3,994	4,375	1.11%
Steam-Electric	7,000	7,000	7,000	7,000	7,000	7,000	0.00%
Mining	4,126	2,788	1,515	1,013	1,161	1,336	-2.23%
Irrigation	141	141	141	141	141	141	0.00%
Livestock	1,613	1,613	1,613	1,613	1,613	1,613	0.00%

Figure 9-4. Projected Water Demand (acft/yr) in Johnson County and Annual Growth Rate Comparison by Usage

Water Needs Projections

Water need is based on the projected supplies and demands of water differences. Based on the 2016 Brazos G Regional Water Plan, there is no water shortage for the City of Keene, therefore, no changes are recommended in supply of water. However, per capita use of the entity is currently below the target rate of 140 gallons per capita per day.

Based on this plan, the City of Keene would have 893 acft storage in 2040 and 519 acft for 2070. Water supply comes from the Trinity Aquifer groundwater through a contract with Johnson County Special Utility District (SUD).

Issues

The City of Keene delivers potable drinking water to all residents of Keene. Keene’s water supply is derived from reservoirs of Lake Pat Cleburne and Alvarado. Water from reservoirs is directed to the City of Keene Water Treatment Facility where it is filtered, disinfected, and reduced in acidic content before it enters the distribution system.

 Economic Constraints

Budgetary constraints may affect the implementation of the proposed sustainable water management system.

 Environmental Constraints

Design of water harvesting systems will be constrained by the existing built environment in the city, which may lead to additional costs and design modifications.

 Social Constraints

Implementation of the proposed sustainable water system will have to take into account educational and other social activities that will happen in the city periodically.

It is important that the city educates residents about the programs on water quality and pollution prevention to ensure that water quality remains high. It is also recommended that the city adopts performance standards for supply and distribution of water. They should consider flow, pressure, quality and costs.

The City can use certain water and sewer funds for the maintenance and preservation of the existing system to deal with the issue of aging infrastructure that the City might have faced. However, changes in land use regulations should be followed by determining some standards for private and public systems.

9.3
ELECTRICITY

Electricity Providers

Electricity service providers for the City of Keene (including zip codes 75059 and 76031) consist of Reliant Energy, TXU Energy, Cirro Energy, 4change Energy, Pennywise Power, Green Mountain Energy, First Choice Power, Bounce Energy, Direct Energy, and Payless Power.

Commercial energy rates vary for each company and respective periods of service (Table 9-4). Minimum service terms are typically month to month and maximum terms at 24 months. Electricity rates also vary by provider, with a minimum of 6.5 cents per KWT and a maximum of 10.4 cents per KWT (Scout, 2017).

Table 9-4. Electricity Rates in Zip Code 76059, Keene, TX (Scout, 2017)

Company	Term (months)	Rate (Cent Per KWT)
Reliant	6	6.5
Reliant	12	6.8
TXU Energy	6	6.9
Cirro Energy	12	7.2
4change Energy	12	7.6
Pennywise Power	12	7.3
TXU Energy	12	7.5
4chanch Energy	12	7.6
Green Mountain Energy	12	7.9
First Choice Power	12	7.9
Bounce Energy	6	8.1
	9	8.9
	12	8.1
	18	8.6
	24	8.8
Cirro Energy	6	8.1
Green Mountain Energy	24	8.3
TXU Energy	12	8.5
Cirro Energy	24	8.5
Pennywise Power	12	8.5
Green Mountain Energy	Month to Mount	8.9
Reliant	Month to Mount	8.9
Pennywise Power	14	9.2
First Choice Power	Month to Mount	9.4
Direct Energy	Month to Mount	9.5
TXU Energy	Month to Mount	10.4
Payless Power	Month to Mount	CALL

Transmission and Distribution Utility Companies

In Johnson County, transmission and distribution utilities are provided by ONCOR and Texas-New Mexico Power (Figure 9-5). ONCOR is a regulated electric transmission and distribution service provider that serves 10 million customers across Texas, with 3,361,026 customers being served in the Dallas Area, including Keene (Texas, 2013) (ONCOR, 2012)

Power Lines

There are two main power lines through Keene's extraterritorial jurisdiction boundary. One runs in the north-south direction and is located in the northeastern part of Keene with a length of 32,351 feet. The other line runs in the east-west direction and is located in the southern part of Keene with a length of 32,054 feet.

There are two power posts in Keene; the first is located in the northern part of the city and the other is located in the southwest part of Keene's ETJ. No power plants exist within the city limit or ETJ. The nearest power plant is located within the city limit of Cleburne, approximately 2.6 miles from Keene's western limit (Figure 9-6).

Based on data from the Public Utility Commission of Texas (PUCT), there are two types of transmission lines and two types of substations including 345 and 138 KV in Johnson County (Texas E. R., 2008) (Figure 9-7).

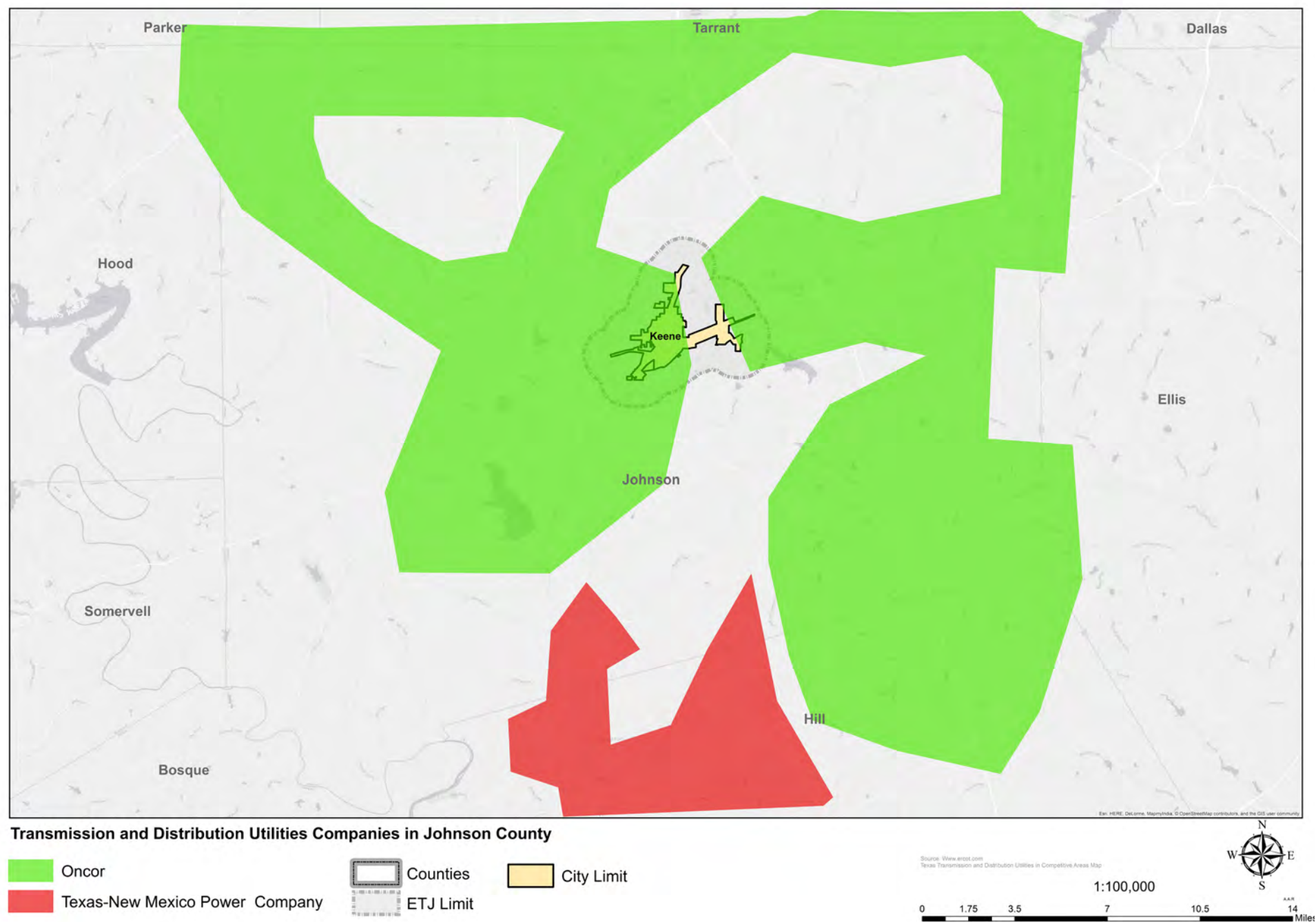


Figure 9-5. Johnson County Transmission and Distribution Utility Companies

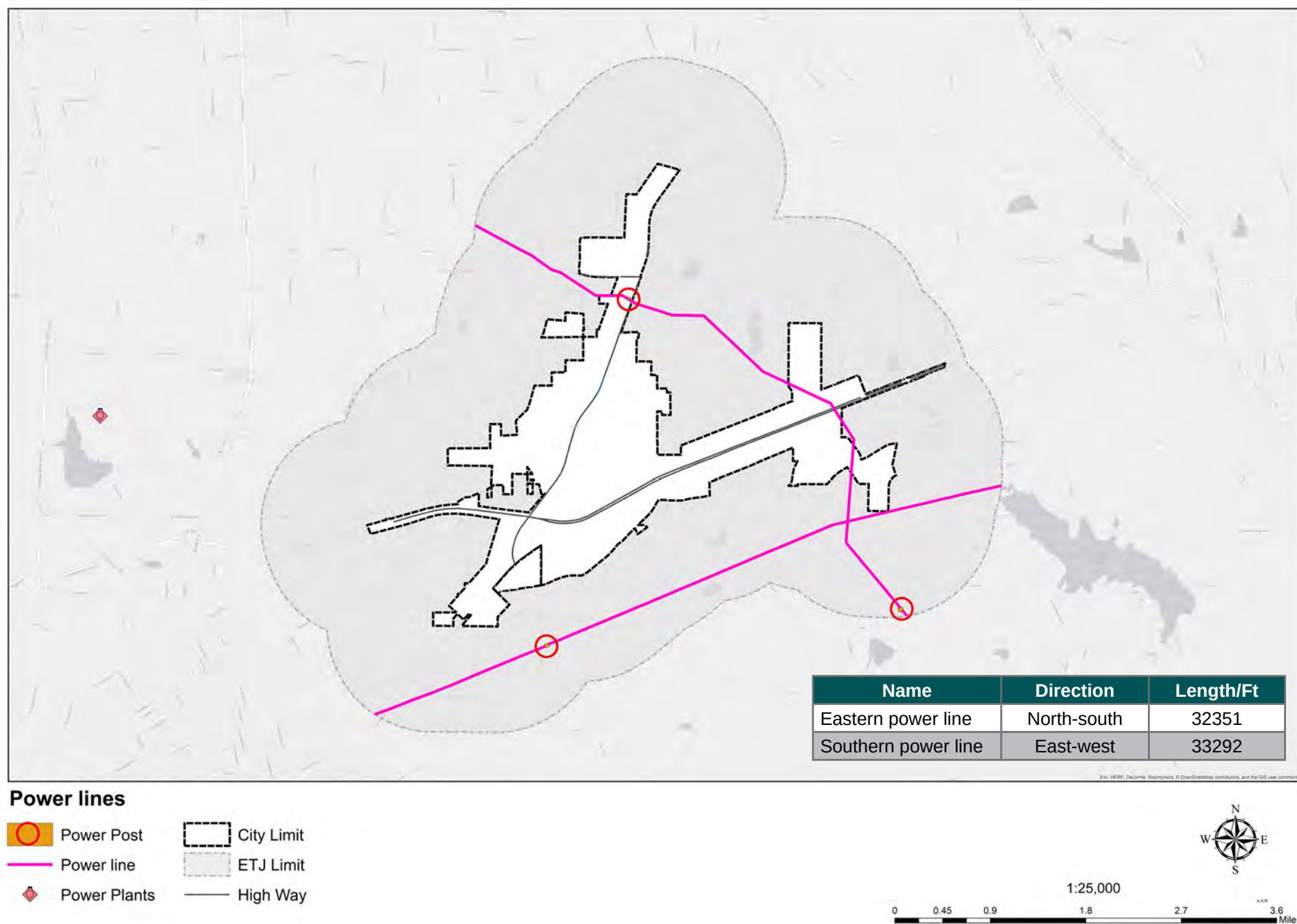


Figure 9-6. Keene Powerline Location

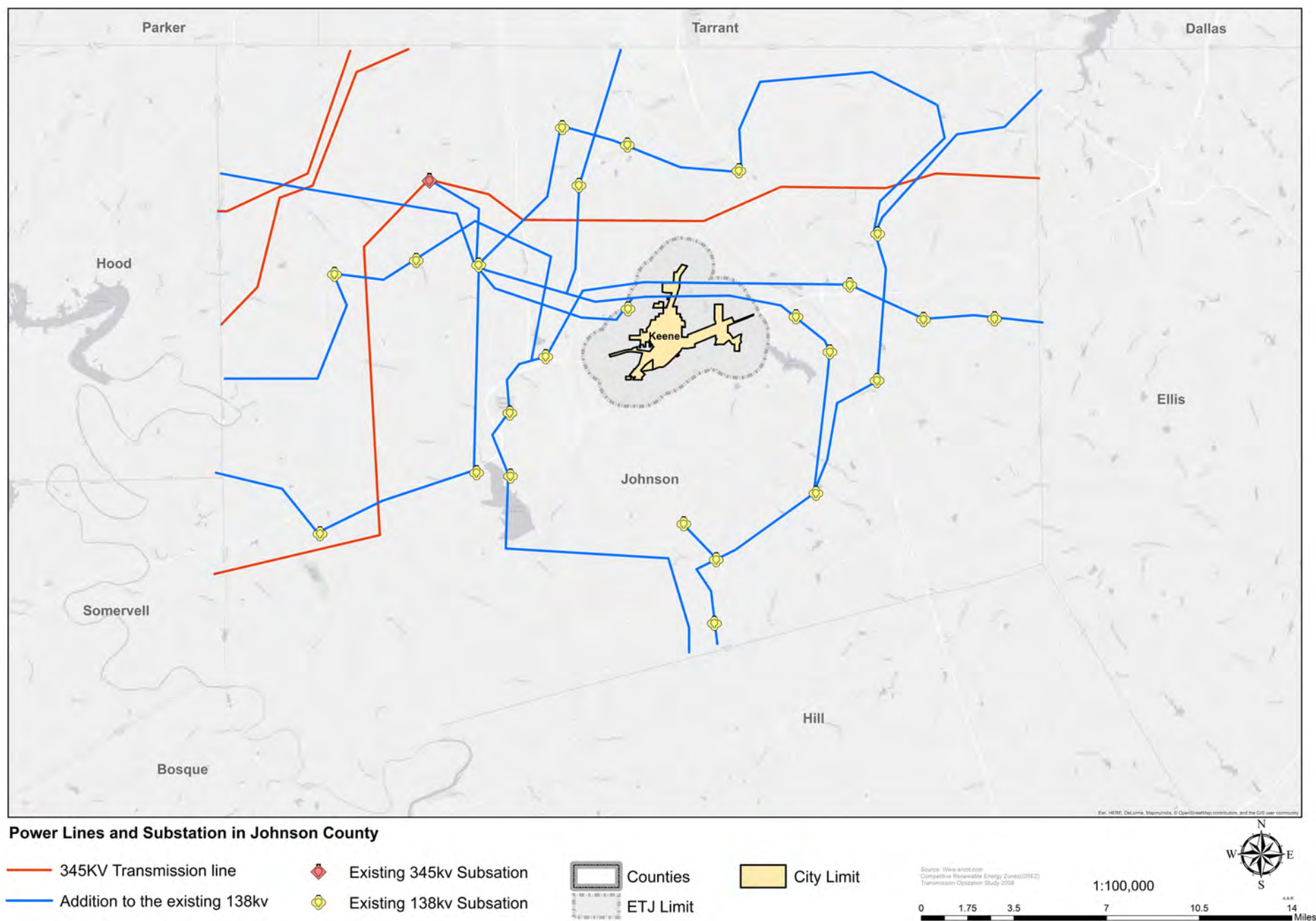


Figure 9-7. Johnson County Powerline and Substations

Recommendation



Regional and State level

Regional and state level generators, providers and transmission and distribution utilities are regulated by the state of Texas. Providing efficient, low-carbon, and affordable energy are main issues in reliable energy infrastructure for all of Texas (Public Utility Commission of Texas, 2015).

The Energy infrastructure for the future is guided by regional plans such as the Comprehensive Economic Development Strategy 2016, NCTCOG Strategic Plan for 2015-2020, Energy Efficiency and Electric Infrastructure in the State of Texas, and the State Energy Plan.

The following policies relate to energy infrastructure and support Texas's Statewide Planning:

- The Public Utility Commission of Texas regulates the state's electric, telecommunication, and water and sewer utilities, implements respective legislation, and offers customer assistance in resolving consumer complaints (Public Utility Commission of Texas, 2015).
- Support for implementing strategies (e.g., solar energy, improved building design, electric vehicles) that promote energy conservation (NCTCOG, 2016).

- Energy Efficiency Policies/Activities Statewide Clean Energy Policy/Energy Efficiency Resource Standard(s) (EERSs) require obligated parties usually regulated retail distributors of electricity to meet a specific portion of their electricity demand through energy efficiency (Governor's, 2008).



City level

There are not any commercial energy generation facilities in the City of Keene or ETJ, which means that energy supply and pricing is controlled by outside providers. Electricity facilities and services in Keene are provided by private utilities and companies. While the City of Keene does not directly provide electricity energy facilities and services, it does promote efficient, sustainable, and resilient energy resources, production, distribution, and consumption.

9.4

TELECOMMUNICATION SERVICES

Providing Services

Keene telecommunication services include telephone, digital subscriber line (DSL), broadband, cable services, fiber optic internet and satellite internet access. However, the industry is growing in a very fast pace which requires the city to keep with the pace.

Availability of high quality communication services is critical to economic development, education, health care and public welfare and safety. This section covers internet services in Keene, TX and compares the situation with that of Cleburne, TX. Moreover, it covers television and radio stations that broadcast for Keene, TX.

**Broadband Service**

As defined by the Federal Communication Commission (FCC), Broadband is a high speed internet that offers services at a higher speed than

dial ups, which varies significantly by technology and the level of service ordered. It covers the speed of at least 25 mbps down and 3 mbps up (FCC, 2016). The service can be provided by local carriers, cable and wireless companies to provide internet and television programming as well as telephone services (NCTCOG, 2012).

**Telephone Services**

Keene residents have access to telephone services with area codes of 817 and 682 (Texas, 2013).

**Cable Services**

This service provides broadband internet using coaxial cables that facilitate pictures and sound delivery to TV sets while watching TV. The speed varies depending on type of cable, network and traffic load (FCC, 2016).

**Fiber Optic**

This technology converts data to light electrical signals and sends them through transparent glass fibers. The speeds exceeding DSL or cable modem speeds, however, might vary based on distance to computer and service (FCC, 2016).

**Satellite Internet Access**

This service is useful to serve remote or sparse areas. The speed depends on service package, customer line of sight to satellite, and weather. It has a slower speed than DSL and cable modem but faster than dial-up internet access (FCC, 2016).

**Digital Subscriber Line (DSL)**

DSL transmits data faster than copper telephone and it has two types of technology:

1. Asymmetrical Digital Subscriber Line (ADSL) – This technology is used mostly by residential customers and provides internet with a faster speed in the downstream direction over the same line that voice service is offered without disrupting telephone calls.
2. Symmetrical Digital Subscriber Line (SDSL) – This is mostly used for commercial purposes and both downstream and upstream traffic speeds are equal. Faster forms of SDSL are High-data-rate Digital Subscriber Line (HDSL) and Very High-data-rate Digital Subscriber Line (VDSL) (FCC, 2016).

Assessing Current Status

• *Internet Service Providers in Keene, TX (Zip code 76059)*

The Public Utility Commission of Texas lists the following agencies as communication companies serving Keene. Three companies offer services for residential purposes and ten provide services to businesses (Table 9-5).

BROADBANDNOW is a website which collects and analyzes internet availability in zip codes. Based on that, Keene TX has a total of 19 internet providers. It has 3 Copper providers, 1 DSL provider, 1 Fiber provider, 7 Fixed Wireless providers, 5 Mobile providers and 2 Satellite providers.

Below the services have been described in detail for residential, small business providers and enterprises. Moreover, Figure 9-8 shows residential high speed connections over 200 kbps for Keene.



Residential

Two types of internet services are provided for residential: fixed wireless and wired. Wired system offer services through DSL or Fiber technology.



Small Business Providers

These companies advertise for small business plans on their websites. Their services are offered through fixed wireless, DSL and Copper.



Enterprise Providers

These companies provide services to enterprise businesses or government and may be able to provide more complex services such as MPLS, transport, backhaul, wholesale bandwidth, and point to point and their prices vary based on client demand. They use fixed wireless or copper to convert data.



Mobile Internet Providers

Five companies provide mobile internet to Keene residents: AT&T, MetroPCS, Sprint, T-Mobile and Verizon.



Satellite Internet Access

BROADBANDNOW lists HughesNet and dishNET as satellite internet providers to Keene, TX (FCC, 2016).

Table 9-5. Keene Communication Companies (Public Utility Commission of Texas, 2013)

Residential Companies	Residential & Business Companies	Business Companies
- ACN Communications Services, INC. - AT&T Texas - ILEC - Birch Telecom Of Texas, LTD, LLP	- AT&T Texas - ILEC - Birch Telecom Of Texas, LTD, LLP - Level 3 Communications, LLC	1STEL, INC. - AT&T Communications Of Texas, LP - AT&T Texas - ILEC - Birch Telecom Of Texas, LTD, LLP - Bullseye Telecom, INC. - Granite Telecommunications, LLC - Level 3 Communications, LLC - MCI Metro Access Transmission Services, INC. - Preferred Long Distance, INC. - TEL West Network Services Corporation

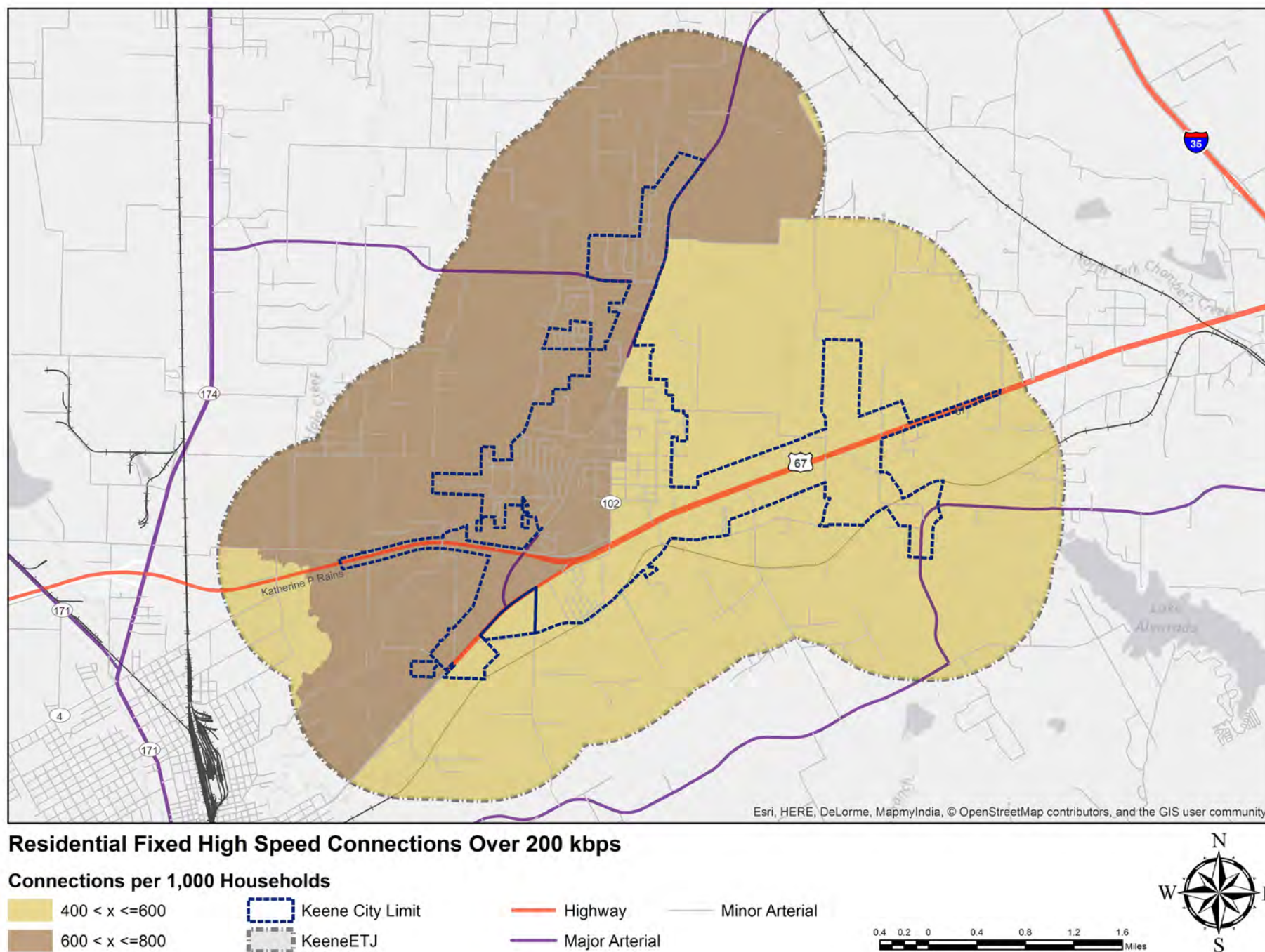


Figure 9-8. Keene Residential High Speed Connections Over 200 Kbps

- **Internet Service Providers in Cleburne, TX (Zip code 76031)**

A total of 28 companies provide internet services to Cleburne, TX, including 2 Cable providers, 5 Copper providers, 3 DSL providers, 3 Fiber providers, 8 Fixed Wireless providers, 5 Mobile providers, and 2 Satellite providers.



Residential

Cleburne offers wired and fixed wireless internet to the residents using DSL, cable and fiber technology with various download and upload speed. In addition, Cleburne Public Library offers publicly funded internet to the residents.



Business Providers

These companies advertise for small business plans or enterprise businesses or government on their websites. Small business provider services are offered through fixed wireless, DSL and Copper. Enterprise providers market for more complex services such as MPLS, transport, backhaul, wholesale bandwidth, and point to point.



Mobile Internet Providers

AT&T, MetroPCS, Sprint, T-Mobile and Verizon are the companies that provide mobile internet to Cleburne residents with various price and speed rates.



Satellite Internet Access

Like Keene, HughesNet and dishNET have the technology to offer satellite internet to Cleburne residents (FCC, 2016).

- **TV and Radio Broadcast Services**

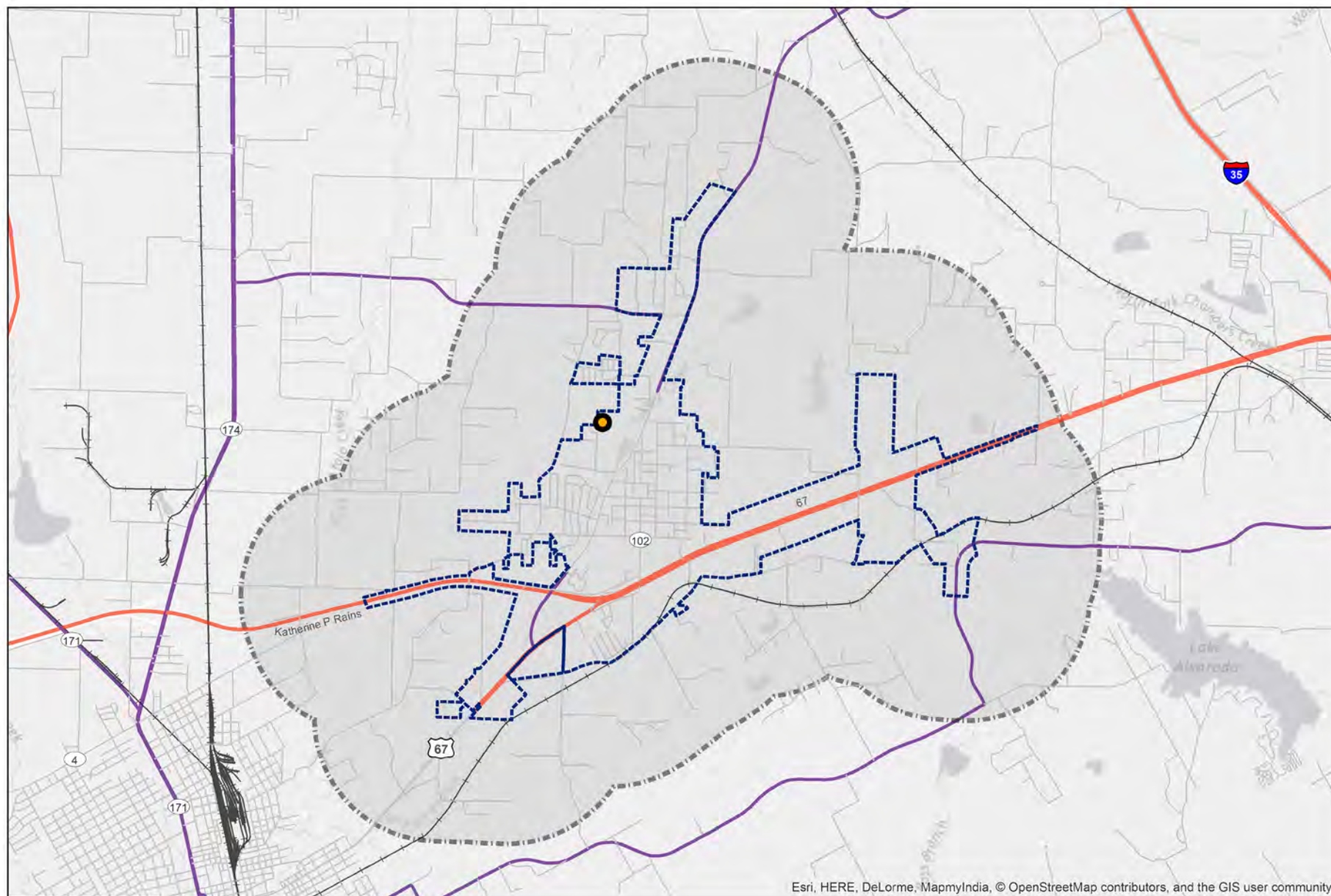
Aside from internet connection, there are two radio and TV stations that broadcast channels for residents both owned by Southwestern Adventist University. Table 9-6 shows the information for these channels and Figure 9-9 is the location map for the stations (FCC, 2016).

Figure 9-10 shows the predicted coverage for Keene radio stations with local, distant and fringe coverage boundaries. Within local coverage, residents will receive radio station signals on any radio with moderately good or very good reception.

Within distant coverage, residents will receive radio station signals on most automobile radios and stereos but will have issues with portable radios. Within the fringe coverage, residents will receive weak radio station signals unless using a good quality radio and antenna. There may also be interference with other stations within this coverage.

Table 9-6. Keene Radio and TV Stations (FCC, 2016)

Lower Channel	Upper Channel	Licensee	Service Device	Channel
200	300	Southwestern Adventist University	FM Full Service	202C3 Frequency: 88.3 MHz Licensed
2	69	Southwestern Adventist University	LD Digital Low Power Television station	-



Keene Radio and TV Stations

- FM Radio Station
- LD Digital TV station
- Keene City Limit
- KeeneETJ
- Highway
- Major Arterial
- Minor Arterial

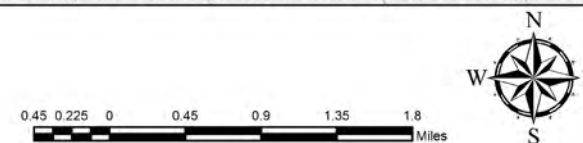


Figure 9-9. Keene Radio and TV Stations

For TV broadcast services in Keene, Table 9-7 lists local TV stations and networks. As shown, NBC, ABC, CBS, FOX, WFAA, My 27, The 33 and Telemundo 39 are the primary local station owned by FOX, NBC, Belo, CBS, and Tribune with their broadcast locations in Dallas-Fort worth region (AmericanTowns, 2016).

Table 9-7. TV Stations in Keene, Texas (American Towns, 2016)

TV Station	Channel Number	Network	Call Sign	Broadcast Location	DMA Coverage	Station Owner	Station Power
FOX 4	4	FOX	KDFW	Dallas, TX	Dallas -Ft. Worth	Fox Television Stations	Digital Full-Power - 857 kW
NBC 5	5	NBC	KXAS	Fort Worth, TX	Dallas -Ft. Worth	NBC Universal	Digital Full-Power - 891 kW
WFAA	8	ABC	WFAA	Dallas, TX	Dallas -Ft. Worth	Belo Corporation	Digital Full-Power - 45 kW
CBS 11	11	CBS	KTVT	Fort Worth, TX	Dallas -Ft. Worth	CBS Corporation	Digital Full-Power - 23 kW
My 27	27		KDFI	Dallas, TX	Dallas -Ft. Worth	Fox Television Stations	Digital Full-Power - 1000 kW
The 33	33		KDAF	Dallas, TX	Dallas -Ft. Worth	Tribune	Digital Full-Power - 780 kW
Telemundo 39	39	Telemundo	KXTX	Dallas, TX	Dallas -Ft. Worth	NBC Universal	Digital Full-Power - 1000 kW

9.5

RECOMMENDATIONS

Water and Wastewater



Goal 11. To assess current water management practices within the City of Keene

Action 11. Ease the pressure on groundwater, which is the most exploited source of water



Goal 12. To analyze the supply/demand gap in water requirement

Action 12. Plan a viable alternative solution to meet the water demand and needs of the people



Goal 13. To design a sustainable water management and distribution system to meet water requirements on a continuous basis

Action 13. Bridge the water supply/demand gap by undertaking a scientific analysis of the water budget and designing a suitable water-augmentation system



Goal 14. To provide sustainable development and proper utilization of available water resources to meet the demands in order to reflect the purpose of sustainable water management

Action 14. Adopt methods of sustainable development to ensure a better system for future generations

Electricity



Goal 15. Increasing energy-efficiency

Action 15a. Modify development ordinances to allow/promote creating mixed use plans at the neighborhood level

Action 15b. Modify development ordinances to increase density near main roads and activity nodes

Action 15c. Develop underutilized land on a contiguous basis rather than encouraging spread out “hop-scotch” development



Goal 16. Energy consumption and conservation

Action 16a. Develop and promote education plans for residents by the City that provide messages about the benefits of energy efficiency, conservation, and demand-response programs, and include guidance for finding and participating in such programs

Action 16b. Consider natural elements such as light and topography in the new facility development plans by the City in regulations and design standards

Action 16c. Implement advanced metering by using new technologies can reduce energy use

Telecommunication Services



Goal 18. Promote the planning, architecture, and implementation of telecommunication systems

Action 18a. Expand networks to areas with low network accessibility

Action 18b. Provide flexible communications services to support developing areas

Action 18c. Establish an inventory of existing network services and agencies to determine their telecommunications business needs

Action 18d. Evaluate existing and available network service for constraints to develop necessary actions to address the constraints

Action 18e. Reduce fee complexities



Goal 19. Improve telecommunication network and aging infrastructure in designated areas

Action 19a. Assess the feasibility of high network coverage in low access areas

Action 19b. Assess current telecommunication cables for aging infrastructure to replace if necessary

Action 19c. Determine areas with lack of network coverage



Goal 17. Mixed use in transmission line rights-of-way

Action 17a. Create green spaces, bicycle, and pedestrian paths within the city limit along transmission corridors

Action 17b. Encourage facilities such as transit shelters, trash receptacles, and benches

Action 17c. Encourage undergrounding of electrical and telecommunications facilities within public rights-of-way in downtown





COMPREHENSIVE PLAN

CHAPTER

10



CHAPTER

10

ECONOMIC DEVELOPMENT

- 10.1 Economic Landscape: Keene and Johnson County
- 10.2 Johnson County's Economic Status: DFW Region
- 10.3 Keene's Economic Status: Johnson County
- 10.4 Best Practices
- 10.5 Recommendations

ECONOMIC DEVELOPMENT

The City of Keene includes many industries and business developments of varying magnitude. The main service centers are education and health care facilities. There are a number of reasons for these two leading services. The City of Keene hosts a private university, Southern Adventist University, located near the city center, and health services, particularly nursing, have been prevalent for many years.

10.1

ECONOMIC LANDSCAPE: KEENE AND JOHNSON COUNTY

Keene is located in Johnson County surrounded by the neighboring cities of Burleson and Joshua to the north, Alvarado to the east, and Cleburne to the southwest. The closest metropolitan area is Fort Worth, approximately 40 minutes away. Keene's location offers access to numerous markets of varying sizes in neighboring cities and in the greater Dallas-Fort Worth region.

Demographics

One of the unique characteristics of Keene is its demographics. According to the 2015 US Census, the median age of Keene was 29. It is the 6th youngest city in North Central Texas and the 45th youngest city among 347 Texas cities with a population over 6,000. The proportion of millennials is also relatively larger in Keene than neighboring cities, as well as in Johnson County as a whole (Figure 10-1).

There are no precise dates regarding the parameters of this cohort, however most demographers and researchers define millennials as those born in the early 1980s to the early 2000s.

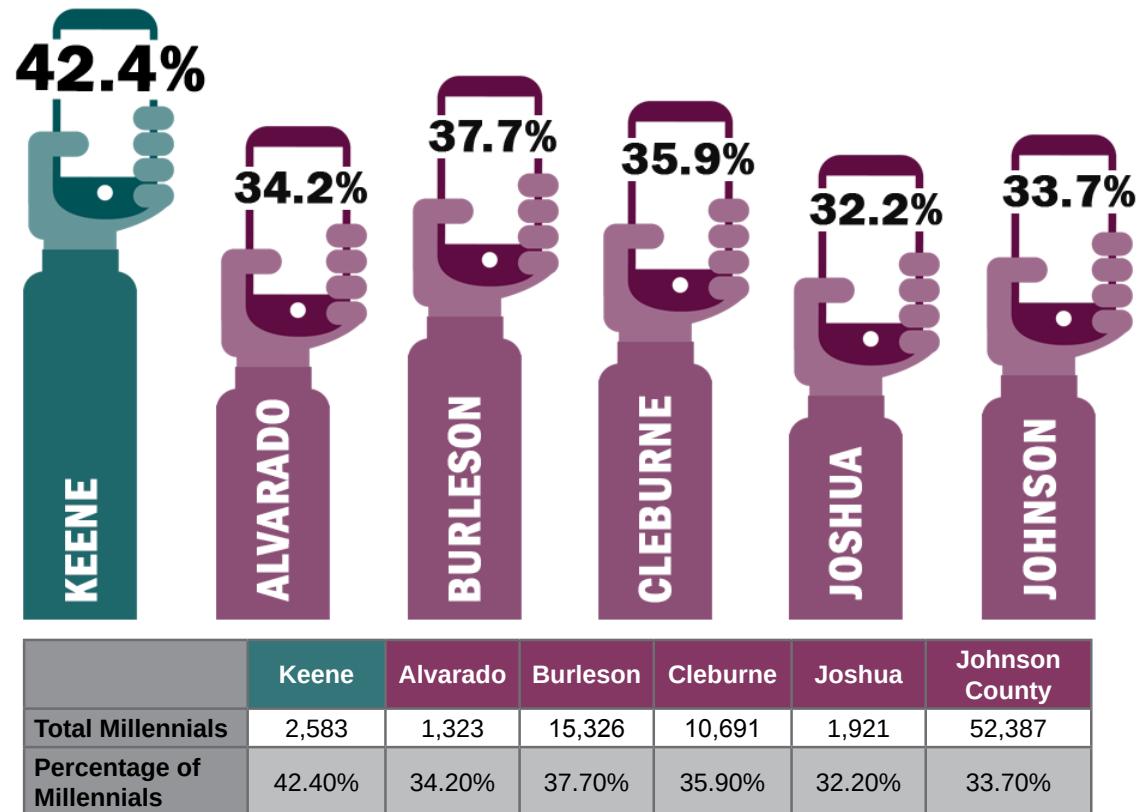


Figure 10-1. Millennials in Keene, neighbor cities, and Johnson County (U.S. Census, 2015)

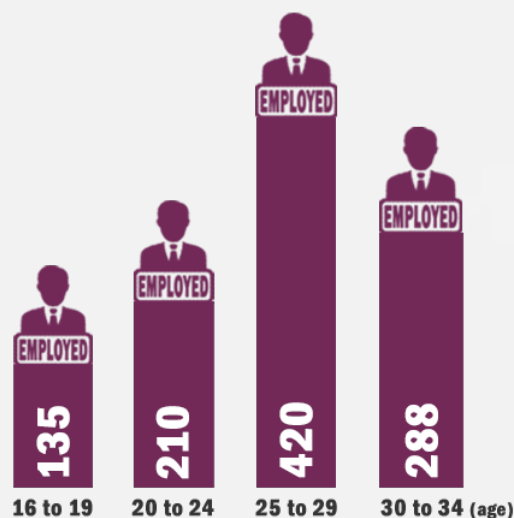
In this report, we considered the population born between 1981 to 2005 (age 10 to 34 in 2015) as millennials (Figure 10-2).

Millennials are one of the largest generations in history and they are about to move into their prime spending year. Unique millennial

experiences and patterns are reshaping the economy. Borrowing from the Goldman Sachs' research on the millennial effect (2016), millennial spending is predicted to increase by 17% over the next 5 years and their purchasing power will likely overtake that of baby boomers by 2018.

MILLENNIAL EMPLOYEES

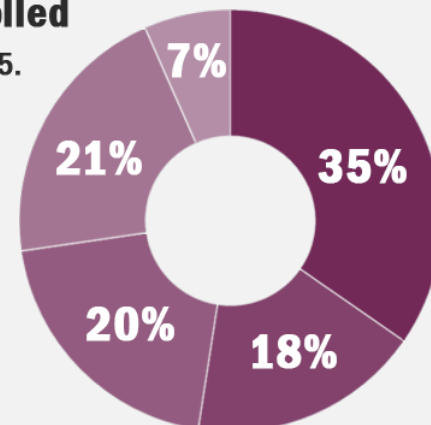
41% of Keene millennials were **employed** in 2015.



58% of Keene millennials **enrolled** in public or private schools in 2015.
674 are in **college or graduate** school.

(Total 1495 students)

Millennial Students by Age



MILLENNIAL STUDENTS

MILLENNIAL POPULATION

Total **Millennial** population in Keene was **2,583** in 2015.
It is approximately **42%** of the Keene Population.



Figure 10-2. Keene Millennials in Detail (U.S. Census, 2015)

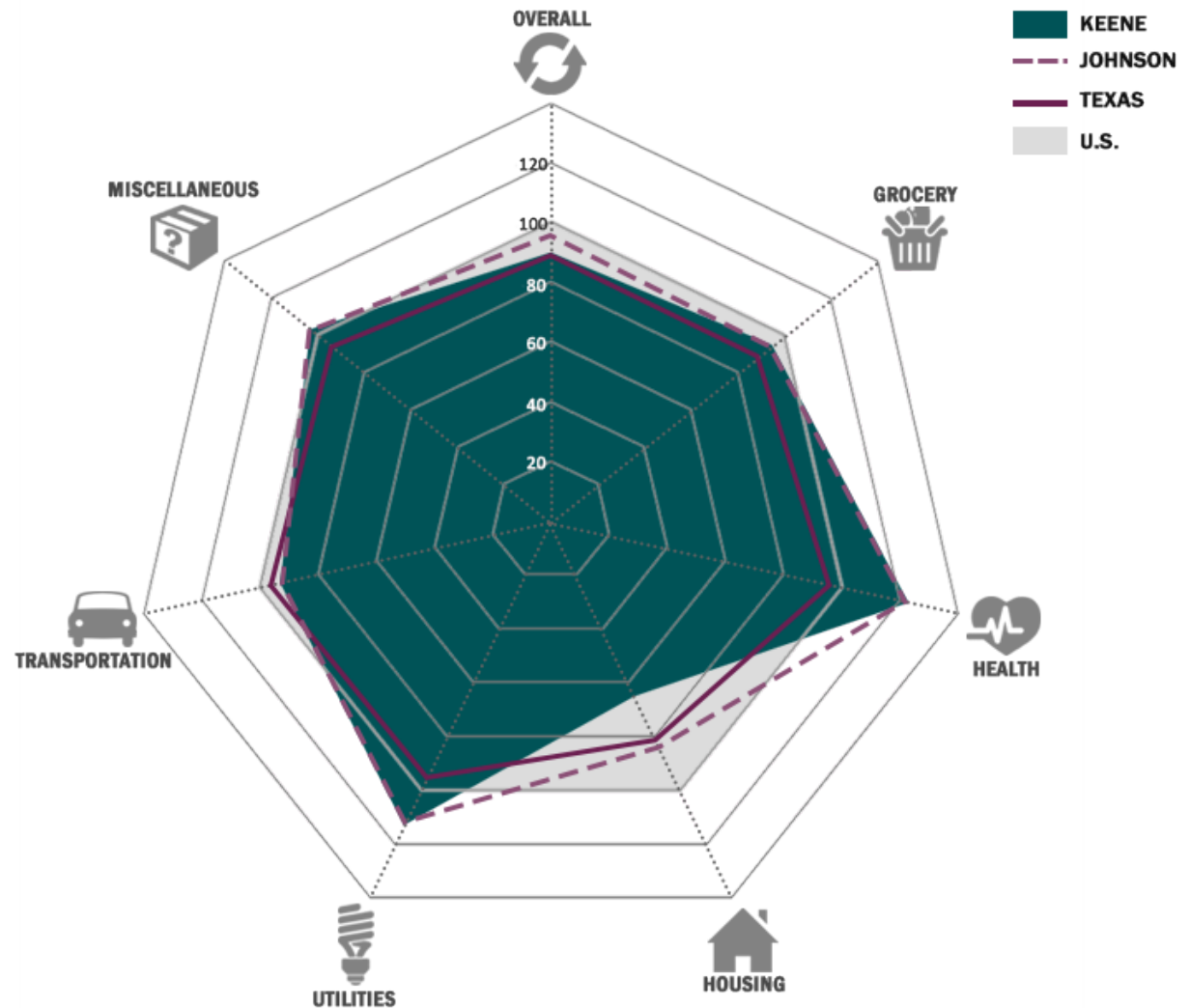
They are more price-sensitive and cautious regarding debt, are therefore are turning to a new set of services that provide access to products without the burdens of ownership; they tend to prefer carpooling and renting over buying. Also, millennials are more likely to value experience, health and wellness; they are traveling more, attending more events, exercising more, eating smarter, and smoking less than the previous generation.

These characteristics of millennials can also be found in the Keene Student Survey (Appendix A-5). For the question “If there were two things you would like the City of Keene to do to serve you better, what would they be?”, most of their responses focused on access to healthy foods, various retail, and a healthy environment.

Cost of Living

In recent years, major metropolitan areas in Texas and the state of Texas itself have been supreme regarding cost of living and affordability. Texas had the 9th lowest cost of living in the United States for 2016 (Missouri Department of Economic Development).

Keene provides relatively affordable housing and overall items than neighboring cities and Johnson County as a whole, including more affordable food, health, housing, and transportation (Figure 9-3).



Cost of Living	Keene	Alvarado	Joshua	Cleburne	Burleson	Johnson County	Texas	United States
Overall	90	85	97	87	96	96	90	100
Grocery	95	95	95	95	95	95	90	100
Health	123	123	123	123	123	123	97	100
Housing	65	50	86	55	84	85	82	100
Utilities	113	113	113	113	113	113	96	100
Transportation	93	93	93	93	93	93	97	100
Miscellaneous	103	103	103	103	103	103	95	100

Figure 10-3. Cost of Living Comparison (Sperling's Best Places, 2016)

- Overall: The total of all cost of living categories weighted subjectively as follows: housing (30%), food and groceries (15%), transportation (10%), utilities (6%), health care (7%), and miscellaneous expenses such as clothing, services, and entertainment (32%). State and local taxes are not included in any category.
- Grocery: The average cost of food in grocery stores in an area
- Health: The average cost of health care calculated using the standard daily rate for a hospital room, and the costs of a doctor's office visit and a dental checkup
- Housing: The average cost of an area's housing, which includes mortgage payments, apartment rents, and property tax
- Utilities: The average cost of heating or cooling a typical residence for the area, including electricity and natural gas
- Transportation: The average cost of gasoline, car insurance and maintenance expenses, and mass transit fare for the area. The cost of the vehicle and any vehicle registration and license taxes are not included
- Miscellaneous: The cost index of those goods and services not included in the other cost of living categories, including clothing, restaurants, repairs, entertainment, and other services

Economic Condition

The Economic Development Administration (EDA) determines eligibility and investment rates of applicants based upon defined measures of economic distress. An applicant's eligibility is primarily based on their ability to demonstrate that the geographic area of impact for a proposed project has: 1) an employment rate for the most recent 24-month period that is at least one percent greater than the national level, 2) per capita

income that is 80 percent or less of the national average per capita income; 3) a designation as a Special Impact Area by EDA.

Based on EDA's primary criteria to measure economic distress, the fundamental economic conditions in Johnson County are shown in good standing (Table 10-1).

Table 10-1. Johnson County's Economic Distress Condition

Economic Distress Criteria	Threshold Standard	U.S.	Johnson County	Johnson Threshold Comparison
24-month Average Unemployment Rate (BLS, period ending in December 2016)	One percentage point above national average	5.1%	4.3%	-0.8%
2015 Per Capita Money Income (ACS)	80% or less of US average	\$28,930	\$25,310	87.5%
2015 Per capita personal Income (BEA)	80% or less of US average	\$48,112	\$38,533	80.1%

10.2

JOHNSON COUNTY'S ECONOMIC STATUS: DFW REGION

Johnson County had 36,399 employees and 2,686 business establishments in 2014 (Figure 10-4). Total employment grew by 4% with a gain of 1,399 jobs over the course of one year (2013 to 2014). Moreover, Johnson County grew by 30% in employment over 10 years (2004 to 2014); the largest growing industry was Support Activities for Mining, a gain of 2,502 jobs. Detailed data of each industry is available in Appendix D.

The average annual wage for Johnson County was \$41,633 in 2014. This is 74% of the average wage of the Dallas-Fort Worth region (\$56,381) and 78% of the average wage of Texas as a whole (\$53,218) (Figure 10-5). While Keene should seek industries that pay above the average wage for the area, it should be noted that Johnson County's average pay can be presented as a cost advantage to potential employers.

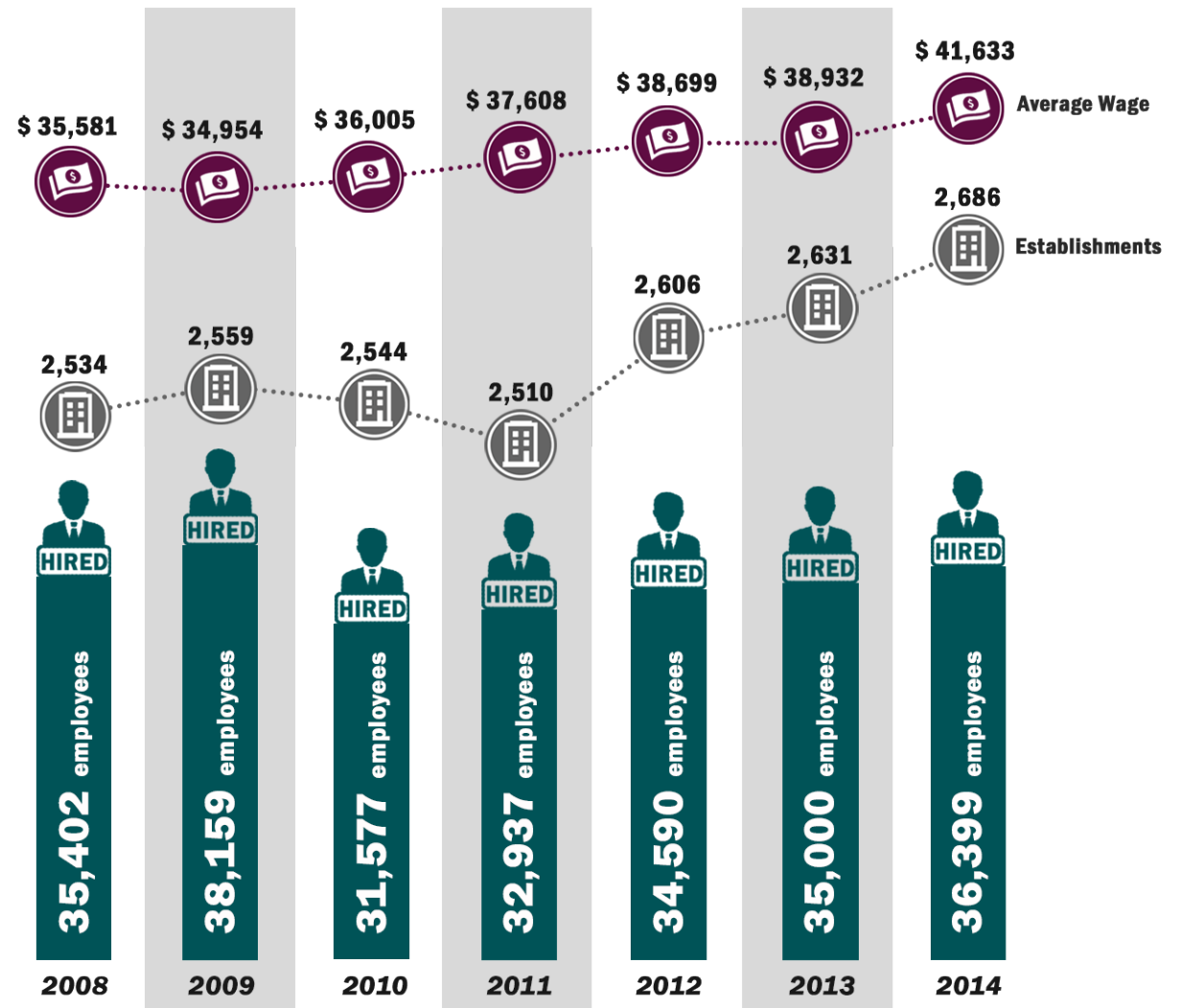


Figure 10-4. Employments in Johnson County (U.S. census and BLS)

Economic Analysis for Johnson County.....

Job creation, whether stemming from new or existing business, is most likely to be linked to the economic strengths or growth poles of each region. The most basic, but primary analysis for exploring the importance of regional comparative advantage in job creation is location quotients and shift-share analysis. These two analytical tools help to identify patterns within the local economy as noted below.

Location Quotient (LQ)

LQ, sometimes called the concentration factor, is a technique used to identify the concentration of an industry sector in a local economy relative to a larger reference economy. It is shown as a ratio between the percentage of employment in an industry locally to the percentage of employment in the same industry in the region, state, or nation (Leigh & Blakely, 2013). For example, an LQ of 1.5 indicates that the local industry has 50% more jobs per capita than the reference area, i.e. the Dallas-Fort Worth region for this report.

Shift-Share

Shift-share is a major tool for the analysis of dynamic changes in a local economy by growth rate, industry mix effect, or differential shift. Differential shift, also called local share effect, is the most popular tool for shift-share analysis, and provides an indication of the competitive advantage of the local economy (Leigh & Blakely, 2013).

To identify Johnson County's competitive advantage in the Dallas-Fort Worth region, the IUS research team applied LQ and differential shift analysis with respect to the DFW region and provided matrices of LQ as well as 5-year and 10-year differential shifts of Johnson County. Figure 10-6 shows how to interpret the produced matrix from LQ and Shift-share analysis.

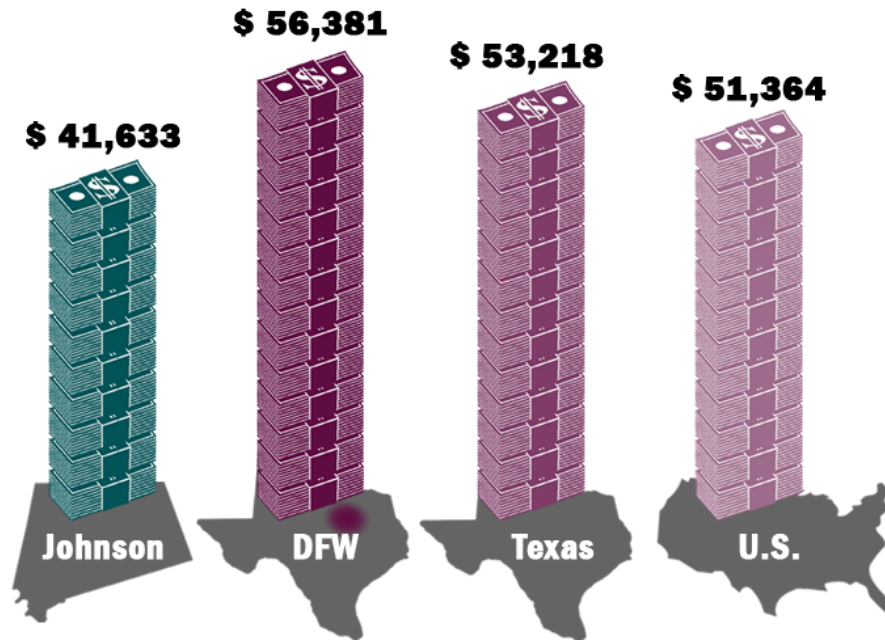


Figure 10-5. Average Wage Comparison (BLS, 2014)

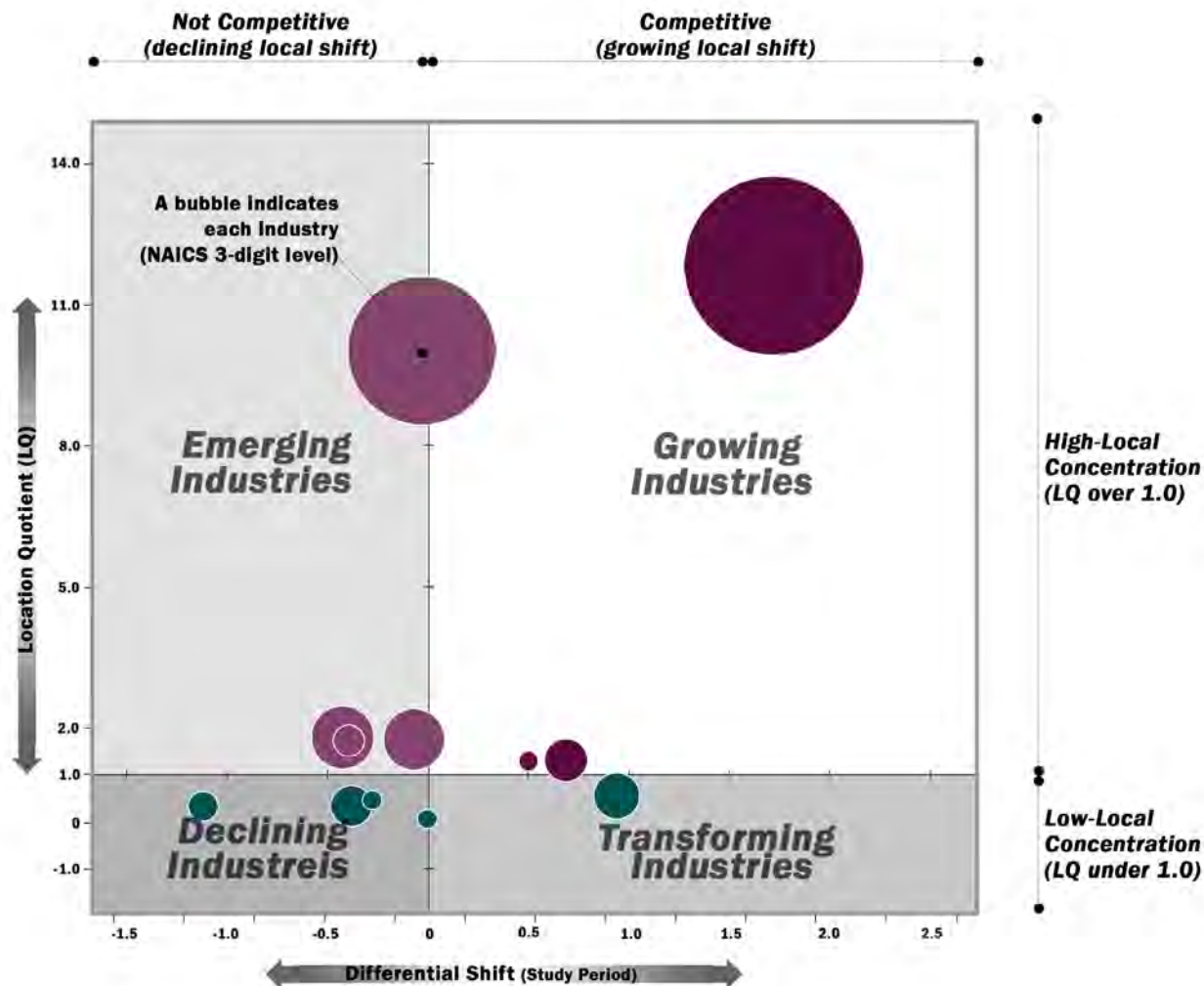


Figure 10-6. How to interpret LQ and Shift-Share Matrix (Source: Leigh & Blakely, 2013 and Texas Workforce Commission)

Over the course of 5 years (2009-2014), the Johnson County economy showed significant growth in employment strength in the areas of Nonmetallic Mineral Product Manufacturing, Rental and Leasing Services, Food and Beverage Stores, Chemical Manufacturing, Truck Transportation, and other industries as seen in Figure 10-7. Also, Oil and Gas Extraction, Mining (Except Oil and Gas), Support Activities for Mining, Utilities, and other industries have been emerging in Johnson County with competitive strength relative to the DFW region.

Over the course of 10 years, several industries in Johnson County that were identified as emerging industries in the 5-year analysis seemed to have competitive growth strength in the same industries as the DFW region (Figure 10-8). Two significant industries among them are Support Activities for Mining and Oil and Gas Extraction. Support Activities for Mining had the largest local share effect (247.6 of differential shift) and a higher local concentration (14.5 of LQ) as compared to the DFW region, and employees in the industry are paid more than the average wage of the DFW region.

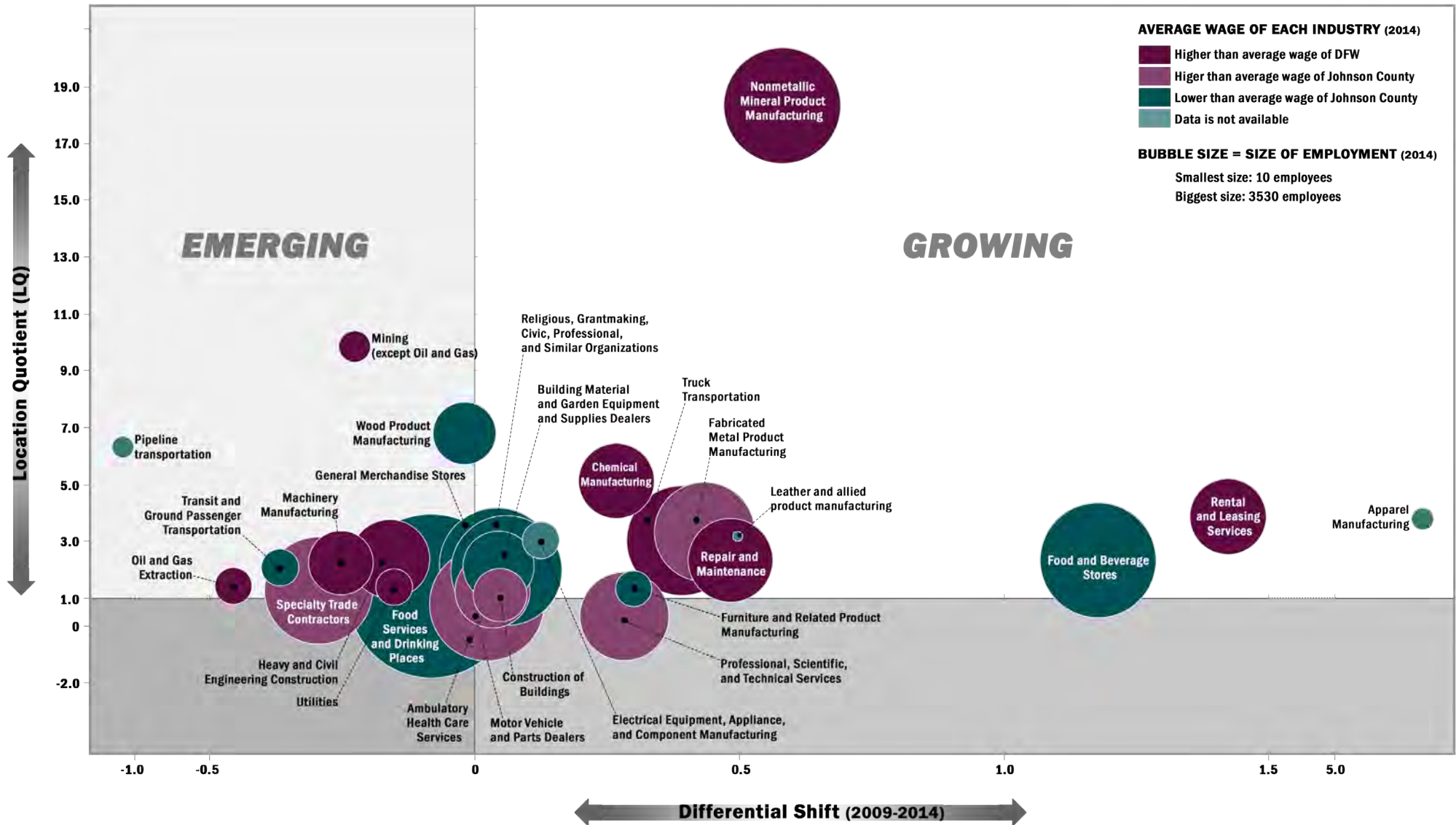


Figure 10-7. Growing and Emerging Industries in Johnson County (2009-2014) with respect to DFW

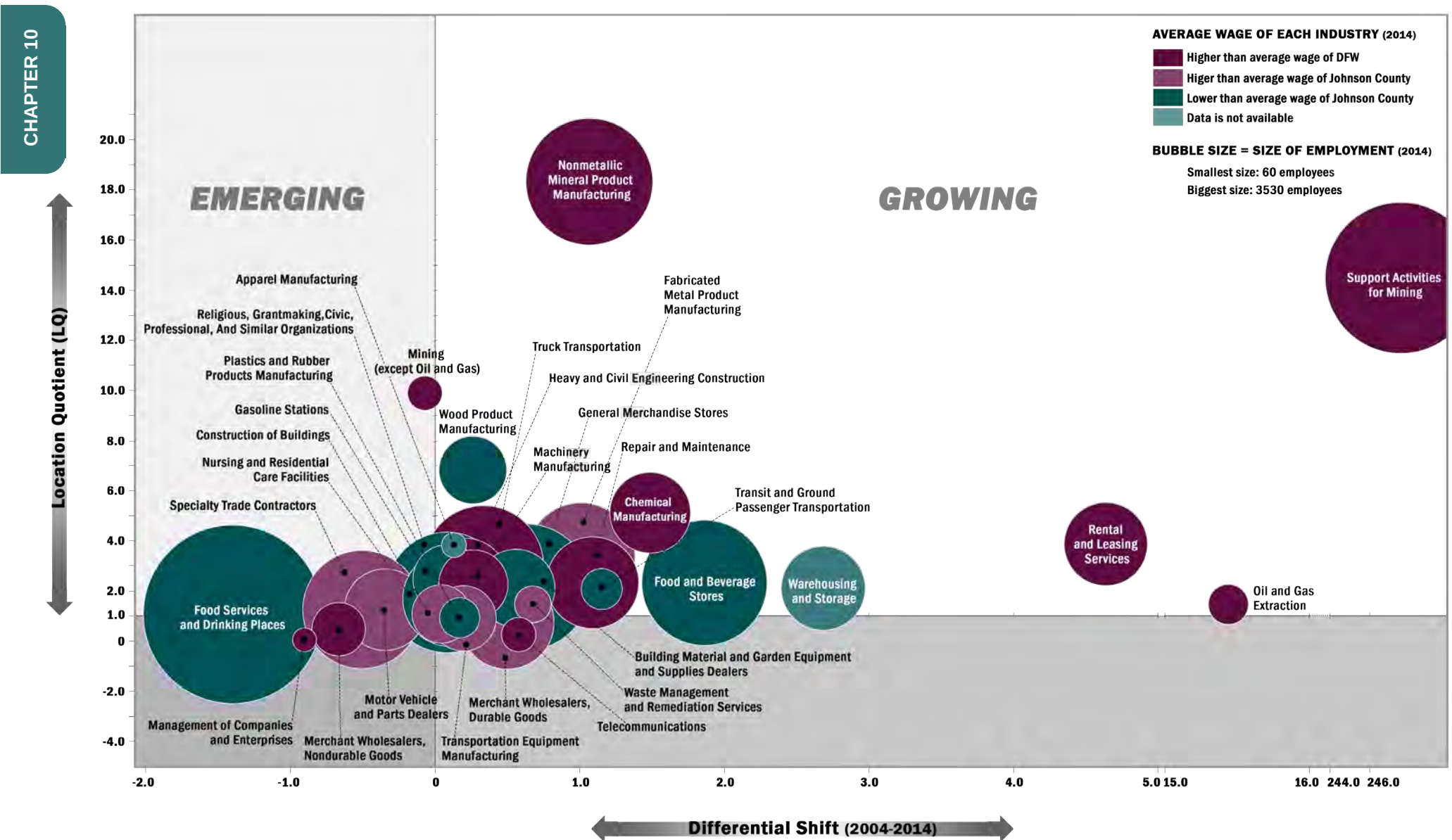


Figure 10-8. Growing and Emerging Industries in Johnson County (2004-2014) with respect to DFW

By synthesizing information of LQ, local share effect, and the average wage of each industry, the IUS team determined eight industries to focus on. Seven industries are already dominant industries, and one industry has potential growth power (Table 10-2). Dominant industries have a strong concentration ($LQ > 1$) of employees with high wages (higher than the average wage of DFW) as well as high local share effect (Differential Shift > 0). Attractive industries do not have a strong local concentration yet, but they do have a high local share effect with higher wages than DFW.

Dominant industries include Oil and Gas Extraction, Support Activities for Mining, Chemical Manufacturing, Nonmetallic Mineral Product Manufacturing, Truck Transportation, Rental and Leasing Service, and Repair and Maintenance. The Support Activities for Oil and Gas Operations industry is the largest job creation sector in dominant industries for the Johnson County economy. It provided 2,457 jobs in 2014, and it comprised 6.8% of total jobs in Johnson County with 32% higher wages than the DFW average.

Moreover, several other dominant industries are related with oil and gas business. For example, the major industry of Rental and Leasing Services consists of construction, mining, and forestry machinery and equipment rental and leasing. Additionally, 76% of jobs in the Repair and Maintenance industry were provided by

commercial and industrial machinery and equipment repair and maintenance establishments.

The second dominant industry is Truck Transportation with 1,137 employees. Its detailed sub-industries are local specialized freight trucking (491 employees) and long-distance specialized freight trucking (646 employees).

An attractive industry is Telecommunication. The major industry is Wired Telecommunications Carriers within the Telecommunication sector. Approximately 126 jobs were provided with an average wage of \$69,113.

These industries are job sectors providing cost benefits with high wages, and are critical to Johnson County's wealth creation. They can appeal to potential employers and employees in the overall DFW region including Keene residents, and can also entice economic developers.

Category	NAICS	Description	Industries Details			
			Major Subindustry	Paid employees	Total establishments	Average wage (2014)
Dominant Industry	211	Oil and Gas Extraction	Crude Petroleum and Natural Gas Extraction	175	11	\$100,534
	213	Support Activities for Mining	Support Activities for Oil and Gas Operations	2,457	36	\$74,168
	325	Chemical Manufacturing	Explosives Manufacturing	375	1	\$61,392
			All Other Miscellaneous Chemical Product and Preparation Manufacturing	175	2	
	327	Nonmetallic Mineral Product Manufacturing	Other Concrete Product Manufacturing	375	3	\$65,995
			Mineral Wool Manufacturing	375	4	
	484	Truck Transportation	Specialized Freight (except Used Goods) Trucking, Local	491	23	\$69,264
			Specialized Freight (except Used Goods) Trucking, Long-Distance	646	15	\$63,432
	532	Rental and Leasing Services	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	617	5	\$84,537
	811	Repair and Maintenance	General Automotive Repair	147	35	\$35,668
			Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	494	29	\$98,683
Attractive Industry	517	Telecommunications	Wired Telecommunications Carriers	126	12	\$69,113

Table 10-2. Significant and Potential Industries in Johnson County

10.3

CITY OF KEENE ECONOMIC STATUS: JOHNSON COUNTY

The City of Keene includes many industries and business developments of varying magnitude. The main service centers are education and health care facilities. There are a number of reasons for these two leading services. The City of Keene hosts a private university, Southern Adventist University, located near the city center, and health services, particularly nursing, have been prevalent for many years.

The university has a great presence within the city; it was established over one hundred years ago with a campus size of over 150 acres. The effect of the university creates a compelling demographic profile as it is comprised of well-educated faculty, staff, and students. In a similar way, health facilities also create certain socio-demographic profiles that result in a number of growth opportunities, particularly the local economy.

The IUS team used zip code information, specifically 76059, in regard to economic development analysis (Figure 10-9). This zip code includes most of the city limits with the exception of a few agricultural industries added in the analyses.

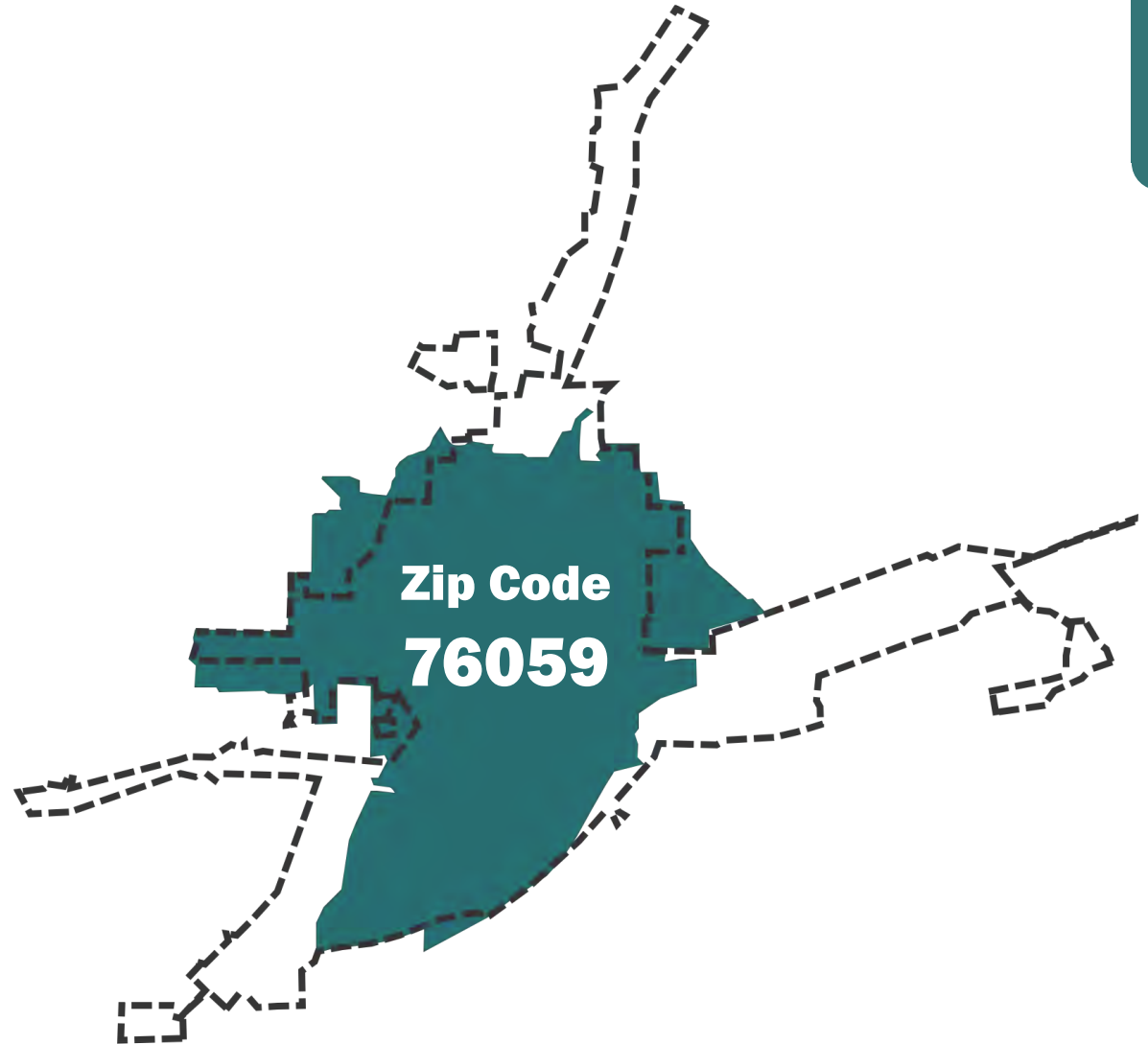


Figure 10-9. Keene Economic Analysis Area (Zip Code 76059)

Table 10-3 lists the industries by employment size in the City of Keene. Nursing and Residential Care Facilities, Educational Services, and Accommodation are the top 3 largest industries in the city as of 2014.

Fabricated Metal Product Manufacturing, Credit Intermediation and Related Activities, and General Merchandise Stores are businesses with large employment.

Table 10-3. Industries by Employment Size in Keene (U.S. Census, 2014)

NAICS	Description	Paid employees	Total establishments
623	Nursing and Residential Care Facilities	299	4
611	Educational Services	212	3
721	Accommodation	175	1
332	Fabricated Metal Product Manufacturing	38	2
522	Credit Intermediation and Related Activities	35	1
452	General Merchandise Stores	22	2
561	Administrative and Support Services	20	3
621	Ambulatory Health Care Services	19	4
624	Social Assistance	17	2
213	Support Activities for Mining	15	1
238	Specialty Trade Contractors	15	4
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	15	1
423	Merchant Wholesalers, Durable Goods	10	2
722	Food Services and Drinking Places	10	4

Table 10-4. Subindustries of Keene's Top 3 Largest Industries (U.S. Census, 2014)

NAICS Code (3-digit)	NAICS Code (5-digit)	Industry Description	Establishment	Employment Size					
				1-4	5-9	10-19	20-49	50-99	100-249
623	623110	Nursing Care Facilities (Skilled Nursing Facilities)	2				●		●
	623210	Residential Intellectual and Developmental Disability Facilities	1			●			
	623312	Assisted Living Facilities for the Elderly	1					●	
611	611110	Elementary and Secondary Schools	1				●		
	611310	Colleges, Universities, and Professional Schools	1						●
	611620	Sports and Recreation Instruction	1	●					
721	721211	RV (recreational vehicle) parks and campgrounds	1						●

Location Quotients

Table 10-5 summarizes the location quotients of many industry sectors for the City of Keene. Location Quotients are used to compare the frequency of the presence of certain industries within certain locations with the frequency of the same businesses within a larger context, such as county or state. A location quotient of 1 demonstrates that the business has the same concentration within a local context as a greater context, such as the U.S. If it is less than 1, it represents that the business is less concentrated locally, and above 1 represents a higher concentration in a local context than the U.S.

Location Quotient Highlights

- Companies with Support Activities for Mining, Accommodation, Educational Services, and Nursing and Residential Care Facilities are located in the City of Keene at a much greater concentration than the nation.
- Performing Arts, Spectator Sports and Related Industries, Fabricated Metal Product Manufacturing, Real Estate, and Social Assistance are at slightly higher concentrations than the nation overall.
- Non-Metallic Mineral Product Manufacturing, Food Services, Repair And Maintenance, and Truck Transportation exist much less frequently in the City of Keene.
- Similarly, Merchant Wholesalers, Health and Personal Care Stores, Sporting Goods, Hobby, Book Stores, and Utilities sectors are slightly less concentrated in the City of Keene.

Table 10-5. Location Quotients of Industries in Keene

NAICS Code	NAICS Code Description	LQ (2014)
721	Accommodation	67.72
213	Support Activities for Mining	44.12
623	Nursing and Residential Care Facilities	11.84
611	Educational Services	10.01
711	Performing Arts, Spectator Sports, and Related Industries	5.88
332	Fabricated Metal Product Manufacturing	1.80
522	Credit Intermediation and Related Activities	1.75
531	Real Estate	1.72
624	Social Assistance	1.33
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	1.28
221	Utilities	0.94
446	Health and Personal Care Stores	0.72
451	Sporting Goods, Hobby, Book, and Music Stores	0.61
423	Merchant Wholesalers, Durable Goods	0.57
713	Amusement, Gambling, and Recreation Industries	0.56
561	Administrative and Support Services	0.56
452	General Merchandise Stores	0.55
524	Insurance Carriers and Related Activities	0.46
621	Ambulatory Health Care Services	0.36
541	Professional, Scientific, and Technical Services	0.34
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	0.33
238	Specialty Trade Contractors	0.22
484	Truck Transportation	0.13
811	Repair and Maintenance	0.12
722	Food Services and Drinking Places	0.10
327	Nonmetallic Mineral Product Manufacturing	0.08

In this section, we will present a distinction of the aforementioned industries by discovering the significance of regional comparative benefits in job creation. Job opportunities of various capacities are provided by numerous regional economies.

The role of regional comparative benefits in job creation is an important factor. Job creation, whether from newly initiated or existing industries, tends to be connected to the economic assets of each location. Many future job opportunities will derive from the same businesses they originated from. The structure and amount of job development might change depending on a series of dynamics, many of which are outside of our scope of research.

There are four essential approaches that job creation configurations may adjust in a regional economy:



Change in regional economy benefits, such as the discovery of new oil deposits or the exhaustion of water resources.

Transformations in infrastructure and regional comparative advantages can alter the structure of employment growth.



Climatic externalities, such as floods, droughts, or other kinds of natural disasters.

The last drought in Texas not only affected farmers and ranchers, but also adversely impacted businesses within the industry supply chain.



Adjustments in governing political climate or control policy, such as necessity for national auto fuel economy, emissions standards, and renewable energy incentives.

Each business is not similarly influenced by governmental rule; however, these standards and assets may have a chief impact on local job growth.



Relocation of services.

Many displacements are particularly effective in smaller groups. A terminating company that employs several local suppliers might have an effect on a local economy.

Wells Fargo mentioned that the main industries that indicated the greatest job growth for total employment in the U.S. over the last two decades were health care and social assistance, professional and technical services, finance and insurance, and administrative and waste services (Wells Fargo, 2011). These industries yield increasing job opportunities in the City of Keene, as well as all over Texas. According to the Wells Fargo research team, this trend should translate into future overall job growth in the nation.

Economic Analysis for City of Keene

The Location Quotient Matrices in Figures 10-10 and 10-11 demonstrate concentrations of employees categorized by industry in various essential locations within the City of Keene.

Figure 10-10 illustrates the differential shift between 2009 and 2014, whereas Figure 10-11 illustrates a 10 year differential shift between 2004 and 2014. The matrices indicate four different labor market aspects of the City of Keene industry and business policy creators familiar to economic development.

Location quotient measurement is presented along the X axis. A location quotient classifies the focus of employees in a business for a location compared with the larger scale region, such as county or nation.

Businesses on the right side of the matrix have a particularly high focus of qualified employees relative to the rest of the nation. Businesses on the left side of the matrix have a particularly low focus of qualified employees relative to the rest of the nation.

The matrices demonstrate the industries with the highest and lowest comparable concentrations, illustrating which business developments in the City of Keene have comparative services or disservices. The vertical line inside each matrix designates average location quotient. While the

average location quotient score is 1.0, this matrix is calculating the location quotient scores logarithmically to demonstrate the change. Therefore, businesses to the right of the vertical line have specifically high concentrations of employees. In short, a large location quotient is equal to comparative advantage.

Employee size of a business (derived from 2014 data) is demonstrated by the size of the business' bubble. Hence, the larger the bubble, the more employees are attributed to that business (the employee range is between 2 and 299 in the Keene Location Quotient Matrix). The bubbles also show where essential businesses show up in the matrix. Change in the trend of the industry through employment growth or shrinkage is demonstrated by the color of the bubble.

A few specific industries have been expanded upon below to further explain the matrices.



Nursing and Residential Care Facilities

Nursing and residential facilities have particularly high concentrations of employees in Keene. Therefore, this industry has a high location quotient, which places it on the right side of the matrix.

Additionally, nursing and residential care facilities have average weekly wages well above the state average that places it high in the upper half of the matrix. The darker shade of the bubble denotes an increasing growth, as it is a consistently growing

business sector in the City of Keene. There are 4 nursing and residential care facilities in the city, with 299 employees within those facilities.



Educational Services

The educational industry employs a large number of people as well, which also aligns closely with the national average for this industry. However, Keene provides a comparative advantage in educational services due to hosting Southern Adventist University. The university has close to 3,000 students and more than 200 staff members, with the student number continually climbing each year. It is represented in the matrix as a lighter colored bubble as it is an emerging business sector in the City of Keene. Educational services are located in 3 facilities with 212 employees.



Religious, Grantmaking, Civic, Professional, and Similar Organizations

This industry has low concentrations of employees in the City of Keene. This business sector has a relatively small location quotient, therefore, its bubble is located on the left side in the matrix. Keene does not have a very strong comparative advantage in the religious, grantmaking, civic, professional, and similar organization sector. It is represented as a green bubble which shows that this industry lost a number of jobs between 2009 and 2014. There is only one location within the religious, grantmaking, civic, professional, and similar organizations category with 15 employees as of 2014.

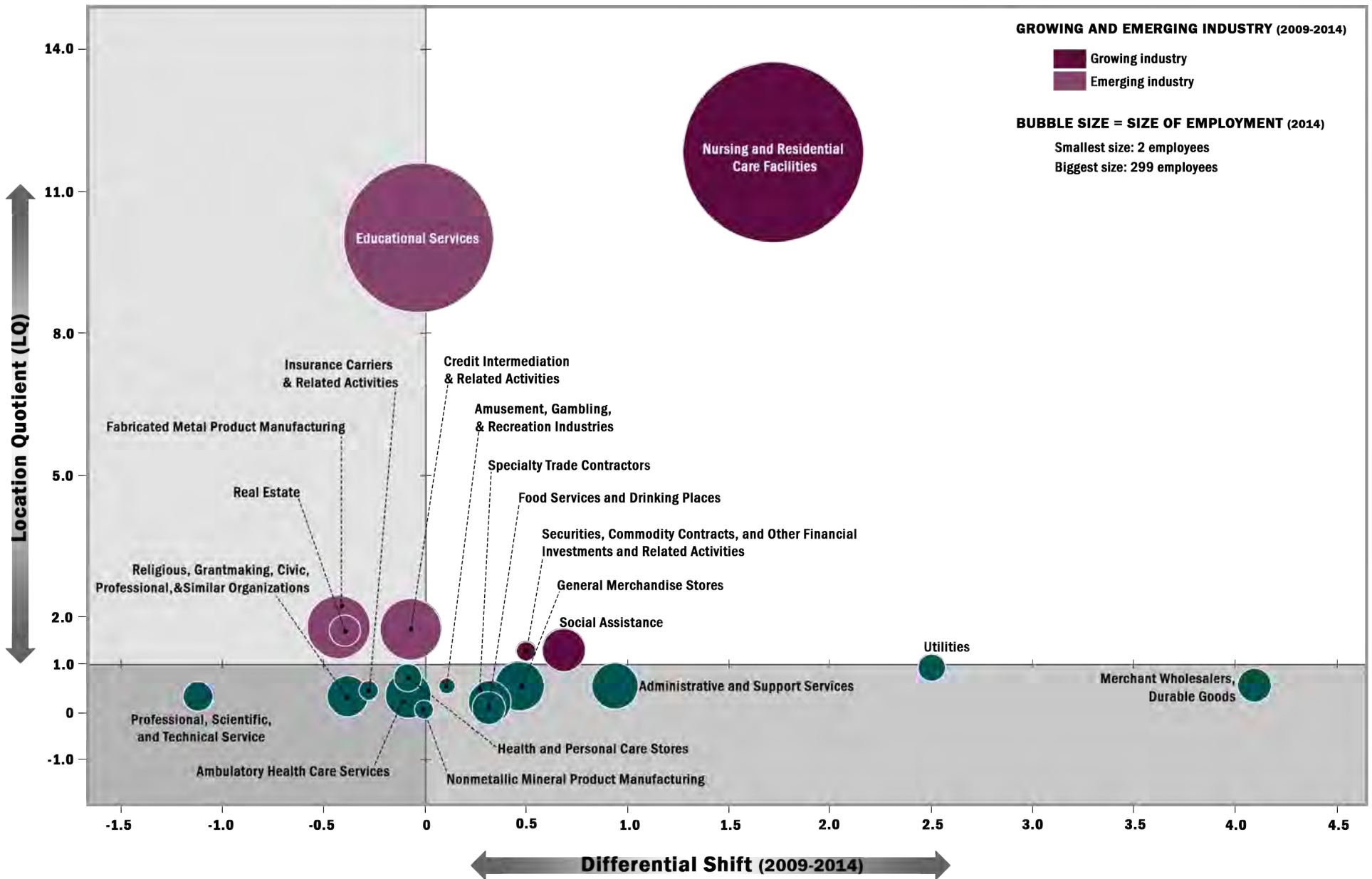


Figure 10-10. Keene Location Quotient Matrix (Differential Shift 2009-2014)

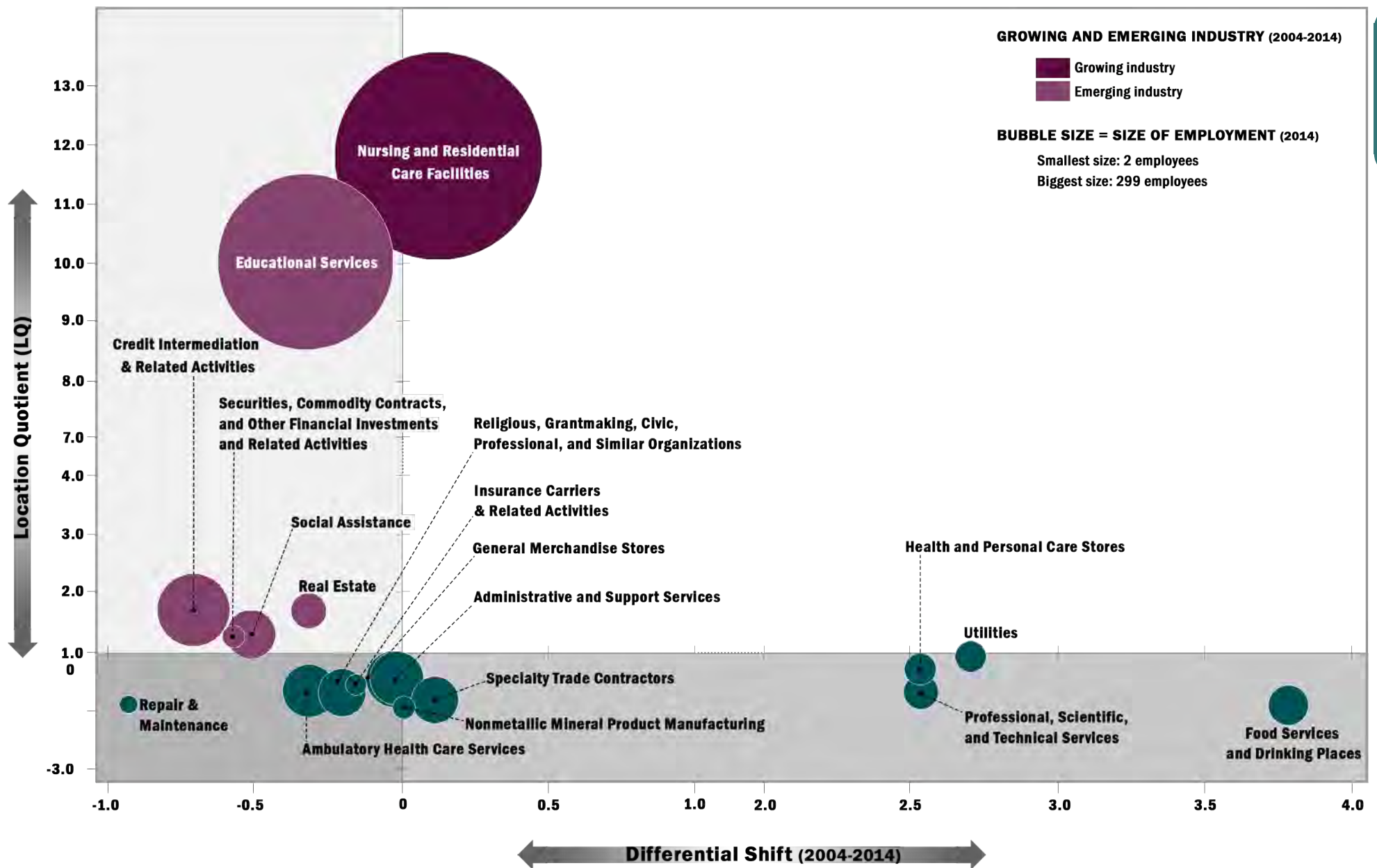


Figure 10-11. Keene Location Quotient Matrix (Differential Shift 2004-2014)

The 10-year matrix in Figure 10-11 can be interpreted in the same way as the 5-year matrix in Figure 10-10. It is necessary to compare two Location Quotient Matrices because the 10-year matrix provides an overall, comprehensive profile for the business sectors in the City of Keene while the 5-year matrix highlights recent industry patterns for the city. For example, Nursing and Residential Care Facilities are shown with relatively the same employee size. However, its location on the 10-year Location Quotient Matrix is different; instead of this industry showing dominance like in the 5-year Location Quotient Matrix, it is in an emerging status in the 10-year Location Quotient Matrix.

Educational Services is moving from an attractive/emerging business sector to a growing business sector in both Location Quotient Matrices. The Social Assistance industry has been increasing in terms of employees, however this industry is becoming more attractive rather than dominant in the City of Keene. Similarly, the Securities, Commodity Contracts, and Other Financial Investments and Related Activities industry is also becoming more attractive instead of dominant when the 5-year and 10-year Location Quotient Matrices are compared.

10.4

BEST PRACTICES

Allendale, SC

Allendale, South Carolina has hosted the University of South Carolina Salkehatchie since 1965.

After an extended period of high unemployment and poverty, Allendale established a regional leadership institute to prepare emerging leaders with the abilities to change the community's fortunes. The city's economy – built on pass-through tourism – was created in the 1960s when Interstate 95 was built 35 miles east of the town. In 1997, the Chamber of Commerce suggested a partnership with South Carolina's Downtown Development Association and state officials for a strategic planning implementation. A lack of leadership was recognized as one of the region's most noticeable issues.

In response, public and private sectors came together to create the Salkehatchie Leadership Institute in 1998. The institute has since trained nearly 2,000 leaders who have gone on to become elected officials or leaders in the field of community and economic development.

Allendale's primary role was to create a regional leadership development program. Several elected officials from Allendale identified the local branch campus of the University of South Carolina as a possible partner in creating this program. Allendale's mayor approached administrators at USC-Salkehatchie, located in Allendale, about hosting a leadership course on campus. From this conversation, the Salkehatchie Leadership Institute emerged.

Allendale, SC	
Population (2010)	3,482
Total budget (2016)	\$N/A
Number of companies (2010)	72
Total housing (2010)	4,448
Median household income (2010)	\$10,433
Poverty rate (2010)	41%
Strategic approach	Regional leadership near university



Figure 10-12. Allendale, SC

(http://www.townofallendale.sc.gov)



WHAT ARE THE LESSONS FROM THE CITY?

- **Leadership development is economic development.**

Allendale's strategy brought in new and well-connected leaders, many of whom became influential in initiating local community and economic development efforts. Indeed, the institute approximates that almost \$10 million in grant funding has been awarded to projects in Allendale because of the initiative of new local leaders. In many rural communities where leaders are few and far between, a capacity building strategy such as leadership development can be a viable strategy for long-term economic development.

- **Leadership development can be a tool for bridging social divides.**

Developing new leaders in small towns is one way to begin dealing with challenging concerns that could be standing in the way of development. The Salkehatchie Leadership Institute was an incubator for a diverse community development organization called Allendale County ALIVE. ALIVE initiated a local process to openly address race and seek community-wide solutions to issues.

- **Local colleges are assets for small town community and economic development.**

The Salkehatchie Leadership Institute was established through a partnership of Allendale, neighboring towns, the state, and the University of South Carolina. Housing the institute on a local campus was helpful, both in terms of fortifying funding for the program and access to professional expertise in the field of leadership development. Local leaders can look to local or regional higher education institutions to support their town's efforts to develop local leaders or create new businesses.

Fairfield, IA

Fairfield, IA	
Population (2010)	9,464
Total budget (2016)	\$N/A
Number of companies (2010)	1,927
Total housing (2010)	4,288
Median household income (2010)	\$37,162
Poverty rate (2010)	17.3%
Strategic approach	Entrepreneurial development near university

Fairfield is located in southeastern Iowa, and the city has become distinguished as one of the nation's most entrepreneurial small towns. Residents mention the town as the entrepreneurial capital of Iowa. A decade ago, the National Center for Small Communities called Fairfield the top entrepreneurial small city in America by presenting it the foundational Grass Roots Entrepreneurship Award. The former president of the Fairfield Entrepreneurs Association noted that success comes when "you return to your entrepreneurial roots and you focus on establishing entrepreneurial networks and relationships."

This situation has been Fairfield's key strategy. The results comprise 2,000 new jobs, \$250 million in new investments, and the creation of a civic infrastructure.

The city hosts the Mahirishi University, now the Maharishi University of Management (MUM), and is the place of establishment of His Holiness Maharishi Mahesh Yogi, who wanted followers of his inspirational meditation practice to be well educated. The original mission of the university was to fulfill a philosophy of shared consciousness into traditional academic subjects. Over time, the university curriculum has evolved into an emphasis on the practical value of gaining deep knowledge and experience. Currently, the university offers graduate-level degrees in teaching, computer science, business, and management.

The campus is accredited at the bachelors, masters, and doctoral levels by the North Central Association of Colleges and Schools, and it attracts a diverse student body hailing from over 60 countries. Thus, Fairfield is a blossoming small town in the rural Midwest with 150 years of history in entrepreneurship, innovation, and higher education. Three decades of traditional Midwestern values with the diverse student population from the university has led to a contemporary culture that, by and large, values creativity and civic engagement.



Figure 10-13. 1st Fridays Art Walk at Fairfield, IA



WHAT ARE THE LESSONS FROM THE CITY?

- ***Inviting everyone's talent to the table to address critical community issues.***

Accepting cultural diversity is a critical phase in the development of generating a fascinating community vision. The integration of the university "outsiders" into the cultural fabric of Fairfield has been a long and difficult process. Pervasive cultural partitions must be coped with when a community is to move onward. Strong leadership is significant to crossing the divide.

- ***Build an economy from a community's existing assets.***

Fairfield's urgencies are associated with the practical authenticities of small-town America. Fairfield does not compete on the basis of having the cheapest labor and location. The city took a very extensive view of its assets, which include small-town character and work ethic and an entrepreneurial culture. Fairfield demonstrates that an attention to building from the community's current assets is a valid strategy.

- ***Community development propagates economic development and vice versa.***

Conventionally, community development is viewed as the establishment of infrastructure (largely by the public sector), and economic development is viewed as the creation of jobs and investment. When the two are viewed as having similar ends, synergies can raise a community's standard of living beyond what would have been possible otherwise. In a similar way, Fairfield has created a cultural infrastructure that helps to keep and energize entrepreneurs. Job opportunities increase and the tax base expands as well as the formation of recreational, cultural, and civic facilities.

San Marcos, TX

San Marcos, TX	
Population (2010)	44,894
Total budget (2016)	\$N/A
Number of companies (2010)	3,544
Total housing (2010)	22,473
Median household income (2010)	\$28,923
Poverty rate (2010)	37%
Strategic approach	Downtown development near university

San Marcos is located within the Austin-Round Rock-San Marcos metropolitan area and the city is known to be one of the oldest inhabited sites in the Americas. The city is home to Texas State University and the Meadows Center for Water and the Environment. The city was listed in Business Week's survey for the Best Place to Raise Your Kids (September News Archive, 2014). In 2013, the city was named as the fastest growing city in the U.S. by the United States Census Bureau (September News Archive, 2014).

The city is highly collaborative with Texas State University regarding topics including economic development and downtown development. The partnership has been working to envision stronger retail and entertainment offerings along the University's edge, and developed improved infrastructure plans for roadways and storm water management. University students, faculty and staff, as well as everyday residents and visitors benefit from partnerships between the City and the University (Downtown Master Plan, 2008).

Therefore, in undertaking downtown neighborhood improvements, San Marcos has the opportunity to further enhance its relationship with Texas State University. The City of San Marcos has the opportunity to partner with the



Figure 10-14. Downtown San Marcos, TX

(<http://www.smtxphotos.com>)

University to bring new cultural events to the community (Downtown Master Plan, 2008). The City may also influence student-oriented development in the downtown neighborhoods closest to campus, strengthening friendly "town-gown" connections that improve San Marcos' overall identity.



Town and Gown

Town and gown are two distinct communities of a university town; "town" being the non-academic population and "gown" metonymically being the university community, especially in ancient seats of learning such as Oxford, Cambridge, Edinburgh, Aberdeen and St Andrews, although the term is also used to describe modern university towns as well as towns with a significant public school. The metaphor is historical in its connotation but continues to be used in the literature on urban higher education and in common parlance.



WHAT ARE THE LESSONS FROM THE CITY?

• **Public Transit**

Currently, the Capital Area Rural Transportation System (CARTS) offers a fixed-route facility for the City of San Marcos. This service is known as CARTS Around Town, or CAT, and is an asset for mobility in San Marcos. Several routes service the downtown and Texas State University, and these routes offer connections to destinations such as the outlet mall and high school (Downtown Master Plan, 2008). The CARTS service links to bicycle routes that are being planned near stations. Texas State University runs a student bus service that connects areas of San Marcos with large student populations to the University. This bus system also services Texas State University students who live in outlying communities such as Austin (Downtown Master Plan, 2008).

• **Downtown Business Development**

The City of San Marcos has the chance to support the renovation and redevelopment of existing office spaces downtown, in addition to new, and infill constructions (Downtown Master Plan, 2008). As the County vacates the justice center, annex, and records building, and as the Post Office relocates, an opportunity for reusing these spaces toward accommodation of new businesses is offered. Even though the retail market is nearly saturated in San Marcos, there remains an opportunity for specialty retail, including dining and entertainment options, to be developed downtown (Downtown Master Plan, 2008). The high demand for office space downtown will increase follow-on demand for supportive retail and commercial businesses. Downtown's best retail opportunities are entertainment, dining, and specialty retail, as those are currently the dominant retailers (Downtown Master Plan, 2008). Demand for this kind of specialty retail in the downtown will grow with the rise in Texas State University enrollment, the addition of office workers downtown, and future residential growth.

Alpine, TX

Alpine, TX	
Population (2010)	5,905
Total budget (2016)	\$N/A
Number of companies (2010)	658
Total housing (2010)	3,115
Median household income (2010)	\$35,941
Poverty rate (2010)	13.7%
Strategic approach	Downtown district plan near university

Alpine is a city in Brewster County, Texas. The city has an elevation of almost 5,000 feet and the surrounding mountain reaches more than a mile high (A Vision for the Future Alpine, 2016). The city has many public facilities such as a hospital, library, and Sul Ross State University.

The city is willing to improve the downtown area that includes the university. The Downtown District is part of the larger Alpine Historic District (A Vision for the Future Alpine, 2016). A first priority for Alpine is to assess the boundaries of the Downtown District to determine pedestrian walking boundaries. Pedestrians will generally walk up to a quarter of a mile or more if an enjoyable streetscape is present.

Residents of Alpine, mainly students of Sul Ross State University, have expressed dissatisfaction with the small amount of weekend/nighttime activities to be found in the city (A Vision for the Future Alpine, 2016). Alpine aims to focus on developing new recreational areas and businesses within the city, while expanding access to the existing recreational opportunities found in the community.



Figure 10-15. Downtown Alpine, TX

Sul Ross State has an enrollment of almost 2,000 students, which is about one-third of the entire population of Alpine. Nearly 1,000 of these students live on campus or in nearby student apartments (A Vision for the Future Alpine, 2016). Student housing on and around Sul Ross State is approximately a mile and a half from downtown Alpine. Alpine would certainly benefit from connecting the student population on and near campus to the Downtown District so that they could patronize businesses there more easily.



WHAT ARE THE LESSONS FROM THE CITY?

- ***Weekend bike rides or races***

Coordinating group bike rides starting near the University and continuing into downtown would provide a social activity for residents and bring more people to downtown. Races could be a competitive activity that would encourage both participants and spectators (A Vision for the Future Alpine, 2016).

- ***Outdoor movie screenings***

Weekly or monthly movie screenings, open to the public, would foster a sense of community and provide a nighttime, outdoor recreational activity. The outdoor space at the proposed special events center could be used for this.

- ***Live performances***

The Theatre of the Big Bend is an established Alpine event, coordinated through Sul Ross State University (A Vision for the Future Alpine, 2016). Establishing a secondary performance arts event through the Theatre of the Big Bend in the Downtown District would add to the downtown environment, and serve as advertisement for the main event. These can be small performances staged at outdoor plazas or parks, or as street theaters occurring on the sidewalks of downtown (A Vision for the Future Alpine, 2016).

- ***Community markets***

An addition to or as a complementary event with the Farmer's Market, a monthly opportunity for vendors to set up shop on main streets would provide an opportunity for the community to gather (A Vision for the Future Alpine, 2016). It would also encourage small local businesses and attract visitors from the surrounding area.

Azle, TX

Azle, TX	
Population (2010)	10,947
Total budget (2016)	\$632,560
Number of companies (2010)	1,023
Total housing (2010)	4,651
Median household income (2010)	\$55,830
Poverty rate (2010)	9.1%
Strategic approach	Downtown development

Azle is a city situated in Parker and Tarrant counties in Texas. The population was 10,947 as of 2010. There are many facilities in the city such as horse trailer loading and marine spectator sports. The city also hosts the Azle Marching Green Pride Band (Profile of General Population, 2017).

There are many business sectors in the city including Azle ISD, Walmart, Harris Methodist Hospital, Albertson's Grocery, the City of Azle, and many others. In addition to these industries, the city also sought solutions to boost the economy. To do this, cities are expected to offer and preserve affordable, high quality elementary services for their residents. City officials should also aspire to offer a high quality milieu for industries and public collaboration (Profile of General Population, 2017). Therefore, distinctiveness is an essential component of each community.



WHAT ARE THE LESSONS FROM THE CITY?

- **Main street**

For many communities, "Main Street" is the genesis of their financial activity and the catalyst of their downtown environments (Downtown Plan, 2010).

A well-planned, well-managed downtown environment provides opportunities for social interaction and commerce, perpetuating the idea of "place" and the center of activity. These can be adopted as specific interests (Downtown Plan, 2010):

- Retail
- Church
- Medical
- Office
- University



Figure 10-16. Downtown Azle, TX

Colleyville, TX

Colleyville, TX	
Population (2010)	22,807
Total budget (2016)	\$39.5 million
Number of companies (2010)	3,610
Total housing (2010)	8,624
Median household income (2010)	\$152,310
Poverty rate (2010)	1.9%
Strategic approach	Business incubator

Colleyville is located in northeast Tarrant County. The population was 22,807 as of the 2010 census. The city was originally known as Bransford. The business industry sectors include Grapevine Colleyville ISD, Lifetime Fitness, Whole Foods Market, Albertson's Grocery, and Walmart (Profile of General Population, 2017).

Colleyville has a primary goal of enhancing quality of life. The city is in a good location to leverage the economic strengths of the region and seeks to enhance those strengths for the future (Profile of General Population, 2017). There are many supportive initiatives to reach this goal, such as running national credit retailers, establishing chain restaurants, and incubating business options.



WHAT ARE THE LESSONS FROM THE CITY?

- **Small business incubator**

A business incubator or accelerator is a business help progression that catalyzes the effective development of start-up businesses by offering industrialists with a selection of targeted resources and facilities (Destination Colleyville, 2015).

A small business incubator is a service that offers small, start-up businesses temporary places and shared industry support facilities. An overarching goal of an incubator or accelerator is to enhance the entrepreneurial climate within the city and to create jobs that can lead to growth and expansion (Destination Colleyville, 2015). The concentration focuses on helping new businesses overcome the common problems that result in an industry to fail within its first three to four years of existence (Destination Colleyville, 2015). Those consist of poor management, absence of funding, and insufficient marketing.

- **Social media**

The City can promote through a number of social media outlets, including Facebook pages and through quarterly economic development newsletters. In the age of social media, this is an important, and oftentimes inexpensive, means of communicating with the community. Additional means of promotion should be explored to “get the word out” about available programs and offerings, amenities, events, festivals, and other important information. The effectiveness of existing outreach should be evaluated to ensure the message is appropriate and resonating with the Keene community.



Figure 10-17. Downtown Colleyville, TX

Sherman, TX

Sherman, TX	
Population (2010)	38,521
Total budget (2016)	\$33.2 million
Number of companies (2010)	3,384
Total housing (2010)	16,708
Median household income (2010)	\$42,923
Poverty rate (2010)	20.4%
Strategic approach	Education

Sherman is located in Grayson County. The population of the city was 38,521 in the 2010 census. There are many business sectors in the city, such as Tyson Foods, Sherman ISD, Austin College, Progress Rail Services, Starr Aircraft, etc. (Find a County, 2017).



WHAT ARE THE LESSONS FROM THE CITY?

- **Supporting excellence in public schools**

The importance of a local school system in economic development cannot be understated. Employers need to be assured of access to trainable workers; company executives and rank-and-file workers strongly desire an excellent education for their children. Additionally, home buyers and the development community recognize their housing investments are affected by the quality of a school district. As a result, it is imperative that the city remains supportive of the local school district and establishes excellence in education and workforce training with long-term goals by (Comprehensive Plan, 2009):

1. Increasing public schools in support of the City's economic development efforts
2. Improving partnerships between the ISD and area higher education institutions.

- **Promote quality of place**

Increasingly, companies rely on the skills and talent of their workforce to retain or gain a competitive advantage. Only recently have employers discovered that one way to tap into talented worker resources is by locating operations in communities with a strong sense of place. This is due to the fact that communities offering a multitude of amenities are attracting many of today's skilled and talented workers.

One communal factor is the inclusive convenience of selections in housing, entertainment, culture, recreation, retail, and employment (Comprehensive Plan, 2009). If the city is to maintain its identity as a stand-alone community, an improved concentration on place should be embraced by the local community. One means for accomplishing this goal would be a sustained focus on ensuring high quality development throughout the community—not only within the residential real estate market, but also along major transportation corridors (Comprehensive Plan, 2009). This can be done by:

1. Assisting renewal and redevelopment activities occurring in downtown
2. Strengthening connections between downtown and the area higher education institutions.



Figure 10-18. Downtown Sherman, TX

Arlington, TX

Arlington is located between Dallas and Fort Worth in Tarrant County. It is nearly 10 miles east of downtown Fort Worth and roughly 20 miles west of downtown Dallas. The population of the city was 365,438 as of 2010 and it is the third largest municipality in the metropolitan area. In addition, Arlington hosts the University of Texas at Arlington, General Motors, Texas Health Resources, Texas Rangers' Globe Life Park, AT&T Stadium, Six Flags Over Texas, Hurricane Harbor, and many other facilities.

There have been many economic development attempts to enhance the city in the last few decades. Although many economic catalyst projects have been established, the city is still in need of additional development.

Arlington, TX	
Population (2010)	365,438
Total budget (2016)	\$454 million
Number of companies (2010)	35,988
Total housing (2010)	146,385
Median household income (2010)	\$53,326
Poverty rate (2010)	17.5%
Strategic approach	Education



WHAT ARE THE LESSONS FROM THE CITY?

- Arlington Independent School District (AISD) program**
"Achieve today. Excel tomorrow. Arlington independent school district (AISD)"

As a part of the 2012-2015 strategic planning process, the Arlington ISD sought to prepare students to excel in the career of their choice. A couple of platforms were considered to achieve this goal:



CTE Dual-Credit Program

For this program, the Arlington ISD professional and technical education unit associated with Tarrant County College to acknowledge Certificates of Completion in dual-credit programs. Areas of study include Automotive Engine Analysis, Fire/EMT, Welding, and many others. This opportunity provides students 15 to 30 hours of college credit toward an associate's degree.

Early College High School (ECHS)

ECHS is a Texas Education Agency in collaboration with Tarrant County College which helps innovative schools to provide students with an option to have a high school diploma and up to 60 college credit hours. The program began in the fall of 2014 and contains roughly 100 freshman students.

Paving the Road to College and Career Readiness

Paving the Road to College and Career Readiness is another Arlington ISD program created to apply compelling teaching and leadership to better prepare students for their educational route. The initiative consists of a comprehensive, continuous, test training opportunity to enhance students' success on university entrance exams.



Figure 10-19. Campus Town at UTA, Arlington, TX

Vernon, TX

Vernon, TX	
Population (2010)	11,002
Total budget (2016)	\$833,554
Number of companies (2010)	1,272
Total housing (2010)	5,082
Median household income (2010)	\$39,353
Poverty rate (2010)	19.9%
Strategic approach	City branding/tourism

Vernon is located in Wilbarger County and its population was 11,002 in the 2010 Census.

Vernon defined a number of priority goals in order to achieve sustainability and enhanced quality of life for residents (Community and Economic Development, 2008). Those goals include a main street program, local government, western heritage and tourism efforts, auditorium improvement, workforce attraction, covered events center, youth activities, beautification, and establishing a retirement community (Community and Economic Development, 2008). It is noteworthy to mention western heritage and tourism efforts as one of the best practice examples.



WHAT ARE THE LESSONS FROM THE CITY?

- ***Western heritage and tourism efforts***

One of Vernon's most distinctive strengths is its wide-ranging western heritage and small town characteristics. These characteristics should be embedded within the city's community development plan through an inclusive brand campaign for the city, refrained organizations and activities, labeled promotions and marketing, community appeal, architecture, food, merchandising, etc.

In order to showcase this heritage and leverage tourism opportunities, tourism-based, community advertising strategies and branding should be made a priority, perhaps through a specific staff position or promotion. This position might be situated within Economic Development or City Management.



Figure 10-20. Car Parade on Main Street, Vernon, TX

(<https://i.ytimg.com/vi/s-xLMGug4M/maxresdefault.jpg>)

Sansom Park, TX

Vernon, TX	
Population (2010)	4,825

Sansom Park is vulnerable to the issues and challenges shared among the PLMC communities. These challenges include aging retail corridors, aging neighborhoods, limited undeveloped land for new development, competition with areas in and around Fort Worth that pull mixed-use investments away from the PLMC communities, and lack of regional market competitiveness. With strategic repositioning and planning, these challenges can serve as opportunities for future quality growth and development in Sansom Park.



WHAT ARE THE LESSONS FROM THE CITY?

- ***Full re-zoning of the entire city***
- ***Developing a comprehensive Land Use Plan for the city***
- ***Retaining economic development consultants to assist in development attraction and funding***
- ***Renovating vacant industrial buildings***
- ***Acquiring land by tax liens to facilitate redevelopment through remediation, clearing, or changing existing use***
- ***Joining with regional planning organizations to include parks in regional and sub-regional development plans***

10.5

RECOMMENDATIONS

Business and economic goals for the City of Keene comprehensive plan have been derived from community input and guideline information.



Goal E1. *Provide increased opportunities for personal growth of current and potential Keene residents through satisfying employment and sound neighborhoods.*

Action E1a. Work with local industries and organizations such as Texas Workforce Commission to identify the skills and training needed to retain and attract key industries to Keene.

Action E1b. Actively promote Keene's potential to employers and economic developers to plan for future Keene residents, including a high proportion of millennials.

Action E1c. Implement the City's efforts through sound land use planning, as well as through the protection and enhancement of existing community character.



Goal E2. *Develop a thorough local economy that attracts investment, increases the tax base, generates employment opportunities for Keene residents, and creates public revenue.*

Action E2a. Redevelop the downtown/university district in cooperation with business owners and related organizations, including Southwestern Adventist University.

Action E2b. Increase cooperation and coordination between public and private sectors in the formulation of economic development plans and programs.

Action E2c. Establish a priority project list and budget to increase infrastructure capacity to support existing and new developments.

Action E2d. Locate a business corridor to develop relevant infrastructure and development procedures for increasing commercial usage and projects.

Action E2e. Develop a departmental branding that coordinates with overall city objectives.



Goal E3. *Establish an economic development strategy that balances the need for development with goals and strategies of neighboring cities.*

Action E3a. Value and enhance Keene's historic and natural assets and features that make it attractive in close cooperation with public sectors. For example, promote the Dinosaur Science Museum in cooperation with Southwestern Adventist University.

Action E3b. Provide tools for neighborhoods to protect and promote adaptive reuse of older features within neighborhoods.

Action E3c. Encourage adaptive reuse of older commercial structures, as well as complementary and compatible new development of great quality.

Action E3d. Promote development opportunities that exclude negative impacts to the environment and well-being of neighborhoods.



Goal E4. Partner with Southwestern Adventist University (SWAU) on economic development initiatives that bring high-paying jobs, visitors, and economic diversity to the Keene community.

Action E4a. Ensure that students living within Keene are safe and contribute positively to the strength and sustainability of community.

Action E4b. Support efforts of increasing direct engagement between local businesses and organizations, as well as young professionals and students.

Action E4c. Facilitate efforts aimed at strengthening the link between local businesses and the University's career services programs.



Goal E5. Support retail development.

Action E5a. Continue to promote Keene's market opportunities to retailers and developers seeking to enter the local market by conducting a retail leakage analysis, and distributing pertinent market and demographic information.

Action E5b. Ensure necessary infrastructure and public services are available when needed to serve development opportunities by implementing a sound land use plan, thoroughfare plan, and infrastructure master plan.

Action E5c. Maintain direct communication with existing businesses to aid in their efforts to maintain and expand their presence in the community.

City Branding

Keene should take advantage of its unique attributes in order to enhance its service to current residents, and to advertise the city as a local attraction and tourist hub to visitors. In order to attract a diverse user group to Keene, a two-part city branding approach is recommended: Heritage Development and Place Branding.



Heritage Development

Heritage Development is a feature particular to specific locations. In this case, heritage is a specialization that allows a location – the city center and university center areas - to gain power in certain categories of the retail market. These locations are also supported from an expanded employment area as their specialization often attracts customers from more distant communities. When a heritage district is created, other outside businesses are often attracted, as they are interested in dealing with the same sample of consumers. Thus, heritage development both acknowledges and promotes the city's history and existing assets, highlighting and demonstrating historical and cultural components.



Strategy HD1

Retail stores are key figures in developing heritage districts. With a prominent retail presence within a downtown heritage district, the city will be able to foster and maintain its downtown economy. A robust downtown image offers residents and tourists a variety of goods and services, enhancing the experiential qualities of that environment.

These developments are able to reach a market range of nearly 40 miles. As an example, the City of Southlake is creating a downtown heritage district by including many retail stores utilizing various categories of products. In doing this, the city also attracts residents from neighboring cities for both shopping and heritage district experiences.

Strategy HD2

A strong heritage and its related features should be demonstrated. These districts need to have successful and efficient circulation systems and need to employ pedestrian-friendly and walkable development strategies. Included would be several activities which serve current residents, attract additional tourists and visitors, and commerce.

According to urban design and planning experts, there are key factors for implementing efficient circulation. In a good circulation system, as Lynch (1981) points out, local streets feed into arterials, which feed into expressways. Such hierarchies match the assumed traffic flows, and have also been observed to develop naturally in unplanned settlements (Lynch 1981).

Aside from the hierarchical classification, Marshall (2005) also categorizes using geometry and topology-based representation systems. Altogether, he differentiates between three different modes of representation – constitutional (hierarchical), configurational (topological), and compositional (geometrical).

If a constitutional representation is an abstraction from configuration, the latter is an abstraction of composition (Marshall 2005), and the composition is a rather direct representation of the actual geometrical street layout. In practical terms, award-winning New York landscape architecture firm Mathews Nielsen highlights that humans are creatures of habit, so it's important to design spaces that complement daily rhythms.

For one of their designs, they suggested three types of circulation: a fast lane along the street curb, a slow lane that borders the interior of the site, and a path that's a stopping lane. The different routes allow one person to dash to class, another to stroll while talking on her cell phone, and a third to stop and take in the space during a work break, all without getting in each other's way and providing walkability with various paces (Taraska, 2015).

Place Branding

Place Branding is a process of creating an image of place within target markets. Recently, counties and cities have been attempting to prioritize place branding in many development categories in order to gain attention through different methods:

- Design (character)
- Infrastructure (built environment)
- Basic services (services provided)
- Attractions (entertainment and recreation)

There are many significant cultural elements within the City of Keene including historical, spatial, economic, demographic, and geographical aspects, and each of these is a potential component of place branding.

Strategy PB1

One strategy for place branding is Origin Branding that mentions the local place of origin in branding a product. In this case, certain components of Southwestern Adventist University such as the SWAU Dinosaur

Museum would be great examples for this category. The museum could be centered as a reference point. Then shops, stores, parks, bus stations, and traffic and library signage could be branded with specialized logos and calculated to symbolize proximity to that reference point in .25 mile increments. Figure 10-21 illustrates examples of such signage.

Strategy PB2

Culture and Entertainment Branding consists of highlighting the physical, economic, and social environments of a place. In this strategy, the university campus and downtown areas would be prime examples. Integrating university and city center areas also creates tourism routes for the city. Commonly applied in cities all over the world, cultural branding owes its development to the growing importance of the cultural, leisure,

and entertainment industries within the current economy, as much for tourists and other visitors, as for the local population.

At the same time, attempts to incorporate this trend in planning the city (Evans 2001) and the increased importance of image-based industries and the people these service (Florida 2002) are strengthening the processes involved in this kind of place branding. Connected with this trend, one can identify a more recent discussion, especially among urban designers, on the effects of high-profile buildings on the city's image and the use of such buildings and other 'landmarks' in general in the city's promotion.

The elements that make up a city's physical, social, and cultural environments influence students' choice of where to study (Cubillo et al., 2006) and affect their overall education experience.



Figure 10-21. Signage and Logo Examples (Ackerman, 2016)

Consequently, not only the reputation of the course, but also the location of the institution play a role in shaping students' motivations and choices about where to study (Worthington and Higgs, 2004). In particular, part of the attraction of studying away from home is the extra-curricular experience, both on and off campus (Petrizzellis and Romanazzi, 2010). Therefore, Keene may seek to fulfil the needs and desires of this gap by its great potential in order to facilitate economic development within the city (Brandt and Pahud de Mortanges, 2011).

Strategy PB3

Place branding also can be at an infrastructural level. In this context, Keene has the potential for a green infrastructure network. As there are many quality green spaces within the City of Keene, they can be further enhanced, increased, and connected to one another.

In addition to existing public spaces, many others can be designated by the City and added into this network. Connected green spaces provide social, environmental, and economic benefits. They can be specific sites or broader environmental features within the city, connected through a variety of methods. This connectivity can be visual or hypothetical; however, physical connections make the most impact (Landscape Institute, 2009). This connectivity can enhance public engagement with the natural environment, improve opportunities for wildlife habitats, biodiversity migration, and assist in reinforcing sustainable forms of travel. Supporting the various functions that connected green spaces performs is the concept of ecosystem services.

Health and well-being depend on the variety of services provided by these ecosystems. These connected green spaces help to mitigate water quality, soil, nutrients, and organisms (Landscape Institute, 2009).

In addition, they mitigate erosion, provide shelter and food for wildlife within ecosystems, and regulate air quality and climate control. They also provide non-material benefits for people including aesthetic qualities and recreational experiences (Landscape Institute, 2009).

City Branding Process

The city branding process initiates with an examination of the components that make Keene unique. A great amount of research should be conducted in order to generate an overall impression of a place and should include an analysis of a number of historical, cultural, contextual, environmental, and institutional components. After this research and analysis is conducted, the “identity” of the place is defined. The next step seeks to establish an image for the place using the determined identity as a catalyst. This image is measured by using a variety of perception methodologies revolving around visual, audible, and other sensory workings. The third step seeks to attain a vision for the place branding. This stage creates a vision for the next five to twenty years for the place branding.

A cluster of visioning phases is suggested for catalyzing city branding for the City of Keene. The notion of a city branding vision initiates by determining a catalyst for identity; Keene should focus the branding identity on the university and downtown areas. Strategically placing signage, logos, way-finding elements, and operating a website are initial steps for drawing residents and visitors to these identity markers. City officials can then expand this initiative by utilizing the open, public spaces of the city through regulation and practical preparation to create a larger network of connectivity that further

feeds into these identity markers. The regulatory action involved in this process can be timely, making it a more feasible five-year goal.

Taking this branding further would include strategizing a system throughout the entire city through circulation networks, public buildings, festivals, events, etc. that would effectively communicate a city identity. In other words, branding the city as the City of Keene: The Heart of Cultural Heritage, would take numerous forms in a city-wide branding strategy and would be integrated into all major systems of the city. Further implementation of this would include the application of multi-media communication platforms to expand on the marketing of the city identity to ensure the success of the branding plan.

“WORKS CITED”

- Ackerman K. City Branding-Heritage City. (2016). Retrieved from <https://www.behance.net/gallery/45832341/City-Branding-Heritage-City>
- AmericanTowns. (2016). <http://www.american towns.com/>. Retrieved from Keene TV Stations and Networks List: <http://www.american towns.com/tx/keene/tv-stations>
- An Economic Development Strategic Plan. (September 2014). Arlington, TX.
- A Vision for the Future Alpine, Texas. (August 2016). Center for Urban and Regional Planning Research. The University of Texas at San Antonio.
- Beckham, S. W. (2002). Johnson County Thoroughfare Plan.
- Blakely, E. J., & Leigh, N. G. (2013). Planning local economic development. Sage.
- Blaschke, Jayme. (November 2014). University News Service. September News Archive.
- Brandt, C. and Pahud de Mortanges, C. (2011). “City branding: a brand concept map analysis of a university town”, Place Branding Public Diplomacy, Vol. 7 No. 1, pp. 50-63.
- BROADBANDNOW. (2017). BROADBANDNOW. Retrieved from INTERNET SERVICE IN KEENE, TEXAS: <http://broadbandnow.com/>
- City of San Marcos Downtown Master Plan. (October 2008). Broaddus & Associates.
- Community and Economic Development Initiative. (2008). Vernon, TX. Texas Engineering Extension Service.
- Comprehensive Plan. (2009). Sherman, TX.
- Cubillo, J.M., Sanchez, J. and Cervino, J. (2006), “International students’ decision-making process”, International Journal of Education Management, Vol. 20 No. 2, pp. 101-115.
- Dinnie K. (2011). City Branding Theory and Cases. Palgrave Macmillan.
- Downtown Plan Report. (March 2010). City of Azle. GSBS.
- Evans G. (2001). Cultural Planning: An Urban Renaissance?, Routledge, London
- FCC. (2016, 10 25). Federal Communications Commission. Retrieved from Getting Broadband: <https://www.fcc.gov/consumers/guides/getting-broadband>

Federal Highway, A. (2014). FHA. Retrieved from Safety/Lane Width: http://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_lanewidth.cfm

Florida R. (2002). *The Rise of the Creative Class and How It's Transforming Work, Leisure, Community and Everyday Life*, Basic Books, New York

GoldMan Sach's Asset Management (2016). Investing in the Millennial Effect. Retrieved from <https://www.gsam.com/content/dam/gsam/pdfs/common/en/public/articles/global-equity-outlook/investing-in-the-millennial-effect.pdf?sa=n&rd=n>

How Does Southwestern Adventist Rank Among America's Best Colleges? (n.d.). Retrieved January 31, 2017, from <http://colleges.usnews.rankingsandreviews.com/best-colleges/southwestern-adventist-3619>

Kavaratzis M., Warnaby G., Ashworth G. (2014). *Rethinking Place Branding: Comprehensive Brand Development for Cities and Regions*. Springer.

Lynch, K. (1981). *Good City Form*. Cambridge, Massachusetts, MIT Press.

Marshall, S. (2005). *Streets & Patterns*. Abingdon, Oxon, Spon Press.

National Association of Counties. (January 23, 2017). "Find a County".

NCTCOG. (2012, 8). North Central Texas Council of Government. Retrieved from Southern Dallas County Infrastructure Analysis: http://www.nctcog.org/trans/sustdev/landuse/funding/plan/sdcia/DRAFT_SDCIA_Final_Report_073012.pdf

ONCOR. (2012). ONCOR. Retrieved from REPORT / VIEWOUTAGES: <http://www.oncor.com/>

Petrizzellis, L. and Romanazzi, S. (2010), "Educational value: how students choose university: evidence from an Italian university", *International Journal of Educational Management*, Vol. 24 No. 2, pp. 139-158.

Radio-locator. (2016). radio-locator. Retrieved from <http://radio-locator.com/cgi-bin/locate?select=city&city=Keene&state=TX>

Small Towns, Big Ideas: Case Studies in Small Town Community Economic Development. School of Government of the University of North Carolina at Chapel Hill. 2008.

Scout, E. (2017). Retrieved from <https://www.electricityscout.com/>

Taraska J. How do you create a successful urban park? Fast Company Magazine. 2015

Texas Commission, o. E. (2016). Texas Commission on Environmental Quality. Retrieved from Download Raw Datasets: <https://www.tceq.texas.gov/>

Texas Water Development, B. (2016). 2016 Brazos G Regional Water Plan.

Texas Water Development, B. (2016). Texas Water Development Board. Retrieved from GIS Data: <http://www.twdb.texas.gov/mapping/gisdata.asp>

Texas, E. R. (2008). ERCOT. Retrieved from Competitive Renewable Energy Zones: <http://www.ercot.com/>

Texas, P. U. (2013). <http://www.puc.texas.gov/>. Retrieved from Telecommunications Industry Information: <http://www.puc.texas.gov/industry/communications/Default.aspx>

Texas Workforce Commission (n.d.). An Atmosphere of Enterprise. Retrieved from <http://www.lmci.state.tx.us/shared/AOE.asp>

U.S. Census Bureau, American Factfinder. "Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data (DP-1): Azle city, Texas". Archived from the original on September 11, 2013. Retrieved January 29, 2017.

Worthington, A. and Higgs, H. (2004), "Factors explaining the choice of an economics major. The role of student characteristics, personality and perceptions of the profession", International Journal of Social Economics, Vol. 31 Nos 5/6, pp. 593-613.

Wells Fargo. "Employment Dynamics and State Competitiveness," Economic Report. 2011

Zenker S. and Braun, E. The Place Brand Centre – A Conceptual Approach for the Brand Management of Places. 39th European Marketing Academy Conference, Copenhagen, Denmark, 1st – 4th June, 2010.



<http://www.uta.edu/cappa/research/ius/index.php>



@iustudies



Institute of Urban Studies



@lofUrbanStudies



A SUPERLATIVE COMMUNITY TO LIVE, LEARN, WORK AND PLAY

