

Forward

Planning Process

The Ivanhoe Comprehensive Plan 2017-2037 provides guidance for the future development of the city. This document was developed by Texas Target Communities in partnership with the City of Ivanhoe.

In summer of 2016, Tyler County and the City of Ivanhoe started collaboration with Texas Target Communities to assess current community conditions and explore future development strategies. The project aimed to enhance community-wide discussion through a public participatory process, resulting in the development of strategies and comprehensive plan to help guide the future growth of the County and City. A representative task force of community members engaged in a participatory planning process including visioning, goal setting, alternative scenario exploration, and strategies for implementation. Using courses on campus, TAMU urban planning students were exposed to the planning process and the opportunity to explore innovative ideas. The result of this collaboration is this document, which provides strategies for the community's growth utilizing the natural resource and the assets of the City.

Background of TTC

The Texas Target Communities program (TTC) is a high-impact service learning and community outreach program at Texas A&M University (TAMU). TTC partners with small communities across Texas to assist them with needs that would otherwise go unmet. TTC also serves as a "real world" learning laboratory for undergraduate and graduate students who provide data collection and recommendations. Since its inception, TTC has worked with over 50 communities to incorporate sustainable planning and design practices. The following report is provided, in part, by a community grant from Texas A&M AgriLife Extension Service for Tyler County.

How to use the Comprehensive Plan?

Comprehensive plans are "the central organizing umbrella under which other plans, regulations, and initiatives exist." (Duerksen, Dale and Elliot, 2009). They typically have long-range planning horizons between 20 and 30 years. This document, can be used to guide, and support, city land use and decision-making. A comprehensive plan should include the overall vision for the community, as well as a plan for the physical growth, future development, and preservation of the culture and environment. Furthermore, it should envision future growth in the various fields of transportation, community facilities, environment, economy, and housing.

This planning document can provide guidance for a range of development activities. As such, it may be used to:

- Communicate the overreaching community vision;
- Guide individual development approvals by representatives such as elected officials and the planning board;
- Serve as a basis for land-use regulations such as zoning, subdivision regulations, etc.;
- Inform and support capital improvement plans.
- Aid in acquiring grants and funds from available sources.

Structure

Chapter 1 presents the background, brief overview of the geography and history of Ivanhoe; Chapter 2 outlines the participatory planning process and provides a summary of the visioning and goal setting meetings. Chapter 3 tells the story of the scenario planning process and serves as a guide to keep land use in line with the vision of Ivanhoe by proposing the Preferred Land Use Plan. Chapters 4 through 7 outline the goals, objectives, and policies of the four focus area of the comprehensive plan: economic development, community facilities and park, transportation and housing. Each chapter explores the issues and opportunities propose recommendations and which are supported with maps and other analytical tools. Chapter 8, the final section of the plan, provides detailed descriptions of implementation strategies with the funding programs including the timeline, funding sources, and responsible parties for implementing the recommendations of this plan.

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CHAPTER 1: INTRODUCTION

OVFRVIFW

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

Woodville is the largest town and county seat, other cities and large towns in the county are Colmesneil, Ivanhoe, and Chester. Tyler County is part of the Deep East Texas Council of Governments (DETCOG), along with 11 other counties. Angelina, Jasper, and Polk counties are members of the COG and also neighbor Tyler County to the east, north, and west, respectively. Hardin County borders Tyler to the south.

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

The City of Ivanhoe is a general-law city. The city does not have a previously adopted comprehensive plan, nor does it have zoning or transportation plans. Though not represented in a Metropolitan Planning Organization (MPO), Ivanhoe is part of the Texas Department of Transportation (TxDOT) Beaumont District. Although Ivanhoe was established in the early 1960s, it did not incorporate until November of 2009. The City has a population of 1,825 full-time residents. It is comprised of approximately 3900 lots, has 5 lakes, 12 parks and almost 60 miles of roads.

¹ Reference: http://cityofivanhoetx.com/?page_id=63

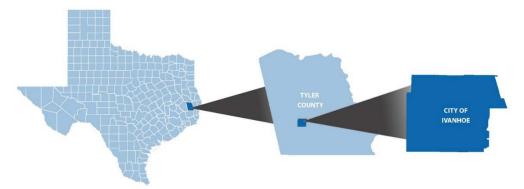


Figure 1.1: City of Ivanhoe on the map of Tyler County, TX

HISTORY

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

In November 2009 residents voted to incorporate the community as a "Class C" municipality. Today the City of Ivanhoe has a population of 1,825 full-time residents and is Tyler County's second largest city. Logging was an active industry in this heavily forested area of Tyler County in the late 1800's and early 1900's. Tram tracks travelled across or alongside three of the spring-fed lakes, taking logs to the nearby mills that were common to Tyler County in that era.

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

² Reference: http://tylercountyhc.org/ivanhoe

DEMOGRAPHIC INFORMATION

Population

The population of Tyler County in 2010 was 21,766, and the population of Ivanhoe City (including Ivanhoe North) was 1,425.³ The population of the 6 main places in Tyler County is shown in Table 1.2.

Table 1.2 Most Recent Population Record and Estimation of Places in Tyler County⁴

	Woodville Town	Ivanhoe City	Wildwood⁵	Warren ²	Colmesneil City	Chester Town
Recorded Population in 2010	2,586	1,425	1,235	757	596	312
Estimated Population in 2014 by ACS ⁶	2,680	1,177 ⁷	805	706	582	341

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

Population Density

³ U.S. Census, 2010

⁴ Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

⁵ This is a Census Designated Place (CDP)

⁶ ACS refers to the U.S. Census Bureau's American Community Survey

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

The population density in Ivanhoe is 358 people per square mile, compared to Tyler County with 23.54 people per square mile, and 96.3 people per square mile in Texas.¹ The population density per square mile of the 6 main places in Tyler County is shown in Table 1.3.

Table 1.3 Population Density per square mile of Places in Tyler County⁸

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

Population Growth

The population growth rates for Tyler County, Ivanhoe City, Woodville, and Texas from 2000 to 2010 are shown below (Table 1.4). The 2010 population for Tyler County was 21,766 or a 4.29% increase from its 2000 population of 20,871. The population for Woodville was 2,415 in 2000 and 2,586 in 2010, or a 7.08% increase. Compared to Tyler County, the population of the state of Texas grew at a higher rate at 20.59%.

Table 1.4 Population Growth Rate from 2000 to 2010 for Tyler County, Woodville Town, Ivanhoe City, and Texas⁹

	Tyler County	Ivanhoe City	Woodville Town	Texas
Population 2000	20,871	1,13910	2,415	20,851,820
Population 2010	21,766	1,425	2,586	25,145,561
Growth Rate	4.29%	2.27%	7.08%	20.59%

⁸ Retrieved from http://www.towncharts.com/Texas/Texas-city-index-Housing-data.html

⁹ United States Census Bureau, 2000 & 2010

¹⁰ Esri Business Analyst.

Population Projection

The projected population of Tyler County from 2020 to 2050¹¹ is calculated by 3 migration scenarios: no migration, 50% of the current migration rate and 100% of the current migration rate (Figure 1.2). If we analyze the population with migration trends, the population would be anywhere from 20,772 to 21,376 people by the year 2050 in Tyler County. The population trend is projected to decrease from 2020-2030. Compared with Tyler County, the projected population growth of Texas is at a higher rate.

Age Distribution

According to U.S. Census 2010, Figure 5¹² shows the age distribution of State-, County- and City-level. Tyler County and Ivanhoe City have slightly older populations than that of the state.

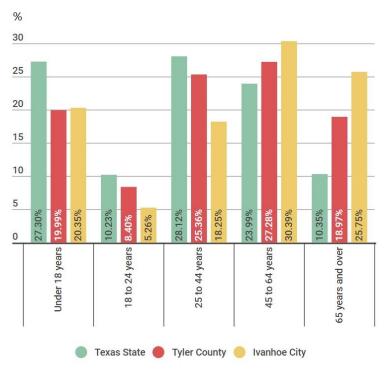


Figure 1.2 Age Distributions in Texas State, Tyler County and Ivanhoe City, 2010

¹¹ Texas Population Projections Program from the Office of the State Demographer produces biennial projections of the population of the state and all Counties in the state.

¹² United States Census Bureau, 2010

Race Distribution

In terms of racial composition, Tyler County and the City of Ivanhoe are predominately White (80.43% & 89.85%), with roughly 10% African American population in the county and 3.6% in the city. As of the year 2010, in Tyler County, the populations of American Indians or

Alaska Natives, Asians, Hawaiians and Pacific Islanders together were less than 1%. Compared to Texas, there are significantly fewer people of Hispanic ethnicity in the County and City. Table 1.5 shows the growth rate of the Hispanic or Latino population, which is experiencing a faster growth and has doubled from 2000 to 2010.

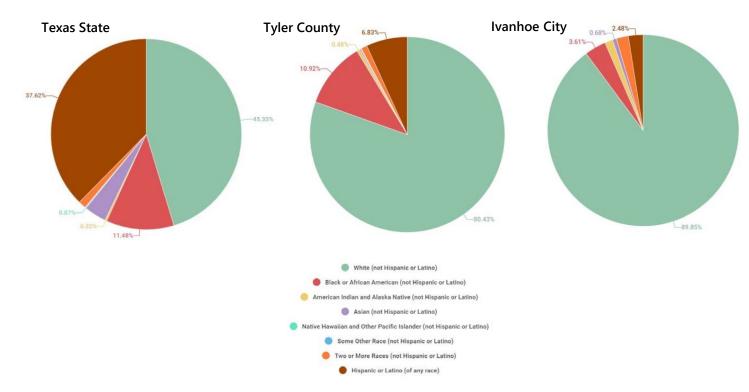


Figure 1.3 Race Distributions in Texas, Tyler County and Ivanhoe City, 2010¹³

¹³ United States Census Bureau, 2010

	Hispanic or	Hispanic or	
	Latino population in	Latino population in	Growth Rate
	2000	2010	
Texas	6,669,666	9,460,921	48.85%

Educational Attainment

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

Overall the City of Ivanhoe and Tyler County has an older population compared to the state of Texas. The city is a majority white, 89.85%, with a roughly 3.6% African American population. These percentages are significantly smaller than that of the state. On the other hand, Tyler County's Hispanic population is greatly increasing, though it is still significantly lower than the state average. Another concern with Tyler County and Ivanhoe that needs to be addressed is the percentage of aging population compared to the state level. Compared to the

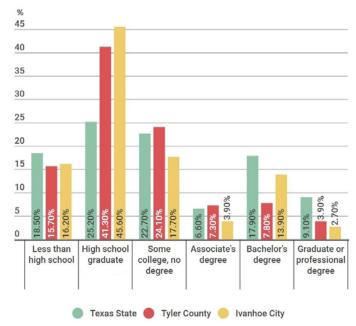


Figure 1.4 Educational Attainment in Texas, Tyler County and Ivanhoe City, 2014

Texas and the county, the city has a much larger percentage of high school graduates, but a lower percent of college graduates.

The data mentioned above was used as a starting point for the comprehensive plan, through which important implications were derived to make more informed decisions.

Chapter 2: Participatory Planning

Chapter 2 outlines the participatory planning process and provides a summary of the meetings that took place between TTC and the Planning Task Force. The city established its vision and goals during the task force meetings. As part of the planning process a task force was created to represent the community. The task force serves as a representative body fundamental to identifying community thoughts, desires, opinions and vision of the community.

ASSETS AND PRIORITIES

In September of 2016, the task force came together to initiate the planning process in the City Hall and Community Center at City of Ivanhoe. The meeting began with a conversation of the assets of the people and place. The task force members were encouraged to invite additional community members for further representation of the community.

During the next meeting current community conditions were presented, a foundational piece for visioning. The task force discussed 'what we have' and the assets of the City of Ivanhoe. Next the City discussed and envisioned future changes.

Assets

- Lakes
- Parks
- Residents
- Undeveloped land
- Highway access
- Liquor store
- City center
- Fishing
- Boating/water recreation
- School district choice
- 50 miles of developed road
- Zoning ordinance
- Social opportunities
- Community activities

- Outstanding fire department (close)
- Property owners' association
- Volunteer base

Future Priorities

- Economic development
- Construction development
- Road improvement
- Youth development
- Improvement and Expand the City Center
- Expand Public Works
- Healthcare
- Technology and Connectivity

VISIONING

This visioning process helps set the direction for the future of the community. In the visioning exercise, the community shared their values, thoughts and desires. Community members came to consensus on their aim to enhance the quality of life. Major discussions focused on sustainable growth, beautifying the community, and the wellbeing of the residents through safety and security. They also expressed the desire to maintain the strong sense of civic pride and engagement among the residents.



"what do we have?"

"what do we want to be?"

Key themes

Sustainable Growth

Economic development

Revenue growth

New construction development

Community Pride

Community "engagement"

Youth engagement and development

Improved/expanded city center

Public and private beautification

Expanded community activities and function

Infrastructure Support

Road improvement

Technology and connectivity development

Expanded public works

Healthcare support

Safety and Security

Private property protection

Crime prevention

General public safety

The City of Ivanhoe strives to provide the highest quality of life for residents by supporting sustainable economic and infrastructure growth, public and private beautification of the community, safety and security of the residents, and a strong sense of civic pride and engagement.

GOALS AND OBJECTIVES

Goals are clearly stated action-oriented statements to help achieve the vision. They are what the community is working toward and focus on community growth and development. Within this plan, goals are broad, abstract and difficult to measure, while objectives are tangible and measurable. The task force developed the goals and objectives to help guide the city towards accomplishing the vision. The goals and objectives were categorized into four sections:

- Economic Development
- Community Facilities and Parks
- Transportation
- Housing

SMART OBJECTIVES

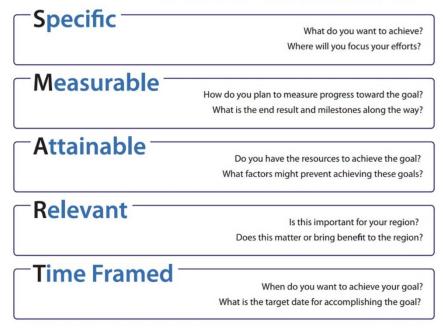


Figure 2.1: Smart Objectives - Adapted from: Heathfield, S.M. (2011)

The following chapters outline specific recommendations for community improvement, goals, and objectives based on task force meetings, data analysis, on-site analyses, input from the City, an assessment of city needs, and research of promising strategies from around the country.

Chapter 3: Land Use

Land use is the approach for distribution of activities in the community that determine what to put where. This chapter will aid to establish the future land use plan that is consistent with the vision by Ivanhoe by proposing alternative scenarios that have different strategies for managing growth. The scenarios were developed according to the current condition, community input and research to explore the possible futures.

CURRENT LAND USE

The most common form of land use regulation is zoning. Ivanhoe controls the development of property through seven zoned districts. Currently the majority of the land within Ivanhoe is residential area (as seen in Figure 3.1 and Table 3.1). The largest land use by area is single-family housing and manufactured housing. Table 3.1 shows the approximate number of acres currently dedicated to each type of land use.

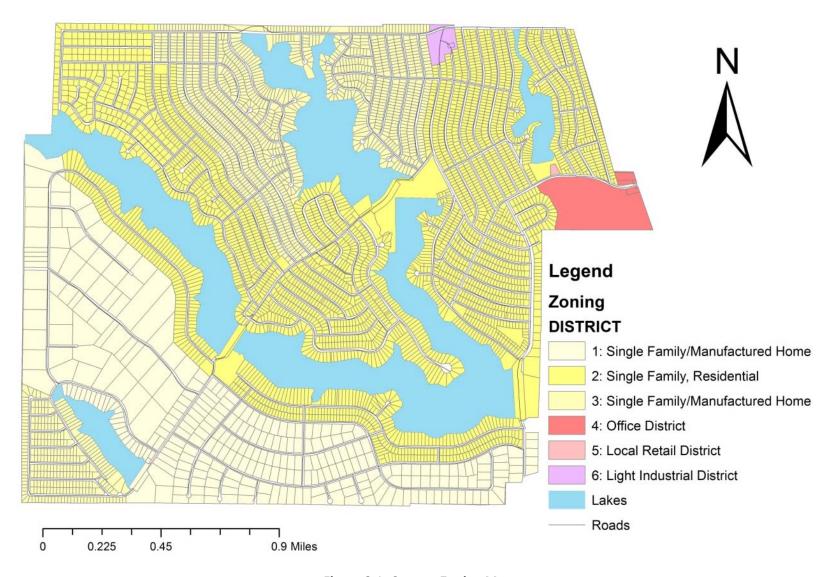


Figure 3.1: Current Zoning Map

The Single-Family Residential district is intended to provide for development of primarily low-density detached, single-family residences on lots of at least 7,000 square feet in size.

Single-Family/Manufactured Home district is intended to provide for development of primarily low-density detached, single-family residences or manufactured homes on lots of at least 6,600 square feet in size.

The Office district is established to create a district for low intensity office and professional uses. The district can be used as a transition district between more intense uses and residential uses. Residential uses and bed-and-breakfasts are also be permitted.

The Local Retail district is established to provide areas for low intensity, specialized retail sales that are intended to service local neighborhoods and citizens and visitors of Ivanhoe. Office uses and bed-and-breakfasts are permitted within Local Retail Districts.

Table 3.1 Current Zoning Districts

Zones	District	Acreage
Single-Family	District II	1270
Residential		acres
Single-Family/	District I and	1149
Manufactured	III	acres +
Home		1546
		acres
Office	District IV	46 acres
Local Retail	District IV	46 acres
	and V	+ 0.72
		acres
Single-Family	(Mentioned	
Attached	in the	
Residential	ordinance)	
Light industrial	District VI	8 acres

The existing city zoning ordinance also mentions Single-Family Attached Residential district may be included within certain areas of neighborhoods to provide a "buffer" or transition district between lower density residential areas and multiple-family or non- residential areas or major thoroughfares. It is intended to promote attached occupancy residential development on individual lots at slightly increased densities. Light industrial district has also added as one of the zoning district.

SCENARIO PLANNING

Scenario planning is an effective way of envisioning different possible futures for growth and development. Decision makers are often faced with conflicting perspectives on desired futures and the role of government in providing services. Scenario planning offers a mechanism to address these needs and issues of potential uncertainty and conflict.¹⁴ The task force considered different scenarios as a tool to consider the full range of emerging conditions that could affect them. The process outlined in Figure 3.2 was used to gather information for developing alternative scenarios for City of Ivanhoe (Berke et. al., 2006).

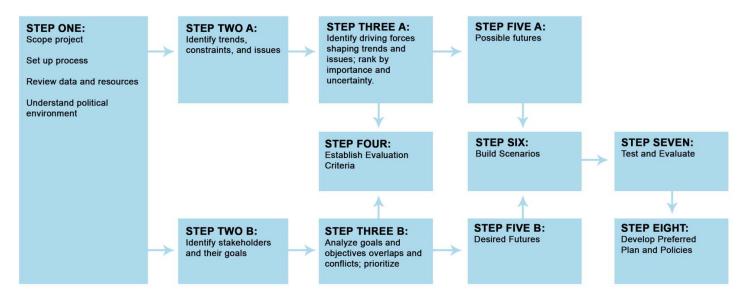


Figure 3.2 : Scenario Planning Process¹⁵

In order, to facilitate the process of visualizing the possible futures for Ivanhoe, four scenarios were created and presented to the community members for feedbacks.

¹⁴ Holway, J. (2011). Scenario Planning Tools for Sustainable Communities. Lincoln Institute of Land Policy,7.

¹⁵ Berke, P. R., Godschalk, D. R., & Kaiser, E. J. (2006). Urban land use planning. Urbana: University of Illinois Press.

Scenario 1: Downtown and Community Center

This scenario considers a downtown design to better improve economic development for the city of Ivanhoe. The downtown would consist of several small businesses such as eateries, bars, retail shops and a small civic center used for community gatherings. The downtown would be located in the already developed area of the current community center or the large vacant parcel along the highway.

KEY CHARACTERISTICS

- Encourages small business developments
- Incorporates the water feature with a small-scale downtown
- Incorporates surrounding nature as a downtown asset

Potential Downtown

Figure 3.3: Scenario showing the downtown and Community Center

STRENGTHS

- Highway accessibility
- Focused on commercial land uses to increase tax revenue
- Utilizing lakes and water access to draw people
- Existing vibrant community center

- Business diversity
- Tourism for 'small town feel'
- Job opportunities

Scenario 2: Parks and Lakes

This scenario provides Ivanhoe with a plan to improve its parks and lakes system through three phases. The first phase is to improve existing parks and implement a trail around the lakes. The second phase is to introduce a city recreation complex with an outdoor space for community functions. The last phase would be to bring in new businesses for a small waterpark, campground, and outdoor rentals company.

KEY CHARACTERISTICS

- Improves existing parks
- Develops lake trail system
- Introduces a city recreation complex
- Establishes a small waterpark
- Provides incentives for a campground and outdoor recreation rental company

STRENGTHS

- Increased property values
- Improves connectivity around the lakes
- Hiking trails promote healthy living
- Improves existing parks in Ivanhoe
- · Gives residents more recreational opportunity

- Eco-tourism industry in Ivanhoe
- Local events



Figure 3.4: Scenario focusing on lakes and parks

Scenario 3: Neighborhood Center

The Neighborhood Center scenario creates community activation nodes within each neighborhood. Activation nodes could include a community center, the revitalization of parks, and the creation of small business districts.

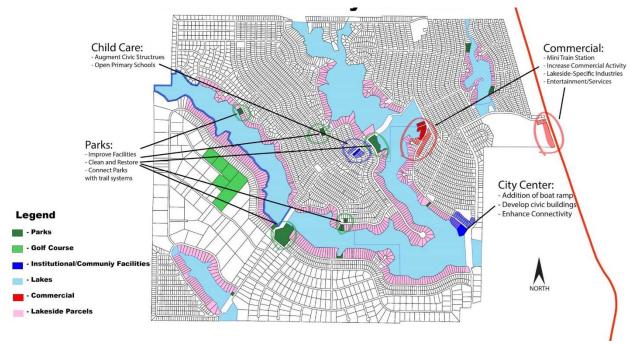


Figure 3.5: Scenario with neighborhood centers as activation nodes

KEY CHARACTERISTICS

- All areas within walking distance to community asset
- Places for residents to gather
- Pedestrian activity
- Commercial clusters

STRENGTHS

- Create an image for the city with landmarks and focal points
- Bring in retail/ restaurants
- Open space and parks

- More community connection
- Infill development
- Minimize crime with more gathering spaces and 'eyes on the street'

Scenario 4: Current Housing Trends

The Current Housing Trends scenario assumes the continuation of current housing trends with areas of focused housing development. New development should focus in priority areas of road construction, infrastructure, and school opportunities.

KEY CHARACTERISTICS

- Guides development in the city
- Encourages growth based on current market and road conditions
- Uses short term development for long term growth

STRENGTHS

- Median housing trends will have a slow but steady increase
- Target areas of the city will increase development
- Character of the city will be maintained
- Focused budget allows for infrastructure improvements



Figure 3.6: Scenario with continuation of current housing trend showing priority areas

- Generate diversity in housing types and affordability
- Steady increase in developed areas of city
- Stimulate population growth

PREFERRED FUTURE LAND USE PLAN

Analyzing the impacts of the variety of growth scenarios, a preferred scenario was brainstormed. Community task force members expressed support for both the Downtown and vibrant city center and Parks and lakes network scenario. The Preferred Future Land Use Plan (Figure 3.9) combines favored aspects of the scenarios to produce a plan that is aligned with the vision and goals of the City. It is based on the City's desire for sustainable economic development. It is designed to promote quality of life through open space preservation, connectivity, focused mixed use development and a strong civic engagement and recreational opportunities.

Planned Unit Development (PUD) is a regulatory process that permits a developer to meet overall community density and land use goals without being bound by existing zoning requirements. The creation of two Planned Unit Development districts in Ivanhoe enables mixed use development such as the Town Center District and the Community Center District. The Town Center is the economic development district that supports the revenue growth and development in Ivanhoe. Meanwhile, the Community Center is a vibrant

community district that serves as a central public place for day-to-day social interactions.

The emphasis on the lake and the park system ensures protections of Ivanhoe's natural assets while providing recreational opportunities. Connectivity and accessibility with maintained street network, new sidewalks, and a new trail system connects the city together.

¹⁶ Douglas Miskowiak and Linda Stoll, 2006 Retrieved from:

 $[\]label{thm:comprehensive} $$ftp://ftp.wi.gov/DOA/public/comprehensive plans/Implementation Toolkit/Documents/PUD.pdf$

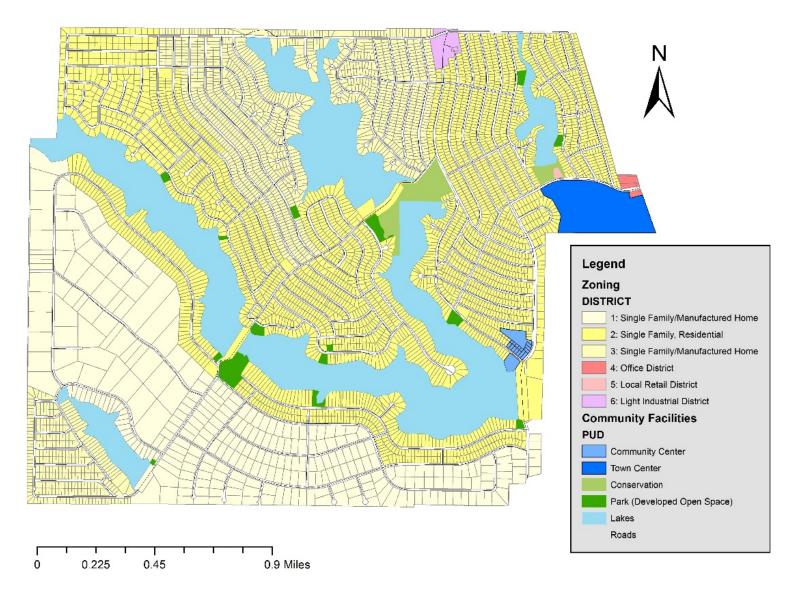


Figure 3.7: Preferred Future Land Use Map

The Preferred Plan focuses on the assets of the city while opening opportunities for development. Much of the existing city fabric has been preserved to protect the sense of place and the identity of the city. The future land use concentrates new residential growth on the existing residential districts and develops two focused mixed use area while preserving park land as open space on the eastern side. See Table 3.2 for the amounts of land for each district.

The future land use map has specific nine districts, however, considering the threats of natural hazards, the city needs to consider area-specific standards or building codes on parcels that are on the floodplains. Figure 3.8 shows the parcels that are on the Federal Emergency Management (FEMA)'s 100-year floodplains.

Table 3.2 Future Land Use Districts

Zones	District	Acreage
Single-Family	District II	1244
Residential		
Single-Family/	District I	1130 +
Manufactured	and III	1546
Home		
Office	District IV	3.25
Local Retail	District IV	46+ 0.72
	and V	
Light industrial	District VI	8
Community	PUD	6.94
Center		
Town Center	PUD	42.09
Parks	Open	17.65
	Space	
Conservation	Open	20.74

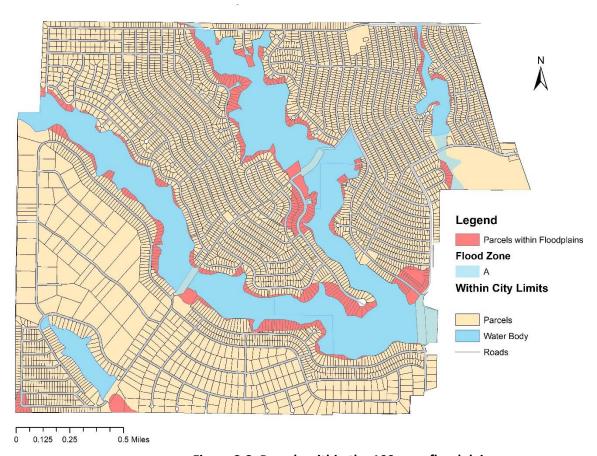


Figure 3.8: Parcels within the 100-year floodplains

The Preferred Future Land Use Plan forms the framework for the following chapters, which detail how to get to this preferred outcome in the specific areas of Economic Development, Community Facilities and Parks, Transportation, and Housing.

Chapter 4: Economy

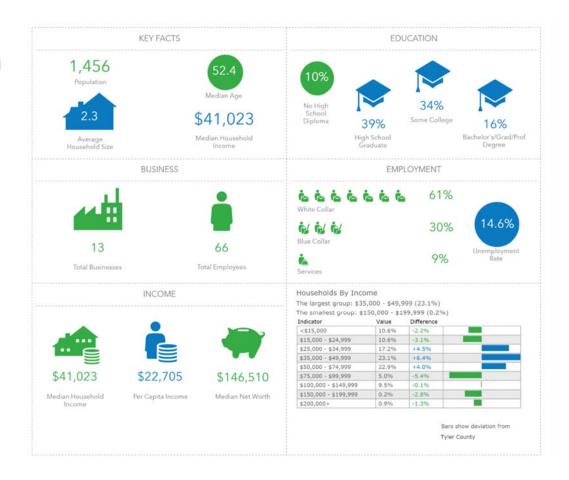
Economic development is vital for improving economic wellbeing and enhancing quality of life. Healthy economic development builds upon existing assets and strength of the community. In this section we examine the current economic characteristics of the City of Ivanhoe and explore the potentials for growth. During the task force meetings, the community showed interest in stimulating economic development by focusing on commercial development along highway US69 and leveraging the community center area to create a 'downtown'.

The recommendations include strategies directed towards low hanging fruit, incremental actions to support the community, and also long-range solutions for achieving sustainable economic development. The strategies address city revenue growth, expansion of job opportunities, town center development, marketing and promotion, and community center area development.

"We want to see economic development by bringing in more businesses in the City."

CURRENT CONDITIONS17

Understanding the economic characteristics as well as the development potential is essential to plan for the future. The following describes the current conditions in Ivanhoe.



¹⁷ For the purpose of this study, data regarding Tyler County will be presented. Ivanhoe City's population size is not yet large enough for empirical data analysis. This report is based on the assumption that the development of future industries in Ivanhoe City can be predicted, planned for, and enhanced through the examination of economic patterns and trends in Tyler County. The information was obtained from federal, state, and local authorities, including the U.S. Census Bureau and ESRI Business Analyst.

Industries

Industry Specialization by Employment Share

better understand the economic characteristics of Tyler County, the employment share data is examined to determine the strengths and weaknesses of different industries (Figure 4.1). In general, the three industries with the highest percentage of the employment share in Tyler County are:

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

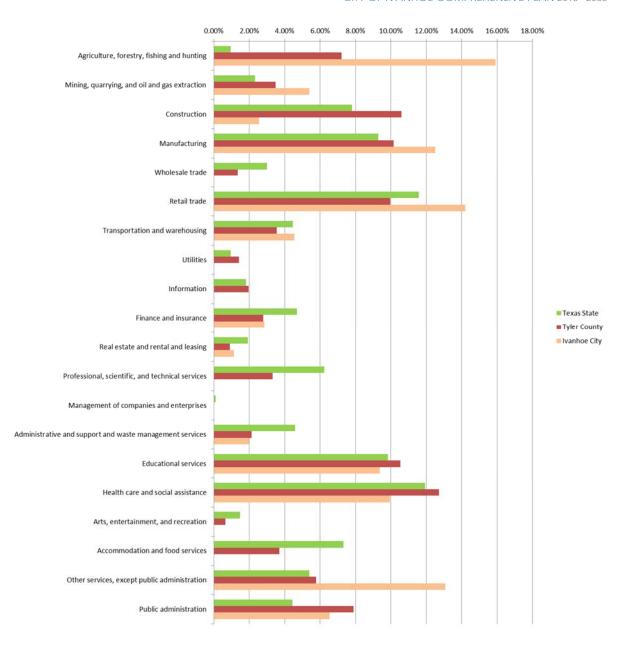
In comparison with Texas State, Tyler County has a higher percentage of workers employed in:

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

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

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

Figure 2.1. Employment Share by Industry in Texas, Tyler County, and Ivanhoe, 2014¹⁸



¹⁸ United States Census Bureau, 2014

Economic/Employment Growth

To identify the trend of economic growth in Tyler County, it is important to examine the growth rate of different industries. Data over a 5-year period is analyzed to provide insight into how these industries are developing (Figure 4.2). Over the 5-year period from 2009 to 2014, the fastest-growing industries in Tyler County by increase rate in employment share were:

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

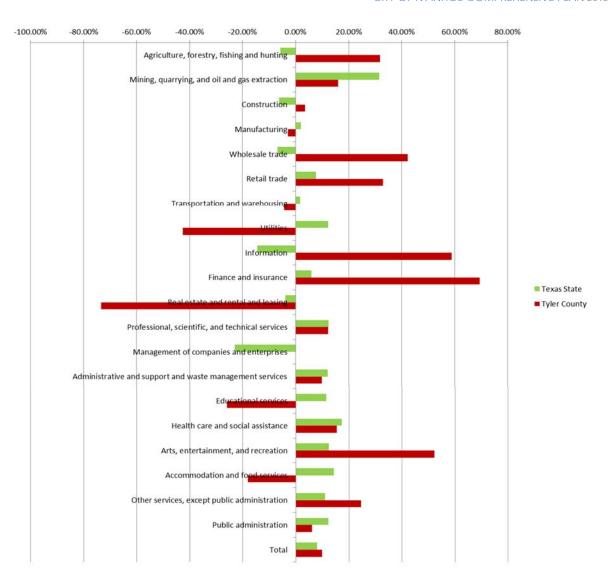
On the other hand, the fastest-shrinking industries are:

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

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

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

Figure 4.2 Change of Employment Share by Industry in Texas and Tyler County, 2009-2014¹⁹



¹⁹ United States Census Bureau, 2014

Location Quotient Analysis

The Location Quotient is another way to consider industry specialization other than looking at the employment share directly. The Location Quotient (LQ) reveals the local employment share compared to a benchmark, such as another region or state (in this case, Texas). The LQ identifies the local region's value and regional competitiveness.20. If the value of LQ is greater than 1, it indicates that the local region, Tyler County, has a specialization in that industry. Table 4.1 shows the calculation outcome of Location Quotients in Tyler County, 2014. There are 10 out of 20 industries whose LQ is higher than 1. According to the LQ value, in 2014, the top five most specialized industries are agriculture, forestry, fishing and hunting, mining, quarrying, and oil and gas extraction, construction, utilities and public administration.

Table 4.1. Location Quotients, Tyler County, 2014*

Industry Title	ei, 201	4 Ei, 2014	LQ					
e _i : Regional employment in industry i; E _i : Benchmark region employment in industry i								
Agriculture, forestry, fishing and hunting	517	112,130	7.59					
Mining, quarrying, and oil and gas extraction	249	274,648	1.49					
Construction	759	921,062	1.36					
Manufacturing	728	1,095,393	1.09					
Wholesale trade	97	352,721	0.45					
Retail trade	714	1,365,482	0.86					
Transportation and warehousing	254	527,057	0.79					
Utilities	101	112,322	1.48					
Information	141	212,915	1.09					
Finance and insurance	200	553,076	0.60					
Real estate and rental and leasing	64	226,689	0.47					
Professional, scientific, and technical services	237	736,154	0.53					
Management of companies and enterprises	0	10,335	0.00					
Administrative and support and waste management services	152	541,652	0.46					
Educational services	755	1,161,308	1.07					
Health care and social assistance	911	1,408,079	1.07					
Arts, entertainment, and recreation	46	172,898	0.44					
Accommodation and food services	265	865,125	0.50					
Other services, except public administration	414	636,462	1.07					
Public administration	565	523,502	1.78					
Total	7,169	11,809,010						

^{*}Industries in red indicate the top five most specialized industries in Tyler County

²⁰ The local employment share is divided by the benchmark employment share.

Economic Base Multiplier Analysis

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

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

The Economic Base Multiplier indicates the total number of jobs that will be created by an increase in one job in a given basic industry. Table 4.2 shows the calculation outcome of the basic & non-basic employment for each industry sector in Tyler County, 2014. The total basic employment is 1,220. The calculation suggests an increase in basic activities of one person would lead to a total increase in regional employment (Tyler County) of 5.88 persons.²¹

Table 4.2. Basic Employment, Tyler County, 2014

Industry Title	ei,	Ei, 2014	LQ	bi	ni
	2014				
e _i : Regional employment in industr	y i; E _i : Benchmarl	k region employm	ent in inc	lustry i	
b _i : Regional basic employment in indu	stry i; n _i : Regiona	l non-basic emplo	yment in	industry i	
Agriculture, forestry, fishing and	517	112,130	7.59	449	68
hunting					
Mining, quarrying, and oil and gas	249	274,648	1.49	82	167
extraction					
Construction	759	921,062	1.36	200	559
Manufacturing	728	1,095,393	1.09	63	665
Wholesale trade	97	352,721	0.45	0	97
Retail trade	714	1,365,482	0.86	0	714
Transportation and warehousing	254	527,057	0.79	0	254
Utilities	101	112,322	1.48	33	68
Information	141	212,915	1.09	12	129
Finance and insurance	200	553,076	0.60	0	200
Real estate and rental and leasing	64	226,689	0.47	0	64
Professional, scientific, and	237	736,154	0.53	0	237
technical services					
Management of companies and	0	10,335	0.00	0	(
enterprises					
Administrative and support and	152	541,652	0.46	0	152
waste management services					
Educational services	755	1,161,308	1.07	50	705
Health care and social assistance	911	1,408,079	1.07	56	855
Arts, entertainment, and recreation	46	172,898	0.44	0	46
Accommodation and food services	265	865,125	0.50	0	265
Other services, except public	414	636,462	1.07	28	386
administration		•			
Public administration	565	523,502	1.78	247	318
Total	7,169	11,809,010		1,220	5,949

²¹ Economic base multiplier in 2014 was be calculated by BM=e/b= 7,169/1,220=5.88

Table 4.3. Economic Base Multiplier in Tyler County, 2014

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

Job Density

As of 2014, there are 3,413 jobs located in the Tyler County, including 2,004 (58.7%) female workers and 1,409 (41.3%) male workers. The map below demonstrates the job density in Tyler County. As shown in the map, Woodville is the major employment center of Tyler County (Figure 4.3).

Table 4.3 shows the employment multipliers for the basic industries in Tyler County. These multipliers indicate the industries in which it would be most fruitful to stimulate economic growth via local policy and investment programs. Therefore, it is highly advisable to invest in both health care and education services in Tyler County.

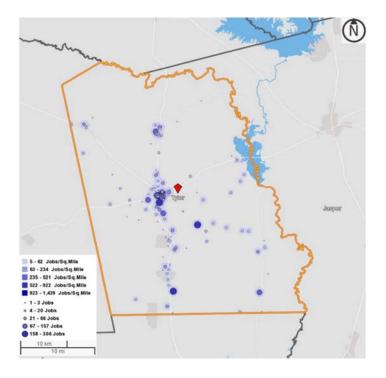


Figure 4.3 Job Density Map of Tyler County, 2014²²

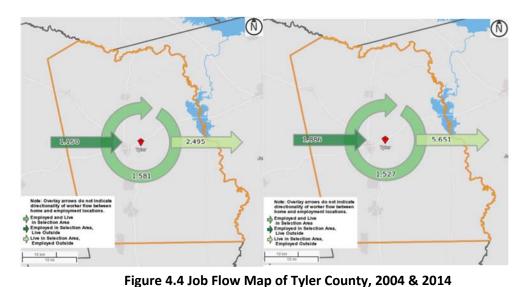
²² United States Census Bureau

Employment Inflows and Outflows

According to the U.S. Census Bureau:

- 1,527 workers live and are employed in Tyler County,
- 1,886 workers live outside but work in Tyler County, and
- 5,651 workers live in Tyler County but work outside its borders (Figure 4.4).

Over the past 10 years, the number of workers living in Tyler County but working outside the county has experienced faster growth. In Ivanhoe, the Census estimates two workers live and are employed within its borders, 20 workers live outside but work in the City, and 885 workers live in Ivanhoe City but work outside its borders (Figure 4.5).



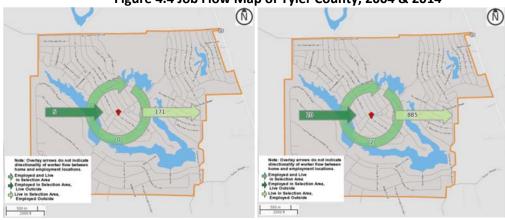


Figure 4.5 Job Flow Map of Ivanhoe, 2004 & 2014

Job Counts by Distance/Direction

Workers in Tyler County who work outside the count commute towards the south and southwest (Figure 4.6). From 2004 to 2014, the proportion of workers whose commute distance is greater than 50 miles increased from 32.5% to 45%. In 2004, the commute time of most workers in Ivanhoe was less than 10 miles to the north in Woodville (Figure 4.7). However, in 2014, the commute distance and jobs count in Ivanhoe increased towards the southwest. The proportion of workers whose commute distance is greater than 50 miles increased from 24.0% to 77.6%.

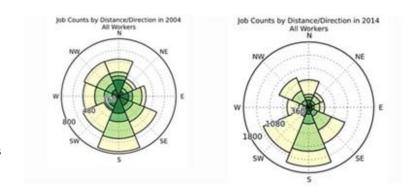




Figure 4.6 Job Counts in Tyler County, 2004 & 2014

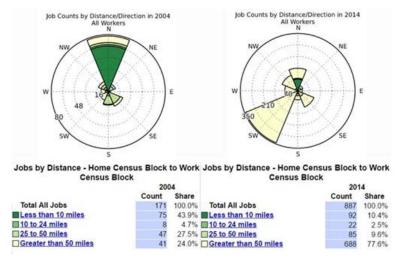


Figure 4.7. Job Counts in Ivanhoe, 2004 & 2014

Leakage/Surplus Factor

The Leakage/Surplus Factor measures the balance between the supply generated by retail business and the demand produced by household spending on retail goods within the same industry (Figure 4.8 and 4.9) ²³. All the positive factors indicate that the existing retailers in the market can't meet the household demand, and therefore there is an opportunity for investment.

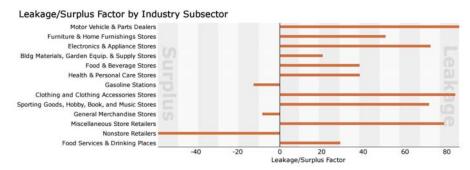


Figure 4.8 Leakage/Surplus Factor by Industry Subsector, Tyler County, 2015

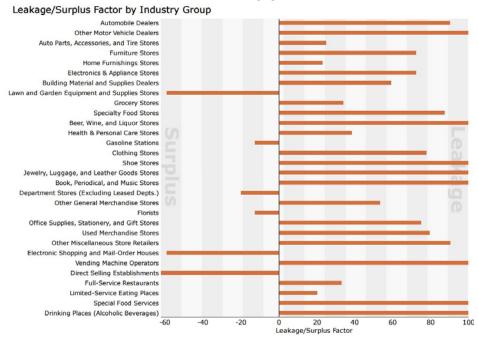


Figure 4.9 Leakage/Surplus Factor by Industry Group, Tyler County, 2015

²³ Retrieved from Esri. Retail Market Place Profile

RECOMMENDATIONS

Economic development and the long-term viability of a city go hand-in-hand. As the world grows, it is increasingly challenging for economic bases to stay competitive and profitable.

Robust Economy

During the community meetings, the taskforce members expressed the need to increase the city revenue through new businesses as well as increasing the property values. Currently, there are very limited businesses within the city limits. The residents travel to nearby cities like Woodville for services. Hence the need for retail and business establishments within the city limits was a big priority. Another approach suggested increasing the property value through beautification or "face life" plan. Also eco-tourism was put forth as an approach to bring in economic development by utilizing the natural assets of the City.

Attract new businesses

Without a healthy level of business activity, it can be difficult for residents to find jobs and earn a sufficient living wage for their families and loved ones. More businesses nearby reduce the cost of acquiring the goods and services that people need in daily life, and having the right businesses nearby can help to cultivate the atmosphere that residents desire.

Ivanhoe seeks to attract new businesses to the City to enhance the quality of life of the residents, as well as, expand investment in the community. Establishing business friendly environment is pivotal towards attracting new businesses. The City should designate an economic development manager to ensure a devoted person to implement economic development programs. Similarly, hiring a grant writer can help the City obtain available funds.

A strategy to pull appropriate businesses is to proactively reach out to businesses that would be a good fit for the City. The possible businesses can be a general discount store and other food service providers.

As a next step more facilities can be added to the community such as medical offices, hair salon and convenience store.

The City of Ivanhoe can encourage home businesses by ensuring that regulations don't inhibit home businesses. The City can provide programs to support prospective local business owners to develop their capacity to run a small enterprise effectively and profitably through Small Business Development Centers (SBDC). Further, to boost local businesses the City can establish a co-working space or business incubator service in the community center. The incubator provides temporary flexible office spaces and also technological support for new startup businesses that need help until they are capable of standing on their own.

Develop Town Center

Currently Ivanhoe has about 43 acres of parcel next to Texas Hwy 69/287 zoned as "Office" and "Local Retail" district (Figure 4.10). Creating the parcel as Planned Unit Development and branding it as the "Town Center" will open new opportunities for economic development. Development opportunity of the site has been explored analyzing the road network and the access to the site.

Based on the different road access, linkages, floodplain and topography, the site have been divided into five distinct areas: highway commercial, main street commercial, light industrial, green space and future mixed use development.

Box 4.1 Small Business Development Centers

(SBDCs) provide a vast array of technical assistance to small businesses and aspiring entrepreneurs. By supporting business growth, sustainability and enhancing the creation of new businesses entities, SBDCs foster local and regional economic development through job creation and retention. As a result of the no cost, extensive, one-on-one, long-term professional business advising, low-cost training and other specialized services SBDC clients receive, the program remains one of the nation's largest small business assistance programs in the federal government. The SBDCs are made up of a unique collaboration of SBA federal funds, state and local governments, and private sector resources.



Figure 4.10 Town Center site location



Figure 4.11 Town Center Design

Highway commercial is commercial strip area with establishments offering services to motorists and may include retail, wholesale, service and repair activities. The town center is designed with a separate controlled access to allow highway traffic to enter the strip center without creating traffic congestion or disturbing the flow of traffic within the city.

Main street commercial is walkable commercial area that supports the provision of goods and services to the community.

Light industrial supports light industries that can produce small consumer goods, rental facilities and warehouses (see Box 4.2). These type of industries are more suited to be located near residential areas and have less environmental impact.

Green space acts as a buffer, segregating different uses, and are protected as green space due to environmental sensitivity. The area within the 100 -year floodplain has been designated as green space to control development and minimize flood damage in the future.

Future expansion area has been allocated for future developments. This area can be developed as a market center with more commercial development. To maintain the ambience and the aesthetic character of Ivanhoe consider the given design guidelines (see Box 4.3).



Highway Commercial



Main Street Commercial



Light Industrial



Green Space

Source: Google Street View

Box 4.2 Small-scale manufacturing

The Smart Growth America Report describes how small-scale manufacturing development in small towns can help boost and strengthen economies. Smallscale manufacturing, downtowns, and neighborhood centers support each other by "creating a foothold for future growth," "providing another attractive option to fill retail space," and creating "a resilient small business environment" (Smart Growth America, 2017). The first step is to "find, connect, and support local manufacturers." Possible sources of funding can be Community Development Block Grants (CDBGs), local banks, or federal loan programs. After a viable funding source has been identified, the next step is to encourage "small, light industrial space in local developments" (Smart Growth America, 2017). The final step in this process is to "create crosssector partnerships" between the private, public, philanthropic, and nonprofit sectors.

More information at https://smartgrowthamerica.org/app/uploads/20 17/11/made-in-place-small-scale-manufacturing-neighorhood-revitalization.pdf

Box 4.3 Town Center Design Guidelines:

Environmental

- Site must be designed with sensitivity to critical watershed paths, soil characteristics, and to conserve as much existing tree cover as possible.
- Site usage and built footprint should not exceed 50% of the total site area and road area should not exceed 10% of total site area.
- Landscaping ordinance needs to be established to place greens space and park area strategically on the site as buffer between different uses in and along the site.

Economic

- Site is to be developed in several phases allowing for incremental investment, flexibility in program, and thoughtful use and modification of its natural assets in sync with local community's preferences and aspirations.
- On priority, the highway frontage along the east side should be captured for its commercial potential to drive short term capital gains that will help fund long term strategies like development of local industries.
- Commercial uses on the site should be designed to accommodate a variety of businesses: popular franchises, locally owned small shops, restaurants, and possibility of expansion for a commercial office space.
- Future development scenario, while allowing for a certain level of use-mix, should ensure availability of at least 70% of total built area for commercial retail, office, and industrial uses.

Architectural

- Design of buildings should speak to Ivanhoe's rural character and love for its native assets.
- Resident and commercial accesses should be separate as far as possible, yet allowing for more connectivity in future in case needed.

Phasing

The redevelopment and construction of the town center would be separated into four sequential phases. The first phase would include adding the highway commercial. Phase two would include the construction of light industrial development. Phase three will be introducing the main street commercial development to the city. The last phase will be further development of the site based on the need and opportunities in the future.

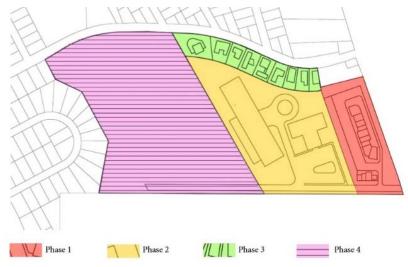


Figure 4.12 Town Center Phasing

Increase property values

To achieve the goal of city revenue growth, the city of Ivanhoe should have its land values reassessed through the appropriate tax assessor or county appraisal district process. Revenue growth for the city can also be a byproduct of aesthetic improvements such as a "face lift" plan including street signs, landscaping, and general lighting improvements. With proper planning, revenue growth for Ivanhoe can gain longevity through the development of business maintenance ordinances.

Branding and Marketing

The goal of growing city revenue can be aided by creating a sense of identity for the city of Ivanhoe. The City can enhance identity through physical characteristics, such as, building codes or restrictive covenants that standardize colors, styles, and décor. Media and outreach can also play a role in enhancing city identity. The city can establish a city "brand" by standardizing a logo, colors, and general "style." The city can invest in creating city brochures with city assets. To capture a larger audience, a web presence is very important through an active and updated city website and city social media. To attract businesses a separate economic development page can be included in the city website to market available land for businesses.

GOALS AND OBJECTIVES

Goal 4.1- Create robust economy with city revenue growth.

Objective 4.1.1 - Attract new businesses to the City.

Objective 4.1.2 – Increase property values.

Objective 4.1.3 – Develop Town Center area in the property next to Highway US 69/287.

Objective 4.1.4 – Establish and market Ivanhoe brand.

Chapter 5: Community Facilities

Community facilities are services established for the general welfare of the community. The high quality of life is dependent on the availability, accessibility and quality of service of these facilities. This chapter examines the available community facilities in the City of Ivanhoe and explores areas of expansion. During the task force meetings, the community members expressed a desire to expand the existing community center as a "community hub." There were discussions on increasing community engagement opportunities, safety, technology and connectivity, and the overall expansion of facilities.

"We want to enhance community pride by creating more community activities."

This chapter addresses multiple types of community facilities in Ivanhoe, including schools, fire station, police station, health services and community center.

CURRENT CONDITION

The City of Ivanhoe lies on the border of two independent school districts: Woodville ISD and Warren ISD. One of the main strengths of Ivanhoe's educational infrastructure is the very small student-to-teacher ratio of 12:1. The Texas Education Association reports that all public schools in Ivanhoe received the "met standard" rating, which evaluates student achievement, student progress, closing performance gaps, and postsecondary readiness. Additionally, online reviews are for schools in Ivanhoe.

There are no hospitals or clinics located within the city boundaries. The nearest hospital is the Tyler County Hospital in Woodville, which is 9 miles to the north. The Tyler County Hospital is equipped with both general medical and surgical facilities, as well 25 beds to accommodate patients. The hospital saw 10,000 patients in the emergency room in 2015. More advanced medical facilities are available in the greater Houston area about two hours away or in Lufkin.

Although there is no official fire department within the City of Ivanhoe, there is one volunteer fire department for the City. The closest fire department is located in Woodville about 9 miles away and in Spurger, which is 16.1 miles away. There are four other volunteer fire

departments in the county with the closest located in Warren about 6.9 miles away. The City of Ivanhoe does not have a police department. There is one city marshal who was inducted in December 2016.

Another community facility that the residents of Ivanhoe frequently use is the Ivanhoe Community Center. Most community meetings are held at this community center as well as most meetings for the Ivanhoe Property Owners Improvement Association (IPOIA). The community center is also used for events and organizations such as: The Men's Club, the Civic Club, the Ivanhoe Fire Department, bingo, game day, holiday parties, etc.

The City of Ivanhoe consists of five lakes and twelve parks within city limits. However, the lakes are private to city property owners and their guests. Most city residents live along one of the lakes or within walking distance. The IPOIA owns and maintains the lakes and parks for use by residents. All maintenance is performed by volunteers and is paid for through maintenance and permit fees. Ivanhoe is also located near both a federal and state nature preserve, both just south of the City.

Outside the city limits of Ivanhoe, a number of recreational opportunities are available through state parks, national forests, and other lands dedicated to recreation and conservation. The John K. Kirby State Forest is approximately 9.7 miles away. The Boy Scouts of America Camp, Camp Urland, is 11.5 miles away. Big Thicket National Preserve is 13.6 miles. Martin Dies Jr., State Park is 25.4 miles away. Sabine National Forest is approximately 30 miles from Ivanhoe and Lake Livingston State Park is 46.9 miles away (figure 5.1). These locations offer opportunities for hiking, camping, boating, and other similar outdoor recreation opportunities.

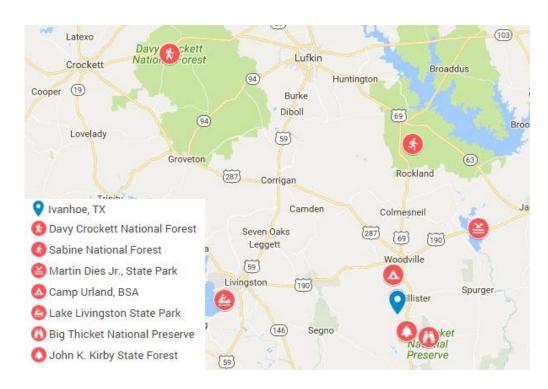


Figure 5.1 Park Facilities in Tyler county

RECOMMENDATIONS

The recommendations for community facilities include stabilizing existing facilities, optimizing resources that have not previously been utilized, and focusing on aspects that possess the ability to grow.

Facilities and Infrastructure for Safety, Security, and Well-being

Infrastructure and community facilities that support safety, security, health, and well-being are paramount. As Ivanhoe continues to develop and grow, the City will require careful planning to accommodate the growth by adding new facilities and updating existing infrastructure.

City center as the community hub

The Ivanhoe Community Center lies on a 1.85-acre lakefront parcel on Camelot Drive (See Fig 5.2). Currently the parcel is in District II zoned as a "Single-family Residential" district. The expansion of the community center is possible by acquiring the available plots around the community center area. Zoning the area as a separate Planned Unit Development district will allow flexible usage and more development opportunities. A variety of complementary functions and spaces will reinforce the community center as a community hub.

The community center area lies with the 100-year floodplain. To minimize the risk of flood damage the City needs to flood-proof the existing building and ensure all



Figure 5.2 Community Center site location

new additions are elevated to or above the base flood level. (See chapter 3)

The proposed design for the Community Center includes harnessing the lake by expanding the swimming area and adding a boat ramp and a pier to Lake Charmaine. The center will also have a board walk and event space. Further, the outdoor areas around the center are designed to serve as a hub for civic and cultural activities. These public spaces will provide the community with a flexible space for gathering events, such as festivals, local concerts, farmers market, and afternoon and weekend activities.

To expand community activities, Figure 5.3 shows a proposed civic center to consist of education, fitness, and health facilities. Additionally, complementary commercial and recreational facilities will help develop a vibrant cultural hub.



Figure 5.3 Community Center development strategies

The community center will add to the unique city identity, sense of place, and allow meaningful interactions between the community members. This center also has a potential to serve as regional attraction for Tyler County.



Figure 5.4 Community Center Site Design

Box 5.1 **Phasing**

The redevelopment and construction of the Community Center is separated into five sequential phases.

Phase one:

- Defined parking for trucks/trailers
- Swimming point

Phase two:

- Constructing the lake walk and boat ramp
- Adding new piers

Phase three:

- Expanding the community center
- Open air theater and landscaped plaza
- Beach volleyball/informal market area

Phase four:

Civic facilities unit and public square

Phase five

- Commercial development
- Observation tower
- Outdoor recreational area

Phase six

• Future acquisition for expansion

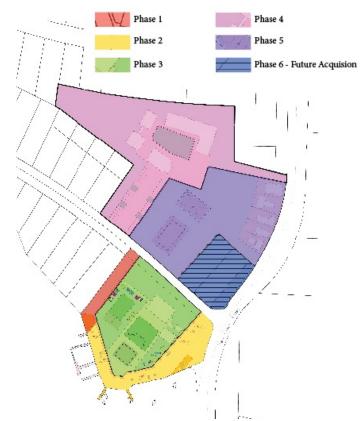


Figure 5.5 Community Center Phasing

Infrastructure needs

Infrastructure such as storm water and wastewater management, utility and communication services, trash and recycling, and drainage services are critical component of a city. Proper planning for future development needs acquiring projections of infrastructure needs over the next 20 years. Needs assessment specialists from each of the aforementioned fields should be consulted to accurately determine what the short-term and long-term needs of the City of Ivanhoe will be with regard to capacity and capability of infrastructural systems. A method of prioritizing which systems are to be augmented first should be determined by the city's leadership. A rough timeline of improvements is projected.

Safety and Security

The City seeks to provide a safe and secure environment for its residents. City safety can be improved by working closely with the police marshal to identify safety concerns and develop strategies to reduce crime. There needs to be a plan to increase law enforcement presence in the future. Animal control was one of the issues expressed in the task force meeting. Enforcing ordinance can help improve animal control. Also, the City can partner with the county to secure animal control services.

Box 5.2 FMT (financial, managerial, and technical) assistance for local governments.

The City of Ivanhoe is located in the TCEQ Region 10: Beaumont, in the Coastal and East Texas section. FMT can give the City of Ivanhoe the proper resources to carry out research and policy changes on a sustainable level (especially in reference to any septic tank issues).

FMT is assistance for public water and wastewater systems. The TCEQ provides free F, M, and T assistance to help public water and wastewater systems comply with regulations through a contract with skilled professionals.

Box 5.3 Case Study: Infrastructure Needs Assessment

The New Jersey State Planning Commission compiled and summarized information provided by state agencies since the adoption of their first needs assessment by the planning commission in June of 1992. The Commission assessed the condition of New Jersey's infrastructure as a whole, and broke down the assessment by categories of infrastructure, including a comprehensive overview. This case study provides an example of what kinds of resources the City of Ivanhoe might employ to acquire the necessary data, perform the requisite analysis, and produce a plan that is suitable implementation, and specifies what and when steps need to be taken.

Parks and Lakes as Assets

The City of Ivanhoe with its scenic beauty, five lakes, and twelve parks, has enormous potential for recreational advancements. The City seeks to upgrade and maintain the parks and lakes. The overarching goal is to enhance the quality of life through expanded, improved, and accessible parks and recreation opportunities.

Out of the twelve city parks, less than half of them are being used to their full potential. Parks upgrades include:

- new play equipment
- · safety surfacing
- sidewalks
- seating areas
- picnic tables
- lighting.

Upgrading existing parks and developing new parks should be completed in a phased approach as funding becomes available. Other considerations include:

- trash receptacles
- shade structures
- signage
- landscaping
- irrigation
- maintenance



Figure 5.6 Parks and Lake in Ivanhoe

Box 5.4 Thinking about cost

A neighborhood park that includes a play structure, safety surfacing, concrete sidewalks, security lighting and one or two benches has a development budget of about \$180,000. Play structures range in price from \$15,000 to well over \$100,000, depending on the brand, size, and options. A good rule of thumb is that it is twice the cost of the play structure for the total cost of the playground (i.e., play structure, surfacing, border, and installation). However, many companies offer a "community build" option wherein community members perform the installation under the direction of a company supervisor. The community build option saves 20-30% of the total playground cost.

Pricing for commercial grade site furnishings (i.e., benches, picnic tables) starts around \$300 and goes up from there. For a small city with a limited budget, Ivanhoe might benefit from building their own benches and picnic tables. This could be done as a community event or by an individual, but the costs of lumber and hardware would be much lower than purchasing them new. Lighting is the most expensive of the recommended park upgrades, as it requires the most labor and specialty work: pedestrian lighting averages \$5,000/pole and security lighting averages \$10,000/pole. Solar-powered lights would be a cheaper alternative the city may want to look into.

For hard surfaces, like sidewalks, the costs are fairly easy to determine once the square footage is known; concrete is about \$8 per square foot and any grading needed can be estimated at \$1-\$2 per square foot. Decomposed granite is a great low-cost, low-maintenance alternative to concrete commonly used in parks; it averages about \$3-\$5 per square foot.

Amphitheater in the park

The outdoor amphitheater is designed to create a gathering space for the community of Ivanhoe and their guests. The best potential location for the amphitheater on one of Lake Charmaine's 2.3 acre parcels (see Fig 5.7). The amphitheater could accommodate one hundred people with sixty designed seats and an additional open seating space. An amphitheater can host entertainment events

(musical or theatrical performances) and support the continued evolution of the well-loved community theater. Possible events include community plays, local concerts, movies in the park, rent out for events, and musical or theatrical performances

.



Figure 5.7 Potential locations for a small-scale water park and outdoor amphitheater

Basic design strategies of Amphitheater (Fig 5.8)

- Establish a low-maintenance, high-quality, terraced, open seating area would significantly enhance the accessibility and increase the functionality of the amphitheaters. The addition of terraced seating would also increase the number of visitors that could enjoy local entertainment and events.
- Open visibility amphitheater stage by providing shaded areas would be the next step toward optimizing the amphitheater use. The minimum size of the stage is 1300 square feet with a capacity of 15 people. Installing electrical outlets would provide for more various entertainment opportunities.
- Create open grassy spaces as an additional space for users to bring their own lawn chairs or picnic blankets to enjoy the local event. The space can also be a play area for children or a picnic site.
- Plant trees along the pathways and the open grassy spaces provides shade and an environmentally friendly landscape.
- Build natural surface walking and biking trails in the short term with a permeable paved walking trail as a long term goal.
- Adding a parking area is a critical need for the amphitheater.

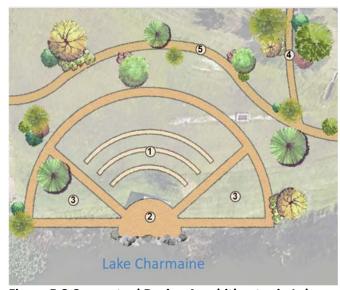


Figure 5.8 Conceptual Design Amphitheater in Lake Charmaine

Lakes for recreational use

The City of Ivanhoe has five private lakes, which can only be used by the community members and their guests. This has led to discussions of bringing recreation facilities and attractions to the City by using the already existing lakefront parks property. To capitalize on the lake, the City needs to monitor and improve the water quality. The City can work with TCEQ to monitor the water and ensure that the lakes adhere to the recommended water quality.

During the planning task force meetings, residents expressed an interest in developing a water park. Water sports could bring in outside visitors and revenue to the area. The City can utilize under-used park land for these new facilities. The new water recreation area could include traditional play equipment and water features, such as:

- splash pad
- floating docks
- · designated swimming area in the lake

The City could charge non-residents and/or residents to use the park to help generate revenue for maintenance or personnel such as lifeguards. The new water park would reclaim undeveloped land, create more public space along the lake, and would promote active living through water recreation.

The lakes of Ivanhoe are suitable for fishing with some existing fishing facilities available. To enhance fishing recreational facilities, the City can construct a new dock near the Community Center on the dam of Lake Charmaine (See Figure 5.4). The City can reach out to Texas Parks and Wildlife department to identify options on surveying the lakes and creating fishing maps.

Box 5.5 **Surface Water Quality Monitoring (SWQM)**

This program monitors and evaluates physical, chemical, and biological characteristics of aquatic systems as a basis for effective policy. Standards are developed to maintain the quality of surface waters in Texas so that it supports public health and enjoyment and protects aquatic life, consistent with the sustainable economic development of the state. For large bodies of water, TCEQ already monitors and provides data for study and policymaking. For a city as small as Ivanhoe, there is not any data present at the moment. TCEQ also provides instructions on how local governments can create their own standards.

Countywide coordination for recreation

Ivanhoe can leverage the proximity and the variety of recreational opportunities in the County. The City can coordinate with the John K. Kirby State Forest, the Boy Scouts of America Camp, Camp Urland, Big Thicket National Preserve, Martin Dies Jr. State Park and the Sabine National Forest to improve regional eco-tourism.

Sense of Community through Events and Activities

To enhance civic pride and a sense of community the City can host monthly events with activities for all ages. The Community Center has the opportunity to facilitate community members coming together. After-school programs can include sports, arts, and crafts. Spring break and summer day camps by the lake can also foster youth interactions within the community. Additionally, a unified community events calendar that is regularly updated on the city website can be a very good medium to keep the residents and visitors informed.

Expand the arts and entertainment community

Community members expressed interest in growing the arts and entertainment in the community. Arts, culture and entertainment are key factors to attract people and bring in tourists as well as new residents.

Currently, there is a growing arts and entertainment initiative in the community. To build on this momentum, the City can nurture arts and entertainment activities designating the community center as an arts and culture hub, such as:

- update the art work displays in the city center
- encourage the theater group to host semiannual theater productions

Box 5.6 Case Study: "Navasota Theatre Alliance"

The City of Navasota, TX has a well-established theater group, Navasota Theatre Alliance. While the population is larger (~7,400), this is still a comparable case study to perceive as an achievable goal. This theater program is a non-profit organization that has gradually grown over the past 31 years providing entertainment for the Brazos Valley.

- foster seasonal concerts and events to attract more visitors
- add educational classes around arts and theater

With the additional proposed facilities--open air outdoor theater (See Fig 5.4) and the amphitheater (See Fig 5.7)—the City can fully develop and nurture arts and entertainment.

Community events at the parks and lakes

The City can increase events at the parks and lakes in the community. Some events can include:

- Community clean-ups held where a few times a year with volunteers split up into groups to work on the parks, clean out trash and overgrowth, as well as update equipment with minor fixes or embellishments would help to keep the cost of overall maintenance as well.
- Community fitness classes put on in the city parks are another type of community
 event that provides a number of positive impacts for Ivanhoe. The events would
 bring residents of all ages together and promote healthy living. Activities could
 include yoga, Zumba, boot camp, or any other popular activity. In addition, events
 like this could pave the way for Ivanhoe to have its own fitness and recreation
 center.
- Between Ivanhoe's five lakes and sixty miles of roads there is plenty of space and opportunity for athletic competitions. Lake Charmaine is capable of both 200m and 500m canoe or kayak races with there being shore line close by for viewing stands. Triathlon "Sprints" are the shortest version of a triathlon and consists of a 0.5-mile swim, 12.4-mile bike, and 3.1-mile run. Another type of triathlon is the XTERRA triathlon which is an off-road race. Larger triathlons could be held in conjunction with other parts of Tyler County. Lastly, 5K and 10K races are popular, simple to setup, and attractive to a wide range of individuals. They are excellent fundraisers for charities, schools, and other local coalitions.

GOALS AND OBJECTIVES

Goal 5.1 – Provide high quality community facilities and infrastructure to meet the needs of safety, security and well-being of the current and future residents of City of Ivanhoe.

Objective 5.1.1 – Expand the civic center to provide a community hub to foster greater local community activities and improve quality of life.

Objective 5.1.2 – Increase and improve infrastructure and facilities based on the need of the community.

Goal 5.2 – Increase recreational facilities through improved and accessible parks and lakes.

Objective 5.2.1 - Reclaim and upgrade existing park according to the priority list.

Objective 5.2.2 - Reclaim and improve existing and water quality lakes for better usage.

Objective 5.2.3 - Create new public recreation attractions by build new parks.

Objective 5.2.4 - Expand fishing opportunity in the city by utilizing the lakes.

Goal 5.3 – Enhance sense of community by increasing number of community events and activities for all ages.

Objective 5.3.1 – Grow arts and entertainment community by Develop City Center area for the arts

Objective 5.3.2 – Enhance the existing community events, activities, and program by incorporating additional activities, classes, and events for residents and visitors of all ages in the community

Chapter 6: Transportation

The City of Ivanhoe desires to have an enhanced transportation network. This chapter provides the framework and steps necessary for a successful future transportation network, including a planning timeline and a summary of current transportation issues. Inputs from the city council and residents were used to frame goals and objectives. The chapter also provides a plan for road classification, several potential funding sources, and a road maintenance priority schedule to ensure the highest level of efficiency in the maintenance and construction of roads throughout the City.

"The City of Ivanhoe desires transportation that enhances accessibility and connectivity to its residents and ensures travel safety."

CURRENT CONDITIONS

Though the City of Ivanhoe is relatively compact in size, it is not densely developed. Ninety-three percent of residents traveled to work by car whereas 3% work from home. Around two-thirds of all work trips take between 10 and 30 minutes from the City (See Fig 6.1 and Fig 6.2).²⁴

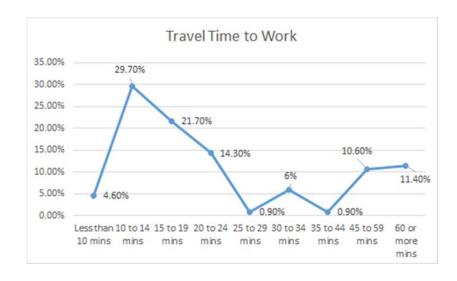


Figure 6.2: Work Trip Travel Times from Ivanhoe

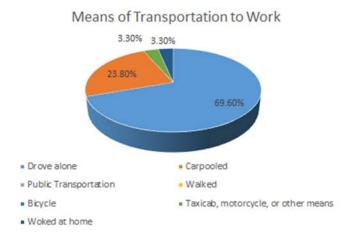


Figure 6.1: The City of Ivanhoe Trip Shares

²⁴ American Community Survey 2014

Existing Road Condition

Per Figure 6.3, the roads have been classified based on the road type. Roads have been classified as dirt, asphalt, or gravel under road type. Many of the roads of each surface type need maintenance. Along with maintenance, a more intricate pedestrian network could be formed, providing an alternative mode of travel through the City.



Asphalt Roads
Dirt Roads

Legend

Gravel Roads
City_Limits

Figure 6.3: Road Classification in Ivanhoe based on Road Type²⁵

The City of Ivanhoe is unique in that most of its roads are privately, or city-owned. This helps the city ensure its residents are the main users of the roads. However, this could

²⁵ Texas Target Communities Windshield Road Survey, 2016

potentially create issues in obtaining larger amounts of funding from state and federal agencies. The quality of roads was rated on a scale from 1 to 10; 1 being the worst and 10 as the best (Fig 6.4).²⁶



Figure 6.4: Road Quality in Ivanhoe

 $^{^{\}rm 26}$ Texas Target Communities Windshield Road Survey, 2016

Transportation System Characteristics

Road Classification

Roadway Classification, also known as functional classification, is the process used to categorize street and highway networks based on the service they are envisioned to provide. Figure 6.5 shows the common road classification hierarchy for rural areas. The City of Ivanhoe currently does not have any existing road classification.

Speed limits & Signage

Speed limits vary by roadway class and is a primary factor in the design of roadways. The city's roads are considerably lower speed limits compared to highway 69 with a speed limit of 75 mph. Speed limits are usually kept low to promote safety within the city.

Elevation

As observed in Figure 6.6, the city has both high and low points. The lowest elevations are the lakes and the high elevations are the areas with a comparatively dense population. Elevation can be used to successfully design trails and bike routes for tourism purposes.

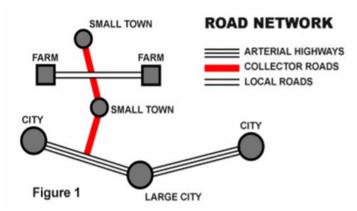


Figure 6.5: Common Road Functional Classification for Rural Areas

Source: Oklahoma Department of Transportation, 2009

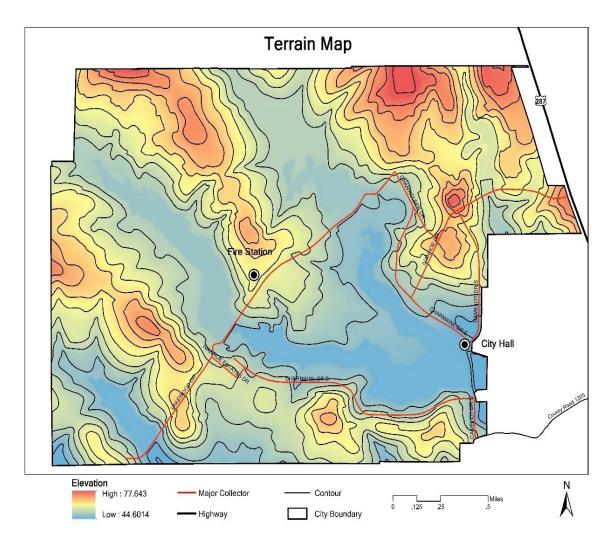


Figure 6.6: Ivanhoe Terrain Map

RECOMMENDATIONS

Road Functional Classification

Figure 6.7 proposes a road functional classification for the City of Ivanhoe. Three levels of roads are included in the map: Major Collector, Minor Collector, and, Local Roads. All levels of roads are designed for multiuse (also called shared lanes) to include automobiles, golf carts, bicyclists and pedestrians.

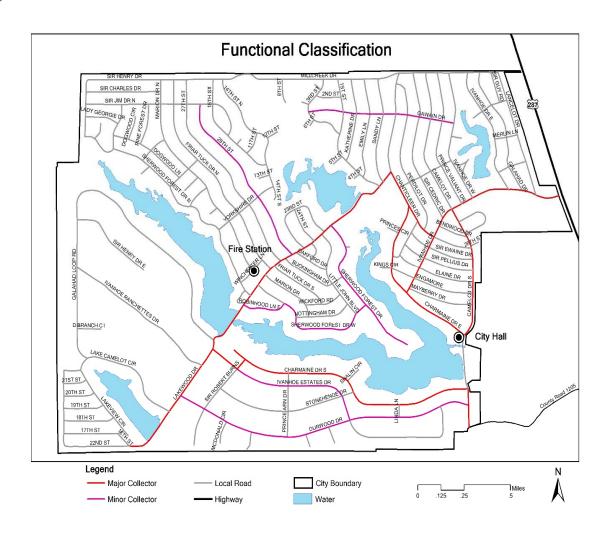


Figure 6.7: Proposed Road Classification for the City of Ivanhoe

Maintenance Priority Zones

Figure 6.8 provides guidance for the order of implementation of all future roadway maintenance and construction projects. The City of Ivanhoe is divided into five maintenance priority zones based on development and population density.

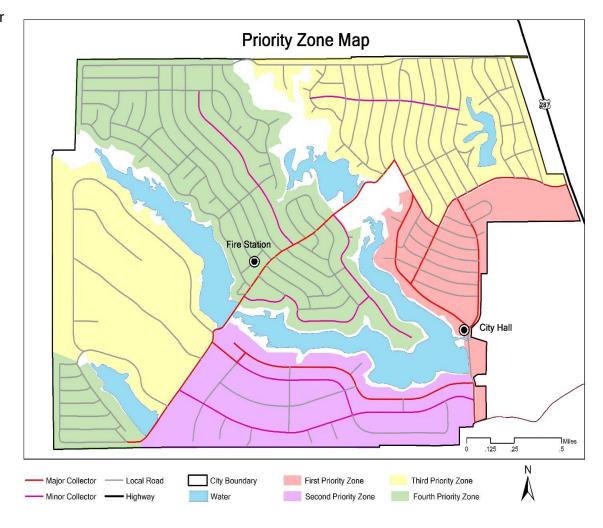


Figure 6.8: Proposed Maintenance Priority Map for the City of Ivanhoe

Design Guidelines

Road Standards

Road Width

The City of Ivanhoe currently possesses 30 feet of right-of-way for roads and drainage and the road widths are between 12 to 18 feet (Table 6.1). The city does not intend to acquire additional right-of-way and roads are expected to be no wider than 18 feet to accommodate open ditch drainage. Figures 6.9 - 6.11 indicate typical road and lane widths planned for Major Collector, Minor Collector, and Local Streets in Ivanhoe. Additionally, paved 2-way roads with low or medium traffic volumes may benefit from the use of a narrow-dashed center line. In these instances, the city can allocate additional right-of-way to pedestrians and bicyclists.



Figure 6.9: Proposed Major Collector Street Section

Table 6.1: Proposed Functional Road Classification Standard for Ivanhoe

Road Functional Class	Right-of- way Width	Multiuse Lane Width	Speed Limit	Road Surface Type
Major Collector	30′	18′	25-35 mph	Asphalt
Minor Collector	30'	16′	20-30 mph	Chip Seal
Local	30'	12'	15-25 mph	Caliche

Speed Limit: Vehicle speed plays an important role in the cause and severity of crashes. Target speed refers to the speed designers intend for drivers to go. Operating speed refers to the actual speed most traffic goes. Typically, streets are designed using a target speed rather than an operating speed. The target speeds should fall between 10-30 mph on most city streets, and would be an ideal target for lyanhoe.²⁷

In general, the maximum target speed for an arterial street is 35 mph and the maximum target speed for a collector or local streets is 30 mph.²⁸ Shared streets and alleys should be assigned lower speeds than higher capacity roads. The higher speeds should be used for limited access freeways and highways and they are inappropriate for urban and rural community streets. Furthermore, on local roads or in neighborhoods with high pedestrian volumes, 20 mph zones reduce speed.



Figure 6.10: Proposed Minor Collector Street Section

²⁷ Jones, P., Boujenko, N., & Marshall, S. (2007). Link & Place-A guide to street planning and design.

²⁸ Transportations, D. W. U. (2010). A Context Sensitive Approach. Institute of Transportation Engineers, West Washington, DC, 2005, 215.

Surface Material: Three commonly used street materials: asphalt, concrete, and pavers. Asphalt is the most common street material, and it is the least expensive of these options to implement. Because an asphalt street surface easily deforms under the weight of heavy vehicles, concrete street surfaces are recommended for streets with large vehicle traffic. However, concrete is more expensive to implement. In shared areas, pavers of different colors, textures, and orientation can be used as indication of differences between pedestrian and vehicle facilities.

Alternate sources of road paving are also considered due to budgetary constraints. Caliche roads are formed out of larger rocks that are then compacted to form a flat, mostly impermeable surface. This form of road is better than dirt, as rain does not wash out caliche as easily. It is also cheaper to build than asphalt roads, and with proper maintenance can endure all types of weather. Caliche is also a form of base road for asphalt roads, and could be easily converted to chip seal or asphalt at a later time. Chip seal is similar to asphalt, using smaller rocks and gravel to form the top layer. However, chip seal roads are only sealed with minimal compacting required. The construction process is similar to an asphalt road, but is less expensive due to a reduced construction time. Chip seal roads are being recommended for the major and minor collector roads in the city.



Figure 6.11: Proposed Local Street Section

Table 6.2 identifies paving materials, estimated costs of each material, and pros and cons for each material.

- Asphalt tends to have an even surface, long life span, and durability. However, paving with asphalt is quite costly.
- Chip sealing is a good, lower cost alternative to asphalt. Chip sealing is easy to install and maintain. However, chip seal roads are more prone to ruts, sinkholes, debris, and dust than asphalt.
- Caliche is more cost effective than chip seal, and the paving material is made from a mixture of sedimentary rock and a binding agent. Caliche is used as a first layer for building asphalt roads, but can also be used as a driving surface. Usually caliche is a base layer of asphalt roads, and this material can be quickly upgraded to chip seal or asphalt when the budget is available. Like chip seal, caliche is vulnerable to flood damage and can cause excessive dust in dry conditions.

Table 6.3 gives a rough estimate of cost for upgrading roads based on case studies and online research. The length and area are calculated by functional classification. Major collectors and minor collectors are recommended to be asphalt or chip seal, because they are most frequently used roads. Local roads can be paved with caliche.

Table 6.2: Comparison of Pavement Material

Classification	Estimated Cost	Pros	Cons	Cost Source
Asphalt Paving	\$3 - \$4 per sq. ft. (\$3.5 per sq. ft. is applied)	-Sleek appearance -Even surface -Long lifespan -Last 12 – 35 years	-Need a frequent seal coating to prevent cracks and pothole -Costly -Required maintenance every 2-5 years -Cracks and holes should be repaired as soon as possible -Can be damaged during extreme heat	http://www.hom eadvisor.com/cos t/outdoor- living/install- asphalt-paving/
Chip Sealing	\$15,000 per mile (\$2.84 per ft. is applied)	-Great alternative to asphalt -Quick installation -Ease of maintenance -Relatively durable -Very competitive price	-Form ruts and sinkholes -Hard to keep smooth and looking good -Cause dust, debris and dirt to fly -Require frequent cleaning nearby home -Not even surface -Somewhat undesirable to ride a bike and walk	www.boiseweekly .com/boise/to- chip-or-not- to/Content?oid=9 32874
Caliche Paving	\$20 per sq. yd. (\$2.22 per sq. ft. is applied)	-Alternative to chip sealing -Quick installation -Acceptable materials as driveway surface -Ease of maintenance -Most competitive price	-Form ruts and sinkholes -Hard to keep smooth and looking good -Cause excessive dust, debris and dirt to fly -Require frequent cleaning nearby home -Not even surface -Not desirable to ride a bike and walk	http://www.reco mtx.com/pricing. html

Table 6.3: Comparison of Estimated Road Pavement Cost by Material and Functional Classification²⁹

*1st Phase Local Roads: Preferentially Recommended to be upgraded or repaired due to higher residential density and frequency of utilization

Road T	уре	Existing Condition	Length (ft)	Width (ft)	Area (sq ft)	Estima	ted Pavement (Cost(\$)	Estimated A Repair	•
						Asphalt	Chip Sealing	Caliche	Pot hole	Crack
		Asphalt	32,370.3	18.0	582,664.6	_	-	-	1,318.00	6,395.40
Major	_	Gravel	736.8	18.0	13,262.6	46,419.30	2,578.80	29,443.10		
Collect	or	Dirt	-	-	-	-	-	-		
	_	Total	33,107.1	-	595,927.2	46,419.30	2,578.80	29,443.10		
		Asphalt	16,227.2	16.0	243,407.8	-	-	-	3,732.30	15,091.30
Minor	_	Gravel	6,657.7	16.0	99,865.6	206,853.00	11,189.80	131,203.90		
Collect	or	Dirt	3,940.1	16.0	59,100.9	349,529.50	18,907.90	221,701.50		
	_	Total	26,824.9	-	402,374.2	556,382.50	30,097.60	352,905.50		
		Asphalt	4,460.0	12.0	44,599.7	-	-	-	1,025.80	2,765.20
	1st	Gravel	15,279.2	12.0	152,792.2	236,331.60	19,176.60	149,901.70		
	Phase	Dirt	6,752.3	12.0	67,523.3	534,722.70	43,393.00	339,198.70		
Local	_	Total	26,491.9	-	264,915.2	771,104.30	62,569.60	489,100.40		
*		Asphalt	86,492.6	12.0	864,926.3	-	-	-	19,121.20	51,544.00
	2nd	Gravel	32,898.6	12.0	328,986.2	1,439,178.30	0 116,779.00 912,850.3			
	Phase	Dirt	41,119.4	12.0	411,193.8	1,151,451.80	93,432.10	730,349.40		
	_	Total	160,510.6	-	1,605,106.3	2,590,630.10	210,211.10	1,643,199.70		
Grand	Total		246,934.2		2,868,323.0	3,964,536.20	305,457.20	2,514,648.70	25,197.30	75,795.90

²⁹ Buchanan, Jesse. (2015). my record journal.com. Retrieved from http://www.myrecordjournal.com/news/southington/6805241-154/southington-officials-debate-pros-and-cons-of-chip-sealing-roads.html

Implementation Timeline

Maintenance and Upgrade Schedule

The following describes a maintenance schedule for the road network. The highest priority roads for improvement are local roads that are in the poorest shape with the highest number of residents. Roads planned as arterials and collectors are prioritized second and third respectively. These roads need repairs, but are currently in better shape than the priority local roads. Many of the arterials and collectors are also currently paved, which is not true for many of the high priority local roads. Finally, the lower priority local roads, with low to no residential density are prioritized fourth and fifth. The full maintenance and upgrade schedule can be found in the appendix.

Pave All Unpaved Roads with the Most Suitable Materials

Approximately 43% of roads in the City of Ivanhoe are currently either gravel or dirt. To ensure adequate transportation facilities, it is necessary to plan for road connectivity. Safety within the transportation network will require maintenance of paved surfaces, while also paving and maintaining existing non-paved surfaces. For better connectivity and enhanced mobility, upgrading and widening existing roads according to the functional classification is recommended.

Paving proposed Major Collectors that are currently gravel with asphalt: Of the current roads planned for major collectors, 97.8% are currently paved. The length of the remaining planned Major Collector road that is currently gravel is approximately 740 feet. This short section of road would complete the paving of Major Collector roads with a relatively low percentage of the overall project budget.

Timeframe: Recommended Road
Paving Schedule

I dville selice	idic
Duration (in	Targeted Road
years)	Description
Year 0-1	Gravel Major Collector
Year 0-1	Dirt Local Road
Year 2	Dirt Minor Collector
Year 3	Dirt Local Road (zone
	1, 2 & 3)
Year 4	Dirt Local Road (zone
	4)
Year 5	Gravel Local Road
Year 5	Gravel Collector
Year 6	Gravel Minor Collector
	(zone 1, 2 & 3)
Year 7	Gravel Minor Collector

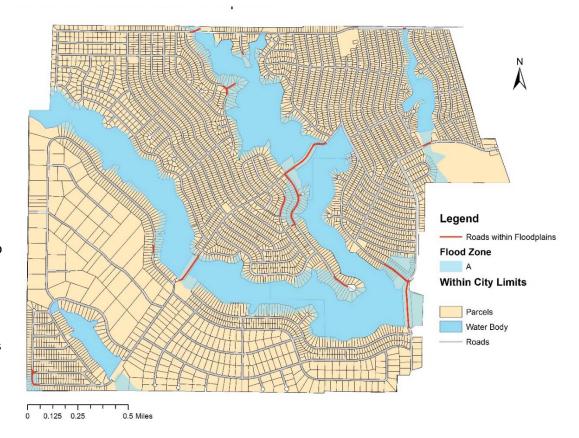
Minor Collector road paving: Similar to the Major Collector roads, the planned Minor collector roads are in relatively good condition, with around 60% of the road planned for Minor Collector currently paved with asphalt. To begin upgrading the remaining 40%, the dirt roads and gravel roads in poor condition can be paved with chip sealing instead asphalt paving. The remaining gravel roads can be upgraded to chip sealing at a later time, when the budget becomes

available.

Local Roads: Three-quarters of the total road mileage in the City of Ivanhoe are classified as local roads. Based on residential density and current pavement status, the local roads are classified into two phases. Similar to Minor Collectors, dirt roads should be paved first with chip seal.

Special attention need to be given to roads in the 100-year floodplains. Figure 6.12 shows all the roads in Ivanhoe that are in the floodplains. The City can work with engineers to ensure proper maintenance of roads on the floodplain.

Figure 6.12 Roads within the floodplains



Repairing Damaged Road Surfaces

Though more than fifty percent of the roads are surfaced with asphalt, many parts of these roads have damage. Cracks and potholes in the road can cause unnecessary vehicle wear and tear or crashes. Resurfacing roads is much costlier than repairing only the damaged spots and repairing can help extend the life of existing roads. The repair schedule follows the functional classification, and considers other planned and existing conditions impacting traffic in each area. It is necessary to fully investigate the damaged roads to ensure an accurate budget estimate.

Specific road conditions, width and length, estimated cost, and locations are available in the appendix.

Upgrade Current Roads to Improve Connectivity and Accessibility

A well-designed road network is the first prerequisite to individual connectivity and accessibility within a city. Road network systems are built on functional classification where roadways are categorized based on their function. For efficient and safe urban circulation systems, it is necessary to design specific facilities to serve certain functions. In the City of Ivanhoe, Major Collectors provide access to Texas State Highway 287 and carry larger traffic volumes of traffic. Minor Collectors are designed to enhance mobility and access through the city, and serve as connections to the Major Collectors. Local roads mainly serve the needs of residents. Through this classification, it is possible to properly decide the number of lanes, streets configuration and speed limits during the planning process, and control traffic, minimize maintenance and construction costs, and reduce traffic conflicts once implemented. It is highly recommended to upgrade current local roads according to the functional classification system created for Ivanhoe.

Timeframe: Recommended Schedules for Damaged Road Surfaces

Damagea Houa Damaces							
Duration	(in	Targeted	Road				
years)		Description	n				
Year 0-1		Asphalt	Major				
		Collector					
Year 2		Asphalt	Local				
		Road					
Year 3		Asphalt	Minor				
		Collector					
Year 4		Asphalt	Local				
		Road					

Multi-Use Local Roads for All Modes of Travel

Ideally, separate right-of-ways for different modes of transportation are recommended, though not always possible. It is recommended local roads be multi-use, for users of motorized vehicles, bicycles, and pedestrians. The local roads provide access to parks, lakes and commercial areas through the city, and allowing for multiple types of users could promote leisure activities, along with daily work travel.

GOALS AND OBJECTIVES

Goal 6.1 - Ensure safe and accessible road ways for all ages.

Objective 6.1.1 - Upgrade roads in substandard condition

Objective 6.1.2 - Maintain an updated list of roadway conditions

Objective 6.1.3 – Improve drainage systems

Objective 6.1.4 - Increase ease of navigation in the city and to recreational sites

Goal 6.2 - Develop infrastructure to promote a pedestrian-friendly and bicycle friendly environment

Objective 6.2.1 - Encourage construction of pedestrian and/or bicycle trails

Objective 6.2.2 - Ensure safety of pedestrians and bicyclists

Chapter 7: Housing

Residential land use is the primary development in Ivanhoe, specifically single family residences. The community aims to maintain neighborhood character, while exploring opportunities to diversify housing types. Additionally, the city seeks to create an environment to attract new home builders. This chapter examines existing housing types, values and affordability and intends to guide development, maintenance, and redevelopment of housing in Ivanhoe.

"We want to stimulate new home builds while maintaining the character of our neighborhood."

CURRENT CONDITION

City of Ivanhoe has a total of 904 housing units, with only 270 houses per square mile. This is consistent with small towns in rural areas. The median housing price of Ivanhoe in 2014 was \$62,700, in comparison with Tyler County's median housing value which was \$77,800. However, when compared to the median of Texas, \$131,400, one is able to start getting a clearer picture of the city and the county as a whole.

In Ivanhoe, the housing is made up of 85.30% single family with the remaining 14.70% being made up of mobile homes and other types of housing units. Ivanhoe has over twice the percentage of mobile homes as the state of Texas. They have comparable rates of overburdened homeowners and a lower rate of overburdened renters when matched against the state average. One potential reason of this could be the low housing value and prices.

As a whole, Ivanhoe experienced the majority of its development post-1970 with over half of its population moving in during the 2000's. Ivanhoe has no multi-family housing yet. The city as a whole is characterized by its rural identity, low density, and its low housing prices. Ivanhoe has a higher than average population of both retirees and recreational home owners.

Rate of Growth/Housing Age

Generally, the housing stock growth follows the path of population growth. As shown below, the growth of housing stock in Tyler County and Ivanhoe City peaked in the 1970s (Figure 7.1). ³⁰

Percentage of Housing Stock

Figure 7.1 Housing Age in Texas, Tyler County and Ivanhoe City, 2014

Texas State Tyler County Ivanhoe City

²⁸ 26 24 22 20 18 16 14 12 10 2000 to 2009 1939 or earlier 1940 to 1949 1950 to 1959 960 to 1969 1970 to 1979 1980 to 1989 1990 to 1999

³⁰ Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Growth by Jurisdiction

In Tyler County, about 50% of the county's housing stock has been built since 1980. As of the growth by "year housing occupant moved in", the following graphs show that the state, county and city have a similar pattern (Figure 7.2). ³¹ Most occupants moved in to housing units during the 2000s. Figure 7.3 shows the parcels sale according to the sales year.

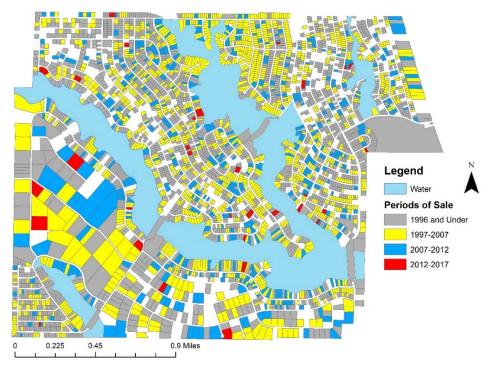


Figure 7.3 Parcel according to period of sales, Tyler Appraisal District

Percentage of Occupied Housing Stock

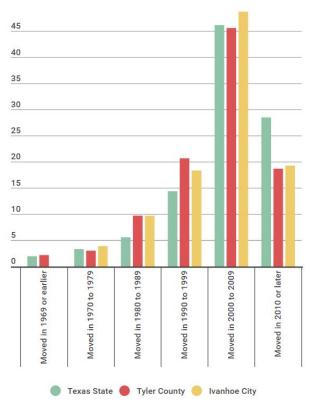


Figure 7.2 "Year Housing Occupant Moved in" in Texas, Tyler County, and Ivanhoe City, 2014

³¹ Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Housing Unit Density

As of 2014, the estimated housing units in Tyler County were 10,593, with a housing density of 11.45 housing units per square mile.³² Compared to the state-level housing density of 39.26, the housing unit density in Tyler County is very low and highly compact in those main cities or towns. City-level housing density is shown below (Table 7).

Table 2 Housing Density per square mile of Major Cities/Towns in Tyler County³³

	Woodville Town	Ivanhoe City	Colmesneil City	Chester Town	Wildwood ³⁴	Warren ²⁴
Total Housing Units	1,328	888	338	164	446	310
Houses per square mile	414	270	169	104	99	74

³² United States Census Bureau, 2014

³³ Retrieved from http://www.towncharts.com/Texas/Texas-city-index-Housing-data.html

³⁴ This is a Census Designated Place (CDP)

Housing Types

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

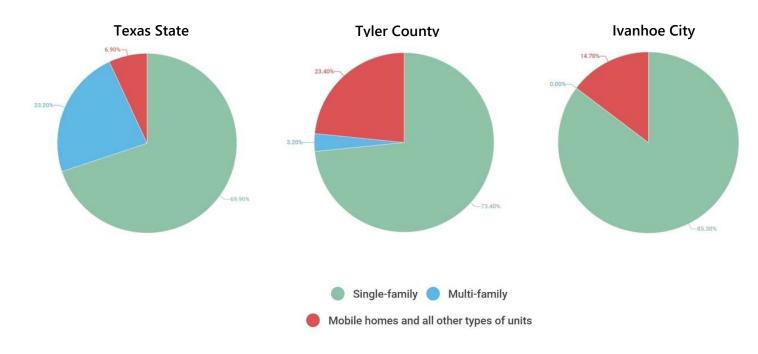


Figure 7.43 Housing Types in Texas, Tyler County and Ivanhoe City, 2014³⁵

³⁵ United States Census Bureau, 2014

Households

The majority (56.36%) of households in Tyler County are married-couple families, which is higher than that of Texas (Figure 7.5). Additionally, the proportion of nonfamily households in Ivanhoe (37.31%) is much higher than that of Texas.

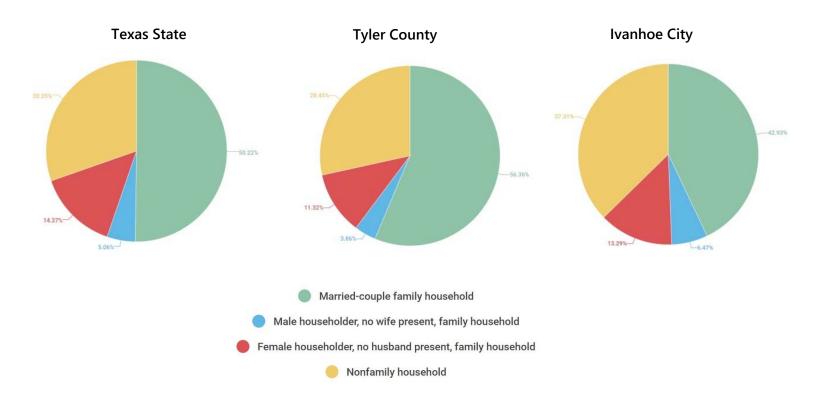


Figure 7.5 Types of Households in Texas, Tyler County and Ivanhoe City, 2014³⁶

³⁶ United States Census Bureau, 2014

House Value

The median house value is about \$77,800 in Tyler County and \$62,700 in Ivanhoe City, which is almost half of the state (\$131,400) (Figure 7.6). ³⁷ There is a sharper drop once the value reaches \$100,000 in the county and city, while the percentage of houses in Texas declines more gradually as the value increases. The lower housing value may be due to the percentage of mobile homes in county and city.

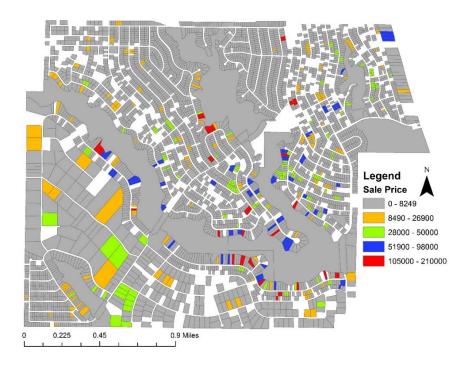
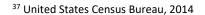


Figure 7.7 Sales Value in parcels in Ivanhoe, Tyler Appraisal District



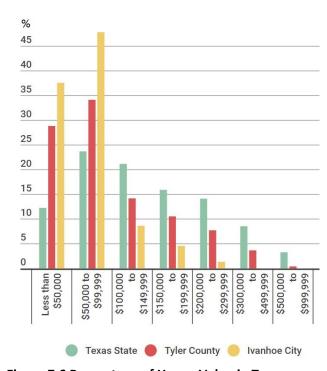


Figure 7.6 Percentage of House Value in Texas, Tyler County and Ivanhoe, 2014

Percentage of Income Spent on Mortgage

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

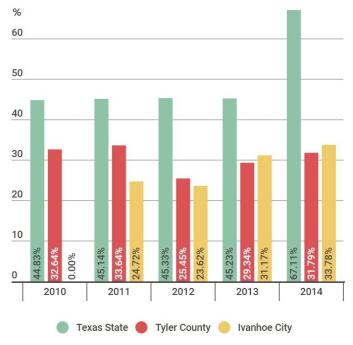


Figure 7.9 Percentage of Housing Cost Overburdened Renters in Texas, Tyler County and Ivanhoe City, 2014

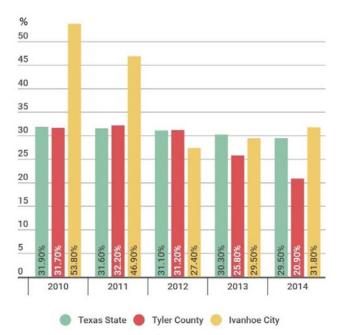


Figure 7.8 Percentage of Housing Cost Overburdened Owners in Texas, Tyler County and Ivanhoe City, 2014

Affordable Housing Programs

There is only one federally assisted affordable rental community in Tyler County – the Terracewood Apartments with 40 units in Woodville. This property is financed through HUD Section 515 projects.³⁸

Occupancy vs. Vacancy Rate

The percentage of renter-occupied units in Tyler County (12.21%) or Ivanhoe City (16.67%) is lower than the state-level of 32.99%; however, the housing vacancy rate (neither owner-occupied nor renter-occupied) in Tyler County (23.02%) or Ivanhoe City (33.90%) is much higher than the state average (11.52%) (Figure 7.10). It also shows obviously that, In Tyler County and Ivanhoe City, the percentage of vacant housing units for seasonal, recreational, or occasional is as high as 10.35% & 20.38%, much higher than the state-average of 2.37%.

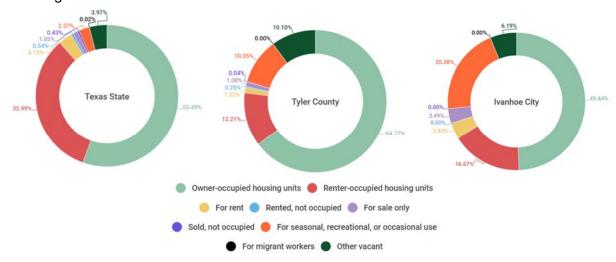


Figure 7.10 Housing Occupancy Status Distribution in Texas, Tyler County and Ivanhoe City, 2014³⁹

³⁸ Retrieved from http://affordablehousingonline.com/housing-search/Texas/Tyler-County/

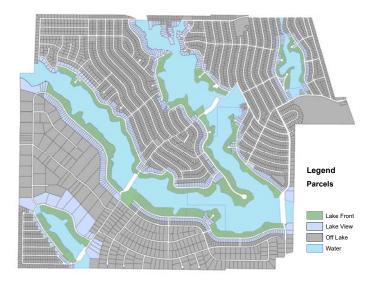
³⁹ United States Census Bureau, 2014

RECOMMENDATIONS

The City of Ivanhoe needs to increase the number of new houses and improve the housing quality of the existing housing stock. The recommendations address the needs of the city for future long term housing solutions.

Stimulate new home builds

Ivanhoe has approximately 3900 lots in total, and 1180 acres of vacant land that can be used to develop housing (Figure 7.11). Ivanhoe has approximately 80 acres of lake front and approximately185 acres of lake view parcels. Ivanhoe can use the natural assets and scenic views to attract new homebuyers into the area (Figure 7.12).



Legend water Vacant

Figure 7.11 Vacant parcels suitable for housing

Figure 7.12 Parcels according to lake proximity

Increase the number of single family houses

The City needs to work with the County Appraisal District to identify and create an updated database for all the vacant properties and the owners. The City needs to start an initiative to reach out and promote the city to the current residents of vacant parcel owners some strategies maybe through a monthly newsletter, or reaching out through social media.

Place branding is valuable to attract the interest of future residents, home buyers, property owners and developers. Ivanhoe can establish its brand by recognizing the unique assets, architecture, style and feel of the City. The branding can include the look, genre, décor, style and a range of color palette.

The City can reach out to developers and market Ivanhoe as attractive and readily available for housing development. Streamlined development processes can help create an environment to attract new home builders. The permitting and review processes can be expedited to encourage efficiency. Meanwhile, the City can identify and coordinate with construction companies in the area, to market their services to be readily available for current and new land owners in the city.

Develop a multi-family living area

Honing in on opportunities such as rental properties or multi-family housing may attract more residents, especially younger populations to Ivanhoe. The City will need to review and update the current ordinance and the zoning to allow construction of multi-family housing. Suitable location for development of multi-family housing can be determined through a land suitability analysis.

To maintain the feel and character of the City, pocket neighborhoods would be particularly suitable in Ivanhoe. Pocket neighborhoods are groupings of smaller residences around a common green space. Clusters of pocket neighborhoods can be easily integrated in the existing built environment, without compromising the unique sense of place of Ivanhoe. Pocket neighborhoods can have cottage styled houses, duplexes or townhomes. The City can encourage the duplexes and townhomes to adhere to architectural standards that reflect the aesthetic of Ivanhoe. Figure 7.13 illustrates a pocket neighborhood module created on a typical three parcel area in the City. This module can be marketed to developers for potential

opportunities of building multi-family housing in the City. Further, the City can also consider looking into feasibility of integrating tiny homes in pocket neighborhoods. Creating a tiny home community would be a unique addition to the city and the first of its kind in East Texas. Tiny home communities are seen to have a significant reduction in the costs of utilities, as well as an enforced sense of community and social interaction between neighbors. Encouraging their construction in Ivanhoe would be a draw for many, and even a potential tourist attraction.

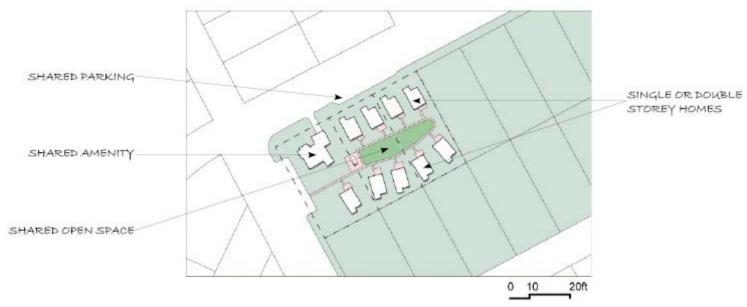


Figure 7.13 Pocket neighborhood module for City of Ivanhoe

Box 7.1 Case Study: "Orland Lakefront"

Orlando Lakefront is a tiny house community focused on sustainability, affordability, practicality, and community. Amenities for residents include a fishing dock, boat dock, a green park, and a Laundromat. Rent for each space varies from \$350-\$550 a month depending on location within the park. Nightly and weekly rates are also available for those that are just staying for a short time.







Source: http://www.orlandolakefrontth.com/

Improve quality of existing structures

The City desires to maintain the aesthetic and improve the quality of existing housing. Currently, the City building codes protect both people and property values by requiring the repair or demolition of substandard and dangerous structures. The focus of the codes is on ensuring the structural integrity of the building, ensuring the building isn't unsanitary or a health hazard to occupants, and ensuring that the structure is visually pleasing from the outside.

The City can add a city-wide home maintenance code including repair ordinances for rot, peeling paints and roofs. Additionally, the city should budget for home maintenance enforcement in order to have objective and consistent enforcement. Specific buildings that are in violation of the codes can be targeted and grandfathered as necessary.

The City should also establish home renovation programs to get homes up to current standards. The Texas Department of Housing and Community Affairs can help with renovations through Homeowner's Rehabilitation Assistance Program. Publicizing the codes as well as the program will help improve the implementation of the program and compliance of the code.

Existing lot maintenance regulations state that — "The owners or occupants of all developed lots shall at all times maintain premises in a clean, safe, and sanitary condition. Any grass or weeds must be less than 12 inches tall. Undeveloped lots are exempt from mowing, but they cannot be used for storage."

The City needs to strengthen yard maintenance. Also, in order to attract buyers, and to have land that has "curbside appeal," maintaining properties which are not developed would be favorable. An effective initiative can be establishing a yard-of-the-month club to encourage property owners to maintain their property. The residents can be encouraged to maintain their yards and recognizing the best maintained yards.

GOALS AND OBJECTIVES

Goal 7.1 - Stimulate new home builds

Objective 7.1.1 – Increase the number of single family houses built

Objective 7.1.2 - Develop a multi-family living area

Goal 7.2 - Improve and maintain the quality standards of housing in new and current homes

Objective 7.2.1 – Improve code enforcement

Chapter 8: Implementation

Implementation is the process of turning strategies and plan proposals into actions to achieve the goals and objectives. This chapter describes in detail a roadmap for the implementation of the comprehensive plan to accomplish the listed goals. It presents the recommended Implementation Action Plan, which is intended to help the City of Ivanhoe organize and initiate the plan implementation process.

Action Steps

The action plan provides a summary of the recommendations for the City of Ivanhoe. Recommendations are grouped into four focus categories:

- Economy
- Community Facilities
- Transportation
- Housing

To achieve each objective, the plan has a list of action steps to be taken. Action steps are projects/tasks whose progress can be measured and have a deadline or specific date of completion. Every task has a specific party/parties responsible for the completion of this task. Successful completion and execution of these projects help in achieving the bigger developmental goals.

Phases

The goals of the comprehensive plan are expected to be implemented within thirty years. However, it is strongly recommended to have a review and update of the project list and their priorities annually.

The action plan suggests four phases for project implementation, as described below. However, the implementation schedule should be flexible and can be updated to reflect the changing needs, conditions and preferences of the area and people.

Stabilize projects which need to be undertaken within the next one-two years.

Optimize projects are expected to be completed during the next one to five years, although some may begin immediately after the adoption of the plan.

Grow projects are long term goals expected to be completed during the next five to ten-year period.

Prosper projects are long term expected to be implemented after the next ten to twenty-year period.

Responsible Parties

The success of the implementation of the plan depends primarily on two main factors: responsible parties and partnerships. Following are the key participants recognized as action leaders for the implementation of the comprehensive plan:

- The City of Ivanhoe City
- Ivanhoe Property Owners Improvement Association (IPOIA) IPOIA
- Tyler County City
- Deep East Texas Council of Governments COG
- Tyler County Appraisal District
- Ivanhoe Police Department: Marshall

Funding

Both internal and external, funding sources are available to assist the City in accomplishing goals. Internal recourses are taxes and fees to support the action item. External resources may include public-private partnerships with external partners such as developers. The Funding column in the Action Tasks table provides suggestions for funding sources or grants for each of the action items.

Economy	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
Goal 4.1- Create robu	st economy with city revenue growth.						
	Designate an economic development manager to ensure a devoted person to implement economic development programs.	x				City	Texas Capital fund (rural)
	Hire a grant writer to help with grant writing to obtain available funds	х				City	Rural business opportunity grants
	Proactively reach out to businesses that would be a good fit for the city such as Dollar Store, Pizza Shop, and Coffee Shop.	x				City	Texas Leverage Fund
Objective 4.1.1 – Attract new businesses.	Consider providing camping facilities in the city and perform a suitability analysis to determine the best location for camp grounds.		х				Small business administration loan programs
	Market the city commercial center to attract facilities such as medical office, hair salon and convenience store.			x		City and IPOIA	Small business innovation research program
	Establish a co-working space or business incubator service in the community center for new startup businesses that need support by providing temporary flexible office space, technological support, and coaching.			x		City	Business and Industry Program
	Provide support for prospective local business owners to develop their capacity to run a small enterprise effectively and profitably through Small Business Development Centers (SBDC).			x		City	The Bicycle Friendly community (BFC) Program
	Encourage home businesses by ensuring that regulations don't inhibit home businesses and inform residents of the possibilities.					City and IPOIA	

Economy	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
	Consider ways to benefit from the newly established bike network in US69		x			City, County, COG	
Objective 4.1.2 – Develop Town Center	Change the zoning from commercial to PUD for more flexible uses.		x			City	Business improvement districts
area in the property next to Highway US 69/287.	Work with the property owner to develop the Highway US 69/287 frontage as a commercial strip area.		x			City, Property Owner	
·	Consider three phased development in the area with light industries and future expansion.				x	Property Owner	
	Consider the given design guidelines in chapter 3 for development of PUD.				x	City, Property Owner	
Objective 4.1.3- Increase	Work with the appraisal district to reassess base land value.	x				City, Appraisal District	Texas Capital fund (rural)
property values.	Develop business maintenance ordinances to set in the correct direction for future.	х				City	Intermediary Relending Program
	Establish a city "Face Lift" plan with street signs, landscaping and lighting.		х			City	
Objective 4.1.4	Standardize colors, logos, and general "style" of construction/décor		х			City	
Objective 4.1.4 – Establish and market our brand.	Regularly update city social media and website to attract visitors, prospective residents and businesses.	х				City	
	Create city brochures showing the city attractions and assets					City	
	Market available land for businesses by creating an economic development page in the website		х			City	

City

Recreational Trail

Community	Specific Action	illize	mize	wo	sper	Responsible	Funding Source
Facilities	Specific Action	Stab	Opti	J.	Pros	Parties	rununing Source

X

Goal 5.1 – Provide high quality community facilities and infrastructure to meet the needs of safety, security and well-being of the current and future residents of City of Ivanhoe.

Rezone the area of city center as PUD for flexible usage.

Cypher Communications

facilities based on the need of the community.

Grants City The Planning and Expand the swimming facility and the boat ramp in Lake **Capacity Building** Х Charmaine City Fund Objective 5.1.1 - Expand Construct a boardwalk and plant trees to develop area Section 108 Loan the civic center to X around the lake in the city center area. City Guarantees provide a community Develop the outdoor area in the city center to allow **Recreational Trails** hub to foster greater X flexible outdoor event space. Program (RPT) City local community Outdoor activities and improve Recreationquality of life. Consider expansion by obtaining vacant properties around Acquisition, X the city center area. Development and City Planning (15.916) Develop a fitness and health center. X City Provide education center. X City Consider developing commercial and recreational facilities X in city center area to develop the city downtown. City Consider flood risk management by flood proofing existing structure, and ensuring elevation above the base flood X level on all new structures. City Objective 5.1.2 - Expand and improve Continue and complete securing broadband service with infrastructure and X

Community Facilities	Specific Action	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
	Work with engineers to assess the needs of the infrastructure such as storm water, wastewater management, utility, and drainage	x				City	
	Create infrastructure maintenance and improvement plan	х				City	
	Work closely with police marshal to identify safety concerns and develop strategies to reduce it and increase law enforcement presence	х				City +Law Enforcement- Marshal	
	Enforce ordinances to improve animal control	x				City	
	Partner with county to secure animal control services		х			City and County	
Goal 5.2 – Increase	recreational facilities through improved and accessi	ble p	arks	and	lakes	5.	
	Reclaim Camelot and Ivanhoe park or lake.	х				IPOIA	Natural Resources Conservation Service Texas Financial Support
Objective 5.2 .1– Reclaim and upgrade	Assess repair and reclamation of Lake Ivanhoe lake level.		х			IPOIA	
existing park according to the priority list.	Upgrade parks with new equipment and covered areas as picnic facilities and amphitheater.		х			IPOIA	
	Water access upgrades (beaches, docks, etc.).		х			IPOIA	Rural Broadband Program
	Establish a community gardening club that could adopt parks for maintenance.	x				IPOIA	The Texas Workforce Commission's Skill Development Program

Community Facilities	Specific Action	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
Objective 5.2.3 - Reclaim and improve	Improve TCEQ compliance by enforcing ordinances.	x					Clean Water State Revolving Fund
existing and water quality lakes for better usage.	Assess need for future sewage treatment facility/alternative.			х		City	Water and Environmental Programs
	Continue the process of controlling and mitigating seaweed in the lakes.	x				City	Community Development Fund (Rural)
	Identify possible park locations in underserved areas for strategic access to park facilities.			х		City	
Objective 5.2.3– Create new public recreation attractions by build new	Consider creating a water park			х		City	
parks.	Partner and coordinate with other park facilities in the counties to create a network of facilities and improve regional eco-tourism.		х			IPOIA	
Objective 5.2.3 - Expand fishing opportunity in the city.	Contact Texas Parks and Wildlife department and identify options on creating a fishing map for Ivanhoe.		x			City	
	Update all the fishing facilities in the city, and add a new fishing dock in the dam in Lake Charmaine.	х				City	

Community Facilities Specific Action	Stabilize Stabilize Stabilize Stabilize Stabilize Stabilize Parties Funding Source	
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Goal 5.3–Enhance sense of community by increasing number of community events and activities for all ages.

Objective 5.3.1 – Grow arts and entertainment community by Develop City Center area for the arts	Continue and regularly update the art work display in the city center.	x			City	Hope VI Main Street Program
	Start community theater and host semiannual theater production.		x		City	
Objective 5.3.2 - Enhance the existing community events, activities, and program by incorporating additional activities, classes, and events for residents and visitors of all ages in the community.	Hold seasonal concerts and promote the event to attract more visitors.		х		City	
	Organize athletic competitions, community clean-ups and community fitness classes.		х		City	
	Create a unified community events calendar that is updated regularly on the city website.	х			City	

Transportation	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
Goal 6.1 – Ensure safe	and accessible road ways for all ages.						
	Utilize maintenance plan in the appendix to reflects the priority of roads to be upgraded.	х				City	Elderly and Persons with Disabilities
Objective 6.1.1 - Upgrade	Allocate budget for road maintenance within the capital improvement budget.	x				City	Job Access and Reverse Commute Program
roads in substandard condition.	Hire a grant writer to help with grant writing to obtain available funds.	X				City	New Freedom Program
	Hire contractor to construct and repair roads as dictated by maintenance plan.	х				City	
	Secure additional street maintenance equipment.	x				City	Transportation Planning Capacity Building Program (TPCBP)
	Pass a road bond to fund arterial repairs.	х				City	
	Create a list of roads and road type and prepare a schedule for implementation.					City	The Texas Mobility Fund
	Implement road maintenance regularly to improve the road surface.					City	
Objective 6.1.2	Create a database of current road conditions.	x				City	Walk Friendly community (WFC)
Objective 6.1.2 - Maintain an updated list of roadway conditions.	Update database with each new construction project	х				City	Choice Neighborhoods Initiative Planning Grant
	Annually update database to reflect conditions and identify new areas in need of repair.	х				City	Formula Grants for Other than Urbanized Areas

Transportation	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
	Repair culverts impeding flow.	x				City	
Objective 6.1.3 – Improve drainage systems.	Install new culverts to optimize flow		х			City	Rural Water & Waste Disposal Loan and Grant Program
	Redesign/install upgraded drainage routes.			х		City	Surface Transportation Program - Transportation Enhancement
Objective 6.1.4 – Increase ease of navigation in the	Develop a unique style to Ivanhoe and provide wayfinding signage throughout the city.		x			City	National Scenic Byways
city and to recreational sites.	Provide signage indicating the location of key sites, parks and recreational sites.		х			City	
	Contact Google to include streets of the City of Ivanhoe in the Google Street View.						
Goal 6.2 – Develop inf	rastructure to promote a pedestrian-friendly an	d bic	ycle f	rien	dly e	nvironment.	
Objective 6.2.1 - Encourage construction of pedestrian and/or	Create walking trails within park to encourage greater usage of parks.			x		IPOIA	The National Complete Streets Coalition
bicycle trails.	Promote pedestrian trails and activities near lakes.			х		City	Transportation, community and systems preservation
Objective 6.2.2 - Ensure safety of pedestrians and bicyclists.	Post lower speed limits based on design guidelines to increase safety of pedestrians on all street types.			x		City	High Priority Projects and Designated and Transportation Enhancement Activities
	Produce signage along roads indicating pedestrians may be present.			х		City	

Housing	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
Goal 7.1 – Stimulate	new home builds.						
	Identify and create a database for all the vacant properties and the owners.	х				City	The Multi-family (Rental Housing) Development Program
Objective 7.1.1 –	Establish and market the City brand (Look/feel/genre/décor/colors).	х				City	Multi-family housing loan guarantees
Increase the number of single family houses build.	Reach out and market the city to current residents and vacant property owners through monthly newsletters.		x			City	Multi-family housing preservation and revitalization MPR Loans and Grants
	Identify and coordinate with construction companies and market their services to be readily available for new house construction in the city.		х			City	Multi-family Housing NOFA Status
	Streamline development process and reduce city permitting and inspection fees						Title I Home Improvement Loans
	Perform a suitability site analysis to determine the location for the multi-family living area.			х		City	Single Family Home Repairs (Section 504)
Objective 7.1.2 – Develop a multi-family living area.	Review and update current ordinance and zoning to allow construction of multi-family housing.			х		City	CBDG Program for Rural Texas
iiviiig ai ca.	Market the designed multi-family module to developers for potential opportunities of building multi-family houses in the city.						
	Consider the feasibility of tiny homes by working with developers.			х		City	

Housing	Specific Actions	Stabilize	Optimize	Grow	Prosper	Responsible Parties	Funding Source
Goal 7.2 – Improve	e quality of existing structures.						
	Create home repair ordinances (rot/peeling paint/tarp roofs/etc.).	x				City	Building Neighborhood Capacity Program (BCNP)
Objective 7.2.1 – Improve code	Start home renovation program by contacting the Texas Department of Housing and Community Affairs to participate in their Homeowner's Rehabilitation Assistance Program.		x			City	Homeowners Rehabilitation Assistance Program
enforcement.	Target specific building that are in violation of the building codes and grandfather as necessary.	x				City	Capital fund Education and Training Community Facility Grant
	Enhance yard keeping ordinances including grass, yard art, and trash.	x				City	Rural Community Development Block Grant Program
	Encourage residents to maintain their yards by establishing yard of the month club.	x				Volunteer group, IPOIA	HUD CDBG
	Publicize the new codes and the home renovation program to inform all the residents.	x				City	Housing Preservation Grants

Funding Sources

Building Neighborhood Capacity Program (BNCP)

- Grantor: U.S. Department of Housing and Urban Development
- Purpose: offer training and technical assistance (TTA) to begin or sustain the process of revitalization, guided by comprehensive neighborhood revitalization plans, in concert with relevant local and state plans and planning processes.
- Eligibility: Five neighborhoods selected. Nonprofit organizations, faith-based and community organizations, institutions of higher learning, and for-profit organizations (commercial) with significant experience in supporting neighborhood and community development through training and technical assistance. For-profit organizations must agree to forgo any profit or management fee.
- Limitations: Up to \$2 million
- More Information: http://www.cssp.org/community/neighborhood-investment/place-based-initiatives/building-neighborhood-capacity

Capital Fund Education and Training Community Facility Grant

- Grantor: U.S. Department of Housing and Urban Development
- Purpose: for public housing authorities to construct, rehabilitate, or purchase facilities for early childhood education, adult
 education, and/or job training programs for public housing residents based on an identified need.
- Eligibility: Public housing authorities
- Limitations: \$15 million; max grant \$5 million
- More Information: http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/cfcf

Community Development Block Grant (CDBG) Program for Rural Texas

- Grantor: Texas Department of Agriculture
- Purpose: develop viable communities by providing decent housing and suitable living environments, and expanding economic
 opportunities principally for persons of low- to moderate-income.
- Eligibility: non-entitlement cities and counties whose populations are less than 50,000 and 200,000 respectively, and are not participating or designated as eligible to participate in the entitlement portion of the federal Community Development Block Grant Program.
- Limitations: Population 50,000 city and 200,000 county. Application Minimum: Single/Multi-Jurisdiction \$75,000, Maximum \$800,000

More information:

http://www.texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/RuralCommunityDevelopmentBlockGrant(CDBG).as px

Choice Neighborhoods Initiative Planning Grant

- Grantor: U.S. Department of Housing and Urban Development
- Purpose: to revitalize severely distressed public and/or HUD-assisted multifamily housing in distressed neighborhoods into viable, mixed-income communities with access to well-functioning services, high quality educational programs, public transportation, and jobs.
- Eligibility: Public housing authorities, local governments, nonprofits, and for-profit developers that apply jointly with a public entity. Preferred Sustainability Applicants receive an additional two bonus points.
- Limitations: \$ 5 million
- More Information: http://www.reconnectingamerica.org/resource-center/federal-grant-opportunities/

Community Development Fund (Rural)

- Grantor: Texas Department of Agriculture
- Purpose: Grants to rural Texas cities and counties for basic infrastructure projects such as water/wastewater facilities, street improvements and drainage.
- Eligibility: non-entitlement cities and counties whose populations are less than 50,000 and 200,000 respectively, and are not participating or designated as eligible to participate in the entitlement portion of the federal Community Development Block Grant Program.
- Limitations: \$75,000-800,000, biennial basis and competition against 24 planning regions in the state.
- More information: http://www.texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/RuralCommunityDevelopmentBlockGrant(CDBG)/C ommunityDevelopment.aspx

Formula Grants for Other than Urbanized Areas

- Grantor: U.S. Department of Transportation
- Purpose: provides funding to states to support public transportation in rural areas.
- Eligibility: population of less than 50,000.
- More information: http://www.fta.dot.gov/grants/13093 3555.html.

Homeowner's Rehabilitation Assistance Program

- Grantor: Texas Department of Housing and Community Affairs.
- Purpose: This program provides the following services:
 - o Rehabilitation or reconstruction of owner-occupied housing on the same site
 - New construction of site-built housing on the same site to replace an existing owner occupied Manufactured Housing Unit (MHU).
 - o Replacement and relocation of existing housing located in a floodplain to a new MHU or new construction of housing on an alternative site.
 - New construction or a new MHU to replace a housing unit that has become uninhabitable as a result of disaster or condemnation by local government
 - o If allowable under the Notice of Funding Availability (NOFA), refinance of existing mortgages meeting federal requirements.
- Eligibility: Organizations must now apply and receive HOME funds under the CHDO set-aside in order to be certified as a CHDO.
- More information: http://www.tdhca.state.tx.us/home-division/hra.htm

Housing Preservation Grants

- Grantor: U.S. Department of Agriculture
- Purpose: to repair or rehabilitate individual housing, rental properties, or co-ops owned and/or occupied by very low- and low-income rural persons. Eligibility: Very low income is defined as below 50 percent of the area median income (AMI); low income is between 50 and 80 percent of AMI. Eligible sponsors include state agencies, units of local government, Native American tribes, and nonprofit organizations.
- Limitations: competitive and are made available in areas wherever there is a concentration of need
- More Information: http://www.rd.usda.gov/programs-services/housing-preservation-grants

CDBG program

- Grantor: U.S. Department of Housing and Urban Development
- Purpose: to develop viable communities by providing decent housing and a suitable living environment and by expanding economic opportunities.
- Eligibility: principally for persons of low- and moderate-income.
- Limitations: The State must ensure that at least 70 percent of its CDBG grant funds are used for activities that benefit low- and moderate-income persons over a one-, two-, or three-year time period selected by the State.
- More information can be found at https://www.hudexchange.info/programs/cdbg-state/

Intermediary Relending Program

- · Grantor: U.S. Department of Agriculture
- Purpose: Finance business facilities and community development projects in rural areas.
- Eligibility: Rural areas and incorporated places with populations of less than 25,000
- Limitations: Interest rate 1% maximum term is 30 years, \$250,000 maximum loan
- More information: http://www.rd.usda.gov/programs-services/intermediary-relending-program

Multi-Family Housing Loan Guarantees

- Grantor: U.S. Department of Agriculture
- Purpose: to increase the supply of moderately-priced housing in rural areas
- Eligibility: be a U.S. citizen(s) or legal resident(s), a U.S. owned corporation, a limited liability corporation (LLC) or a partnership in which the principals are U.S. citizens or permanent legal residents.
- Limitations: The maximum loan to value is 90% for for-profit entities and 97% for non-profit entities.
- More Information: http://www.rd.usda.gov/programs-services/multi-family-housing-loan-guarantees

Multi-Family Housing NOFA Status

- Grantor: U.S Department of Housing and Urban Development
- Purpose: The <u>Service Coordinator Program</u> provides funding for the employment of Service Coordinators in insured and
 assisted Multifamily housing that is designed for the elderly and persons with disabilities. The Service Coordinator plays a critical
 role to support HUD assisted housing as a platform for financial security, physical security, social connections, and the delivery of
 long-term community based supportive services, especially for vulnerable populations such as the elderly..
- Eligibility: Depending on State
- More Information: http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/scp/scphome

Multi-Family Housing Preservation and Revitalization (MPR) Loans and Grants

- Grantor: U.S. Department of Agriculture
- Purpose: provide affordable multi-family rental housing
- Eligibility: for very low-, low-, and moderate-income families; the elderly; and persons with disabilities.
- More Information: http://www.rd.usda.gov/programs-services/housing-preservation-revitalization-demonstration-loans-grants

Outdoor Recreation-Acquisition, Development and Planning (15.916)

• Grantor: Department of the Interior

- Purpose: provide financial assistance to the States and their political subdivisions for the preparation of Statewide Comprehensive Outdoor Recreation Plans (SCORPs) and acquisition and development of outdoor recreation areas and facilities for the general public, to meet current and future needs.
- Eligibility: For planning grants, only the State agency formally designated by the Governor or State law as responsible for the preparation and maintenance of the SCORP is eligible to apply. For acquisition and development grants, the above designated agency may apply for assistance for itself, or on behalf of other State agencies or political subdivisions, such as cities, counties, and park districts. Indian organized tribes to govern themselves and perform the functions of a general purpose unit of government qualify for assistance. Individuals, nonprofit organizations, and private organizations are not eligible.
- Limitations: Land acquisition and development grants may be used for a wide range of outdoor recreation projects, Facilities must
 be open to the general public and not limited to special groups. Every park or outdoor recreation area acquired or developed with
 assistance under this program must remain available and accessible for public outdoor recreation use forever. Development of
 basic rather than elaborate facilities is favored. Operation and maintenance of facilities are not eligible expenses for funding.
- More information: https://www.cfda.gov/index?s=program&mode=form&tab=core&id=49de7517fcf9e734d2868a40aee748be

Recreation Grants

- Grantor: Texas Parks and Wildlife Department
- Purpose: This grant was created to meet recreation needs. The grant provides 50% matching grant funds to eligible municipalities and counties. Funds must be used for development or acquisition of parkland.
- Eligibility: Must be a small Texas community with a population of 20,000 and under. Eligible projects include ball fields, boating, fishing, and hunting facilities, picnic facilities, playgrounds, swimming pools, trails, camping facilities, beautification, restoration, gardens, sports courts and support facilities.
- More information: https://tpwd.texas.gov/business/grants/recreation-grants

Rural Business Opportunity Grants (RBOG)

- Grantor: USDA
- Purpose: promotes sustainable economic development in rural communities with exceptional needs through provision of training and technical assistance
- Eligibility: Rural public bodies, rural nonprofit corporations, rural Indian tribes, and cooperatives with primarily rural members.
- Limitations: The maximum grant for a project serving a single state is \$50,000. The maximum grant for a project serving two or more states is \$150,000.
- More Information: https://www.rd.usda.gov/programs-services/rural-business-development-grants

Rural Transit Assistance Program (5311b3)

• Grantor: Department of Transportation

- Purpose: provides a source of funding to assist in the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in no urbanized areas.
- Eligibility: States, local governments, and providers of rural transit services.
- Limitations: Apportioned to States by a formula
- More Information: https://www.transit.dot.gov/funding/grants/rural-transportation-assistance-program-5311b3

Rural Water & Waste Disposal Loan & Grant Program

- Grantor: U.S. Department of Agriculture (USDA)
- Purpose: Provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas.
- Eligibility: Rural areas, cities, and towns with a population up to 10,000
- Limitations: quarterly interest rates, maximum repayment period 40 years
- More information: http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program

Section 108 Loan Guarantees

- Grantor: U.S. Department of Housing and Urban Development
- Purpose: Provides CDBG-eligible communities with a source of financing for economic development, public facilities, and other eligible large-scale physical development projects.
- Eligibility: metropolitan cities and urban counties, no entitlement communities that are assisted in the submission of applications by States that administer the CDBG program, and no entitlement communities eligible to receive CDBG funds under the HUD-Administered Small Cities CDBG program (Hawaii). The public entity may be the borrower or it may designate a public agency as the borrower.
- More Information: https://www.hudexchange.info/programs/section-108/

Single Family Home Repairs (Section 504)

- Grantor: U.S. Department of Agriculture (USDA) & Rural Development
- Purpose: provide loans to very-low-income homeowners to repair, improve, or modernize their homes or grants to elderly very-low-income homeowners to remove health and safety hazards.
- Eligibility: Rural areas with populations up to 10,000 if located in a MSA or up to 20,000 if not in a MSA.
- Limitations: up to \$7,500-27,500 loans and grants, 20-year repayment, very-low-income applicants or elderly persons age 62 or older.
- More information: http://www.rd.usda.gov/programs-services/single-family-housing-repair-loans-grants

Small Business Administration Loan programs

- Grantor: U.S. Small Business Administration
- Purpose: General Small Business Loans, Microloan Program, Real Estate & Equipment Loans, and Disaster Loans.
- More information: http://www.sba.gov/loanprograms

Small Business Innovation Research Program

- Grantor: US Small Business Administration
- Purpose: funds the critical startup and development stages of Small Business. It targets the entrepreneurial sector.
- Eligibility: Small businesses that are American owned and independently operated, for-profit, principle researcher employed by business and company size limited to 500 employees.
- Limitations: Funding awarded in three phases, up to \$750,000.
- More Information: https://www.sbir.gov/solicitation-listing/open

Surface Transportation Program - Transportation Enhancement

- Grantor: Department of Transportation
- Purpose: expand transportation choices and enhance transportation through 12 eligible transportation enhancement surface transportation activities, including pedestrian & bicycle infrastructure and safety programs, landscaping beautification, historic preservation, and environmental mitigation.
- Eligibility: State/MPO allocated
- Limitations: Apportioned to States by a formula
- More Information: https://www.fhwa.dot.gov/environment/transportation_enhancements/index.cfm

The Texas Leverage Fund

- Grantor: Texas Economic Development
- Purpose: provides additional financing help to communities that have adopted an economic development sales tax. The communities may expand economic development through using and collecting future sales tax revenues.
- Limitations: \$25,000 \$5 million
- More Information: https://texaswideopenforbusiness.com/services/financing

Texas Capital Fund (Rural)

- Grantor: Texas Department of Agriculture
- Purpose: Supports rural business development, retention and expansion by providing funds for public infrastructure, real estate development, or the elimination of deteriorated conditions.
- Eligibility: see program website

More information: http://texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/TexasCapitalFund.aspx

The Multi-family (Rental Housing) Development Program

- Grantor: provides funding to units of General Local Governments, Public Housing Authorities, nonprofits, and for-profit entities
 towards the new construction or rehabilitation of affordable multifamily rental developments.
- Eligibility: Development funds are awarded on a first-come, first-serve basis through an application process.
- More information: http://www.tdhca.state.tx.us/multifamily/home/index.htm

The National Complete Streets Coalition

- Grantor: Smart Growth America
- Purpose: promoting the design and operation of road- ways to provide safe, comfortable, and convenient access for all users, from motorists to bicyclists and pedestrians of all ages and abilities.
- More Information: http://www.smartgrowthamerica.org/complete-streets

The Planning and Capacity Building Fund

- Grantor: Texas Department of Agriculture
- Purpose: provides grants for local public facilities and housing planning activities.
- Eligibility: Non-entitlement cities under 50,000 in population and non-entitlement counties that have a non-metropolitan population under 200,000 and are not eligible for direct CDBG funding from HUD may apply for funding through any of the Texas CDBG programs.
- Limitations: Maximum grant award: \$55,000, competitive application process, applications accepted biennially, grants provided annually.
- More information: http://www.texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/RuralCommunityDevelopmentBlockGrant(CDBG)/PI anningandCapacityBuildingFund.aspx

The Texas Workforce Commission's Skill Development Program

- Grantor: Texas Workforce Commission through Texas Legislature
- Purpose: provides grants to community and technical colleges to provide customized job training programs for businesses who
 want to train new workers or upgrade the skills of their existing workforce.
- Eligibility: A business, consortium of businesses, or trade union identifies a training need, and then partners with a public community or technical college.
- Limitations: Texas Administrative Code, Title 40, Part 20, Chapter 803 and Texas Labor Code, Chapter 303.

More Information: http://www.twc.state.tx.us/partners/skills-development-fund

Title I Home Improvement Loans

- Grantor: U.S. Department of Agriculture
- Purpose: for alterations, repairs and site improvements. Loans on multifamily structures may be used only for building alteration and repairs.
- Eligibility: A property owner may apply at any lender (i.e. bank, mortgage company, savings and loan association, or credit union) that is approved to make Title I loans. Beware of deceptive home improvement contractors.
- Limitations: Single-family house \$25,000, manufactured house on permanent foundation (classified and taxed as real estate) \$25,090, manufactured house (classified as personal property) \$7,500, multifamily structure an average of \$12,000 per living unit, up to a total of \$60,000.
- More information: http://portal.hud.gov/hudportal/HUD?src=/program offices/housing/sfh/title/ti abou

Walk Friendly Community (WFC)

- Grantor: U.S. Department of Transportation Federal Highway Administration.
- Purpose: helps to promote safe walking environments in cities.
- Limitations: By applying will receive specific suggestions and resources on how to make needed changes for pedestrian safety.
- More Information: http://assessment.walkfriendly.org/index.cfm

APPENDIX

Road Name	Functional	Existing	Length	Width	Area	Priority	Asphalt	Pot hole	Asphalt	Chip	Caliche	Repair	Upgrade
	Classification	Paving	(ft)	(ft)	(sq . ft)	Zone	Sealing Crack (\$)	(\$)	Paving(\$)	sealing (\$)	paving(\$)	Sched.	Sched.
SAXON LN	S.P.Local	Gravel	673.6	12.0	6,735.5	3	0.0	0.0	23,574.4	1,912.9	14,818.2		year6
SHERWOOD FOREST DR W	Collector	Asphalt	2,752.5	16.0	41,287.1	4	2,559.8	633.1	0.0	0.0	0.0	year2	
DOGWOOD CIR	S.P.Local	Gravel	602.4	12.0	6,024.2	4	0.0	0.0	21,084.8	1,710.9	13,253.3		year7
15TH ST	S.P.Local	Asphalt	2,806.5	12.0	28,064.8	4	1,740.0	645.5	0.0	0.0	0.0	year4	
KINGS CIR	S.P.Local	Gravel	318.2	12.0	3,182.2	1	0.0	0.0	11,137.6	903.7	7,000.8		year6
BENDWOOD DR	S.P.Local	Dirt	744.0	12.0	7,439.9	1	0.0	0.0	26,039.7	2,112.9	16,367.8		year1
SHALIN CIR	S.P.Local	Gravel	394.1	12.0	3,940.6	2	0.0	0.0	13,792.1	1,119.1	8,669.3		year6
MAYBERRY DR	F.P LOCAL	Gravel	1,634.1	12.0	16,340.7	1	0.0	0.0	57,192.5	4,640.8	35,949.5		year5
OAKFORD LN	S.P.Local	Asphalt	550.7	12.0	5,506.6	4	341.4	126.7	0.0	0.0	0.0	year4	
CHARMAINE DR S	M. Collector	Asphalt	6,373.5	18.0	114,722.0	2	7,112.8	1,465.9	0.0	0.0	0.0	year1	
EMILY LN	S.P.Local	Asphalt	2,530.4	12.0	25,304.4	3	1,568.9	582.0	0.0	0.0	0.0	year3	
SIR GUY RD	S.P.Local	Gravel	791.6	12.0	7,916.0	3	0.0	0.0	27,705.8	2,248.1	17,415.1		year6
SIR CEDRIC DR	F.P LOCAL	Dirt	3,893.1	12.0	38,930.9	3	0.0	0.0	136,258.2	11,056.4	85,648.0		year1
SIR ROBERT BURNS	F.P LOCAL	Gravel	2,258.9	12.0	22,589.2	2	0.0	0.0	79,062.2	6,415.3	49,696.2		year5
SIR HENRY DR		Dirt	3,557.4	12.0	35,574.3	4	0.0	0.0	124,510.1	10,103.1	78,263.5		year4
D BRANCH CT	S.P.Local	Gravel	584.6	12.0	5,845.7	3	0.0	0.0	20,459.8	1,660.2	12,860.4		year6
OAKFORD DR	S.P.Local	Asphalt	869.3	12.0	8,692.8	4	539.0	199.9	0.0	0.0	0.0	year4	
SIR EWAINE DR	F.P LOCAL	Gravel	1,720.1	12.0	17,201.4	1	0.0	0.0	60,204.9	4,885.2	37,843.1		year5
RAMBLEWOOD CIR	S.P.Local	Gravel	232.0	12.0	2,319.5	4	0.0	0.0	8,118.4	658.7	5,103.0		year7
BUCKINGHAM DR	S.P.Local	Asphalt	1,702.9	12.0	17,028.5	4	1,055.8	391.7	0.0	0.0	0.0	year4	
GALAHAD ESTATES DR	S.P.Local	Gravel	827.6	12.0	8,275.7	4	0.0	0.0	28,964.9	2,350.3	18,206.5		year7
GALAHAD LOOP RD	S.P.Local	Asphalt	6,142.7	12.0	61,426.5	3	3,808.4	1,412.8	0.0	0.0	0.0	year3	
FRIAR TUCK DR N	S.P.Local	Asphalt	5,589.2	12.0	55,892.2	4	3,465.3	1,285.5	0.0	0.0	0.0	year4	

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
		8	(1-7)	(1-7)	(-9:)		Crack (\$)	(+)		(\$)	p8(+)		
21ST ST	S.P.Local	Asphalt	571.5	12.0	5,715.0	4	354.3	131.4	0.0	0.0	0.0	year4	
LADY GEORGIE DR	S.P.Local	Dirt	838.9	12.0	8,389.2	4	0.0	0.0	29,362.2	2,382.5	18,456.3		year4
STONEHENGE DR	F.P LOCAL	Gravel	3,203.8	12.0	32,037.7	2	0.0	0.0	112,132.0	9,098.7	70,482.9		year5
6TH ST	S.P.Local	Gravel	168.9	12.0	1,689.1	3	0.0	0.0	5,912.0	479.7	3,716.1		year6
19TH ST	S.P.Local	Asphalt	998.9	12.0	9,989.2	4	619.3	229.8	0.0	0.0	0.0	year4	
PRINCES CIR	S.P.Local	Asphalt	297.8	12.0	2,977.7	1	184.6	68.5	0.0	0.0	0.0	year3	
MERLIN LN	S.P.Local	Gravel	567.7	12.0	5,677.1	3	0.0	0.0	19,869.7	1,612.3	12,489.6		year6
LITTLE JOHN BLVD	S.P.Local	Asphalt	2,360.2	12.0	23,602.2	4	1,463.3	542.9	0.0	0.0	0.0	year4	
WHITEHORSE CIR	S.P.Local	Asphalt	97.6	12.0	975.7	4	60.5	22.4	0.0	0.0	0.0	year4	
WICKFORD RD	S.P.Local	Asphalt	932.9	12.0	9,328.7	4	578.4	214.6	0.0	0.0	0.0	year4	
ELAINE DR	F.P LOCAL	Gravel	2,183.8	12.0	21,838.0	1	0.0	0.0	76,433.0	6,202.0	48,043.6		year5
SAXON CIR	S.P.Local	Gravel	276.9	12.0	2,768.9	3	0.0	0.0	9,691.0	786.4	6,091.5		year6
27TH ST	S.P.Local	Asphalt	5,370.2	12.0	53,702.0	4	3,329.5	1,235.1	0.0	0.0	0.0	year4	
17TH ST	S.P.Local	Asphalt	1,497.3	12.0	14,972.5	4	928.3	344.4	0.0	0.0	0.0	year4	
23RD ST	S.P.Local	Asphalt	2,349.3	12.0	23,492.8	4	1,456.6	540.3	0.0	0.0	0.0	year4	
DOGWOOD LN	S.P.Local	Dirt	987.0	12.0	9,870.0	4	0.0	0.0	34,545.0	2,803.1	21,714.0		year4
LINDA LN	S.P.Local	Gravel	317.8	12.0	3,177.5	2	0.0	0.0	11,121.3	902.4	6,990.5		year6
LAKEWOOD DR	M. Collector	Asphalt	9,858.0	18.0	177,444.0	2	11,001.5	2,267.3	0.0	0.0	0.0	year1	
16TH ST	S.P.Local	Asphalt	424.3	12.0	4,242.5	4	263.0	97.6	0.0	0.0	0.0	year4	
3RD ST	S.P.Local	Asphalt	1,975.1	12.0	19,751.2	3	1,224.6	454.3	0.0	0.0	0.0	year3	
GALAHAD DR	S.P.Local	Gravel	1,836.0	12.0	18,360.3	3	0.0	0.0	64,261.1	5,214.3	40,392.7		year6
22ND ST	S.P.Local	Asphalt	3,915.3	12.0	39,153.4	4	2,427.5	900.5	0.0	0.0	0.0	year4	
YORKSHIRE DR	S.P.Local	Asphalt	1,085.3	12.0	10,853.3	4	672.9	249.6	0.0	0.0	0.0	year4	
MILLCREEK DR	S.P.Local	Asphalt	2,836.6	12.0	28,366.2	3	1,758.7	652.4	0.0	0.0	0.0	year3	
4TH ST	S.P.Local	Asphalt	164.8	12.0	1,648.0	3	102.2	37.9	0.0	0.0	0.0	year3	
PERDILOT DR	S.P.Local	Dirt	4,026.7	12.0	40,266.6	3	0.0	0.0	140,933.1	11,435.7	88,586.5		year3
TRISTAN LN	S.P.Local	Dirt	735.9	12.0	7,358.8	3	0.0	0.0	25,755.9	2,089.9	16,189.4		year3
2ND ST	S.P.Local	Asphalt	621.0	12.0	6,210.4	3	385.0	142.8	0.0	0.0	0.0	year3	

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
CHARMAINE DR E	M. Collector	Asphalt	4,226.4	18.0	76,075.0	1	Crack (\$) 4,716.7	972.1	0.0	(\$)	0.0	vear1	
18TH ST	S.P.Local	Asphalt	1,251.3	12.0	12,513.1	4	775.8	287.8	0.0	0.0	0.0	year4	
			· ·									year4	voor2
GILBERT LN	S.P.Local	Dirt	1,447.0	12.0	14,469.8	3	0.0	0.0	50,644.3	4,109.4	31,833.6		year3
IVANHOE RANCHETTES DR	S.P.Local	Dirt	3,997.5	12.0	39,975.1	3	0.0	0.0	139,912.9	11,352.9	87,945.2		year3
PINE FOREST DR	S.P.Local	Dirt	1,039.0	12.0	10,389.8	4	0.0	0.0	36,364.3	2,950.7	22,857.6		year4
IVANHOE DR	M. Collector	Asphalt	2,797.9	18.0	50,362.2	1	3,122.5	643.5	0.0	0.0	0.0	year1	
GAWAIN DR	Collector	Asphalt	2,157.6	16.0	32,363.7	3	2,006.5	496.2	0.0	0.0	0.0	year2	
SHERWOOD FOREST DR	Collector	Asphalt	3,878.4	16.0	58,176.1	4	3,606.9	892.0	0.0	0.0	0.0	year2	
QUEEN CIR	S.P.Local	Dirt	434.2	12.0	4,342.2	4	0.0	0.0	15,197.6	1,233.2	9,552.8		year4
PRINCE ARN DR	S.P.Local	Dirt	643.9	12.0	6,439.3	2	0.0	0.0	22,537.6	1,828.8	14,166.5		year3
8TH ST	S.P.Local	Asphalt	197.0	12.0	1,970.1	3	122.1	45.3	0.0	0.0	0.0	year3	
ROBINHOOD LN E	Collector	Asphalt	1,101.8	16.0	16,526.4	4	1,024.6	253.4	0.0	0.0	0.0	year2	
10TH ST	S.P.Local	Asphalt	158.8	12.0	1,587.7	4	98.4	36.5	0.0	0.0	0.0	year4	
12TH ST	S.P.Local	Asphalt	288.1	12.0	2,881.3	4	178.6	66.3	0.0	0.0	0.0	year4	
FRIAR TUCK DR S	S.P.Local	Asphalt	1,543.9	12.0	15,439.1	4	957.2	355.1	0.0	0.0	0.0	year4	
7TH ST	S.P.Local	Asphalt	171.0	12.0	1,710.1	3	106.0	39.3	0.0	0.0	0.0	year3	
ALETA CIR	S.P.Local	Gravel	323.9	12.0	3,238.8	2	0.0	0.0	11,335.6	919.8	7,125.3		year6
ENGAMORE	F.P LOCAL	Dirt	2,115.3	12.0	21,152.5	1	0.0	0.0	74,033.8	6,007.3	46,535.5		year1
W FOREST DR	S.P.Local	Dirt	637.5	12.0	6,375.0	4	0.0	0.0	22,312.5	1,810.5	14,025.0		year4
28TH ST	Collector	Asphalt	4,570.2	16.0	68,552.7	4	4,250.3	1,051.1	0.0	0.0	0.0	year2	
13TH ST	S.P.Local	Asphalt	264.8	12.0	2,648.4	4	164.2	60.9	0.0	0.0	0.0	year4	
IVANHOE DR W	S.P.Local	Gravel	3,347.4	12.0	33,473.7	3	0.0	0.0	117,158.0	9,506.5	73,642.1		year6
HICKORY CIR	S.P.Local	Gravel	272.3	12.0	2,722.5	4	0.0	0.0	9,528.8	773.2	5,989.5		year7
20TH ST	S.P.Local	Asphalt	767.7	12.0	7,677.2	4	476.0	176.6	0.0	0.0	0.0	year4	
24TH ST	S.P.Local	Asphalt	948.2	12.0	9,482.3	4	587.9	218.1	0.0	0.0	0.0	year4	
1ST ST	S.P.Local	Asphalt	2,381.9	12.0	23,819.3	3	1,476.8	547.8	0.0	0.0	0.0	year3	
MARION DR	S.P.Local	Asphalt	1,581.8	12.0	15,817.9	4	980.7	363.8	0.0	0.0	0.0	year4	
MARION DR N	S.P.Local	Gravel	2,188.7	12.0	21,887.0	4	0.0	0.0	76,604.5	6,215.9	48,151.4		year7

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
							Crack (\$)			(\$)			
WINCHESTER LN	S.P.Local	Gravel	796.0	12.0	7,960.1	4	0.0	0.0	27,860.2	2,260.7	17,512.1		year7
IVANHOE ESTATES DR	Collector	Gravel	2,105.9	16.0	31,587.8	2	0.0	0.0	110,557.3	5,980.6	69,493.2		year5
PARK VIEW LN	S.P.Local	Asphalt	955.4	12.0	9,554.1	4	592.4	219.7	0.0	0.0	0.0	year4	
HICKORY LN	S.P.Local	Dirt	759.8	12.0	7,597.7	4	0.0	0.0	26,591.9	2,157.7	16,714.9		year4
14TH ST S	S.P.Local	Asphalt	345.8	12.0	3,458.3	4	214.4	79.5	0.0	0.0	0.0	year4	
9TH ST	S.P.Local	Asphalt	598.9	12.0	5,989.2	3	371.3	137.8	0.0	0.0	0.0	year3	
IVANHOE DR E	S.P.Local	Gravel	868.8	12.0	8,688.2	3	0.0	0.0	30,408.5	2,467.4	19,113.9		year6
SHERWOOD FOREST DR N	S.P.Local	Asphalt	5,395.9	12.0	53,959.4	4	3,345.5	1,241.1	0.0	0.0	0.0	year4	
LAKEVIEW CIR	S.P.Local	Asphalt	2,393.1	12.0	23,931.2	4	1,483.7	550.4	0.0	0.0	0.0	year4	
GUENEVERE DR	S.P.Local	Dirt	966.1	12.0	9,661.1	1	0.0	0.0	33,813.7	2,743.7	21,254.4		year3
26TH ST	S.P.Local	Dirt	204.4	12.0	2,043.8	1	0.0	0.0	7,153.4	580.4	4,496.4		year3
KING ARTHURS CT	S.P.Local	Gravel	1,005.2	12.0	10,051.7	3	0.0	0.0	35,181.0	2,854.7	22,113.7		year6
ROBINHOOD LN W	S.P.Local	Gravel	577.4	12.0	5,774.0	4	0.0	0.0	20,209.1	1,639.8	12,702.8		year7
CAMELOT DR S	M. Collector	Asphalt	3,383.9	18.0	60,909.8	1	3,776.4	778.3	0.0	0.0	0.0	year1	
SIR DOUGLAS DR	S.P.Local	Gravel	463.1	12.0	4,630.6	2	0.0	0.0	16,207.0	1,315.1	10,187.3		year6
KATHERINE DR	S.P.Local	Asphalt	2,111.4	12.0	21,113.9	3	1,309.1	485.6	0.0	0.0	0.0	year3	
MCDONALD CIR	S.P.Local	Gravel	563.8	12.0	5,638.5	2	0.0	0.0	19,734.6	1,601.3	12,404.6		year6
SIR PELLIUS DR	F.P LOCAL	Gravel	1,854.0	12.0	18,539.5	1	0.0	0.0	64,888.3	5,265.2	40,786.9		year5
5TH ST	S.P.Local	Asphalt	278.8	12.0	2,787.8	3	172.8	64.1	0.0	0.0	0.0	year3	
SANDY LN	S.P.Local	Asphalt	2,675.5	12.0	26,755.3	3	1,658.8	615.4	0.0	0.0	0.0	year3	
KINGS FOREST CIR	S.P.Local	Gravel	424.3	12.0	4,243.0	2	0.0	0.0	14,850.6	1,205.0	9,334.7		year6
SIR CHARLES DR	S.P.Local	Dirt	1,830.0	12.0	18,300.0	4	0.0	0.0	64,050.0	5,197.2	40,260.0		year4
11TH ST	S.P.Local	Asphalt	585.1	12.0	5,851.3	4	362.8	134.6	0.0	0.0	0.0	year4	
LAKE CAMELOT CIR	S.P.Local	Asphalt	2,657.0	12.0	26,570.3	3	1,647.4	611.1	0.0	0.0	0.0	year3	
CHANTICLEER DR	S.P.Local	Gravel	1,524.4	12.0	15,244.2	3	0.0	0.0	53,354.7	4,329.4	33,537.2		year6
PRINCE VALIANT DR	S.P.Local	Dirt	2,419.9	12.0	24,198.9	3	0.0	0.0	84,696.2	6,872.5	53,237.6		year3
SIR JIM DR N	S.P.Local	Asphalt	2,326.5	12.0	23,265.0	4	1,442.4	535.1	0.0	0.0	0.0	year4	
ROUND TABLE DR	S.P.Local	Gravel	245.4	12.0	2,454.0	3	0.0	0.0	8,589.0	696.9	5,398.8		year6

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
CAMELOT DR	S.P.Local	Dirt	3,664.9	12.0	36,648.8	3	Crack (\$) 0.0	0.0	128,270.8	(\$) 10,408.3	80,627.4		vear3
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SIR HENRY DR E	S.P.Local	Dirt	2,193.5	12.0	21,934.6		0.0	0.0	76,771.1	6,229.4	48,256.1		year3
NOTTINGHAM DR	S.P.Local	Asphalt	1,088.1	12.0	10,881.4	4	674.6	250.3	0.0	0.0	0.0	year4	
LANCELOT DR	S.P.Local	Dirt	1,649.4	12.0	16,494.2	3	0.0	0.0	57,729.7	4,684.4	36,287.2		year3
14TH ST N	F.P LOCAL	Asphalt	3,252.5	12.0	32,525.3	4	2,016.6	748.1	0.0	0.0	0.0	year1	
WINCHESTER CIR	S.P.Local	Gravel	455.6	12.0	4,555.7	4	0.0	0.0	15,945.0	1,293.8	10,022.6		year7
DURWOOD DR	Collector	Dirt	1,350.2	16.0	20,252.4	2	0.0	0.0	70,883.4	3,834.5	44,555.3		year2
GALAHAD LOOP RD	F.P LOCAL I	Gravel	2,424.6	12.0	24,245.7	3	0.0	0.0	84,860.0	6,885.8	53,340.5		year5
DURWOOD DR (1)	Collector	Asphalt	733.1	16.0	10,997.2	2	681.8	168.6	0.0	0.0	0.0	year2	
DURWOOD DR (2)	Collector	Gravel	1,247.2	16.0	18,707.3	2	0.0	0.0	65,475.6	3,541.9	41,156.1		year5
CHANTICLEER DR (1)	M. Collector	Asphalt	1,033.8	18.0	18,608.9	1	1,153.8	237.8	0.0	0.0	0.0	year1	
CHANTICLEER DR (2)	S.P.Local	Gravel	1,479.8	12.0	14,797.6	1	0.0	0.0	51,791.6	4,202.5	32,554.7		year6
1ST ST	S.P.Local	Asphalt	844.0	12.0	8,440.0	3	523.3	194.1	0.0	0.0	0.0	year3	
STONEHENGE DR	S.P.Local	Gravel	291.1	12.0	2,911.3	2	0.0	0.0	10,189.5	826.8	6,404.8		year6
GALAHAD LOOP RD	F.P LOCAL	Asphalt	1,207.4	12.0	12,074.4	3	748.6	277.7	0.0	0.0	0.0	year1	
NOTTINGHAM DR	S.P.Local	Gravel	301.7	12.0	3,016.8	4	0.0	0.0	10,558.8	856.8	6,637.0		year7
DURWOOD DR (1)	Collector	Dirt	671.3	16.0	10,070.2	2	0.0	0.0	35,245.7	1,906.6	22,154.4		year2
DURWOOD DR (2)	Collector	Gravel	1,309.3	16.0	19,638.9	2	0.0	0.0	68,736.2	3,718.3	43,205.6		year5
DURWOOD DR (3)	Collector	Gravel	548.9	16.0	8,233.9	2	0.0	0.0	28,818.5	1,558.9	18,114.5		year5
IVANHOE ESTATES DR	S.P.Local	Asphalt	3,244.9	12.0	32,448.7	2	2,011.8	746.3	0.0	0.0	0.0	year3	
DURWOOD DR	Collector	Dirt	592.8	16.0	8,892.2	2	0.0	0.0	31,122.6	1,683.6	19,562.8		year2
PRINCE ARN DR	S.P.Local	Gravel	652.8	12.0	6,527.8	2	0.0	0.0	22,847.1	1,853.9	14,361.1		year6
IVANHOE ESTATES DR	M. Collector	Asphalt	781.3	18.0	14,063.8	2	872.0	179.7	0.0	0.0	0.0	year1	
PRINCE ARN DR	S.P.Local	Gravel	323.7	12.0	3,237.2	2	0.0	0.0	11,330.3	919.4	7,121.9		year6
DOGWOOD LN	S.P.Local	Gravel	388.4	12.0	3,883.8	4	0.0	0.0	13,593.2	1,103.0	8,544.3		year7
SIR HENRY DR	S.P.Local	Gravel	1,206.6	12.0	12,066.4	4	0.0	0.0	42,232.4	3,426.9	26,546.1		year7
SIR HENRY DR	S.P.Local	Dirt	1,546.7	12.0	15,466.7	3	0.0	0.0	54,133.5	4,392.5	34,026.7		year3
GALAHAD DR	S.P.Local	Dirt	688.2	12.0	6,881.7	3	0.0	0.0	24,085.8	1,954.4	15,139.6		year3

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
	Ciassification	1 441118	(1.0)	()	(39.10)	20116	Crack (\$)	(4)	1 441118(47)	(\$)	ρατιιβ(Ψ)	Jeneu.	Jenea.
LANCELOT DR	S.P.Local	Gravel	1,599.0	12.0	15,989.7	3	0.0	0.0	55,964.0	4,541.1	35,177.3		year6
IVANHOE DR E	S.P.Local	Asphalt	497.9	12.0	4,978.9	3	308.7	114.5	0.0	0.0	0.0	year3	
CHANTICLEER DR	S.P.Local	Dirt	971.2	12.0	9,712.4	1	0.0	0.0	33,993.5	2,758.3	21,367.4		year3
IVANHOE DR	M. Collector	Asphalt	2,427.6	18.0	43,697.2	1	2,709.2	558.4	0.0	0.0	0.0	year1	
PRINCE VALIANT DR	S.P.Local	Gravel	1,088.5	12.0	10,884.6	3	0.0	0.0	38,096.1	3,091.2	23,946.1		year6
GAWAIN DR	Collector	Gravel	1,446.5	16.0	21,697.7	3	0.0	0.0	75,942.0	4,108.1	47,734.9		year5
CHANTICLEER DR (1)	S.P.Local	Dirt	1,050.1	12.0	10,500.7	3	0.0	0.0	36,752.5	2,982.2	23,101.5		year3
CHANTICLEER DR (2)	M. Collector	Asphalt	506.1	18.0	9,109.8	1	564.8	116.4	0.0	0.0	0.0	year1	
MARION DR N (1)	S.P.Local	Asphalt	610.7	12.0	6,106.7	4	378.6	140.5	0.0	0.0	0.0	year4	
MARION DR N (2)	S.P.Local	Dirt	1,829.4	12.0	18,294.3	4	0.0	0.0	64,030.1	5,195.6	40,247.5		year4
YORKSHIRE DR	S.P.Local	Dirt	648.3	12.0	6,483.3	4	0.0	0.0	22,691.4	1,841.2	14,263.2		year4
SHERWOOD FOREST DR N	S.P.Local	Gravel	905.8	12.0	9,058.1	4	0.0	0.0	31,703.3	2,572.5	19,927.8		year7
GALAHAD ESTATES DR	S.P.Local	Dirt	339.6	12.0	3,395.9	4	0.0	0.0	11,885.5	964.4	7,470.9		year4
DOGWOOD LN	S.P.Local	Dirt	312.6	12.0	3,126.3	4	0.0	0.0	10,942.2	887.9	6,877.9		year4
MARION DR N	S.P.Local	Dirt	922.0	12.0	9,219.5	4	0.0	0.0	32,268.3	2,618.3	20,282.9		year4
SIR JIM DR N	S.P.Local	Gravel	1,837.6	12.0	18,375.5	4	0.0	0.0	64,314.3	5,218.6	40,426.1		year7
DOGWOOD LN	S.P.Local	Gravel	306.5	12.0	3,064.8	4	0.0	0.0	10,726.8	870.4	6,742.6		year7
IVANHOE DR E	S.P.Local	Gravel	1,110.5	12.0	11,104.8	3	0.0	0.0	38,866.8	3,153.8	24,430.6		year6
IVANHOE ESTATES DR	Collector	Dirt	1,325.7	16.0	19,886.1	2	0.0	0.0	69,601.4	3,765.1	43,749.4		year2
DURWOOD DR	Collector	Asphalt	1,033.6	16.0	15,504.6	2	961.3	237.7	0.0	0.0	0.0	year2	
GALAHAD DR	S.P.Local	Gravel	759.4	12.0	7,593.8	3	0.0	0.0	26,578.4	2,156.6	16,706.4		year6
IVANHOE DR E	S.P.Local	Dirt	778.4	12.0	7,783.9	3	0.0	0.0	27,243.5	2,210.6	17,124.5		year3
MILLCREEK DR	S.P.Local	Asphalt	2,470.2	12.0	24,702.3	3	1,531.5	568.2	0.0	0.0	0.0	year3	
CHANTICLEER DR	M. Collector	Gravel	421.4	18.0	7,585.4	3	0.0	0.0	26,549.0	1,196.8	16,687.9		year1
CAMELOT DR S (1)	S.P.Local	Asphalt	1,377.7	12.0	13,776.8	1	854.2	316.9	0.0	0.0	0.0	year3	
CAMELOT DR S (2)	M. Collector	Asphalt	562.0	18.0	10,115.6	1	627.2	129.3	0.0	0.0	0.0	year1	
SIR ROBERT BURNS	M. Collector	Gravel	315.4	18.0	5,677.2	2	0.0	0.0	19,870.3	895.7	12,489.9		year1
CAMELOT DR S	M. Collector	Asphalt	419.8	18.0	7,556.3	1	468.5	96.6	0.0	0.0	0.0	year1	

CITY OF IVANHOE COMPREHENSIVE PLAN 2018 - 2038

Road Name	Functional Classification	Existing Paving	Length (ft)	Width (ft)	Area (sq . ft)	Priority Zone	Asphalt Sealing	Pot hole (\$)	Asphalt Paving(\$)	Chip sealing	Caliche paving(\$)	Repair Sched.	Upgrade Sched.
SHERWOOD FOREST DR W	S.P.Local	Asphalt	791.3	12.0	7,912.5	4	Crack (\$) 490.6	182.0	0.0	(\$)	0.0	year4	
TOTAL			246,934.2		2,868,323.0		107,607.1	32,096.5	3,964,536.2	304,970.9	2,491,994.2		