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Littlefield, Texas

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Littlefield by

Austin, Texas

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Members of the City Council,

City Staff,

&

Residents of Littlefield

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1 Community Goals & Objectives

1.1 Comprehensive Planning

A comprehensive plan is a document that articulates a future vision for a community and the goals, objectives, and actions to help achieve it. It provides guidance to City staff, leaders, decision-makers, property owners, businesses, developers, and residents in the choices and decisions they make.

A comprehensive plan:

- Provides detailed information about what a city looks like and how it functions;
- Articulates a vision of how residents and other community members want the city to grow as it looks to the future;
- Identifies specific goals and actions to help achieve the vision;
- Provides a framework for policy decisions and physical development;
- Covers a long-term time frame of 10- to 20-years; and
- Is integrated with other planning documents, studies, and initiatives carried out by the City and region.

While not statutorily required for Texas cities, comprehensive plans provide important legal and political support for zoning, subdivision, and other city development processes. A comprehensive plan defines a city's reasons for adopting and implementing land use regulations and provides information for budgeting, capital improvements programs, and other regulatory documents of the City.

Once complete, a comprehensive plan represents not only a sophisticated set of data about a city but also a set of priorities and specific projects established by the community that the city's leadership can use to move the city into the future.

1.2 Developing a Vision

Community goals and objectives guide the actions recommended throughout this comprehensive plan. Littlefield residents' goals and objectives were developed through public hearings, presentations, and surveys. The City of Littlefield hosted a planning workshop at the Council Chambers on January 7th, 2020. The purpose of the workshop was to identify, organize, and analyze goals and objectives for the community. The conclusions from the workshop can be expressed as a community vision statement that describes residents' hopes for what Littlefield might be like in 2030:

City of Littlefield Community Vision Statement

In 2030, Littlefield will be an affordable, charming community that provides excellent services and attractive amenities. The city will be characterized by:

- *A peaceful and welcoming, small-town feel:*
- *An active and supportive community;*
- *Diverse housing opportunities affordable to and serving the needs of all segments of the population;*
- *A local economy that supports a variety of businesses;*
- *Updated and efficient water and sewer systems that provide good service at a low cost to taxpayers; and*
- *Well-maintained parks and recreation facilities for residents of all ages.*

1.3 Community Input

The planning workshop gathered information from Littlefield residents using an effective, established process known as the Goals Grid Method.[1] The following questions were presented to those in attendance:

1. What are you trying to achieve?
2. What are you trying to preserve?
3. What are you trying to avoid?

[1] Nichols, Fred (2000) The Goals Grid: A Tool for Clarifying Goals and Objectives

4. What are you trying to eliminate?

Residents responded as follows:

Preserve/Achieve

- Community
  - Small-town peace and tranquility
  - Close-knit community
  - Sustainable, controlled growth
- Historic Preservation
  - Downtown structures & aesthetic
  - Windmill
  - Duggin House
- Housing
  - A diverse market that reflects the needs & cost limitations of current residents
  - More housing & more affordable housing options
  - Continue to provide housing rehabilitation programs
- Recreation & Open Space
  - Littlefield City Parks
    - Improve
      - Increase safety with lighting and fencing
      - Increase ADA accessibility
      - Improve facilities (water fountains, benches, shade, etc.)
    - Expand - More facilities & community events
  - More recreational options
    - Aquatic Recreation Center
- Infrastructure
  - Water and Sewer Systems
    - Replace old, deteriorating lines
  - Streets
    - Fix potholes and damaged streets
- Land Use
  - Improve downtown commercial center
  - Preserve and expand Lamb Healthcare Center
  - More businesses (retail, franchise)
    - Restaurants; Grocery; Shops
- Economic Development

- Ensure opportunities for current residents
  - Existing businesses remain
  - Support new local business
- Support downtown revitalization program

Eliminate/Avoid

- Substandard Structures & Lot Conditions
  - Remove vacant, substandard housing
  - Help for residents to clarify titles and deeds
  - Consider community outreach effort to promote dilapidated structure removal
  - Junked yards
  - Vacant commercial buildings downtown and deteriorating walkways

- Land Use
  - Avoid further sprawl
  - Separate conflicting land uses (i.e. industrial and housing)

- Infrastructure
  - Water & Sewer
    - Avoid overextending services to new parts of town
  - Streets
    - Fix potholes/poor road conditions
    - Avoid further road erosion

1.4 Implementation: Goals & Objectives Framework

The results of the Goals Grid Method were used in conjunction with fieldwork and background research to define specific implementation plans for each area of this comprehensive plan. Each implementation plan contains long-term goals and specifically defined objectives, timelines, involved parties, and estimated costs.

1.5 Commitment to Fair Housing

In recognition of fair housing as important to all aspects of community planning, the studies in this plan include analyses of protected classes in Littlefield and of how Littlefield policies, procedures, and investments impact protected classes in the city.

2 Population Analysis

Comprehensive plans include estimates of the current and future population because the size and rate of a community's growth affect planning for community facilities and services. Information for the population analysis comes from the United States Census Bureau, the Texas Demographic Center, the Texas Water Development Board, and a survey of the community's occupied houses.

2.1 Highlights

Like many small cities in Texas, Littlefield's population fluctuated over the past 50 years. Historical population changes were impacted by the activities and investments of mills and plants in the area as well as the productivity of surrounding agricultural lands. In 2020, Littlefield is a primarily residential community for surrounding employment centers in the region. Littlefield's location on US Highway 84 provides a direct link to Lubbock.

Littlefield's population decreased over the last decade (2000-2010) and became somewhat older. Out-migration occurred among nearly all age groups, particularly among residents in their early thirties. Littlefield's population is likely to decrease over the planning period considering historic trends in both Littlefield and Lamb county. Current population estimates support this possibility. Based on the 2020 population estimate derived for this plan, the city of Littlefield's population decreased by 0.3% over the last ten years.

This study projects that Littlefield's population will experience slight decline over the next 10 years, reaching approximately 6,249 residents in 2030.

2.2 Conditions

The city of Littlefield is the county seat of Lamb County located off US 84. Incorporated in 1924, Littlefield is a General Law City with a mayor-council form of government and is within the South Plains Associations of Governments (SPAG).

Historical Development & Growth

Littlefield's history is closely tied to the activities and investments of the railroad and agriculture industry. The town was named for George W. Littlefield who formed a land company when surveys showed the new Santa Fe railroad line would pass through his land. In 1913 the site became a station on the Panhandle and Santa Fe Railway and a school, which was supported by the Littlefield Land Company, was founded.

Littlefield was elected the county seat for Lamb County in 1946. Its population was 3,817 in 1940 and 6,558 in 1950. The city was surrounded by irrigated farmlands that produced cotton, grains sorghums, and vegetables. Littlefield became the retail and commercial center for Lamb County as well as parts of Hockley and Bailey counties.

Table 2A: Population (1960 – 2020)

Year	Littlefield	Lamb County	State of Texas
1960	7,236	7,236	9,579,677
1970	6,738	6,738	11,196,730
1980	7,409	7,409	14,229,191
1990	6,489	6,489	16,986,540
2000	6,507	6,507	20,851,820
2010	6,372	6,372	25,145,561
2020 (estimate)		6,406	

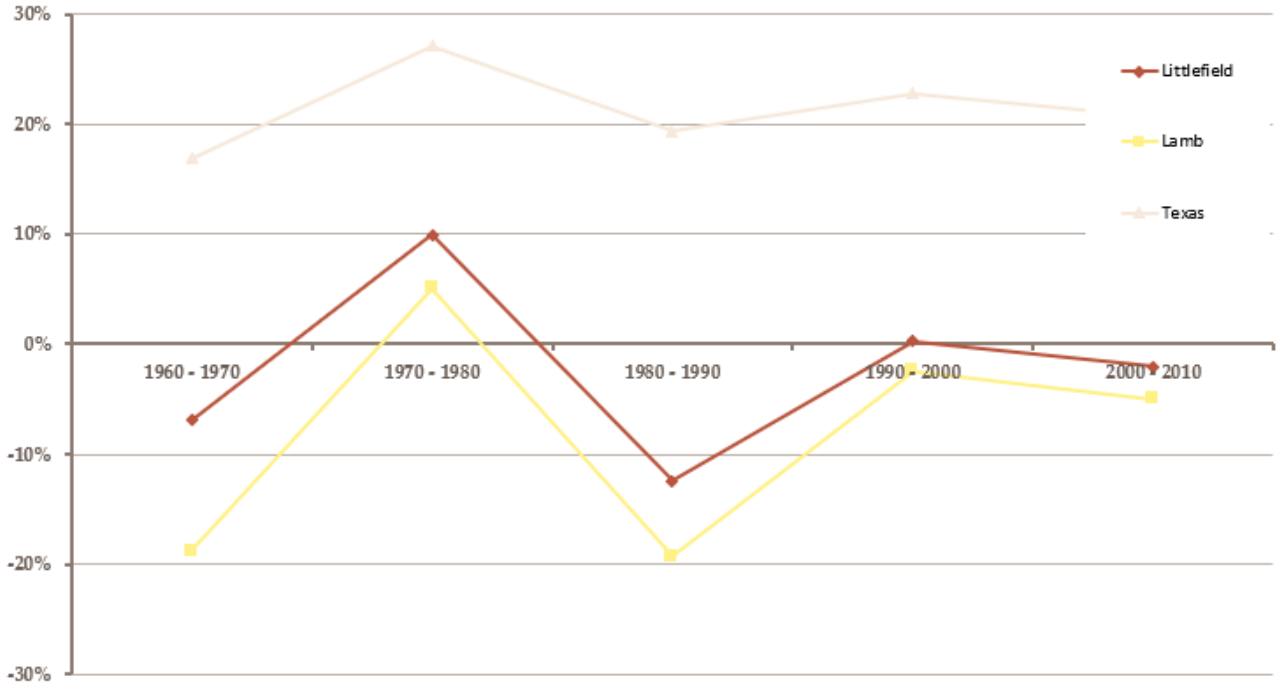
Source: US Census Bureau, Profile of Demographic Characteristics, 1960 – 2010; GrantWorks 2020 estimate

Fertilizer products and irrigation equipment manufacturing contributed to the city's economy and in the 1980's a textile mill opened. The population of Littlefield has fluctuated around 6,500 since peaking in the 1980's. [2]

Chart 2A and *Chart 2B (next page)* compare population changes in Littlefield, nearby cities, Lamb County, and the State of Texas over the last 50 years. As the charts show, Littlefield and Lamb county experienced identical fluctuations in population compared to the state of Texas's population fluctuations which were much less pronounced. Nearby cities like Hale Center and Shallowater experienced similar population change fluctuations.

[2] https://tshaonline.org/handbook/online/articles/HFL05

Chart 2A: Historical Population Change (1960 – 2010) [City, County, Texas]



Source: US Census of Population and Housing

Chart 2B: Historical Population Change (1960 – 2010) [City, Nearby Cities]

Source: US Census of Population and Housing

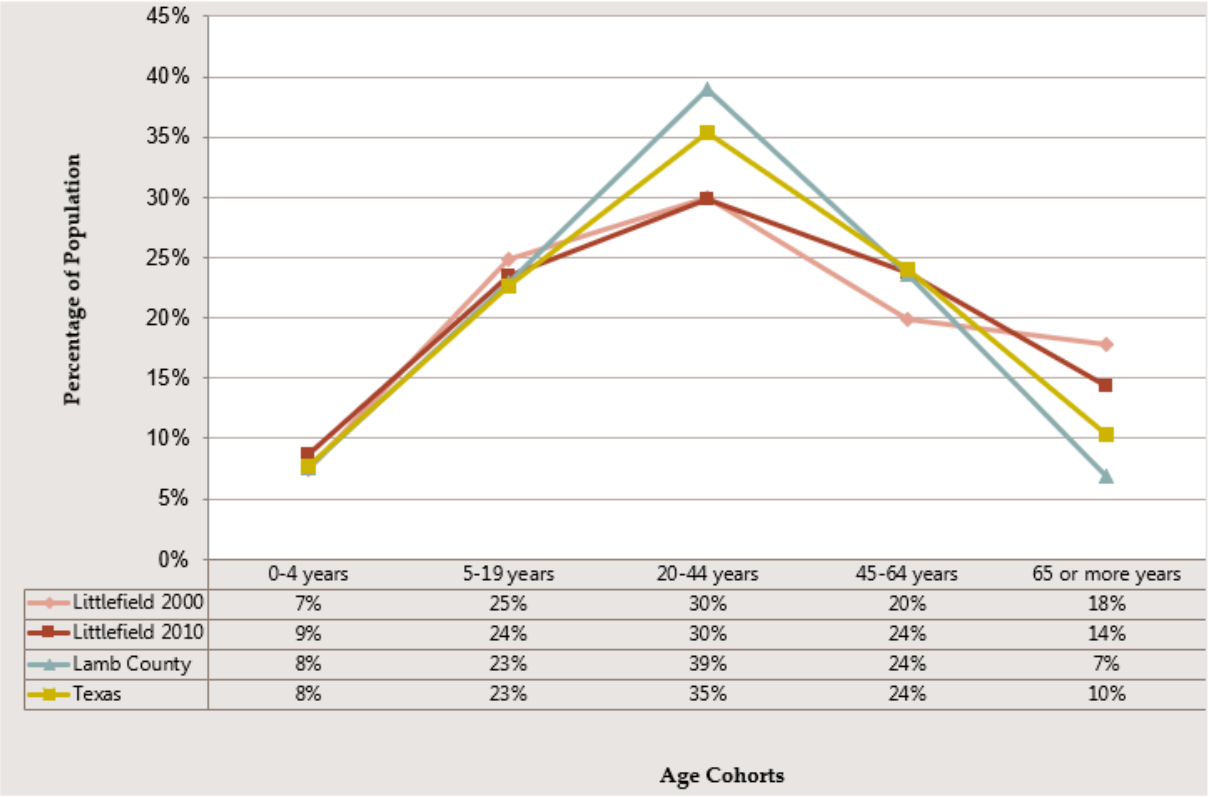
Recent Population Changes (2000-2010)

Littlefield's population decreased by 2% (-135 residents) over the last decennium (2000-2010). The following sections analyze changes in age distribution and representation of racial and ethnic minorities in the city during this period.

Age Distribution

Chart 2C illustrates age cohort distributions for Littlefield (2000 and 2010), Lamb County (2010), and the State of Texas (2010). An age distribution peaked by the 20-to-44-year-old age cohort generally indicates a stable-to-expanding or "healthy" population distribution. The 2010 Texas distribution is an example of a "healthy" population distribution. In contrast, a flatter distribution can indicate relatively stationary or declining population change. As the *Chart 2C* demonstrates, the age distribution of Littlefield's residents in both 2000 and 2010 are peaked by the 20-to-44-year-old age cohort. There is little difference between Littlefield's population in 2000 and 2010. It should be kept in mind that, due to the relatively small size of Littlefield's population, the age distribution can fluctuate from minor changes. However, this comparison suggests that Littlefield's population remained relatively the same between 2000 and 2010.

Chart 2C: Recent Population Change, by Age Group (2000 – 2010)



	0-4 years	5-19 years	20-44 years	45-64 years	65 or more years
Littlefield 2000	7%	25%	30%	20%	18%
Littlefield 2010	9%	24%	30%	24%	14%
Lamb County	8%	23%	39%	24%	7%
Texas	8%	23%	35%	24%	10%

Source: 2000 and 2010 Census of Population and Housing, Summary Population and Housing

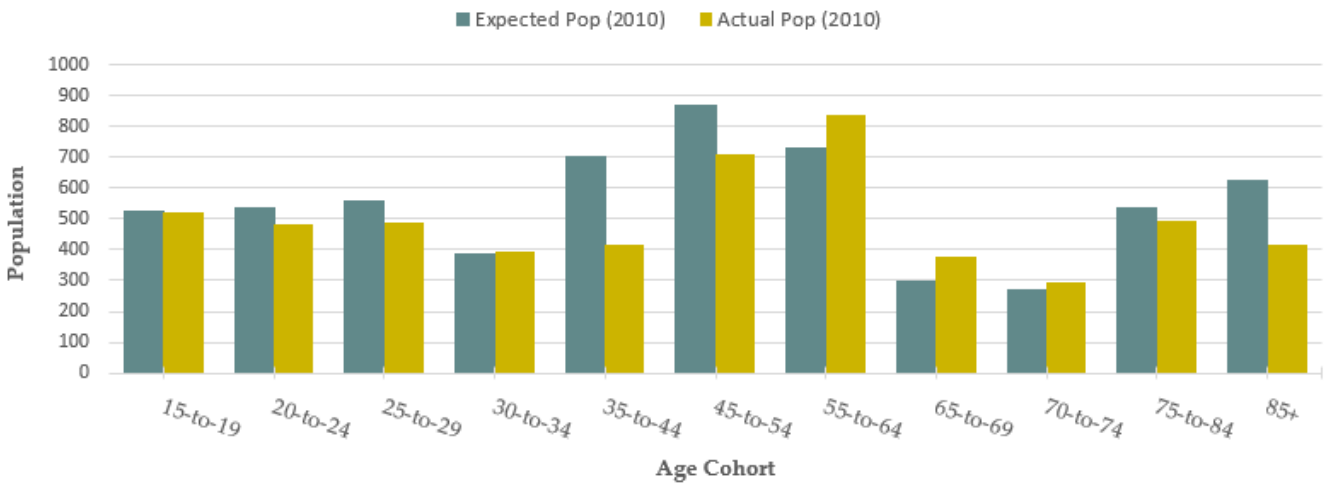
Actual Versus Expected Population

Population changes are usually the result of both migration - residents moving to or leaving a city - and natural changes – new births or current residents passing away. Examining the relative impact of these factors provides a more nuanced understanding of recent population change.

Chart 2D compares Littlefield's expected 2010 population (organized by age group) with the actual population figures from the 2010 Census (also organized by age group). The expected population in each group is based on the aging of individuals living in Littlefield in 2000. For example, the expected population of 20-to-24-year-olds in 2010 is the population that was 10-to-14 years-old in 2000. A higher than expected 2010 population suggests that new residents in the age group moved to Littlefield between 2000 and 2010. In the case of residents under the age of 15, this could also indicate natural population growth (new births to parents already living in the city). A lower than expected 2010 population could be the result of several factors, namely mortality or previous residents moving away.

Comparison of Littlefield's actual and expected 2010 population by age group suggests that several residents living in Littlefield in 2000 likely left or passed away over the last decade. The actual 2010 population was equal to or lower than expected in all but three age groups – adults 55-to-74. In particular, the actual population of residents in their thirties and early forties was notably lower than expected.

Chart 2D: Expected & Actual 2010 Population, by Age Group



Source: 2000 and 2010 Census of Population and Housing, Summary Population and Housing

It is important to note that these are only general reference figures to identify general changes. The comparison captures only overall changes.

Race & Ethnicity

The U.S. Census distinguishes between two minority population groups: "racial minorities" - all non-"White" residents - and "ethnic minorities" - all "Hispanic or Latino" residents. *Table 2B* provides a population profile of residents in Littlefield and Lamb County in terms of race and ethnicity.

As *Table 2B (next page)* demonstrates, approximately 26% of Littlefield's 2010 population identify as a racial minority (non-White), and 55% identify as an ethnic minority (Hispanic or Latino). Racial minorities comprised a very similar percentage of Littlefield residents in 2010 than in 2000, as did representation with racial minority groups. Littlefield's ethnic minority population increased slightly during this period (9%). *Table 2B* also shows that Littlefield is more ethnically diverse than the populations in Lamb County and the State of Texas.

As shown on *Map 2A: Population Distribution 2020-2030* and discussed further in *Chapter 3: Housing Study,* the city of Littlefield has several areas of high minority concentration. The State of Texas defines an "Area of High Minority Concentration" as "a census block group that consists of 65% or more of minorities".[3] Minorities include all racial and ethnic population groups other than 'White, non-Hispanic (Anglo)'". Census data is not available to map the locations of other protected classes for towns or cities with fewer than 20,000 residents.

Additional data regarding minorities in Littlefield included in *Appendix 2A: Project Beneficiaries.*

[3] The "65 percent threshold" is based on the definition of "an area of minority concentration" used by the Texas General Land Office in its 10/1/2012 publication**, "**Homeowner Opportunity Program Guidelines - CDBG Disaster Recovery Program - Hurricanes Ike & Dolly, Round 2."

Table 2B: Population Change by Race & Ethnicity (2000, 2010) [City, County, State]

Characteristic	LITTLEFIELD				LAMB COUNTY		STATE	
	2000		2010		2010		2010	
	#	%	#	%	#	%	#	%
Total Population	**6,507**	**100%**	**6,372**	**100%**	**662,614**	**100%**	**25,145,561**	***100%***
Race								
White	5,017	77%	4,721	74%	497,260	75%	17,701,552	*70%*
Black or African American	350	5%	397	6%	55,534	8%	2,979,598	*12%*
American Indian, Alaskan Native	45	1%	41	0.6%	4,551	0.7%	170,972	*0.7%*
Asian	11	0.2%	10	0.2%	43,478	6.6%	964,596	*4%*
Native Hawaiian / Hawaiian / Another Pacific Islander	3	0.0%	3	0%	462	0.07%	21,656	*0.1%*
Other	951	15%	1,038	16%	41,916	6%	2,628,186	*10%*
Two or More Races	130	2%	162	3%	19,413	3%	679,001	*3%*
Ethnicity								
Hispanic or Latino	2982	46%	3,483	55%	120,836	18%	9,460,921	*38%*
Not Hispanic or Latino	3,525	54%	2,889	45%	541,778	82%	15,684,640	*62%*

Source: U.S. Census Bureau.
Note: Figures may be rounded to next whole number

2.3 Population Projections & Forecast

Population Projections

Population projections inform federal, state, and local funding decisions about facilities such as highways, sewage treatment plants, and schools. Population projections are based on historical trends ranging from the population changes in the most recent decade to changes over the past century or more. Planners considered several population projections, based on differing methods, to help guide the planning recommendations for the city of Littlefield in this comprehensive plan.

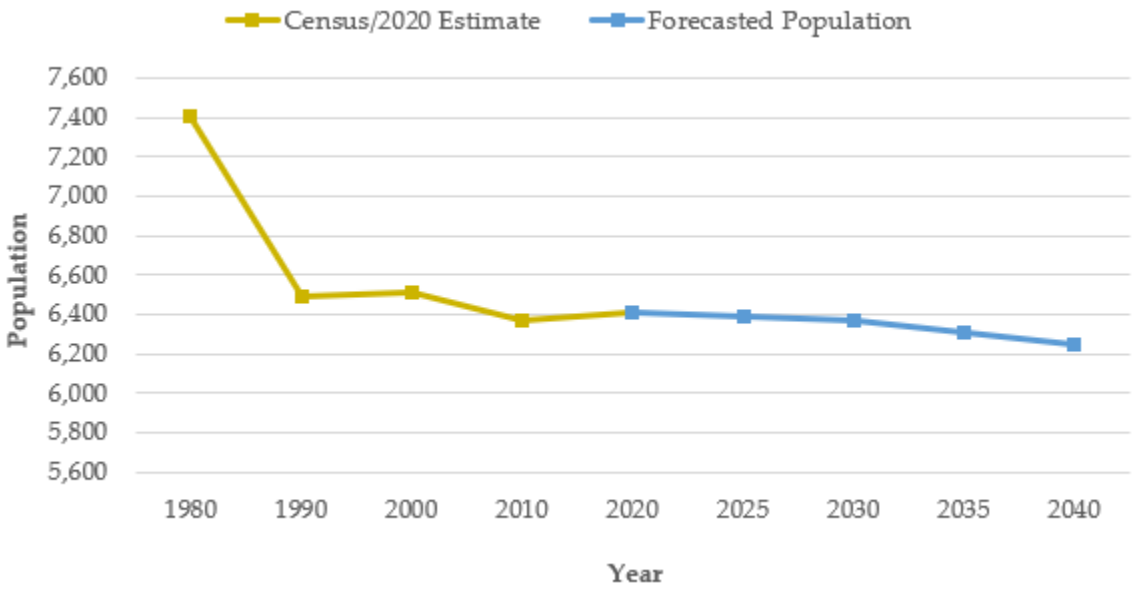
- Extrapolation of Texas Demographic Center (TDC) cohort population projection for Lamb County (adjusted by the city of Littlefield's relative population)
- Geometric extrapolation of recent Census data (2000, 2010)
- Linear regression analysis of Census data (1930-2010)
- Texas Water Development Board (2016 estimate)

Appendix 2B provides a more detailed discussion of the population projection methods.

Population Forecast

Littlefield's population forecast was created using the city level data projection from the Texas Water Development Board (TWDB). **This study forecasts that Littlefield's population will experience slight decline over the next 10 years, reaching approximately 6,366 residents by 2030**. *Map 2A* shows the expected locations of Littlefield's population in 2030.

Chart 2E: Population Forecast



2.4 Appendix 2A: Project Beneficiaries

Table 2A.1 contains information required by the U.S. Department of Housing and Urban Development (HUD) in the fulfillment of this planning grant. The numbers detailed for project beneficiaries below may not correspond exactly to the numbers presented in *Table 2B (*above) because HUD grant programs generally require at least a 51% low-to-moderate community income level to qualify for funding. However, income levels are not collected from all Census respondents. Census income levels are derived from a 1-in-6 sample and weighted to represent the total population. Race beneficiary numbers are then mathematically derived to correspond to income beneficiary numbers. When Census income level estimates seem too high, additional door-to-door surveys are conducted to verify a 51% low-to-moderate income level. Because the income tabulation is slightly different for the grant application, the resulting numbers generally do not correspond to the 100% population samples that represented in *Table 2A.1.*

Table 2A.1: Beneficiary Report

Total Project Beneficiaries 6,225 Male 3,169 Female 3,056

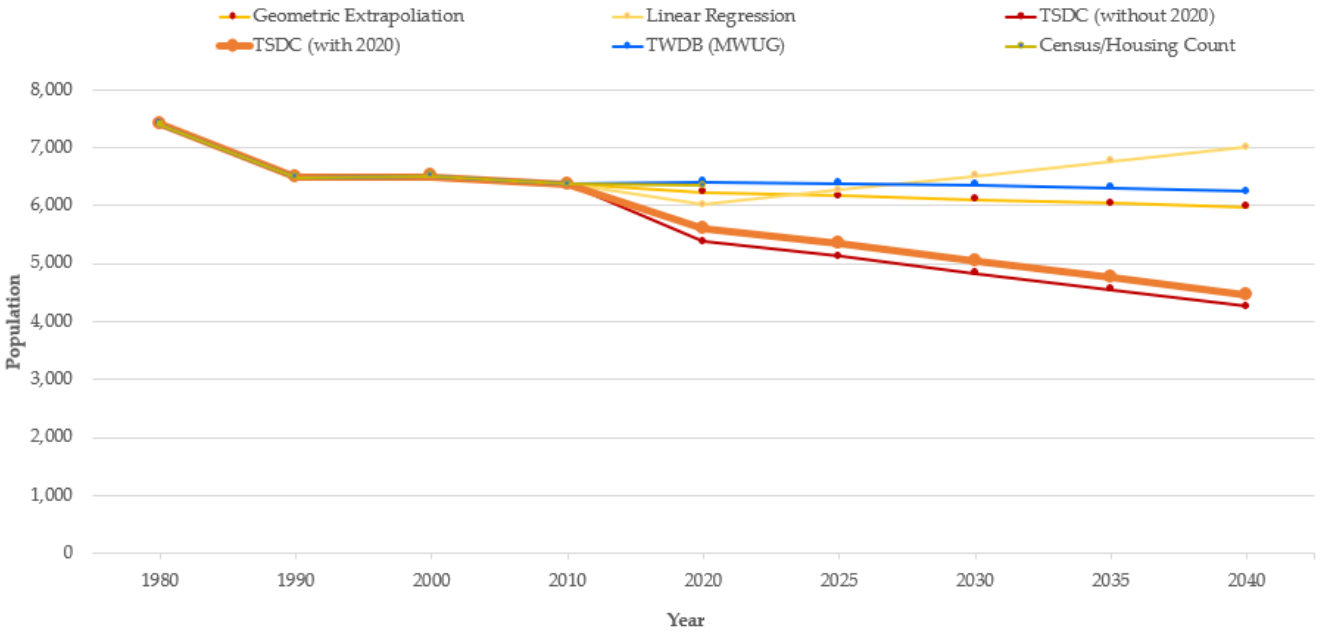
Race	Non-Hispanic	Hispanic Ethnicity	Total
White	2,239	2,896	5,135
Black/African American	389	177	566
American Indian/Alaskan Native	22	0	22
Asian	36	0	36
Native Hawaiian/Other Pacific Islander	0	0	0
Other Multi-Racial	33	345	378
Black/African American & White	6	14	20
American Indian/Alaskan Native & White	14	26	40
Asian & White	10	18	28
American Indian/Alaskan Native & Black/African American	0	0	0
		Grand Total	*6,225*

Income Level	No. of Persons
Very Low (at or below 30% of the AMFI)	n/a
Low (31-50% of the AMFI)	n/a
Moderate (51-80% of the AMFI)	n/a
Non-Low/Moderate (above 80% of AMFI)	n/a
Total	**6,175**
Subtotal – All Low/Mod	***3,720 (60.2%)***

2.5 Appendix 2B: Population Projection Methods

Chart 2B.1 illustrates each projection considered for this plan. The following sections describe projection methods.

Chart 2B.1 Population Projections Comparison



Cohort Extrapolation

Population estimates identify changes to the city's population and provide a benchmark to guide population projections and forecasts. The Texas Demographic Center (TDC) periodically issues population estimates for all incorporated places in the state; the TDC's system provides a baseline for the cohort extrapolation estimate produced as part of this study. The TDC uses the **Cohort-Component Method** to calculate estimates and projections. The basic characteristics of this technique are the use of separate cohorts – persons with one more characteristic – and the separate projection of each of the major components of population change –fertility, mortality, and migration for each of the cohorts. The latest projections employ a migration scenario that assumes a continuation of 2010-2015 rates of age-, sex-, and race/ethnicity-specific rates of migration.

Geometric Extrapolation

The geometric extrapolation model operates on the assumption that the population will change by the same percentage in each future year as the average annual change over the base period (2000-2010).

Linear Regression

Linear regressions attempt to model the relationships between two variables by fitting a linear equation to the observed data. One variable is considered to be an explanatory variable (time) and the other is considered to be a dependent variable (population change). Linear regressions help to adjust for short term fluctuations over time to identify longer-term trends.

Texas Water Development Board

The Texas Water Development Board (TWDB) provides population projections for "Municipal Water User Groups," which include:

- Cities with a 2010 population greater than 500;
- Select Census Designated Places, such as military bases and in counties with no incorporated cities;
- Utilities (areas outside the places listed above) providing more than 280 acre-feet of municipal water per year);
- Collections of utilities with a common water supplier or water supplies (Collective Reporting Units); and
- Remaining rural, unincorporated population summarized as "County-Other".

Municipal water user group ("MWUG") projections are taken from county-level projections based on projections from the Texas Demographic Center (TDC) / Office of State Demography (*see Cohort Extrapolation above*). County-level projections are based on the TSDC half-migration scenario, but alternative scenarios are selected where more reflective of anticipated growth patterns. Projections for individual MWUGs are developed by allocating growth from the county-level projections according to the following methods:

- Share of Growth – applying the MWUG's historical (2000-2010) share of the county's growth to future growth;
- Share of the Population – applying the MWUG's historical share (2000-2010) of the county population to the projected county population; and
- Constant Population – applied to military bases and other water user groups that had a population decline between 2000 and 2010 in a county with overall population growth.

The sum of all MWUG populations within a county is reconciled to the total county projection. More information about the MWUG population projection methods and methodology can be found at https://www.twdb.texas.gov/waterplanning/data/projections/.

3 Housing Study

The Housing Study analyzes the location and condition of Littlefield's housing stock. It identifies the various types of housing, including multifamily (apartments, duplexes, etc. and government-funded units), single-family (the typical house), and mobile/manufactured houses, as well as fair housing-related characteristics of the city's housing stock. The study lists particular issues that need to be addressed, actions municipal authorities should take, and resources available for improving local housing.

In 2005, GrantWorks, Inc. completed a comprehensive plan for the city of Littlefield that included a housing study (study recommendations summarized below).

3.1 Highlights

The city of Littlefield's housing stock is characterized by single-family, stick-frame housing (87% of all units). Approximately 69% of housing units are in standard condition, but residential vacancy rates are considered high (estimated 13.3%).[4] The City has numerous multi-family units (235), including duplexes, triplexes, and apartments. Most of the multifamily units (97%) are in standard condition. Landlords report high occupancy in, and demand for, affordable rental units.

Littlefield faces several significant challenges for maintaining and further developing a healthy housing stock. Approximately 31% of Littlefield's housing (866 units) is in substandard condition (i.e. deteriorated or dilapidated condition), and nearly all substandard units are occupied (70% or 609 units). In addition, there are 257 vacant, dilapidated/deteriorating units located within the city limits. Vacant, dilapidated houses are a key community concern, increase risks to public health and welfare, and should be removed.

Map 3A: Housing Conditions shows the location of housing by type and condition.

[4] Estimated vacancy rate derived from the average of the 2010 US Census vacancy rate and the 2020 vacancy rated based on windshield observations (further discussed in *Section 3.3.2).*

Improving the existing housing stock will require financial and technical support for repair and maintenance, as well as financial and technical support for housing removal and replacement. The City should focus on assisting residents with home repair (e.g., through grant applications and dissemination of information on organizations able to help individuals) and with dilapidated structure removal. The City should continue to enforce relevant ordinances to ensure that housing and lots meet high standards and adopt new ordinances to encourage maintenance of rental units.

Based on a projected decline in population (2.5%), the city of Littlefield will not require new housing except to replace existing substandard units. City representatives and residents expressed a desire for more affordable and diverse housing options in Littlefield. The City should continue to work with area foundations, large landowners, and regional developers to identify areas and to finance and build new housing.

3.2 Context: History & Community Input

Previous Studies

GrantWorks, Inc. conducted a housing study for the City of Littlefield in 2005 as part of a comprehensive planning process. *Table 3A* compares the 2005 housing study data to the housing data collected for this plan (2020).

Table 3A: Housing Changes (2004, 2020)

	2004	2020
Total # of Housing Units	2,720	2,813
# of single-family units	2,383	2,578
# of multifamily units	225	235
# stick-frame	2,383	2,445
# mobile/manufactured	112	133
Total in standard condition	1,754	1,947
Total in deteriorated condition	535	409
Total in dilapidated condition	266	457
Vacancy Rate	6%	13.3%

** Estimated figure. See Section 3.3 for further explanation*

The goals expressed at the end of the 2005 housing study are listed below with the status of each goal in 2020:

1. Annually, publicly proclaim Fair Housing Month, provide information regarding federal Fair housing policy and local Fair Housing Ordinances to the public.

- In conjunction with the acceptance of grant funds from the Texas Community Development Block Grant Program (TxCDBG) program of the U.S. Department of Housing and Urban Development (HUD), the City of Littlefield stated that it would affirmatively further fair housing (AFFH) and uphold the 1968 Fair Housing Act.

2. Annually, continue an active enforcement program to deal with dilapidated, vacant structures within the City.

   - The City of Littlefield has an active enforcement program which demolishes dilapidated, vacant houses as often as financially possible.

3. Complete HOME program owner-occupied rehabilitation/reconstruction grant to construct nine new homes.

   - Following completion of the 2005 comprehensive plan, the City of Littlefield participated in the HOME program in 2007 but has not participated since then. Since 1993, the City has facilitated 19 home replacements and almost $800K in housing rehabilitation through the HOME program.

4. Work with local churches and community groups to begin a self-help housing rehabilitation program aimed at preserving the City's existing housing stock.

   - The City of Littlefield has not started a self-help housing rehabilitation program.

5. Consider participating in establishing a county-wide non-profit community housing development organization (CHDO) to take advantage of housing development funds from the Texas Housing Trust Fund and the owner-occupied rehabilitation CHDO set-asides.

   - The City of Littlefield does not participate in a CHDO.

6. In conjunction with local banks, pursue additional HOME first-time homebuyer and down payment assistance to encourage home purchases in the community.

7. Following completion of the 2005 comprehensive plan, the City of Littlefield participated in the HOME program in 2007 but has not participated since then. Since 1993, the City has facilitated 19 home replacements and almost $800K in housing rehabilitation through the HOME program.

8. Investigate funding sources for handicapped accessibility improvements to single-family and manufactured houses to help elderly and other disabled individuals remain in their homes.

   - The City of Littlefield has not investigated funding sources for handicapped accessibility improvements.

Community Input

Housing goals expressed by residents in *Chapter 1: Community Goals & Objectives* are:

Achieve/Preserve	Avoid/Eliminate
▪ A diverse market that reflects the needs & cost limitations of current residents ▪ More housing & more affordable housing options ▪ Continue to provide housing rehabilitation programs	▪ Remove vacant, substandard housing ▪ Help for residents to clarify titles and deeds ▪ Consider community outreach effort to promote dilapidated structure removal ▪ Junked yards ▪ Vacant commercial buildings downtown and deteriorating walkways

3.3 Inventory & Forecast

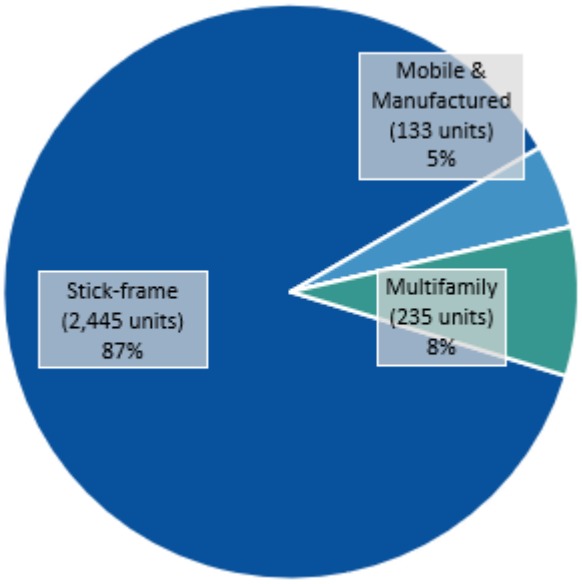
Housing Types & Condition

The city of Littlefield's housing stock includes stick-frame, mobile manufactured, and multifamily units. However, the housing stock in Littlefield is characterized by single-family, stick-frame units – 87% of all housing in the city (see *Chart 3A, next page*).

Approximately 2/3 of Littlefield's housing stock is in standard condition (see *Chart 3B, next page*). Relative housing conditions differ across housing types. Almost an equal percentage of housing units are considered to be in dilapidated condition (16% of all units) compared to deteriorated condition (15% of all units). This means that homes in Littlefield are equally likely to be considered to be unsafe than in need of repair. Given that roughly 50% of the dilapidated housing is inhabited, Littlefield should pursue home rehabilitation programs to improve the housing stock.

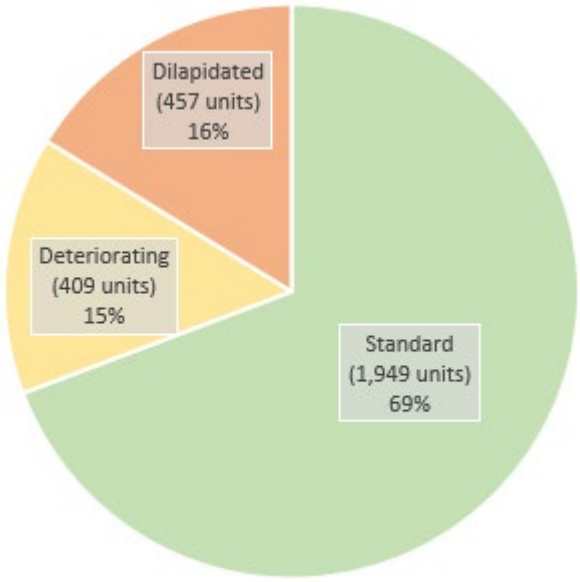
There are 866 substandard housing units in Littlefield. Substandard units include all housing types, but 90% of substandard units are stick-frame structures. Nearly all substandard units are occupied (70%). Half (53%) of substandard housing units have significant problems indicating dilapidation, such as holes in the exterior walls, missing windowpanes, cracked foundation, etc.; nearly half of these dilapidated units are occupied (see *Table 3D, page 3-7*). These findings support one of the key housing goals identified by Littlefield residents: the need for support for home repair and maintenance. *Appendix 3A.* provides a detailed tabulation of all housing units by type, condition, occupancy, and location (city and ETJ).

Chart 3A: Houses, by Type



Source: GrantWorks, Inc. Fieldwork 2020

Chart 3B: Houses by Condition, All Types



Source: GrantWorks, Inc. Fieldwork 2020

Table 3B: Housing Conditions, by Type

Unit Type & Condition	All Units #	All Units %	
Stick-frame	**2445**		**87%**
Standard	1667	68%	
Deteriorated	374	15%	
Dilapidated	404	17%	
Mobile & Manufactured	**133**		**5%**
Standard	59	44%	
Deteriorated	29	22%	
Dilapidated	45	34%	
RV	**0**		**0%**
Standard	0	-	
Deteriorated	0	-	
Dilapidated	0	-	
Multifamily	**235**		**8%**
Standard	221	94%	
Deteriorated	6	3%	
Dilapidated	8	3%	
Total Substandard Units	**866**	31%	
Total Dilapidated Units	**457**	16%	
Total Units	**2813**	-	

Source: GrantWorks, Inc., Fieldwork 2020

Table 3C: Occupied Housing Conditions, by Type

Unit Type & Condition	Occupied Units #	Occupied Units %	
Stick-frame	**2188**	**90%**	**90%**
Standard	1639	75%	
Deteriorated	348	16%	
Dilapidated	201	9%	
Mobile & Manufactured	**113**	**5%**	**5%**
Standard	59	52%	
Deteriorated	28	25%	
Dilapidated	26	23%	
RV	**0**	**0%**	**0%**
Standard	0	-	
Deteriorated	0	-	
Dilapidated	0	-	
Multifamily	**214**	**9%**	**9%**
Standard	208	97%	
Deteriorated	6	3%	
Dilapidated	0	0%	
Total Substandard Units	**609**	**24%**	
Total Dilapidated Units	**227**	**9%**	
Total Units	**2515**	**-**	

Source: GrantWorks, Inc., Fieldwork 2020

Table 3D: Substandard Housing Conditions & Occupancy, by Type

Unit Type & Condition	All Units #	All Units %		Occupied Units #	Occupied Units %		Occupancy Rate %	
Stick-frame	**778**			**549**				
Deteriorated	374	48%	**90%**	348	63%	**90%**	93%	**71%**
Dilapidated	404	52%		201	37%		50%	
Mobile & Manufactured	**74**			**54**				
Deteriorated	29	39%	**9%**	28	52%	**9%**	97%	**73%**
Dilapidated	45	61%		26	48%		58%	
RV	**0**			**0**				
Deteriorated	0	-	**0%**	0	-	**0%**	-	-
Dilapidated	0	-		0	-		-	
Multifamily	**14**			**6**				
Deteriorated	6	43%	**2%**	6	100%	**1%**	100%	**43%**
Dilapidated	8	57%		0	0%		0%	
Total Dilapidated Units	457	53%		227	37%		50%	
Total Units	**866**			**609**			**70.3%**	

Source: GrantWorks, Inc., Fieldwork 2020

Vacancy Rate

Littlefield's estimated residential vacancy rate is 13.3%, or approximately 1 in 8 houses.[5]

Vacant Structures

Fieldwork windshield observation identified 298 vacant units in Littlefield. Most vacant units have significant problems like holes in exterior walls, missing windowpanes, cracked foundation, etc. (coded as dilapidated). An additional six vacant units requite repair beyond routine maintenance (coded as deteriorated) (*see Table 3E, next page*).

[5] The estimated vacancy rate for this study is the average of the 2010 U.S. Census vacancy rate and the 2020 vacancy rate based on windshield observations. According to U.S. Census Data, 16% of houses in Littlefield were vacant in 2010. Fieldwork windshield observations from 2020 indicate a 10.6% vacancy level. Windshield observations are necessarily limited to observation of external and readily apparent housing characteristics and therefore may miss some units. In addition, windshield observations may undercount vacant structures in better condition because it is easier to identify vacant housing that is deteriorated/dilapidated than vacant housing that is in standard condition. For example, some houses in Littlefield had "For Sale" signs posted. Unless otherwise apparent, it was assumed that these structures were occupied. However, the possibility exists that these structures, and other structures in an externally standard condition, were in fact vacant. As a result, the vacancy rate based on windshield observations may be somewhat understated.

Table 3E: Vacant Housing, by Condition

Unit Condition & Type	Vacant Units #	Vacant Units %	
Standard	**41**		
Stick-frame	28	68%	**5%**
Mobile/Manufactured	0	0%	
RV	0	0%	
Multifamily (Excluding Institutional)	13	32%	
Deteriorated	**27**		
Stick-Frame	26	96%	**11%**
Mobile/Manufactured	1	4%	
RV	0	0%	
Multifamily (Excluding Institutional)	0	0%	
Dilapidated	**230**		
Stick-Frame	203	88%	**84%**
Mobile/Manufactured	19	8%	
RV	0	0%	
Multifamily (Excluding Institutional)	8	3%	
Total Substandard Units	257	-	
Total Units	**298**	-	

Source: GrantWorks, Inc. Fieldwork 2020

Vacant, dilapidated housing increases the risks to public health and welfare and should be removed. These findings support one of the key housing goals identified by Littlefield residents: to eliminate substandard and dangerous houses from the community.

Multifamily Housing

Littlefield has several multifamily housing options. There are six apartment complexes and several duplexes throughout the city. Detailed information about the number of bedrooms/bathrooms, ADA accessibility, and income limitations for several multifamily units was not available at the time of plan production. The South Plains Regional Housing Authority offers three housing complexes, one in the north part of the city and two in the southeast. Together the three complexes include 86 units, it is unclear how many are ADA accessible. There are at least 13 units with more than one bedroom, indicating opportunities for tenants with families.

Littlefield's second largest multifamily complex is the Oak Terrace Apartments located off Wicker Avenue, near Littlefield High School. The complex includes 45 units. Unit options range from one- to two-bedrooms, with almost half of all units having two bedrooms, indicating opportunities for tenants with families.

Littlefield Manor is an income-limited retirement community that has 24 units, all of which have two bedrooms. The last apartment complex is Jones Apartments, located in the south part of Littlefield off Hall Avenue *(see Map 4A: Existing Land Use).* Many units are in externally standard condition, but several require repair beyond routine maintenance.

According to local landlords, multifamily rental units are in high demand; there were only three vacant multifamily units at the time of fieldwork.

Table 3F: Multifamily Housing Condition, Occupancy, & Income-Limitations

Name	Condition	# of Units	# Occupied	# Vacant	# Income-limited
Windmill Village Apartments	Standard	20	20	0	No
Littlefield XIT Apartments	Standard	18	18	0	No
Jones Apartments	Standard	10	10	0	No
College Heights	Standard	48	40	8	Yes
Littlefield Manor Apartments	Standard	24	21	3	Yes
Oak Terrace Apartments	Standard	45	45	0	No
Duplex on W 2nd St	Standard	2	0	2	No
Duplex on E 23rd St	Standard	2	2	0	No
Duplex on E 23rd St	Deteriorated	2	2	0	No
Duplex on E 23rd St	Standard	2	2	0	No
Duplex on E 23rd St	Standard	2	2	0	No
Two duplexes W 3rd St	Deteriorated	4	4	0	No
3 Duplexes on E 26th St	Standard	6	6	0	No
Duplex on S Wicker Ave	Standard	2	2	0	No
Duplex on E 7th St	Standard	2	2	0	No
Duplex on E 7th St	Standard	2	2	0	No

Duplex on E 7th St	Standard	2	2	0	No
Duplex on E 23rd St	Standard	2	2	0	No
Duplex on E 23rd St	Standard	2	2	0	No
Duplex on E 23rd St	Standard	2	2	0	No
3 Duplexes on E 27th St	Standard	6	6	0	No
3 Duplexes on E 28th St	Standard	6	6	0	No
Duplexes on S Wicker Ave	Standard	4	4	0	No
Two quadplexes on W 3rd St	Dilapidated	8	0	8	No
Quadplexes on E 22nd St	Standard	4	4	0	No
Quadplexes on E 22nd St	Standard	4	4	0	No
Total Standard		**193**	**180**	**13**	**N/A**
Total Deteriorated		**6**	**6**	**0**	**N/A**
Total Dilapidated		**0**	**0**	**0**	**N/A**
Total Multifamily Units			199		

Source: GrantWorks, Inc. Fieldwork 2020

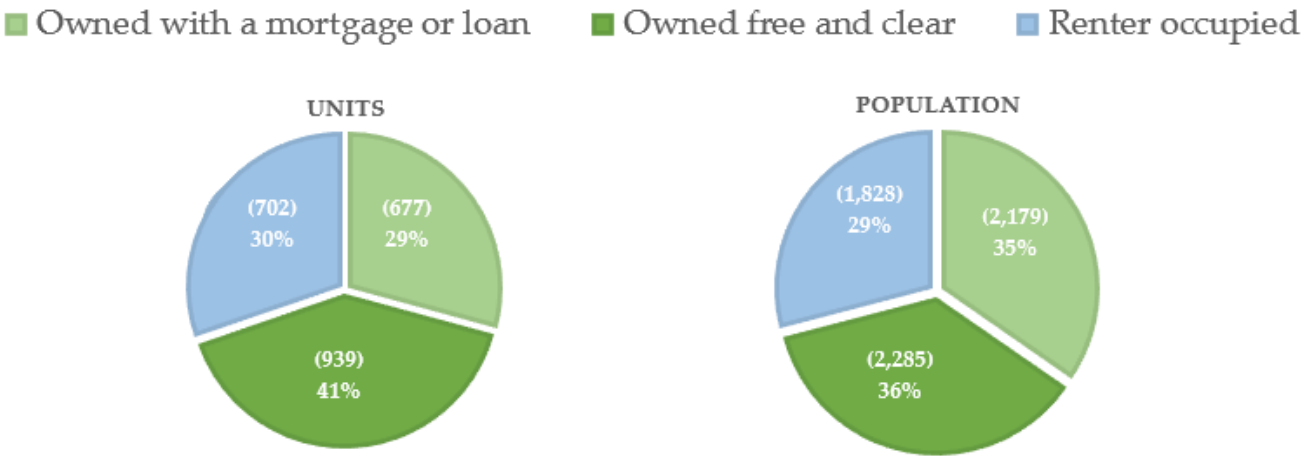
Residents would like to see an increase in housing development that will be attractive and affordable for current and future residents. Additional multifamily housing development could support this goal (see *Section 3.4.2 - Key Considerations).*

Homeownership & Renting

Tenure refers to the conditions under which land or buildings are held or occupied, for example, through ownership or through renting. Examining tenure types and comparing the characteristics of residents with different types of tenure can provide helpful information about shared or differing needs between these groups.

Chart 3C compares the percentage of units, and of Littlefield's total population, held through the following tenure types: outright ownership, ownership through a mortgage, and renting. As the chart shows, most Littlefield residents own or are in the process of purchasing their house, but, notably, nearly 1/3 of residents live in a rental unit.

Chart 3C: Housing Unit & Population, by Tenure Type



Source: Census 2010, SF1, Tenure (H4) and Population in Occupied Units by Tenure (H11)

Renter-householders and owner-households[6] in Littlefield differ in terms of age. As in many US cities, renting is more common among younger residents, and homeownership is more common among older residents. *Chart 3D (next page)* demonstrates this difference by illustrating the percentage of householders in each age group that rent or own their house. As the chart shows, most householders in Littlefield between 15 and 44 rent their house but starting in the 45-to-54-year-old age group most householders own their house.

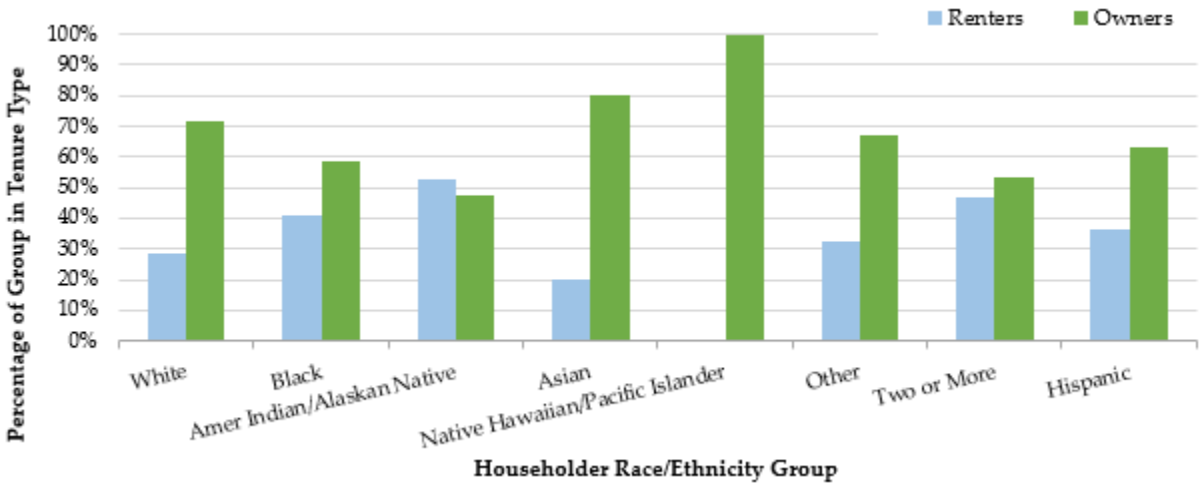
Renter- and owner-householders in Littlefield also differ in terms of race and ethnicity. *Chart 3E (next page)* compares the percentage of Littlefield householders that rent or own their house across several racial/ethnic groups. As the chart shows, most householders in each group own their homes, but the prevalence of homeownership varies between groups.

[6] Refers to the person who is the head of the household.

Chart 3D: Householders, by Age, Tenure

Source: Census 2010, SF1, Tenure by Age of Householder (H17)

Chart 3E: Householders, by Race/Ethnicity[7]

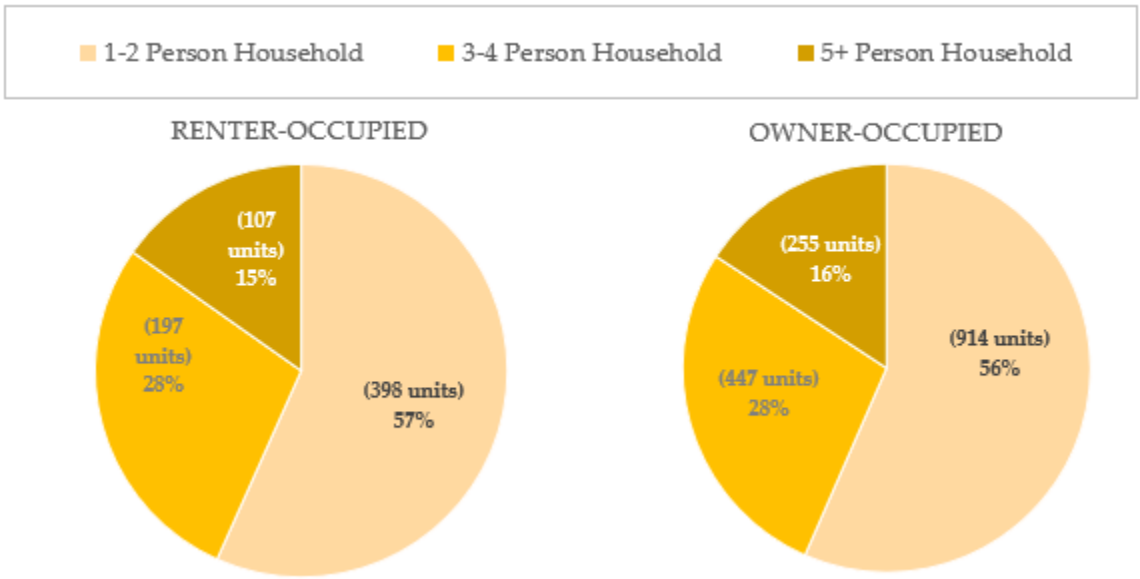


Source: Census 2010, SF1, Tenure by Hispanic or Latino Origin of Householder By race of Householder (HCT1)

[7] For ease of reference this chart only shows population groups with a universe greater than 10.

While renter- and owner-householders in Littlefield differ somewhat in terms of age, race, and ethnicity, household sizes are similar in these two groups. *Chart 3F* compares household sizes in Littlefield by tenure type. As the chart shows, household sizes are very similar in both tenure categories. Notably, 43% of renter-occupied households include three or more people, suggesting that rental housing may be an important housing option for families in Littlefield.

Chart 3F: Household Size Comparison, by Tenure



Source: Census 2010, SF1, Tenure by Household Size (H16)

Rental housing has often been characterized as a necessary option for only certain groups, such as low-income households or individuals and young couples in transition to homeownership. As a result, rental housing may be treated as an option of secondary importance (to homeownership). However, studies in cities throughout the U.S. have found that renting is increasingly prevalent and that renter households represent a more diverse array of individuals and life situations than previously thought. These findings have led many researchers and policymakers to reconsider the contribution that renting can make to a healthy housing market (further discussed in *Section 3.4.2 - Key Housing Considerations).*

Residents in Littlefield recognize the prevalence of renting in their community and would like to see additional rental housing development that is affordable for residents from all segments of the population. Residents would also like to achieve more support for local landlords interested in providing affordable rental housing and for developers looking to provide missing middle housing (duplexes, triplexes, small apartments, etc.).

Housing Affordability

According to American Community Survey (ACS) data, houses in Littlefield are, on average, more affordable than those in Lamb County or the state of Texas. The median home value in Littlefield – estimated at $60,700- is lower than the county-area and state-wide estimates. The city's median home value is $4,000 lower than the median home value for Lamb County ($64,700 and approximately $125,300 less than the median home value for Texas ($186,000).

However, the median household income in Littlefield – estimated at $39,615 annually - is also lower than county-area and state-wide estimates; the median annual household income in Littlefield is approximately $3,781 less than the county-area estimates and $21,014 less than the state-wide estimates, or a difference in monthly income of roughly $315-to-$1,751. Therefore, a more appropriate measure of housing affordability in Littlefield would be the percentage of the median income consumed by housing costs.

Housing expenses are conventionally considered to be affordable when they consume less than 30% of a household's monthly income. The level of affordability for owner-occupied units differs depending on whether the owner has a mortgage or owns the home outright. Owner-occupied housing costs for Littlefield residents *without a mortgage* consume an estimated 11% of the average income. However, owner-occupied housing costs for residents *with a mortgage* consume an estimated 27% of the average income (see *Appendix 3B*). Owner-occupied housing costs for residents with a mortgage in Lamb County also consume an estimated 27% of the average income in the county.

Housing affordability in Littlefield also varies by tenure.[8] Monthly housing costs for renters in Littlefield are affordable but consume a slightly higher percentage of the average income than rental costs in Lamb County; median monthly rent consumes approximately 23% of the average income in Littlefield and 19% of the average income in Lamb County (see *Appendix 3B*).

Appendix 3B includes detailed tables and methodology regarding housing affordability calculations.

Fair Housing

In conjunction with the acceptance of grant funds from the Texas Community Development Block Grant Program (TxCDBG) program of the U.S. Department of Housing and Urban Development (HUD), the City of Littlefield stated that it would affirmatively further fair housing (AFFH) and uphold the 1968 Fair Housing Act. The Fair Housing Act prohibits discrimination based on disability, familial status, race, color, religion, sex, or national origin. *Table 3G, page 3-16)* provides basic data on the availability of housing types to those protected classes. The following paragraphs discuss each protected group.

[8] "Tenure" refers to the conditions under which land or buildings are held or occupied, for example through ownership or through renting

- Disability: According to the 2014-2018 American Community Survey (ACS), approximately 15.5% of residents in Littlefield (estimated 921 residents) have a disability;[9] this figure is higher than the State-wide average – 11.5% of all Texans. An estimated 63.8% of Littlefield residents with a disability are over 74 years old. It is not known how many single-family or duplex homes in Littlefield fully meet ADA accessibility standards. *Appendix 3C* includes information about organizations providing grants and loan assistance to disabled individuals.

- Familial Status: As measured by the number of bedrooms available, a variety of rental properties and homes for ownership are available to accommodate families, as well as single occupants.

- Race & Ethnicity: As shown in *Figure 3A (page 3-18),* the minority population in several Census areas of Littlefield is 65% or higher, which is the threshold[10] used by the State of Texas for defining an area of "minority concentration." Houses in both good and poor conditions are located throughout the community, although the majority of dilapidated housing in Littlefield is located in these areas of minority concentration. There are six multifamily developments, 17 duplexes, and 4 quadplexes within the city limits.

[9] In the 2014-2018 American Community Survey, individuals were classified as having a disability if they had hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and/or independent living difficulty.
[10] The "65% threshold" is based on the definition of "an area of minority concentration" used by the Texas General Land Office in its 10/1/2012 publication**, "**Homeowner Opportunity Program Guidelines - CDBG Disaster Recovery Program - Hurricanes Ike & Dolly, Round 2."

Table 3G: Housing by Type/Location

Housing by Type/Location (Field Survey 2020)

	Units	% of all Units in City [1]	ADA Accessible	2+ Bedroom	Location
Multifamily Units (Occupied and Vacant)					
Windmill Village Apartments	20	2%	N/A	10	City
Littlefield XIT Apartments	18	2%	N/A	11	City
Jones Apartments	10	1%	N/A	N/A	City
College Heights	48	6%	N/A	N/A	City
Littlefield Manor Apartments	24	3%	N/A	0	City
Oak Terrace Apartments	45	6%	N/A	24	City
Duplex on W 2nd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Two duplexes W 3rd St	4	0%	N/A	N/A	City
3 Duplexes on E 26th St	6	1%	N/A	N/A	City
Duplex on S Wicker Ave	2	0%	N/A	N/A	City
Duplex on E 7th St	2	0%	N/A	N/A	City
Duplex on E 7th St	2	0%	N/A	N/A	City
Duplex on E 7th St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
Duplex on E 23rd St	2	0%	N/A	N/A	City
3 Duplexes on E 27th St	6	1%	N/A	N/A	City

3 Duplexes on E 28th St	6	1%	N/A	N/A	City
Duplexes on S Wicker Ave	4	0%	N/A	N/A	City
Two quadplexes on W 3rd St	8	1%	N/A	N/A	City
Quadplexes on E 22nd St	4	0%	N/A	N/A	City
Quadplexes on E 22nd St	4	0%	N/A	N/A	City
Total MF Units	**231**	**29%**	**0**	**45**	
Houses (Occupied and Vacant)					
Single-family Rentals [2]	1597	59%	N/A	1078	Throughout City
Single-family Owned	848	31%	N/A	746	Throughout City
Single-family Vacant	277	10%	N/A	187	Throughout City
Total Units	**2722**				

Housing by Race/Ethnicity (Census 2010) [3]

Characteristic	Owned		Rented	
	#	%	#	%
Race				
White	1278	*72%*	*507*	*28%*
Black	86	59%	60	41%
American Indian or Alaska Native	9	47%	10	53%
Asian	4	80%	1	20%
Native Hawaiian & Other Pacific	2	100%	0	0%
Other	213	67%	103	33%
Two or More Races	24	53%	21	47%
Ethnicity				
Hispanic or Latino	672	63%	389	37%

Source: Census 2010, Sf-1 Data, Quick Table Hi (QTH1)

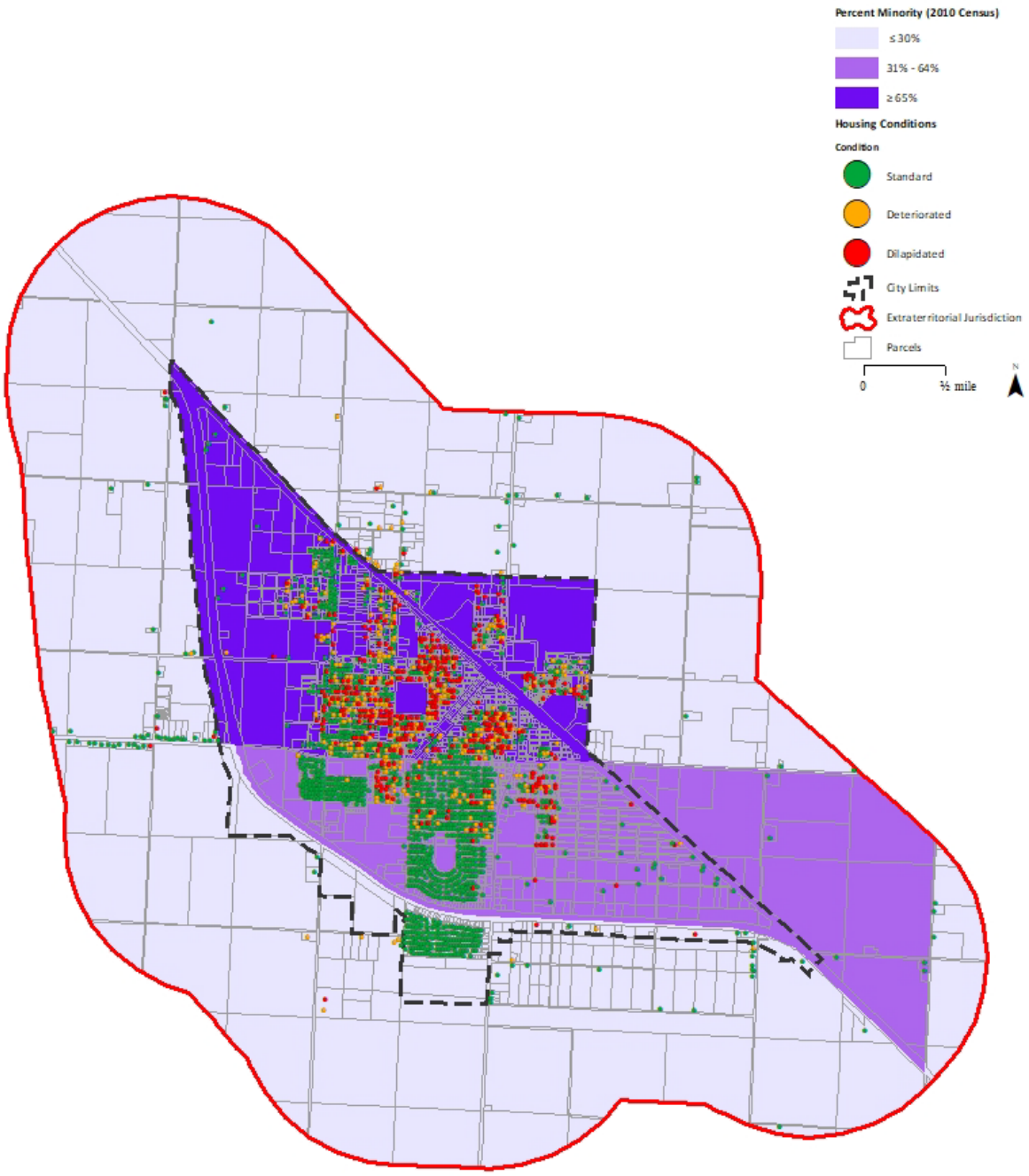


Figure 3A: Distribution of Minority Residents

Future Housing Needs

To improve the condition of the existing housing stock and ensure that current residents have access to safe and suitable housing, the City of Littlefield will need to remove and replace the following occupied, substandard units:

- 54 occupied deteriorated/dilapidated manufacturing units,
- 201 occupied, dilapidated stick-frame units, and
- 6 occupied, deteriorated multifamily units.

The City will also need to take action to support repair and prevent further deterioration of 348 currently deteriorating, stick-frame units (see *Table 3H*). Additional construction beyond the 348 replacements for occupied, substandard units may take place instead of deteriorated unit rehabilitation. However, rehabilitation is often cheaper.

In addition, based on a projected 2030 population of 6,366 residents, Littlefield will not need to construct any additional units due to a decline in population. The City should instead focus on demolition and rehabilitation of the existing substandard housing we well as vacant substandard commercial buildings (see *Table 3H*).

Table 3H: Future Housing Needs

	Single-family	Multifamily	Total
Housing 2020, 2030			
Occupied Housing in 2020	2301	214	2515
Total Housing in 2020	2578	235	2813
Total needed in 2030	*2290*	*210*	*2500*
Future Housing Strategy 2020-2030			
Need to repair *(Deteriorated SF)*	374	6	380
Need to remove/replace *(Occupied: dilapidated MH & SF, deteriorated MH)*	255	8	263
New construction needed	0	0	0
Need to remove *(Vacant: dilapidated MH & SF, deteriorated MH)*	223	8	231

Note: SF – Strick Frame; MH – Manufactured House

3.4 Key Housing Considerations

Based on the community input and local housing data described above, the City of Littlefield and its residents should focus on the following key areas related to housing: structural condition, stock diversity and affordability, and Fair Housing Act compliance.

3.4.1 Improving Structural Conditions

Littlefield residents expressed a desire for improved housing conditions. The City has two ongoing methods for assisting residents with single-family housing conditions: HOME program grants and enforcement of City ordinances (further described below). The City should pursue the following strategies to support improved residential structural conditions.

Reduce Dilapidated Housing

Within the city limits, Littlefield has 866 occupied, dilapidated/deteriorating houses that need to be replaced, and 257 vacant, dilapidated/deteriorating houses. Dilapidated houses comprise approximately 32% of Littlefield's housing stock.

Common causes of house deterioration include:

- A change in financial circumstances that makes an owner unable to pay for home repairs;
- Elderly residents no longer attentive to or able to maintain their homes;
- Lack of motivation by rental property owners to maintain their properties (because of low renter expectations, desire to maximize profit, living out-of-town, lack of enforcement, etc.); and
- Lack of pride in the property.

Figure 3B: Overgrown Yard/Dilapidated Housing Example

The effects of deteriorated and dilapidated houses impact the entire community, and it is worth community investment to address the problem. Effects include:

- Health risks to residents of deteriorated and dilapidated structures;
- Downward pressure on property values; and
- Reluctance of future homeowners to move to an area with large numbers of deteriorated or dilapidated houses.

Littlefield should pursue the following strategies to support the renovation or removal of substandard houses in the community, and to prevent future deterioration.

To improve the condition of Littlefield's housing stock, the City should:

a) Track the number and location of vacant, dilapidated structures in the community;

b) Continue to Enforce the Minimum Building and Dwelling Standards Ordinance;

c) Support voluntary and alternative dilapidated building removal; and

d) Apply for, and educate homeowners about, available grants

The following sections describe these recommendations in further detail.

Many of these strategies require clear property titles to be successful. Complicated titles are a key concern raised by residents and public representatives (see *Chapter 4: Land Use* for more information about legal clinics to assist residents).

Track Vacant, Dilapidated Structures

Tracking vacant, dilapidated housing enables the City to have a clear understanding of both the extent of the challenge and of progress in addressing that challenge. Depending on municipal resources and needs, the tracking system could be as sophisticated as a mapped database or something as simple as a single word document or excel spreadsheet noting structure addresses and the date each vacancy was identified. Tracking implies regular or semi-regular updates to the database or document/spreadsheet. Updates can similarly vary based on the resources and needs of the municipality. Municipalities with less available resources for this activity could select a time each year to drive the community, identify newly vacant, dilapidated structures, and update the document/spreadsheet as needed.

An up-to-date record of vacant, dilapidated housing can enable a city to make strategic decisions about its actions, such as focusing efforts on a few proximate structures or integrating demolition activities with other neighborhood improvements. Vacant, dilapidated housing records may also support grant applications. The City could also share general figures with community members as part of an educational campaign about housing conditions or to encourage support for a voluntary clean up event.

The City of Littlefield has an established system for tracking vacant, dilapidated housing. As part of this comprehensive plan, the city will receive fieldwork data collected to support each study, including housing. The City could use this data to update its tracking system.

Continue to Enforce Substandard Buildings & Structures Ordinance

Local Government Code, Title 7, Subtitle A, Chapter 214 establishes a municipality's authority to regulate substandard buildings. The statutes enable a municipality to, by ordinance, require the vacation, relocation of occupants, securing, repair, removal, or demolition of certain buildings. Such ordinance must

- ✓ Establish minimum standards for the continued use and occupancy of all buildings regardless of the date of their construction
- ✓ Provide for giving proper notice
- ✓ Provide for a public hearing to determine whether a building complies with the ordinance is standards

In addition, in 2011 and 2012, the Texas Supreme Court released opinions on the City of Dallas v. Stewart that impact dangerous structures ordinance enforcement. Most importantly, cities must allow 30 days after an administrative nuisance declaration for an owner to appeal the declaration before enforcing the ordinance. The Texas Municipal League (TML) has prepared a detailed report on the case and its implications for municipal enforcement of substandard structures ordinances. That report is included in the *Digital Appendix* to this study and is available on the TML website (www.tml.org).

Support Code Enforcement in Littlefield

According to code of ordinances, the City of Littlefield adopted a minimum building and dwelling standards; abatement of nuisance or dangerous structures in 2018. The City should continue to support this ordinance. The effectiveness of an ordinance depends on enforcement, and fortunately the City of Littlefield has an active code enforcement program. Code enforcement officials, who are empowered to secure properties that pose a threat to public health, safety, and welfare, can then issue citations and levy fines on problem properties. Successful early intervention is the best course of action because deterioration compounds quickly over time.[11]

[11] https://www.huduser.gov/portal/periodicals/em/winter14/highlight1.html

Code enforcement can be a powerful tool if the system is working well. The first step to create an effective code enforcement system is to conduct an assessment of the current system and how it functions. An evaluation, such as an audit by an outside consultant, will provide city officials and community advocates with a better understanding of the problems areas in the system and provide information on how to improve the system. Questions to ask in the audit include:

- How long does the enforcement process take on average from initiation to completion?
- What percent of properties are brought into compliance?
- Is there comprehensive coordination among city departments?
- How does the city deal with code enforcement liens?
- Does the city foreclose on these liens?
- Is assistance provided to lower-income homeowners who do not have the financial means to bring their homes into compliance with code?

For more information as well as best practices for code enforcement refer to the "Texas Problem Properties Toolkit" PDF in the *Digital Appendix*.

Support Voluntary & Alternative Building Removal Strategies

The City can also support the effectiveness of a Substandard Structures Ordinance by supporting voluntary and alternative building removal strategies. One way that some cities have encouraged landowners to abide by dangerous structures codes without entering litigation is to include a provision in the regulating ordinance that provides City assistance with demolition to landowners who voluntarily come forward and ask for an inspection. Instead of the $5,000-to-$10,000 it can cost to demolish the structure, the property owner pays landfill costs and $500 to the City for labor and hauling.

Some cities also provide no-cost demolition to homeowners who show financial inability to pay. Some small cities negotiate with their solid waste providers to include provisions such as removal of one or more dilapidated structures per year in their solid waste contract.

Home demolition is expensive, and costs may prove prohibitive for municipalities and residents. The City can also facilitate ordinance compliance by allowing for demolition alternatives. Two increasingly popular alternatives to house demolition are deconstruction and house moving. Rather than bringing in heavy equipment to raze an abandoned structure before sending it to the landfill, home deconstruction specialists and salvagers take apart abandoned houses piece by piece. Their focus is on collecting materials for reuse, so they limit the amount of waste that heads to the landfill. Unlike demolition, pricing for deconstruction is not always straightforward.

In some cases, salvagers will pay to remove certain materials, but they might not take everything. In other cases, deconstruction specialists will demolish the house for the right to collect the materials they want. In still other cases, deconstruction can cost significantly more than demolition. However, deconstructing a home allows the homeowner to take a significant tax deduction, often higher than the cost of deconstruction itself. The *Digital Appendix* includes an explanation of the appraisal process for donated building materials.

Some structural moving companies maintain an inventory of the commercial and residential structures they remove from properties to resell and relocate. Often, structural moving companies sell their inventory at relatively affordable prices. By reselling the homes, house movers keep them out of the landfill, and they give new buyers an opportunity to rehabilitate the structures. If structural movers keep the structure, they may or may not charge for house removal. Depending on the house, they might buy it from the property owner before moving the structure. As long as the home is structurally sound enough to be moved, structural moving companies will collect homes and other buildings in all conditions.

Rental Property Registration Ordinance

Another tool cities can potentially use to address dilapidated or deteriorated housing is through rental property registration ordinances. Rental property registration ordinances ensure that tenants and landlords of rental properties are involved in maintaining homes to be in safe and sanitary conditions. These ordinances can apply to both single-family and multifamily properties. Property owners of rental units are required to register with the city by submitting a simple form identifying basic information about the property, such as how to reach the landlord. Usually a small annual fee ($10 to $25 per unit is typical) is required as part of the registration, but this fee also covers the cost of inspection. The city inspects each property, typically once every one-to-three years, for major code violations and life-threatening conditions.

Rental property registration can dramatically increase the ability of a city to enforce major code violations in rental properties and prevent the properties from creating dangerous conditions for the residents and surrounding community. Rental property registration programs require owners to register their rental properties with the city. The programs also typically give the city authority to inspect the premises. Through nominal fees assessed on each rental unit, registration programs provide resources for cities to conduct regular inspections at these properties and to then enforce violations.

While most rental property registration ordinances focus on code violations, some, like Houston's ordinance, are focused on fighting crime. Registration ordinances vary widely in terms of what types of rental properties are targeted (e.g., single family or multifamily), the amount of fees assessed, if any, and the frequency of inspections (annually or less frequently). Several cities in Texas have adopted rental property registration ordinances including, Dallas, Fort Worth, Houston, Carrollton, Hurst, and College Station. Refer to the "Texas Problem Properties Toolkit" PDF in the *Digital Appendix* for more information.

Receivership

Under Texas law, when a property creates an imminent risk of harm to tenants and the surrounding community, a city or nonprofit housing organization can file a lawsuit and ask a judge to appoint a receiver to take over the property. The receiver then steps into the shoes of the owner. A receiver may collect rents, make repairs to the property, and rebuild the property with court approval. Depending on which receivership statute is utilized in Texas, the receiver can be an individual, a nonprofit organization, or other entity. The receiver has a lien on the property for the receiver's expenses, but the receiver is responsible for fronting the costs of rehabilitating the property. If the owner does not reimburse the receiver, the receiver can ask the court for permission to sell the property and is reimbursed out of the sales proceeds. Receivership is available for multifamily, single-family, commercial, and vacant properties.

Receivership gives cities and community-based nonprofits the ability to rehabilitate dangerous properties when the property owner refuses to address the dangerous conditions and can also give cities a tool to clear titles to problem properties. Receivership is used successfully in many cities and states across the country, including Baltimore, Cleveland, and New Jersey. Texas has three different receivership statutes that can be used to rehabilitate dangerous properties: hazardous property receivership, community receivership, and equitable receivership.

Refer to the "Texas Problem Properties Toolkit" PDF in the *Digital Appendix* for more information on the various types of receivership.

Land Banking

Land banking is the process by which local governments acquire title to properties, clear title, assemble properties, and control redevelopment of the properties for affordable housing or other functions. Land banks can be used to transform vacant and abandoned properties into affordable housing and community assets, which in turn foster greater community prosperity and strengthen a city's economic well-being.

One of the biggest problems with abandoned property is the lack of clear title, which makes it very difficult if not impossible to sell the property, leading to long-term blight and related problems. In Texas, the Urban Land Bank program, under Chapter 379E of the Local Government Code, allows municipalities to acquire clear title to certain tax-foreclosed properties at little or no cost, outside of the regular tax foreclosure sale process. The statute enables cities to clear title to these properties and control their redevelopment as affordable housing.

Under Chapter 379E, cities can adopt an urban land bank after adopting a land bank plan and obtaining the permission of the other taxing entities. The city can then ask the tax foreclosure officer to sell or donate eligible properties to the land bank. Any community considering the creation of a land bank should assess a number of factors to determine if a land bank is needed or likely to be successful.

Some common triggers for creating a land bank include:

- Large inventories of vacant and abandoned property,
- Properties with little to no market value,
- Properties with delinquent taxes in excess of fair market value,
- Properties with title problems,
- Inflexible policies that dictate the disposition of public property, denying local governments the chance to be strategic and nimble, or
- The speculation and uncertainty inherent in the auction sale of tax-foreclosed properties.[12]

Refer to the "Texas Problem Properties Toolkit" PDF in the *Digital Appendix* for more information.

Improve Manufactured Housing Regulations

Manufactured houses comprise 5% of Littlefield's housing stock. Although less durable than well-constructed, stick-frame houses, when in compliance with HUD and building codes, manufactured units can provide affordable, safe housing. One of the most common complaints about manufactured houses is that their appearance negatively impacts surrounding property values. Manufactured houses are increasingly similar to stick-frame houses in design and, when located on single-family lots with landscaping, masonry skirts, and regular maintenance, can be near-indistinguishable from stick-frame houses.

Figure 3C: New Manufactured Home Example

[12] https://www.communityprogress.net/land-banking-faq-pages-449.php

Manufactured home values may be more likely to depreciate than stick-frame homes values due to factors like location, maintenance, and purchase price. Depreciation negatively impacts local property tax revenues. A 2003 study conducted by the Consumers Union in Texas assesses which aspects of manufactured houses are most likely to lead to depreciation or appreciation in value.[13] The Consumers Union concludes that variability in manufactured house appreciation/depreciation is much higher than in stick-frame construction. However, the study finds that homeowners and regulators can pursue several actions to increase the likelihood of appreciation:

- ✓ Own Land. If land ownership is not an option, rent and tenancy should be as stable as possible. Homes should be sold in place
- ✓ Select durable houses
- ✓ Pay fair price – and it may be that shopping for a deal in used homes is worthwhile
- ✓ Improve demand for used homes by creating lending products to finance this market
- ✓ Place housing in good locations and neighborhoods [increase appreciation]
- ✓ Give the home-site built visual appeal and congruence with neighborhood styles
- ✓ Budget money for repairs
- ✓ Consider all the aspects that lead to equity building, not just appreciation

The impact of manufactured houses on municipal tax revenues also depends on state tax law and county appraisal district methods for depreciating manufactured housing.

Because of the dual considerations of Littlefield's larger low-income population (see *Appendix 2A*) and residents' desire to improve the city's housing stock, the City of Littlefield should

a) Adopt manufactured housing ordinance to replace the outdated mobile home ordinance currently in effect; and

b) Over time and in conjunction with other economic development projects, consider adopting stricter ordinance standards to both improve manufactured house value and encourage more stick-frame construction.

Update Manufactured Housing Ordinance

Manufactured housing standards are not likely to reduce the number of manufactured units in the city, but standards are likely to improve the condition of Littlefield's manufactured housing stock over time.

[13] Study available from www.consumersunion.org and is included in the *Digital Appendix* for this plan.

The Texas Manufactured Housing Standards Act, passed in June 2003, established manufactured housing regulations at the state level (Texas Occupations Code, Subtitle C, Chapter 1201). The standards create an important distinction between "Mobile Homes" and "HUD-Code Manufactured Homes". This distinction is important because the structure types receive different protections under the law. For example, it is lawful for a city to prohibit the new installation of a Mobile Home within the city limits (with a few caveats). However, a city may NOT prohibit the new installation of HUD-Code Manufactured Home in the city limits. The act defines the term "Manufactured Home" or "Manufactured Housing" as a "HUD-code Manufactured Home or a Mobile Home".

The City enforces a Mobile Homes and Mobile Home Parks Ordinance (Article 3.05 of the Code of ordinances). However, the ordinance has not been updated since its initial adoption in 2003. As a result, the ordinance does not include more recent statutory changes (e.g., the distinction between manufactured houses and mobile homes). The City should adopt a new manufactured housing ordinance and seek legal counsel to ensure that the revised standards comply with statutory limitations.

Sample manufactured housing ordinances from other municipalities, as well as a legal Q&A report regarding manufactured housing regulation from the Texas Municipal League, are included in the *Digital Appendix* to this study.

Apply for Grants / Educate Homeowners about Available Grants

Within the city limits, Littlefield has 382 occupied, residential structures in deteriorated conditions that need renovation and 227 occupied, dilapidated/deteriorating houses that need to be replaced. The City can further support improved housing conditions by applying for grants and working to share information about available grant programs with homeowners.

HOME Grants. Since 1997, the City has facilitated 24 home replacements and over $1.2 million in housing rehabilitation through the HOME program. The City should continue applying for grants under the HOME program. The HOME grant is the most common grant program for rehabilitation or replacement of single-family homes. The program is managed by the Texas Department of Housing and Community Affairs (TDHCA) and funded by the U.S. Department of Housing and Urban Development (HUD). Program details change year to year, but, in general, the recipient resident must meet income limits and have a clear title to the property and land. The City may also have to provide a cash or labor/materials match, depending on population size.

Maintenance Grants. Municipal authorities should also work to share information about available maintenance grant programs with homeowners. Housing maintenance and repairs can be costly. Providing homeowners with information about home maintenance and repair grant and loan programs is a key component not only to preventing structural deterioration but also for maintaining affordability. Several programs are available to homeowners that assist with a variety of home maintenance needs such as weatherization improvements, general home repairs, and low-interest loans.

Appendix 3C: Community Housing Organizations & Grant Programs lists grant programs and resources that public officials should be aware of and should share with residents.

Consider Developing a Disaster Recovery Program

North Texas experiences more tornadoes than other parts of Texas. Flood events and hailstorms are also frequently experienced in the region.

The City should consider developing a disaster recovery program. The Rapid Disaster Recovery Housing Report, developed out of the Rapid Housing Recovery Pilot Program (RAPIDO) in the Lower Rio Grande Valley, is an excellent resource.

The report was created to "…give an overarching view of the lessons learned from the RAPIDO Demonstration Project[14] as well as findings from a comparison of other reports completed after similar disasters across the Gulf and Atlantic Coasts" (CDC Brownsville, 2015).

The report approaches disaster management as an "ongoing cycle of action that takes place both during and between disasters. In other words, recovery from one disaster is mitigation for the next" (CDC Brownsville, 2015). The disaster management cycle consists of four phases – mitigation, preparedness, response, recovery – each requiring ongoing planning to reduce the impact of disasters. The program emphasizes several "Key Concepts and Innovations", including pre-disaster preparedness, pre-procurement, local focus, supportive case navigation, community empowerment, and temporary-to-permanent housing strategy.

> *"Disasters both magnify and accelerate processes already occurring in communities, such as housing turnover, gentrification, or conversions of land use from residential to commercial…. Such acceleration might not permit the extent of community input or interventions that might occur normally.*
>
> *Consequently, in the days, weeks, and months that follow a disaster, decisions must be made rapidly to deal with pressing immediate issues like emergency sheltering and temporary housing, rebuilding, and the restoration of community infrastructure.*
>
> *The pace of decision-making defies typical rational planning methods that require the collection of data and consideration of many alternatives, forcing communities to make hasty decisions that may later turn out to be ill-advised, but yet now are long-lasting if not permanent."*
>
> (CDC Brownsville (2015)., pg. 05)

The Rapid Disaster Recovery Housing Report consists of three documents: policy recommendations, a step-by-step technical guide for local jurisdictions, and a program comparison report. The report is available online at http://www.rapidorecovery.org/.

[14]http://www.cdcbrownsville.org/rapido.html

3.4.2 Developing More Diverse & Affordable Housing Options

Although the city is not expected to grow over the planning period, any growth that should happen to occur should support the City's desire for a more diverse and affordable housing market. Residents currently living in dilapidated/deteriorating housing that needs to be replaced could also benefit from additional housing development efforts. The City should pursue the following strategies that promote a variety of housing options, affordable for diverse incomes and stages of life:

(a) Promote residential infill, especially multifamily

(b) Collect and share housing and community information

(c) Network with affordable housing organizations and developers

Promote Residential Infill, Especially Multifamily Housing

Any future development, housing or other, should be developed in strategic locations where the City does not have to extend services. The City should promote infill development. One key component in affordability is the costs associated with utility bills and taxes. These costs tend to rise when a city issues municipal bond debt. Bond debt is a common tool used to finance large-scale infrastructure improvements that result from growth and development. One way to limit the need for increased infrastructure costs that result from growth is to encourage residential infill development on vacant, subdivided land within the corporate limits.

Since existing infrastructure systems already serve these lots, new development would not require significant infrastructure expansion and would allow the City to focus on existing system maintenance and improvements. Development should be encouraged in areas identified as semi-developed and located outside of the 100-year Floodplain. Strategies to promote infill development and a map showing the location of developable properties ideal for infill development are found in *Chapter 4: Land Use Study.*

The City should also promote multifamily housing development. An Urban Land Institute (ULI) study finds that multifamily housing:

- ✓ Is needed and preferred by many people at a variety of life stages (individuals, new families, empty-nesters, seniors, etc.);
- ✓ Is important to the economic vitality of the broader community;
- ✓ Can help minimize traffic congestion;
- ✓ Enables a community to provide housing that is affordable to a broader range of incomes; and
- ✓ If well designed, can be an attractive and compatible addition to the community.

The ULI study is included in the *Digital Appendix* to this plan.

Multifamily housing does not have to be exclusive to renters. Multifamily housing development could also provide an important alternative housing option for Littlefield's potential homeowners as multifamily housing units, such as duplexes, are often (but not always) more affordable than single-family housing.

Collect & Share Housing & Community Information

The City of Littlefield can also support the development of more diverse and affordable housing options by collecting and sharing housing and community information through record-keeping, surveys, and workshops.

The City should keep records of housing market information such as:

- ✓ Requests made to City Hall for rental housing information;
- ✓ Records of occupancy and vacancy rates in rental housing (including RV parks and single-family houses);
- ✓ Information on land available for lease or purchase; and
- ✓ Information on utility rates and capacities.

Keeping records of inquiries about available single-family and multifamily housing opportunities would make Littlefield more appealing to potential residents and housing developers. This type of basic legwork by municipal staff and residents makes a city more appealing. The potential resident/developer does not have to spend as much time on research, and such work builds trust that residents and staff members are able and willing to work with new residents or development groups.

The City should also consider regularly collecting information from residents about housing conditions. For example, a survey conducted every three-to-five-years could help the City maintain a better understanding of housing conditions. In addition to potentially supporting grant applications and studies, record keeping, and housing survey results could help the City identify key community challenges and opportunities and to work with residents on these issues. For example, the housing survey could be followed up with a workshop to educate residents about fair housing laws and available grant and loan programs that pertain to housing needs expressed through the survey.

Community and housing information could be shared on the City website.

Network with Affordable Housing Organizations & Developers

The City should consider networking with affordable housing organizations. Several regional and State organizations promote affordable housing. Coordinating and communicating with these organizations will keep Littlefield updated about affordable housing programs and opportunities. State organizations working on affordable housing initiatives include the Texas Department of Housing and Community Affairs, Texas Affiliation of Affordable Housing Providers, Texas State Affordable Housing Corporation. *Appendix 3C* includes more information about those and other housing organizations.

The City should also network with affordable housing developers. Recruiting those developers would require networking, consulting with potential developers about their needs, and providing information about the city to as many people as possible. *Appendix 3C* describes several organizations that provide general information, grants, and loans for housing development and access to networks of housing developers, including:

- ✓ Texas Affiliation of Affordable Housing Providers (TAAHP)
- ✓ Texas State Affordable Housing Corporation (TSAHC)
- ✓ Texas Department of Housing and Community Affairs (TDHCA)
- ✓ U.S. Department of Agriculture Rural Development (USDA-RD)

In terms of encouraging affordable, multifamily, rental housing development to come to Littlefield, the City should focus on working with developers who are eligible to apply for the Housing Tax Credit (HTC) program. The HTC program is a dollar-for-dollar reduction of federal income tax liability through the Texas Department of Housing and Community Affairs (TDHCA). The program reduces the cost to developers, allowing them to provide more affordable units at lower rates to tenants. This would increase the number of quality, affordable units in Littlefield. The program is competitive, so municipal participation is encouraged in the form of development support and funding contributions. Visit the TDHCA website for more information (www.tdhca.state.tx.us/multifamily).

3.4.3 Continuing to Support Fair Housing

The City of Littlefield has adopted or agreed to adopt several policies and to undertake actions to increase local awareness of fair housing issues and increase the availability of housing choices to protected classes. The City must consider whether its policy and budget decisions intentionally or unintentionally sanction segregation or limit free housing choice, if it has sufficiently educated the public about the Fair Housing Act, and if it has taken proper steps to uphold the Act.

The fair housing analysis in this plan is guided by the State of Texas Analysis of Impediments and the Fair Housing Activities Statement of Texas (FHAST), both of which provide standards for analyzing fair housing in a community. The FHAST often combines references to protected classes with references to low-income because there is a high correlation between the two groups; therefore, the following analysis also references income-related assistance.

The City has at least three tools by which it can affect fair housing:

Grant Applications. With the exception of HOME (described above), many grant applications that would help residents with home repair and rehabilitation must be initiated by individuals or non-municipal organizations. Littlefield's public officials and municipal staff can publicize and provide contact information for such grants. *Appendix 3C* provides a list of grant programs and area organizations that work on housing assistance.

Ordinance Adoption & Enforcement. The City's ordinances do not appear to contain fair housing impediments. The following review assesses how fair housing is affected by the City's standards for flood damage prevention and minimum standards for continued use and occupancy of a building.

- *Flood Hazard Prevention Ordinance*: Littlefield's Flood Hazard Prevention Ordinance permits the construction of structures in flood-prone areas provided that the construction meets damage-prevention and safety standards.
- *Minimum Building & Dwelling Standards; Abatement of Nuisance or Dangerous Structures.* Houses of varying conditions are located throughout the City, and the standards apply equally to all such housing. The standards would be improved if combined with assistance to owners who are unable to repair or replace their homes (primarily through HOME grants and other grant resources listed in *Appendix 3C*).

Policy Adoption & Community Education. The City has regularly published the following ad in its newspaper of record in conjunction with TxCDBG grants.

To promote fair housing practices, the City of Littlefield encourages potential homeowners and renters to be aware of their rights under the National Fair Housing Law. Title VIII of the Civil Rights Act of 1968, as amended, prohibits discrimination against any person on the basis of race, color, religion, sex, handicap, familial status, or national origin in the sale or rental of units in the housing market. For more information on fair housing or to report possible fair housing discrimination, call the U.S. Department of Housing and Urban Development's toll-free hotline at 1-800-669-9777.

The City posts provisions of the National Fair Housing Laws and the process for filing a complaint regarding housing discrimination at City Hall.

The City should take the following actions to further support fair housing in Littlefield.

a) Provide at City Hall:

   - Local, State, and Federal contacts for reporting a fair housing complaint.
   - A copy of the City's Fair Housing policy and complaint procedures.
   - A copy of the Federal Fair Housing Act.[15]
   - A copy of the Texas Accessibility Standards[16] and Construction Requirements for Single-Family Affordable Housing (Texas Government Code, Section 2306.514).[17]

b) Adopt and annually update fair housing ordinances, resolutions, and policies, including:

   - A Fair Housing Ordinance based on HUD model ordinances.
   - A policy explicitly requiring that all non-federally funded projects in the city follow State and Federal laws regarding special-needs construction standards.
   - A policy preventing the concentration of undesirable infrastructure (e.g. sewer plant, solid waste dump, etc.) in locations that would unfairly impact protected classes.
   - A resolution designating April as Fair Housing Month.

c) Provide annual fair housing training to all senior municipal staff.[18]

d) Establish a procedure for municipal staff to keep logs and records of fair housing complaints and referrals.

e) Coordinate housing grant applications with other grant applications so that housing quality in an area is improved at the same time as water, sewer, streets, and drainage.

f) Develop an anti-NIMBYism[19] action plan to disseminate timely and accurate information to residents and other concerned parties during the planning and execution of fair housing projects and developments.

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[15] Availa*ble at the Department of Justice Civil Rights Division website: www.justice.gov/crt/about/hce/title8.php*
[16] *Available at www.tdlr.state.tx.us/ab/abtas.htm*
[17] *Available at www.statutes.legis.state.tx.us/Docs/GV/htm/GV.2306.htm#2306.514*
[18] The Texas Workforce Commission offers a variety of training programs. Visit http://www.twc.state.tx.us/partners/fair-housing-presentations-training for further information.
[19] "NIMBY" is an acronym for "Not In My Backyard". An AntiNIMBYism action plan is intended to prevent/address misinformation that may lead to NIMBY-type sentiments about proposed new developments and fair housing opportunities.

3.5 Implementation Plan

The Implementation Plan organizes the recommended action items recommended to address each issue identified in the above sections into a timeline for completion. The actions are prioritized and organized by date.

Table 3I: Implementation Plan: 2020-2030

Goals & Objectives	Activity Year(s) 2020-2023	2024-2026	2027-2030	Lead Organization	Cost Estimate	Funding Sources
Goal 3.1 *Renovate or replace occupied, substandard housing and support housing stock resiliency*						
Reconstruct or replace at least one (1) house per year with HOME grants	X	X	X	City	Match is variable[20]	GEN; TDHCA;
Keep up-to-date information on housing assistance organizations at City Hall, on a City website, and at local institutions (service organizations, churches, etc.) (*see Appendix 3C for a list of organizations*)	X	X	X	City	Staff	GEN
Keep up-to-date information on grant programs at City Hall, on a City website, and at local institutions (service organizations, churches, etc.) (*see Appendix 3C for a list of programs*)	X	X	X	City	Staff	GEN
Adopt an updated Manufactured Housing Ordinance	X			City	$1,000 (legal)	GEN
Adopt a Rental Property Registration Ordinance	X			City	$1,000 (legal)	GEN
Consider developing a Disaster Recovery Housing Program		X	X	City	Staff; Variable	GEN
Goal 3.2 *Remove vacant, dilapidated structures*						
Update and maintain the log of vacant, dilapidated structures	X	X	X	City	Staff/Varies	GEN; Local

[20] HOME program details, including match requirements, change year-to-year.

Pursue one or more strategies to support voluntary and alternative dilapidated building removal	X	X	X	City	Staff	GEN; Local
Remove at least one (1) vacant, dilapidated house per year		X	X	City	Varies (US avg. = $18,000)	GEN; Local
Goal 3.3 *Pursue diverse and affordable housing development*						
Network with affordable housing organizations and developers		X	X	City	Variable	EDC; GEN; Local
Collect information on Littlefield's population and housing needs (e.g. rental housing requests, occupancy rates, demographics)		X	X	City	Varies by form	GEN; Local
Update website to make information about Littlefield easily accessible to residents and developers		X	X	City	Variable by form; (estimated $100 - $1,500/year) + Staff	EDC; GEN; Local
Goal 3.4 *Continue to support Fair Housing initiatives*						
Adopt and conduct annual reviews of ordinances, resolutions, and policies that support fair housing	X	X	X	City	Staff	GEN
Keep up-to-date information on Fair Housing laws, policies, complaint procedures, and ADA construction standards at City Hall and on a City website	X	X	X	City	Staff	GEN
Provide annual fair housing training to all senior staff	X	X	X	TWC, Staff	Staff	GEN
Establish a procedure for City staff to keep logs and records of fair housing complaints and referrals	X			Staff	Staff	GEN
Develop an anti-NIMBYism action plan to disseminate timely and accurate information to residents during the planning of fair housing developments			X	City	Staff	GEN
Goal 3.5 *Attract economically stable residential development that complements existing development*						

Prioritize and market lots suitable for residential infill	X	X	X	City	Staff	GEN
Adopt an updated Zoning Ordinance to limit extension of city services (see *Chapter 4: Land Use*)	X			City	$1,000 (legal)	GEN
Adopt an updated Subdivision Ordinance to encourage infill development	X			City	$1,000 (legal)	GEN
Adopt a Future Land Use Map that will encourage infill development and prioritize smart growth	X			City	Staff	N/A
Establish a schedule for regular review of Future Land Use Map, Zoning Ordinance, and Subdivision Ordinance		X		City	N/A	GEN

Sources: **EDC** = Littlefield Economic Development Organization; **GEN** = Municipal funds; **Staff** = Staff time (City); **Local** = donations of time/money/goods from private citizens, charitable organizations, and local businesses; **TDHCA** = Texas Department of Housing and Community Affairs; **TDLR** = Texas Department of Licensing and Regulation; **TWC** = Texas Workforce Commission

3.6 Appendix 3A: Detailed Housing Data

In January 2020, GrantWorks, Inc. conducted an exterior/windshield survey of all residential buildings in Littlefield to determine the physical condition of each housing unit in the city and extraterritorial jurisdiction (ETJ). A housing unit can be a single-family detached house, a mobile/manufactured house, or a multifamily unit such as an apartment, condominium, or townhome). The survey rated the condition of each housing unit on a scale from "standard" to "dilapidated," as defined in *Table 3A.1.*

Table 3A.1: Housing Condition Survey Classifications & Criteria

	Criteria
Standard	Few or no minor visible exterior defects such as: • cracked, peeling, or missing paint • cracked, sagging, rotting, or missing siding, steps, porch planks, or other wooden surfaces • cracked or broken windowpanes • cracked masonry, brick, or mortar surfaces • missing or damaged roof shingles • small rust spots on mobile homes Generally, meets local building codes No detriment to health and safety present
Deteriorating	Few visible exterior defects requiring repair beyond routine maintenance such as: • missing or damaged wooden surfaces that could cause injury if walked upon or leaned against • missing windowpanes • badly deteriorated window frames • major holes in exterior walls, up to one (1) foot across and/or penetrate through the interior walls • roof missing many shingles or has holes up to six (6) inches across • chimney bricks missing • extensive rusting, joint separation on mobile home exterior Rehabilitation is economically feasible
Dilapidated	Fails to provide safe shelter Several of the major defects listed under Deteriorating Any major structural damage such as: • sagging foundation • sagging roof • slanted or tilted exterior walls • missing doors • collapsed chimney or porch • fire or severe water damage Rehabilitation is not economically feasible All non-HUD Code (pre-June 15, 1976) mobile homes are considered dilapidated

Housing occupancy was determined by visual inspection of each house. Each house was checked for: wired electric meter, yard maintenance, intact blinds and/or visible furniture, undamaged or secured windows, and the condition of yard furniture. *Table 3A.2* tabulates the complete survey results.

Table 3A.2: Housing Data from Windshield Survey

	Type / Condition	Occupancy	City	ETJ	Total Region
Stick Frame	**Standard**	Occupied	1639	89	1728
		Vacant	28	0	28
	Deteriorated	Occupied	348	9	357
		Vacant	26	0	26
	Dilapidated	Occupied	201	0	201
		Vacant	203	0	203
	Total (Occupied)		2188	98	2286
	Total (Vacant)		257	0	257
	Subtotal - Stick Frame Homes		*2445*	*98*	*2543*

	Type / Condition	Occupancy	City	ETJ	Total Region
Mobile & Manufactured	**Standard**	Occupied	59	8	67
		Vacant	0	0	0
	Deteriorated	Occupied	28	8	36
		Vacant	1	0	1
	Dilapidated	Occupied	26	0	26
		Vacant	19	4	23
	Total (Occupied)		113	16	129
	Total (Vacant)		20	4	24
	Subtotal – Manufactured Homes		*133*	*20*	*153*
	Subtotal- Single-Family Homes		*2578*	*118*	*2696*

	Type / Condition	Occupancy	City	ETJ	Total Region
Multifamily	**Standard**	Occupied	204	0	204
		Vacant	17	0	17
	Deteriorated	Occupied	6	0	6
		Vacant	0	0	0
	Dilapidated	Occupied	0	0	0
		Vacant	8	0	8
	Total (Occupied)		210	0	210
	Total (Vacant)		25	0	25
	Subtotal - Multifamily Homes		*235*	*0*	*235*

	Type / Condition	Occupancy	City	ETJ	Total Region
Total Housing Conditions	**Standard**	Occupied	1,902	97	1,999
		Vacant	45	0	45
		Total Standard	1,947	97	2,044
	Deteriorated	Occupied	382	17	399
		Vacant	27	0	27
		Total Deteriorated	409	17	426
	Dilapidated	Occupied	227	0	227
		Vacant	230	4	234
		Total Dilapidated	457	4	461
	Total (Occupied)		2,511	114	2,625
	Total (Vacant)		302	4	306
	Total Housing Units		*2,813*	*118*	*2,931*

Source: GrantWorks, Inc., 2020 Fieldwork Study

3.7 Appendix 3B: Housing Affordability Calculations

Housing units are conventionally considered to be affordable when monthly costs are less than 30% of monthly income. *Table 3B.1: Housing Tenure Data* tabulates the median monthly income, the total number of owner- and renter-occupied housing units, and housing costs as a percentage of income for both renters and homeowners. Average housing costs for owner-occupied units with a mortgage consume 27% of the median monthly income in Littlefield.

Table 3B.1: Housing Tenure Data (2015)

		Littlefield	Lamb County
Owner-occupied Units	*Total Occupied Housing Units*	*2,066*	*4,754*
	# of Units	1,374	3,345
	% of Total	67%	70%
	Monthly $ w/Mortgage (median)	$878	$959
	% of monthly income	**27%**	**27%**
	Monthly $ w/o Mortgage (median)	$348	$344
	% of Income	**11%**	**10%**
Rental Units	Number of Units	692	1,409
	% of total units	33%	30%
	Median monthly rent	$749	$703
	% of monthly income	**23%**	**19%**

** The City housing unit count is from the ACS and does not include additional houses counted in the field survey.*
Source: U.S. Census Bureau; American Community Survey 2014-2018, Tables S2502, B25077, B19013, B25088, B25064; <data.census.gov>

Another affordability measure for housing and a key component of mortgage lending decisions is the price-to-income ratio. The price-to-income ratio is the disparity between median income and median housing value. It provides a measure to answer the question "Is a median-priced home affordable for a median income earner?" Houses are generally considered to be affordable for the purchaser when the cost of the house equals roughly 2.6 times the purchaser's annual income.[21] *Table 3B.2* shows that Littlefield's price-to-income ratio is equal to the ratio for Lamb County but less than the ratio for the state. The ratio for both Littlefield and Lamb County is considered affordable.

Table 3B.2: Median Household Income & Housing Values

	Littlefield	Lamb County	State
Median Household Income	$39,615	$43,396	$60,629
Median Household Monthly Income	$3,301	$3,616	$5,052
Median Home Value	$60,700	$64,700	$186,000
Median Home Value / Median Household Income	**1.5**	**1.5**	**3.1**

Source: U.S. Census Bureau; American Community Survey 2014-2018, Tables B19013 and B25077; <data.census.gov>

3.8 Appendix 3C: Community Housing Organizations & Grant Programs

Detailed information regarding programs that serve housing needs in Lamb County and Littlefield are listed below. Additional information on state and federal programs that may be useful to Littlefield's residents may be found by contacting local offices and reviewing individual organizations' websites.

3.8.1 Services Currently Available/Active in Littlefield

South Plains Regional Housing Authority

The South Plains Regional Housing Authority is a division of South Plains Community Action Association. The housing program provides housing solutions to individuals and families who cannot find affordable and adequate housing due to income or special needs. The Housing Authority administers the Public Housing and Housing Choice Voucher Program (Section 8) through federal funding from the U.S. Department of Housing and Urban Development (HUD).

Organization / Office: South Plains Regional Housing Authority
Address: 411 Austin Street
Levelland, Texas 79336
Email: msanchez@spcaa.org
Website: *www.spcaa.org/home/housing-program/*

[21] "Where the House-Price-to-Income Ratio is Most out of Wack" retrieved from: https://www.citylab.com/equity/2018/05/where-the-house-price-to-income-ratio-is-most-out-of-whack/561404/; "High Home Price-to-Income Ratios Hiding Behind Low Mortgage Rates" retrieved from: http://www.forbes.com/sites/zillow/2013/04/16/high-home-price-to-income-ratios-hiding-behind-low-mortgage-rates/

South Plains Association of Governments (SPAG)

The South Plains Association of Governments (SPAG) is a Council of Governments that serves a fifteen-county region in North West Texas. SPAG is the only organization representing all general-purpose governments, both cities and counties, in the region. Created in 1967 when local officials recognized that the South Plains is a unique region whose identity is defined by common interests, geography, climate, and economy. In essence, SPAG, is a service organization, created by its local government members to enhance their individual capacities. SPAG sponsored programs and services include Area Agency on Aging, Economic Development, Regional Services, Regional 9-1-1, Law Enforcement, 3-1-1 Texas, Aging and Disability Resource Center.

Organization / Office:	South Plains Association of Governments
Address:	1323 58th St Lubbock, TX 79412
Phone:	(806) 762-8721
Website:	*www.spag.org*
Counties Served:	*Bailey, Cochran, Crosby, Dickens, Flloyd, Hockley, Garza, Hale, King, Lamb, Lynn, Lubbock, Motley, Terry, Yoakum*

Area Agency on Aging

Local area agencies on aging (AAAs) are affiliated with the Texas Department on Aging and receive State and federal funds to help coordinate local elderly care for those over age 60. Services the agency provides include: Nursing Home Ombudsman, Benefits Counseling (legal information), Care Coordination (in-home assistance with meals, minor repair, health care, etc.), Caregiver Support Program (counseling/assistance to caregivers) and some additional services (health and wellness). SPAG administers the program in Lamb County. The Department of Health and Human Services provides an online eldercare locator that includes the option for an online chat at *http://www.eldercare.gov/eldercare.NET/Public/index.aspx.*

Organization / Office:	Area Agency on Aging
Address:	1323 58th St Lubbock, TX 79412
Phone:	(806) 762-8721
Website:	*www.spag.org/programs-services/area-agency-on-aging/*
Counties Served:	*Bailey, Cochran, Crosby, Dickens, Flloyd, Hockley, Garza, Hale, King, Lamb, Lynn, Lubbock, Motley, Terry, Yoakum*

3.8.2 Grants/Loans & Organizational Resources Available to the City

Texas Department of Housing and Community Affairs (TDHCA)

TDHCA is the state agency responsible for promoting and preserving homeownership and financing the development of affordable rental housing. The agency has programs to build and to rehabilitate single-family and multifamily housing. The City can apply for funding to:

- Assist with multifamily unit rehabilitation projects; (Rental Housing Development Program);
- Assist renters, including veterans and persons with disabilities, with utility and security deposits (Tenant-Based Rental Assistance Program, Tenant-Based Rental Assistance Program for Persons with Disabilities, and the Veterans Housing Support Program);
- Provide down payment assistance to individuals who have not owned a home in three years or who are first-time home buyers (Texas HOMEbuyer Assistance Programs);
- Repair or replace substandard homes for low-to-moderate-income residents (HOME Rehabilitation Program and Homeownership Assistance Program); and
- Construct home accessibility projects for disabled residents (Amy Young Barrier Removal Program)

Organization / Office:	Texas Department of Housing & Community Affairs
Address:	221 East 11th Street Austin, Texas 78701
Phone / Email:	(512) 475-3800 or (800) 525-0657 / *info@tdhca.state.tx.usa*
Website:	*www.tdhca.state.tx.us*

U.S. Department of Agriculture Rural Development (USDA-RD)

The mission of USDA-RD is to improve the economy and quality of life in rural America. USDA programs include homeownership opportunities, owner-occupied housing assistance, rental assistance, rental housing development, community development activities, business development, and technical assistance in rural areas of the State (generally considered areas with a population of fewer than 20,000 people). Programs include:

- Loan Program: USDA-RD Guaranteed Rural Housing Loans for Single-family Dwellings offers help for people who want to own a home but cannot pay a down payment. Low and moderate-income applicants can have closing costs associated with purchasing a house financed into the loan up to the appraised value of the property. Loans can be for new or existing homes.

  The Guaranteed Rural Housing Program charges a 1.5% guarantee fee that is due at closing. Generally, the program targets communities with populations of 10,000 or less in locations not closely associated with urban areas.

- Direct Loan Program: Individuals can apply for direct loans through the area offices.

- Rural Repair and Rehabilitation Loans: Used to modernize existing homes by adding bathrooms, central heating, modern kitchens, and other improvements such as driveways and foundation plantings. Individuals who meet the requirements should contact USDA directly for these loans. The USDA Rural Development Lubbock office accepts applicants from Littlefield. Some seniors may be eligible for grants of up to $7,500 for home repairs.

Programs are explained at *www.rurdev.usda.gov/ProgramsAndOpportunities.html* or the following offices can be contacted.

Organization / Office:	US Department of Agriculture Rural Development / Lubbock Service Center
Address:	6113 43RD ST Lubbock, TX 79407-3747
Phone / Email:	(806) 785-5644 ext. 4/ cyde.jenkins@tx.usda.gov

Organization / Office:	US Department of Agriculture Rural Development / State Office
Contact:	Housing Program Staff
Address:	101 South Main Street, Suite 102 Temple, Texas 76501
Phone / Email:	(254) 742-9770, TTD (254) 742-9712
Website:	*http://www.rd.usda.gov/tx* or *http://www.rd.usda.gov/contact-us/state-offices/tx*

Texas Affiliation of Affordable Housing Providers (TAAHP)

TAAHP is a non-profit association of affordable housing developers, financers, and designers throughout Texas. The goal of TAAHP is to "increase the supply and quality of affordable housing for Texans with limited incomes and special needs," and the organization's primary focus is on education and lobbying. The group is a good starting place for communities interested in affordable housing projects. It provides communities with networking opportunities (through conferences and newsletters) to market available land, seek financing information, and/or discuss changes to state laws that could bring more affordable housing to their cites.

Organization / Office:	Texas Affiliation of Affordable Housing Providers
Address:	221 East 9th Street, Suite 408 Austin, Texas 78701
Phone / Email:	(512) 476-9901
Website:	*http://www.taahp.org/*

Rural Rental Housing Association of Texas (RRHA)

RRHA is a non-profit association of professionals involved in the development and management of rental housing in rural Texas. Like TAAHP, the organization provides communities with networking opportunities and lobbying for the industry as well as technical assistance and training for housing providers.

Organization / Office:	Rural Rental Housing Association of Texas
Address:	417-C West Central Avenue Temple, Texas 76501
Phone / Email:	(254) 778-6111
Website:	*http://www.rrhatx.com/index.php*

3.8.3 Grants/Loans & Organizational Resources Available to Residents

Combined Community Action, Inc.

Combined Community Action, Inc. is a non-profit organization that provides assistance through programs focusing on tenant-based rental assistance, weatherization, and comprehensive energy assistance, among others. CCA's mission is to assist people to become independent and self-sufficient by transitioning people out of poverty and providing comprehensive programs that support families and individuals.

Organization / Office:	Combined Community Action, Inc.
Address:	165 West Austin Giddings, Texas 78942
Phone / Email:	(979) 540-2980/ info@bvcaa.org
Website:	*http://www.ccaction.com/about/about-cca*
Counties Served:	*Not specified*

Texas State Affordable Housing Corporation (TSAHC)

TSAHC is a self-supporting, not-for-profit organization created by state statute in 1994 to provide safe, decent and affordable housing for low-income Texans and other underserved populations. TSAHC provides a variety of affordable housing programs that range from First-time Homebuyer Programs for individuals and families. Programs provide low-interest financing to individuals, particularly first-time homebuyers, teachers, paid firefighters, EMS personnel, peace officers, correction of juvenile corrections officers, county jailers, and public security officers. It also provides various financing options for developers of both single-family and multifamily housing, portions of which would serve low-to-moderate income tenants. Programs are listed on the agency website at www.tsahc.org. The agency can be reached at 512-477-3555 or 888-638-3555.

Aging in Place

Aging in Place is a joint program of Partners for Livable Communities and the National Association of Area Agencies on Aging. It provides regional workshops and Jumpstart grants to facilitate conversations and form action plans that address issues of aging in place within a community. Past JumpStart grants have been used to create programs that assist seniors with home maintenance and lawn care, provide paratransit services to help senior residents remain an active part of their community, and create "return visit" programs where nurses/social workers visit regularly to identify possible issues that may impair the individual's ability to remain in their home. For information, contact Penny Cuff, Vice President of Programs for Partners for Livable Communities by emailing pcuff@livable.org or calling (202) 887-5990. Website: www.aginginplaceinitiative.org

Additional resources on aging in place can be found through national networks:

National Aging in Place Council (www.ageinplace.org)
Senior Resource (www.seniorresource.com/ageinpl.htm)

Texas Ramp Project

Texas Ramp Project is a non-profit agency that relies on volunteers, foundations, civic organizations, and corporate partners to build ramps for low-income elderly and disabled residents. Since it was established in 2006, the organization has built over 17,700 ramps throughout the state. The organization accepts client referrals from social service agencies through its 36 service areas. Social service agencies can refer clients by submitting an online form to their respective service area.

Organization / Office:	Texas Ramp Project / Central Administration Office
Address:	PO Box 832065 Richardson, Texas 75083
Phone / Email:	(214) 675-1230 / *info@texasramps.org*
Website:	*http://www.texasramps.org/*

Texas Association of Structural Movers (TASM)

TASM is a statewide trade organization for structural movers. Their website provides an easy to use Member Directory that is organized by region. It also provides an Online Quote Engine to send a request for services to all TASM members. The organization is a good source for helpful information about the house moving process and permitting requirements.

Organization / Office:	Texas Association of Structural Movers
Contact Name:	Joe McCullough, Executive Director
Address:	1306-A West Anderson Lane Austin, Texas 78757
Phone / Email:	(512) 454-8626 / *jmccullough@assnmgmt.com*
Website:	*www.texashousemovers.com*

The ReUse People of America

The ReUse People of America provide deconstruction services across the country. With over 20 years of experience in the deconstruction industry, they are experts in making sure that homeowners get as much salvageable material as possible. Their expertise is important because the value of the salvageable material will determine the tax deduction that a homeowner can take on the donated deconstructed materials. In addition to deconstruction services, The ReUse People of America conduct job training seminars. In the past, they have worked with cities to provide job training for unemployed and underemployed residents.

Organization / Office:	The ReUse People of America
Contact Name:	Mike Thrutchley, Deconstruction Manager, Texas Regional Office
Phone / Email:	(214) 251-2306 / mikethrutchley@thereusepeople.org
Website:	*http://www.deconstructiontexas.com/*
Corporate Office	9235 San Leandro Street Oakland, California 94603 (510) 383-1983 / *info@thereusepeople.org*

Pure Salvage Living

Pure Salvage Living is Tiny Texas Houses' salvage operation. They salvage materials from dilapidated and decaying structures before completing demolition. They can deconstruct a structure and leave the salvaged materials for the property owner, or they can keep the salvaged materials. The Pure Salvage Living website is a good source for homeowners trying to locate deconstruction professionals in their area. The website is also the best way for homeowners to have their projects evaluated. It includes an online form where homeowners can input information about the size, condition, and location of the structure that needs to come down, along with the desired project timeframe. Pure Salvage Living reviews deconstruction projects on a case by case basis. All fees for deconstruction must be worked out directly with Pure Salvage Living or their representatives.

Organization / Office:	Pure Salvage Living
Address	20501 East I-10 Luling, Texas 78648
Phone / Email:	(830) 875-2500
Website:	*www.puresalvageliving.com*

Legal Aid Services

Local legal aid organizations provide civil legal representation and advice at little or no cost to low-income individuals who cannot afford a lawyer. Legal aid focuses on legal issues relating to basic needs, self-sufficiency, children and families, elderly and disability, and housing and homelessness prevention.

Legal Aid of NorthWest Texas (www.internet.lanwt.org/en-us) is a nonprofit Texas corporation that seeks equal access to justice for people living in poverty in North and West Texas. The organization provides free civil legal services to eligible residents in 114 Texas Counties, with offices in Abilene, Amarillo, Brownwood, Dallas, Denton, Fort Worth, Lubbock, McKinney, Midland, Odessa, Plainview, San Angelo, Waxahachie, Weatherford and Wichita Falls.

Organization / Office:	Legal Aid of NorthWest Texas
Address	305 West 7th Street (Plainview) Plainview TX 79072
Phone / Email:	800-955-8491 or 806-293-8491
Website:	*www.internet.lanwt.org/en-us*

Leader Dog for the Blind

Leader Dog works to improve the mobility and independence of blind or visually impaired individuals by partnering them with a guide dog. Applicants complete a 26-day residential training program and must be 16 years or older and in good mental and physical health. The training program is located in Rochester Hills, Michigan and is offered at no cost. Room and board and transportation costs to and from the training program for clients traveling within the United States are also provided free of charge. The organization also offers orientation and mobility and GPS programs to professionals and clients. Applicants can apply online at or can download an application to print and mail.

Organization / Office:	Leader Dogs for the Blind
Address	1039 South Rochester Rd. Rochester Hills, Michigan 48307
Phone / Email:	(248) 651-9011, Toll Free (888) 777-5332, TTY (248) 651-3713 / *leaderdog@leaderdog.org*
Website:	*http://www.leaderdog.org*

4 LAND USE STUDY

The location and extent of land uses in a community impact property values, City service expenditures, traffic flow, aesthetics, and economic development potential. The Existing Land Use Map (*Map 4A*) shows land development patterns within the city limits and extraterritorial jurisdiction (ETJ).[22] The Future Land Use Map (*Map 4B*) and Land Use Study help the community plan for infrastructure to guide the desired direction of future growth.

4.1 Highlights

Right-of-way is the most common active land use in Littlefield, based on total acreage (1,348 acres in the city limits and ETJ). This uncommonly high amount of right-of-way is due to several major arterials that traverse the city, including US 84 and US 385. A railroad line also crosses the city southeast to northwest parallel to Highway 430. As a result, Littlefield streets create a grid-like road network, though connectivity in several areas is limited due to dead end roads.

Development in Littlefield city limits is characterized primarily by single-family housing (793 acres or 30% of developed land), semi-developed land (345 acres), and commercial uses (130 acres). The city has five public recreational areas – Laguna Park (24 acres), Crescent Park (14.5 acres), city-owned softball and little league fields (18.7 acres), Dunbar Park (1.3 acres), and the Waylon Jennings RV Park (1.2 acres). Residential, commercial, and industrial land uses are generally separated.

The city of Littlefield also has a large amount of undeveloped and semi-developed land within the city limits (1,774 acres combined). Most of the undeveloped land consists of larger lots in the city's periphery. In contrast, much of the semi-developed lots are scattered throughout existing neighborhoods and commercial centers. Vacant lots can have 'spillover' effects that negatively impact neighboring properties. Research has found that vacant and abandoned properties can be linked to reduced property values, increased crime, as well as increased risk to public health and welfare. In commercial areas, vacant lots can also reduce the feeling of business activity.

[22] The ETJ is the area within a certain distance beyond the city or town limits in which the local government can control land development patterns through its subdivision ordinance.

Residents are interested in these primary areas of land use improvement:

- Enhanced community appearance, including dilapidated building removal and yard maintenance;
- Additional housing options to serve the needs of all segments of the population;
- Additional businesses to support an active downtown and local economy; and
- Additional recreation amenities.

Map 4B: Future Land Use illustrates: (a) a preference for renovated housing and housing diversity throughout the city; (b) a desire to develop a vibrant local center in the City's traditional downtown; (c) a preference to develop commercial nodes of varied character (Local Commercial versus Highway Commercial). The Future Land Use Map also reflects the cities desire to focus on infill development to avoid overextending city services.

4.2 Context: History & Community Input

Previous Land Use

GrantWorks, Inc. conducted a land-use study for the city of Littlefield in 2005 as part of a comprehensive planning process. Most land uses have remained the same since the completion of the 2005 Comprehensive Plan, notable differences include:

- An approximate decrease of 51 acres of institutional land;
- An approximate decrease of 8 acres of multifamily land;
- An approximate decrease of 40 acres of park space;
- An approximate decrease of 58 acres of agricultural land; and
- An approximate increase of 163 acres of semi-developed land.

Chart 4A and *Chart 4B (next page)* compare changes in Littlefield's basic land use characteristics in 2005 and in 2020 by acreage and percentage of land dedicated to each use-type.[23]

[23] The following Land Use categories are excluded from this comparison because they are not specified in the 2004 Comprehensive Plan: Agricultural Processing and Utilities. Total acreage excluded equals 11.9 acres.

Chart 4A: Land Use Change, Acres (2005, 2020)

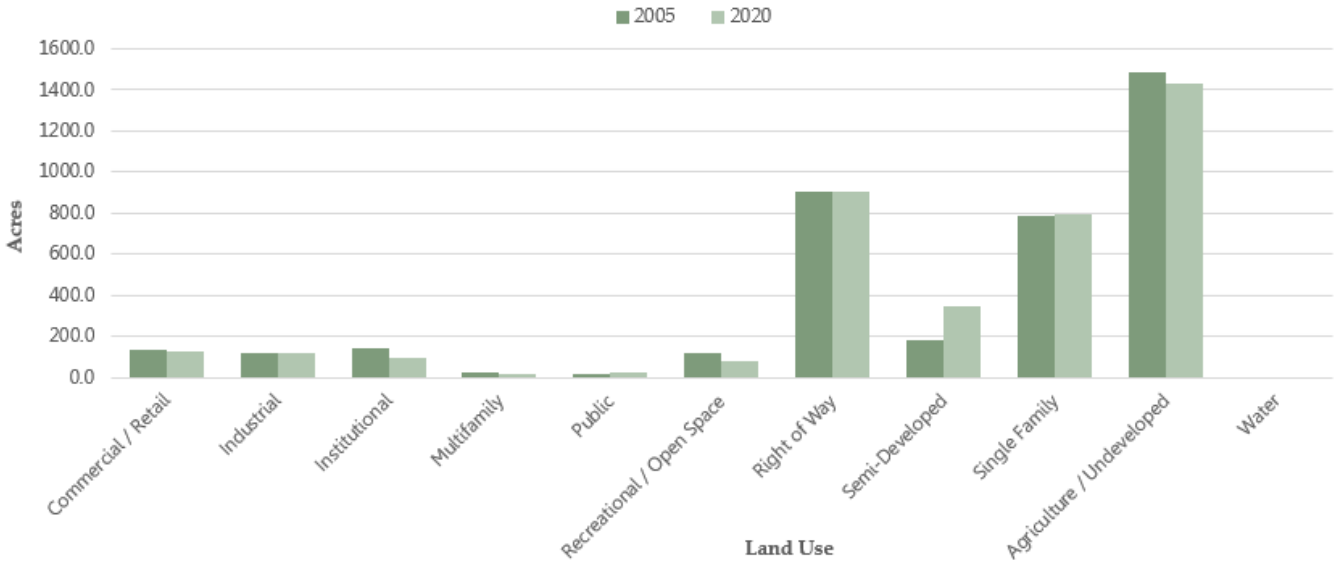
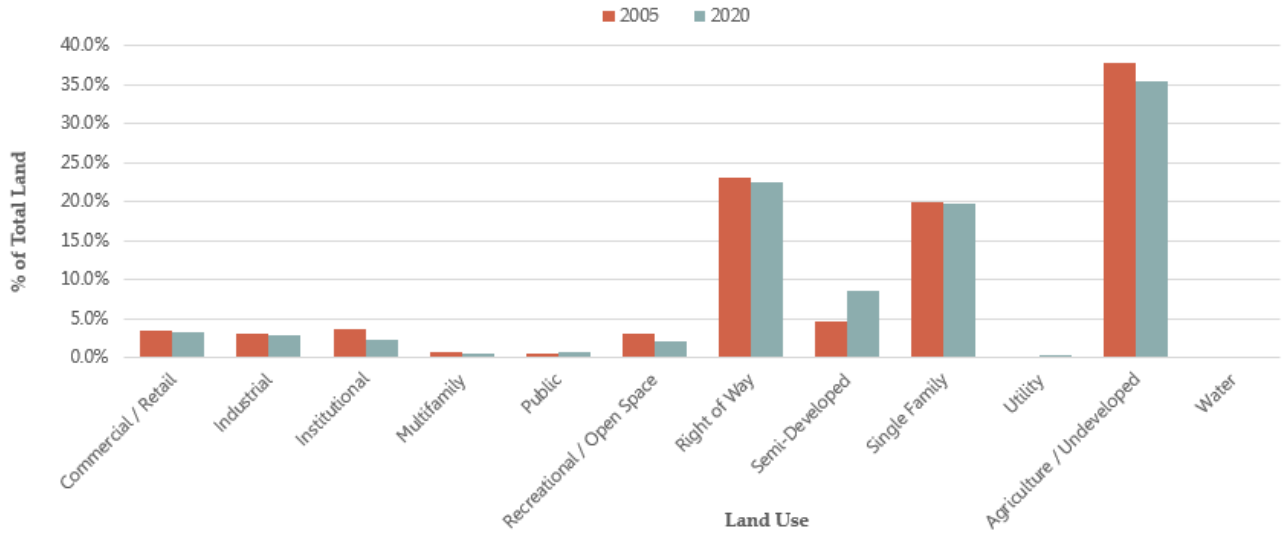


Chart 4B: Land Use Change, Percentage Dedicated to Use (2005, 2020)



Community Input

A detailed discussion of community input collection is located in *Chapter 1: Community Goals & Objectives.* The particular concerns expressed by residents that relate to land use are:

Achieve/Preserve	Avoid/Eliminate
▪ Improve downtown commercial center ▪ Preserve and expand Lamb Healthcare Center ▪ Focus on infill development to avoid extension of services ▪ Sustainable, controlled growth	▪ Avoid further sprawl ▪ Separate conflicting land uses (i.e. industrial and housing)

4.3 Inventory & Forecast

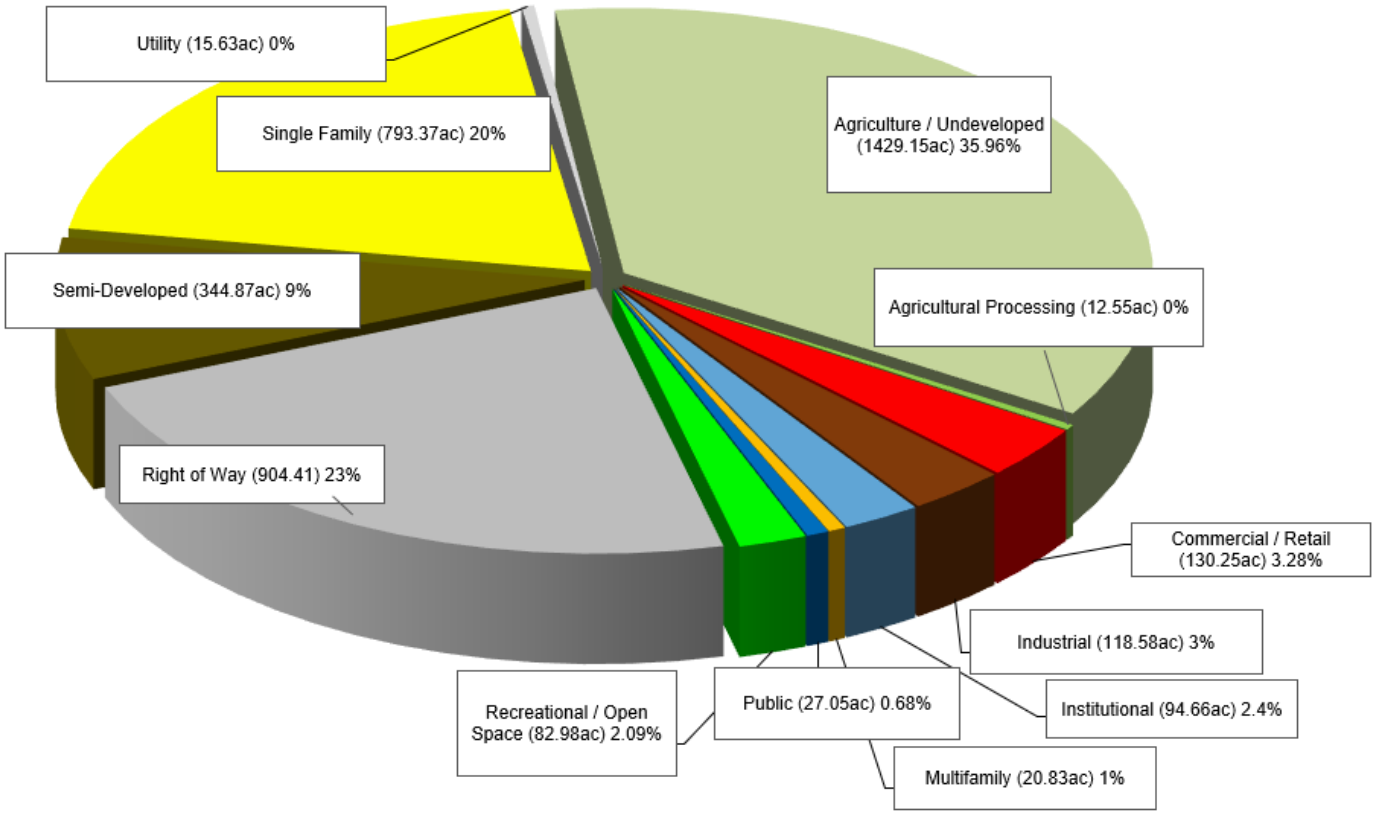
4.3.1 Existing Land Use

Littlefield's land use in 2020 is characterized by:

- Approximately 4,022 acres in the city limits; approximately 1,774 acres are semi-developed,[24] undeveloped, or used for agriculture.
- Approximately 793 acres of single-family residential land in the city limits (an average 0.3 acres per house).
- Approximately 904 acres of right-of-way within the city limits, an unusually large amount for a city the size of Littlefield, which is primarily attributable to US Highway 84, State Highway 430, and the railroad.
- General separation of commercial, residential, and industrial land uses (see *Map 4A*).

[24] Subdivided and provided with city services, but no building on the property.

Chart 4C: Land Use, Total Acres/Percent



Appendix 4A provides definitions, detailed tables, and an explanation of the methodology used to calculate land use.

4.3.2 Land Development Considerations

Environmental Factors

Environmental factors impacting construction include lakes and streams, floodplain, and soil type. These factors do not prevent construction, but they can make initial costs and/or long-term maintenance more expensive.

Lakes & Streams

There are no lakes or streams within Littlefield's city limits or extraterritorial jurisdiction. There is a pond within Laguna Park, a detention pond in Crescent Park, and several man-made ponds used for industrial purposes in the northern part of the city.

Floodplain – Problem Drainage

There is no land within Littlefield's city limits that is within the FEMA-identified 100-year Floodplain. There are no natural lakes, rivers, or streams and therefore no FEMA-identified 100-year Floodplain. However, the city of Littlefield is located in a Special Flood Hazard Area (SFHA). An SFHA is an area that is in a higher risk flood zone, meaning there is at least a 1 in 4 chance of flooding during a 30-year mortgage. Littlefield is in an area designated as Zone A. This is an area with a 1% chance of flooding at any given time and a 26% chance of flooding over the life of a 30-year mortgage.

Given that there are no larger natural bodies of water and most land in this area is very flat, the city is most at risk for drainage challenges, especially after a storm event. *Map 7A: Existing Storm Drainage Conditions 2020* indicates problem drainage areas as identified by City of Littlefield staff and residents, as well as observation during fieldwork for this plan.

Soil

Soils in Littlefield are primarily characterized as very deep, well drained, and moderately permeable. These types of soils are best suited for crop production. According to the United States Department of Agriculture the types of soils generally found in the area around Littlefield are Southern High Plains soils, primarily amarillo, acuff, or olton series soils.

Southern High Plains soils formed on a nearly level plain on an elevated plateau, commonly bordered by moderately steep escarpments on west and east margins. Numerous playa basins dot the plains. The area is characterized by deep, well-developed soils, with clay increasing in subsoil horizons and accumulations of calcium carbonate. Sherm, Darrouzett, Pullman, Lofton, and Randall soils have clayey subsoil horizons and shrink-swell properties. Acuff, Olton, and Gruver are loamy soils having dark surface horizons (higher organic matter), whereas Amarillo, Dallam, Rickmore, and Vingo are loamy soils having less organic matter. Patricia, Brownfield, Jalmar, and Triomas soils have sandy surface horizons. Nutivoli and Penwell are sandy, less-developed soils. Conlen, Sunray, Spurlock, and Veal soils are calcareous throughout, and Mobeetie and Berda soils are loamy and occur along flanking escarpments.

Figure 4A illustrates soil types and buildability within and around Littlefield. Soil areas are organized in two groups: soil types and/or slopes that create more construction restrictions (darker red indicating more restrictions) and soil types and/or slopes that create fewer construction restrictions (green indicating fewer restrictions). Most houses in Littlefield have been constructed in areas with some soil limitations on construction of streets, small commercial buildings, or one-to-three-story, single-family homes (shades of orange in *Figure 4A*). The presence of limiting factors does not prevent construction, but it can make initial development and long-term maintenance more expensive. Detailed soil data is available through the U.S. Department of Agriculture – Natural Resources Conservation Service.[25]

[25] http://datagateway.nrcs.usda.gov/GDGOrder.aspx

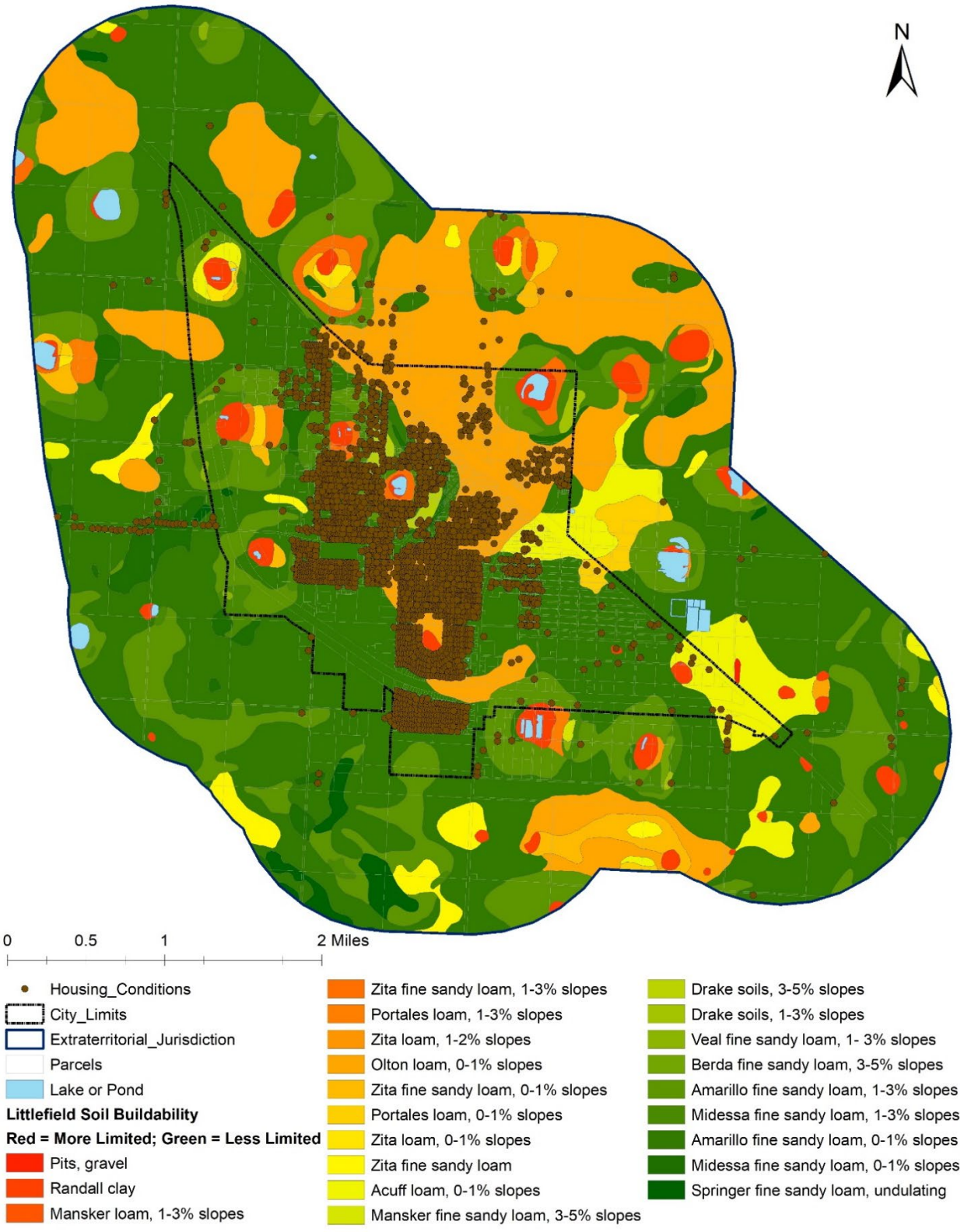


Figure 4A: Soil Types & Buildability

Future Land Use

Littlefield is expected to experience only minor changes in land-use patterns over the next 10 years based on a forecasted population decrease from 6,406 to 6,366 (-2.5%). There is ample room within the existing city limits and the ETJ for any new land development, including both infill and larger-scale development. Soil conditions and drainage challenges may limit some new construction, but the feasibility of additional development will depend primarily on continuing improvements to Littlefield's water and sewer systems to ensure that both remain below capacity. The City should avoid any expansions to the water and sewer system given the ample amount of easily developable land and declining population.

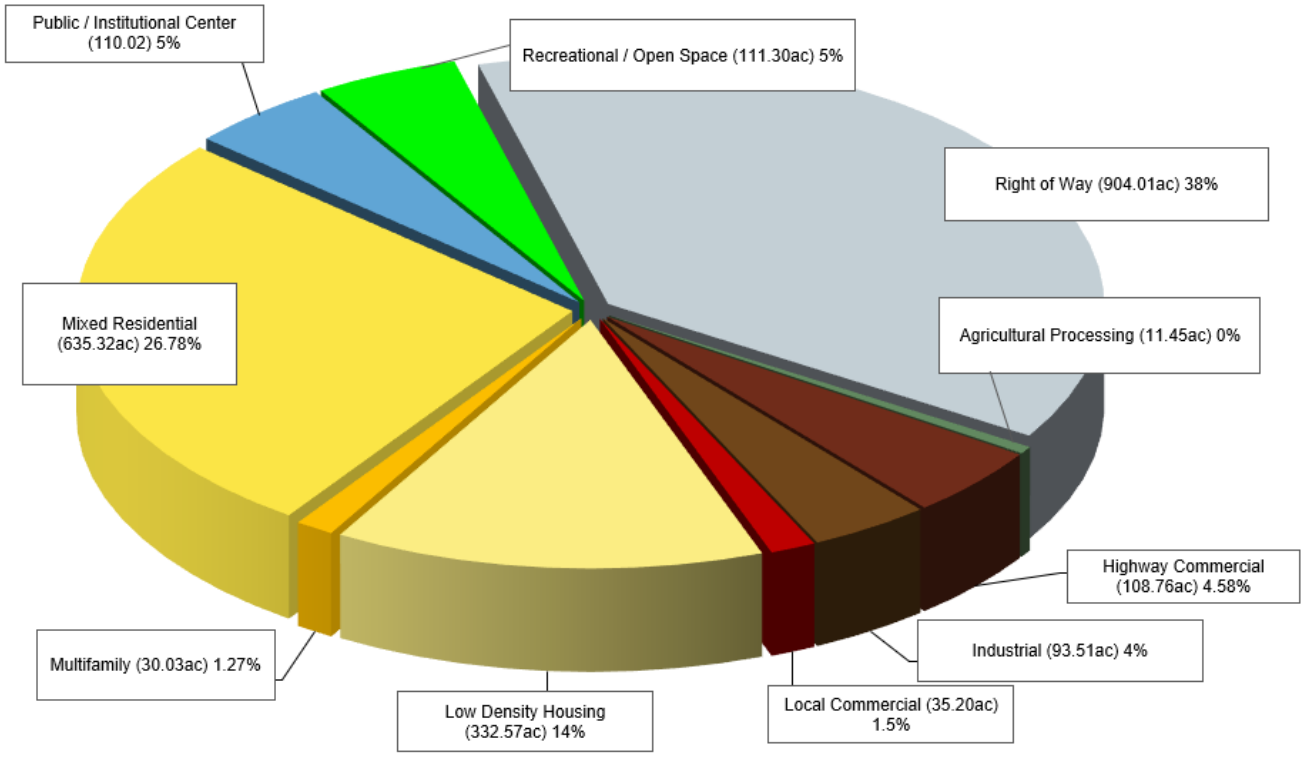
Map 4B: Future Land Use illustrates desired future land use areas in Littlefield. Unlike an existing land use map, which depicts land uses at the parcel level, a future land use map is a general visualization.

The depicted land uses describe the general desired character of land area, rather than the particular use on each parcel. The illustrated changes often extend beyond the current planning period (2020-2030) to visually establish preferred growth boundaries. For example, Littlefield's future land use map illustrates: (a) a preference for additional housing and housing diversity throughout the city; (b) a desire to develop a vibrant local center in the City's traditional downtown; (c) a preference to develop commercial nodes of varied character (Local Commercial versus Highway Commercial); (d) a desire to limit development that would require city services to be extended.

Chart 4C (next page) illustrates anticipated general land uses areas in Littlefield based on the future land use map.

It is important to note that **a future land use map is a visual statement of where and how a community wants to grow, not a prediction of future growth**. However, adopting a future land use map can encourage additional growth because it communicates a city's long-range development goals not only to residents and future local governments, but also to potential developers with an interest in creating thriving developments.

Chart 4D: Future Land Use, Total Acres/Percent



4.4 Key Land Use Considerations

Based on the community input and local land use data described in this chapter, Littlefield should focus on the following key areas related to land use: flood damage prevention, community physical appearance, historical assets, and future growth.

4.4.1 Flood Hazard Prevention

The City can work to prevent future damage due to flooding by pursuing the following strategies:

a) Continue to enforce the Flood Hazard Prevention Ordinance

b) Assist residents with clarifying clouded property titles

c) Promote and support NFIP Participation/Compliance

Continue to Enforce the Flood Hazard Prevention Ordinance

The City should continue to enforce the Flood Hazard Prevention Ordinance (adopted in 2003). Based on the model ordinance developed by the Texas Water Development Board (TWDB), the ordinance establishes requirements and limitations for construction in areas of special flood hazard. Special flood hazard areas, or floodplain boundaries, are set by FEMA's November 4, 2016 "Flood Insurance Study (FIS) for Lamb County, Texas and Incorporated Areas" and accompanying maps, including any revisions to the study/maps. The ordinance establishes basic construction requirements such as anchoring structures to prevent flotation or ensuring that on-site waste disposal systems will not be impaired by any floods. The City of Littlefield should continue to enforce this ordinance and participate in the National Flood Insurance Program.

Assist Residents with Clarifying Clouded Property Titles

"Clouded title" refers to issues in a property's past that make legal ownership of that property unclear. Several situations may result in a clouded title such as unreleased liens or improperly described foreclosures. Very often, however, clouded title may result from lack of clear inheritance, sometimes over multiple generations, and/or disagreement between multiple heirs. Lack of clear title presents a major impediment to connecting residents with State and federal housing funding.

The City should reach out to area law schools and relief assistance resource providers, such as the Rebuild Texas Fund, to obtain legal counseling for residents with a clouded title. Legal assistance may also become available through the State. After Hurricanes Dolly and Ike, the Texas General Land Office (GLO) funded the Texas Title Project to help low-income homeowners acquire clear title to their land. As part of the project UT law students hosted a series of pro bono legal clinics.

Promote & Support NFIP Participation/Compliance

The City should encourage more residents to participate in the National Flood Insurance Program (NFIP). Created by the US Congress in 1968, NFIP enables property owners in participating communities to purchase federal insurance protection against flood losses. The City of Littlefield has participated in National Flood Insurance Program (NFIP) since 1987. However, relatively few residents have NFIP insurance; as of July 31, 2019, there are only 7 NFIP policies in force in the city of Littlefield.[26] Many residents may not be aware that flood insurance is available, may not see the need to insure their property, or may not be aware that insurance must be purchased at least 30 days before any claim to be covered. As noted in the NFIP manual:

[26] More information available at https://www.fema.gov/national-flood-insurance-program-community-status-book and https://www.fema.gov/policy-claim-statistics-flood-insurance.

> "Flood insurance is a wise investment. Floods are the number-one natural disaster in the United States… Just a few inches of water can cause tens of thousands of dollars in damage. Flood damage is not covered by most standard homeowners or business insurance policies. Disaster assistance, if it is available, is typically a loan that must be repaid with interest".[27]

To promote and support NFIP participation, the City should conduct public outreach to educate residents about the need for flood insurance and information about the NFIP. Public outreach activities could include a public workshop, targeted letters to owners of property within the floodplain, or even a few sentences included in each water bill indicating where residents can obtain more information about the NFIP. Public outreach activities could also result in credit - and therefore reduced insurance premiums for residents - through the NFIP's Community Rating System (discussed below).

In addition, the City should:

a) post the FEMA Flood Insurance Rate Map (FIRM) in a visible location at City Hall; and

b) maintain records of the number of flood insurance policies in the community and identify areas that require further coverage; and

c) post information about flood damage and flood insurance on the City website (see also *Chapter 9: Economic Development).*

4.4.2 Enhancing Littlefield's Physical Appearance

Community members would like to see the local government and current residents expand their involvement in shaping and maintaining the city's physical appearance. Littlefield can support an enhanced physical appearance by pursuing the following strategies:

a) Continue to Enforce nuisance ordinances

b) Consider voluntary measure to promote building/yard clean up

c) Activate vacant lots through temporary use

[27] Federal Emergency Management Agency. (2017). "National Flood Insurance Program Community Rating System Coordinator's Manual FIA-15/2017". https://www.fema.gov/media-library/assets/documents/8768

Continue to Enforce Nuisance Ordinances

One of the key community goals identified by Littlefield residents was to eliminate damaged structures and abandoned housing from the city. Observations from the field survey conducted in January 2020 support the need to address this challenge; the survey found 45 vacant, dilapidated/deteriorating houses. Community members also expressed a desire to eliminate junked vehicles and the survey identified some lots with piles of debris in the yard.

Many cities use nuisance standards/ordinances to address structure and yard conditions such as vacant/dangerous structures and junked vehicles. Generally, nuisance refers to the use of land/property in a way that injures the rights of others or that may negatively impact the health, morals, safety, welfare, comfort, or convenience of the general public. For example, allowing weeds and trash to accumulate may negatively impact the health and safety of the general public by resulting in an unsanitary environment which may attract vermin and/or disease-carrying pests.

The City of Littlefield has three separate ordinances which address public nuisances:

a) Weeds, Rubbish, and Other Unsightly or Unsanitary Conditions (adopted 8/29/2013),

b) Abandoned Property Other Than Motor Vehicles (adopted in 2003), and

c) Junked Vehicles (adopted in 2003).

The Weeds, Rubbish, and Other Unsightly or Unsanitary Conditions establishes procedures for abatement of neighborhood nuisances. The Junked Vehicles Ordinance and the Abandoned Property Other Than Motor Vehicles ordinance establish procedures for the abatement and removal of junked vehicles and other nuisances or obstructions as a public nuisance on a private property. Public (neighborhood) nuisances include but are not limited to "keeping/storing/accumulating rubbish, brush, or any unused, discarded, or abandoned object, for ten (10) days or more unless the rubbish is completely enclosed with a building or is not available from the public street" or "maintaining premises in a manner that creates unsanitary conditions likely to attract or harbor, mosquitos, rodents, vermin, or disease-carrying pests". Generally, the nuisance regulations:

- ✓ Establish procedures and requirements for:
  - Filing a nuisance complaint
  - Investigation of a potential nuisance
  - Notice of violation
  - Public Hearing
  - Appeal

- ✓ Provide for the City Council to accept bids for abatement/removal

The City of Littlefield should continue to enforce its nuisance standards. It is commendable that the city has multiple separate ordinances as nuisance law can be very specific. Separate ordinances permit specificity in the ordinance language that may be important to preventing legal challenges to City nuisance abatement efforts.

Many cities also declare dangerous or substandard buildings to be a nuisance and adopt substandard building ordinances to establish procedures for removing, repairing, rehabilitating, or demolishing such structures. In 2018, the City of Littlefield adopted a substandard buildings ordinance, this ordinance should also continue to be enforced. See *Chapter 3: Housing Study* for more detail.

Sample nuisance ordinances from other municipalities, as well as a legal Q&A report from Texas Municipal League, are included in the *Digital Appendix* to this study and available on the TML website (www.tml.org) for reference.

Consider Voluntary Measures to Promote Building/Yard Cleanup

Adopting voluntary measures is another key method for addressing structure and yard conditions. Motivating property owners to voluntarily clean up their buildings and yards is usually the most politically popular and effective mechanism for eliminating junked yards and dilapidated buildings and improving property maintenance.

Littlefield should support additional voluntary activities related to housing and yard conditions that have been successful in other similarly sized communities such as:

1. Competitions for "yard of the month," "best garden," and/or "best maintained property". For example, each month from June through October members of a local landscape committee in Mesquite, Texas select up to five residents living in the city to receive a "Yard of the Month" award signed by the mayor. Award winners demonstrate property that has no visible code violations and is considered one of the most visually pleasing in the area. For more information, visit https://www.cityofmesquite.com/385/Yard-of-the-Month.

2. Self-assessments. It is easy for anyone to get used to how the things and places around them look. One effective way to help property owners refocus on their property is to ask them to conduct a self-assessment of their property's appearance. A "Self-Assessment Questionnaire" used in another small city is included in the *Digital Appendix* to this study. The questionnaire was sent by a volunteer group working on image improvement to owners of properties on that city's main thoroughfares. The volunteers included a letter explaining the project and requesting that owners evaluate their properties. The letter resulted in approximately 50% of property owners

conducting repair and maintenance work.

3. Mowing Clubs. Mowing clubs can help support regular private yard maintenance. Often mowing clubs are designed to assist low-income seniors in the community who may be unable to maintain their properties. Clubs can be started as Eagle-Scout projects or by other neighborhood and community groups. The Aging in Place Initiative is one organization that has successfully implemented such a program. (See www.aginginplaceinitiative.org and information in *Appendix 3C* in *Chapter 3: Housing Study).*

In addition to promoting voluntary activities like the ones listed above, the City can help connect residents with support opportunities from governmental and/or non-profit organizations. For example, the Texas Department of Transportation and Keep Texas Beautiful sponsor a scholarship competition for high-school students involved in a trash-off organization. Information is available on their websites (www.ktb.org/programs/litter-prevention/dont-mess-with-texas-trash-off.aspx and www.dontmesswithtexas.org/).

Activate Vacant Lots Through Temporary Use

Littlefield 's appearance can also be enhanced by activating some of the 345 acres of semi-developed land within the city limits, particularly vacant lots in existing residential and commercial areas. Vacant lots can have 'spillover' effects that negatively impact neighboring properties. Research has found that vacant and abandoned properties can be linked to reduced property values, increased crime, as well as increased risk to public health and welfare. In commercial areas, vacant lots can also reduce the feeling of business activity. Until such time as more-permanent development occurs, Littlefield should consider activating vacant lots in the community through temporary uses. The Office of Policy Development and Research for the United States Department of Housing and Development (HUD) notes in its Winter 2014 issue of Evidence Matters that:

> "Temporary use, when successful, can rapidly and efficiently bring underutilized land into productive use, thereby reducing or removing many undesirable externalities. As low-cost and low-risk strategies, temporary projects can also respond quickly to changing conditions and demands — a particular advantage in many cities, where political and economic conditions are uncertain, and cause a reluctance to enter potential long-term commitments, responsibilities, and liabilities… For city administrators facing tight budgets, temporary use projects can be a cost-effective strategy for dealing with vacant land that yields rapid results."

A copy of this issue is included in the *Digital Appendix.*[28]

[28] The *Evidence Matters (Winter 2014)* issue also available at and can be found at https://www.huduser.gov/portal/periodicals/em/winter14/index.html.

Vacant lots can be activated by introducing general activity spaces, as well as through more specific community events. The below lists provide just a few examples of temporary uses:

Activity Spaces

- Public park
- Free library, outdoor reading space
- Public art
- Community garden/children's learning or school garden

Events

- Farmer's market / bake sale
- Community chess, board, or card game tournaments
- Outdoor concert or dance
- Local vendor and artisan stalls

Communities throughout the United States, as well as in many other countries around the world, have been turning to temporary use as a way to address some of the negative community impacts created by vacant lots in developed areas. As a result, there are a number of resources available to help both residents and local governments pursue these options. In addition, state and national government departments provide resources for a number of activities that could be used to activate vacant land.

For example, the Texas Department of Agriculture (TDA) provides resources supporting initiatives like garden-based learning[29] and setting up and maintaining a local farmer's market.[30] Similarly, the National Parks and Recreation Association (NPRA) has created a general guide for creating mini-parks.[31] The TDA and NPRA reports are included in the *Digital Appendix* for this plan.

Figure 4B: Little Free Library[32]

Figure 4C: Community Garden[33]

[29] For more information about garden-based learning visit http://www.squaremeals.org/FandNResources/TexasFarmFresh/GardenBasedLearning.aspx
[30] The TDA report on starting a farmer's market is also available at Reports are also available online at http://www.gotexan.org/Portals/1/PDF/FarmersMarketGuide-online_version_lo-res.pdf/
[30] The NPRA report on mini-parks is also available online at https://www.nrpa.org/uploadedFiles/nrpaorg/Grants_and_Partners/Recreation_and_Health/Resources/Issue_Briefs/Pocket-Parks.pdf.
[31] Ibid.
[32] Source: https://littlefreelibrary.org/pressresources/
[33] Source: http://inhabitat.com/top-10-cities-in-the-us-for-urban-farming/portland-community-garden/

Several nonprofits also provide useful guides and resources. For example, Keep Texas Beautiful also offers grants and funding for a number of projects that could be used to activate vacant spaces, such as butterfly gardening[34] and the American Community Gardening Association provides informational and resource support for community gardening initiatives.[35] In addition, Littlefield can draw from the experiences of a number of local governments and communities throughout the United States that have already undertaken initiatives to active vacant land in their cities. For example, the City of St. Louis, Missouri provides residents with a number of resources for "fostering the creative reuse of the City owned land" on its website.[36] The City of Milwaukee, Wisconsin has similarly put together a "Vacant Land Handbook" to support resident projects on publicly owned land.[37]

4.4.3 Highlighting & Protecting Historical Assets

A city's history can inspire a sense of community pride among residents and, if shared, may draw visitors and businesses. Littlefield can highlight and protect historical assets by pursuing the following strategies:

a) Identify structures potentially eligible for state and/or national landmarks

b) Preserve historical development character

c) Identify buildings of local historical importance

d) Develop a Historic Preservation Ordinance

There is only one State historical marker located within the city. It commemorates a replica of XIT's Giant Windmill, the original was 132 feet tall and known as the world's tallest windmill until it toppled over in 1926. Littlefield should consider working with property owners to identify other structures that are potentially eligible for state and/or national landmark status. Communities often fail to recognize which of their characteristics non-members find important or attractive; therefore, it can be challenging but useful to receive the kind of recognition represented by historic listings such as the National Register of Historic Places[38] and the Texas Historic Landmarks Program.[39] Additional information can be found at: www.nps.gov/subjects/nationalregister/index.htm and www.thc.state.tx.us/preserve/projects-and-programs/state-historical-markers.

[34] More information about butterfly gardening is available at https://www.ktb.org/butterfly-gardening
[35] More information about the American Community Garden Association is available at https://www.communitygarden.org/
[36] More information available at https://www.stlouis-mo.gov/government/departments/planning/sustainability/toolkit/develop-creative-use-for-vacant-land.cfm
[37] Handbook available at http://city.milwaukee.gov/ImageLibrary/Groups/cityDCD/planning/pdfs/VacantLotHandbook.pdf
[38] The National Register of Historic Places is a nation-wide program aimed at protecting America's historic and archaeological resources.
[39] Awarded by the Texas Historical Commission, Texas Historical Landmarks recognize historically and architecturally significant properties in the State of Texas.

Littlefield's historical development character is another important asset. Preservation of amenities commonly found in historic districts and lost in new construction adds value to properties. Streets that accommodate pedestrian and bicycle as well as automobile traffic (and typically include features such as uniform setbacks, trees, benches, etc.) – create the following advantages:[40]

- Retail sales increase through accommodating non-auto users and creating an appealing space for pedestrians and shoppers
- More residents shop locally due to reduced travel time and added convenience
- New development and businesses are attracted to the area
- Residential property values increase because, in general, homeowners will pay a premium to reside in walkable communities
- Office and retail property values increase[41]

From a land use perspective, Littlefield should strongly consider regulations and public investments that:

- Preserve existing historical structures and lot layouts
- Encourage new construction that matches or enhances existing historical structures and lot layouts
- Provide additional practical and/or aesthetic benefits that will draw people to the city

Littlefield should also consider bringing community members together to identify the historic buildings or areas they wish to protect through a historic preservation ordinance. Texas Local Government Code (Sec. 211.003) provides that "In the case of designated places and areas of historical, cultural, or architectural importance and significance, the governing body of a municipality may regulate the construction, reconstruction, alteration, or razing of buildings and other structures." No limits are placed on the type of city with regards to that type of regulation (i.e. general law or home rule). The Texas Historical Commission has produced a model ordinance, and that ordinance as well as the version of that ordinance adopted by Fredericksburg, are included in the *Digital Appendix* to this plan. Mount Vernon, a General Law Type A City in northeast Texas has also been widely recognized for the success of its historic preservation efforts.[42]

[40] See https://smartgrowthamerica.org/resources/economic-revitalization-benefits-of-complete-streets/ for examples and studies
[41] Pivo, G. & Fisher, J.D. (2010). The Walkability Premium in Commercial Real Estate Investments.
[42] Mount Vernon's historic preservation ordinance is available at www.comvtx.com/

4.4.4 Guiding Future Development

Littlefield residents would like to see new development that complements existing development, both within existing developed areas and outside of the city center. Littlefield can support these goals by pursuing the following strategies for guiding future growth:

a) Prioritize infill development

b) Coordinate land use planning with surrounding municipalities

c) Ensure orderly and timely expansion through targeted annexation

d) Consider alternative development types

Prioritize Infill Development

Littlefield should prioritize infill development. As discussed in *Chapter 3: Housing Study,* infill - development provides several benefits including:

- Maintains housing affordability by minimizing infrastructure costs;
- Supports hunting and agriculture land preservation, as well as downtown revitalization; and
- Discourages development near industrial sites.

There is enough undeveloped land within the current city limits to accommodate the future population, as well as potential space for desired non-residential development, such as additional commercial establishments.

There are approximately 647 acres within the city limits that are easily developed, meaning that the land is:

- Currently identified as either vacant or used for agricultural purposes;
- Within 100 feet of water and sewer distribution lines; and
- Located adjacent to public right-of-way and paved or dirt streets; and
- Located outside of the 100-year floodplain (FEMA special hazard area).

Approximately 48% (311 acres) of such easily developed land has frontage on an arterial including US 84, US 385, TX 430, Hall Avenue, Littlefield Drive, XIT Drive, Phelps Avenue, and Sunset Avenue. An additional 32 acres have all the above advantages except for public right-of-way access.

Figure 4D (next page) shows all of Littlefield's undeveloped land as defined by the above criteria, including land in the floodplain and floodway, and a large-scale version of the map in PDF format is included with the *Digital Appendix* to this study. That map should be posted in a visible location at City Hall (and ideally on a City website) to demonstrate the type and variety of undeveloped land within the city limits.

To facilitate infill development, Littlefield should:

- Limit extension of services beyond the town limits.
- Update and enforce the subdivision ordinance and adopt public works construction manual to ensure the provision of high-quality infrastructure when new development occurs,
- Adopt a future land use map that illustrates where infill development will occur and what type of infill development is prioritized by the community, and
- Update the zoning ordinance and zoning map so they can be used to achieve future land use goals.

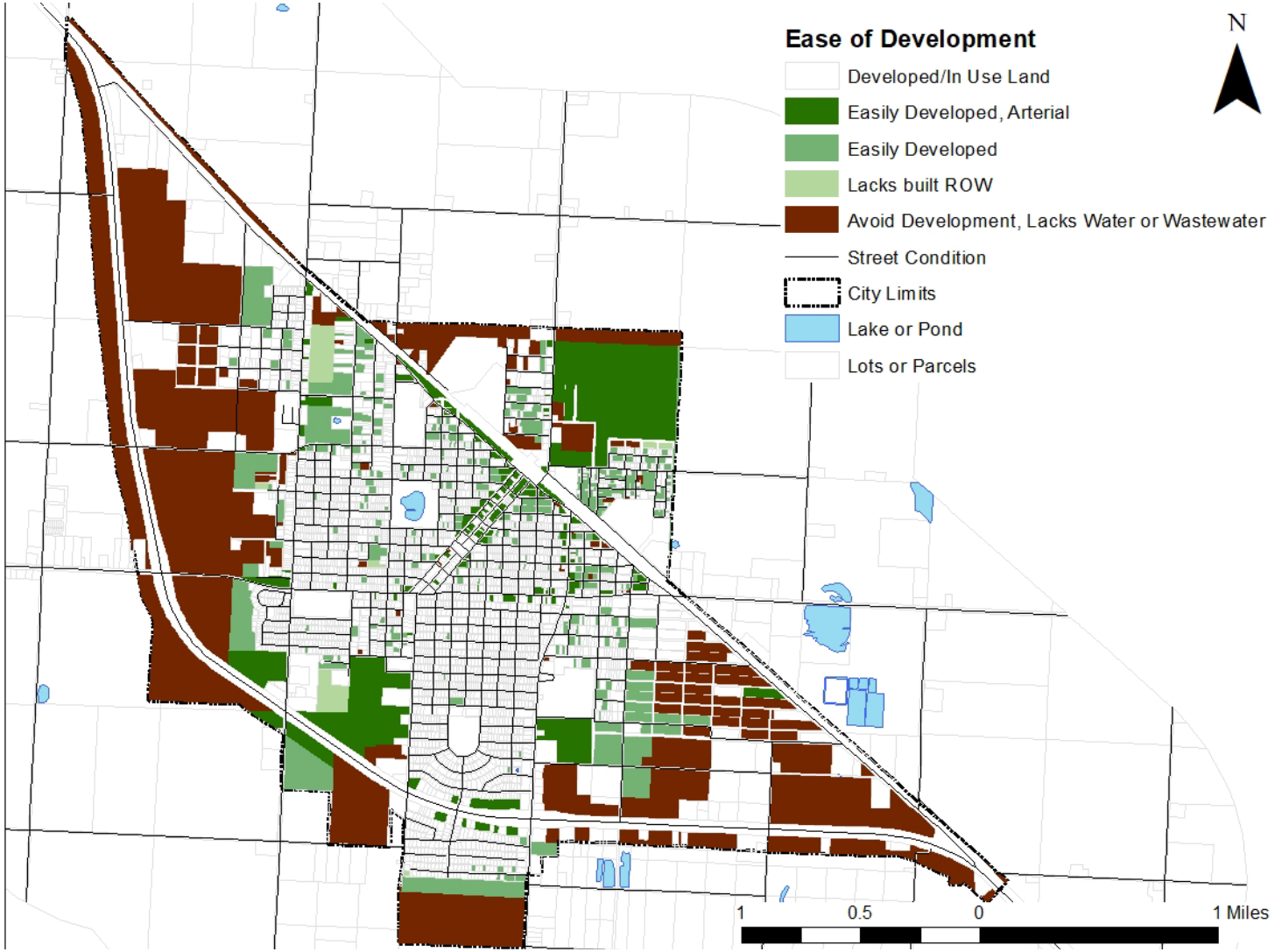


Figure 4D: Ease of Development

Ensure Orderly & Timely Expansion through Targeted Annexation

Targeted or directed annexation is another way to shape and manage growth. The purpose of annexing land is to bring urbanizing areas into a system where development can be regulated to ensure public health, safety, and welfare. Only parcels in certain locations and under certain conditions can be annexed. A city may only annex land that is contiguous with its corporate limits. The land must also be located within that city's extraterritorial jurisdiction; it cannot be located in another municipality's extraterritorial jurisdiction.

Cities are further limited in terms of how annexation may occur. The Texas Local Government Code establishes two general forms of annexation for municipalities: voluntary and unilateral (or involuntary). The following paragraphs provide information on these two options but should not be considered a substitute for legal counsel.

Voluntary or Consent Annexation: Voluntary annexation is based on a petition by residents of the area(s) to be annexed. Residents must file an affidavit with the mayor certifying that a vote by the majority of qualified voters in the area to be annexed approved the annexation. Once the affidavit has been certified, the city council can annex the area by ordinance. This type of annexation would likely require a city-initiated education campaign and door-to-door vote/petition of residents. Essential to the process would be demonstrating cost savings for residents associated with living within the corporate limits.

Unilateral or Consent Exempt Annexation: Unilateral annexation occurs when a city has the authority to involuntarily annex a parcel of land.

The 2019 Texas Legislative Session introduced several important changes to annexation law:

- Texas House Bill 347 (HB 347) effectively prohibited unilateral annexation in most cities and counties.
- Texas House Bill 4257 (HB 4257) establishes that disapproval of proposed annexation does not affect any existing legal obligation of the city proposing to annex to provide governmental services in the area.
- Texas Senate Bill (SB 1303) requires all cities to maintain a copy of the city boundaries and extraterritorial jurisdictional in a location that is easily accessible to the public, and make copies of said map available without charge, with additional requirements for Home Rule cities.
- Texas Senate Bills SB 1303 and SB 1204 establish additional requirements for cities planning to consent under remaining "consent exempt" provisions.

Appendix 4B further describes the main elements of this bill.

If a city fails or refuses to provide services or to cause services to be provided to an annexed area within the period specified by the service plan for that area or the period specified by written agreement or resolution, a majority of qualified voters of the area may petition the governing body to dis-annex the area. If the area is dis-annexed it may not be annexed again within 10 years after the date of annexation.

Annexation is not recommended without significant legal counselling. However, in July 2019 the Texas Municipal League updated its existing, detailed explanation of annexation procedures and requirements in Texas (included in the Digital Appendix).[43]

Annexation can be financially beneficial for cities when it brings the developed land on to the city's tax rolls. At the same time, annexation can introduce an additional financial burden because a city that annexes land must provide full municipal services, including water and sewer, within a designated period. Thus, at minimum, cities considering annexation should conduct a financial analysis to determine whether the provision and maintenance of water, sewer, street, drainage, and police and fire services would be adequately paid for by fees and taxes on those served over the long-term (i.e. including replacement of lines and pavement at 30-year intervals).Determining the relative costs and benefits of annexation is often complex and may involve factors that are not easily measurable in financial terms. As a result, many larger cities in Texas have developed policies or criteria to help guide decisions. For example, the City of Tyler, Texas uses the following prioritized criteria to guide annexation decisions:

- Amount of existing development and potential tax benefits
- Potential for imminent new development
- Potential connection to unique transportation locations like interstate highway interchanges and the airport
- Adverse consequences of not annexing the area
- Cost of extending infrastructure
- Potential for significant shaping of the development character

Due to the large amount of easily developed land already within the city limits (approximately 647 acres, see Figure 4H, page 4-27), annexation is not generally recommended for Littlefield. Nonetheless, the City can begin work now to ensure that Littlefield is prepared to make informed decisions about annexation when and where the opportunity arises in the future.

[43] www.tml.org/DocumentCenter/View/1233/Annexation-Paper-TML-July-2019PDF

Consider Alternative Development Types

Littlefield should also consider permitting alternative development types that support the community growth goals. Planned Unit Developments and Cluster Developments are two types of development that many municipalities are encouraging as alternatives to traditional suburban development.

Planned Unit Development (PUD): A PUD is a designed grouping of varied and compatible land uses, such as housing, recreation, commercial centers, and industrial parks, within one development or subdivision. It is used as part of conventional zoning or form-based code to allow for flexibility in land use planning. It can be an overlay district or a zoning category. Depending on the type of PUD, a project might go through the subdivision and zoning processes at the same time. PUDs are usually implemented to carry out master planning of a tract of a land and are intended to:

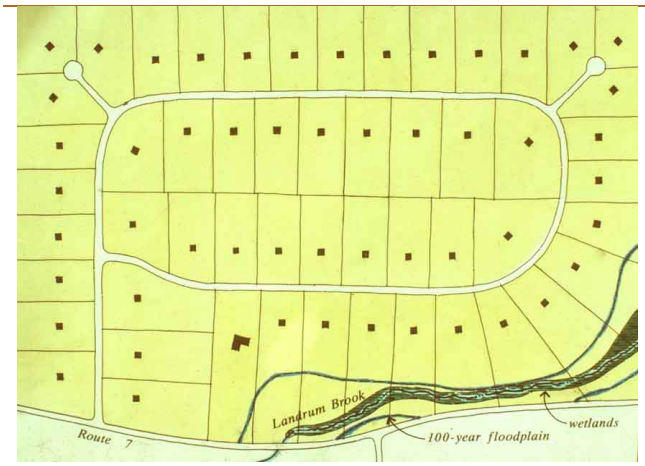
- Foster city or public/private partnered special projects;
- Allow for the development of mixed use, transit-oriented, or traditional neighborhoods with a variety of uses and housing types;
- Carry out specific goals of a comprehensive plan; and/or
- Preserve natural features, open space, and other topographical features of the land.

Standards within a PUD are usually negotiated between city authorities and staff and the developer on a case-by-case basis, and they require approval under adopted zoning and/or subdivision codes, including plan review and public hearings.

Cluster Development: Cluster developments, also known as conservation subdivisions, are residential subdivisions that have been designed to maximize contiguous open space to:

- Provide habitat for wildlife;
- Provide shared open space for recreation;
- Enhance community spirit;
- Reduce infrastructure maintenance costs (fewer miles of pavement and utility lines);
- Reduce flooding and road deterioration (less water enters the drainage system); and
- Preserve the city's rural character (by preserving open space).

As shown in *Figures 4E* and *4F (next page),* a piece of land subdivided as a cluster development allows for the same number of houses as a traditional development. While each individual lot is smaller in the cluster development, the remaining land becomes common open space that can be used for recreation, utilities such as storm water detention ponds, and for public gardens or agriculture.



130-acre site with 55, 2-acre home sites

Figure 4E: Standard Subdivision[44]

Same 130-acre site with 55, ¾ acre home sites; 81 acres preserved as common open space.

Figure 4F: Cluster Subdivision

The City of Pearland has adopted a provision for cluster developments and could be contacted for guidance on adopting an appropriate ordinance amendment and encouraging their construction. See City of Pearland website at www.cityofpearland.com and *Digital Appendix* for this study. The *Digital Appendix* also includes a fact sheet on cluster developments created by Ohio State University.

Several non-profit groups are working with cities, developers, and individuals throughout the country to promote energetic, livable cities through design and would be a good source for technical information on various design features, community education, and funding as relates to both alternative subdivision design (PUDs and cluster developments) and thoroughfare design elements. These include the USDA Office of Sustainable Development (www.usda.gov), the Congress for New Urbanism (www.cnu.org/), the Urban Land Institute (www.uli.org) and Smart Growth Online (www.smartgrowth.org/).

[44] Images retrieved from www.landchoices.org. Extensive information available on that site and from the University of Minnesota Extension office www.extension.umn.edu/

4.5 Implementation Plan

The Implementation Plan organizes the action items recommended to address each issue identified in the above sections into a timeline for completion. The actions are prioritized and organized by date.

Table 4A: Implementation Plan: 2020-2030

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources
	2020-2023	2024-2026	2027-2030			
Goal 4.1 *Support flood damage prevention*						
Pursue legal counseling assistance to help residents clarify property titles	X	X	X	City	N/A	N/A
Continue to enforce the Flood Hazard Prevention Ordinance	X	X	X	City	Staff	GEN
Post the FEMA Flood Insurance Rate Map (FIRM) in a visible location at City Hall and on a City website; update as needed	X			City	N/A	N/A
Start annual public outreach activity to encourage participation in NFIP		X	X	City	Staff	GEN; Local
Goal 4.2 *Enhance Littlefield's physical appearance and recognize community beautification efforts*						
Continue to enforce Substandard Structures Ordinance; remove at least (1) dilapidated, non-residential structure per year	X	X	X	City	cost per structure variable; US avg. = $18,000/structure	GEN; EDC
Host annual trash collection day; keep records of tons of trash collected	X	X	X	City	Variable	GEN; Local
Encourage local organizations and groups to start a mowing club to help low-income seniors maintain their yards.	X	X	X	City	Variable	Local
Start a community beautification recognition program (garden club, yard of the month, etc.); create record of winning properties (pictures	X			City	Variable	GEN; Local

and text) post at City Hall and include on a City website						
Adopt an updated Zoning Ordinance that supports high-quality development in Littlefield	X			City	$1,000 (legal)	GEN
Develop a library of reference materials available at City Hall (and on a City website) to support residents interested in developing temporary uses on vacant land in Littlefield		X		City	Staff	EDC; GEN
Goal 4.3 *Highlight and protect historical assets*						
Adopt a Historic Preservation Ordinance.			X	City	$2,000 (legal)	GEN
Familiarize residents with National Historic Register and State Historical Landmarks application eligibility and requirements; support interested applicants		X	X	City	Staff	GEN
Feature information about Littlefield's history and historical assets at City Hall and on a City/EDC website		X	X	City	N/A	N/A
Goal 4.4 *Infill development occurs instead of greenfield development, and as a result, the City spends less on infrastructure costs, the rural character of the area is preserved, housing remains affordable, and the downtown investment increases.*						
Post the FEMA Flood Insurance Rate Map (FIRM) in a visible location at City Hall and on a City website; update as needed	X	X	X	City	N/A	N/A
Refuse to extend city services to development within the city limit only.	X	X	X	City	N/A	N/A
Keep the future land use map and information on desired development types on display at City Hall and on a City website.	X	X	X	City	N/A	N/A

Adopt a public works construction manual.	X			City	$2,000 (legal)	GEN
Goal 4.5 *Attract economically stable development that complements existing development*						
Conduct cost-benefit analysis of new developments	X	X	X	City	Varies	GEN
Develop annexation criteria for potential future when annexation is beneficial	X			City	N/A	GEN
Adopt an updated Subdivision Ordinance	X			City	$1,000 (legal)	GEN
Adopt a Future Land Use Map	X			City	Staff	N/A
Establish a schedule for regular review of Future Land Use Map, Subdivision Ordinance, and Zoning Ordinance		X		City	Staff	N/A

Sources: **GEN** = Municipal funds; **CDBG-DR** = Community Development Block Grant Disaster Recovery program; **EDC** = Economic Development Corporation; **FEMA** = Federal Environmental Management Agency hazard mitigation/disaster recovery grants; **Local** = donations of time/money/goods from private citizens, charitable organizations, and local businesses; **Staff** = Staff time**;**

4.6 Appendix 4A: Land Use Methodology

GrantWorks Inc. conducted a land use survey in Littlefield in January 2020. Land use data was collected by driving by every property in the city and extraterritorial jurisdiction (ETJ), using aerial imagery available from the Texas Natural Resources Information System (www.tnris.org), and consulting with City staff. *Table 4A.1: Land Use Classifications* defines the land uses that were chosen to describe property in Littlefield.

Table 4A.1: Land Use Classifications

Classification	Examples
Agricultural / Undeveloped	Fields, farms, woodlands, open flood plain
Agricultural Processing	Cotton Gin; Grain/Seed Storage; Mills; Feed Lots; Slaughterhouses; Chick or Pig "Factories"; Livestock showing; Peanut Processing
Single-Family Residential	Single-family houses, mobile homes
Multifamily Residential	Duplexes, triplexes, apartments, condominiums
Mixed Use	Apartment over office or store, home occupation with store/office front
Commercial	Stores, mini-storage businesses, offices, including medical offices, and commercial parking lots/facilities
Industrial	Factories, salvage yards, mines, large warehouses, industrial yards and refineries
Institutional	Educational and religious institutions, and hospitals, jails, prisons, and nursing homes, including associated parking lots and recreation/park areas for the institutional use only
Recreational	Developed recreational or open space (public or private), not associated with other uses
Public	Government offices and facilities, water and wastewater facilities, public utilities
ROW	Highway and street right-of-way, railroad right of way
Utility	Private utility, including cell phone towers, electrical stations, transformer stations, etc.
Semi-Developed	Vacant subdivided lots of less than 10 acres in areas with or very near water, sewer, and street infrastructure

Table 4A.2: Detailed Land Use Tabulation

City Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	13	0.5%	0.3%	1.0
Airport	0	0.0%	0.0%	0.0
Cemetery	48	1.8%	1.2%	3.7
Commercial / Retail	130	5.0%	3.2%	10.2
Industrial	119	4.6%	2.9%	9.3
Institutional	95	3.7%	2.4%	7.4
Multifamily	21	0.8%	0.5%	1.6
Oil Field	0	0.0%	0.0%	0.0
Public	27	1.0%	0.7%	2.1
Recreational / Open Space	83	3.2%	2.1%	6.5
Right of Way	904	34.9%	22.5%	70.7
Semi-Developed	345	13.3%	8.6%	26.9
Single Family	793	30.6%	19.7%	62.0
Utility	15.6	0.6%	0.4%	1.2
Total for Developed Areas	*2,593*	*100.0%*	*64.5%*	*202.6*
Agriculture / Undeveloped	*1,429*	-	35.5%	111.7
Water	*0*	-	0.0%	0.0
Citywide Total	**4,022**		**100.0%**	**314.2**

ETJ Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	30	3.2%	0.3%	10.7
Airport	0	0.0%	0.0%	0.0
Cemetery	0	0.0%	0.0%	0.0
Commercial / Retail	55	5.8%	0.5%	19.7
Industrial	100	10.5%	0.9%	35.6
Institutional	28	3.0%	0.3%	10.0
Multifamily	0	0.0%	0.0%	0.0
Oil Field	1	0.1%	0.0%	0.2
Public	0	0.0%	0.0%	0.0
Recreational / Open Space	0	0.0%	0.0%	0.0
Right of Way	443	46.8%	4.2%	158.3
Semi-Developed	17	1.7%	0.2%	5.9
Single Family	267	28.2%	2.5%	95.2
Utility	7	0.8%	0.1%	2.6
Total for Developed Areas	*947*	*100.0%*	*8.9%*	*338.1*
Agriculture / Undeveloped	*9,676*	-	91.0%	3455.8
Water	*0*	-	0.0%	0.0
ETJ Total	**10,623**	**-**	**100.0%**	**3793.9**

Regional Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	43	1.2%	0.3%	2.7
Airport	0	0.0%	0.0%	0.0
Cemetery	48	1.3%	2.0%	3.1
Commercial / Retail	185	5.2%	1.3%	11.9
Industrial	218	6.2%	1.5%	14.0
Institutional	123	3.5%	0.8%	7.9
Multifamily	21	0.6%	0.1%	1.3
Oil Field	1	0.0%	0.0%	0.0
Public	27	0.8%	0.2%	1.7
Recreational / Open Space	83	2.3%	0.6%	5.3
Right of Way	1,348	38.1%	9.2%	86.4
Semi-Developed	361	10.2%	2.5%	23.2
Single Family	1,060	29.9%	7.2%	67.9
Utility	23	0.6%	0.2%	1.5
Total for Developed Areas	***3,540***	***100.0%***	***24.2%***	***226.9***
Agriculture / Undeveloped	*11,105*	-	75.8%	711.9
Water	0	-	0.0%	0.0
Regional Total	**14,645**	**-**	**100.0%**	**938.8**

Source: GrantWorks, Inc. Field Survey, 2020

Note: Values may be rounded to next whole number.

4.7 Appendix 4B: Summary of Recent Annexation Bills

HB 347

1. Eliminates the distinction between Tier 1 and Tier 2 cities and counties created by S.B. 6;
2. Eliminates existing annexation authority that applied to Tier 1 cities and makes most annexations subject to the three consent annexation procedures that allow for annexation:
    a. On request of each owner of the land;
    b. Of an area with a population of less than 200 by petition of voters and, if required, owners in the area; and
    c. Of an area with a population of at least 200 by election of voters and, if required, petition of landowners; and
3. Authorizes certain narrowly-defined types of annexation (e.g., city-owned airports, navigable streams, strategic partnership areas, industrial district areas, etc.) to continue using a service plan, notice, and hearing annexation procedure.

H.B. 4257

Applies only to Subchapter C-4 (election-approved annexations).

1. The disapproval of the proposed annexation of an area does not affect any existing legal obligation of the city proposing the annexation to continue to provide governmental services in the area, including water or wastewater services, regardless of whether the municipality holds a certificate of convenience and necessity to serve the area; and
2. A city that makes a wholesale sale of water to a special district may not charge rates for the water that are higher than rates charged in other similarly situated areas solely because the district is wholly or partly located in an area that disapproved of a proposed annexation.

SB 1024

Applies only to "consent exempt" annexations.

1. A city with a population of 350,000 or less shall provide access to services provided to an annexed area under a service plan that is identical or substantially similar to access to those services in the city;
2. A person residing in an annexed area subject to a service plan may apply for a writ of mandamus against a city that fails to provide access to services in accordance with (1);

3. In the action for the writ:
    a. The court may order the parties to participate in mediation;
    b. The city has the burden of proving that it complied with (1);
    c. The person may provide evidence that the costs for the person to access the services are disproportionate to the costs incurred by a municipal resident to access those services; and
    d. If the person prevails, the city shall disannex the property that is the subject of the suit within a reasonable period specified by the court or comply with (1); and (e) the 12 court shall award the person's attorney's fees and costs incurred in bringing the action for the writ; and
4. A city's governmental immunity to suit and from liability is waived and abolished to the extent of liability created under the bill.

SB 1303

1. Every city must maintain a copy of the map of city's boundaries and extraterritorial jurisdiction in a location that is easily accessible to the public, including:
    a. The city secretary's office and the city engineer's office, if the city has an engineer; and
    b. If the city maintains a website, on the city's website;
2. A city shall make a copy of the map under (1), above, available without charge;
3. Not later than January 1, 2020, a home rule city shall:
    a. Create, or contract for the creation of, and make publicly available a digital map that must be made available without charge and in a format widely used by common geographic information system software;
    b. If it maintains a website, make the digital map available on that website; and
    c. If it does not have common geographic information system software, make the digital map available in any other widely used electronic format; and
4. If a city plans to annex under the "consent exempt" provisions that remain in the Municipal Annexation Act after the passage of H.B. 347 (discussed below), a home rule city must:
    a. Provide notice to any area that would be newly included in the city's ETJ by the expansion of the city's ETJ resulting from the proposed annexation; and

b. Include in the notice for each hearing a statement that the completed annexation of the area will expand the ETJ, a description of the area that would be newly included in the ETJ, a statement of the purpose of ETJ designation as provided by state law, and a brief description of each municipal ordinance that would be applicable, as authorized by state law relating to subdivision ordinances, in the area that would be newly included in the ETJ; and

c. Before the city may institute annexation proceedings, create, or contract for the creation of, and make publicly available, without charge and in a widely used electronic format, a digital map that identifies the area proposed for annexation and any area that would be newly included in the ETJ as a result of the proposed annexation. (Note: Many of the remaining provisions of the bill modified sections in Chapter 43 of the Local Government Code, relating to municipal annexation, which were eliminated by H.B. 347.)

5 WATER SUPPLY & DISTRIBUTION STUDY

The approximate date of the original construction of the City of Littlefield's water distribution system is sometime in the 1960's. Original line material consists of cast iron and asbestos cement. Field work inventory indicates that less than 6% of the system is original. Previous water system maps were generated by the City's engineering firm Parkhill, Smith and Cooper.

There have been at least two (2) projects since 2000 using funds from Texas Department of Rural Affairs Grant ORCA, now administered by the Texas Department of Agriculture, TDA).

1. 2019 - Contractor reconstructed an elevated water storage tank on Prairie Street and a ground water storage tank on North Side Drive, conducted waterworks and SCADA improvements at a plant on Division Street, and added six (6) new taps and valves along the city's ten-inch (10") supply main using 120 LF of ten-inch (10") main and 120 LF of six-inch (6") main on Prairie and Division streets.
2. 2011 - Contractor installed one (1) SCADA system, one (1) turbidity filter system and media, approximately two hundred linear feet (200 LF) of six-inch (6") water line, casing, hydrants, service reconnections, pavement repair, and all associated appurtenances.

This system is serving groundwater to 2269 connections with an estimated population of 6,406. The distribution system consists of one plant serving one pressure plane.

The following sections provide an inventory of the major components of the Littlefield's water system as of the date of this comprehensive plan. The plan identifies areas of operation in which system improvements should be implemented to improve the safety, efficiency, and economy of the treatment and distribution operations. The plan will conclude by providing a prioritized summary of the needed improvements and their estimated costs.

5.1 Water System Inventory

Table 5A and 5B show the inventory and locations of the various components associated with the water treatment, storage, and distribution system.

Table 5A: Major Water System Components

Component	Location	Capacity or Size
Ground Storage Tank	US HWY 181 S Frontage Road	400,000 gallons
Elevated Storage Tank	S. Gregory Street	100,000 gallons

Table 5B: Water Distribution System Components

Component	Linear Feet (LF)	Component	# Of Units
2" Line	87,561	Elevated Storage Tank	2
4" Line	44,851	Ground Storage Tank	2
6" Line	148,305	Fire Hydrant	182
8" Line	39,113	Gate Valve	464
10" Line	8,898	Meter	2
12" Line	25,564	-	-
14" Line	16,312	Service connections	2269 (TCEQ)
24" Line	4,104	-	-

Table 5C shows the locations and capacity of generators used to support the Littlefield water system.

Table 5C: Generator Locations & Capacity

Generator	Location	Capacity or Size
Booster Pump Station	Houston Ave	Unknown

5.2 Water System Analysis

Standards & Criteria

The Texas Commission of Environmental Quality (TCEQ), the American Water Works Association (AWWA), and the U.S. Environmental Protection Agency (EPA) have established regulations and standards for the safe treatment, storage, and distribution of potable water to the public. All Public Water Supply (PWS) systems operating within the State of Texas must adhere to these regulations and standards.

Table 5D lists the TCEQ-adopted engineering standards that apply to the minimum production and supply capacities for public water systems and, according to copies of recent routine compliance reports from the TCEQ, capacities for the Littlefield Water Supply System.

Table 5D: Minimum Water System Standards

Facility or Measure	TCEQ / Engineering Standard	City of Littlefield
Well Production, Surface Water Production, or Purchase Capacity (GPM/Connection)	0.6	1 **[3]**
Total Storage – TCEQ (gal/connection)	200	881 **[3]**
Elevated Storage (gal/connection)	100	253 **[4]**
Service Pump (GPM/Connection) **[4]**	0.6	2.64
Normal Operating Pressure (psi)	35	+/-55
"C" Certified Operators **[1]**	2	2
Minimum Main Size **[2]**	2"	2"

Sources: TCEQ and Texas State Data Center Population Estimates for 2020 and plan fieldwork

[1] Depends on system type and size, according to TCEQ 30 TAC 290, Subchapter D: Rules and Regulations for Public Water Systems, Section 290.46

[2] According to TCEQ 30 TAC 290, Subchapter D: Rules and Regulations for Public Water Systems, no new waterline under two inches in diameter will be allowed to be installed in a public water system distribution system. These minimum line sizes do not apply to individual customer service lines.

[3] Calculated using TCEQ Water Utility Database information indicating a total of 2269 connections to the system and using a production rate 2269 gallons per minute as reported in the CCI Report # 1612581 – 10/23/2019

[4] If Elevated Storage Capacity is > 200 Gallons/Connection, Service Pump Capacity is 0.6 GPM/Connection. If Elevated Storage Capacity is < 200 Gallons/Connection, Service Pump Capacity is 2.0 GPM/Connection. The minimum Elevated Storage Capacity requirement is always 100 Gallons/Connection.

Table 5C indicates that the City of Littlefield is operating in accordance with the established standards for minimum production and supply capacities in all categories.

Water Supply

The water supply source for the City of Littlefield is groundwater drawn from the Ogallala Aquafer. The City owns and operates eight (8) wells at the Hawsell Ranch well field twelve (12) miles north of town. These wells are capable of a production capacity of approximately 2225 gallons per minute (GPM), or 3.204 million gallons per day (MGD). The wells pump into a 0.50 MG ground storage tank located at the intersection of County Roads 192 and County Road 217, approximately ten (10) miles north of town. Disinfection is provided via gaseous chlorination ahead of the tank. Water then gravity flows to a 1.50 MG ground storage tank located at the pump station. Four (4) service pumps with a combined capacity of 6,000 GPM take suction from the tank and pump to the distribution system. Booster disinfection is provided via gaseous chlorination ahead of the storage tank. A 0.50 MG elevated storage tank near the hospital and a 0.075 MG elevated storage tank near City Hall float on the system. The City's water supply is rated as superior by the TCEQ Water System Data Sheet.

Operating staff describe the water quality as good.

Water Storage

For water systems with greater than 250 connections, The Texas Administrative Code, Title 30, Chapter 290, Subchapter D, mandate that the system have storage capacity for the total number of connections served equal to or greater than: a) 200 gallons of total storage per connection; and, b) 100 gallons of elevated storage per connection or a pressure tank capacity of 20 gallons per connection. According to the TCEQ Water Utility Database the City has 2269 total connections.

The City of Littlefield meets the established minimum standards for water storage capacity with 881 gallons per connection of total storage and 253 gallons per connection of elevated storage.

Water Distribution System

Water system pipes in the city of Littlefield range in diameter from 2"-to-24". The system is comprised of approximately 374,708 Linear Feet (LF) of distribution lines. The materials contained in the original lines are primarily Cast Iron and Asbestos Cement. The newer replacement lines are primarily PVC.

Two-inch (2") diameter lines represent roughly 23.4% (87,561 LF) of the water distribution system in city of Littlefield. Lines of 3" and 4" diameter comprise about 12% (44,851 LF) of its water system. Undersized water lines limit both volume and pressure within the distribution system. The Texas Administrative Code (TAC), Subchapter D, Section 290.44(c) prohibits the installation of new water lines smaller than 2". The standards permit more than ten (10) connections on existing water mains only when a licensed professional engineer deems it necessary. There are many segments of 2" pipe in the distribution system. Some are located at the periphery of the system where the intensity of development is low, but a significant number are located within established residential neighborhoods and have numerous single-family connections.

The City does not have an established program for routine line replacement. The City does not dedicate specific revenues such as a water utility fund for annual repair and maintenance. The City replaces lines periodically when required by events such as line breakage, valve malfunctions, or other related system failures.

System Water Pressure

The City's water system operates at a normal working pressure of approximately 55 pounds per square inch (psi). This is sufficient to operate the system effectively.

Future Development Considerations

The city of Littlefield is projected to experience approximately a 2.5% decline in population during this planning period. Growth is influenced by adjacent city centers and industrial developments in the area.

The Texas Administrative Code (TAC) Title 30, Chapter 291 states that when a water utility that requires a Certificate of Convenience and Necessity (CCN) reaches 85% utilization of the minimum capacity requirements for the system it must submit to the TCEQ Director a planning report indicating how the utility plans to expand its capacity to meet future demands. According to the information contained in *Tables 5D (page 5-3) and 5E*, the City's system will support the number of new connections before reaching the 85% threshold as shown below:

Table 5E: Capacity for New Connections

Measure	Required	Provided [1]	# New Connections
Production Capacity	0.6	1.00	945
Total Storage	200	881	6231
Elevated Storage	100	253	2619
Service Pump Capacity	0.6	2.64	6231

[1] Based on current connection count of 2269 active connections

As shown in *Table 5D*, the most restrictive elements in the City's water system regarding the capacity for future growth is the maximum purchase capacity. With a -2.5% growth rate over the next ten (10) years, the City will have approximately 57 fewer connections.

To stay below the 85% threshold, the City would need the capacity to purchase enough water daily to provide the future connection count of 2212 connections with 0.6 Gallons Per Minute (GPM) per connection or 1,327 GPM, plus enough surplus so that the 1327 GPM represented less than 85% of the purchase capacity. In other words, the City will need to have a maximum purchase capacity of 1,526 GPM to comply with the 0.6 GPM standard and still be below the 85% threshold that would trigger planning requirements for expansion. The City currently produces 3.204 MGD (2,269 GPM), so in the future with less connections it will still meet standards and the 85% rule because it will only need 2.20 MGD (1,526 GPM). The City of Littlefield exceeds future requirements.

Fire Protection Considerations

The primary consideration for fire protection issues is whether the system is capable of delivering sufficient flow volume at sufficient pressure to effectively respond to emergencies.

The standards for adequate fire protection are established in the International Fire Code (IFC). The code recommends minimum flow volume, flow pressure, hydrant spacing, and construction standards. Examples of the IFC recommendations are as follows:

1. Every building in a community should be located no more than 500' from a fire hydrant;
2. All fire hydrants should be installed on water mains no smaller than 6" in diameter;
3. Each hydrant should provide a minimum flow volume of 1,500 GPM; and
4. The minimum flow volume should be delivered at a minimum residual pressure of 20 psi.

Fire departments perform individual hydrant flow tests to determine if adequate pressure and flow rates are available at specified hydrant locations. Testing every hydrant is usually beyond the capabilities of most small communities but field-testing at selected hydrants can give the City some preliminary information on water system firefighting capabilities. When any major new subdivision construction is proposed, a computer-aided water system model of the existing conditions and the effects of the proposed development should be prepared by the consulting engineer. This model will assist the City and its representatives to evaluate the existing system's capacity to provide adequate flow volume at sufficient pressure to effectively respond to emergencies.

There are numerous homes within the city of Littlefield that are not within 500' feet of a hydrant connected to a 6" water main. There are a number of homes within the City that are located near to 4" or smaller lines. A 4" line will provide adequate flow volume and pressure for firefighting purposes under ideal conditions, but the configuration is usually not effective. A smaller line cannot provide adequate flow and pressure for firefighting purposes under any conditions. This plan will recommend several line replacement projects that will replace aging, deteriorating, and/or undersized lines. All these line replacement projects will include lines of sufficient size to provide adequate flow and pressure for firefighting purposes. These projects will also include fire hydrants at the appropriate locations.

System Operations

TCEQ conducted a Comprehensive Compliance Investigation (CCI) in October 23, 2019. TCEQ records indicate that any minor violations have been resolved. The last CCI indicated that the system was operating at an average pressure of 55 psi with a residual chlorine level of 1.47 milligrams per liter (mg/L).

Water System Revenues

The city of Littlefield has adopted a rate schedule as follows:

Table 5F: Minimum Monthly Water Fee

User	First 2,000 Gallons	Additional 1,000 ea.
Residential	$35.00	$3.25
Residential (Outside Limits)	$45.00	$3.50
Sewer	$28.00	$0.50
Sewer (Outside Limits)	$42.00	$0.75

According to the information provided by City staff, the City's revenues and expenses as related to water and sewer services are as follows:

Table 5G: Water/Sewer Revenues & Expenses

Water & Capital Assets	$3,173,000
Water & Operating Revenues	$2,943,200
Water & Operating Expenses	$1,236,111
Estimated Water Pumped	315,642,000

Water Losses

Unmetered water usage and/or unaccounted-for usage affects the cost to provide water services. City staff indicates that there are no unmetered or unbilled customers. Available data on the actual number of gallons purchased compared with actual gallons billed indicates an approximate water loss of 9.6% annually. A typical value of acceptable water loss ranges from 6% - 11%. Major sources of water loss include:

- Line leakage,
- Line breaks,
- Aging or faulty meters,
- Inaccurate or incomplete record keeping,
- Water theft and unauthorized use.

The City is planning to replace aging lines and meters as funding becomes available.

Water Interconnections

The City of Littlefield maintains an emergency interconnection with the City of Lubbock, PWS ID 1520002. The maximum purchase rate is 45 MG per year (MGY), with a daily maximum of 1.5 MD per day (MGD) at a flow rate not to exceed 1000 GPM. Littlefield wholesales treated water under direct pressure to Sunnydale Water Supply Corporation (WSC), PWS ID 1400027 at a rate of 24 (MGY) with a daily maximum of 0.15 MGD.

Regional & Drought Planning

In 1999, the 75th Texas Legislature passed Senate Bill 1. This legislation requires that all entities providing public water supplies must develop drought contingency plans. These plans must be implemented during periods of severe water shortages and drought. A drought contingency plan often combines several strategies designed to achieve long-term advancements in the efficient use of water.

The plans require the development of specific response measures aimed at avoiding, minimizing, or mitigating the risks and impacts of drought-related water shortages and other emergencies. The plan adopted by a water provider should ensure the provider's capability of providing adequate water supplies under drought conditions.

The City of Littlefield has adopted a Drought Contingency Plan and it is currently under revision. The plan includes both a Drought Contingency Plan and an Emergency Water Demand Management Plan.

The Emergency Water Demand Management Plan contains five (5) stages of water demand that provides detailed information on the process that should occur in extended periods of low rainfall.

The Region O 2016 Regional Water Plan projects that the water supplies for the city of Littlefield will remain steady for the duration of this planning period.

As Littlefield grows by the estimated amount described previously, the City may attempt to develop some water conservation methods as part of the development standards. These standards may include the following:

1. Require recirculation equipment for all new swimming pool installations and insulation of hot water piping for all new construction;
2. Require builders to utilize low demand fixtures and appliances;
3. Implement a conservation water rate structure in which the rates increase as the water consumption increases;
4. Implement testing of all meters;
5. Require sub-dividers and builders to include low water demand landscaping items in their development plans; and
6. Reduce unaccounted for water by 5% per year for the first two (2) years and 2% per year for the remainder of this planning period (2020-2030).

Texas water law requires that revised and updated Regional and State Water Plans be prepared every five (5) years. The 2016 Plans may be found at the TWDB web site.

5.3 Water Supply & Distribution System Improvement Projects

The Littlefield Comprehensive Plan places a high priority on a continuing program of replacing old and undersized system lines and aging, broken valves to help ensure that the City and the surrounding area continue to meet local water supply demand.

Prioritized Problems

City leaders, residents, operating staff, and consulting engineers have identified the following areas of concern with regards to the water system:

1. A need to rehab the interior of the Sandhills ground storage tank and the Wildcat Elevated storage tank;
2. A need to replace the twenty-four (24") transmission line;

3. A need to replace aging, deteriorated, and undersized lines throughout the system that are susceptible to leaks and breaks;
4. A need to make the water system more resilient against disruptive events

Goals & Objectives for the Water System

Goal 1: A local water system that operates efficiently and cost-effectively.

Objective 1.1: By 2030, reduce operating costs.

Policy 1.1.1: Promote and exercise preventative maintenance by inspecting all facilities once per year.

Policy 1.1.2: Maintain a monitoring plan and report on a timely basis.

Objective 1.2: Reduce system water loss by 40% by 2030.

Policy 1.2.1: Implement methods to classify meters and replace meters that are damaged or leaking.

Policy 1.2.2: Replace deteriorated lines throughout system, with priority given to those made of obsolete materials.

Policy 1.2.3: By 2020, enact procedures to document water used but not billed.

Objective 1.3: The City is financially able to maintain and improve the system to improve quality of life for residents and enable growth.

Policy 1.3.1: By 2022, evaluate rate structure and usage characteristics to determine if a rate increase would be feasible and enable the Town to complete more line replacement projects.

Policy 1.3.2: Beginning in 2020 and continuing throughout the planning period, regularly apply for available grants through the Texas Department of Agriculture to fund replacement of aging, deteriorated water lines.

Goal 2: City and area residents have clean, safe, potable water.

Objective 2.1: Over the planning period, deteriorated lines and equipment are replaced and/or improved.

Policy 2.1.1: Continue maintaining and inspecting the existing system facilities according to a regular schedule and providing repairs as the need arises.

Policy 2.1.2: In phases throughout the planning period, replace deteriorated and

undersized lines with PVC lines four inches (4") or larger in diameter.

Policy 2.1.3: In phases throughout the planning period, replace defective meters.

Goal 3: Customers have access to a sustainable water supply that provides sufficient pressure and fire protection, particularly in times of drought.

Objective 3.1: By 2030, upgrade the system to ensure adequate pressure and coverage for fire safety.

Policy 3.1.1: Provide additional storage capacity.

Policy 3.1.2: Install fire hydrants and upgrade lines in areas with inadequate fire protection coverage.

Goal 4: The City's water system maintains acceptable levels of functionality during and after disruptive events, and efficiently recovers full functionality after a hazard event

Objective 4.1: Minimize disruption of water system during adverse weather events

Policy 4.1.1: Install backup generators for all critical water system components including treatment plants, pump stations, etc.

Policy 4.1.2: Harden storage tanks against flood damage and high winds, etc.; elevate storage tanks out of the floodplain

Policy 4.1.3: Institute protocol to harden critical water system components prior to adverse weather

Policy 4.1.4: Incorporate targeted projects to improve system resilience, such as planned retrofits and replacements, in capital improvements priorities

Objective 4.2: Proactively support recovery of full functionality after a hazard event

Policy 4.2.1: Incorporate water system resilience into community goals and plans

Policy 4.2.2: Coordinate with government emergency managers and local utility providers to develop service restoration priorities and procedure(s)

Policy 4.2.3: Develop and evaluate water system's ability to meet performance goals during a hazard event; identify and plan to address performance gaps.

Proposed System Improvements – Planning Period 2020-2030

The following section describes a series of proposed improvements to the existing water treatment, storage, and distribution system. The improvement projects are presented as phased improvements that are suggested for implementation over the 10-year planning period encompassed by this comprehensive plan.

The projects are listed in a sequence that represents just one of several possible approaches, all of which should lead to the achievement of the long-term goals adopted by the City for the operation and maintenance of the water treatment, storage and distribution system.

The sequence shown in this plan is a logical, step-by-step process intended to increase the safety, efficiency, and economy of the water system operations. The sequence is intended only as a suggested program of phased improvements, and alternative sequences are recommended if funding availability requires significant changes.

Table 5F (Section 5.4) contains the estimated projected costs for each phase of the improvements program. These costs are based on current costs of record for similar projects in south Texas. Every effort has been made to include appropriate cost factors such as inflation, variations in the market, and advances in water treatment, storage, and distribution technology. These cost estimates are predicated on several assumptions related to the scope of each phase.

These assumptions are as follows:

- The choice of specific lines to be replaced within each area – The cost estimates assume that all lines less than 6" in diameter will be replaced with 6"-to-8" C-900 DR 18 PVC pipe and fire hydrants at the appropriate spacing. The priority is placed on replacing the smaller lines, but each individual project evaluation may identify segments of larger lines that need replacement. In this event, the funding should be applied to replacing the lines with the greatest need for repair, regardless of size;

- Fire hydrants – Fire hydrants are included in the estimates. However, when replacing lines of 6" and larger, the estimates assume that approximately 50% of the existing fire hydrants can be re-used;

- Service re-connects, valves, and appurtenances – Service re-connects, valves, and appurtenances are estimated at 12%-to-15% of the line costs, depending on the housing density and complexity of the proposed improvements;

- Street & pavement repair – Streets, driveways, and pavement repair is estimated at 5%-to-10% of the line costs, depending on the housing density and the presence of curb & gutter in the area of interest;

- Engineering & Surveying – Engineering and surveying services are estimated at 15% of the estimated construction costs of the combined elements described above.

The suggested phases for the system improvements are as follows:

- ✓ **Phase 1 (2020-2022):** Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.
- ✓ **Phase 2 (2022-2025):** Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.
- ✓ **Phase 3 (2025-2027):** Obtain funding to replace old asbestos cement (AC) eight-inch (8") lines in the system. Project will include replacement of approximately 5,432 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.
- ✓ **Phase 4 (2020-2030):** Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.

5.4 Implementation Plan

The City strives to provide a safe, efficient, and uninterrupted water supply while meeting all applicable water system standards. These goals can be accomplished by implementing the improvements described above over the planning period of 2020 through 2030. The estimated costs for the proposed improvements to the water system are as follows:

Table 5H: Water System Improvement Plan Projects: 2020-2030

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate*	Funding Sources
	2020-2024	2024-2027	2027-2030			
Goal 5.1 *Replace and/or improve deteriorated lines and equipment so town and area residents have access to clean, safe, and potable water.*						
Phase 1: Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.	X			City	$300,000	EDA; TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
Phase 2: Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.		X		City	$496,800	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
Phase 3: Obtain funding to replace old asbestos cement (AC) eight-inch (8") lines in the system. Project will include replacement of approximately 5,432 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.			X	City	$323,267	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
Phase 4: Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5	X	X	X	City	$6,436,385	TxCDBG; GEN (General Obligation Bond); USDA;

MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.						TWDB loan; City Utility Fund (Rev Bond)
Goal 5.2 *Ensure local water system operates efficiently, cost-effectively, and in compliance with TCEQ requirements*						
Exercise preventative maintenance by inspecting all facilities once per year	X	X	X	City	Variable	GEN; Utility
Seek funding to address TCEQ issues	X	X	X	City	N/A	N/A
Evaluate rate structure and usage characteristics to determine if rate increase would be feasible and enable the system operator to complete more line replacement projects	X	X	X	City	N/A	N/A
Regularly apply for TxCDBG grants to fund replacement of aging, deteriorated water lines	X	X	X	City	N/A	N/A
Goal 5.3 *Ensure customers have access to a sustainable water supply that provides sufficient pressure and fire protection, particularly in times of drought and disaster*						
Replace as many lines 2" or less in diameter, giving priority to those with more than ten (10) connections	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility
Replace as many lines 4" in diameter that connect to at least one (1) fire hydrant	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility
Install fire hydrants in areas with inadequate fire protection coverage	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility
Continue City's participation and mention in the Region O Regional Water Plan	X	X	X	City	$1,000 annually	GEN; Utility
Install generators and fuel tanks with adequate capacity to power all water plants and well sites	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility
Harden storage tanks in areas prone to flooding and windstorm damage	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility
Increase system and source reliability through additional system interconnections with adjacent systems and/or new water sources to ensure adequate firm water supply.	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility

Develop and institute pre-adverse event procedures to harden and prepare the system for disaster	X	X	X	City	Variable	TxCDBG, GEN; USDA; TWDB; Utility

Sources: **EDA** = US Economic Development Administration grant program; **GEN =** Municipal funds and General Obligation Bonds; **TxCDBG** = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); **TWDB** = Texas Water Development Board grants and loans; **USDA =** US Department of Agriculture Rural Development Water and Wastewater Infrastructure loans and grants; **UTILITY** = City utility fund/revenue

Notes on Cost Estimates: GrantWorks Engineering Staff provided cost estimate

6 WASTEWATER SUPPLY & DISTRIBUTION STUDY

Most of the City of Littlefield's existing sewage collection and treatment system was constructed in the 1990's. The current wastewater treatment plant (WWTP) was commissioned in 2001 and is a pond system. The City's engineering firm, Parkhill Smith and Cooper, completed the most recent system maps.

There have been at least two (2) system improvement projects implemented since 1995 using funds from Texas Department of Rural Affairs Grant Programs (TDRA – formerly ORCA, now administered by the Texas Department of Agriculture, TDA). These projects are described briefly as follows:

1. 2011 – Contractor replaced deteriorated and surcharged clay sewer lateral by installing 3,800 linear feet of eight-inch (8") and ten-inch (10") PVC sewer main, fifteen (15) manholes, eighty (80) service connections, and related pavement repair. Construction took place in the 3rd Street Alley from North Wicker Avenue to XIT Drive and from XIT Drive to Delano Avenue.
2. 2019 – Contractor installed six (6) aerators, made improvements to six (6) SCADA systems, electrical improvements, and all associated appurtenances. Construction took place at the WWTP located at the intersection of FM 54 and County Road 217, lift station located at Highway 84 and South Brownlee Street, lift station located at West 6th Street and South Ripley Avenue, lift station located on South Sunset Avenue, and the main lift station located at the WWTP.

The most recent Comprehensive Compliance Investigation (CCI) report of November 4, 2019 indicates that the City has received several minor alleged violations for sludge provisions, monitoring and reporting, effluent limitations, and operational requirements. Staff indicate that these allegations are being resolved, or have been resolved, as of the time of this plan.

6.1 Wastewater Collection System Inventory

The quantity of the collection lines and lift stations associated with the collection system operated by the City of Littlefield are shown by size, total length, and percentage of the system as a whole in *Table 6A.*

Table 6A: Major Sewer Collection System Components

Sewer Lines			
	Diameter (in.)	Length (ft.)	Percent
Force Mains			
	4″	1,651	0.63%
	6″	11,735	4.47%
	8"	2,127	0.81%
	10″	8,657	3.30%
Subtotal – Force Main		24,169	9.21%
	Diameter (in.)	Length (ft.)	Percent
Gravity Feed			
	6"	161,107	61.36%
	8"	38,520	14.67%
	10"	29,170	11.11%
	12"	9,574	3.65%
Subtotal – Gravity Feed		46,6372	90.79%
Total Sewer Lines		**61,650**	**100%**

Table 6B: Lift Station Inventory

Lift Stations			
Name	**Pump Capacity (GPM)**	**Year Built**	**Condition**
South Sunset Ave	320 GPM	1997	Fair
East Highway 84	1097 GPM	2005	Good
South Wicker Street	Unknown	UNK	Fair
Prison LS	Unknown	UNK	Fair
Barton Ave/West 1st Street	320 GPM	1997	Fair
Laguna	500 GPM	1997	Fair
Dunbar	320 GPM	1997	Fair
Main LS/WWTP	1900 GPM	2000	Fair

Table 6C show the location and capacity of generators used to support the Littlefield wastewater system.

Table 6C: Generator Locations & Capacity

Generator	Location	Capacity or Size
Permanent	Main LS	UNK
Portable	WWTP	UNK

The City of Littlefield either uses a five-inch (5") gasoline powered mobile pump to by-pass the lift stations to the next manhole or portable generators to power the lift stations. The City is a member of Texas Water/Wastewater Agency Response Network (TxWARN). Additional portable generators are available through this organization.

6.2 Wastewater System Analysis

The wastewater system analysis evaluates the system components described in the previous sections with respect to the applicable standards and criteria as described in the previous sections. This analysis will consider the following elements:

- Standards & Criteria;
- The wastewater treatment facilities;
- Industrial waste and special treatment facilities;
- Collection system conditions;
- Unserved/underserved areas;
- Manhole conditions;
- The characteristics of the soil and terrain affecting the collection facilities;
- Lift station conditions;
- Infiltration/inflow problems; and
- Operational procedures.

Standards & Criteria

The U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) outline the standards or criteria applicable to the design and operation of municipal wastewater systems. The standards address influent quality, collection, treatment, and effluent quality. The TCEQ guidelines were originally set forth in Title 30 Part 1 Chapter 317 of the Texas Administrative Code *"Design Criteria for Sewerage Systems"*.

The State of Texas has revised the standards and replaced Chapter 317 with Chapter 217, *"Design Criteria for Domestic Wastewater Systems",* which outlines system design and operations in all respects. EPA requirements mainly relate to discharge limitations and industrial wastewater treatment.

For wastewater treatment facilities, the TCEQ standards provide detailed information concerning design flows and design loadings expected at the treatment facility for the average municipal wastewater effluent stream. The authorized effluent discharge quality limitations are established in the individual municipality or operator's Permit to Discharge Waste and will vary based on local conditions. Typically, effluent strength entering the treatment facility should not exceed approximately 200-350 mg/L BOD-5,[45] depending on the characteristics of the influent stream and the source of the wastewater stream. BOD-5 and TSS values higher than 200 mg/L would likely be the result of wastewater demand from industrial sources that should be pretreated or eliminated.

The average quantity of wastewater flow set forth by the standards depends on the source. For example, a residential subdivision would have a design flow of 75 -100 gallons per capita per day, while a hospital design flow is approximately 200 gallons per capita per day. For another example, the design flow criteria for a facility with expected flows of less than 1 million gallons per day (MGD) establishes the permitted flow as the maximum 30-day average flow. This permitted flow is estimated by multiplying the average annual flow by a factor of at least 1.5 and dividing that value by 12. When site-specific data is unavailable, the two-hour peak flow must be estimated by multiplying the permitted flow described above by a factor of four (4).

The criteria for sewage treatment facilities are based on process type and address the individual system components. The design standards account for design flow, peak flow, influent characteristics, and required discharge quality. The criteria are comprehensive and consider most treatment technologies currently in common use.

When a public sewer system experiences average daily flows in excess of 75% of its permitted capacity for three (3) or more consecutive months TCEQ regulations require that the system owner begin planning for plant expansion or replacement. When average daily flows exceed 90% for three (3) or more consecutive months, TCEQ requires that the owner of the facility begin construction on a new or expanded treatment facility.

Design criteria for collection systems include standards for pipe size, horizontal and vertical spacing, gradient, manhole spacing, lift station connections, and allowable infiltration/inflow. The standards require a minimum diameter of 6" for gravity collection mains. The standards also specify minimum gradients for various pipe sizes that will be required to achieve a flow velocity of at least two feet per second (2' fps).

[45] Two hundred to three hundred fifty milligrams per liter biochemical oxygen demand

Table 6D lists the grade requirements and pipe size minimums that should be required within the city of Littlefield's system.

Table 6D: Sewer Gradient Standards

Main Size (in.)	Fall in Feet per 100 Feet of Line (ft.)
6"	0.50
8"	0.33
10"	0.25
12"	0.20

The typical manhole spacing for 6"-to-12" main sizes with straight alignment and uniform grades is 500 feet (maximum). Reduced spacing may be necessary based on a system's ability to clean and maintain its sewer with available equipment.

Lift station design criteria establishes general requirements that include, but are not limited to, the following:

1. The raw wastewater pump, with the exception of a grinder pump, must be capable of passing a sphere of 2.5 inches or greater;
2. The raw wastewater pump must have suction and discharge openings of at least three (3) inches in diameter;
3. The lift station pumping capacity must have a firm pumping capacity equal to or greater than the expected peak flow;
4. For a lift station with more than two (2) pumps, a force main in excess of ½-mile, or firm pumping capacity of 100 GPM or greater, system curves must be provided for both the normal and peak operating conditions at C values for proposed and existing pipe;
5. A collection system lift station must be equipped with a tested quick-connect mechanism or a transfer switch properly sized to connect to a portable generator, if not equipped with an onsite generator;
6. Lift stations must include an audiovisual alarm system and the system must transmit all alarm conditions to a continuously monitored location;
7. A lift station must be fully accessible during a 25-year 24-hour rainfall event;
8. A force main must be a minimum of four (4) inches in diameter, unless it is used in conjunction with a grinder pump station;
9. For a duplex pump station, the minimum velocity is three feet per second (3 fps) with one (1) pump in operation;
10. For a pump station with three (3) or more pumps, the minimum velocity is 2 fps with only the

smallest pump in operation. The use of pipe or fittings rated at a working pressure of less than 150 pounds per square inch (psi) is prohibited;

Wastewater Treatment Facility

The City of Littlefield's wastewater treatment plant is an aerated lagoon treatment plant. It was constructed in 2001. The facility includes two (2) lagoons and one (1) storage pond with a total surface area of 10.67 acres and a total capacity of 132.5 acre-feet for storage of treated effluent prior to irrigation. The current Permit to Discharge Wastes (WQ0010207002) authorizes the discharge of treated domestic wastewater effluent at a daily average flow not to exceed 1.5 million gallons per day (MGD) via surface irrigation of 476 acres of non-public access of agricultural land.

The most recent Comprehensive Compliance Investigation (CCI) report of November 4, 2019 indicates that the City has received several minor alleged violations for sludge provisions, monitoring and reporting, effluent limitations, and operational requirements. Staff indicate that these allegations are being resolved, or have been resolved, as of the time of this plan.

According to operations staff, current average daily flows at the facility are an estimated 0.349 MGD. 2-Hour peak flows are not available at this time. Peak flows during and after significant storm events are also not available at this time. The City's sewer system is very sensitive to rainfall. Collection systems of this age typically experience a significant amount of inflow and infiltration (I/I) into the system. Flows that exceed the systems design capacity can cause the WWTP to experience solids washout and other plant failures that would in turn cause violations of the permitted effluent quality. In addition, when a public sewer system experiences average daily flows in excess of 75% of its permitted capacity for three (3) or more consecutive months TCEQ regulations require that the system owner begin planning for plant expansion or replacement. When average daily flows exceed 90% for three (3) or more consecutive months, TCEQ requires that the owner of the facility begin construction on a new or expanded treatment facility.

The current estimated average daily flow of 0.349 MGD represents roughly 23.3% of permitted levels. The City is currently developing a strategy to identify and address I/I.

Industrial Waste & Special Treatment Facilities

There are no significant industrial wastewater contributors as the large industrial facilities and refineries surrounding Littlefield own and operate their own industrial wastewater treatment facilities.

Collection System Lines

Littlefield's collection system consists of 262,541 linear feet (LF) of sewer line. Many of the lines were installed with the original system in the late 1990s. The City's collection system is comprised of two (2) different types of pipe; Vitrified Clay and PVC. City staff estimate that of the 262,541 LF of pipe in the system, 91% is Clay, and the remaining 9% is PVC. The clay pipe is a serious source of inflow and infiltration (I/I) for the system.

Clay pipe has been used extensively throughout the city. The advantages of clay pipe include availability, low cost, and that it sustains ordinary street load when installed properly. However, clay pipe as it ages becomes brittle and cracks easily, is susceptible to root intrusion, and to sewer gases which are corrosive and can dissolve the pipes leaving nothing but a tunnel in the soil.

The old, deteriorating vitrified clay pipes in City's collection system are a primary cause for constant leaks and subsequent repairs and inflow and infiltration (I/I). The City is currently developing a strategy to identify and address I/I.

Unserved/Underserved Areas

According to the best information available at this time, there are no areas that do not receive sewer services within the City or ETJ.

Manholes & Cleanouts

There are approximately 405 manholes and 94 cleanouts within the collection system. The manholes and cleanouts are distributed throughout the collection system. For exact locations please see *Map 6A: Existing Wastewater System 2020*. Older, deteriorating brick and mortar manholes in the system are probably one of the causes of excessive inflow and infiltration into the collection system and the City should continue to replace these brick manholes as funding sources are found in the future.

Soil Conditions

The integrity of wastewater systems may be affected by soil and topography with respect to system infiltration and inflow, pipe breakage, and other construction issues. For example, soils with high porosity characteristics may contribute to higher system infiltration rates than soils with low infiltration rates, particularly when collection lines and manholes have deteriorated due to age and breakage. Soils that absorb water and swell, like fat clays, can crack sewer pipes and manholes, particularly when these components have been constructed with improper bedding material or techniques. In areas that include septic systems, certain soils may be unsuitable for septic systems if they do not have suitable porosity and percolation characteristics.

According to current system maps, the City of Littlefield provides centralized sewer collection service to all residents within the corporate city limits, so the porosity and percolation characteristics of the local soils are not relevant. In addition, the collection system is relatively young in terms of service life and was installed in the 1990's. Modern regulations require pipe installation to be constructed with engineered bedding materials that surround the pipe. These bedding techniques essentially remove the effects of swelling and shrinking clay soils and render the nature of the soil irrelevant.

Lift Stations

There are eight (8) lift stations operating within the collection system. According to the best information available at this time, the lift stations are full-size lift stations. Operations staff indicates that the lift stations require rehabilitation. One lift station is located within the Bill Clayton Detention Center of Littlefield and is owned and operated by the prison system. The South Wicker Avenue lift station is privately owned and operated by a housing addition and operated by a home-owners association. City staff indicate that both the lift stations owners use private companies to service the stations, as needed, with the exception of replacing pumps at the Wicker lift station. The City of Littlefield purchases the specialty pumps and installs them, as needed, per an historical agreement between the city and lift station owner. City Council is currently discussing the responsibility for the lift station.

Inflow & Infiltration (I/I)

Inflow and Infiltration (I/I) are terms used to describe the flow of surface water or ground water into a wastewater collection system. Primary causes include deteriorated manholes that are no longer watertight, cracked or collapsed pipes, disjointed pipe connections, and inadvertent storm water flows into the sanitary system via storm drains (cross-connections). I/I is a serious, continuous, and cumulative problem that has a significant adverse effect on the operation costs and efficiency of a wastewater treatment facility.

Acceptable levels of I/I are determined by applying the standard of 200 gallons per inch of diameter per mile of pipe per day. Using information collected in the system inventory, the allowable I/I for the City of Littlefield would be about 63,689 GPD. This represents approximately 18.25% of the normal average daily flow.

Operational Procedures

The treatment facility is classified as a Class "D" facility and requires one operator with a Class "D" or higher license. The City currently employs one Class "C" operator, and a second operator also holds a valid level "D" wastewater operator's license.

In the area of operational procedures, there are several issues that all sewer systems should address concerning its treatment and collection systems that require a minimum of capital outlay. These issues are continuous and should be addressed by routine, scheduled operational procedures such as the following:

- Establish a routine to locate sources of I/I and a plan to address these problems in a timely fashion;
- Establish a program for routine scheduled maintenance of plant mechanical equipment, possibly incorporating currently available technological systems such as SCADA (Supervisor Control and Data Acquisition) packages designed for this task;
- Monitor influent and effluent quality on a regularly scheduled basis, with appropriate recording and reporting procedures;
- Establish a routine line and manhole inspection schedule and a plan for the required line and manhole replacement and/or rehabilitation.

In many systems, these operational/maintenance practices occur in the form of repair as opposed to preventive maintenance. This situation appears to have occurred frequently in Littlefield.

6.3 Wastewater Collection & Treatment System Improvement Projects

Prioritized Problems

In summary, the wastewater system analysis and input from City staff have identified the following problems with the current municipal wastewater collection and treatment system:

1. A need to rehabilitate the existing lift stations;
2. A need to reduce potential system infiltration in large rain events due to;
    a. Presence of brick and mortar manholes in the system contributes to excessive inflow and infiltration
    b. Presence of aging and deteriorated collection lines in the system, also a major contributor to excessive inflow/infiltration.
3. A need to make the wastewater system more resilient against natural disasters.

Goals & Objectives

The City established the following goals for its wastewater system:

Goal 1: An efficient wastewater system with minimal operational and maintenance costs.

Objective 1.1: Deteriorating lines in the collection system are replaced by 2030.

Policy 1.1.1: Replace deteriorating and undersized lines, manholes, and cleanouts in the system to reduce inflow and infiltration in the system and thereby reduce operational costs.

Policy 1.1.2: Apply for grants and/or loans from the TxCDBG Program, USDA Rural Development, and other sources to keep the costs of system improvements at a minimum.

Goal 2: Safe and sanitary wastewater treatment and disposal.

Objective 2.1: By 2029, Failing equipment that poses a safety hazard will have been replaced as needed and an annual program put in place to ensure the continued safety of the wastewater system.

Policy 2.1.1: After major improvements are made according to the phased projects in this report, begin an annual program to smoke test and pressure test all existing manholes and cleanouts for leakage. Install waterproofing and seals as needed.

Goal 3: The City's wastewater system maintains acceptable levels of functionality during and after disruptive events, and efficiently recovers full functionality after a hazard event

Objective 3.1: Minimize disruption of wastewater system during adverse weather events

Policy 3.1.1: Install backup generators for all critical wastewater system components including lift stations, treatment plants, etc.

Policy 3.1.2: Harden lift stations against flood damage, etc.; elevate lift stations out of the floodplain

Policy 3.1.3: Institute protocol to harden critical wastewater system components prior to adverse weather

Policy 3.1.4: Incorporate targeted projects to improve system resilience, such as planned retrofits and replacements, in capital improvements priorities

Objective 3.2: Proactively support recovery of full functionality after a hazard event

Policy 3.2.1: Incorporate wastewater system resilience into community goals and plans

Policy 3.2.2: Coordinate with government emergency managers and local utility providers to develop service restoration priorities and procedure(s)

Policy 3.2.3: Develop and evaluate wastewater system's ability to meet performance goals during a hazard event; identify and plan to address performance gaps

Proposed System Improvements – Planning Period 2020-2030

The following section describes a series of proposed improvements to the existing wastewater collection and treatment system. The improvement projects are presented as phased improvements that are suggested for implementation over the 10-year planning period encompassed by this comprehensive plan.

The projects are listed in a sequence that represents just one of several possible avenues, all of which should lead to the achievement of the long-term goals adopted by the City of Littlefield for the operation and maintenance of the wastewater collection and treatment system. The sequence shown in this plan is a logical, step-by-step process intended to increase the safety, efficiency, and economy of the wastewater system operations. The sequence is intended only as a suggested program of phased improvements, and alternative sequences are recommended if funding availability requires significant changes to this proposed system improvements program.

Table 6D (Section 6.4) contains the estimated projected costs for each phase of the improvements program. These costs are based on current costs of record for similar projects in the same geographical area of the state. Every effort has been made to include appropriate cost factors such as inflation, variations in the market, and advances in wastewater technology.

The suggested phases for the system improvements are as follows:

- ✓ **Phase 1 (2020-2023)**: Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.
- ✓ **Phase 2 (2023-2027)**: Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.
- ✓ **Phase 3 (2027-2030)**: Obtain funding to continue replacing aging and/or deteriorated collection lines and manholes. Project will include approximately replacement of eighteen (18) manholes, 8,640 linear feet (LF) of line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from Hwy 84 Lift station to the Sunset Lift Station. Project will include administrative, engineering, and survey services.

6.4 Implementation Plan

The City strives to provide a safe, efficient, and sanitary wastewater collection and treatment system while meeting all applicable wastewater system standards. These goals can be accomplished by implementing the actions and improvement projects outlined in *Table 6E* below.

Table 6E: Wastewater System Improvement Plan Projects: 2020-2030

Goals & Objectives	Activity Year(s) 2020-2023	Activity Year(s) 2023-2027	Activity Year(s) 2027-2030	Lead Organization	Cost Estimate	Funding Sources
Goal 6.1 *Replace deteriorated lines and equipment to increase the efficiency of the wastewater system and to minimize operational and maintenance costs.*						
Phase 1: Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.	X			City	$425,500*	TWDB; CDBG; USDA; Private; WW Utility
Phase 2: Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.		X		City	$443,900*	TWDB; CDBG; USDA; Private; WW Utility
Phase 3: Obtain funding to continue replacing aging and/or deteriorated collection lines and manholes. Project will include approximately replacement of eighteen (18) manholes, 8,640 linear feet (LF) of line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from Hwy 84 Lift station to the Sunset Lift Station. Project will include administrative, engineering, and survey services.			X	City	$521,900*	TWDB; CDBG; USDA; Private; WW Utility

Apply for grants and/or loans from the TxCDBG program, USDA Rural Development, and other sources to keep costs of system improvements at a minimum	X	X	X	City	N/A	TxCDBG; USDA
Goal 6.2 *Ensure customers have access to a safe and sanitary disposal system, particularly in times of disaster*						
After major improvements are made according to the phased projects in this report, begin an annual program to smoke test and pressure test all existing manholes and cleanouts for leakage. Install waterproofing and seals as needed.	X	X	X	City	Variable	GEN; WW Utility
Install generators and fuel tanks with adequate capacity to power all sewer plant and lift station sites	X	X	X	City	Variable	TxCDBG, GEN; USDA; Utility
Harden lift stations in areas prone to flooding	X	X	X	City	Variable	TxCDBG, GEN; USDA; Utility
Develop and institute pre-adverse-event procedures to harden and prepare system for disaster	X	X	X	City	Variable	TxCDBG, GEN; USDA; Utility

**Includes any associated engineering, administration, and/or acquisition costs*

Sources: **Private** = Private funding sources through Development Agreements; **TxCDBG** = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); **TWDB** = Texas Water Development Board; **WW UTILITY** = Municipal Water & Sewer Fund or Certificated of Obligation/Revenue Bonds; **USDA** = US Department of Agriculture – Rural Development

7 Storm Drainage System Study

Storm drainage facilities prevent or minimize damage resulting from overland flows or pooling of water during and following periods of rainfall. They collect and channel the runoff from heavy rainfalls or other surface water into a natural stream course or other body of water. A community's storm drainage system might include creeks, rivers, canals, reservoirs, lakes, marshes or wetlands, channels, culverts, enclosed pipe storm sewers, and ditches.

There is no known previous comprehensive study and there are no known maps of the City's network of roadside ditches. The fieldwork associated with this plan will produce a map of the roadside ditches, curb and gutter sections, and channels.

This plan recommends that the City attempt to obtain funding for problem drainage mitigation projects, establish a routine program to clean out culverts, grade ditches, regularly maintain drainage facilities, replace selected damaged culverts, replace undersized culverts, re-grade associated ditches where necessary, and adopt a streets and drainage construction manual/ordinance.

7.1 Storm Drainage System Inventory

In January 2020, GrantWorks Inc. conducted a field survey of the storm water drainage system in the city of Littlefield. The survey identified the location, type, size, condition and level of blockage or damage (when applicable) for all the drainage features including curb and gutter (if applicable), channels and roadside ditches, bridges, and culverts. That information is illustrated on *Map 7A: Existing Storm Drainage Conditions 2020.*

The drainage system elements that serve the city of Littlefield are controlled by three (3) separate entities: Lamb County, the Texas Department of Transportation (TxDOT), and the City of Littlefield. The City's drainage system capabilities are subject to the jurisdiction of those three entities, so it does not control all of the decisions related to the scope, location, or timing of drainage system improvements. The City is responsible for minor roadside ditch and culvert maintenance and major structures that are located within the City limits on roads and properties maintained by the City.

Lamb County is responsible for maintaining the drainage channels in the ETJ that are not located on the US highways or on farm-to-market roads. TXDOT maintains the roadside drainage system along US 84, US 385, and FM 54.

Drainage systems typically consist of curb and gutter, pipes, ditches, and bridges that use the natural topography or grade of the land to facilitate the movement of stormwater out of the developed areas of the community. The City of Littlefield relies on a system of curb and gutter, culvert pipes, roadside ditches, channels, and creeks to control excess storm water and convey it to detention ponds located in and around Littlefield, including Laguna Park, Crescent Park, and three unnamed ponds located at US highway 84 and 1st Street, North Sunset Avenue and 1st Street, and at US 84 and South Brownlee Avenue.

The different types of culvert pipes found throughout the City and ETJ of Littlefield include Corrugated Metal Pipe (CMP and Reinforced Concrete Box Culvert (RCBC). The field survey recorded 5 culverts within the city limits and ETJ. Of those, 3 were located within the City's corporate boundaries. Littlefield is not responsible for the maintenance of any culverts utilized for the drainage of TxDOT or County maintained right of ways. Altogether, TxDOT and Lamb County are responsible for maintaining 4 of the 5 culverts located throughout the municipal region of Littlefield.

In addition to culverts and drainage channels, storm water is removed from the community by approximately 415,106 linear feet (LF) of curb and gutter, ten (10) identified area inlet and no identified curb inlets. The curb and gutter system appears to be in fair condition and to function properly. Underground storm drains may be located in some areas of town where curb inlets were mapped. In other locations the inlets are assumed to drain into adjacent channels or roadside ditches. Mapping of any underground pipes was not available for the system. However, storm sewer inlets were inventoried and are shown on *Map 7A: Existing Storm Drainage Conditions 2020*.

7.2 Storm Drainage System Analysis

Geographic Context

Littlefield is located in the Northeastern High Plains and the drainage basin of Double Mountain Fork Brazos River in segment 1241 of the Brazos River Basin. Natural drainage in Littlefield occurs toward low spot detention ponds (playa lakes) in and around the city, in a generally southeast direction. The highest elevation in the city is 3570 feet above sea level and the lowest is 3530 feet above sea level. This equates to a drop of 40 feet or less over the entire city.

The city drains into three main drainage areas. The northern section of the city drains into either Laguna Park or a poorly defined drainage area located near North Sunset Ave and West 1st Street. The southern section of the city drains into either Crescent Park or a poorly defined area near US 84 and South Brownlee Avenue, except for the area that pools at Hall Avenue and US 84 frontage road.

Existing Drainage Facilities

Littlefield's drainage system was developed over the course of the city's growth. The system does not function well in some areas in its present configuration. The existing roadside ditches and culverts serve as the primary roadway drainage infrastructure in the city. In some cases, these ditches do not have adequate capacity to convey runoff during average rainfall events and many do not drain well after the event. The inadequate ditches also do not provide positive drainage for the pavement resulting in pavement subgrade and surface deterioration. Moreover, localized flooding occurs due to the lack of ditches and culverts alongside local streets. The sections below examine the state of each type of drainage facility in more detail.

Roadside Ditches/Drainage Channels

Roadside drainage ditches line state roads and city streets within the Littlefield. *Table 7A* lists channel types. The roadside ditches within the city and its extraterritorial jurisdiction are maintained by TxDOT, Lamb County, and the City.

Table 7A: Drainage Channel Type & Length, City Limits & ETJ

Drainage Channel Type	Linear Feet (LF)
Roadside Ditch	191,811
Natural Lined Channel	N/A
Concrete Lined Channel	N/A

Source: 2020 Fieldwork

Figure 7A: Roadside ditch & concrete culvert

Figure 7B: Roadside ditch

Underground Storm Drainage System

According to the best information available at this time, the underground storm drains, if any, are likely located along TxDOT-maintained US 84 or US 385 within the City. No maps of the underground systems are available at this time. Curb and gutter are shown on *Map 7A: Existing Storm Drainage Conditions 2020*. Curb inlet markings indicate where underground storm drainage may be handling storm water. Damaged curb and gutter sections are shown on *Map 7A: Existing Storm Drainage Conditions 2020*

Figure 7C: Inlet Along SH 276

Culverts

The most significant problems with Littlefield's culvert facilities are their inadequate sizing in some locations and their lack of maintenance. However, as with the ditch system, the maintenance of the majority of the culverts located in the vicinity are TxDOT's and Lamb County's responsibility. Of the one (1) City-maintained culvert none are damaged or blocked. The city-maintained culvert has a headwall or safety end treatment to prevent damage.

The most common problem encountered with culvert pipes is either blockage from the accumulation of silt, vegetation, and other debris, or damaged ends from vehicle traffic. The reduction in storm water movement caused by the blocked culverts may lead to standing water and mosquito problems for residents, although there have been occasional reports of buildings flooding.

Culvert damage can result from several factors including but not limited to: insufficient turning radii of pavement sections at intersections; insufficient pavement width at intersections; high velocities of the runoff in the ditches, channels, and streams; and the absence of protective headwalls or end treatments for the culvert pipes. Those factors cause vehicular traffic, particularly truck traffic, to pass over and crush the unprotected ends of the pipes in the process of turning. High water velocities within the ditches, channels, and streams can cause erosion and undermining of the culvert pipes, which can damage or significantly reduce their bearing capacity.

Figure 7D: Damaged Culvert Example

Figure 7E: Undamaged Culvert Example

Drainage Problem Areas

According to City staff, the primary area in which property flooding and nuisance ponding occurs is located mostly in the central area of town, mainly in areas north of US 84 and the south end of Hall Avenue. There are occasional cases of nuisance ponding throughout the city during average rainfall events that result in minor property damage and standing water is always detrimental to road surfaces. The areas are:

1. The area at the south end of Hall Avenue and US-84 frontage Road;

The City of Littlefield **does** have established priorities and/or procedures for responding to routine flooding.

Major Flood Preparedness

Disaster preparedness refers to measures taken to anticipate and attempt to reduce the damage caused by disaster events, such as a major or extreme flood event. Communities can take the following key steps to support disaster preparedness:

- Identify and understand potential vulnerabilities in the event of a disaster

- Designate someone responsible for emergency management prior, during, and after a disaster
- Coordinate with other government emergency mangers/local utility providers to prepare for a potential disaster
- Ensure that residents know emergency procedures in the event of disaster

The City of Littlefield **has** designated a local emergency management coordinator and **does** have a Disaster Preparedness and Response Plan for a major flood event.

National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a FEMA program that provides federally backed flood insurance to members of communities that carry out measures to reduce the risk of flood damage. While NFIP participation is voluntary, federally backed flood insurance is not available for structures in non-participating communities, and disaster assistance as well as federal grants and loans are not available for structures in FEMA designated special flood hazard areas (SFHAs) of non-participating communities. Various requirements and caveats apply to the obligations of lenders and property owners with respect to flood insurance and specific questions should be addressed to FEMA or the Texas Water Development Board NFIP division.

The City of Littlefield participates in the National Flood Insurance Program (NFIP). Among many other services, the U.S. National Flood Insurance Program provides flood insurance rate maps that depict the 100-year and 500-year special flood hazard areas (SFHA's) for many communities, including the city of Littlefield. None of the city lies in the 100-year floodplain. The effective date of the most recent Flood Insurance Rate Map (FIRM) for Littlefield is April 10, 1987 (H-01-05).

Appendix 7A contains more detailed information concerning the NFIP and the benefits that a community can receive through active participation. More detailed information regarding all aspects of the program can also be found through the TWDB (www.twdb.state.tx.us/wrpi/flood/nfip.htm) and FEMA (www.fema.gov/nfip/) websites.

Appendix 7B contains information on how to score points through the Community Rating System, which is a set of actions participating communities can take to reduce flood insurance rates for property owners. Community Rating System recommended actions related to the Littlefield Comprehensive Plan include:

- Adopting the Comprehensive Plan.
- Adopting a subdivision ordinance that includes erosion and sedimentation control requirements during construction in addition to establishing standards for drainage facilities for new construction.

- Educating residents whose properties are located within floodplains about floodplain building regulations.
- Purchasing property in the flood plain, zoning for open space, or otherwise restricting the use of parcels in the floodplain. These actions increase the credits homeowners receive on flood insurance premiums. The amount of premium reduction is based on the percentage of special flood hazard area preserved as open space.

Flood Prevention Ordinance

The City has adopted a Flood Damage Prevention Ordinance, effective June 26, 2018. The ordinance is a comprehensive ordinance that sets forth rules and regulations for development within the community that meets and satisfies CFR Section 60.3© of the NFIP Regulations.

7.3 Storm Drainage System Improvement Projects

This report is an evaluation, analysis, and planning report rather than a design study; detailed design data for individual construction projects has not been developed as a part of the report. The construction of improvements to the storm drainage system should be preceded by a detailed engineering design analysis, plans, and specifications. This report is intended solely to provide the city of Littlefield with guidance in the planning of future storm drainage improvements.

Prioritized Problems

City staff and consulting engineers have identified the following areas of concern with regard to the storm-water system.

1. Not enough curb and gutter in street system to effectively remove runoff. Need to install curb and gutter throughout the city.
2. Conduct a TxDOT drainage study to alleviate flooding at south end of Hall Avenue and US 84.
3. Need to maintain ditches and control erosion and sedimentation build-up that impedes the function of drainage infrastructure.
4. Need to make Littlefield more resilient against flooding.

Like many rural cities, Littlefield faces a difficult predicament with respect to drainage problems. There is little grant money available to make improvements to the drainage systems of rural towns. Routine maintenance is the only viable route available to many cities to address various drainage problems. The following plan framework outlines a specific set of actions to meet Littlefield's drainage system needs with local resources.

Goals & Objectives

Goal 1: The city-wide drainage system prevents flooding of private property.

Objective 1.1: Mitigate all nuisance ponding areas over the planning period.

Policy 1.1.1: Between 2020 and 2030 annually budget to fund the installation of curb and gutter throughout the city and engaging engineers to properly design curb and gutter improvements.

Policy 1.1.2: Between 2020 and 2030 determine if nuisance ponding areas can be addressed as water and sewer improvements are made.

Policy 1.1.3: Continue to communicate regularly with TxDOT and Lamb County to provide for on-going, semi-annual routine maintenance of all culvert pipes, drainage channels, and roadside ditches by removing silt, debris, and vegetation that impede the flow of water.

Objective 1.2: By 2024, commission and adopt a basic street and drainage construction manual/ordinance specifying required width and depth of drainage channels and diameter of culverts for use by current and future City staff and contractors hired to construct improvements.

Goal 2: The City maintains a functional city-wide drainage system that limits sedimentation loading to nearby creeks.

Objective 2.1: Improve drainage system between 2020 and 2030 to alleviate nuisance ponding areas.

Objective 2.2: Decrease opportunities for introducing sediment into the city's drainage system.

Policy 2.2.1: Educate City public works staff on and increase annual funding to the public works department to construct properly sized drainage channels and culverts.

Goal 3: Littlefield responds quickly and efficiently to flood events and pursues strategies to reduce the impact of flooding on the community.

Objective 3.1: Maintain a clear organizational framework to respond to flood events

Policy 3.1.1: Coordinate with other government emergency managers and local utility providers about priorities/procedures before, during, and after an extreme flood event.
Policy 3.1.2: Disseminate and inform residents of emergency procedures in the event of a major flood.
Policy 3.1.3: Develop response priorities and procedures for local, routine flooding.

Objective 3.2: Reduce impact of flood events on Littlefield.

Policy 3.2.1: Identify potential local and nearby vulnerabilities in the event of a flood (upstream dams, frequently flooded areas, critical infrastructure likely to be impacted by a flood, etc.)

Policy 3.2.2: Incorporate targeted projects to eliminate/mitigate flooding vulnerabilities in capital improvements projects.
Policy 3.2.3: Adopt land use policies that prevent/reduce flooding vulnerabilities.

Proposed System Improvements – Planning Period 2020-2030

The following section describes a series of proposed improvements to the existing drainage infrastructure. The improvement projects are presented as phased improvements that are suggested for implementation over the 10-year planning period encompassed by this comprehensive plan.

The projects are listed in a sequence that represents just one of several possible avenues, all of which should lead to the achievement of the long-term goals adopted by the City of Littlefield for the maintenance of the drainage infrastructure. The sequence shown in this plan is a logical, step-by-step process intended to increase the safety and efficiency of the drainage infrastructure. The sequence is intended only as a suggested program of phased improvements; alternative sequences are recommended if funding availability requires significant changes to this proposed infrastructure improvements program.

Table 7B (Section 7.4) contains the proposed schedule for each phase of the improvements program during the 10-year planning period. These costs are based on current costs of record for similar projects in the same geographical area of the state. Every effort has been made to include appropriate cost factors such as inflation, variations in the market, and advances in stormwater technology.

These cost estimates are predicated on several assumptions related to the scope of each phase. These assumptions are as follows:

- Culvert pipe replacements costs are based on using Reinforced Concrete Pipe (RCP);
- Culvert replacements are estimated for a pipe size increase of one standard size over the existing size. Standard sizes are defined as those sizes that are readily available from a local supplier;
- The culverts that are identified as damaged are assumed to require 100% replacement;
- For Town maintained culverts, the addition of a standard TxDOT-type Safety End Treatment (SET) at each end of the pipe is assumed for culverts scheduled for replacement;
- The cost estimates include grading to "daylight" at each end in order to ensure positive drainage;
- Culvert replacement includes driveway and pavement repair assuming a pavement cut of 4-feet in width, ROW width minus 20 feet in length, and a 2-inches depth of HMAC pavement placement;

- New and existing roadside ditches assumes a full depth excavation with a triangular cross-section of a 3 feet top width and a 1-foot depth at center;
- Existing drainage channel maintenance assumes a one-half depth excavation with a trapezoidal cross-section of a 7-feet top width, 1-foot bottom width, 3-feet depth at center, and 1:1 side slope;
- Engineering & Surveying – Engineering and surveying services are estimated at 20-35% of the estimated construction costs of an element as described above.

These costs are based on current costs of record for similar projects in the same geographical area of the state. Every effort has been made to include appropriate cost factors such as inflation, variations in the market, and advances in storm water technology.

The proposed phases of future drainage system improvements are as follows:

- ✓ **Phase 1 (2020-2022)**: Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection; and administration and Engineering & Surveying services.
- ✓ **Phase 2 (2022-2024):** Work in conjunction with Lamb County to obtain funding to replace three (3) damaged culverts and 15,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.
- ✓ **Phase 3 (2024-2026):** Work in conjunction with Lamb County to obtain funding to replace 8,000 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.
- ✓ **Phase 4 (2026-2030):** Work in conjunction with TxDOT to obtain funding to implement the recommendations from the Phase 1 drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection, pavement repair, administration and Engineering & Surveying services.

7.4 Implementation Plan

Like many rural cities, the City of Littlefield faces a difficult predicament with respect to drainage problems. There is little grant money available to make improvements to the drainage systems of rural towns. Routine maintenance is the only viable route available to many cities to address various drainage problems. The following plan framework outlines a specific set of actions to meet the city's drainage system needs. The estimated costs for the actions and improvement projects are as follows:

Table 7B: Drainage System Improvement Plan Projects: 2020 - 2030

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources
	2020-2023	2023-2027	2027-2030			
Goal 7.1 *Develop a city-wide drainage system that prevents flooding of private property*						
Phase 1: Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include administration and Engineering & Surveying services.	X			City	$250,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR
Phase 2: Work in conjunction with Lamb County to obtain funding to replace three (3) damaged culverts and 6,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	X	X		City	$378,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
Phase 3: Work in conjunction with Lamb County to obtain funding to replace 8,000 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.		X		City	$318,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
Phase 4: Work in conjunction with TxDOT to obtain funding to implement the recommendations from the Phase 1 drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection, pavement repair, administration and		X	X	City	TBD	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private

Engineering & Surveying services.

Adopt a basic street and drainage construction manual/ordinance specifying required width and depth of drainage channels and diameter of culverts for use by current and future city staff and contractors hired to construct improvements.		X		City	$2,000 (Legal, Engineers)	TxCDBG; USDA
Goal 7.2 *Respond quickly and efficiently to flood events and pursue strategies to reduce the impact of flooding on the community*						
Disseminate and inform residents of emergency procedures in the event of a major/extreme flood	X	X	X	City	Variable	GEN
Coordinate with regional partners to maintain a Disaster Preparedness Response Plan for major/extreme flood events	X	X	X	City; County; COG	Variable	GEN
Adopt and enforce land use policies that support flood damage and disaster prevention (*See Chapter 4: Land Use Study)*	X	X	X	City	See chapter	See chapter

Source: **FMA**=Flood Mitigation Assistance program through the TWDB for NFIP members only; **GEN** = Municipal fund; **Private**=Land donation; **TWDB**=Texas Water Development Board Flood Protection Planning; **TxCDBG**=Texas Community Development Block Grant program if area is involved in project where street/curb and gutter repair is required; **TxCDBG-DR**=TxCDBG Disaster Relief funds; **TxDOT**=Texas Department of Transportation; **USDA**=USDA Rural Development

*Notes on Estimates: * Negotiate a cost sharing agreement that provides equipment, labor, and materials for drainage maintenance. ** Refer to NFIP information concerning available funding through the program.*

7.5 Appendix 7A: National Flood Insurance Program

The following describes regulations set by FEMA with which NFIP members must comply. The text derives primarily from NFIP Legislation and Regulation Guidance Documents (sections 59-61, available at www.fema.gov/guidance-documents-other-published-resources)

Federal "100-year" Standard: The NFIP has used a comprehensive study by a group of experts to advise the agency as to the best standard to be used as the basis for risk assessment, insurance rating, and floodplain management for the Program. After extensive study and coordination with Federal and State agencies, this group recommended the one percent-annual-chance flood (also referred to as the 100-year or "Base Flood") be used as the standard for the NFIP. The -percent-annual-chance flood was chosen on the basis that it provides a higher level of protection while not imposing overly stringent requirements or the burden of excessive costs on property owners. The one-percent-annual-chance flood (or 100-year flood) represents a magnitude and frequency that has a statistical probability of being equaled or exceeded in any given year, or, stated alternatively, the 100-year flood has a 26 percent (or one-in-four) chance of occurring over the life of a 30-year mortgage. The regulatory flood plains cover areas that would most likely be inundated by the largest storm events that typically occur in the area. While these storm events are referred to as 100-year or 500-year events, the designation actually refers to the probability of a storm of that particular magnitude occurring in any given year. As mentioned before, the "100-year" storm has a 1% chance of occurring in any given year, and the "500-year" storm has a 0.2 percent chance of occurring in any given year.

Identifying and Mapping Flood-Prone Areas: Under the NFIP, Flood Hazard Boundary Maps (FHBMs), which delineated the boundaries of the community's Special Flood Hazard Areas (SFHAs), have been prepared using approximate methods prior to completion of a community's Flood Insurance Study (FIS), These methods identify on an approximate basis a one-percent-annual-chance floodplain, but do not include the determination of Base Flood Elevations (BFEs) (100-year flood elevations), flood depths, or floodways. The Flood Hazard Boundary Map is intended to assist communities that do not have current FIRMs in managing floodplain development, and to assist insurance agents and property owners in identifying those areas where the purchase of flood insurance was advisable.

FISs that use detailed hydrologic and hydraulic analyses to develop BFEs and designate floodways and risk zones for developed areas of the floodplain have been subsequently produced for most NFIP communities. Once more detailed risk data was provided to communities, the community could then enter the Regular Program whereby the community is required to adopt more comprehensive floodplain management requirements and owners of structures could purchase higher amounts of insurance.

An FIS usually generates the following flood hazard information:

- BFEs are presented as either water-surface elevations or average depths of flow above the ground surface. These elevations and depths are usually referenced to either the National Geodetic Vertical Datum of 1929 (NGVD29) or the North American Vertical Datum of 1988 (NAVD88).
- Water-surface elevations for the 10-year (10-percent-annual-chance), 50-year (2-percent-annual-chance), 100-year (1-percent-annual-chance), and 500-year (0.2-percent-annual-chance) floods.
- Boundaries of the regulatory 100-year floodway. The regulatory floodway is defined as the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the entire Base Flood (100-year flood) discharge can be conveyed with no greater than a 1.0-foot increase in the BFE.
- The boundaries of the 100- and 500-year floodplains. The 100-year floodplain is referred to as the Special Flood Hazard Area (SFHA).

Floodplain Management: The Congressional Acts that created the NFIP prohibit the Federal Emergency Management Agency (FEMA) from providing flood insurance to property owners unless the community adopts and enforces floodplain management criteria established under the authority of Section 1361(c) of the Act. These criteria are established in the NFIP regulations at 44 CFR §60.3. The community must adopt a floodplain management ordinance that meets or exceeds the minimum NFIP criteria. Under the NFIP, "community" is defined as:

"any State, or area or political subdivision thereof, or any Indian tribe or authorized tribal organization, or Alaska Native village or authorized native organization, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction."

The power to regulate development in the floodplain, including requiring and approving permits, inspecting property, and citing violations, is granted to communities under a State's police powers. FEMA has no direct involvement in the administration of local floodplain management ordinances.

Minimum NFIP Floodplain Management Requirements: Under the NFIP, the minimum floodplain management requirements that a community must adopt depend on the type of flood risk data (detailed FIS and FIRMs with BFEs or approximate A Zones and V Zones without BFEs) that the community has been provided by FEMA. Under the NFIP regulations, participating NFIP communities are required to regulate all development in SFHAs. "Development" is defined as:

"Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

Before a property owner can undertake any development in the SFHA, a permit must be obtained from the community. The community is responsible for reviewing the proposed development to ensure that it complies with the community's floodplain management ordinance. Communities are also required to review proposed development in SFHAs to ensure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, such as 404 wetland permits from the Army Corps of Engineers or permits under the Endangered Species Act.

Under the NFIP, communities must review subdivision proposals and other proposed new development, including manufactured home parks or subdivisions to ensure that these development proposals are reasonably safe from flooding and that utilities and facilities servicing these subdivisions or other development are constructed to minimize or eliminate flood damage.

In general, the NFIP minimum floodplain management regulations require that new construction or substantially improved or substantially damaged existing buildings in A Zones must have their lowest floor (including basement) elevated to or above the Base Flood Elevation (BFE). Non-residential structures in A Zones can be either elevated or dry-floodproofed. In V Zones, the building must be elevated on piles and columns and the bottom of the lowest horizontal structural member of the lowest floor of all new construction or substantially improved existing buildings must be elevated to or above the BFE. The minimum floodplain management requirements are further described below:

- For all new and substantially improved buildings in A Zones:
- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the BFE.
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE. Dry floodproofing means that the building must be designed and constructed to be watertight, substantially impermeable to floodwaters.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Because extended foundation or other enclosure walls will be exposed to flood forces, they must be designed and constructed to withstand hydrostatic pressure otherwise the walls can fail, and the building can be damaged. The NFIP regulations require that foundation and enclosure walls that are subject to the 100-year flood be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. These openings allow floodwaters to reach equal levels on both sides of the walls and thereby lessen the potential for damage. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

In addition, to the above requirements, communities are required to select and adopt a regulatory

floodway in riverine A Zones. The area chosen for the regulatory floodway must be designed to carry the waters of the one percent-annual-chance flood without increasing the water surface elevation of that flood more than one foot at any point. Once the floodway is designated, the community must prohibit development within that floodway which would cause any increase in flood heights. The floodway generally includes the river channel and adjacent floodplain areas that often contain forests and wetlands. This requirement has the effect of limiting development in the most hazardous and environmentally sensitive part of the floodplain.

Ordinance Adoption: Once FEMA provides a community with the flood hazard information upon which floodplain management regulations are based, the community is required to adopt a floodplain management ordinance that meets or exceeds the minimum NFIP requirements. FEMA can suspend communities from the Program for failure to adopt once the community is notified of being flood-prone or for failure to maintain a floodplain management ordinance that meets or exceeds the minimum requirements of the NFIP. The procedures for suspending a community from the Program for failure to adopt or maintain a floodplain management ordinance that meets or exceeds the minimum requirements of the NFIP are established in the NFIP regulations at 44 CFR §59.24(a) and (d).

Prior to filing an application for NFIP participation, the community would have to adopt a resolution stating it wishes to become an NFIP participant and designating a Floodplain Administrator. The 77th Legislature of the State of Texas amended Subchapter I, Chapter 16, Water Code, by adding Section 16.3145 to read as follows:

"The governing body of each city and county shall adopt ordinances or orders, as appropriate, necessary for the city or county to be eligible to participate in the National Flood Insurance Program...., not later than January 1, 2001".

Model ordinances and sample permit forms are available online at www.twdb.state.tx.us/wrpi/flood/nfip.htm. Flood prevention ordinances often require or encourage appropriate development in flood prone areas and/or set zoning standards for areas to restrict the use or density of floodplain development. They also vest a designated Flood Administrator with the responsibility of delineating areas of special flood hazard; providing information about inhabited floodplain areas; maintaining FEMA flood maps; and cooperating with federal, state and local officials and private firms in undertaking to study, survey, map and identify floodplain. The Administrator is also to assist with the development and implementation of floodplain management measures.

Community Rating System: The NFIP's Community Rating System (CRS) provides discounts on flood insurance premiums in those communities that establish floodplain management programs that go beyond NFIP minimum requirements. Under the CRS, communities receive credit for more restrictive regulations, acquisition, relocation, or floodproofing of flood-prone buildings, preservation of open space, and other measures that reduce flood damages or protect the natural resources and functions of floodplains.

Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet the three goals of the CRS:

1. Reduce flood losses, i.e.
    a. Protect public health and safety,
    b. Reduce damage to property,
    c. Prevent increases in flood damage from new construction,
    d. Reduce the risk of erosion damage, and
    e. Protect natural and beneficial floodplain functions;
2. Facilitate accurate insurance rating; and
3. Promote the awareness of flood insurance.

There are 10 CRS classes: Class 1 requires the most credit points and gives the largest premium reduction; Class 10 receives no premium reduction. CRS premium discounts on flood insurance range from five percent for Class 9 communities up to 45 percent for Class 1 communities. The CRS recognizes 18 creditable activities, organized under four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.

For example, credits are provided for use of future conditions hydrology and more restrictive floodway standards, prohibiting fill in the floodway, and adopting compensatory storage regulations, innovative land development criteria, storm water management regulations, other higher regulatory standards, and local floodplain management plans. Credits are also provided in the CRS for preserving open space in their natural state and for low-density zoning and for acquiring and clearing buildings from the floodplain and returning the area to open space. The 2002 *CRS Coordinator's Manual* includes a new section, "Land Development Criteria," which specifically credits community land development regulations that limit development in the floodplain or provide incentives to limit floodplain development. Communities receive credits for adopting smart growth land development criteria and for creating open space through their land development process.

7.6 Appendix 7B: NFIP Community Rating System

The National Flood Insurance Program Community Rating System

Information from: http://training.fema.gov/EMIWeb/CRS/

The Community Rating System (CRS) is a part of the NFIP. The CRS reduces flood insurance premiums to reflect what a community does above and beyond the NFIP's minimum standards for floodplain regulation. The objective of the CRS is to reward communities for what they are doing, as well as to provide an incentive for new flood protection activities. The reduction in flood insurance premium rates is provided according to a community's CRS classification, as shown in the chart.

Community participation in the CRS is VOLUNTARY.

To apply for CRS participation, a community submits documentation that shows what it is doing and that its activities deserve at least 500 points. The documentation is attached to the appropriate worksheet pages in this CRS Application. The application is submitted to the ISO/CRS Specialist. The ISO/CRS Specialist is an employee of the Insurance Services Office, Inc. (ISO). ISO works on behalf of the Federal Emergency Management Agency (FEMA) and the insurance companies to review CRS applications, verify the communities' credit points, and perform program improvement tasks.

The 2017 CRS manual is included in the *Digital Appendix* and available at www.fema.gov/media-library/assets/documents/8768.

A Quick Check of a Community's Potential CRS Credit

a. Purpose

A minimum of 500 points is needed to receive a CRS classification of Class 9, which will reduce premium rates. This quick check provides some basic information for local officials to determine if their communities will have enough points to attain Class 9.

If a community does not qualify for at least 500 points, it may want to initiate some new activities in order to attain Class 9. For example, some of the public information activities can be implemented for a very low start-up cost. The quick check can identify where points can be earned for new activities.

b. Quick Check Instructions

The section numbering system is used throughout all CRS publications. Sections 300 through 600 describe the 18 creditable activities. Activity 310 (Elevation Certificates) is required of all CRS communities and Activity 510 (Floodplain Management Planning) is required of designated repetitive loss communities. The rest of the activities are optional. Only the elements most frequently applied for are listed.

If the activity is applicable, the average community score (which is in parentheses) should be entered in the blank to the left to provide a rough estimate of the community's initial credit points.

c. Minimum Requirements

Section 211 (Prerequisites): The community must be in the Regular Phase of the NFIP and be in full compliance with the minimum requirements of the NFIP. The application must include a letter from the Federal Emergency Management Agency (FEMA) Regional Office confirming that the community is meeting all of the latest NFIP requirements.

Activity 310 (Elevation Certificates): All CRS communities must maintain FEMA's elevation certificates for all new and substantially improved construction in the floodplain after the date of application for CRS classification.

Sections 501–503 (Repetitive Loss Areas): A community with properties that have received repeated flood insurance claim payments must map the areas affected. Communities with 10 or more such properties must prepare, adopt, and implement a plan to reduce damage in repetitive loss areas. The FEMA Regional Office can tell whether this applies to any given community.

d. Other Activities

If the activity is applicable, the average community score (which is in parentheses) should be entered in

the blank at left to provide a rough estimate of the community's initial credit points.[46]

Public Information Activities (Series 300)

____ (38) 310 (Elevation Certificates) Maintain FEMA elevation certificates for all new construction. Maintaining them after the date of CRS application is a minimum requirement for any CRS credit.

____ (73) 320 (Map Information) Respond to inquiries to identify a property's FIRM zone and publicize this service.

____ (87) 330 (Outreach Projects) Send information about the flood hazard, flood insurance, and flood protection measures to flood-prone residents or all residents of the community.

____ (14) 340 (Hazard Disclosure) Real estate agents advise potential purchasers of flood-prone property about the flood hazard; or regulations require a notice of the flood hazard.

____ (38) 350 (Flood Protection Information) The public library maintains references on flood insurance and flood protection.

____ (55) 360 (Flood Protection Assistance) Give inquiring property owners technical advice on protecting their buildings from flooding and publicize this service.

____ (39) 370 (Flood Insurance Promotion) Assess current flood insurance coverage; develop and implement a plan to improve coverage; and provide technical advice to property owners about flood insurance.

Mapping and Regulatory Activities (Series 400)

____ (60) 410 (Flood Hazard Mapping) Develop new flood elevations, floodway delineations, wave heights, or other regulatory flood hazard data for an area that was not mapped in detail by the flood insurance study; or have the flood insurance study's hydrology or allowable floodway surcharge based on a higher state or local standard.

____ (509) 420 (Open Space Preservation) Guarantee that a portion of currently vacant floodplain will be kept free from development.

____ (270) 430 (Higher Regulatory Standards) Require freeboard; require soil tests or engineered foundations; require compensatory storage; zone the floodplain for minimum lot sizes

[46] Figures are based on communities that have received verified credit under the 2013 CRS Coordinator's manual, as of October 2016. The Maximum points available are based on the 2013 *Coordinator's Manual.* Growth adjustments are not included.

of 1 acre or larger; regulate to protect sand dunes; or have regulations tailored to protect critical facilities or areas subject to special flood hazards (e.g., alluvial fans, ice jams, or subsidence).

____ (115) 440 (Flood Data Maintenance) Keep flood and property data on computer records; use better base maps; or maintain elevation reference marks.

____ (132) 450 (Storm water Management) Regulate new development throughout the watershed to ensure that post-development runoff is no worse than pre-development runoff

Flood Damage Reduction Activities (Series 500)

____ (175) 510 (Floodplain Management Planning) Prepare, adopt, implement, and update a comprehensive plan using a standard planning process.

____ (195) 520 (Acquisition and Relocation) Acquire and/or relocate flood-prone buildings so that they are out of the floodplain.

____ (73) 530 (Flood Protection) Document floodproofed or elevated pre-FIRM buildings.

____ (218) 540 (Drainage System Maintenance) Conduct periodic inspections of all channels and retention basins and perform maintenance as needed.

Warning and Response (Series 600)

____ (254) 610 (Flood Warning and Response) Provide early flood warnings to the public and have a detailed flood response plan keyed to flood crest predictions.

____ (157) 620 (Levee Safety) Maintain levees that are not credited with providing base flood protection.

____ (35) 630 (Dam Safety) All communities in a State with an approved dam safety program receive credit.

____ **TOTAL ESTIMATED POINTS FOR THE COMMUNITY**

8 Street System Study

Streets are in some ways the most difficult capital improvement to budget for because they are expensive, not usually related to imminent health and safety concerns, and not often fundable through grants. This study assesses existing street conditions and makes recommendations for the timing and funding of needed improvements.

The City of Littlefield has never conducted a comprehensive street system study. The street repair department of Littlefield has a maintenance schedule. Potholes are repaired monthly according to public request and inspections. Other street improvements also take place on an as needed basis. The City of Littlefield has a mutual aid agreement with Lamb County wherein the City purchases materials and pays labor costs and the county provides equipment and laborers.

8.1 Street System Inventory

In January 2020, the existing street system was surveyed and the following information collected:

- The dimension of each street, both the width and right-of-way;
- The surface material (e.g. asphalt, caliche, or gravel/dirt); and
- A rating of the condition of each street's surface according to the following classifications:

Good Condition	Few surface cracks or potholes; little edge deterioration
Fair Condition	(a) Surface cracks less than one-half inch (<½") in width; (b) potholes less than two inches (<2") in diameter and/or less than two inches (<2") in depth; (c) crumbling edges extending less than one inch (<1") from street edge
Poor Condition	(a) Surface cracks more than one-half inch (>½") in width; (b) potholes greater than two inches (>2") in diameter and/or less than or equal to two inches (≤2") in depth; (c) crumbling edges extending more than one inch (>1") from street edge

The location of existing curbs and gutters or similar drainage (all drainage structures identified in *Chapter 7: Storm Drainage System Study).*

Figure 8A: East 12th Street

Good condition.

Figure 8B: West Weidel Street

Fair condition.

Figure 8C: West 9th Street

Poor condition.

The street system survey included streets within both the Littlefield city limits and the extraterritorial jurisdiction (ETJ). *Table 8A and Table 8B (next page)* provide an inventory of the survey findings. In both tables the street system is delineated according to street type (paved, unpaved), material (asphalt, gravel, concrete, etc.), and condition (good, fair, poor).

Table 8A indicates the inventory for all streets in the Littlefield city limits and ETJ.

Table 8A: Street Inventory (All)

Type, Material, & Condition	LF	Miles	%	
Paved	*372,230*	*70.5*		**64%**
Asphalt	*359,544*	*68.1*		
Good	201,485	38.2	56%	**97%**
Fair	119,924	22.7	33%	
Poor	38,134	7.2	11%	
Concrete	**12,687**	2.4		
Good	5,003	0.9	39%	**3%**
Fair	4,952	0.9	39%	
Poor	2,732	0.5	22%	
Unpaved	*212,102*	*40.2*		**36%**
Gravel	*180,995*	*34.3*		
Good	0	0.0	0%	**85%**
Fair	73,361	13.9	41%	
Poor	107,634	20.4	59%	
Dirt	**31,106**	5.9		
Good	0	0.0	0%	**85%**
Fair	0	0.0	0%	
Poor	31,106	5.9	100%	
All Streets	**584,332**	**110.7**	**100%**	
Good	**206,488**	**39.1**	**35%**	
Fair	**198,237**	**37.5**	**34%**	
Poor	**179,607**	**34.0**	**31%**	

Source: GrantWorks 2020 Fieldwork

The City of Littlefield owns, and therefore is responsible for maintaining, approximately 69% of the streets located within the city limits and the extraterritorial jurisdiction. *Table 8B* indicates the inventory for all city-maintained streets.

Table 8B: Street Inventory (City-Maintained Streets)

Type, Material, & Condition	LF	Miles	%	
Paved	*256,898*	*48.7*		**79%**
Asphalt	*248,418*	*47.0*		
Good	114,867	21.8	32%	**97%**
Fair	109,123	20.7	30%	
Poor	24,427	4.6	7%	
Concrete	**8,480**	**1.6**		
Good	796	0.2	6%	**3%**
Fair	4,952	0.9	39%	
Poor	2,732	0.5	22%	
Unpaved	*68,897*	*13.0*		**21%**
Gravel	*53,286*	*10.1*		
Good	0	0.0	0%	**77%**
Fair	43,842	8.3	24%	
Poor	9,443.74	1.8	5%	
Dirt	**15,611**	3.0		
Good	0	0.0	0%	**23%**
Fair	0	0.0	0%	
Poor	15,611	3.0	50%	
All Streets	**325,795**	**61.7**	**100%**	
Good	**115,663**	**21.9**	**36%**	
Fair	**157,917**	**29.9**	**48%**	
Poor	**52,215**	**9.9**	**16%**	

Source: GrantWorks 2020 Fieldwork

Map 8A: Existing Street Conditions 2020 illustrates the survey findings for spatial analysis and includes street location, condition, right-of-way, and width. *Map 8A* also shows unbuilt right-of-way.

8.2 Street System Analysis

Based on the survey findings outlined in *Section 8.1*, the street system analysis determines the adequacy of the system to meet existing and forecasted needs and makes recommendations for any needed improvements concerning traffic flow and street conditions.

8.2.1 Street Condition

Road conditions and maintenance often present a major challenge for smaller communities. Paved (asphalt or concrete) roads comprise 79% of streets and are primarily in good-to-fair condition (62%). Unpaved (gravel or dirt) roads comprise 21% of streets and are in fair-to-poor condition (see *Table 8B, page 8-5, and Table 8C*).

Table 8C: Street Condition (City-Maintained Streets)

Condition & Material	LF	Miles	%	
GOOD	*115,663*	*21.9*		
Paved (Asphalt/Concrete)	115,663	21.9	100%	**36%**
Unpaved (Gravel/Dirt)	0	0.0	0%	
FAIR	*157,917*	*29.9*		
Paved (Asphalt/Concrete)	114,075	21.6	72%	**48%**
Unpaved (Gravel/Dirt)	43,842	8.3	28%	
POOR	*52,215*	*9.9*		
Paved (Asphalt/Concrete)	27,159	5.1	52%	**16%**
Unpaved (Gravel/Dirt)	25,055	4.7	48%	
All Streets	**325,795**	**61.7**	**100%**	

Source: GrantWorks 2020 Fieldwork

Without regular street maintenance, flooding can damage both unpaved and paved streets (such as stripping asphalt overlays). Therefore, in addition to regular street maintenance (discussed below), keeping drainage infrastructure maintained will be essential to keeping Littlefield's streets in good condition (see *Chapter 7: Storm Drainage Study)*.

8.2.2 Street Repair

Four standard street repair options are available to improve and maintain the condition of asphalt streets in Littlefield:

- *Point Repairs:* Point repairs such as treating potholes and roadway hazards are a portion of annual, ongoing street maintenance. Point repairs are completed by excavating failed pavements sections to the back course and back filling with cold mix asphalt which is then compacted to the existing grade. Surface sealant is optional.

- *Seal Coat (Also known as Chip Seal):* Ideally conducted every three-to-five-years, seal coating maintains streets and forestalls costlier repairs. Seal coats are completed by applying asphalt cement which is then covered with pre-coated aggregate at about one (1) cubic yard of aggregate per 90 square yards. Using recent engineering cost estimates, chip seal coating would cost an estimated $3.20 per square yard. There are several different types of materials used for seal coating. One of the most popular materials, coal-tar sealcoat, is a widely-recognized source of polycyclic aromatic hydrocarbons (PAHs). The USGS provides facts and research about *PAHs and Coal-Tar-Based Pavement Sealcoat* on their website, at: http://tx.usgs.gov/sealcoat.html.

- *Overlay:* Overlay, which completely replaces the surface material of a street, should be done every 10-to-20-years to address pavement deterioration and extend street life; frequency of overlay depends on traffic load and environmental conditions. Depending on the severity of wear, approximately one inch of surface is milled off the existing street to level depressions in the pavement. The remaining surface material is overlaid with a minimum of 1.5-to-2-inches of hot mix asphaltic concrete (HMAC) or hot mix/cold laid asphaltic concrete, followed by a surface treatment (two-course). Two-course overlay increases the life of the pavement and would require additional milling. Using recent engineering cost estimates, overlay projects would cost an estimated $14.08 per square yard, depending on processes chosen.

- *Reclaim/Reconstruct:* In cases of extensive deterioration, streets will need to be reclaimed or reconstructed. Street reconstruction involves removing the existing base to a minimum depth of six inches; creating a roadway base of emulsified asphalt mixed with recycled asphalt; and creating a bearing surface by applying two-course of asphalt cement. Base is proof-rolled at each course. Surface sealant optional. Streets receiving the reclamation treatment will last 12-to-20 years, depending on the traffic load and environmental conditions. Cost estimates would be higher than for overlay methods, at about $43.62 per square yard. The cost of this method also approximates costs for paving a gravel road.

Before seal coat, overlay, or reconstruct activities are undertaken, an engineer should assess the condition of the road and kind of construction needed. Road base condition cannot always be accurately determined by driving condition and **choosing the wrong construction type will increase costs over time.**

Street repairs should also always occur in conjunction with or shortly following water, sewer, and other underground utility line projects to avoid duplicating efforts. When street repairs are not consciously phased with line projects, it is not uncommon for a street to be paved, torn up for line replacement, and then repaved within the space of five years.

8.2.3 Street Maintenance Costs

The initial cost of streets is usually paid for by the developer and new residents, and that can make it easy to ignore the cost implications of street design. However, because street maintenance and reconstruction are typically paid for through taxes rather than grants or special funding, it is important to consider the long-term cost implications of short-term construction decisions.

Two primary considerations impact street costs over time: a) initial street design, such as street and lane width as well as street layout, and b) maintenance policies.

When considering policies that set standards for street design and maintenance, the City should consider the costs and benefits of each criterion.

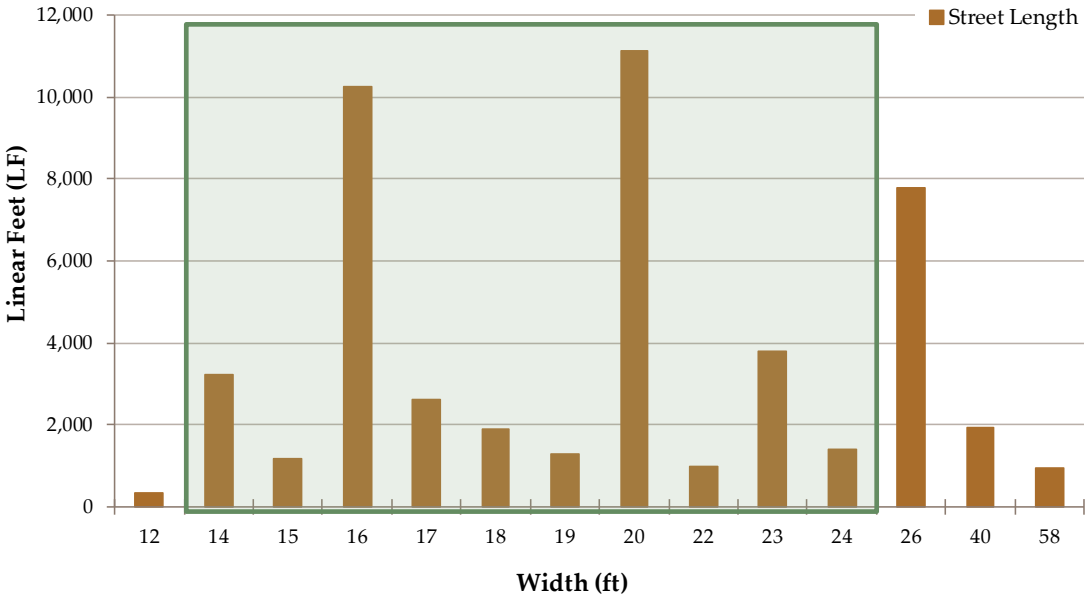
Street & Lane Width

Street width can have important implications not only for maintenance costs but also for public safety. "The wider the better" is often an accepted standard for street width, and subdivision ordinances often reflect that sentiment. However, in general, streets should be built to a minimum of 14 feet and a maximum of 25 feet. Widths below 14 feet can limit automobiles' ability to easily pass each other. As roads exceed 25 feet in width, problems related to speeding, on-street parking (which can be a hazard to children in residential areas), heat-island effects, and maintenance of street and drainage systems increase. Wider roads should be used in high-traffic areas, including dense residential neighborhoods.

Lane width present a similar issue. The American Association of State Highway and Transportation Officials (AASHTO) manual states that lane widths for rural and urban arterials may vary from 10-to-12-feet. Common practice builds to 12 feet and assumes that narrower lane widths are less safe. However, there is ample research that proposes the exact opposite – that narrower lane widths are not correlated with higher crash rates and may even be associated with lower crash rates by helping to reduce speeding. Cities around the country are finding that when an existing road is redesigned for 10- or 11-foot lanes there is enough left-over space to include on-street bike facilities.

Chart 8A shows the number of linear feet of roadway at each road width measured in the field survey. As the chart demonstrates, only 19% of City-maintained streets are within the recommended road width range of 14-to-25 feet (shown as green square). Most streets in Littlefield have widths greater than 25-feet, nearly all streets in the center of Littlefield (60% of city-maintained roads) are 34-feet wide. Streets with widths narrower than recommended (12ft) are small sections of neighborhood roads in the west of the city. Streets in Littlefield maintained by other entities such as TxDOT and Lamb County range from 13 feet to 300 feet in width and are usually intended for more intense use (e.g. US 84).

Chart 8A: Street Width Distribution, City-maintained Streets



Street Network Layout

Street layout and connectivity can also impact maintenance costs. For example, a high number of dead-end streets - also shown in the cul-de-sac networks in *Figure 8D* will increase congestion and speed road deterioration. Grid-based networks facilitate ease of access and movement, but also require a larger amount of land use for streets and, as a result, higher maintenance costs. Curvilinear loop networks offer an option for maintaining connectivity while reducing the land area required for streets *(see Figure 8D).* The layout of Littlefield's street system has been determined primarily by the location railroad right-of-way and TxDOT-maintained and County-maintained roads that surround the city (e.g. US 84, US 385, and Highway 430). These roads serve as Littlefield's primary thoroughfares. Local streets extend from the thoroughfares to form a general grid and several small neighborhoods. Littlefield has a strong grid pattern that serves to connect all parts of the city. The City should continue to consider both motorized and non-motorized connections and avoid extending the street network since the city is not projected to grow over the next 10 years.

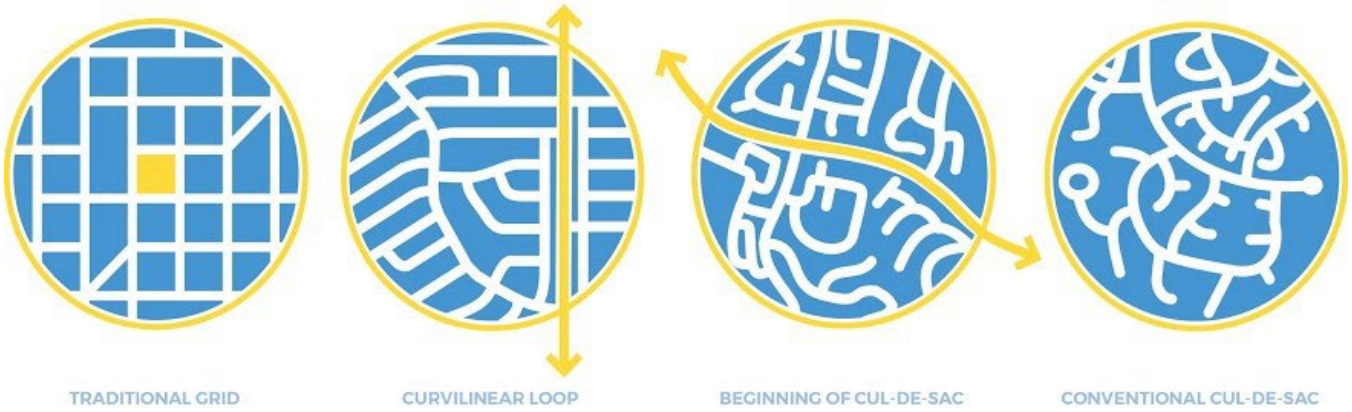


Figure 8D : Street Network Examples[47]

The City should also take actions to promote connectivity between existing streets and future developments. Cul-de-sacs may be appropriate where topography limits through-streets. However, if new development does not incorporate connections with existing local streets, the high number of dead ends create an otherwise avoidable additional financial and administrative burden. Street design requirements, such as layout and width, are usually established within a subdivision ordinance, although they can also be controlled through zoning or through a construction manual.

Strategic decisions about unbuilt right-of-way can also support connected and efficient future street development. Often, cities have sections of right-of-way that were dedicated when the land was platted but streets were never constructed. This often occurs because (a) the developments were never completely built out or (b) topographic barriers made construction of the streets impractical. Making strategic decisions about whether to maintain or abandon unbuilt right-of-way can support future connectivity and avoid unnecessary general maintenance expenditure (such as mowing). For example, it is not worthwhile to keep sections of unbuilt right-of-way that have either already been occupied by residential yards or structures, or that are considered a poor location for development because of existing streams or swampy soil. **In general law cities, an abutting street may not be closed or vacated without consent of the adjoining property owners.**

Figure 8E illustrates recommendations for which sections of unbuilt right-of-way in Littlefield should be maintained to enable future connections with potential development (green) and which sections should be abandoned (red). *Figure 8E* also illustrates areas of the Littlefield street network that are used for public right-of-way but are not formalized as such (orange). These areas are scattered throughout the city and generally already used as dirt access roads for farms or neighborhoods. Given Littlefield's predicted population decline and the high cost to maintain roads, this plan does not recommend the city develop any unbuilt ROW into streets, but the city should keep recommended and informal ROW for the potential future.

[47] *Source: https://www.cnu.org/our-projects/street-networks/street-networks-101*

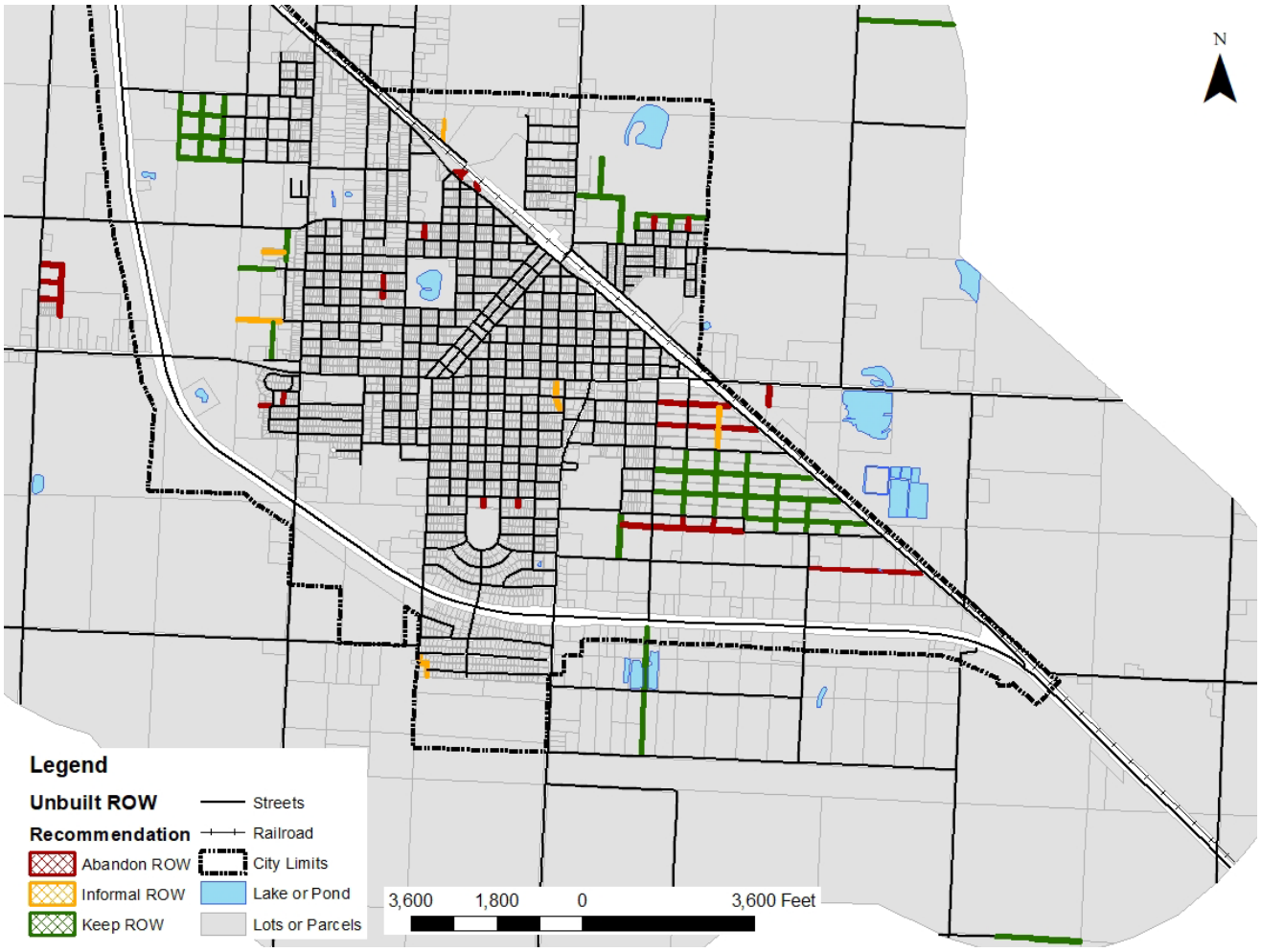


Figure 8E: Unbuilt Right-of-Way

Maintenance Policies

A regular and strategic street maintenance schedule is key to avoiding extensive street deterioration and costly repairs. Delayed maintenance decreases the surface life of paved roads. Routine maintenance extends the life of streets, delays higher cost improvements, and can save a city money in the long run. *Figure 8F (next page)* illustrates how the use of preventative maintenance treatments can defer the need for rehabilitation.

An ideal maintenance schedule addresses road deterioration as it occurs so that roads never fall below "fair" condition. Roads receive annual pothole and crack sealing, a seal coat every 8-to-10-years, some overlay every 20 years, and reconstruction every 30 years. Seal coat and overlay repairs extend the life of the road and forestall more expensive maintenance. A delayed maintenance schedule only addresses roads that have fallen into fair-to-poor condition. Because of surface and road base deterioration, cheaper maintenance options will only have a temporary effect on roads in fair-to-poor condition.

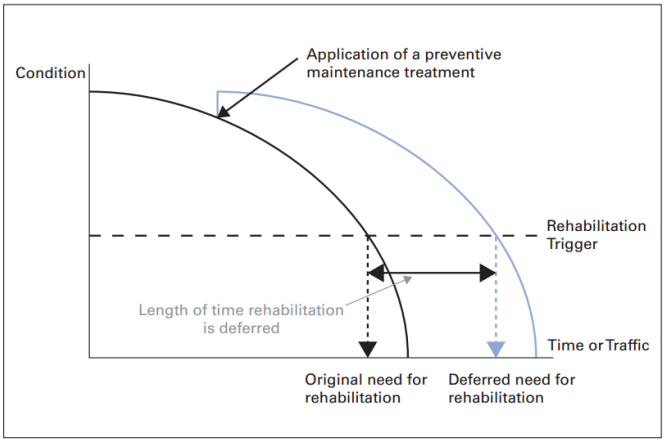


Figure 8F: Preventative Maintenance Treatments Slow the Rate of Pavement Deterioration[48]

The street repair department of Littlefield has a maintenance schedule. Potholes are repaired monthly according to public request and inspections. Other street improvements also take place on an as needed basis. The City of Littlefield has a mutual aid agreement with Lamb County wherein the City purchases materials and pays labor costs and the county provides equipment and laborers.

Littlefield spent approximately $465,705 on streets and public works during the 2019-2018 fiscal year and $513,858 during the 2017-2018 fiscal year. Using the standards in *Table 8D* and the percentages of asphalt streets currently maintained by the city of Littlefield, an ideal city-wide road maintenance program would cost approximately $1,022,085 per year. As *Table 8D* also demonstrates, widening City-maintained streets by only one foot raises the cost of an ideal maintenance program by $28,264 per year.

Table 8D: City-wide Street Maintenance Costs

Repair Type	Repair Frequency	$ per square yard	Ideal Maintenance Schedule (**annual** price at existing average street width of 32 feet)	**Annual** price per each additional foot of road width*
Seal Coat (asphalt)	10 years (10% per year)	$3.20	$282,644	$8,832
Overlay (asphalt)	20 years (5% per year)	$14.08	$621,817	$19,431
Preventative Maintenance (e.g. potholes)	Annual, city-wide, as-needed	N/A	$117,622	-
	Total		**$1,022,085**	**$28,264**

*Estimate in 2019 dollars using 2019 costs; does not include inflation, cost fluctuation or other variables, and $/yard estimate is included to facilitate re-calculation using adjusted numbers.

[48] *Source: Federal Highway Administration Pavement Preservation Compendium II http://www.fhwa.dot.gov/pavement/preservation/ppc06.pdf*

Substandard materials and inadequate drainage also decrease the surface life of paved roads. Developers will sometimes attempt to cut construction costs by installing inferior quality materials and sub-standard design in towns and cities that do not have minimum design standards and/or that do not require regular inspection during construction by a licensed engineer.

Littlefield should consider developing a public works construction manual. Littlefield should also consider updating the subdivision ordinance to include specific warranty and testing requirements for new street construction to ensure that new streets and roadside drainage features (which generally maintained by the municipality) after installation are of standard quality.

8.2.4 Share the Road

Biking and walking are not just for dense, urban areas. Active transportation has many benefits for rural Americans and data shows that not only are rural Americans interested in walking and biking, they are already doing it at higher rates than previously believed.[49] Investing in active transportation infrastructure like bike facilities, sidewalks, and trails can improve the safety, health, and happiness of a community. These projects are much less expensive to build compared to road projects and can help mitigate traffic congestion. Multimodal infrastructure also offers less expensive transportation options for users. Transportation is the second largest expenditure for American families (after housing) (National Complete Streets Coalition, 2018).

Safe and comfortable pedestrian and bike facilities encourage those who might otherwise feel unsafe or intimidated to explore the city outside of their vehicles; 20% of park survey respondents indicated that they do not feel safe walking to the nearest park or it is too far and 21% do not feel safe biking. These facilities are especially important for children and kids, who without the ability to drive often walk or bike to school or friend's homes. See *Chapter 10: Recreation & Open Space* for a detailed summary of survey findings. Sidewalks run along many of the streets in south Littlefield but are sporadic or non-existent in other parts of the city. The City should further develop its existing sidewalk network.

Coordination between transportation goals and land use goals is essential for enhancing mobility because land use patterns and design have a significant impact on traffic flow and mobility. As *Figure 8G* depicts, the typical suburban housings development design is often less efficient in terms of mobility, especially for residents on foot. Because of the 'lollipop' street network layout, a one-minute walk becomes a 10-minute walk or, without infrastructure to support non-motorized travel such as sidewalks or bike lanes, travelers may only feel safe driving.

[49] U.S. DOT 2009 Omnibus Household Survey

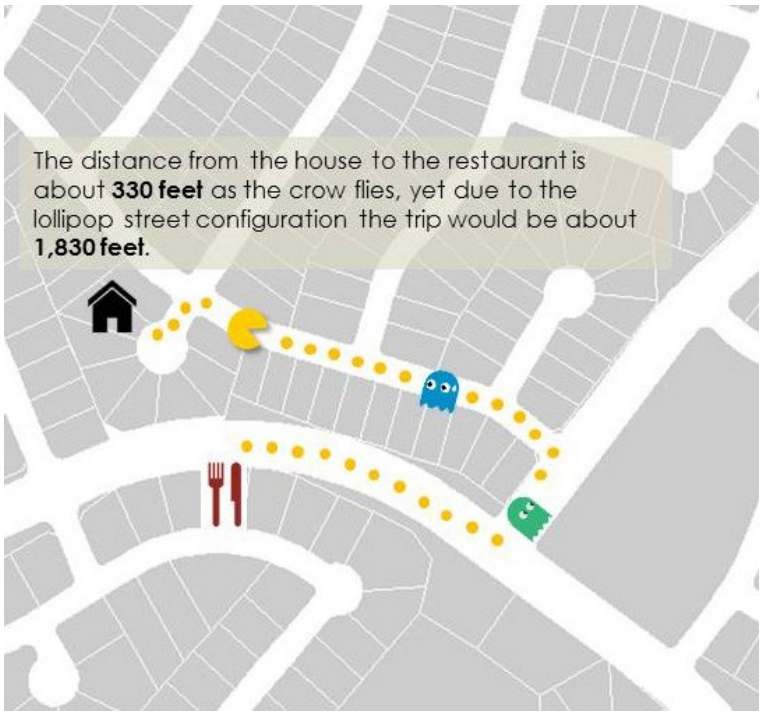


Figure 8G: Land Use Impacts Transportation

8.2.5 Emergency Preparedness

Well-planned transportation systems should also consider movement of people in non-routine and less predictable circumstances, such as events that may require evacuation and emergency transportation. The Texas Department of Transportation (TxDOT) designates specific routes for safe and timely evacuation of coastal areas in the event of a hurricane. TxDOT may use *contraflow* (reversal of inbound lanes to outbound lanes) or *evaculanes* (use of the road's shoulder) to facilitate evacuation along these regional routes.

There are no TxDOT designated routes located close to the city of Littlefield. TxDOT's only specified evacuation routes are hurricane evacuation routes and generally do not extend west of Austin/San Antonio. While not officially designated as evacuation routes, major arterials like US 84 and US 385 will provide key emergency transportation in event of potential severe weather or a disaster event.

The City should consider developing local evacuation routes/procedures. The City should identify roads that (a) have numerous connections with local roads (providing key connections through and between neighborhoods) and/or (b) provide connections to major arterials. Roads that meet these specifications, especially roads meeting both specifications, should be established as local evacuation routes and receive priority for traffic (re)direction, debris clearing, etc. in the event of an emergency.

Developing a local evacuation plan will also help the City identify potentially vulnerable areas, such as areas of the community that have only single street access. Residents in these areas may not be able to safely access an evacuation route if a tree or large debris blocks the road. The City of Littlefield should invest in projects to improve connectivity with these areas. A well-connected street system can greatly facilitate the safe and rapid movement of people away from a threat, as well as the swift delivery of post-disaster assistance and supplies. This chapter identifies areas of low connectivity in Littlefield and demonstrates how existing unbuilt rights-of-way, where applicable, may be built out to improve connectivity (unbuilt rights-of-way also discussed in *Section 8.2.3, above*).

The City of Littlefield should also invest in preventative measures to reduce/avoid the impact of potential flooding on the city and the city's road network in the future. Over the planning period, the City should complete the storm drainage improvements identified in *Chapter 7: Storm Drainage Study*.

8.2.6 Funding

One alternative to using a General Fund for street maintenance costs is a 4B Sales Tax. The 4B Sales Tax is a locally implemented program that allows municipalities to create economic development corporations that manage projects funded by local sales tax. The tax can fund a broad range of community improvement projects related to economic development and community improvement, and a number of Texas cities choose to dedicate revenues to street improvements. The 4B program is established by vote at the local level and requires the establishment of a development corporation to manage the funds. The tax is adopted as an additional increment of 0.125% on top of a city's existing sales tax. A second alternative to using the general fund for street maintenance costs is a Street Maintenance Tax. Like the 4B Sales Tax, the Street Maintenance Tax is established by vote. Unlike the 4B Sales Tax, the Street Maintenance Tax is capped at 0.25%, all revenues are dedicated to street maintenance, the tax must be re-established every four years, and no development corporation is required.

However, local sales taxes cannot exceed 2.0% (or 8.25% total sales tax). The City of Littlefield has collected a 0.5% 4B Sales Tax and a 0.5% 4A Sales Tax since 2011 in addition to the 1.0% City Sales Tax for a total local sales tax of 2.0% (or 8.25% total sales tax).

8.3 Prioritized Problems

Problems with the City's street system are ranked and listed as follows:

1. Local streets in fair-to-poor condition need repaving or reconstruction.
2. Littlefield needs to pursue an ongoing maintenance program to limit long-term costs.
3. Lack of drainage infrastructure contributes to substandard street conditions.
4. Unbuilt right-of-way not intended for future construction should be vacated.

8.4 Street System Improvement Projects

The following section describes a series of proposed improvements to the existing street system. The improvement projects are presented as phased improvements that are suggested for implementation over the 10-year planning period encompassed by this comprehensive plan.

Table 8E: Street Improvement Plan Projects (Section 8.5) elaborates the implementation plan for street improvements in Littlefield over the next 10 years. The plan includes four construction phases:

- **Construction Phase 1 (2020-2022):** Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.
- **Construction Phase 2 (2023-2025):** Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.
- **Construction Phase 3 (2025-2027):** Repair 80,765 Linear Feet (LF) of streets in fair condition; with Phase 3 improvements for water and/or wastewater and in western part of city. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.
- **Construction Phase 4 (2028-2030):** Repair 60,815 Linear Feet (LF) of remaining streets in fair-to-good condition with Phase 4 improvements for water and/or wastewater. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost

estimates assume paving dirt roads with gravel and regrading gravel roads.

Construction phases are illustrated on *Map 8B: Proposed Street Improvements 2020-2030.*

The construction phasing reflects an effort to address streets in fair-to-poor condition by 2030 and to execute an ongoing system of street maintenance for local roads. The projects are sequenced to coordinate with the recommended water and wastewater line replacement projects in *Chapter 5 and Chapter 6.* Street repairs should occur in conjunction with or shortly following line projects to avoid duplicate street construction/paving caused by damages from line projects. Changes to water and wastewater project phasing (commonly due to funding availability and changes in project priorities) would result in changes to street project phasing.

For those streets that route traffic directly to highly traveled destination, including schools, parks, central business districts, repair operations should include an overlay process for the sections of paved streets that can be salvaged and new pavements sections for those areas that currently do not have pavement. For less highly traveled roads, seal coating may be sufficient.

Table 8E (Section 8.5) also includes estimated costs for each construction phase. The costs are based on current costs of record for similar projects in the same geographical area of the state. Cost estimates are also based on the goal of (re)paving all roads in fair-to-poor condition and the assumption that street widths will not change. The costs of each type of construction and the linear feet and cubic yards for each street have been included in *Table 8F* to facilitate adjustments to the cost estimates.

Littlefield spent approximately $465,705 on streets and public works during the 2019-2018 fiscal year and $513,858 during the 2017-2018 fiscal year. **The proposed construction phases average approximately $1,058,386 per year**. As with all planning documents, the costs are estimates only provided to inform staff and council members on approximate amounts required for city-wide street improvements. Exact prices cannot be known until specific proposals have been created and construction bids entered.

Construction phases are also expected to be altered based on fund availability. Although generally more cost effective in the long term, the costs of increasing and maintaining a paved road network is not financially feasible for many smaller communities. The City should continue to develop paving priorities based on frequency of use and connections between key destinations such as school, business centers, etc. In addition, the Federal Highway Administration's "Gravel Roads Constructions and Maintenance Guide" provides both information to help guide paving decisions and technical guidance for extending the longevity of unpaved roads (guide included in the *Digital Appendix)*.

The City should also consider reducing street widths to decrease improvements costs where appropriate. The City could save an estimated $28,264 per year by reducing streets widths by only one foot (see *Table 8D, Section 8.2.3).*

8.5 Implementation Plan

The following table outlines a specific set of actions and improvement projects to achieve a functional street system that improves the quality of life in Littlefield. The estimated costs for the actions and improvement projects are as follows:

Table 8E: Street Improvement Plan Projects: 2020 - 2030

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources*
	2020-2023	2024-2026	2027-2030			
Goal 8.1 *A safe, well-maintained and functional community street system*						
By 2021, establish a system for maintaining street system on an overlapping, rotating basis by following a program of chip seal coating, overlay, and reclamation projects to keep paved surfaces in good condition.	X			City	N/A	N/A
Adopt updated subdivision ordinance standards that establish minimum street design requirements and require developers to provided interconnectivity between new development and the existing street system	X			City	$500 - $1,000 (legal)	GEN
Construction Phase 1: Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	X			City	$2,699,461 ($899,820/ year)	GEN
Construction Phase 2: Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets	X	X		City	$2,601,234 ($867,078/ year)	GEN

that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.						
Construction Phase 3: Repair 80,765 Linear Feet (LF) of streets in fair condition; with Phase 3 improvements for water and/or wastewater and in western part of city. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.		X	X	City	$2,524,487 ($1,262,244/ year)	GEN
Construction Phase 4: Repair 60,815 Linear Feet (LF) of remaining streets in fair-to-good condition with Phase 4 improvements for water and/or wastewater. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.			X	City	$2,408,803 ($1,204,401/ year)	GEN
Annual seal coat ten (10) percent of City streets; annual overlay five (5) percent of City streets; and budget for preventative maintenance of City streets (based on 30-foot average width incorporated into the above construction phases).	X	X	X	City	$1,022,085 / year	GEN
Implement drainage projects in *Chapter 7: Storm Drainage System Study* to prevent ponding of water on roadways.	X	X	X	City	TBD	City, TxDOT
Goal 8.2 *The City's street system support safe and rapid movement of people in the event of an emergency.*						
Develop a local evacuation plan that establishes priority routes based on key connector streets	X			City	Staff	GEN
Disseminate and inform residents of regional emergency routes/procedures	X	X	X	City	Variable; Staff	GEN
Incorporate targeted projects to improve street network connectivity in capital improvement projects so residents have more options to access emergency routes	X	X	X	City	Variable	GEN

Source: City of Littlefield General Fund (GEN), including funds from any new tax; Texas Department of Transportation (TxDOT). Some street segments may require associated curb and gutter construction. Those prices are not included in the costs on this table.

Table 8F: Street Improvements by Construction Phase (Current Widths)

2020-2022									
Phase	**Street**	**From**	**To**	**Condition**	**Material**	**Linear Feet**	**Current Width**	**Square Yards**	**Cost**
Phase 1	Crescent Drive	S Farwell Street	E 17th Street	Fair	Asphalt	1,340	34	5,063	$27,240
Phase 1	E 11th Street	S Duggan Avenue	S Harral Avenue	Good	Asphalt	534	50	2,967	$9,493
Phase 1	E 11th Street	S Harral Avenue	Phelps Avenue	Good	Asphalt	2,242	34	8,469	$27,100
Phase 1	E 12th Street	S Duggan Avenue	Phelps Avenue	Good	Asphalt	2,775	34	10,484	$33,548
Phase 1	E 13th Street	S Duggan Avenue	S Harral Avenue	Good	Asphalt	515	34	1,946	$6,228
Phase 1	E 13th Street	S Harral Avenue	Phelps Avenue	Fair	Asphalt	2,256	34	8,522	$45,849
Phase 1	E 14th Street	S Duggan Avenue	Phelps Avenue	Fair	Asphalt	2,761	34	10,430	$56,111
Phase 1	E 15th Street	Hall Avenue	Phelps Avenue	Fair	Asphalt	2,790	34	10,539	$56,701
Phase 1	E 16th Street	Hall Avenue	Phelps Avenue	Good	Asphalt	2,773	34	10,476	$33,525
Phase 1	E 17th Street	Hall Avenue	S Twitchell Avenue	Fair	Asphalt	875	34	3,305	$17,780
Phase 1	E 17th Street	S Twitchell Avenue	S Wroe Avenue	Fair	Asphalt	359	50	1,994	$10,728
Phase 1	E 17th Street	S Wroe Avenue	Phelps Avenue	Fair	Asphalt	1,540	34	5,819	$31,307
Phase 1	E 18th Street	Hall Avenue	Crescent Drive	Good	Asphalt	1,222	34	4,617	$14,775
Phase 1	E 18th Street	Crescent Drive	Phelps Avenue	Good	Asphalt	819	34	3,094	$9,902
Phase 1	E 19th Street	Hall Avenue	Crescent Drive	Good	Asphalt	1,221	34	4,611	$14,756
Phase 1	E 19th Street	Crescent Drive	Phelps Avenue	Good	Asphalt	831	34	3,141	$10,052
Phase 1	E 20th Street	Hall Avenue	Crescent Drive	Good	Asphalt	1,298	34	4,902	$15,686
Phase 1	E 20th Street	Crescent Drive	Phelps Avenue	Good	Asphalt	918	34	3,469	$11,102
Phase 1	E 21st Street	E 20th Street	E 20th Street	Good	Asphalt	1,563	34	5,906	$18,900
Phase 1	E 22nd Street	Hall Avenue	E 23rd Street	Good	Asphalt	1,296	34	4,895	$15,663
Phase 1	E 23rd Street	Hall Avenue	Phelps Avenue	Good	Asphalt	2,853	34	10,778	$34,491

Phase 1	E 3rd Street	Eastside Avenue	S Harral Avenue	Fair	Asphalt	107	50	597	$3,210
Phase 1	E 3rd Street	S Harral Avenue	LFD Drive	Good	Concrete	200	34	756	$0
Phase 1	E 3rd Street	LFD Drive	Phelps Avenue	Good	Asphalt	677	34	2,558	$8,186
Phase 1	E 4th Street	LFD Drive	Condition Change	Fair	Asphalt	15	50	84	$451
Phase 1	E 4th Street	Condition Change	Phelps Avenue	Good	Asphalt	207	34	782	$2,503
Phase 1	E 4th Street	Hall Avenue	LFD Drive	Good	Asphalt	1,478	45	7,390	$23,648
Phase 1	E 5th Street	LFD Drive	Phelps Avenue	Good	Concrete	204	34	770	$0
Phase 1	E 5th Street	Eastside Avenue	N Duggan Avenue	Fair	Asphalt	365	34	1,378	$7,414
Phase 1	E 5th Street	N Duggan Avenue	LFD Drive	Good	Asphalt	1,037	34	3,919	$12,542
Phase 1	E 6th Street	LFD Drive	Phelps Avenue	Poor	Concrete	208	60	1,383	$89,924
Phase 1	E 6th Street	SL 430	LFD Drive	Good	Asphalt	3,106	34	11,733	$37,545
Phase 1	E 7th Street	LFD Drive	Phelps Avenue	Good	Asphalt	200	60	1,333	$4,265
Phase 1	E 7th Street	Hall Avenue	LFD Drive	Good	Asphalt	2,364	34	8,929	$28,573
Phase 1	E 8th Street	LFD Drive	Phelps Avenue	Fair	Asphalt	201	34	760	$4,091
Phase 1	E 8th Street	Seldon Avenue	LFD Drive	Good	Asphalt	3,355	34	12,673	$40,554
Phase 1	E 9th Street	LFD Drive	Phelps Avenue	Fair	Asphalt	215	34	811	$4,363
Phase 1	LFD Drive	Waylon Jennings Boulevard	E 8th Street	Good	Asphalt	558	34	2,108	$6,746
Phase 1	LFD Drive	E 8th Street	E 7th Street	Fair	Asphalt	454	34	1,715	$9,229
Phase 1	LFD Drive	E 7th Street	E 6th Street	Good	Asphalt	443	60	2,953	$9,449
Phase 1	LFD Drive	E 6th Street	E 3rd Street	Poor	Concrete	1,403	60	9,353	$607,931
Phase 1	LFD Drive	E 3rd Street	SL 430	Poor	Asphalt	466	60	3,109	$43,779
Phase 1	N Duggan Avenue	Waylon Jennings Boulevard	E 5th Street	Good	Asphalt	1,438	34	5,431	$17,380
Phase 1	N Duggan Avenue	E 5th Street	E 4th Street	Good	Asphalt	363	36	1,453	$4,648
Phase 1	N Duggan Avenue	E 4th Street	SL 430	Good	Asphalt	641	45	3,207	$10,261
Phase 1	Phelps Avenue	US 84	E 23rd Street	Fair	Asphalt	467	50	2,594	$13,957
Phase 1	Phelps Avenue	E 23rd Street	Waylon Jennings	Fair	Asphalt	3,939	42	18,381	$98,889

			Boulevard						
Phase 1	Phelps Avenue	Waylon Jennings Boulevard	E 9th Street	Good	Asphalt	288	90	2,883	$9,226
Phase 1	Phelps Avenue	E 9th Street	E 7th Street	Good	Asphalt	929	60	6,194	$19,819
Phase 1	Phelps Avenue	6th Drive	E 6th Street	Fair	Asphalt	242	60	1,611	$8,665
Phase 1	Phelps Avenue	E 6th Street	SL 430	Fair	Concrete	1,854	70	14,420	$0
Phase 1	Crescent Drive	S Farwell Street	E 17th Street	Fair	Asphalt	1,340	34	5,063	$27,239
Phase 1	S Duggan Avenue	E 14th Street	Waylon Jennings Boulevard	Fair	Asphalt	1,442	34	5,446	$29,300
Phase 1	S Eastside Avenue	Waylon Jennings Boulevard	E 7th Street	Good	Asphalt	705	34	2,664	$8,526
Phase 1	S Eastside Avenue	E 7th Street	E 5th Street	Fair	Gravel	721	34	2,724	$71,528
Phase 1	S Eastside Avenue	E 5th Street	E 4th Street	Fair	Asphalt	367	34	1,388	$7,465
Phase 1	S Eastside Avenue	E 4th Street	E 3rd Street	Good	Asphalt	337	45	1,683	$5,386
Phase 1	S Farwell Avenue	E 17th Street	XIT Drive	Fair	Asphalt	3,843	34	14,519	$78,115
Phase 1	S Harral Avenue	E 22nd Street	E 18th Street	Good	Asphalt	1,069	34	4,039	$12,925
Phase 1	S Harral Avenue	E 18th Street	E 17th Street	Fair	Asphalt	417	34	1,574	$8,468
Phase 1	S Harral Avenue	E 17th Street	E 8th Street	Good	Asphalt	2,884	34	10,895	$34,865
Phase 1	S Harral Avenue	E 8th Street	E 7th Street	Fair	Asphalt	352	34	1,330	$7,158
Phase 1	S Harral Avenue	E 7th Street	E 5th Street	Good	Asphalt	712	34	2,691	$8,610
Phase 1	S Harral Avenue	E 5th Street	E 3rd Street	Fair	Asphalt	717	34	2,708	$14,570
Phase 1	S LFD Drive	End of Road	E 17th Street	Fair	Asphalt	211	50	1,174	$6,313
Phase 1	S LFD Drive	E 17th Street	Waylon Jennings Boulevard	Fair	Asphalt	2,482	34	9,376	$50,443
Phase 1	S Morse Avenue	E 17th Street	E 8th Street	Fair	Asphalt	2,875	34	10,863	$58,442
Phase 1	S Twichell Avenue	E 17th Street	E 16th Street	Fair	Gravel	359	20	798	$20,956

Phase 1	S Twichell Avenue	E 16th Street	E 11th Street	Good	Asphalt	1,797	34	6,789	$21,725
Phase 1	S Twichell Avenue	Waylon Jennings Boulevard	LFD Drive	Good	Asphalt	1,814	34	6,852	$21,927
Phase 1	S Wroe Avenue	E 17th Street	E 15th Street	Good	Asphalt	712	34	2,690	$8,608
Phase 1	S Wroe Avenue	E 15th Street	E 14th Street	Fair	Asphalt	365	34	1,381	$7,429
Phase 1	S Wroe Avenue	E 14th Street	E 13th Street	Good	Asphalt	343	34	1,295	$4,145
Phase 1	S Wroe Avenue	E 13th Street	E 12th Street	Fair	Asphalt	378	34	1,427	$7,676
Phase 1	S Wroe Avenue	E 12th Street	Waylon Jennings Boulevard	Good	Asphalt	710	34	2,684	$8,588
Phase 1	S Wroe Avenue	Waylon Jennings Boulevard	E 8th Street	Fair	Asphalt	368	34	1,392	$7,490
Phase 1	S Wroe Avenue	E 8th Street	E 7th Street	Good	Asphalt	350	34	1,323	$4,233
Phase 1	S Wroe Avenue	E 7th Street	E 6th Street	Good	Asphalt	357	35	1,388	$4,440
Phase 1	SL 430	E 3rd Street	XIT Drive	Fair	Asphalt	566	45	2,830	$15,227
Phase 1	W 3rd Street	Phelps Avenue	XIT Drive	Good	Concrete	201	34	758	$0
Phase 1	W 4th Street	Phelps Avenue	XIT Drive	Good	Concrete	191	34	723	$0
Phase 1	W 5th Street	Phelps Avenue	S Ripley Avenue	Good	Asphalt	1,037	34	3,918	$12,537
Phase 1	W 6th Street	Phelps Avenue	XIT Drive	Poor	Concrete	185	60	1,236	$80,369
Phase 1	W 7th Street	Phelps Avenue	XIT Drive	Good	Asphalt	194	60	1,292	$4,134
Phase 1	W 8th Street	Phelps Avenue	XIT Drive	Fair	Asphalt	203	34	767	$4,129
Phase 1	W 9th Street	Phelps Avenue	XIT Drive	Fair	Asphalt	196	34	742	$3,991

Phase 1	XIT Drive	Waylon Jennings Boulevard	W 7th Street	Good	Asphalt	1,383	34	5,224	$16,715
Phase 1	XIT Drive	W 7th Street	W 6th Street	Fair	Asphalt	434	60	2,892	$15,557
Phase 1	XIT Drive	W 6th Street	W 5th Street	Poor	Concrete	471	60	3,142	$204,240
Phase 1	XIT Drive	W 5th Street	W 3rd Street	Fair	Concrete	915	60	6,101	$0
Phase 1	XIT Drive	W 3rd Street	W 2nd Street	Poor	Concrete	465	50	2,582	$167,809
Subtotal						*94,675*		*395,058*	*$2,699,461*

2023-2025									
Phase	**Street**	**From**	**To**	**Condition**	**Material**	**Linear Feet**	**Current Width**	**Square Yards**	**Cost**
Phase 2	Mockingbird Lane	W 14th Street	W Locust Lane	Good	Asphalt	897	34	3,389	$10,845
Phase 2	N Farwell Avenue	W 1st Street	SL 430	Fair	Asphalt	376	34	1,420	$7,641
Phase 2	N Lake Avenue	W 1st Street	SL 430	Fair	Asphalt	1,135	34	4,287	$23,065
Phase 2	N Morse Avenue	W 1st Street	SL 430	Fair	Gravel	678	24	1,807	$47,463
Phase 2	N Ripley Avenue	W 1st Street	W Weidel Street	Poor	Asphalt	361	34	1,362	$19,180
Phase 2	N Ripley Avenue	W Weidel Street	W Griggs Street	Fair	Asphalt	365	34	1,379	$7,417
Phase 2	N Ripley Avenue	W Griggs Street	SL 430	Poor	Asphalt	190	34	719	$10,120
Phase 2	S Ash Avenue	W 7th Street	W 4th Street	Poor	Dirt	1,091	12	1,455	$38,204
Phase 2	S Ash Avenue	W 4th Street	End of Road	Poor	Dirt	114	8	101	$2,651
Phase 2	S Austin Street	W 8th Street	W 7th Street	Poor	Dirt	373	10	415	$10,887
Phase 2	S Austin Street	End of Road	W 2nd Street	Fair	Gravel	162	24	433	$11,368
Phase 2	S Austin Street	W 2nd Street	W 1st Street	Poor	Gravel	373	24	995	$26,129
Phase 2	S Barton Avenue	W 8th Street	W 6th Street	Fair	Gravel	720	20	1,601	$42,040
Phase 2	S Barton Avenue	W 6th Street	W 4th Street	Fair	Gravel	717	24	1,912	$50,216
Phase 2	S Barton Avenue	W 4th Street	W 3rd Street	Poor	Gravel	362	20	804	$21,122
Phase 2	S Barton Avenue	W 3rd Street	W 2nd Street	Poor	Dirt	365	20	811	$21,296

Phase 2	S Barton Avenue	W 2nd Street	W 1st Street	Fair	Gravel	358	24	955	$25,080
Phase 2	S Bell Avenue	Waylon Jennings Boulevard	W 9th Street	Good	Asphalt	367	34	1,385	$4,433
Phase 2	S Bell Avenue	W 9th Street	W 8th Street	Poor	Asphalt	358	24	955	$13,441
Phase 2	S Bell Avenue	W 8th Street	W 7th Street	Good	Asphalt	358	34	1,352	$4,328
Phase 2	S Bell Avenue	W 6th Street	W 5th Street	Poor	Gravel	363	20	807	$21,203
Phase 2	S Bell Avenue	W 5th Street	W 4th Street	Poor	Asphalt	354	34	1,337	$18,819
Phase 2	S Bell Avenue	W 4th Street	W 3rd Street	Poor	Gravel	362	24	966	$25,370
Phase 2	S Bell Avenue	W 3rd Street	W 2nd Street	Poor	Gravel	362	20	806	$21,153
Phase 2	S Bell Avenue	W 2nd Street	W 1st Street	Poor	Gravel	353	24	940	$24,695
Phase 2	S Farwell Avenue	W 4th Street	W 3rd Street	Good	Asphalt	358	34	1,352	$4,327
Phase 2	S Farwell Avenue	W 3rd Street	W 2nd Street	Fair	Gravel	358	34	1,354	$35,546
Phase 2	S Farwell Avenue	W 2nd Street	W 1st Street	Poor	Gravel	362	34	1,367	$35,900
Phase 2	S Lake Avenue	W 8th Street	W 6th Street	Fair	Asphalt	717	34	2,710	$14,577
Phase 2	S Lake Avenue	W 3rd Street	W 1st Street	Good	Asphalt	716	34	2,705	$8,655
Phase 2	S Monticello Avenue	W 14th Street	Waylon Jennings Boulevard	Good	Asphalt	1,425	34	5,385	$17,232
Phase 2	S Morse Avenue	W 6th Street	W 5th Street	Poor	Asphalt	356	34	1,347	$18,962
Phase 2	S Morse Avenue	W 5th Street	W 2nd Street	Fair	Asphalt	1,080	34	4,082	$21,959
Phase 2	S Morse Avenue	W 2nd Street	W 1st Street	Poor	Gravel	357	34	1,349	$35,426

Phase 2	S Park Avenue	W 14th Street	Waylon Jennings Boulevard	Good	Asphalt	1,425	34	5,384	$17,229
Phase 2	S Park Avenue	Waylon Jennings Boulevard	W 9th Street	Fair	Asphalt	365	34	1,380	$7,426
Phase 2	S Park Avenue	W 9th Street	W 8th Street	Poor	Asphalt	353	34	1,335	$18,793
Phase 2	S Park Avenue	W 8th Street	W 6th Street	Good	Asphalt	718	34	2,714	$8,684
Phase 2	S Park Avenue	W 3rd Street	W 2nd Street	Fair	Asphalt	348	34	1,315	$7,074
Phase 2	S Ripley Avenue	W 7th Street	W 1st Street	Fair	Asphalt	2,161	34	8,163	$43,916
Phase 2	S Twichell Avenue	W 2nd Street	SL 430	Fair	Asphalt	177	34	668	$3,592
Phase 2	S Westside Avenue	W 15th Street	W 14th Street	Fair	Asphalt	314	30	1,048	$5,636
Phase 2	S Westside Avenue	W 14th Street	Waylon Jennings Boulevard	Good	Asphalt	1,426	34	5,388	$17,242
Phase 2	S Wicker Avenue	End of Road	Waylon Jennings Boulevard	Good	Asphalt	1,901	34	7,180	$22,976
Phase 2	S Wicker Avenue	Waylon Jennings Boulevard	W 9th Street	Fair	Asphalt	363	34	1,373	$7,388
Phase 2	S Wicker Avenue	W 9th Street	W 8th Street	Poor	Asphalt	359	34	1,357	$19,102
Phase 2	S Wicker Avenue	W 8th Street	W 6th Street	Poor	Gravel	722	34	2,726	$71,590
Phase 2	S Wicker Avenue	W 6th Street	W 5th Street	Fair	Gravel	363	34	1,370	$35,971
Phase 2	S Wicker Avenue	W 5th Street	W 4th Street	Poor	Gravel	353	24	941	$24,717
Phase 2	S Wicker Avenue	W 4th Street	W 3rd Street	Poor	Dirt	365	24	975	$25,594
Phase 2	S Wicker Avenue	W 3rd Street	W 2nd Street	Poor	Gravel	345	24	919	$24,136
Phase 2	S Wicker Avenue	W 2nd Street	W 1st Street	Fair	Gravel	365	34	1,381	$36,259

Phase 2	S Wroe Avenue	W 3rd Street	W 1st Street	Fair	Asphalt	719	34	2,715	$14,606
Phase 2	SL 430	XIT Drive	N Morse Avenue	Fair	Gravel	1,707	50	9,482	$248,989
Phase 2	SL 430	N Morse Avenue	W Griggs Street	Fair	Asphalt	92	45	460	$2,475
Phase 2	SL 430	W Griggs Street	N Ripley Avenue	Fair	Asphalt	339	34	1,282	$6,897
Phase 2	S Sunset Avenue	Us 84	W 14th Street	Good	Asphalt	1,417	34	5,353	$17,130
Phase 2	S Sunset Avenue	W 14th Street	W 12th Street	Fair	Asphalt	633	50	3,515	$18,912
Phase 2	S Sunset Avenue	W 12th Street	W Cherry Blossom	Good	Asphalt	546	34	2,064	$6,603
Phase 2	S Sunset Avenue	W Cherry Blossom	W 7th Street	Fair	Asphalt	1,158	34	4,375	$23,540
Phase 2	S Sunset Avenue	W 7th Street	W 6th Street	Poor	Asphalt	366	34	1,383	$19,471
Phase 2	S Sunset Avenue	W 6th Street	W 1st Street	Fair	Asphalt	1,673	34	6,321	$34,007
Phase 2	W 11th Street	S Park Avenue	S Wicker Avenue	Good	Asphalt	1,133	34	4,281	$13,700
Phase 2	W 12th Street	S Park Avenue	S Monticello Avenue	Good	Asphalt	709	34	2,677	$8,565
Phase 2	W 12th Street	S Sunset Avenue	Mockingbird Lane	Good	Asphalt	543	34	2,052	$6,565
Phase 2	W 12th Street	S Wicker Avenue	S Sunset Avenue	Good	Asphalt	1,356	34	5,123	$16,395
Phase 2	W 13th Street	Phelps Avenue	S Monticello Avenue	Good	Asphalt	1,000	34	3,777	$12,086
Phase 2	W 13th Street	S Wicker Avenue	Mockingbird Lane	Good	Asphalt	1,965	34	7,423	$23,752
Phase 2	W 14th Street	Phelps Avenue	S Westside Avenue	Good	Asphalt	598	34	2,260	$7,233
Phase 2	W 14th Street	S Westside Avenue	S Westside Avenue	Fair	Asphalt	42	50	235	$1,266

Phase 2	W 14th Street	S Westside Avenue	S Wicker Avenue	Good	Asphalt	784	34	2,960	$9,472
Phase 2	W 14th Street	S Wicker Avenue	Mockingbird Lane	Good	Asphalt	1,965	34	7,422	$23,751
Phase 2	W 15th Street	Phelps Avenue	S Westside Avenue	Fair	Gravel	594	30	1,981	$52,010
Phase 2	W 15th Street	S Wicker Avenue	End of Road	Good	Asphalt	527	34	1,990	$6,368
Phase 2	W 1st Street	SL 430	S Morse Avenue	Fair	Asphalt	851	34	3,216	$17,303
Phase 2	W 1st Street	S Morse Avenue	S Lake Avenue	Fair	Asphalt	726	34	2,741	$14,748
Phase 2	W 1st Street	S Lake Avenue	S Westside Avenue	Good	Asphalt	721	50	4,003	$12,811
Phase 2	W 1st Street	S Westside Avenue	S Sunset Avenue	Fair	Asphalt	2,125	34	8,029	$43,194
Phase 2	W 2nd Street	SL 430	S Twitchell Avenue	Fair	Asphalt	253	50	1,403	$7,548
Phase 2	W 2nd Street	S Twitchell Avenue	S Morse Avenue	Good	Asphalt	1,077	34	4,067	$13,016
Phase 2	W 2nd Street	S Morse Avenue	S Ripley Avenue	Fair	Asphalt	359	34	1,356	$7,296
Phase 2	W 2nd Street	S Ripley Avenue	S Westside Avenue	Good	Asphalt	1,080	34	4,080	$13,055
Phase 2	W 2nd Street	S Austin Street	S Wicker Avenue	Poor	Gravel	446	18	892	$23,412
Phase 2	W 2nd Street	S Barton Avenue	S Bell Avenue	Fair	Asphalt	339	34	1,282	$6,899
Phase 2	W 2nd Street	S Bell Avenue	S Sunset Avenue	Poor	Asphalt	393	34	1,486	$20,921
Phase 2	W 3rd Street	XIT Drive	S Wroe Avenue	Good	Asphalt	330	34	1,246	$3,987
Phase 2	W 3rd Street	S Wroe Avenue	S Farwell Avenue	Fair	Asphalt	369	34	1,392	$7,491
Phase 2	W 3rd Street	S Farwell Avenue	S Morse Avenue	Good	Asphalt	355	34	1,341	$4,293

Phase 2	W 3rd Street	S Morse Avenue	S Lake Avenue	Fair	Asphalt	725	34	2,737	$14,727
Phase 2	W 3rd Street	S Lake Avenue	S Park Avenue	Poor	Asphalt	359	34	1,355	$19,083
Phase 2	W 3rd Street	S Park Avenue	S Westside Avenue	Good	Asphalt	353	34	1,333	$4,266
Phase 2	W 3rd Street	S Westside Avenue	S Wicker Avenue	Poor	Asphalt	916	34	3,459	$48,706
Phase 2	W 3rd Street	S Wicker Avenue	S Sunset Avenue	Fair	Asphalt	1,196	34	4,517	$24,301
Phase 4	W 3rd Street	S Sunset Avenue	End of Road	Fair	Asphalt	18	50	97	$524
Phase 2	W 4th Street	XIT Drive	S Farwell Avenue	Fair	Concrete	409	34	1,545	$0
Phase 2	W 4th Street	S Farwell Avenue	S Ripley Avenue	Fair	Asphalt	732	34	2,764	$14,870
Phase 2	W 4th Street	S Westside Avenue	S Bell Avenue	Fair	Asphalt	1,707	34	6,448	$34,688
Phase 2	W 4th Street	S Bell Avenue	S Ash Avenue	Good	Asphalt	791	34	2,990	$9,567
Phase 2	W 4th Street	S Ash Avenue	End of Road	Fair	Asphalt	239	34	903	$4,859
Phase 2	W 5th Street	S Westside Avenue	S Wicker Avenue	Poor	Asphalt	918	34	3,468	$48,831
Phase 2	W 5th Street	S Wicker Avenue	S Bell Avenue	Fair	Asphalt	791	34	2,988	$16,075
Phase 2	W 5th Street	S Bell Avenue	S Sunset Avenue	Poor	Asphalt	407	34	1,537	$21,648
Phase 2	W 6th Street	XIT Drive	S Morse Avenue	Good	Asphalt	190	45	951	$3,044
Phase 2	W 6th Street	S Morse Avenue	S Lake Avenue	Good	Asphalt	718	34	2,714	$8,685
Phase 2	W 6th Street	S Lake Avenue	S Park Avenue	Fair	Asphalt	355	34	1,341	$7,215
Phase 2	W 6th Street	S Park Avenue	S Westside Avenue	Good	Asphalt	360	34	1,360	$4,351

Phase 2	W 6th Street	S Westside Avenue	S Wicker Avenue	Fair	Asphalt	918	34	3,468	$18,660
Phase 2	W 6th Street	S Wicker Avenue	S Barton Avenue	Good	Asphalt	447	34	1,688	$5,402
Phase 2	W 6th Street	S Barton Avenue	S Bell Avenue	Good	Asphalt	338	50	1,876	$6,002
Phase 2	W 6th Street	S Bell Avenue	S Sunset Avenue	Fair	Asphalt	419	34	1,584	$8,524
Phase 2	W 7th Street	XIT Drive	S Westside Avenue	Good	Asphalt	1,347	34	5,089	$16,285
Phase 2	W 7th Street	S Westside Avenue	S Austin Avenue	Fair	Asphalt	461	34	1,741	$9,367
Phase 2	W 7th Street	S Austin Avenue	S Wicker Avenue	Good	Asphalt	456	34	1,721	$5,508
Phase 2	W 7th Street	S Wicker Avenue	S Sunset Avenue	Fair	Asphalt	1,205	34	4,552	$24,489
Phase 2	W 7th Street	S Sunset Avenue	S Ash Avenue	Fair	Gravel	390	20	867	$22,764
Phase 2	W 8th Street	XIT Drive	S Westside Avenue	Good	Asphalt	1,051	34	3,972	$12,710
Phase 2	W 8th Street	S Austin Avenue	S Wicker Avenue	Poor	Dirt	453	34	1,711	$44,933
Phase 2	W 8th Street	S Wicker Avenue	S Barton Avenue	Poor	Asphalt	450	34	1,698	$23,911
Phase 2	W 8th Street	S Barton Avenue	S Bell Avenue	Fair	Asphalt	353	34	1,332	$7,166
Phase 2	W 8th Street	S Bell Avenue	S Sunset Avenue	Good	Asphalt	410	34	1,550	$4,960
Phase 2	W 9th Street	S Sunset Avenue	Width Change	Poor	Gravel	620	24	1,654	$43,425
Phase 2	W 9th Street	Width Change	End of Road	Poor	Asphalt	165	20	366	$5,159
Phase 2	W 9th Street	XIT Drive	S Westside Avenue	Good	Asphalt	761	34	2,876	$9,203
Phase 2	W 9th Street	S Westside Avenue	S Wicker Avenue	Fair	Asphalt	908	50	5,044	$27,137

Phase 2	W 9th Street	S Wicker Avenue	S Sunset Avenue	Fair	Asphalt	1,217	34	4,599	$24,742
Phase 2	W Cherry Blossom Drive	Width Change	Mockingbird Lane	Fair	Asphalt	250	24	667	$3,589
Phase 2	W Cherry Blossom Drive	W Cherry Blossom Drive	Width Change	Fair	Asphalt	366	50	2,035	$10,947
Phase 2	W Cherry Blossom Drive	S Sunset Avenue	Mockingbird Lane	Fair	Asphalt	1,151	24	3,070	$16,515
Phase 2	W Griggs Street	SL 430	N Lake Avenue	Fair	Asphalt	639	34	2,415	$12,992
Phase 2	W Locust Street	S Sunset Avenue	W Cherry Blossom Drive	Fair	Asphalt	282	24	752	$4,044
Phase 2	W Weidel Street	N Farwell Avenue	N Lake Avenue	Fair	Asphalt	1,103	34	4,168	$22,426
Phase 2	S Westside Avenue	Waylon Jennings Boulevard	W 9th Street	Fair	Asphalt	360	34	1,361	$7,323
Phase 2	S Westside Avenue	W 9th Street	W 6th Street	Good	Asphalt	1,078	34	4,072	$13,029
Phase 2	S Westside Avenue	W 6th Street	W 1st Street	Fair	Asphalt	1,808	34	6,829	$36,742
Subtotal						*89,547*		*330,589*	*$2,601,234*

2025-2027									
Phase	**Street**	**From**	**To**	**Condition**	**Material**	**Linear Feet**	**Current Width**	**Square Yards**	**Cost**
Phase 3	Alabama Avenue	E 18th Street	E 17th Street	Fair	Gravel	266	18	531	$13,950
Phase 3	Arkansas Street	City Limits	US 84	Fair	Gravel	228	15	381	$10,000
Phase 3	Arkansas Street	US 84	E 18th Street	Fair	Gravel	1,995	18	3,990	$104,786
Phase 3	E 11th Street	S Brownlee Avenue	S Seldon Avenue	Fair	Asphalt	658	34	2,486	$13,375
Phase 3	E 11th Street	S Seldon Avenue	Hall Avenue	Good	Asphalt	825	34	3,116	$9,973
Phase 3	E 11th Street	Hall Avenue	S Duggan Avenue	Fair	Asphalt	479	50	2,663	$14,329
Phase 3	E 12th Street	S Brownlee Avenue	Hall Avenue	Fair	Asphalt	1,660	34	6,273	$33,746
Phase 3	E 12th Street	Hall Avenue	S Duggan Avenue	Fair	Asphalt	297	50	1,651	$8,885
Phase 3	E 14th Street	SL 430	S Brownlee Avenue	Fair	Gravel	2,766	24	7,375	$193,664
Phase 3	E 14th Street	S Brownlee Avenue	Hall Avenue	Fair	Asphalt	1,840	34	6,951	$37,395
Phase 3	E 15th Street	S Brownlee Avenue	S Seldon Avenue	Good	Asphalt	645	34	2,435	$7,792
Phase 3	E 16th Street	S Brownlee Avenue	S Seldon Avenue	Good	Asphalt	652	34	2,462	$7,880
Phase 3	E 17th Street	Alabama Avenue	S Brownlee Avenue	Fair	Gravel	1,940	18	3,879	$101,866
Phase 3	E 17th Street	S Brownlee Avenue	S Seldon Avenue	Good	Asphalt	725	34	2,737	$8,760
Phase 3	E 17th Street	S Seldon Avenue	Hall Avenue	Fair	Asphalt	1,285	34	4,856	$26,124
Phase 3	E 18th Street	SL 430	Alabama Avenue	Fair	Gravel	2,918	18	5,836	$153,246

Phase 3	E 20th Street	Arkansas Street	S Brownlee Avenue	Fair	Gravel	3,298	18	6,597	$173,237
Phase 3	E 20th Street	S Brownlee Avenue	Hall Avenue	Poor	Dirt	1,972	18	3,945	$103,590
Phase 3	E 25th Street	E 26th Street	Phelps Avenue	Fair	Asphalt	969	34	3,662	$19,702
Phase 3	E 26th Street	E 25th street	S Farwell Avenue	Fair	Asphalt	369	34	1,393	$7,492
Phase 3	E 26th Street	Hall Avenue	S Farwell Avenue	Fair	Concrete	1,774	34	6,700	$0
Phase 3	E 27th Street	Hall Avenue	S Farwell Avenue	Good	Asphalt	1,702	34	6,431	$20,580
Phase 3	E 28th Street	Hall Avenue	End of Road	Fair	Asphalt	2,559	34	9,668	$52,013
Phase 3	E 5th Street	SL 430	S Eastside Avenue	Good	Asphalt	941	34	3,554	$11,374
Phase 3	E 7th Street	SL 430	S Badger Avenue	Fair	Gravel	1,095	24	2,920	$76,669
Phase 3	E 7th Street	S Badger Avenue	Hall Avenue	Fair	Asphalt	350	34	1,324	$7,122
Phase 3	E 8th Street	S Moore Street	S Brownlee Avenue	Fair	Gravel	382	18	763	$20,039
Phase 3	E 8th Street	S Brownlee Avenue	S Williams Avenue	Fair	Gravel	352	24	939	$24,654
Phase 3	E 8th Street	S Williams Avenue	S Seldon Avenue	Poor	Asphalt	350	24	933	$13,134
Phase 3	E Basin Street	S Hilbun Avenue	N Elm Avenue	Fair	Asphalt	612	30	2,039	$10,972
Phase 3	E Bridges Street	N Central Avenue	S Galveston Avenue	Poor	Gravel	228	18	456	$11,978
Phase 3	E Bridges Street	End of Road	N Elm Avenue	Poor	Asphalt	229	30	763	$10,739
Phase 3	E Davis Street	N Central Avenue	S Galveston Avenue	Fair	Gravel	236	15	394	$10,351
Phase 3	E Davis Street	End of Road	N Elm Avenue	Fair	Asphalt	375	30	1,249	$6,718

Phase 3	E Weidel Street	End of Road	N Galveston Avenue	Poor	Asphalt	324	30	1,080	$15,200
Phase 3	E Weidel Street	N Galveston Avenue	N Jones Avenue	Fair	Asphalt	358	30	1,192	$6,414
Phase 3	E Weidel Street	N Jones Avenue	N Hilbun Avenue	Poor	Asphalt	360	30	1,201	$16,912
Phase 3	E Weidel Street	N Hilbun Avenue	N Elm Avenue	Poor	Asphalt	367	30	1,225	$17,246
Phase 3	Griffin Street	S Galveston Avenue	N Elm Avenue	Fair	Asphalt	1,281	30	4,269	$22,966
Phase 3	Griffin Street	N Central Avenue	S Galveston Avenue	Fair	Asphalt	230	30	765	$4,117
Phase 3	Hall Circle	Hall Avenue	Hall Avenue	Poor	Gravel	766	34	2,893	$75,978
Phase 3	Martin Luther King Boulevard	City Limits	US 385	Fair	Asphalt	2,756	35	10,718	$57,660
Phase 3	N Dallas Avenue	End of Road	Griffin Street	Fair	Gravel	222	20	494	$12,960
Phase 3	N Dallas Avenue	Griffin Street	Martin Luther King Boulevard	Fair	Asphalt	439	30	1,463	$7,872
Phase 3	N Elm Avenue	End of Road	E Davis Street	Fair	Asphalt	390	30	1,301	$7,001
Phase 3	N Elm Avenue	E Davis Street	Griffin Street	Poor	Asphalt	212	30	706	$9,947
Phase 3	N Elm Avenue	Griffin Street	Martin Luther King Boulevard	Fair	Asphalt	440	30	1,468	$7,899
Phase 3	N Elm Avenue	Martin Luther King Boulevard	E Weidel Street	Poor	Asphalt	321	30	1,069	$15,055
Phase 3	N Galveston Avenue	Martin Luther King Boulevard	E Weidel Street	Poor	Asphalt	328	30	1,094	$15,406
Phase 3	N Hilbun Avenue	Martin Luther King Boulevard	E Weidel Street	Fair	Asphalt	322	30	1,074	$5,775
Phase 3	N Jones Avenue	Martin Luther King Boulevard	E Weidel Street	Poor	Asphalt	322	30	1,073	$15,103
Phase 3	S Badger Avenue	Waylon Jennings Boulevard	E 8th Street	Fair	Gravel	369	34	1,395	$36,624

Phase 3	S Badger Avenue	E 8th Street	E 5th Street	Poor	Dirt	1,080	24	2,879	$75,601
Phase 3	S Brownlee Avenue	US 84	E 17th Street	Poor	Dirt	2,223	18	4,445	$116,736
Phase 3	S Brownlee Avenue	E 17th Street	Waylon Jennings Boulevard	Good	Asphalt	2,846	34	10,751	$34,402
Phase 3	S Brownlee Avenue	Waylon Jennings Boulevard	E 8th Street	Poor	Asphalt	281	34	1,061	$14,940
Phase 3	S Brownlee Avenue	E 8th Street	E 7th Street	Fair	Gravel	373	34	1,411	$37,045
Phase 3	S Central Avenue	E Bridges Street	Griffin Street	Poor	Asphalt	687	30	2,290	$32,247
Phase 3	S Central Avenue	Griffin Street	Martin Luther King Boulevard	Fair	Asphalt	342	30	1,139	$6,126
Phase 3	S Farwell Avenue	E 27th Street	Crescent Drive	Good	Asphalt	512	34	1,934	$6,188
Phase 3	S Farwell Avenue	End of Road	E 27th Street	Fair	Asphalt	2,212	34	8,355	$44,948
Phase 3	S Galveston Avenue	End of Road	Martin Luther King Boulevard	Fair	Asphalt	1,024	30	3,413	$18,361
Phase 3	S Hilbun Avenue	End of Road	Griffin Street	Fair	Gravel	212	20	471	$12,369
Phase 3	S Hilbun Avenue	Griffin Street	Martin Luther King Boulevard	Fair	Asphalt	454	30	1,514	$8,146
Phase 3	S McCarty Avenue	End of Road	Martin Luther King Boulevard	Fair	Asphalt	748	27	2,245	$12,080
Phase 3	S Moore Street	Waylon Jennings Boulevard	SL 430	Fair	Gravel	349	34	1,319	$34,628
Phase 3	S Phelps Avenue	E 25th street	US 84	Fair	Asphalt	580	42	2,708	$14,568
Phase 3	S Seldon Avenue	E 17th Street	E 8th Street	Good	Asphalt	3,057	34	11,550	$36,959
Phase 3	S Seldon Avenue	E 8th Street	E 6th Street	Fair	Gravel	719	24	1,917	$50,331
Phase 3	S Stadium Avenue	E 14th Street	Waylon Jennings Boulevard	Fair	Asphalt	1,462	34	5,524	$29,719

Phase 3	S Texas Avenue	End of Road	Martin Luther King Boulevard	Poor	Asphalt	881	27	2,644	$37,225
Phase 3	S Whitenburg Avenue	E 14th Street	E 11th Street	Fair	Asphalt	926	34	3,499	$18,824
Phase 3	S Williams Avenue	Waylon Jennings Boulevard	SL 430	Fair	Gravel	980	24	2,614	$68,655
Phase 3	SL 430	US 84	County Road 629	Good	Asphalt	1,840	12	2,454	$7,851
Phase 3	SL 430	County Road 629	E 14th Street	Good	Asphalt	4,916	18	9,831	$31,460
Phase 3	SL 430	E 14th Street	Waylon Jennings Boulevard	Good	Asphalt	2,334	40	10,375	$33,200
Phase 3	SL 430	Waylon Jennings Boulevard	S Moore Street	Fair	Asphalt	615	50	3,414	$18,370
Phase 3	SL 430	S Moore Street	Hall Avenue	Fair	Asphalt	2,324	34	8,780	$47,239
Subtotal						*80,756*		*254,368*	*$2,524,487*

2027-2030									
Phase	**Street**	**From**	**To**	**Condition**	**Material**	**Linear Feet**	**Current Width**	**Square Yards**	**Cost**
Phase 4	Cole Street	US 385	Underwood Avenue	Poor	Asphalt	1,034	18	2,067	$29,108
Phase 4	County Road 181	City Limits	US 84	Poor	Asphalt	670	13	968	$13,636
Phase 4	County Road 282	US 84	City Limits	Poor	Gravel	515	18	1,030	$27,035
Phase 4	Dillon Street	N Sunset Avenue	N Cedar Avenue	Poor	Asphalt	1,391	15	2,318	$32,631
Phase 4	Dillon Street	N Cedar Avenue	End of Road	Fair	Gravel	521	14	810	$21,262
Phase 4	E Blakely Street	US 385	Underwood Avenue	Fair	Gravel	1,053	22	2,575	$67,622
Phase 4	E Greenfield Street	US 385	Underwood Avenue	Fair	Gravel	1,057	22	2,584	$67,857
Phase 4	E Harris Street	US 385	Underwood Avenue	Fair	Gravel	1,051	22	2,569	$67,450
Phase 4	E Swope Street	US 385	Underwood Avenue	Fair	Gravel	1,040	22	2,542	$66,745
Phase 4	E Thompson Street	US 385	Underwood Avenue	Fair	Gravel	1,064	20	2,364	$62,071
Phase 4	N Ash Avenue	W Reed Street	Dillon Street	Fair	Gravel	460	16	818	$21,475
Phase 4	N Ash Avenue	Dillon Street	W Burleson Street	Poor	Asphalt	454	35	1,767	$24,880
Phase 4	N Ash Avenue	W Burleson Street	W Nickols Street	Fair	Gravel	464	12	619	$16,257
Phase 4	N Ash Avenue	W Nickols Street	W Smith Street	Poor	Gravel	721	16	1,282	$33,657
Phase 4	N Austin Avenue	W 1st Street	SL 430	Fair	Asphalt	2,377	30	7,924	$42,629
Phase 4	N Beech Avenue	W Reed Street	Dillon Street	Poor	Gravel	471	16	837	$21,968

Phase 4	N Beech Avenue	Dillon Street	W Burleson Street	Poor	Asphalt	456	35	1,774	$24,972
Phase 4	N Beech Avenue	W Burleson Street	W Nickols Street	Fair	Asphalt	459	50	2,551	$13,726
Phase 4	N Beech Avenue	W Nickols Street	W Cook Street	Poor	Gravel	357	12	476	$12,510
Phase 4	N Beech Avenue	W Cook Street	End of Road	Fair	Gravel	576	16	1,024	$26,898
Phase 4	N Cedar Avenue	W 1st Street	W Reed Street	Poor	Dirt	1,389	8	1,234	$32,411
Phase 4	N Cedar Avenue	W Reed Street	SL 430	Fair	Gravel	3,658	15	6,097	$160,099
Phase 4	N Sunset Avenue	W 1st Street	W Reed Street	Poor	Asphalt	1,213	35	4,718	$66,424
Phase 4	N Sunset Avenue	W Reed Street	SL 430	Fair	Asphalt	2,602	35	10,118	$54,435
Phase 4	N Westside Avenue	Tronson Road	City Limits	Fair	Asphalt	293	34	1,107	$5,955
Phase 4	N Westside Avenue	W 1st Street	W Reed Street	Good	Asphalt	1,078	34	4,073	$13,032
Phase 4	N Westside Avenue	W Reed Street	SL 430	Fair	Asphalt	922	34	3,485	$18,747
Phase 4	N Wicker Avenue	W 1st Street	SL 430	Poor	Asphalt	2,757	30	9,190	$129,390
Phase 4	SL 430	N Ripley Avenue	W Keeling Street	Fair	Asphalt	769	45	3,844	$20,683
Phase 4	SL 430	W Keeling Street	N Sunset Avenue	Fair	Asphalt	3,439	70	26,749	$143,910
Phase 4	SL 430	N Sunset Avenue	US 84	Good	Asphalt	6,450	45	32,249	$103,197
Phase 4	Smith Street	N Ash Avenue	N Beech Avenue	Poor	Asphalt	367	35	1,427	$20,098
Phase 4	Smith Street	N Sunset Avenue	N Ash Avenue	Fair	Asphalt	342	50	1,900	$10,223
Phase 4	Sunny Lane East	Twilight Boulevard	End of Road	Fair	Gravel	357	19	753	$19,766

Phase 4	Sunny Lane West	Twilight Boulevard	End of Road	Fair	Gravel	380	19	802	$21,073
Phase 4	Tronson Road	End of Road	N Westside Avenue	Fair	Gravel	1,553	21	3,624	$95,159
Phase 4	Twilight Boulevard	N Sunset Avenue	Sunny Lane West	Fair	Gravel	367	19	775	$20,364
Phase 4	Underwood Avenue	End of Road	E Thompson Street	Fair	Gravel	397	20	882	$23,165
Phase 4	Underwood Avenue	E Thompson Street	End of Road	Fair	Gravel	1,625	19	3,431	$90,093
Phase 4	W 1st Street	N Sunset Avenue	N Cedar Avenue	Poor	Dirt	1,398	12	1,864	$48,947
Phase 4	W 1st Street	N Cedar Avenue	US 84	Poor	Dirt	2,215	12	2,953	$77,542
Phase 4	W 1st Street	US 84	City Limits	Poor	Gravel	480	20	1,066	$28,005
Phase 4	W Burleson Street	N Sunset Avenue	N Beech Avenue	Poor	Asphalt	920	35	3,576	$50,352
Phase 4	W Burleson Street	N Beech Avenue	N Cedar Avenue	Fair	Gravel	464	15	773	$20,295
Phase 4	W Burleson Street	N Cedar Avenue	End of Road	Fair	Gravel	506	13	730	$19,174
Phase 4	W Cook Street	N Sunset Avenue	N Ash Avenue	Fair	Gravel	364	14	567	$14,888
Phase 4	W Cook Street	N Ash Avenue	N Beech Avenue	Fair	Asphalt	346	35	1,344	$7,232
Phase 4	W Keeling Street	SL 430	N Westside Avenue	Poor	Gravel	526	34	1,988	$52,213
Phase 4	W Nickols Street	N Sunset Avenue	N Beech Avenue	Poor	Asphalt	700	35	2,724	$38,348
Phase 4	W Nickols Street	N Beech Avenue	N Cedar Avenue	Fair	Gravel	691	15	1,152	$30,260
Phase 4	W Nickols Street	N Cedar Avenue	US 84	Poor	Dirt	2,574	15	4,291	$112,674
Phase 4	W Reed Street	N Westside Avenue	N Austin Street	Poor	Asphalt	468	35	1,818	$25,601

Phase 4	W Reed Street	N Austin Street	N Wicker Avenue	Fair	Asphalt	451	35	1,754	$9,439
Phase 4	W Reed Street	N Wicker Avenue	N Sunset Avenue	Poor	Asphalt	1,175	30	3,918	$55,164
Phase 4	W Reed Street	N Sunset Avenue	N Cedar Avenue	Poor	Asphalt	1,389	35	5,402	$76,054
Subtotal						*60,815*		*191,275*	*$2,408,803*
Total 2020-2030						*325,793*		*1,171,290*	*10,233,985*

9 Recreation & Open Space Study

Over the past 20 years, population growth in Texas has been accompanied by increases in obesity and natural disasters, as well as a decline in children's connection with nature as the state continues to urbanize. As a result, the State of Texas recognizes the importance of continued support for popular outdoor sports; amenities critical to the use of local parks such as pedestrian connections and safety features; and the strategic construction of park and open space features that will also reduce drainage infrastructure costs, support local economic development, and lead to better health for Texas residents.[50]

In communities like Littlefield recreation areas play a key role not only in the health of the individual but also in the health of the community. Parks and recreation areas provide pleasant places for family reunions, friendly competition, exercise, and socializing.

To encourage healthy living, every city and town has the responsibility of providing adequate parks and open space. However, limited funds for these public uses generally require foresight in planning for future development and expansion of parks and public open spaces. To adequately plan for the future, it is important to understand the community's historical background and demographic profile. Several demographic and cultural factors contribute to increased demand for parks and recreational facilities in many Texas towns and cities (including Littlefield): the increase in life expectancy coupled with earlier retirement ages for many people; the spread of competitive sporting programs to the youngest and oldest age groups; and the understanding that a healthy diet and regular exercise are good for mental and physical well-being.

This Parks Master Plan includes analysis that is based on survey responses as well as on the cultural and economic characteristics of Littlefield's residents. The Parks Master Plan also analyzes the lack of facilities currently available in Littlefield. The city has four parks and an RV park (detailed in *Section 9.5 - Inventory & Assessment of Existing Resources).*

[50] T*exas Outdoor Recreation Plan (2012)*

However, several recreation facilities in Littlefield are aged and in deteriorated condition, and Crescent Park has minimal programming. As a result, residents do not have sufficient access to several recreational opportunities that allow for quality leisure time pursuits or activities which lead to a healthy lifestyle. In addition to removing and replacing facilities in poor condition and refinishing/rehabilitating existing facilities that can be salvaged, Littlefield residents would benefit from access to more general use/soccer fields, a swimming pool, three more basketball courts, another tennis court, additional playgrounds and family picnic areas, a light activity area, a small skate park, and additional multiuse trails/paths. Access to some of these amenities can be easily achieved by establishing an agreement between the city and Independent School District (ISD) to give the public access to school recreation facilities on weekends.

9.1 Introduction

Littlefield's early history is tied to ranching and the railroad. George Littlefield purchased around 300,000 acres of XIT Ranch along the Santa Fe Railway and named it Yellow House Ranch. Littlefield sent his niece, Sarah and her husband Arthur Duggan, to sell the land at $1 an acre. The city of Littlefield was incorporated in 1924. Farming became prevalent in the 30's and 40's and has continued to be a large part of Littlefield's economy.[51] Littlefield was elected the county seat for Lamb County in 1946. Its population was 3,817 in 1940 and 6,558 in 1950. The city was surrounded by irrigated farmlands that produced cotton, grains, sorghums, and vegetables. Littlefield became the retail and commercial center for Lamb County as well as parts of Hockley and Bailey counties.

Fertilizer products and irrigation equipment manufacturing contributed to the city's economy and in the 1980's a textile mill opened. The population of Littlefield has fluctuated around 6,500 since peaking in the 1980's.[52] During the last decade (2000-2010) Littlefield's population decreased 2.1% (or -135 residents).

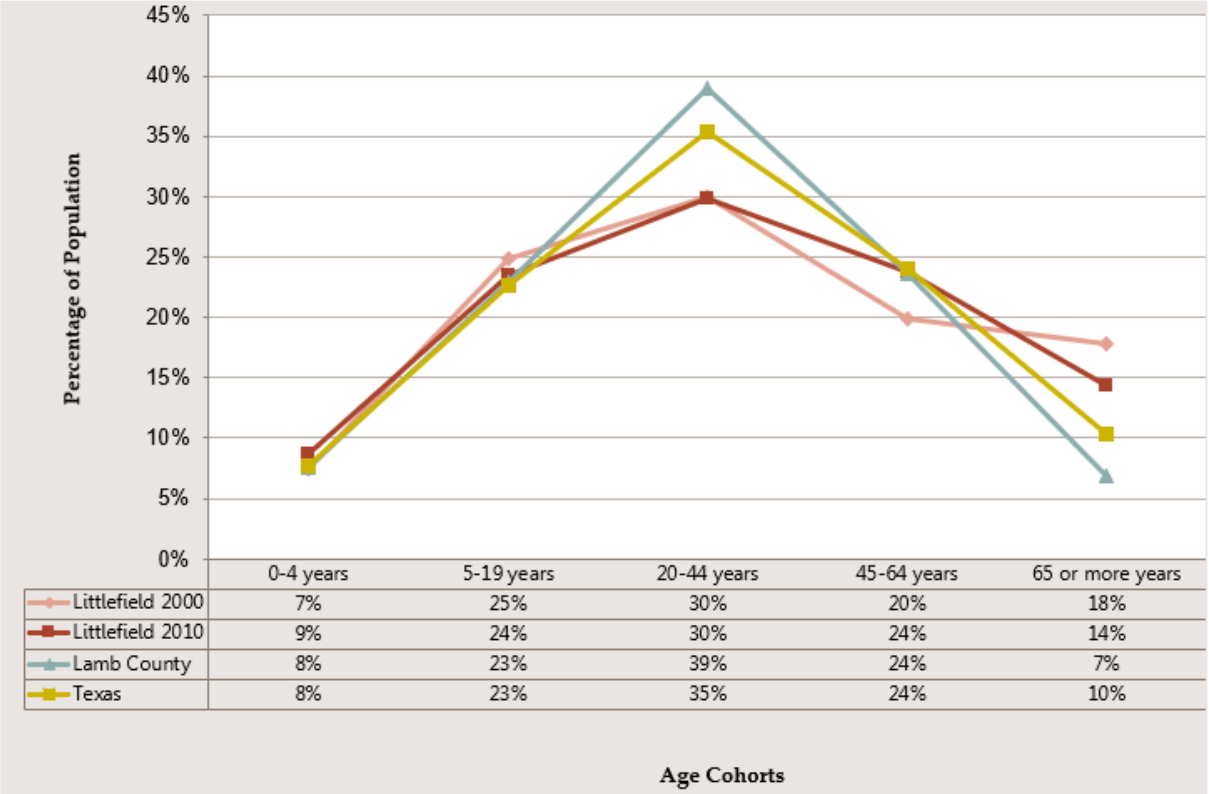
Population Changes (2000-2010)

Chart 9A (next page) illustrates age cohort distributions for Littlefield (2000 and 2010), Lamb County (2010), and the state of Texas (2010). An age distribution peaked by the 20-to-44-year-old age cohort generally indicates a stable-to-expanding or "healthy" population distribution. The 2010 Texas distribution is an example of "healthy" population distribution. In contrast, a flatter distribution can indicate relatively stationary or declining population.

[51] https://www.kcbd.com/story/12896122/history-of-littlefield/
[52] https://tshaonline.org/handbook/online/articles/HFL05

As *Chart 9A* demonstrates, the age distribution of Littlefield's residents in both 2000 and 2010 are peaked by the 20-to-44-year-old age cohort. There is little difference between Littlefield's population in 2000 and 2010. It should be kept in mind that, due to the relatively small size of Littlefield's population, the age distribution can fluctuate from minor changes. However, this comparison suggests that Littlefield's population remained relatively the same between 2000 and 2010.

Chart 9A: Population by Age Group (2000, 2010)



	0-4 years	5-19 years	20-44 years	45-64 years	65 or more years
Littlefield 2000	7%	25%	30%	20%	18%
Littlefield 2010	9%	24%	30%	24%	14%
Lamb County	8%	23%	39%	24%	7%
Texas	8%	23%	35%	24%	10%

Source: 2000 and 2010 Census of Population and Housing, Summary Population and Housing

The U.S. Census distinguishes between two minority population groups: "racial minorities" - all non- "White" residents - and "ethnic minorities" - all "Hispanic or Latino" residents.

Table 9A (next page) provides a population profile of residents in the city of Littlefield, as well as Lamb County, in terms of race and ethnicity. As *Table 9A* demonstrates, approximately 26% of Littlefield's 2010 population identifies as a racial minority (non-White) and 55% identify as an ethnic minority (Hispanic or Latino). In 2000, the percentage of residents identifying as either a racial minority or an ethnic minority was slightly lower than in 2010, meaning Littlefield has become more diverse. *Table 9A* also shows that Littlefield is very similar to Lamb County in terms of racial diversity but significantly more ethnically diverse.

Residents of all races and ethnicities in Littlefield were invited to participate in the survey about park needs.

Table 9A: Population by Race & Ethnicity (2000, 2010)

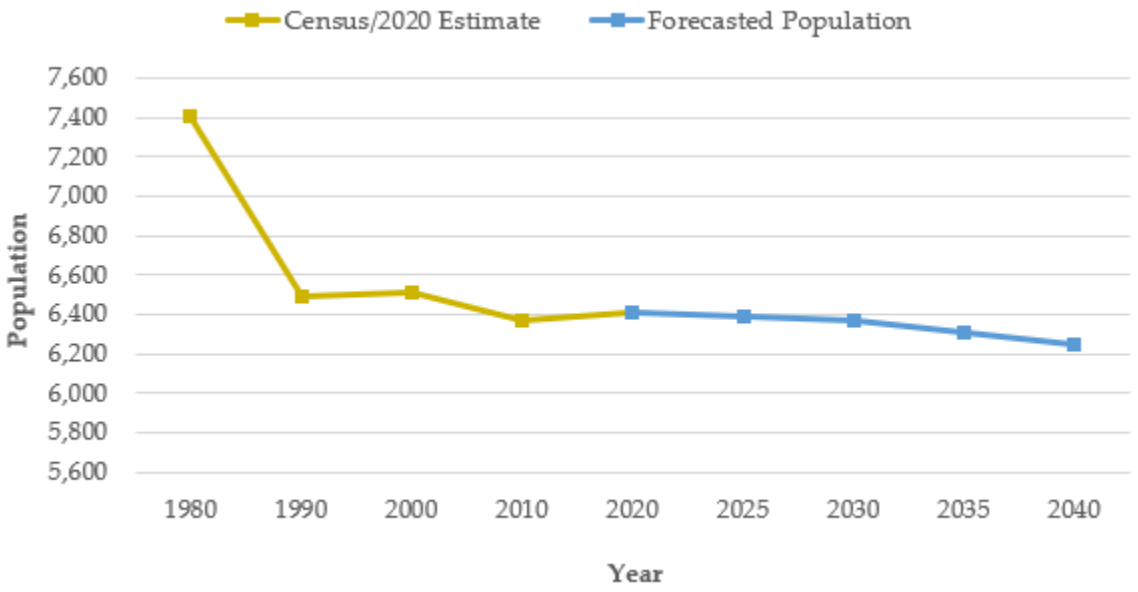
Characteristic	LITTLEFIELD 2000 #	LITTLEFIELD 2000 %	LITTLEFIELD 2010 #	LITTLEFIELD 2010 %	LAMB COUNTY 2010 #	LAMB COUNTY 2010 %
Total Population	**6,507**	**100%**	**6,372**	**100%**	**662,614**	**100%**
Race						
White	5,017	77%	4,721	74%	497,260	75%
Black or African American	350	5%	397	6%	55,534	8%
American Indian, Alaskan Native	45	1%	41	0.6%	4,551	0.7%
Asian	11	0.2%	10	0.2%	43,478	6.6%
Native Hawaiian / Hawaiian / Another Pacific Islander	3	0.0%	3	0%	462	0.07%
Other	951	15%	1,038	16%	41,916	6%
Two or More Races	130	2%	162	3%	19,413	3%
Ethnicity						
Hispanic or Latino	2982	46%	3,483	55%	120,836	18%
Not Hispanic or Latino	3,525	54%	2,889	45%	541,778	82%

Source: U.S. Census Bureau.
Note: Figures may be rounded to next whole number

2020 Popuation Estimate & 2030 Forecast

Littlefield's estimated 2020 population is 6,406 residents. The population forecast was created using the city level data projection from the Texas Water Development Board (TWDB). This study forecasts that Littlefield's population will experience slight decline over the next 10 years, reaching approximately 6,366 residents by 2030 see *Chart 9B, next page*).

Chart 9B: Littlefield (1980 – 2040)



Recreation & Open Space Survey

A demand-based assessment of local recreation facilities was made using results from a survey available to Littlefield residents online for three months in early 2020 (January to March). Twenty (20) surveys were completed. Nearly all survey respondents live in the city of Littlefield (see *Chart 9C).* Survey respondents' range in age from 21 to 65. The average age of survey respondents is 46 years old (see *Chart 9D, next page*).

Chart 9C: Do you live within the Littlefield city limits?

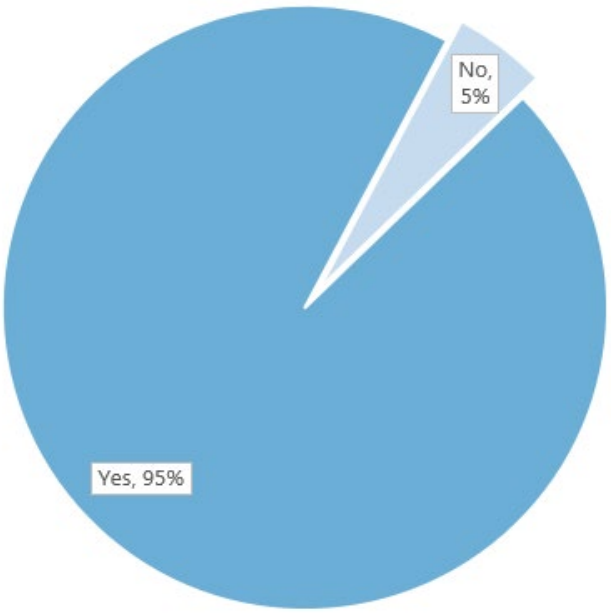
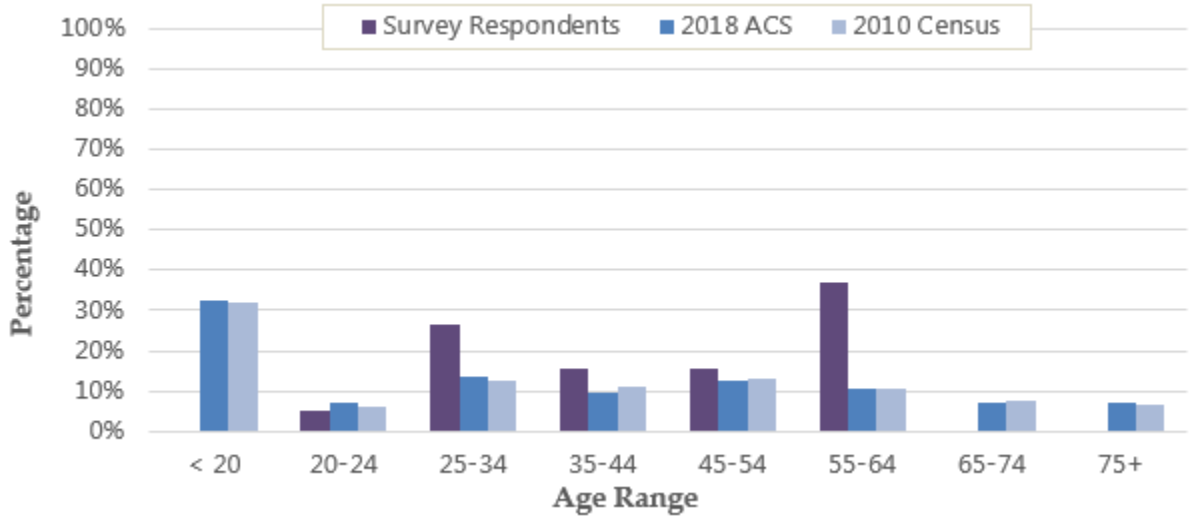


Chart 9D: Survey Respondents by Age Group



Data gathered from the surveys identified common recreational activities of adults and children, favorite parks and needed improvements, and important/prioritized additional recreational facilities. **The City of Littlefield desires to provide recreational activities for all segments of the population regardless of age.**

Anticipated Financial Resources for Parks & Recreation Facilities

An estimated 28.8% of Littlefield residents live below the poverty level.[53] The unemployment rate in Lamb County is 3.8% which is higher than both the unemployment rate in South Plains Workforce Development Area (WDA), which includes Lamb County,[54] - 3.0%, and the unemployment rate for the state of Texas – 3.5%.[55] Average weekly wages in Lamb County ($842) are higher than average wages for the South Plains WDA ($837) but lower than the state of Texas ($1,116). However, depending on the employment industry area, average weekly wages range from $241 to $1,862. [56]

Based on the above-referenced measures, the City has some ability to fund recreation facilities through increased taxes, bond issues, or user fees. Residents rely on local parks because they have fewer resources to travel outside of Littlefield and less money to spend on private recreation than residents of wealthier municipalities.

[53]From the American Community Survey 5-year estimates 2013-2018, Table DP03, Poverty level of "All people", accessible from data.census.gov
[54] The South Plains Workforce Development Area includes Bailey, Cochran, Crosby, Dickens, Floyd, Garza, Hale, Hockley, King, Lamb, Lubbock, Lynn, Motley, Terry, and Yoakum counties.
[55] Texas Workforce Commission (TWC) Labor Market & Career Information Department (LMCI) TRACER 2019 Annual Data
[56] Texas Workforce Commission (TWC) Labor Market & Career Information Department (LMCI) TRACER 2019 Q3 Data

9.2 Goals & Objectives

Littlefield's Parks Master Plan provides a foundation for development of future park and recreation facilities and guidance for maintenance of existing facilities in the town. To realize this vision for the future, actions suggested in this plan relate to specific goals that the residents of Littlefield hope to accomplish.

The goals and the objectives presented here were determined through formal surveys of local residents and a public meeting held to discuss town-wide aspirations for recreation facilities and other improvements.

Table 9B: Recreation & Open Space Goals & Objectives 2020-2030

Goals & Objectives	Activity Year(s) 2020-2023	2024-2026	2027-2030	Lead Organization	Cost Estimate	Funding Sources
Goal 9.1 *Maintain recreation facilities in good condition*						
Establish a voluntary donation fund to fund maintenance, repair, and upgrade Littlefield parks. Solicitation could be added to City utility bill.	X			City	< $1,000	GEN
Develop shared-resources plan with Littlefield ISD to establish a schedule of public access for ISD recreation facilities. Create plan to share facility maintenance and review biennially.	X			City	Staff	GEN; ISD
Schedule creation of new Parks Master Plan.			X	City	$10,000	GEN; CDBG
Budget funds for park maintenance and for on-going facility development.	X	X	X	City	Variable	GEN; EDC
Schedule biennial review of the Parks Master Plan and update priority list as needed. Solicit new public input every five (5) years.	X	X	X	City	< $1,000	GEN
Goal 9.2 *Improve existing recreation facilities to permit and encourage additional use and construct new facilities that fulfill residents expressed needs and bring the town more up to standard.*						
Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation facilities at Crescent Park. Remove aged picnic tables, install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	X			City	$75,000 (or 50% match of TPWD grant funds)	GEN
Establish "community workday" at public parks to accomplish a portion of park development using volunteer labor. Tasks can include site preparation, clean-up, and preliminary construction tasks. Seek volunteers from residents, City Staff, community service workers, religious and civic groups, etc.	X			City	< $1,000	GEN; Local

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources
	2020-2023	2024-2026	2027-2030			
Renovate and update city owned softball and little league fields near the Lamb County Agriculture and Community Center.	X			City	Variable	GEN; Local
Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park. Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court.	X			City	Up to $75,000 (or 50% match of TPWD grant funds)	GEN
Install inclusive play activities (such as "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	X			City	$1,000/per	GEN
Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park. Replace deteriorating picnic tables and play infrastructure. Install additional playscape for younger children.		X		City	Up to $75,000 (or 50% match of TPWD grant funds)	GEN
Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/card tables) at Dunbar Park and/or elsewhere as appropriate.		X		City	$1,000/per	GEN
Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation program to construct new Aquatic Center on Phelps Avenue.		X			Up to $375,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $750,000)
Submit Parks Master Plan to TPWD to ensure eligibility for Non-urban Outdoor Recreation Grant.		X		City	Staff	GEN

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources
	2020-2023	2024-2026	2027-2030			
Apply for funding January 2028 to the TPWD Recreational Trails Grant program to construct nine (9) miles of trails in Littlefield parks and/or elsewhere as appropriate.			X	City	At least $40,000 (or 20% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $200,000)
Encourage development of other indoor activities typically operated by private businesses such as a movie theater, bowling alley, roller-skating rink, gymnastics/twirling center, and indoor rodeo facilities.			X	City	Staff	GEN; Local
Encourage development of other outdoor activities typically operated by private businesses such as a skate park, equestrian facilities, miniature golf, bicycle motor-cross, and a mountain bike trail.			X	City	Staff	GEN; Local
Hold an annual festival at Laguna Park or Crescent Park. *Festivals and events provide diverse activities not normally available in the park and enhance the usefulness of facilities. These events can also highlight the community's cultural diversity or offer special events such as kite-flying contests or bike-a-thons.* Earmark any proceeds from activities for park improvement projects.	X	X	X	City	$1,000 - $2,000	GEN; Local
Hold "community workday" to accomplish a portion of projects related to park improvement.	X	X	X	City	<$1,000	GEN; Local
Goal 9.3 *Establish ongoing maintenance and improvements to open spaces and highway right-of-way to demonstrate local pride and attract visitors, investors, and new residents.*						
Start annual Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	X			City	$100	GEN; Local
Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example,	X	X	X	City	Staff	GEN; Local

Goals & Objectives	Activity Year(s)			Lead Organization	Cost Estimate	Funding Sources
	2020-2023	2024-2026	2027-2030			
maintain a library of reference materials for public use, encourage use through public outreach; (co)sponsor a temporary use, etc.						
Hold annual "community workday" to accomplish a portion of projects related to cleanup of vacant lots and improvements to properties with frontage on thoroughfares.	X	X	X	City	< $1,000	GEN; Local; TxDOT
Continue annual Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	X	X	X	City	$100 per year	GEN; Local

GEN = City of Littlefield Municipal Funds; **EDC** = Economic Development Corporation; **ISD** = Independent School District; **CDBG** = Community Development Block Grant Program; **Local** = Donations from private citizens, organization, and local businesses; **TPWD** = Texas Parks & Wildlife Department; **TxDOT** = Texas Department of Transportation

9.3 Plan Development Process

Previous Studies

There are no previous studies of parks in the city of Littlefield.

2020-2030 Plan

Development of this plan began in February 2019 when the City of Littlefield hired a professional planning firm, GrantWorks Inc. of Austin, to create a Parks Master Plan as part of a comprehensive planning process.

To begin judging the level of interest in park needs, planners consulted with City staff, City officials, and residents of all ages. An online survey was made available to Littlefield residents for three months during early 2020. Twenty (20) surveys were completed. Nearly all of the survey respondents live within the city limits (see *Chart 9C, page 9-5*). A majority of survey respondents (70%) agree that existing park facilities in Littlefield need to be fixed; 4 respondents indicated "I don't know". Survey results are further discussed in *Section 9.6: Needs Assessment & Identification*.

Appendix 9A provides a copy of the survey form.

In addition to community input, this plan evaluates Littlefield's recreation resources in relation to its existing and projected population and an inventory of existing facilities, a method called Standards-based Assessment. The analysis is used to develop a logical and cost-efficient strategy to address the identified needs over a 10-year planning period.

Following adoption of this plan by the City Council, the City's ongoing responsibility will be: to maintain and improve City-managed facilities; to identify funding resources; and to engage in cooperative projects with local volunteer groups and local schools.

Texas Parks and Wildlife recommends that parks and recreation plans be updated every five years to reflect changing realities in recreation trends, participation, area population, and funding. An update would include: revised goals and objectives that raise items of lower priority to higher priority as higher priority items are accomplished; a new facility inventory; and a new survey.

A new plan will be required in 2030.

9.4 Area & Facility Concepts & Standards

Several basic principles guide successful development of parks and recreational opportunities in communities of all sizes and types. These standards and guidelines provide direction to community leaders who know generally what their community's needs are but require more specific information to guide the planning process.

The City's standards for needed recreation and open space include facility type, facility size, facility service area, and needed equipment at the facility. The criteria are based on nationwide standards developed by the National Recreation and Park Association (NRPA)[57] and small-community standards developed by the State of Colorado.[58] The standards were tailored to Littlefield based on knowledge about financial capacity, popular sports, community activities, and which facilities would provide participation opportunities to the broadest segments of residents.

The City of Littlefield's standards are as follows:

General Standards for all Facility Development

- Residents should have access to a minimum of five acres and an ideal 15 acres of developed park land per 1,000 residents.
- When possible, active recreation areas should be separated according to the users' ages, primarily to protect younger children from injury. Some areas should be designated for use by all ages so entire families can enjoy being together.
- Residents of all age groups should have access to recreational facilities.
- Recreational areas should be accessible to the age group they are designed to serve. For example, neighborhood playgrounds usually serve an area with a radius of ½-mile, which is a reasonable distance for a child to walk. Safe pedestrian routes should provide access to those facilities.
- All City park facilities will be made accessible to physically challenged and special needs populations when required by applicable laws. The items mentioned as needed for other categories apply equally to special needs populations. Additional special needs facilities may be developed as warranted by local demand.

[57] *NRPA-suggested classification system (Berke, Kaiser, Godschalk and Rodriguez, Urban Land Use Planning, University of Illinois Press, Fifth Edition.)*

[58] *State of Colorado Small Community Park & Recreation Planning Standards* (2003). RPI Consulting, Inc. and Colorado Heritage Planning Grant program, Office of Smart Growth, Colorado Department of Local Affairs. (Page 16). Accessed at www.dola.state.co.us/osg/docs/Park%20Standards%20Report.pdf

- All facility construction is required to meet the minimums found in the International Building Code.
- Combined municipal and school recreational facilities are recommended. Lack of coordination often leads to the construction of redundant facilities. When possible, school recreational areas, including parking areas, drinking fountains, and restrooms, should remain open on weekends and during the summer months.
- Greenbelts, hike and bike trails, parkways, or paths should be provided to connect large recreational areas to improve access to facilities, scenic views, and recreational opportunities.
- Vehicular routes should be encouraged only when recreational areas are separated by more than one mile.
- Ideally, each recreation area should include public access to restrooms and water fountains and should be equipped with lighting and trash cans.

Standards for Service Area and Park Types

Table 9C describes the size and service area standards for types of park and recreation areas already located in Littlefield or considered possible as future City recreation areas.

Table 9C: Types of Parks: Size & Service Area Standards

Park Type	Use	Service Area	Desirable Size	Desirable Site Characteristics
Minipark	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens	< 1/4-mile radius	≤ 1 acre	Within neighborhoods and close to apartment complexes, townhouses, housing for the elderly or Central Business District.
Neighborhood Park/ playground	Area for intense recreational activities such as field games, court games, crafts, skating, and picnicking; also, for wading pool and playground apparatus area	¼- to ½-mile radius to serve a population up to 5,000.	1 to 15+ acres	Suited for intense development; easily accessible to neighborhoods; geographically centered with safe walking and bike access; may be developed as a school-park facility
Community Park	Includes areas suited for intense recreational facilities, such as athletic complexes, large swimming pools; may be an area of natural quality for outdoor recreation, such as walking viewing, sitting, picnicking.	Several neighborhoods 1- to 2-mile radius	15 to 25+ acres	May include natural features, such as water bodies, and areas suited for intense development; easily accessible to neighborhoods
Linear Park	Area developed for one or more mode of recreational travel, such as hiking, biking, canoeing, horseback riding. May include active play areas.	N/A	Sufficient width to protect the resources and provide maximum use	Built on corridors, such as utility right of way, bluff lines, vegetation patterns, or roads that link other components of the recreation system or community facilities such as schools and libraries.
Special Use	Areas for single-purpose recreational activities such as golf courses, nature centers, zoos, conservatories, gardens, outdoor theaters. Also, plazas or squares in or near commercial centers, boulevards, and parkways	N/A	Variable	Within city limits
Conservancy	Protection and management of the natural or cultural environment with recreational use as a secondary objective	N/A	Sufficient to protect the resource	Variable, depending on the resource being protected.

Facility Standards

Table 9D presents recommended standards for Littlefield's park equipment and sports fields/courts. The activities and facilities listed are based on existing facilities and feedback from the Parks & Recreation Survey. In the future, as standards are changed or upgraded, part of the Parks Master Plan review process should address any discrepancies. The City's standards should conform to nationally recognized organizations' most recent standards.

Table 9D: Facility Standards

Activity/ Facility	Service Radius	Space Requirements *SF = Square feet;* *Min. = Minimum*	Suggested #/ Population	Characteristics
Team Sport Courts & Fields				
General Use / Soccer Field	1- to 2-miles	1.7-to-2.0 acres	1 per 1,500	Usually in school, recreation complex, or neighborhood/community park.
Softball/ Little League Field	¼- to ½-mile	1.5-to-2.0 acres	1 per 10,000	Slight difference in dimensions for 16" slow pitch. May also be used for youth baseball.
Adult Baseball	¼- to ½-mile	3.0-to-3.85 acres	1 per 5,000	Part of neighborhood park. Lighted field part of community park.
Basketball Court	¼- to ½-mile	7,000 SF/ 0.16 acres	1 per 1,000	Usually in school, recreation complex, or church. Safe walking or bike access. Outdoor courts in neighborhoods and community parks.
Tennis Court	¼- to ½-mile	Min. 7,200 SF per court (0.17 acres)	1 per 2,000	Best in batteries of 2-4. Located in community or neighborhood park or near schools.
Volleyball Court	¼- to ½-mile	Min. 3,000 SF	1 per 7,000	Usually in school, recreation, or church facility. Safe walking or bike access. Outdoor courts in neighborhoods and community parks.
Football	¼- to ½-hour travel time	2 acres	1 per 20,000	Usually part of a sports or school complex
Soccer (dedicated)	1- to 2-miles	1.7-to-2.2 acres	1 per 5,000	Part of neighborhood park. Lighted field part of community park.
Softball (dedicated)	¼- to ½-mile	1.5-to-2.0 acres	1 per 5,000	Slight difference in dimensions for 16" slow pitch
Little League (dedicated)	¼- to ½-mile	1.2 acres	1 per 5,000	Part of neighborhood park. Lighted field part of community park.

Activity/ Facility	Service Radius	Space Requirements	Suggested #/ Population	Characteristics
Individual & Specialty Use				
¼-mile Running Track	¼-hour travel time	4.3 acres	1 per 20,000	Usually part of a high school or in community park complex.
Multiuse Trail (per mile)	N/A	N/A	Per mile: Unpaved: 1,000; Paved: 2,000	Capacity: rural trail – 40 hikers per day per mile; urban trail – 90 hikers per day per mile.
Swimming Pool	¼- to ½-hour travel time	Varies with size of pool and amenities. Usually 1/3-to-2-acres	1 per 6,000	Pools for general community use should be planned for teaching, competitive, and recreational purposes with enough depth (3.4m) to accommodate 1m and 3m diving boards. Located in community parks or school sites.
Group & Passive Recreation				
Playground	¼- to ½-mile	3,200 SF	1 per 1,000	Part of neighborhood park.
Family Picnic Area/ Picnic Table	¼- to ½-mile	435 SF	1 per 200	1 garbage can within 150 ft. of every 4 picnic tables; 40 ft. between uncovered picnic tables; Picnic tables within 400 ft. of parking
Group Picnic Area (Covered)	¼- to ½-mile	1-to-2 acres	1 per 2,000	
Park Bench	N/A	N/A	1 per 150	Variable
Light Activity Area	¼- to ½-mile	Estimated 500 SF	1 per 2,000	Could include facilities for horseshoe pit, shuffleboard, chess, meditation, gardening, or similar activity

9.5 Inventory & Assessment of Existing Resources

This section provides information on the availability of recreation facilities to Littlefield's residents and existing organizations that are involved in recreation and open space activities and development. Existing resources are assessed as they relate to opportunities for improvements to each recreation area, Littlefield's demographics, and organizations available to pursue recreation and open space improvements in Littlefield.

9.5.1 Local Outdoor Recreation Areas

Laguna Park (24 acres)

Located in the center of Littlefield off Ripley Avenue and 3rd Street, Laguna Park is the city's oldest recreation area. Park facilities include two kickball fields, disc golf stations, and a basketball court. However, most of the fields and sports equipment have been neglected, and there is ample space for more recreational programming inside the parks 24 acres.

Figure 9A: Sports Facilities at Laguna Park

Laguna Park also includes a play area with a merry-go-round, jungle gym, a playscape, a gaga ball pit, and other play structures (see *Figure 9B*). The play facilities are mostly in good condition. New equipment, such as a larger playscape, should be non-metal and offer play opportunities for a wide age range than current equipment. Currently there are no shaded areas of play within the park, which could be dangerous during the summer.

Figure 9B: Play Facilities at Littlefield Park

A pavilion, picnic tables, benches, a lake, and BBQ grills near the playground and elsewhere in Laguna Park provide opportunities for passive recreation *(see Figure 9C, next page).* Other than the pavilion, the passive facilities at Laguna Park need to be renovated and upgraded. The lake functions as a detention pond for drainage from surrounding areas and causes ponding in other parts of the park. Two buildings are located on park grounds, a park department building and a building for girl scouts' meetings. Both are in substandard condition.

Figure 9C: Passive Facilities at Laguna Park

Additional facilities that may be appropriate at Laguna Park include a general use/soccer field, a light activity area, an additional basketball court, hiking and walking trails, additional play equipment (inclusive play equipment recommended), and/or additional facilities for passive recreation like picnic tables, benches, or gazebos.

Crescent Park (14.5 acres)

Crescent Park is located in a residential neighborhood in the south part of town near 17th Street. Park facilities include two tennis courts, a basketball court, a playground, and a light activity area (see page 9-17 for further description). The park also provides facilities for passive recreation including picnic tables (both covered and uncovered), park bench, and a pavilion. Large trees provide shade for park visitors who walk the ½ mile paved path around the park (see *Figure 9D, next page*).

Figure 9D: Crescent Park

Park facilities in Crescent Park are generally in good condition. The tennis and basketball courts could use some updating but everything else seems to be recently updated. The City should focus on installing additional facilities in some of the roughly 9 acres of unused park space. The center of Crescent Park occasionally floods with stormwater runoff. Ideal uses for that space would be general use or soccer field with removable goals, gardens, or other uses not heavily impacted by flooding.

City Softball Fields (18.7 acres)

The city owns and maintains softball and little league fields near The Lamb County Agriculture and Community Center. The community Center is owned and maintained by the County with the exception of the baseball and softball fields. City owned facilities include two softball fields, three little league fields, two softball fields, picnic tables (covered and uncovered), and a light activity area. The Lamb County Community Center also has a few buildings used for the rodeo and a veteran's memorial.

The softball and little league fields are all in standard condition but could use some updating. However, there is no space for additional park amenities. Given the ample amount of space in other parks and the planned aquatic center this plan recommends converting one softball field into an adult baseball field and updating the rest of the fields but not adding additional amenities.

Figure 9E: Lamb County Agriculture Community Center Facilities

Waylon Jennings RV Park (1.2 acres)

The Waylon Jennings RV Park is located on Hall Avenue near the Lamb County Agriculture and Community Center. The park functions as a free RV park for visitors and memorial to Waylon Jennings. Guests can stay for free up to 4 periods of 24 hours, after that a $20 per day fee is charged. The park is handicap accessible and provides water and electric hookups for 8 RV's.

Figure 9F: Waylon Jennings RV Park

Dunbar Park (1.3 acres)

Dunbar Park is a small neighborhood park located in the northern part of Littlefield. Park facilities include a basketball court, a playground, picnic tables (covered and uncovered), a pavilion, and BBQ grills. While the playground facilities are in good condition all other facilities should be replaced. The picnic tables are missing benches or have holes in the table and the basketball goals are missing nets. Additionally, there is ample space for more recreation amenities such as additional play infrastructure or basketball courts.

Figure 9G: Dunbar Park Facilities

9.5.2 ISD Facilities

Littlefield High School

High School recreation facilities are split between two parts of town. The football stadium, baseball field, and ¼-mile running track are located on East 14th Street and Stadium Avenue. And three tennis courts and a softball field are adjacent to the high school on Waylon Jennings Boulevard.

Figure 9H: Littlefield High School Sports Facilities

Littlefield Elementary

Littlefield Elementary is located next to Littlefield Junior High but it is unclear if they share outdoor recreation facilities. There are four basketball courts and two playgrounds adjacent to the Elementary School Building.

Littlefield Primary

Littlefield Primary School is located across the street from both Littlefield Junior High and Littlefield Elementary School. The school houses children from pre-kindergarten to second grade. There are two playgrounds adjacent to the Primary School.

9.5.3 Inventory

Table 9E provides the shared inventory for all public parks in Littlefield. Only facilities open to the public and maintained by the City are included in the recreation facility inventory.

Table 9E: Recreation Facility Inventory

AMENITIES	Total	CITY-MAINTAINED			
		Laguna Park	Crescent Park	City Softball Fields	Dunbar Park
TEAM SPORT COURTS & FIELDS					
General Use / Soccer Field	3	3	-	-	-
Little League Field	3	-	-	3	-
Softball Field	2	-	-	2	-
Basketball Court	3	1	1	-	1
Tennis Court	2	-	2	-	-
SUPPORTING AMENITIES					
Ticket Booth		No	No	Yes	No
Bleachers		No	No	Yes	No
Concessions Stand		No	No	Yes	No
Dugouts		No	No	Yes	No
Lights		Yes	No	Yes	No
Scoreboard		No	No	Yes	No
Trashcans		Yes	Yes	Yes	Yes
Flagpole		No	No	Yes	No
PLAYGROUND					
Playground	3	1	1	-	1
Merry-Go-Round	2	1	-	-	1
Monkey Bars/Jungle Gym	4	2	2	-	-
Playscape	8	2	3	-	3
Spring Rider	1	-	1	-	-
Slides	15	8	7	-	-
See-saw	2	-	1	-	1
PASSIVE					
Picnic Tables - Covered	14	-	6	4	4
Picnic Tables – Uncovered	15	7	3	3	2
Pavilion	3	1	1	-	1
BBQ Grill	11	5	6	-	4
Park Bench	24	15	7	2	-
Light Activity Area	2	-	1	1	-

ADDITIONAL AMENITIES					
Paved Multiuse Trail (miles)	0.5	-	0.5	-	-
OTHER SUPPORTING AMENITIES					
Lighting		Yes	No	Yes	No
Parking		Yes	No	Yes	No
Trashcans		Yes	Yes	Yes	Yes
Fencing		Yes	Yes	Yes	No

Source: GrantWorks Field Survey, 2020

9.5.4 Additional Local Areas Used for Outdoor Activities

Open Space

A city's park system often includes dedicated open spaces to provide opportunities for passive recreation, to provide habitat for local flora and fauna, to preserve landmarks or vistas, or to ensure no development occurs in areas where potential hazards exist, such as flooding. Littlefield has land that could be used for dedicated open space. Approximately 35% of land in the city limits is currently undeveloped or used for farmland (1,429 acres) and another 8.6% is subdivided but not developed (345 acres). Combined, that totals over 1,774 acres of "open" land within the city limits, some of which could become dedicated open space.

9.5.5 Regional Recreation Areas

Caprock Canyons State Park

About 70 miles from Hale Center, Caprock Canyons State Park is a beautiful example of the landscape of the Caprock Escarpment. Activities include camping, hiking, biking, horseback riding, swimming, picnicking, and fishing. In addition visitors can watch the bat colony at Clarity tunnel, a historic railroad tunnel built in the 1920s, and visit the Official State of Texas Bison Herd, descended from a herd of bison cared for by ranch owner Charles Goodnight and his wife, which they started after bison were decimated by hide hunters around 1876. Information on reservations and ranger programs is available from Texas Parks and Wildlife (https://tpwd.texas.gov/state-parks/caprock-canyons).

Palo Duro Canyon State Park

Known as the "Grand Canyon of Texas," the Palo Duro Canyon State Park is also the second largest park in the TPWD system. It is located about 80 miles north of Hale Center and includes many activities including camping, hiking, horseback riding, wildlife viewing, and biking. The nearby Panhandle-Plains Historical Museum in Canyon, Texas is an area attraction as well. In the summertime, visitors can view nightly performances of the musical "Texas." (https://tpwd.texas.gov/state-parks/palo-duro-canyon).

Playa Lakes Wildlife Management Area

Texas Parks and Wildlife's Playa Lakes Wildlife Management area is about 55 miles northwest of Hale Center and offers hunting, hiking, and wildlife viewing. Although there are no developed trails, hikers generally walk around the lakes at the WMA. The Playa Lakes WMA features many species of migratory birds including Canada geese, ducks, and other waterfowl and North American birds. More information is available at the Texas Parks and Wildlife Department website (www.tpwd.texas.gov/huntwild/hunt/wma/find_a_wma/list/?id=19).

Muleshoe National Wildlife Refuge

Muleshoe National Wildlife Refuge is located approximately 30 minutes west of Littlefield. It is the oldest national wildlife refuge in Texas and was established in 1935. Most of the short-grass prairie habitat has never seen a plow and stands today as it did hundreds of years ago. Important to migratory birds and many resident species of wildlife, the refuge is best known for hosting one of the largest concentrations of lesser sandhill cranes in North America. Muleshoe National Wildlife Refuge offers wildlife-dependent recreation, including wildlife watching and photography, hiking, and camping. The 6,440-acre refuge is part of the National Wildlife Refuge System, a national network of lands and waters set aside for the benefit of wildlife, habitat, and you. More information can be found at the US Fish and Wildlife Service website (www.fws.gov/refuge/Muleshoe/about.html).

Plainview Parks System

The City of Plainview has 16 developed parks with recreational facilities that include six baseball fields, two basketball courts, two community buildings, a disc golf course, a golf driving range, three multipurpose courts (tennis, basketball, and volleyball), three half-mile walking trails, four pavilions, two soccer fields, three softball fields, and others. More information can be found at the Plainview city website (www.plainviewtx.org/198/Parks).

Lubbock Parks System

The City of Lubbock has an extensive parks system with a large variety of activities and facilities, all available to the public. The parks system includes all manner of sports courts, swimming facilities, community centers, and park programming. More information can be found at the Lubbock city website (www.ci.lubbock.tx.us/departments/parks-recreation/about-us).

Privately Owned Recreational Facilities

Lubbock Country Club. The Lubbock Country Club is located approximately 30 miles south of Hale Center. Founded in 1921, this private club offers an 18-hole golf course, swimming pool, tennis courts, and a restaurant. For more information visit www.lubbockcc.org.

Lubbock Golf Courses. The Lubbock area contains several private golf courses and driving ranges in addition to the Lubbock Country Club.

Plainview Country Club. The Plainview Country Club is located approximately 15 miles north of Hale Center. This private club offers an 18-hole golf course, a swimming pool, and two restaurants. For more information visit www.plainviewcc.com.

9.6 Needs Assessment & Identification

This section outlines local recreational needs using a standards-based assessment and a demand-based assessment.

9.6.1 Standards-Based Assessment

The standards-based assessment uses three criteria to determine Littlefield's recreational needs: the current and future population; acreage devoted to parks and open space; and the number of households within/outside of a recreational facility service area. The standards-based assessment does not consider residents' desires or a community's capacity to maintain facilities.

Littlefield parks include opportunities for multiple age groups. Park facilities include playground equipment for young children. Depending on size, courts and fields offer team sport opportunities for children, teens, and adults. Adults and seniors can walk/run along the walking trail that surrounds Crescent Park. The parks also include passive recreation opportunities for all residents including benches, picnic tables, and cooking facilities. However, most facilities at Littlefield parks are in deteriorated condition and this likely discourages use. In addition, some facilities are severely dilapidated such that use is not possible or safe. Facility conditions are further discussed in *Section 9.5.1* and *Section 9.5.2.*

According to a standards-based assessment, Littlefield needs additional one (1) general use/soccer field, one (1) adult baseball field, three (3) basketball courts, one (1) tennis court, one (1) dedicated soccer field, three (3) playgrounds, three (3) picnic tables, eighteen (18) park benches, one (1) light activity area, six (6) miles of unpaved trails, two-and-a-half (2.5) miles of paved trails, one (1) swimming pool, and one (1) small skate park. Creating a plan with the Littlefield Independent School District to share recreational facilities on weekends or after school is an easy way to create additional recreation opportunities for residents. Based on the small anticipated population change over the next 10 years, Littlefield will not have any additional facility requirements during the planning period (see *Section 9.4-Area & Facility Concepts & Standards)*.

Detailed Standard-Based Assessment Data

Facility Needs by Population Size

Table 9F identifies Littlefield's existing and future needs based upon the population projection and standards for facilities described earlier in the chapter.

Table 9F: Facilities Standards & Existing Facilities Comparison

Facility	2020		Additional Facilities Needed	
	Existing within service area	*Suggested (#/population)*	*Currently needed*	*Total needed by 2030*
Facilities needed locally (within 2 miles)				
General-Use / Soccer Field	3	1 per 1,500	1	4
Adult Baseball	-	1 per 5,000	1	1
Basketball Court	3	1 per 1,000	3	6
Tennis Court	2	1 per 2,000	1	3
Soccer Field (dedicated)	-	1 per 5,000	1	1
Little League (dedicated)	3	1 per 5,000	-	1
Softball (dedicated)	2	1 per 5,000	-	1
Playground	3	1 per 1,000	3	6
Picnic Tables	29	1 per 200	3	32
Group Picnic Area (Covered)	3	1 per 2,000	-	3
Benches	24	1 per 150	18	42
Light Activity Area	2	1 per 2,000	1	3
Small Skate Park	-	1 per 6,250	1	1
Swimming Pool	-	1 per 6,000	1	1
Multiuse Paths/Trails	**Actual Mileage**	**Pop Per Mile**		
Multiuse Trails (Dirt/Gravel)	-	1,000	6	6
Multiuse Trails (Paved)	0.5	2,000	2.5	3

Source GrantWorks Fieldwork 2020

Acreage Needs by Population Size

Level of Service (LOS) is the term used to describe the park system's role in the community. The LOS for parks and open space is based on useable space per 1,000 residents; therefore, undeveloped parkland is not included. As expressed in the City's facility standards, Littlefield's residents should have access to a minimum of five (5) acres and an ideal 15 acres of developed park land per 1,000 residents. Due to policies restricting the availability of use by the public, the acreage of private recreational facilities and areas of school campuses not open to the public or open only on a limited basis are not included.

The city of Littlefield's current Level of Service (LOS) exceeds the ideal park acreage. Developed public parks provide a LOS of 9.1 acres of developed parkland per 1,000 residents.

Table 9G: Existing Parks, Level of Service

Facility	Park Type	Acreage			Service Area (Miles)	City Households Served	% of Houses
		Desirable (acres)	*Total*	*Developed*			
Crescent Park	Neighborhood	1-to-15 acres	14.5	5.0	1/2	696	26
Dunbar	Neighborhood	1-to-15 acres	1.3	1.3	1/4	56	0
Waylon Jennings	Neighborhood	1-to-15 acres	1.2	1.2	1/4	1556	233
City Softball Fields	Community	15-25+ acres	18.7	18.7	1	179	66
Laguna Park	Community	15-25+ acres	24.0	24.0	1	2274	181
Total Acreage			**68.1**	**58.6**	**-**	**-**	**-**
Population – 6,406 (est. 2020); 6,366 (est. 2030)							
Level of Service 2020 (acres per 1,000 residents)		***10.6***		***9.1***			
Level of Service 2030		***10.7***		***9.2***			

Source: GrantWorks Fieldwork, 2020

Acreage Needs by Park Location

The standards-based assessment also determines recreation needs based upon park service areas. The service area refers to the area formed by a predetermined radius extending out from the park that would typically serve the surrounding population. The service area of existing parks is described in *Table 9G (above)* and in *Figure 9I (next page)*. Based on housing locations, most residents living within the Littlefield city limits are served by at least one public recreational facility (see *Figure 9I*).

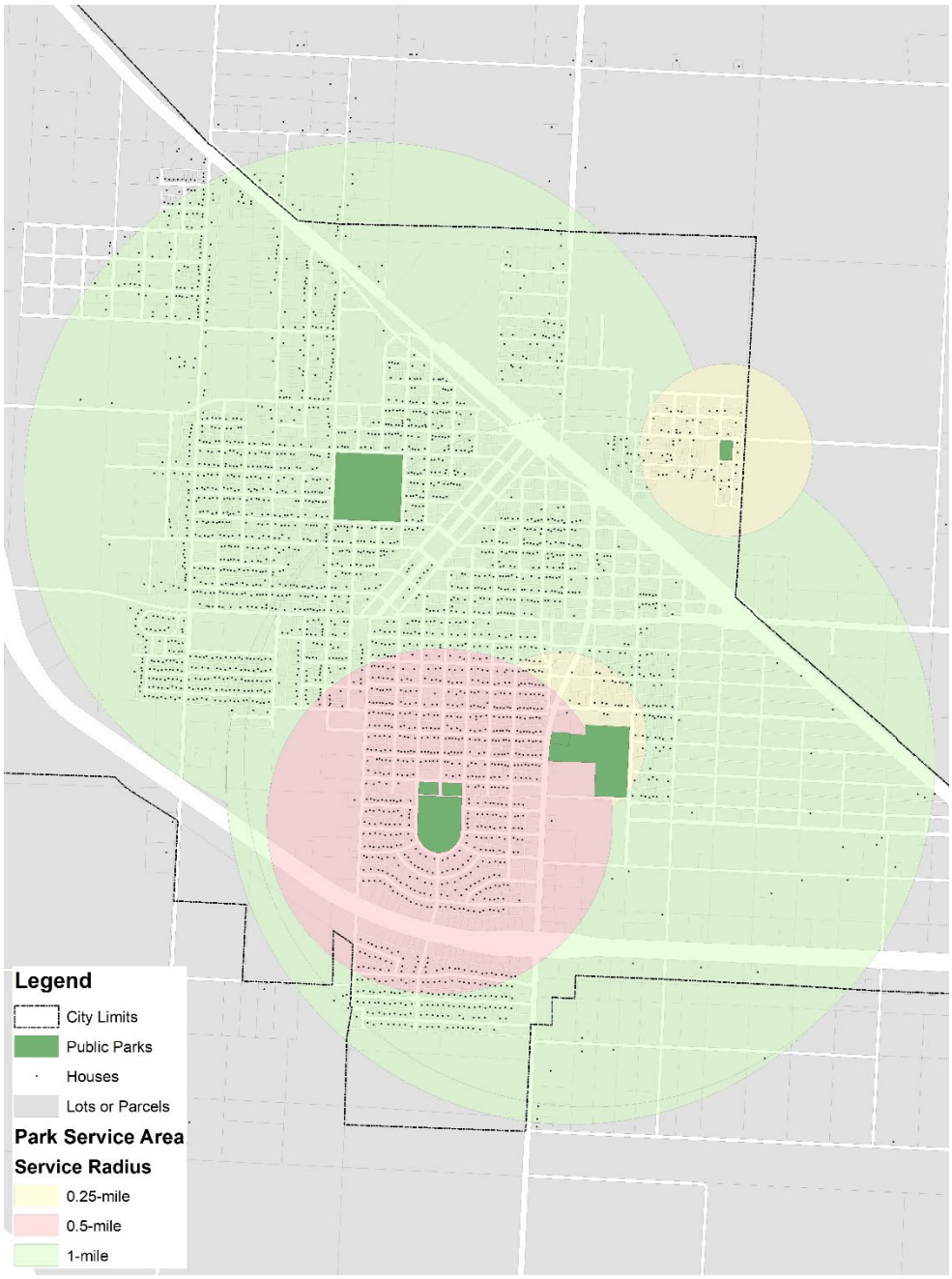


Figure 9I: Park Service Areas

9.6.2 Demand-Based Assessment

The demand-based assessment of local recreation facilities is based on the results from a survey made available to other Littlefield residents throughout January, February, and March 2020. Twenty (20) surveys were completed. Data gathered from the surveys identified common recreational activities of adults and children; favorite parks and needed improvements; and important/priority additional recreational facilities.

Table 9H summaries key assessment results:

Table 9H: Top Four: Activities, Important Facilities, Activity Locations

Top 4:	Children's Activities	Adults' Activities	Important Facilities	Locations for Activities
1.	Basketball	Walking	Swimming Pool	Home / Friend's Home
2.	Walking	Basketball	Recreation Center	City Parks
3.	Swimming	Swimming	Hiking/Jogging/Bike Trails	Parks/Gyms/Schools in other Cities
4.	Football	Golf	Golf Course	School

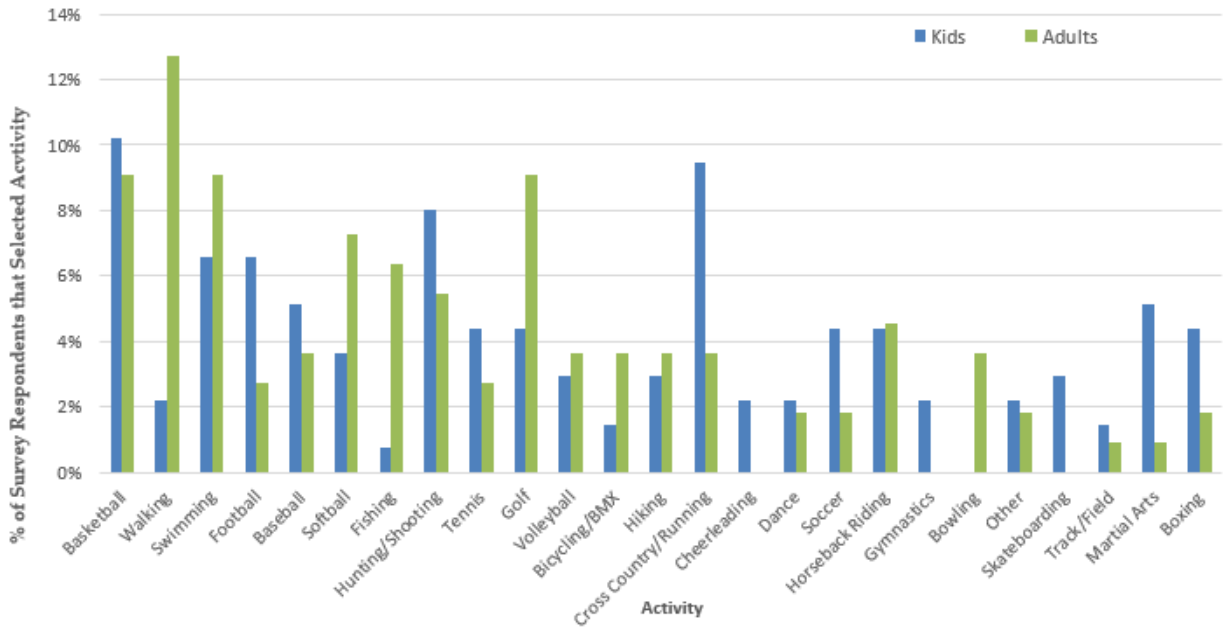
Source: GrantWorks Parks & Recreation Survey, 2020

Detailed Demand-Based Assessment Data

Resident Activites & Activity Locations

The survey asked respondents to share the recreational activities of children and adults in their household and where those activities take place. As *Chart 9E* shows, walking, swimming, and fishing are the most popular recreational activities among Littlefield youth. The most popular youth team sports are basketball, football, and baseball. Walking, basketball, and swimming are the most popular adult activities. The most popular adult team sports are basketball, golf, and softball.

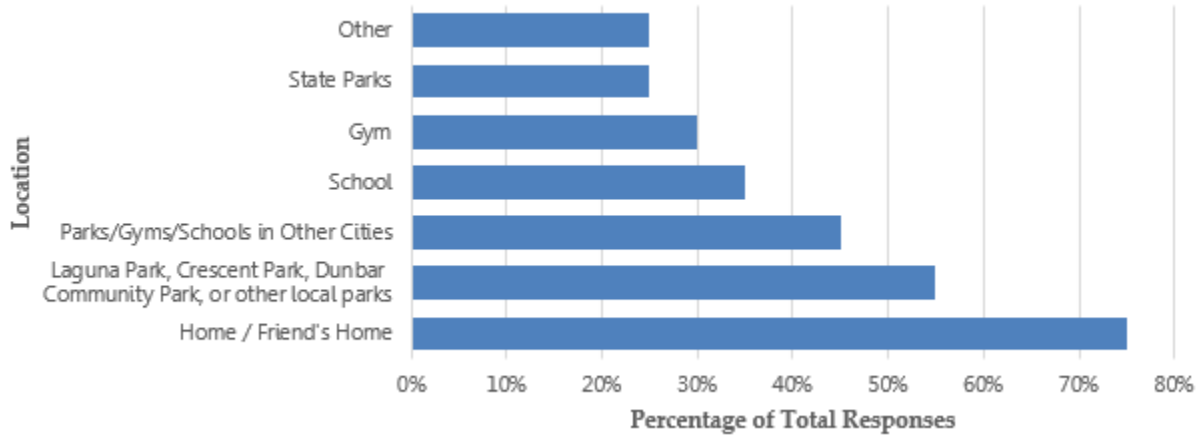
Chart 9E: Top Activities for Children & Adults



Source: GrantWorks Parks & Recreation Survey, 2020

As *Chart 9F: Recreational Activity Locations* shows, most of the activities that children and adults participate in are based at home, at city parks, and at school.

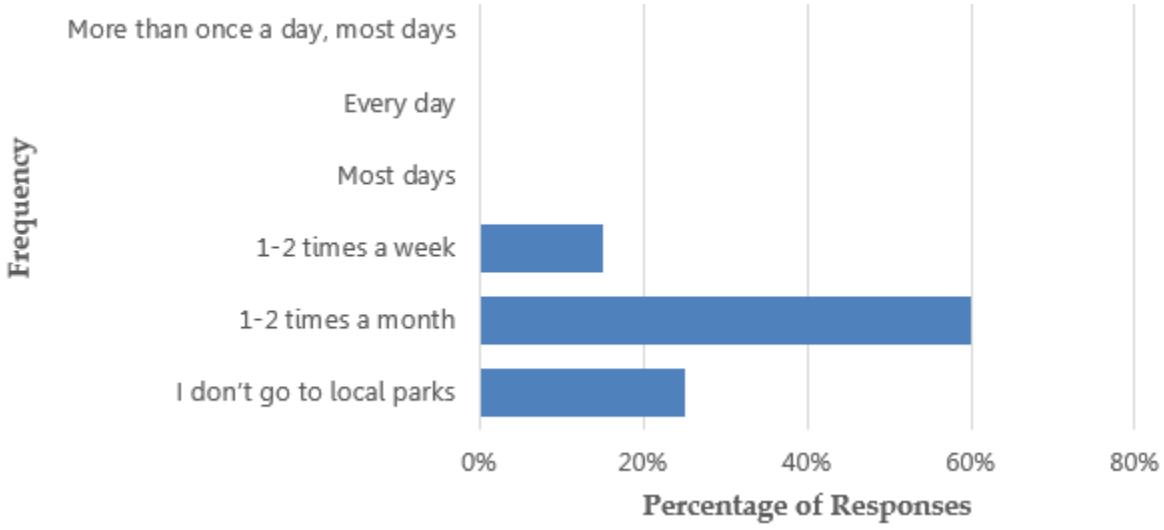
Chart 9F: Recreational Activity Locations



Source: GrantWorks Parks & Recreation Survey, 2020

Most survey respondents report visiting the public park in Littlefield (75%). Of the respondents who visit the public park, most visit once or twice a month (see *Chart 9G)*.

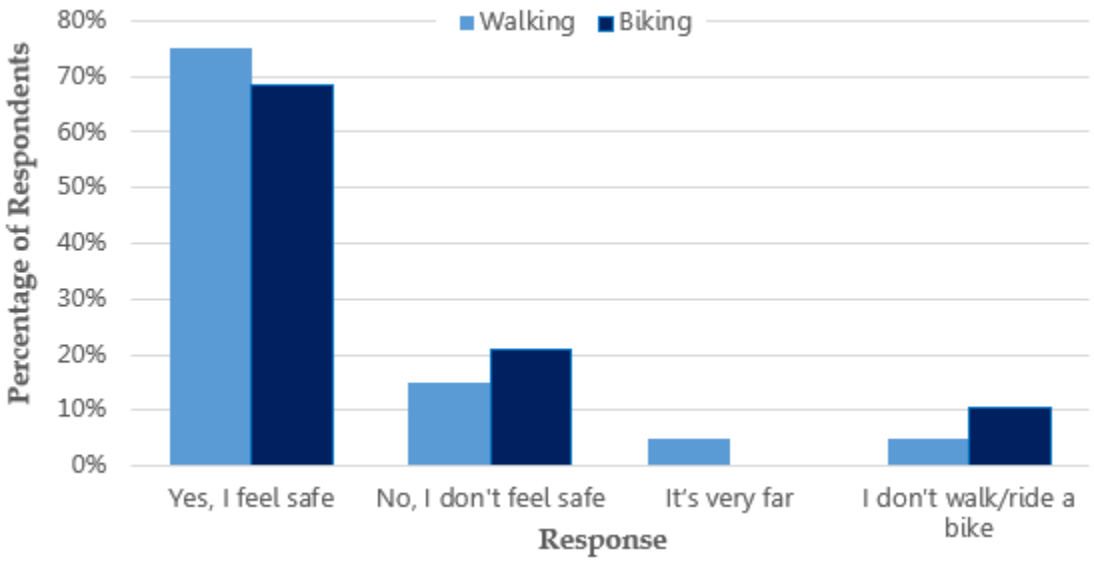
Chart 9G: How many times a week do you visit a park in Littlefield?



Source: GrantWorks Parks & Recreation Survey, 2020

Park proximity and perceived safety of non-motorized access to parks do not appear to play a role in the lesser frequency of visits to parks Littlefield. As *Chart 9H* shows, approximately 70% of respondents safe walking or biking to the nearest public park.

Chart 9H: Do you feel comfortable walking or riding a bike to nearest park?



Source: GrantWorks Parks & Recreation Survey, 2020

Park Improvements

The survey asked respondents to consider whether existing parks in Littlefield should be updated. As *Table 9I* shows, most survey respondents (70%) agree that existing park facilities in Littlefield need to be upgraded; 20% of survey respondents indicated that they were not sure.

Table 9I: Do parks in Littlefield need to be fixed?

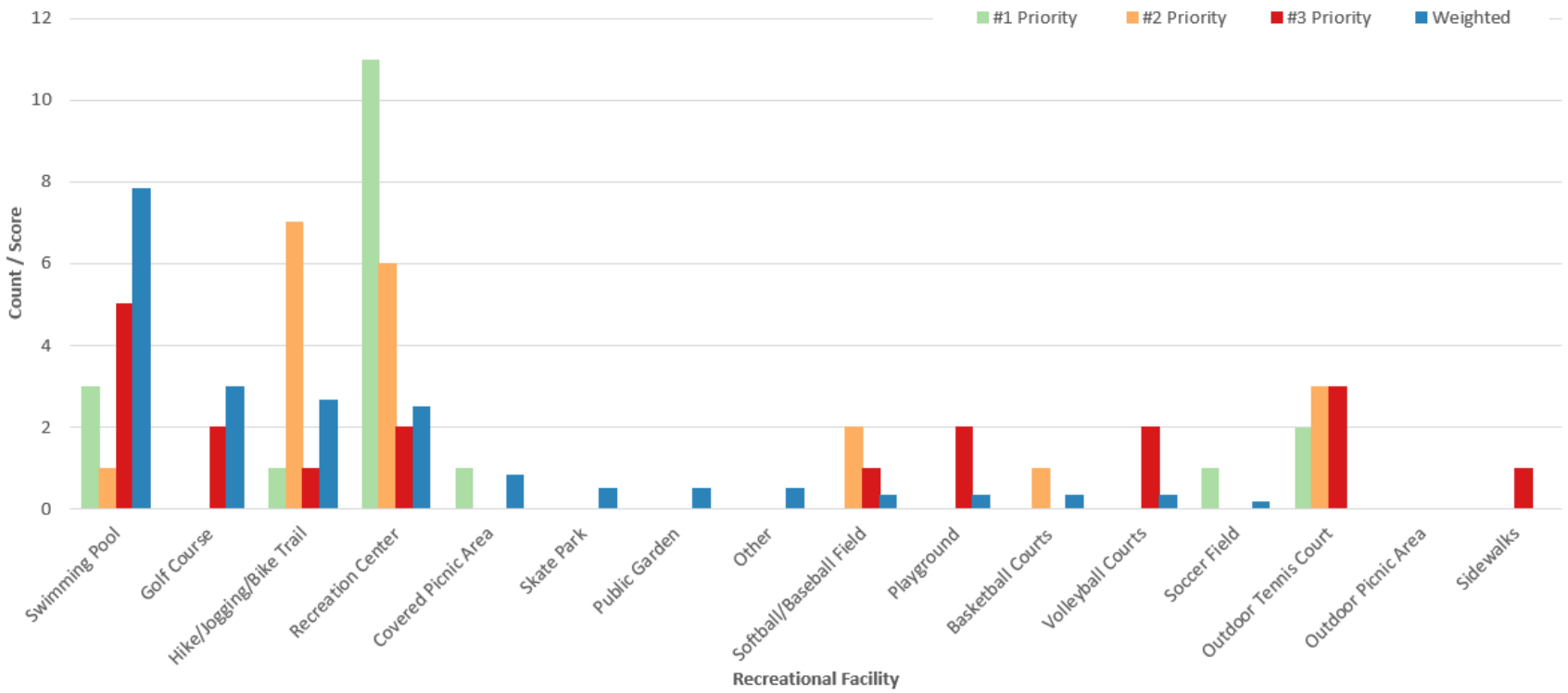
Yes	No	Not Sure
70% (14)	10% (2)	20% (4)

Source: GrantWorks Parks & Recreation Survey, 2020

Additional Facilities Wanted

The final question asked respondents to specify their #1, #2, and #3 priority for an additional recreational facility in Littlefield. Respondents could select from a list of facilities or write-in a new facility. The responses were weighted; #1-rated facilities received three points, #2-rated facilities received two points, and #3-rated facilities received one point. Only one person wrote in a new facility under the "other" category, that person wrote "physical therapy, medical pool." *Chart 9I* shows the resulting scores.

Chart 9I: Additional Facilities by Priority & Weight



Note: Starred recreational facilities (e.g. *Soccer Field*) are top facilities, i.e. facilities receiving a weighted score above or equal to 80% of the highest weighted score.
Source: GrantWorks Parks & Recreation Survey, 2020

9.7 Prioritization of Needs

A review of public comments, survey results, and established standards indicates the need for the City of Littlefield to remove and replace existing facilities in deteriorated and dilapidated condition and make targeted investments in new facilities to expand recreational opportunities in Littlefield.

Park planners realize that establishing priorities based solely on the public's numerical ranking of activities may not give appropriate consideration to the most logical and efficient use of limited available cash and may not provide the widest range of activities to the broadest possible target audience. When establishing priorities to direct future investment it is important to strike a balance between community preferences, standards-based assessments, and the ability of the City to fund construction and maintenance of proposed facilities.

Park Priorities by Type

The City of Littlefield has established the following development priorities.

Outdoor Construction-related Priorities (OC):

Priority 1:	Renovate sport facilities (basketball court and general use fields) and replace deteriorating buildings in Laguna Park. Install additional play infrastructure or sports facilities where possible.
Priority 2:	Renovate or replace aged play equipment and sports facilities (basketball court and light activity area) at Crescent Park. Install additional play infrastructure or sports facilities where possible.
Priority 3:	Renovate or replace aged play equipment or sports facilities (basketball court) at Dunbar Park. Install additional play infrastructure or passive recreation opportunities where possible.
Priority 4:	Replace deteriorated picnic tables and benches at Littlefield Parks; add additional passive recreation facilities as needed.
Priority 5:	Renovate softball and little league fields near Lamb County Agriculture Community Center.
Priority 6:	Install 9 miles of walking/hiking trails (6 miles unpaved and 3 miles paved multiuse trails) in existing and future Littlefield parks.
Priority 7:	Pursue development of Littlefield Aquatic Center on Phelps Avenue.
Priority 8:	Conduct annual tree planting campaign; plant one (1) tree per year.
Priority 9:	Develop a light activity area with activities pursued by elderly residents such as horseshoes, shuffleboard, or domino/cards game tables where none currently exist and as needed.
Priority 10:	Install inclusive play activities (such as a "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities.

Priority 11:	Encourage development of other outdoor activities typically operated by private businesses such as a skate park, equestrian facilities, miniature golf, bicycle motor-cross, or a mountain-bike trail.

Indoor Construction-related Priorities (IC):

Priority 1:	Encourage development of other indoor activities typically operated by private businesses such as a movie theater, bowling alley, roller-skating rink, gymnastics/twirling center, and indoor rodeo facilities.

Ongoing Non-Construction Priorities (NC):

Action Item 1:	Budget funds for park maintenance.
Action Item 2:	Budget funds for on-going facility development.
Action Item 3:	Establish a voluntary donation fund to maintenance, repair, and upgrade City parks. Solicitation could be added to City utility bill.
Action Item 4:	Establish "community workday" to accomplish a portion of park development using volunteer labor. Tasks can include site preparation, clean-up, and preliminary construction tasks. Seek volunteers from local citizens, City staff, community service workers, school district, and sports and civic groups.
Action Item 5:	Hold an annual festival at Laguna Park or Crescent Park. Festivals and events provide diverse activities not normally available in the park and enhance the usefulness of the facilities. These events can also highlight the community's cultural diversity or offer special events such as kite-flying contests or bike-a-thons. Earmark any proceeds from activities for use in Save Our School campaign and park improvement projects.
Action Item 6:	Support both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.
Action Item 7:	Develop a shared-resources plan with local institutions to share public and private recreation facilities.
Action Item 8:	Schedule biennial reviews of Parks Master Plan to update inventory and priority needs lists. Solicit new public input every five years.
Action Item 9:	Schedule creation of new Parks Master Plan

9.8 Recreation & Open Space Plan

This plan is designed to be implemented during a 10-year period starting with fiscal year 2020-2021 and ending with fiscal year 2029-2030. The plan addresses the full spectrum of the City's new construction, maintenance, and operation needs to ensure that the highest quality park, recreation, and open space opportunities are available.

The following implementation plan sets forth the most reasonable development timeline assuming funding resources are available. The items are identified as Construction (C) priorities or as non-construction (NC) action items. Outdoor activities are identified as OC. Indoor activities are identified as IC.

Potential methods of funding for these projects are identified. These potential sources include:

- Local general funds;
- General obligation bonds;
- Certificates of obligation (CO's);
- Sales tax revenue;
- Local in-kind labor;
- Donations of land, cash, materials, and labor from private individuals; and
- Grants from Texas Parks & Wildlife Department (TPWD) through the outdoor, indoor, trails, and small community programs, and the TPWD Community Outdoor Outreach Program (COOP).

The following plan outlines projects the City should strive to achieve on a short-term basis within the first five years of the planning period and on a long-term basis. The plan derives from the above analyses: the inventory of existing conditions, including physical and social resources; the standards-based assessment; and the needs-based assessment.

Table 9J: Implementation Plan: 2020-2030

FY 2020-2021 (10/1/20 to 9/30/21)

Implementation Item	Action Item	Estimated Cost	Funding Source(s)
Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation facilities at Crescent Park. Remove aged picnic tables, install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	OC 2 OC 4	Up to $75,000 (or 50% match of TPWD grant funds)	GEN; TPWD
Establish a voluntary donation fund to fund maintenance, repair, and upgrade of Littlefield parks. Solicitation could be added to City utility bill.	NC 3	< $1,000	GEN
Establish a "community workday" public parks to accomplish a portion of park development using volunteer labor.	NC 4	< $1,000	GEN
Develop shared-resources plan with Littlefield ISD to establish a schedule of public access for ISD recreation facilities. Create plan to share facility maintenance and review biennially.	NC 7	Staff	GEN; ISD
Schedule biennial review of the Parks Master Plan and update priority list as needed. Solicit new public input every five (5) years.	NC 8	< $1,000	GEN
Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Budget funds for park maintenance and for on-going facility development.	NC 1 NC2	Variable	GEN; EDC

GEN = City of Littlefield Municipal Funds; **EDC** = Economic Development Corporation; **ISD** = Independent School District; **CDBG** = Community Development Block Grant Program; **Local** = Donations from private citizens, organization, and local businesses; **TPWD** = Texas Parks & Wildlife Department

FY 2021-2022 (10/1/21 to 9/30/22)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Conduct a biennial review of Parks Master Plan and update priority list and inventory, if needed.	NC 8	Staff	GEN
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Hold an annual festival at Laguna Park or Crescent Park. Festivals and events provide diverse activities not normally available in the park and enhance the usefulness of facilities. These events can also highlight the community's cultural diversity or offer special events such as kite-flying contests or bike-a-thons. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" at public parks to accomplish a portion of park development using volunteer labor.	NC 4	< $ 1,000	GEN; Local

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FY 2022-2023 (10/1/22 to 9/30/23)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park. Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court.	OC 1 OC 4	Up to $75,000 (or 50% match of TPWD grant funds)	GEN; TPWD
Start annual Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local
Renovate and update city owned softball and little league fields near the Lamb County Agriculture and Community Center.	OC 5	Variable	GEN; Local
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" at public parks to accomplish a portion of park development using volunteer labor.	NC 4	< $ 1,000	GEN; Local

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FY 2023-2024 (10/1/23 to 9/30/24)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Install inclusive play activities (such as "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	OC 10	$1,000/per	GEN; Local; TPWD
Conduct a biennial review of Parks Master Plan and update priority list and inventory, if needed.	NC 8	Staff	GEN
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC2	Variable	GEN; EDC
Annual: Continue "community workday" at public parks to accomplish a portion of park development using volunteer labor.	NC 4	< $ 1,000	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

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FY 2024-2025 (10/1/24 to 9/30/25)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park. Replace deteriorating picnic tables and play infrastructure. Install additional playscape for younger children.	OC 3 OC 4	Up to $75,000 (or 50% match of TPWD grant funds)	GEN; TPWD
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

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FY 2025-2026 (10/1/25 to 9/30/26)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/card tables) at Dunbar Park and/or elsewhere as appropriate.	OC 3 OC 9	$1,000/per	GEN; TPWD
Review the Parks Master Plan and solicit new public input; update as needed.	NC 8	< $1,000; Staff	GEN
Submit Parks Master Plan to TPWD to ensure eligibility for Non-urban Outdoor Recreation Grant.	OC 7	Variable	GEN
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

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FY 2026-2027 (10/1/26 to 9/30/27)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation program to construct new Aquatic Center on Phelps Avenue.	OC 7	Up to $375,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $750,000)
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

GEN = City of Littlefield Municipal Funds; **EDC** = Economic Development Corporation; **ISD** = Independent School District; **CDBG** = Community Development Block Grant Program; **Local** = Donations from private citizens, organization, and local businesses; **TPWD** = Texas Parks & Wildlife Department

FY 2027-2028 (10/1/27 to 9/30/28)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Apply for funding January 2028 to the TPWD Recreational Trails Grant program to construct nine (9) miles of trails in Littlefield parks and/or elsewhere as appropriate.	OC 6	Variable	GEN
Conduct a biennial review of Parks Master Plan and update priority list and inventory, if needed.	NC 8	Staff	GEN
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

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FY 2028-2029 (10/1/28 to 9/30/29)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Encourage development of other outdoor activities typically operated by private businesses such as a skate park, equestrian facilities, miniature golf, bicycle motocross, and a mountain bike trail.	OC 11	Staff	GEN; Local
Encourage development of other indoor activities typically operated by private businesses such as a movie theater, bowling alley, roller-skating rink, gymnastics/twirling centers, and indoor rodeo facilities.	IC 1	Staff	GEN; Local
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

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FY 2029-2030 (10/1/29 to 9/30/30)			
Implementation Item	**Action Item**	**Estimated Cost**	**Funding Source**
Schedule creation of a new Master Park Plan.	NC 9	$10,000	GEN
Annual: Continue to budget funds for park maintenance and for on-going facility development.	NC 1 NC 2	Variable	GEN; EDC
Annual: Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	NC 6	Staff	GEN; Local
Annual: Continue programming and festivals at Littlefield parks. Earmark any proceeds from activities for park improvement projects.	NC 5	$1,000-$2,000	GEN; Local
Annual: Continue "community workday" to accomplish a portion of projects related to park and/or vacant lot cleanup/improvement.	NC 4	< $ 1,000	GEN; Local
Annual: Continue Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	OC 8	$100	GEN; Local

GEN = City of Littlefield Municipal Funds; **EDC** = Economic Development Corporation; **ISD** = Independent School District; **CDBG** = Community Development Block Grant Program; **Local** = Donations from private citizens, organization, and local businesses; **TPWD** = Texas Parks & Wildlife Department

9.9 Appendix 10A: Survey

1) Do you live in Littlefield?

☐ Yes ☐ No ☐ I do not know

2) How old are you? _____

3) What sports do the kids in your family play? (Check all that apply)

☐ Basketball	☐ Cross Country/Running	☐ Hunting/Shooting
☐ Football	☐ Swimming	☐ Martial Arts
☐ Baseball	☐ Tennis	☐ Boxing
☐ Soccer	☐ Golf	☐ Horseback Riding
☐ Softball	☐ Skateboarding	☐ Hiking
☐ Volleyball	☐ Gymnastics	☐ Walking
☐ Cheerleading	☐ Dance	☐ Bowling
☐ Track/Field	☐ Bicycling/BMX	☐ Fishing

☐ Other (Please describe):

4) What sports do the adults in your family play? (Check all that apply)

☐ Basketball	☐ Cross Country/Running	☐ Hunting/Shooting
☐ Football	☐ Swimming	☐ Martial Arts
☐ Baseball	☐ Tennis	☐ Boxing
☐ Soccer	☐ Golf	☐ Horseback Riding
☐ Softball	☐ Skateboarding	☐ Hiking
☐ Volleyball	☐ Gymnastics	☐ Walking
☐ Cheerleading	☐ Dance	☐ Bowling

☐ Track/Field ☐ Bicycling/BMX ☐ Fishing

☐ Other (Please describe):

5) Where does your family play? (Check all the places that you play)

☐ Home/ Friend's Home ☐ Parks/YMCA/Gym in Other Cities

☐ School ☐ Gym

☐ Laguna Park, Crescent Park, Dunbar Park, or other local parks ☐ State Parks

☐ Other (Please describe any other parks in the region that you visit):

6) How often do you visit a park in Littlefield?

☐ 1-2 times a month ☐ 1-2 times a week ☐ Most Days ☐ Every day ☐ More than once a day, most days ☐ I do not go to local parks

7) Do you feel comfortable walking or riding a bike to the nearest park?

	Yes, I feel safe	No, I do not feel safe	It is very far	I do not walk/ride a bike
Walking	☐	☐	☐	☐
Biking	☐	☐	☐	☐

8) Do parks in Littlefield need to be fixed?

☐ Yes ☐ No ☐ I do not know

If you answered "Yes", what kind of fixes?

9) What other things do you want in Littlefield? (Please check one box for each thing)

Recreation Center	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Hike/Jogging/Bike Trail	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Swimming Pool	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Outdoor Tennis Court	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Softball/Baseball Field	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Soccer Field	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Covered Picnic Area	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Outdoor Picnic Area	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Golf Course	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Playground	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Basketball Courts	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Volleyball Courts	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Sidewalks	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Skate Park	☐ Yes	☐ Maybe	☐ No	☐ I do not know
Public Garden	☐ Yes	☐ Maybe	☐ No	☐ I do not know

10) What is your #1 wish for Littlefield parks?

Priority #1	

11) What is your #2 wish for Littlefield parks?

Priority #2	

12) What is your #3 wish for Littlefield parks?

Priority #3	

THANK YOU!

10 Capital Improvement Projects

The condition of infrastructure is a major concern of all communities. Infrastructure deteriorates with time and use, and as cities expand, stress is placed upon the capacity of local governments to accommodate additional people. When properly developed and used, a capital improvements program (CIP) is a tool for local government to identify ongoing and long-term capital needs and assess financial capabilities to meet those needs.

10.1 Highlights

Although Littlefield is a small, lower-income community, the City has the financial capacity to carry out some of the necessary capital improvements over the next 10 years. Both sales tax and property tax revenues increased over the last five years and the City's current debt service remains manageable. Standard benchmarks and indicate that the City of Littlefield could issue approximately $100,000 in annual debt while maintaining a conservative fiscal policy ($1 million over the planning period).

Projects recommended in the Five-Year Capital Improvements Program Schedule at the end of this chapter (and on *Map 10A: Capital Improvements Program 2020-2030)* total an estimated $14.63 million. The order of those projects and the exact locations of some improvements would depend on funding availability, engineering studies, and the changing needs of the community. Local financing options are discussed below. *Chapter 11: Funding Sources* contains extensive information on grants and loans available from external sources.

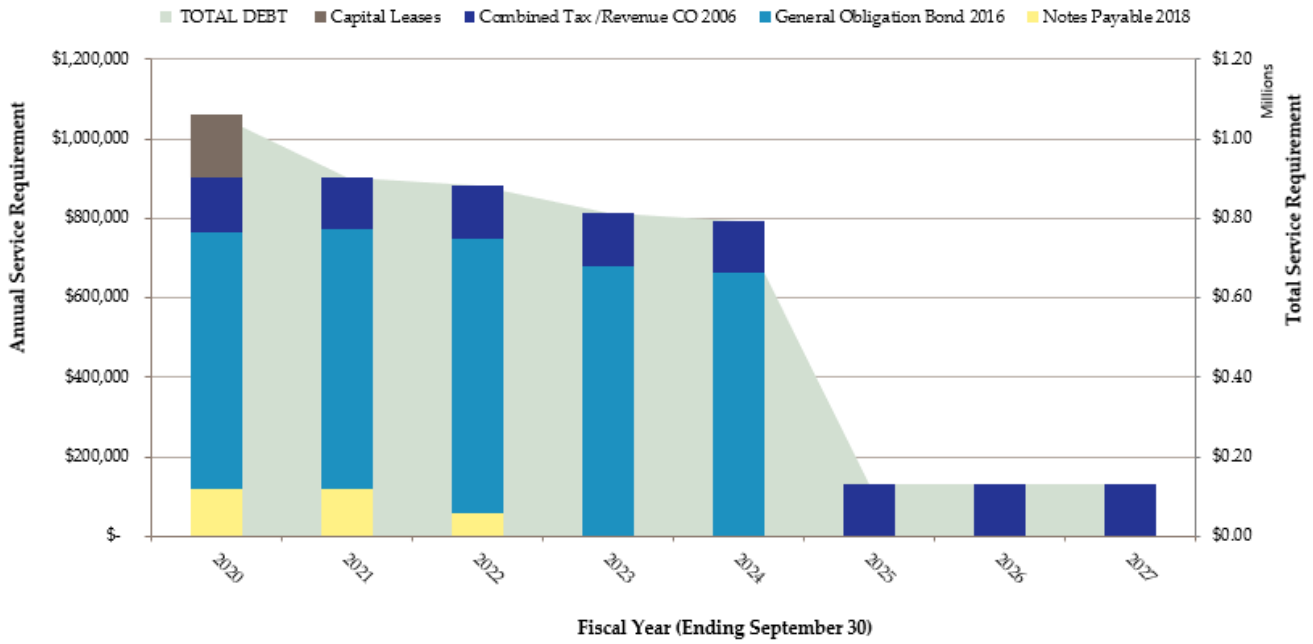
10.2 City Financial Condition

This section describes the City's financial condition with regards to public debt, income and expenditures, tax revenue trends, and residents' income levels.

10.2.1 Public Debt

The audit for the City of Littlefield's 2019 fiscal year, identifies four sources of debt – a Combination Tax and Revenues Certification of Obligation, a General Obligation Taxable Refunding Bond, note payable for the purchase of equipment, and capital leases. The certificate is recorded as a governmental-activities liability in the City's financial statements. According the annual financial report for the year ending September 30, 2019, the debt service for the certificate is $4,850,865. *Chart 10A* illustrates the City's outstanding debt obligations including principal and interest.

Chart 10A: City Debt Service Payments[59] (2020-2027)



10.2.2 Income & Expenditures

The City of Littlefield organizes revenues and expenses in compliance with standard governmental accounting practice. All funds are either Governmental Fund types or Proprietary Fund types. Major Governmental Funds types in the most recent financial audit include: General Fund, Economic Development Fund, and Other Governmental Funds. The General Fund is the general operating fund of the City. Income for the General Revenue Fund is generated primarily through taxes and charges for services. General Fund expenditures include general governments costs and costs to provide public services such as police, fire protection, sanitation, and public works. The ED fund used for activities of Littlefield's 4A and 4B Economic Development Corporations Debt service payments are made out of the Littlefield EDC Fund.

[59] *Source: Annual Financial Report, year ending 9/30/2016, pg. 46*

Governmental Fund revenues increased by approximately 4% between the 2018 and 2019 fiscal years. This change resulted primarily from an increase in Local Funds ($183,081) and an increase in Grants ($42,629).

Governmental Fund expenditures increased by approximately 16% over the same period. This change resulted primarily from an increase in Capital Outlay spending ($400,175).

Table 10A: General Fund Revenues & Expenditures (2018, 2019)

	2018	2019
Revenues		
Taxes	$2,735,290	$2,690,763
Charges for Services	$1,693,065	$1,724,268
Licenses and permits	$26,352	$27,140
Fines	$41,833	$38,528
Grants	$245,928	$288,557
Local Funds	$74,504	$257,585
Interest Income	$47,436	$73,823
Other Revenue	$249,757	$223,381
Total Revenues	**$5,114,165**	**$5,324,045**
Expenditures		
Legislative	$73,867	$90,288
Administrative	$241,687	$251,823
Municipal Court	$97,210	$92,670
Police	$922,385	$979,168
Dispatch	$184,449	$197,732
Fire	$131,908	$133,179
Refuse	$389,025	$392,363
Residential Collection	$206,411	$177,322
Public Works	$342,151	$465,705
Building & Maintenance	$513,858	$544,839
EMS	$762,580	$826,508
Fleet Services	$45,472	$43,906
LEDC	$35,331	$73,399
Licensing & Enforcement	$157,124	$110,434
Emergency Management	$19,059	$21,175
SRF's	$26,914	$56,877
Incentives	-	$50,042
Capital Outlays	$452,031	$852,206
Debt Service (Principal)	$227,658	$246,845
Debt Service (Interest)	$17,651	$18,994
Total Expenses	**$4,846,771**	**$5,625,475**
Operating Income (Loss)	**$267,394**	**($301,430)**
Other Financing Sources		

Proceeds from Sale of Assets	$27,000	$50,589
Proceeds from Capital Leases	-	-
Transfers In	$743,173	$732,871
Transfers Out	($348,741)	($300,843)
Total Other Financing Sources	**$421,432**	**$482,617**
Net Change in Fund	*$688,826*	*$181,187*
Beginning Fund Balance	*$1,241,576*	*$1,930,403*
Ending Fund Balance	*$1,930,403*	*$2,111,590*

Source: Annual Financial Report, year ending 9/30/2019, pg. 17 & Annual Financial Report, year ending 9/30/2018, pg. 17

The Proprietary Fund includes activities that the City operates similarly to a business. Revenues come primarily from Water Sales, Charges for Services, and Fee Revenue. Proprietary Fund revenues increased approximately 10% between the 2018 and 2019 fiscal years, due primarily to an increase in revenue from Water Sales Proprietary Fund expenditures decreased during this period, due in large part to decreases in Supplies and Maintenance costs.

Table 10B: Proprietary Fund Revenues & Expenditures (2018, 2019)

	2018	2019
Operating Revenues		
Water Sales	$1,823,636	$1,997,245
Charges for Services	$860,805	$880,351
Fee Revenue	$783,926	$888,474
Taxes	$138,119	$140,041
Other Revenue	$103,990	$161,089
Total Operating Revenues	**$3,710,476**	**$4,067,200**
Operating Expenditures		
Personnel Services	$457,546	$501,487
Contractual Services	$429,625	$409,824
Supplies and Maintenance	$228,773	$140,791
Depreciation and Amortization	$470,134	$437,337
Total Operating Expenses	**$1,586,078**	**$1,489,439**
Operating Income (Loss)	**$2,124,398**	**$2,577,761**
Nonoperating Revenues / Expenditures		
Interest Income	$16,288	$15,988
Bonds and Capital Lease Interest	($294,736)	($193,894)
Bond Amortization	($69,741)	($65,861)
Transfers In	$260,568	$250,000
Transfers Out	($655,000)	($682,028)
Income before transfer	$1,776,209	$2,333,994
Total Nonoperating Revenues	**($348,189)**	**($243,767)**

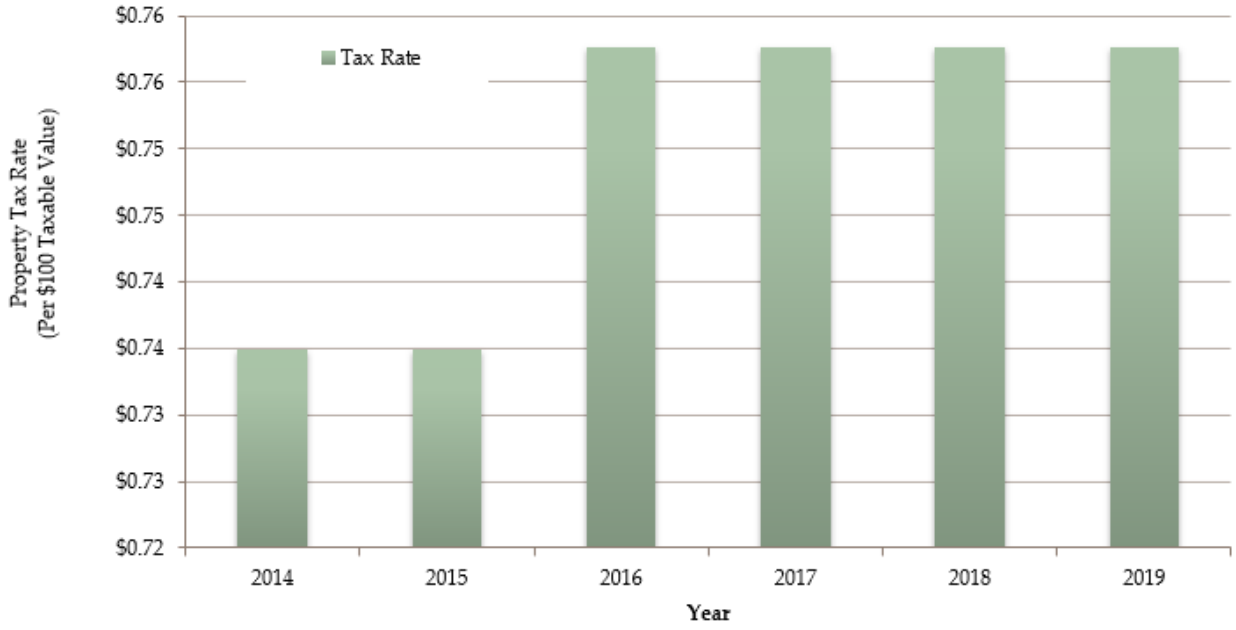
Net Change in Fund	*$1,381,777*	*$1,901,966*
Beginning Fund Balance	*$7,320,219*	*$8,701,995*
Ending Fund Balance	*$8,701,995*	*$10,603,962*

Source: Annual Financial Report, year ending 9/30/2018, pg. 22 & Annual Financial Report, year ending 9/30/2019, pg. 22

10.2.3 Local Taxes

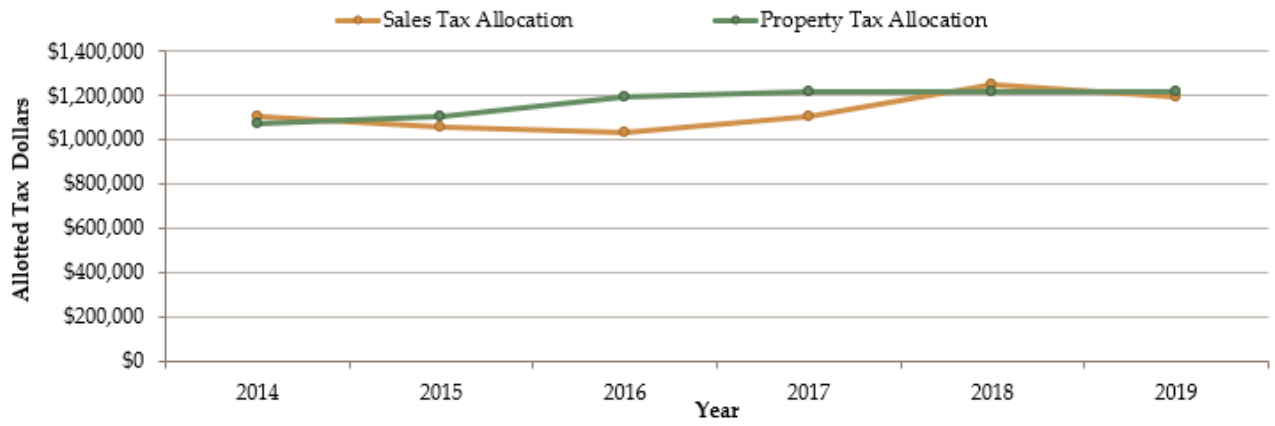
Local taxes are a key source of Governmental Fund revenues. *Chart 10B* depicts the historical property tax rate data from the Texas Bond Review Board for the city of Littlefield. The City's property tax rate increased from $0.7349 to $0.7576 per $100 taxable value between 2014 and 2019. Littlefield's property tax rate is higher than the average for all Texas cities ($0.467) and higher than the average for Texas cities with a population between 6,000 and 7,500 residents ($0.543).[60] Both property tax and sales tax allocations increased over the past five years *(see Chart 10C).*

Chart 10B: Property Tax Rate History (per $100 taxable value) (2014-2019)



[60] https://comptroller.texas.gov/taxes/property-tax/rates/

Chart 10C: Tax Allocation History[61] (2014-2019)



10.2.4 Community Income Levels

Resident income levels can affect which grant programs are available for capital improvements. The following statistics are those most often used by State agencies for grant qualification. Numerous grant and loan programs are described in *Chapter 11: Funding Sources*. As program requirements change frequently, individual agencies and organizations should be contacted for details prior to submitting an application.

- According to the 2014-2018 American Community Survey,[62] Littlefield's estimated annual per capita income is $18,330. Some programs require per capita income to be 80% or less of the national or below the State-wide average.

- According to the 2014-2018 American Community Survey (ACS),[63] Littlefield's estimated poverty rate is 28.8%, higher than the estimated poverty rate for Lamb County – 23.6% - as well as the estimated rate for the state of Texas – 15.5%. Some grant programs provide additional points for areas with higher poverty rates.

- According to the Texas Workforce Commission,[64] the annual unemployment rate for Lamb County in 2019 was 3.8%, higher than both the Texas unemployment rate (3.5%) and the national rate (3.7%). Some grant programs are more available to localities where unemployment rates exceed the national rate by at least one percentage point.

- The US Department of Housing and Urban Development (HUD) sets income limits to determine who can qualify for programs such as Housing Choice Vouchers (Section 8) and HOME. HUD

[61] Comptroller at www.texasahead.org/texasedge/run_report.php and Texas Bond Review Board at www.brb.state.tx.us/
[62] U.S. Census Bureau at data.census.gov Table B19301
[63] The numbers used for Community Development Block Grant and Texas Capital Fund grants come from the American Community Survey 5-year estimates, Table DP03, Poverty level of "All people", accessible from data.census.gov
[64] https://texaslmi.com/LMIbyCategory/LAUS

reports Median Family Income in 2019 for Lamb County at $53,800. HUD has set the income limits for 2020 at those listed by family size in *Table 10C.*[65]

- TxCDBG programs require that at least 51% of residents for community-wide projects be moderate-to-low income. In *Tables 10C* that would correspond to HUD definitions of "low" to "extremely low."

Table 10C: HUD Income Limits (2019)

Lamb County, Texas								
FY 2019 Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Very Low (50%) Income Limits*	$20,550	$23,500	$26,450	**$29,350**	$31,700	$34,050	$36,400	$38,750
Extremely Low Income	$12,490	$16,910	$21,330	**$25,750**	$30,170	$34,050*	$36,400*	$38,750*
Low (80%) Income Limits	$32,900	$37,600	$42,300	**$46,950**	$50,750	$54,500	$58,250	$62,000

**The FY 2019 Consolidated Appropriations Act changed the definition of extremely low-income to be the greater of 30/50ths (60 percent) of the Section 8 very low-income limit or the poverty guideline as established by the Department of Health and Human Services (HHS), provided that this amount is not greater than the Section 8 50 percent very low-income limit. Consequently, the extremely low-income limits may equal the very low (50 percent) income limits.*

10.3 Key Capital Improvements Considerations

Based on the capital needs identified in other chapters of this comprehensive plan and the financial data described above, the City of Littlefield should focus on the following key issues related to capital improvements: public improvements debt financing options, City debt capacity, and impact of project on protected classes.

[65] HUD data available from www.huduser.org/portal/datasets/il.html

10.3.1 Public Improvements Debt Financing Options

The type of financing used to pay for infrastructure expenditures depends on several factors, most critically the annual tax revenues generated, the unmet demand for different infrastructure projects, and the jurisdiction's indebtedness. Because costs often run into the millions of dollars, multiple sources are often used to finance infrastructure expansion or replacement: general obligation bonds and certificates of general obligation, revenue bonds, operating revenues/general fund, impact fees, and State or federal funds. The following list does not include external funding options, which have been described in other chapters of this plan and include: grants and below-market loans (*Chapter 11: Funding Sources)*, volunteer activities, inter-community partnerships, and public-private partnerships.

- General obligation (G.O.) bonds are paid out of annual general revenues. These bonds usually raise large sums of money with the debt retired over several decades. G.O. bonds are backed by the "full faith, credit and taxing powers" of the issuing jurisdiction. When G.O. bonds are sold, the jurisdiction guarantees that it will raise sufficient revenues to retire the debt on schedule, usually using property taxes. Because G.O. bonds are repaid by all taxpayers in a community, they are usually used to finance projects that benefit the community as a whole, such as public buildings, parks, recreation centers, and major street improvements. G.O. bonds require voter approval.

- Certificates of Obligation are similar to G.O. bonds. However, they are usually used to pay a contractual obligation incurred in: (1) a construction contract; (2) the purchase of materials, supplies, equipment, machinery, buildings, land, and rights-of-way for authorized needs and purposes; or (3) the payment of professional services, including services provided by appraisers, engineers, architects, attorneys, auditors, financial advisors, and fiscal agents. Debt service is paid from tax revenue and/or system revenues. C.O. bonds, unlike G.O. bonds do not require voter approval.

- Revenue bonds are sold to develop projects that produce revenues, such as municipal sewer and water systems. The guarantee of repayment comes from the revenues generated by the financed project, which usually includes taxes or fees collected from the project's beneficiaries. Most projects financed using revenue bonds benefit a wide class of users, such as water customers, airport users, or toll road users. Unlike G.O. bonds, revenue bonds do not require the backing of the jurisdiction's "full faith, credit and taxing powers." Consequently, the local government is not obligated to raise taxes to avoid default, but revenue bonds usually carry higher interest rates than general obligation bonds. Voter approval is not usually necessary to float revenue bonds.

- Private Activity Bonds are a special type of bond administered by the Texas Bond Review Board. From the Bond Review Board website:

  Private activity bonds are those bonds that meet any of the following tests: 1) Private Business

Use Test - more than 10 percent of the proceeds are to be used for any private business use; 2) Private Security or Payment Test - payment on principal or interest of more than 10 percent of the proceeds is to be directly or indirectly secured by, or payments are to be derived from, a private business use; and 3) Private Loan Financing Test - proceeds are to be used to make or finance loans to persons other than governmental units.[66]

The Tax Act of 1986 limited municipality Private Activity Bond use. The Texas Bond Review Board allocates these bonds on a "first-come, first-served" basis every year. They should be contacted at 1-512-463-1741 (or at www.brb.state.tx.us) if a municipality or jurisdiction wishes to be considered for an allocation.

- Sales Tax Bonds (Texas Leverage Fund program) are available to cities that have passed the local Sales and Use Tax for Economic Development. Loans leverage future local sales and use taxes that will be due the 4A or 4B Economic Development Corporation in future years. The program is designed to give cities quick capital for business development activities approved in the legislation voters approved in forming the 4A (manufacturing or industrial activities) or 4B (business development and infrastructure activities including those that improve quality of life for the City). Loans cannot exceed $5 million.

- General Fund Operating Revenues are funds that are derived from the income-generating functions of a local government. Financing infrastructure with operating revenues or the general fund saves the interest and fees associated with issuing bonds. However, because the operating revenue cannot usually provide the large cash flows of a bond issuance, General Fund Operating Revenues are usually used to finance smaller, lower-cost capital improvement projects that can be paid for in one year. Some cities with limited budgets have allocated a portion of their budgets annually into a fund for specific projects, such as street or drainage improvement, and allowed the fund to accumulate and gain interest until it was large enough to fund a project.

- Exactions. A city may require that a developer fund or construct public facilities in proportion to the impact the development will have on city services. Exactions can include dedication of land for specific purposes or construction of public facilities as authorized by constitutional, statutory or charter authority, such as that enabled by a subdivision ordinance. Projects often include drainage easements and facilities, street and alley right of way, water and wastewater easements and facilities, street lighting, fire hydrants, sidewalks, street signs, and traffic control devices. Less common are park dedication (or fees in lieu); school site dedications; major public works facility dedication (e.g. water treatment plant); and public service facility dedication (e.g. fire or police stations, library branches). Cities must show that the dedication, construction, or payment in lieu

[66] TX Bond Review Board: www.brb.state.tx.us/pab/pab.aspx

is "reasonably related" to the public needs created by the new development.

- Fees include user fees, impact fees, and special assessments and are usually collected from the beneficiaries of a project. User fees include public swimming pool or golf course user fees, trash collection fees, or water meter tap fees. Impact fees, a type of exaction, include charges to property developers to defray the costs of providing off-site water, sewer, and transportation infrastructure impacted by a new development. Developers typically pass the cost of infrastructure construction to the primary beneficiaries: the residents of the new development.
    - Special assessments are used to fund improvements such as water, wastewater, drainage, sidewalk, parking, library, recreation, and landscaping. While impact fees reflect the cost of the development, special assessments reflect the projected increase in a development's value created by the improvements. They are assessed against properties affected by the improvement and must be approved by property owners representing more than 50% of the area of property to be taxed.

Additional Considerations

Cost of Financing: Each option available to pay for infrastructure carries a certain financial obligation. One objective of local governments is to incur minimal interest and finance charges, which may depend on the bond rating of the jurisdiction. If enterprise funds, revenues from general taxes, or outside assistance from state or federal sources are sufficient to pay for infrastructure development, no financing costs will be incurred. Nevertheless, most cities find that they must issue debt to provide needed services. A 2019 Texas Municipal League survey of cities indicated that, for cities with populations between 6,000 and 7,500 residents, 96% had general obligation or revenue bonds or certificates of obligation. General obligation bond debt ranged from $24,000 to $6.9 million. Certificate of obligation debt ranged from $470,000 to $25 million. Revenue bond debt ranged from $425,000 to $13.2 million. Most of the debt paid for municipal buildings, sewer and water infrastructure, and parks.[67]

Equity: Local governments must determine the relationship between those who receive the benefits and those who pay the costs. In some cases, it is possible to identify groups of individuals who benefit more directly from a particular project; in others, the benefit may be more widely distributed. Some forms of financing may be more burdensome to one group of citizens than another, leaving local governments to decide how the costs and benefits of infrastructure projects will be distributed. Some financing mechanisms, such as impact fees and special assessments, require the government to prove a relationship between the residents served and the fee paid.

[67] https://www.tml.org/228/Taxation-Debt-Survey

Political Acceptability: While most communities have a range of infrastructure financing options, local political realities often play a major role in determining which option is chosen. In some communities, it may not be politically feasible to increase property taxes, while it may be acceptable to issue bonded indebtedness for a specifically earmarked purpose. In other cases, it may be more acceptable to charge fees directly to those who benefit from a project or incur debt that will be repaid by fees charged for use of the project.

10.3.2 City Debt Capacity

Debt capacity analysis is used to determine how much additional debt the City could afford. Based on the above summary of the City's finances and the following analysis, the City could consider issuing additional debt for capital improvements and still remain within accepted debt affordability benchmarks. The City could conservatively issue approximately $1 million (or $100,000 annually) in new debt.

The analysis below uses standard benchmarks to evaluate the current debt burden of a municipality. Major debt issuance decisions would require more detailed study of market interest rates, available funding packages, loans and bonds issued by other area political entities, and other factors at the time of financing.

Direct Debt as a Percentage of Market Value: *Direct debt measures total debt outstanding as a percentage of the assessed value of property in the City. Direct debt should not exceed 10%.* More fiscally conservative communities use 6% as the upper limit for direct debt. Less fiscally conservative communities calculate direct debt using market value rather than assessed value.

> The total assessed value of the property in Littlefield in 2019 was $160,487,407. Based on a benchmark of 6%-to-10% of assessed property value, Littlefield's local tax base could support between $9.6 and $16 million in direct debt. The City currently has four long-term debt obligations which are set to retire by 2027. The total debt obligation for the City of Littlefield is $4,850,865. According to this measure, the city of Littlefield can conservatively incur additional direct debt of approximately $4.7 million, if desired. According to this metric, the City should not incur additional direct debt above $16 million.

Per Capita Bonded Indebtedness: *The amount of direct debt outstanding for each citizen of a jurisdiction should generally be kept below $1,200 (principal only).* More fiscally conservative communities set the upper limit at $600. Direct debt includes all long-term obligations supported by general revenues and taxes, including combination bonds that are backed by taxes and general revenues.

> Based on the 2019 population estimate of 5,962, the City could support between $3.89 million and $7.68 million in tax supported debt. The City's total current debt – $4,850,865 – is already between this metric. According to this indicator, Littlefield could support up to $2.8 million in additional debt service at this time.

Overlapping Debt: *The City's debt burden from debt held by all jurisdictions should be no more than 10%.* Overlapping debt is calculated as the City's direct debt plus the percentage of debt held by overlapping jurisdictions that will be paid by taxes from the assessed value of land within the city limits.

The overlapping debt for the City of Littlefield could not be calculated because neither Lamb County nor Littlefield Independent School District have outstanding debt. Therefore, it is not possible to calculate this metric.

Table 10D: Total/Overlapping Debt (FY 2019)

Taxing Entity	Outstanding Debt	City's Share of Assessed Value	City's portion of debt based on Assessed Value
Littlefield	$4,850,865	100%	$4,304,825
Littlefield ISD	$0	n/a	n/a
Lamb County	$0	n/a	n/a
Totals	$4,850,865	-	$4,304,825
City of Littlefield Assessed Value = $160,487,407			
Total Direct and Overlapping Debt as a percent of net assessed value:			**n/a**

Source: https://data.texas.gov/Government-and-Taxes/Debt-Outstanding-By-Local-Government/dyv5-3bjd

Annual Debt Service as a Percentage of Receipts: *The City's annual debt service (principal and interest) should not exceed 20% of the City's annual receipts.*

The City's annual debt service for 2020 is expected to be $1,062,937 (principal and interest). The expected annual debt service in 2019 is $9,391,245. The debt service is approximately 11.3% of the City's annual receipts, which is within the 20% maximum. According to this indicator, the City of Littlefield could support up to $1.8 million in annual debt service (or a total of $8.1 million in debt service over the planning period).

Revenue Debt (debt service coverage ratio): *The debt service coverage ratio (DSCR) refers to the amount of cash available to meet annual payments on debt, and a DSCR greater than 1.0 is required to make annual debt payments.* The DSCR is calculated using the following equation:

$$\frac{\text{(Net Operating Income + depreciation and amortization + non-operating revenues)}}{\text{Annual Debt Service (principal and interest)}}$$

The DSCR is used to determine a city's ability to pay current long-term debt obligation based on current revenues. Littlefield's debt obligations are backed by both a taxes levy and revenue pledge. Therefore, the DSCR calculation should be based on both the Governmental Fund and the Proprietary Fund. The combined DSCR is 2.8. According to this metric the City could support approximately $1.8 million in additional annual debt service and maintain a DSCR above 1.0.

10.3.3 Impact of Projects on Protected Classes

In prioritizing projects, the City considered the locations of past infrastructure projects and the locations of projects recommended in the various studies in the plan to determine if those projects had or would inadvertently result in disparate treatment of members of protected classes. Specifically, it noted whether infrastructure projects had the impact of:

- Positively promoting affordable housing in areas outside of geographic concentration and giving members of protected classes the opportunity to move out of areas of concentration;
- Positively promoting equal treatment and access for disabled persons, particularly in public facilities;
- Negatively promoting racial concentration or disparate treatment of members of protected classes; or
- Negatively placing undesirable infrastructure in areas where protected classes reside.

As discussed in *Chapter 3: Housing Study* and shown on *Map 3A: Housing Conditions,* Littlefield has several areas of racial concentration at the block group level, the level of analysis used by the State to define concentrations of protected classes. The geographic distribution of other protected classes (color, national origin, religion, sex, familial status or handicap) is unknown as the Census does not report this data geographically for cities the size of Littlefield.

As shown in the infrastructure and housing studies accompanying this plan, the condition of existing infrastructure is similar throughout the City. There is no indication of historical neglect in any areas. Capital improvement projects are prioritized in the tables that follow and include all areas of the city.

Capital improvement projects are prioritized in the tables that follow and include all areas of the city.

The following specific projects would have a positive impact on all citizens of Littlefield including the protected classes:

- ✓ **Water Phase 1 (2020-2022):** Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.
- ✓ **Water Phase 2 (2022-2025):** Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.
- ✓ **Water Phase 3 (2025-2027):** Obtain funding to replace old asbestos cement (AC) eight-inch (8") lines in the system. Project will include replacement of approximately 5,432 linear feet (LF) of AC

water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.

- ✓ **Water Phase 4 (2020-2030):** Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.

- ✓ **Wastewater Phase 1 (2020-2023)**: Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.

- ✓ **Wastewater Phase 2 (2023-2027)**: Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.

- ✓ **Wastewater Phase 3 (2027-2030)**: Obtain funding to continue replacing aging and/or deteriorated collection lines and manholes. Project will include approximately replacement of eighteen (18) manholes, 8,640 linear feet (LF) of line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from Hwy 84 Lift station to the Sunset Lift Station. Project will include administrative, engineering, and survey services.

- ✓ **Drainage Phase 1 (2020-2022)**: Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection; and administration and Engineering & Surveying services.

- ✓ **Drainage Phase 2 (2022-2024):** Work in conjunction with the Lamb County to obtain funding to replace three (3) damaged culverts and 15,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.

- ✓ **Drainage Phase 3 (2024-2026):** Work in conjunction with the Lamb County to obtain funding to replace 8,000 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.

- ✓ **Drainage Phase 4 (2026-2030):** Work in conjunction with TxDOT to obtain funding to implement the recommendations from the Phase 1 drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection, pavement repair, administration and Engineering & Surveying services.

- ✓ **Streets Phase 1 (2020-2022):** Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.

- ✓ **Streets Phase 2 (2023-2025):** Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.

- ✓ **Streets Phase 3 (2025-2027):** Repair 80,765 Linear Feet (LF) of streets in fair condition; with Phase 3 improvements for water and/or wastewater and in western part of city. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.

- ✓ **Streets Phase 4 (2028-2030):** Repair 60,815 Linear Feet (LF) of remaining streets in fair-to-good condition with Phase 4 improvements for water and/or wastewater. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.

- ✓ **Parks and Recreation (2020-2030):** Several improvements are recommended for Littlefield City Parks. The construction of a new park with facilities is recommended during the planning period. Park facilities would follow state standards for ADA accessibility.

In the past, the City has been awarded several TxCDBG grants to make improvements its water and wastewater systems. Previous City-managed fair housing initiatives are described in *Chapter 3: Housing Study.*

10.4 10-Year Capital Needs Prioritization

This section prioritizes the capital needs identified throughout the Comprehensive Plan and provides a consolidated overview of recommended improvements for the next 10 years. Due to competition for limited funds, improvements that may be considered "mandatory" because they promote health and safety may be built after other improvements considered "desirable" or "acceptable" such as certain street construction or park improvements. A community must consider both the urgency and the feasibility of a particular capital project. If funds are likely to become available for a lower priority project before a higher priority project, the City should indicate that on its capital improvements schedule. Capital needs have been classified using the following system:

1. Mandatory (M): those which address an imminent threat to life or health;
2. Necessary (N): those which provide important public services by improving existing systems and/or replacing obsolete facilities;
3. Desirable (D): those which improve the aesthetic aspects of a community or address quality of life issues;
4. Acceptable (A): those which may fall under the "necessary" or "desirable" categories above but are undertaken primarily to reduce operating costs to the City.

Table 10E: Capital Needs Prioritization

Water Projects	Year	Need
Phase 1: Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.	2020-2022	Mandatory
Phase 2: Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	2022-2025	Mandatory
Phase 3: Obtain funding to replace old asbestos cement (AC) eight-inch (8") lines in the system. Project will include replacement of approximately 5,432 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	2025-2027	Mandatory
Phase 4: Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.	2027-2030	Mandatory
Wastewater Projects	**Year**	**Need**
Phase 1: Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.	2020-2023	Mandatory
Phase 2: Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.	2023-2027	Mandatory
Phase 3: Obtain funding to continue replacing aging and/or deteriorated collection lines and manholes. Project will include approximately replacement of eighteen (18) manholes, 8,640 linear feet (LF) of line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from Hwy 84 Lift station to the Sunset Lift Station. Project will include administrative, engineering, and survey services.	2027-2030	Mandatory

Drainage Projects	Year	Need
Phase 1: Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include administration and Engineering & Surveying services.	2020-2022	Mandatory
Phase 2: Work in conjunction with the Lamb County to obtain funding to replace three (3) damaged culverts and 6,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	2022-2024	Mandatory
Phase 3: Work in conjunction with the Lamb County to obtain funding to replace 8,000 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	2024-2026	Mandatory
Phase 4: Work in conjunction with TxDOT to obtain funding to implement the recommendations from the Phase 1 drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection, pavement repair, administration and Engineering & Surveying services.	2026-2030	Mandatory
Streets Projects	**Year**	**Need**
Phase 1: Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2020-2022	Necessary
Phase 2: Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2023-2025	Necessary
Phase 3: Repair 80,765 Linear Feet (LF) of streets in fair condition; with Phase 3 improvements for water and/or wastewater and in western part of city. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2025-2027	Necessary

Phase 4: Repair 60,815 Linear Feet (LF) of remaining streets in fair-to-good condition with Phase 4 improvements for water and/or wastewater. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2028-2030	Necessary

Parks & Recreation Projects	Year	Need
Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation facilities at Crescent Park. Remove aged picnic tables, install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	2020-2023	Desirable
Renovate and update city owned softball and little league fields near the Lamb County Agriculture and Community Center.	2020-2023	Desirable
Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park. Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court.	2020-2023	Desirable
Install inclusive play activities (such as “scent or sensory garden”) and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	2020-2023	Desirable
Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park. Replace deteriorating picnic tables and play infrastructure. Install additional playscape for younger children.	2024-2026	Desirable
Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/card tables) at Dunbar Park and/or elsewhere as appropriate.	2024-2026	Desirable
Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation program to construct new Aquatic Center on Phelps Avenue.	2024-2026	Desirable
Apply for funding January 2028 to the TPWD Recreational Trails Grant program to construct nine (9) miles of trails in Littlefield parks and/or elsewhere as appropriate.	2024-2026	Desirable

10.5 Five-Year Capital Improvements Program Schedule

The following table delineates the proposed capital improvements for the 2020-2024 planning period, the estimated costs, sources of funds, and timing of the projects. The projects are listed in order of priority. Projects that fall after 2023 are listed in detail in the appropriate chapters.

Costs for projects are estimates based on recent representative bids for similar items. Unit costs may vary within a given time period for a variety of reasons including but not limited to:

1. Economies of scale – A project with large quantities of a particular item will have a lower unit cost than a project with small quantities;
2. Relative location of the project with respect to the bidding contractor's location – Contractors having to mobilize labor, equipment, & materials from a long distance will bid a higher unit cost than contractors in the local area;
3. The general state of the economy – Contractors & Suppliers bid lower when work is scarce than when work is plentiful;
4. Energy prices – PVC, steel, iron, and fuel costs rise and fall with the global price of oil.

Table 10F: Capital Improvements Program Schedule: Fiscal Year 2020-2024

Type	Scheduled Capital Improvement Projects	Year	2020	2021	2022	2023	2024	Priority	Cost	Source of Funds
W	Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.	2020-2023						M	$300,000	EDA; TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
WW	Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.	2020-2023						M	$425,500	TWDB; CDBG; USDA; Private; WW Utility
D	Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include administration and Engineering & Surveying services.	2020-2022						M	$250,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR
S	Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2020-2023						N	$2,699,461	GEN
P	Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation	2020-						D	$75,000 (or 50% match	GEN

	facilities at Crescent Park. Remove aged picnic tables, install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	2023							of TPWD grant funds)	
P	Renovate and update city owned softball and little league fields near the Lamb County Agriculture and Community Center.	2020-2023						D	Variable	GEN; Local
P	Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park. Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court.	2020-2023							Up to $75,000 (or 50% match of TPWD grant funds)	GEN
P	Install inclusive play activities (such as "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	2020-2023						D	$1,000/per	GEN
W	Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.	2020-2030						M	$6,436,385	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
S	Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be	2023-2025						N	$2,601,234	GEN

	salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads									
W	Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	2024-2027						M	$496,800	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
WW	Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.	2023-2027						M	$443,900	TWDB; CDBG; USDA; Private; WW Utility
D	Work in conjunction with the Lamb County to obtain funding to replace three (3) damaged culverts and 6,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	2022-2024						M	$378,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
P	Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park. Replace deteriorating picnic tables and play infrastructure. Install additional playscape for younger children.	2024-2026						D	Up to $75,000 (or 50% match of TPWD grant funds)	GEN
P	Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/card tables) at Dunbar Park and/or elsewhere as appropriate.	2024-2026						D	$1,000/per	GEN
P	Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation	2024-2026						D	Up to $375,000 (or	GEN; TPWD (total grant

	program to construct new Aquatic Center on Phelps Avenue.								50% match of TPWD grant funds)	and match not to exceed $750,000)

Source: **GEN =** Municipal funds and General Obligation Bonds; **EDA** = US Economic Development Administration grant program; **FMA** = Flood Mitigation Assistance program through the TWDB for NFIP members only; **TxCDBG** = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); **TWDB** = Texas Water Development Board grants and loans; **USDA =** US Department of Agriculture Rural Development Water and Wastewater Infrastructure loans and grants; **UTILITY** = City utility fund/revenue; **Private** = Private funding sources through Development Agreements; **WW UTILITY** = Municipal Water & Sewer Fund or Certificated of Obligation/Revenue Bonds; **TxCDBG-DR** = TxCDBG Disaster Relief funds; **TPWD** = Texas Parks & Wildlife Department; **Local** = Donations from private citizens, organization, and local businesses

11 Funding Sources

Funding for projects in small, low-income, rural cities is one of the biggest challenges' city staff, residents, and volunteers face when trying to improve their communities. Not only are grants scarce and competitive, but they require time, sophistication, and patience to write and administer. Nevertheless, they are often the only resource available to reach desired goals.

Funding sources have been identified throughout this comprehensive plan that can help accomplish specific activities. This section of the plan lists detailed information on many of the most common, effective, and implementable grants available. While every attempt has been made to keep the information up to date, funding availability and rules change frequently. After identifying desired grants or loans, it is always essential to call the organization directly to confirm details such as: deadlines, whether the proposed project will be eligible, and probability of funding (i.e. how competitive the grant is).

If a specific project is desired that does not fit one of the funding options below, it is worth checking the home page of each agency for additional programs, contacting the agencies for information, and using the internet to search for additional programs. Although most grants come with specific requirements, most funding agencies are also able to offer technical assistance to help communities find the resources they need to fulfill those requirements. The Foundation Center (http://foundationcenter.org/) is a good starting point for online grant searches.

Because of the complexity of identifying, writing, and managing grants, community partners are often the key to successful grant programs. Those frequently include:

- Co-applicants (most typically with other counties or municipalities) where projects or services meet the needs of several jurisdictions
- Sponsored providers of services that benefit residents, which are often provided by nonprofit organizations (VFDs, EMS, youth programs like Boys & Girls Club) or hospital districts, water (MUD/SUDIWCID), drainage, groundwater districts.
- Sources of matching funds (EDC, municipalities, local park foundation or youth sports league, Optimists, Kiwanis or Rotary)
- Sources of information or expertise (local community college or state university, local NRCS office,

regionally COG, or internally from the public works director, police chief, etc.)

The following State agencies provide a wide range of grants and technical assistance.

Agency Name	Website
Texas Department of Agriculture	www.texasagriculture.gov
Texas Water Development Board	www.twdb.state.gov
Texas Commission on Environmental Quality	www.tceq.state.gov
Texas Department of Transportation	www.txdot.gov
Texas Historical Commission	www.thc.state.gov
Texas Department of Public Safety Division of Emergency Management	www.dps.texas.gov/dem/
Texas Forest Service (Rural VFD assistance)	www.tfsweb.tamu.edu/
Texas Task Force on Indigent Defense	www.tidc.texas.gov/
Texas Parks and Wildlife Department	www.tpwd.state.tx.us/
Texas Department of Housing & Community Affairs	www.tdhca.state.tx.us/
Texas General Land Office (Coastal Programs)	www.glo.texas.gov/coast/grant-projects/cmp/index.html
Texas Governor's Office Criminal Justice Division	www.gov.texas.gov/organization/cjd/criminal-justice-division
Texas Governor's Office Economic Development	www.gov.texas.gov/business
Texas Office of the Attorney General (Crime victim services)	www.texasattorneygeneral.gov/crime-victims
Texas Department of State Health Services (Indigent Health Care)	www.dshs.texas.gov/transition/chi/
Texas State Library	www.tsl.state.gov
Texas Comptroller of Public Accounts (SECO)	www.comptroller.texas.gov/programs/seco

Detailed Grant Tables by Project Type

Economic Development						
Project Type	**Deadline**	**Organization**	**Program Name**	**Program Description**	**Grant/Loan Amount**	**Local Contribution**
Industry - Infrastructure	Quarterly: February 20, May 20, August 20, November 20	Texas Department of Agriculture (TDA) www.texasagriculture.gov	Texas Capital Fund (TCF) – Infrastructure / Real Estate Programs	For economic development projects that create new jobs for low-to-moderate income persons (new or expanding businesses). Public infrastructure improvements can include: water & sewer facilities/lines, road/street construction/improvements, natural gas line construction/improvements, electric, telephone, & fiber optic line construction/improvements, harbor/channel dredging, purchase of real estate related to public infrastructure improvements, traffic signals and signs, drainage improvements, and railroad spurs. OR Funds must be used for real estate development to assist a business that commits to create and/or retain permanent jobs, primarily for low and moderate-income persons. The real estate and/or improvements must be owned by the community and leased to the business.	$100,000 to $1,000,000, based on the number of jobs the business will create or retain. Locality can request up to $25,000 per job business will create and $10,000 per job business will retain.	Requirements for minimum amount of leveraged funds (match and fixed assets) varies by project.
CBD - Infrastructure	Annually in early October	TDA	TCF – Downtown Revitalization Program	Funds can be used for public infrastructure improvements such as parking, sidewalks, lighting, utility upgrades in designated "historic commercial district." Engineering costs are not eligible.	$50,000 to $350,000	Cash or in-kind. 10% minimum required, but points awarded for 20% or 30%. Example: on a $150,000 grant, $15,000 is required, but points awarded for $30,000 or $45,000
CBD - Infrastructure	Annually in early October	TDA	TCF – Grants for Main Street Communities	Funds can be used for public infrastructure improvements such as parking, sidewalks, lighting, utility upgrades in the designated "historic commercial district" of participating Main Street communities. Engineering costs are not eligible to be paid with TCF-DRP funds so those costs must be paid for with local funds.	$50,000 to $350,000	Cash or in-kind. 10% minimum required, but points awarded for 20% or 30%. Example: on a $150,000 grant, $15,000 is required, but points awarded for $30,000 or $45,000

Planning	Annually in Spring for funding the following year	TDA	CDBG - Planning and Capacity Building Fund	Funds can be used to map housing, land use, streets, drainage, public utilities; determine needs to ensure adequate utilities; determine future growth patterns (10-year growth period); & establishes a capital improvement plan.	Varies by size, but maximum grant is $55,000.	Match varies by population
Retail - Infrastructure	Project dependent	Texas Historical Commission (THC) www.thc.state.gov	Federal Historic Preservation Tax Incentives	Available for rehabilitation of income-producing buildings. Building must be listed in the National Register of Historic Places before project completion. Tax credit application must be made before project completion. Project examples include substantial: structural work, building repairs, electrical, plumbing, heating and air conditioning, roof work and painting	Up to 20% of eligible rehabilitation costs	Private funding of at least 80% of project costs
Retail - Marketing, Preservation	Annually in Summer	THC	Certified Local Government Grants	Available to Certified Local Governments (certified cities or counties, or certified counties on behalf of non-certified cities). Project examples include: surveys, oral histories, preservation planning, educational activities, ordinance review, and rehabilitation projects.	$2,000 to $30,000	1-to-1 match required. Match can be cash or in-kind and excludes federal grants except for CDBG.
Retail - Marketing, Preservation	Annually in late July	THC	Main Street	Technical assistance program for revitalization of historic downtown areas. Focus is on: organization, marketing, design, and economic development. Successful implementation requires local human resource capacity and community participation. Assistance includes training in economic development and marketing for local managers and retailers, on-site evaluation and recommendations, design assistance, and participation in the First Lady's Tour	No cash. Participation qualifies community to apply for TCF Main Street grants	City must hire a full-time coordinator and fund the program for 3years
Industry - Infrastructure	First business day of March, June, Sept, & Dec	Office of the Governor http://governor.state.tx.us / http://texaswideopenforbusiness.com	Texas Enterprise Zone	State sales and use tax refunds capital costs to businesses that invest in and employ residents of qualified economically disadvantaged areas. Each business must be nominated by a local community. Maps of designated Enterprise Zones, based on Census data, are located at the state's mapping website of http://www.texassitesearch.com/	$25,000 to $3.75M refund for capital improvement investment from $40,000 to $250M	The local community must offer tax or permitting incentives to the nominated business.
Industry - Infrastructure	Ongoing	U.S. Department of Agriculture (USDA) www.usda.gov	Rural Economic Development Loan and Grant (REDLG)	REDLG program finances utility-managed loans and revolving loan funds. Under the loan program, the managing utility makes zero interest loans to local businesses. Under the grant program, the utility creates a revolving loan fund that makes loans to local businesses. Qualifying projects include: business incubators, telecom. facilities for distance learning, etc.	N/A	Up to 80 % of project costs; 20 % must be provided by the ultimate recipient or the local utility. The interest rate is 0%.

Industry - Infrastructure , Education	Varies	USDA	Rural Business Enterprise Grant (RBEG)	Grants available to small cities and non-profits for activities that will benefit small and emerging private businesses. Examples include: land acquisition, plant renovations/ modernizations; construction of access roads to businesses; parking areas, utilities; distance learning/adult education; and revolving loan fund capitalization	No maximum, but typical award is $10,000 to $500,000	N/A
Industry & Retail - Education, Planning	Varies	USDA	Rural Business Opportunity Grants (RBOG)	Technical assistance grants available to rural towns, non-profits, and cooperatives. Typical projects include development of: trade strategies, economic plans, business training, business incubators, and leadership training programs	$100,000 maximum for projects within one state	N/A
Industry - Infrastructure , Education	Varies	USDA	Rural Business Development Grant (RBDG)	RBDG is a competitive grant designed to support targeted technical assistance, training and other activities leading to the development or expansion of small and emerging private businesses in rural areas that have fewer than 50 employees and less than $1 million in gross revenues. Programmatic activities are separated into enterprise or opportunity type grant activities.	No maximum, but typical award is $10,000 to $500,000	N/A
Industry - Infrastructure	Varies	USDA	Business and Industry Guaranteed Loans	Loans to an organization or an individual for: office/plant modernization or enlargement; employee retention/expansion; land or equipment lease/acquisition. Emphasis on employee expansion, renewable energy, and water conservation/aquaculture	60%-80% loan guarantee, terms negotiated with the agency	Collateral required to secure loan
Industry & Retail - Infrastructure	Varies	Texas State Comptroller www.comptroller.texas.gov	4A/4B Sales Tax	Locally implemented program that allows municipalities to create economic development corporations that manage projects funded by local sales tax. The program is established by vote at the local level. Type A corporations fund industry projects that have specific job creation requirements, while Type B corporations can also fund a broader range of community improvement projects.	Varies	Local management by volunteer board
Retail - Marketing, Preservation	Varies	Comptroller	Hotel/Motel Tax	Available to cities and counties. Maximum tax is 7% of room bill within the city or 15% combined across taxing entities if located in the ETJ. Tax funds must be used on projects that will increase hotel occupancy and can be used for: historic restoration/preservation, visitor centers, arts promotion, city advertising, and similar.	Varies	City staff manages accounting.

Industry - Education	Ongoing	Texas Workforce Commission (TWC) www.texasworkforce.org	Skills Development Fund	The Skills Development Fund pays for workforce training programs created as a partnership between businesses and educational institutions.	$500,000 maximum per business	None
Industry & Retail	Ongoing	Accion Texas http://us.accion.org/your-accion/location/texas	Multiple	Loans to small businesses or individuals for: business expansion and stabilization. In addition to loans, Accion Texas also provides business support services through their business support team as well as a number of online resources for entrepreneurs.	Varies	N/A
Industry & Retail - Infrastructure	Ongoing	Texas Mezzanine Fund, Inc. http://www.tmfund.com/	Multiple	Loans to small businesses or individuals for: business expansion, equipment, acquisition, and real estate in distressed and low/moderate income communities or that provide jobs for low/moderate income persons. Also provides loans for community facilities that serve the community's social and economic needs.	Up to $300,000 for stand-alone loans; Up to $500,000 for in tandem loans; Up to $750,000 when collateralized by real estate	N/A
Industry & Retail	Ongoing	People Fund https://peoplefund.org/	Multiple	Loans to small businesses and nonprofits for: equipment purchases, permanent working capital term loans, revolving lines of credit, and real estate. Also provides business assistance and education programs through workshops and one-to-one mentorship.	Varies	NA
Multiple	None	Meadows Foundation www.mfi.org	Multiple	The Meadows Foundation provides grants and loans statewide for a variety of causes. Ideal projects already have at least 50% of needed funding and the organizational and financial capacity for execution beyond the grant period. The Foundation should be contacted for information about whether a given project fulfills its priorities.	Varies	Local organizational capacity

Library	January 15, June 1	Tocker Foundation http://tocker.org/	Multiple	The Tocker Foundation offers grants that increase library and literacy assistance to underserved populations (rural, handicapped, elderly, youth, non-English speakers, and the illiterate) and provide training for rural librarians.	Varies	Varies

Public Service Infrastructure
(water, sewer, streets, drainage, energy, telecommunications)

Project Type	Deadline	Organization	Program Name	Program Description	Grant/Loan Amount	Local Contribution
Water/ Sewer	First-come first-serve basis per year	Texas Department of Agriculture (TDA) www.texasagriculture.gov	Small Towns Environment Program (STEP)	Funds for water and sewer projects utilizing at least 51% local volunteer labor and in-kind donations to complete project.	Up to $350,000	No match required.
Water/ Sewer	Annually in Spring for funding the following year.	TDA	Community Development Block Grant Program (CDBG) - Community Development Fund	Funds can be used for water and/or sewer improvements. Drainage improvements can be constructed if they are incidental to the water or sewer improvements.	Up to $800,000 (varies by region)	Match based on population: 0 – 1,500 persons = 5%; 1,501 – 3,000 = 10%; 3,001 – 5,000 = 15%; > 5,000 = 20%
Energy	Annually in early July	TDA	CDBG - Renewable Energy Demonstration Pilot Program	Assists rural communities with installing renewable energy projects, including wind turbines or solar panels to power wastewater treatment or water treatment facilities.	Up to $500,000	Match of 2% to 25% required, depending on population size. Sliding scale earns points on application. Match can be cash, land, or in-kind.

Drainage	Annually	Texas Water Development Board (TWDB) www.twdb.texas.goc/flood/grant	Flood Mitigation Assistance Program	Funds for planning and project grants to develop or update the flood hazard component of a Multi-Hazard Mitigation Plan (prepared by the COG) and for constructing flood mitigation projects.	Planning grant max: $50,000; Construction: < $3.3 million over a 5-year period.	25% match of which not more than half (12.5%) can be of in-kind services.
Drainage	Annually	TWDB	Flood Protection Planning	Funds for regional/watershed-wide planning to evaluate structural and nonstructural solutions to flooding problems.	Varies	1-to-1-match
Water/ Sewer	Annually	TWDB	Revolving Loan Funds	Below-market interest rate loans for planning, acquisition and construction of **Clean Water** (also for wastewater treatment, storm water and nonpoint source pollution control, and reclamation/reuse projects) and **Drinking Water** (also includes water supply and Source Water protection infrastructure)	Up to 15% of available funds; 70%-100% principal forgiveness for low-income	Varies
Water/ Sewer	Monthly	TWDB	Rural Water Assistants Funds (RWAF)	Below-market interest rate loans for small, rural cities, counties, water districts, and non-profit utilities. Typical projects: water/sewer lines, storage, purchase/lease of water rights.	Varies	Varies
Water/ Sewer	Ongoing	TWDB	Economically Distressed Areas Program (EDAP)	Grants and loans for water/sewer in economically distressed areas for PAD (planning, acquisition, design) and construction.	50%-100% grant for PAD; Grant-to loan calculation for construction varies	Varies
Streets/ Sidewalks	Fall	Texas Department of Transportation (TxDOT) www.txdot.gov	Safe Routes to School	Non-infrastructure funds can be used to create student safety programs and incentives. Infrastructure funds can be used to construct sidewalks, bike lanes, drop-off lanes, etc., or install signage, signalization, etc. Must have a TxDOT approved SRTS Plan in place to apply for infrastructure construction funds.	Varies	No match required, but local injection can earn additional points. Match contribution can be cash, land value, and/or in-kind.
Streets/ Sidewalks	Varies	TxDOT	Statewide Transportation Alternatives Set-Aside Program	Previously the Statewide Transportation Enhancement Program, 2017 program details not available at this time. Contact Teri Kaplan – Tap Program Manager, TxDot-PTN (512) 374-5235 or teri.kaplan@txdot.gov	Fixed amount of TA Set-Aside funds for each project determined by commission.	At least 20%

Streets	Varies	Texas State Comptroller http://www.comptroller.texas.gov	Street Maintenance Sales Tax	Cities can vote to dedicate a percentage of sales tax to street maintenance and repair.	Varies	City staff manages accounting.

Parks & Recreation						
Project Type	**Deadline**	**Organization**	**Program Name**	**Program Description**	**Grant/Loan Amount**	**Local Contribution**
Infrastructure	December 4	Texas Parks & Wildlife (TP&W) www.tpwd.state.tx.us	Small Community	Funds can be used for development or rehab of any public outdoor recreation facilities. City would be required to self-administer the project.	Up to $150,000	1-to-1 match. Can be cash, land, or in-kind.
Infrastructure	December 4	TP&W	Non-Urban Outdoor Recreation	Funds can be used for development or rehab of any public outdoor recreation facilities. Must have master park plan completed prior to application.	Up to $750,000	1-to-1 match. Can be cash, land, or in-kind.
Infrastructure	TDB	TP&W	Non-Urban Indoor Recreation	Funds can be used for development or rehab of any public indoor recreation facilities. Must have master park plan completed prior to application.	Up to $1 million	1-to-1 match. Can be cash, land, or in-kind.
Programming	December 4	TP&W	Community Outdoor Outreach	Funds can be used to purchase supplies and equipment for outdoor programs. No construction allowed.	Up to $50,000.	No match required, but match improves chances of funding.
Infrastructure	February 1	TP&W	Recreational Trails	Funds can be used for new trail development or rehab of existing trails, and trail amenities such as parking areas, restrooms, drinking fountains.	Up to $200,000	20% of total project cost required as local match (can be cash, land, or in-kind).

Infrastructure	October 1	TP&W	State Boating Access	Funds can be used to develop new or renovate public boating access facilities including boat ramps, parking areas, access roads, boater amenities such as restrooms, picnic areas, courtesy docks, etc.	Up to $500,000	25% of total project cost required as local match contribution (can be cash, land value, and/or in-kind).
Infrastructure	October 1	TP&W		Funds can be used to develop new or renovate public launching facilities such as ramps and boat lifts. Funds can also be used for land acquisition, fish cleaning stations, parking, restroom, or camping facilities associated with the boating facilities, etc.	Up to $500,000	25% of total project cost required as local match contribution.
Infrastructure	February	TxDOT & Keep Texas Beautiful	Governor's Community Achievement Awards	Funds can be used for landscaping along public right of way. Location and type of project is decided by the community and TxDOT.	By population: <3,000=$90K; <5,000=$110K; <9,000=$130K	N/A
Infrastructure	Jan. 1, April 1, July 1, Oct. 1	Major League Baseball (mlb.com)	Baseball Tomorrow Fund	Funds can be used for field improvements, equipment purchases, umpire training, but not on-going operational costs. Letter of interest submitted first (due 45 days before deadline). If invited to apply, application submitted by deadline.	No maximum, but typical award is $50,000 to $100,000	No match required, but match improves chances of funding.
Infrastructure	February; Rolling deadline for Safe Place to Play grants	U.S. Soccer Foundation www.ussoccerfoundation.org	Program Grants; Safe Places to Play	Priority focus changes annually, but funds can be used for construction of new fields or enhancement of existing fields with lighting or irrigation, in areas primarily designed to serve low-income communities.	Varies, current award is $30,00 to $90,000	50% of project funding must be in hand
Infrastructure	Biannual	Tony Hawk Foundation www.tonyhawkfoundation.org	Skatepark Grants	Funds can be used for the design, construction or operation of new skateboard parks, primarily to serve low-income communities.	$1,000 to $25,000	If funds requested for construction, match must be provided.
Infrastructure/ Programming	Sept. 15, March 15	Captain Planet Foundation http://captainplanetfoundation.org/	ecoSolution Grants	Funds can be used for community gardens, native plant gardens, learning trails, cleaning up local parks, maintaining/restoring environmentally sensitive areas such as forests and prairies, wetlands, rivers, streams. Preferential consideration is given to projects seeking seed funding of $500 or less or projects that have at least a 50% match or in-	$500 to $2,500	No match of in-kind funding required, but match improves chances of funding.

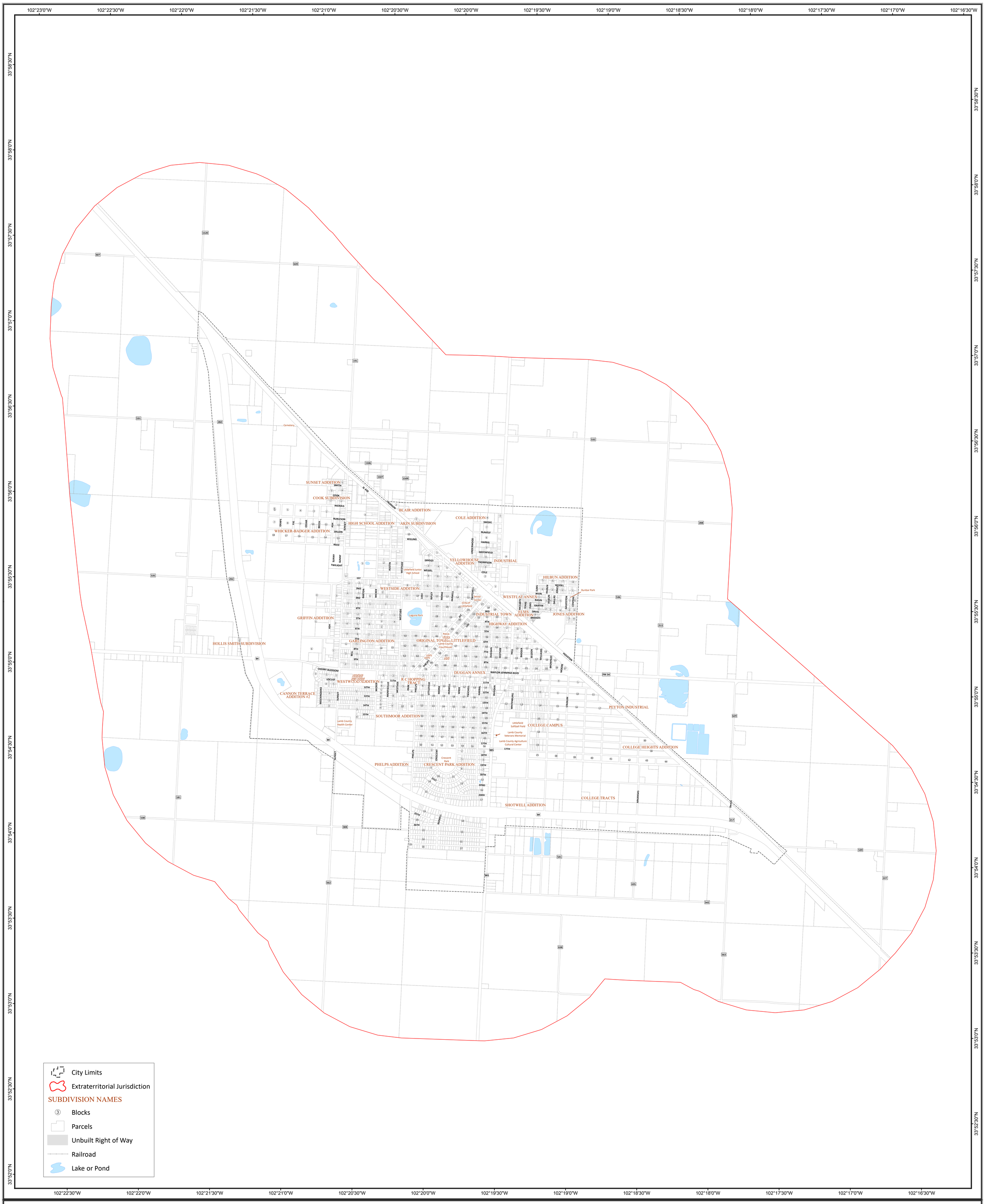
				kind contribution in funding.		
Infrastructure/ Programming	November	National Gardening Association www.kidsgardening.org/garden-grants/	Budding Botanist	The program helps low income schools build school gardens by providing tools, educational materials, and monetary contributions.	$1,000 to $2,250	No match required.
Infrastructure/ Programming	December	National Gardening Association www.kidsgardening.org/garden-grants/	Youth Garden Grant	Any nonprofit organization, public or private school, or youth program in the United States or US Territories planning a new garden program or expanding an established one that serves at least 15 youth between the ages of 3 and 18 is eligible to apply.	$775 to $2,360 in materials and money	No match required.
Infrastructure	Spring	Fiskars http://www2.fiskars.com/Community/Project-Orange-Thumb	Project Orange Thumb	The program awards grant recipients a combination of financial funding and Fiskars tools to build or make over community gardens.	$2,500 in gift cards or Fiskars tools	No match required. Only available for non-profit organizations.

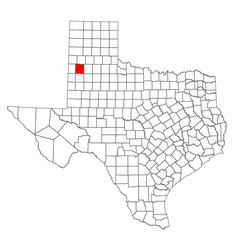
Housing

Project Type	Deadline	Organization	Program Name	Program Description	Grant/Loan Amount	Local Contribution
Construction	Ongoing	Texas Department of Housing and Community Affairs (TDHCA) www.tdhca.state.tx.us	HOME	Funds can be used for rehabilitation or demolition and reconstruction of up to six substandard homes. Rehabilitation is not permitted for manufactured homes.	$100,000 per unit	Match required, 0% to 1% per thousand on total project amount, depending on population size. Plus $40,000 in cash leverage. Match can be in-kind or cash.

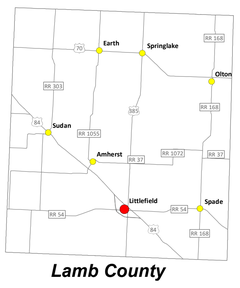
Construction	Ongoing	TDHCA	Multifamily (Rental Housing) Development	Available to local governments, public housing authorities, non-profit, and for-profit organizations for funding multifamily rehabilitation and new construction projects	Subsidy varies by county and number of bedrooms.	Long-term rent and renter income restrictions
Financial Assistance	Ongoing	TDHCA	Tenant Based Rental Assistance (TBRA); TBRA for Persons with Disabilities and Veterans	Assists renters, including veterans and persons with disabilities, with utility and security deposits for up to 24 months. Available to local governments, public housing authorities, and non-profits	Varies	Varies
Financial Assistance	Ongoing	TDHCA	Texas HOME buyer Assistance Programs	Available to local governments, public housing authorities, and non-profits to provide down payment and closing cost assistance to individuals who have not owned a home in three years or who are first-time home buyers. Also includes funding for single-family housing accessibility modifications.	Varies	Varies
Construction	Ongoing until fund emptied	TDHCA	Amy Young Barrier Removal Program	Available to local governments, public housing authorities, and non-profits to construct home accessibility projects for disabled residents (tenants and owners)	Up to $20,000	N/A
Construction	Ongoing	U.S. Department of Agriculture (USDA) www.usda.gov	Rural Housing Repair and Rehabilitation grants and loans	Available to very low-income residents. Grants available to those over 62 years of age to remove health and safety hazards. Loans available for hazard removal, home repair, improvement, and modernization.	Loan maximum: $20,000; Grant maximum: $7,500; can be combined	N/A
Financial Assistance	Ongoing	USDA	Guaranteed Housing Loans	Available to any State housing agency or approved lender for loans to those making no more than 115% of the area median income who lack adequate housing.	Varies	Loan recipient must be able to pay mortgage, tax, and insurance

Construction	Ongoing	U.S. Department of Energy through local Council of Government or Action Agency	Weatherization Assistance	Low income families can apply for assistance to make home improvements that will improve energy efficiency and reduce energy bills.	Varies	Varies
Programming	Ongoing	Aging in Place Initiative www.aginginplaceinitiative.org	JumpStart	Grants have been used to create programs that assist seniors with home maintenance and lawn care, provide paratransit services, and create "return visit" programs where nurses/social workers visit regularly to identify possible issues that may impair the individual's ability to remain in their home	Varies	Varies
Construction	Ongoing	Texas Ramp Project www.texasramps.org	Texas Ramp Project	The mission of this organization is to build accessibility ramps. The organization accepts referrals from social service agencies and establishes regional capacity for ramp building.	Ramp building	N/A
Programming	Ongoing	Legal Aid www.lonestarlegal.org	Legal Aid	Legal aid organizations provide civil legal representation and advice at little or no cost to low income individuals who cannot afford a lawyer. Assistance focuses on basic needs, self-sufficiency, children and families, elderly and disability, and housing and homelessness prevention.	Varies	Varies
Programming	Ongoing	Leader Dog for the Blind www.leaderdog.org	Guide Dogs	Applicants must be 16 years or older and in good mental and physical health. They complete a 26-day residential training program in Rochester Hills, Michigan. Room, board, training, and transportation costs for clients traveling within the U.S. are free of charge. The organization also offers mobility and GPS programs to professionals and clients.	N/A	N/A





Lamb County, Texas



Lamb County

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City of Littlefield

Lamb County, Texas

Map 1A

Corporate Base Map

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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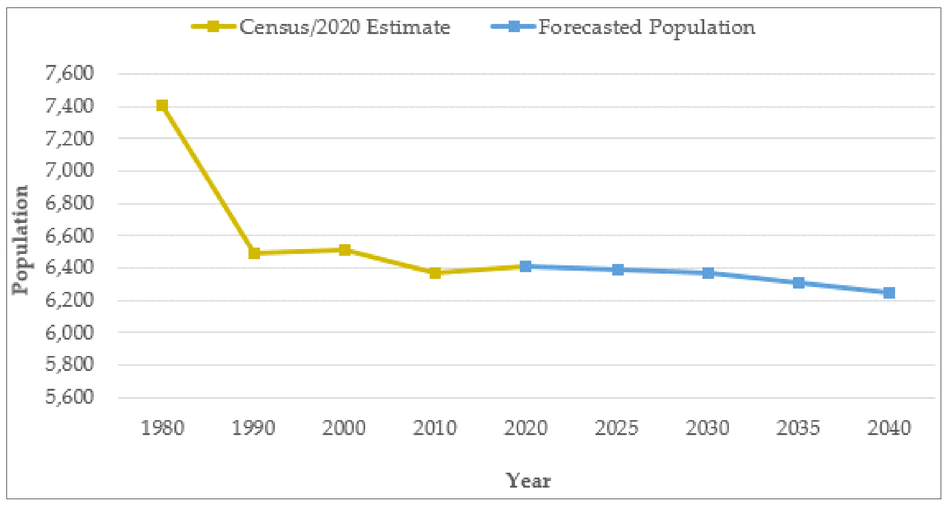

*The "65% threshold" is based on the definition of "an area of minority concentration" used by the Texas General Land Office in its 10/1/2012 publication, "Homeowner Opportunity Program Guidelines - CDBG Disaster Recovery Program - Hurricanes Ike & Dolly, Round 2." Minorities include all racial and ethnic population groups other than 'White, non-Hispanic (Anglo)'". Census data is not available to map the locations of other protected classes for towns under 20,000 population.

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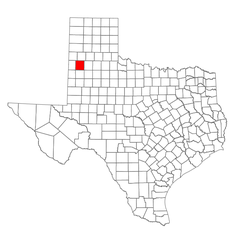
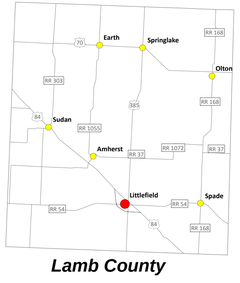


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 2A

Population Distribution
2020 - 2030
May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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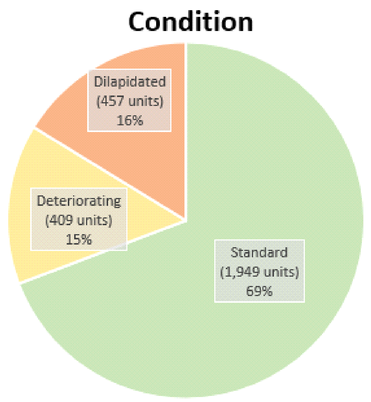

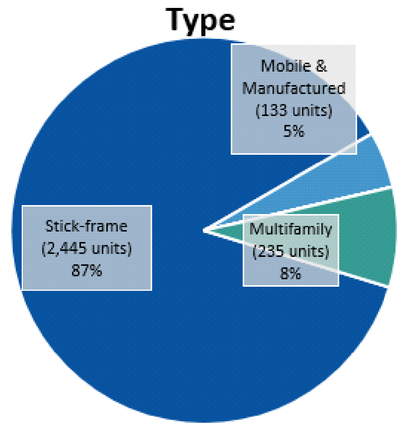

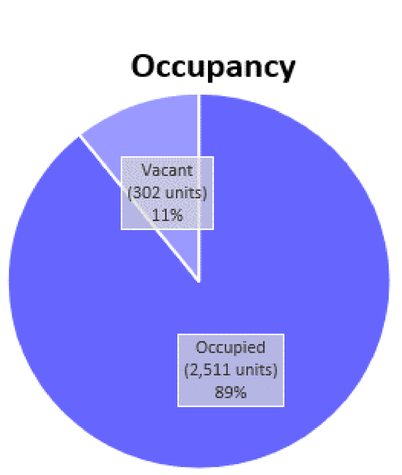

Housing Features

CONDITION
- Standard
- Deteriorated
- Dilapidated

TYPE, OCCUPANCY
- Stick Frame Home, Occupied
- Stick Frame Home, Vacant
- Manufactured Home, Occupied
- Manufactured Home, Vacant
- RV, Occupied
- RV, Vacant

- Affordable Housing
- **Multifamily Complex**
- **[Label: Total Units]**
- Standard
- Deteriorated
- Dilapidated
- Low-Moderate Income Areas*
- Areas of High Minority Concentration**

- Extraterritorial Jurisdiction
- City Limits
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond

*The City of Littlefield's population is at least 51% low-moderate income according to HUD and the 2010 Census.
**The "65% threshold" is based on the definition of "an area of minority concentration" used by the Texas General Land Office in its 10/1/2012 publication, "Homeowner Opportunity Program Guidelines - CDBG Disaster Recovery Program - Hurricanes Ike & Dolly, Round 2." Minorities include all racial and ethnic population groups other than 'White, non-Hispanic (Anglo)'". Census data is not available to map the locations of other protected classes for towns under 20,000 population.

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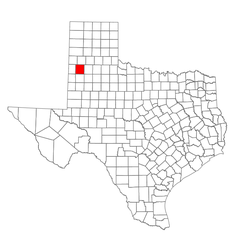
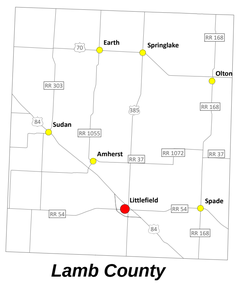


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 3A

Housing Conditions

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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City Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	13	0.5%	0.3%	0.2
Airport	0	0.0%	0.0%	0.0
Cemetery	48	1.8%	1.2%	0.7
Commercial / Retail	130	5.0%	3.2%	2.1
Industrial	119	4.6%	2.9%	1.9
Institutional	95	3.7%	2.4%	1.5
Multifamily	21	0.8%	0.5%	0.3
Oil Field	0	0.0%	0.0%	0.0
Public	27	1.0%	0.7%	0.4
Recreational / Open Space	83	3.2%	2.1%	1.3
Right of Way	904	34.9%	22.5%	14.2
Semi-Developed	345	13.3%	8.6%	5.4
Single Family	793	30.6%	19.7%	12.5
Utility	15.6	0.6%	0.4%	0.2
Total for Developed Areas	***2,593***	***100.0%***	***64.5%***	***40.8***
Agriculture / Undeveloped	*1,429*	-	35.5%	22.5
Water	*0*	-	0.0%	0.0
Citywide Total	**4,022**		**100.0%**	**63.3**

ETJ Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	30	3.2%	0.3%	9.2
Airport	0	0.0%	0.0%	0.0
Cemetery	0	0.0%	0.0%	0.0
Commercial / Retail	55	5.8%	0.5%	16.8
Industrial	100	10.5%	0.9%	30.4
Institutional	28	3.0%	0.3%	8.6
Multifamily	0	0.0%	0.0%	0.0
Oil Field	1	0.1%	0.0%	0.2
Public	0	0.0%	0.0%	0.0
Recreational / Open Space	0	0.0%	0.0%	0.0
Right of Way	443	46.8%	4.2%	135.1
Semi-Developed	17	1.7%	0.2%	5.0
Single Family	267	28.2%	2.5%	81.3
Utility	7	0.8%	0.1%	2.2
Total for Developed Areas	***947***	***100.0%***	***8.9%***	***288.7***
Agriculture / Undeveloped	*9,676*	-	91.0%	2950.9
Water	*0*	-	0.0%	0.0
ETJ Total	**10,623**	**-**	**100.0%**	**3239.6**

Regional Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	43	1.2%	0.3%	0.6
Airport	0	0.0%	0.0%	0.0
Cemetery	48	1.3%	2.0%	0.7
Commercial / Retail	185	5.2%	1.3%	2.8
Industrial	218	6.2%	1.5%	3.3
Institutional	123	3.5%	0.8%	1.8
Multifamily	21	0.6%	0.1%	0.3
Oil Field	1	0.0%	0.0%	0.0
Public	27	0.8%	0.2%	0.4
Recreational / Open Space	83	2.3%	0.6%	1.2
Right of Way	1,348	38.1%	9.2%	20.2
Semi-Developed	361	10.2%	2.5%	5.4
Single Family	1,060	29.9%	7.2%	15.9
Utility	22.8	0.6%	0.2%	0.3
Total for Developed Areas	***3,540***	***100.0%***	***24.2%***	***53.0***
Agriculture / Undeveloped	*11,105*	-	75.8%	166.2
Water	*0*	-	0.0%	0.0
Regional Total	**14,645**	**-**	**100.0%**	**219.2**

Land Use

- Agricultural Processing
- Agriculture / Undeveloped
- Cemetery
- Commercial / Retail
- Industrial
- Institutional
- Multifamily
- Oil Field
- Public
- Recreational / Open Space
- Semi-Developed
- Single Family
- Utility

- Extraterritorial Jurisdiction
- City Limits
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond

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Lamb County, Texas

Lamb County

City of Littlefield

Lamb County, Texas

Map 4A

Existing Land Use

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

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Datum: D North American 1983

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City Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	11	0.3%	0.3%	0.2
Agriculture / Limited Rural Housing	1,602	39.8%	39.8%	25.2
Cemetery	48	1.2%	1.2%	0.7
Highway Commercial District	109	2.7%	2.7%	1.7
Industrial	94	2.3%	2.3%	1.5
Local Commcercial District	35	0.9%	0.9%	0.6
Low Density Housing Area	333	8.3%	8.3%	5.2
Oil Field	0	0.0%	0.0%	0.0
Multifamily Area	30	0.7%	0.7%	0.5
Mixed Residential Area	635	15.8%	15.8%	10.0
Public / Institutional Center	110	2.7%	2.7%	1.7
Recreation / Open Space	111	2.8%	2.8%	1.8
Right of Way	904	22.5%	22.5%	14.2
Total for Developed Areas	4,022	100.0%	100.0%	63.3
Water	0		0.0%	0.0
Citywide Total	**4,022**		**100.0%**	**63.3**

ETJ Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	15	0.1%	0.1%	4.6
Agriculture / Limited Rural Housing	10,007	94.2%	94.2%	3051.9
Cemetery	0	0.0%	0.0%	0.0
Highway Commercial District	7	0.1%	0.1%	2.2
Industrial	255	2.4%	2.4%	77.6
Local Commcercial District	0	0.0%	0.0%	0.0
Low Density Housing Area	0	0.0%	0.0%	0.0
Oil Field	0	0.0%	0.0%	0.0
Multifamily Area	0	0.0%	0.0%	0.0
Mixed Residential Area	0	0.0%	0.0%	0.0
Public / Institutional Center	28	0.3%	0.3%	8.4
Recreation / Open Space	0	0.0%	0.0%	0.0
Right of Way	311	2.9%	2.9%	94.9
Total for Developed Areas	***10,623***	***100.0%***	***100.0%***	***3239.6***
Water	0		0.0%	0.0
ETJ Total	**10,623**	**-**	**100.0%**	**3239.6**

Regional Land Use Classification	Acres	% DEV	% TOTAL	Acres/100
Agricultural Processing	27	0.2%	0.2%	0.4
Agriculture / Limited Rural Housing	11,609	79.3%	79.3%	173.8
Cemetery	48	0.3%	2.0%	0.7
Highway Commercial District	116	0.8%	0.8%	1.7
Industrial	348	2.4%	2.4%	5.2
Local Commcercial District	35	0.2%	0.2%	0.5
Low Density Housing Area	333	2.3%	2.3%	5.0
Oil Field	0	0.0%	0.0%	0.0
Multifamily Area	30	0.2%	0.2%	0.4
Mixed Residential Area	635	4.3%	4.3%	9.5
Public / Institutional Center	138	0.9%	0.9%	2.1
Recreation / Open Space	111	0.8%	0.8%	1.7
Right of Way	1,215	8.3%	8.3%	18.2
Total for Developed Areas	***14,645***	***100.0%***	***100.0%***	***219.2***
Water	0		0.0%	0.0
Regional Total	**14,645**	**-**	**100.0%**	**219.2**

Future Land Use

- Agricultural Processing
- Agriculture / Limited Rural Housing
- Cemetery
- Highway Commercial
- Industrial
- Local Commercial
- Low Density Housing
- Mixed Residential
- Multifamily
- Public / Institutional Center
- Recreational / Open Space
- Extraterritorial Jurisdiction
- City Limits
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond

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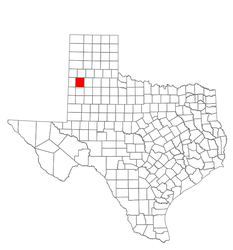
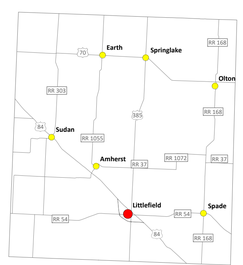


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 4B

Future Land Use

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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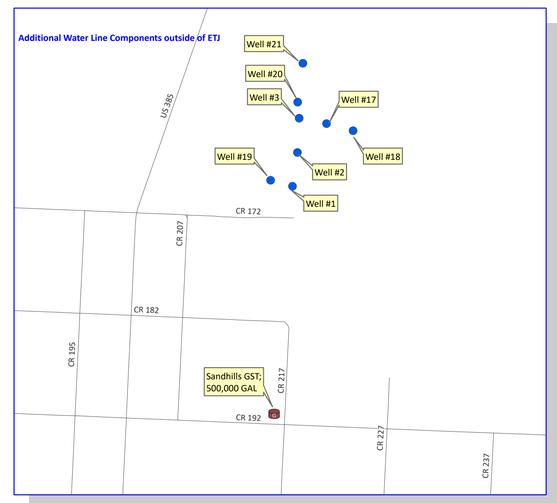

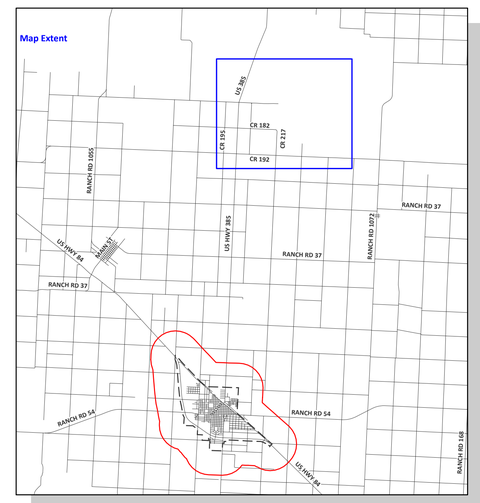

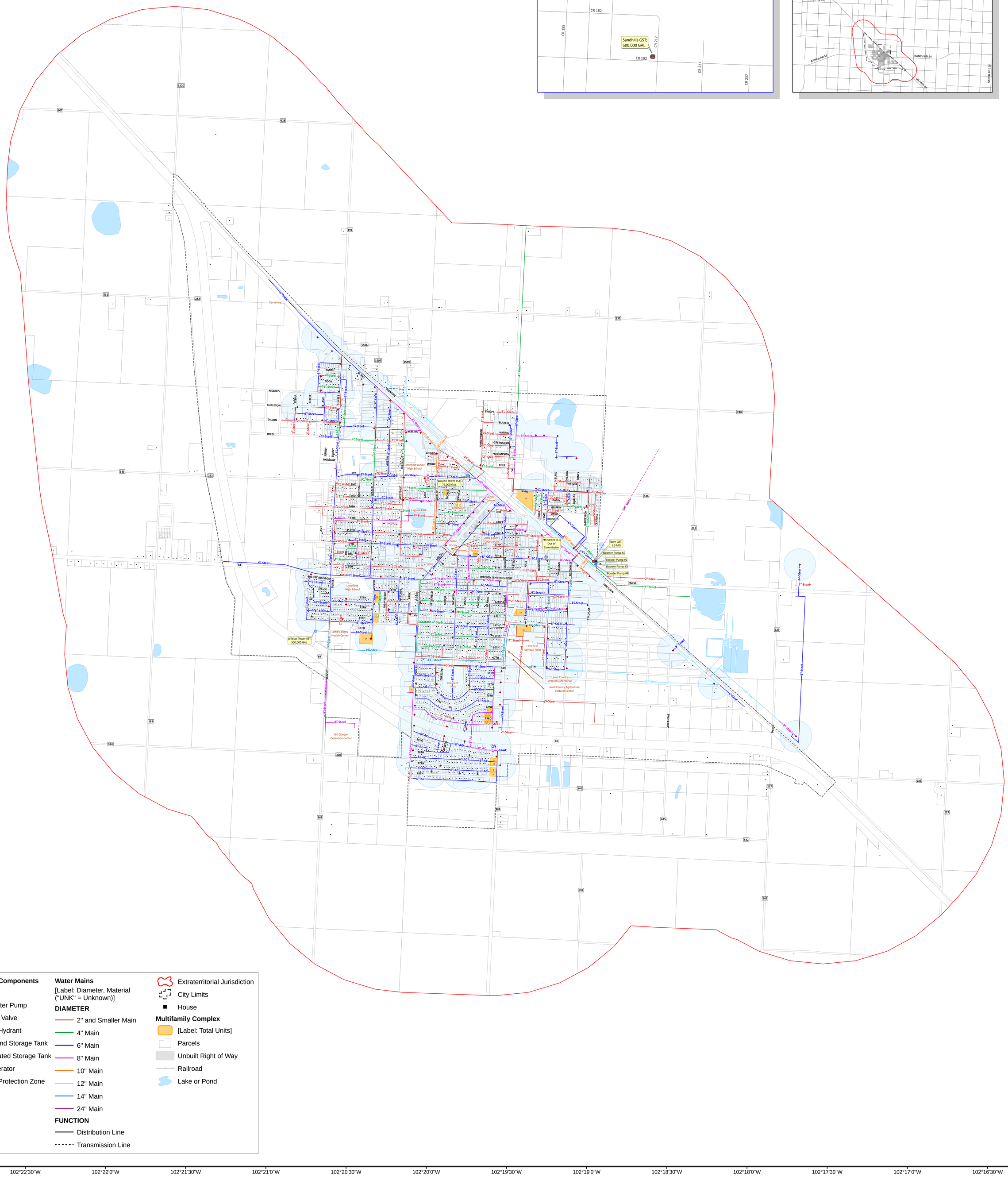

Water Line Components

- Well
- Booster Pump
- Gate Valve
- Fire Hydrant
- Ground Storage Tank
- Elevated Storage Tank
- Generator
- Fire Protection Zone

Water Mains

[Label: Diameter, Material ("UNK" = Unknown)]

DIAMETER

- 2" and Smaller Main
- 4" Main
- 6" Main
- 8" Main
- 10" Main
- 12" Main
- 14" Main
- 24" Main

FUNCTION

- Distribution Line
- Transmission Line

- Extraterritorial Jurisdiction
- City Limits
- House

Multifamily Complex

- [Label: Total Units]
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond

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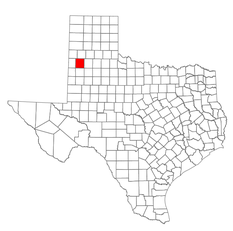
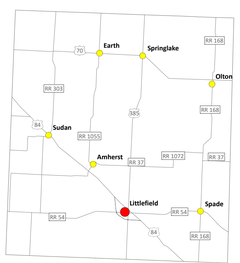


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 5A

Existing Water System 2020

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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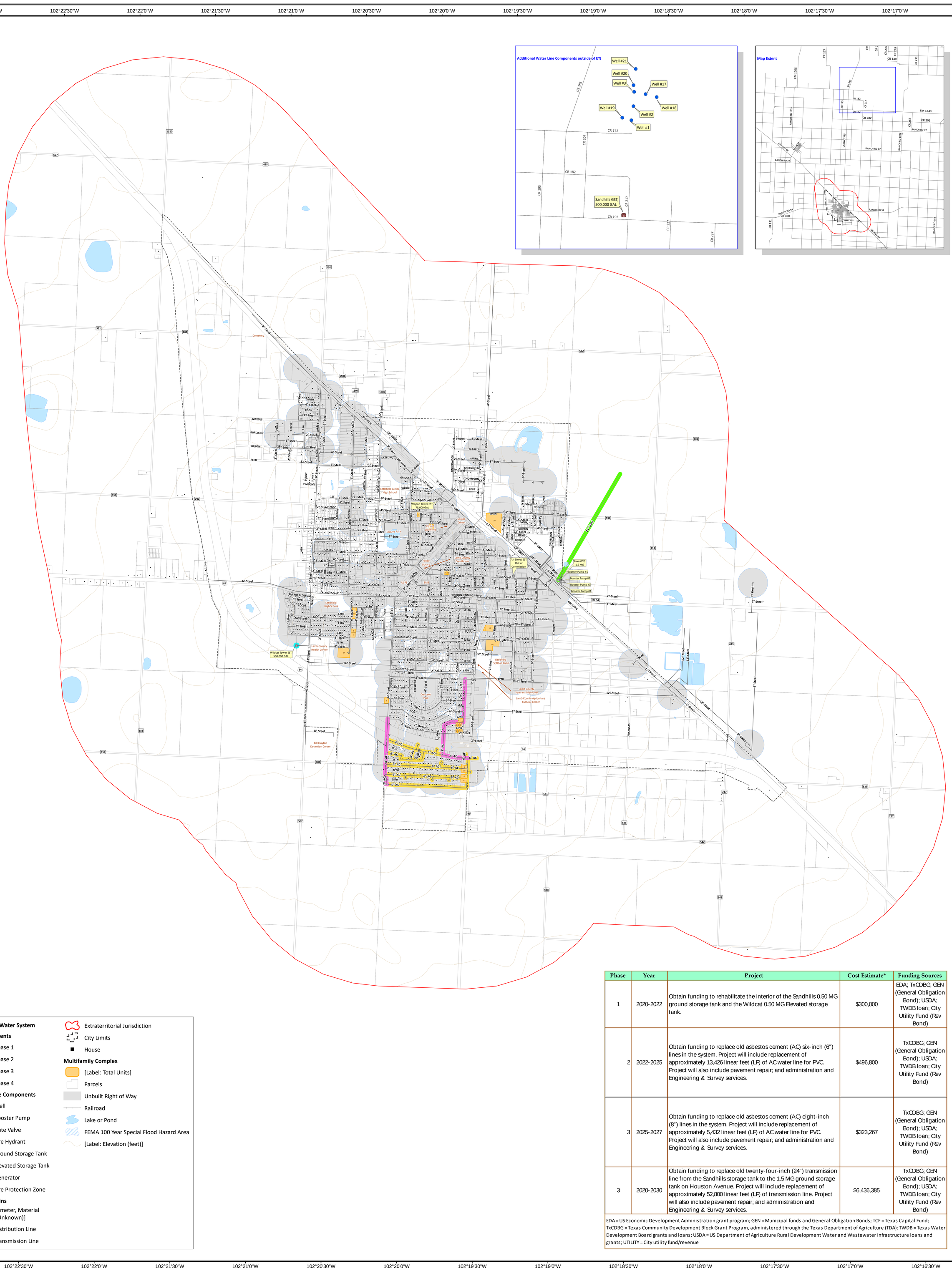

Phase	Year	Project	Cost Estimate*	Funding Sources
1	2020-2022	Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.	$300,000	EDA; TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
2	2022-2025	Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	$496,800	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
3	2025-2027	Obtain funding to replace old asbestos cement (AC) eight-inch (8") lines in the system. Project will include replacement of approximately 5,432 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	$323,267	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
3	2020-2030	Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.	$6,436,385	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)

EDA = US Economic Development Administration grant program; GEN = Municipal funds and General Obligation Bonds; TCF = Texas Capital Fund; TxCDBG = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); TWDB = Texas Water Development Board grants and loans; USDA = US Department of Agriculture Rural Development Water and Wastewater Infrastructure loans and grants; UTILITY = City utility fund/revenue

Proposed Water System

Improvements
- Phase 1
- Phase 2
- Phase 3
- Phase 4

Water Line Components
- Well
- Booster Pump
- Gate Valve
- Fire Hydrant
- Ground Storage Tank
- Elevated Storage Tank
- Generator
- Fire Protection Zone

Water Mains

[Label: Diameter, Material ("UNK" = Unknown)]
- Distribution Line
- Transmission Line

- Extraterritorial Jurisdiction
- City Limits
- House

Multifamily Complex
- [Label: Total Units]
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond
- FEMA 100 Year Special Flood Hazard Area
- [Label: Elevation (feet)]

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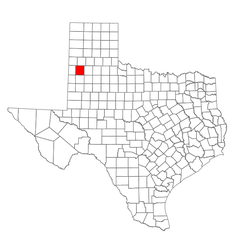
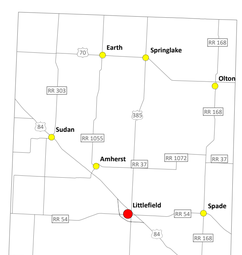


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 5B

Proposed Water System Improvements 2020 - 2030

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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City of Littlefield

Lamb County, Texas

Map 6A

Existing Wastewater System 2020

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

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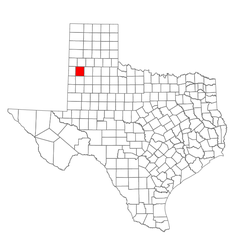
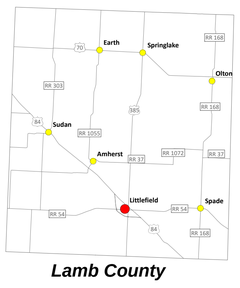


Lamb County, Texas



Lamb County

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Phase	Year	Project	Cost Estimate*	Funding Sources
1	2020-2023	Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.	$425,500*	TWDB; CDBG; USDA; Private; WW Utility
2	2023-2027	Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.	$443,900*	TWDB; CDBG; USDA; Private; WW Utility
3	2027-2030	Obtain funding to continue replacing aging and/or deteriorated collection lines and manholes. Project will include approximately replacement of eighteen (18) manholes, 8,640 linear feet (LF) of line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from Hwy 84 Lift station to the Sunset Lift Station. Project will include	$521,900*	TWDB; CDBG; USDA; Private; WW Utility

Sources: Private = Private funding sources through Development Agreements; TxCDBG = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); TWDB = Texas Water Development Board; WW UTILITY = Municipal Water & Sewer Fund or Certificated of Obligation/Revenue Bonds; USDA = US Department of Agriculture – Rural Development

*Includes any associated engineering, administration, and/or acquisition costs

Proposed Wastewater System

Improvements
- Phase 1
- Phase 2
- Phase 3
- Treatment Pond

Wastewater Line Components
- Cleanout
- Lift Station
- Manhole
- Generator

Wastewater Mains
[Label: Diameter, Material ("UNK" = Unknown)]
- Gravity
- Force Main

- Extraterritorial Jurisdiction
- City Limits
- House

Multifamily Complex
- [Label: Total Units]
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond
- FEMA 100 Year Special Flood Hazard Area
- [Label: Elevation (feet)]

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Lamb County, Texas

Lamb County

City of Littlefield

Lamb County, Texas

Map 6B

Proposed Wastewater System Improvements 2020 - 2030
May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

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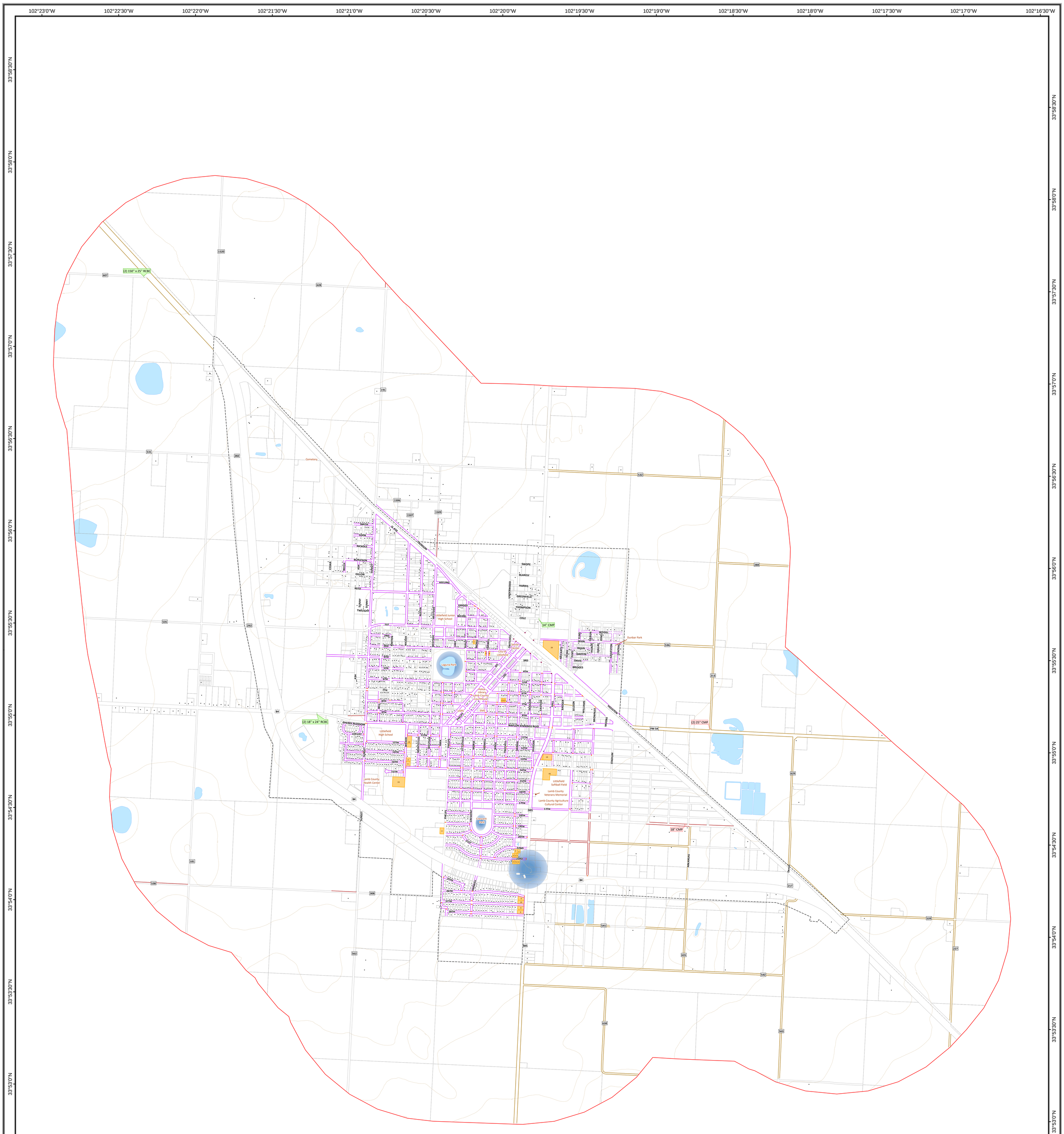

Extraterritorial Jurisdiction
City Limits
House

Multifamily Complex
[Label: Total Units]
Parcels
Unbuilt Right of Way
Railroad
Lake or Pond

Storm Sewer Inlet
Area Inlet, Damaged
Area Inlet, Not Damaged

Culvert
[Label: (Number of Pipes) Size & Type*]
Damaged
Not Damaged

Curb and Gutter
Damaged
Not Damaged

Drainage Channel
Roadside Ditch, Maintained
Roadside Ditch, Not Maintained

Valley Cut
Damaged
Not Damaged
FEMA 100 Year Special Flood Hazard Area
[Label: Elevation (feet)]
Problem Drainage Area

*Abbreviations of culvert material: CMP=Corrugated Metal Pipe; HDPE=High Density Polyethelene; RCBC=Reinforced Concrete Block Culvert; RCP=Reinforced Concrete Pipe

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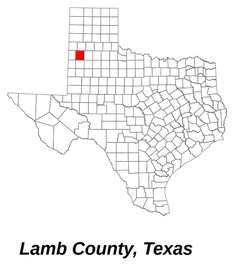
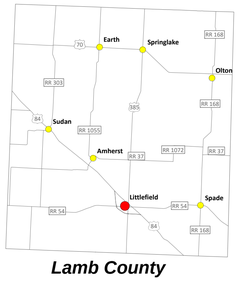


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 7A

Existing Storm Drainage Conditions 2020

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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Phase	Year	Project	Cost Estimate*	Funding Sources
1	2020-2022	Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include administration and Engineering & Surveying services.	$250,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR
2	2122-2024	Work in conjunction with Lamb County to obtain funding to replace three (3) damaged culverts and 6,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	$378,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
3	2024-2026	Work in conjunction with Lamb County to obtain funding to replace 8,000 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	$318,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
4	2026-2030	Work in conjunction with TxDOT to obtain funding to implement the recommendations from the Phase 1 drainage study to alleviate flooding at south end of Hall Avenue and US 84. The project will include acquisition of additional drainage easements, side slope protection, pavement repair, administration and Engineering & Surveying services.	TBD	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
5	2023-2027	Adopt a basic street and drainage construction manual/ordinance specifying required width and depth of drainage channels and diameter of culverts for use by current and future city staff and contractors hired to construct improvements.	$2,000 (Legal, Engineers)	TxCDBG; USDA

FMA=Flood Mitigation Assistance program through the TWDB for NFIP members only; GEN = Municipal fund; Private=Land donation; FHWA=Federal Highway Administration; TWDB=Texas Water Development Board Flood Protection Planning; TxCDBG=Texas Community Development Block Grant program if area is involved in project where street/curb and gutter repair is required; TxCDBG-DR=TxCDBG Disaster Relief funds; TxDOT=Texas Department of Transportation; USDA=USDA Rural Development

Proposed Drainage System Improvements
- Phase 1
- Phase 2
- Phase 3
- Phase 4

Storm Sewer Inlet
- Storm Sewer Inlet

Culvert
- Culvert

Curb and Gutter
- Curb and Gutter

Drainage Channel
- Drainage Channel

Valley Cut
- Valley Cut
- Problem Drainage Area

- Extraterritorial Jurisdiction
- City Limits
- House

Multifamily Complex
- [Label: Total Units]
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond
- FEMA 100 Year Special Flood Hazard Area
- [Label: Elevation (feet)]

*Abbreviations of culvert material: CMP=Corrugated Metal Pipe; HDPE=High Density Polyethelene; RCBC=Reinforced Concrete Block Culvert; RCP=Reinforced Concrete Pipe

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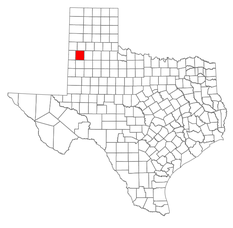
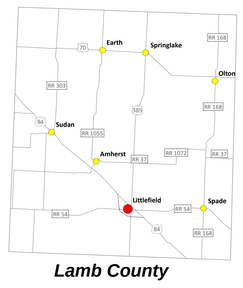


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 7B

Propsoed Storm Drainage Improvements 2020 - 2030

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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City of Littlefield

Lamb County, Texas

Map 8A

Exisiting Street Conditions 2020

May - 2020

Streets

[Label: Pavement, ROW Widths]

CONDITION

- Good
- Fair
- Poor

MATERIAL

- Concrete
- Asphalt
- Gravel
- Brick
- Dirt
- Curb and Gutter

- Extraterritorial Jurisdiction
- City Limits
- Parcels
- Unbuilt Right of Way
- Railroad
- Lake or Pond

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
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Lamb County, Texas

Lamb County

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Phase	Year	Project	Cost Estimate*	Funding Sources
1	2020-2022	Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	$2,699,461	GEN
2	2023-2025	Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	$2,601,234	GEN
3	2025-2027	Repair 80,765 Linear Feet (LF) of streets in fair condition; with Phase 3 improvements for water and/or wastewater and in western part of city. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading	$2,524,487	GEN
4	2027-2030	Repair 60,815 Linear Feet (LF) of remaining streets in fair-to-good condition with Phase 4 improvements for water and/or wastewater. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	$2,408,803	GEN

Notes on Cost Estimates: * GrantWorks Engineering Staff provided cost estimate; costs include any associated engineering, adminsitrative, and/or acquisition costs; Some street segements may require assocaited curb and gutter construction. Those prices are not included in costs on this table.
Sources: GEN = Municipal funds and General Obligation Bonds

Proposed Street Improvements
Phase 1
Phase 2
Phase 3
Phase 4

Streets
[Label: Pavement, ROW Widths]
MATERIAL
Concrete
Asphalt
Gravel
Dirt
Curb and Gutter

Extraterritorial Jurisdiction
City Limits
Parcels
Unbuilt Right of Way
Railroad
Lake or Pond

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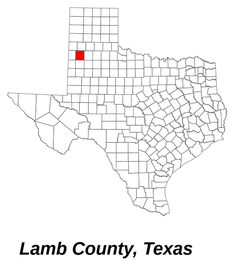
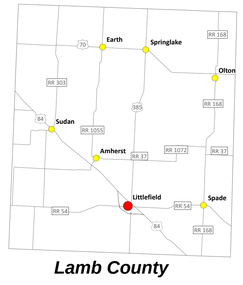


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 8B

Proposed Street Improvements
2020 - 2030
May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

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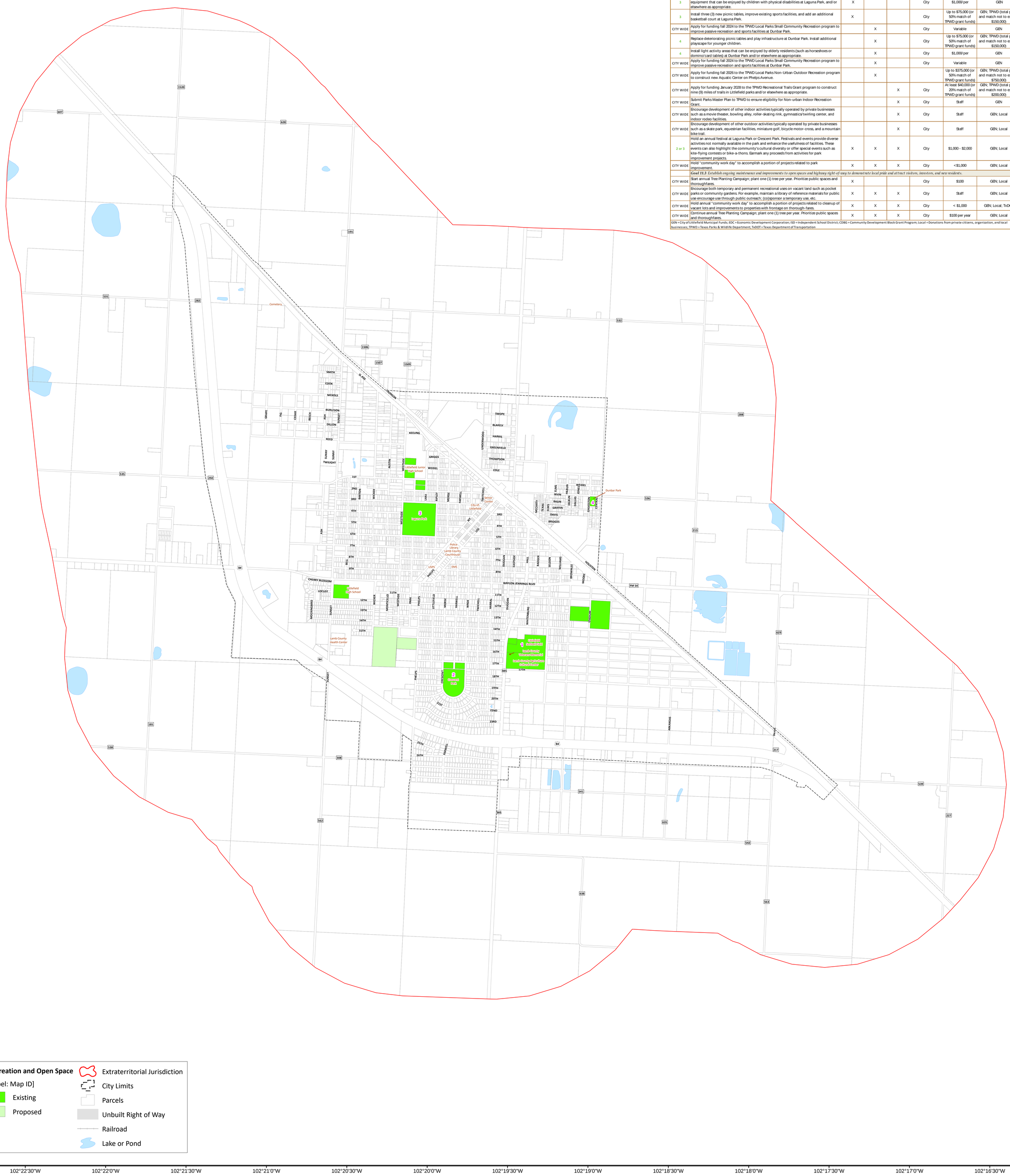
Map ID	Goals and Objectives	Activity Year(s) 2020-2023	2024-2026	2027-2030	Lead Organization	Cost Estimate	Funding Sources
	Goal 11.1 *Maintain recreation facilities in good condition.*						
CITY WIDE	Establish a voluntary donation fund to fund maintenance, repair, and upgrade Littlefield parks. Solicitation could be added to City utility bill.	X			City	< $1,000	GEN
CITY WIDE	Develop shared-resources plan with Littlefield ISD to establish a schedule of public access for ISD recreation facilities. Create plan to share facility maintenance and review biennially.	X			City	Staff	GEN; ISD
CITY WIDE	Schedule creation of new Parks Master Plan.			X	City	$10,000	GEN; CDBG
CITY WIDE	Budget funds for park maintenance and for on-going facility development.	X	X	X	City	$6,000+	GEN; EDC
CITY WIDE	Schedule biennial review of the Parks Master Plan and update priority list as needed. Solicit new public input every five (5) years.	X	X	X	City	< $1,000	GEN
	Goal 11.2 *Improve existing recreation facilities to permit and encourage additional use and construct new facilities that fulfill residents' expressed needs and bring the city more up to standard.*						
CITY WIDE	Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation facilities at Crescent Park.	X			City	Variable	GEN
CITY WIDE	Establish "community work day" at public parks to accomplish a portion of park development using volunteer labor. Tasks can include site preparation, clean-up, and preliminary construction tasks. Seek volunteers from residents, City Staff, community service workers, religious and civic groups, etc.	X			City	< $1,000	GEN; Local
1	Renovate and update city owned softball and little league fields near the Lamb County Agriculture Community Center.	X			City	Variable	GEN; Local
2	Remove aged picnic tables from Crescent Park. Install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	X			City	$75,000 (or 50% match of TPWD grant funds)	GEN; TPWD (Total grant and match not to exceed $150,000)
CITY WIDE	Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park.	X			City	Variable	GEN
3	Install inclusive play activities (such as "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	X			City	$1,000/per	GEN
3	Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court at Laguna Park.	X			City	Up to $75,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $150,000)
CITY WIDE	Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park.		X		City	Variable	GEN
4	Replace deteriorating picnic tables and play infrastructure at Dunbar Park. Install additional playscape for younger children.		X		City	Up to $75,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $150,000)
4	Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/card tables) at Dunbar Park and/or elsewhere as appropriate.		X		City	$1,000/per	GEN
CITY WIDE	Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park.		X		City	Variable	GEN
CITY WIDE	Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation program to construct new Aquatic Center on Phelps Avenue.		X			Up to $375,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $750,000)
CITY WIDE	Apply for funding January 2028 to the TPWD Recreational Trails Grant program to construct nine (9) miles of trails in Littlefield parks and/or elsewhere as appropriate.			X	City	At least $40,000 (or 20% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $200,000)
CITY WIDE	Submit Parks Master Plan to TPWD to ensure eligibility for Non-urban Indoor Recreation Grant.			X	City	Staff	GEN
CITY WIDE	Encourage development of other indoor activities typically operated by private businesses such as a movie theater, bowling alley, roller-skating rink, gymnastics/ twirling center, and indoor rodeo facilities.			X	City	Staff	GEN; Local
CITY WIDE	Encourage development of other outdoor activities typically operated by private businesses such as a skate park, equestrian facilities, miniature golf, bicycle motor-cross, and a mountain bike trail.			X	City	Staff	GEN; Local
2 or 3	Hold an annual festival at Laguna Park or Crescent Park. Festivals and events provide diverse activities not normally available in the park and enhance the usefulness of facilities. These events can also highlight the community's cultural diversity or offer special events such as kite-flying contests or bike-a-thons. Earmark any proceeds from activities for park improvement projects.	X	X	X	City	$1,000 - $2,000	GEN; Local
CITY WIDE	Hold "community work day" to accomplish a portion of projects related to park improvement.	X	X	X	City	<$1,000	GEN; Local
	Goal 11.3 *Establish ongoing maintenance and improvements to open spaces and highway right-of-way to demonstrate local pride and attract visitors, investors, and new residents.*						
CITY WIDE	Start annual Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	X			City	$100	GEN; Local
CITY WIDE	Encourage both temporary and permanent recreational uses on vacant land such as pocket parks or community gardens. For example, maintain a library of reference materials for public use encourage use through public outreach; (co)sponsor a temporary use, etc.	X	X	X	City	Staff	GEN; Local
CITY WIDE	Hold annual "community work day" to accomplish a portion of projects related to cleanup of vacant lots and improvements to properties with frontage on thorough-fares.	X	X	X	City	< $1,000	GEN; Local; TxDOT
CITY WIDE	Continue annual Tree Planting Campaign; plant one (1) tree per year. Prioritize public spaces and thoroughfares.	X	X	X	City	$100 per year	GEN; Local

GEN = City of Littlefield Municipal Funds; EDC = Economic Development Corporation; ISD = Independent School District; CDBG = Community Development Block Grant Program; Local = Donations from private citizens, organization, and local businesses; TPWD = Texas Parks & Wildlife Department; TxDOT = Texas Department of Transportation



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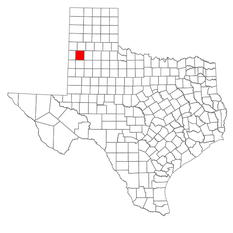
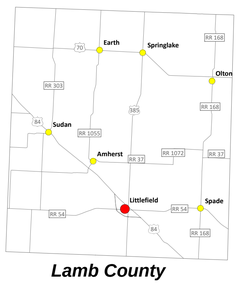


Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 9A

Recreation and Open Space

May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

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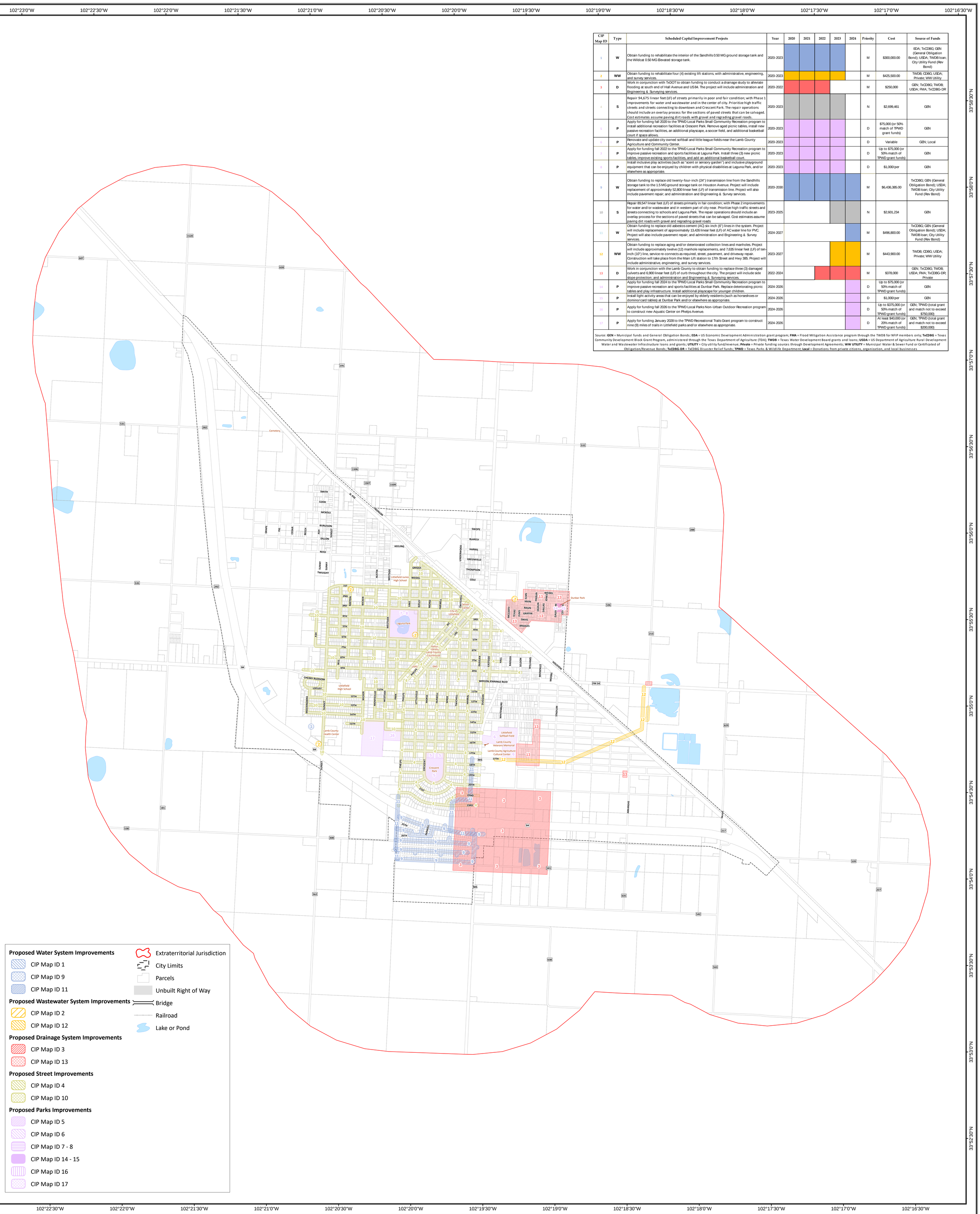
CIP Map ID	Type	Scheduled Capital Improvement Projects	Year	2020	2021	2022	2023	2024	Priority	Cost	Source of Funds
1	W	Obtain funding to rehabilitate the interior of the Sandhills 0.50 MG ground storage tank and the Wildcat 0.50 MG Elevated storage tank.	2020- 2023						M	$300,000.00	EDA; TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
2	WW	Obtain funding to rehabilitate four (4) existing lift stations, with administrative, engineering, and survey services.	2020- 2023						M	$425,500.00	TWDB; CDBG; USDA; Private; WW Utility
3	D	Work in conjunction with TxDOT to obtain funding to conduct a drainage study to alleviate flooding at south end of Hall Avenue and US84. The project will include administration and Engineering & Surveying services.	2020- 2022						M	$250,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR
4	S	Repair 94,675 linear feet (LF) of streets primarily in poor and fair condition; with Phase 1 improvements for water and wastewater and in the center of city. Prioritize high traffic streets and streets connecting to downtown and Crescent Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads.	2020- 2023						N	$2,699,461	GEN
5	P	Apply for funding fall 2020 to the TPWD Local Parks Small Community Recreation program to install additional recreation facilities at Crescent Park. Remove aged picnic tables, install new passive recreation facilities, an additional playscape, a soccer field, and additional basketball court if space allows.	2020- 2023						D	$75,000 (or 50% match of TPWD grant funds)	GEN
6	P	Renovate and update city owned softball and little league fields near the Lamb County Agriculture and Community Center.	2020- 2023						D	Variable	GEN; Local
7	P	Apply for funding fall 2022 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Laguna Park. Install three (3) new picnic tables, improve existing sports facilities, and add an additional basketball court.	2020- 2023						D	Up to $75,000 (or 50% match of TPWD grant funds)	GEN
8	P	Install inclusive play activities (such as "scent or sensory garden") and inclusive playground equipment that can be enjoyed by children with physical disabilities at Laguna Park, and/or elsewhere as appropriate.	2020- 2023						D	$1,000/per	GEN
9	W	Obtain funding to replace old twenty-four-inch (24") transmission line from the Sandhills storage tank to the 1.5 MG ground storage tank on Houston Avenue. Project will include replacement of approximately 52,800 linear feet (LF) of transmission line. Project will also include pavement repair; and administration and Engineering & Survey services.	2020- 2030						M	$6,436,385.00	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
10	S	Repair 89,547 linear feet (LF) of streets primarily in fair condition; with Phase 2 improvements for water and/or wastewater and in western part of city near. Prioritize high traffic streets and streets connecting to schools and Laguna Park. The repair operations should include an overlay process for the sections of paved streets that can be salvaged. Cost estimates assume paving dirt roads with gravel and regrading gravel roads	2023- 2025						N	$2,601,234	GEN
11	W	Obtain funding to replace old asbestos cement (AC) six-inch (6") lines in the system. Project will include replacement of approximately 13,426 linear feet (LF) of AC water line for PVC. Project will also include pavement repair; and administration and Engineering & Survey services.	2024- 2027						M	$496,800.00	TxCDBG; GEN (General Obligation Bond); USDA; TWDB loan; City Utility Fund (Rev Bond)
12	WW	Obtain funding to replace aging and/or deteriorated collection lines and manholes. Project will include approximately twelve (12) manhole replacements, and 7,635 linear feet (LF) of ten-inch (10") line, service re-connects as required, street, pavement, and driveway repair. Construction will take place from the Main Lift station to 17th Street and Hwy 385. Project will include administrative, engineering, and survey services.	2023- 2027						M	$443,900.00	TWDB; CDBG; USDA; Private; WW Utility
13	D	Work in conjunction with the Lamb County to obtain funding to replace three (3) damaged culverts and 6,900 linear feet (LF) of curb throughout the city. The project will include side slope protection; and administration and Engineering & Surveying services.	2022- 2024						M	$378,000	GEN; TxCDBG; TWDB; USDA; FMA; TxCDBG-DR; Private
14	P	Apply for funding fall 2024 to the TPWD Local Parks Small Community Recreation program to improve passive recreation and sports facilities at Dunbar Park. Replace deteriorating picnic tables and play infrastructure. Install additional playscape for younger children.	2024- 2026						D	Up to $75,000 (or 50% match of TPWD grant funds)	GEN
15	P	Install light activity areas that can be enjoyed by elderly residents (such as horseshoes or domino/ card tables) at Dunbar Park and/or elsewhere as appropriate.	2024- 2026						D	$1,000/per	GEN
16	P	Apply for funding fall 2026 to the TPWD Local Parks Non-Urban Outdoor Recreation program to construct new Aquatic Center on Phelps Avenue.	2024- 2026						D	Up to $375,000 (or 50% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $750,000)
17	P	Apply for funding January 2028 to the TPWD Recreational Trails Grant program to construct nine (9) miles of trails in Littlefield parks and/or elsewhere as appropriate.	2024- 2026						D	At least $40,000 (or 20% match of TPWD grant funds)	GEN; TPWD (total grant and match not to exceed $200,000)

Source: **GEN** = Municipal funds and General Obligation Bonds; **EDA** = US Economic Development Administration grant program; **FMA** = Flood Mitigation Assistance program through the TWDB for NFIP members only; **TxCDBG** = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture (TDA); **TWDB** = Texas Water Development Board grants and loans; **USDA** = US Department of Agriculture Rural Development Water and Wastewater Infrastructure loans and grants; **UTILITY** = City utility fund/revenue; **Private** = Private funding sources through Development Agreements; **WW UTILITY** = Municipal Water & Sewer Fund or Certificated of Obligation/Revenue Bonds; **TxCDBG-DR** = TxCDBG Disaster Relief funds; **TPWD** = Texas Parks & Wildlife Department; **Local** = Donations from private citizens, organization, and local businesses



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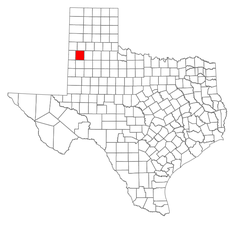
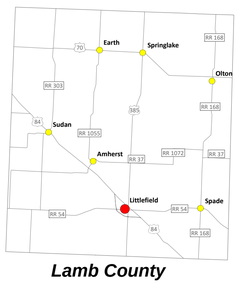
This illustration was created using the best available data. Subsequent additions, edits, & georectification performed by Grantworks, Inc.



Lamb County, Texas



Lamb County

City of Littlefield

Lamb County, Texas

Map 10A

Capital Improvements Program
2020 - 2025
May - 2020

1 inch = 1,000 feet

0 500 1,000 1,500 feet

0 0.1 0.2 0.3 mile

Texas State Plane Zone 4
Texas South Central
Projection: Lambert Conformal Conic

GCS North American 1983
Datum: D North American 1983

Disclaimer

The maps and documents included in this planning study are to be used for comprehensive planning purposes only as reference material provided for laypersons, whether they are public officials or members of the general public. Recommendations for infrastructure improvements in this study, which are derived from engineering studies, or project cost estimates prepared by an engineer, are cited as such. Under no circumstances should material contained within this study regarding improvements to the City's infrastructure be construed as a detailed engineering plan,specification, engineering design, or any other type of document intended for the purpose of specific public work construction. The municipality and/or governing agency is responsible for obtaining the services of a licensed professional engineer to perform engineering design services for the construction of public works projects as required by The Texas Engineering Practice Act.

The lot, right-of-way, corporate and extraterritorial jurisdiction boundaries depicted on these maps were derived from readily available information such as existing corporate maps, Census maps, or plat maps from the County Clerk or Appraisal District and are representational in nature. Locations and characterizations of infrastructure, facilities, and structures depicted on these maps are approximate. The City and GrantWorks, Inc. do not intend to establish or confirm true and legal boundaries or exact locations of physical objects with these maps and do not warrant or approve the use of these maps for any purpose other than general reference and information.