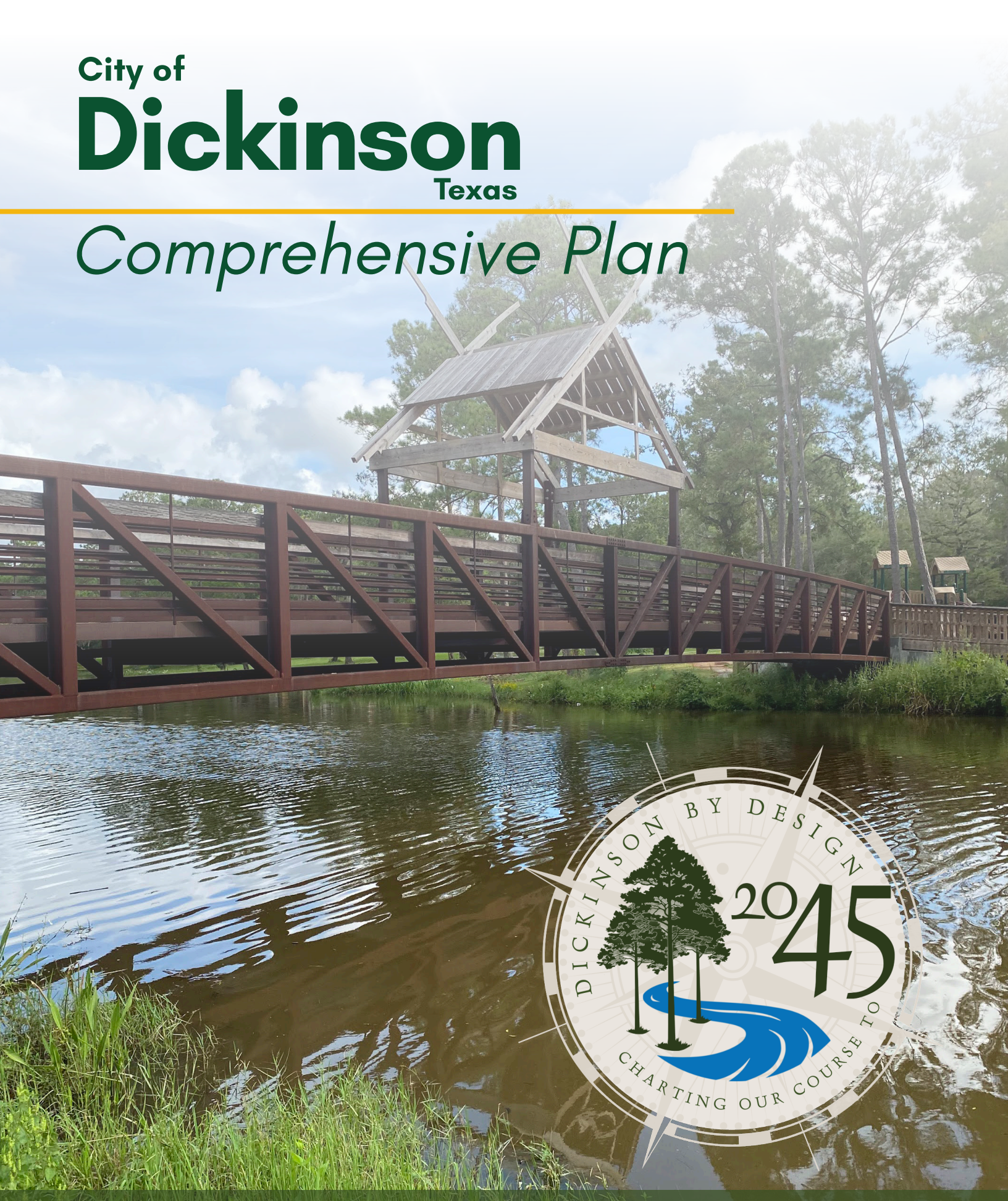
City of

Dickinson

Texas

Comprehensive Plan



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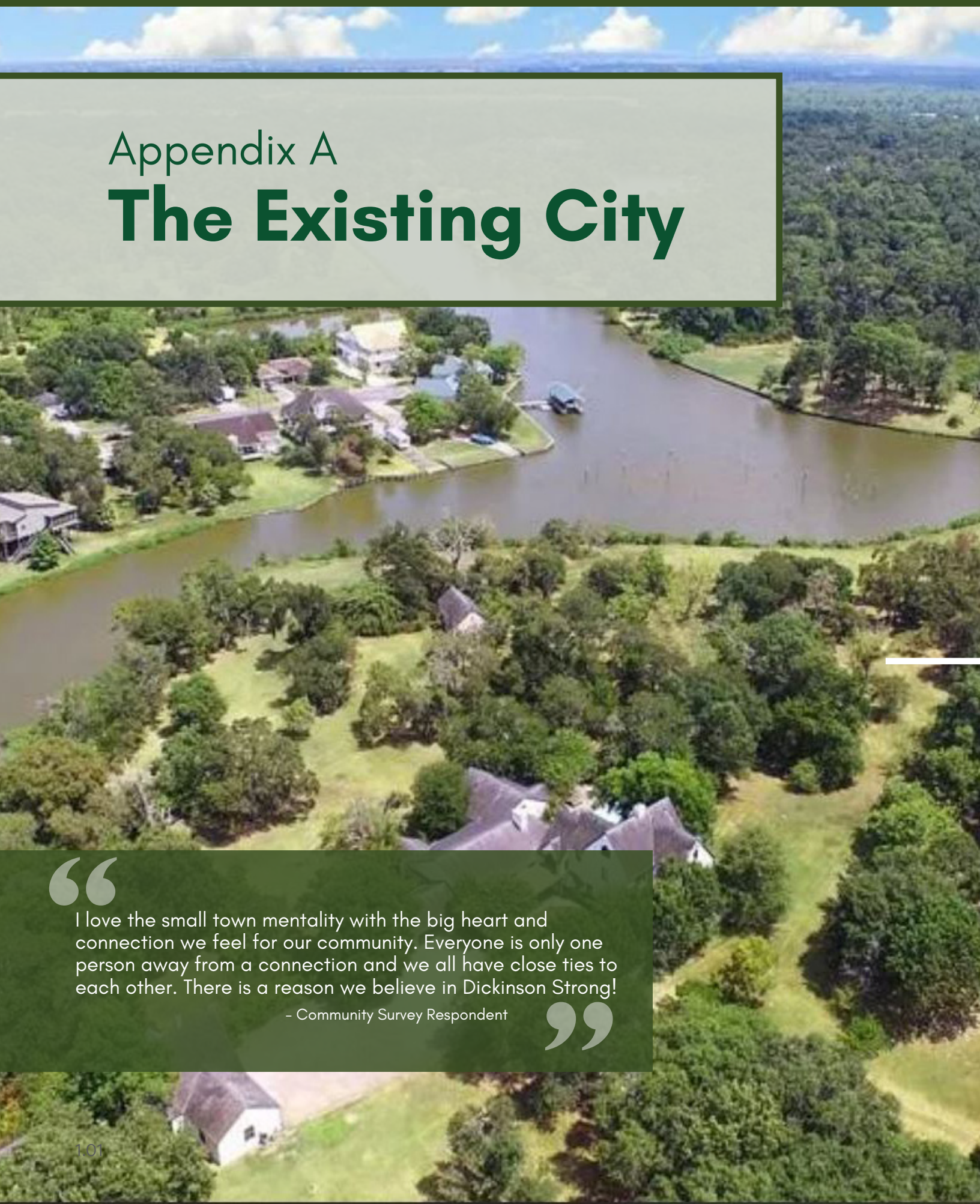
ADOPTED
May 9th 2023

Appendix A
The Existing City



> I love the small town mentality with the big heart and connection we feel for our community. Everyone is only one person away from a connection and we all have close ties to each other. There is a reason we believe in Dickinson Strong!
>
> – Community Survey Respondent

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Introduction

The Existing City provides background and insights about Dickinson as it is today. The information in this appendix is presented in topical areas relevant to the City's long-range plan and community-desired vision for physical growth and development.

The Existing City summarizes existing conditions through the lens of multiple systems-based elements, including built infrastructure, social fabric and community resources, and natural environment. This approach to existing conditions analysis avoids the common pitfalls of analyzing plan elements in isolation, and covers all of the plan elements together to further understand the relationship between natural and constructed systems.

This report also highlights key planning considerations for the years ahead, and lays the framework for goals, objectives, strategies, policies and recommendations outlined in *The Future City* and *Pathways to Implementation* sections of the *Comprehensive Plan*.

Below is a brief description of each element in this chapter:

Land Use and Development

The *Land Use and Development* section begins with an analysis and review of Dickinson's existing land uses and their spatial distribution and concentrations throughout the City, and then outlines regulations (i.e., zoning and related ordinances) that affect land use and guide development. Afterwards, development trends are characterized and explained in the context of land use, vacant land, redevelopment potential and new residential and commercial growth patterns. This section then assesses the community's long-range outlook within the context of Dickinson's proximity to Dickinson Bayou, Galveston Bay, and other sub-watersheds.

Utilities Infrastructure

The City's infrastructure systems and networks are covered in the *Utilities Infrastructure* section, including the location, age, material, and replacement status of potable water, sanitary sewer, and stormwater drainage systems. This section also evaluates the City's ability to accommodate new development with existing and planned utility infrastructure and services.

Housing and Neighborhoods

The *Housing and Neighborhoods* section studies existing residential patterns, housing stock, occupancy and vacancy rates, housing types and tenure, age and quality of housing stock, housing value, gross rent, and housing affordability by ownership status.

Mobility

The *Mobility* section explains Dickinson's roadways and transportation network, including major thoroughfares, roadway classifications and level of service, public transit, and the locations of vehicle collisions. Spatial trends in pedestrian and vehicle collisions are visualized as a heat map to easily identify problematic transportation "hot spots." Areas with high concentrations of fatalities are highlighted for further review and improvement. This section ensures orderly development and sequential improvement of the City's existing transportation system, while also considering facilities that support pedestrian circulation. The *Mobility* section details the location, gaps, and regulations of existing pedestrian mobility infrastructure in Dickinson. The objective of enhancing pedestrian facilities (i.e., sidewalks, cycling lanes, and trails) is two-fold: first, it is to install infrastructure where coverage gaps exist and second, it is to ensure that regulatory mechanisms exist to provide and enforce walkability throughout the community.

Community Resources and Local Economy

The *Community Resources and Local Economy* section highlights the assets that weave Dickinson's social fabric and position Dickinson as an attractive place to live, work and play, including public education through Dickinson Independent School District, higher education through College of the Mainland, local employment opportunities and prominent employers. This section elaborates on facilities like the Dickinson Public Library and Bayou Animal Services, and summarizes the needs of public safety institutions.

The *Community Resources and Local Economy* section also covers Dickinson's robust cultural resources, civic groups, and available parks and recreational facilities. This section also explains the purpose and role of Dickinson Management District (DMD) in administering and facilitating Chapter 380 economic development agreements. Before concluding, this section goes on to discuss various community health metrics and leading health factors outlined by the Centers for Disease Control and Prevention (CDC).

Conclusion

Key findings from each of the above sections are summarized, which are then used to inform the Comprehensive Plan's principles, goals, objectives, strategies and recommendations, and policies outlined in *The Future City* report.

Land Use and Development

Existing Land Use

A description of existing land use patterns and the character of development is essential to plan for future development, economic growth, and open space preservation that is compatible with the character of the community. This description of existing land uses in Dickinson is based on information obtained from the Galveston County Appraisal District (GCAD) and the City of Dickinson Code of Ordinances. The existing land use description and the subsequent analysis of land available for redevelopment on page 1.11 is based on parcel data, property values and ownership status obtained from GCAD. Understanding land use and development patterns will help city administrators project future population and infrastructure needs. As illustrated in Map 1, *Existing Land Use*, and detailed in Table 1, *Existing Land Uses* on the facing page, the existing land uses in Dickinson are as follows:

General Residential (Suburban Residential)

General Residential represents detached single-family dwellings on small lots (typically 0.25 acre) and patio homes with zero lot lines. Zero lot line development allows building footprints to abut on a side lot boundary in order to increase available and useable land on the opposing side lot boundary. More than 50 percent of Dickinson's land coverage is residential, of which 80 percent is suburban with concentrations of homes between IH-45 and Country Club Drive.

Farm and Ranchland

Farm and Ranchland is used for agricultural crop, animal husbandry, and related by-products.

Rural Residential

Rural Residential land use represents low-density dwelling units typically located in rural settings. Conventional detached single-family dwellings at a density typically not exceeding one (1) dwelling unit per acre. Includes existing large lots, un-platted tracts of land, areas where adequate public facilities are not available to support higher density urban development, and areas that are appropriate for large lot development given the surrounding land use and zoning.

General Commercial

General Commercial provides for a variety of commercial uses including wholesale sales and services, general retail and service businesses, and office uses. Typically concentrated in high traffic areas adjacent to arterial streets and highways. Automobile-centric site designs facilitate commercial developments that are characterized by large parking lots surrounding stand-alone storefronts, drive-through establishments and strip centers. Includes commercial businesses that require a large amount of land such as vehicle and farm equipment sales, plant nurseries, other outdoor sales, and big-box retailers. Dickinson's commercial properties are typically concentrated along the IH-45 highway corridor, FM 517 and SH 3.

Undeveloped

Represents undeveloped, vacant or developable land. Undeveloped parcels are generally found along Dickinson Bayou.

Public and Institutional

Public and Institutional land uses include improved parcels and facilities which are held in the public interest. This category typically encompasses major City-owned facilities, schools, hospitals, universities, and other public and private buildings and sites with an institutional nature. Other essential utility services include wastewater treatment plants and landfills. Public and institutional land uses are concentrated in central Dickinson around City Hall and other municipal offices.

Multi-Family Residential (Urban Residential)

Multi-family Residential represents dwellings such as duplexes, triplexes, town homes, condominiums and apartments. Provides for development of quality apartments in a high density setting, while ensuring livability, property values, open space, design quality and landscaping, safety and the general welfare of its residents.

Developed Park Land

Developed Park Land represents parks, recreational, or other natural environmental areas. Intended to provide open space for outdoor recreational activities and to create an aesthetically pleasing environment that may improve quality of life, prevent overcrowding of land, and provide visual buffering between roadways and structures. Dickinson has two traditional parks, one golf course, and one boat launch which provides access to Dickinson Bayou.

Heavy Industry

Heavy Industrial land uses include high impact manufacturing or industrial uses that can create nuisance and environmental impacts which are not compatible with residential or commercial developments.

MAP 1, EXISTING LAND USE

Legend

Land Use

- Commercial
- Public/Institutional
- High-Density Residential
- Suburban Residential
- Rural Residential
- Farm and Ranchland
- Heavy Industry
- Developed Park Land
- Riprarian Corridors/Reservoirs
- Utility
- Manufactured Home
- Undeveloped

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

Table 1, Existing Land Uses

Land Use Code	Category	Land Use Count	% of Total	Acres	% of Total
SR	Suburban Residential	6,564.0	82.0%	2,350.0	39.0%
FR	Farm and Ranchland	39.0	0.5%	777.0	13.0%
RR	Rural Residential	286.0	4.0%	725.0	12.0%
C	Commercial	501.0	6.0%	635.0	11.0%
U	Undeveloped	347.0	4.0%	544.0	9.0%
PI	Public / Institutional	26.0	0.3%	409.0	7.0%
G	Riparian Corridors / Reservoirs	108.0	1.0%	248.0	4.0%
UT	Utility	39.0	0.5%	166.0	3.0%
DP	Developed Park Land	9.0	0.1%	108.0	2.0%
UR	Urban Residential	66.0	1.0%	54.0	1.0%
HI	Heavy Industry	2.0	0.02%	20.0	0.2%
MH	Manufactured Home	9.0	.01%	6.0	0.1%
TOTAL		7,996.0	100%	6,040.0	100%

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Land Use Regulations

Land development in Dickinson is regulated by zoning and subdivision regulations, building codes, and health regulations. Zoning is the most widely implemented land use regulation and is commonly utilized by municipal governments to control the physical development of land.

Dickinson's Zoning Ordinance

Chapter 18 - Zoning, within the Dickinson Code of Ordinances, outlines the City's general zoning provisions, which covers topics such as approval authority, zoning districts, parking, dimensional requirements, and accessory uses. Although there are 12 base zoning districts established by the City's zoning code, only nine are currently in use.

As illustrated in Map 2, *Official Zoning Map*, and in Table 2, *Zoning Categories* the City delineates the location and extent of each zoning district within its limits, which are described in more detail below:

Residential Districts

- **Rural Residential (RR):** Detached single-family dwellings on large land parcels at a density not exceeding one (1) dwelling unit per acre and sparsely developed. Mainly agricultural and semi-wilderness forested lands, typically located around Dickinson's perimeter.
- **Conventional Residential (CR):** Conventional detached single-family dwellings in low-density residential developments. A majority of Dickinson is zoned as Conventional Residential. Spatially concentrated in long vertical swaths stretching from the southern to northern corporate limit. There are no prescriptive lot sizes for this district.
- **Small Lot Residential (SR):** Detached single-family dwellings on small lots, and patio homes with zero lot lines intended to consolidate yard space and enhance privacy in exchange for an increase in lot coverage. Typically found in Dickinson's southwestern and northeastern areas.
- **High Density Residential (HR):** Conventional single and multi-family dwellings such as apartments, condos and townhomes, up to 18 units per acre. Typically found along the IH-45 and FM 517 corridors.
- **Manufactured Home (MH):** Intended for the development of a manufactured home subdivision or manufactured home community on a single unsubdivided parcel. Allows for affordable housing within a well-managed, compatible, and cohesive manufactured home environment. Spatially concentrated on the eastern half of Dickinson along the northern and southern corporate boundary.

Commercial Districts

- **Neighborhood Commercial (NC):** Small-scale, limited impact retail and office businesses meant to be compatible with nearby residential areas and serve retail and personal service needs. Character of buildings are intended to blend into adjacent nearby properties without causing adverse impacts. Typically used to buffer between the FM 517 roadway and interior residential homes.
- **Interstate Commercial (IC):** Regulates commercial uses along IH-45. This are no properties currently zoned as Interstate Commercial.
- **General Commercial (GC):** Various commercial uses including wholesale sales and services, general retail and service businesses located along high traffic areas adjacent to arterial streets and highways. Spatially concentrated along IH-45, FM 517 and Highway 3.

Industrial Districts

- **Light Industrial: (LI):** Areas of large-scale industrial development that focuses on research and development, warehousing, assembly, high technology, and small-scale distribution and processing. Uses are limited to ensure they do not create offensive noise, vibration, smoke, dust and/or odor. Concentrated at the northeastern tip of Dickinson's corporate limits.
- **General Industrial (GI):** Various light and heavy industrial uses including office warehousing, manufacturing and product assembly. Typically incompatible with nearby residential uses. Spatially concentrated along Highway 3.

Other Districts

- **Designated Open Space (DOS):** Provides open space for outdoor recreational activities. Neither of the City's two parks are classified as Designated Open Space.
- **Planned Development (PD):** Provides for the combination and mixing of uses allowed in various districts and to permit growth flexibility in the use and design of land and buildings. There are no properties currently zoned as Planned Development, although one was proposed in February 2022.

Specific Use Permits

The City also periodically issues Specific Use Permits for certain land uses, buildings or structures that may not be appropriate in any given zoning district. Subsequent to a public hearing, City Council may by ordinance, issue a Specific Use Permit, allowing a compatible land use, building, structure or business operation to occur in a district that would otherwise not allow it unless it is determined that the proposed use would be compatible with the existing uses in the area. At least 30 or more Specific Use Permits have been issued to date, mostly for religious institutions, school buildings, restaurants serving alcohol and vehicle sales.

Table 2, Zoning Categories

District Abbr.	District	Count	% of Total	Acres	% of Total
CR	Conventional Residential	188.0	52.0%	3,785.0	68.0%
RR	Rural Residential	5.0	1.0%	865.0	16.0%
GC	General Commercial	61.0	17.0%	44.0	8.0%
NC	Neighborhood Commercial	37.0	10.0%	91.0	2.0%
MH	Manufactured Home	21.0	6.0%	82.0	1.0%
HR	High Density Residential	13.0	4.0%	59.0	1.0%
SR	Small Lot Residential	4.0	1.0%	52.0	1.0%
GI	General Industrial	2.0	1.0%	47.0	1.0%
HLI	Light Industrial	2.0	1.0%	5.0	0.1%
Other	Other	28.0	8.0%	111.0	2.0%
	TOTAL	361.0	100%	5,538.0	100%

Official Zoning District Map

City of Dickinson, Texas

Adopted: May 13, 2014

Scale: 1 inch = 800 feet

LEAGUE CITY CITY LIMITS

LEAGUE CITY ETJ

TEXAS CITY ETJ

TEXAS CITY CITY LIMITS

Legend

Zoning District Classifications

- RR - Rural Residential District
- CR - Conventional Residential District
- SR - Small Lot Residential District
- HR - High Density Residential District
- MH - Manufactured Home District
- NC - Neighborhood Commercial District
- GC - General Commerical District
- GI - General Industrial District
- ③ Specific Use Permit

Highway 3 Overlay District

- Sub-District 1
- Sub-District 2
- Sub-District 3
- City Limits - Dickinson
- City Limits -Texas City
- ETJ - Texas City
- City Limits - League City
- ETJ - League City

SPECIFIC USE PERMITS LEGEND

Label N	Address	Specific Use Description	Ordinance Nu	Effective Dat
1	323 HUGHES RD	CHURCH, SCHOOL & RECREATIONAL	457-2002	8/13/2002
2	2920 AVENUE F	CHURCH & SCHOOL	462-2002	9/10/2002
3	4105 GULF FREEWAY	CHURCH	472-2003	1/28/2003
4	2910 AVENUE F	GROUP DAY CARE CENTER	483-2003	5/27/2003
5	4601 FM 517 EAST	CHURCH	503-2003	11/11/2003
6	4100 HIGHWAY 3	CHURCH & SCHOOL	523-2004	5/25/2004
7	2601 DEATS ROAD SUITE C	CHURCH (SEGUNDA IGLESIA EVANGELICA MINISTERIO DIOS ALTISIMO)	553-2005	6/28/2005
8	1817 FM 517 EAST	CHURCH	558-2005	10/11/2005
9	3002 FM 517 EAST	AUTOMOTIVE REPAIR-BODYWORK SHOP	568-2005	1/3/2006
10	3800 BAKER DRIVE	SCHOOL	574-2006	2/28/2006
11	3424 HIGHWAY 3	CHURCH	581-2006	3/28/2006
12	800 FM 517 EAST	CHURCH	580-2006	3/28/2006
13	12425 PINE OAK DRIVE	GROUP HOME	590-2006	9/12/2006
14	5651 FM 517 EAST	SCHOOL	604-2007	1/23/2007
15	660 FM 517 WEST	SALE AND CONSUMPTION OF ALCOHOL - BEER AND WINE (LOS RAMIREZ MEXICAN RESTAURANT)	607-2007	3/13/2007
16	660 FM 517 WEST	SALE AND CONSUMPTION OF ALCOHOL - MIXED BEVERAGES (LOS RAMIREZ MEXICAN RESTAURANT)	630-2008	3/25/2008
17	FM 517 WEST	CHILD DAY CARE CENTER	632-2008	5/11/2008
18	650 FM 517 WEST	SALE OF ALCOHOLIC BEVERAGES - BEER AND WINE	633-2008	5/13/2008
19	351 FM 646 NORTH	CHILD DAYCARE FACILITY	652-2008	11/11/2008
20	2902 FM 517 EAST	USED AUTOMOTIVE SALES (EXCEL AUTOMOTIVE)	685-2009	9/22/2009
21	2234 FM 517 EAST	USED AUTOMOTIVE SALES (CARS BY CRUZ)	687-2009	10/13/2009
22	2218 FM 517 EAST	DISD PUBLIC EDUCATION SUPPORT CENTER	688-2009	10/13/2009
23	1837 FM 517 EAST	CHURCH AND RELIGIOUS SERVICES	692-2010	1/12/2010
24	200 FM 517 WEST	CHURCH AND RELIGIOUS SERVICES (FIRST UNITED METHODIST CHURCH)	699-2010	7/13/2010
25	1621 FM 517 EAST	CHURCH AND RELIGIOUS SERVICES (MAINLAND COMMUNITY CHURCH)	700-2010	7/13/2010
26	3210 STATE HIGHWAY 3	CHURCH AND RELIGIOUS SERVICES (BETHEL EVANGELISTIC CHURCH)	702-2010	8/10/2010
27	3210 STATE HIGHWAY 3	CHILD DAY CARE CENTER (EXCELLENCE ACADEMY)	703-2010	8/10/2010
28	5828 FM 517 EAST	SALE OF ALCOHOLIC BEVERAGES - BEER AND WINE (VIVA MEXICO RESTAURANT)	711-2010	11/9/2010
29	408 FM 517 WEST	GENERAL MERCHANDIZE STORE NO > 10,000 SQ FT - (DOLLAR GENERAL)	731-2011	10/11/2011
30	5202 FM 517 EAST	SALE OF ALCOHOLIC BEVERAGES - BEER AND WINE (CHAPALA RESTAURANT)	732-2011	11/8/2011
31	2512 TERMINI STREET	CHURCH AND RELIGIOUS SERVICES (GOSPEL INTERNATIONAL MINISTRIES)	757-2013	4/9/2013
32	3208 STATE HIGHWAY 3	CHILDREN'S DAYCARE & LEARNING CENTER	766-2013	8/13/2013
33	3527 OAK DRIVE	ASSISTED LIVING CENTER	767-2013	8/13/2013

Development Patterns and Redevelopment Potential

Per Capita Land Use

As depicted in Table 3, *Existing Land Use in City Limits*, the area (in acres) of existing residential, commercial, park land, industrial, and farm and ranch, and miscellaneous land uses was calculated for the lands within Dickinson's city limits. Land use areas were then divided by the U.S. Census 2020 population of 20,847 to determine a per capita land use area. More than half of land acreage in Dickinson is dedicated to residential uses. The next highest land uses are farm and ranchland (12.9 percent) and commercial (10.5 percent), while a little less than 10 percent of land in Dickinson is currently undeveloped.

Vacant Parcels

As depicted in Map 3, *Improvement Value to Total Assessed Value and Vacant Parcels*, there are approximately 347 undeveloped parcels, or 544 acres, in Dickinson and undeveloped land tends to be spatially concentrated to the south of Dickinson Bayou. In general, undeveloped parcels are interspersed as vacant infill lots among a variety of other adjacent land uses, as opposed to large swaths of undeveloped land. This is noteworthy as Dickinson is completely surrounded by municipalities and their corresponding extraterritorial jurisdictions on all sides, which means Dickinson cannot grow by sprawling outwards or annexing nearby properties. Growth in Dickinson will most likely need to be directed toward infill locations.

Redevelopable Parcels

The ratio of improvement value to total assessed value depicts the difference between the Tax Appraiser's assessed value of parcel improvements (e.g., buildings) to the parcel's total value. An improvement value to total assessed value ratio of "1" represents parcels where the value of the site improvement is most comparable to the value of the full site, including land; while a ratio of "0" represents parcels where the ratio of site improvement value to site value, including land, is the least. The higher the ratio, the more closely attributable the total parcel value is to the site improvements. This metric can be used as a proxy to indicate areas that are distressed, contain blighted buildings, or where the land is otherwise worth more than the improvement.

Consequently, the parcels with an improvement value to total assessed value ratio value of "0" to "0.3-0.4" represent the parcels that stand to benefit the most from redevelopment, as value of their improvements is low. Redevelopment of these parcels will have the most net positive contribution benefit to the City's tax revenue base.

Using 2020 Galveston County Appraisal District data, Map 3**,** *Improvement Value to Total Assessed Value and Vacant Parcels*, depicts over 1,400 parcels (2,434 acres or 40 percent of total acreage) with a ratio of improvement value to total assessed value of 0.40 or less. These parcels are identified as ideal redevelopment locations to attain a higher taxable value.

Table 3, Existing Land Use in City Limits

Land Use Type and Category	Acreage	% of Total Area
Residential Land, All	3,135	**51.9%**
Rural Residential	725	
"Rural Residential Land" Acres / Population	3%	
Suburban Residential	2,350	
"Suburban Residential Land" Acres / Population	11.3%	
Manufactured Housing	6.0	
"Manufactured Housing Residential Land" Acres / Population	0.03%	
High-Density Residential	54	
"High-Density Residential Land" Acres / Population	0.26%	
General Commercial Land	635	**10.5%**
Developed Park Land	108	**1.8%**
Industrial Land	20	**0.3%**
Farm and Ranchland	777	**12.9%**
LAND USE SUBTOTAL	4,675	**77.4%**
Undeveloped Land	544	**9.0%**
Water Bodies	248	**4.1%**
Public/Institutional	409	**6.8%**
Utility	166	**2.7%**
SUBTOTAL	1,367	**22.6%**
TOTAL AREA	6,042	**100.0%**

MAP 3, IMPROVEMENT VALUE TO TOTAL ASSESSED VALUE AND VACANT PARCELS

Legend

Vacant Parcels

Ratio of Improvement Value to Total Assessed Value

- 0.0
- 0.1 - 0.2
- 0.3 - 0.4

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Platting Process

Dickinson's Code of Ordinances (Appendix A - Subdivision Ordinance) contains the technical specifications applicants must adhere to prior to plat approval, including parcel specifications, building setbacks, pavement width, street design, land dedication and county recordation.

Plat Application and Timeline

The typical development plat begins with a pre-application conference where City staff helps an applicant prepare the necessary documents for approval. Staff then explains submittal requirements and respective due dates, including the plat's technical review criteria such as easement call-outs and property boundaries.

To properly manage plat processing, ensure consistency in construction standards and compliance with municipal regulations, application documents explaining submittal deadlines, architectural and engineering standards, and development criteria should be made available to the public and updated periodically. The existing platting process in Dickinson lacks these public-facing documents.

Recent Construction Permitting (2016-2021)

Based on a review of building permit applications, over the last five years, approximately 622 new building permits have been issued for 592 residential homes and 30 commercial buildings. These permits represent new construction only, not renovations or additions to existing homes or structures. The predominant pattern of development reflects growth at the fringes of the City, as illustrated in part, by Table 4, *New Construction Permits (2016-2021)* below and in Map 4, *New Construction Permits (2016-2021)* on the facing page.

Table 4, New Construction Permits (2016-2021)

Permit Type	2016	2017	2018	2019	2020	2021	Total
Residential	45	52	88	100	205	102	592
Commercial	7	3	7	4	4	5	30
TOTAL	52	55	95	104	209	107	622

Residential Development Patterns

Residential development has typically occurred within newly platted conventional subdivisions of single-family detached housing in the eastern and western fringes of Dickinson. This housing and development style limits cross-connectivity in the neighborhood, encourages reliance on automobiles, and increases vehicle miles traveled (VMT), a key metric to air and environmental quality.

Compared to new subdivisions in Dickinson, the existing historical neighborhoods are typically laid out in traditional grids on lots of varying acreage. This housing and development style facilitates vehicle through-traffic, social connectivity and pedestrian mobility. Aside from one permit for a new multi-family fourplex, substantially all the new residential permits over the last five years have been issued for single-family detached homes.

Two recently constructed subdivisions in Dickinson are provided below to characterize examples of conventional subdivision design:

- The *Bayou Lakes* subdivision, located at the intersection of FM 517 Road and Shoreview Drive to the west of IH-45, consists of approximately 350 single-family one- to two-story detached homes on one-quarter (0.25) acre lots. The internal street network consists of stub-outs that will be extended at a later filing for continued residential development in the subdivision. Closed-loop cul-de-sacs prohibit continuous vehicle movement and pedestrian connectivity.
- The *Bayou Maison* subdivision, located at the intersection of FM 517 Road and Bayou Maison Drive to the east of IH-45, consists of approximately 190 primarily two-story detached single-family homes on less than one-seventh (0.15) acre lots. The smaller lot sizes allows for denser housing development than most subdivisions in Dickinson.

New residential construction on Desel Dr.
Source: Halff Associates

New residential construction on Lovers Ln.
Source: Halff Associates

MAP 4, NEW CONSTRUCTION PERMITS (2016-2021)

Legend

- New Commercial Building, 2016
- New Commercial Building, 2017
- New Commercial Building, 2018
- New Commercial Building, 2019
- New Commercial Building, 2020
- New Commercial Building, 2021
- New Residential Building, 2016
- New Residential Building, 2017
- New Residential Building, 2018
- New Residential Building, 2019
- New Residential Building, 2020
- New Residential Building, 2021

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- City Limits
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City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Floodplains

Dickinson is vulnerable to natural flooding events due to its low-lying location near the Galveston Bay and Gulf Coast. A combination of urban development, low-infiltration soils, and relatively flat topography leads to high runoff rates during storm events. Occasionally, these rainfall events cause flooding of streets, buildings, and residences, and can risk human health and safety.

What are Floodplains?

In several parts of the City, land is developed right up to the Dickinson Bayou waterline, exposing homes and businesses to water-related damage.

The risk for flooding increases the closer a structure is to a waterbody, assuming the structure is not elevated.

The Federal Emergency Management Agency (FEMA) produces floodplain maps that indicate the extent to which a waterbody will leave its banks during excessive rainfall events.

A floodplain is an area at risk for flooding from a bayou, creek or other waterway overflowing during certain flooding events.

Before deciding how and where future growth should occur, it is important to identify and delineate natural barriers to development.

Where are Dickinson's Floodplains?

According to FEMA, a floodway is an area within a one percent (100-year) floodplain closest to a bayou or creek where land development is regulated by a city or county.

It is the area where water flows most quickly and is most likely the deepest.

The floodway is the area needed to discharge or move floodwater downstream.

As indicated in Map 5, *Floodplains*, Dickinson Bayou and its leading tributaries all serve as floodways.

A one percent (100-year) flood, or Base Flood Elevation, is a flooding event that has a one percent (1 in 100) chance of occurring in any given year at any given location.

Structures located in a one percent (100-year) floodplain have a minimum of a one percent chance of flooding in any given year.

A 0.2 percent (500-year) floodplain is an area at risk for flooding from a bayou, creek or other waterway overflowing during a 0.2 percent (500-year) flood.

Structures located in a 0.2 percent (500-year) floodplain have a minimum of a 0.2 percent chance of flooding in any given year.

Approximately 74 percent of the City is in the 100-year floodplain and approximately 90 percent of the City is within the 500-year floodplain, meaning that a majority of Dickinson is within either the 100-year or 500-year floodplain.

Hurricane Harvey

In August 2017, Hurricane Harvey struck the Texas coast, bringing a historic amount of rainfall to the Houston metro region.

The storm produced unprecedented precipitation depths in Galveston County, as well as several surrounding counties.

Historic flooding occurred in Texas as a result of the widespread, heavy rainfall; wind and flood damages were estimated to be $125 billion, and the storm resulted in at least 68 direct fatalities.[1]

Like other watersheds in the region, the Dickinson Bayou watershed experienced widespread flooding which resulted in loss of life, significant property damage, and disruption to people's livelihoods.

According to the Galveston County Appraisal District and as depicted in Map 5, *Floodplains*, almost 70 percent of Dickinson residents recorded flood damage.

Using USGS data, Hurricane Harvey inundated floodways exceeded their banks by at least between 8-16 feet above normal levels.

Using data presented by the Dickinson Emergency Medical Services (EMS) to City Council, more than 800 single-family homes and 442 apartment units were affected by water damage, and more than 90,000 cubic yards of debris were cleared away as of October 2017.

The estimated cost of Hurricane Harvey to Dickinson's budget, including debris clearing, emergency response, and road, bridge, and building repair, exceeds $60 million dollars.

1* Watson, K.M., Harwell, G.R., Wallace, D.S., Welborn, T.L., Stengel, V.G., and McDowell, J.S., 2018, Characterization of peak streamflows and flood inundation of selected areas in southeastern Texas and southwestern Louisiana from the August and September 2017 flood resulting from Hurricane Harvey: U.S. Geological Survey Scientific Investigations Report 2018-5070, 44 p., https://doi.org/10.3133/sir20185070.

MAP 5, FLOODPLAINS

Legend

- Floodway
- 100-Year Floodplain
- 500-Year Floodplain
- Hurricane Harvey Affected Parcel

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Wetlands

The Dickinson Bayou watershed encompasses a variety of habitats, including prairies, forests, wetlands, streams, and bays. As a tidally-influenced waterbody, Dickinson Bayou and its watershed community faces the challenge of supporting on-going and future development while improving water quality to meet the designated uses for the region which include water-related recreational activities. This is coupled with the challenge of maintaining habitat integrity within the watershed to support the flora and fauna native to the region.

What are Wetlands?

In general, wetlands are areas where water covers the soil, or is present either at or near the surface of the soil for part or all of the year, including the growing season for plants. Wetlands typically lie between deep water in lakes, ponds, and streams and dry upland.

How do Wetlands Protect Dickinson?

Wetlands, like soils, trees, fields, bayous, and other natural resources, are vital components of Dickinson's landscape. Wetlands provide opportunities to filter stormwater before it reaches tributaries and rivers. Wetland plants and soils naturally store and filter nutrients and sediments. Calm wetland waters, with their flat surface and slow flow characteristics, allow these materials to settle, where plants in the wetland then filter nutrients from the water. Wetlands are critical habitats for pollution abatement and recharge underground aquifers.

Wetlands also protect homes from floods. Like sponges, wetlands soak up and slowly release floodwaters. This lowers flood heights and slows the flow of water down rivers and streams. Wetlands also help to control erosion. Shorelines along rivers, lakes, and streams are protected by wetlands, which hold soil in place, absorb the energy of waves, and buffer against strong currents.

Water Quality Impairment

The Texas Commission on Environmental Quality (TCEQ) monitors and tests the quality of surface waters in Texas. Water quality standards identify appropriate uses for Texas' surface waters, including aquatic life and recreation. The criteria used for evaluating dissolved oxygen levels, temperature, pH, dissolved minerals, toxic substances, and bacteria.

According to the 2020 TCEQ Integrated Report Index of Water Quality Impairments, Dickinson Bayou and its contributing tributaries (Bordens Gully, Geisler Bayou, Bensons Bayou, and Gum Bayou) are all impaired waterbodies due to elevated bacteria and toxic pollutants and depressed levels of dissolved oxygen. This impairment adversely affects the safety of contact water recreation activity like swimming, kayaking and fishing, and the consumption of fish caught in the Dickinson Bayou. As a result, it is recommended by TCEQ to limit contact water recreation activity and to limit consumption of fish caught in this area. Dickinson's riparian habitats that occur along watercourses and waterbodies are dependent on uncontaminated water for their survival. Contamination in water jeopardizes aquatic wildlife and disrupts food chains for larger predators.

Increased land clearing has removed shrub habitat further destabilizing stream banks and increasing sediment loss into Dickinson Bayou. Any restoration of wetlands, or implementation of locally-scaled green infrastructure projects, would potentially enhance or restore some water quality and habitat functions within the watershed. Examples of green infrastructure projects include rain gardens, pervious pavement, vegetated swales, vegetated roadway buffers, rainwater harvesting, green roofs, or compost for turf grass management.

Wetlands serve important functions, both in human benefits such as maintaining the quality of water and controlling flooding, and environmental benefits such as providing habitat for endangered species of wildlife and plants.

Source: Halff Associates

MAP 6, SURFACE WATER AND WETLANDS

Legend

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

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Utilities Infrastructure

Potable Water System

Galveston County Water Control and Improvement District #1

In the City of Dickinson, potable water service is provided by Galveston County Water Control and Improvement District #1 ("GCWCID"). Pursuant to the provisions of Chapter 51 of the Texas Water Code, GCWCID is empowered to purchase, operate and maintain all facilities, plants and improvements necessary to provide water, wastewater service, and storm sewer drainage.

Service Area

Most of Dickinson is within the GCWCID service area, and the southwestern portion that is not within GCWCID boundaries has its potable water needs serviced by well water. The City's potable water supply is currently sourced from the Brazos River through Gulf Coast Water Authority's (GCWA) Texas City Water Treatment Plant, which supplies 13 other communities in Galveston County. GCWCID contracts with GCWA for 4.2 million gallons per day, which is expected to meet GCWCID demand for the next 20 years through 2040. As of 2021, there are no plans to expand GCWCID's service area boundaries for potable water, except to provide water to lots adjacent to the furthest extent of it's service area.

Funding

GCWCID is funded through property taxes and utility fees. In late 2021, potable water service fees are projected to increase by approximately eight percent to accommodate higher service costs and infrastructure upgrades. Similar service fee increases are projected for 2022 and 2023. GCWCID anticipates the need for multiple bond elections to make needed infrastructure replacements and upgrades, in five year increments starting in 2023.

Potable Water Infrastructure Capacity

As depicted on Map 7, *Potable Water System*, Dickinson's primary potable water infrastructure consists of water mains to deliver potable water to households and businesses, ground-level and elevated water storage tanks, water wells and booster pumps to pressurize water and facilitate delivery.

As indicated in Table 5, *Water Storage Facilities*, Dickinson has six water storage tanks with a total storage capacity of approximately five million gallons. The average daily potable water use in Dickinson is 2.28 million gallons per day (approximately 41 percent of total storage capacity, and 54 percent of total contracted capacity). An additional storage tank at the West Pumping Station is scheduled for installation in late 2021.

Four groundwater wells serve as an emergency backup. All four are undergoing rehabilitation through 2023, and upon completion, their water pumping capacity will be measured. The average capacity of the nine booster pumps is 1,100 gallons per minute. There are approximately 8,780 active water connections.

Water Mains

There are approximately 28 miles of water mains that vary in diameter (8" to 24" dia. with larger water mains having increased flow rate capacity) and material (PVC, cast iron, and asbestos concrete). The oldest pipe installation date on record is 1956.

The water mains that are greatest in diameter (16" to 24" dia.) are located on the eastern half of Dickinson connecting residences and businesses to the City's highest-capacity water storage tank south of Dickinson Bayou. A one-quarter mile buffer was applied to the 16" to 24" dia. water mains, as shown on Map 7, *Potable Water System*, to indicate the system's primary expansion area to support the contiguous growth of Dickinson's urbanized area. Water mains between 8" to 16" dia. are located along FM 517 and other primary roadways before branching off into 8" diameter and below water mains that connect to residences and businesses.

Development Policies

The City of Dickinson implements standard minimum pipe sizes for newly constructed buildings to ensure compatibility and consistency with existing potable water infrastructure. Additionally, GCWCID implements an extensive water conservation and drought contingency plan, which was updated in July 2021.

Known Issues

According to GCWCID staff, aged infrastructure results in bad odor and taste in parts of the service area. About 180 dead-end water lines need to continuously be flushed to maintain water quality. Water tanks need additional mixing and agitation equipment to prevent water stagnation. Approximately eight miles of cast iron and six miles of asbestos concrete piping need replacement due to damage resulting from excessive rain events.

The water main along FM 517 West is undersized, resulting in decreased service reliability to the western half of Dickinson. Several water mains of varying widths converge into a 10" dia. water main after passing underneath IH-45, restricting water flow. GCWCID is currently prioritizing capital investments to install a mile of 16" dia. water line, which would significantly improve service reliability to the western half of Dickinson.

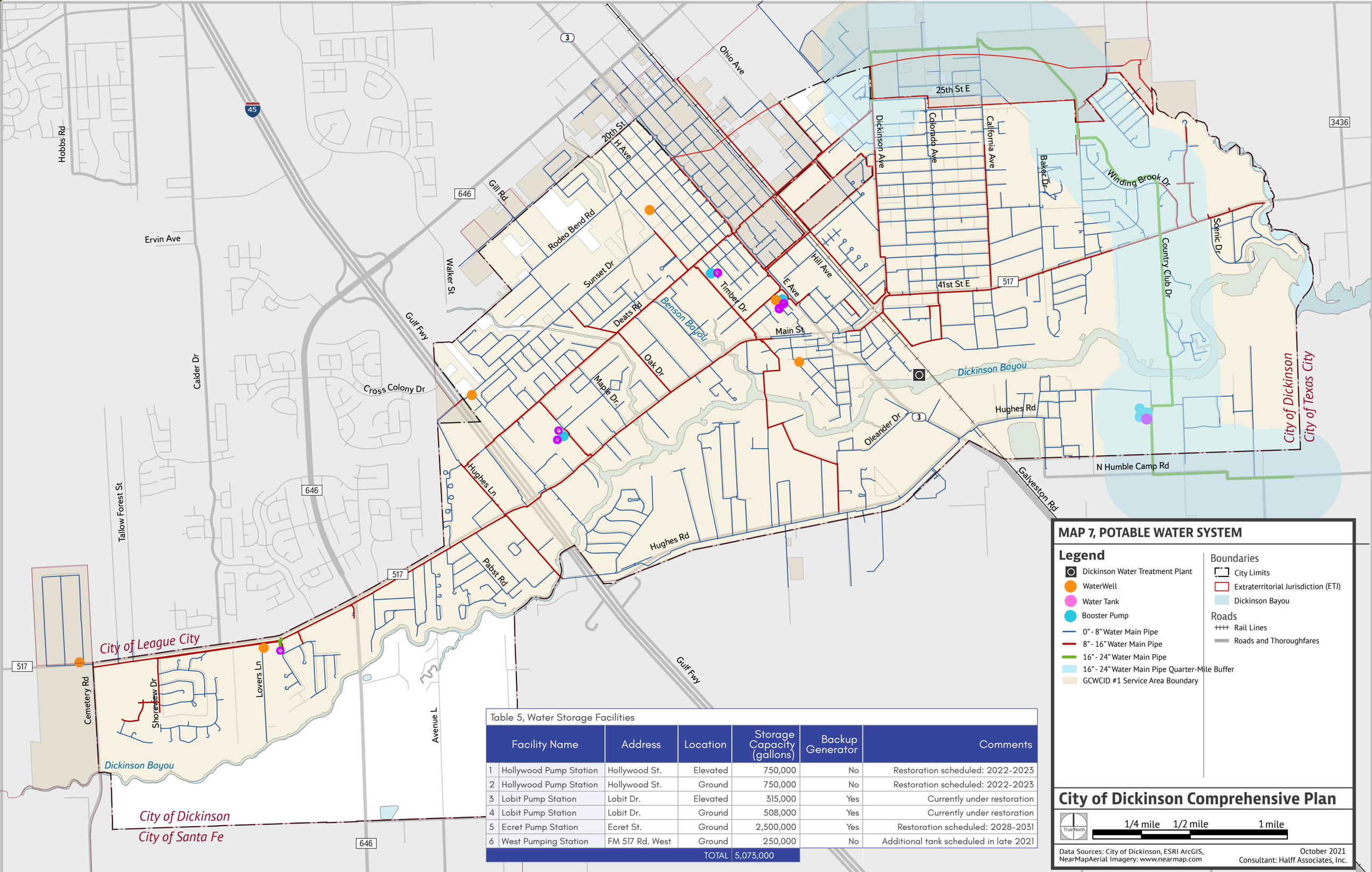

Table 5, Water Storage Facilities

	Facility Name	Address	Location	Storage Capacity (gallons)	Backup Generator	Comments
1	Hollywood Pump Station	Hollywood St.	Elevated	750,000	No	Restoration scheduled: 2022-2023
2	Hollywood Pump Station	Hollywood St.	Ground	750,000	No	Restoration scheduled: 2022-2023
3	Lobit Pump Station	Lobit Dr.	Elevated	315,000	Yes	Currently under restoration
4	Lobit Pump Station	Lobit Dr.	Ground	508,000	Yes	Currently under restoration
5	Ecret Pump Station	Ecret St.	Ground	2,500,000	Yes	Restoration scheduled: 2028-2031
6	West Pumping Station	FM 517 Rd. West	Ground	250,000	No	Additional tank scheduled in late 2021
			TOTAL	5,073,000		

MAP 7, POTABLE WATER SYSTEM

Legend

- Dickinson Water Treatment Plant
- WaterWell
- Water Tank
- Booster Pump
- 0" - 8" Water Main Pipe
- 8" - 16" Water Main Pipe
- 16" - 24" Water Main Pipe
- 16" - 24" Water Main Pipe Quarter-Mile Buffer
- GCWCID #1 Service Area Boundary

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

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October 2021
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Wastewater and Sanitary Sewer System

Wastewater Treatment and Storage

In the City of Dickinson, wastewater treatment and sanitary sewer service is also provided by Galveston County Water Control and Improvement District #1 ("GCWCID").

Service Area

Most of Dickinson is within the GCWCID service area, and the southwestern portion that is not within GCWCID boundaries has its wastewater needs serviced by septic systems. As of 2021, there are no plans to expand GCWCID's service area boundaries for wastewater, except to provide wastewater service to lots adjacent to the furthest extent of it's service area.

Funding

GCWCID is funded through property taxes and utility fees. In late 2021, wastewater service fees are projected to increase by approximately five percent to accommodate higher service costs and infrastructure upgrades. Similar service fee increases are projected for 2022 and 2023. GCWCID anticipates the need for multiple bond elections to make needed infrastructure replacements and upgrades, in five year increments starting in 2023.

Wastewater and Sanitary Sewer Capacity

Dickinson's sanitary sewer and wastewater treatment system consists of a wastewater treatment facility, and equipment such as air relief valves, clean outs, lift stations, manholes, reducers, system valves, force mains, gravity mains and service lines. Map 8, *Wastewater Collection and Treatment System* depicts infrastructure that is critical to this Comprehensive Plan, which are further explained below.

Dickinson's wastewater treatment plant is located at 4900 Nebraska Street, south of Downtown Dickinson, and has a daily wastewater treatment capacity of 4.8 million gallons. The average daily treatment flow is 1.8 million gallons, or 37 percent of total treatment capacity. The surplus capacity in daily wastewater treatment can support additional growth in the City. There are approximately 8,600 active sanitary sewer connections.

At wastewater treatment plants, raw wastewater undergoes preliminary, primary, secondary, and in some cases, additional treatment to yield treated water. GCWCID treats wastewater to tertiary standards. Tertiary-level wastewater treatment includes advanced disinfection control of pathogenic microorganisms and viruses, and the removal of nitrogen and phosphorus from effluent to minimize nutrient enrichment of surface waters which can lead to algae blooms and the depletion of oxygen levels available to aquatic animals and plant life in the Dickinson Bayou and Galveston Bay watershed. The City of Dickinson does not utilize treated wastewater on municipal property. GCWCID sells excess treated wastewater to local businesses for use in their manufacturing and industrial processes to generate additional revenue before it is discharged into Dickinson Bayou.

Dickinson has approximately 33 lift stations located through the City. The oldest known lift station was installed in 1973, with some rebuilt as recently as 2016. Only seven of 33 lift stations have auxiliary power in the event of an electrical outage, and only four lift stations have bypass pumps to handle overflow flooding.

There are at least 120 separate force main segments, and the oldest known installation date is 2001, although it is known that other force mains have aged beyond recommended useful lives. Most force mains are composed of PVC pipe, with a few composed of steel, and standard diameters range from 2" to 24" dia.

Unlike force mains that rely on pressure, gravity mains offer reliable sewage movement at little to no energy costs. There are approximately 110 miles of gravity main lines spread throughout the City and they are primarily composed of concrete, vitrified clay pipe and PVC. The oldest known gravity main installation date is 1990, although it is known that many segments are significantly older. The largest diameter gravity mains (36" to 54" dia.) are located in close proximity to the City's wastewater treatment plant to facilitate wastewater conveyance.

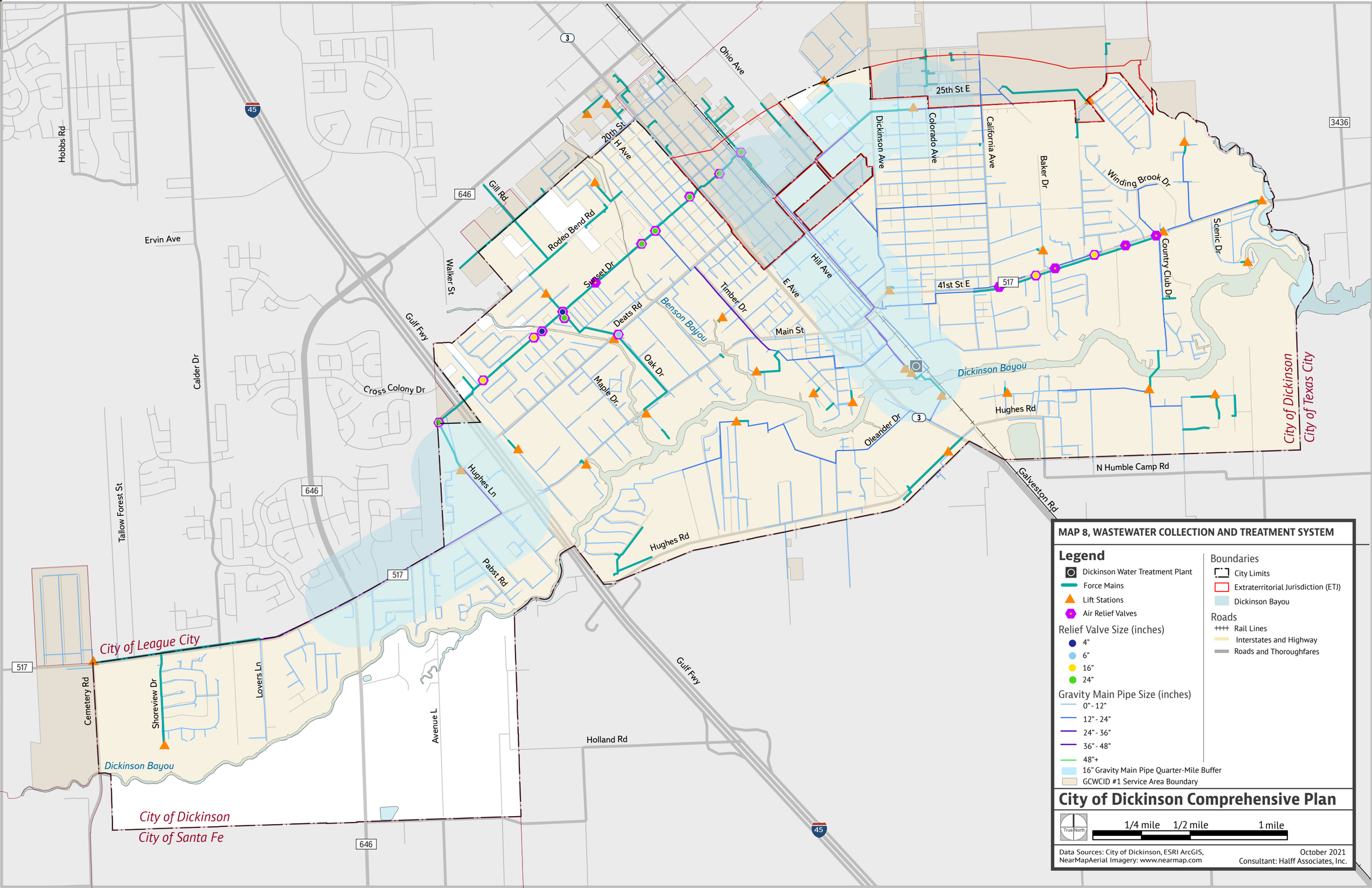
A one-quarter mile buffer was applied to the 36" to 54" dia. gravity mains, as shown on Map 8, *Wastewater Collection and Treatment System*, to indicate the system's primary expansion area to support the contiguous growth of Dickinson's urbanized area.

Development Policies

The City of Dickinson implements standard minimum pipe sizes for newly constructed buildings to ensure compatibility and consistency with existing wastewater and sanitary sewer infrastructure.

Known Issues

A significant amount of sanitary sewer pipe rehabilitation is needed throughout GCWCID to support wastewater treatment without compromising existing standards. GCWCID identified inflow and infiltration (I & I) as a major issue, which occurs when groundwater and stormwater enters the sanitary sewer collection system through faulty joints, connections, manholes and cracks driven by aged infrastructure. Inflow and infiltration forces collection systems to transport more water flow than they are designed to handle, increasing costs for wastewater treatment facilities because harmless stormwater and groundwater mixes with sewage. This reduces the overall capacity of the wastewater treatment plant to treat additional wastewater resulting from new growth and development.



MAP 8, WASTEWATER COLLECTION AND TREATMENT SYSTEM

Legend

- Dickinson Water Treatment Plant
- Force Mains
- Lift Stations
- Air Relief Valves

Relief Valve Size (inches)

- 4"
- 6"
- 16"
- 24"

Gravity Main Pipe Size (inches)

- 0" - 12"
- 12" - 24"
- 24" - 36"
- 36" - 48"
- 48"+
- 16" Gravity Main Pipe Quarter-Mile Buffer
- GCWCID #1 Service Area Boundary

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

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October 2021
Consultant: Halff Associates, Inc.

Stormwater System

Dickinson Bayou and its contributing tributaries (Bordens Gully, Geisler Bayou, Bensons Bayou, and Gum Bayou) are subject to both coastal and riverine flooding. Coastal flooding occurs in areas the lie on the coast of a sea, ocean or other large body of open water and is the result of extreme tidal conditions caused by severe weather. Storm surges, produced when high winds push water onshore, is the leading cause of coastal flooding. In this type of flood, water overwhelms low-lying land. Fluvial, or riverine flooding, occurs when excessive rainfall over an extended period of time causes a river to swell and overbank, or overflow the edges of its channel. Both types of flooding require careful investment in Dickinson's stormwater conveyance capacity.

Service Area

The City's boundaries include a portion of Dickinson Bayou, a major regional watershed.

Dickinson Bayou drains surface water from Alvin, Friendswood, League City, Santa Fe, Dickinson and unincorporated Galveston County as it flows from its upstream end in Brazoria County to its outfall in Galveston Bay.

Various canals and natural ditches collect stormwater runoff and direct waterflow into Dickinson Bayou as indicated in Map 9, *Stormwater Drainage System*.

The Public Works Department is responsible for the administration and operation of the City's drainage system.

According to the City's Stormwater Management Plan, stormwater infrastructure-related responsibilities include mowing approximately 26 acres of right-of-way and drainage easements, and inspection and maintenance of 42 miles of storm sewer lines and open ditches.

Periodic desilting and regrading is required when the ditches become overly silted and stagnant.

The City of Dickinson's drainage operations have jurisdictional overlap with other drainage districts - Galveston County Drainage District #1 and #2.

These drainage districts are partially or fully located within the corporate limits of Dickinson.

Development Policies

The City of Dickinson Drainage Criteria Manual provides instructions for the preparation of drainage plans and establishes regulations for drainage improvements within the City's jurisdiction.

Due to the nature of the watershed hydraulics within the City's boundaries and the prevalent existence of floodplains that exceed the banks of the creeks, the City's policy is to maintain zero net increase in stormwater runoff rates and to ensure no negative impacts attributable to new development and redevelopment.

Stormwater and Drainage Infrastructure Capacity

Dickinson's older neighborhoods are only partially connected to the broader stormwater drainage network and primarily rely on roadside ditches to convey stormwater to Dickinson Bayou.

Stormwater sewers, where present, are primarily constructed of reinforced concrete. Most stormwater pipes range between 18" to 36" in dia. Wider stormwater pipes are installed in high runoff-volume areas along FM 517 and surrounding Dickinson High School.

Stormwater Conveyance and Drainage Projects

A variety of municipal projects to improve floodwater conveyance capacity are planned, underway or have been completed.

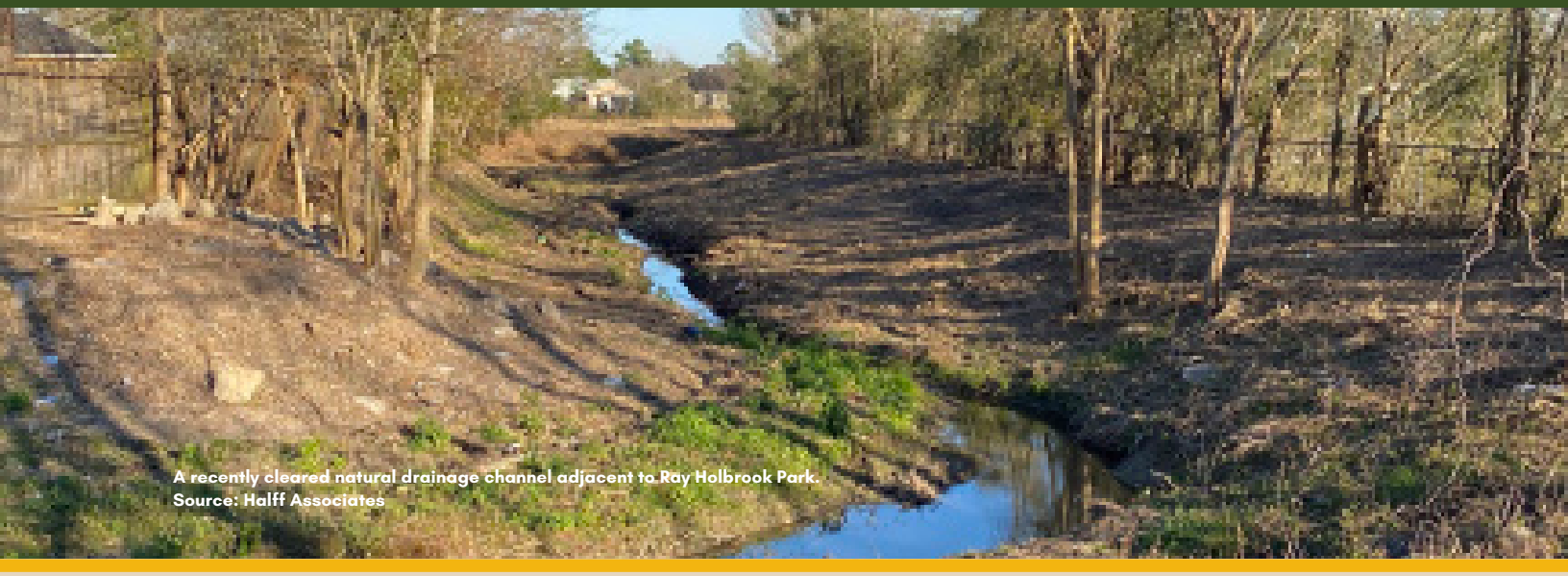
After Hurricane Harvey, Dickinson received federal funding to desilt along Dickinson Bayou and along roadside ditches. Desilting involves removing accumulated dirt that obstructs stormwater conveyance through pipes and channels.

As part of the ongoing roadway improvements throughout Dickinson, each time a roadway is improved, drainage capacity is enhanced by replacing undersized culverts and repairing damaged infrastructure.

For example, storm sewers were installed at Dickinson High School during its construction. Additional regional detention ponds are planned along Benson, West Gum and Magnolia Bayous. Interlocal agreements to coordinate partnership between the City of Dickinson, Galveston County and other agencies is currently underway.

A drainage diversion channel off of Dickinson Bayou east of IH-45 to Hughes Road and downstream will supplement drainage.

Drainage channels and roadside ditches serve as a majority of existing drainage infrastructure in Dickinson
Source: Halff Associates



A recently cleared natural drainage channel adjacent to Ray Holbrook Park.
Source: Halff Associates

Known Issues

- **Jurisdictional Overlap:** Dickinson Bayou's headwaters start in Brazoria County and flow through the jurisdictions of League City, Santa Fe, Dickinson and Texas City before expelling into Galveston Bay. As a result of this jurisdictional overlap, there have been no major consolidated efforts from jurisdictional entities to realign, dredge, widen, or otherwise change the natural channel. The main channel of Dickinson Bayou remains generally unimproved.
- **Provision of Infrastructure Throughout Dickinson:** Dickinson's older neighborhoods are only partially connected to the broader stormwater drainage network and primarily rely on roadside ditches to convey stormwater to Dickinson Bayou. Newer subdivisions such as the Bayou Lakes neighborhoods (on the far west side of the City at Shoreview Drive and FM 517) are served by stormwater sewer infrastructure. There are severe water ponding issues along Hughes Road on the southern edge of Dickinson's corporate limits as there is no local outflow for water. Drainage bypasses in the form of box culverts are planned for several parts of the City.
- **Ownership, Easements and Maintenance Access:** Ownership and jurisdiction remain persistent issues regarding drainage ditch and bayou maintenance. The City will need to acquire the requisite right-of-way to maintain drainage channels, or at a minimum negotiate maintenance access with property owners. Property lines and ownership boundaries are unclear along Dickinson Bayou and its contributing tributaries. Some bayous are unchannelized, and it would be cost prohibitive to implement a program to channelize natural drainage corridors. The establishment of maintenance easements is unclear and records stored at Galveston County were destroyed during historical flooding events. For example, some parcels have an unchannelized drainage corridors running through them, but do not currently assume responsibility for drainage corridor maintenance. This results in accumulated brush and debris that further impairs stormwater conveyance. Illegal dumping blocks vital waterways and clogs drains. Additionally, only a portion of drainage channels constructed by TxDOT along FM 517 are currently maintained by the City, further exacerbating stormwater conveyance capacity.
- **Shoreline Erosion:** Shoreline erosion is another issue in Dickinson. Eroded shorelines impair an owner's use of their land. A variety of shoreline stabilization methods have been implemented to attenuate wave action along waterfront properties to varying degrees of success, including concrete riprap, armored embankments, and bulkheads. Shoreline erosion affects water quality as vegetated embankments that normally filter harmful chemicals in stormwater runoff are absent. Additionally, these embankments serve as vital riparian wetland habitats to various wildlife species, which are at risk of displacement when shoreline erosion occurs. Due to unclear property ownership boundaries and multiple jurisdictional entities with water-related oversight, a City-wide shoreline maintenance program may be an opportunity to further protect Dickinson Bayou and contributing tributaries but warrants further examination.
- **Impaired Conveyance Capacity:** As previously mentioned, all nearby waterbodies could potentially overbank during riverine flooding events. In the absence of ongoing maintenance, and as a result of the natural fluctuation of watercourses, bayou and tributary banks change and shift, altering their stormwater carrying capacity. Benson Bayou's carrying capacity is severely undersized and League City intends to build detention ponds upstream to compensate. Along West Gum Bayou, the City of Dickinson has obtained funding to perform improvements, namely increasing the size of two existing detention ponds in combination with street improvements. Drainage bypasses are under consideration along Hughes Road to assist with drainage capacity in southern Dickinson.

MAP 9, STORMWATER DRAINAGE SYSTEM

Legend

- Channel (Canal/Ditch)
- Dickinson Bayou
- Direction of Water Flow
- Stormwater Infrastructure Projects

Stormwater Pipes (inches)

- 0" - 18"
- 18" - 36"
- 36" - 72"
- 72"+

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
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City of Dickinson Comprehensive Plan

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October 2021
Consultant: Halff Associates, Inc.

Housing and Neighborhoods

Housing Characteristics

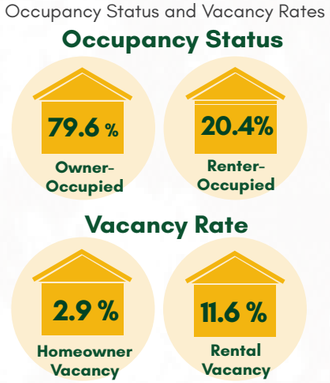
Introduction

This section uses American Community Survey (ACS) data to summarize key housing metrics and trends by comparing two five-year periods: 2010-2014 and 2016-2020.

Occupancy Status and Vacancy Rates

In the past five years, the total number of housing units in Dickinson has increased from 7,272 to 9,027, reflecting a growth of 24 percent in the number of residential units in the city. While the overall number of housing units in Dickinson has increased, the number of occupied units has decreased by one percent between 2014 and 2020. Both homeowner and rental vacancy rates have increased by 1.4 percent and 2.3 percent, respectively, and the rental vacancy rate continues to be significantly higher than the homeowner vacancy rate (Figure 1, *Occupancy Status and Vacancy Rates, 2016-2020*)

Figure 1, Occupancy Status and Vacancy Rates (2016-2020)



Housing Types and Tenure

Approximately 74 percent of residential buildings in Dickinson are single family detached, making single family homes the dominant housing type in the city. Multi-family buildings with 20 or more units constitute only 6.3 percent of the City's housing (Table 7, *Housing Type*). Multi-family buildings with five to 19 units constitute about seven percent of residential buildings, and smaller multi-family buildings, such as duplexes, triplexes, and quadruplexes, comprise less than three percent of the residential buildings in Dickinson. At 10.3 percent of the total housing units in Dickinson, mobile homes are the second-most dominant type of residential housing in the city.

Almost 80 percent of Dickinson's occupied housing units are owner-occupied. This number has increased by 10 percent in the past six years. Conversely, 20.4 percent of the occupied housing units are renter-occupied, and this number has decreased by 10 percent between 2014 and 2020 (Table 8, *Housing Tenure*).

Age and Quality of Housing Stock

According to the U.S. Census, the largest number of homes, about one-quarter of the total housing units in Dickinson, were built between the years 1970 and 1979 (2016-2020 American Community Survey). Since then, Dickinson's housing stock has grown by an average of 15 percent per decade until 2010; after 2010, housing construction slowed to low single digits through 2014 and later as depicted in Table 6, *Age of Housing Stock*. A significant number of homes (20 percent) were built before 1970 making them over 50 years old. Almost all housing units in Dickinson have natural gas and electricity connections for heating. However, one percent of the housing units lack kitchen facilities, and less than one percent lack plumbing facilities.

Table 6, Age of Housing Stock

Year	2020 (%)
Built 2014 or later	3.8
Built 2010 to 2013	4.5
Built 2000 to 2009	14.8
Built 1990 to 1999	15.0
Built 1980 to 1989	16.5
Built 1970 to 1979	24.6
Built 1960 to 1969	10.3
Built 1950 to 1959	6.1
Built 1940 to 1949	1.5
Built 1939 or earlier	2.9

Table 7, Housing Type

Housing Units	2020 (%)	2014 (%)
1-Unit, Detached	73.5	71.3
1-Unit, Attached	0.4	1.3
2 Units	0.8	0.2
3 or 4 Units	2	3.2
5 to 9 Units	2.8	4.3
10 to 19 Units	3.9	3.7
20 or More Units	6.3	4.0
Mobile Home	10.3	12

Table 8, Housing Tenure

	2020 (%)	2014 (%)
Owner-Occupied	79.6	69.7
Renter Occupied	20.4	30.3

Housing Value

As depicted in Figure 2, *Median Home Value*, the median value of owner-occupied homes in Dickinson is $169,700 according to ACS 2016-2020 data, which is less than the median value of owner-occupied homes in Galveston County and Harris County. Galveston County Appraisal District (GCAD) data indicates the average residential home value is $163,619. According to ACS data, over 24 percent of the owner-occupied housing in Dickinson, which is primarily single family detached housing, is valued at less than $99,999. At 38 percent, the largest concentration of housing value is between $100,000 and $199,999, and approximately 25 percent is valued between $200,999 and $299,999. The remaining 14 percent of owner-occupied homes are valued above $300,000. In 2022, as exemplified in the Bayou Maison subdivision, newly constructed single-family homes on one-quarter acre parcels are selling for in excess of $300,000 (Zillow). Census Bureau ACS data metrics lag behind market conditions and may not reflect current home sales prices.

In the past six years, the proportionate number of homes valued between $50,000 and $149,000 have decreased by 28 percent from 48 percent in 2014 to 20 percent in 2020, while the proportionate number of homes valued over $150,000 have increased by 22 percent from 39.3 percent in 2014 to 61.1 percent in 2020. The median value of owner-occupied homes has increased by $39,100 over the same time period from $130,600 in 2014 to $169,700 in 2020. Census Bureau ACS data metrics lag behind market conditions and may not reflect current home sales prices.

Figure 2, Median Home Value (ACS 2016-2020)

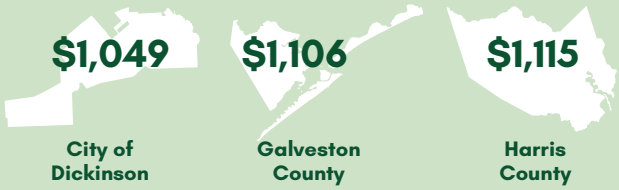
Median Home Value

Gross Rent

As depicted in Figure 3, *Median Gross Monthly Rent*, the median gross rent for renter-occupied housing in Dickinson is $1,049, which is slightly lower than median gross rent in Galveston County ($1,106) and Harris County ($1,115), indicating that the renter housing in Dickinson is more affordable than renter housing in the surrounding areas.

Figure 3, Median Gross Monthly Rent (ACS 2016-2020)

Median Gross Monthly Rent



Source: American Community Survey (2016-2020)

Typical single-family detached residence in the Bayou Park subdivision.
Source: Halff Associates

Interior view of Bayou Village Apartments.
Source: Halff Associates

Typical single-family detached residence on Yacht Club Dr.
Source: Halff Associates

Affordability

Occupancy and Vacancy Rates

The 2016-2020 American Community Survey indicates that the median value of a home in 2020 in Dickinson is approximately $169,700, representing a 26 percent increase above the median value in 2010 ($126,100). Over the last decade, median household income as reported by the U.S. Census Bureau increased 22 percent from $54,742 in 2010 to $70,468 in 2020, leaving a gap as housing costs outpace wage growth.

As indicated in Map 10, *Median Household Income By Block Group*, residents with the highest incomes live in the northeast and west portions of the City. Block groups with residents that have the lowest incomes are predominately located within the central portion of the City. With respect to median home value, which can be referenced in Map 11, *Median Home Value By Block Group*, on page 1.32, the highest values of homes are located in the northeast and northwest quadrants of the City which is consistent with the highest earning residents. The next highest tier of home values are located in the southwest portion of the City which also reflects the location of a comparable tier of median household income.

Housing programs have long measured housing affordability in terms of percentage of income. Federal housing programs and lenders have historically set 30 percent of annual income as the amount a household should on housing costs. In Dickinson, about one-quarter (23.5 percent) of all households with a mortgage spend over 30 percent of their annual income on housing costs, which include mortgage payments, flood insurance payments, and property tax. In fact, 21.7 percent are paying greater than 35 percent of their annual income toward housing costs (Table 9, *Monthly Housing Costs as a Percentage of Household Income for Homeowner Households with a Mortgage*). The number of households with a mortgage spending between 30 to 34.9 percent of their annual income on housing costs has improved by 3.5 percent from 5.3 in 2014 to 1.8 percent in 2020.

The percentage of homeowner households without a mortgage spending more than 35 percent of their annual income on housing costs is just slightly lower than homeowner households with a mortgage, at 20 percent. Overall, over one-fifth (21.6 percent) of homeowner households without a mortgage are spending over 30 percent of their annual income on housing costs (Table 10, *Monthly Housing Costs as a Percentage of Household Income for Homeowner Households without a Mortgage*). This number has increased sharply from 5.1 percent in 2014 to 21.6 percent in 2020 due to increased costs of flood and hazard insurance after Hurricane Harvey-related flooding in 2017.

Approximately 60 percent of the renters in Dickinson are spending 30 percent or more of their annual income toward housing, with 45 percent of the renters paying more than 35 percent of their income on rent. Defined by the Department of Housing and Urban Development (HUD) as "Cost Burdened," these households are paying disproportionately more in housing costs and, therefore, end up spending less on critical needs, such as healthcare, or choose to sacrifice on education and other quality of life expenditures. In Dickinson, the number of cost burdened renter households has increased from 51.1 percent in 2014 to 60.2 percent in 2020 (Table 11, *Monthly Housing Costs as a Percentage of Household Income for Renter Households*).

The affordability of local housing is a key factor regarding a community's economic development potential and ability to attract and retain a quality workforce. As more new and existing homes come to market at higher sale prices, maintaining affordability for a large proportion of the local population, and especially for first-time home buyers, is an ongoing challenge. In response to area growth and housing demand, it is important to bring more "starter,"

Table 9, Monthly Housing Costs as a Percentage of Household Income for Homeowner Households with a Mortgage

Percentage of Income (%)	Percent Homeowner Households 2020	Percent Homeowner Households 2014
Less than 20.0 %	47.3	47.9
20.0 to 24.9 %	14.3	14.6
25.0 to 29.9 %	14.8	11.1
30.0 to 34.9 %	1.8	5.3
35.0 % or more	21.7	21.1

Table 10, Monthly Housing Costs as a Percentage of Household Income for Homeowner Households without a Mortgage

Percentage of Income (%)	Percent Homeowner Households 2019	Percent Homeowner Households 2014
Less than 10.0 %	42.5	55
10.0 to 14.9 %	18.9	15.1
15.0 to 19.9 %	6.4	10.5
20.0 to 24.9 %	4.4	9
25.0 to 29.9 %	6.2	5.3
30.0 to 34.9 %	6.4	0.8
35.0 % or more	15.2	4.3

Table 11, Monthly Housing Costs as a Percentage of Household Income for Renter Households

Percentage of Income (%)	Percent Renter Households 2019	Percent Renter Households 2014
Less than 15.0 %	12	11.1
15.0 to 19.9 %	9.8	11.5
20.0 to 24.9 %	12.1	16.1
25.0 to 29.9 %	5.9	10.2
30.0 to 34.9 %	15.3	8.6
35.0 % or more	44.9	42.5

MAP 10, MEDIAN HOUSEHOLD INCOME BY BLOCK GROUP

Legend

- Less than $18,948
- $18,949 - $55,250
- $55,251 - $74,167
- $74,168 - $100,824
- $100,825 - $124,898

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

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intermediate, and custom homes – as well as multi-family projects – to the market that aim for price points and rents that balance affordability with value and quality. Local governments can promote housing affordability by ensuring an adequate supply of land zoned for residential development which supports diverse housing types, in locations that can be supported with the necessary utility infrastructure and public services.

Affordability Gap

Housing cost burden is a distinctly different measure than the affordability indexes that are based on typical housing cost and the median income. A housing affordability index and related affordability indexes measure affordability based on the ratio of median income to median housing cost. The indexes reflect the affordability of the average unit for the average household consumer. Even though the average unit might be affordable to the average household, this does not mean that individual households might not face significant problems with housing affordability.

The housing cost burden measure provides the actual "affordability outcome" of the housing choices made by individual households. These choices are constrained by each household's income and preferences, as well as by the housing available. The housing cost burden measure reflects preferences, budgets, and housing units that are available to each household.

According to the 2016-2020 ACS, Dickinson's median household income in 2020 was $70,468. This is above the Area Median Income (AMI) for the Houston Metropolitan Area, at $63,375, according to the City of Houston Housing and Community Development Department. For housing to be considered affordable to a family earning the median income in Dickinson, housing costs should not exceed $1,762 in a month regardless of the type or terms of the mortgage, as referenced in Table 12, *Median Income and Affordable Housing Payments*.

Table 12, Median Income and Affordable Housing Payments

Income Category	Median Household Income	Affordable Monthly Housing Payments
Extremely Low Income (30% Median Income)	$21,140	$529
Very Low Income (50% Median Income)	$35,234	$881
Low Income (80% Median Income)	$56,374	$1,409
Median Income (100% Median Income)	$70,468	$1,762
High Income (120% Median Income)	$84,562	$2,114

What is the difference between a Neighborhood and a Subdivision?

Is a neighborhood different from a subdivision, or do these terms describe the same thing?

The American Planning Association (APA) defines "neighborhood" in a variety of ways, including "a sub area of the city in which the residents share a common identity focused around a school, park, community business center, or other feature;" and "an area of a community with characteristics that distinguish it from other community areas and that may include schools, or social clubs, or boundaries defined by physical barriers, such as major highways and railroads, or natural features, such as rivers." The APA also defines "subdivision" as "the process of laying out a parcel of raw land into lots, blocks, streets, and public areas. In most states, a subdivision is defined as the division of a tract of land into five or more lots."

The latter definition suggests an action – to subdivide, that results in an assemblage of smaller units; compared to the former definitions of neighborhood which infer a *place* that is composed of key characteristics.

Do all neighborhoods begin as subdivisions before they are endowed with some degree of social meaning and values; suggesting an evolutionary process over time?

Hence the description that neighborhoods are perceived as being older, compared to subdivisions which are new.

Or is the distinction between terms driven more by density, whereby neighborhoods are urban, and subdivisions are suburban?

Is there a difference in design, whereby neighborhoods are interconnected to the surrounding area through a grid; compared to subdivisions which tend to end in cul-desacs?

Understanding the difference between a subdivision and neighborhood is critical to creating communities with a social fabric that weave a common sense of place and mutual belonging.

MAP 11, MEDIAN HOME VALUE BY BLOCK GROUP

Legend

- Less than $95,000
- $95,001 - $133,499
- $133,500 - $188,499
- $188,500 - $240,599
- More than $240,600

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
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Housing affordability is, of course, a relative term based upon the annual income of the household.

To better determine affordability, as well as general need, HUD has categorized housing cost by income.

These categories range from High Income (greater than 120 percent of median income) to Extremely Low Income (less than 30 percent of median income).

An online tool known as the "Affordability Calculator" (available on www.zillow.com) was used to estimate the maximum value of a home that is affordable to individuals at the top of each HUD income classification, including at the median household income level.

As detailed in Table 13, *Home Loan Thresholds in Dickinson (2020)* are the calculation results for Dickinson based on the local median income. The results show that an individual or family in Dickinson earning the median household income for 2020 ($70,468) could afford to purchase a house as much as $213,762 depending on the type of loan involved.

These calculations assume no other significant consumer debt, which would impact the purchasing power of a potential home buyer depending on the amount of credit card and other debt being carried.

The table also illustrates that persons who qualify for a conventional loan typically can buy "more house" in terms of dollar value, but they must also cover more of the closing costs themselves, which can be significant depending on the final sale price and loan amount.

The Affordability Calculator results also indicate that even those individuals and families earning 80 percent of median income in Dickinson ($56,374) could afford to purchase the median value home ($168,886) using any of the common loan types.

This is another indicator of the housing affordability advantage Dickinson has to offer.

As noted elsewhere, the challenge in coming years will be whether the community can keep income levels growing in line with the increases in housing costs that are already occurring and will likely continue over time.

Table 13, *Home Loan Thresholds in Dickinson (2020)*, provides a summary the amount of discretionary income that could be allocated toward monthly housing expenses, for the median value of owner-occupied units in Dickinson, factoring in costs associated with a variety of fixed-rate, 30-year home loan structures.

The table indicates that the median household income in Dickinson in 2020 could afford to purchase a home value above the median value of a typical home within the City of Dickinson.

There is a subset of owners and renters within Dickinson that currently live in housing that costs more than 30 percent of their monthly income. As previously summarized, one-quarter of owners and over 60 percent of renters are cost burdened.

This analysis indicates that the City needs a wider range of housing options to support these cost burdened residents. The higher number of cost-burdened renters suggests that the most emphasis should be placed on encouraging public and private developers to vary the type and size of housing units in new housing developments and infill opportunities to create affordable housing for renters.

Anecdotal conversations with local realtors in May 2022 indicated the following housing trends in Dickinson:

- Low home inventory exacerbated by the COVID-19 pandemic has driven up the cost of housing, often significantly above asking price.
- Homes constructed in the last two decades usually sold above $200,000, and newly constructed homes can reach sale prices of $250,000-$300,000.
- An influx of buyers come to Dickinson from other locations in the broader Houston area.
- Buyers indicate a preference for single-family residential homes.
- Families tend to move during the summer months when children are not in school.
- Homes are typically sold within one week of being listed.
- Buyers are using both Federal Housing Administration (FHA) and conventional home loans.

In 2022, as exemplified in the Bayou Maison subdivision, newly constructed single-family homes on one-quarter acre parcels are selling for in excess of $300,000 (Zillow).

Table 13, Home Loan Thresholds in Dickinson (2020)

Income Category	Median Household Income	Affordable Monthly House Payments (30%)	Maximum Sales Price	Loan Amount	Down Payment (15% of Home Sale Price)
Extremely Low Income (30% of median income)	$21,140	$529	$56,329	$47,880	$8,449
Very Low Income (50% of median income)	$35,234	$881	$101,574	$86,338	$15,236
Low Income (80% of median income)	$56,374	$1,409	$168,886	$143,553	$25,333
Median Income (100% median income)	$70,468	$1,762	$213,762	$181,698	$32,064
High Income (120% of median income)	$84,562	$2,114	$258,639	$219,843	$38,796

New residential construction in the Bayou Maison subdivision
Source: Halff Associates

Mobility

Thoroughfare Network

Historically, street classification systems have been rigid and uncompromising, providing little to no flexibility in their application. Most cities use a traditional functional classification system to group roadways according to the type of service they are intended to provide.

Dickinson's roadway network is composed of five classifications of thoroughfares:

Interstate

High speed, limited access thoroughfares with grade separated intersections. Bi-directional travel lanes usually separated by a physical barrier with limited ingress/egress points to on- and off-ramps.

Principal Arterial

Highest traffic volume corridors serving the longest trip distance demands. Provides connectivity between surrounding cities and major activity centers.

Major Collector

Serves both land access and traffic circulation in higher density residential and commercial/ industrial areas; operating characteristics include higher speeds and more signalized intersections distributing traffic between local roads and arterials.

Minor Arterial/Collector

Serves both land access and traffic circulation in lower density residential and commercial/ industrial areas; operating characteristics include lower speeds and fewer signalized intersections distributing trips between local roads and arterials.

Local Roadways

Provides direct access to adjacent land and provides service connections to travel over short distances.

State Maintained Roadways

Local roadways provide access to these major roadways, facilitating movement across the city and to various regional destinations. As depicted in Map 12, *Roadway Functional Classification*, Dickinson is primarily served by major roadways such as FM 517 and SH 3. Below is a description of all major roadways within and surrounding the City of Dickinson:

- **Interstate Highway 45** ("IH-45") passes through Dickinson for 1.06 miles, and is the major artery from Houston to Galveston. Northbound or southbound motorists on IH-45 can access Dickinson at Exit 19. IH-45 is also a major hurricane evacuation route.
- **State Highway 3** ("SH 3"), which is another major north-south thoroughfare between League City to the north and Texas City to the south.
- **Farm-to-Market Road 517** ("FM 517") is the only road in Dickinson that runs the entire length of the City from east to west.
- **Farm-to-Market Road 646** ("FM 646") is located on the west side of the City and runs from north to south between League City to the north and Santa Fe to the south. The only portion of this road within the City is south of FM 517.
- **Farm-to-Market Road 1226** ("FM 1266") is located on the east side of the City, less than one mile from SH 3 and runs north to League City. FM 1266 intersects with FM 517 and motorists must then travel either east or west along FM 517.

Upcoming Projects

Based on TxDOT's Statewide Planning Map, Map 12, *Roadway Functional Classification* summarizes plans to modify primary thoroughfares. The numbers on the map correspond to Table 14, *Future Thoroughfare Improvements* below, which lists the location, description and schedule of upcoming TxDOT roadway improvements. Both IH-45 projects widen the highway leading to Dickinson. The improvements to FM 517 will widen the roadway and improve the intersection leading up to IH-45. The final project at the intersection of SH 3 and Main Street will improve the intersection safety and eliminate hazards in the roadway.

Table 14, Future Thoroughfare Improvements

Label	Roadway	From	To	Segment Length (miles)	Future Road Improvements Description	Scheduled Project Date	
						Start	End
1	IH-45	0.452 miles south of FM 518	North of FM 517	3.39	Widen road - add lanes	Underway	2022
2	IH-45	North of FM 517	South of FM 1764	5.07	Widen road - add lanes	Underway	2023
3	FM 517	Brazoria County Line	FM 646	7.20	Widen road - add lanes	<2030	TBD
4	FM 517	FM 646	IH-45	1.00	Highway improvement	<2030	TBD
5	SH 3	0.1 miles west of FM 517	0.1 miles east of FM 517	0.20	Hazard elimination & safety	<2030	TBD

MAP 12, ROADWAY FUNCTIONAL CLASSIFICATION

Legend

- Interstates
- Principal Arterial Roads
- Major Collector Roads
- Minor Collector Roads
- Local Roads

Boundaries
- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads
- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Transit Network

Gulf Coast Transit District (GCTD)

Gulf Coast Transit District (GCTD) provides affordable fixed bus route services, ADA paratransit, and shared on-demand services throughout Galveston and Brazoria Counties. GCTD is under the leadership of an Executive Director who reports to the fifteen-member GCTD Board of Directors, the membership of which consists of commissioners, city managers, rural representatives, and mayors from the surrounding region.

GCTD has an annual operating budget of $5.5 million and operates 67 vehicles, at over 1,100 stops servicing 30 routes.

Service Area

GCTD operates fixed-route service in the cities of Texas City, La Marque, Dickinson, Bacliff, San Leon, Lake Jackson, Angleton, Freeport and Clute. Riders can transfer between routes in Dickinson, Texas City and La Marque.

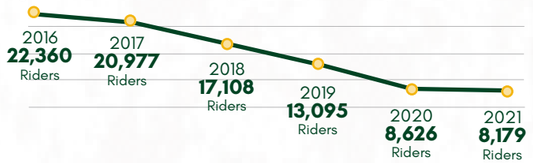
GCTD will expand service by adding more transit stops in Dickinson and League City, as well as adding additional connections across Galveston County and Harris County. Coordination with METRO Houston is ongoing to operate service between Galveston and Houston.

As depicted in Map 13, *Transit Network*, buffers were drawn at the 1/2-mile and 1/4-mile distance from each bus stop, representing the typical distance the average resident would comfortably walk or bike to a bus stop. The existing transit network serves approximately 60 percent of all residences within a one-quarter mile walkshed of a bus stop, or 84 percent of residences at the one-half mile walkshed distance. This means that between 60 and 84 percent of Dickinson's residential areas are within walking distance of a bus stop. Outlying service areas include Dickinson's southwestern and southeastern fringes.

GCTD offers a range of transportation services in Galveston and Brazoria counties including:

- ADA paratransit through an application process, within 3/4-mile radius of the fixed-route bus stop in Galveston and Brazoria Counties, scheduled up to 24 hours in advance upon availability.
- Shared on-demand service that provides threshold-to-threshold transportation in Galveston and Brazoria counties for areas outside of the fixed-route services, scheduled up to seven days in advance upon availability.

Figure 2, GCTD Route 105 (Dickinson) Ridership



GCTD Routes and Schedules in Dickinson

Dickinson residents are served by three hourly local routes with over 124 stops located throughout the City:

- **Route 105 Dickinson**
- **Route 106 Texas City Express**
- **Route 107 Bacliff/San Leon**

All local bus routes operate on one-hour headways, meaning riders can expect one bus per bus stop per hour. Park and Ride service is also provided from the League City Park and Ride (Victory Lakes) to stops in Texas City and University of Texas Medical Branch (UTMB) in Galveston.

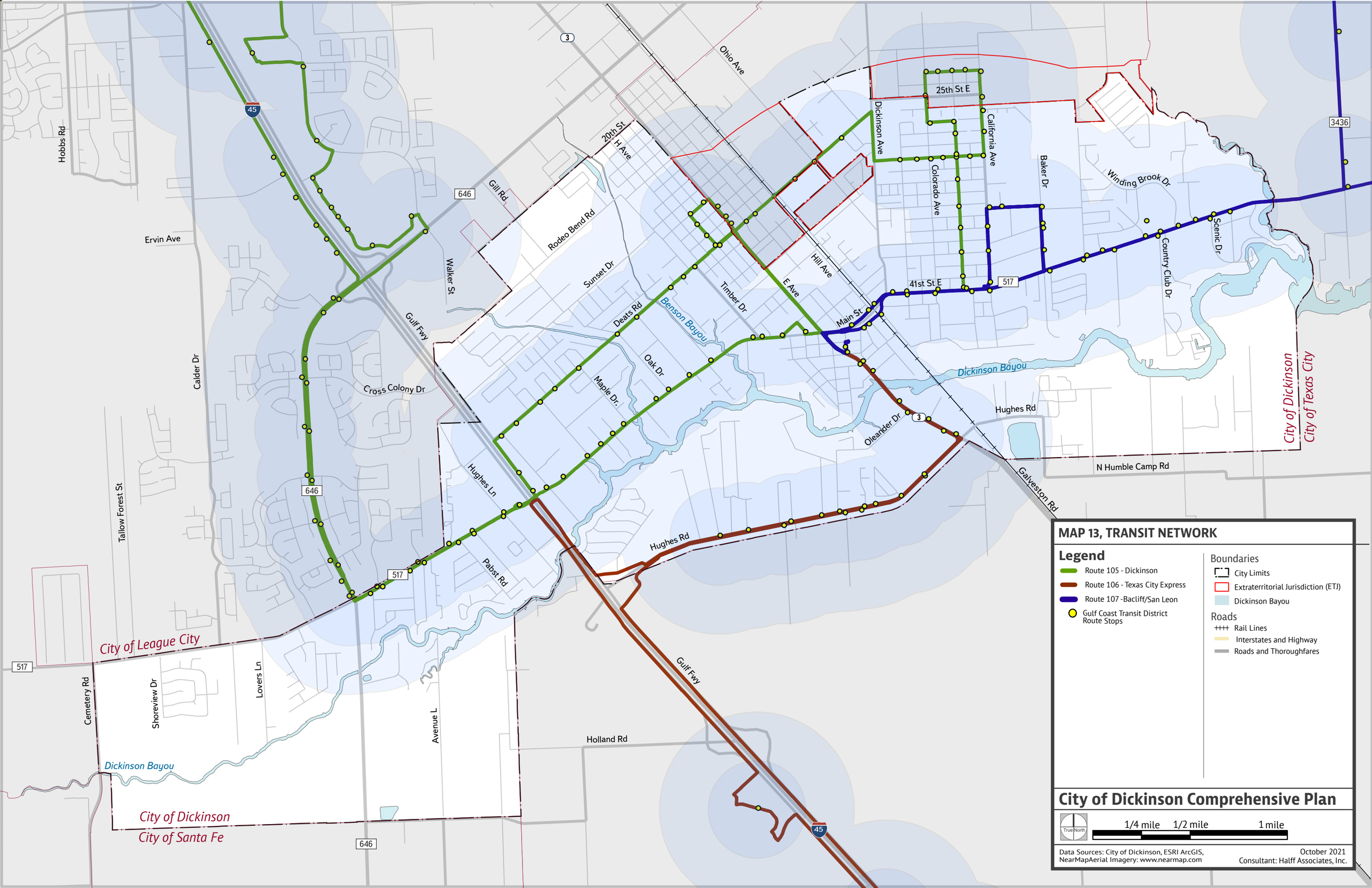
Route 105, the primary GCTD route servicing Dickinson, begins at Dickinson Public Library and connects riders to local retail destinations such as H-E-B, Walmart, Target and Kroger, before returning to Dickinson Public Library. As depicted in Figure 2, *GCTD Route 105 (Dickinson) Ridership*, annual ridership on fixed-route service has decreased primarily due to COVID-19 related service disruptions. Daily ridership in Dickinson varies between 10-60 riders depending on weather and time of year. Of the two Galveston County Parks in Dickinson, only Paul Hopkins Park in central Dickinson is accessible via GCTD. South and east Dickinson is serviced by different GCTD routes (106 and 107, respectively) than the main portion of Dickinson, potentially requiring passengers to transfer buses to continue their trip, which lengthens their trip if bus transfers do not align.

The GCTD stop at Dickinson Public Library may be relocated due to parking lot congestion and ease of rider access. Poor roadway conditions affect rider comfort, particularly on California Street, Colorado Street and Texas Street in east Dickinson. As potholes are repaired and streets are resurfaced, rider comfort is expected to improve.

Shelter Conditions and Bus Stop Locations

Many of the stops located within Dickinson do not have adequate infrastructure in place such as signage, shelters, and sidewalks leading up to each stop. Providing adequate infrastructure along high activity stops will help enhance ridership quality and experience.

Passenger boards GCTD at Dickinson Public Library
Source: The Goodman Corporation



MAP 13, TRANSIT NETWORK

Legend

- Route 105 - Dickinson
- Route 106 - Texas City Express
- Route 107 -Bacliff/San Leon
- Gulf Coast Transit District Route Stops

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

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Vehicle Crashes and Pedestrian Collisions

Roadway design heavily affects vehicle and pedestrian safety. Crash data was collected from the TxDOT Crash Records Information System (CRIS) database to determine concentrations of vehicle crashes and pedestrian collisions.

Crash Analysis

Between 2016 and 2021, 1,949 vehicle crashes occurred on Dickinson roadways, after excluding collisions on the IH-45 overpass. The following observations were made regarding crashes along roadways within the City:

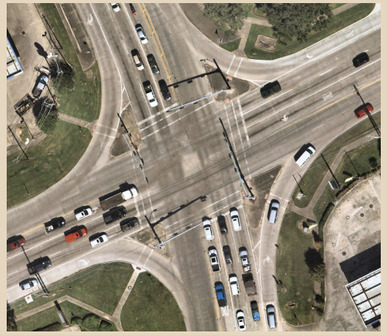
- A majority of crashes (1,200 or 63 percent) occurred on Farm-to-Market roads FM 517 and FM 1266/ Dickinson Ave, and SH 3, which serve as Dickinson's primary north-south and east-west corridors. The speed limits on these roads vary between 30-60 miles per hour.
- Injuries occurred in approximately 506 crashes (26 percent), and 8 crashes were fatal (less than one percent).
- Approximately 27 percent of the crashes occur during the evening peak period.
- Approximately 63 percent of crashes were driveway access or intersection/intersection related crashes, and 35 percent of crashes are rear-end collisions followed by left turn collisions (19 percent) and crashes only involving one motor vehicle (16 percent).

Crash Density and Severity

Crash densities are a useful assessment of road network safety that represents highly concentrated locations of crashes relative to other areas in Dickinson. The color gradients on Map 14, *Collision Heat Map (2016-2021)* represent the density of all vehicle crashes along the localized street network, with green being the least concentrated number of collisions and red being the most concentrated.

Concentrations appear along FM 517 at intersections with FM 646, IH-45, SH 3, and Dickinson Avenue, and other pockets of crash densities can be found at Deats Road and SH 3, and along Dickinson Avenue at 25th Street. Contributing factors include multiple converging roadways or street alignments merging at odd angles, driveway access management, and visibility.

Major Accident Concentrations



1. FM 517 at FM 646
Source: Nearmap

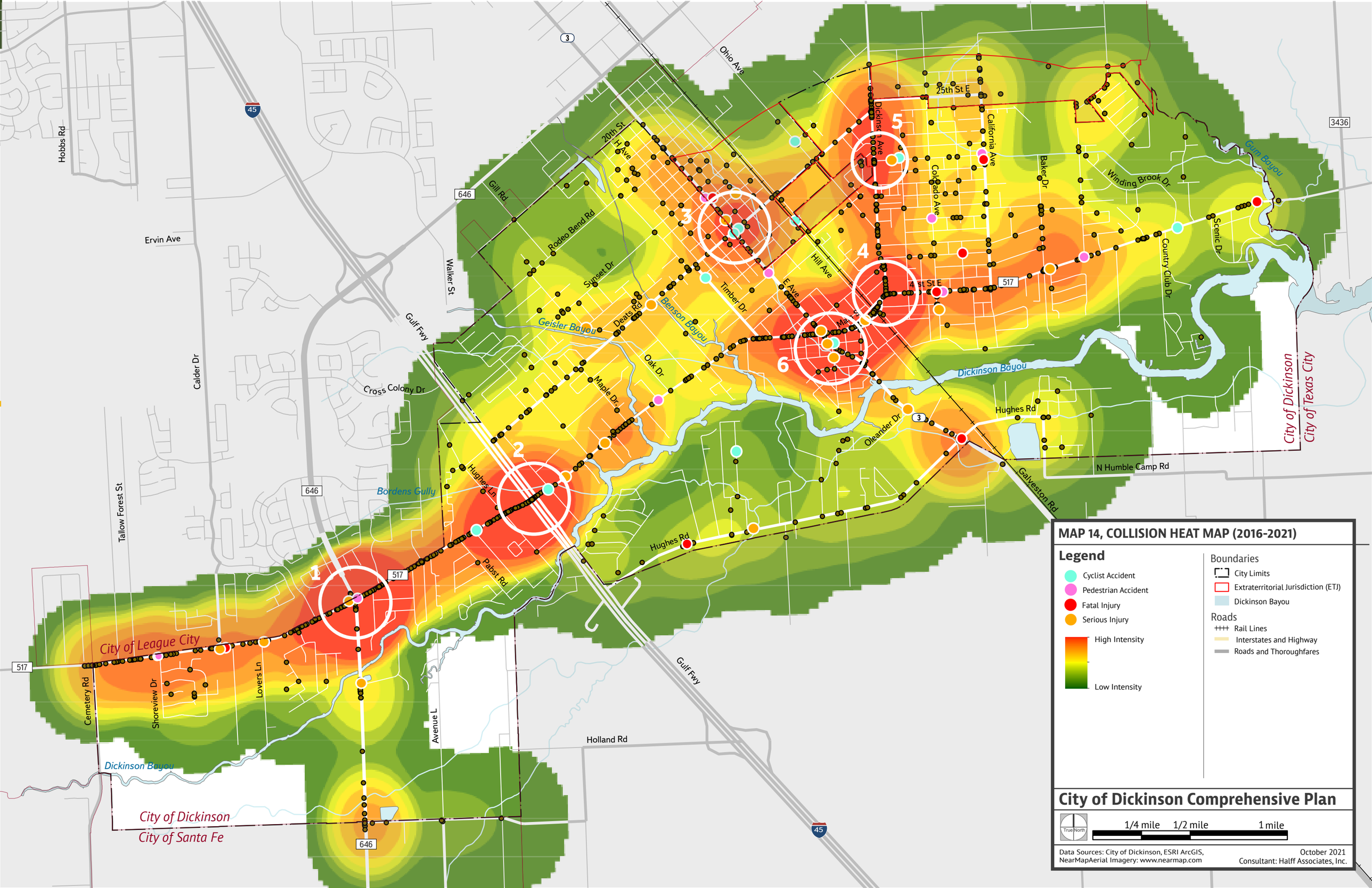
2. FM 517 at IH-45
Source: Nearmap

3. SH 3 at Deats Rd.
Source: Nearmap

4. FM 517 at Dickinson Ave.
Source: Nearmap

5. Dickinson Ave. at 25th St.
Source: Nearmap

6. SH 3 at FM 517
Source: Nearmap



MAP 14, COLLISION HEAT MAP (2016-2021)

Legend

- Cyclist Accident
- Pedestrian Accident
- Fatal Injury
- Serious Injury
- High Intensity
- Low Intensity

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
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City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

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Thoroughfare Level of Service (LOS)

Traffic volume is an important basis for determining what improvements, if any, are required on a highway or street facility. Average daily traffic volumes are used to calculate the service flow rate, or level of service (LOS), a qualitative measure of traffic conditions. Knowledge of a roadway's LOS is essential to properly fit a highway or street to meet traffic demands.

According to the TxDOT Roadway Design Manual, a facility should be designed to provide sufficient capacity to accommodate traffic volumes.

A variety of factors affect LOS, including lane width, rate of speed and types of vehicles traveling on the route.

When factors arise that inhibit the flow of traffic, structural interventions, such as lane widening or signal optimization, may be necessary.

As described in Table 15, *Level of Service (LOS) Criteria* below, roadways are designated from LOS A (free flowing) to LOS F (congested, forced flow condition) based on traffic volume and flow.

When traffic is free-flowing (LOS A), drivers can expect very low vehicle delays. At LOS F, drivers can expect unacceptable delays, unstable flow, heavy congestion and stop-and-go conditions.

Generally, LOS C/D are acceptable levels of service, whereas LOS E/F are considered "failing" and roadway volumes are typically higher than the actual roadway capacity.

Level of Service Analysis

As depicted in Map 15, *Thoroughfare Level of Service*, using data derived from the 2020 H-GAC Regional Travel Demand Model existing congestion is primarily located along FM 517 between SH 3 and Nichols Street and is ranked an LOS of F. This section of FM 517 bisects from four lanes into two two-lane roads, Parke Street to the north and Main Street to the south, before merging again beyond the railroad tracks.

As FM 517 is one of the primary east-west connectors to IH-45 that additionally functions as a commercial corridor, FM 517 is expected to carry the highest vehicle volumes.

A lack of connectivity and continuous alternative travel routes renders Dickinson's roadway network vulnerable to disruptions and congestion.

From an emergency management perspective, bottlenecks are noteworthy to monitor during severe weather events. Both IH-45 and Highway 146 (not shown on map; further east on FM 517 outside of Dickinson) serve as TxDOT designated evacuation routes. Congestion on leading roadways can result in evacuee panic and gridlock during an evacuation.

Annual Average Daily Traffic (AADT)

TxDOT annually collects short-term traffic volume counts. The total volume of vehicle traffic of a highway or road, divided by 365 days, provides an annual measure of how busy a roadway is. Using TxDOT data points, Map 15, *Thoroughfare Level of Service* and Table 16, *TxDOT AADT Counts* on the facing page illustrate twelve distinct traffic count locations in Dickinson and on surrounding roads. Between 2015 and 2019, annual traffic counts increased approximately 14 percent, indicating higher traffic volume along primary roads in Dickinson, and characterizing traffic congestion at critical intersections.

All collection sites experienced an increase in traffic counts, ranging as low as three percent at the intersection of FM 517 at IH-45, to as high as 23 percent at FM 517 after Dickinson Avenue, indicating higher traffic flow traveling east. In conjunction with Map 14, *Collision Heat Map (2016-2021)* on the previous page, this data can be used to identify key intersections needing pedestrian and vehicular traffic improvements.

Table 15, Level of Service (LOS) Criteria

Level of Service	Description	Volume to Capacity Ratio
A	Free-flow conditions with unimpeded maneuverability. Stopped delay at signalized intersection is minimal.	0.00 to 0.60
B	Reasonably unimpeded operations with slightly restricted maneuverability. Stopped delays are not bothersome.	0.61 - 0.70
C	Stable operations with somewhat more restrictions in making mid-block lane changes than LOS B. Motorists will experience appreciable tension while driving.	0.71 - 0.80
D	Approaching unstable operations where small increases in volume produce substantial increases in delay and decreases in speed.	0.81 - 0.90
E	Operations with significant intersection approach delays and low average speeds.	0.91 - 1.00
F	Operations with extremely low speeds caused by intersection congestion, high delay, and adverse signal progression.	Greater than 1.00

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209 (Washington, D.C., 1994).

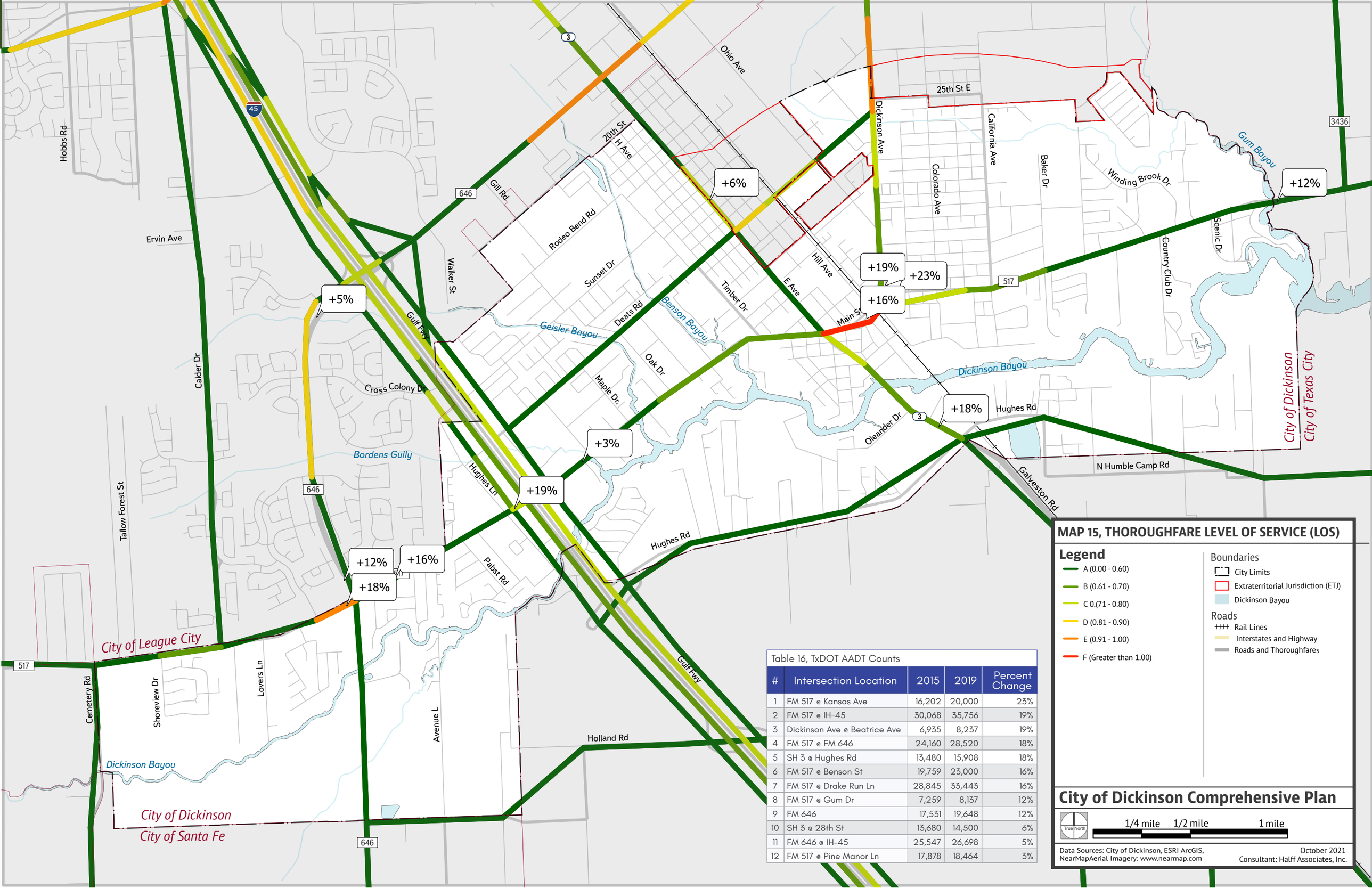

Table 16, TxDOT AADT Counts

#	Intersection Location	2015	2019	Percent Change
1	FM 517 @ Kansas Ave	16,202	20,000	23%
2	FM 517 @ IH-45	30,068	35,756	19%
3	Dickinson Ave @ Beatrice Ave	6,935	8,237	19%
4	FM 517 @ FM 646	24,160	28,520	18%
5	SH 3 @ Hughes Rd	13,480	15,908	18%
6	FM 517 @ Benson St	19,759	23,000	16%
7	FM 517 @ Drake Run Ln	28,845	33,443	16%
8	FM 517 @ Gum Dr	7,259	8,137	12%
9	FM 646	17,531	19,648	12%
10	SH 3 @ 28th St	13,680	14,500	6%
11	FM 646 @ IH-45	25,547	26,698	5%
12	FM 517 @ Pine Manor Ln	17,878	18,464	3%

MAP 15, THOROUGHFARE LEVEL OF SERVICE (LOS)

Legend

- A (0.00 - 0.60)
- B (0.61 - 0.70)
- C 0.(71 - 0.80)
- D (0.81 - 0.90)
- E (0.91 - 1.00)
- F (Greater than 1.00)

Boundaries
- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads
- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Pedestrian Infrastructure

Sidewalks, off-street recreational trails, and on-street bike lanes are an essential part of a resilient, healthy, and high quality community environment. As sidewalks are one of the most common and most impactful type of pedestrian infrastructure used in a typical city environment, it is important that a cohesive, consistent approach to sidewalk development and maintenance is formulated and adopted in Dickinson to serve as the framework for additional pedestrian infrastructure.

Co-benefits of Pedestrian Connectivity

Infrastructure built for pedestrians and cyclists provide alternative forms of transportation to residents for whom an automobile may not be a primary transportation option.

Making it easier and safer for Dickinson residents to walk can increase the use of trail systems and other outdoor recreational facilities, potentially decreasing the number of daily trips made by vehicles and eliminating the environmental impacts associated with vehicle dependency.

Sidewalks also provide important connections to transportation networks, residential areas, schools, parks, economic centers, and other essential elements of a city.

For example, rather than driving to a park, a family might choose to walk along a trail instead, if pedestrian connectivity is available.

Existing Pedestrian Infrastructure

As indicated in Map 16, *Pedestrian Infrastructure*, sidewalks are the only existing pedestrian-related infrastructure in Dickinson are sidewalks.

There are no existing cycling lanes or recreational trails in Dickinson, although H-GAC has identified possible locations for a proposed cycling network, which will be covered in further detail in *The Future City* report.

Sidewalks are typically concentrated along FM 517, SH 3, and Deats Road.

In residential subdivisions, interior sidewalks typically terminate at approaching roadways, but lack additional connectivity extending beyond subdivision entrances.

Some sidewalks have ADA-compliant ramps, but other sidewalks terminate directly at the curb edge without a ramp.

Additionally, DISD students are dependent on school buses for transportation because most of Dickinson lacks sidewalks connecting residential areas to schools.

Codifying Walkability

As Dickinson continues to grow and develop, it is important to ensure that new development meets requirements that promote and facilitate walkability.

Currently, the Dickinson Code of Ordinances only specifies the construction material and minimum width requirements (minimum four foot wide) for sidewalk construction throughout the City.

Additionally, the Code of Ordinances does not mention recreational trails or cycling lanes; nor does it require that pedestrian infrastructure relate or connect in a cohesive manner.

This means that a new subdivision is neither required nor incented to provide pedestrian through-access to an adjacent sidewalk, cycling lane or trail.

These development regulations would provide connections that are essential to promoting walkability in Dickinson.

MAP 16, PEDESTRIAN INFRASTRUCTURE

Legend

- Sidewalks

Boundaries
- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads
- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

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Consultant: Halff Associates, Inc.

Hobbs Rd
Ervin Ave
Calder Dr
Tallow Forest St
Cross Colony Dr
Gulf Fwy
Walker St
Gill Rd
Rodeo Bend Rd
Sunset Dr
Deats Rd
Benson Bayou
Timber Dr
Main St
Oak Dr
Maple Dr.
Hughes Ln
Pabst Rd
Hughes Rd
Holland Rd
Avenue L
Lovers Ln
Shoreview Dr
Cemetery Rd
Dickinson Bayou
City of League City
City of Dickinson
City of Santa Fe
Ohio Ave
20th St
H Ave
E Ave
Hill Ave
Dickinson Ave
Colorado Ave
California Ave
Baker Dr
25th St E
Winding Brook Dr.
Scenic Dr
Country Club Dr
41st St E
Oleander Dr
Hughes Rd
N Humble Camp Rd
Galveston Rd
3436
517
646
3
45

Community Resources and Local Economy

Education

Dickinson Independent School District

The Dickinson Independent School District (DISD) serves the communities of Dickinson and the unincorporated towns of Bacliff and San Leon. DISD serves over 11,000 students on 17 campuses, 13 of which are Title 1 campuses that serve predominantly economically-disadvantaged communities. DISD has four alternative programs designed to assist students achieve their high school diploma. In 2019, DISD received an official Texas Education Agency (TEA) rating of B, with an overall score of 85. While the District covers an area of 61 square miles, only two schools, Dunbar Middle School and Dickinson High School, are within the city limits of Dickinson. The District's fastest growing areas are outside Dickinson's corporate limits, so DISD administrators project no new school buildings will be constructed in Dickinson. A lack of sidewalk infrastructure throughout Dickinson means students cannot safely walk to school and must rely on District-provided transportation (i.e., school buses) or be dropped off by parents or guardians.

Interlocal Agreements

DISD has an existing agreement with Nessler Park Family Aquatic Center in Texas City for students' use of the pool and fitness facility. The City of Dickinson currently has no interlocal agreements with DISD. An opportunity exists to augment Dickinson's park and recreation network with DISD properties.

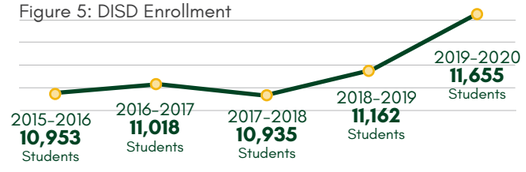
Scholarship Opportunities

Established in 2021 through Dickinson Management District (DMD), the Dickinson Opening Doors Promise Scholarship offers monetary support to graduating DISD students who attend the College of the Mainland.

Enrollment

In 2019, DISD had approximately 11,600 enrolled students. Enrollment has remained relatively flat over the last four school years and has grown approximately six percent since 2015. DISD's only high school, Dickinson High School, has approximately 3,500 enrolled students. By 2031, DISD administrators project enrollment will grow by another 15-20 percent to 14,534 students. Figure 3, *DISD Enrollment* below captures historical enrollment from 2015 to 2019.

Figure 5: DISD Enrollment



Future Growth and Upcoming Projects

In late 2020, DISD passed a $94.2 million bond to construct a new 1,200-student Junior High School, among other District facility expansions and additions. The table below briefly details each project and projected costs.

Table 17, DISD Bond Projects Approved in 2020

Project	Cost
New 1,200-student Junior High School	$73,700,000
Transportation Center Additions and Renovation	$11,600,000
Agricultural Center Additions and Renovation	$1,500,000
McAdams Junior High School Running Track Replacement	$300,000
Hughes Road Elementary Parking Lot Improvements	$2,000,000
District-Wide Security Vestibule Improvements	$1,500,000
Lobit Ed Village and Kranz Junior High School Safety Upgrades	$400,000
TOTAL	$94,200,000

Source: Dickinson Independent School District

College of the Mainland

Located in Texas City, the College of the Mainland (COM)is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees and certificates. The community college serves Dickinson and other cities in the region. In addition to the Texas City main campus, COM has campuses in League City and La Marque and holds classes at Dickinson High School. COM's taxing district includes Dickinson, Texas City, and Santa Fe. The college awards associate degrees and certificates in a range of study areas, including accounting, health services, business, computer science, criminal justice, fine arts, teaching, and welding technologies.

Through its Collegiate High School program, high school students from participating campuses can simultaneously enroll at COM while completing their diploma.

College of the Mainland (COM) Campus

Source: COM.edu

MAP 17, DICKINSON INDEPENDENT SCHOOL DISTRICT (DISD) PROPERTY

Legend

- DISD Propoerty
- DISD Building Footprint

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Silbernagel Elementary School
Kranz MS
Dunbar Middle School
Barber Middle School
Dickinson High School
Dickinson Continuation Center
Dickinson ISD Offices
McAdams Middle School
Hughes Road Elementary School
Calder Road Elementary School
Bay Colony Elementary School
Lobit Elementary School
City of Dickinson
City of Texas City
City of League City
City of Dickinson
City of Santa Fe
Benson Bayou
Dickinson Bayou
Dickinson Bayou
Hobbs Rd
Ervin Ave
Gulf Fwy
Walker St
Gill Rd
Rodeo Bend Rd
Sunset Dr
Deats Rd
Timber Dr
Ohio Ave
20th St
H Ave
Hill Ave
E Ave
25th St E
Dickinson Ave
Colorado Ave
California Ave
Baker
Winding Brook Dr
Scenic Dr
Country Club Dr
41st St E
Main St
Oak Dr
Maple Dr.
Oleander Dr
Hughes Rd
N Humble Camp Rd
Galveston Rd
Calder Dr
Cross Colony Dr
Tallow Forest St
Hughes Ln
Pabst Rd
Cemetery Rd
Shoreview Dr
Lovers Ln
Avenue L
Holland Rd
Gulf Fwy
3
45
646
517
3436

Local Economy and Tax Revenue

Value Per Acre

How land is utilized and developed has a direct effect on municipal balance sheets, and by extension, directly impacts the services and quality of services available to residents. This analysis of Dickinson's economic health focuses on the "Value Per Acre" metric as a unit of productivity. Cities and counties are, at their simplest, finite areas of land. The Per Acre metric normalizes total revenues and tax values into a direct comparison utilizing land consumed as a unit of productivity.

Put another way, different cars have differently sized gas tanks, so, when looking at the productivity or efficiency of a vehicle, the gallon is used as the standard measure, not the tank. Therefore, "miles per gallon" is the standard metric to gauge fuel efficiency, not "miles per tank." This analysis applies the same principle to measure the financial productivity of various development types across the Dickinson community.

The land-use patterns of a city have an impact on the amount of property and sales tax revenue generated. In the following sections, the impact of different development types on the fiscal productivity of property tax throughout the city and county is visualized. Expansive developments with large footprints, like a sprawling subdivision or big-box retailer, are typically more expensive to service with roadways, water, sewer and other utilities as bigger footprints require larger quantities of infrastructure. Thus, examining a development's total tax production overlooks the amount of land and other public resources consumed in order to produce revenue. Nevertheless, many cities use a total value map, like the ones throughout the Land Analytics and Productivity section. Comparatively, the Value Per Acre maps on the following pages highlight the lower Value Per Acre efficiency areas (dark green) near municipal fringes and the concentrations of higher Value Per Acre efficiency parcels (dark red and purple), typically near historic centers and traditional, non-interstate corridors. The historic city of Galveston successfully illustrates high Value Per Acre development. The value per acre metric more accurately measures how well a city or county uses its chief finite resource: land.

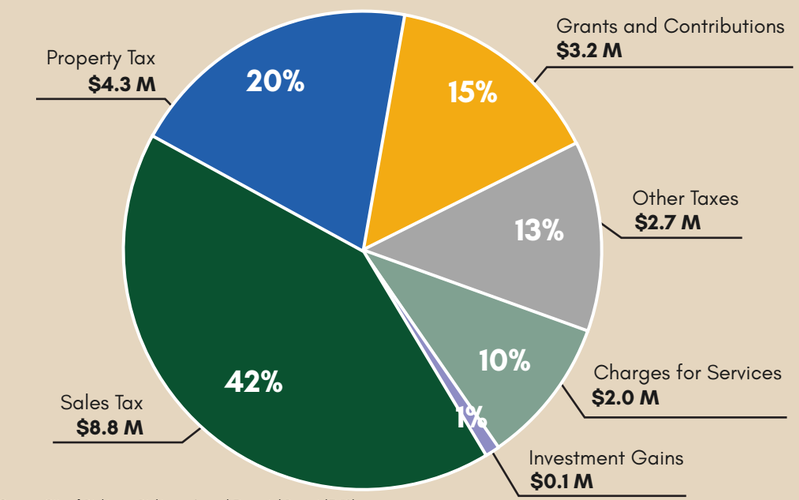
City of Dickinson Revenue Sources

How a city generates revenue is an important part of analyzing its fiscal health. According to Dickinson's Annual Financial Report, the City collected approximately $21 million (M) in revenue.

The largest source of revenue was proceeds from sales tax at $8.8M (42 percent), followed by property tax at $4.3M (21 percent).

Budget Revenue Sources

City of Dickinson Revenue by Source (FY19)



Source: City of Dickinson Dickinson Annual Financial Report (FY19)

Dickinson has an abundance of commercial and retail shopping establishments, predominantly of the auto-urban character (top right and bottom). Dickinson also boasts local service providers and retailers uniquely tailored to the City's population and needs (top left).
Source: Halff Associates

Land Analytics and Productivity - Galveston County

This 3D visualization of development and property values also illustrates the spatial manifestation of public policy, whereby one can observe dramatic spikes in Value Per Acre productivity along the City of Galveston waterfront, and in League City.

As depicted in Figure 6, *Total Taxable Value, Galveston County*, below, as one travels northbound along IH-45 toward the Houston metropolitan area, Value Per Acre productivity metrics rise.

Examples of high Value Per Acre land uses in Galveston County include Mall of the Mainland and other nearby shopping areas along IH-45.

While big-box retailers typically have a low Value Per Acre driven by sprawling parking lots that are not economically productive, certain locations for these establishments are appropriate given proximity to roadways and large volumes of vehicle traffic.

However, big-box retailers do not provide housing, recreational or other social value to communities outside of business hours.

As depicted in Figure 7, *Value Per Acre, Galveston County* and Figure 8, *3D Visualization of Value Per Acre, Galveston County*, the most fiscally productive areas (high Value Per Acre basis) in Galveston County are observed near waterways, highways, and historic downtown Galveston.

Galveston County contains historic cities and relatively newer bedroom communities serving the greater Houston area.

This pattern appears in the Value Per Acre model with historic areas, such as downtown Galveston, having higher Values Per Acre relative to the rest of Galveston County.

This model also highlights the value derived from beachfront property and the recreational access they provide.

Dickinson as a whole, relative to other cities in Galveston County, is missing a higher productivity node to help fund the city's mission of providing service.

Figure 6, Total Taxable Value, Galveston County

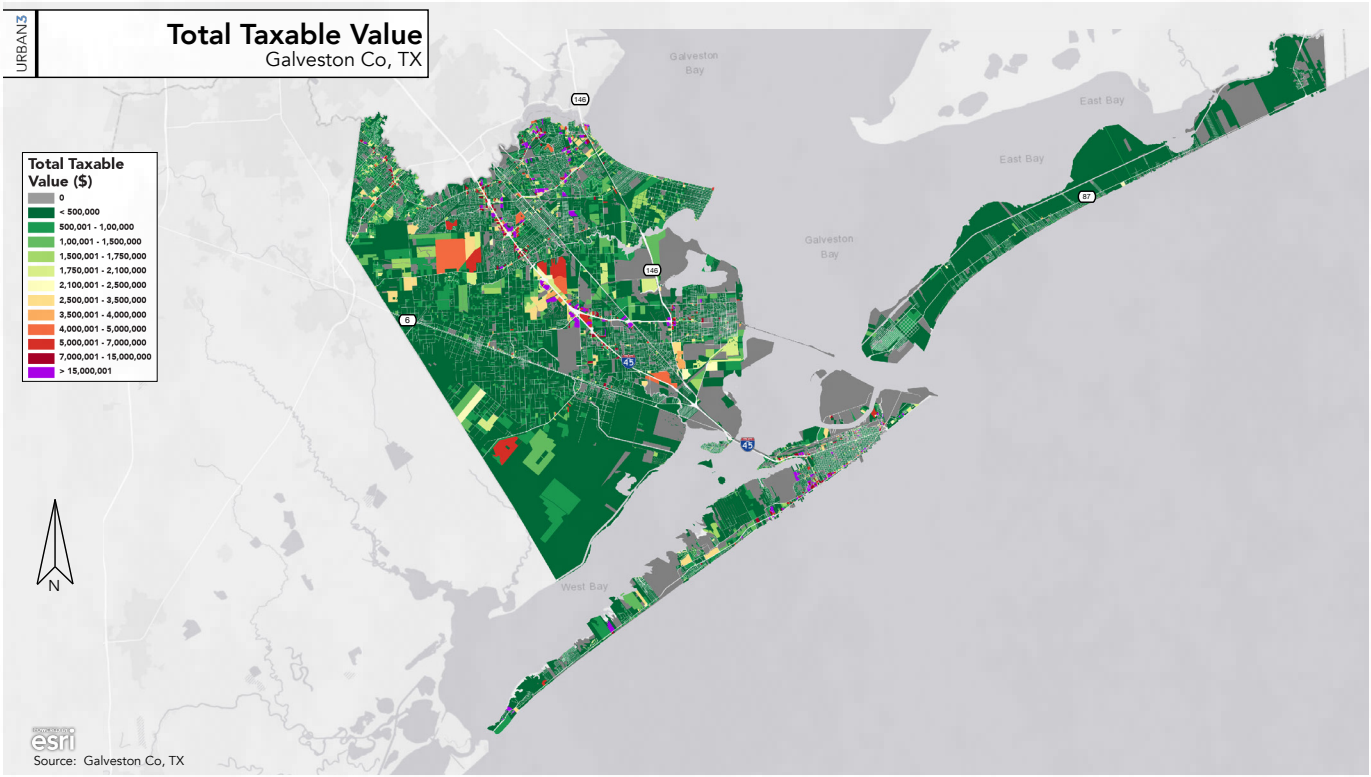


Figure 7, Value Per Acre, Galveston County

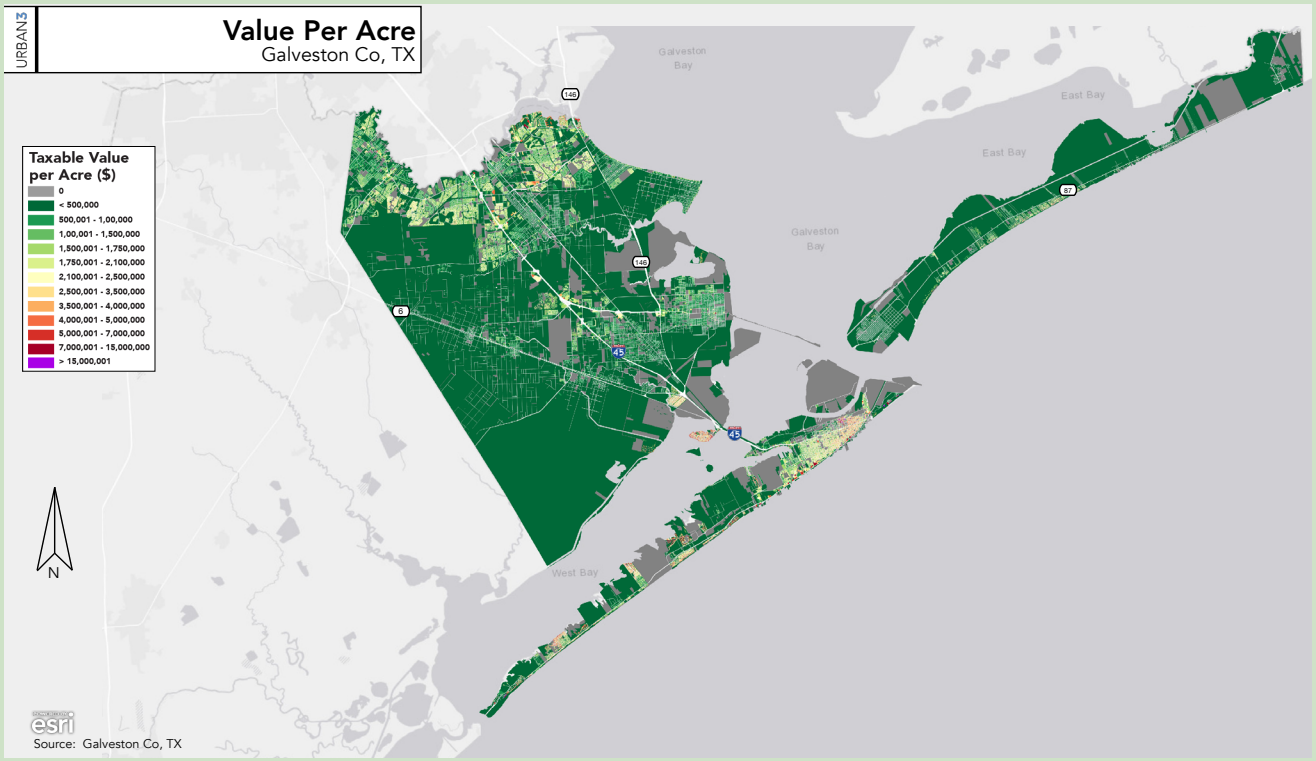
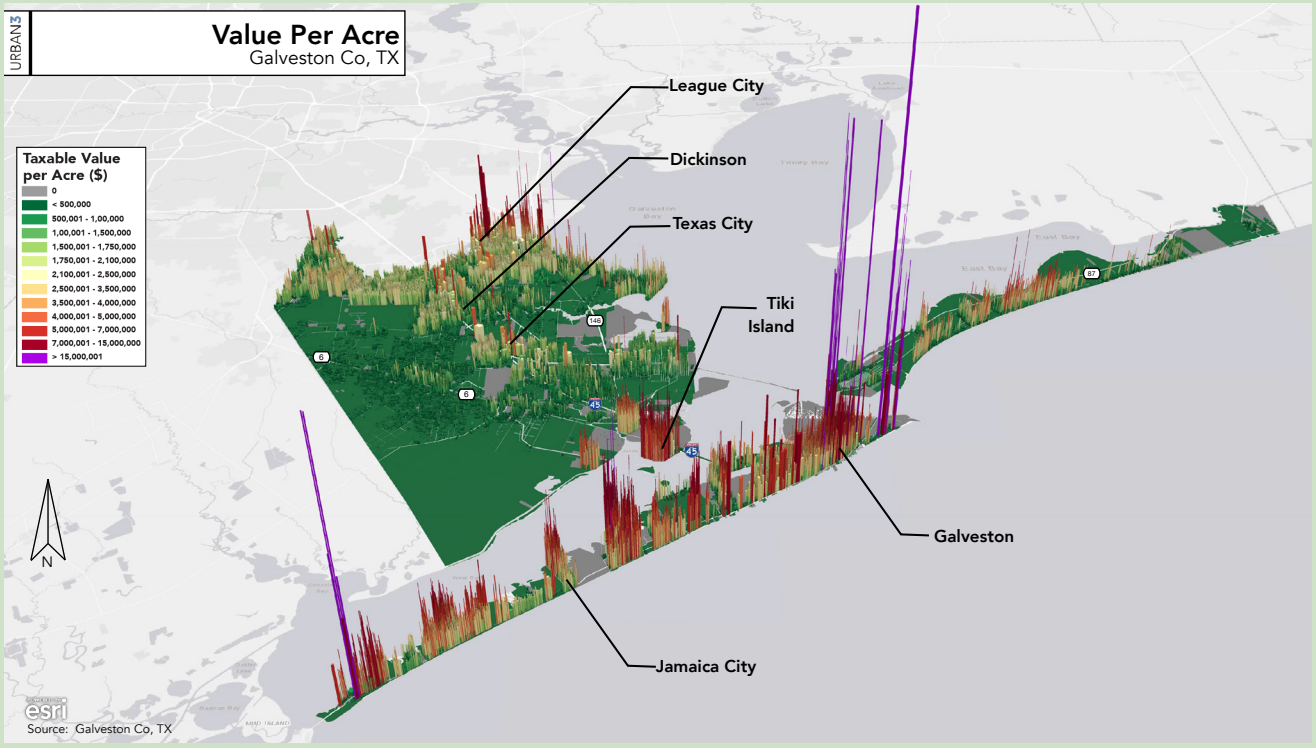


Figure 8, 3D Visualization of Value Per Acre, Galveston County



Land Analytics and Productivity - City of Dickinson

From a land use perspective, Dickinson is a bedroom community with a majority of its land reserved for and dedicated to single-family residential housing.

The figures below and on the facing page demonstrate the difference between total value and value per acre within Dickinson.

As depicted in Figure 9, *Total Value, City of Dickinson*, some of the most valuable properties are concentrated in Dickinson's downtown and along the IH-45 commercial frontage.

When viewed in Value Per Acre, the highway frontage stands out less while some newer neighborhoods rise from unremarkable total value to middle high value per acre, and a few standouts in downtown show high productivity of value per acre.

As depicted in Figure 10, *Value Per Acre, City of Dickinson* and Figure 11, *3D Visualization of Value Per Acre, City of Dickinson*, this bedroom community characteristic manifests on a Value Per Acre basis as most land uses are homogeneous in form and use, so there is little variance in value per acre, driven primarily by small differences in lot or home size. This explains why the model in these figures closely mirror neighborhood outlines and lack variation.

Figure 9, Total Value, City of Dickinson

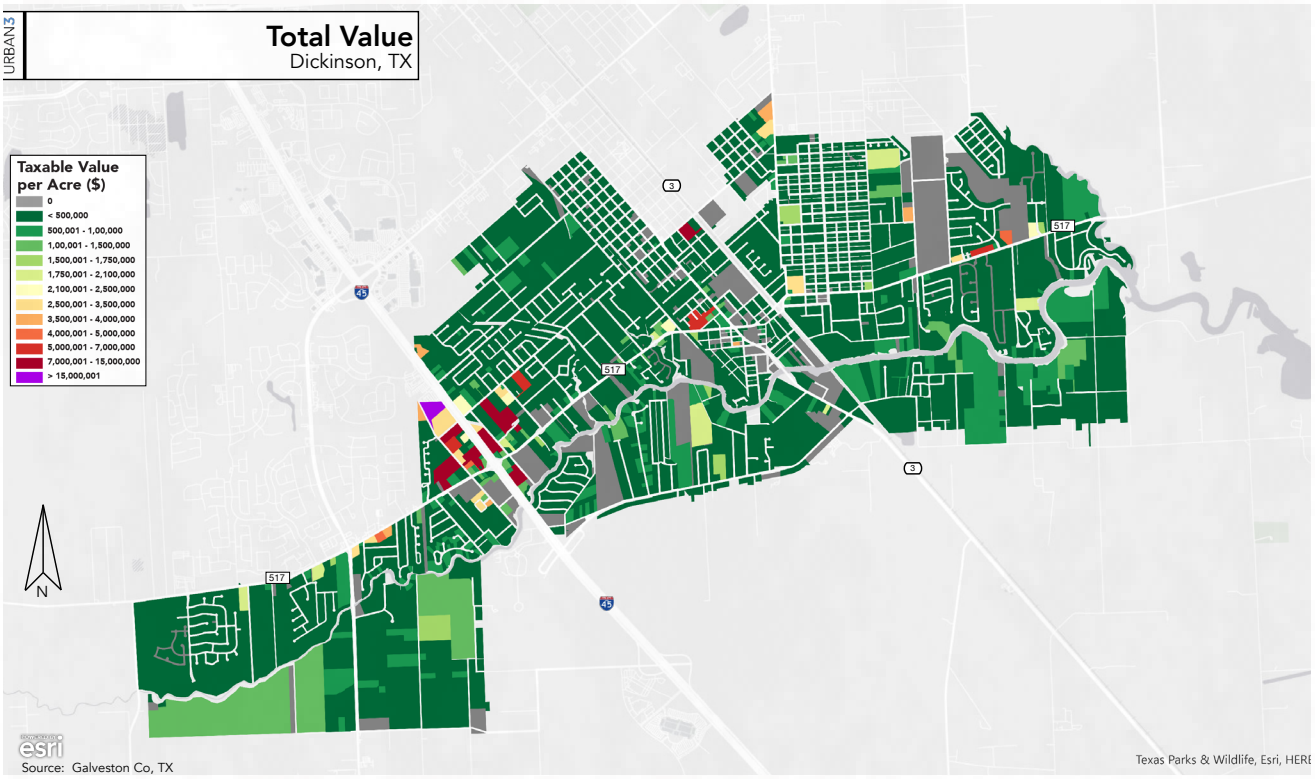


Figure 10, Value Per Acre, City of Dickinson

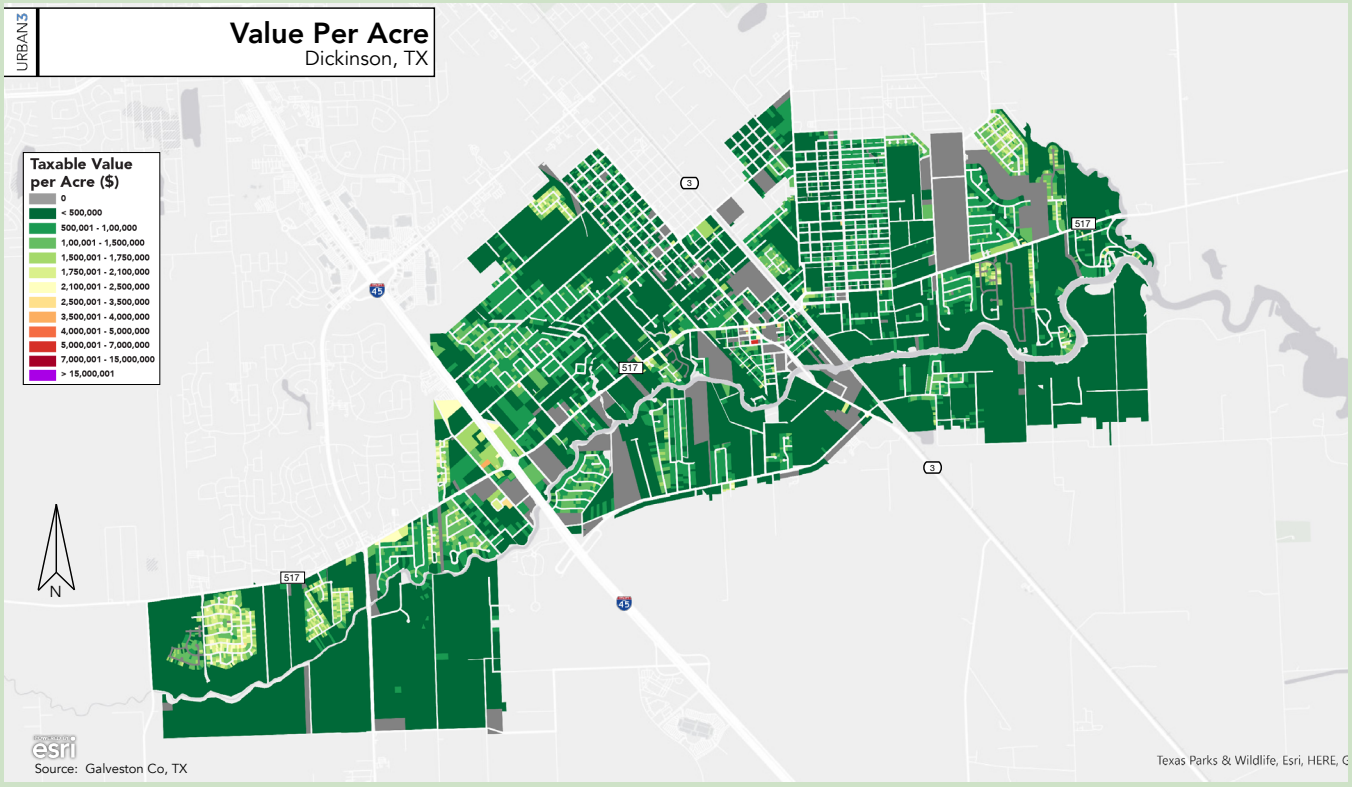
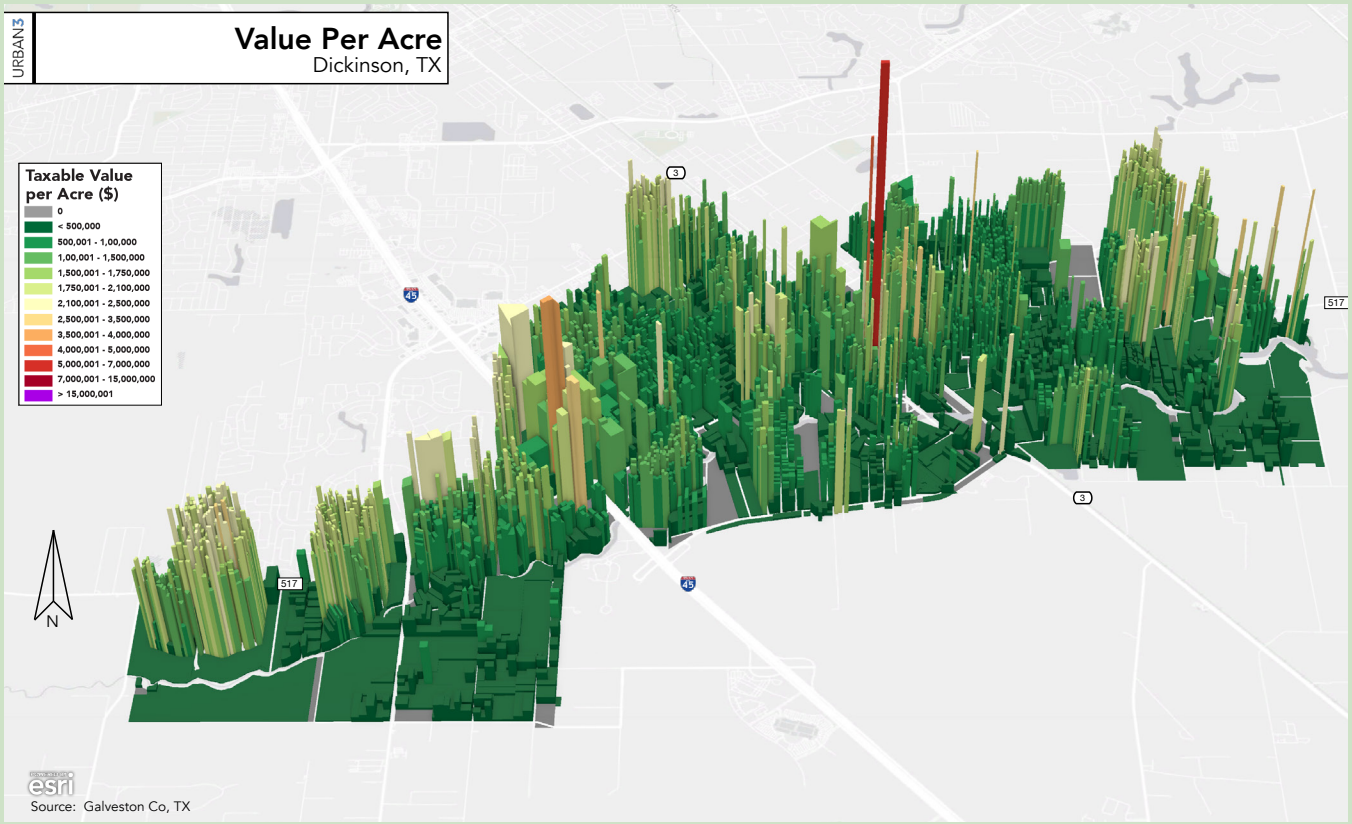


Figure 11, 3D Visualization of Value Per Acre, City of Dickinson



Land Analytics and Productivity - Downtown Dickinson

This section examines the fiscal productivity of downtown Dickinson relative to the City of Dickinson as a whole.

While downtown Dickinson is one percent of the size of Dickinson, it is approximately two percent of the value.

This means downtown Dickinson is more valuable than Dickinson proportionally. In general. this ratio is low and demonstrates that the downtown area represents a lucrative opportunity for more fiscally efficient development on a Value Per Acre basis.

However, when compared to all of Galveston County, Dickinson's downtown area outperforms the Galveston County at a 3:1 ratio. This means that despite only being .03 percent of Galveston's land, Dickinson has 0.1 percent of the total value in the county. Within Dickinson, the downtown has an area to value ratio of 1:2.

Looking at Dickinson, there is no easily defined downtown area. Ambiguous downtown boundaries is a shared phenomenon typically observed in suburban municipalities nestled in larger metropolitan areas of relatively recent growth. The lack of a defined downtown, and the benefits associated with a walkable, tax-efficient space, hinders Dickinson's identity as a community.

The majority of parcels in the downtown area are less fiscally productive, relative to the rest of Dickinson and Galveston County because of the concentration of non-taxable parcels.

As depicted in Figure 13, *Value Per Acre, Downtown Dickinson*, and Figure 14, *3D Visualization of Value Per Acre, Downtown Dickinson*, some buildings have a relatively high Value Per Acre.

The most fiscally productive property, a rather unassuming box-style building that serves as an operation center for Frontier Communications, is in the downtown area.

This is an important illustration of how even modest buildings can make intensive use of their parcel, or share of the city, and be a relatively productive contributor to the tax base.

Typically, downtown areas are the most fiscally productive areas of a city and help carry the financial burden of municipal operations.

Dickinson's relatively low productivity on a Value Per Acre basis indicates an opportunity for growth and improvement that could benefit the whole City.

Figure 12, Total Taxable Value, Downtown Dickinson

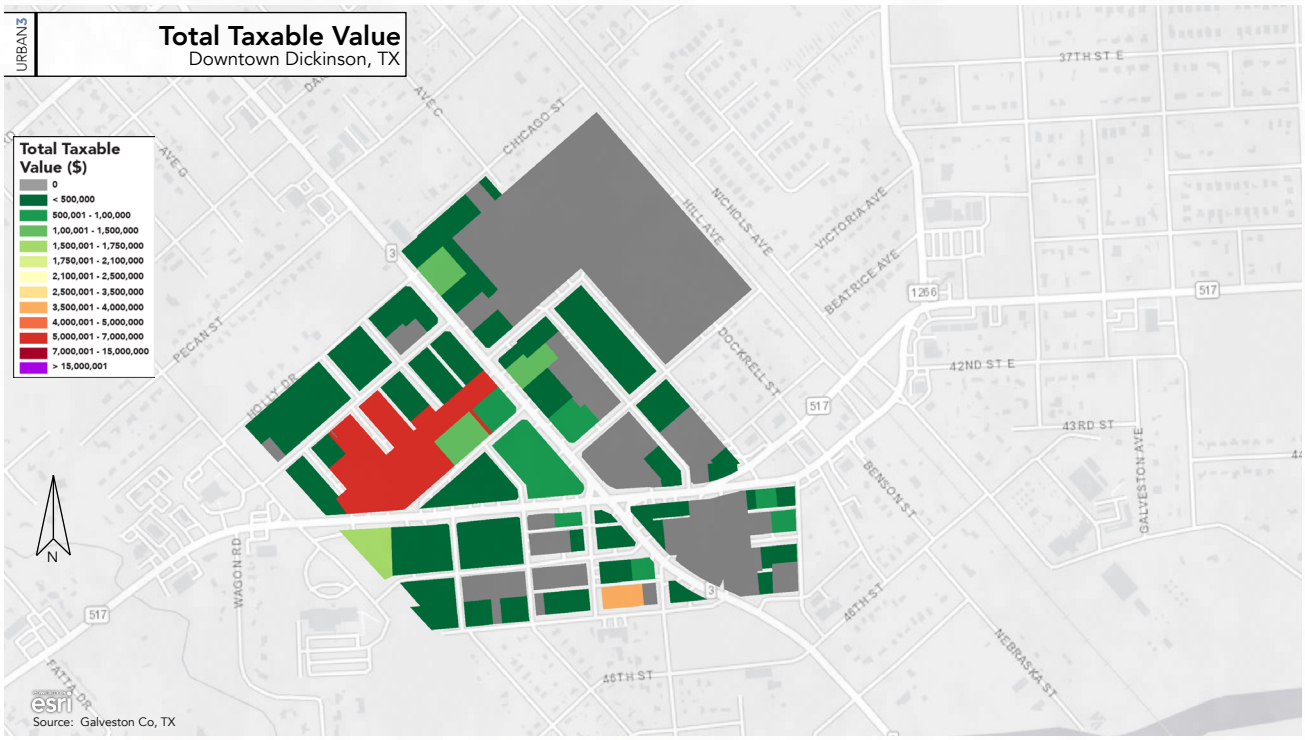


Figure 13, Value Per Acre, Downtown Dickinson

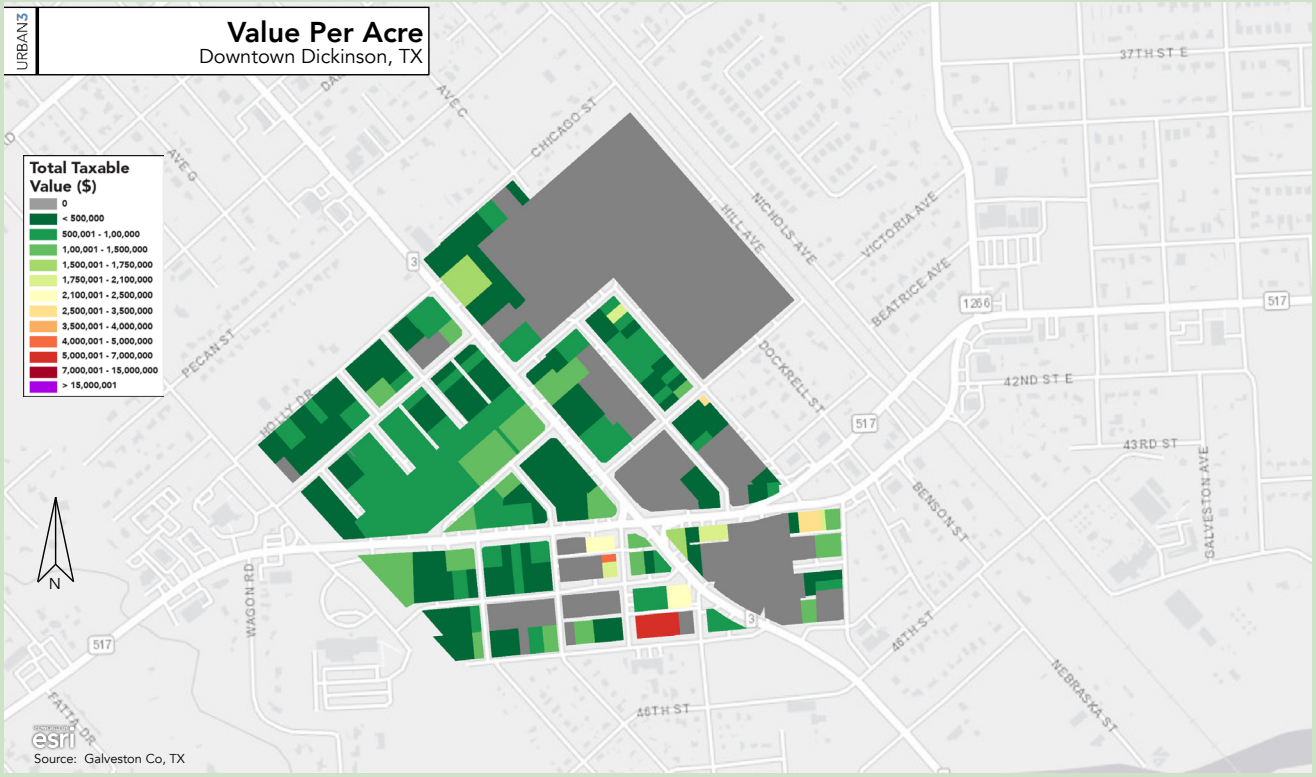


Figure 14, 3D Visualization of Value Per Acre, Downtown Dickinson

Value Productivity

Value productivity is the ratio of the share of land consumed to the share value created. This is a key metric to evaluate a city's fiscal performance by comparing how much an area generates wealth and taxes compared to using up space and services. As depicted in Figure 16, *Dickinson Productivity within Galveston County*, Dickinson, relative to Galveston County, has a 1:1.4 ratio indicating slightly more of a share of the county's wealth than space. As depicted in FIgure 18, *Downtown Productivity within Dickinson*, Downtown Dickinson has close to a 1:2 ratio to the city providing some heightened productivity but less than the 1:6 typical to other strong downtowns.

Figure 15, Galveston County Value Per Acre

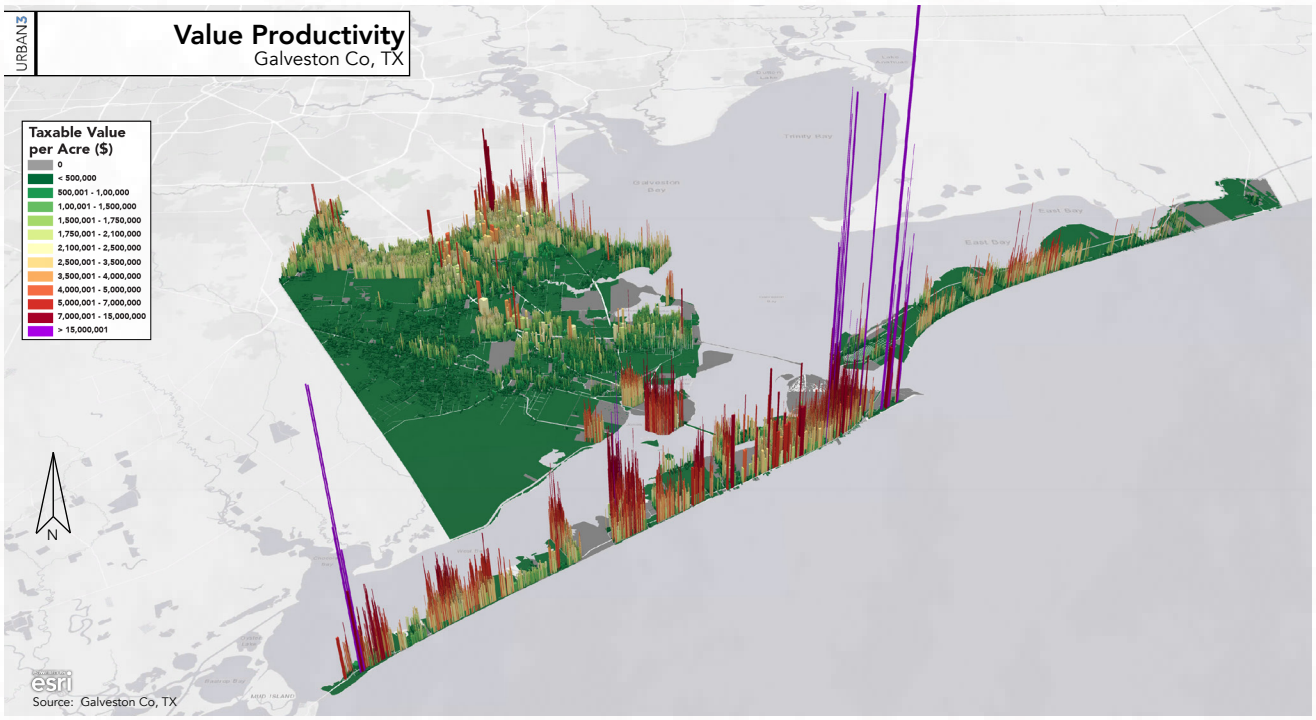


Figure 16, Dickinson Productivity within Galveston County

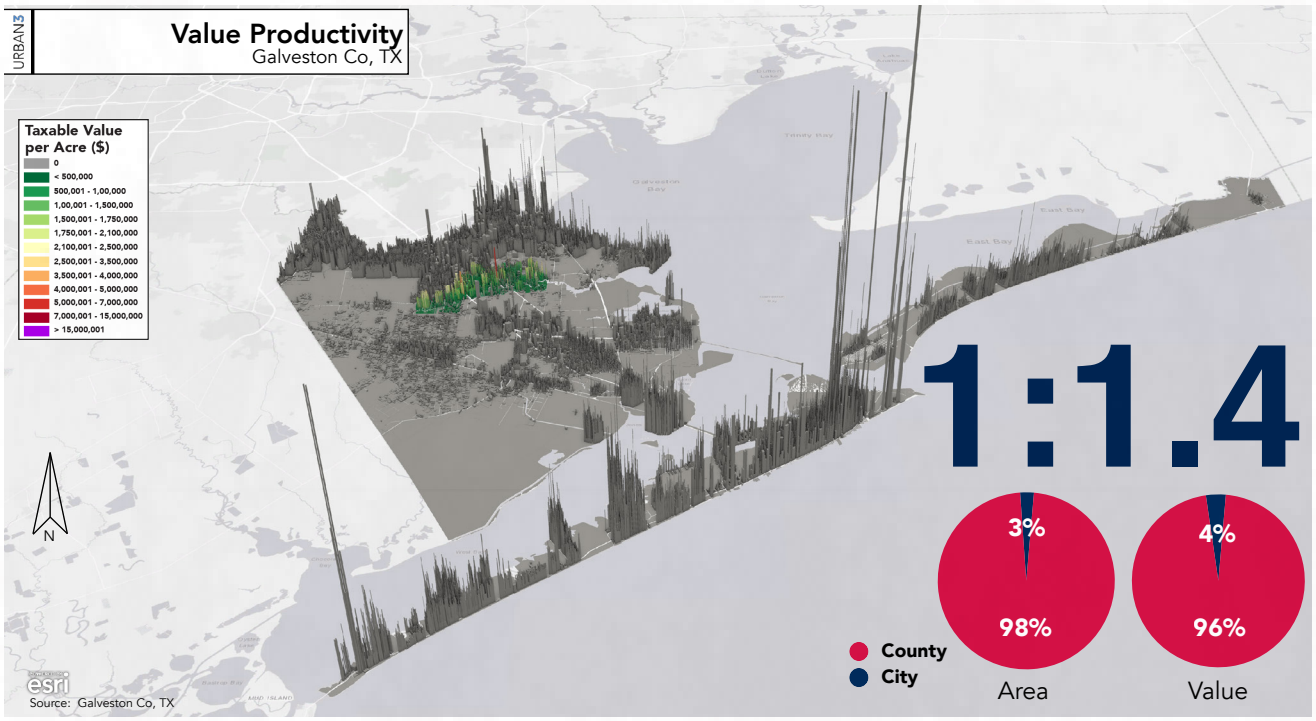


Figure 17, Dickinson Value per Acre

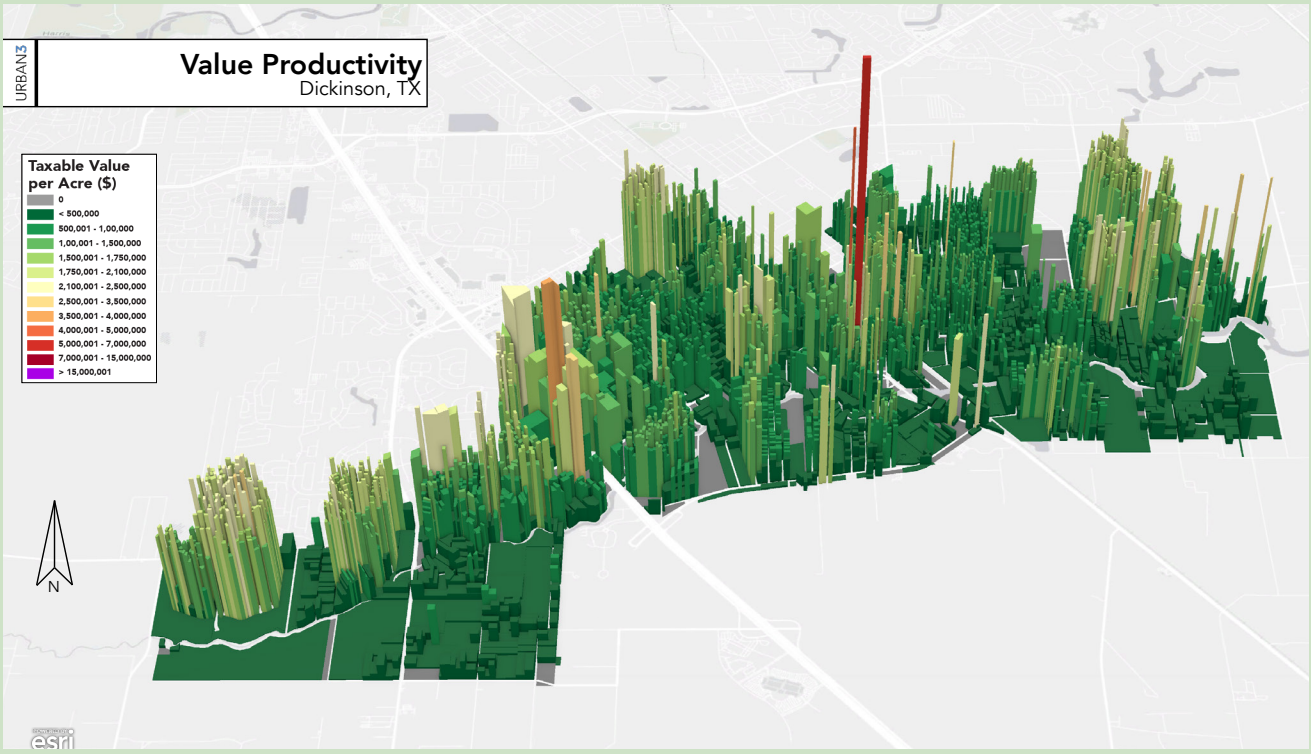
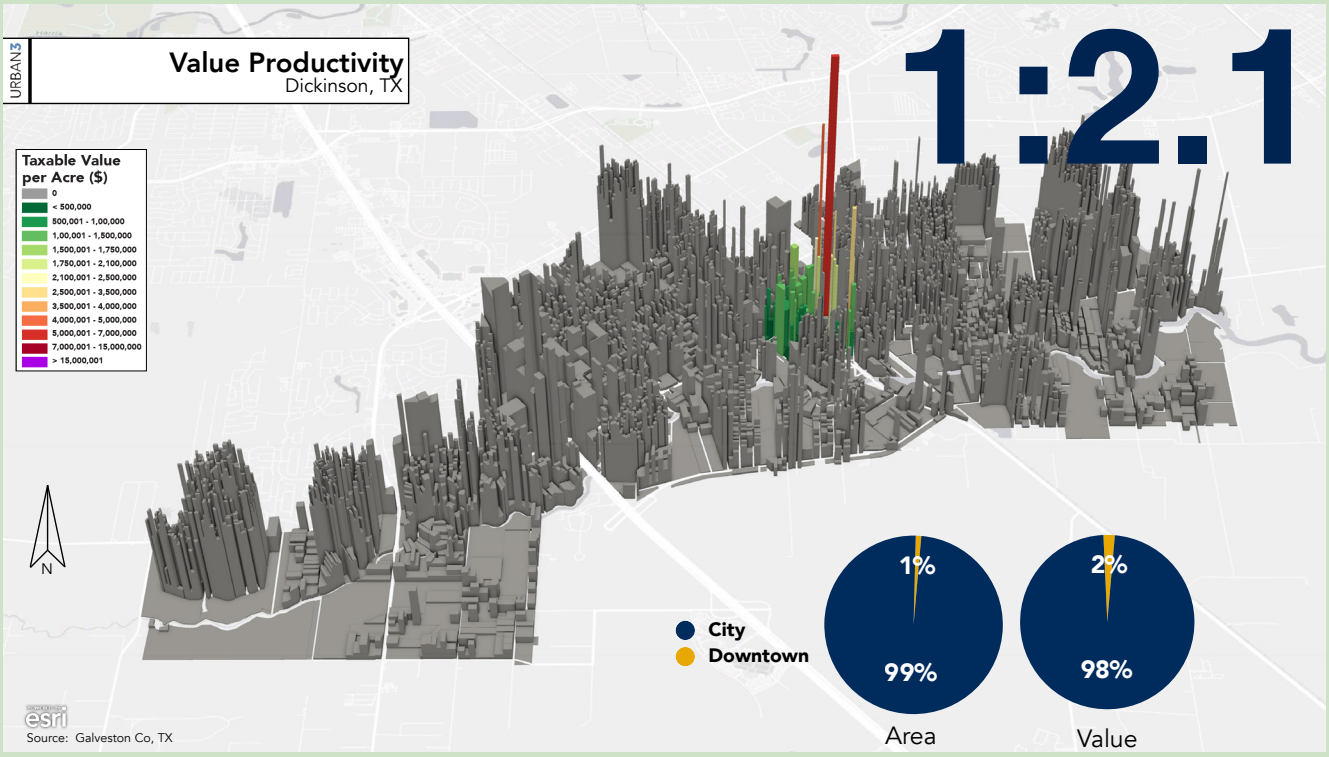


Figure 18, Downtown Productivity within Dickinson



Taxable Land Versus Non-Taxable Land

The maps in this section examine the distribution of taxable land (green) and nontaxable land (gray). All cities have both taxable and non-taxable land. Non-taxable uses like schools, city hall, houses of worship and roads are all part of a community's social fabric and contribute to a sense of place and belonging that reflects the community's values.

It is important to note that the taxable status of the land is usually not permanent and changes over time due to a shift in use or ownership.

Land owned by municipalities or other nontaxable entities can be treated as capital investments, and after a certain holding period, can be sold off to a taxable entity.

Land could also be purchased by a university or other tax-exempt organization and be granted nontaxable status.

Considering the amount of taxable and nontaxable land is important to understand what portion of land generates revenue for a city and what portion of land is non-revenue generating.

For example, in Royse City, municipal government buildings form a key part of their downtown and add value to the downtown community.

By growing its downtown, Dickinson could increase revenue and help fund more public services. It should also be noted that this section does not measure right-of-way land uses.

As depicted in Figure 19, *Taxable Property, Galveston County* and Figure 20, *Taxable Property, City of Dickinson*, Galveston County has 18 percent non-taxable land compared to Dickinson's non-taxable land, which is only 10 percent. As depicted in Figure 21, *Taxable Property, Downtown Dickinson*, Downtown Dickinson's non-taxable percentage is significantly higher at 45 percent. This is due to multiple governments and tax-exempt organizations operating in downtown Dickinson.

Dickinson could collaborate with governmental property owners and private developers to create fiscally productive developments on land owned by the government. Dickinson must remain aware of its ratio of taxable to non-taxable land when making land use and investment decisions.

Figure 19, Taxable Property, Galveston County

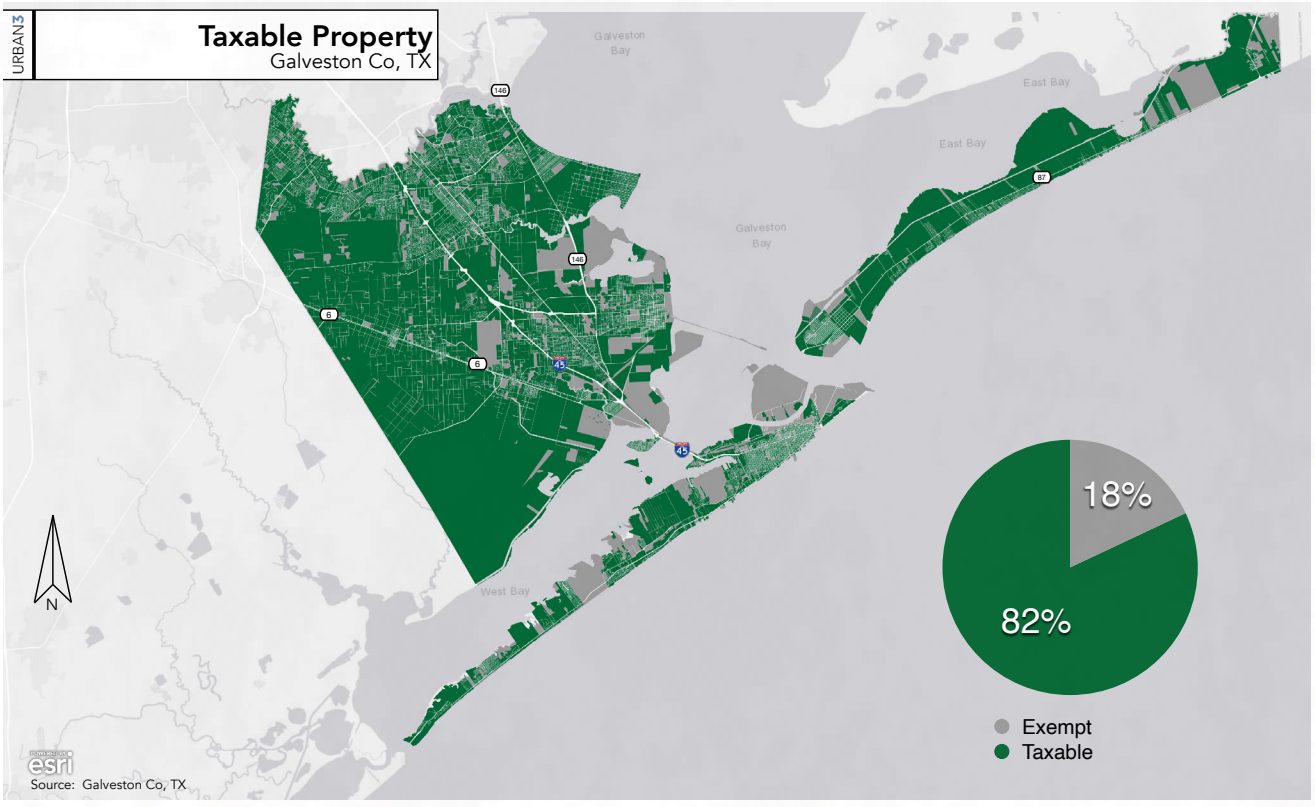


Figure 20, Taxable Property, City of Dickinson

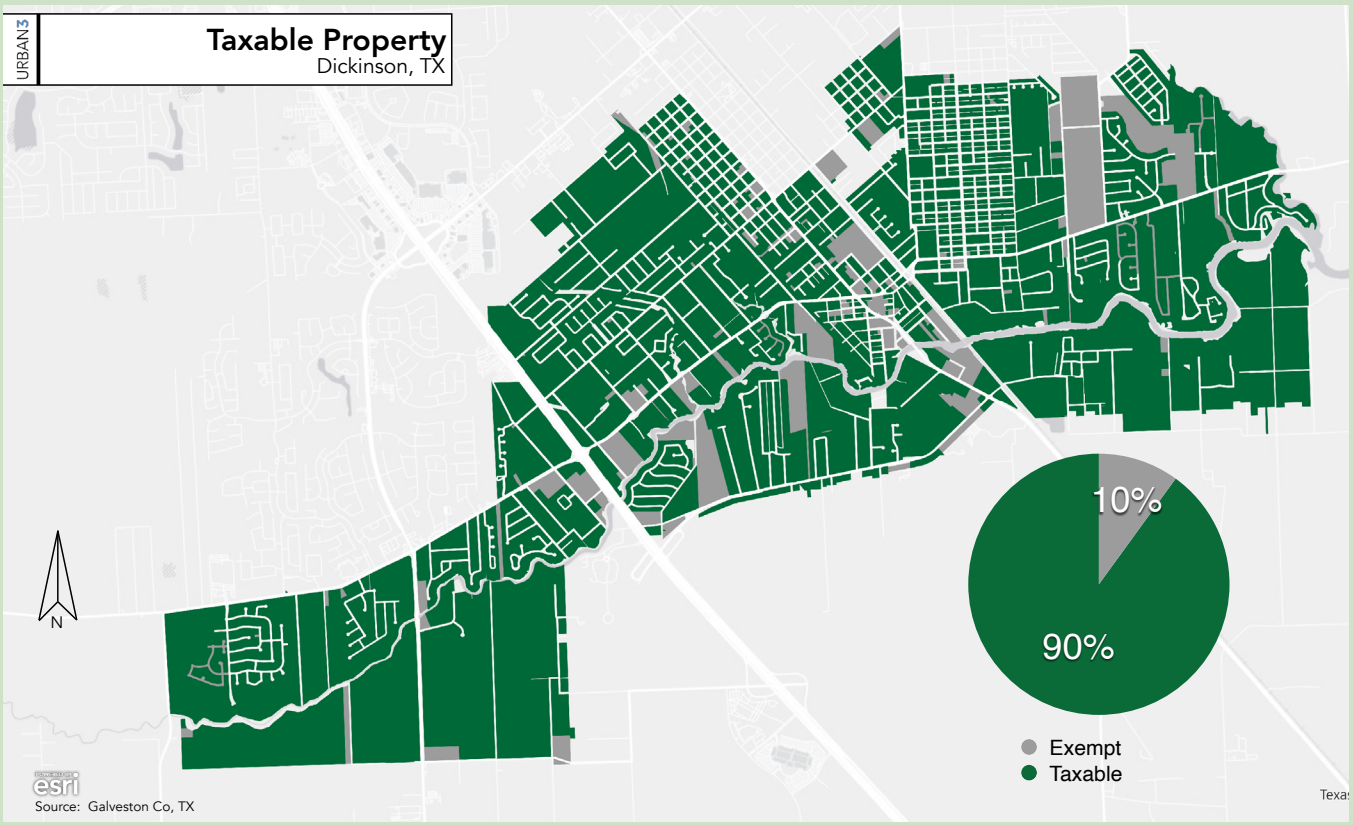


Figure 21, Taxable Property, Downtown Dickinson

Residential Land Use

Housing is often a challenging subject for local governments. Trying to find ways to house more people while retaining the locale's character is a hard balance to achieve. The purpose of this analysis is not to pass judgment on any particular type of home or its residents, but rather to examine the different financial results associated with different housing typologies. Suburban design is largely unable to return in tax revenues what it uses in infrastructure costs.

As depicted in Figure 22, *Single Family Housing in Dickinson*, and Figure 23, *Multi-Family Housing in*

Figure 22, Single Family Housing in Dickinson

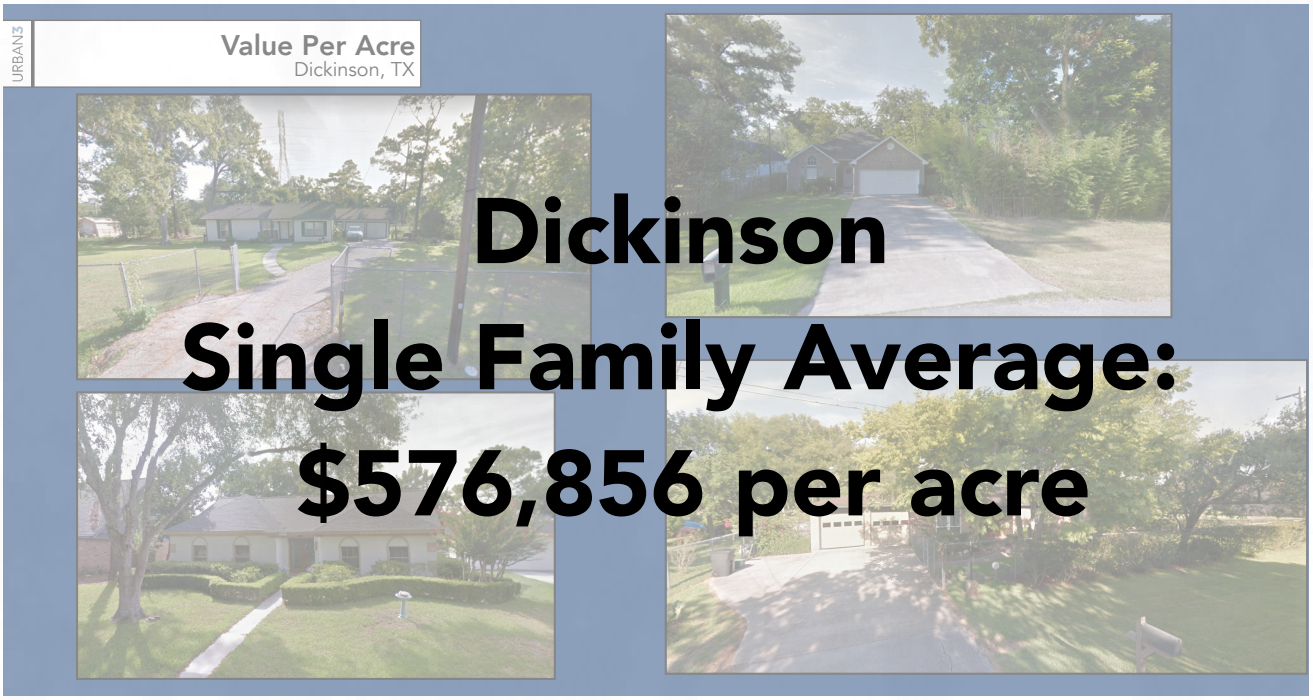
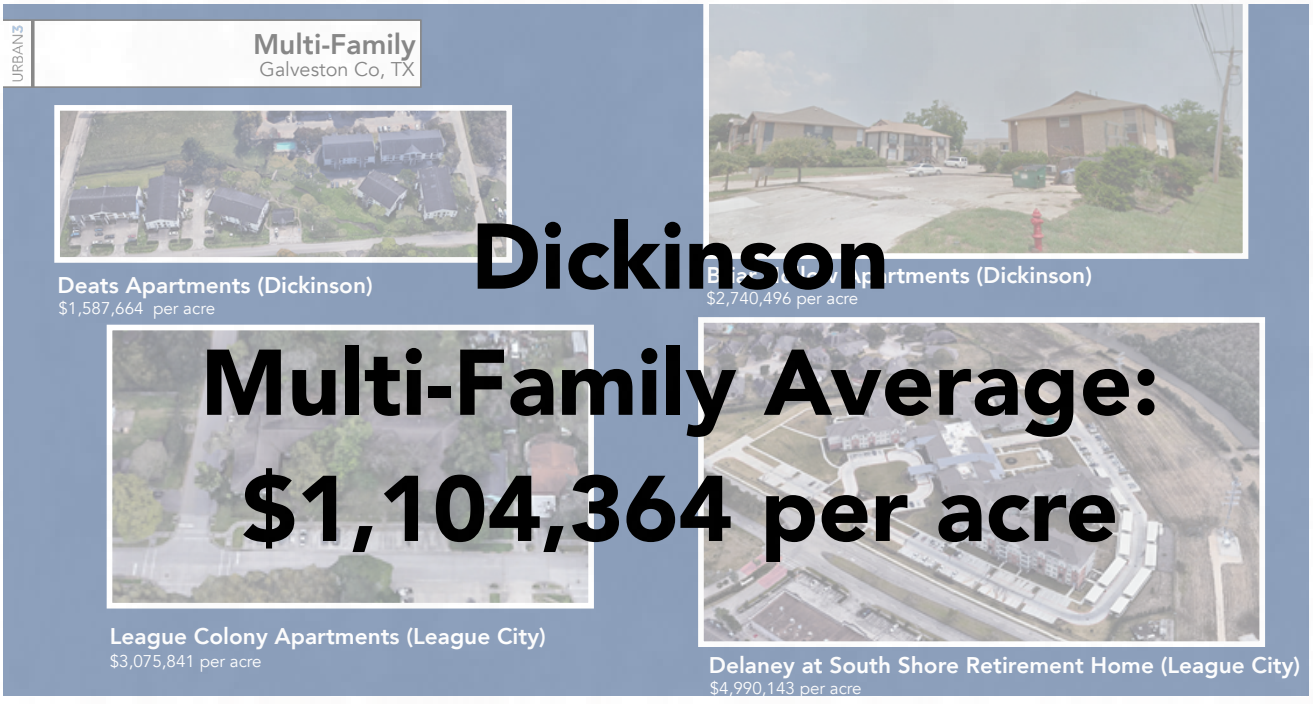


Figure 23, Multi-Family Housing in Dickinson



Dickinson, single-family homes are worth about half as much per acre as multi-family buildings.

As depicted in Figure 24, *Single Family Housing in Galveston County*, and Figure 25, *Multi-Family Residential in Galveston County*, multi-family housing is about three times as valuable as single-family homes. The most efficient housing typology is often associated with a higher value per acre; a trend seen across the country.

Figure 24, Single Family Housing in Galveston County

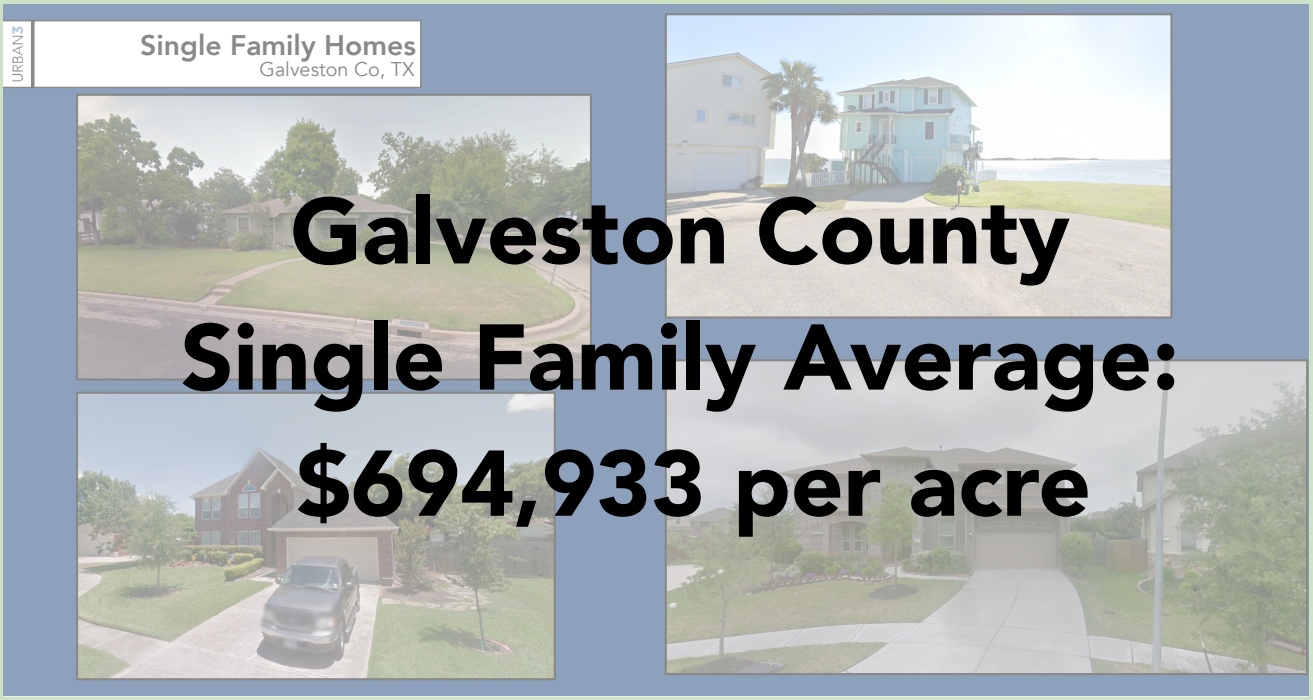
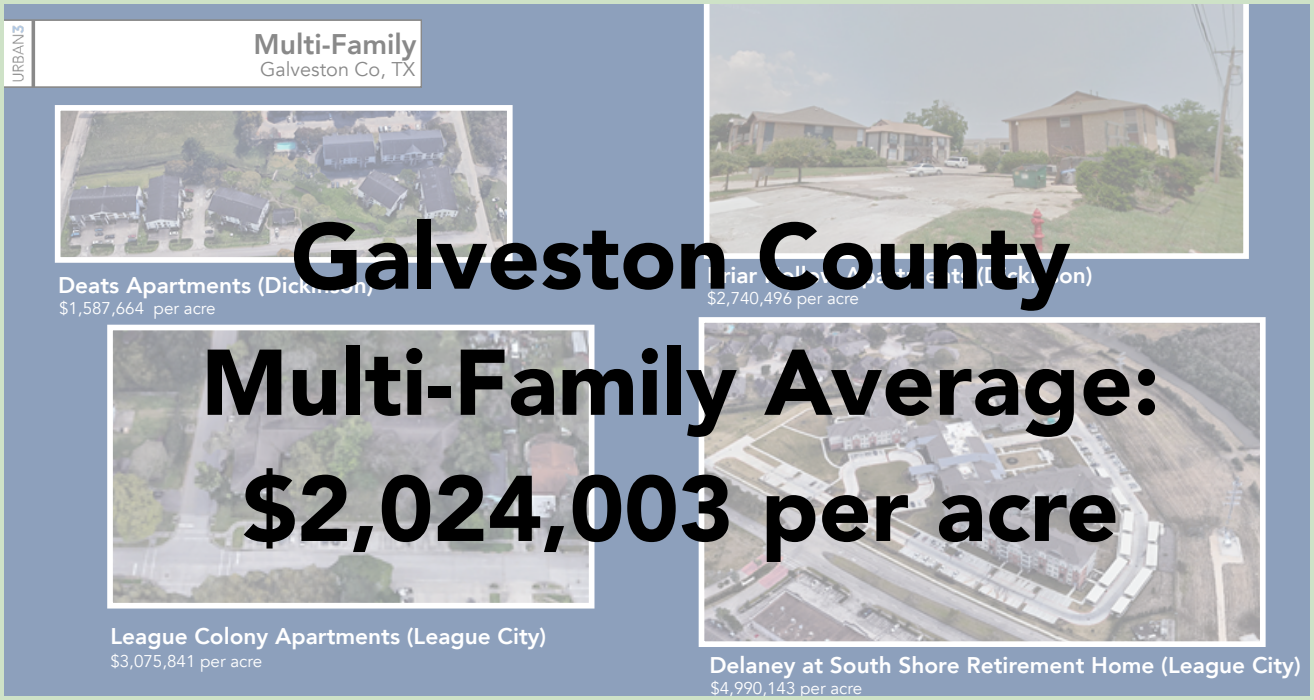


Figure 25, Multi-Family Housing in Galveston County



Commercial Land Use

Commercial buildings represent a wide variety of building typologies, ranging from the ubiquitous big-box store, to the corner gas station, to the small mom-and-pop shop. The design and footprint of commercial properties heavily impacts their tax productivity.

Big-box stores typically generate a large amount of tax revenue when compared to other individual retail establishments because they move volume, but big-box stores also require a large amount of land, both for the store itself and for an equally large (if not larger) parking lot.

A small neighborhood shop may not be worth millions, but they require little space and are able to share parking with other nearby establishments.

In Galveston County, no big-box stores come close to the productivity of Frontier Communications, modest building that makes intense use of its parcel.

As depicted in Figure 29, *Historic or Tall Development*, even more intense examples exist in the form of multistory buildings in Galveston with even three story buildings creating 10 to 20 times the productivity of big box development. This illustrates the idea that while the large footprint of the big box stores may be an asset to the stores, it is a liability to the county and city that has to maintain the infrastructure to service them.

In the *Scale and Use Comparison* section on page 1.63, we highlight just how large the disparity is between these building typologies.

The City of Galveston contains properties with some of the highest value per acre in Galveston. While the same building in Dickinson may not have the same value per acre, we could expect it to perform substantially better than the current development in the city.

The mixed-use buildings in Galveston City can be used to evaluate potential development in Dickinson for its relative productivity.

Figure 27, Frontier Communications

Figure 26, Big Box Retail Development

Figure 28, Mall and Outlet Development

Figure 29, Historic or Tall Development

Scale and Use Comparisons

This comparison demonstrates how density and design impact productivity.

Development pattern comparisons imagine a scenario in which a sample development site is filled with one type of building and compare it to another site filled with a different building.

When we compare historic, downtown, or mixed use styles of development to more recent large scale and large parking developments, we see the potency of dense land use patterns and small parcels.

Tax assessment is agnostic of name brand or appearances of luxury, it simply assigns value to the development and the land upon which it sits.

Taking this data and making it spatial and apples to apples normalizes the distortion possible in comparing large and small on their total value instead of value per acre.

This shows the differences in productivity between different land-use patterns, despite their scale.

Value per Acre is the metric that reveals fiscal productivity and how a development might contribute to the community.

Figure 30, Intense Building vs Large Parking

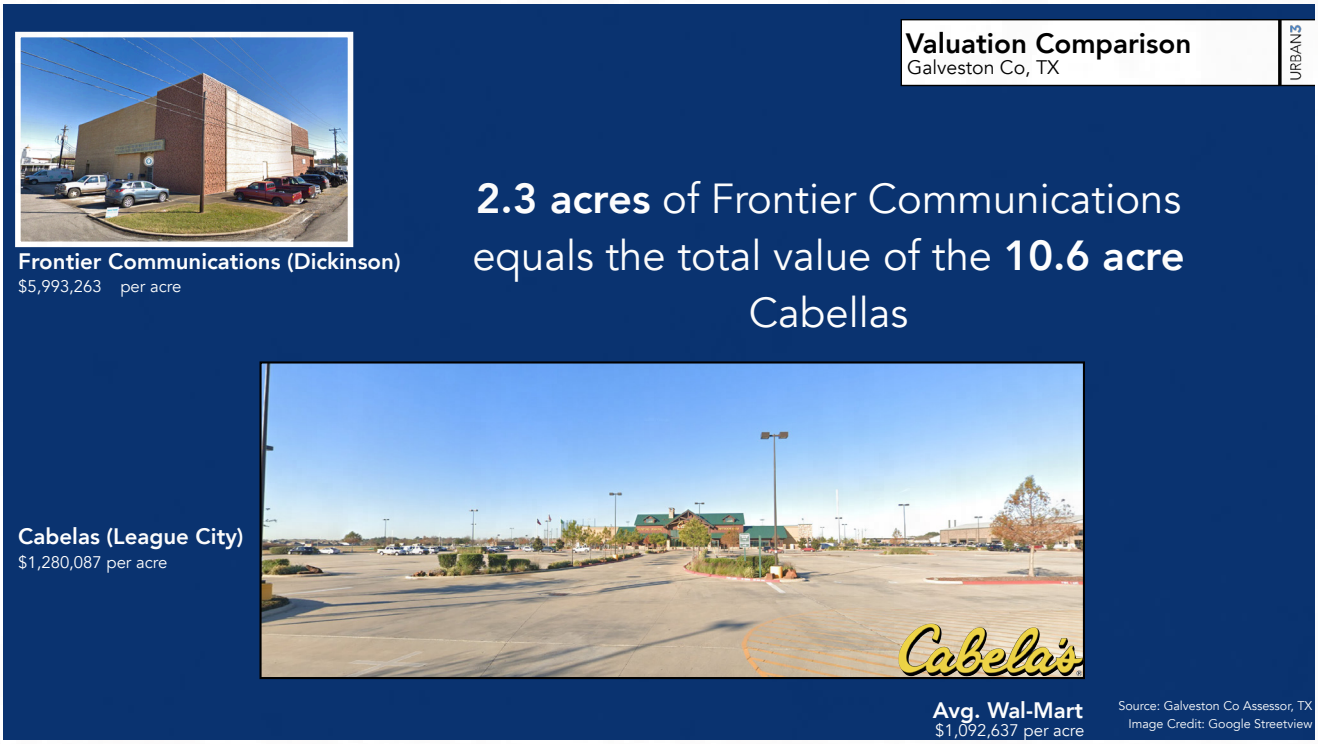


Figure 31, Mixed Use vs Big Box

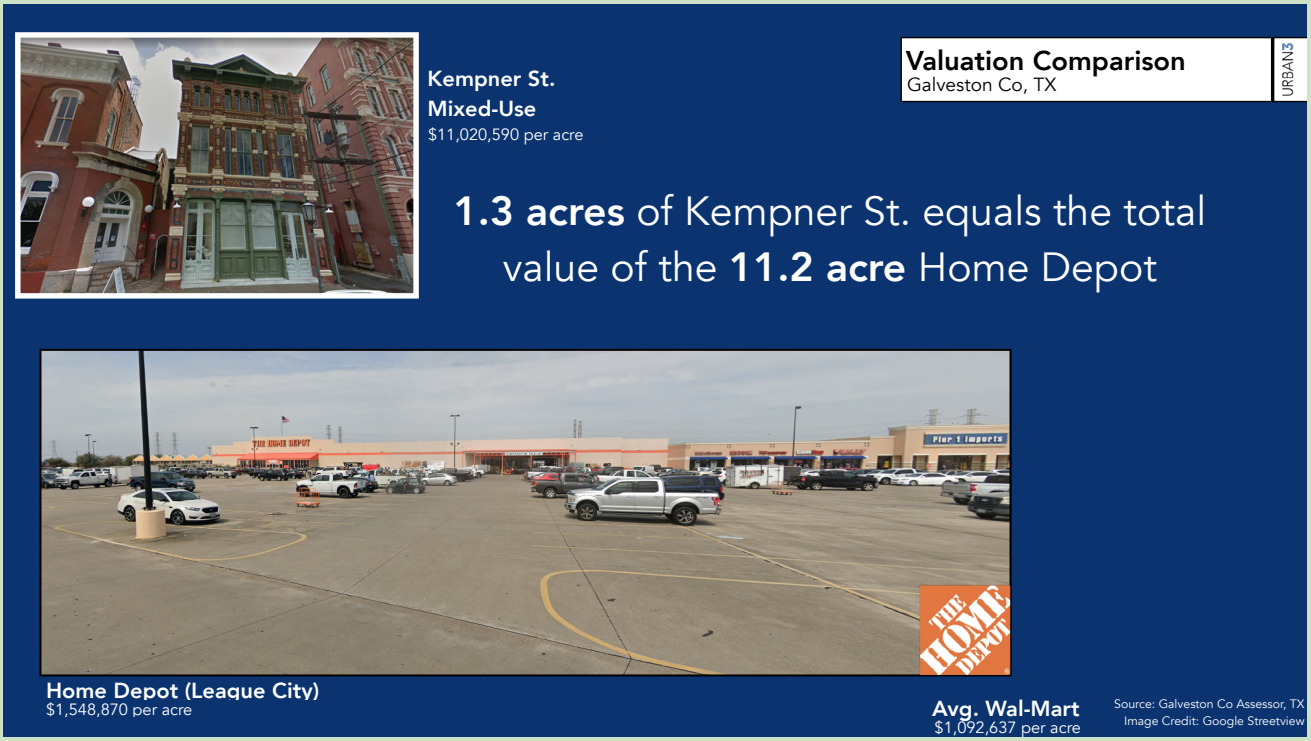


Figure 32, Historic vs Big Box

Land Value Analysis

When finding the market value of a property both the value of the building and the land underneath is taken into consideration.

Examining land value can yield interesting insights. As depicted in Figure 33, *Land Value Per Acre, Galveston County*, throughout Galveston County, land with access to water is significantly more valuable per acre than inland parcels. This reflects the value of access to waterways. In historic Galveston we see the high land value as well.

We often see a higher land value where infrastructure investment, zoning entitlements, or proven historic buildings clearly increase land prices.

As depicted in Figure 34, *3D Visualization of Land Value Per Acre* and Figure 35, *3D Visualization of Land Value Per Acre, Dickinson*, throughout Galveston County and in Dickinson we see the land value is higher around commercial corridors, a common trend throughout the country. Large commercial stores value proximity to these corridors and this, in part, drives the increased land value.

Figure 33, Land Value Per Acre, Galveston County

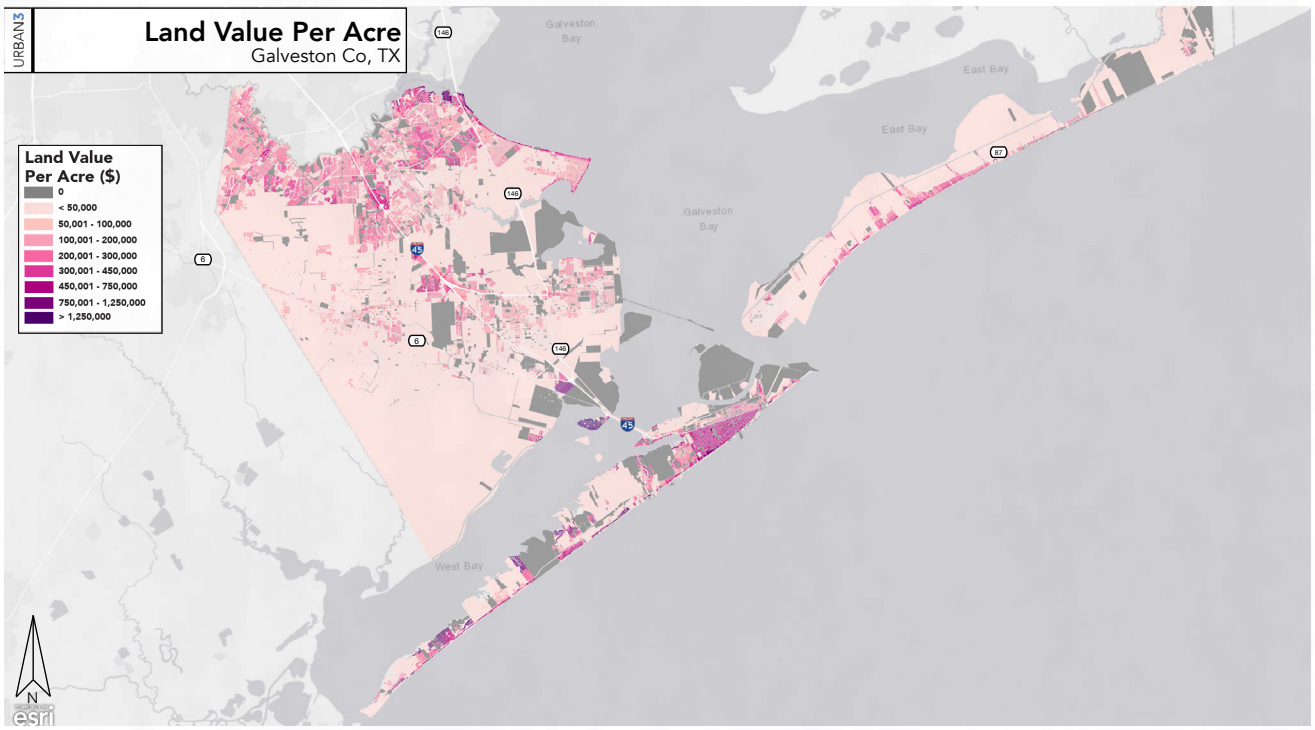


Figure 34, 3D Visualization of Land Value Per Acre, Galveston County

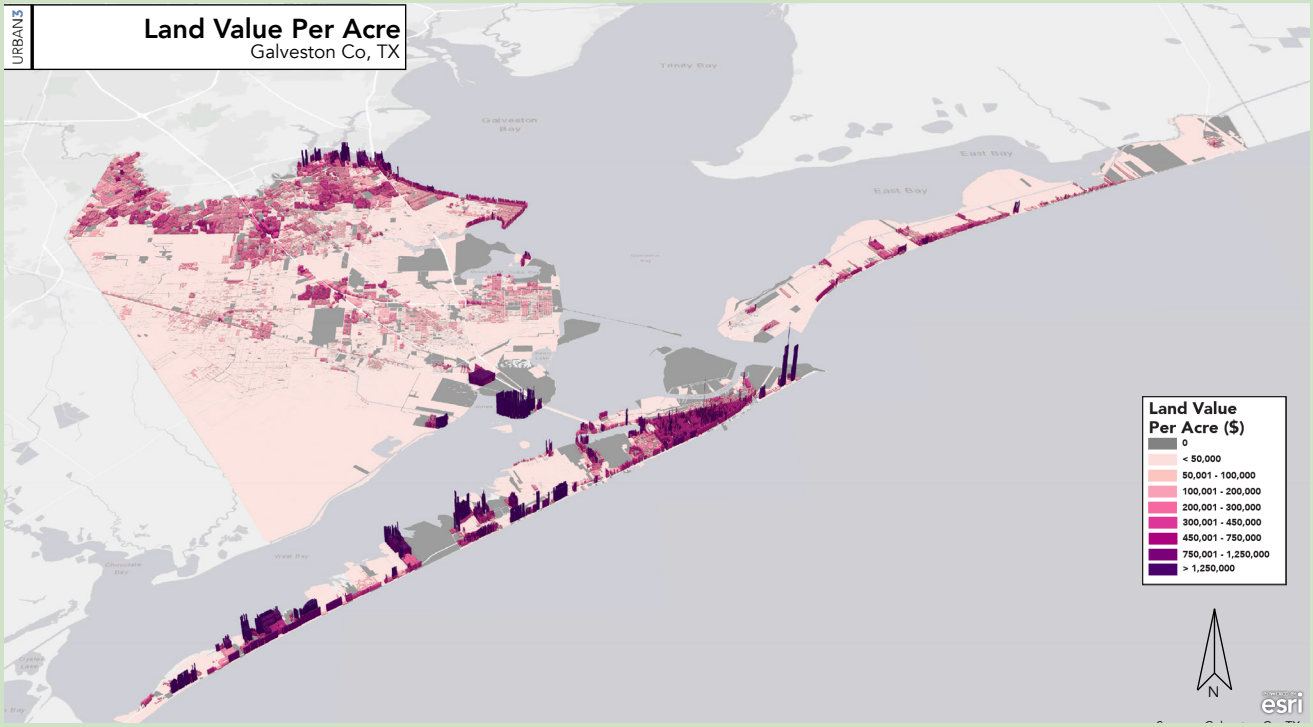
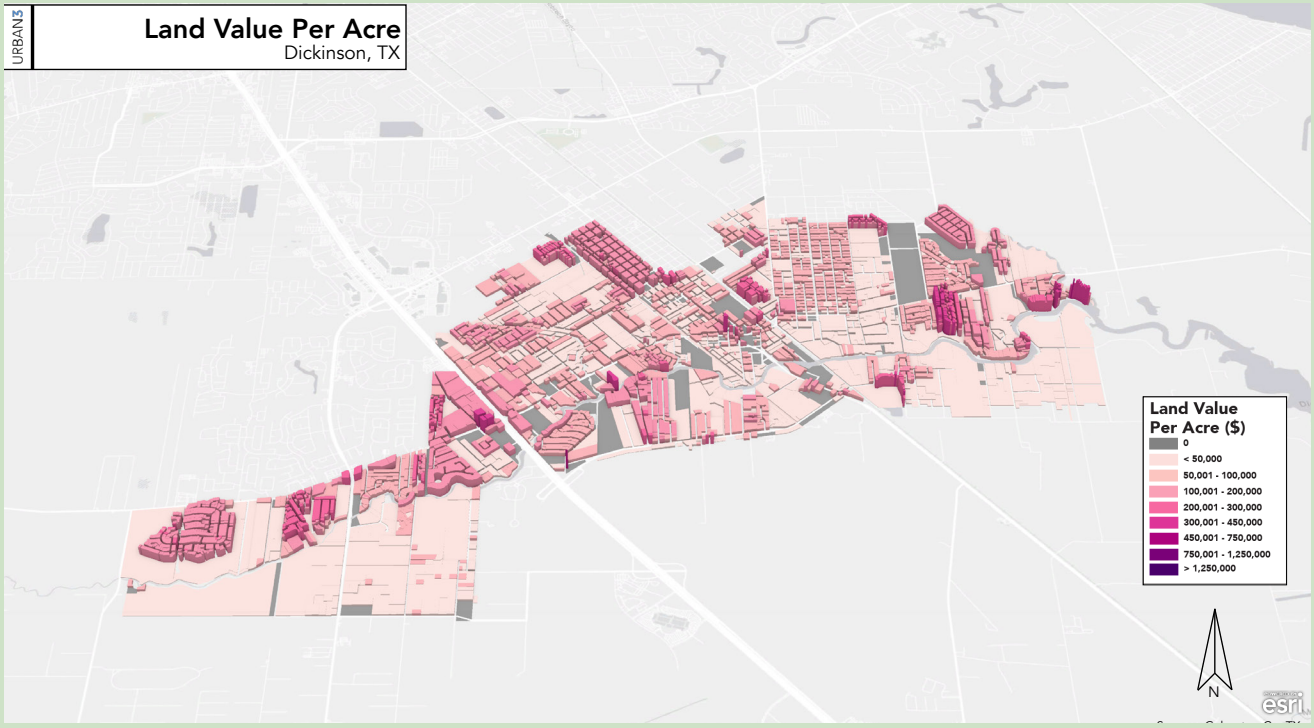


Figure 35, 3D Visualization of Land Value Per Acre, Dickinson



Special Financing Districts and Programs

Dickinson Management District

Established in 2005, Dickinson Management District (DMD) No. 1 is a special financing district and political subdivision created by the State of Texas at the request of the City of Dickinson.

The primary purpose of the DMD is to promote, develop, and maintain employment, commerce, transportation, housing, tourism, recreation, the arts, entertainment, economic opportunity, safety, and the public welfare.

To achieve this, the DMD imposes a tax assessment on the retail sales of taxable items within the district, and those tax proceeds are then distributed as grants or loans for the purposes of facilitating public economic development and diversification within the District. The City of Dickinson and the DMD are contractually obligated for the provision of financing and governmental services through an interlocal agreement.

According to the City of Dickinson website (https://www.ci.dickinson.tx.us), the DMD Board of Directors consists of five members and meet regularly to discuss funding a variety of improvements and services within its district including public safety, maintenance, and business recruitment, relief of traffic congestion, recreation, and cultural enhancement projects.

Examples of initiatives undertaken by DMD include:

- Offering a fixed route bus service
- Providing funding for street maintenance and bus stop improvements
- Distributing scholarship funds to support students at the College of the Mainland
- Supplementing salaries of professional City staff

Chapter 380/381 Economic Development Agreements

Named for their sections in Texas Local Government Code, Chapter 380 and 381 Economic Development Agreements are tools used to enable Texas cities and counties to provide incentives designed to promote economic development such as commercial and retail projects.

Dickinson and its residents benefit from Chapter 380 and 381 Agreements through the promotion of economic development activity, job creation, increased tax revenues, creation of new businesses, and infrastructure commitments.

Development incentives typically take the form of property tax abatements, subsidized application fees, loans or grants, commitments for infrastructure, reimbursement incentives over a period of time, or payments of portions of the sales tax generated by the project.

Eligible projects must demonstrably stimulate business and commercial activity in Dickinson. These incentives invite businesses and services to Dickinson that might not otherwise establish a place of business within the corporate limits of the City, allowing Dickinson to collect sales tax revenue from the businesses' proceeds which can then be circulated throughout the City.

Dickinson's Chapter 380 and 381 Agreements are jointly administered by the City of Dickinson and Dickinson Management District (as a special financing district and political subdivision).

A variety of recent projects have been completed under Chapter 380 and 381 Agreements including the construction of a vehicle dealership, and the opening of several local companies such as building supply sales and real estate management. Benefits to Dickinson include Agreement beneficiaries' local hiring and minimum sales tax generation requirements.

A new 85,000+ sq.ft. vehicle dealership adjacent to IH-45 was facilitated by a Chapter 380 Agreement.
Source: Nearmap

Dickinson Economic Development Corporation

Dickinson Economic Development Corporation (DEDC) initiates, encourages and participates in economic development efforts to create job opportunities and strengthen the local economy and tax base. The DEDC relies exclusively on dedicated sales taxes to fund operations. In FY21, DEDC had an operating revenue of approximately $2.3 million primarily driven by sales tax revenue.

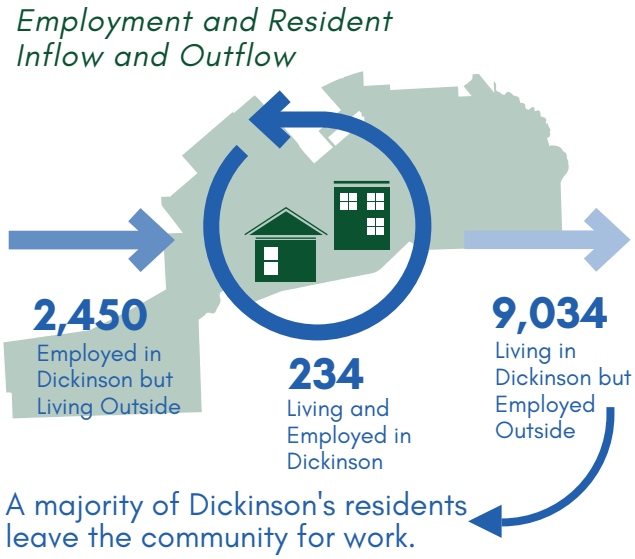
Employment Inflow and Outflow

Employment Inflow and Outflow analysis uses U.S. Census Bureau data to highlight the movement of workers commuting into and out of selected geographies. Movement captured by inflow/outflow diagrams shows both the employment level of a community and whether it is a net importer or exporter of workers. As depicted in Figure 36, *Employment and Resident Inflow and Outflow*, Dickinson is a net exporter of talent, employing 2,450 workers who live outside of the City. Conversely, 9,034 workers live in the City, but work outside of Dickinson, and only 234 workers live and work within the City. This indicates a key opportunity to bolster housing options to provide for additional workers, as well as aiding in the attraction of additional industry to keep workers within the city who currently work elsewhere.

Area Retail Opportunities

As depicted in Figure 37, *Area Retail*, Dickinson's retail mix predominantly consists of chain retailers and restaurants. This concentration presents opportunities for local businesses and service providers in the City.

Figure 36, Employment and Resident Inflow and Outflow



	Number of People	Percent of People
Employed in Dickinson	2,684	100.0%
Employed in Dickinson but Living Outside	2,450	91.3%
Employed and Living in Dickinson	234	8.7%

	Number of People	Percent of People
Living in Dickinson	9,268	100.0%
Living in Dickinson but Employed Outside	9,034	97.5%
Living and Employed in Dickinson	234	2.5%

Figure 37, Area Retail

Community Services and Facilities

Dickinson Public Library

Dickinson Public Library provides free and open access to information in order to develop an informed community. The Library is composed of six FTEs, including a Director and Assistant Director. The FY21 operating budget was approximately $400,000. In 2020, the Dickinson Public Library hosted 380 programs with close to 7,000 participants and had close to 50,000 visitors.

Bayou Animal Services

The Bayou Animal Services Corporation (BAS) is a non-profit local government corporation established in 2016 for animal control and sheltering services. The shelter provides animal adoption, fostering, low-cost spray/neutering and volunteer opportunities. BAS is currently jointly funded through interlocal contributions from three participating cities: Clear Lake Shores, Santa Fe, and Dickinson. BAS consists of a seven-member board appointed by City Council, who also approves BAS' operating budget, which was approximately $1.1 million in FY21-22.

Dickinson City Hall

Located at 4404 SH 3, Dickinson City Hall is the administrative hub for the City of Dickinson and contains several critical departments responsible for Dickinson's daily operations, including the City Attorney, City Council, the City Clerk's office, Community Development and the Municipal Court.

Need exists for additional office spaces and waiting rooms at City Hall. Future capital upgrades needed at City Hall include HVAC replacement and foundation repair.

Public Safety

Dickinson's Police Department, Volunteer Fire Department, Emergency Management Services (EMS) Department and Fire Marshal exist to protect the health, safety, and public welfare of the community. The effectiveness of each department is dependent on the staffing of well-trained police officers, firefighters, and emergency medical personnel; equipment such as vehicles, apparatus, and firearms; training and continuing education; and adequate building facilities. Station locations is a critical factor regarding response time for emergency calls, which correlates to life safety. The capacity of these essential functions is necessary to evaluate the impacts and needs warranted by community growth. This section provides an overview for each of Dickinson's public safety departments: Police, Volunteer Fire, EMS and Fire Marshal.

Dickinson Police Department

Established in 1983, the Dickinson Police Department (DPD) is under the management of the Police Chief, three Captains and one Lieutenant. The Department is charged with enforcing all applicable laws, protecting the citizens against the criminal activities of others, and serving as a visible entity to the community, interacting with the public to facilitate the delivery of professional law enforcement services with understanding and compassion for citizen needs and concerns. The Department is responsible for ensuring that Dickinson stays a safe and secure place to live. In 2011, the Dickinson Police Department was recognized by the Texas Police Chiefs Association for compliance with the Texas Law Enforcement Best Practices program.

In fiscal year 2020-2021, the Dickinson Police Department has an operating budget of approximately $4.3 million. Department goals for the upcoming fiscal year include reducing the number of Response to Resistance incidents, Fleet Accidents/Personnel Injuries, and Pursuits by one percent.

City of Dickinson City Hall
Source: Houston Chronicle

City of Dickinson Police Department, Liggio Street entrance
Source: Halff Associates

Service Area
The Police Department's service area is limited to Dickinson's corporate limits. The City of Dickinson has an established interlocal agreement with the Galveston County Sherriff's Department and other adjacent municipalities. The Department does not perform functions outside of emergency response, such as animal control, EMS response, or code enforcement.

Facilities
The current 10,000-square foot Police Station located at 4000 Liggio Street was built in 2001 and opened for service in January 2002 at a cost of $2.2 million. It was originally built to only serve approximately 40 employees, and currently houses all the administration, support staff, uniformed patrol services, jail facilities, crime labs, and training rooms for the Dickinson Police Department. There are no existing police substations nor is there a projected demand for police substations beyond expanding the existing facility.

Staffing
The Police Department has approximately 50 FTE's, including 33 sworn officers, eight administrative support staff, one K-9 unit, and nine dispatching staff. Annual training includes firearms safety and community policing strategies, and is maintained according to a pre-existing schedule. As of 2021, there are no plans to hire more staff, although Police Department staffing is subject to change.

Programs and Activities
The Police Department is active in the Dickinson community and frequently hosts and participates in a variety of recurring programs, including but not limited to:

- Citizen Police Academy
- Birthday Back Up
- Annual Thanksgiving Dinner, Blue Santa Program and National Night Out
- Student Police Academy and School Lunch Visits

Equipment and Vehicles
The Police Department fleet includes 30 vehicles (one police trailer, SUVs and trucks, and four bicycles) and is maintained according to an annually reviewed replacement schedule. The number of vehicles is tied to the number of staff, and the Police Department has an established vehicle and vehicle equipment replacement policy. Purchasing and upfitting is handled by the Administrative Captain and fleet maintenance is handled by the Patrol Captain.

Service Indicators and Response Time
As indicated in Table 18, *Emergency Response Statistics (2016-2020)*, over the last five years the average Police Department response time was under six minutes to approximately 86,000 dispatched calls.

Needs
Because of rapid growth in Dickinson and within the Police Department, the existing police station is severely undersized for current operations. Police staffing and equipment requirements will need to keep pace with population growth. Please see the *Police Facility Needs Assessment and Planning Study* completed in 2015 by Brinkley, Sargent, Wiginton Architects for more detail.

Facility challenges include no interior storage space, limited and outdated workflow space, no expansion opportunities within the existing building footprint and a lack of parking to accommodate public and City vehicles. The sallyport entrance turning radius is too narrow, and several patrol vehicles have been damaged on bollards while making entry. The rear administrative parking lots are too small and cannot accommodate staff vehicles, resulting in some vehicles parking in the front parking lots. Interior storage has been exhausted, and exterior storage sheds are nearly full to capacity. There is limited secured storage for high-tech electronics and firearms. Conference rooms have been converted to work and storage areas. Lastly, staff workstations overlap preventing staff from being able to perform their duties in a neat and organized manner.

Historical photo of Dickinson Police Department, circa 1984
Source: Dickinson Police Department

Dickinson Volunteer Fire Department

Established in 1942, the Dickinson Volunteer Fire Department (DVFD) is under the management of the Fire Chief/President. It is one of 16 volunteer fire departments in Galveston County. The Department's annual operating budget is approximately $300,000 and is primarily funded by both Galveston County Water Control and Improvement District #1 (GCWCID) service fees and utility bill donations, as well as through the City of Dickinson's municipal budget.

In 2017, Dickinson voters approved a mandatory service fee per active connection to serve as a guaranteed source of income for the DVFD, which was previously only funded through donations.

Service Area

The DVFD service area is not restricted to Dickinson's corporate limits and extends into other unincorporated areas in Galveston County outside of Dickinson. The DVFD has an established interlocal agreement with the City of League City and Santa Fe Fire & Rescue in the form of an automatic mutual aid agreement for all structural fire calls, as well as agreements with all fire departments for mutual aid, on request, through the Galveston County Fire Services Contract.

Outside of emergency response, DVFD provides first-responder EMS response (City of Dickinson provides ambulance service), fire prevention in conjunction with the City Fire Marshal, and swiftwater, heavy extrication and trench technical rescue.

Facilities

As indicated on Map 18, *Public Facilities and Institutions*, the DVFD operates primarily out of the central station on FM 517 Road which is owned by the City of Dickinson, as well as a substation and storage facility that are both owned by DVFD at the following addresses:

- Central Fire Station: 4500 FM 517 Rd E,
- Fire Station #2: 221 Farm to Market 517 Rd W,
- Equipment Storage and Training: 4210 Dockrell St.

Equipment and Vehicles

DVFD has a variety of emergency fire engines, land and water rescue vehicles and utility vehicles ranging in age from 1992 to 2020. The DVFD does not have an official vehicle or vehicle equipment replacement policy or schedule due to funding constraints. Fleet maintenance is handled through an agreement with a local dealership. Future additions to the vehicle fleet include a larger rescue boat to assist with water-related emergencies.

Staffing

DVFD operations depend solely on the effort of 30 to 40 volunteer firefighters, and one part-time office administrator. Training includes 150 hours of new firefighter academy, monthly drills, maintenance and business meetings, and emergency management certifications through various local schools and Texas A&M University.

Programs and Activities

The DVFD is active in the Dickinson community and frequently hosts and participates in a variety of recurring programs, including but not limited to:

- Elementary School(s) Fire Prevention Week and Fire Extinguisher Training for Students and Teachers (DISD)
- Station Tours on Request
- Assist DPD Police Academy Class
- Various Community Events and Parades on Request

Service Indicators and Response Time

As indicated previously in Table 18, *Emergency Response Statistics (2016-2020)*, over the last five years the average DVFD response time was approximately nine minutes to approximately 3,000 dispatched calls.

Table 19, *Dickinson Volunteer Fire Department Response Statistics* on page 1.73 includes additional data regarding calls outside of Dickinson's corporate limits and breaks down the types of calls DVFD responds to. While close to 30 percent of total emergency calls are classified as good intent (i.e., smoke scares), a majority of these calls were cancelled en route by

Table 18, Emergency Response Statistics (2016-2020)

Category	2020		2019		2018		2017		2016		Total	
	# of Calls	Avg. Response Time (RT) (mins)	# of Calls	Avg. RT (mins)	# of Calls	Avg. RT (mins)	# of Calls	Avg. RT (mins)	# of Calls	Avg. RT (mins)	# of Calls	Avg. RT (mins)
Police Department	11,763	6.76	16,873	6.43	19,329	4.74	20,693	5.27	18,079	5.74	86,737	5.79
Emergency Management Service (EMS)	2,095	8.56	1,910	8.5	1,895	8.42	2,247	9.55	2,367	8.06	10,514	8.62
Volunteer Fire Department	614	9.47	616	9.51	518	8.86	719	8.88	582	9.17	3,049	9.18
Fire Marshall	29	3.5	22	6.06	129	4.12	236	3.57	229	3.91	645	4.23
TOTAL	14,051	7.07	19,421	7.63	21,871	6.54	23,895	6.82	21,257	6.72	100,945	6.96

Showcase of Dickinson Volunteer Fire Department equipment
Source: Dickinson Volunteer Fire Department

the caller or by the dispatcher. Over 12 percent of all calls were fire related, with an average of 57 fires occurring in Dickinson annually.

As of 2021, the DVFD achieved an Insurance Services Office (ISO) rating of three. Public protection classifications range from one (best) to ten (worst). The City's ISO rating affects fire insurance rates and service costs to residents and businesses within city limits. Strategies to improve the City's ISO rating are outlined in *The Future City* report.

Needs

The most significant problem facing the DVFD is an undersized fire station and the cost of new equipment. The existing facility, parking, and storage areas at 4500 FM 517 Road are all jointly shared with the DVFD and City EMS crews. The current space meet neither the workflow, vehicle and apparatus storage, nor the meeting space needs of existing staffing. Poorly designed parking areas result in responders having to carry heavy emergency response gear several hundreds of feet back to the station, often crossing through a stormwater retention area.

DVFD has additional need for a decontamination area for personnel and equipment due to health risks associated with exposure to harmful chemicals from burning buildings or flame suppressants during an emergency response.

Lastly, new National Fire Protection Association (NFPA) requirements on vehicles and personal protection in the fire stations and for deployed crews are projected to be prohibitively expensive and the DVFD is not in a position to upgrade vehicles and equipment without additional financial support.

Dickinson Emergency Medical Services

Dickinson's Emergency Medical Services (EMS) Department uses highly trained and skilled medical professionals to respond to emergencies. The EMS Department aggressively plans and prepares for the emergency needs of the community. The Department is under the management of the EMS Director and 21 other emergency personnel operating in 4 shifts.

The EMS Department has an operating budget of approximately $1.3 million and responds to about 2,500 emergency calls. The EMS Department shares Central Fire Station facility with the Dickinson Volunteer Fire Department.

Major EMS Department goals for the upcoming fiscal year include continued partnership with DVFD on training classes and information, continued procedural and reporting requirements for the Texas Ambulance Services Supplemental Payment Program, maintaining an emergency response time of 8 minutes or less, and the continued transfer of records to electronic format.

Fire Marshal

The Fire Marshal's Office is responsible for enforcing the City's ordinances and laws regarding fire prevention and safety, conducting fire and life safety inspections of all commercial buildings, reviewing construction plans, and investigating the origin and causes of fires. The Fire Marshal's Office also assists in code enforcement and emergency management.

The Fire Marshal's Office is under the management of the Fire Marshal and two part-time Fire Inspectors and has an operating budget of approximately $140,000 and conducted approximately 500 inspections, 200 plan reviews and 100 training hours in the previous year.

Table 19, Dickinson Volunteer Fire Department Response Statistics (2016-2020)

	Type of Emergency	2020		2019		2018		2017		2016		Total
		Inside City Limits	Outside City Limits	Inside City Limits	Outside City Limits	Inside City Limits	Outside City Limits	Inside City Limits	Outside City Limits	Inside City Limits	Outside City Limits	
1	Fire	60	32	60	38	57	38	53	34	57	28	457
2	Overpressure Rapture, Explosion, Overheat (no fire)	2	0	2	1	3	1	4	0	0	1	14
3	Rescue & Emergency Medical Service Incident	169	60	153	29	139	47	133	44	171	46	991
4	Hazardous Condition (No Fire)	127	27	154	22	105	13	151	27	98	20	744
5	Service Call	24	6	32	12	15	8	28	16	25	6	172
6	Good Intent Call	131	58	166	69	127	34	127	48	180	44	984
7	False Alarm & False Call	58	11	50	10	64	7	94	14	61	18	387
8	Severe Weather & Natural Disaster	3	1	1	0	0	2	3	1	1	0	12
9	Special Incident Type	2	0	0	0	1	0	1	1	0	1	6
	TOTAL	576	195	618	181	511	150	594	185	593	164	3,767
		771		799		661		779		757		

MAP 18, PUBLIC FACILITIES AND INSTITUTIONS

Legend

- Dickinson Volunteer Fire Department (DVFD)
- DVFD Two Mile Response Time Buffer
- Dickinson Police Department (DPD)
- DPD Two Mile Response Time Buffer
- Dickinson City Hall
- Dickinson Public Library
- United States Postal Service Post Office
- Bayou Animal Services
- Dickinson Historical Society Railroad Depot Museum
- Dickinson Water Treatment Plant
- Dickinson Community Center
- City of Dickinson Owned Parcels
- Parks

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021

Consultant: Halff Associates, Inc.

Hobbs Rd
Ervin Ave
Calder Dr
Cross Colony Dr
Gulf Fwy
Tallow Forest St
Cemetery Rd
Shoreview Dr
Lovers Ln
Avenue L
Walker St
Gill Rd
Rodeo Bend Rd
Sunset Dr
Deats Rd
Maple Dr.
Oak Dr
Benson Bayou
Timber Dr
20th St
H Ave
Ohio Ave
E Ave
Hill Ave
Main St
25th St E
Dickinson Ave
Colorado Ave
California Ave
Baker Dr
Winding Brook Dr
Scenic Dr
Country Club Dr
41st St E
Dickinson Bayou
Hughes Rd
Oleander Dr
N Humble Camp Rd
Galveston Rd
Hughes Ln
Pabst Rd
Holland Rd
City of League City
City of Dickinson
City of Santa Fe
City of Texas City
3436
45
646
517
3

Cultural Resources

Dickinson Railroad Depot Museum

Home to the Dickinson Historical Society, the original Galveston, Houston, and Henderson Railroad Depot was first built in 1859 and rebuilt in 1902. The museum celebrates Dickinson's rich history and currently serves as a community meeting facility, visitor center, gift shop, bicycle rest stop and houses offices for the Dickinson Historical Society, as well as the Dickinson Economic Development Corporation.

Historic Districts and Properties

The Texas Historical Commission, Texas' state agency on historic preservation, has identified over 20 various historical and cultural resources in Dickinson, not including locally designated sites. These resources contribute to Dickinson's unique built and cultural environment, and promote destinations and tourism within the City and the surrounding region.

Neighborhood surveys identify historically significant structures that contain prominent architectural features and designs which are in mostly original condition. There are approximately 14 residential homes and civic buildings identified for their historic and architectural significance in Dickinson, including the Scottish Rite Cathedral, the Weigand House, Bagot House and various homes along 45th, 47th and Main Streets.

Historical Markers commemorate diverse topics in Texas history, including: the history and architecture of houses, commercial and public buildings, religious congregations, and military sites; events that changed the course of local and state history; and individuals who have made lasting contributions to the state, community organizations, and businesses. There are six Historical Markers in Dickinson at the following locations: Evergreen Cemetery, Dickinson Station of the GH&H Railroad, First United Methodist Church of Dickinson, Faith United Methodist Church, Townsite of Dickinson and Holy Trinity Episcopal Church.

Many cemeteries are endangered due to lack of historic context and knowledge of their presence or exact location. The Historic Texas Cemetery designation aids processing, recording, and protecting historic cemeteries. Four cemeteries are designated in Dickinson: Evergreen Cemetery, Mount Olivet Catholic Cemetery, Dickinson Cemetery, and Magnolia Cemetery.

The Texas Meridian Highway is a network of historically prominent roads spanning more than 800 miles and is officially designated by TxDOT and the Texas Historical Commission. The historic roadway was originally envisioned as a major north-south connection between Canada and Mexico, and contains significant engineering and roadside architectural features such as railroad trellises, bridges and overpasses. SH 3, which runs through the eastern half of Dickinson, is a portion of the Texas Meridian Highway.

Civic Groups

- **Keep Dickinson Beautiful** is a Dickinson-based nonprofit organization comprised of local citizens interested in creating a beautiful, sustainable community environment. Volunteers participate in community clean-ups and neighborhood beautification projects intended to promote civic pride and environmental awareness. Keep Dickinson Beautiful is an affiliate of Keep Texas Beautiful and Keep America Beautiful.
- **Dickinson Bayou Watershed Partnership** is a community advocacy and research group that promotes awareness and public education for water quality concerns in the Dickinson Bayou Watershed such as pollution, dissolved oxygen, and bacteria issues. The Watershed Partnership is directed by a steering committee that includes organizations such as Texas Parks and Wildlife, Galveston Bay Foundation, Houston-Galveston Area Council and the City of Dickinson.
- **The Dickinson Festival of Lights** is a not-for-profit organization that creates family-oriented annual winter festival light displays in Paul Hopkins Park.
- **The Dickinson Historical Society** educates Dickinson residents and visitors on the City's robust cultural legacy, prominent citizens and important locations through historic preservation, monuments and landmarks. The Historical Society provides history programs and museum tours, and retains cultural artifacts in the G.H. & H. Railroad Depot Museum.

Photograph of a historic property located at 1810 Pine, October 1979
Source: Texas Historical Commission/University of North Texas

Photograph of the Dickinson Railroad Station/Museum, October 1979
Source: Texas Historical Commission/University of North Texas

MAP 19, HISTORIC AND CULTURAL RESOURCES

Legend

- Neighborhood Survey
- National Register of Historic Places
- Museum
- Historical Marker
- Cemetery
- Historic Highway Route

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Parks and Recreation

A community's parks, open spaces, trails, and recreational facilities should fulfill the recreation and leisure needs of residents and visitors, thereby enhancing their quality of life. This section outlines parks level of service in Dickinson using National Recreation and Parks Association (NRPA) standards to evaluate park land service areas. Using a standards-based approach determines park land acreage level of service (number of park land acres per 1,000 people) and service area (number of residents within a standard distance) for each park and facility in the community.

Galveston County Parks Department owns and maintains two parks in Dickinson. The City of Dickinson does not have its own Parks and Recreation Department. A paddle/kayak trail along Dickinson Bayou is promoted by the Dickinson Chamber of Commerce.

Paul Hopkins Park

At approximately 11 acres in size, Paul Hopkins Park is a Community Park that provides amenities such as an interpretive trail, free kayak/canoe launch, covered picnic areas, boardwalk pier, playground and festival grounds. Paul Hopkins Park is home to Dickinson's annual winter Festival of Lights.

Ray Holbrook Park

At approximately 33 acres in size, Ray Holbrook Park is a Community Park that provides amenities available such as picnic areas, unlit softball fields and a concession stand.

Park Land Level of Service (LOS)

A high level of service for a park means that it is adequately meeting the needs of the community. Conversely, a low level of service (LOS) signifies inadequacy or gaps in the parks system such that it does not fulfill community needs. According to NRPA recommended LOS for community parks, Dickinson should have two park land acres per 1,000 residents, or 42 park land acres overall. Dickinson currently has 2.1 park land acres per 1,000 residents and 44 park land acres in the City. A two-and-a-half acre surplus indicates that Dickinson residents' park needs are narrowly met, in terms of community parks. However, the City has no neighborhood or pocket parks. **Overall, there is a significant need for additional park land acreage in the City.**

Park Service Area and Accessibility

Analyzing service areas for parks helps to characterize the distribution of parks in a community. A park's service area is determined by its 'walkshed,' or the average distance users are must walk or cycle to it. Specifically, it identifies the under-served areas in the city where residents may have to walk or drive longer distances to access parks and recreational facilities. As depicted in Map 20, *Parks and Recreation Facilities*, buffers were drawn at the 1/2-mile and 1/4-mile distance from each of the two parks in Dickinson. These represent the typical walking or cycling distances the average resident would comfortably walk or bike to a park. The existing park network serves less than 10 percent of all residences within a one-quarter mile walkshed of a park, or 21 percent at the one-half mile walkshed distance. This means that between 80 to 90 percent of Dickinson is not within walking distance of a park.

Galveston County Boat Ramp Facilities

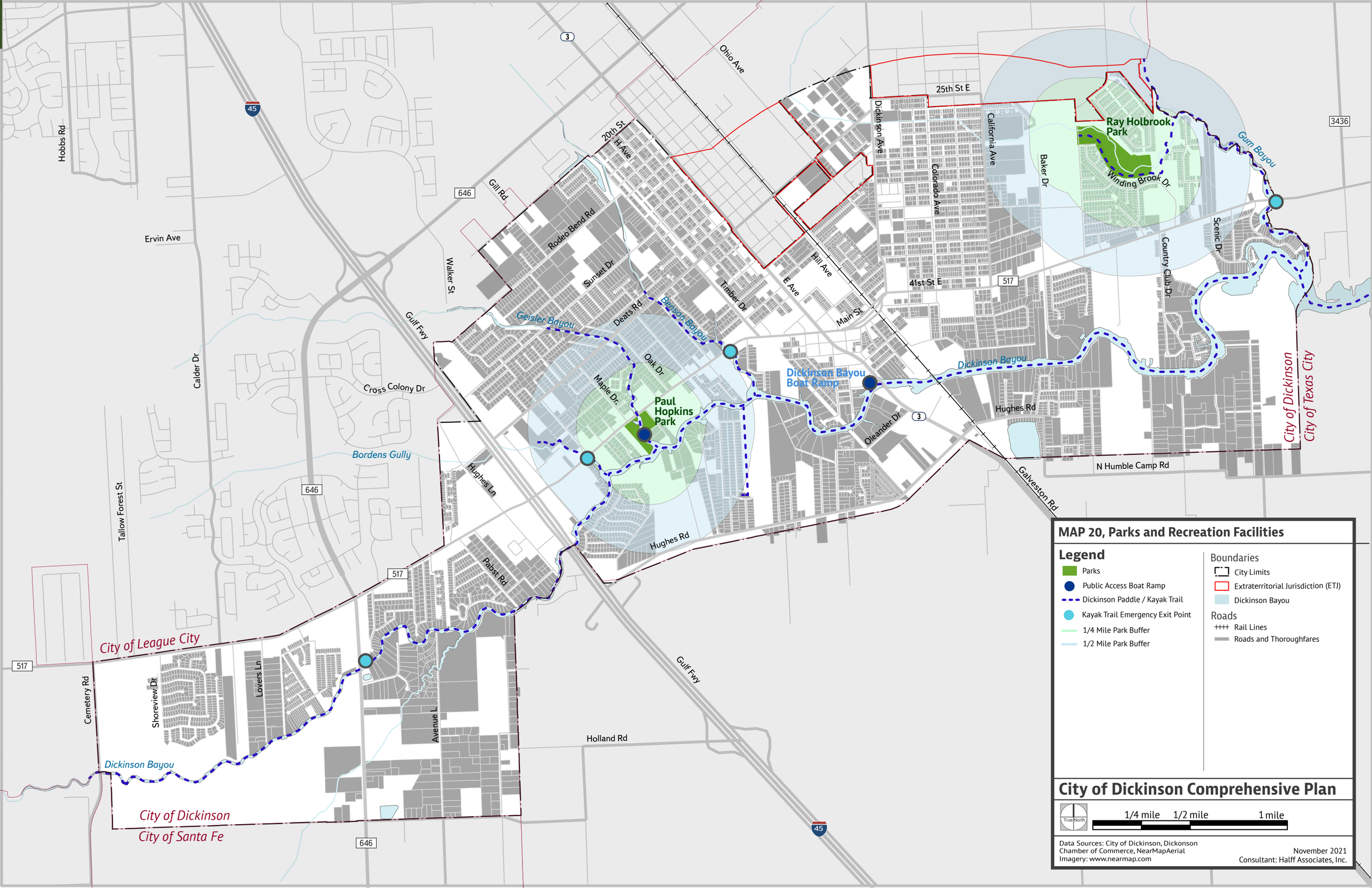
Galveston County owns and operates two public boat ramps for accessing Dickinson Bayou. One is on the north side of Dickinson Bayou and west side of SH 3 near 48th Street, and the other is underneath SH 146, beyond Dickinson's city limits.

Table 20, Park Level of Service (LOS)

Type of Park	Count	Existing LOS (Based on 2020 Population)		Recommended LOS Standard by NRPA	Recommended Current Acreage (Based on 2020 Population)	
		Existing Acreage	Current LOS*		Recommended Acreage 2021	Surplus/(Deficit) Acreage
Community Parks	2	44	2.1	2	41.5	**2.5**

Playground at Paul Hopkins Park
Source: Halff Associates

Galveston County's Highway 3 Boat Ramp
Source: Halff Associates



MAP 20, Parks and Recreation Facilities

Legend

- Parks
- Public Access Boat Ramp
- Dickinson Paddle / Kayak Trail
- Kayak Trail Emergency Exit Point
- 1/4 Mile Park Buffer
- 1/2 Mile Park Buffer

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, Dickonson Chamber of Commerce, NearMapAerial Imagery: www.nearmap.com

November 2021
Consultant: Halff Associates, Inc.

Community Health

Health metrics were analyzed to better understand the current health conditions of the community residents and formulate recommendations to improve quality of life in Dickinson. Data was obtained from the Centers for Disease Control and Prevention (CDC) Population Level Analysis and Community Estimates (PLACES) data model which provides health metrics at a local level. This data allows health officials, policy makers, nonprofits, and decision makers to better understand the health status of residents and focus their efforts to improve health at the local level.

The conditions in the places where people live, learn, work, and play affect a wide range of health and quality-of-life-risks and outcomes. The PLACES model data provides information for 27 major health measures, including unhealthy behaviors (e.g., current smoking), health outcomes (e.g., coronary heart disease, diabetes), and prevention practices (e.g., health insurance coverage, cholesterol screening) that lead to illness, suffering, and early death related to chronic diseases and conditions, as well as conditions and diseases that are the most common, costly, and preventable of all health problems.

Health Outcomes

Compared to other geographic locations, Dickinson residents have worse health outcomes, unhealthier behaviors, and poorer prevention habits. As illustrated in Table 21, *CDC Health Metrics*, Dickinson residents are statistically more likely to have:

- Higher diagnoses of asthma, high blood pressure, diabetes, and kidney disease
- Episodes of stroke, and bouts of poor mental or physical health lasting two weeks or more
- Worse dental care, rates of physical exercise, and less hours of sleep

Contributing Factors

According to the CDC, "social determinants of health include healthcare access and quality, education access and quality, social and community context, economic stability, and neighborhood and built environment." Resources that enhance these quality-of-life measures can have a significant influence on population health outcomes.

The widest health disparities between Dickinson and other localities are driven by preventative measures, namely:

- **Lack of health insurance among adults**, resulting in deferring other healthcare screenings (dentists, primary care, etc.). Without health insurance, people are less likely to have a regular health care provider and more likely to skip routine health care, putting them at increased risk for serious health problems.
- **Less leisure-time physical activity** resulting in significantly higher rates of obesity. According to the Department of Health and Human Services, only one in four adults and one in five adolescents in the United States meets physical activity guidelines for aerobic and muscle-strengthening activities. Physical activity can help prevent disease, disability, injury, and premature death. Although most people don't get the recommended amount of physical activity, it can be especially hard for older adults and people with chronic disease or disabilities. The trend of less leisure-time activity indicates that residents cannot incorporate recreational exercise into their daily habits, or do not have access to such opportunities, and the trend correlates with higher rates of obesity in Dickinson. Establishing physical fitness and healthy eating habits in children and young adults makes it easier to carry those behaviors into adulthood.

Pathways to Implementation provides policy and program recommendations to improve the social determinants of health in Dickinson.

Table 21, CDC Health Metrics

Topic	Dickinson	Galveston County	H-GAC Region	Texas	United States
Population	20,454	337,890	7,169,252	25,145,397	327,167,434
Health Outcomes					
Arthritis among adults aged >=18 years	26.0	25.2	24.5	22.4	25.8
High blood pressure among adults aged >=18 years	35.9	34.8	35.3	32.8	32.4
Prevalence of cancer (excluding skin cancer) among adults aged >=18 years	6.5	6.7	6.4	5.7	6.9
Prevalence of current asthma among adults aged >=18 years	9.9	9.3	9.1	9.2	9.2
Prevalence of coronary heart disease among adults aged >=18 years	7.2	6.7	7.3	6.7	6.8
Prevalence of chronic obstructive pulmonary disease among adults aged >=18 years	7.6	6.6	7.2	6.7	6.9
Diagnosed diabetes among adults aged >=18 years	13.4	12.7	12.9	12.5	11.4
High cholesterol among adults aged >=18 years who have been screened in the past 5 years	36.3	35.7	35.8	34.0	34.1
Chronic kidney disease among adults aged >=18 years	3.2	3.1	3.1	3.1	3.1
Mental health not good for >=14 days among adults aged >=18 years	15.1	13.4	13.7	14.3	12.7
Physical health not good for >=14 days among adults aged >=18 years	14.0	12.4	13.3	13.5	12.5
Prevalence of stroke among adults aged >=18 years	3.7	3.3	3.5	3.3	3.4
Prevalence of all teeth lost among adults aged >=65 years	17.3	13.8	15.3	15.9	13.5
Prevention					
Current lack of health insurance among adults aged 18-64 years	27.1	23.4	25.8	28.0	12.2
Taking medicine for high blood pressure control among adults aged >=18 years with high blood pressure	74.5	75.0	74.7	71.8	75.8
Prevalence of cervical cancer screening among adult women aged 21-65 years	81.6	82.9	81.5	81.3	84.7
Prevalence of routine doctor checkups within the past year among adults aged >=18 years	74.1	74.9	73.8	72.4	76.7
Prevalence of cholesterol screening among adults aged >=18 years	78.9	80.8	80.0	78.9	81.5
Prevalence of colonoscopy among adults aged 50-75 years	54.3	58.3	59.4	56.7	66.4
Crude prevalence of older adult men aged >=65 years who are up to date on a core set of clinical preventive services	25.9	27.0	24.4	24.2	32.4
Crude prevalence of older adult women aged >=65 years who are up to date on a core set of clinical preventive services	21.4	25.1	24.4	22.0	28.4
Prevalence of visits to dentist or dental clinic among adults aged >=18 years	53.2	58.1	55.9	56.3	66.5
Prevalence of mammography use among women aged 50-74 years	73.6	71.6	70.7	75.0	74.8
Unhealthy Behaviors					
Binge drinking among adults aged >=18 years	18.8	18.9	16.7	17.2	16.4
Prevalence of current smoking among adults aged >=18 years	20.9	18.2	17.4	17.2	15.5
No leisure-time physical activity among adults aged >=18 years	29.1	26.0	27.7	28.1	24.2
Obesity among adults aged >=18 years	37.0	34.8	36.2	36.3	30.9
Sleeping less than 7 hours among adults aged >=18 years	40.3	38.8	37.1	36.6	35.7

Tree Canopy

Dickinson's natural landscape and abundant tree canopy was consistently mentioned during stakeholder listening sessions as one of the City's most attractive features.

Using data retrieved from the National Land Cover Database, Map 21, *Tree Canopy* demonstrates the City's distinctive tree canopy, which provides up to 75 percent or greater land cover in some areas of the City.

According to the Dickinson Bayou Watershed Partnership Habitat Workgroup, the forested areas of Dickinson Bayou watershed lie primarily along the riparian corridor of the bayou and its tributaries.

The riparian corridor for sections of Dickinson Bayou contain larger complexes of upland forests intermingled with lower lying riparian forested wetlands or coastal flatwoods.

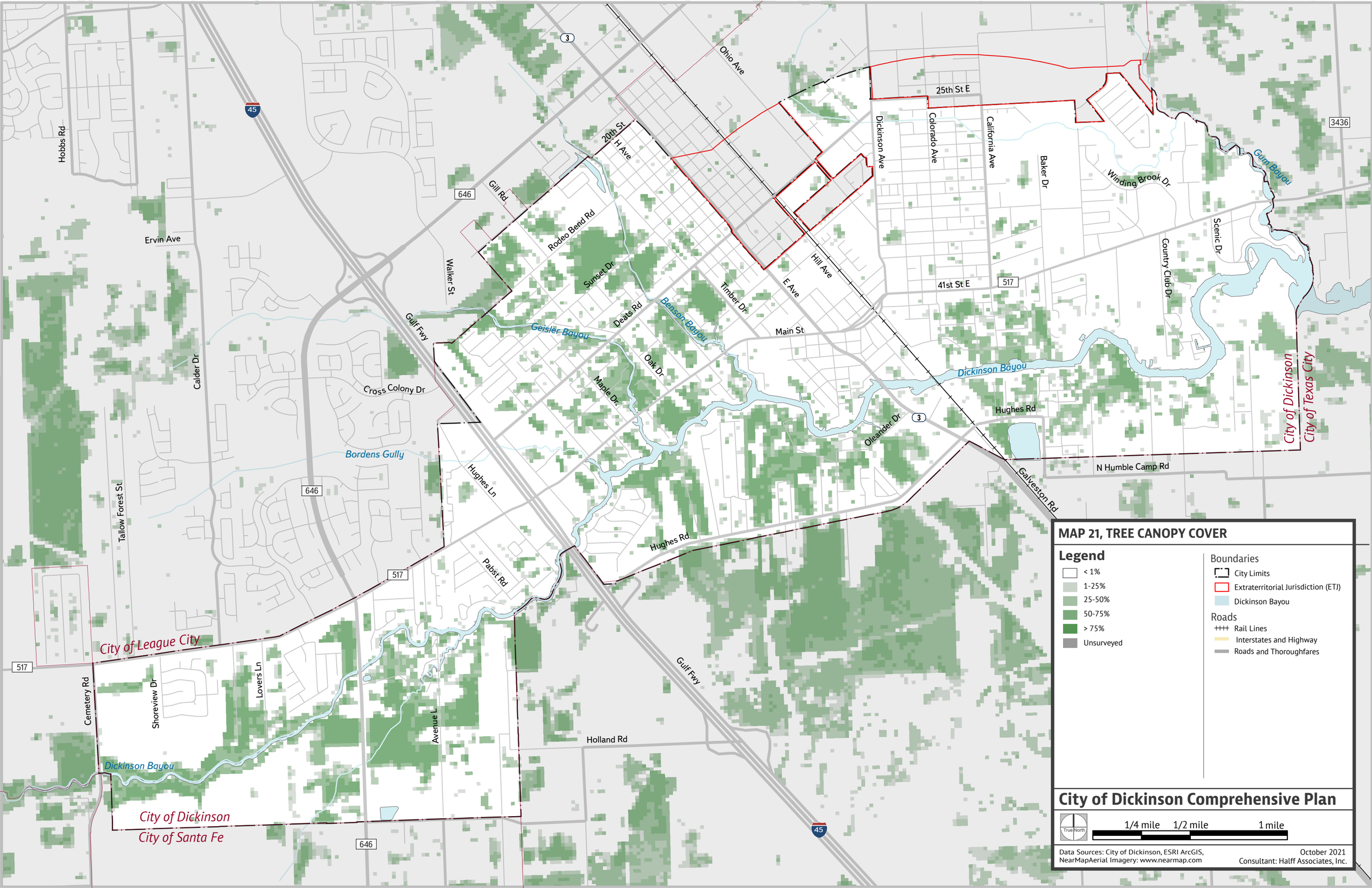
These riparian corridors are dominated by a variety of vegetation, including cedar elm (*Ulmus crassifolia*), willow oak (*Quercus phellos*), and black willow (*Salix nigra*) along the banks.

Upland forests along higher elevations in this same corridor are characterized by live oak (*Quercus virginiana*), Loblolly pine (*Pinus taeda*), Eastern red cedar (*Juniperus virginiana*) and green ash (*Fraxinus pennsylvanica*).

Understory ground cover may include upland species like American beautyberry (*Callicarpa americana*) and yaupon (*Ilex vomitoria*).

Wetland species such as spiderwort (*Tradenscancia ohiensis*) and palmetto (*Sabal minor*) also contribute to the understory vegetation in these corridors.

Aerial view captured above Dickinson Bayou
Source: Halff Associates



MAP 21, TREE CANOPY COVER

Legend

- < 1%
- 1-25%
- 25-50%
- 50-75%
- > 75%
- Unsurveyed

Boundaries

- City Limits
- Extraterritorial Jurisdiction (ETJ)
- Dickinson Bayou

Roads

- Rail Lines
- Interstates and Highway
- Roads and Thoroughfares

City of Dickinson Comprehensive Plan

True North

1/4 mile 1/2 mile 1 mile

Data Sources: City of Dickinson, ESRI ArcGIS, NearMapAerial Imagery: www.nearmap.com

October 2021
Consultant: Halff Associates, Inc.

Conclusion

This section provides an overview of findings in *The Existing City*. Please refer to *The Future City* report for more information about Comprehensive Plan goals, objectives, strategies, and recommendations.

Land Use and Development

- More than 50 percent of land in Dickinson is devoted to residential uses, followed by 13 percent for farm and ranchland, and ten percent for commercial uses. Approximately nine percent of Dickinson is undeveloped or vacant.
- Primary commercial corridors are IH-45, SH 3, and FM 517.
- More than 80 percent of land in Dickinson is zoned for residential uses (68 percent Conventional Residential (CR) and 16 percent Rural Residential (RR)). There are 12 base zoning districts established by the City's zoning code, although only nine are currently in use. One Planned Development (PD) was proposed in February 2022. The two remaining unused zoning districts are Designated Open Space (DOS) and Interstate Commercial (IC).
- Over 33 Specific Use Permits have been issued to date, mostly for religious institutions, school buildings, restaurants serving alcohol and vehicle sales, indicating an opportunity to improve zoning regulations to eliminate the need for Specific Use Permits.
- Based on Galveston County Appraisal District improvement value data, more than 40 percent of Dickinson qualifies for redevelopment relative to land value.
- From 2016 to 2021, approximately 622 new building permits have been issued for 592 residential structures and 30 commercial structures. Substantially all new residential permits over the last five years have been issued for single-family detached homes.
- The predominant pattern of development reflects fringe growth in conventional subdivision styles that promote vehicle dependency and multiple, recurring vehicle trips driven by linear, closed-loop designs.
- The existing platting process lacks permit application documents that clearly explain submittal deadlines, architectural and engineering standards and development criteria. These public-facing documents help guide applicants and are typically made available online.
- The existing Drainage Criteria Manual was approved and adopted in 2011, prior to Hurricane Harvey in August 2017 where most of the City was damaged. The Drainage Criteria Manual should be updated to reflect more stringent stormwater runoff control mechanisms.
- Similarly, an Engineering Standards Manual is not readily available to assist developers with Dickinson's regulations.
- According to the 2020 TCEQ Integrated Report Index of Water Quality Impairments, Dickinson Bayou and its contributing tributaries (Bordens Gully, Geisler Bayou, Bensons Bayou, and Gum Bayou) are all impaired waterbodies due to elevated bacteria and toxic pollutants and depressed levels of dissolved oxygen. This impairment adversely affects the safety of contact water recreation activity like swimming, kayaking and fishing, and the consumption of fish caught in the Dickinson Bayou.
- Any restoration of wetlands, or implementation of locally-scaled green infrastructure projects, would potentially enhance or restore some water quality and habitat functions within the watershed.
- Approximately 74 percent of the City is in the 100-year floodplain. Approximately between 90 to 100 percent of the City is within the 500-year floodplain, meaning that almost every part of Dickinson is within either the 100-year or 500-year floodplain.

Veteran's memorial pavilion on St. Goar St.
Source: Halff Associates

Utility Infrastructure

- The average daily potable water use in Dickinson is 2.28 million gallons per day, approximately 54 percent of the 4.2 million gallons per day contracted capacity. The surplus capacity in daily potable water consumption can support additional growth.
- About 180 dead-end water lines need to continuously be flushed to maintain water quality. Water tanks need additional mixing and agitation equipment to prevent water stagnation.
- The water main along FM 517 West is undersized resulting in decreased service reliability to the western half of Dickinson where several water mains of varying widths converge into a 10" diameter water main under IH-45.
- Approximately eight miles of cast iron and six miles of asbestos concrete piping need replacement due to damage resulting from excessive rain events.
- Dickinson's wastewater treatment plant has a daily wastewater treatment capacity of 4.8 million gallons. The average daily treatment flow is 1.8 million gallons, or 37 percent of total treatment capacity. The surplus capacity in daily wastewater treatment can support additional growth.
- A significant amount of sanitary sewer pipe rehabilitation is needed throughout Dickinson due to inflow and infiltration ("I & I") which forces collection systems to carry and eventually treat more water flow than they are designed to handle.
- As a result of jurisdictional overlap, there have been no major consolidated efforts from jurisdictional entities to realign, dredge, widen, or otherwise change the natural channel of Dickinson Bayou. The main channel remains generally unimproved.
- Eroded shorelines impair an owner's use of their land. A variety of shoreline stabilization methods have been implemented to attenuate wave action along waterfront properties to varying degrees of success, including concrete riprap, armored embankments, and bulkheads. Shoreline erosion affects water quality as vegetated embankments that normally filter harmful chemicals in stormwater runoff are absent.

Housing and Neighborhoods

- Approximately 74 percent of residential buildings in Dickinson are single family detached, making single family homes the dominant housing type in the city.
- Multi-family buildings with 20 or more units constitute 6.3 percent of the City's housing.
- At 10.3 percent of the total housing units in Dickinson, mobile homes are the second-most dominant type of residential housing in the City.
- A significant number of homes (20 percent) were built before 1970 making them over 50 years old.
- The median value of owner-occupied homes in Dickinson is $169,700 according to ACS 2016-2020 data, which is less than the median value of owner-occupied homes in Galveston County ($212,000) and Harris County ($189,000). Galveston County Appraisal District (GCAD) data indicates the average residential home value is $163,619.
- The median gross rent for renter-occupied housing in Dickinson is $1,049, which is less than median gross rent in Galveston County ($1,106) and Harris County ($1,115), indicating that the renter housing in Dickinson is more affordable than renter housing in the surrounding areas.

Mobility

- The existing transit network provided by Gulf Coast Transit District serves approximately 60 percent of all residences within a one-quarter mile walkshed of a bus stop, or 84 percent of residences at the one-half mile walkshed distance. This means that between 60 and 84 percent of Dickinson's residential areas are within walking distance of a bus stop. Poor roadway conditions, particularly on California, Colorado, and Texas Streets in east Dickinson, adversely affect rider comfort.
- Between 2016 and 2021, 1,949 vehicle crashes occurred in Dickinson. More than 60 percent of all crashes occurred on FM 517, Dickinson Avenue and SH 3 which serve as Dickinson's primary north-south and east-west corridors. Eight crashes were fatal (less than 1 percent).
- Between 2015 and 2019, annual traffic counts increased approximately 14 percent, indicating higher traffic volume along primary roads in Dickinson, and characterizing traffic congestion at critical intersections.

- Upcoming TxDOT improvements include widening IH-45 and safety improvements on SH 3.
- Dickinson's existing pedestrian infrastructure network including sidewalks and bicycle infrastructure is largely incomplete and discontinuous. Sidewalks are uncomfortable due to narrow sidewalk width and proximity to the roadway shoulder. Many of the new subdivisions include interior sidewalks only, but not along the perimeter. As burrow ditches are common throughout many of the streets in Dickinson, construction of sidewalk infrastructure is prohibitively expensive or not feasible.
- There are no bicycle facilities or trails in Dickinson.

Community Resources and Local Economy

- Dickinson Independent School District (DISD) officials project a 15-20 percent increase in enrollment by 2031. Dickinson lacks the pedestrian infrastructure to support students, forcing students to depend on district transportation. No new school buildings are projected by DISD in Dickinson's corporate limits.
- DISD does not have an interlocal agreement for schoolground parks with the City of Dickinson. An opportunity exists to augment Dickinson's parks and recreational facilities with after-hours access to DISD property.
- The park network, consisting of two community parks (there are no neighborhood or pocket parks), is woefully inadequate to serve Dickinson's existing population; and this need is expected to increase in the future as the population continues to grow. The park network serves less than 10 percent of all residences within a one-quarter mile walkshed of a park, or 21 percent at the one-half mile walkshed distance. Between 80 to 90 percent of Dickinson is not within walking distance of a park. A two-and-a-half acre surplus indicates that Dickinson residents' park needs are narrowly met, in terms of community parks. However, the City has no neighborhood or pocket parks. Overall, there is a significant need for additional park land acreage in the City.
- The undersized Police, Fire and Emergency Services Departments buildings presents an urgent need for new operational headquarters. Due to funding constraints, Dickinson Volunteer Fire Department does not have an official vehicle or vehicle equipment replacement policy or schedule.
- Dickinson is positioned within a highly competitive retail market and is afforded frontage along IH-45. Some of Dickinson's greatest assets with regards to potential retail development include the natural environment as an amenity, access to a large regional population, and some key market segment opportunities, most notably a grocer.
- Galveston County has 18 percent non-taxable land. This is higher than Dickinson, which only has 10 percent non-taxable land. Downtown Dickinson's non-taxable percentage is significantly higher at 45 percent. This is due to multiple governments and tax-exempt organizations operating in downtown Dickinson.
- Looking at Dickinson, there is no defined downtown area. Ambiguous downtown boundaries is a shared phenomenon typically observed in suburban municipalities nestled in larger metropolitan areas of relatively recent growth. The lack of a defined downtown, and the benefits associated with a walkable, tax-efficient space, hinders Dickinson's identity as a community.
- Downtown Dickinson is a small downtown with a similar value productivity to the rest of the city. Typically, downtown areas are the most fiscally productive areas of a city and help carry the financial burden of municipal operations. Dickinson's relatively low productivity on a Value Per Acre basis indicates an opportunity for growth and improvement that could benefit the whole City.
- According to the CDC, Dickinson residents are statistically more likely to have: higher diagnoses of asthma, high blood pressure, diabetes, and kidney disease, episodes of stroke, and bouts of poor mental or physical health lasting two weeks or more.
- Dickinson Management District (DMD) serves an instrumental role in attracting new businesses and local employment through the administration of Chapter 380/381 Agreements.
- Central Dickinson boasts abundant tree canopy, contributing to walkable conditions in this part of the city.

Aerial view captured above Dickinson High School football stadium.
Source: Halff Associates