# State of Community Report Willacy County, Texas

Date: 08/23/2019



Source: Texas Historical Commission

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Executive Summary

## 1. County Overview

Willacy County lies in the Rio Grande valley of South Texas, thirty miles north of Mexico. It is situated in the lower plain of south Texas with flat coastal prairie sloping toward Gulf surfaced by alluvial, sandy and marshy soils. It is bordered by Kenedy County to the north, Cameron County to the south, Hidalgo County to the west and Gulf of Mexico to the east. Humid and subtropical, the annual average temperatures range from 48°F in January to 95°F in July (Garza, 2010). The average annual rainfall in the county is 27 inches a year. Tropical storms and hurricanes are possible from June through October.

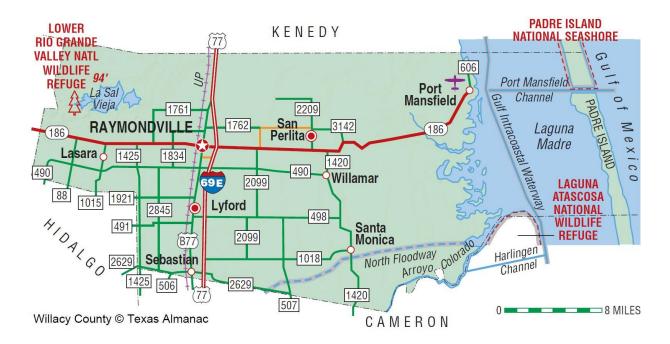
The 2018 county population is estimated by Census to be 21,515 people, and the population of its largest town and county seat, Raymondville, is 10,940. Raymondville is located at the north central part of the county on U.S. Highway 77 and the Missouri Pacific Railroad. Lyford and San Perlita are major cities of the county. Lasara, Los Angeles, Port Mansfield, Ranchette Estates, Santa Monica, Sebastian, and Zapata Ranch are Census Designated Places of the county.

The county covers an area of 784 square miles, of which 591 square miles is land and 194 square miles is water. It comprises small portion of Laguna Atascosa National Wildlife refuge in northeastern territory and some portion of Padre Island National Seashore in eastern territory. Salt lake, La Sal Vieja, six miles northwest of Raymondville used to supply salt to South Texas and north Mexico but today is popular for saltwater fishing. These natural environment coupled with mild climate attracts winter tourists for various recreational activities such as fresh and saltwater fishing, and hunting of deer, turkey and dove (Willacy County, 2018).

Oil and mineral gas are the source of minerals for the county. The county's economy is based on agriculture and oil. Cotton, sorghum, corn, vegetables and sugarcane are the cash crops. Livestock farming such as cattle, horses, goats and hogs also contributes in county's economy.

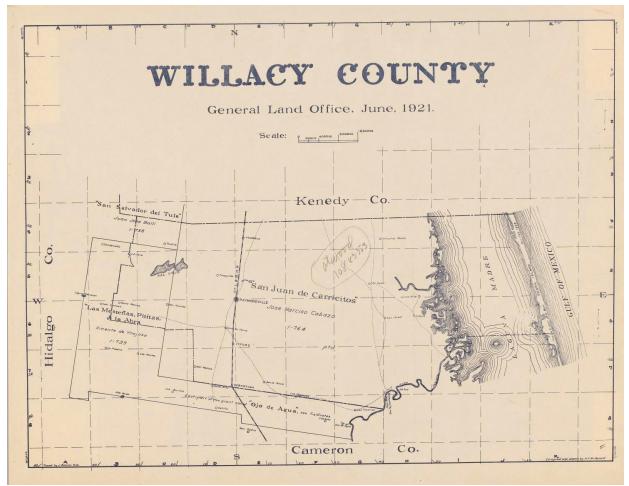
Transportation in the county is served by Interstate 69E (under construction), US Highway 77, State Highway 186 and Farm to Market Road 498. The county also has Missouri Pacific Railroad (MoPac), one of the first railroads in the United States west of the Mississippi River (Willacy County, Texas, 2019).

There are three airports in the county, and waterborne commerce is served by Port Mansfield. Special events include the Willacy County Livestock Show, the Port Mansfield Fishing Tournament, and the Port Mansfield Lady Anglers Tournament (Garza, 2010).



Willacy County, TX Source: Handbook of Texas Online, Alicia A. Garza, "WILLACY COUNTY," accessed June 26, 2019, http://www.tshaonline.org/handbook/online/articles/hcw10.

## 2. History



Historic Willacy County Map, 1921

Source: McDonald, H. F. & Giles, J. Bascom. Willacy County, map, 1921; [Austin, Texas]. (https://texashistory.unt.edu/ark:/67531/metapth492876/m1/1/?q=willacy%20county: accessed June 26, 2019), University of North Texas Libraries, The Portal to Texas History, https://texashistory.unt.edu; crediting Hardin-Simmons University Library.

Willacy County was formed in 1911 from Cameron and Hidalgo counties and organized in 1912. Sarita used to be its county seat. It was reorganized in 1921 after most of its territory was given over to Kenedy County (Willacy County, 2018). It was named for state senator John G. Willacy.

The earliest known inhabitants were the nomadic Coahuiltecan Indians who inhabited for 11,000 years and the Karankawa Indians inhabited along the coast. In 1519, the coast was mapped and named Amichel by Alonzo Álvarez de Pineda. There were three land grants made in the Willacy County area by the Spanish and Mexican governments. The earliest Spanish land grant of half million acres was made to José Narciso Cabazos in 1792 who immediately settled the land and stocked his ranch with 900 cattle. Two other land grants in the Willacy County area were made to Vicente de Ynojosa by Spain in 1798. At this time salt lake, La Sal Vieja, supplied all of the area of what is now South Texas and northern Mexico with salt. Cabazos's heirs lost control of the land in 1811 when hostile Indians drove them off. In 1821, a trade road was built from Matamoros through the future Willacy County to San Patricio.

Oranges were introduced to the Willacy County area by a ranchman named Cantú in 1886 and ranching was introduced in the early nineteenth century by Spanish settlers. The real surge of Anglo settlement came after the building of the St. Louis, Brownsville and Mexico Railway into the lower Valley in 1904 and they molded into Hispanic culture. Along with them came the land promoters, who converted pastures to plowed fields; and railroad companies that contributed in settling the area.

In 1912 Bermuda onion was introduced to Willacy County that displaced ranchland in southern part of the county, becoming most important crop. By the early 1920s, Willacy County had become Anglo territory with new Anglo farmer settlers who neglected Tejano customs and older culture. They also attributed county's poverty to lack of industriousness and ambition of Mexican laborers which made county officials to forbid Mexicans from holding dances and fiestas. Relations between Anglos and Mexicans became even more antagonistic during the late 1920s which showed that Mexicans were controlled by the Anglo minority. Till late 1920 the county didn't have any paved roads, La Sal Vieja was supplying the area with salt.

Willacy County was again reorganized in 1921 when disputes arose between farmers and ranchers (early white settlers) separating ranching area in the northern regions of the county which became Kenedy County. Raymondville was chosen as the county seat. Since its reorganization, Willacy County's main industry has been agriculture. Cotton, sorghum, vegetables, sugar cane, cattle, horses, and hogs were the chief agricultural products. In 1940, first oil wells were sunk in county's Willamar oilfield and by 1946, the county had 200 wells producing in three oilfields. Today oil production is major part of local economy.

"During the twentieth century Willacy County has changed from a predominantly Anglo population to a predominantly Mexican American population. In 1920, 99 percent of the population was white, but by 1930 only 43 percent was white. In the 1980s Willacy County ranked thirteenth among all United States counties in the highest percentage of residents of Hispanic origin (Garza, 2010)."



#### Willacy County Courthouse, 1981

Source: Texas Historical Commission. [Willacy County Courthouse], photograph, December 1, 1981; (https://texashistory.unt.edu/ark:/67531/metapth959838/m1/1/?q=willacy%20county: accessed June 26, 2019), University of North Texas Libraries, The Portal to Texas History, https://texashistory.unt.edu; crediting Texas Historical Commission.

## 3. Demographics

## 3.1 Population Density

		Popul	Population		Density (per sq. mi)	
	Area (sq. mi)	2010	2017	2010	2017	
Lasara Census Designated Place	1.4	1.020	020	740	(())	
(CDP)	1.4	1,039	928	742	663	
Sebastian Census Designated	1.7	1.017	1 501	1 100	026	
Place (CDP)	1.7	1,917	1,591	1,128	936	
San Perlita City	0.5	573	653	1,146	1,306	
Lyford City	1.8	2,611	2,585	1,451	1,436	
Raymondville City	3.8	11,284	11,087	2,969	2,918	
Willacy County	784.0	22,134	21,839	28	28	
Texas	268,581.0	25,145,561	27,419,612	94	102	

Table 1 - Population Density of CDPs and cities of Willacy County, Texas, 2010 and 2017

Source: U.S. Census Bureau, 2010a, 2010b, 2010c, 2010d and 2010e; 2017a, 2017b, 2017c, 2017d and 2017e

Willacy County's population density remained same for both 2010 and 2017 i.e. 28 people per square mile. Raymondville and Lyford City, and Sebastian CDP affect the demographic patterns of the Willacy County. The population of the county is more concentrated in Raymondville and Lyford Cities i.e. in 2010, population density for Raymondville was 2,969 people per square mile and that for Lyford was 1,451 people per square mile. Population density in all cities and CDPs decreased in 2017 compared to 2010. But 2017 5-year ACS estimates might not be reliable source to rely on since it is just an estimation. Willacy County has significantly low density in comparison to the state as can be seen in Table 1. Texas population density increased from 94 to 102 people per square mile in 2017.

## 3.2 Historical Population Growth

Year	Lasara	Sebastian	San	Lyford	Raymondville	Willacy	Texas
	CDP	CDP	Perlita				State
1850							212,592
1860		—	_				604,215
1870			—				818,579
1880		_					1,591,749
1890			—				2,235,527
1900		—	_				3,048,710
1910			—				3,896,542
1920		_					4,663,228
1930		_		795	2,050	10,499	5,824,715
1940			—	891	4,050	13,230	6,414,824
1950			—	1,473	9,136	20,920	7,711,194
1960			348	1,554	9,385	20,084	9,579,677
1970			352	1,425	7,987	15,570	11,196,730
1980			475	1,618	9,493	17,495	14,229,191
1990		1,598	512	1,674	8,880	17,705	16,986,335
2000	1,024	1,864	680	1,973	9,733	20,082	20,851,820
2010	1,039	1,917	573	2,611	11,284	22,134	25,145,561
2017	928	1,591	653	2,585	11,087	21,839	27,419,612

Table 1: Historical Population Growth in cities and CDPs of Willacy County, and Texas

Source: U.S. Census Bureau, Decennial Census and 2017 ACS

The population of Texas has been increasing since 1850. Willacy County also follows the State's trend of increasing population. Though according to ACS 2017 data, it shows that population of Willacy County dropped slightly. Raymondville is the major city for Willacy County since it contributes approximately fifty percent share of population for the county.

#### 3.3 Population Growth Rate

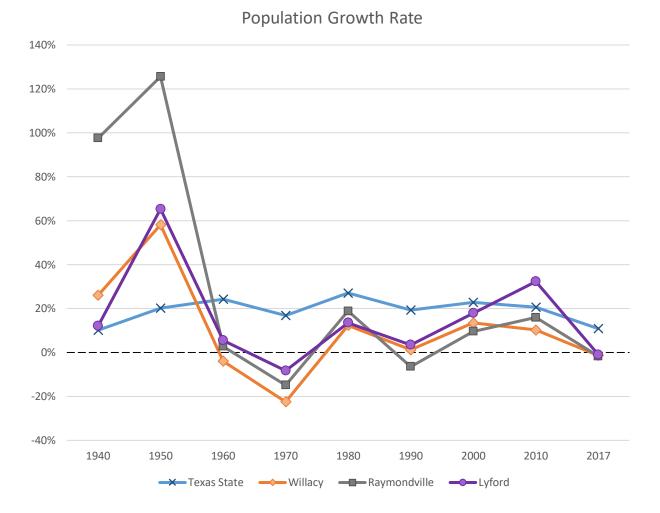


Figure 7: Population Growth Rate of Lyford City, Raymondville City, Willacy County and Texas from 1940 to 2017

#### Source: US Census Bureau, Decennial Census; 2017a, 2017b, 2017c, 2017d and 2017e; IPUMS NHGIS

The historical growth rate for Willacy County has been peculiarly irregular. Both Raymondville and Lyford follow similar population growth rate as that of the county. The county and its cities has experienced busts and booms since 1940. As shown in Figure 7, we can see that there was population boom in 1950s but plunged down drastically in 1960's and 1970s. In 1950, the population growth rate for Raymondville City and Lyford City was 125% and 65% respectively. Raymondville City's population doubled in 1940s and 1950's but stopped growing rapidly after that. This population boom might be the result of baby boomers in that era and drastic decrease in population in 1960s and 1970s might be the result of out-migration and recession. Texas population growth rate seems consistent as opposed to that of Willacy County. According to 2017 5-year ACS estimates, the population growth rate of both Texas and Willacy County seems to be

decreasing. Willacy County's population grew by 42.16 percent between 1970 and 2010, a rate that was less than half that of the State of Texas as a whole over the same period (124.58 percent).

## 3.4 Population Trend Line

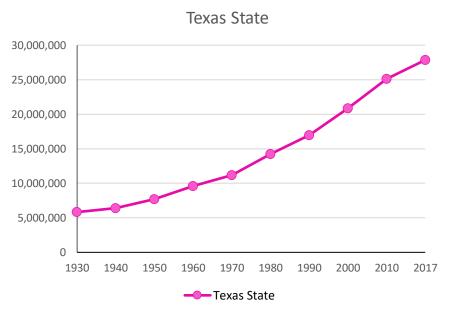
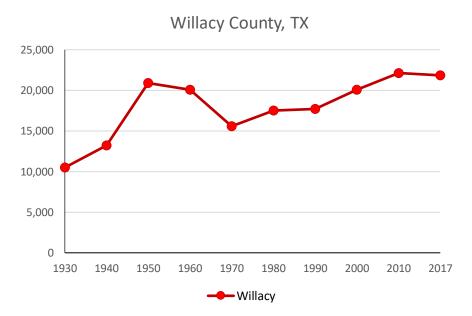
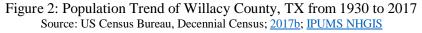
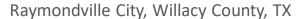


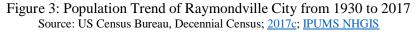
Figure 1: Population Trend of Texas from 1930 to 2017 Source: US Census Bureau, Decennial Census; <u>2017a</u>; <u>IPUMS NHGIS</u>



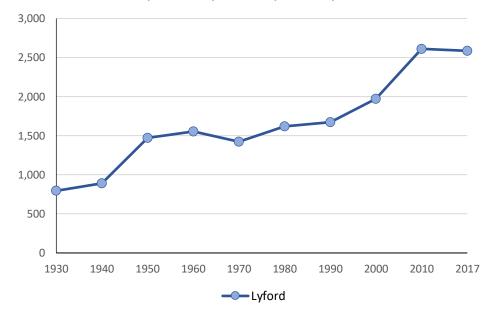


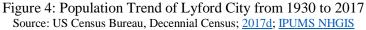






Lyford City, Willacy County, TX





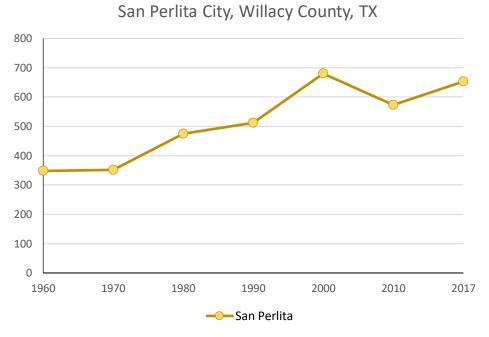
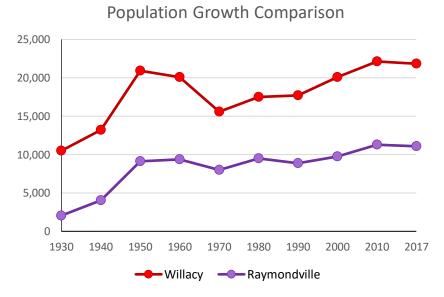
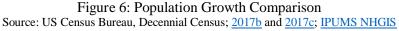


Figure 5: Population Trend of San Perlita City from 1930 to 2017 Source: US Census Bureau, Decennial Census; 2017e; IPUMS NHGIS

Figure 1 shows population trend of Texas from 1930 to 2017 and the pattern seems to be consistent growth throughout i.e. no rapid increase or decrease of population. Figure 2 through Figure 5 shows population trend of Willacy County, its cities and CDPs. For Willacy County and its cities, there is significant growth of population in 1950 and drop in population in 1970.

#### 3.5 Population Growth





Comparing population growth of Willacy County and its major city Raymondville's, both show similar pattern of population growth.

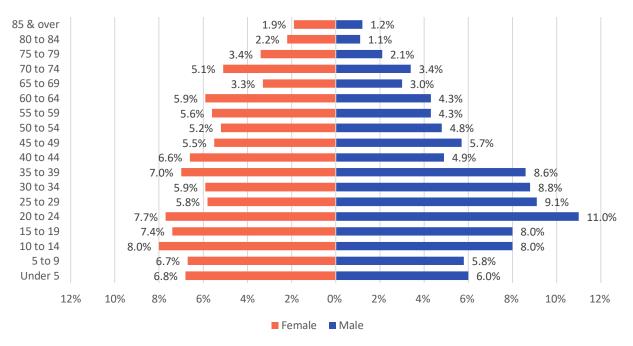
## 3.6 Male to Female Ratio

The male to female ratio has been stable through recent past, and the trend is expected to continue for Willacy County. The female population was 45.65% of the total population while the male population made up 54.35% of the population per the 2010 Census, which implies that there were 119.1 males per 100 females in Willacy County. These statistics indicate that the female population is slightly lower than that of the male population.

Raymondville City depicts similar male to female ratio pattern as that of county. The female population was 40.36% of the total population while the male population made up 59.64% of the population per the 2010 Census, which implies that there were 147.8 males per 100 females in Willacy County. These statistics indicate that the female population is significantly lower than that of the male population.

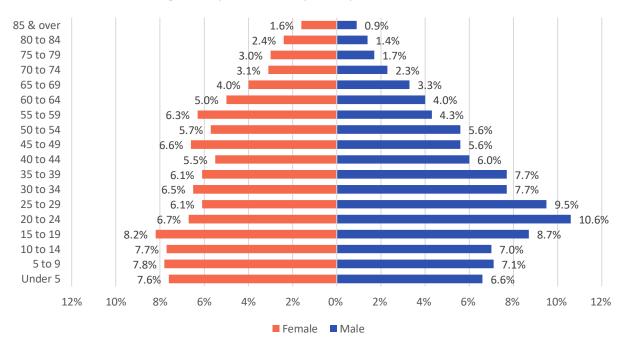
In contrast Lyford City has about equal male to female ratio. The female population was 51.44% of the total population while the male population made up 48.56% of the population per the 2010 Census, which implies that there were 94.4 males per 100 females in Willacy County. These statistics indicate that the female population is slightly higher than that of the male population.

## 3.7 Age Distribution



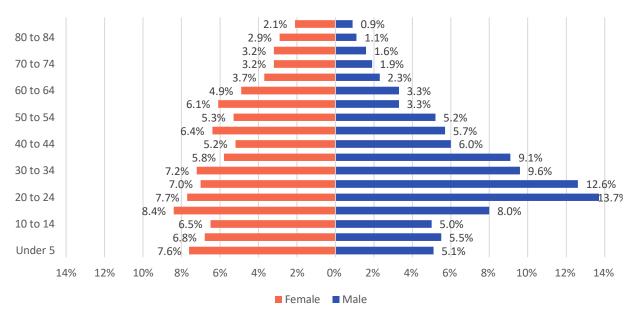
Age-Sex Pyramid, Willacy County, TX (2017 5-Year ACS Data)





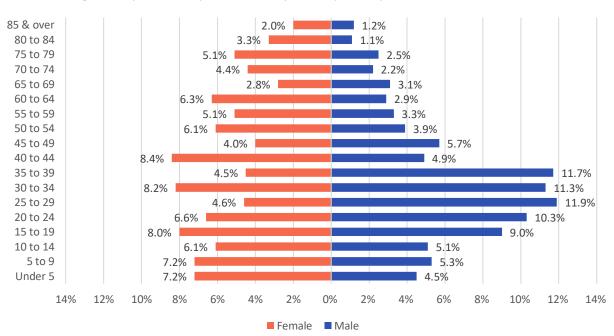
Age-Sex Pyramid, Willacy County (2010 Census Data)

Figure 8: Age-Sex Pyramid, Willacy County, TX (2010 Census Data) Source: US Census Bureau, Table QT-P1; 2010f For Willacy County, male population aged 20-24 years is higher in both 2010 Census as well as 2017 ACS data. Male population aged 20-39 years is higher compared to female population of that age group. Observing the population from the data, it can be concluded that Willacy County has active working population .i.e. 20-39 years of age, which is good for county's economy.



Age-Sex Pyramid, Raymondville City, Willacy County, TX (2010 Census Data)

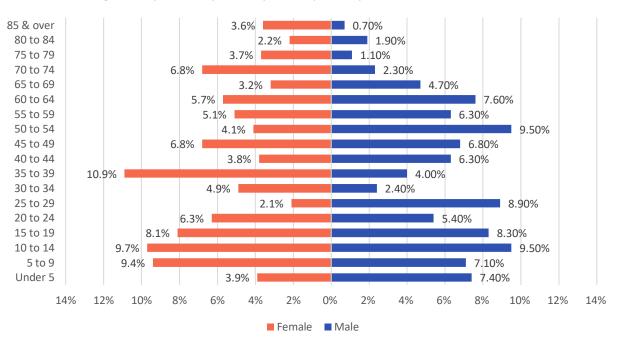
Figure 8: Age-Sex Pyramid, Raymondville City, Willacy County, TX (2010 Census Data) Source: US Census Bureau, Table QT-P1; 2010g



Age-Sex Pyramid, Raymondville City, Willacy County, TX (2017 5-Year ACS Data)

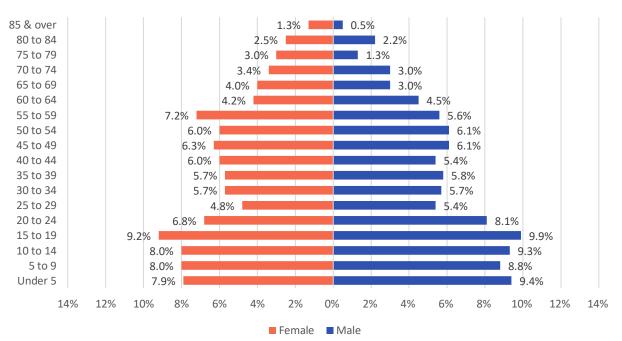
Figure 8: Age-Sex Pyramid, Raymondville City, Willacy County, TX (2017 5-year ACS Data) Source: US Census Bureau, Table S0101; <u>2017g</u>

The age distribution for 2010 of Raymondville City reflects the same patterns seen by the county. Male population dominates female population in both 2010 and 2017.



Age-Sex Pyramid, Lyford City, Willacy County, TX (2017 5-Year ACS Data)

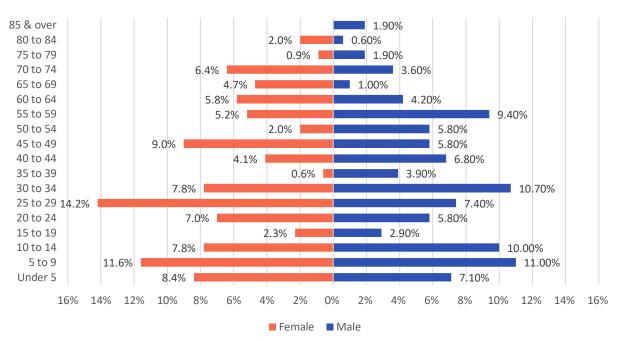
Figure 8: Age-Sex Pyramid, Lyford City, Willacy County, TX (2017 5-year ACS Data) Source: US Census Bureau, Table S0101; 2017h



#### Age-Sex Pyramid, Lyford City, Willacy County, TX (2010 Census Data)

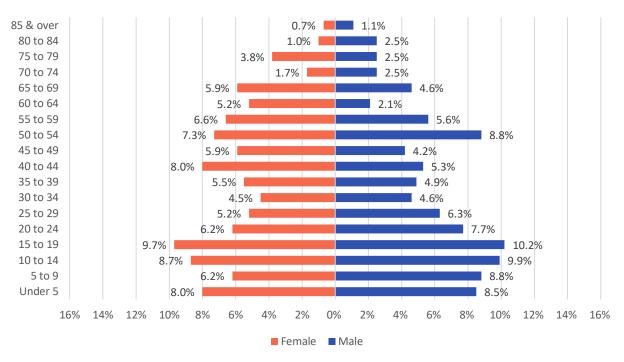
Figure 8: Age-Sex Pyramid, Lyford City, Willacy County, TX (2010 Census Data)

According to 2010 census data, Lyford City seems to have surge of working population in coming years. But 2017 ACS data tells different story with less working age population and resembles gender ratio imbalance. Since it is population estimates, we cannot rely on this data for factual information of Lyford City.



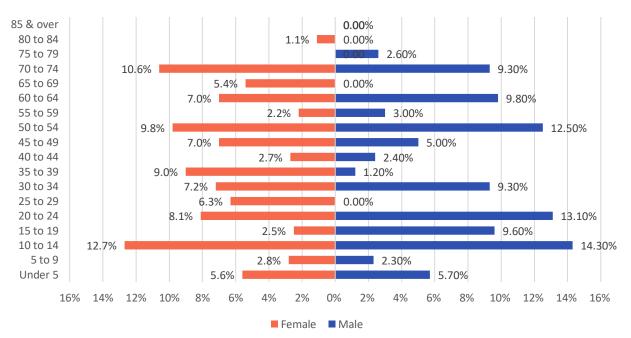
Age-Sex Pyramid, San Perlita City, Willacy County, TX (2017 5-Year ACS Data)

Figure 8: Age-Sex Pyramid, San Perlita City, Willacy County, TX (2017 5-year ACS Data) Source: US Census Bureau, Table S0101; <u>2017i</u>



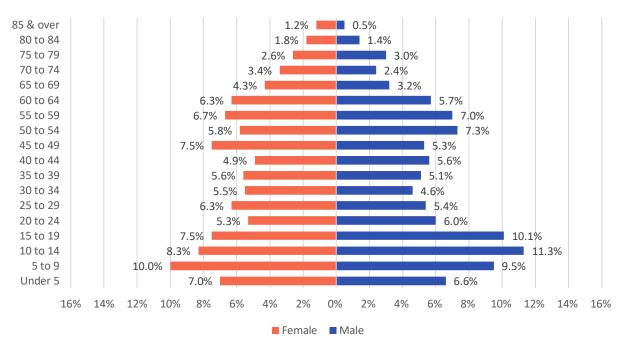
Age-Sex Pyramid, San Perlita City, Willacy County, TX (2010 Census Data)

Figure 8: Age-Sex Pyramid, San Perlita City, Willacy County, TX (2010 Census Data) Source: US Census Bureau, Table QT-P1; <u>2010i</u>



Age-Sex Pyramid, Sebastian CDP, Willacy County, TX (2017 5-Year ACS Data)

Figure 8: Age-Sex Pyramid, Sebastian CDP, Willacy County, TX (2017 5-year ACS Data) Source: US Census Bureau, Table S0101; <u>2017j</u>

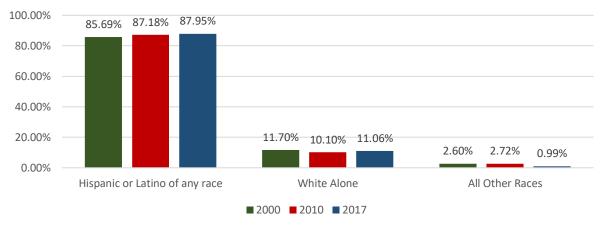


Age-Sex Pyramid, Sebastian CDP, Willacy County, TX (2010 Census Data)

Figure 8: Age-Sex Pyramid, Sebastian CDP, Willacy County, TX (2010 Census Data) Source: US Census Bureau, Table QT-P1; 2010j

#### 3.8 Race Distribution

Willacy County's population is more homogenous than the population of the State of Texas as a whole. However, whereas Whites comprised 60.8 percent of the population statewide in 1990, they made up only 15.3 percent of the Willacy County population. Hispanics, on the other hand, represented 87.18 percent of the Willacy County population 2010. compared 16.3 in to percent statewide (https://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf?cssp=SERP). Whites made up approximately 10.10 percent of the county's population according to the same census. For 2010, the cities Raymondville, Lyford, and Sebastian, had even more homogenous populations than Willacy County as a whole, with Hispanics composing from 86.86 percent (Raymondville) to 94.57 percent (Sebastian) of the population.



Race Distribution Comparison, Willacy County, TX

Figure 9: Race Distribution, Willacy County, TX Source: US Census Bureau, Table P00411, Table P912, and Table B0300213

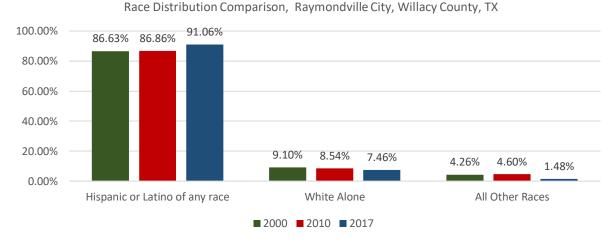
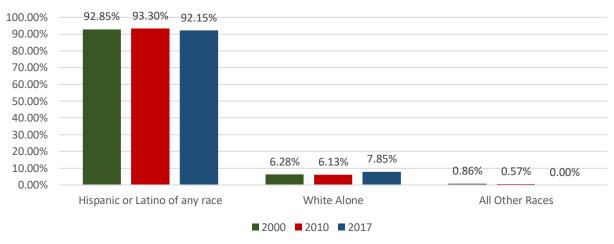
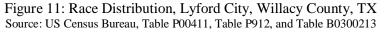
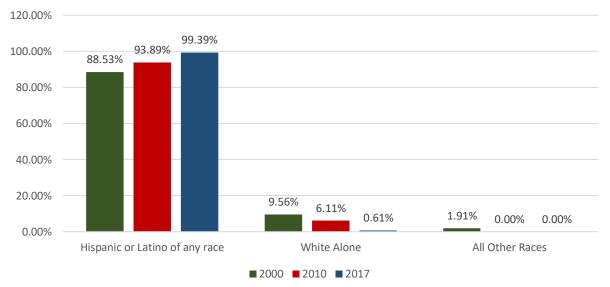


Figure 10: Race Distribution, Raymondville City, Willacy County, TX Source: US Census Bureau, Table P00411, Table P912, and Table B0300213



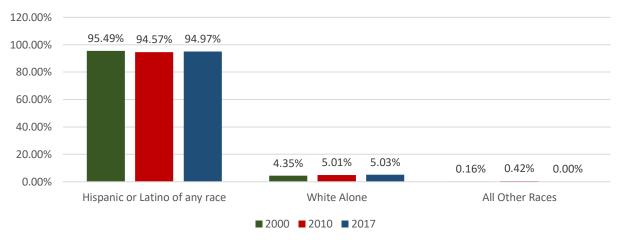
Race Distribution Comparison, Lyford City, Willacy County, TX



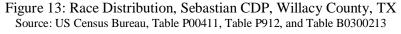


Race Distribution Comparison, San Perlita City, Willacy County, TX

Figure 12: Race Distribution, San Perlita City, Willacy County, TX Source: US Census Bureau, Table P00411, Table P912, and Table B0300213



#### Race Distribution Comparison, Sebastian CDP, Willacy County, TX



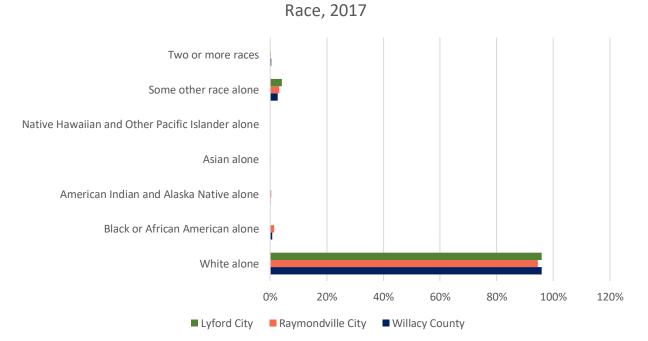


Figure 14: Comparison of Racial Distribution among Lyford City, Raymondville City and Willacy County, 2017 Source: US Census Bureau, Table B02001

## 3.9 Education

#### Table 2: School Enrollment of Willacy County, TX. 2017

Subject	Total	Percentage
Population 3 years and over enrolled in school	5,393	100.00%
Nursery school, preschool	204	3.78%
Kindergarten to 12th grade	4,349	80.64%
College, undergraduate	763	14.15%
Graduate, professional school	77	1.43%

Source: US Census Bureau, Table S1401

#### Table 3: School Enrollment of Raymondville City, Willacy County, 2017

Subject	Total	Percentage
Population 3 years and over enrolled in school	2,373	100.00%
Nursery school, preschool	57	2.40%
Kindergarten to 12th grade	1,984	83.61%
College, undergraduate	274	11.55%
Graduate, professional school	58	2.44%

Source: US Census Bureau, Table S1401

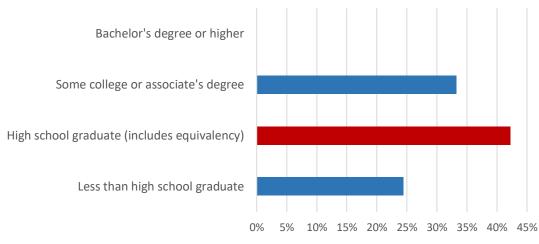
## Table 4: School Enrollment of Lyford City, Willacy County, 2017

Subject	Total	Percentage
Population 3 years and over enrolled in school	694	100.00%
Nursery school, preschool	27	3.89%
Kindergarten to 12th grade	616	88.76%
College, undergraduate	47	6.77%
Graduate, professional school	4	0.58%

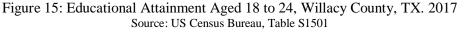
Source: US Census Bureau, Table S1401

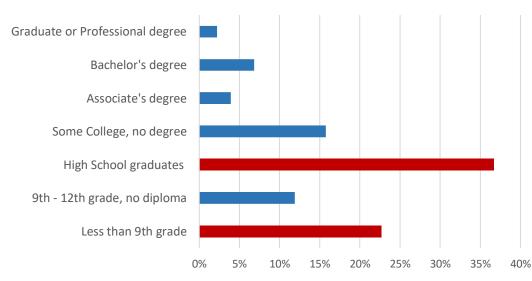
In 2017, the student population of Willacy County was 5,393 students, which is 25% of the total population (Table 1).

## 3.10 Educational Attainment



#### Educational Attainment, 18 to 24 years (Willacy County)





Educational Attainment, 25 years and older (Willacy County)

Figure 16: Educational Attainment Aged 25 years old & Over, Willacy County, TX. 2017 Source: US Census Bureau, Table S1501

A large share of the population aged 18 to 24 in Willacy County has attained high school degree; however population having bachelor's degree or higher is absolutely absent for this age group. They basically opted for some college or associate's degree (Figure 15).

When reviewing the statistics for the population aged 25 and older, additional details, such as individuals who did not complete the 9th grade were added. This amount of detail enables the community to assess

areas that are in need of improvement for the overall state of the community (Figure 16). The population with high school graduates, is significantly higher for the Willacy County (36.7%).

Educational Attainment, 18 to 24 years (Raymondville City)

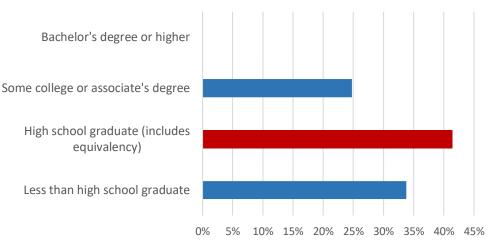


Figure 17: Educational Attainment Aged 18 to 24, Raymondville City. 2017 Source: US Census Bureau, Table S1501

#### Educational Attainment, 25 years and older (Raymondville City)

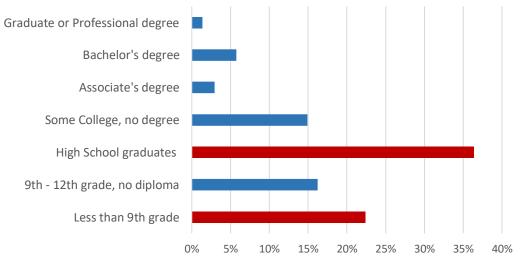


Figure 18: Educational Attainment Aged 25 years old & Over, Raymondville City. 2017 Source: US Census Bureau, Table S1501

#### Educational Attainment, 18 to 24 years (Lyford)

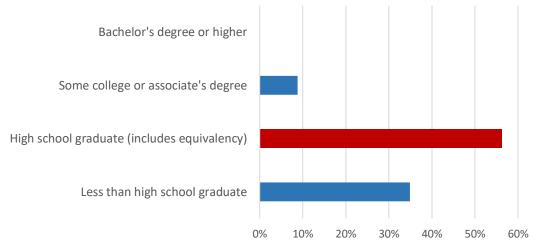
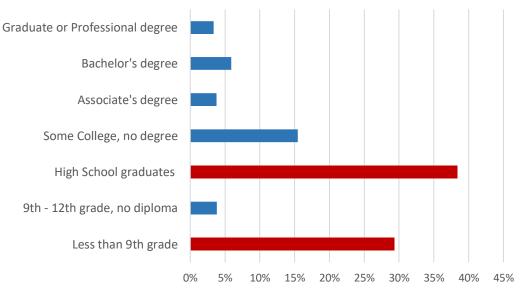


Figure 19: Educational Attainment Aged 18 to 24, Lyford City. 2017 Source: US Census Bureau, Table S1501



Educational Attainment, 25 years and older (Lyford)

Figure 20: Educational Attainment Aged 25 years old & Over, Lyford City. 2017 Source: US Census Bureau, Table S1501

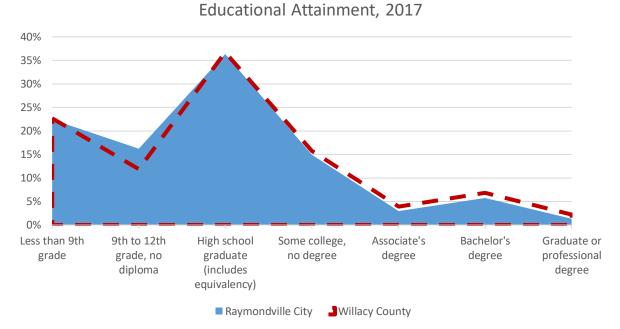


Figure 21: Educational Attainment for Raymondville City & Willacy County. 2017 Source: US Census Bureau, Table S1501

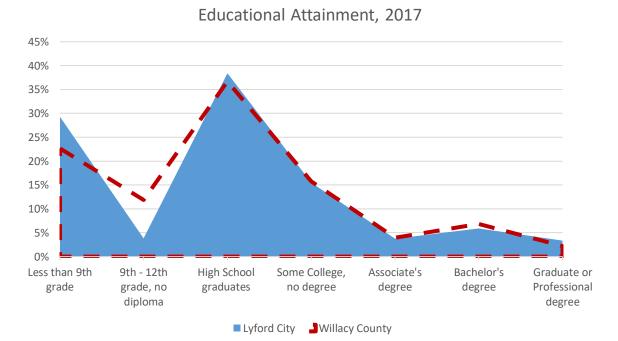


Figure 22: Educational Attainment for Lyford City & Willacy County. 2017 Source: US Census Bureau, Table S1501

#### 3.11 Poverty

Race	Total Estimated	% below poverty level
	Population	
White alone	6,883	35.50%
Black or African American alone	17	25.40%
American Indian and Alaska Native alone	2	100.00%
Asian alone	-	-
Native Hawaiian and Other Pacific Islander alone	-	0.00%
Some other race alone	222	39.70%
Two or more races	33	34.70%

#### Table 5: Population below Poverty Level by Race for Willacy County, 2017

Source: US Census Bureau, Table S1701

#### Table 6: Population below Poverty Level by Race for Raymondville City, 2017

Race	Total Estimated	% below poverty level
	Population	
White alone	3,680	41.20%
Black or African American alone	17	25.40%
American Indian and Alaska Native alone	-	-
Asian alone	-	-
Native Hawaiian and Other Pacific Islander alone	-	-
Some other race alone	179	52.20%
Two or more races	17	51.50%

Source: US Census Bureau, Table S1701

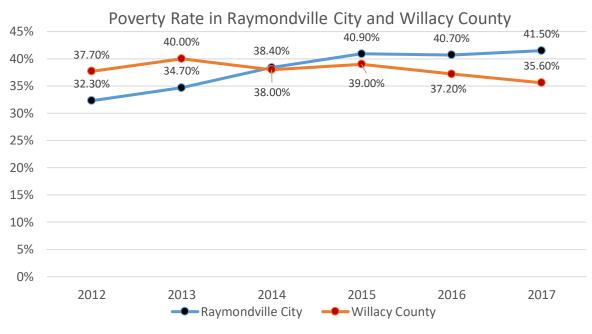
Table 7: Population below Poverty Level by Race for Lyford City, 2017						
Race	Total Estimated	% below poverty level				
	Population					
White alone	914	37.30%				
Black or African American alone	-	-				
American Indian and Alaska Native alone	-	-				
Asian alone	-	-				
Native Hawaiian and Other Pacific Islander alone	-	-				
Some other race alone	11	10.30%				
Two or more races	-	-				
Source: US Census Bureau Table \$1701						

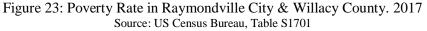
## Table 7: Dopulation below Deverty Level by Dece for Lyford City 2017

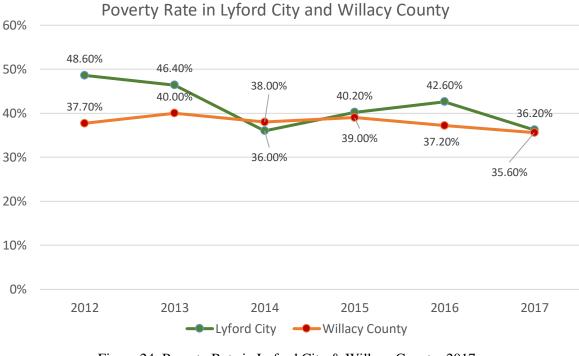
Source: US Census Bureau, Table S1/01

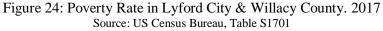
For the State of Texas in 2017, about 15.6% of people were estimated to be below the poverty level. This is lower than the Willacy County average of 33%. The breakdown of poverty level by race is illustrated in Table 5. It is interesting to note that 35.5% of all White alone are in poverty

- Poverty rate in Raymondville City greater compared to the county for year 2017.
- Poverty rate similar for both county and Lyford City for year 2017. ٠

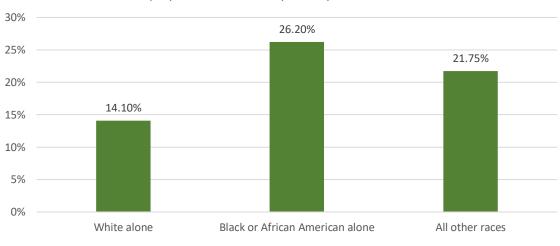




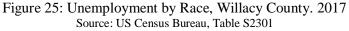




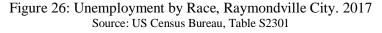
# 3.12 Unemployment Rate



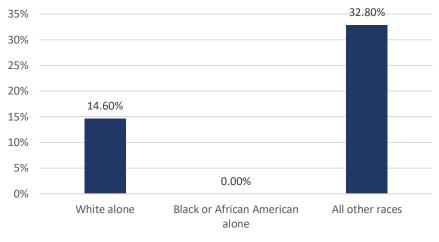
## Unemployment Rate, Willacy County, 2017



35% 32.35% 30% 26.20% 25% 18.10% 15% 18.10% 5% White alone Black or African American All other races alone



Unemployment Rate, Raymondville City, 2017



#### Unemployment Rate, Lyford City, 2017

Figure 27: Unemployment by Race, Lyford City. 2017 Source: US Census Bureau, Table S2301

People are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. For Willacy County, the unemployment rate distribution by age indicates that it is highest for the youngest age cohort, i.e. those between 16 to 19 years of age (Refer Figure 28). This is not a very alarming statistic since that age cohort has the highest student population share. It would only be alarming if this population was neither enrolled in school nor employed, i.e., falling under the categorization of disconnected youth. The more concerning thing is that those between 20 to 34 years of age are unemployed.

It is interesting to note the county's population in age cohort 55 to 59 years of age is estimated to have an unemployment rate of 2.50%, indicating that individuals in this age cohort are included in the workforce (Refer Figure 28). The estimates are not published for the population 75 years and over, as there were too few or no observations to compute an estimate.

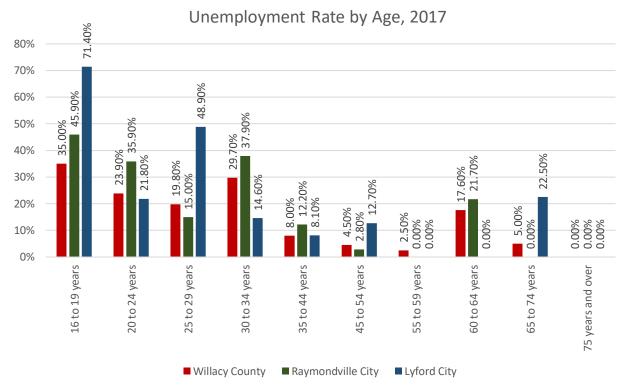


Figure 28: Unemployment Rate by Age for Raymondville City, Lyford City & Willacy County. 2017 Source: US Census Bureau, Table S2301

# 3.13 Population Projection

			Table 8: F	Published Populat	tion Projec	ctions		
Year	Texas Water Development Board						e Demograph /illacy Coun	
	Sebastian CDP	San Perlita City	Lyford City	Raymondville	Willacy	No Migration	0.5 Migration	1.0 Migration
2010	1,917	573	2,611	11,284	22,134	22,134		
2020	2,094	655	2,981	12,880	25,264	22,134		
2030	2,360	738	3,360	14,519	28,479	21,641		
2040	2,615	817	3,723	16,089	31,559	20,578		
2050	2,887	902	4,110	17,762	34,840	19,226		
2060	3,150	985	4,485	19,379	38,012			
2070	3,408	1,065	4,851	20,964	41,121			
		Source:	Texas Water I	Development Board a	and Texas St	ate Demograph	er	<u>I</u>

# 4. Housing

# 4.1 OVERVIEW

This section takes into consideration the different housing variables that are used to compare Willacy County and the important cities within it to Texas State and the United States.

# 4.2 HOUSING STOCK GROWTH

The housing stock has grown at a similar rate to the population with a faster growth rate after World War II. According to Figure 5.1 shown below demonstrates that housing growth peaked in the 2000's and then slowed down significantly after 2010. Overall the growth patterns are similar for all the cities within Willacy, Texas State and the United States. The large increase in the number of housing units is directly proportional to the number of occupants moving into housing units as can be seen below.

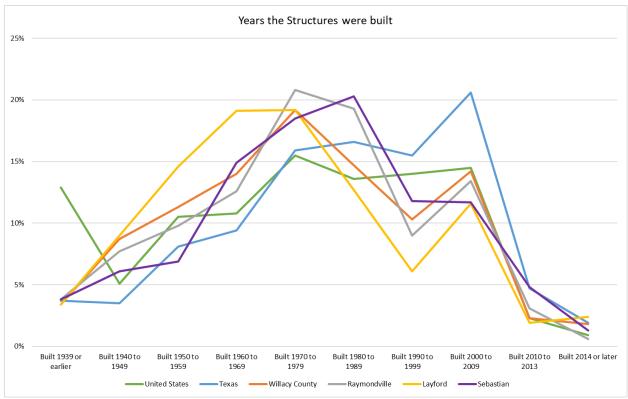


Figure 5.1: Comparison of Housing Age in Willacy County, Texas and United States Source: U.S Census Bureau 2017 (<u>Table DP04</u>)<sup>1</sup>

# 4.3 HOUSING UNIT DENSITY

Willacy County has a total of 7224 housing units. The number of housing units has increased by just 3% from 2010 (7043 housing units) to 2017. The housing unit density is calculated to be 9.21 per square mile. There is an unbalance in the number of people and the number of housing units from 2010 to 2017. The population in Willacy County decreased by 295 people, but the number of housing units increased by 181 which is strikingly contrasting.

#### 4.4 HOUSING TYPES

The housing types in Willacy County slightly differ than that of Texas. There is a large percentage of the population living in mobile homes and a smaller percentage of population living in multi-family dwellings in Willacy County as shown in figure 5.2.

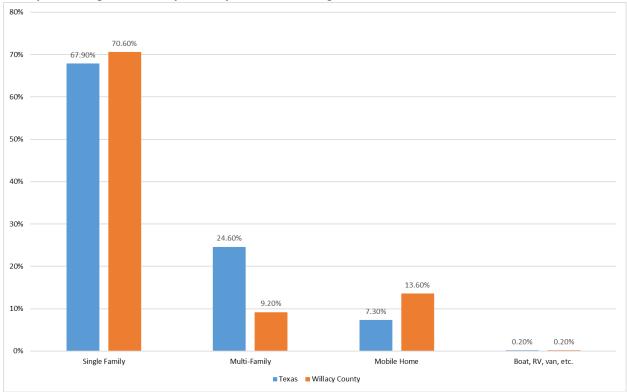


Figure 5.2: Comparison between types of housing units in Willacy County and Texas, 2017 Source: U.S Census Bureau 2017 (<u>Table DP04</u>)<sup>2</sup>

# 4.5 HOUSEHOLD TYPES

Figure 5.3 below shows that maximum (51.56%) of the households in Willacy County are marriedcouple families which is higher than that in Texas. The percentage of male householder (6.22%) and female householder (23.95%) living alone is higher in the county than the state. This means that Willacy County has a large number of single parent population living alone. Non-family households, which includes people living alone and other non-family households, make up 16.61% which is less compared to Texas State which is 24.94%.

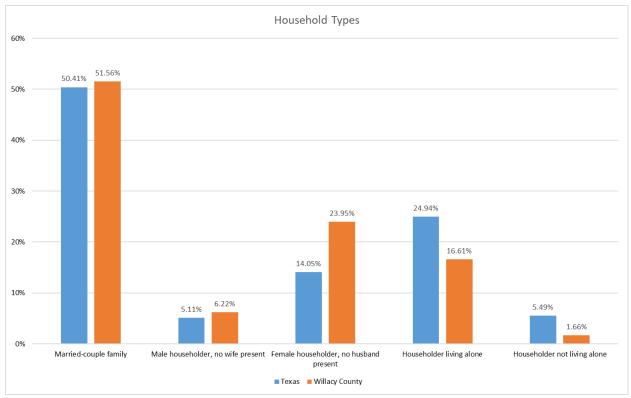


Figure 5.3: Comparison between types of Household in Willacy County and Texas, 2017 Source: U.S Census Bureau 2017 (<u>Table B11001</u>)<sup>3</sup>

#### **4.6 HOUSING PRICES**

Figure 5.4 below shows the average housing price over the years from 2000 to 2017 for Willacy County compared to the state of Texas and the United States as a whole. The housing prices for all of them follow a hierarchy seen by increasing median housing values between the years 2000 to 2017. While the United States and Texas State show a steep increase, Willacy County has a comparatively slow and steady increase in the housing prices; especially in the years 2010 to 2017 where the housing prices increase by only \$3000. Hence it can thus be concluded that owing a house in Willacy County is much cheaper than the state.

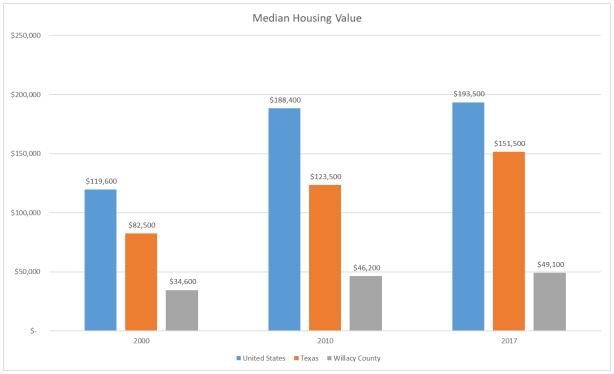


Figure 5.4: Comparison of median housing values in Willacy County and Texas, 2017 Source: U.S Census Bureau 2017 (<u>Table DP04</u>)<sup>4</sup>

### 4.7 HOUSING AFFORDABILITY

The housing affordability of a region is calculated based on the total household income and the monthly housing costs. The residents are termed to be living in an unaffordable house when the householder pays 30% or more of their income for housing costs (U.S Department of Housing and Urban Development (HUD). In the U.S, renter-occupied housing units commonly cost 30% or more of the total income of the household, thus making it unaffordable for a large population in the city.

For Willacy County, the owner-occupied households having an annual income of less than \$35,000 (i.e. about 13.67% of the population) spend 30% or more of their income for housing and thus are more cost-burdened than the renter-occupied housing units which constitutes of only 7.46% of the population. There is a large population of owner occupied housing units that spend about less than 20% of their income into housing.

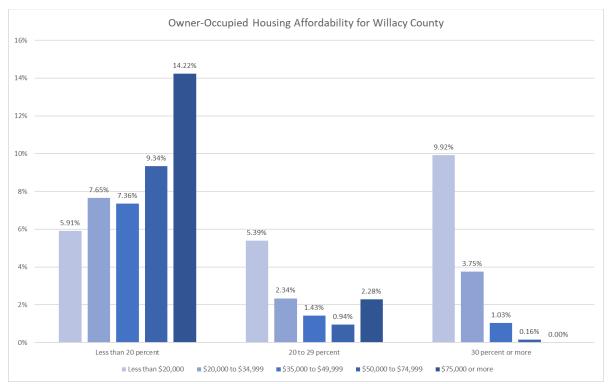


Figure 5.5: Owner-occupied monthly housing costs by percent income for Willacy County, 2017 Source: U.S. Census Bureau, <u>Table B25106</u><sup>5</sup>

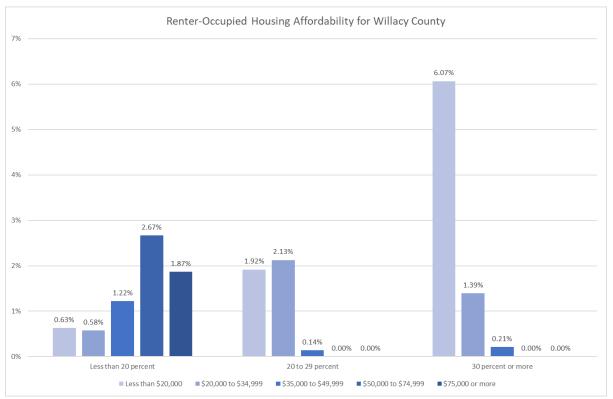


Figure 5.6: Renter-occupied monthly housing costs by percent income for Willacy County, 2017 Source: U.S. Census Bureau, Table  $\underline{B25106}^6$ 



Figure 5.7: Percentage of Owners and Renters spending 30% or more of Household income on Housing in Willacy County, TX, 2013-2017 Source: U.S. Census Bureau, Table B25106<sup>7</sup>

#### 4.8 VACANCY STATUS

The vacancy status is a helpful tool in determining the housing demand and to create a comprehensive outline for the housing market in the city. Figure 5.8 shows that a large number of the vacant houses are used for seasonal, recreational or occasional use. The highest percentage of vacant houses are under the category of other vacant which is 50.91%. But this vacancy status published is misleading as it consists of the houses that are not included in the housing market. The actual vacancy rate is shown in figure 5.9 which is calculated based on the gross rent and sale only units that are divided by the total housing units.

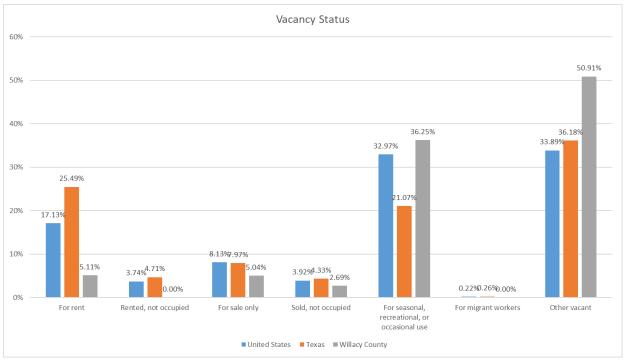


Figure 5.8: Vacancy status of houses in Willacy County, 2017 Source: U.S. Census Bureau, <u>Table B25004</u><sup>8</sup>

# 4.9 OCCUPANCY VS. VACANCY RATE

In 2017, the vacancy rate of housing units in Willacy County was 20.6% which is significantly higher than both Texas State (11.1%) and the United States (12.2%). About 1,487 houses out of a total of 7,224 housing units are vacant in Willacy County. This record in 2010 was 22.1% (i.e. 1,558 out of 7,043 housing units were vacant). The high vacancy rate poses to be a threat to the County and indicates that immediate attention needs to be given to the matter before it becomes even worse.

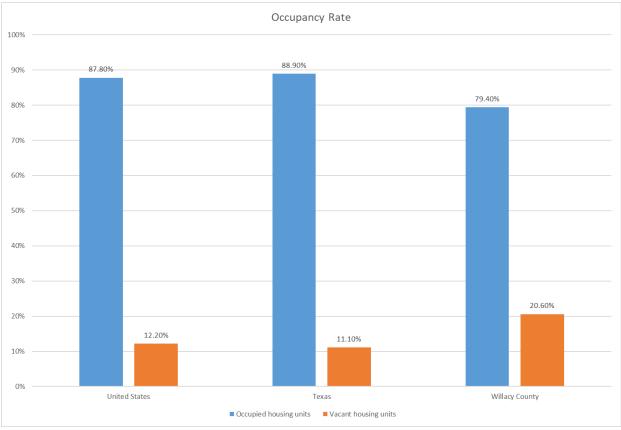
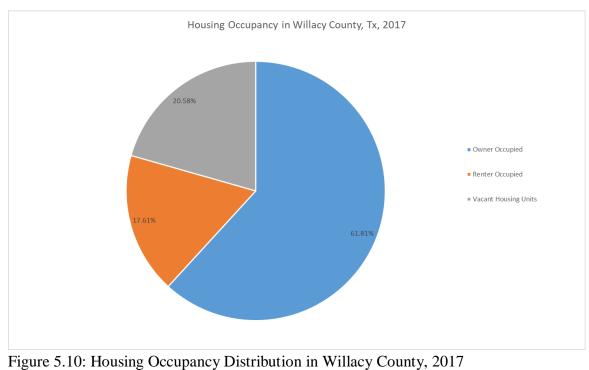


Figure 5.9: Housing unit occupancy rate in Willacy County, 2017 Source: U.S. Census Bureau, Table <u>DP04</u><sup>9</sup>



Source: U.S. Census Bureau, Table DP04<sup>10</sup>

#### 4.10 OWNER OCCUPIED HOUSING

The owner-occupied and renter-occupied housing units are compared to have a better understanding of the housing occupancy status of the city. According to the U.S. Census Bureau 2017, about 77.8% of the households are owned by the house owner. This number had declined to 71.1% in 2010, but Willacy County has a higher occupancy rate than both Texas state and the United States.

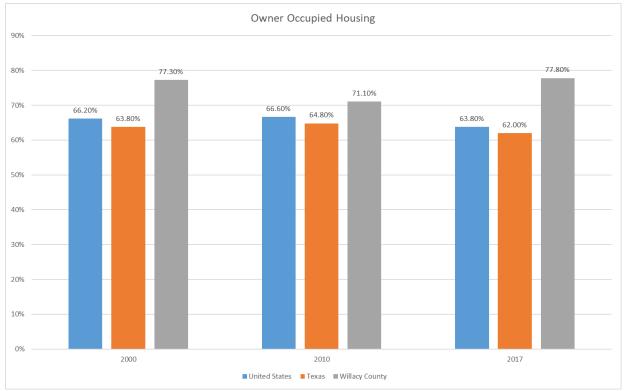


Figure 5.11: Owner-Occupied housing units in Montgomery City, from 2000 to 2017 Source: U.S. Census Bureau, Table  $\underline{DP1}^{11}$  and  $\underline{DP04}^{12}$ 

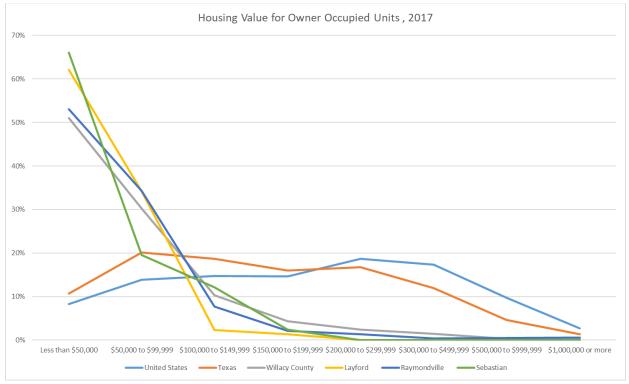


Figure 5.12: Housing Values for Owner Occupied Units in Willacy County, 2017 Source: U.S. Census Bureau, Table <u>DP1<sup>13</sup></u> and <u>DP04<sup>14</sup></u>

#### 4.11 RENTER OCCUPIED HOUSING

About 22.2% of the total housing units in Willacy County are renter occupied housing units. The number of renter occupied housing units was nearly the same in 2000 and increased by 2% in 2010. But now it has again decreased and the number is reflected by the increase in owner occupied housing units in the County. The percentage of population living on rent in Willacy is significantly less compared to Texas and the United States which is 38% and 36.2% respectively.

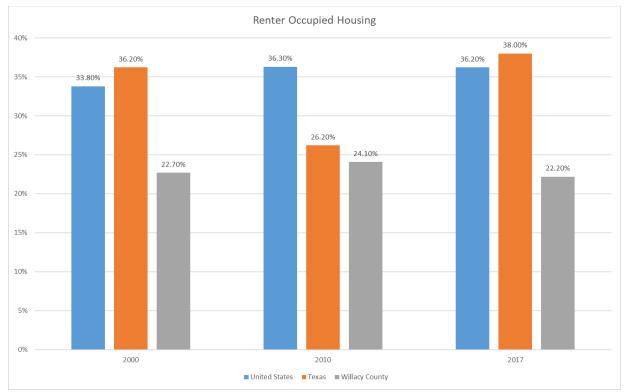


Figure 5.12: Renter occupied housing units in Willacy County, from 2000 to 2017 Source: U.S. Census Bureau, Table <u>DP1</u><sup>15</sup> and <u>DP04</u><sup>16</sup>

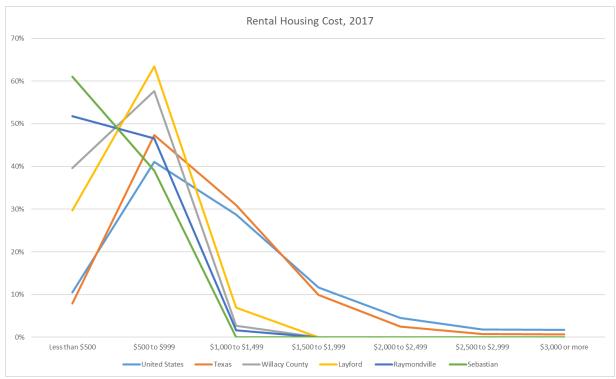


Figure 5.12: Renter occupied housing units in Willacy County, from 2000 to 2017 Source: U.S. Census Bureau, Table  $\underline{DP1}^{17}$  and  $\underline{DP04}^{18}$ 

# 5. Economy

# 5.1 Spatial distribution of income levels

The spatial distribution of income levels can be seen in Figure 5.1. The census tracts near the city of Raymondville and Post Mansfield (in dark green shade) are more poverty ridden compared to census tracts in Lyford and Sebastian.

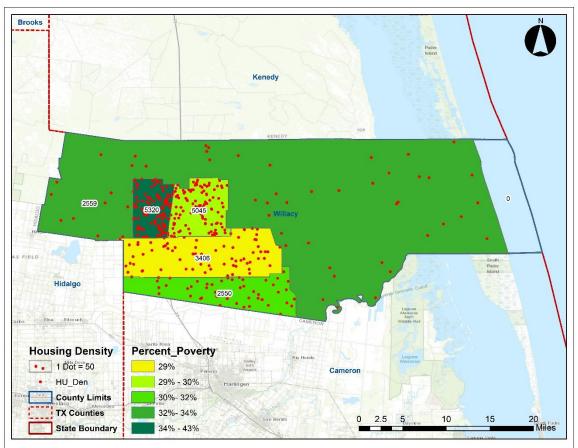
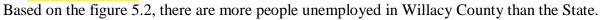
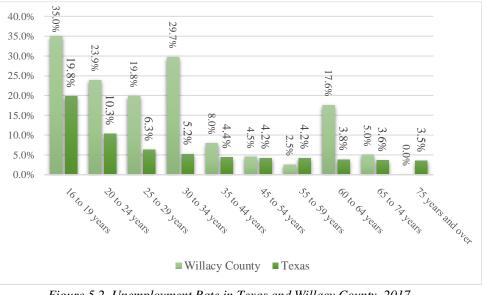


Figure 5.1: Percentage of Families in Poverty

Areas in the mid-west near San Perlita, Lasara & Raymondville city, have a higher percentage of families living in poverty. Areas in the south-west closer to Sebastian, Lyford, and Santa Monica have a smaller percentage of families living in poverty.

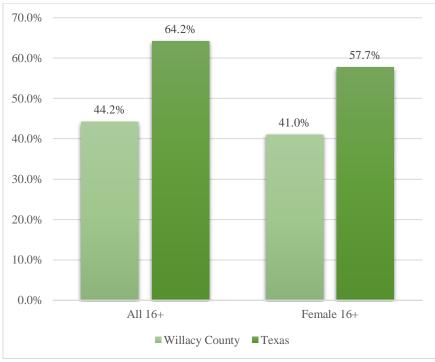
# 5.2 Unemployment Rate





*Figure 5.2. Unemployment Rate in Texas and Willacy County, 2017* Source: U.S. Census Bureau, S2301<sup>19</sup> 2017

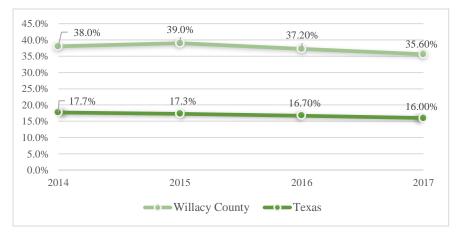
Figure 5.3 below shows that compared to Texas, Willacy county has a smaller percent of the working-age population is actively in the labor force, with more males in the labor force than females.



*Figure 5.3. Percentage of Population in the Labor Force, 2013-2017* Source: U.S. Census Bureau, 2013-2017<sup>20</sup>

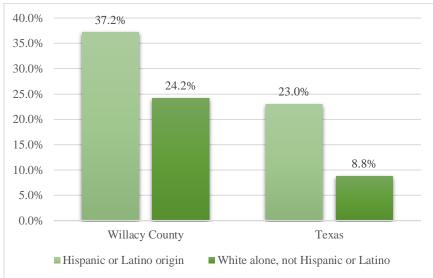
# 5.3 Poverty Rate

Texas poverty rate has decreased whereas Willacy County's poverty rate has decreased at a low rate (38.0% to 35.06%) as shown in Figure 5.4.



*Figure 5.4 Poverty rate history in Texas and Willacy County* Source: U.S. Census Bureau, S1701<sup>21</sup> 2014-2017

Based on the poverty rate in different ethnicities presented in the Figure 5.5, poverty rate of Hispanic or Latino origin is much higher than that of White alone, in both Texas and Willacy County. The rate of Hispanic or Latino origin in Willacy County (37.2%) is higher than that of Texas (24.2%).



*Figure 5.5 Poverty rate of different ethnicity in Texas and Willacy County* Source: U.S. Census Bureau, S1701<sup>22</sup> 2017

# Economy

Economic analysis is vital for the Willacy County State of the Community Report because it describes the current and future opportunities for the economy and specific industries; this would also give a brief idea of how the county has been influenced by the shape and growth of its regional economy.

# 5.4 Employment and Labor Force

Figure 5.6 shows the total population in the Willacy County that were working in 2015, the population over the age of 16 years, is 16,940. Compared to Texas (59.8%) and the United States (58.0%), Willacy has the lowest percentage of working people (31.7%).

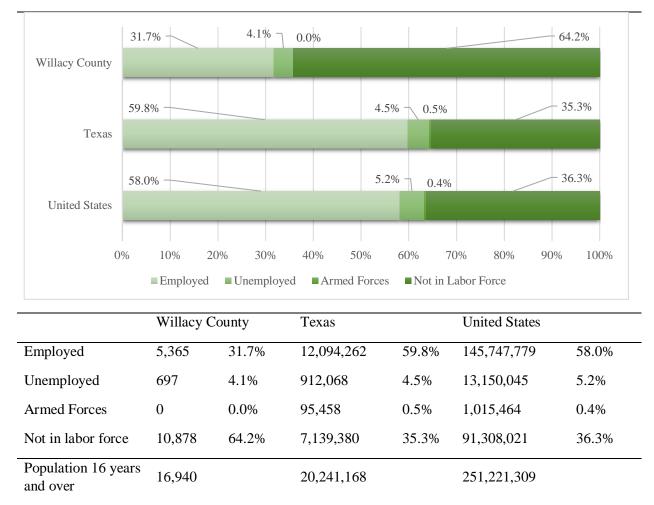
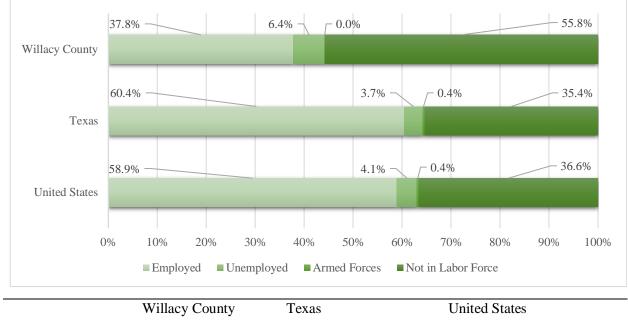


Figure 5.6 Employment status, Willacy County, Texas, & United States, 2015

Source: U.S. Census Bureau, DP03<sup>23</sup> 2015

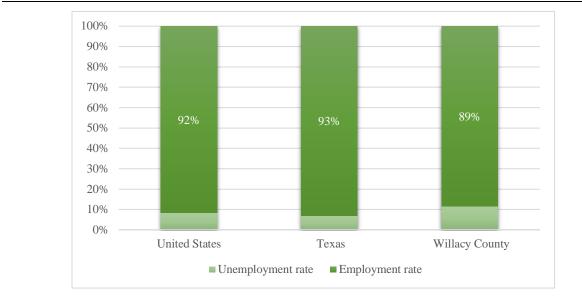
Figure 5.7 shows the total population in the Willacy County that were working in 2017, the population over the age of 16 years, is 16,965 (increased by just 25 people from 2015). Compared to Texas (60.4%) and the United States (58.9%), Willacy still has the lowest percentage of working people (37.8%). This may slow the economy because there is a smaller workforce with less spending power, but this number also includes school-aged students and retired adults.



Employed	6,415	37.8%	12,689,069	60.4%	150,599,165	58.9%
Unemployed	1,087	6.4%	784,888	3.7%	10,560,305	4.1%
Armed Forces	0	0.0%	91,081	0.4%	1,024,855	0.4%
Not in labor force	9,463	55.8%	7,432,970	35.4%	93,613,367	36.6%
Population 16 years and over	16,965		20,998,008		255,797,692	

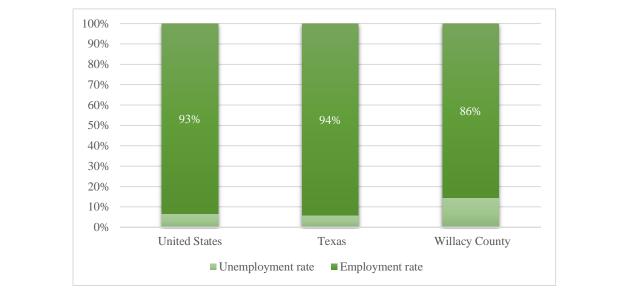
*Figure 5.6 Employment status, Willacy County, Texas, & United States, 2017* Source: U.S. Census Bureau, DP03<sup>24</sup> 2017

Figure 5.5 and 5.6 focuses on the labor force employment rate in 2015 and 2017. Willacy County has the highest unemployment rate (11.5%) compared to Texas (7.0%) and United States (8.3%) in 2015. The unemployment rate in Texas (5.8%) and United States (6.6%) has decreased perhaps, it has increased in Willacy County (14.5%) by the year 2017.



	Willacy	County	Те	xas	United	States
Unemployment rate	863	11.5%	910,443	7.0%	1,079,525	8.3%
Employment rate	6,644	88.5%	12,095,887	93.0%	145,709,305	91.7%

*Figure 5.7 Labor force employment rate, Willacy County, Texas, & United States, 2015* Source: U.S. Census Bureau, DP03<sup>25</sup> 2015



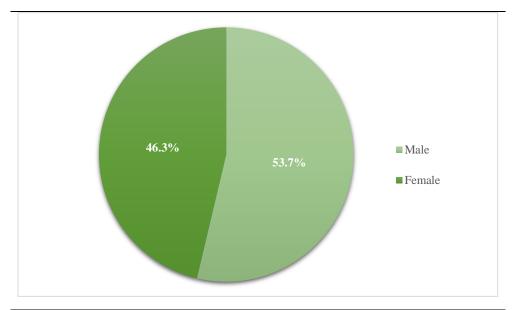
	Willacy	County	Te	xas	United	States
Unemployment rate	1,088	14.5%	781,490	5.8%	889,281	6.6%
Employment rate	6,414	85.5%	12,692,467	94.2%	12,584,676	93.4%

*Figure 5.8 Labor force employment rate, Willacy County, Texas, & United States, 2017* Source: U.S. Census Bureau, DP03<sup>26</sup> 2017

#### 5.6 Workforce Characteristics

Figure 5.9 shows 46.3% of those employed are female and 53.7% are male in 2015.

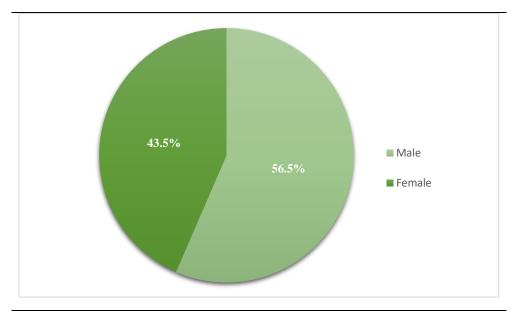
The workforce race composition is different to that of the total population in Willacy County. The largest race for both employment and residents is White alone, 95.5% of workers and 94.8% of residents. The second largest population is some other races alone with 0.30% of the workforce and 2.9% of the residents. Whereas, African Americans has the second largest workforce with 1.5% and 1.6% residents.



*Figure 5.9 Gender of employed, Willacy County, TX, 2015* Source: U.S. Census Bureau, S2408<sup>27</sup> 2015

#### 5.7 Workforce Characteristics

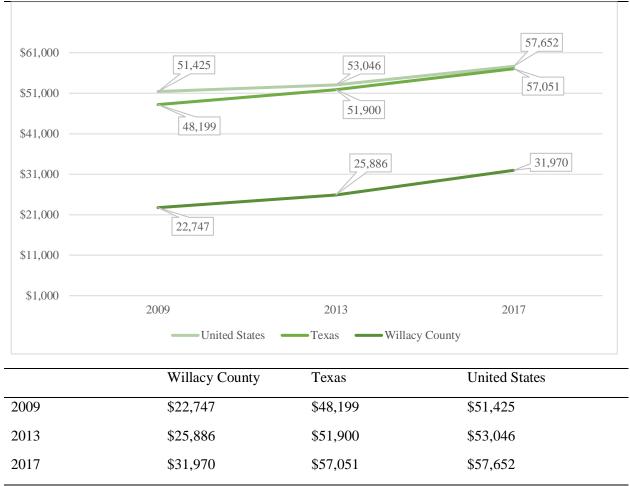
Figure 5.10 shows 43.5% of those employed are female and 56.5% are male in 2017.



*Figure 5.10 Gender of employed, Willacy County, TX, 2017* Source: U.S. Census Bureau, S2408<sup>28</sup> 2017

### 5.8 Household Income

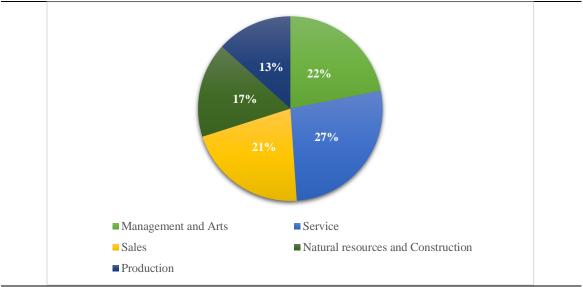
Compared to the state of Texas and the United States, Willacy County has experienced a much lower household income, averaging a lower income of \$ 25,081 per year. The median household of income of Willacy County has increased by \$6,084 (+23.50%) from 2013 to 2017, wheareas Texas and the United States has increased 9.92% and 8.68% respectively. Figure 5.11 compares the median household income from 2009 to 2013 to 2017 between Willacy County, the state of Texas, and the United States.



*Figure 5.11 Median household income, Willacy County, TX, & United States, 2009, 2013, 2017* Source: U.S. Census Bureau, S2503 2009<sup>29</sup>, 2013<sup>30</sup>, 2017<sup>31</sup>

# 5.9 Major Employers and Occupations

Figure 5.12 shows the major industries in Willacy County and the amount of the workforce within each sector. Service Occupations have 27% of the labor force; within this sector the majority of the jobs are related to Healthcare support occupations (348 out of 1,450 jobs). The second highest industry is Management, business, science, and arts occupations with 22% of the labor force; the majority of the jobs are Education, legal, community service, arts, and media (533 out of 1,173 jobs). Sales and office occupations have 21% of the workforce; 576 out of 1,137 jobs are Office and administrative support. Natural resources, construction, and maintenance occupations have 17% of the labor force in Willacy County; the main jobs include construction and extraction (310 out of 892 jobs). Finally, Production, transportation, and material moving occupations hold 13% of the labor force; with the majority of jobs in transportation (415 out of 713 jobs).

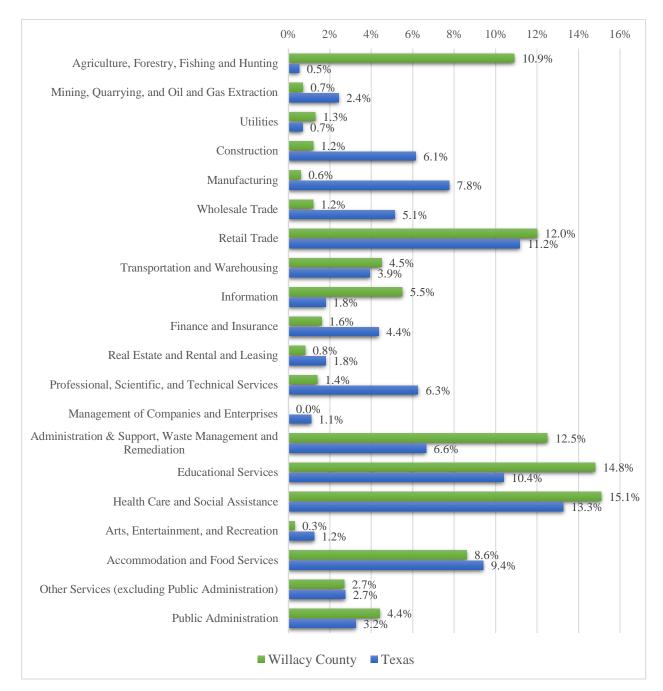


*Figure 5.12 Occupation by industry, Willacy County, TX, 2015* Source: U.S. Census Bureau, S2401<sup>32</sup> 2015

# 5.10 Industry Specialization by Employment Share

Figure 5.13 compares the Willacy County and the state of Texas employment share by industry in 2015. This will allow the county officials to recognize strengths and weaknesses in the economy; which industries the county relies heavily on; and where there can be specific economic growth.

Industries where Willacy County has a higher share of workers than Texas (greater than 2.5%) include: Agriculture, Forestry, Fishing and Hunting, Administration Support, Waste Management, and Remediation, and Educational Services.



*Figure 5.13 Industry sectors by employment, Willacy County and Texas, 2015* Source: OnTheMap, NAICS Industry Sector<sup>33</sup>

# 5.11 Location Quotient

NAICS Code	NAICS Title	Willacy County Employment (e <sub>i</sub> )	Texas Employment (Ei)	Location Quotient (LQ <sub>i</sub> )	Basic Employment (b <sub>i</sub> )	Nonbasic Employment (n <sub>i</sub> )
Total Em	ployment	2,862	11,575,073	-	840	2,022
11	Agriculture, Forestry, Fishing and Hunting	311	60,172	20.90	296	15
21	Mining, Quarrying, and Oil and Gas Extraction	19	280,362	0.27	0	19
22	Utilities	36	79,093	1.84	16	20
23	Construction	33	711,002	0.19	0	33
31-33	Manufacturing	17	899,202	0.08	0	17
42	Wholesale Trade	34	594,242	0.23	0	34
44-45	Retail Trade	344	1,292,389	1.08	24	320
48-49	Transportation and Warehousing	129	455,203	1.15	16	113
51	Information	157	207,148	3.07	106	51
52	Finance and Insurance	45	504,271	0.36	296	45
53	Real Estate and Rental and Leasing	23	207,940	0.45	0	23
54	Professional, Scientific, and Technical Services	41	723,507	0.23	16	41
55	Management of Companies and Enterprises	0	126,583	0.00	0	0
56	Administrative and Support and Waste Mgmt.	358	768,962	1.88	0	190
61	Educational Services	424	1,202,703	1.43	0	297
62	Health Care and Social Assistance	433	1,536,561	1.14	24	380
71	Arts, Entertainment, and Recreation	10	143,061	0.28	16	10
72	Accommodation and Food Services	245	1,088,467	0.91	106	245
81	Other Services (except Public Administration)	77	318,157	0.98	0	77
92	Public Administration	126	376,048	1.36	0	93

Table 5.1 Location quotient using two-digit industry classification, comparing Willacy County with Texas, 2015

Source: OnTheMap, NAICS Industry Sector<sup>34</sup>

Table 5.1 displays the location quotients, and basic and nonbasic employment for Willacy when compared to the benchmark region, Texas.

LQ<1
Mining, Quarrying, and Oil and Gas Extraction
Construction
Manufacturing
Wholesale Trade
Finance and Insurance
Real Estate and Rental and Leasing
Professional, Scientific, and Technical Services
Management of Companies and Enterprises
Arts, Entertainment, and Recreation
Accommodation and Food Services
Other Services excluding Public Administration

#### Table 5.2. 2015 Industry Location Quotients

NAICS Title	LQ 2015 Willacy-Texas	LQ 2015 Willacy-US
Agriculture, Forestry, Fishing and Hunting	20.90	12.56
Mining, Quarrying, and Oil and Gas Extraction	0.27	1.24
Utilities	1.84	2.16
Construction	0.19	0.25
Manufacturing	0.08	0.07
Wholesale Trade	0.23	0.28
Retail Trade	1.08	1.08
Transportation and Warehousing	1.15	1.27
Information	<b>3.07</b>	2.49
Finance and Insurance	0.36	0.37
Real Estate and Rental and Leasing	0.45	0.52
Professional, Scientific, and Technical Services	0.23	0.22
Management of Companies and Enterprises	0.00	0.00
Administration & Support, Waste Management and Remediation	<mark>1.88</mark>	<mark>1.99</mark>
Educational Services	1.43	1.57
Health Care and Social Assistance	1.14	1.03
Arts, Entertainment, and Recreation	0.28	0.20
Accommodation and Food Services	0.91	0.93

Other Services (excluding Public Administration)	0.98	0.85
Public Administration	1.36	0.95

Source: OnTheMap, NAICS Industry Sector

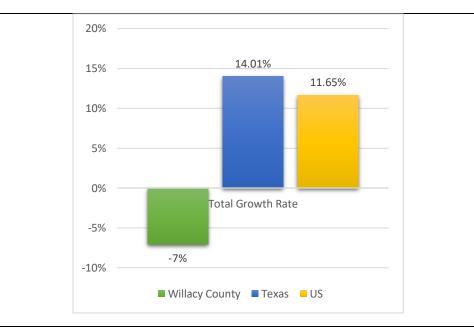
# 5.12 Economic Base Analysis

Economic base multiplier for Texas State: 3.41 United States of America: 3.58

Base Multiplier= total basic employment by the total employment of Willacy County. This number means that for every one new employee, there will be an additional 3.14 jobs created.

# 5.13 Economic Growth Rate

The United States of America and the state of Texas experienced fast economic growth rates from 2010 to 2015. Figure 5.14 shows that the Willacy county growth rate has declined to -7.00%, reducing 217 jobs, whereas Texas growth rate was 14.01%, adding 1,422,683 jobs and United States growth rate is 11.65% adding 14,282,909 jobs.



*Figure 5.14 Employment Growth rate, Willacy County and Texas, 2010-2015* Source: U.S. Census Bureau, OnTheMap Application, 2010, 2015

Table 5.3 Work area profile using NAICS codes, comparing Willacy County and Texas,	
2010, 2015	

NAICS Title	Willacy County growth rate	Texas growth rate	USA growth rate
-------------	----------------------------------	----------------------	-----------------

Total count and rate	-0.07	0.140	0.11
Agriculture, Forestry, Fishing and Hunting	-0.05	0.08	0.14
Mining, Quarrying, and Oil and Gas Extraction	-0.32	0.36	0.18
Utilities	0.24	-0.04	0.00
Construction	-0.54	0.23	0.23
Manufacturing	-0.70	0.09	0.09
Wholesale Trade	-0.45	0.19	0.09
Retail Trade	-0.03	0.13	0.10
Transportation and Warehousing	<mark>2.39</mark>	0.19	0.17
Information	0.44	-0.01	0.06
Finance and Insurance	-0.22	0.11	0.08
Real Estate and Rental and Leasing	-0.23	0.18	0.10
Professional, Scientific, and Technical Services	-0.31	0.24	0.19
Management of Companies and Enterprises	-1.00	0.51	0.24
Administrative and Support and Waste Mgmt.	-0.53	0.26	0.23
Educational Services	0.58	0.02	0.03
Health Care and Social Assistance	0.01	0.13	0.15
Arts, Entertainment, and Recreation	-0.47	0.13	0.13
Accommodation and Food Services	0.16	0.23	0.19
Other Services (except Public Administration)	0.35	0.12	0.01
Public Administration	0.21	-0.09	-0.03

Source: U.S. Census Bureau, OnTheMap Application, 2010, 2015

### 5.14 Shift Share Analysis

Table 5.4 shows Willacy County's shift-share analysis, the table uses 2010 and 2015 employment changes by breaking down the employment changes to analyze which share had the greatest effect on the employment change. These individual changes assume that the "overall observed economic growth in the benchmark region will inevitably be reflected in regional

economic growth"; meaning if all variables stayed consistent, these increases would proportionally be the same nationally, regionally, and in each industry.

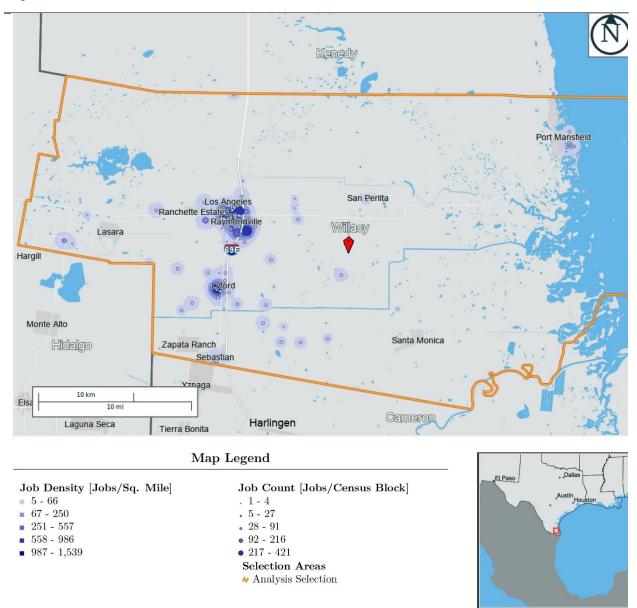
NAICS Title	Willacy Employment 2010	National Growth Share	Regional Industry Mix Share	Regional Growth Share	Total Employment Change	Willacy Employment 2015
Agriculture, Forestry, Fishing and Hunting	328	46	-21	-42	-17	311
Mining, Quarrying, and Oil and Gas Extraction	28	4	6	-19	-9	19
Utilities	29	4	-5	8	7	36
Construction	71	10	6	-54	-38	33
Manufacturing	56	8	-3	-44	-39	17
Wholesale Trade	62	9	3	-40	-28	34
Retail Trade	356	50	-4	-58	-12	344
Transportation and Warehousing	38	5	2	84	91	129
Information	109	15	-17	49	48	157
Finance and Insurance	58	8	-2	-19	-13	45
Real Estate and Rental and Leasing	30	4	1	-12	-7	23
Professional, Scientific, and Technical Services	59	8	6	-32	-18	41
Management of Companies and Enterprises	1	0	0	-2	-1	0
Administrative and Support and Waste Mgmt.	763	107	89	-601	-405	358
Educational Services	269	38	-34	151	155	424
Health Care and Social Assistance	430	60	-6	-51	3	433
Arts, Entertainment, and Recreation	19	3	0	-11	-9	10
Accommodation and Food Services	212	30	18	-15	33	245
Other Services (except Public Administration)	57	8	-1	13	20	77
Public Administration	104	15	-23	31	22	126

Table 5.4 Shift-share, total growth calculations, using industry classification in Willacy, TX, 2015

Source: U.S. Census Bureau, OnTheMap Application, Willacy County, Texas

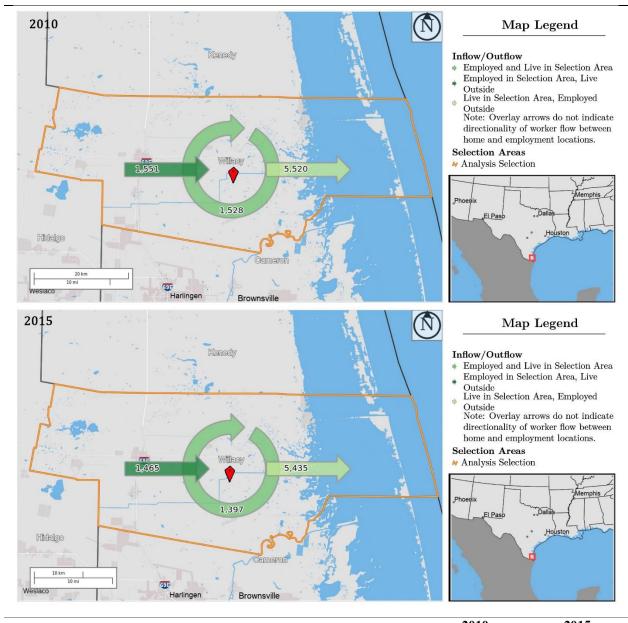
# 5.15 Job Density and Inflow/Outflow

Figure 5.15 presents the spatial density of jobs within Willacy County. There are three hot-spots of employment; these are located in Los Angeles, Ranchette Estates, Raymondville (majorly align to Interstate 69E).



*Figure 5.15 Job density, Willacy County, TX, 2015* Source: U.S. Census Bureau, OnTheMap Application, Work area profile analysis

#### 5.15.1 Inflow/Outflow



	2010	2015	
Living outside Willacy County, employed inside	1,551	1,465	
Living inside Willacy County, employed outside	1,528	1,397	
Living inside Willacy County, employed inside	5,520	5,435	

*Figure 5.16 Inflow/Outflow of jobs, Willacy County, TX, 2010, 2015* Source: OnTheMap, Inflow/Outflow

#### 5.15.2 Jobs by Destination

Table 5.5 Willacy County res	ident job counts by places,	2015
Harlingen city, TX	1,074	15.7%
Raymondville city, TX	813	11.9%

McAllen city, TX	487	7.1%
Corpus Christi city, TX	358	5.2%
Edinburg city, TX	338	4.9%
Lyford city, TX	336	4.9%
Brownsville city, TX	334	4.9%
Weslaco city, TX	197	2.9%
Houston city, TX	155	2.3%
Laredo city, TX	150	2.2%
All Other Locations	2,590	37.9%
Total jobs	6,832	100%

Source: OnTheMap, Destination

#### 5.15.3 Jobs by Distance

Figure 5.17 displays the direction and distance traveled to work in Willacy. The two largest categories are less than 10 miles holds 44.8% of the employers, while 10-24 miles has 25.2% of the employers. The majority of workers are traveling in are from the east predominantly from Harlingen and Brownsville city.

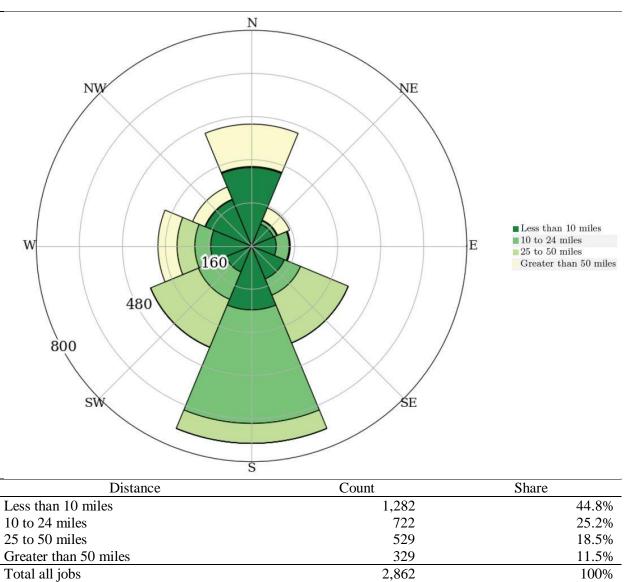


Figure 5.17 Job counts by distance/direction, Willacy County, TX, 2015

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015).

# 6. Environment

Willacy County lies within the Gulf Coastal Prairies physiographic region of Texas. The Gulf Coastal Prairies represent the surface expression of a series of depositional formations that parallel the gulf coastline in bands and slope gently gulf ward. These sediments are generally Quaternary-aged deltaic sands and muds that have been continuously deposited for the last several hundred thousand years. The topography is nearly level to gently sloping.

#### 6.1 Ecoregions

"Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. They are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components." <u>https://www.epa.gov/eco-research/ecoregion-download-files-state-region-6</u>

Willacy County locates itself amongst the Western Gulf Coastal Plains and lies in the 'Coastal Sand Plain, Lower Rio Grande Valley and Laguna Madre Barrier Islands and Coastal Marshes' sub-ecoregion, which can be seen in the Map. The principal distinguishing characteristics of the Western Gulf Coastal Plain are its relatively flat topography and mainly grassland potential natural vegetation. Inland from this region the plains are older, more irregular, and have mostly forest or savanna-type vegetation potentials. Largely because of these characteristics, a higher percentage of the land is in cropland than in bordering ecological regions. Rice, grain sorghum, cotton, and soybeans are the principal crops. Urban and industrial land uses have expanded greatly in recent decades, and oil and gas production is common.

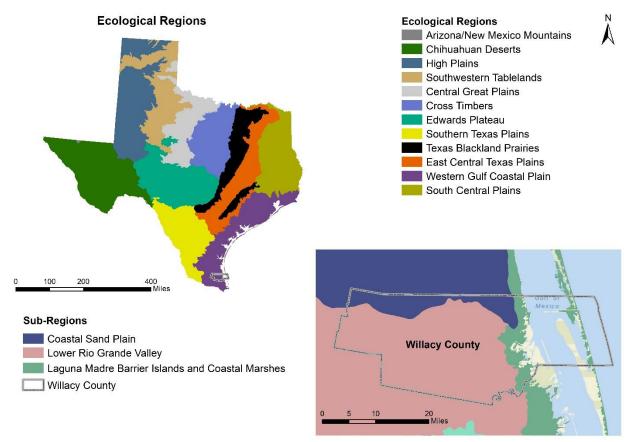
The **Coastal Sand Plain** ecoregion consists of active and (mostly) stabilized sand dune deposits with lesser amounts of silt sheet deposits (silt and fine sand) to the north. Vegetation is mostly mid and tall grasses such as seacoast bluestem, switchgrass, gulfdune paspalum, fringeleaf paspalum, sandbur, purple threeawn, pricklypear, and catclaw with an overstory of southern live oak and honey mesquite trees. Most of the Coastal Sand Plain has been moderately to heavily grazed, and large areas have been converted to nonnative range or pasture grasses.

The **Lower Rio Grande Valley** ecoregion once supported dense, diverse grassland and shrub communities and low woodlands. However, mesquite, granjeno, and a variety of brush and shrub species invaded the landscape. Now, it is almost all in cropland, pasture, and urban land cover. The region is underlain by a mix of Quaternary clays and sands with some Miocene-age sediments of the Goliad Formation at the western edge. Mollisols are extensive, and the soils are deep, mostly clay loams and sandy clay loams.

The Laguna Madre Barrier Islands and Coastal Marshes ecoregion is distinguished by its hypersaline lagoon system, vast seagrass meadows, wide tidal mud flats, large overwintering redhead duck population, numerous protected species, great fishery productivity, and a narrow barrier island with a number of washover fans. There is extreme variability in annual rainfall, and evapotranspiration is generally two to three times greater than precipitation. As no rivers drain into the Texas Laguna Madre, the lagoon water can be hypersaline. Combined with the Laguna Madre of Tamaulipas, it is the largest hypersaline system in the world. The shallow depth, clear water, and warm climate of this lagoon are conducive to seagrass production. Nearly 80% of all seagrass beds in Texas are now found in the Laguna Madre. The food web of the Laguna Madre is predominantly based on this submerged aquatic vegetation (seagrass and algae), rather than free-floating phytoplankton. Because of the hypersalinity, oysters are not commercially harvested to a large extent, although the region does contain the only strain of high-salinity adapted oysters in North America. The blue crab harvest is also smaller than the other two coastal regions to the north. Pink shrimp make up an important part of the commercial harvest while white shrimp are more abundant to the north in 34g. The historically highly productive commercial fisheries have now given way to an important

sport fishery for species such as red drum, black drum, and spotted sea trout. Marshes are less extensive on the southern coast. A few stands of black mangrove tidal shrub occur in this region.

Griffith, G.E., Bryce, S.A., Omernik, J.M., Comstock, J.A., Rogers, A.C., Harrison, B., Hatch, S.L., and Bezanson, D., 2004, Ecoregions of Texas (color poster with map, descriptive text, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:2,500,000).

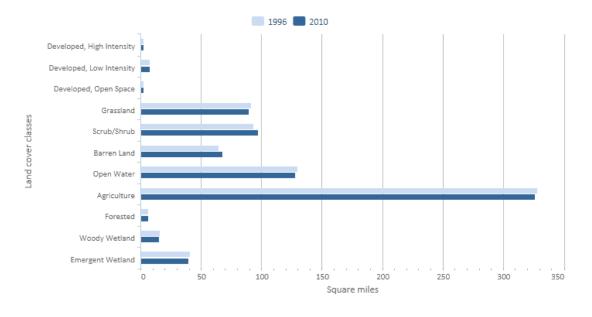


Map: Ecological Regions in Texas Source: Environmental Protection Agency, 2019

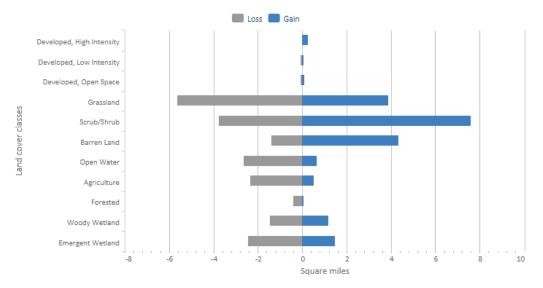
#### 6.2 Land Cover

"Cropland dominates existing land use in Willacy County. Approximately 52.6 percent of the land in Willacy County is used as cropland. Of the remaining land in Willacy County 17.6 percent of the land is covered by water; 14.8 percent is rangeland; 3.6 percent is federal land or Conservation Reserve Program land; 2.0 percent is devoted to pastureland; 2.0 percent is in urban and transportation uses; and the remaining 7.4 percent is in other minor land uses. Twenty percent of the cropland in Willacy County is irrigated. Sugar cane is the major irrigated crop in the county. Other important crops include cotton, sorghum, corn, and vegetables. Livestock includes cattle, horses, goats, and hogs (Dallas Morning News, 1999). Urbanized areas include Lyford, Port Mansfield, San Perlita, Sebastian, and the county seat of Raymondville, which is the largest city in Willacy County." (ENVIRONMENTAL ASSESSMENT US 77 WILLACY COUNTY , May 2001)

Since 1996, about 2.84% of Willacy County's land cover has changed. Most of the land cover in the county is dominated by Agriculture with 326.59 sq. miles in 2010 as shown in figure below.



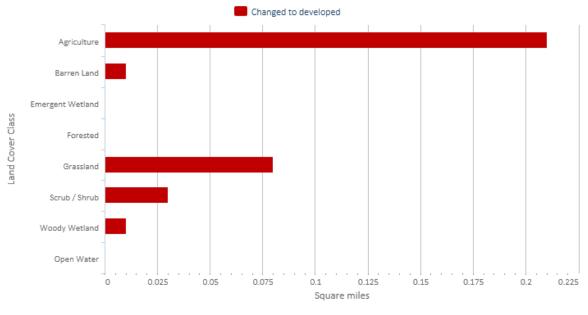
Distribution of land cover by type Source: NOAA, 2019 <u>https://coast.noaa.gov/ccapatlas/#</u>



Distribution of change (losses & gains) by land cover from 1996 to 2010 Source: NOAA, 2019 <u>https://coast.noaa.gov/ccapatlas/#</u>

From 1996 to 2010, there is significant loss of land cover in Forest and Grassland while there is increase in Developed, High Intensity, barren land and Scrub/shrub land cover. Agriculture Land Cover also decreased by 0.56% in 2010.

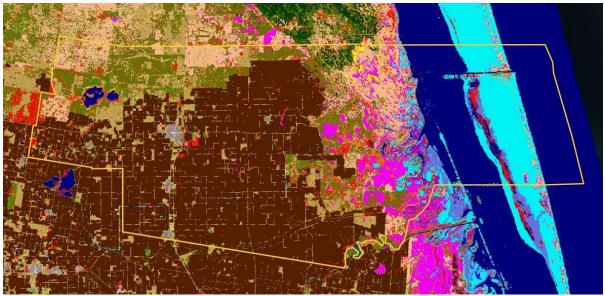
Land Cover	Area 1996	Area Lost	Area gained	Area 2010	Net	Change
					Change	
	sq.mi	sq.mi	sq.mi	sq.mi	sq.mi	%
Developed, High	2.46	-0.01	0.27	2.72	0.26	10.53%
Intensity						
Developed, Low	7.87	-0.06	0.06	7.87	0	0.02%
Intensity						
Developed, Open	2.24	-0.06	0.11	2.29	0.05	2.20%
Space						
Grassland	91.51	-5.64	3.87	89.75	-1.76	-1.93%
Agriculture	328.42	-2.34	0.51	326.59	-1.83	-0.56%
Forested	6.66	-0.39	0.07	6.34	-0.32	-4.82%
Scrub/Shrub	93.28	-3.75	7.59	97.12	3.84	4.12%
Woody Wetland	15.92	-1.45	1.18	15.66	-0.26	-1.65%
Emergent Wetland	40.9	-2.45	1.49	39.94	-0.96	-2.36%
Barren Land	64.79	-1.37	4.33	67.76	2.97	4.58%
Open Water	130.2	-2.62	0.64	128.22	-1.98	-1.52%



Distribution of areas lost to development by land cover Source: NOAA, 2019 <u>https://coast.noaa.gov/ccapatlas/#</u>

Most of the agricultural land and grassland cover changed to developed land area as shown in figure above. Based on NOAA data, from 1996 to 2010 there is 2.47% net increase in developed area in Willacy County giving rise to 4.96% net increase in impervious surface area. In 1996, the county had 0.51% of impervious surface area that got increased to 0.54% in 2010. In 1996, 1.60% of Willacy County was developed and by 2010, 1.64% of the county has been developed.

By 2010, there is 3.34% net decrease in forested area of Willacy County. In 1996, 0.96% of Willacy County was forested and by 2010, 0.93% of the county is forested.

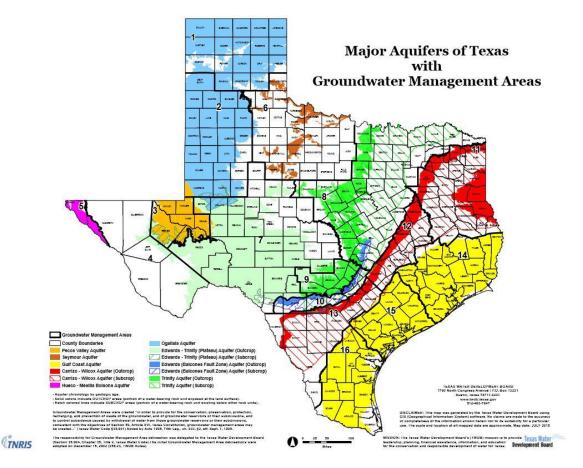


Land Use- Land Cover Map, Willacy County, Texas Source: NOAA, 2019 https://coast.noaa.gov/ccapatlas/#

#### 6.3 Watershed and Aquifers

"An aquifer is an underground layer of permeable rock or sand that collects, holds, and conducts water. The materials act like underground sponges allowing water to flow very slowly through it. Water in the aquifer is called groundwater. Many aquifers are like reservoirs because they store water useful to humans and aquatic ecosystems. <u>https://texasaquaticscience.org/aquifers-and-springs-aquatic-science/</u> " "Water conservation practices can also help to fill out the aquifers artificially. High water demand, combined with extended periods of low precipitation, and the inability of aquifers to recharge can lead to water depletion and eventually drought in a region. (Rockport SOC)"

Willacy County belongs to Groundwater Management Area 16, which consists of 16 counties. Following map shows the major aquifer in Texas and indicates that Willacy County is part of the Gulf Coast Aquifer (denoted in yellow on the map).

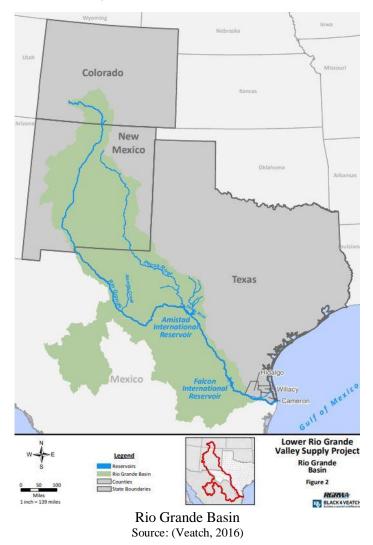


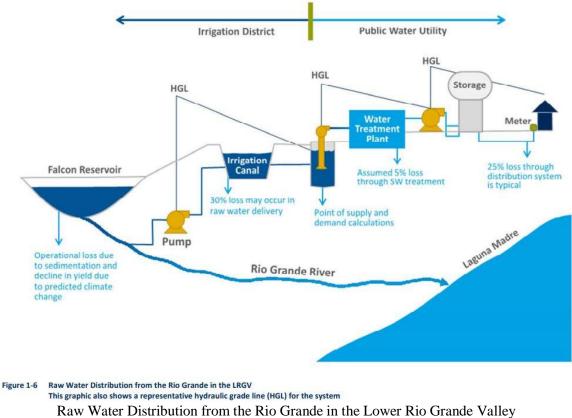
Map: Major Aquifers of Texas Source: Texas Water Development Board, 2015

#### 6.4 Water Demand

Willacy County East Main Drain-Laguna Watershed is in the Madre https://www.arcgis.com/apps/Viewer/index.html?appid=2b3604bf9ced441a98c500763b8b1048 . Willacy County is unique in that it is the only county in Texas without any natural drainage features (U.S. Dept. of Agriculture, 1982). No major rivers, streams, or lakes exist within or adjacent to the county. Though the county lies over the Gulf Coast Aquifer; however, groundwater use for municipal, industrial, and agricultural supplies has either declined or almost ceased in Willacy County because of poor water quality (Texas Water Development Board, 1997).

The Rio Grande is the major source of water supply for Willacy County. The Rio Grande Basin extends from southern Colorado through New Mexico and Texas as shown on Figure below. Located in the region are Amistad and Falcon Reservoirs which are operated as a system for flood control and water supply purposes by the International Boundary and Water Commission (IBWC). (Veatch, 2016)





Source: (Veatch, 2016)

The Texas State Water Plan has projected the demand and supply logistics for Willacy County and Raymondville as shown in figure below.

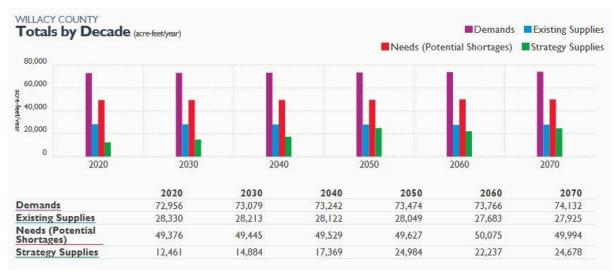


Figure: Water Demand and Supply for Willacy County, Texas Source: Texas State Water Plan

Based on the projections it is expected there will be potential shortages in the future. There will be shortage of water even for municipal use, manufacturing and irrigation, therefore, the county must prepare beforehand strategies to tackle this problem.

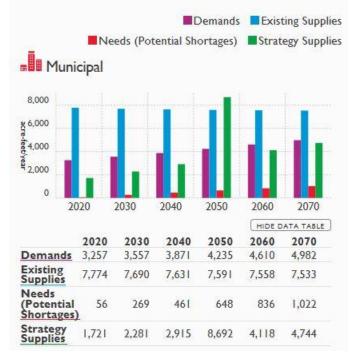


Figure: Water Demand and Supply for Willacy County based on Municipal Usage, Texas Source: Texas State Water Plan

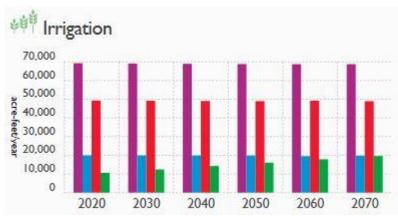


Figure: Water Demand and Supply for Willacy County based on Irrigation Usage, Texas Source: Texas State Water Plan

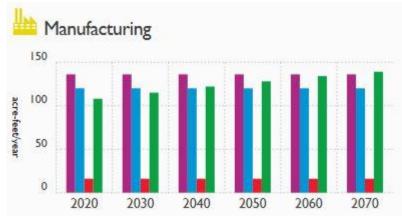
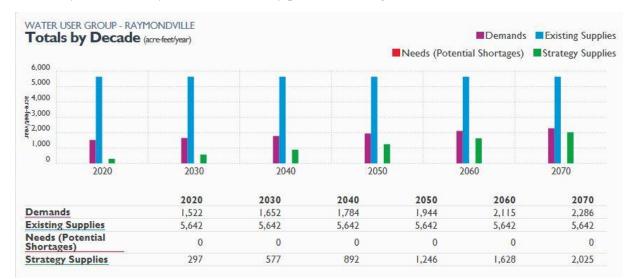
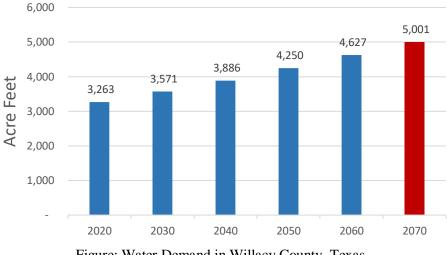


Figure: Water Demand and Supply for Willacy County based on Manuacturing Usage, Texas Source: Texas State Water Plan



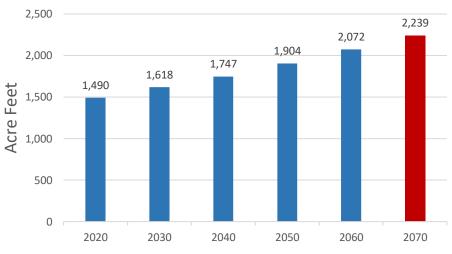
But for Raymondville City, there seems no any potential shortage of water in future.

Figure: Water Demand and Supply for Raymondville City, Texas Source: Texas State Water Plan



#### Water Demand for Willacy County

Figure: Water Demand in Willacy County, Texas Source: Texas State Water Plan



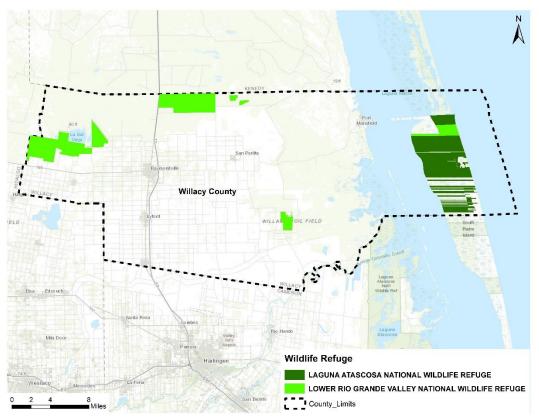
#### Water Demand for Raymondville City

Figure: Water Demand in Raymondville City, Texas Source: Texas State Water Plan

The Texas Water Development Board publishes the estimated water demand for all the counties and cities in Texas. Above Figure illustrates the Municipal Water Demand projections from 2020-2070 for Willacy County and Raymondville City. Both city and county's population is expected to grow, therefore the demand for water tends to increase as well. The water demand provided by the Texas Water Development Board highlights this same projection trend.

#### 6.5 Critical Habitats and Disturbances

"The Endangered Species Act defines a Critical Habitat as a specific geographic area containing features essential to the conservation of an endangered or threatened species that may require special management and protection. <u>https://www.fws.gov/sacramento/es/Critical-Habitat/</u> "



Map: Wildlife Refuge in Willacy County

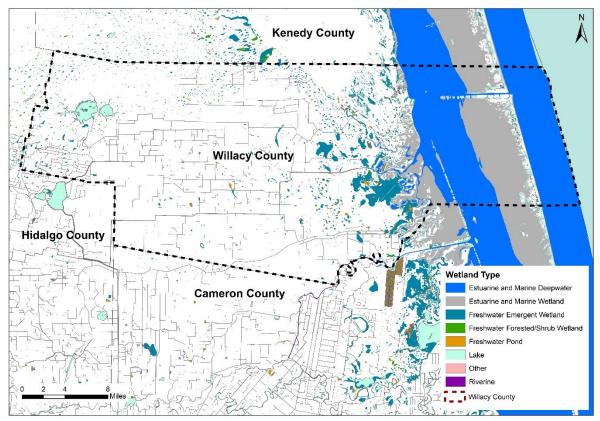
Source: TTC, https://www.fws.gov/refuge/Lower\_Rio\_Grande\_Valley/map.html

The Laguna Atascosa National Wildlife Refuge and Lower Rio Grande Valley National Wildlife Refuge supports a diverse community of species, some of which are considered endangered and threatened. Wildlife refuges act as rehabilitation efforts for vulnerable species, and are critical habitats for fostering the life of species.

Wildlife data downloaded from <u>https://www.fws.gov/gis/data/CadastralDB/index\_cadastral.html</u>

#### 6.6 Wetlands

Wetlands are transitional areas between terrestrial and aquatic systems and are defined by the USACE according to three criteria: 1) the presence of hydrophytic vegetation; 2) hydric soil characteristics; and 3) wetland hydrology. Wetlands act as natural sponges, holding floodwaters and lowering flood heights. Wetlands, located along the coast, contain a rich abundance of wildlife and nutrients. The composition of this ecosystem provides a habitable place for numerous birds, fish and amphibians. Wetlands not only foster breeding and feeding areas for wildlife, but they serve as important fishing grounds, birdwatching and other recreational activities, which Willacy County's economy thrives on. Map shows the wetland types within Willacy County. The major types of wetlands include estuarine and marine, freshwater emergent and freshwater ponds. However, as development increases and human activities become more prominent in the area, wetlands will become more susceptible to harmful contaminates that ultimately impact the wildlife that inhabits it and the quality of water for city use.



Map: Wetland Types in Willacy County, Texas Source: U.S. Fish and Wildlife Service, 2019

#### 6.7 Vegetation

"Willacy County lies within the Gulf Coast Prairies and Marshes vegetation area of Texas. https://tpwd.texas.gov/huntwild/wild/wildlife\_diversity/wildscapes/ecoregions/ " This ecological region experiences oceanic impact from severe wind and rain. According to Texas Parks and Wildlife, the primary vegetation coverage of Willacy County includes bushes and marshes with some special vegetation and plants. Short rooted plants, commonly found in this area and ecological region, locate themselves among the side of open waters. Table provides a list of plants grown in this area

Trees	Wildflowers	Vines	Grasses	Wildflowers
American Beautyberry	Beach Evening Primrose	Carolina Jessamine	Big Blue Stem	Prickly-Pear Cactus
American Elm	Cardinal Flower	Coral Honeysuckle	Bushy Bluestem	Spanish Dagger
Buttonbush	Coral Bean	Cross-Vine	Eastern Gamma Grass	
Eastern Red Cedar	Gulf Coast Penstemon	May-pop	Gulf Cordgrass	
Flame Leaf Sumac	Indian Paintbrush	Muscadine Grape	Inland Sea-oats	
Lantana	Lance-Leaf Coreopsis	Pipevine	Sugarcane Plume Grass	
Lolobolly Pine	Meadow Pink	Trumpet Creeper		
Red Buckeye	Scarlet Sage			
Red Mulberry	Showy Evening Primrose			
Short-Leaf Pine	Spider Lily			
Shrubs	Turk's Cap			
Shumard Red Oak				
Southern Live Oak				
Sugarberry				
Water Oak				
Wax Myrtle				
Willow Oak				
Yaupon Source: Texas Parks and Wildlife, 2016				

#### Table: Plant Species in Gulf Coast Prairies

#### 6.8 Wildlife

Wetlands and sea shores are habitats of more diverse animals than others geographical regions (Texas Parks and Wildlife, 2018). The Willacy County which is located within the boundary of Gulf Coast Prairies, is habitable by millions of migrating birds such as geese, ducks, and songbirds during winter along with alligators, fiddler crabs, spoonbills, and sea turtles that can be found on these areas. Spoonbills is another animal which like to build shelters in this area so that to take benefit from accessibility to shallow water in which can hunt on fish. The lightning whelk, which only is to be seen on Gulf Coast Prairies, is a large sea snail with a heavy shell that are carnivores and historically they were very important to Native Americans as they were very useful for creating tools due to their hard shells (Texas Parks and Wildlife, 2018).

https://www.fws.gov/uploadedFiles/FederallyListedT-E LRGV-508.pdf

Bird: Piping Plover, Reddish Egret, Roseate Spoonbill, American Oystercatcher, Long-billed Curlew, Northern Harrier, Black-necked Stilt

Fish: Atlantic Croaker, Spotted Seatrout, Sheepshead Minnow, Red Drum, Pinfish, Striped Mullet

Turtle: Kemp's Ridley Sea Turtle

Shell: Lightning Whelk, Atlantic Bay Scallop

Sea Animals: Blue Crab, Eastern Oyster, Fiddler Crab, Stone Crab

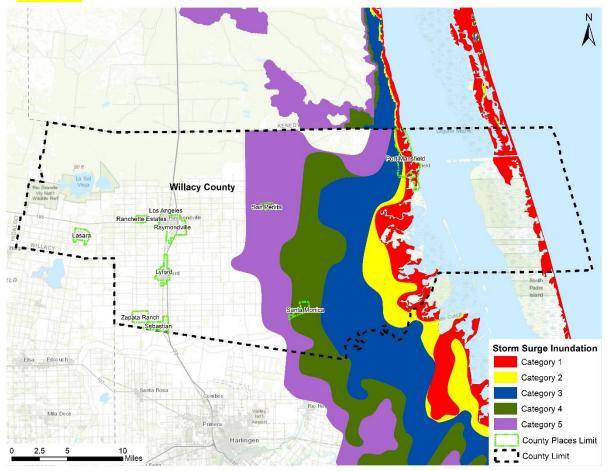
#### Threatened, Endangered, and Rare Species

Table: Federally-Listed Threatened and Endangered Species as of 2010

Species	Status		
Mammals			
Gulf Coast Jaguarundi	Endangered		
Ocelot	Endangered		
Birds			
Northern aplomado falcon	Endangered		
Piping plover	Threatened		
Reptiles			
Hawksbill sea turtle	Endangered		
Kemp's Ridley sea turtle	Endangered		
Leatherback sea turtle	Endangered		
Texas Ayenia	Endangered		
Green sea turtle	Threatened		
Loggerhead sea turtle	Threatened		

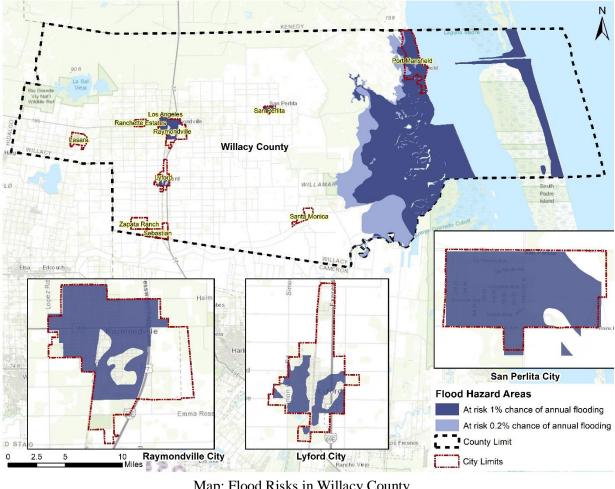
https://www.fws.gov/uploadedFiles/FederallyListedT-E\_LRGV-508.pdf

# 7. Hazard Vulnerability



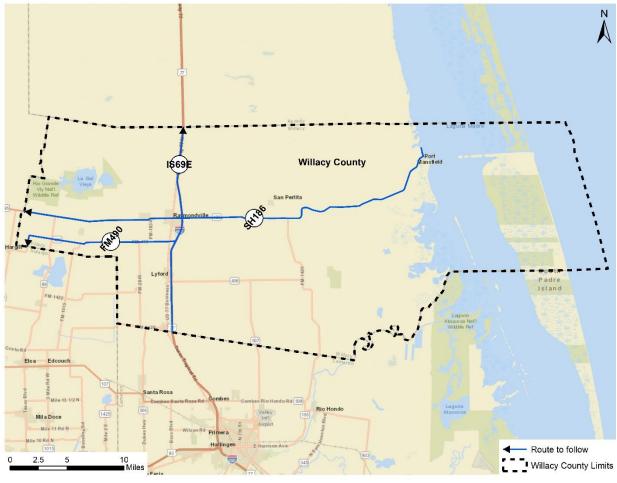
Map: Storm Surge in Willacy County Source: Texas Coastal Texas Atlas <u>https://www.texascoastalatlas.com/AtlasViewers/CoastalAtlas/MainAtlas.html</u>

"Willacy County receives annual rainfall averages of 27 inches. Several historic storms affected the area. In September 1984, the county experienced the worst flooding since Hurricane Beulah in September 1967. An average of 20 inches of rain fell in a three-day period. The eye of hurricane Allen passed over Willacy County in August 1980. Willacy County entered the regular National Flood Insurance Program (NFIP) in February 1984." <u>http://www.riskmap6.com/Community.aspx?cid=494&sid=5</u>



Map: Flood Risks in Willacy County Source: Texas Coastal Texas Atlas <u>https://www.texascoastalatlas.com/AtlasViewers/CoastalAtlas/MainAtlas.html</u>

Both major cities .i.e. Raymondville and Lyford are at flood risk with 1% chance of annual flooding.



Map: Hurricane Evacuation Route Source: Texas Coastal Texas Atlas <u>https://www.texascoastalatlas.com/AtlasViewers/CoastalAtlas/MainAtlas.html</u>

The evacuation routes for Willacy County citizens is limited to three main routes. For Hurricane Evacuation Routes, TxDOT has designated State Highway 186, Interstate Highway 69E and FM 490.

## 8. Transportation

### 8.1 OVERVIEW

### 8.2 MEANS OF TRANSPORTATION

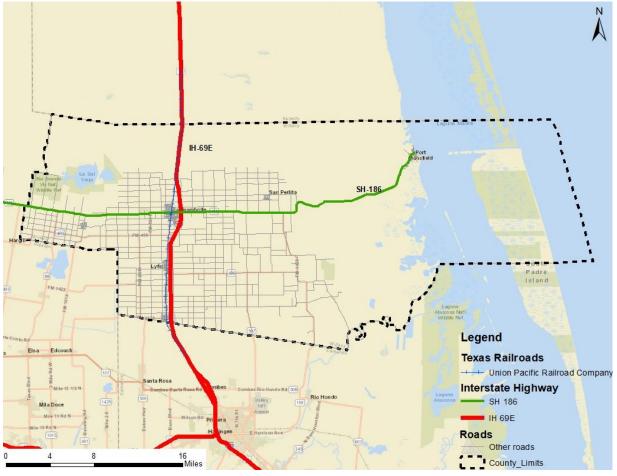


Figure 6.1: Transportation map of Willacy County

Source: Texas Department of Transportation

## 8.2.1 HIGHWAYS

Willacy County is comprised of a State highway, an interstate highway and arterials. The map \_\_\_\_\_\_ shown below shows the transportation network. Texas State Highway 186 which runs east-west is the main collector of traffic in and out of Willacy. Interstate Highway 69E runs north-south through South Texas which is currently under construction. I-69E runs centrally through Willacy County and shares its alignment with State Highway 77 for its entire length.

## 8.2.2 RAILROADS

There is only one railroad that runs through and operates inside the county which is the Union Pacific Railroad Company. The railway track is situated right next to Highway 77 and passes through Raymondville and Lyford cities and Sebastian CDP. The Union Pacific Railroad company run right from Brownsville in the south to Houston and continues along the southern gulf coast region.

#### 8.2.3 AIRPORTS

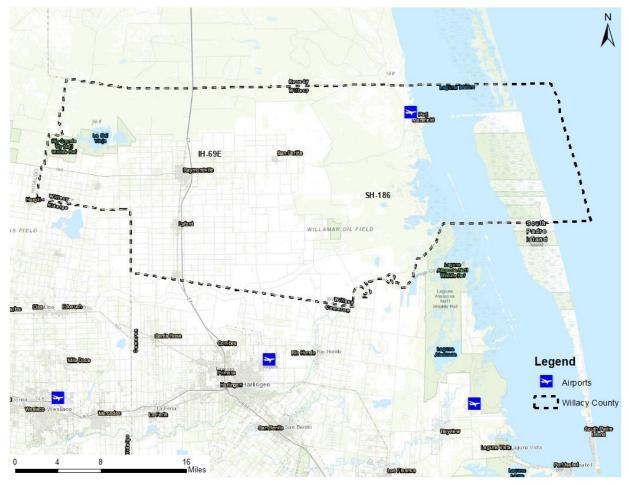


Figure 6.2: Airports in Willacy County

### Source: Google Maps

Willacy County has only 1 international public airport which is Charles R Johnson Airport, located in Port Mansfield City.<sup>35</sup> There are two other private airports in Raymondville City, Bell Airfield-XS56 and TR Funk Incorporated Airport.<sup>36</sup>

The following nearby airports can be used by residents in Willacy County:

- 1. Brownsville South Padre Island International Airport: A public airport located in Brownsville City. Approximately one hour drive from Raymondville.
- 2. Valley International Airport: A public airport in Harlingen City. Approximately 30 minutes drive from Raymondville City.
- 3. McAllen Miller International Airport: A public airport situated in McAllen City. Approximately one hour drive from Raymondville City.

#### 8.2.4 SEA PORTS

The geographic location of Willacy County makes it an important location for building of ports along the coast. Port Mansfield is located at about 25 miles from Raymondville. It is a small sized shallow draft port.<sup>37</sup> It is majorly used for recreational fishing and scrap metal and its 3-feet draft limits its use to small recreational uses.<sup>38</sup>

The Port of Harlington (shown in Figure \_\_) is approximately 30 miles from Raymondville. It is a public port which is small with shallow draft water. It specializes in the transport of liquid fertilizers, sand, aggregates, fuel, raw sugar, cotton, sorghum and corn.<sup>39</sup> Port Isabel is located on the south of Willacy County, close to South Padre Island. It lies at a distance of approximately 64 miles from Raymondville City. Its a medium sized draft mainly used for offshore servicing, transporting concrete, sand and aggregate.<sup>40</sup> Port of Brownsville is a deep draft port located to the south of Willacy County and close to Mexico. It lies at a distance of about 48 miles from Raymondville. It is a public port which is majorly used for steel, fuels, waxes, lubricants, limestone, asphalt, minerals, grains, bauxite, scrap metal, electrical poles, windmill components, etc.

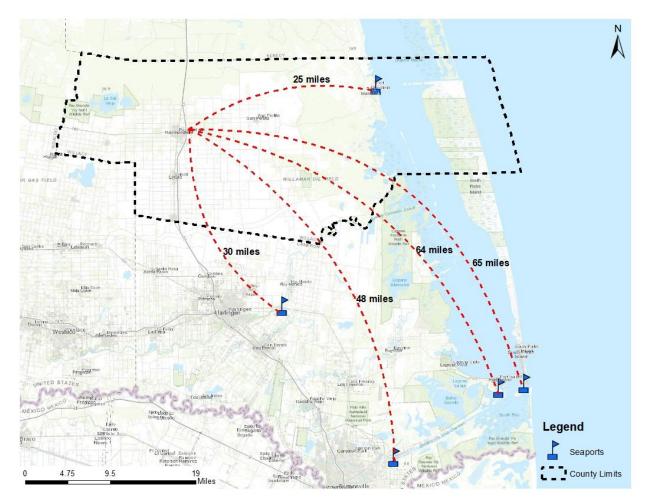


Figure 6.3: Sea Ports near Willacy County Source: Texas Department of Transportation

#### 8.3 MODE OF COMMUTE

Figure 6.4 below shows that about 86% of the residents in Willacy County are automobile dependent which is similar to the trend in Texas overall. It is also notable that compared to the state of Texas just 5% of the population carpooled in Willacy County. About 5% of the residents walked to work which is higher than the State of Texas, with 2%. People do not use public transport or taxicab, motorcycle as their mode of transport at all in Willacy County.

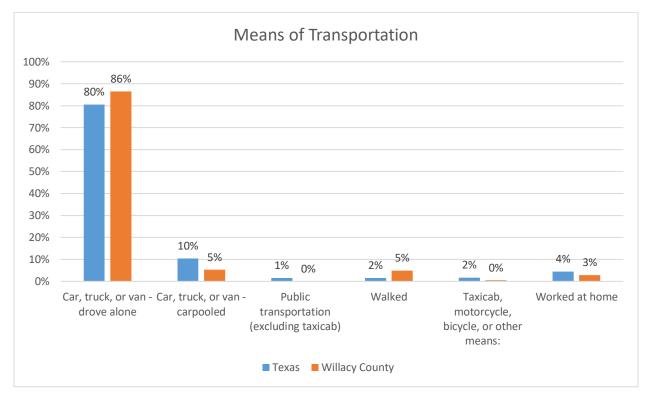


Figure 6.4: Means of Transportation for Willacy County

Source: U.S Census Bureau, Table B08101<sup>41</sup>

### 8.4 PUBLIC TRANSIT

There are very few options for people to choose from in the public transportation system in Texas. Some of the services available within the county are:

Valley Transit Bus

Full-service Bus Company serving South Central Texas and Northern Mexico with more than 50 daily schedules, as well as connections to nationwide travel on Greyhound Lines.

#### Valley Metro

The Lower Rio Grande Valley Development Council provides public transportation in urbanized and non-urbanized areas of the lower Rio Grande Valley through its transit department, Valley Metro. The LRGVDC is a voluntary association of local governments formed under Texas Law in 1967 as one of Texas' 24 regional Council of Governments (COG's) serving Cameron, Hidalgo and Willacy County.

## 9. Community Facilities

### 9.1 Willacy County Schools

Willacy County consists of three Independent School Districts and one Consolidated Independent School Districts. The three ISDs are: (<u>http://www.raymondvilletx.us/edc/education.php</u>)

- 1. Lasara Independent School District (ISD)
- 2. Raymondville Independent School District (ISD)
- 3. San Perlita Independent School District (ISD)

And one CISD is:

1. Lyford Consolidated Independent School District (CISD)

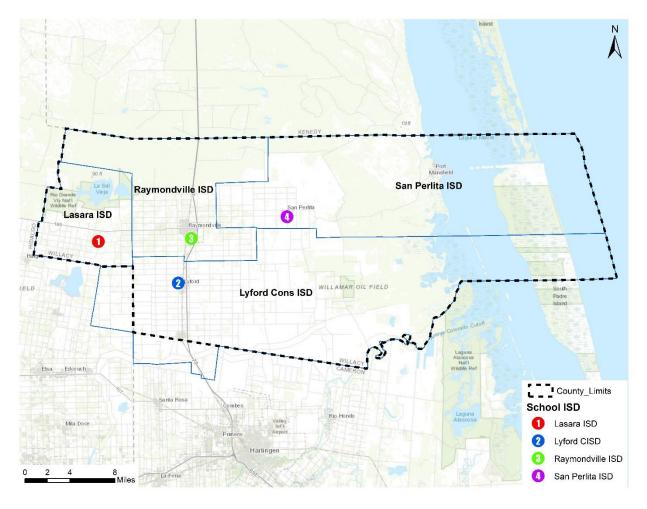


Figure: Independent School District Boundary in Willacy County Source: TTC

Table below shows public schools of Willacy County by student enrollment and Accountability Rating in 2018.

Table: Public Schools by Student Enrollment and Accountability Rating in Willacy County, 2018

S.N.	School Name	Grade Span	Students	Accountability Rating 2018
1	Lasara Independent School District (ISD)		410	В
1.1	Lasara Elementary School	PK - 08	298	Met Standard
1.2	Lasara High School	09 - 12	112	Met Standard
2	Lyford Consolidated Independent School District		1551	В
	(CISD)			
2.1	Lyford Elementary	EE - 05	700	Met Standard
2.2	Lyford Middle School	06 - 08	376	Met Standard
2.3	Lyford High School	09 - 12	475	Met Standard
3	Raymondville Independent School District (ISD)		2,083	В
3.1	L.C. Smith Elementary School	PK - 05	441	Met Standard
3.2	Pittman Elementary School	EE - 05	611	Met Standard
3.3	Myra Green Middle School	06 - 08	436	Met Standard
3.4	Raymondville Early College High School	09 - 12	66	Met Standard
3.5	Raymondville Options Academia Academy	09 - 12	529	Met Alternative
				Standard
4	San Perlita Independent School District (ISD)		262	В
4.1	San Perlita Elementary School	PK - 05	115	Met Standard
4.2	San Perlita Middle School	06 - 08	63	Met Standard
4.3	San Perlita High School	09 - 12	84	Met Standard

Source: Texas Education Agency, Accountability Rating, 2018

#### **Raymondville ISD**

The largest school district of Willacy County, Raymondville ISD serves a student population of approximately 2,083. The school district is made up of two high schools, one middle school and two elementary campuses.

### Lyford CISD

Lyford CISD includes the surrounding communities of Sebastian and Santa Monica and serves approximately 1,551 students. The district has one elementary school, one middle school, and one high school.

#### San Perlita ISD

The district serves approximately 262 students from San Perlita, Port Mansfield and surrounding farm/ranch communities northeast of Willacy County.

#### Lasara ISD

Located approximately 8 miles west of Raymondville is Lasara ISD. The school serves 410 students in pre-K through 12th Grade and offers a variety of extracurricular activities. It is recognized as a T-STEAM Academy.

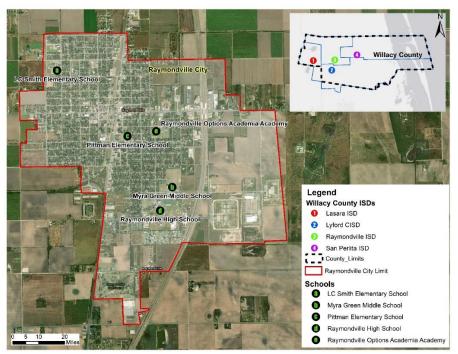


Figure: Public Schools in Raymondville City of Willacy County Source: Texas Education Agency, 2018



Figure: LC Smith Elementary School (a) Source: Google Street View, 2019



Figure: Myra Green Middle School (b) Source: Google Street View, 2019



Figure: Pittman Elementary School (c) Source: Google Street View, 2019



Figure: Raymondville High School (d) Source: Google Street View, 2019



Figure: Raymondville Options Academia Academy (e) Source: https://www.raymondvilleisd.org/24067\_1

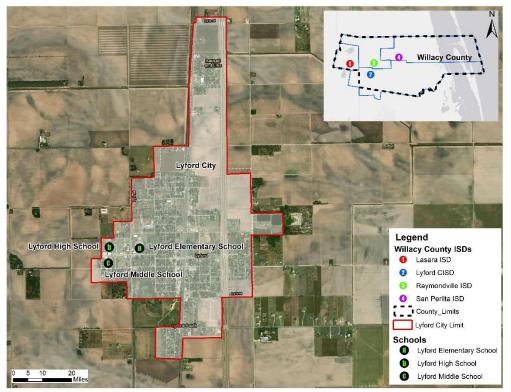


Figure: Public Schools in Lyford City of Willacy County Source: Texas Education Agency, 2018



Figure: Lyford Elementary School (a) Source: Google Street View, 2019



Figure: Lyford Middle School (c) Source: Google Street View, 2019



Figure: Lyford High School (c) Source: Google Street View, 2019

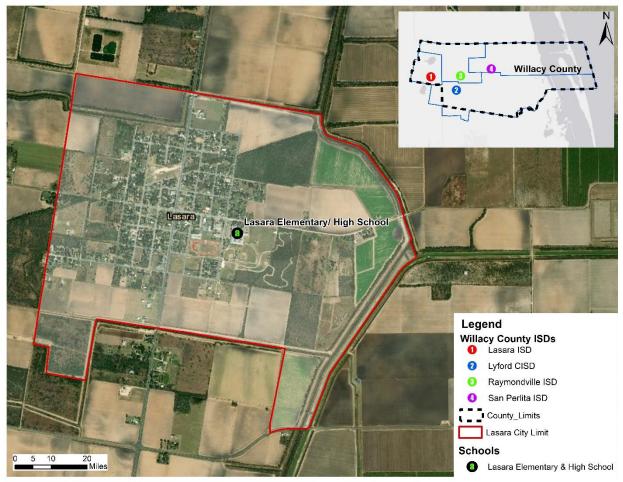


Figure: Public Schools in Lyford City of Willacy County Source: Texas Education Agency, 2018



Figure: Lasara Elementary & High School (a) Source: Google Street View, 2019



Figure: Public Schools in Lyford City of Willacy County Source: Texas Education Agency, 2018



Figure: San Perlita Elementary School Source: https://www.spisd.org/30352\_1



Figure: San Perlita High School Source: https://www.spisd.org/30352\_1



Figure: San Perlita Middle School Source: Google Street View, 2019

## 9.2 Willacy County Health Care Services

The following medical facilities are available to the residents of Willacy County. Most of the medical clinics are available in Raymondville City.

Medical Facilities	Туре			
Raymondville City				
Willacy County Emergency Medical Services	Emergency Medical Services			
Raymondville Family Medical Clinic	Medical Clinic			
Su Clinica Familiar Dental (DC)	Dental Clinic			
Su Clinica Raymondville Pharmacy (MC)	Medical Clinic			
RGV Diagnostics Sleep Center (MC)	Medical Clinic			
Raymondville Dialysis Clinic (MC)	Medical Clinic			
Valley Family Clinic (MC)	Medical Clinic			
Kid Spot Pediatric Rehab ()	Physical Therapy Clinic			
Raymondville Family Dentistry (DC)	Dental Clinic			
Kids Skills (Physical Therapy)	Physical Therapy Clinic	Physical Therapy Clinic		
Impact Physical Therapy	Physical Therapy Clinic	Physical Therapy Clinic		

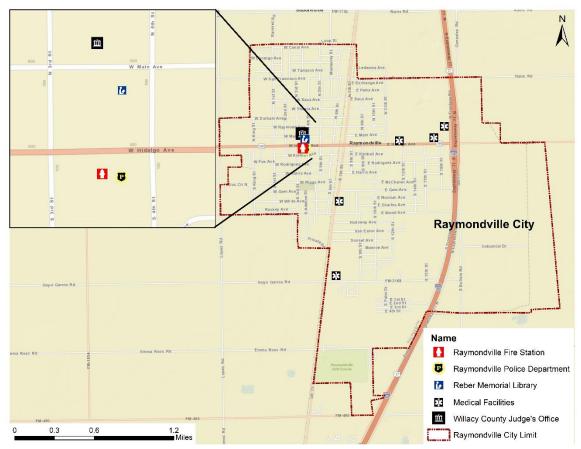
Table: Willacy County's Medical Facilities



Figure: Willacy County Emergency Medical Services Source: Google Street View, 2019

#### 9.3 Governmental Infrastructure

Raymondville City being the county seat, it houses Willacy County Judge's Court. The city also has a public library, and municipal Court. Apart from Raymondville City, Lyford City has its own city hall.



Raymondville City Critical Facilities Source: Google Maps, 2019



Willacy County Judge's Court Source: <u>https://www.thc.texas.gov/blog/february-courthouse-</u> <u>month-willacy-county</u>

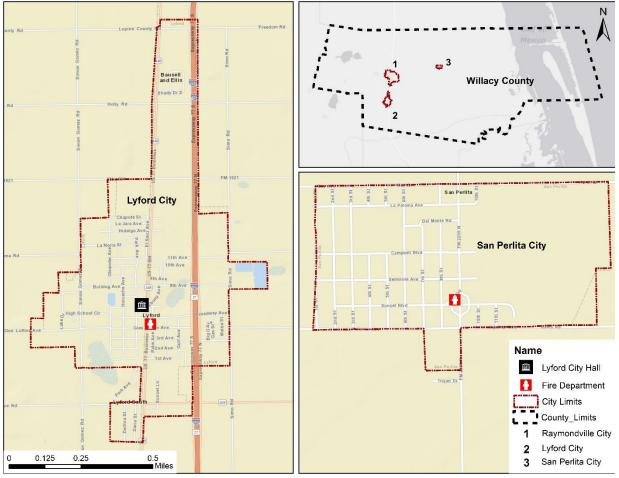


Reber Memorial Library Source: <u>https://www.thc.texas.gov/blog/february-</u> <u>courthouse-month-willacy-county</u>



Raymondville Municipal Court / Police Department Source: ttp://www.raymondvilletx.us/police.php

Lyford City Hall/ Water Department/ Police Department Source: Google Street View 2019



Critical Facilities in Lyford City and San Perlita City Source: Google Maps, 2019

#### Police and Fire Services

Raymondville and Lyford has its police department. All three cities of Willacy County has its fire department i.e. Raymondville Fire Station, Lyford Fire Department and San Perlita Fire Department.



Raymondville Fire Station Source: http://raymondvilletx.us/fire.php



Raymondville Memorial Cemetery Source: http://raymondvilletx.us/cemetery.php



Lyford Fire Department Source: Google Street View 2019

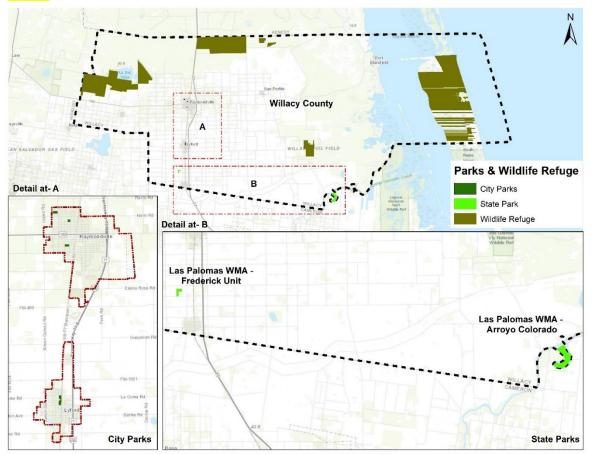


Evergreen Cemetery in Lyford Source: <u>http://www.waymarking.com/gallery/image.aspx?f=1&guid=18b4</u> <u>6096-969f-4e8b-8cf0-d518c745a816&gid=3</u>



San Perlita Fire Department Source: http://www.waymarking.com/waymarks/WMJXBG\_San\_Perlita\_Fire\_Department

## 9.4 Parks and Wildlife Refuge



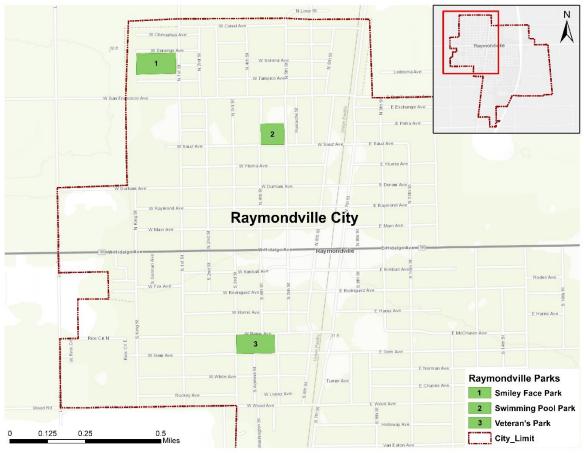
Parks and Wildife Refuge in Willacy County Source: ParkServe.com, 2019

Willacy County has four city parks; three in Raymondville City and one in Lyford City, totaling an area of about 25.35 acres. It has two state parks with an area of 284.25 acres and two wildlife refuge with a total area of about 6,927 acres. The Laguna Atascosa National Wildlife Refuge and Lower Rio Grande Valley National Wildlife Refuge supports a diverse community of species, some of which are considered endangered and threatened.

#### 9.4.1 Raymondville City

In 2019, 50% of the population in Raymondville City lived within a 10-minute walk of a park, quite lower than the national average of 54% (<u>https://www.tpl.org/city/raymondville-texas</u>). 1% of Raymondville's city land is used for parks and recreation, much lower than the national average of 15%.

Parks	People served	Acre
Veterans Park	1,423	6.3
Swimming Pool Park	2,187	3.4
Smiley Face Park	1,639	5.1
	5,249	



City Parks in Raymondville City Source: ParkServe.com, 2019



Veterans' Park in Raymondville City Top View Source: Google Earth 2019



Veterans' Park Source: <u>http://raymondvillechamber.com/</u>



Swimming Pool Park in Raymondville City Source: Google Earth 2019



Swimming Pool Park in Raymondville City Source: http://raymondvilletx.us/parks\_recreation.php



Smiley Face Park Source: Google Earth 2019

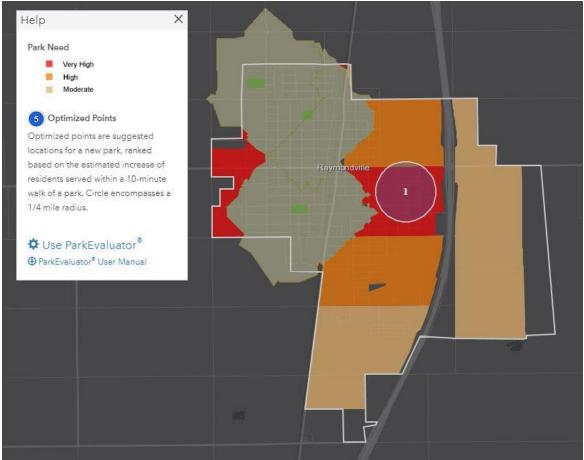


Smiley Face Park Source: http://raymondvilletx.us/parks\_recreation.php

Veterans Park has a walking trail and skate park and small sports facility.

Swimming Pool Park serves swimming activities for Raymondville Residents.

Smiley Face Park is a recreational park with a walking trail, small sports complex, and a community pavilion. The water tank in the park has smiley face on it.

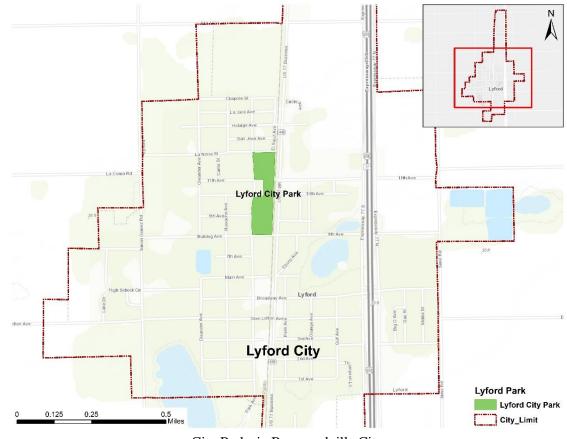


Raymondville City Park Service Boundary Source: ParkServe.com, 2019

The figure above shows necessity of park in the Raymondville City. Areas in red signifies very high need, dark orange signifies high need and light orange signifies moderate need of park.

### 9.4.2 Lyford City

In 2019, 53% of the population in Raymondville City lived within a 10-minute walk of a park, about equal to the national average of 54% (https://www.tpl.org/city/raymondville-texas). 1% of Lyford's city land is used for parks and recreation, much lower than the national average of 15%.



City Parks in Raymondville City Source: ParkServe.com, 2019



Top View of Lyford City Park Source: Google Earth 2019

Lyford City Park Source: Google Earth 2019

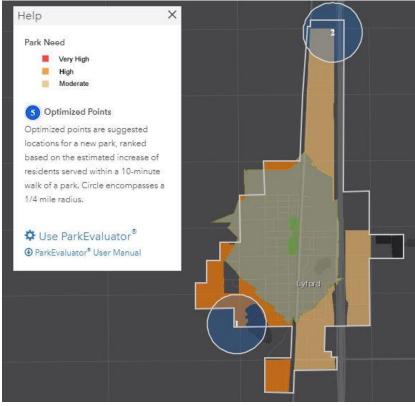


Top View of Lyford Central Park Source: Google Earth 2019



Lyford Central Park Source: https://www.lyfordtx.us/city-parksfacilities

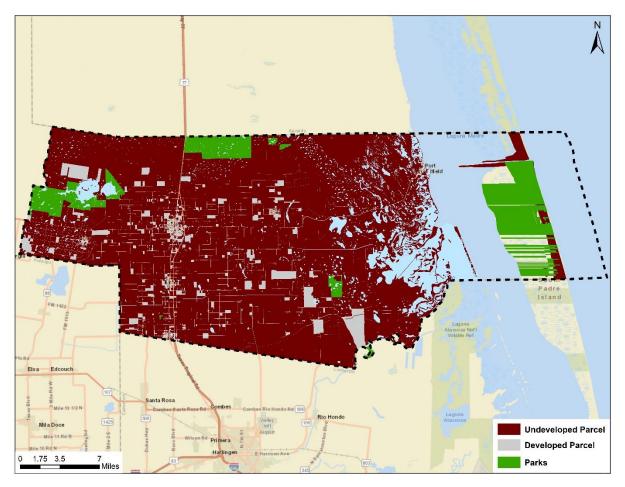
Lyford Central Park, Second Park for Lyford City is under construction. The park will feature a new baseball field along with an observatory deck. Not to mention the amphitheater were various shows would be watched.



Raymondville City Park Service Boundary Source: ParkServe.com, 2019

The figure above shows necessity of park in the Lyford City. Areas in red signifies very high need, dark orange signifies high need and light orange signifies moderate need of park.

### 10. Undeveloped Parcel



Map: Developed and Undeveloped Parcel of Willacy County Source: Texas Natural Resources Information System <u>https://tnris.org/stratmap/land-parcels/</u>

About 94.68% of total area of Willacy County is undeveloped and only 5.32% of its total area is developed. Also, parks and wildlife refuge covers approximately 10.02% of county's area and wetland covers approximately 10.84% of the county's area.

#### 11. Colonia

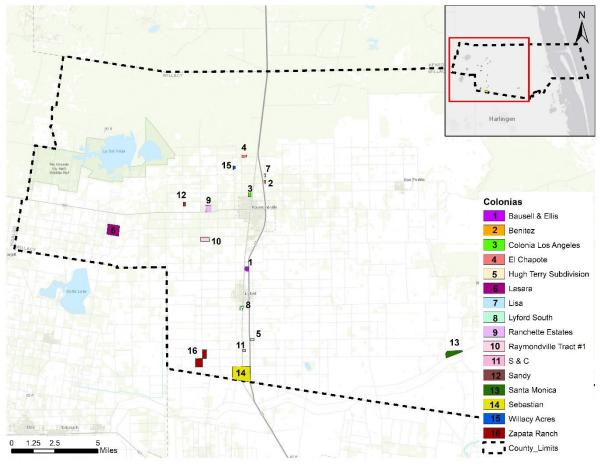
"In the United States, colonias are low-income, unincorporated, slum-areas, located along the Mexico– United States border region that began to emerge with the advent of informal housing. Colonias consist of peri-urban subdivisions of substandard housing lacking in basic services such as potable water, electricity, paved roads, proper drainage, and waste management. Often situated in geographically inferior locations, such as former agricultural floodplains, colonias suffer from associated issues like flooding. Furthermore, urbanization practices have amplified the issues, such as when developers strip topsoil from the ground in order to subdivide land, the resulting plains become breeding grounds for mosquitoes and disease. Traditional homeownership financing methods are rare amongst colonias residents, and therefore these areas consist of ramshackle housing units built incrementally with found material on expanses of undeveloped land. Colonias have a predominant Latino population where 85 percent of those Latinos under the age of 18 are United States citizens. The U.S. has viewed border communities as a place of lawlessness, poverty, backwardness, and ethnic difference.

Despite the economic development, liberalization and intensification of trade, and strategic geographic location, the southern U.S. border is one of the poorest regions in the nation.[1] Most cases had shown that these communities formed when unscrupulous landowners illegally sold and subdivided rural lands, often to buyers who did not understand the terms under which this land was being sold. The contract for deed through which plots were offered by land developers often made false promises that utilities would be installed.

The majority of these communities have no water infrastructures and lack wastewater or sewage services. Where sewer systems do exist there are no treatment plants in the area, and untreated wastewater is dumped into arroyos and creeks that flow into the Rio Grande or the Gulf of Mexico.

These settlements are part of an informal sector or informal economy that is not bound by the structures of government regulations within labor, tax, health and safety, land use, environmental, civil rights, and immigration laws.

Section 916 of the National Affordable Housing Act (NAHA) defines colonias as any "identifiable community" determined by objective criteria that include the lack of potable water and adequate sewage systems, the lack of decent, safe, and sanitary housing, and which were in existence before the passage of the Cranston–Gonzalez National Affordable Housing Act (1990). According to the U.S. Department of Housing and Urban Development (HUD), the term colonias has a specific meaning within the U.S., referring to a community within the rural Mexico–U.S. border region with marginal conditions related to housing and infrastructure." <a href="https://en.wikipedia.org/wiki/Colonia">https://en.wikipedia.org/wiki/Colonia</a> (United States)#Colonias in Texas

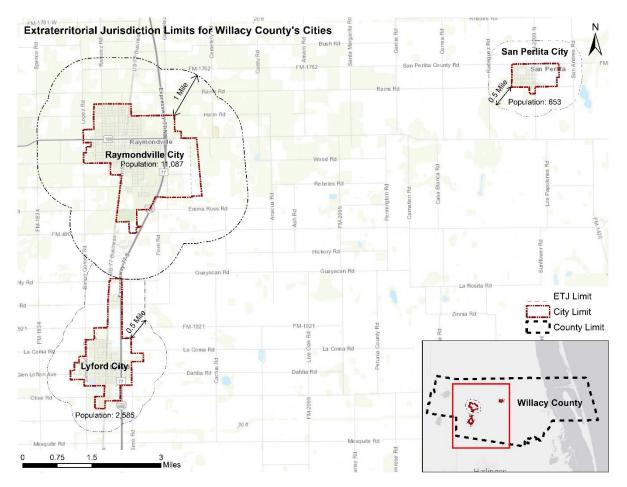


Colonias in Willacy County Source: https://coloniadata.oag.state.tx.us/

Table: Colonia in Willacy County							
Acres	Pop from 2000	People With water	People Without water	Waste water community service	Without wastewater collection	No of Lots	Occupied lots
32.91	100	100	0	Lyford	100	49	37
12.53	30						
23.16	69	0	69	Raymondville	69	10	10
24.83	12						
16.33	50	50	0	On-site	50	27	21
267.52	824	824	0	North Alamo WSC	0	298	225
9.99	12			Septic lots		4	4
22.77	158	158	0	Lyford	158	122	92
88.14	120	120	0	Cluster System	120	46	22
81.92	9						
14.3	17						
20	2						
146.94	65						
558.26	1904	1904	0	Sebastian MUD	0	680	513
14.84	18						
204.28	75	75	0	On-site	75	50	38
	32.91 12.53 23.16 24.83 16.33 267.52 9.99 22.77 88.14 81.92 14.3 20 146.94 558.26 14.84	from           32.91         100           12.53         30           23.16         69           24.83         12           16.33         50           267.52         824           9.99         12           22.77         158           88.14         120           81.92         9           14.3         17           20         2           146.94         65           558.26         1904           14.84         18	AcresPop from 2000People With water $32.91$ 100100 $12.53$ $30$ 100 $12.53$ $30$ 20 $23.16$ $69$ $0$ $24.83$ $12$ 100 $16.33$ $50$ $50$ $267.52$ $824$ $824$ $9.99$ $12$ 20 $22.77$ $158$ $158$ $88.14$ $120$ $120$ $81.92$ $9$ 14.3 $14.3$ $17$ 20 $24.83$ $1904$ $1904$	AcresPop from 2000People With waterPeople Without water $32.91$ 1001000 $12.53$ 30 $ 23.16$ 69069 $24.83$ 12 $ 16.33$ 50500 $267.52$ 8248240 $9.99$ 12 $ 22.77$ 1581580 $88.14$ 1201200 $81.92$ 9 $  14.3$ 17 $  20$ 2 $  146.94$ 65 $  558.26$ 190419040	AcresPop from 2000People With waterPeople Without waterWaste water community service $32.91$ 1001000Lyford $12.53$ 30 $23.16$ 69069Raymondville $24.83$ 12 $16.33$ 50500On-site $267.52$ 8248240North Alamo WSC $9.99$ 12-Septic lots $22.77$ 1581580Lyford $88.14$ 1201200Cluster System $81.92$ 9 $14.3$ 17 $20$ 2 $14.34$ 18	AcresPop from 2000People With waterPeople Without waterWaste water community serviceWithout wastewater collection $32.91$ 1001000Lyford100 $12.53$ 30 $23.16$ 69069Raymondville69 $24.83$ 12 $16.33$ 50500On-site50 $267.52$ $824$ $824$ 0North Alamo WSC0 $2.77$ 1581580Lyford158 $28.14$ 1201200Cluster System120 $81.92$ 9 $14.3$ 17 $20$ 2 $14.34$ 1819040Sebastian MUD0	Acres from 2000People With waterPeople Without waterWaste water community serviceWithout wastewater collectionNo of Lots $32.91$ 1001000Lyford10049 $12.53$ 30 $23.16$ 69069Raymondville6910 $24.83$ 12 $16.33$ 50500On-site5027 $267.52$ 8248240North Alamo WSC0298 $9.99$ 12-Septic lots4 $22.77$ 1581580Lyford158122 $88.14$ 1201200Cluster System12046 $81.92$ 9 $14.3$ 17 $20$ 2 $14.694$ 65 $14.84$ 18-0Sebastian MUD0680

Table shows Willacy County's colonia area, number of people without basic facilities and occupied lots in those colonias. Colonia Los Angeles' residents are deprived of both potable water facility and wastewater collection. Other colonias without wastewater collection Bausell and Ellis, Hugh Terry Subdivision, Lyford South, Ranchette Estates and Zapata Ranch.

#### 12. Extraterritorial Jurisdiction (ETJ)



Map: Extraterritorial Jurisdiction (ETJ) for cities of WillacyCounty Source: Local Government Code <u>https://statutes.capitol.texas.gov/Docs/LG/htm/LG.42.htm</u>

"Extraterritorial Jurisdiction (ETJ), as it refers to cities, is the legal capability of a municipality to exercise authority beyond the boundaries of its incorporated area. In the US, Texas is one of the states that by law allow cities to claim ETJ to contiguous land beyond their city limits. In Texas, cities with populations over 100,000 may extend their ETJ to five miles beyond the boundaries of the incorporated limit." (https://www.austintenantadvisors.com/blog/extraterritorial-jurisdiction-etj-is-it-constitutional/)

"The extraterritorial jurisdiction of a municipality is the unincorporated area that is contiguous to the corporate boundaries of the municipality and that is located:

- (1) within one-half mile of those boundaries, in the case of a municipality with fewer than 5,000 inhabitants;
- (2) within one mile of those boundaries, in the case of a municipality with 5,000 to 24,999 inhabitants;
- (3) within two miles of those boundaries, in the case of a municipality with 25,000 to 49,999 inhabitants;

- (4) within 3-1/2 miles of those boundaries, in the case of a municipality with 50,000 to 99,999 inhabitants;
- (5) within five miles of those boundaries, in the case of a municipality with 100,000 or more inhabitants."

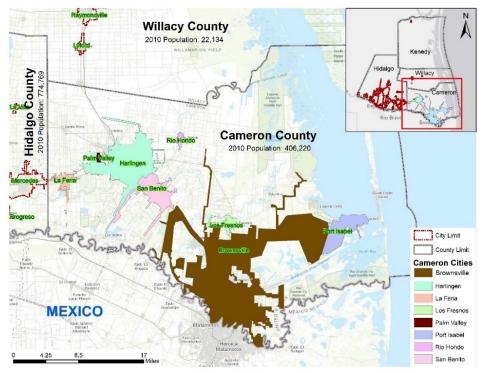
#### https://statutes.capitol.texas.gov/Docs/LG/htm/LG.42.htm

For cities of Willacy County, Raymondville City has 1 mile ETJ limit, and both Lyford and San Perlita City have 0.5 mile ETJ limit as shown in above map. These ETJs are determined by it's population.

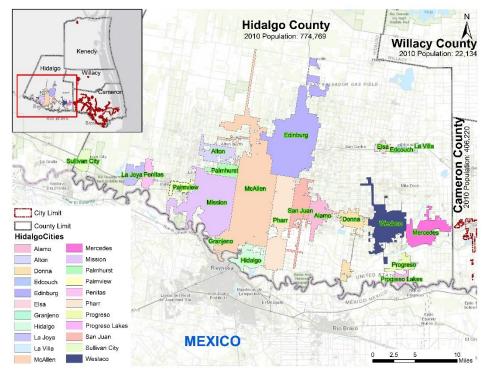


Map: WillacyCounty Precincts (Rough Sketch) Source:TTC

# 13. Cities in Adjoining Counties of Willacy County



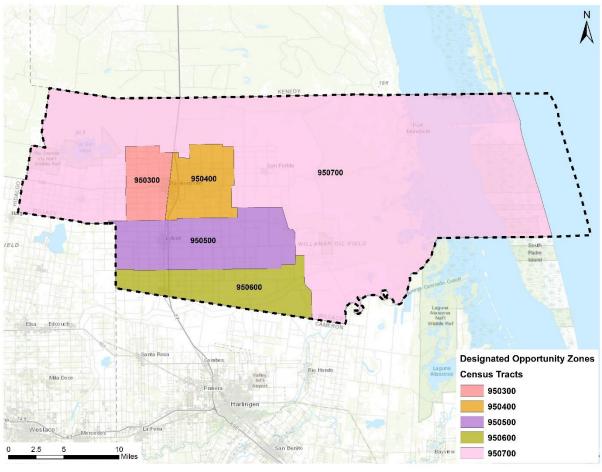
Cities in Cameron County Source: Tigerline Shapefiles 2019



Cities in Hidalgo County Source: Tigerline Shapefiles 2019

### 14. Opportunity Zone

"Opportunity Zones are low income census tracts nominated by governors and certified by the U.S. Department of the Treasury into which investors can now put capital to work financing new projects and enterprises in exchange for certain federal capital gains tax advantages." (Opportunity Zones, 2019) It is an economic development tool designed to encourage economic development and job creation in distressed communities by providing tax benefits to investors. Investors can invest in the development of Opportunity Zones through Opportunity Funds.



Designated Opportunity Zones of Willacy County Source: <u>https://www.arcgis.com/apps/View/index.html?appid=9c692acbb39048a987c8c05d21ccf90b</u>

In Willacy County, all its census tracts are designated opportunity zones.

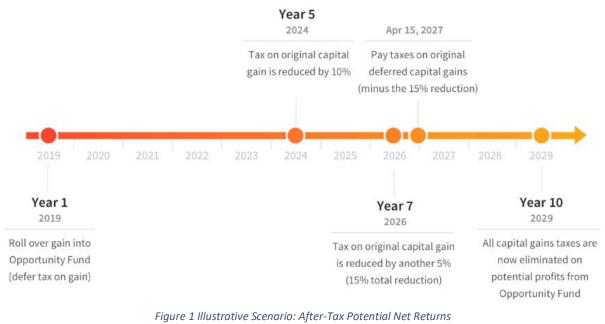
#### More on Opportunity Fund

"An Opportunity Fund is an investment vehicle that intends to invest at least 90% of its holdings into partnership interests, businesses, or property (real estate, factory equipment, etc.) within a qualified Opportunity Zone (FUNDRISE, 2019)." These funds are solely invested for the improvement of Opportunity Zone's community such as for supporting a local business or sparking the rehabilitation of local buildings. If an investor invests into an Opportunity Fund, they can expect to minimize their tax burden substantially and on the other side, they are contributing in economic development of Opportunity Zone's community.

Some of the advantages of Opportunity Funds are:

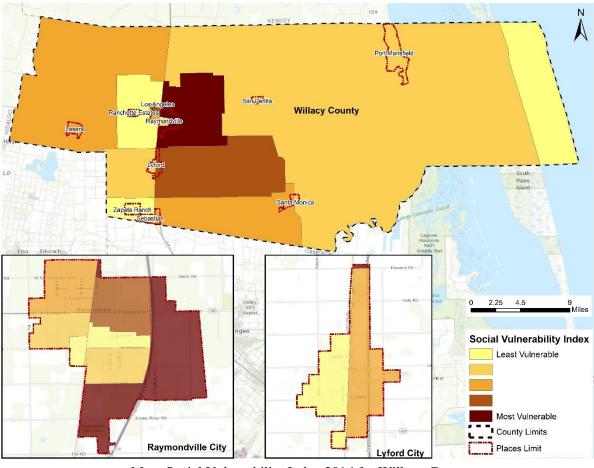
- 1. By moving realized capital gains into a qualified Opportunity Fund within 180 days of the asset sale, investors can defer paying capital gains taxes on that gain until December 31, 2026 or until they sell their Opportunity Fund investment whichever is earlier. Funds that otherwise would have been used to pay taxes upfront can instead be invested and earn returns for several additional years (FUNDRISE, 2019).
- 2. "If an investor holds their Opportunity Fund investment for at least 5 years prior to December 31, 2026, they can reduce their deferred capital gains tax liability by 10% through a step-up in basis. If that investor holds their Opportunity Fund investment for 2 additional years they can reduce their deferred capital gains liability by another 5%. That means by holding an Opportunity Fund investment for 7 years prior to December 31, 2026, an investor can reduce their tax liability on the deferred capital gains invested in the Opportunity Fund by 15% (FUNDRISE, 2019)."
- 3. "If an investor holds their Opportunity Fund investment for another 3 years (10 years total), they can expect to pay zero dollars in capital gains taxes on any appreciation from their original Opportunity Fund investment. That's because Opportunity Fund gains earned from Opportunity Zone investments can qualify for permanent exclusion from the capital gains tax if the investment is held for at least 10 years (FUNDRISE, 2019)."

This suggests that the longer you hold the investment in Opportunity Fund, more benefit is gained from the steadily improving tax incentives. Below is the timeline of what investors could expect under an Opportunity Fund:



Source: (FUNDRISE, 2019)

## 15. Social Vulnerability Index



Map: Social Vulnerability Index 2016 for Willacy County Source:

Map above shows socially vulnerable areas in Willacy County. We can see that Raymondville City has most vulnerable population in the county.

## 16. Conclusion

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