Sabine Pass to Galveston Bay, Texas
Coastal Storm Risk Management and Ecosystem Restoration
Final Integrated Feasibility Report and Environmental Impact Study

Appendix R

STUDY AREA DEMOGRAPHICS

May 2017

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1   STUDY AREA DEMOGRAPHICS

The socioeconomic characteristics of the study area are important to understand in the process of alternative formulation and making choices among the alternatives. This section provides data that describe the socioeconomic makeup of the study area and surrounding county.

1.1   RACE AND ETHNICITY

Table 1 breaks down the total population, as well as the racial and ethnic makeup, for Brazoria, Jefferson, and Orange counties and the study areas within each of these counties for the years 2000 and 2010.

Table 1. County and Study Area Racial Composition

	Brazoria County				Study Area			
	2000		**2010**		**2000**		**2010**	
Population	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Total	241,767	100%	313,166	100%	24,195	100%	46,208	100%
Male	124,837	51.6%	159,000	50.8%	12,382	51.2%	23,733	51.4%
Female	116,930	48.4%	154,166	49.2%	11,813	48.8%	22,475	48.6%
White*	131,320	54.3%	166,674	53.2%	11,442	47.3%	28,203	61.0%
Hispanic	55,063	22.8%	86,643	27.7%	7,393	30.6%	12,415	26.9%
Black	20,540	8.5%	36,880	11.8%	1,465	6.1%	3,589	7.8%
Asian	4,842	2.0%	17,013	5.4%	88	0.4%	514	1.1%
Am. Indian	1,280	0.5%	1,013	0.3%	137	0.6%	314	0.7%
Hawaiian, PI	73	0.0%	105	0.0%	5	0.0%	7	0.0%
Other	28,649	11.8%	4,838	1.5%	3,665	15.1%	1,166	2.5%
*White, Not Hispanic								
	Jefferson County				Study Area			
	2000		**2010**		**2000**		**2010**	
Population	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Total	252,051	100%	252,273	100%	41,486	100%	40,576	100%
Male	126,689	50.3%	128,946	51.1%	26,285	63.4%	24,435	60.2%
Female	125,362	49.7%	123,327	48.9%	15,201	36.6%	16,141	39.8%
White	117,738	46.7%	112,503	44.6%	18,524	44.7%	18,136	44.7%
Hispanic	26,536	10.5%	42,899	17.0%	6,078	14.7%	7,069	17.4%
Black	85,046	33.7%	84,500	33.5%	13,278	32.0%	13,394	33.0%
Asian	7,274	2.9%	8,525	3.4%	1,204	2.9%	975	2.4%
Am. Indian	857	0.3%	747	0.3%	205	0.5%	207	0.5%
Other	14,600	5.8%	3,099	1.2%	2,197	5.3%	795	2.0%

Table 1, continued

	Orange County				Study Area			
	2000		2010		2000		2010	
Population	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	84,966	100%	81,837	100%	46,684	100%	45,195	100%
Male	41,696	49.1%	40,708	49.7%	22,944	49.1%	22,488	49.8%
Female	43,270	50.9%	41,129	50.3%	23,740	50.9%	22,707	50.2%
White	71,676	84.4%	67,895	83.0%	37,699	80.8%	35,770	79.1%
Hispanic	3,073	3.6%	4,766	5.8%	1,802	3.9%	2,700	6.0%
Black	7,124	8.4%	6,922	8.5%	5,292	11.3%	5,110	11.3%
Asian	664	0.8%	797	1.0%	479	1.0%	514	1.1%
Am. Indian	473	0.6%	340	0.4%	259	0.6%	224	0.5%
Other	1,956	2.3%	1,117	1.4%	1,153	2.5%	877	1.9%

Source: U.S. Bureau of the Census, 2010

Brazoria County's population increased by almost 30 percent between 2000 and 2010. Jefferson County increased by only 0.1 percent while Orange decreased almost four percent for the same period. The study area in Brazoria County, by contrast, increased by almost 91 percent from 2000 to 2010. The study area in Jefferson County decreased by 2.2 percent, while the study area in Orange County decreased by 3.2 percent. The study areas in the three counties represented 19.4 percent of the total population of the three counties in the year 2000 and around 20 percent in 2010. Minority population comprised 45.7 percent of the population for Brazoria County in 2000 and 46.8 percent in 2010. Minorities made up 53.3 percent of the population in Jefferson County in 2000 and 55.4 percent in 2010. Minorities made up 15.6 percent of the population in Orange County in 2000 and 17 percent in 2010. The study area minority population in Brazoria County was almost 53 percent in 2000 but decreased to 39 percent in 2010. The minority population in the study area of Jefferson County was 53.3 percent in both 2000 and 2010, while the minority population for the study area in Orange County was 19.2 percent in 2000 and 20.9 in 2010.

1.2   INCOME

On the next page, Figures 1, 2, and 3 illustrate the income distribution based on household income for the three counties, as well as the study areas within the three counties in 2010. As the charts illustrate, the distribution of income of the Counties as a whole are similar to the income distribution of the study areas within the three counties. Brazoria has relatively higher percentages of households with incomes ranging from $50K up to $125K. Jefferson has more relatively low levels of income but incomes increase between the levels of $50K to $125K. Orange County, like the other two counties, has relatively substantial high percentages of incomes between $50K up to $125K, but also has nearly 10 percent of its population that have household incomes of less than $10K.
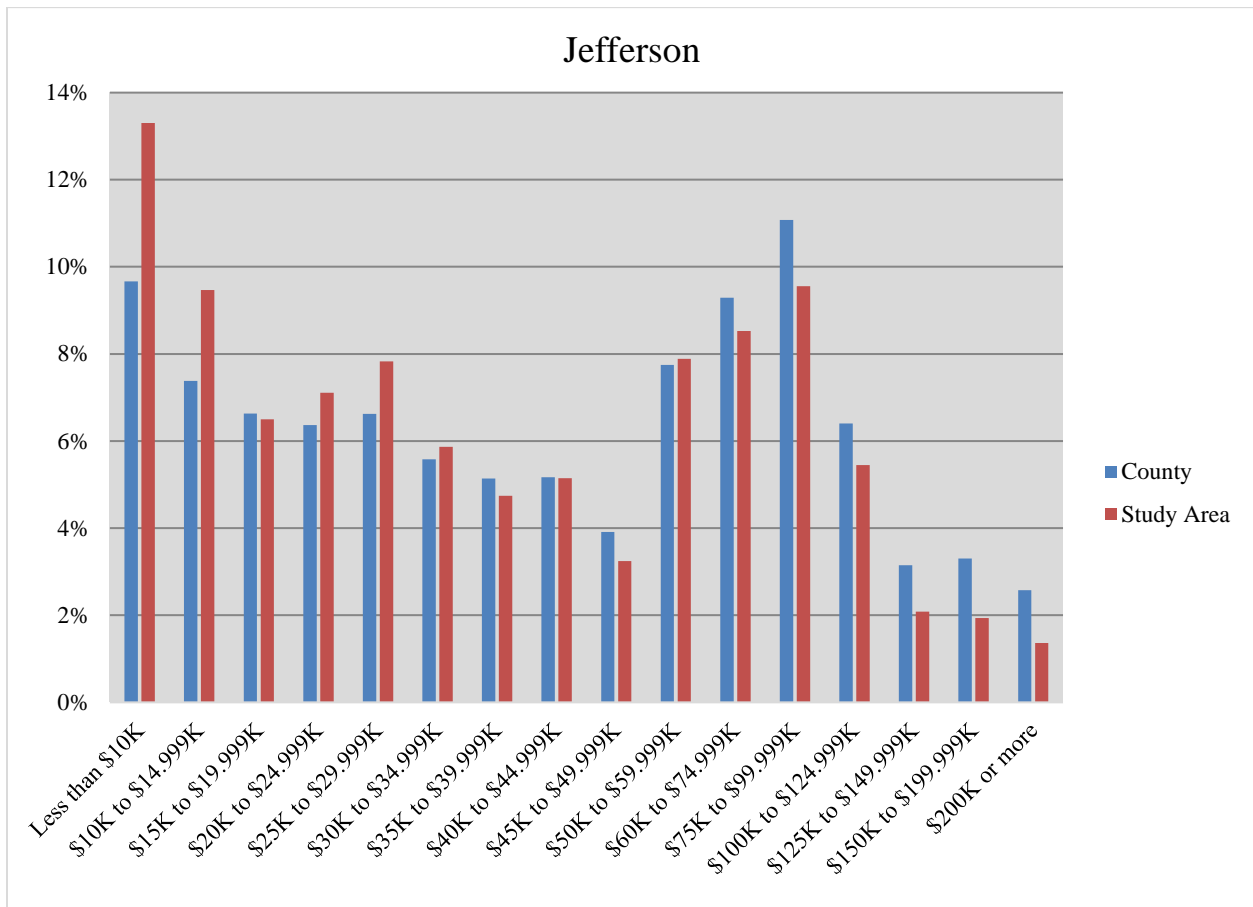
Source: U.S. Bureau of the Census, 2010

Figure 1. 2010 Income Distribution for Jefferson County
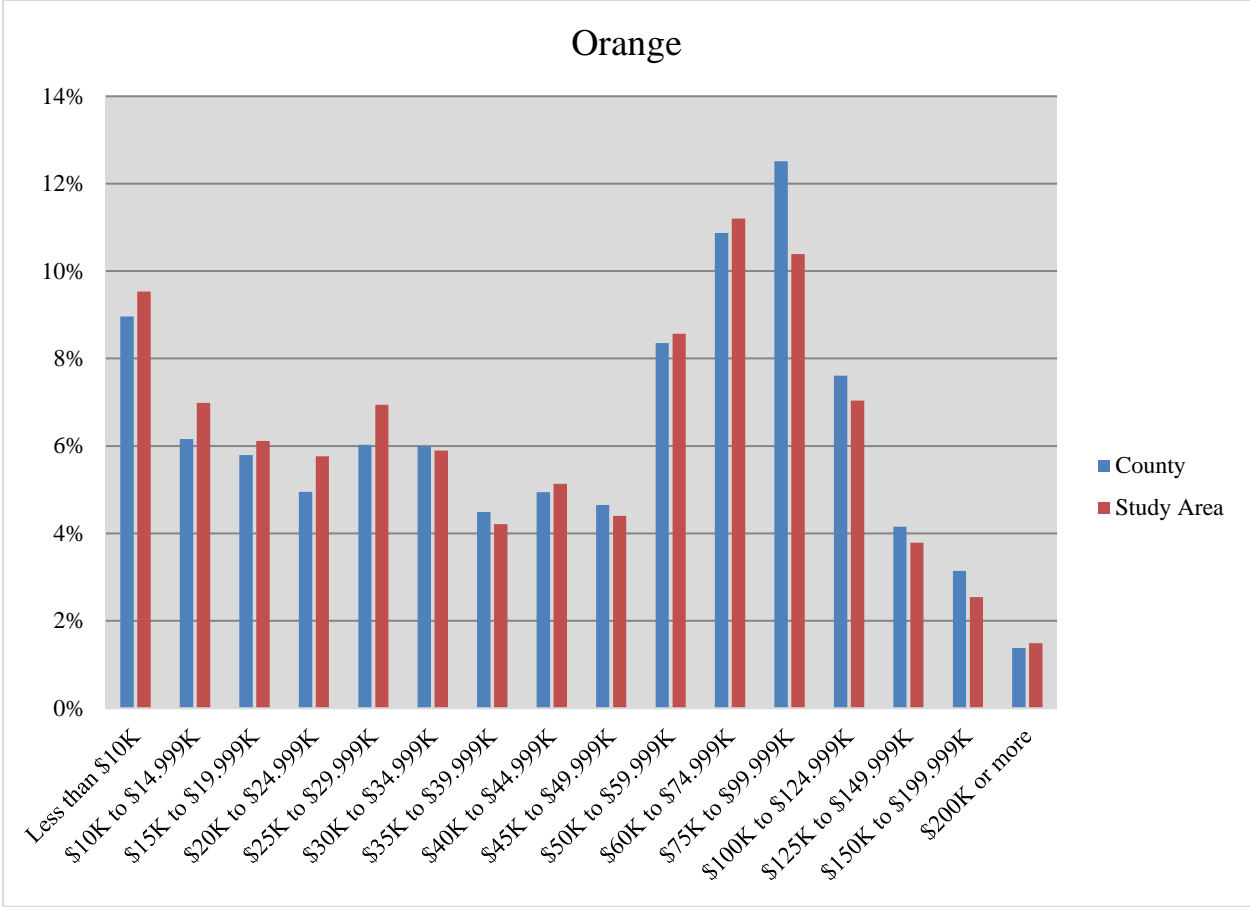
Orange

Source: U.S. Bureau of the Census, 2010

Figure 2. 2010 Income Distribution for Orange County

Source: U.S. Bureau of the Census, 2010

Figure 3. 2010 Income Distribution for Brazoria County

As the charts illustrate, the distribution of income of the study areas of each county is similar to that of the counties as a whole. All have relatively higher percentages of households with incomes in the range of $50K to $125K, with the exception of Orange, which has fairly large segment of the population with incomes below $10K.
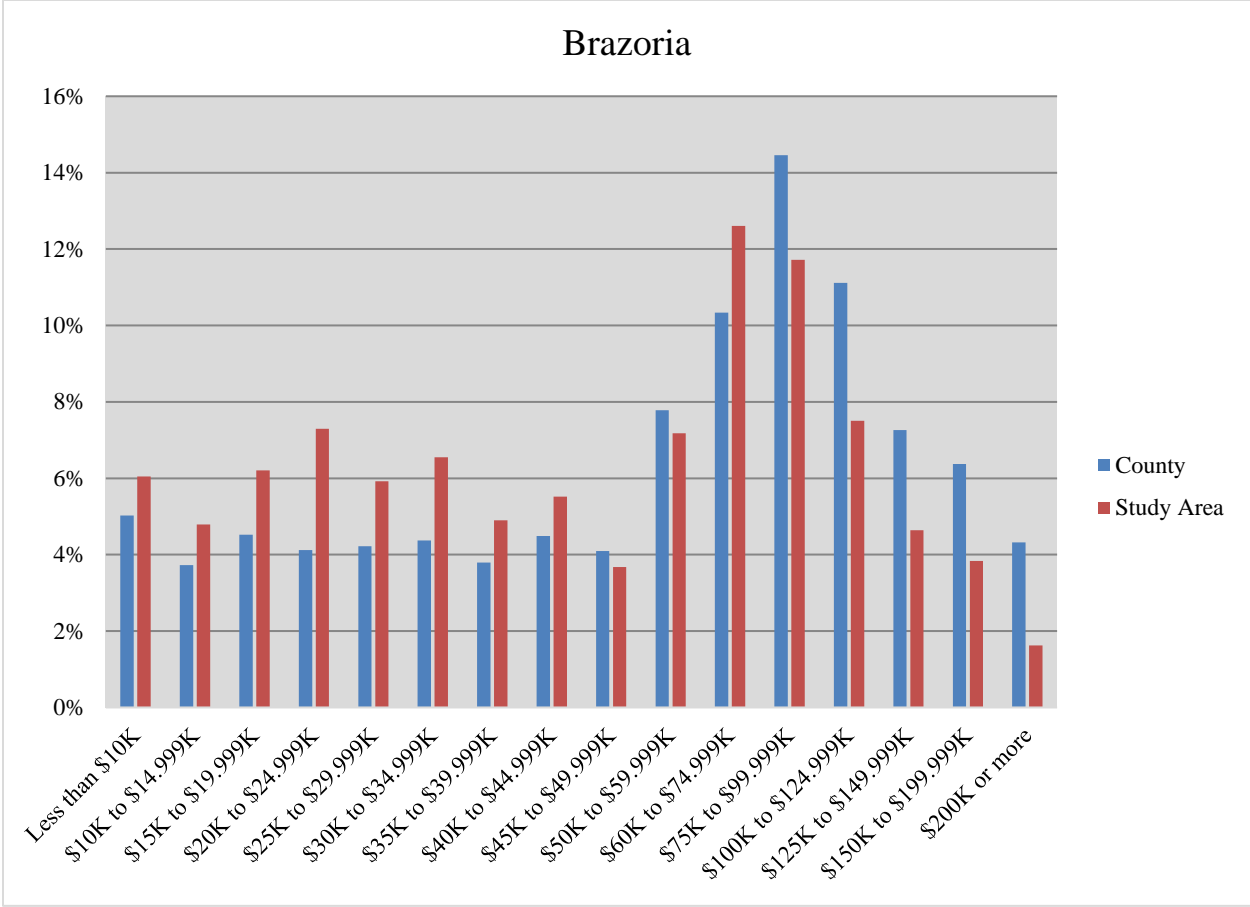
Table 2 displays the number of households, aggregate household income, and average household income for counties and the study areas in 2010.

Table 2. 2010 Household Income

Household Characteristic	Brazoria County	Study Area
Total Households	101,656	15,398
Aggregate Income	$8,131,315,866	$941,129,375
Average Income	$79,989	$61,120
	Jefferson County	Study Area
Total Households	90,671	16,833
Aggregate Income	$5,316,131,170	$814,135,843
Average Income	$58,631	$48,365
	Orange County	Study Area
Total Households	31,271	21,553
Aggregate Income	$1,868,247,406	$1,235,127,500
Average Income	$59,744	$57,307

Source: U.S. Bureau of the Census, 2010

While the pattern of the income distribution between the study areas within the counties and the income distribution of the counties as a whole is similar, slightly higher percentages of households in the study areas have lower incomes than those of the entire counties. This is evident when examining the average household income for the study areas and the counties. Average household income for the study area in Brazoria County is approximately 76 percent of the average income for the entire county. In Jefferson County, the study area household income is approximately 82.5 percent of the county, while the study area in Orange County is 96 percent of the household income of the entire county. The study area in Jefferson County also has the lowest average household income of the three counties.

Table 3 describes the poverty status for the three counties and the study areas within the three counties. Brazoria and Orange counties have relatively low poverty levels, while Jefferson County

has a higher percentage of its population below the poverty level; 23.4 percent for the study area and 18.8 percent for the entire county.

Table 3. Poverty Status

Population Characteristic	Brazoria County	Study Area
Total for Poverty Determination	287,910	42,357
Total Above Poverty Level	257,324	36,265
Total Below Poverty Level	30,586	6,092
Percent Above Poverty Level	89.4%	85.6%
Percent Below Poverty Level	10.6%	14.4%
	Jefferson County	Study Area
Total for Poverty Determination	233,086	44,806
Total Above Poverty Level	189,366	34,300
Total Below Poverty Level	43,720	10,506
Percent Above Poverty Level	81.2%	76.6%
Percent Below Poverty Level	18.8%	23.4%
	Orange County	Study Area
Total for Poverty Determination	80,925	54,734
Total Above Poverty Level	69,694	46,450
Total Below Poverty Level	11,231	8,284
Percent Above Poverty Level	86.1%	84.9%
Percent Below Poverty Level	13.9%	15.1%

Source: U.S. Bureau of the Census, 2010

1.3   EDUCATION

Figures 4, 5, and 6 depict educational attainment for Brazoria, Jefferson, and Orange counties, as well as the study areas within those counties for 2010. The study area in Brazoria County has higher percentages of lower levels of educational attainment than the county as a whole. Educational attainment for the study area in Jefferson County closely mirrors that of the county. Orange County exhibits a pattern similar to that of Brazoria County.
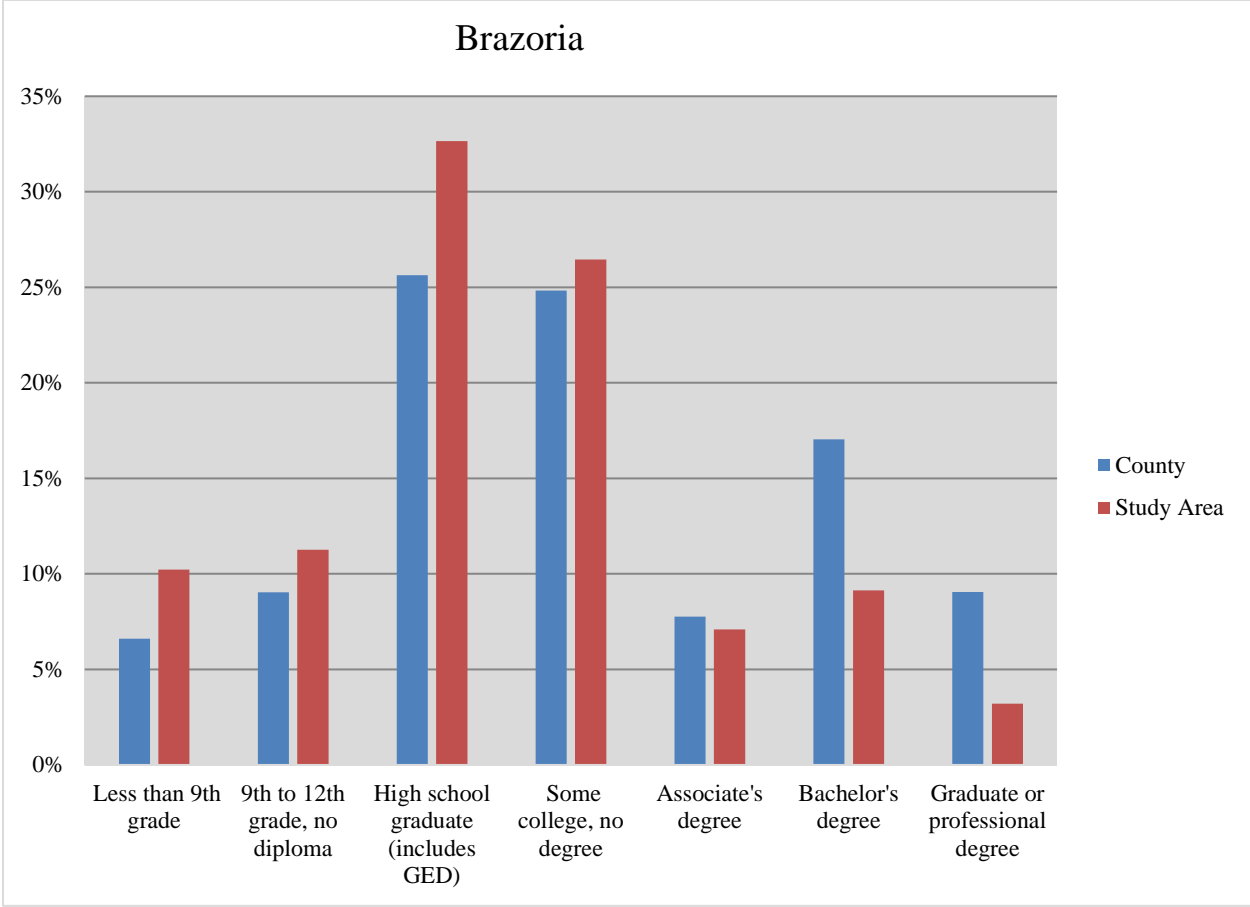
Source: U.S. Bureau of the Census, 2010

Figure 4. Educational Attainment for Brazoria County and Study Area
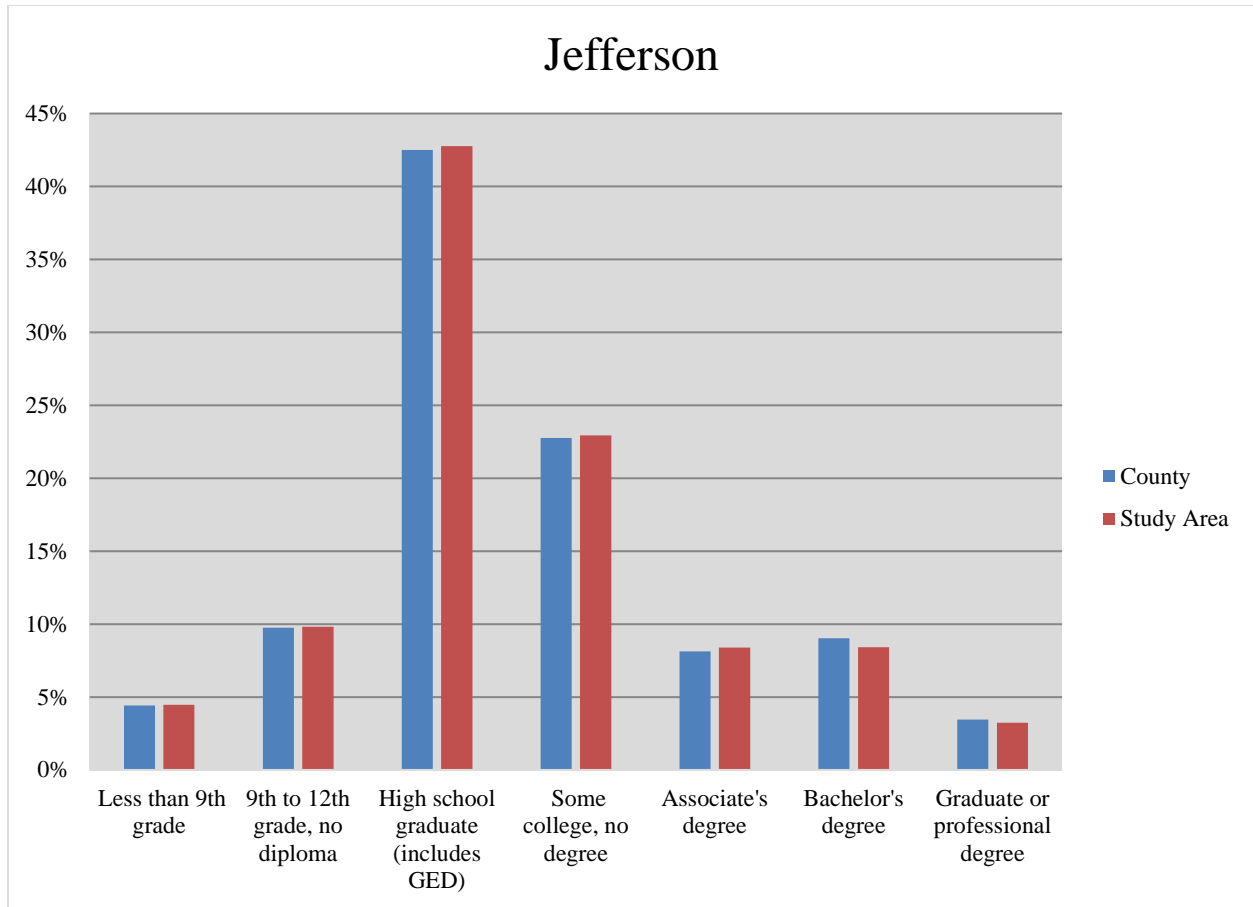
Jefferson

Source: U.S. Bureau of the Census, 2010

Figure 5. Educational Attainment for Jefferson County and Study Area
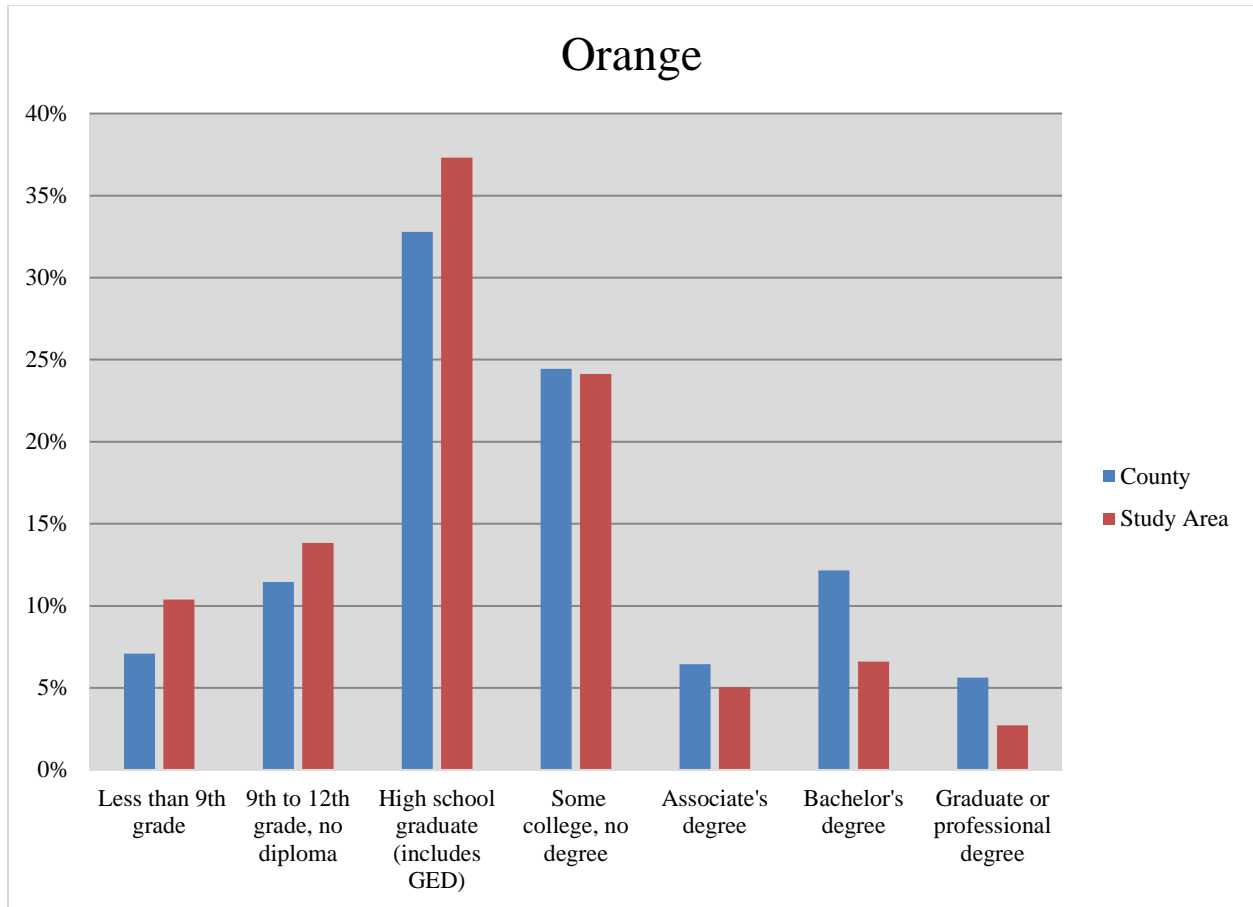
Source: U.S. Bureau of the Census, 2010

Figure 6. Educational Attainment for Orange County and Study Area

1.4 EMPLOYMENT

Table 4 displays the unemployment rates for Brazoria, Jefferson, and Orange counties, as well as the study areas within those counties for 2010. Unemployment rates are lowest for Brazoria County but highest for Jefferson County, both for the study area and the entire county.

Table 4. County and Study Area Unemployment Rates

Labor Force Characteristic	Brazoria County	Study Area
Total Civilian Labor Force	147,009	20,310
Employed	138,962	19,002
Unemployed	8,047	1,308
Unemployment Rate	5.5%	6.4%
	Jefferson County	Study Area
Total Civilian Labor Force	113,225	19,471
Employed	103,135	17,552
Unemployed	10,090	1,919
Unemployment Rate	8.9%	9.9%
	Orange County	Study Area
Total Civilian Labor Force	36,743	24,998
Employed	34,012	23,074
Unemployed	2,731	1,924
Unemployment Rate	7.4%	7.7%

Source: U.S. Bureau of the Census, 2010

1.5 HOUSING

Table 5 describes the occupancy status, vacancy rates, and the percentages of home ownership and rentals for Brazoria, Jefferson, and Orange counties, as well as the study areas within those counties, for 2010. Vacancy rates for all three of the study areas within the three counties are higher than the vacancy rates for the three counties as a whole, with Brazoria County being the highest at 20.7 percent. Vacancy rates for the three counties range from 9.9 percent in Brazoria County to 12.1 percent in Orange County. Home ownership is highest in Orange County with a rate of 76.7 percent, and lowest in Jefferson County with rate of 63.2 percent. However, among the study areas, home ownership was lowest in Brazoria County with a rate of 66.7 percent.

Table 5. County and Study Area Housing Statistics

Housing Characteristic	Brazoria County	Study Area
Total Units	118,336	19,952
Occupied Units	106,589	15,816
Vacant Units	11,747	4,136
Owner Occupied	79,477	10,557
Renter Occupied	27,112	5,259
Owner Occupied (Percent of Total Occupied)	74.6%	66.7%
Renter Occupied (Percent of Total Occupied)	25.4%	33.3%
Vacancy Rate	9.9%	20.7%
	Jefferson County	Study Area
Total Units	104,424	19,833
Occupied Units	93,441	16,998
Vacant Units	10,983	2,835
Owner Occupied	59,066	11,407
Renter Occupied	34,375	5,591
Owner Occupied (Percent of Total Occupied)	63.2%	67.1%
Renter Occupied (Percent of Total Occupied)	36.8%	32.9%
Vacancy Rate	10.5%	14.3%
	Orange County	Study Area
Total Units	35,313	24,747
Occupied Units	31,031	21,303
Vacant Units	4,282	3,444
Owner Occupied	23,808	15,694
Renter Occupied	7,223	5,609
Owner Occupied (Percent of Total Occupied)	76.7%	73.7%
Renter Occupied (Percent of Total Occupied)	23.3%	26.3%
Vacancy Rate	12.1%	13.9%

Source: U.S. Bureau of the Census, 2010

1.6   POPULATION PROJECTIONS

The following population projections for Brazoria, Jefferson, and Orange counties come from the Texas State Data Center and reflect the projections based on its 2000–2010 migration scenario, which takes into account post-2000 population trends for age, sex, race, and ethnicity. Based on these projections, the total population for Brazoria, Jefferson, and Orange counties is expected to grow by 88, 27, and 18 percent, respectively, between 2010 and 2050. This compares with a

growth rate for the State of Texas of 61 percent for the same period under the same scenario. For Brazoria County, virtually all of the growth is through the non-white population. Growth in Jefferson and Orange counties is dependent on the Hispanic populations, which are projected to increase by 180 percent in Jefferson County and 211 percent in Orange County by 2050, and by Other populations. Alternately, Anglo populations will actually decrease in Jefferson County by 28 percent and just under 2 percent in Orange County. Black populations will stay fairly steady in Jefferson County and increase moderately in Orange County. Figures 7, 8, and 9 reflect the population growth of the three counties themselves, and Figure 10 and the growth rates of the State and the counties in comparison.
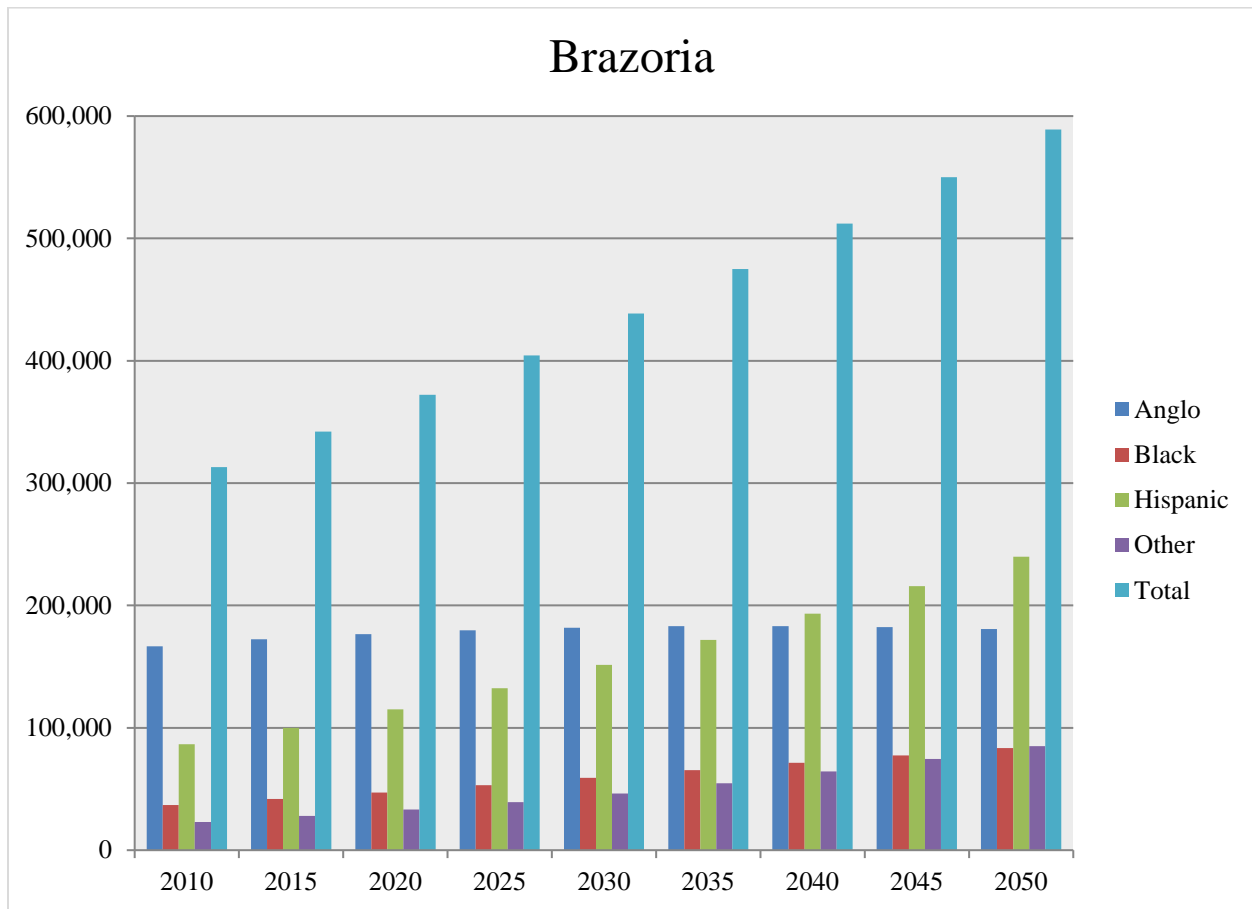
Source: Texas State Data Center

Figure 7. Brazoria County Population Growth by Race
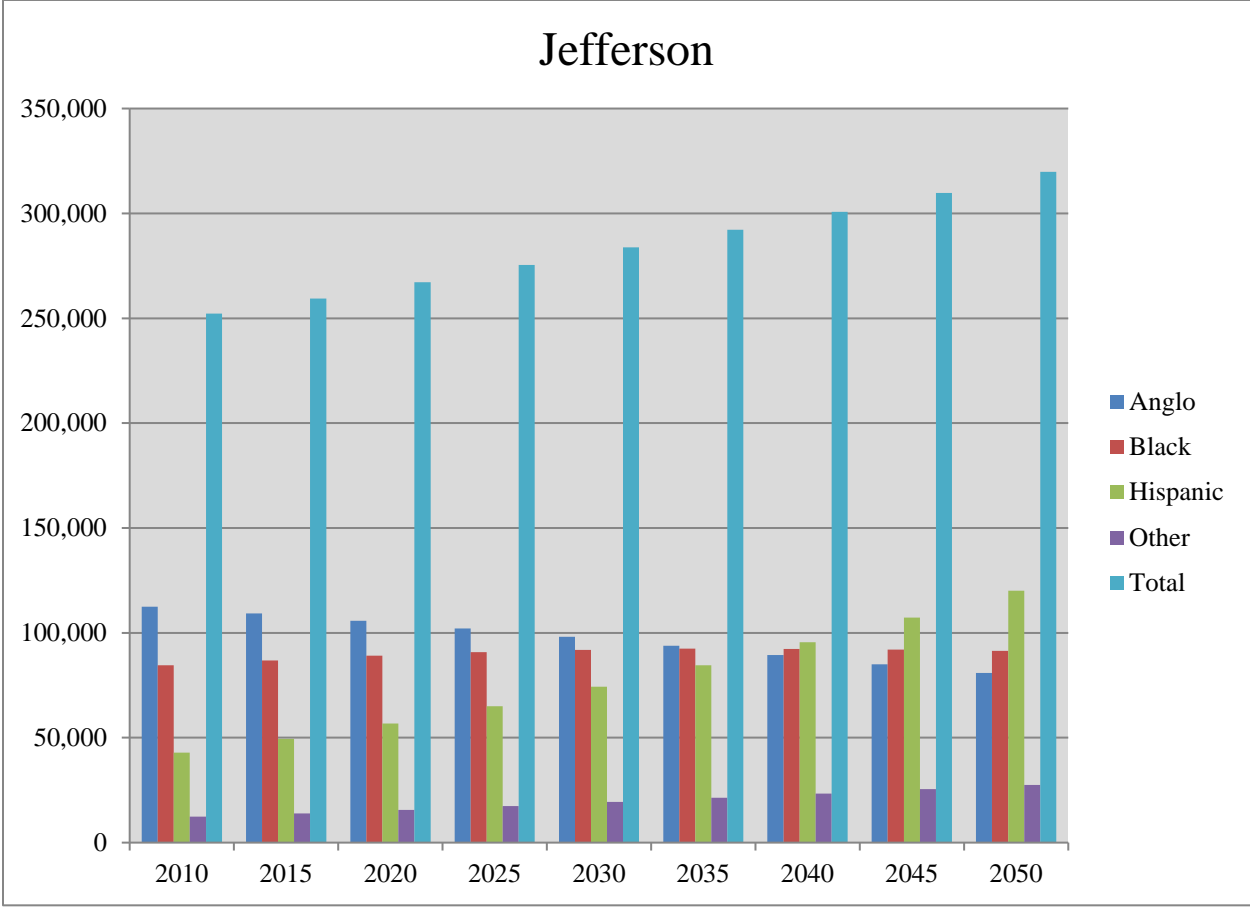
Source: Texas State Data Center

Figure 8. Jefferson County Population Growth by Race
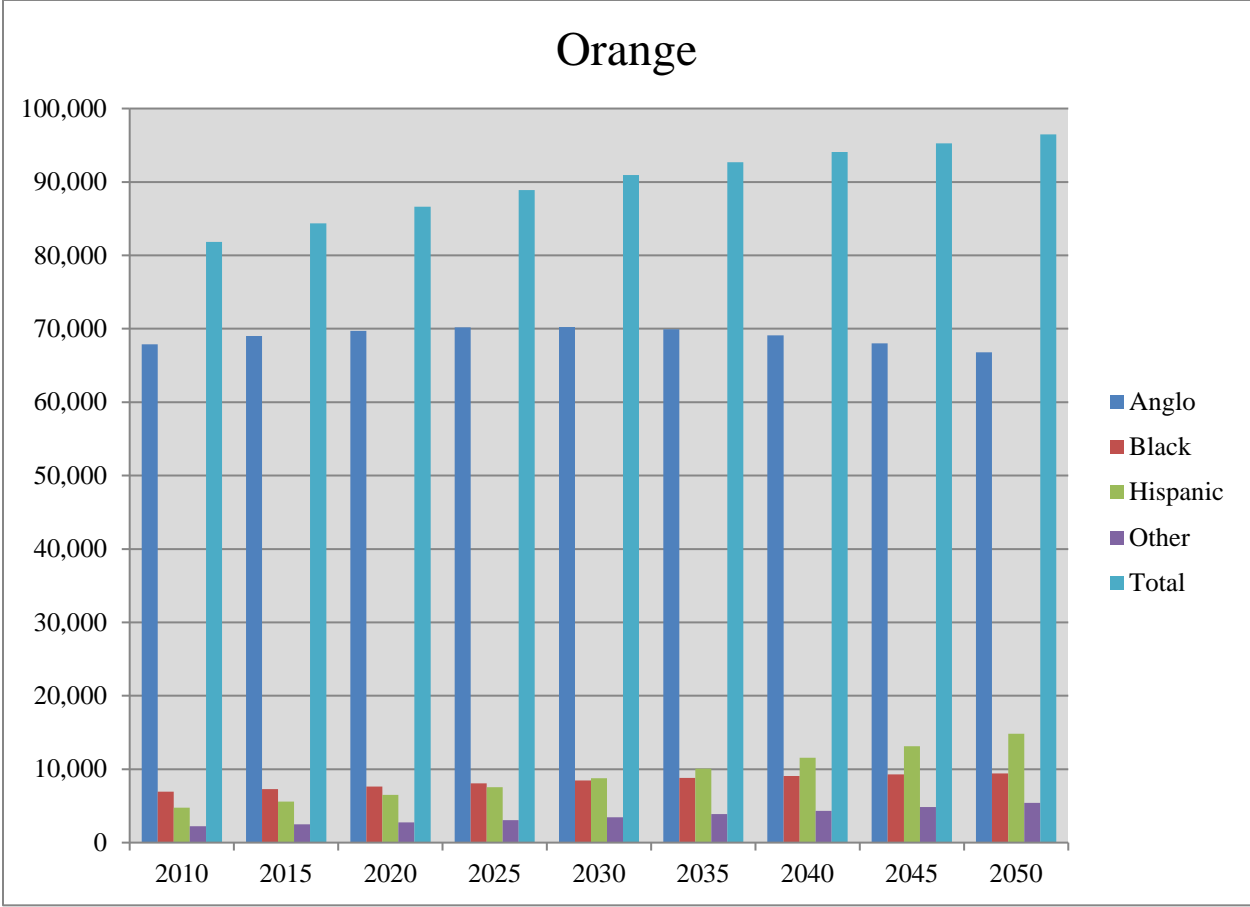
Source: Texas State Data Center

Figure 9. Orange County Population Growth by Race
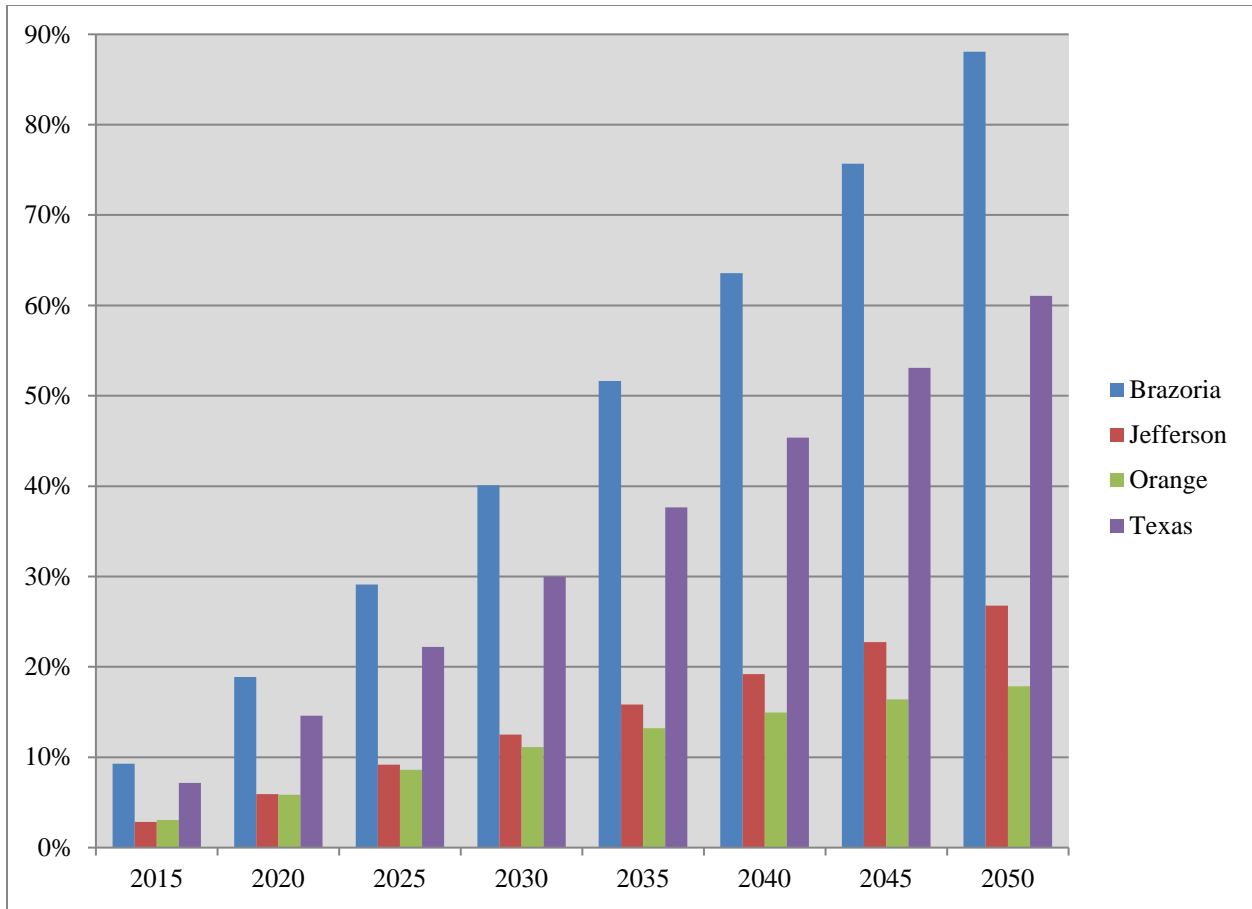
Source: Texas State Data Center

Figure 10. Population Growth in Texas vs. Brazoria, Jefferson, Orange Counties

1.7   AFFECTED POPULATIONS

In accordance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations," data were compiled to help assess the potential impacts on minority and low-income populations within the study area. This information indicates that 10 of the 39 2010 Census tracts in the Brazoria County study area, 20 of the 33 tracts in the Jefferson County study area, and 7 of the 40 tracts in the Orange County study area have minority populations higher than 50 percent. Table 6 shows the racial makeup percentages of each census block that intersects the study area. Those with minority populations above 50 percent are highlighted in red.

Table 6. Distribution of Population by Race/Ethnicity per Census Tract

Census Tract	White*	Hispanic	Black	Asian	Am. Indian	Hawaiian / PI	Other
Brazoria							
6617.1	71.2%	22.8%	3.0%	0.1%	0.3%	0.0%	2.5%
6617.2	72.7%	20.0%	3.1%	0.0%	0.9%	0.0%	3.3%
6617.3	76.6%	20.6%	0.0%	0.0%	1.1%	0.0%	1.7%
6620.4	78.4%	13.4%	3.2%	0.8%	1.2%	0.0%	3.0%
6621.1	50.4%	38.9%	7.8%	0.3%	0.9%	0.2%	1.6%
6624.3	79.5%	15.5%	1.5%	0.4%	0.7%	0.0%	2.4%
6624.4	80.0%	15.7%	0.1%	0.5%	0.4%	0.0%	3.3%
6625.1	79.8%	12.8%	4.2%	0.6%	0.8%	0.0%	1.8%
6626.3	75.1%	17.3%	5.4%	0.3%	0.7%	0.0%	1.2%
6628.1	65.8%	11.7%	17.8%	0.7%	1.2%	0.0%	2.8%
6628.6	74.1%	10.5%	11.6%	0.3%	0.6%	0.0%	2.9%
6629.1	63.5%	19.7%	13.3%	0.5%	0.8%	0.0%	2.3%
6629.3	64.7%	25.0%	6.6%	0.6%	1.0%	0.0%	2.1%
6629.4	78.2%	12.6%	5.2%	1.7%	0.5%	0.0%	1.8%
6630.2	77.0%	16.3%	5.3%	0.0%	0.3%	0.0%	1.1%
6630.3	21.6%	37.0%	39.8%	0.7%	0.3%	0.0%	0.8%
6630.4	64.1%	11.5%	22.4%	0.2%	0.2%	0.1%	1.7%
6631.4	82.2%	10.4%	1.9%	3.9%	0.4%	0.0%	1.2%
6634.1	67.6%	15.6%	5.1%	9.3%	0.2%	0.0%	2.2%
6640.2	58.7%	35.9%	2.3%	0.4%	0.2%	0.0%	2.5%
6641.4	46.6%	45.6%	4.0%	0.6%	1.1%	0.0%	2.1%
6641.5	72.5%	22.8%	1.7%	0.9%	0.3%	0.0%	1.9%
6642.1	76.3%	15.5%	3.6%	0.6%	1.2%	0.0%	2.8%
6642.2	67.1%	24.6%	2.9%	0.1%	1.9%	0.0%	3.4%
6642.3	89.2%	5.8%	1.7%	0.9%	1.1%	0.0%	1.3%
6643.2	24.2%	59.7%	13.2%	0.7%	0.3%	0.0%	1.9%
6643.3	24.4%	62.4%	7.0%	0.2%	1.2%	0.0%	4.8%
6644.1	12.9%	68.5%	14.9%	0.3%	0.8%	0.0%	2.5%
6644.2	36.6%	43.9%	13.5%	0.3%	0.7%	0.0%	5.0%
6644.3	22.2%	69.5%	5.0%	0.5%	0.1%	0.0%	2.6%
6644.4	23.8%	58.5%	9.8%	0.3%	1.6%	0.0%	5.9%
6644.5	38.4%	42.0%	10.5%	0.8%	1.7%	0.0%	6.6%
6644.6	36.0%	52.2%	8.5%	0.4%	0.5%	0.1%	2.3%
6616.02.1	73.1%	20.9%	2.4%	1.8%	0.1%	0.0%	1.7%
6645.01.1	56.3%	38.2%	3.2%	0.1%	0.2%	0.0%	2.0%
6645.01.2	80.6%	10.3%	4.2%	0.6%	0.9%	0.0%	3.3%
6645.01.3	82.8%	8.1%	7.4%	0.3%	0.1%	0.0%	1.4%
6645.01.4	60.7%	13.7%	22.1%	0.1%	0.3%	0.0%	3.1%

Table 6, continued

6645.01.5	77.7%	16.6%	2.6%	1.0%	0.6%	0.0%	1.6%
9900.0	-	-	-	-	-	-	-

Jefferson

Census Tract	White	Hispanic	Black	Am. Indian	Asian	Other	
7.4	4.2%	1.6%	92.8%	0.0%	0.0%	1.4%	
17.1	13.6%	7.5%	76.2%	1.9%	0.1%	0.6%	
51.1	13.3%	3.2%	82.8%	0.2%	0.0%	0.5%	
55.1	4.8%	19.6%	38.1%	34.3%	0.0%	3.2%	
55.2	9.7%	30.8%	42.5%	11.1%	1.8%	4.1%	
55.3	9.8%	25.4%	59.3%	1.5%	1.2%	2.8%	
56.1	8.2%	46.7%	35.5%	4.3%	0.5%	4.8%	
61.3	7.9%	7.2%	81.9%	0.2%	0.6%	2.3%	
66.1	77.8%	17.0%	1.4%	2.5%	0.9%	0.5%	
66.2	12.2%	14.0%	57.3%	14.1%	0.1%	2.3%	
69.1	28.9%	3.8%	59.4%	5.7%	0.3%	2.0%	
69.2	37.9%	5.9%	53.7%	0.7%	0.1%	1.7%	
71.1	67.7%	24.0%	4.5%	1.3%	0.6%	1.9%	
71.3	77.6%	17.8%	2.6%	0.2%	0.4%	1.4%	
101.1	12.5%	50.6%	28.9%	4.3%	1.4%	2.3%	
108.1	88.4%	8.3%	1.0%	0.5%	0.9%	0.9%	
108.2	84.5%	8.5%	1.9%	1.3%	0.9%	2.9%	
116.1	86.7%	8.2%	3.7%	0.4%	0.3%	0.8%	
116.2	78.9%	19.2%	0.5%	0.2%	0.0%	1.2%	
117.1	6.8%	15.2%	72.5%	0.7%	0.7%	4.2%	
117.2	23.2%	46.6%	26.0%	0.8%	0.2%	3.1%	
118.2	3.0%	10.1%	84.3%	0.3%	0.0%	2.3%	
1.03.2	8.5%	2.9%	86.3%	0.2%	0.3%	1.8%	
112.01.1	61.7%	7.0%	27.6%	1.0%	0.6%	2.1%	
112.01.2	81.7%	14.3%	0.6%	0.6%	0.3%	2.5%	
112.01.5	90.2%	6.7%	0.1%	1.1%	0.3%	1.6%	
112.03.1	10.9%	39.1%	49.4%	0.0%	0.6%	0.0%	
113.02.1	24.1%	31.4%	39.4%	0.8%	1.3%	2.9%	
113.03.1	89.3%	8.7%	0.4%	0.2%	0.4%	1.1%	
113.03.2	89.5%	7.8%	0.7%	0.5%	0.5%	1.0%	
113.04.1	48.1%	18.5%	32.4%	0.3%	0.1%	0.5%	
113.04.2	75.5%	7.5%	12.6%	2.0%	0.3%	2.0%	
13.03.2	21.3%	14.1%	62.2%	0.3%	0.4%	1.7%	

Orange

Census Tract	White	Hispanic	Black	Asian	Am. Indian	Other	
202.1	44.1%	4.2%	49.3%	0.1%	0.0%	2.3%	

Table 6, continued

202.2	14.6%	4.6%	78.7%	0.7%	0.1%	1.3%	
202.3	38.8%	8.2%	51.1%	0.1%	0.2%	1.6%	
202.4	7.3%	2.3%	88.9%	0.0%	0.0%	1.5%	
203.1	87.8%	3.6%	6.2%	0.6%	0.1%	1.6%	
203.2	75.5%	10.4%	10.6%	1.1%	0.5%	2.0%	
203.3	74.0%	7.3%	15.9%	0.5%	0.6%	1.6%	
205.1	81.6%	9.4%	4.6%	0.6%	0.3%	3.5%	
205.2	79.9%	11.9%	5.4%	0.5%	0.9%	1.3%	
205.3	78.2%	7.8%	9.3%	0.7%	1.1%	2.9%	
205.4	70.3%	20.1%	6.5%	0.5%	0.4%	2.1%	
207.1	86.9%	4.4%	1.5%	4.9%	0.5%	1.8%	
208.1	81.0%	3.8%	12.4%	0.0%	1.1%	1.7%	
208.2	68.8%	5.8%	21.2%	1.0%	0.7%	2.5%	
209.1	46.2%	5.4%	44.1%	1.2%	0.3%	2.8%	
209.2	30.1%	7.8%	57.7%	2.0%	1.0%	1.4%	
209.3	57.0%	4.8%	33.2%	3.6%	0.1%	1.3%	
209.4	40.2%	2.9%	53.2%	1.0%	0.3%	2.4%	
210.1	88.4%	3.7%	3.9%	0.7%	0.7%	2.5%	
211.1	92.1%	3.7%	0.8%	0.5%	0.2%	2.6%	
216.1	92.6%	5.0%	0.1%	0.1%	1.3%	0.9%	
216.3	95.1%	2.8%	0.0%	0.2%	0.4%	1.6%	
217.1	92.6%	3.8%	0.1%	1.6%	0.9%	1.0%	
217.2	90.9%	6.7%	0.1%	0.4%	0.4%	1.5%	
219.5	92.1%	4.9%	0.3%	0.3%	0.5%	1.9%	
219.6	92.2%	3.8%	0.1%	1.0%	0.6%	2.3%	
220.2	91.9%	5.1%	0.6%	0.2%	0.1%	2.1%	
220.3	91.7%	5.9%	0.1%	0.2%	0.7%	1.4%	
222.1	97.5%	1.5%	0.2%	0.0%	0.3%	0.5%	
222.2	88.4%	6.7%	0.7%	1.1%	1.1%	1.9%	
223.1	69.8%	23.4%	0.1%	2.9%	0.5%	3.3%	
223.2	92.1%	4.1%	0.6%	1.6%	0.1%	1.6%	
223.3	88.5%	6.3%	0.1%	2.3%	1.0%	1.7%	
223.4	92.0%	4.3%	0.0%	1.9%	0.2%	1.6%	
223.5	92.4%	4.8%	0.0%	0.8%	0.5%	1.4%	
224.1	89.8%	6.1%	0.1%	1.6%	0.1%	2.3%	
224.2	87.7%	6.0%	0.8%	2.8%	0.5%	2.1%	
224.3	92.1%	5.0%	0.1%	1.7%	0.0%	1.2%	
224.4	84.0%	9.4%	0.4%	2.3%	0.4%	3.4%	
224.5	86.3%	7.6%	0.2%	3.0%	0.2%	2.7%	

Source: U.S. Bureau of the Census, 2010

In assessing the existence of low-income populations for the study area, mean household incomes were examined for all of the study area Census tracts. Based on a poverty threshold for a family size of three (considering that average number of persons per household for each county ranged from 2.53 to 2.85), an income of $17,373 was used for comparison. None of the census blocks fall below this poverty threshold. Table 7 presents the median income for each census block in the study area and the amount by which the median income per block is above the poverty threshold.

Table 7. Comparison of Median Household Income to Poverty Threshold

Brazoria		
Census Tract	**Mean Income ($)**	**Amount Above Threshold ($)**
6617	$69,081	$51,708
6624	$71,093	$53,720
6634	$79,836	$62,463
6640	$43,502	$26,129
6641	$69,890	$52,517
6642	$52,756	$35,383
6643	$45,711	$28,338
6644	$51,619	$34,246
6645.01	$58,736	$41,363
Jefferson		
Census Tract	**Mean Income ($)**	**Amount Above Threshold ($)**
1.03	$24,042	$6,669
7	$32,178	$14,805
51	$36,852	$19,479
55	$37,200	$19,827
56	$38,209	$20,836
61	$35,204	$17,831
66	$46,176	$28,803
69	$55,319	$37,946
71	$52,409	$35,036
101	$42,027	$24,654
108	$57,895	$40,522
113.02	-	-
113.03	$58,886	$41,513
113.04	$91,518	$74,145
116	$65,128	$47,755
117	$31,085	$13,712

Table 7, continued

118	$35,397	$18,024
Orange		
Census Tract	**Mean Income ($)**	**Amount Above Threshold ($)**
202	$35,156	$17,783
203	$46,024	$28,651
205	$44,221	$26,848
207	$55,514	$38,141
208	$56,216	$38,843
209	$53,690	$36,317
210	$79,447	$62,074
211	$68,920	$51,547
216	$54,361	$36,988
217	$51,534	$34,161
219	$49,657	$32,284
220	$46,415	$29,042
222	$89,753	$72,380
223	$76,427	$59,054
224	$62,656	$45,283

Source: U.S. Bureau of the Census, 2010

1.9   ASSESSMENT OF PROTECTED POPULATIONS AND POTENTIAL IMPACTS

1.9.1   Orange-Jefferson CSRM

The potential for impacts from the Tentatively Selected Plan on protected populations exists primarily at the Orange-Jefferson CSRM since it encompasses the construction of new levees and floodwalls. Both Freeport and Port Arthur have systems that are being proposed for improvements over their existing conditions. For the purposes of making a determination on the potential for impacts on potentially protected populations, the racial makeup of the Census block groups that intersect the footprint of the proposed features of the Orange-Jefferson portion of the TSP were examined. Of the eleven Census block groups, only one displayed a population where more than 50 percent of the population was non-white. Census block 202.1 has a white population of 44.1 percent with the remaining belonging to historically identified minority groups. There is no indication that populations may be protected on the basis of existing income among these Census block groups. Census block 202.1, however, resides at the very end of the Orange 3 reach of the proposed TSP in Orange County where impacts would not be expected to be as great as the potential impacts in other areas. Regardless, there should be no disproportionate impacts on the populations in this Census block.

1.9.1.1   County Economic Profile

To compare economic sectors of the three counties with those of the study areas within those three counties, information in Table 8 was obtained from the 2007 County Business Patterns, which outlines the number of employees and establishments for the major North American Industry Classification System (NAICS) classifications. The table gives the total number of employees per broad NAICS category for the three counties and for the zip codes that intersect the study areas within the three counties.

Table 8. 2010 County and Study Area Civilian Employment by NAICS Sector

Sector	Brazoria County		Study Area	
	Number	Percent	Number	Percent
Total Employees	142,798	100%	44,289	100%
Agriculture, Forestry, Fishing and Hunting, and Mining	3,588	2.5%	1,341	3.0%
Construction	13,429	9.4%	0	0.0%
Manufacturing	19,645	13.8%	7,069	16.0%
Wholesale Trade	4,598	3.2%	1,118	2.5%
Retail Trade	14,176	9.9%	5,755	13.0%
Transportation and Warehousing, and Utilities	7,485	5.2%	2,616	5.9%
Information	2,449	1.7%	726	1.6%
Finance and Insurance, and Real Estate and Rental and Leasing	7,106	5.0%	2,150	4.9%
Professional, Scientific, and Management, and Administrative and Waste Management Services	15,207	10.6%	4,344	9.8%
Educational Services, and Health Care and Social Assistance	32,421	22.7%	9,624	21.7%
Arts, Entertainment, and Recreation, and Accommodation and Food Services	9,164	6.4%	4,177	9.4%
Other Services, except Public Administration	6,777	4.7%	2,947	6.7%
Public Administration	6,753	4.7%	2,422	5.5%
Sector	Jefferson County		Study Area	
	Number	Percent	Number	Percent
Total Employees	102,898	100%	67,201	100%
Agriculture, Forestry, Fishing and Hunting, and Mining	1,289	1.3%	973	1.4%
Construction	10,321	10.0%	7,767	11.6%
Manufacturing	11,433	11.1%	7,643	11.4%
Wholesale Trade	2,236	2.2%	1,307	1.9%
Retail Trade	11,913	11.6%	7,950	11.8%
Transportation and Warehousing, and Utilities	5,399	5.2%	3,358	5.0%
Information	1,465	1.4%	906	1.3%
Finance and Insurance, and Real Estate and Rental and Leasing	4,461	4.3%	2,866	4.3%

Table 8, continued

Professional, Scientific, and Management, and Administrative and Waste Management Services	9,573	9.3%	5,978	8.9%
Educational Services, and Health Care and Social Assistance	24,852	24.2%	15,638	23.3%
Arts, Entertainment, and Recreation, and Accommodation and Food Services	8,267	8.0%	5,643	8.4%
Other Services, except Public Administration	5,788	5.6%	3,705	5.5%
Public Administration	5,901	5.7%	3,467	5.2%

Sector	Orange County		Study Area	
	Number	Percent	Number	Percent
Total Employees	34,026	100%	34,026	100%
Agriculture, Forestry, Fishing and Hunting, and Mining	389	1.1%	389	1.1%
Construction	4,257	12.5%	4,257	12.5%
Manufacturing	6,338	18.6%	6,338	18.6%
Wholesale Trade	659	1.9%	659	1.9%
Retail Trade	4,226	12.4%	4,226	12.4%
Transportation and Warehousing, and Utilities	1,700	5.0%	1,700	5.0%
Information	332	1.0%	332	1.0%
Finance and Insurance, and Real Estate and Rental and Leasing	1,283	3.8%	1,283	3.8%
Professional, Scientific, and Management, and Administrative and Waste Management Services	2,433	7.2%	2,433	7.2%
Educational Services, and Health Care and Social Assistance	6,877	20.2%	6,877	20.2%
Arts, Entertainment, and Recreation, and Accommodation and Food Services	2,142	6.3%	2,142	6.3%
Other Services, except Public Administration	2,435	7.2%	2,435	7.2%
Public Administration	955	2.8%	955	2.8%

Source: U.S. Bureau of the Census, 2010

In terms of total employment, both Brazoria County and the study area within Brazoria County have more Educational Services and Health Care and Social Assistance employees than any other business sector. This also true for Jefferson County and Orange County.