

## **CHAPTER 4 – REGIONAL POPULATION AND EMPLOYMENT TRENDS**

Cover page: The demand for transportation services is directly related to an area's demographic, economic, and geographic characteristics. By 2045, the Corpus Christi MPO region may be home to nearly 470,000 people.

### **INTRODUCTION**

Changes in these demographics have a direct impact on travel behavior and travel patterns. Travel patterns and behavior help in estimating demand for travel which in turn provides the information to project on what transportation improvements would be required for the next 20-year planning horizon.

The Corpus Christi MPO Planning Area is comprised of the Corpus Christi and parts of rural Nueces, San Patricio, and Aransas counties that are determined to become urbanized by 2045. Because much of the required data is only available at the full county level, the Corpus Christi MPO performs demographic and employment data activities using the 3-counties as a whole.

### **REGIONAL DEMOGRAPHIC FORECAST**

The total demand for transportation typically changes in proportion to changes in population, employment, and improved economic conditions. As an urban area expands, the numbers and lengths of individual trips increase, unless densities and mixed-use developments increase at an equal or greater rate. Expanding population, employment, and urban area size, along with improved economic conditions, result in an increased need for transportation facilities and services. These include freight, roadway, transit, bicycle, and pedestrian facilities, along with strategies intended to increase the efficient use of existing facilities. The Corpus Christi MPO uses macro-level forecasts from the Texas Demographic Center to create its future forecast, projecting where people might live and work so that transportation investments will address anticipated issues. There are 2 parts to a Small Area Forecast (SAF). First, the actual forecast of how many people will reside in the county in a future year is conducted by the Texas Demographic Center using rigorous methodology. It is often referred to as the control total. The forecasts from the Texas Demographic Center are used by every MPO in the State of Texas, along with every state agency, such as the Texas Department of Transportation and the Texas State Water Board.

Under the direction of the State Demographer, the Texas Demographic Center's (TDC) Texas Population Projections Program collects information to produce the population projections for the State of Texas as required by state law (Chapter 468 of Texas Government Code). The Texas Population Projections Program produces projections for the entire state of Texas and each individual county in the state by age, sex, and race/ethnicity. These projections use assumptions about future events that may or may not occur. The current forecast, released October 24, 2022, consists of the projections of the resident population of the State for each year from 2020 through 2060. This accommodates the 2045 planning horizon and satisfies the requirement of using the most recent information. One change from previous forecasts is the TDC provided two scenarios of migration to better fit differences between fast growing urban areas and slower growing or shrinking rural or urban areas. The Corpus Christi TPC adopted the highest of these projections as the control total in September 2023.

### **Population Forecast**

A population forecast is a projection of how many people will live in a certain area based on a multitude of factors. The 2045 MTP UPDATE uses the 2022 Texas Demographic Centers 2060 demographic forecast to develop transportation recommendations. Year 2021 is the base year to demarcate general trends in population and employment growth through 2045. Based on population forecasts for 2020 and 2045, the total population of the Corpus Christi MPO travel demand model study area is projected to increase by 25,591 from 445,763 in 2020 to 467,907 in 2045. This is approximately 1,000 people per year.

### **Historical Employment Growth**

Understanding not only population growth, but employment growth, is critical to transportation planning and to providing the best system to move people to and from jobs.

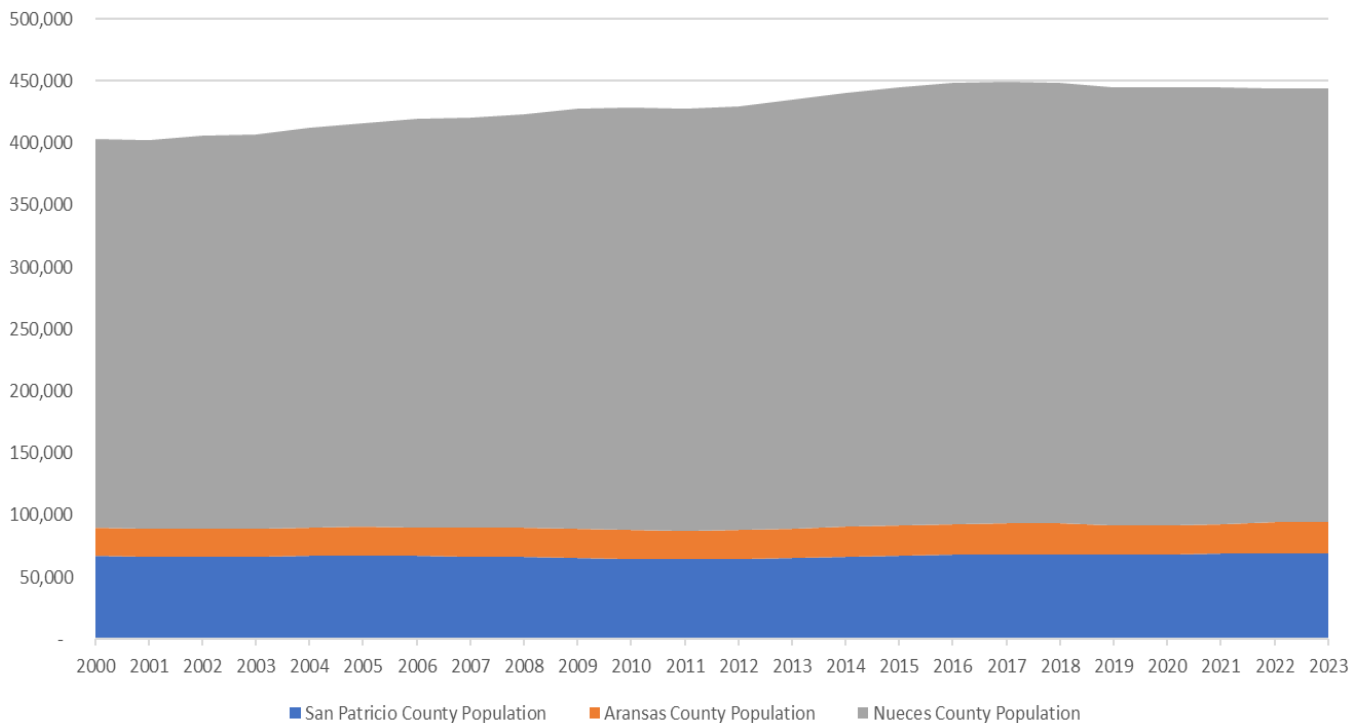
**Employment Forecast**

The Corpus Christi MPO forecasts employment growth to ensure that transportation facilities provide the region’s residents with access to jobs. Employment within the study area is projected to increase from 225,787 jobs in 2021 to over 237,000 jobs in 2045.

**Historical Population Growth**

Historical population data from the US Census Bureau helps inform the regional population and employment projections the Corpus Christi MPO makes for the future. In the 2020 decennial Census, the three-county MPO travel demand model study area had a population of approximately 445,763. By the year 2045, the study area population is forecasted to increase to 467,907. Historical population growth is important to understanding where populations will grow in the future. Exhibit 4-1 shows the population distribution by county for 2000, 2010, and 2020 based on Decennial Census data.

**Exhibit 4-1: Estimated Actual Population Change by County 2000 to 2023**



Source: Texas State Demographic Center

**Population Forecast**

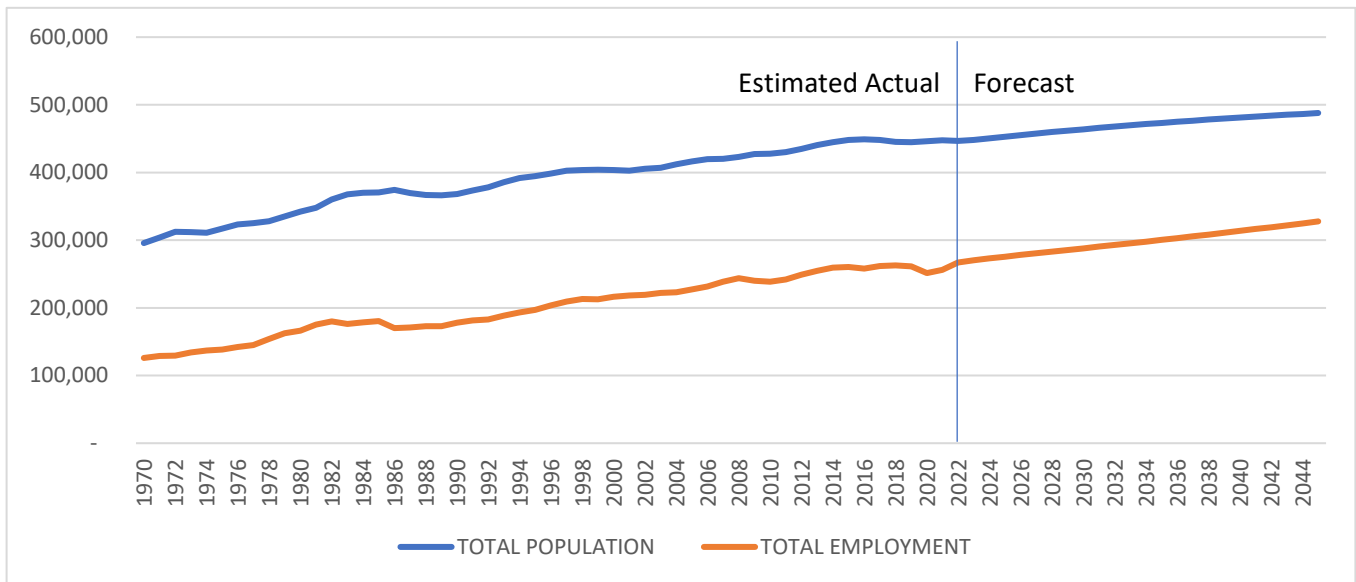
A population forecast is a projection of how many people will live in a certain area based on factors like past growth trends, development potential, and market demand. The 2045 MTP UPDATE uses the Corpus Christi MPO’s 2045 demographic forecast to develop transportation recommendations. The year 2021 is used as the base year to illustrate general trends in population and employment growth through 2045. Based on population forecasts for 2020 and 2045, the total population of the Corpus Christi MPO travel demand model study area is projected to increase from 445,763 in 2020 to 467,907 in 2045.

**Exhibit 4-2: Forecasted Population Growth by County, 2020 to 2045**

County	Adopted Population Control Totals			
	2020	2045	Growth	Percent Change
Nueces	353,178	371,797	18,322	5.18%
San Patricio	68,755	74,250	6,245	9.08%
Aransas	23,830	21,753	1,370	5.83%
<b>Total</b>	<b>445,763</b>	<b>467,907</b>	<b>25,937</b>	<b>4.84%</b>

Source: Texas State Demographic Center

**Exhibit 4-3: 3-County Population and Employment 1970 to 2045**

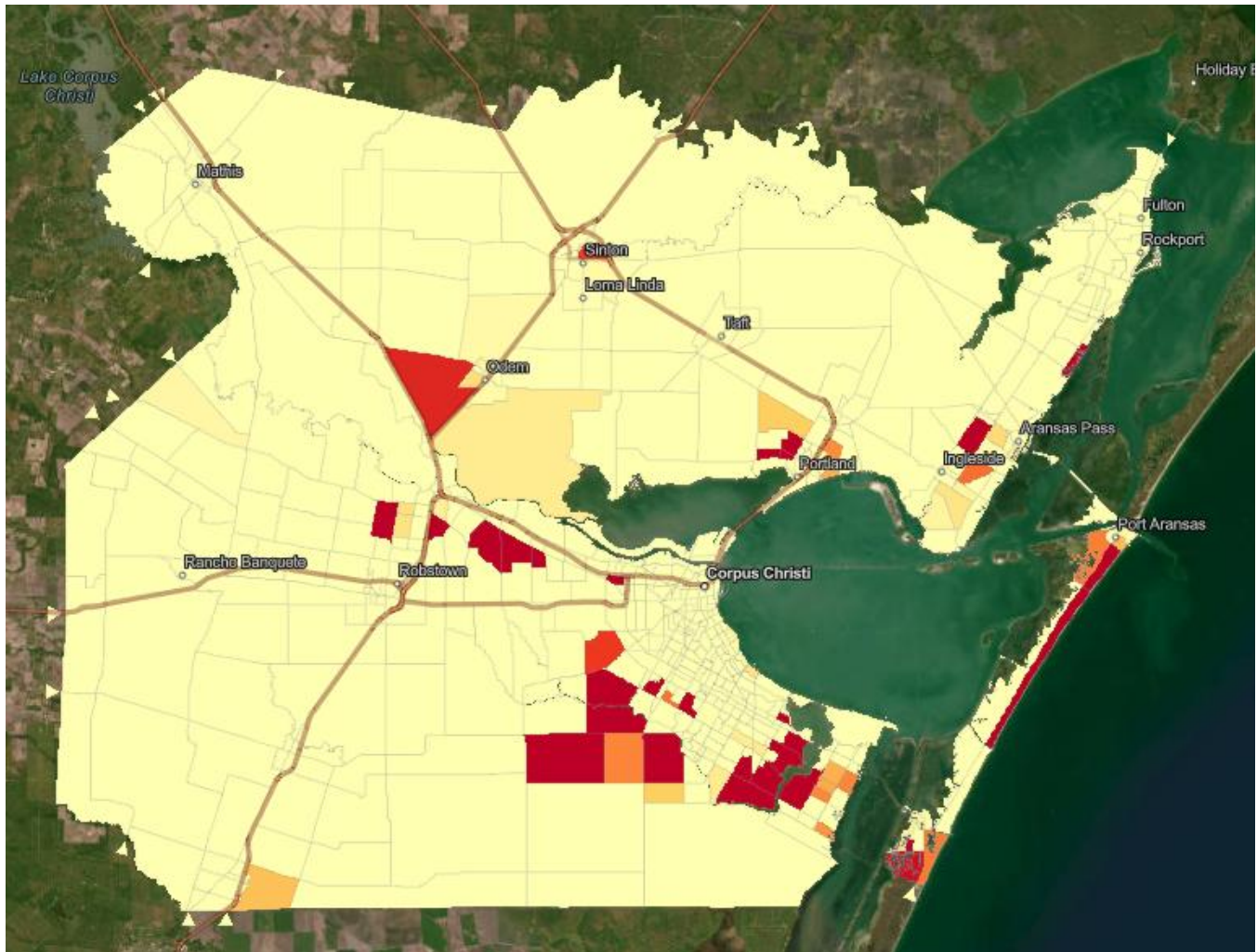


Source: Texas State Demographic Center and Woods and Poole

### Population Density

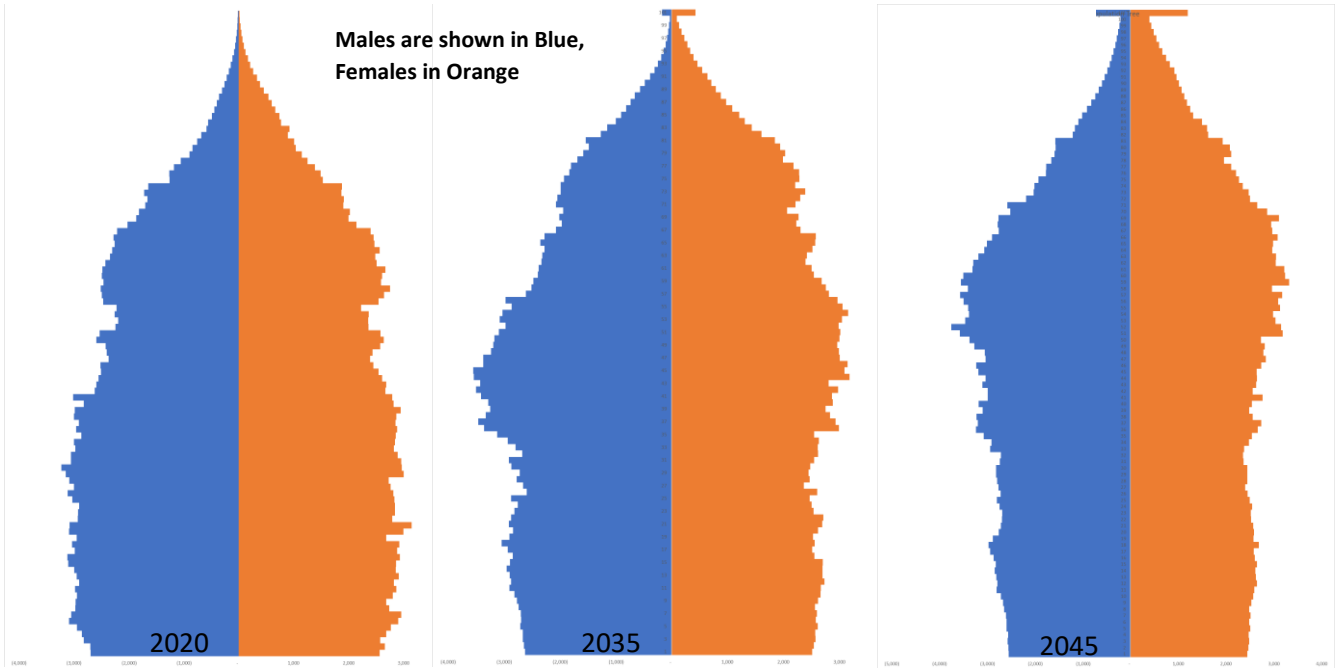
In addition to population forecasts, population density is critical when planning transportation activities. Areas with high population and job density may warrant more multimodal transportation infrastructure to ensure that residents are able to travel efficiently. Exhibit 4-4 show the change in population density by Traffic Analysis Zone (TAZ) between 2021 and 2045. TAZs are a geographic unit used for transportation planning within the travel demand model.

**Exhibit 4-4 Population Growth by TAZ, 2021 to 2045**



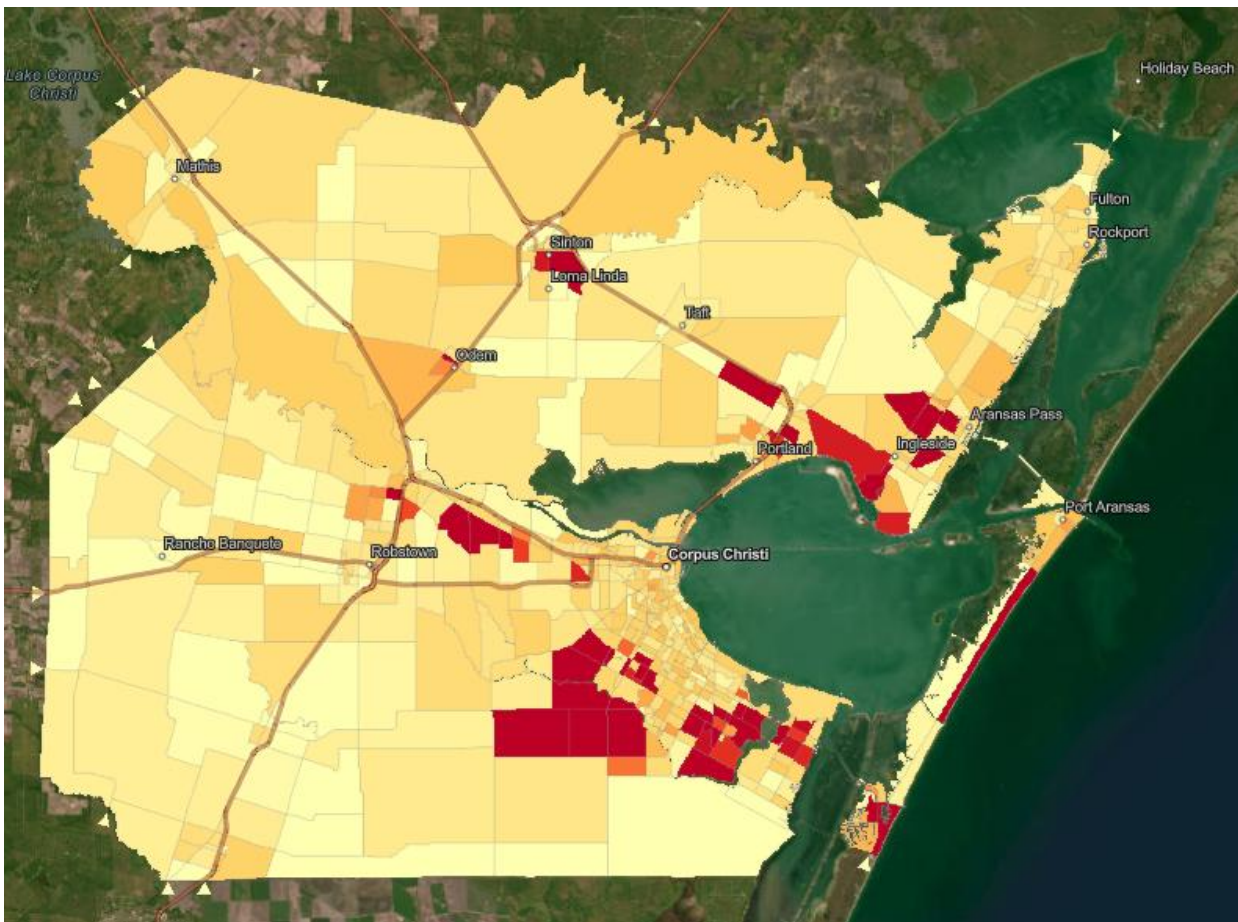
As shown below in Exhibit 4-5, Population Trees for the Corpus Christi Region, the population within the Corpus Christi MPO area is becoming an older population. There are relatively fewer families and relatively more retirees. This is due in part to the declining birth rate in the state and the nation, along with the increase in migration of older, retired persons. In 2020, 15.2% of the population was over 65 and 24.5% was under 18. By 2035, this is forecast to change to 20.0% being over 65 and 22.0% being under 18.

Exhibit 4-5: Population By Age in Years 2020, 2035, and 2045



Source: Woods and Poole

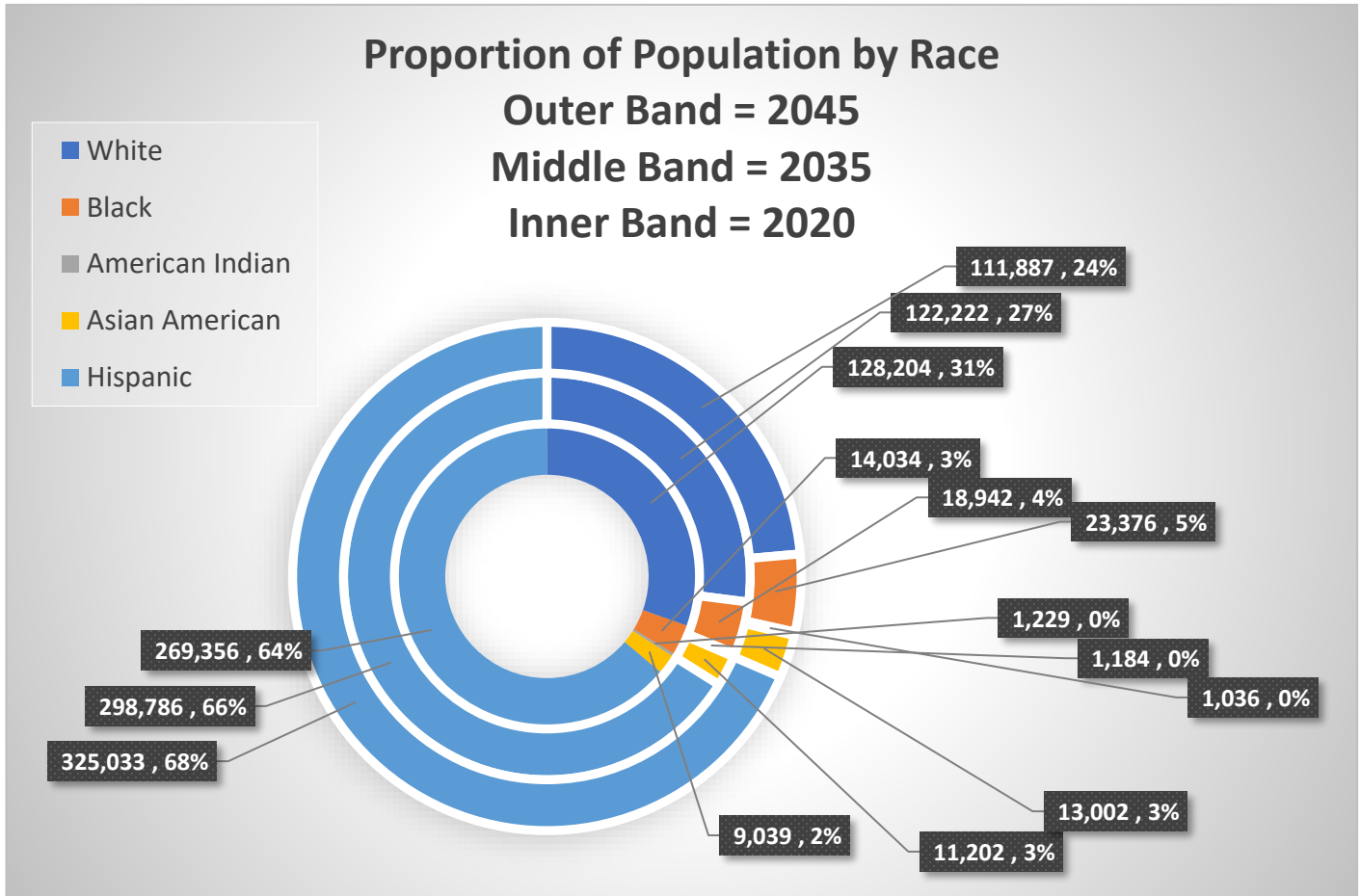
Exhibit 4-6: Employment Growth by TAZ, 2021 to 2045



**POPULATION PROFILE CHANGES**

In a region that is demographically diverse, planners must consider how this diversity affects residents’ transportation needs. Demographic trends indicate the region’s population profile will change over time in terms of race, ethnicity, income, language, and age. The data source for the majority of the following demographic data is the 2018-2022 American Community Survey 5-Year Estimates, the most recent dataset that included all the applicable data at the time the 2045 MTP Update was developed.

**Exhibit 4-7: Regional Population by Race and Ethnicity**

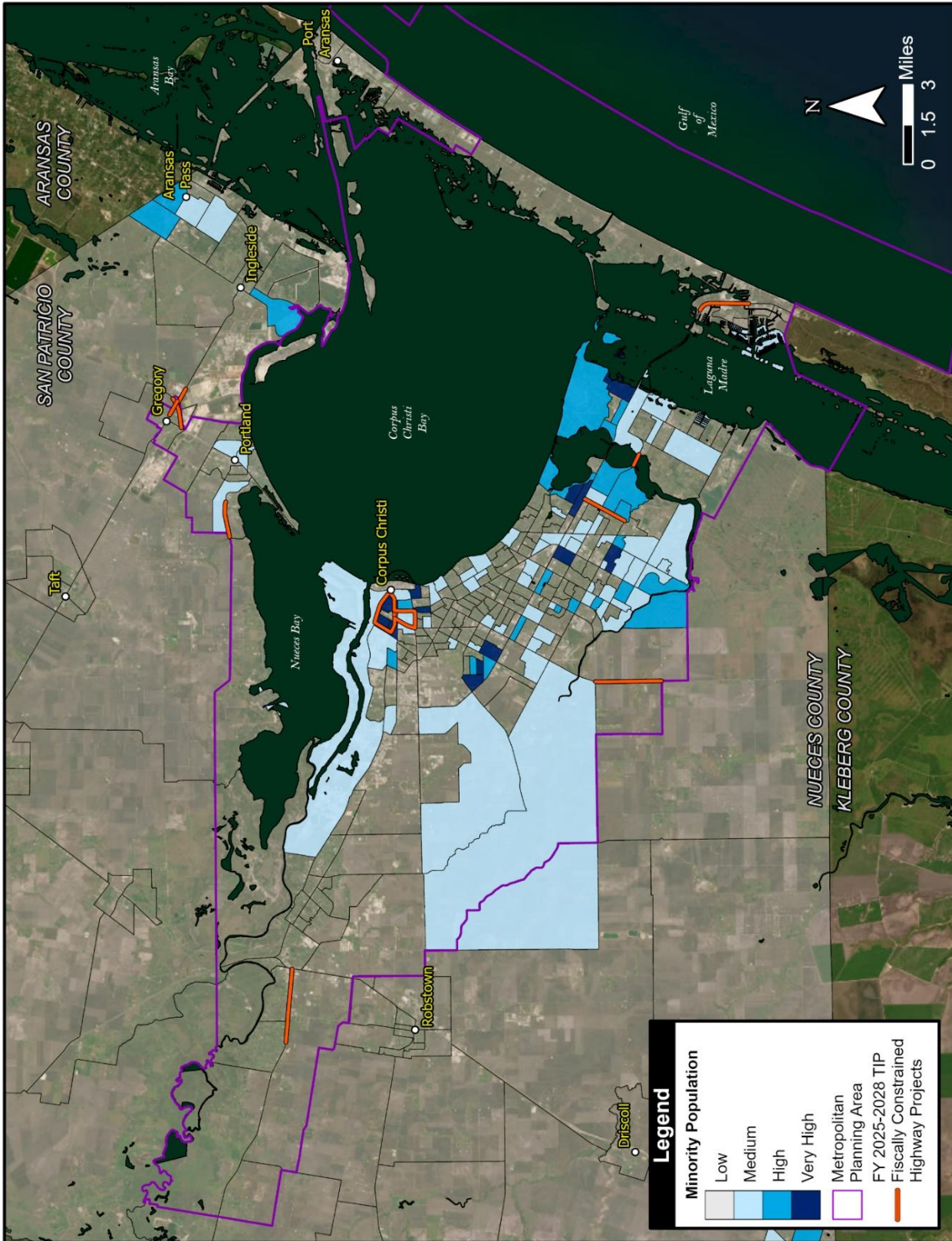


Source: [Woods and Poole](#)

**Changes in Race and Ethnicity**

Since the 1970s, both the overall population and minority population have increased in the region. The forecast for Hispanic populations show them increasing from 64% in 2020 to 68% in 2045, while White populations are forecast to decline from 31% to 24% of the total population. Black populations are forecast to increase from 3% in 2020 to 5% in 2045, while Asian American Populations increase from 2% in 2020 to 3% in 2045. Native American populations are relatively stable at less than 1%.

Exhibit 4-8: Minority Populations by Block Group



**Changes in Income**

Income is an additional population indicator that must be considered when planning transportation facilities. Individuals or households with lower incomes may not have access to a working vehicle and may rely on other modes of transportation. Based on the 2018 to 2022 ACS 5-Year Estimates, 14.39 percent of the region’s population lives below the poverty level.

**Exhibit 4-9: Low-Income Populations by Block Group**

