

In this Brief:

- As Texas grows, it also becomes older and increasingly diverse.
- The majority of counties experienced population growth between 2010-2018, especially metropolitan counties.
- While both net migration and natural increase contribute to population growth in Texas, the rapid growth in many metropolitan counties is driven to a greater extent by net in-migration.
- The sex ratio of the workforce varies by type of county economy, with mining-, manufacturing-, and farm-dependent counties having more males while recreation and service industry-dependent counties having more females.
- Most metropolitan counties have aged since 2010, but the magnitude of aging remains greatest in rural counties.
- Ten Texas cities alone added over 1 million in population between 2010 and 2018, fueling the growth of the state as a whole.

The Texas Demographic Center produces, interprets, and disseminates demographic information to facilitate data driven decision making for the benefit of Texans.

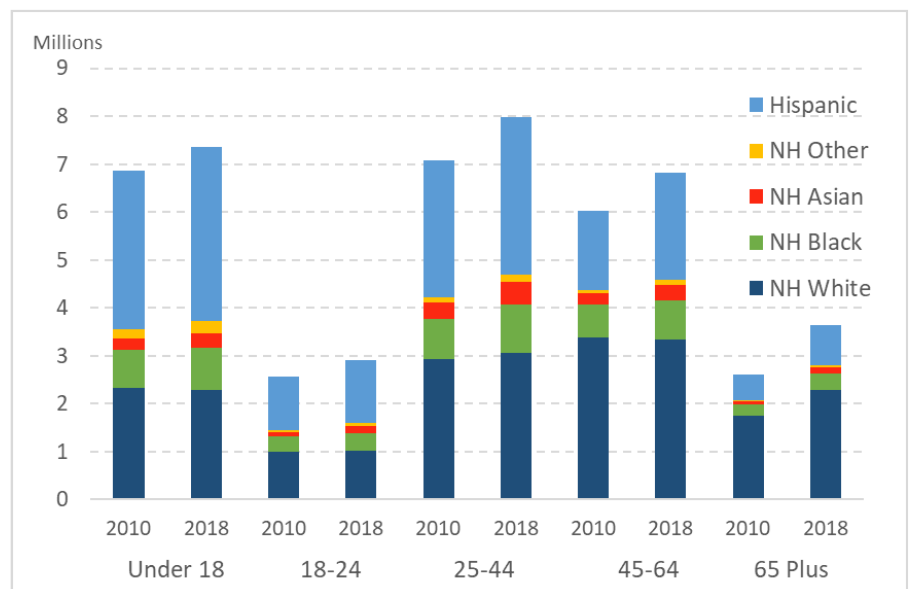
December 2019

The Texas Demographic Center (TDC) produces annual estimates of the total population of the state and its counties and places. These estimates are widely used by the state and local governments, non-profit and community based organizations, businesses, as well as the public in their planning and decision making processes. This document provides a brief overview of the latest 2018 estimates and highlights some of the recent demographic trends across the State of Texas.

As Texas grows, it also becomes older and increasingly diverse.

The July 1, 2018 estimated population for Texas is 28,702,243, which represents a 14.9 percent increase from the census count of 25,145,565 in April 2010. Texas added over 3.55 million people between 2010 and 2018. However, growth is not evenly distributed across age and race/ethnicity groups. Figure 1 shows that between 2010 and 2018, the 65 plus age category had the greatest increase (slightly more than one million) and grew at the fastest rate compared to the younger age groups. During this same period, all race/ethnicity groups saw increases in every age group, except for NH Whites. Specifically, NH Whites

Figure 1: Race/Ethnicity Composition by Age Group in Texas 2010-2018



Source: U.S. Census Bureau, 2010 Census Data; Texas Demographic Center, 2018 Population Estimates

experienced population declines in the under 18 years and 45-64 years age groups, but had the most significant growth in the 65 years plus age group. Despite the greatest growth in the 65 years plus age group overall, NH Whites experienced a decline in the share of population among this age group (from 68 percent to 63 percent). In fact, NH Whites saw declines while Hispanics experienced increases in their share of the state population across all age groups, and all the other race/ethnicity groups saw relatively stable shares of the state population across all age groups. As a result, the Texas population has grown older, with its median age increasing from 33.6 years in 2010 to 34.9 years in 2018.

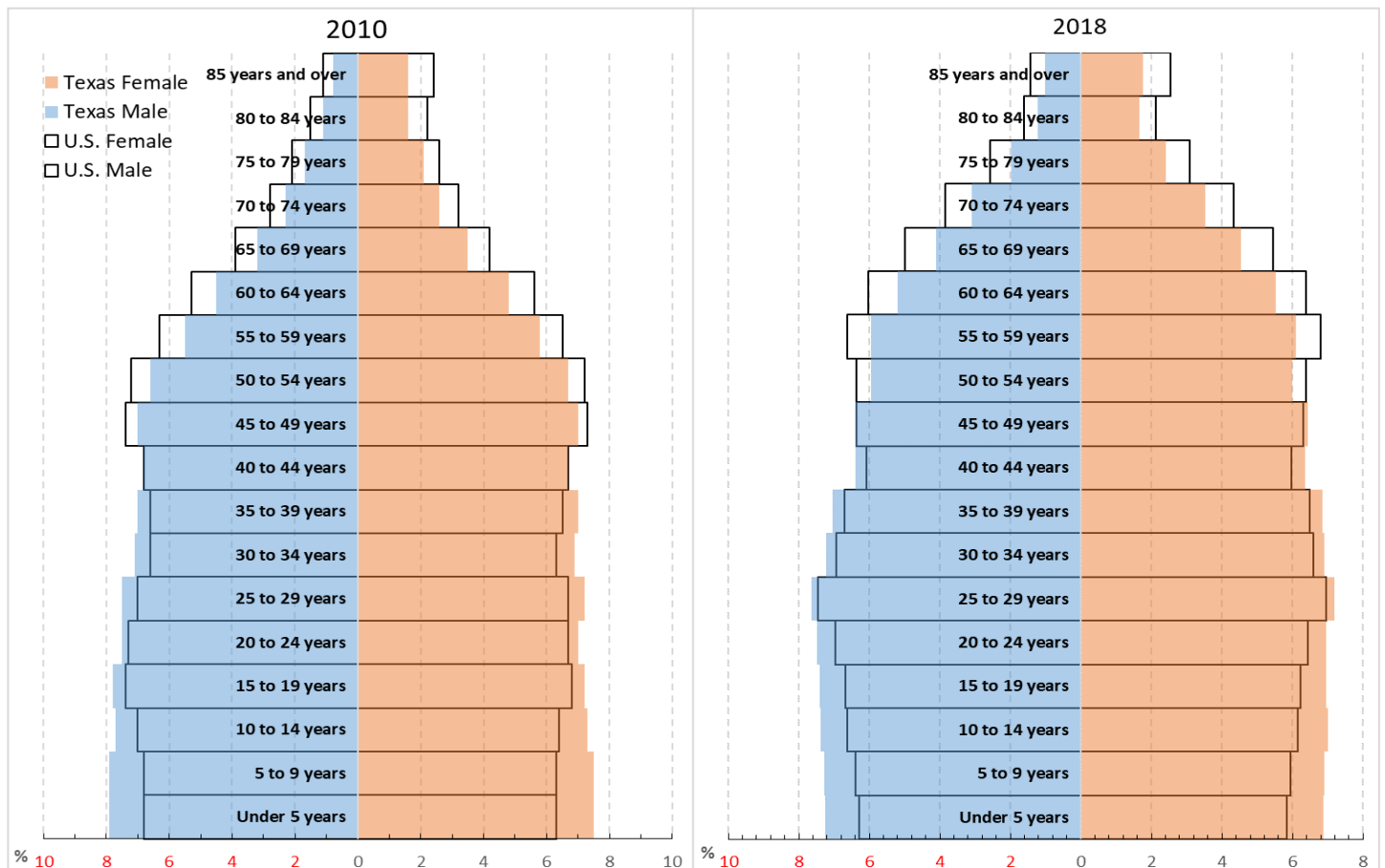
However, Texas is still younger than the nation as a whole. When we overlay the Texas population pyramid in 2010 onto the U.S. population pyramid in the same year (Figure 2), the shape of the Texas population pyramid has a

slightly wider base and a narrower peak than the U.S. population pyramid, indicating a higher proportion of population in the younger ages and a lower proportion in the older ages. The same comparison between Texas and the U.S. remains unchanged in 2018. However, both Texas and the U.S. have narrower bases and broader peaks in their respective population pyramids in 2018, indicating lower fertility and aging of the populations.

Net migration and natural increase play equally strong roles in the growth of the Texas population, but this balance varies by county population size.

In general, more than two thirds, or 68.5 percent, of counties saw population growth between 2010 and 2018, while less than one third, or 31.1 percent, saw population decline. The components of population change, consisting of

Figure 2: U.S. and Texas Population Pyramids, 2010 and 2018

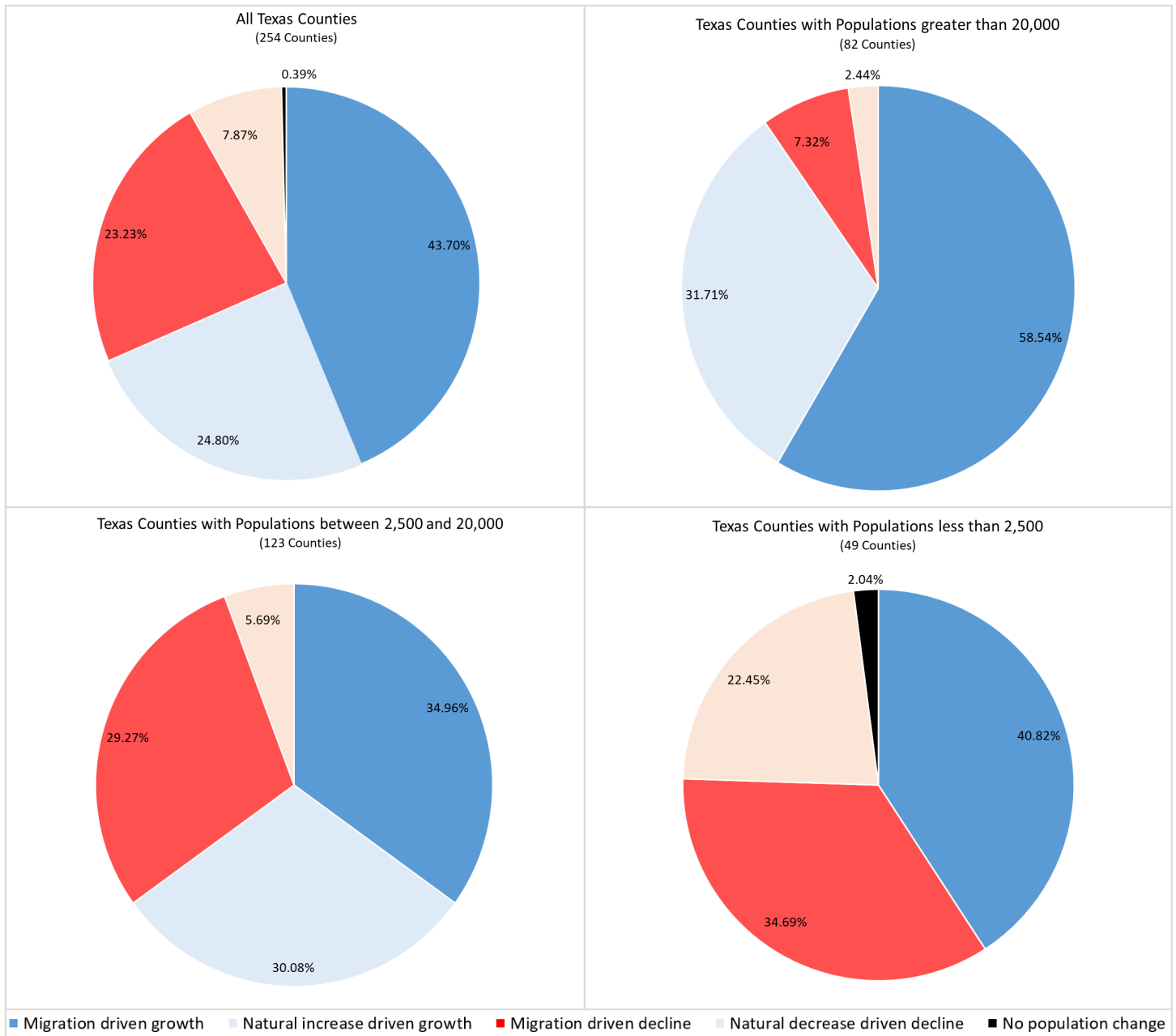


Source: U.S. Census Bureau, 2010 Census Data; Texas Demographic Center, 2018 Population Estimates

natural increase (or births minus deaths) and net migration (or in-migrants minus out-migrants) driving population growth and decline, varied by county population size. Specifically, 43.7 percent of Texas counties experienced population growth driven to a greater extent by positive net migration, whereby more than 50 percent of the population growth is due to more people moving into a county. Additionally, about a quarter of counties experienced population growth driven to

a greater extent by natural increase, whereby more than 50 percent of the population growth is due to an excess of births over deaths. Slightly less than a quarter, or 23.2 percent, of counties experienced population decline driven to a greater extent by negative net migration, whereby more than 50 percent of population decline is due to more people moving out of a county. Lastly, nearly eight percent of counties experienced population decline driven mostly by natural

Figure 3: Population Change by Type of Driving Force in Counties in Texas, Metros (Population > 20,000), Towns (Population 2,500 to 20,000), and Rural Areas (Population < 2,500)



Source: U.S. Census Bureau, 2010 Census Data; Texas Demographic Center, 2018 Population Estimates

More about the Texas Demographic Center Population Estimates

The Population Estimates and Projections Program at the Texas Demographic Center produces annual population estimates for counties and places in Texas. We also break down the county population by sex, single year of age from 0 to 95 and older, and five race/ethnicity groups, including Non-Hispanic (hereafter NH) White, NH Black, NH Asian, NH Other, and Hispanic.

In producing the estimates, we collect and utilize the most recent data. The most recent decennial census data are used as the base population data. The latest American Community Survey and the Census Bureau Building Permits survey data are used to monitor demographic trends in housing arrangement and occupancy rates. We also collect administrative data from various state and local agencies. These include vital statistics, voter registration, vehicle registration, prison and correctional facilities, public school enrollment, public higher education enrollment, and dormitory count data. In addition, we also conduct our own surveys on private schools and universities/colleges and annexation and boundary changes as well as building permits issued.

For our total population estimates, we use three methods: ratio-correlation, component-method II, and housing-unit method. The ratio-correlation method uses multiple regression models in the estimation of population, including predictors such as births, deaths, vehicle registration, voter registration, school enrollment, housing units, etc. The cohort component II method takes into account the three components of population change, namely births, deaths and net migration, estimated using the school enrollment change for the population under 65 years and Medicare enrollment change for the population 65 years and over. The housing unit method utilizes building permit data to estimate the number of newly added housing units and the population associated with the different types of housing units.

To learn more about the estimates program, the methods and data used, and to download the estimates, please visit our website (<https://demographics.texas.gov/Data/TPEPP/Estimates/>).

decrease, whereby more than 50 percent of the population decline is due to an excess of deaths over births.

In Figure 3, we show the components of change by three population thresholds: 1) metropolitan counties with populations of more than 20,000, 2) small town counties with populations between 2,500 to 20,000, and 3) rural counties, or counties with less than 2,500 people.

Net migration drives population growth in Metro Counties.

Just over 90 percent of Texas metropolitan counties experienced population growth between 2010 and 2018, whereas 9.8 percent of metro counties experienced population decline during the same time period. Among the growing metro counties, the majority, or 58.5 percent, such as Bexar, Travis, and Fort Bend, experienced population growth driven to a greater extent by positive net migration; slightly less than a third of

them, or 31.7 percent, including Dallas, Harris, and Tarrant, experienced population growth driven to a greater extent by natural increase. Among metro counties with population decline, 7.3 percent, such as Potter and Coryell, experienced population decline driven to a greater extent by negative net migration. Only Carson and Clay experienced population decline driven by natural decrease.

Natural increase and net migration drive population growth in Small Town Counties, but many remain vulnerable to out migration.

Similar to the state of Texas as a whole, about two thirds, or 65.0 percent, of small town counties experienced population growth between 2010 and 2018, whereas roughly a third, or 35 percent, of them experienced population decline. Specifically, more than one third, or 35.0 percent, of these counties, such as Walker, Andrews, and Wood, experienced population

growth driven to a greater extent by positive net migration. Less than one third, or 30.1 percent, such as Maverick, Gaines, and Navarro, experienced population growth driven to a greater extent by natural increase. Twenty-nine percent of small town counties, such as Hale, Gray, and Shelby, experienced population decline driven to a greater extent by negative net migration, and six percent, including Young, Houston, and Coleman, experienced population decline driven to a greater extent by natural decrease.

Net migration, both in and out, plays a big role in population change in rural counties.

Different from metropolitan and small town counties, less than half, or 40.8 percent, of rural counties experienced population growth between 2010 and 2018. By contrast, the majority, or 57.1 percent, of these counties experienced population decline. Specifically, 40.8 percent of rural

counties, such as San Jacinto, Blanco, and Baylor, saw population growth driven to a greater extent by positive net migration, and none of the rural counties experienced population growth driven by natural increase. Slightly more than a third, or 34.7 percent, including Kenedy, King, and Wheeler, saw population decline driven to a greater extent by negative net migration. Additionally, 22.5 percent, such as Kent, Stonewall, and Marion, saw population decline driven to a greater extent by natural decrease.

Sex ratios vary by age and type of economy in the county.

The sex ratio, or the ratio of males to females, is a measure of the sex composition of a population. It is expressed as the number of males per 100 females. A sex ratio greater than 100 indicates a population has more males than females; conversely, a sex ratio of less than 100 denotes a population has more females than males.

The sex ratio tends to be high at very young ages and decreases in older ages. The sex ratio in the working ages (18 to 64 years) tends to be more balanced but can vary depending on migration patterns, occupations, and industries in a geographic region. The sex ratio at older ages is generally lower because of the higher survival rates of the female population. A substantial group quarters population can also impact sex ratios, especially at the county or lower geographic levels, depending on the type of facility (e.g., prison, military base, school dormitory, nursing home, etc.). Table 1 shows the 2018 sex ratios in Texas for three age groups: under 18, working age, and 65 plus. The sex ratios are 104.2, 100.5, and 80.8, respectively. These patterns remained relatively unchanged from 2010.

Table 1 also includes the sex ratios of the working age population at the county level by type of economy. Based on the county typology code created by the U.S. Department of Agriculture, we group the counties by the industry that yielded the

Table 1: Sex Ratio (Number of Males per 100 Females) in Texas and Texas Counties

| State Sex Ratio by Age Group | | |
|---|-------|-------|
| | 2010 | 2018 |
| Under 18 Years | 104.6 | 104.2 |
| Working Age (18 to 64 Years) | 99.7 | 100.5 |
| 65 Plus Years | 77.5 | 80.8 |
| County Sex Ratio of Workforce by Economy Type | | |
| | 2010 | 2018 |
| Non-Specialized Economy | 100.4 | 101.9 |
| Farm-Dependent Economy | 104.0 | 105.2 |
| Mining-Dependent Economy | 110.1 | 112.6 |
| Manufacturing-Dependent Economy | 101.4 | 102.2 |
| Federal/State Government Dependent Economy | 108.1 | 110.4 |
| Recreation-Dependent Economy | 96.0 | 97.3 |

Source: Sex ratios derived by Texas Demographic Center from 2018 Population Estimates; US Department of Agriculture 2015 Economic Research Service County Typology Codes
 Note: 22 counties with more than 10% group quarters populations were excluded from analysis.

most earnings and/or produced the most employment between 2010 to 2012.¹ We excluded 22 counties with group quarters accounting for more than 10 percent of the county's total population.

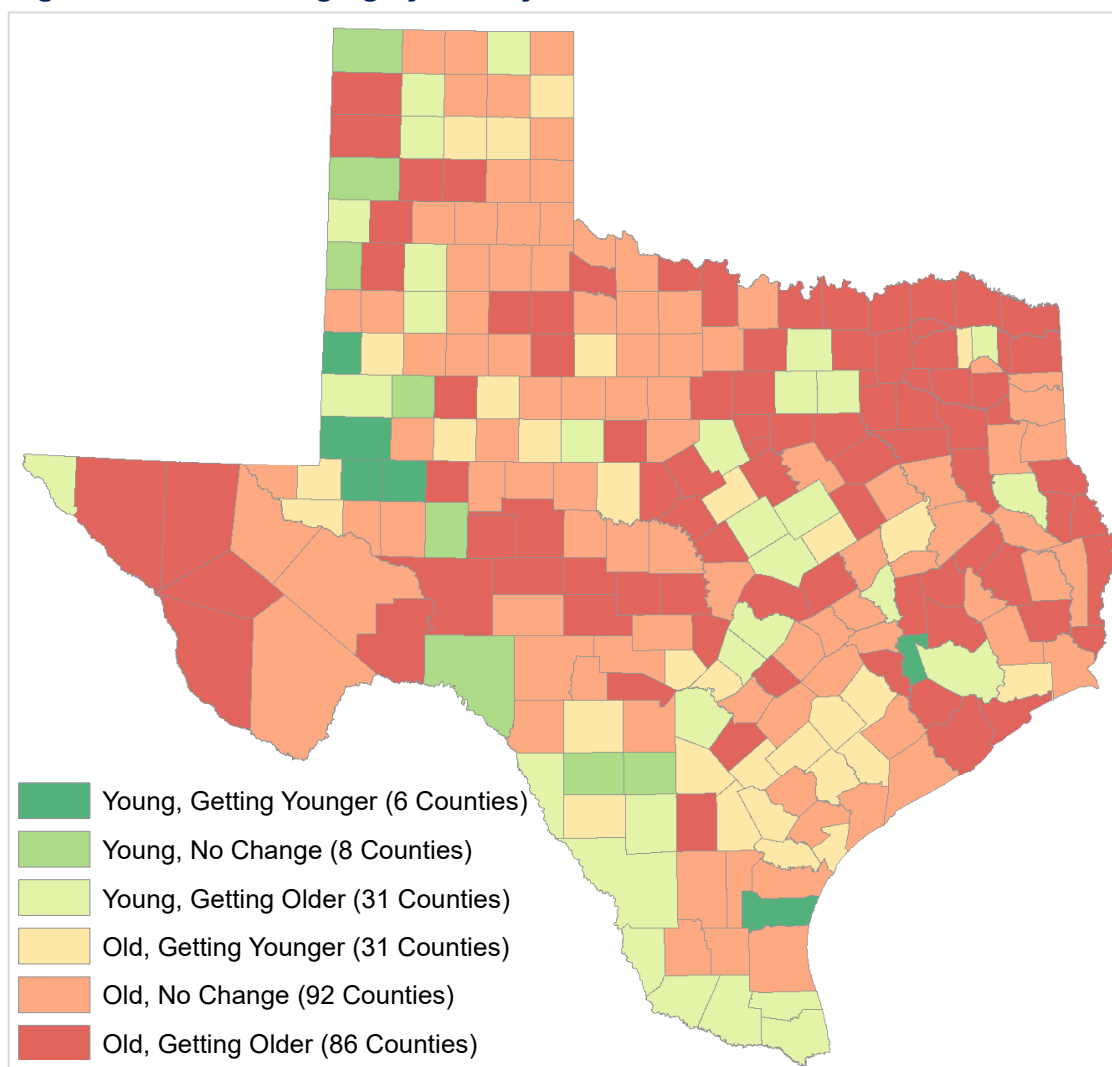
Table 1 shows the mean sex ratios of these grouped counties. The 2018 patterns are very similar to those of 2010. Sex ratios are more or less balanced, ranging from 100.4 to 101.9, in counties that are more dependent on manufacturing and those that do not have a specialized economy. On the other hand, we see higher sex ratios, ranging from 108.1 to 112.6, in mining-dependent and federal/state government-dependent counties, followed by farm-dependent counties, with sex ratios of 104.0 to 105.2. In

recreation-dependent counties, where many service workers are employed, the sex ratios are less than 100, ranging from 96.0 to 97.3.

Texas continues to age but remains young when compared to the U.S.

In 2010, the majority of counties were older than the state when comparing the county median age to the state median age of 33.6 years. On the map in Figure 5, we show how county median age changed between 2010 and 2018. To rule out changes in median age that may be related to a small population, we use Mood's median test to determine significant changes in median age that takes into account the size of a county population.¹¹ Overall, more than one third, or 100, of the counties did not

Figure 5: Trends in Aging by County 2010 to 2018



have significant changes in median age between 2010 and 2018.

Among the 209 counties that were older than the state in 2010 (depicted in shades of orange to red), one third, or 86 counties, got older and 31 counties saw a decline in median age, or got younger. On the other hand, of the 45 counties that were younger than the state in 2010 (depicted in shades of green), 31 counties got older but 6 got younger.

In fact, the majority of the metropolitan counties aged between 2010 and

Source: U.S. Census Bureau, 2010 Census Data; Texas Demographic Center, 2018 Population Estimates

2018. However, among all the counties that experienced significant increases in the median age, rural counties had the greatest magnitude of population aging. Specifically, 18 percent of Texas rural counties experienced increases in the median age of two to four years, and 16 percent of them experienced increases of more than four years. The comparable figures for Texas metro counties were 13 percent and 2 percent, and only 7 percent and 0 percent for Texas small town counties.

Geographically, major metropolitan cities such as Houston, Dallas, Fort Worth, San Antonio, Austin, and El Paso as well as the southern border regions had younger populations than the state in 2010, but still got older between 2010 and 2018. Several young counties neighboring oil fields in West Texas experienced reverse population aging (i.e., declines in the median age) likely due to the influx of young working age migrants. Similarly, a few counties in the Panhandle region and South Texas region that were older than the state in 2010 saw reverse population aging as well. These areas of the state also experienced an influx of young migrants employed in meat-packing plants in the region. The remaining counties were older than the state in 2010 and continued to age throughout this time period.

Population Growth and Decline in Texas Places

Every year since 2006, Texas has added more population than any other state. Much of the population growth added in the state is driven by population growth in Texas big cities, or places.

Table 2 includes the top ten places with the greatest and least numeric change, and Table 3 includes the top 10 places with the greatest and least percent change between 2010 and 2018. Population change for places also includes change attributable to annexations during this time period.

Numerically, much of the population growth in Texas came from large urban places,

such as Houston, San Antonio, Austin, Dallas, and Fort Worth, with each of these places adding over 140,000 people between 2010 and 2018. (See Table 2.) Other places with increases of more than 30,000 in population during this time period, include Frisco, McKinney, Sugar Land, El Paso, and Pearland. Together, these 10 places added over one million in population between 2010 and 2018, accounting for 32 percent of the population growth in Texas during this time.

Table 3 shows the top 10 places having the fastest growth rates are mostly suburban places, such as Fulshear, Coffee City, Prosper, Melissa, Manvel, Manor, Annetta, Selma, and Buda. Escobares, located in Starr County along the southern Texas-Mexico border is the only non-suburban place that experienced fast population growth. Fulshear, located in Fort Bend County, grew tenfold and registered the fastest growth rate of all the Texas places between 2010 and 2018. Coffee City, located in the Dallas-Fort Worth metro area, grew nearly fivefold. The rest of these places saw an increase of at least 30 percent in their populations during the same time period.

Although Texas is generally characterized by rapid and high growth, 250 of the 1,221 places, or 20 percent, experienced population decline between 2010 and 2018. Among places with the greatest population losses are places mostly in rural and more sparsely populated areas of the state, particularly in parts of the Panhandle, West, and East Texas. Plainview, located in Hale County, saw the greatest population decline, losing 1,480 residents during this time period.

The top 10 counties with the lowest percent change lost between 10 and 83 percent of their populations between 2010 and 2018. The place with the greatest population decline, in terms of percentage, during this time period is Kingsbury, located in Guadalupe County.

Table 2: Top 10 Texas Places with Greatest and Least Numeric Change between 2010 and 2018

| Place | Ranking | 2010 | 2018 | Numeric Change |
|-------------|---------|-----------|-----------|----------------|
| Houston | 1 | 2,100,263 | 2,324,916 | 224,653 |
| San Antonio | 2 | 1,327,407 | 1,533,572 | 206,165 |
| Austin | 3 | 790,491 | 966,089 | 175,598 |
| Dallas | 4 | 1,197,816 | 1,357,303 | 159,487 |
| Fort Worth | 5 | 741,206 | 884,593 | 143,387 |
| Frisco | 6 | 116,989 | 188,522 | 71,533 |
| McKinney | 7 | 131,117 | 182,199 | 51,082 |
| Sugar Land | 8 | 78,817 | 128,311 | 49,494 |
| El Paso | 9 | 649,121 | 682,669 | 33,548 |
| Pearland | 10 | 91,252 | 122,242 | 30,990 |
| Lamesa | 1,212 | 9,422 | 8,970 | -452 |
| Presidio | 1,213 | 4,426 | 3,957 | -469 |
| Sweetwater | 1,214 | 10,906 | 10,396 | -510 |
| Pampa | 1,215 | 17,994 | 17,344 | -650 |
| Kingsbury | 1,216 | 782 | 130 | -652 |
| Kingsville | 1,217 | 26,213 | 25,487 | -726 |
| Borger | 1,218 | 13,251 | 12,508 | -743 |
| Vernon | 1,219 | 11,002 | 10,236 | -766 |
| Eden | 1,220 | 2,766 | 1,538 | -1,228 |
| Plainview | 1,221 | 22,194 | 20,714 | -1,480 |

Table 3: Top 10 Texas Places with Greatest and Least Percent Change between 2010 and 2018

| Place | Ranking | 2010 | 2018 | Percent Change |
|-------------|---------|-------|--------|----------------|
| Fulshear | 1 | 1,134 | 11,990 | 957.3 |
| Coffee City | 2 | 278 | 1,473 | 429.9 |
| Prosper | 3 | 9,423 | 24,432 | 159.3 |
| Melissa | 4 | 4,695 | 11,565 | 146.3 |
| Manvel | 5 | 5,179 | 12,662 | 144.5 |
| Manor | 6 | 5,037 | 11,936 | 137.0 |
| Annetta | 7 | 1,288 | 3,053 | 137.0 |
| Selma | 8 | 5,540 | 13,027 | 135.1 |
| Escobares | 9 | 1,188 | 2,775 | 133.6 |
| Buda | 10 | 7,295 | 16,915 | 131.9 |
| Hedley | 1,212 | 329 | 296 | -10.0 |
| Lockney | 1,213 | 1842 | 1653 | -10.3 |
| Presidio | 1,214 | 4426 | 3957 | -10.6 |
| Impact | 1,215 | 35 | 31 | -11.4 |
| Floydada | 1,216 | 3,038 | 2,671 | -12.1 |
| Eldorado | 1,217 | 1951 | 1681 | -13.8 |
| Marfa | 1,218 | 1981 | 1702 | -14.1 |
| Eden | 1,219 | 2766 | 1538 | -44.4 |
| Paint Rock | 1,220 | 273 | 151 | -44.7 |
| Kingsbury | 1,221 | 782 | 130 | -83.4 |

Source: Texas Demographic Center, 2018 Population Estimates; Note: Analysis does not include Census Designated Places (CDPs).

In Conclusion

Population estimates from the Texas Demographic Center indicate our state continues to grow. As it approaches 29 million, the state grows older and increasingly diverse. The components of population change play unique roles in the growth, or decline, trends of Texas counties, especially when county population size is considered. We also see how a county's economy can impact demographic characteristics, such as the sex ratio. As Texas continues to add more population every year than any other state, with Texas cities, especially those in the metropolitan areas of the state fueling population growth, many rural areas of the state continue to be challenged by population decline.

About This Report

The estimates of the total population of counties and places in Texas for July 1, 2018 and January 1, 2019 are completed by the personnel at the Texas Demographic Center at The University of Texas at San Antonio. The authors of this population estimates brief include: Po-Chun Huang, Helen You, Lila Valencia, and Lloyd B. Potter.

Endnotes

- I. U.S. Department of Agriculture, 2015 Economic Research Service County Typology Codes. <https://www.ers.usda.gov/data-products/county-typology-codes/>
- II. Mood's Median Test: <https://wrstephe.public.iastate.edu/stat403/MoodTukey.pdf>



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