## Is Our Population Aging? Why Does It Matter?
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In this issue of the Hibbs Brief, we examine changes in some demographic indicators over the past decades and discuss their impact in the context of an aging population in the United States, Texas and Tyler Area, as well as some economic implications of this situation.

### Is Our Population Aging?

The aging of a population is typically driven by the combination of two important demographic factors: a relevant decrease in birth rates and an increase in life expectancies. A gradual decrease in the number of children in a population affects aging by driving up the median age of this population. Similarly, an increase in life expectancies drives median ages further up as populations live to older ages.[1]

The population pyramid, one of the most frequently used demographic indicators, provides a visual perspective of the population proportion shares for different age cohorts. It serves as a powerful diagnostic tool for analysts and policymakers where demographic transitions and challenges can be identified. Population pyramids are also used to infer or predict other relevant demographic indicators such as birth rates, death rates, migration patterns and more.[2]

Figure 1 depicts the population pyramids of the United States and Texas for 1970 and 2022. These pyramids break down the population into 5-year age cohorts by their proportion share concerning the total. The national numbers are represented by blue bars on the left-hand side, while Texas is represented by the orange bars on the right-hand side.[3]

As we can see in Figure 1, the shape of the pyramid has changed over the five decades for both the country and the state. While the pyramid has a marked triangular shape in 1970, it turns into a barrel-like shape in 2022. This change

denotes a decline in birth rates, and is typically recognized by demographers as an aging population.[4]

**Figure 1. Population Pyramid in the U.S. and Texas (1970 and 2022)**
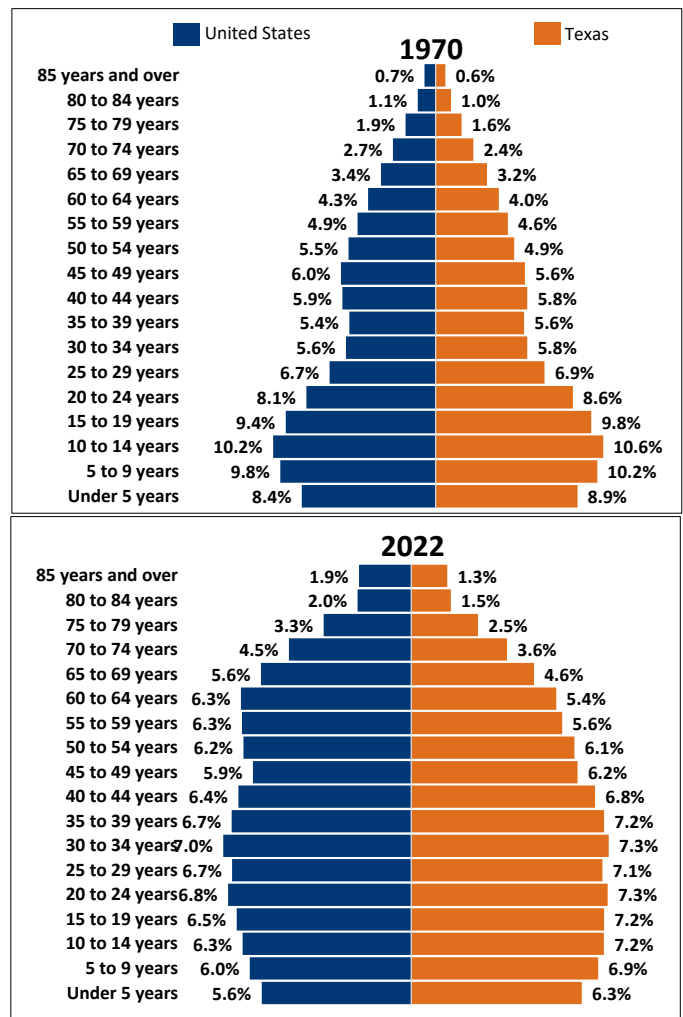


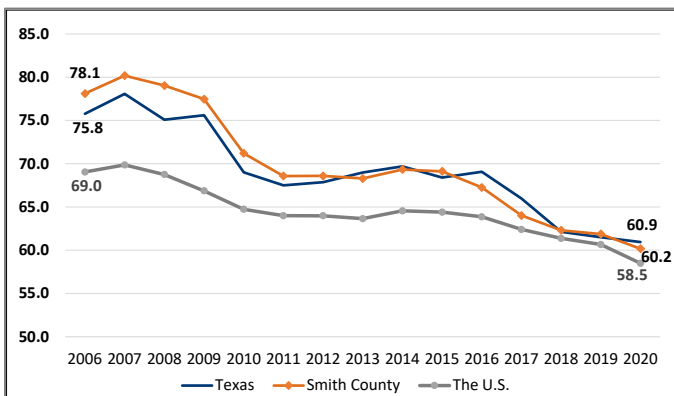Source: Hibbs Institute's estimates using U.S. Census Bureau data.

The number of "young" individuals has proportionally decreased gradually over the past decades in the United States. While in 1970, the population under 24 years of age in the nation was 46%, by 2022, this same age segment

represented only 31.1% of the population. In contrast, the number of subjects in retirement age increased substantially. While in 1970, 9.8% of the population was 65 years or older, by 2022, this age group increased to 17.3% of the population. At the state level, Texas showed a similar pattern. The number of individuals under 24 years dropped from 48.1% in 1970 to 34.9% in 2022. And the number of individuals 65 years or older in Texas increased from 8.8% in 1970 to 13.4% in 2022.[5]

Median age, another demographic indicator, has increased considerably in the nation from 28.1 years in 1970 to 39 years in 2022. Maine and New Hampshire are the "oldest" states, with a median age of 45.1 and 43.3, respectively, while Utah (32.1) and Texas (35.6) are the "youngest," although Texas experienced a substantial increase from 26.4 in 1970 to 35.6 in 2022.[6]

Fertility rates are also employed to assess the gradual aging of a population. This demographic indicator provides information about the size of the coming generations. In essence, it calculates the number of babies born in a given year with respect to 1,000 women within their reproductive age (15-44 years old). **Figure 2** shows that fertility rates for the nation, Texas and Smith County decreased considerably between 2006 and 2020. Fewer babies born in the past decades imply that the population pyramid will continue narrowing at the bottom. The widening of older cohorts and narrowing of younger cohorts indicate the progressive aging of our population at its different national, state and regional levels.[7]

**Figure 2. Fertility Rates for the U.S., Texas and Smith County (2006 - 2020)**



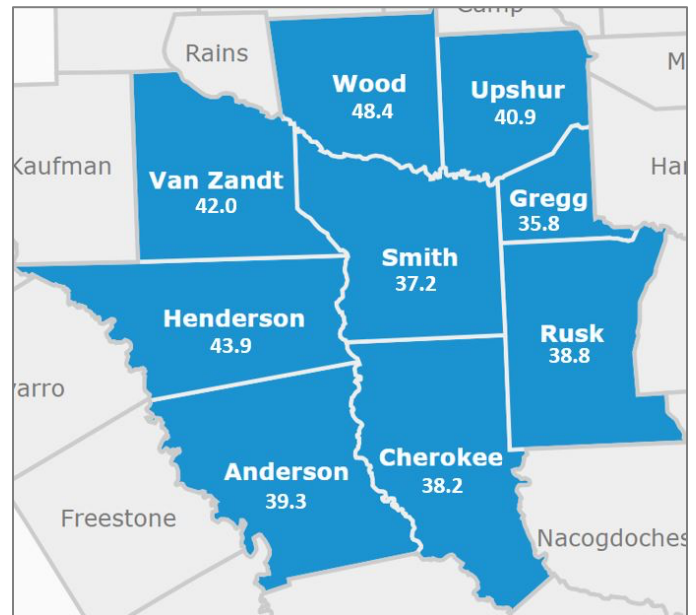Source: Hibbs Institute's estimates using U.S. Census Bureau and Texas Health data.

### Aging in East Texas

Although the Hibbs Brief typically discusses current topics concerning the Tyler metro area (or Smith County), this time

we were curious to know whether this aging trend is also present in a larger geographic area. We assessed the median age and the size of the age-retiring population for the **Tyler Area**, which we defined as eight contiguous counties around Smith County, including Anderson, Cherokee, Henderson, Gregg, Rusk, Upshur, Van Zandt and Wood.

**Figure 3** displays a map with the nine counties included in the Tyler Area and their corresponding median age indicators. Interestingly, some counties in the Tyler Area may be considered older than the oldest states in the nation (Wood County with 48.4 and Henderson County with 43.9). Others are younger than the nation's median (39) and closer to the youngest states. Gregg County is the "youngest" of the Tyler Area with a median age of 35.8, while Smith County has a median age of 37.2.[8]

**Figure 3. Median Age for the Tyler Area Counties**



Source: Hibbs Institute's estimates using U.S. Census Bureau data.

Another key indicator frequently used by demographers to assess aging is the rate of the population 65 years and older to the total population. **Figure 4** shows the population 65 years and older and the percent of its total population for the Tyler Area (the nine counties combined). This segment of the total population has increased by 30,000 people in 12 years, from 106,000 in 2010 (15.3% of the total) to 136,000 in 2022, 18.1% of the total population in the Tyler Area. To put these numbers in context, 17.3% of the population in the United States is 65 years and older, while 13.4% of the overall population of the state of Texas falls in this age group.[9]

## Figure 4. Tyler Area Population 65 Years & Older and Its Percent of Total Population (2010 – 2022)
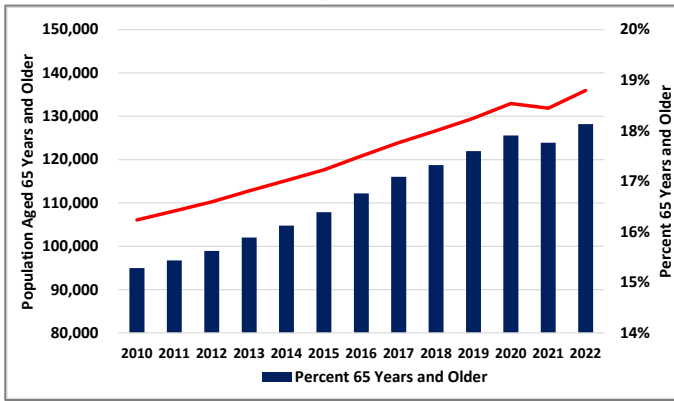


Source: U.S. Census Bureau.

## Some Economic Implications

The nation is aging and having fewer children, and East Texas is no exception. Across industrialized countries, it is common to see women who prioritize education and work in their 20s, marry older and have fewer children. This is particularly true for younger generations (millennials and Gen Z).[10]

On one hand, this situation could potentially represent an economic opportunity for some specific locations and regions in the country. Many cities and counties have successfully promoted themselves as retiring communities. Local regions in warm states such as Arizona and Florida are particularly attractive to retirees who look for a place where they can take advantage of the weather and local amenities (and spend their well-gained dollars).

Local governments have materialized this situation into sales tax revenue dollars that are used to revitalize the area and create a virtuous cycle where more money is used to capture the attention of more people.

On the other hand, an aging population poses an important challenge to the local workforce. With an increasing number of individuals retiring and a decreasing number of young individuals entering the workforce, the labor market is gradually shrinking. Today, there are roughly 1.5 job openings for every available worker. The need for workers that companies experience these days has fueled inflation over the past 24 months because such companies need to increase wages to retain their workers, and the additional production cost is eventually transferred to us, the final consumers, as higher prices.[11]

The labor market shortage is an intricate topic experienced by the United States. An aging population and a decreasing number of young workers are only two factors among many others that have contributed to an unbalanced labor market; the demand for workers exceeds its supply. The Hibbs Institute will discuss the current labor market dynamics and many other factors that impact the labor market shortage in an upcoming bulletin.

**The Hibbs Institute wishes our readers a very nice and peaceful holiday. Merry Christmas and Happy New Year.**

## End Notes

[1] Texas Demographic Center, San Antonio Office. Aging in Texas: Introduction (2016).

https://demographics.texas.gov/Resources/Publications/2016/2016_06_07_Aging.pdf

[2] National Geographic (2023). https://education.nationalgeographic.org/resource/population-pyramid/

[3] Hibbs Institute's estimates using U.S. Census Bureau data.

[4] Geobuddin Graphers (2023). Population Pyramid. https://www.buddinggeographers.com/population-pyramid/#:~:text=Interpreting%20a%20Population%20Pyramid&text=A%20broad%20top%20or%20wide,and%20a%20rising%20life%20expectancy.

[5] Hibbs Institute's estimates using U.S. Census Bureau data.

[6] U.S. Census Bureau. America is Getting Older (June 22, 2023).

https://www.census.gov/newsroom/press-releases/2023/population-estimates-characteristics.html

[7] Hibbs Institute's estimates using U.S. Census Bureau and Texas Health data.

[8 & 9] U.S. Census Bureau, 2017-2022 American Community Survey 5-Year Estimates. Tables S0101.

https://data.census.gov/table/ACSST5Y2021.S0101?q=Age&g=050XX00US48001,48073,48183,48213,48401,48423,48459,48467,48499

[10] Goldstein, D. (June 2023). The U.S. Population Is Older Than It Has Ever Been. The New York Times. https://www.nytimes.com/2023/06/22/us/census-median-age.html#:~:text=New%20census%20data%20shows%20that,In%201980%2C%20it%20was%2030.

[11] Davidson, C. (January 2023). We're Getting Older, and the Labor Market Shows It. Federal Reserve Bank of Atlanta. https://www.atlantafed.org/economy-matters/economic-research/2023/01/12/we-re-getting-older-and-the-labor-market-shows-it

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