

Included in this Brief:

- The older population in Texas grew at a faster rate than in the nation from 2000 to 2014.
- Among all states, Texas has the third largest elderly population.
- While Texas has a large elderly population and continues to age, it is still among the youngest states in the country.

The Texas Demographic Center is responsible for interpreting and communicating information on demographic and socioeconomic issues for the State of Texas to the public and the legislature.

### **Aging in Texas: Introduction**

When it comes to demographic shifts, Texas often leads the pack. Texas has led the nation in annual population growth since 2006. Texas is also among states leading in racial/ethnic diversification. However, with population aging trends, Texas seems to be on a unique path. While Texas added the second largest number of elderly to its population between 2000 and 2014, that elderly population is a small share of the Texas total population, when compared to other states. In general, population aging in Texas falls parallel to U.S. aging trends. However, while Texas is growing older, it is relatively younger than most states in the country. In this brief, we explore these seemingly contradictive trends by comparing indicators of aging across states and in the U.S.

#### Background

Aging population is driven by a combination of decreasing birth rates and increasing life expectancies; these influences apply globally, nationally, and in Texas. Decreasing the number of children in a population impacts aging by driving up the median age of a population. Similarly, increasing life expectancies drive median ages further up as populations live to older and older ages. This phenomena is well documented in the theory of the demographic transition model. See Box 1-1 for additional information on the demographic transition model.

Demographers began to see indicators of aging in the U.S. population more than 30 years ago. These population aging trends are expected to reach their peak over the next two decades, with the entry of the Baby Boom generation (those born between 1946 and 1964) into the elder years. In 2011, the oldest Baby Boomers turned 65, and by 2030 the entire cohort will be 65 years and older, resulting in an elder population of 74.1 million. At that point, over one in five people in the U.S. will be over 64 years of age.<sup>ii</sup>

In general, Texas has been experiencing a similar demographic shift. However, in true Texas character, our population aging is somewhat unique. In Texas, the aging of the Baby Boom generation is projected to yield an elder population of 5.9 million, or 19.4 percent of the state's total population in 2030. At this point, just under one in five people in Texas will be over 64 years of age. Even while adding record numbers of elder population, Texas remains one of the youngest states in the country. Regardless, the social and economic implications of population

### Aging and the Demographic Transition Model<sup>i</sup>

Utilizing two demographic characteristics – the birth rate and death rate – the Demographic Transition model describes a population's growth through stages as the population develops economically. Each stage is characterized by a specific relationship between the birth and death rates.

<u>Stage 1. High birth rate, high death rate</u>. Characterizes most of the world prior to the Industrial Revolution. Populations are fairly constant but are greatly impacted by events such as war and pandemics.

<u>Stage 2. High birth rate, declining death rate</u>. Characterizes many of the least developed countries today. Modern medicine lowers death rates, among children then among the elderly, while birth rates remain high, resulting in rapid population growth.

<u>Stage 3. Declining birth rate, declining death rate</u>. Characterizes most developing countries today. Birth rates decline as economies improve and women gain access to education and contraception. Population growth continues due to demographic momentum but at slower rates.

<u>Stage 4. Low birth rate, low death rate</u>. Population growth stabilizes. Countries in this stage typically have stronger economies, higher educational attainment, robust labor force participation, and fertility rates of around 2 children per woman. Characteristic of most developed countries today. The current demographic transition stage for the U.S.

<u>Stage 5. Lower birth rate, higher death rate</u>. Fertility rates drop below 2 children per woman, and the elderly population surpasses the younger population, resulting in population decline. Some countries thought to be on the verge of entering Stage 5 include, Japan, Greece, and Germany.

A shortcoming of this Model is that it does not account for political or social influences, namely migration, which can have a significant impact on population characteristics.

Box 1-1. Aging and the Demographic Transition Model

aging, whether at the national or state level, will be of great importance to policy makers, the economy, and communities as a whole.

This brief is the first of a series entitled Aging in Texas. In this brief, we examine four key indicators of population aging: 1) share of the population aged 65 years and older, 2) median age, 3) rate of growth of the older population, and 4) the elder-child ratio. We use these indicators to compare aging in Texas to that of the U.S. and other states and to explore how Texas remains among the youngest states in the country.

### About the Data

All references to the older or elder population apply to those aged 65 years and older. The data included in this report are drawn primarily from four sources: the 2000<sup>iii</sup> and 2010 U.S. decennial censuses,<sup>iv</sup> the 2014 U.S. Census Bureau population estimates,<sup>v</sup> and the 2014 Vintage Texas Demographic Center (TDC) population projections using the 2000-2010 migration scenario.<sup>vi</sup> Please refer to the following link for additional details on the TDC projections methodology. <u>http://</u> <u>demographics.texas.gov/Data/TPEPP/Projections/</u> <u>Methodology.pdf</u>

### Numerical Growth and Share of the U.S. Older Population

### The older population is growing faster in Texas than in the nation.

The older population in the U.S. has grown by 32.2 percent (11.3 million), from nearly 35.0 million in 2000 to 46.2 million in 2014. Texas has the third largest elderly population and share of the total U.S. elderly population. The older population in

Texas grew at a rate even faster than the nation's. The Texas older population grew by 49.5 percent (over 1.0 million), from nearly 2.1 million in 2000 to nearly 3.1 million in 2014. Between 2000 and 2014, only California added more elder population than Texas, and only California and Florida have larger older populations than Texas. As illustrated in Table 1, the older population in California was estimated at nearly 5.0 million, and Florida had an older population of nearly 3.8 million in 2014.

Texas also increased its share of the U.S. older population between 2000 and 2014. During this time, the Texas share of the U.S. older population increased from 5.9 to 6.7 percent. Again, only California and Florida had greater shares of the elderly population when compared to Texas. California and Florida respectively had 10.8 percent and 8.2 percent of the total U.S. older population in 2014. See Table 1 for rankings of the top 10 states with the largest older populations and their increase in the number and share of the U.S. older population between 2000 and 2014.

#### **Proportion Growth among the Older Population**

Its share of older population makes the U.S. an old population, whereas Texas is one of the youngest states.

One key indicator of population aging is an increase in the proportion of a population within older age groups. In the study of demography, populations with 10.0 percent or more people 65 years old and over are considered "old."<sup>vii</sup> By these standards, the U.S. has been considered an aging population for decades. The country's older population has made up at least 10.0 percent of the population since before 1980. The country's share of those 65 years and older increased from 12.4 percent to 14.5 percent between 2000 and 2014.

Using this same definition, only Utah and Alaska are considered young states in 2014. These two states have older populations that are less than 10.0 percent of their total state populations. Florida has the greatest percentage of population 65 years and older. The older population in Florida increased from 17.6 percent to 19.1 percent between 2000 and 2014. Other states with large shares of elderly populations include Maine, West Virginia, and

	2000					2010				2014				
Rank	State	Total	Aged 65 and Older	% of those Aged 65 and Older in the US	State	Total	Aged 65 and Older	% of those Aged 65 and Older in the US	State	Total	Aged 65 and Older	% of those Aged 65 and Older in the US		
1	CA	33,871,648	3,595,658	10.3%	CA	37,253,956	4,246,514	10.5%	CA	38,802,500	4,993,047	10.8%		
2	FL	15,982,378	2,807,597	8.0%	FL	18,801,310	3,259,602	8.1%	FL	19,893,297	3,791,544	8.2%		
3	NY	18,976,457	2,448,352	7.0%	NY	19,378,102	2,617,943	6.5%	ТΧ	26,956,958	3,099,081	6.7%		
4	ТΧ	20,851,820	2,072,532	5.9%	ТХ	25,145,561	2,601,886	6.5%	NY	19,746,227	2,898,094	6.3%		
5	PA	12,281,054	1,919,165	5.5%	PA	12,702,379	1,959,307	4.9%	PA	12,787,209	2,134,521	4.6%		
6	ОН	11,353,140	1,507,757	4.3%	ОН	11,536,504	1,622,015	4.0%	ОН	11,594,163	1,799,169	3.9%		
7	IL	12,419,293	1,500,025	4.3%	IL	12,830,632	1,609,213	4.0%	IL	12,880,580	1,788,533	3.9%		
8	MI	9,938,444	1,219,018	3.5%	МІ	9,883,640	1,361,530	3.4%	MI	9,909,877	1,530,052	3.3%		
9	NJ	8,414,350	1,113,136	3.2%	NC	9,535,483	1,234,079	3.1%	NC	9,943,964	1,463,362	3.2%		
10	NC	8,049,313	969,048	2.8%	NJ	8,791,894	1,185,993	2.9%	NJ	8,938,175	1,313,503	2.8%		
-	US	281,421,906	34,991,753	100.0%	US	308,745,538	40,267,984	100.0%	US	318,857,056	46,243,211	100.0%		
Source	: U.S. Ce	nsus Bureau, 2	2000 and 201	0 Decennial	Census	ses, U.S. Censu	s Bureau, 201	4 Populatio	n Estim	ate by State				

Table 1. States with the Greatest Number of Population Aged 65 Years and Older, 2000, 2010, 2014.

Vermont. Even though Texas has a large number of older residents, these residents comprise 11.5 percent of the state's population. Consequently, compared to Texas, only Utah (with 10.0 percent) and Alaska (with 9.4 percent) have smaller proportions of their populations that are 65 years and older. See Table 2 for rankings of the states with the highest and lowest percent of their state populations who are over age 64.

## Texas is one of the youngest states, but it's getting older.

Figure 1 shows the number and share of Texas's older population between 1950 and 2050. This chart reveals Texas reached the 10 percent "old population" benchmark in 1990, when the older population made up 10.1 percent of the total state population. In 2000, the Texas older population fell

	2000				2010				2014				
Rank	State	Total	Aged 65 and Older	% of Total	State	Total	Aged 65 and Older	% of Total	State	Total	Aged 65 and Older	% of Total	
1	FL	15,982,378	2,807,597	17.6%	FL	18,801,310	3,259,602	17.3%	FL	19,893,297	3,791,544	19.1%	
2	PA	12,281,054	1,919,165	15.6%	WV	1,852,994	297,404	16.0%	ME	1,330,089	243,507	18.3%	
3	WV	1,808,344	276,895	15.3%	ME	1,328,361	211,080	15.9%	WV	1,850,326	328,612	17.8%	
4	IA	2,926,324	436,213	14.9%	PA	12,702,379	1,959,307	15.4%	VT	626,562	106,199	16.9%	
5	ND	642,200	94,478	14.7%	IA	3,046,355	452,888	14.9%	MT	1,023,579	171,155	16.7%	
46	ТΧ	20,851,820	2,072,532	9.9%	CO	5,029,196	549,625	10.9%	CO	5,355,866	680,015	12.7%	
47	CO	4,301,261	416,073	9.7%	GA	9,687,653	1,032,035	10.7%	GA	10,097,343	1,251,538	12.4%	
48	GA	8,186,453	785,275	9.6%	ТΧ	25,145,561	2,601,886	10.3%	ТΧ	26,956,958	3,099,081	11.5%	
49	UT	2,233,169	190,222	8.5%	UT	2,763,885	249,462	9.0%	UT	2,942,902	295,260	10.0%	
50	AK	626,932	35,699	5.7%	AK	710,231	54,938	7.7%	AK	736,732	69,413	9.4%	
-	US	281,421,906	34,991,753	12.4%	US	308,745,538	40,267,984	13.0%	US	318,857,056	46,243,211	14.5%	
Source	: U.S. Ce	nsus Bureau, 2	2000 and 2010	) Decennia	al Censu	ses, U.S. Censu	s Bureau, 201	4 Populat	ion Estin	nate by State			

Table 2. States with the Highest and Lowest Percent of Population Aged 65 Years and Older, 2000, 2010, 2014.



**Figure 1.** Population 65 Years and Older by Size and Percent of Total Population, Texas, 1950—2050.

Source: U.S. Census Bureau, State Population Estimates, 2014, U.S. Census Bureau, 1950-2010 Decennial Censuses, Texas Demographic Center, 2014 Population Projections, 1.0 Migration Scenario slightly below 10.0 percent to 9.9 percent but has steadily increased since then. In 2000, Texans 65 years and older made up 10.3 percent of the state population. By 2014 Texas's older population increased its share to 11.5 percent of the total state population. Despite this increase, Texas still ranks among the youngest states based on this measure.

The Texas Demographic Center (TDC) projections suggest the older population in Texas will continue to increase its share of the state population. These projections, employing the 1.0 migration scenario, indicate the older population's share will rise to nearly 16.0 percent in 2030, when the entire Baby Boom generation will have aged to 65 years and over, and further increase to 17.4 percent at the end of the projections horizon in 2050.

#### **Median Age**

### The U.S. is an old population by median age, but Texas is one of the youngest states.

Populations can also be described as "young" or "old" based on their median age. Median age is the age at which half of the population is older and half is younger. Demographers often classify a population as young if its median age is under 20 years, old if its median age is 30 and over, and intermediate if it falls between 20 and 30 years. Increases in the median age determine whether or not a population is aging.

The U.S. was determined to be an old population by median age decades ago. The U.S. median age reached 30.2 years in 1950. The high fertility years of the Baby Boom brought the median age back below 30 during the 1960s, but it began rising during the 1970s, reaching 30.0 in 1980. In 2014, the median age in the U.S. was 37.6 years.

Between 2000 and 2014, most states saw an increase of at least 2.5 years in their median age. In terms of median age, Maine is the oldest state in the nation, and it is also aging. Maine experienced the greatest increase in their median age, rising from 38.6 in 2000 to 44.2 years in 2014.

According to median age, Texas once again ranks among the youngest states. In 2000, the median age in Texas was 32.2 years. Only Utah, at 27.1 years, had a lower median age than Texas. By 2014, the median age in Texas had risen to 34.2 years, and two states now have lower median ages than Texas – Alaska at 33.3 years and Utah at 30.5 years. In 2014, all U.S. states now have old populations. See Table 3 for state rankings by median age for 2000, 2010, and 2014.

	2000			2010		2014			
Rank	State	Median Age	Rank	State	Median Age	Rank	State	Median Age	
1	West Virginia	38.9	1	Maine	42.7	1	Maine	44.2	
2	Florida	38.7	2	Vermont	41.5	2	New Hampshire	42.6	
3	Maine	38.6	3	West Virginia	41.3	3	Vermont	42.6	
4	Pennsylvania	38.0	4	New Hampshire	41.1	4	West Virginia	42.0	
5	Vermont	37.7	5	Florida	40.7	5	Florida	41.8	
46	California	33.3	46	California	35.2	46	Idaho	35.7	
47	Idaho	33.2	47	Idaho	34.6	47	North Dakota	34.9	
48	Alaska	32.4	48	Alaska	33.8	48	Texas	34.2	
49	Texas	32.3	49	Texas	33.6	49	Alaska	33.3	
50	Utah	27.1	50	Utah	29.2	50	Utah	30.5	
-	United States	35.3	-	United States	37.2	-	United States	37.7	
Source: U	I.S. Census Burea	iu, 2000 and 20	10 Decen	nial Censuses, U.S. Ce	nsus Bureau, 2	014 Popula	ition Estimate by Sta	te	

Table 3. States with the Highest and Lowest Rankings of Median Age, 2000, 2010, 2014

#### The Younging Effect of the Energy Boom

In spite of the national aging trend, one state became "younger" between 2000 and 2014. North Dakota's median age dropped from 36.2 years to 34.9 years from 2000 to 2014. A similar trend was seen for a number of Texas counties. Driving the younging of these two regions of the country is the recent discovery of shale gas reserves, specifically the Parshall oil field in North Dakota and the Cline Shale and Eagle Ford Shale in Texas. Indeed, West Texas counties with oil and gas extraction booms experienced an average drop in the median age of 2.3 years.

The Texas Panhandle was another area in Texas to buck the aging trend. Texas Counties in this area experienced an average drop of 3.3 years in their median ages. This area of Texas has experienced high inmigration of predominately Hispanic workers seeking employment in meat and poultry packing plants in the region. Migrants, especially Hispanics, tend to be of a younger age structure, leading to shifts in the age distribution of the local populations. Therefore, we see that economic development, such as new oil and gas extraction facilities or animal production plants, is associated with the younging of these areas. However, it is the younger age structure of the migrants seeking employment in these industries that is driving the shift in age structure of the local populations.

If migrants settle permanently and raise families in these areas, we may see a continued younging effect resulting from the increased births rates. However, the younging effect can be fleeting if migrants leave after the boom.

More can be found on the demographic impact of migrants in White et al. (2015). VIII

Box 1-2. The Younging Effect of the Energy Boom

#### Rate of Growth among the Older Population

Another indicator of the aging of a population is the rate of growth of the older population, especially when compared to the younger population. In Texas, the older population is outpacing the growth of the state overall as well as that of younger population segments. Additionally, the oldest of the old are also growing at a faster rate than the youngest of the older population.

### Texas's older population is growing faster than the state as a whole.

The state's high growth rate is driving the increasing number and share of the older population in Texas. No state added more people than Texas between 2000 and 2014. Additionally, Texas had the fourth fastest growth rate in the nation during this same time. That said, the Texas older population grew at an even faster pace than the state population. Between 2000 and 2014, Texas added over 6.1 million people and grew at a rate of 29.3 percent. Over 1.0 million of the people added were older Texans, producing a 49.5 percent growth rate for this group. This significant increase in such a short time is largely driven by the aging of the Baby Boom generation. In 2011, the oldest Baby Boomers turned 65; 103,776 seniors were added to the population in that year alone. Another 140,081 were added in 2012, 127,305 in 2013, and 126,033 in 2014. The growth seen in the last year equates to over 345 new seniors added to the older population each day between 2013 and 2014. The state is said to add about 1,000 people a day to the population. By this estimation, 1 in 3 individuals added each day is 65 years and older.

### In the U.S. and in Texas, the older population is growing faster than the younger population.

Between 2000 and 2014, the older population grew faster than younger age groups. Since 2000, the older population in the U.S. increased by 11.3 million, or 32.2 percent, while those under 65 increased by 10.6 percent during this same period.

	20	00	20	10	20	14	2000-2014		
Age Group	Population	Percent	Population	Percent	Estimate	Percent	Absolute Change	Percent Change	
Under 18	5,886,759	28.2	6,865,824	27.3	7,115,614	26.4	1,228,855	20.9	
18 to 64	12,892,529	61.8	15,677,851	62.3	16,742,263	62.1	3,849,734	29.9	
65 and Older	2,072,532	9.9	2,601,886	10.3	3,099,081	11.5	1,026,549	49.5	
Total	20,851,820	100.0	25,145,561	100.0	26,956,958	100.0	6,105,138	29.3	
Source: U.S. (	Census Bureau,	2000 and 201(	) Censuses, U.S	. Census Burea	u, 2014 Popula	tion Estimate l	by State		

Table 4. Texas Population by Age Group, 2000 to 2014

In Texas, the older population is growing at an even faster rate. As can be seen in Table 4, between 2000 and 2014, older Texans increased by over 1.0 million, or 49.5 percent. While the younger population, those under 65, added more people (5.1 million) during this time, they grew at the slower rate of 27.0 percent.

Texas Demographic Center (TDC) population projections show a continuation of these trends. The total state population is projected to more than double in size between 2010 and 2050 (see Table 5). The total Texas population is projected to grow from 25.1 million to nearly 54.4 million, or by 116.2 percent. These projections indicate the older population will more than double in size between 2010 and 2030 to nearly 6.0 million. By 2050, nearly 3.5 million more are projected to be added to the Texas elder population, leading to a 262.9 percent growth rate between 2010 and 2050.

TDC projections also suggest a strong positive association between age and rate of growth. In

other words, the older the age group, the faster their growth throughout the projection horizon. No other age group is projected to grow as fast as those 65 and older. Throughout the projections horizon, the older population is projected to grow by 262.9 percent, peaking as the bulk of the Baby Boomers age into the elder population in 2030 and leveling off as they age into higher mortality years. The young adult and middle-aged populations are also projected to double in size by 2050, growing by 105.1 percent and 112.5 percent, respectively. In contrast, TDC projections indicate the youngest age group, those under 18 years of age, will not achieve this accelerated growth rate throughout the projections horizon. Rather, the youngest population segment is projected to grow from nearly 6.9 million in 2010 to 12.3 million by 2050, or a growth rate of 79.6 percent.

The fast growth of the older population is projected to increase its numbers and its share of the total state population. Figure 4 depicts the 2010 – 2050

Age Group	2010	2020	2030	2040	2050	2010-2050 Percent Change				
Under 18	6,865,824	7,753,883	8,939,615	10,538,300	12,327,957	79.6				
18 to 44	9,644,824	11,576,732	13,983,745	16,696,120	19,777,640	105.1				
45 to 64	6,033,027	7,197,280	8,302,253	10,138,091	12,820,835	112.5				
65 and Older	2,601,886	4,014,083	5,929,471	7,583,385	9,442,865	262.9				
Total Population	25,145,561	30,541,978	37,155,084	44,955,896	54,369,297	116.2				
Source: US Census Bureau, 2010 Census, Texas Demographic Center, 2014 Projections, 1.0 Migration Scenario										

Table 5. Population Projections by Age Group, 2010 to 2050





projected populations of those under 65 and those 65 and over and their share of the state population. In 2014, the older population makes up 11.5 percent of the total state population. By the end of the projections horizon, older persons are projected to make up 17.4 percent of the total population. TDC projections indicate the younger population's share of the total population will decrease from 88.5 percent to 82.6 percent between 2014 and 2050. These projections suggest a trend towards convergence of the proportions of the population made up by those 65 and over and those younger than 65. However, it would be long after 2050 when the older population would outnumber the younger population, if ever, in Texas.

# The oldest old population is growing faster than the youngest old population.

Rates of growth also differ among the elder population. Specifically, the oldest old, those 85 years and over, are growing at faster rates than the total older population. This trend, where the oldest old are growing faster than the rest of the elder

Age Group	2010	2020	2030	2040	2050	2010-2050 Numeric Change	2010-2050 Percent Change
65 and Older	2,601,886	4,014,083	5,929,471	7,583,385	9,442,865	6,840,979	262.9
65-69	853,100	1,375,699	1,779,930	2,019,401	2,519,575	1,666,475	195.3
70-74	619,156	1,081,697	1,569,556	1,747,404	2,136,439	1,517,283	245.1
75-79	477,245	714,641	1,181,376	1,568,513	1,830,330	1,353,085	283.5
80-84	347,206	440,399	794,965	1,186,724	1,365,653	1,018,447	293.3
85+	305,179	401,647	603,644	1,061,343	1,590,868	1,285,689	421.3
Total Population	25,145,561	30,541,978	37,155,084	44,955,896	54,369,297	29,223736	116.2

Source: US Census Bureau, 2010 Census, Texas State Data Center, 2014 Projections, 1.0 Migration Scenario

 Table 6. Population Projections for Those Aged 65 Plus, 2010 to 2050

population, is indicative of deep population aging.

Between 2000 and 2014, the growth rate for those 85 plus was 51.9 percent compared to a growth rate of 49.2 percent among those 65 to 84 years of age. Table 6 illustrates the 85 plus population is projected to continue to outpace the growth of the youngest of the older population through 2050. This trend will have significant implications on a number of policy areas but especially those related to health services and the living arrangements of the elder population, as the likelihood of disability and the need for nursing home care rises sharply after age  $85.^{^{\mbox{ix}}}$ 

### **Aging Index**

### The U.S. is an old population by its elder-child ratio, but Texas is one of the youngest states.

Another indicator of population aging is the aging index, or the elder-child ratio. The aging index is defined as the ratio of elders (individuals 65 years and older) to children (youths under the age of 15). Populations with aging index scores of 15 or less are

	2000			2010		2014					
Rank	State	A.I. Score	Rank	State	A.I. Score	Rank	State	A.I. Score			
1	Florida	92.52	1	Florida	99.24	1	Maine	115.46			
2	West Virginia	84.13	2	Maine	94.80	2	Florida	113.23			
3	Pennsylvania	79.32	3	West Virginia	93.19	3	Vermont	107.62			
4	Maine	74.55	4	Vermont	87.37	4	West Virginia	104.41			
5	Rhode Island	73.56	5	Pennsylvania	86.15	5	New Hampshire	97.72			
46	Colorado	45.35	46	Colorado	53.61	46	Idaho	64.81			
47	Georgia	43.18	47	Georgia	49.82	47	Georgia	60.26			
48	Texas	42.21	48	Texas	45.34	48	Texas	52.02			
49	Utah	31.99	49	Alaska	35.28	49	Alaska	44.38			
50	Alaska	22.59	50	Utah	33.65	50	Utah	38.67			
	United States 58.07 United States 65.77 United States 75.72										
Source: 2014 Po	Source: Calculations derived by Office of the State Demographer from U.S. Census Bureau 2000 and 2010 Decennial Censuses and 2014 Population Estimates										

Table 7. State Rankings by Aging Index Score (A.I.), 2000, 2010, 2014

described as young, whereas populations with aging index scores of 30 or greater are considered old. In 2000, all U.S. states, with the exception of Alaska, were considered old by this measure. By 2014, every state in the U.S. had an old aging index score. In some cases, states had more elders than children, yielding aging index scores exceeding 100. This was the case for Maine, Florida, Vermont, and West Virginia, the top four states with the highest aging index scores in 2014. As seen with other measures of aging, Texas once again ranks among the youngest states. As Table 7 illustrates, since 2000 Texas has been ranked the third youngest state, with aging index scores starting at 42.2 in 2000 and increasing to 52.0 in 2014. In essence, the aging index score for Texas indicates there are approximately two children for every older adult.

#### **Conclusion and Discussion**

This brief compared Texas with the U.S. and other states on four key indicators of population aging. In general, Texas is following the population aging trend seen throughout the U.S. and other states. However, despite clear indications of population aging, Texas remains one of the youngest states in the country based on a number of indicators of population aging. Although Texas added the second highest number of elder population between 2000 and 2014, Texas remains one of the youngest states as defined by median age, proportion of older population, and the aging index. The one indicator that clearly shows Texas is aging is the rate of growth of the older population in the state. Texas's older population is growing at a faster rate than the U.S. older population, and it is growing even faster than the overall state population. Among the elder population, the oldest old are growing at the fastest rate, indicative of deep population aging.

One key factor that is contributing to Texas's youth is its migrant population and booming economy. We saw a "younging" effect in a number of Texas counties with oil and gas extraction booms and animal processing plants. States with similar economic conditions also experienced this "younging" effect. Our migration series has also highlighted the impact foreign born immigrants can have on our state's age composition.

A number of trends indicate Texas is likely to continue to age while at the same time remaining one of the youngest states in the country. Research has shown trends toward increasing numbers of relatively young migrants and their families continuing to move to the state. The migration of large numbers of young people and their children from other states will work to keep our median age lower and increase the proportion of the population under 65 years of age.<sup>\*</sup> The migration of young immigrant families is one tactic that many aging countries around the world are using to curb their population aging while at the same time boosting their economies. Research also indicates increasing birth rates among certain subsets of the population.<sup>xi</sup> Again, an increasing number of children in the population would work to decrease our elder-child ratio and further reduce our state's median age. Another demographic trend occurring in Texas that could work to keep our state younger relative to other states is our increasing racial/ ethnic diversity.<sup>xii</sup> The age distribution and fertility of racial/ethnic minorities would have a similar "younging" effect on our state population. One recent trend with otherwise negative implications could also work to keep our state relatively young. That trend is an increase in death rates among middle aged white males.<sup>xiii</sup> It will be important to evaluate the implication of this trend, especially in the less diverse and more rural areas of the state.

In subsequent reports in this series, we will explore the age-sex and race/ethnicity composition of the older population, its geographic distribution, and the policy areas most likely to be impacted by shifts in the Texas elder population. <sup>i</sup> Demographic Transition Model, https://www.un.org/esa/population/publications/bulletin42\_43/weinbergermirkin.pdf

<sup>ii</sup> Vincent, G.K. and Velkoff, V.A. 2010. The next four decades, the older population in the United States: 2010 to 2050. Current Population Reports, P25-1138, U.S. Census Bureau, Washington, DC.

<sup>iii</sup> U.S. Census Bureau, Population Division. 2000. Decennial Census data, U.S. Census Bureau, Washington, DC.

<sup>iv</sup> U.S. Census Bureau, Population Division. 2010. Decennial Census data, U.S. Census Bureau, Washington, DC.

<sup>v</sup> U.S. Census Bureau, Population Division. 2015. Annual estimates of the resident population for selected age groups by sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2014, U.S. Census Bureau, Washington, DC.

<sup>vi</sup> Texas State Data Center. 2014. Projections of the population of Texas and counties in Texas by age, sex, and race/ ethnicity for 2010-2050. <u>http://demographics.texas.gov/Data/TPEPP/Projections/Methodology.pdf</u>

<sup>vii</sup> Siegel, J.S. and Swanson, D.A. 2004. The methods and materials of demography. Second Edition. NY: Elsevier Academic Press.

<sup>viii</sup> White, S. et al. 2015. Introduction to migration in Texas. UTSA, Texas Demographic Center, San Antonio, TX. <u>http://</u> <u>demographics.texas.gov/Resources/Publications/2015/2015-03-04\_Intro\_to\_Mig.pdf</u>

<sup>ix</sup> U.S. Census Bureau. 2014. 65+ in the United States: 2010, U.S. Government Printing Office, P23-212, Washington, DC.

<sup>x</sup> White, S. et al. 2016. Introduction to Texas domestic migration. UTSA, Texas Demographic Center, San Antonio, TX. <u>http://demographics.texas.gov/Resources/Publications/2016/2016\_04-13\_DomesticMigration.pdf</u>

<sup>xi</sup> Hamilton, B.E. et al. 2015. Births: Preliminary data for 2014. National vital statistics reports, vol. 64, no. 6. National Center for Health Statistics, Hyattsville, MD.

<sup>xii</sup> White, S. et al. 2015. The foreign-born population in Texas: Sources of growth. UTSA, Texas Demographic Center, San Antonio, TX. <u>http://demographics.texas.gov/Resources/Publications/2015/2015\_10\_07\_ForeignBorn.pdf</u>

<sup>xiii</sup> Case, A. and Deaton, A. 2015. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21<sup>st</sup> century. PNAS, 112(49), 15078-15083.

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