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Nazrul Hoque
Hobby School of Public Affairs
University of Houston
mnhoque@uh.edu

Savannah L. Sipole
Department of Political Science
Hobby School of Public Affairs
University of Houston
ssipole@yahoo.com

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Nazrul Hoque, *University of Houston*
Savannah L. Sipole, *University of Houston*

This report provides population estimates for the State of Texas and describes its patterns of population change for 2010-2016, as of July 1, 2016. It shows the estimated population for the Council of Government Regions (COG), metropolitan statistical areas (MSA), counties, and places. It also presents data on components of population change, such as, natural increase, international migration, and domestic migration. Texas' population increased from 25,145,561 in 2010 to 27,862,596 in 2016. This is an increase of 2,717,035 persons or 10.8 percent between April 1, 2010 and July 1, 2016. This growth leads the nation in numerical increase. All three components; natural increase, domestic and international migration played important roles for this growth.

Keywords: population estimate, natural increase, domestic migration, international migration.

Introduction

Population Estimates are among the most important sources of demographic data. In non-census years, population estimates provide demographic data regarding the size, distribution, and composition of the population by place of residence. Population estimates for the state, counties, and places are essential for planning different types of services, such as health care, schools, highways, water, and sewer. Planning for health services requires accurate information on the number of persons by age (for services targeting children or elderly), sex, marital status, and place of residence. Population estimates provide a basis for allocating resources between areas in relation to population size in non-census years (Shryock and Siegal, 1980; Bryan, 2004). The federal government uses the Census Bureau's national and subnational population estimates for program evaluation, needs assessment, and distribution of billions of dollars to the states. The American Community Survey (ACS) and Current Population Survey (CPS) also use the Census Bureau's population estimates to control their surveys. These estimates are also necessary to provide denominators to compute many types of rates and ratios, such as birth rates, death rates, labor force participation rates, school enrollment rates, dependency ratios, and sex ratios in non-census years. Population estimates play an important role in market analysis, public facility and environmental planning, and form a major basis for determining the present and future markets for a variety of goods, services, and other aspects of private-sector planning and marketing efforts (Murdock and Ellis, 1991). These current numbers are often critical elements in the analyses leading to decisions of whether or not to build a new school, fire station, library, hospital, a shopping mall, or highway (Siegel, 2002). Thus, population estimates make an important contribution to the activities of governments, organizations, and businesses in non-census years (Hoque, 2012).

Population Change in Texas, 2010-2016

This report provides population estimates for the State of Texas and describes the patterns of population change for 2010-2016 for the State of Texas, as of July 1, 2016. It also provides estimated population for the Council of Government Regions (COG), metropolitan statistical areas (MSA), counties, and places as of July 1, 2016. It also presents data on components of population change, such as, natural increase, international migration, and domestic migration. Patterns of population change are examined for the Council of Government Regions (COG), Metropolitan Statistical Areas (MSA), Counties, and Places.

Texas remains one of the fastest growing states in the United States; although, the 2016 population estimates suggest that the annual rate of population growth in Texas has decreased slightly from 2015 to 2016 compared with annual growth rate from 2013-2016. Texas' population increased from 25,145,561 in 2010 to 27,862,596 in 2016. This is an increase of 2,717,035 persons or 10.8 percent between April 1, 2010 and July 1, 2016. This growth leads the nation in numerical increase as illustrated in the table given below (Table 1). For perspective, this increase in Texas is slightly higher than the combined 2016 total populations of Wyoming (585,501), Vermont (624,594), District of Columbia (681,170), and Alaska (741,894) (see Appendix Table 1).

In comparison, California experienced the second highest growth of 1,996,061 persons, followed by Florida (1,811,129 persons), Georgia (622,718 persons), and North Carolina (611,718 persons) during the same period.

Table 1. Ranked by Numerical Population Change from 2010-2016 for top 10 States

State	Census Count 2010	Est. July 2016	Numerical Change	Percent Change
Texas	25,145,561	27,862,596	2,717,035	10.8
California	37,253,956	39,250,017	1,996,061	5.4
Florida	18,801,310	20,612,439	1,811,129	9.6
Georgia	9,687,653	10,310,371	622,718	6.4
North Carolina	9,535,483	10,146,788	611,305	6.4
Washington	6,724,540	7,288,000	563,460	8.4
Arizona	6,392,017	6,931,071	539,054	8.4
Colorado	5,029,196	5,540,545	511,349	10.2
Virginia	8,001,024	8,411,808	410,784	5.1
New York	19,378,102	19,745,289	367,187	1.9

Source: U.S. Census Bureau. Detailed data can be found at HCPP webpage at http://www.uh.edu/class/hcpp/.

In terms of percent population growth, Texas ranked second with an increase of 10.8 percent. North Dakota ranked first with an increase of (12.7 percent), followed by Utah (10.4 percent), Colorado (10.2 percent), and Florida (9.6 percent) (see Table 2).

Table 2. Ranked by Percent Population Change from 2010-2016 for top 10 States

State	Census Count 2010	Est. July 2016	Numerical Change	Percent Change
North Dakota	672,591	757,952	85,361	12.7
Texas	25,145,561	27,862,596	2,717,035	10.8
Utah	2,763,885	3,051,217	287,332	10.4
Colorado	5,029,196	5,540,545	511,349	10.2
Florida	18,801,310	20,612,439	1,811,129	9.6
Nevada	2,700,551	2,940,058	239,507	8.9
Arizona	6,392,017	6,931,071	539,054	8.4
Washington	6,724,540	7,288,000	563,460	8.4
Idaho	1,567,582	1,683,140	115,558	7.4
South Carolina	4,625,364	4,961,119	335,755	7.3

Source: U.S. Census Bureau. Detailed data can be found at HCPP webpage at http://www.uh.edu/class/hcpp/.

The data in Appendix Table 1 suggest that the annual rate of population growth remained steady between 2010-2013, increasing slightly between 2013 and 2015, and decreasing slightly between 2015 and 2016. From 2010-2012, Texas' population increased at an annual rate of 1.6 percent, from 2012 to 2013 by 1.5 percent, from 2013 to 2015 by 1.8 percent, from 2015 to 2016 by 1.6 percent.

What really makes this growth pattern remarkable is the percentage of growth due to domestic migration. While most of the states are experiencing domestic out-migration, a significant portion of the population increase in Texas can be attributed to domestic in-migration. Texas ranked second with an increase of 888,278 persons due to domestic net in-migration, Florida ranked first with an increase of 912,057 persons during the same period. In terms of international migration, Texas ranked fourth with an increase of 508,843 persons, California ranked first with an increase of 826,554 persons, followed by New York with an increase of 699,448 persons, and Florida with an increase of 695,906 persons. Natural increase is still the most significant component of population growth in Texas amounting to 48.6 percent of the increase since 2010. However, domestic migration is the next highest contributor at 32.7 percent, followed by international migration at 18.7 percent. These changes are shown in Appendix Table 2**.**

The rate of domestic migration into Texas does not appear to be subsiding anytime soon. Why then are large numbers of people coming from other regions of the country and looking to Texas as a destination of choice? The primary reason may simply be the growing economy coupled with a stable and reasonably priced real estate market in comparison to other regions of the country.

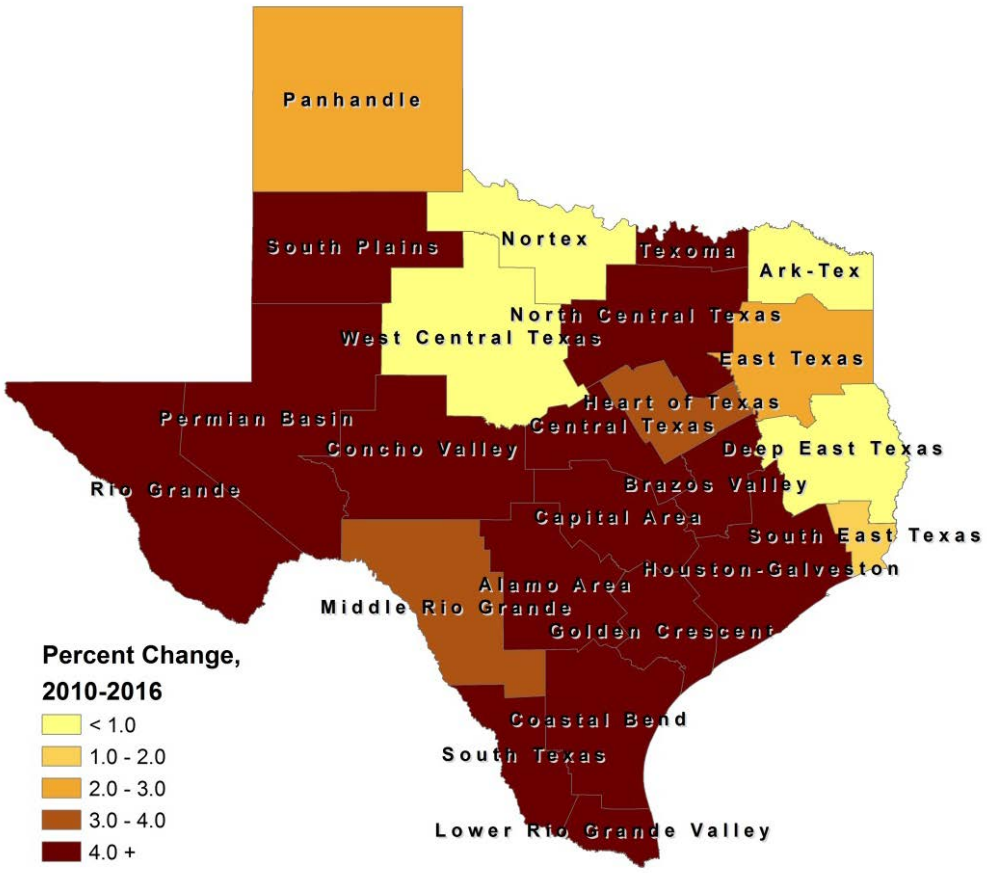
The distribution of populations in Texas are uneven, some regions are densely populated while others are sparsely populated. The change in population during 2010-2016 has not been distributed evenly throughout Texas either. Some parts of the State have grown rapidly, some have grown slowly, and others have declined. In the following sections we examine the patterns of population growth for the Council of Governments Regions, Metropolitan Statistical Areas (MSAs), Counties, and Places in Texas.

Population Change in Council of Government Regions in Texas, 2010-2016

In this section we examine the patterns of population change in Council of Government (COG) regions in Texas. There are 24 Council of Governments (COG) regions in Texas (see Figure 1). The populations in 2010 and 2016 for Council of Governments regions were derived by summing the appropriate county populations. All but one regions experienced population growth during the post-2010. The Houston-Galveston COG gained the most population (856,762), followed by the North Central Texas COG (811,608), Capital Area COG (346,603), and the Alamo Area COG (292,930). Nortex is the only COG that saw a decline in population during the 2010-2016 period. The estimated population for 2011 to 2016 for Council of Government regions are given in Appendix Table 3.

In terms of percent population change, the fastest growing regions from 2010-2016 have been the Capital Area with an increase of 18.9 percent, it was followed by the Houston-Galveston with an increase of 14.1 percent, Permian Basin with an increase of 13.9 percent, Alamo Area with an increase of 13.0 percent, North Central with a 12.4 percent, and Brazos Valley with a 9.2 percent increase. The slowest growing regions have been the Ark-Tex with a 0.6 percent increase, followed by Deep East with an increase of 0.8 percent, West Central with 1.0 percent, and South East with a 1.9 percent increase (Figure 1 and Appendix Table 4).

Figure 1. Percent Population Change in Texas Council of Governments Regions, 2010-2016



Population Change in Metropolitan Statistical Areas (MSA's) in Texas, 2010-2016

The patterns of population change in Metropolitan Statistical Areas (MSAs) are shown in Appendix Table 5. All comparisons are made using the 2013 definition for Metropolitan Statistical Areas as defined by the Office of Management and Budget (OMB, 2003). Twenty four metropolitan areas experienced population growth during the post 2010. Houston-The Woodlands-Sugar Land MSA gained the most population (852,054), followed by the Dallas-Fort Worth-Arlington MSA (807,109). Austin-Round Rock San increased by 340,116 persons, San Antonio-New Braunfels increased by 287,101 persons, and McAllen-Edinburg-Mission increased by 75,074 persons. Wichita Falls is the only MSA that lost population; it lost 572 persons during 2010-2016 (see Appendix Table 5).

In terms of percent population change from 2010 to 2016, Austin-Round Rock showed the largest gain, with an increase of 19.8 percent, followed by Midland MSA, with an increase of 18.8 percent, Odessa (14.8 percent) Houston-The Woodlands-Sugar Land (14.4 percent), San Antonio-New Braunfels (13.4 percent), and Dallas-Fort Worth-Arlington (12.6 percent). The slowest growing MSAs were Texarkana (1.4 percent), Longview (1.4 Percent), Beaumont-Port Arthur (1.7 percent), and Abilene (3.1 percent) (see Appendix Table 6).

All of the 25 Metropolitan Statistical Areas gained population increase due to international migration during the post 2010 period. Fourteen MSA gained population due to domestic migration while eleven (11) MSA lost population due to domestic migration. Houston-The Woodlands-Sugar Land gained the most population due to international migration (193,618), followed by Dallas-Fort Worth-Arlington (140,476), Austin-Round Rock (37,592), and San Antonio-New Braunfels (33,534). Dallas-Fort Worth-Arlington gained the most population due to domestic migration (308,808), followed by Houston-The Woodlands-Sugar Land (285,453), Austin-Round Rock (197,659), and San Antonio-New Braunfels (151,275). The level of net migration and the extent to which migration accounted for population growth varies widely among the metropolitan areas. The highest rates of net migration have been in Wichita Falls (574.5 percent), Sherman-Denison (86.5 percent), followed by Austin-Round Rock (69.2 percent), and San Antonio-New Braunfels (60.9 percent). During the same period, nine metropolitan areas experienced net out-migration.

Finally, the data in Appendix Table 6 suggest that for Metropolitan Statistical Areas, as was the case for Council of Governments regions, the fastest growing areas are generally those which have had both extensive natural increase and net in-migration. Natural increase played an important role in population growth for the following MSAs: Brownsville-Harlingen, Longview, El Paso, Beaumont-Port Arthur, Laredo, Texarkana, McAllen-Edinburg-Mission, and Killeen-Temple. More than 100 percent of the growth is due to natural increase. Clearly, although many of the State's metropolitan areas have experienced relatively rapid net in-migration, natural increase is still an essential element in the growth of rapidly growing areas.

Population Change in Counties in Texas, 2010-2016

In this section we summarize general patterns of population change evident across counties during the post 2010 period. There are 254 counties in Texas and it is not feasible to describe patterns of population change for individual counties. Due to space limitations we have provided

data for the ten fastest growing and declining counties (see Tables 3 and 4). Detailed data for all 254 counties are given in Appendix Tables 7 and 8.

The seven most populous counties contained, in combination, more than 50 percent of Texas' total population in 2016. These seven counties are Harris, Dallas, Tarrant, Bexar, Travis, Collin, and Hidalgo. Harris County remains the most populous county with approximately 4.6 million people, accounting for 16.5 percent of the State's population. Dallas, with 2.6 million people, was the second most populous county, accounting for 9.2 percent of the State's total population. Tarrant was the third largest county with 2.0 million population, or 7.2 percent of the total population. Almost two hundred least populous counties account for only 10.0 percent of Texas' total population.

Out of 254 counties, 158 counties gained population while 96 counties lost population during 2010-2016. The largest numerical increases in population from 2010 to 2016 were in the counties with the largest populations including Harris County with an increase of 497,469, Bexar County with an increase of 213,907, Tarrant County with an increase of 207,838, Dallas County with an increase of 206,845, Travis County with an increase of 175,057, and Collin with an increase of 157,244. Top 10 counties with largest numerical population growth are given in Table 3.

Out of 254 counties, 158 counties gained population while 96 counties lost population during 2010-2016. The largest numerical increases in population from 2010 to 2016 were in the counties with the largest populations including Harris County with an increase of 497,469, Bexar County with an increase of 213,907, Tarrant County with an increase of 207,838, Dallas County with an increase of 206,845, Travis County with an increase of 175,057, and Collin with an increase of 157,244. Top 10 counties with largest numerical population growth are given in Table 3.

Table 3. Ranked by Numerical Population Change from 2010-2016 for top 10 Counties

County	Census Count 2010	Est. July 2016	Numerical Change	Percent Change
Harris	4,092,459	4,589,928	497,469	12.2
Bexar	1,714,773	1,928,680	213,907	12.5
Tarrant	1,809,034	2,016,872	207,838	11.5
Dallas	2,368,139	2,574,984	206,845	8.7
Travis	1,024,266	1,199,323	175,057	17.1
Collin	782,341	939,585	157,244	20.1
Fort Bend	585,375	741,237	155,862	26.6
Denton	662,614	806,180	143,566	21.7
Williamson	422,679	528,718	106,039	25.1
Montgomery	455,746	556,203	100,457	22.0

Source: U.S. Census Bureau.

In terms of percent population change, Loving County gained the most (37.8 percent), followed by Hays County (30.1 percent), Kendall County (27.3 percent), Fort Bend County (26.6 percent) Williamson County (25.1 percent), Comal County (24.3 percent), Montgomery County

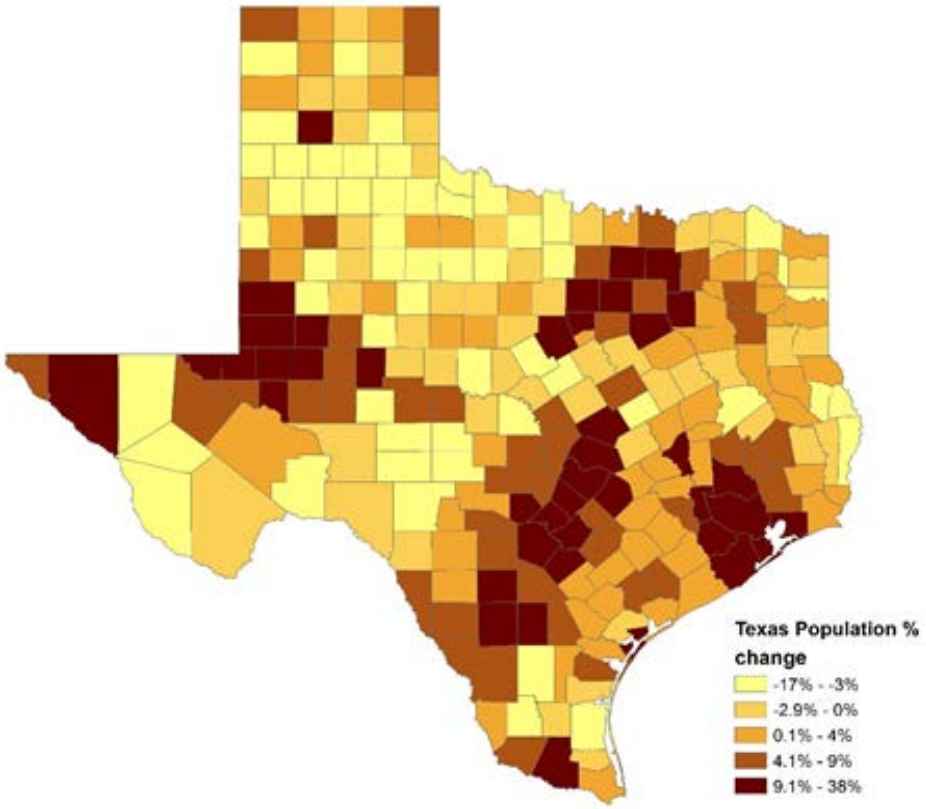
(22.0 percent), Denton County (21.7 percent), Andrews County (20.1 percent), and Collin County (20.1 percent). Top 10 counties with largest percent population growth are presented in Table 4 and Figure 2.

Table 4. Ranked by Percent Population Change from 2010-2016 for top 10 Counties

State	Census Count 2010	Est. July 2016	Numerical Change	Percent Change
Loving	82	113	31	37.8
Hays	157,107	204,470	47,363	30.1
Kendall	33,410	42,540	9,130	27.3
Fort Bend	585,375	741,237	155,862	26.6
Williamson	422,679	528,718	106,039	25.1
Comal	108,472	134,788	26,316	24.3
Montgomery	455,746	556,203	100,457	22.0
Denton	662,614	806,180	143,566	21.7
Andrews	14,786	17,760	2,974	20.1
Collin	782,341	939,585	157,244	20.1

Source: U.S. Census Bureau.

Figure 2. Percent Population Change in Texas Counties, 2010-2016



As mentioned before, 96 counties lost population during the period 2010-2016. The top 10 counties that lost most populations were:

County	Population Loss 2010-2016
Hale	2,010
Houston	978
Presidio	860
Anderson	724
Dawson	722
Lamb	702
Coryell	702
Mitchell	683
Red River	653
Wilbarger	643

Source: U.S. Census Bureau.

In terms of percent decline, the top 10 counties with largest percentage declines were:

County	Percent Population Decline 2010-2016
Terrell	17.5
Schleicher	11.7
Foard	11.5
Presidio	11.0
Dickens	10.6
Briscoe	10.0
Culberson	8.3
Floyd	8.2
Cochran	7.8
Donley	7.4

Source: U.S. Census Bureau.

International migration is an important factor in population growth and presents challenges for a population because of assimilation processes as opposed to natural increases. The top 10 counties with the largest numerical increases due to international migration were:

County	Population Increase due to International Migration 2010-2016
Harris	153,824
Dallas	65,895
Tarrant	34,552
Bexar	31,392
Travis	30,350
Fort Bend	23,750
Collin	22,744
El Paso	15,729
Denton	13,811
Hidalgo	9,548

Source: U.S. Census Bureau.

In terms of percent population growth due to international migration, Val Verde County gained the most followed by Bailey County, and Wichita County. For certain counties, international migration contributed more to the increase in population than did domestic migration during the period of 2010 - 2016. For other counties, domestic migration was the primary contributor to the population increase.

When just accounting for domestic migration, the top counties that experienced the largest numerical increase in populations were:

County	Population Increase due to Domestic Migration 2010-2016
Fort Bend	94,778
Bexar	90,947
Collin	90,722
Denton	89,508
Travis	76,500
Williamson	74,820
Tarrant	72,338
Montgomery	70,196
Harris	61,425
Hays	38,036

Source: U.S. Census Bureau.

In total, 130 counties gained population due to net in-migration. The top 10 counties that experience population increase due to net in-migration were:

County	Population Increase due to Net In-Migration 2010-2016
Harris	215,249
Bexar	122,339
Fort Bend	118,528
Collin	113,466
Tarrant	106,890
Travis	106,850
Denton	103,319
Williamson	81,035
Montgomery	78,837
Dallas	56,131

Source: U.S. Census Bureau.

In total, 123 counties lost population due to net out-migration. The top 10 Counties that lost most population due to net out-migration during the period of 2010-2016 were:

County	Population Decline due to Net Out-Migration 2010-2016
El Paso	16,644
Cameron	14,468
Potter	5,567
Webb	5,257
Jefferson	4,538
Coryell	4,463
Hale	3,328
Val Verde	3,299
Starr	2,914
Wichita	2,571

Source: U.S. Census Bureau.

Detailed data on component of population change for all 254 counties are given in Appendix Table 8.

Nevertheless, population growth from 2010 to 2016 has slowed compared to the 1990s and 2000 - 2010 when one examines the number of counties in Texas that have shown growth and decline in population. For example, during the period of 1990-2000, 68 counties experienced population decline and 89 counties experienced net outmigration. During the period of 2000 to 2010, the number of counties with population decline was 88 and the number of counties with net outmigration was 119. During the 2010-2016, 102 counties lost population and the number of counties with net outmigration was 126.

Population Change in Places in Texas, 2010-2016

Population change has also impacted the places and cities of Texas during 2010-2016. Given that there are more than 1,200 places in Texas, population change for individual places cannot be discussed in detail; therefore, only general population patterns for Texas cities and places will be described. Detailed data on population estimates for places can be obtained from Appendix Table 9.

It may be mentioned here that these estimated data are from the Census Bureau. In examining these data, it is important to note that some places may have shown growth or decline through boundary changes (i.e., annexation, deannexation) and/or changes in institutional population (i.e., college dormitories, prisons, nursing homes etc.) from 2010 to 2016. Although the growth is substantial, it has not been distributed evenly throughout the state. While some places have grown rapidly, some have grown slowly, while some have lost their population. For the period of 2010 -2016, 855 places added at least 1 residence population, while 330 places lost population, and the population for 26 places remained the same. The largest numerical increases in population from 2010 to 2016 were in places with the largest populations including Houston with an increase of 204,031, San Antonio with an increase of 165,103, Austin with an increase of 157,500, Dallas with an increase of 120,113, and Fort Worth with an increase of 112,907. The top 10 places with largest numerical increase are given in Table 5.

Table 5. Ranked by Numerical Population Change from 2010-2016 for top 10 Places

Place	Census Count 2010	Estimate July 2016	Numerical Change	Percent Change
Houston City	2,099,451	2,303,482	204,031	9.7
San Antonio City	1,327,407	1,492,510	165,103	12.4
Austin City	790,390	947,890	157,500	19.9
Dallas City	1,197,816	1,317,929	120,113	10.0
Fort Worth City	741,206	854,113	112,907	15.2
Frisco City	116,989	163,656	46,667	39.9
McKinney City	131,117	172,298	41,181	31.4
El Paso City	649,121	683,080	33,959	5.2
Arlington City	365,438	392,772	27,334	7.5
Plano City	259,841	286,057	26,216	10.1

Source: U.S. Census Bureau.

In terms of percent population change, Fulshear City gained the most (598.9 percent), followed by Dish Town (115.4 percent), Escobares City (109.3 percent), Buda City (105.9 percent), Knollwood City (100.9 percent), and Prosper Town (95.0 percent). Top 10 places with largest percent population growth are given in the following Table 6.

Table 6: Ranked by Percent Population Change from 2010-2016 for top 10 Places

Place	Census Count 2010	Est. July 2016	Numerical Change	Percent Change
Fulshear City	1,134	7,925	6,791	598.9
DISH Town	201	433	232	115.4
Escobares City	1,188	2,487	1,299	109.3
Buda City	7,295	15,023	7,728	105.9
Knollwood City	226	454	228	100.9
Prosper Town	9,423	18,379	8,956	95.0
McLendon-Chisholm City	1,373	2,633	1,260	91.8
Selma City	5,540	10,008	4,548	82.1
Cibolo City	15,349	27,855	12,506	81.5
Melissa City	4,695	8,423	3,728	79.4

Source: U.S. Census Bureau.

As mentioned before, 330 places lost population during the period 2010-2016. Gatesville City lost the most population (3,253), followed by Mineral Wells City (1,962), and Plainview City (1,335).

Conclusions

During 2010-2016, Texas led the nation in population increase. Texas' population has reached almost 28 million. However, not every county experienced population growth during the period 2010-2016. Out of 254 counties, 96 counties lost population and 123 counties experienced net out migration.

The steady population growth experienced in larger counties can be partly attributed to what is typically considered urbanization and the prevalence of resources in larger counties when compared to smaller more rural counties. What also may be contributing to this shrinking of smaller counties is an aging rural population, low fertility rates, and out migration due to younger residents choosing the larger cities not only for employment opportunities, but also pace of lifestyle, and recreational benefits. The annual rate of population growth in Texas has slowed during the post-2010 period to 1.7 percent, compared with 2.1 percent during 2000-2010, but is still higher than the national rate of growth rate of 0.7 percent. One must be careful to note that patterns based on only a few years may change quickly. The patterns of 2010-2016, however, suggest that Texas' population is growing at a level that is substantially higher than the potential rate of growth for the nation and all but a handful of other states. All of these changes have significant implications for education, the labor force, health services, and the polity.

One may ask whether such growth will continue in the future. It is impossible to predict future patterns with absolute accuracy, but the fact that such a large part of Texas' population growth is due to natural increase (48.6 percent) suggests that population growth will likely continue, even if the rate of growth slows from that observed in the past. Texas may thus be

expected to remain among those states with the largest numerical increase in population and to continue to be among the nation's fastest growing states in the coming years.

The real challenge however, is the ability of Texas to provide the resources necessary to accommodate the growth in population and also stabilize the population for losing counties. Additionally, Texas must consider the demographic changes that come with a growing and declining population. As age, sex, race/ethnicity and other demographic characteristics change, other socioeconomic characteristics associated with them also change, and so far, this change has predictably led to an increase and/or decrease in demand for housing, healthcare, transportation infrastructure, and educational resources.

The trend of population growth leads us to predict that Texas will continue to experience an increase in domestic migration and population growth in general as long as the economy remains relatively stable. The real challenge will be how to provide the resources necessary to accommodate this growth over the long run.

References

Bryan, T. 2004. "Population Estimates." In J. Siegel and D. A. Swanson, eds., *The Methods and Materials of Demography, 2nd Edition*, 523-560. San Diego, CA: Elsevier Academic Press.

Hoque, N. 2008. "An Evaluation of Population Estimates for Counties and Places in Texas for 2000." In S. H. Murdock and D. A. Swanson, eds., *Applied Demography in the 21st Century*, 125-148. Dordrecht, Netherlands: Springer Science and Business Media B.V.

Hoque, N. 2012. "An Evaluation of Small Area Population Estimates Produced by Housing Unit, Ratio-correlation, and Component Method II compared to 2000 Census Counts." *Canadian Studies in Population* 39(1-2): 91-108.

Murdock, S. H., and Ellis, D. 1991. *Applied Demography: An Introduction to Basic Concepts, Methods, and Data*. Boulder, Colorado: Westview Press, Inc.

Shryock, H., and Siegel, J. 1980. *The Methods and Materials of Demography*. Washington, DC: Government Printing Office.

Siegel, J. S. 2002. *Applied Demography: Applications to Business, Government, Law and Public Policy*. San Diego, CA: Academic Press.

Smith, S. K., and Cody, S. 2004. "An Evaluation of Population Estimates in Florida: April 1, 2000." *Population Research and Policy Review* 23(1): 1-24.

Office of Management and Budget. 2003. *OMB Bulletin No. 03-04: Revised Definitions of Metropolitan Statistical Areas, New Definitions of Micropolitan Statistical Areas and Combined Statistical Areas, and Guidance on Uses of the Statistical Definitions of These Areas*. Available at: http://www.whitehouse.gov/omb/bulletins_b03-04/.