Fact Sheet
June 2021

Kem C. Gardner
POLICY INSTITUTE
THE UNIVERSITY OF UTAH
DAVID ECCLES SCHOOL OF BUSINESS

Fertility in Utah: Recent Changes

Despite having the highest total fertility rate in the nation for many years, Utah's total fertility rate is now the 3rd highest in the nation, behind North Dakota and South Dakota. Increases in fertility rates for mothers age 30 and over in the Dakotas, combined with substantial decreases in fertility rates for young mothers in Utah, have driven this shift.

Overview and U.S. Comparison

Utah's high fertility rate has distinguished the state for decades. Utah's total fertility rate (TFR) has long been higher than the nation, with Utah being the youngest state in the nation since the 1980s. Despite a declining TFR across the last 15 years, Utah has remained above the nation (1.99 compared to 1.71 in 2019).

Even with recent decreases in births and fertility rates, natural increase (births minus deaths) is a significant contribution to Utah's continued population growth.

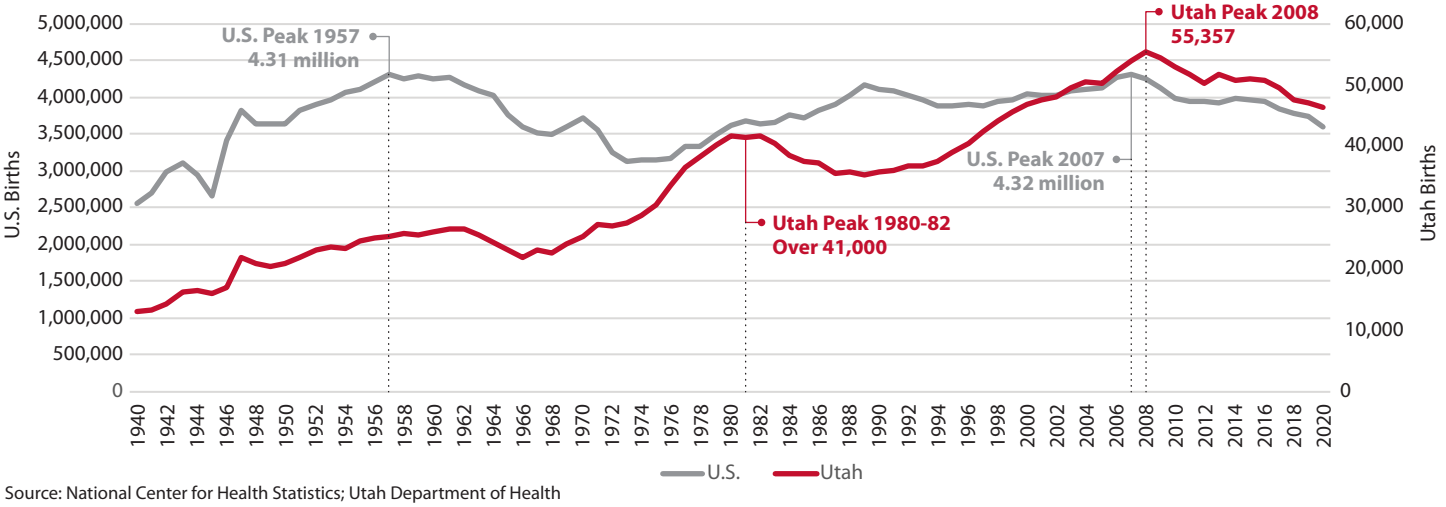
Figure 3 highlights the difference between TFRs in Utah and the nation over time. From 1990 through the mid-2000s, Utah's fertility paralleled the nation, hovering approximately 0.6 above the national rate. However, the Great Recession in 2008 marked the end of this stability. Utah's TFR continues to decline faster than the U.S. as a whole, and as a result, Utah's rate is closer to the nation's rate than ever before.

Table 1: Common Fertility Measures and Terminology

Measure	Acronym	Definition
Birth Rate		The number of live births per thousand of population per year.
Total Fertility Rate	TFR	The average number of children a woman will have if she survives all her childbearing (or reproductive) years. Also the sum of the Age Specific Fertility Rates.
Age Specific Fertility Rate	ASFR	The number of live births (often per 1,000 women) in a specific age group for a specific point in time, usually a year.
Childbearing years		Ages 15 to 49 years in this report.

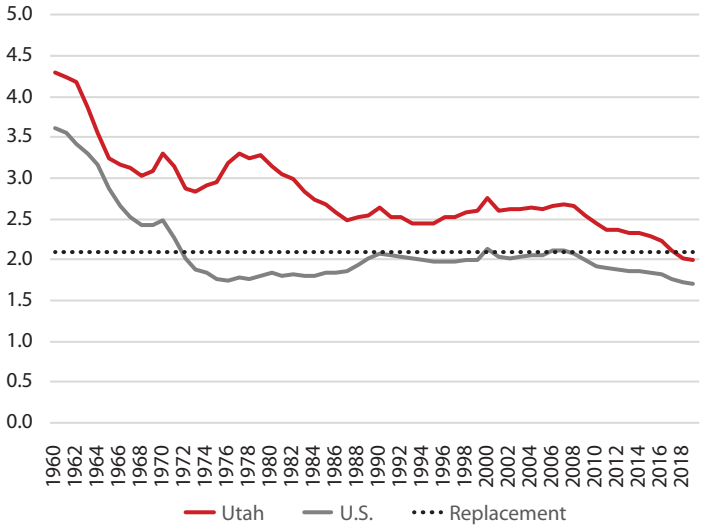
Previous research explored external factors that might contribute to Utah's declining fertility after the Great Recession.[1] Costs for higher education, housing, and childcare have continued to increase since that discussion. Before the onset of COVID-19, women's educational attainment and labor force participation rates continued to increase. Recent research from the CDC confirms that nationally women with higher educational attainment have lower total fertility rates.[2]

Figure 1: Births in Utah and United States, 1940-2020



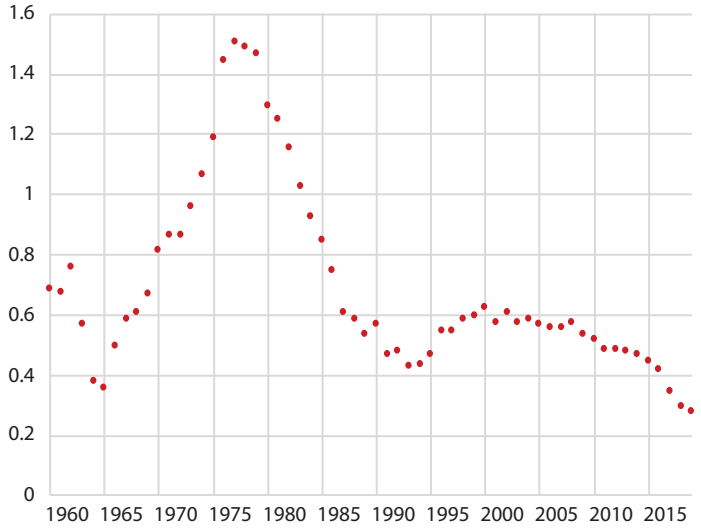
Source: National Center for Health Statistics; Utah Department of Health

Figure 2: Total Fertility Rate for Utah and the United States, 1960-2019



Note: The Replacement Level (TFR of 2.1) is the theoretical fertility level at which the current population is replaced.
Source: National Center for Health Statistics

Figure 3: Difference in Total Fertility Rate, Utah minus the United States, 1960-2019



Source: National Center for Health Statistics

How does Utah compare to other states?

Total Fertility

The most up-to-date data (2019) ranks Utah's TFR (1.99) third highest in the nation, below South and North Dakota. Nebraska (1.97) ranks fourth below Utah and state fertility rates subsequently drop much lower (see Table 2). Utah's fertility rate traditionally ranked first in the nation, but since 2009, it has declined by 20%. As Utah's fertility rate continued to decline over ten years, it dropped below South Dakota in 2016 and dropped below North Dakota in 2018. South and North Dakota did not start to see noticeable declines in their TFRs until 2017, unlike Utah's steady decline since 2009.

It is important to note that the three highest state TFRS are very close together. The rates and their rankings could change once the Census Bureau releases the 2020 census counts of the female population, used as denominators in this calculation.

Age Specific Fertility

Breaking down the TFRs into Age Specific Fertility Rates (ASFR) helps explain the differences seen across the top three states.

Figure 5 compares 2009 and 2019 ASFRs for the three states with the highest TFRs. All three states had, and continue to have, peak fertility in the 25-29 age group. Additionally, these states saw declines in their ASFRs from women ages 15 through 29.

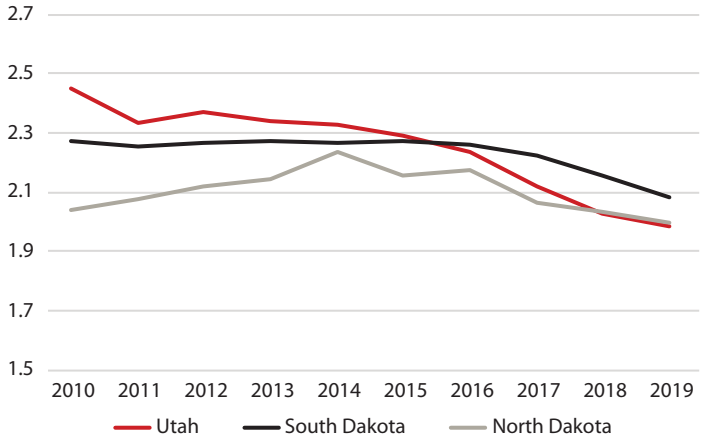
Table 2: Total Fertility Rates, Top and Bottom 10 States and District of Columbia, 2019

Rank	TFR	State
1	2.082	South Dakota
2	1.999	North Dakota
3	1.985	Utah
4	1.973	Nebraska
5	1.940	Alaska
6	1.920	Idaho
7	1.899	Iowa
8	1.870	Kansas
9	1.862	Louisiana
10	1.859	Arkansas

Rank	TFR	State
42	1.600	Washington
43	1.545	Connecticut
44	1.534	Colorado
45	1.495	Maine
46	1.465	Oregon
47	1.450	Massachusetts
48	1.434	Rhode Island
49	1.429	Vermont
50	1.428	New Hampshire
51	1.308	District of Columbia

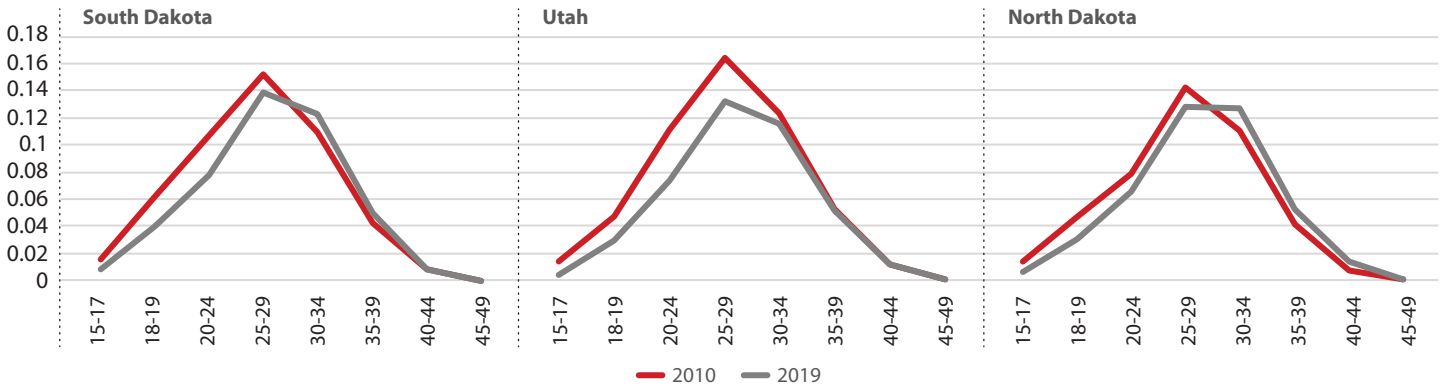
Source: National Center for Health Statistics

Figure 4: Total Fertility Rates for Utah, South Dakota, and North Dakota, 2010-2019



Source: National Center for Health Statistics

Figure 5: Age Specific Fertility Rates for Utah, South Dakota, and North Dakota, 2010 and 2019



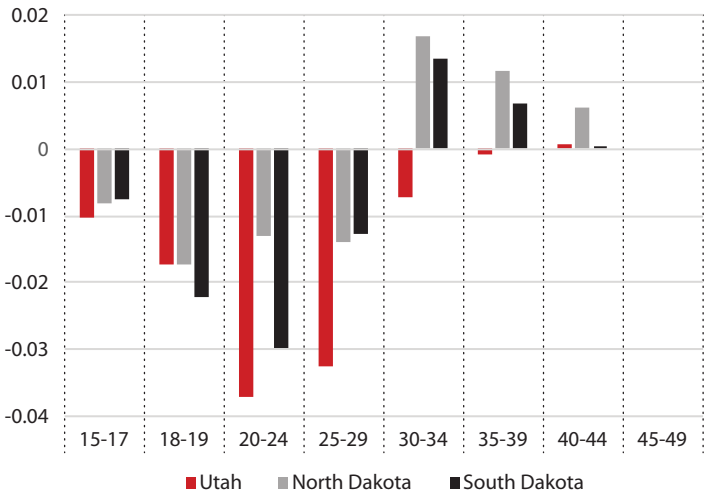
Source: National Center for Health Statistics

Recent research indicates that non-Hispanic white teens in Utah experienced an 8.5% decrease in birth rates.[3] However, differences appear in the older age groups over time. Both North and South Dakota experienced slightly increased fertility in women ages 30 and older, but Utah's fertility rates in the older ages stayed the same.

All states saw declines in the fertility rates for women between aged 15 to29, but the magnitudes are not the same (see Figure 6). Utah saw much higher declines in the 20-29 age groups than the other two states. This difference, coupled with Utah's stagnation in the older fertility rates, explains the differences we see in the TFRs across states.

Births are further declining as the COVID-19 pandemic influences family planning decisions, and researchers are still waiting to see whether this will be a temporary deferment or a permanent decrease in births. It is important to note that many factors affect fertility. Utah's recent sharp decline in fertility may not be indicative of what the future holds. Fertility may level off, experience a slight rebound, or continue its convergence path with the U.S. State-level differences in these rates reflect the different conditions each state experiences, and as conditions, populations, and demographics change, fertility rates and their trajectories can subsequently change.

Figure 6: Difference between Age Specific Fertility Rates by State, 2019 minus 2010



Source: National Center for Health Statistics

Endnotes

1 Hollingshaus, M., Bateman, M., Harris, E., & Perlich, P. (2017). Fertility in Utah since the Great Recession: The New Normal or a Pregnant Pause? Gardner Business Review.

2 Hamilton BE. Total fertility rates, by maternal educational attainment and race and Hispanic origin: United States, 2019. National Vital Statistics Reports; vol 70 no 5. Hyattsville, MD: National Center for Health Statistics. 2021.

3 Hamilton BE. State teen birth rates by race and Hispanic origin: United States, 2017–2018. National Vital Statistics Reports; vol 69 no 6. Hyattsville, MD: National Center for Health Statistics. 2020.

Authored by: Emily Harris, Senior Demographer

(DE) Fertility FS Jun2021