

## State and County Population Estimates FAQ

*This document specifically discusses state and county resident population estimates for Utah, discussing and comparing two main sources: the Utah Population Committee estimates, and the Census Bureau estimates.*

**Q: What are Population Estimates?**

**A:** Annual population estimates provide a once-a-year snapshot of the population between each decennial Census count that happens every 10 years. Population estimates are an important part of planning, funding, and research. Whether it's at the national, state, county, city, or even smaller level, people rely on population estimates to understand their area, determine specific funding and infrastructure needs, generate population projections, and create research that deepens our understanding of general demographic trends.

**Q: What do Population Estimates Measure?**

**A:** The state and county population estimates measure the number of people living in an area at a specified point in time, usually July 1st. They are created to serve as the best representation of a single year's population and to provide a consistent reference point across years.

Both sources of population estimates in this document refer to the usual, resident population, meaning they are not meant to capture seasonal or transient populations.

**Q: What Population Estimates are Available for Utah?**

**A:** There are two main sources of publicly available population estimates for Utah: the Utah Population Committee (UPC) population estimates and the Census Bureau population estimates. Each source provides annual state and county estimates with components of population change. Additionally, the Census Bureau provides city-level estimates and estimates with more demographic detail. Both series measure the usual, resident population for July 1 of each year.

**Q: Why are there Multiple Sources of Population Estimates?**

**A:** There are multiple sources of population estimates, often causing confusion among data users. The Census Bureau has a population estimates program that creates estimates at the national, state, county, and city level for the entire United States. However, many states also create their own population estimates due to individual need or confidence that they can create more accurate population estimates than the Census Bureau.

**Q: Which Population Estimates Should You Use?**

**A:** If only geographies in Utah are needed, use [estimates from the UPC](#). These will be more closely vetted by local data experts than the Census Bureau's estimates.

If comparing Utah or its counties to other geographies in the U.S., or racial and ethnic data is needed, use [data from the U.S. Census Bureau](#).

**Q: Why are the UPC and Census Bureau Population Estimates Different from Each Other?**

**A:** UPC and the Census Bureau use different input data and different methodologies, resulting in different estimates. See sections below for more detail.

**Q: What is the Difference Between Estimates and Projections?**

**A:** Estimates measure the past and present, while projections are for future dates. Estimates use existing data, while projections must assume what demographic trends will be in the future. For dates when both population estimates and projections are available, population estimates are the preferred data.

## Methodologies

### Basics: UPC

The UPC starts by collecting birth and death data from the Utah Department of Health and averages the results of three methods to produce population estimates for each county in Utah. The state total population estimate is the sum of these county totals. The methods include the IRS Exemption Method, Housing Stock Method, and School Enrollment Method. These are each detailed in the methodology document, found [here](#). The estimates are produced for July 1 of each year. Flow variables include births, deaths, natural increase, and net migration and are measured for July 1 fiscal year periods.

$$\text{Net Migration} = \text{Current Population Estimate} - \text{Previous Population Estimate} - \text{Births} - \text{Deaths}$$

### Basics: Census Bureau

[The Census Bureau creates county level estimates](#) by collecting birth and death data from the [National Center for Health Statistics](#) (NCHS) and the [Federal State Cooperative for Population Estimates](#) (FSCPE). They then create net migration estimates by creating net domestic migration rates and net international migration rates, multiplying those rates to the total population, and adding the two migration estimates together. They then apply a raking procedure to ensure that all estimates and totals add up to the designated county and state totals.

$$\text{Population Base} + \text{Births} - \text{Deaths} + \text{Migration} = \text{Population Estimate}$$

### Methodological Similarities

The Census Bureau and UPC have very similar vital records information. Although they are technically pulled from different sources, the data is often very similar since the national vital records information is gathered from state health departments. The Census Bureau has less up-to-date data since they are utilizing a national database (on a two-year lag). UPC pulls from the Utah Department of Health and Human Services, using data that is more up-to-date and mostly final.

### Methodological Differences

The major difference between the two estimate methodologies is that the Census Bureau estimates net migration, both domestically and internationally. The UPC estimates consider net migration as a residual of the current year's estimate and natural increase.

*"For state and county total estimates, the Census Bureau calculates county-to-county net domestic migration based on four data sources:*

1. Internal Revenue Service (IRS) tax return data for ages 0-64
2. Medicare enrollment data from Centers of Medicare and Medicaid Services (CMS) for ages 65+,
3. Social Security Administration's Numerical Identification File (NUMIDENT) for all ages
4. Change in the group quarters population (described in the "Group Quarters" section)"<sup>1</sup>

This allows the Census Bureau to track individual movement and calculate net migration by age, which they need when producing their age and sex population estimates later.

UPC does not have access to any of this extremely sensitive and linked data to create net migration estimates. UPC averages multiple methods to create one population estimate. Two of the methods estimate population rather than net migration, but one method, the school enrollment method, estimates an actual net migration instead of a population. See UPC methodology for more details.<sup>2</sup>

## Endnotes

1 <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2020-2022/methods-statement-v2022.pdf>

2 <https://gardner.utah.edu/demographics/state-and-county-level-population-estimates/>