Projections of Florida Population by County, 2025–2050, with Estimates for 2023

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The Bureau of Economic and Business Research (BEBR) at the University of Florida has produced population projections for Florida and its counties since the 1970s. This report presents our 2024 set of projections and describes the methodology used to construct those projections. To account for uncertainty regarding future population growth, we publish three series of projections – low, medium, and high. We recommend using the medium series for most purposes; this series has historically provided the most accurate forecasts for Florida counties. It should be noted that these projections refer solely to the resident population of Florida; they do not include temporary or seasonal residents whose usual place of residence is in another jurisdiction.

State Projections

The starting point for the state-level projections was the decennial census count for April 1, 2020. Projections were made in one-year intervals using a cohort-component methodology in which births, deaths, and migration are projected separately for each age-sex cohort in Florida.

Survival rates were applied by single year of age and sex to project future deaths in the population. These rates were based on Florida Life Tables for 2012–2018, using mortality data published by the Office of Vital Statistics in the Florida Department of Health. We adjusted the survival rates for 2020–2028 to make them consistent with recent mortality trends, and to align the projected deaths with those from the State of Florida's Demographic Estimating Conference (DEC) held November 28, 2023. After 2028, we made small adjustments to the survival rates based on projected changes in survival rates released by the U.S. Census Bureau.

Domestic migration rates by age and sex were based on Public Use Microdata Sample (PUMS) files from the 2011–2019 American Community Survey (ACS) 1-year estimates and 2015–2019 ACS 5-year estimates. We calculated an average of those two sets of migration estimates; projections based on input data from more

than one period tend to be more accurate than those based on a single period. By combining 1-year ACS estimates, which are more current, with 5-year ACS estimates, which are more stable, we make use of the different strengths of each type of ACS data.

We applied smoothing techniques to the migration rates by single year of age and sex to adjust for data irregularities caused by small sample sizes. The smoothed in- and out-migration rates were weighted to account for recent changes in Florida's population growth rates. Projections of domestic in-migration were made by applying weighted in-migration rates to the projected population of the United States (minus Florida), using the most recent set of national projections produced by the U.S. Census Bureau. Projections of out-migration were made by applying weighted outmigration rates to the Florida population. In both instances, rates were calculated separately for males and females for each age up to 90 and over.

The distribution of foreign immigrants by age and sex was also based on averages of the patterns observed over the same time periods using the same ACS data sets as for domestic migration. Again, we smoothed the estimates to account for irregularities in the age/sex distribution of immigrants.

Projections were made in one-year intervals, with each projection serving as the base for the following projection. Projected in-migration for each one-year interval was added to the survived Florida population at the end of the interval and projected out-migration was subtracted, giving a projection of the population age one and older.

Births were projected by applying age-specific birth rates (adjusted for child mortality) to the projected female population. These birth rates were based on Florida birth data for 2012–2018 published by the Office of Vital Statistics in the Florida Department of Health. They imply a total fertility rate (TFR) of 1.75 births per woman. These rates were reduced in the short-term projections to make them consistent with recent fertility trends, and to align the projected births with those from the

November 28, 2023 DEC. The long-term projections imply about 1.83 births per woman.

The medium projections of total population for 2024–2028 were adjusted to be consistent with the state population forecasts for those years produced by the November 28, 2023 DEC. None of the projections after 2028 had any further controls.

In the addition to the medium series, we also created a low and a high series for Florida. These should not be considered low and high growth scenarios; rather, they represent an indication of the uncertainty surrounding the medium projections. The low and high series were based on analyses of past population forecast errors for Florida. In this publication, we provide projections for 2025, 2030, 2035, 2040, 2045, and 2050. State projections for other years are available by request.

County Projections

The cohort-component model is the most widely used technique to make population projections for larger areas such as states, but it is not necessarily the best way to make projections at the county level. Many counties in Florida have small populations, which make it difficult to produce reliable cohort-component projections by age and sex. Furthermore, county growth patterns can be volatile, and projections based on a single technique using data from a single time period may provide suboptimal results. We believe more useful projections of total population can be made by applying different techniques that incorporate data from different time periods.

For counties, we started with the population estimate constructed by BEBR for April 1, 2023. We made projections for each county using six different techniques in five-year increments. The six techniques were:

Linear – the population will change by the same number of persons in each future year as the average annual change during the base period.

1. Exponential – the population will change at the same percentage rate in each future year as the average annual rate during the base period.
2. Share-of-growth – each county's share of state population growth in the future will be the same as its share during the base period.
3. Shift-share – each county's share of the state population will change by the same annual amount

in the future as the average annual change during the base period.
4. Constant-share – each county's share of the state population will remain constant at its 2023 level.
5. Constant – each county's population will remain equal to its 2023 estimate.

For the linear technique, we used base periods of ten and twenty years (2013–2023, and 2003–2023) yielding two sets of projections; for the exponential technique, we used a fifteen-year base period (2008-2023) yielding one projection; for the share-of-growth technique, we used base periods of two, ten, and twenty years (2021–2023, 2013–2023, and 2003–2023) yielding three sets of projections; and for the shift-share technique, we used base periods of five and fifteen years (2018–2023 and 2008–2023) yielding two sets of projections; and. The constant-share and constant techniques were based on data from a single year (2023).

This methodology produced ten different projections for each county for each projection year (2025, 2030, 2035, 2040, 2045, and 2050). From these, we calculated four averages: one using all ten projections (AVE10), one that excluded the highest and lowest projections (AVE-8), one that excluded the two highest and two lowest projections (AVE-6), and one that excluded the three highest and three lowest projections (AVE-4). Based on the results of previous research, we designated the average that excluded the three highest and three lowest projections (AVE-4) as the default technique for each county. For counties in which AVE-4 did not provide reasonable projections, we selected the technique producing projections that fit most closely with our evaluation criteria. We evaluated the resulting projections by comparing them with historical population trends and with the level of population growth projected for the state.

For 62 counties we selected projections made with AVE-4, the default technique. In the remaining five counties, we selected projections made with an individual technique or calculated a custom average (e.g., an average of two individual techniques). These include Gadsden, Hardee, Lee, Monroe, and Sumter counties.

In counties with large institutional populations – including university students and state and federal prison inmates – we projected the non-institutional population separately from the institutional population. In the present set of projections, such adjustments were made for Alachua, Baker, Bradford, Calhoun, Columbia, DeSoto, Dixie, Franklin, Gadsden, Gilchrist, Glades, Gulf,

Hamilton, Hardee, Hendry, Holmes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Okeechobee, Santa Rosa, Sumter, Suwannee, Taylor, Union, Wakulla, Walton, and Washington counties. In all other counties the projections were made for total population.

Range of County Projections

The methodology described above was used to construct the medium series of county projections. This is the series we believe will generally provide the most accurate forecasts of future population change. We also constructed a low and a high series, which provide an indication of the uncertainty surrounding the medium county projections. The low and high series were based on analyses of past population forecast errors for counties in Florida, broken down by population size and growth rate. They indicate the range into which approximately three-quarters of future county populations will fall, if the future distribution of forecast errors is similar to the past distribution.

The range between the low and high projections varies based on three factors: a county's population size in 2023 (less than 30,000; 30,000–199,999; and 200,000 or more), rate of population growth between 2013 and 2023 (less than 7.5%; 7.5–15%; 15–30%; and 30% or

more), and the length of the projection horizon. Our studies have found that the distribution of absolute percent errors tends to remain relatively stable over time, leading us to believe that the low and high projections provide a reasonable range of errors for most counties. It must be emphasized, however, that the actual future population of any given county could be below the low projection or above the high projection.

For the medium series of projections, the sum of the county projections equals the state projection for each year (except for slight differences due to rounding). However, for the low and the high series, the sum of the county projections does not equal the state projection. The sum of the low projections for counties is lower than the state's low projection and the sum of the high projections for counties is higher than the state's high projection. This occurs because potential variation around the medium projection is greater for counties than for the state.

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