

Why Does the Nation Have a Labor Shortage?

Informing Upon the Structural Basis of the United States' Labor Force

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Utah Department of Workforce Services

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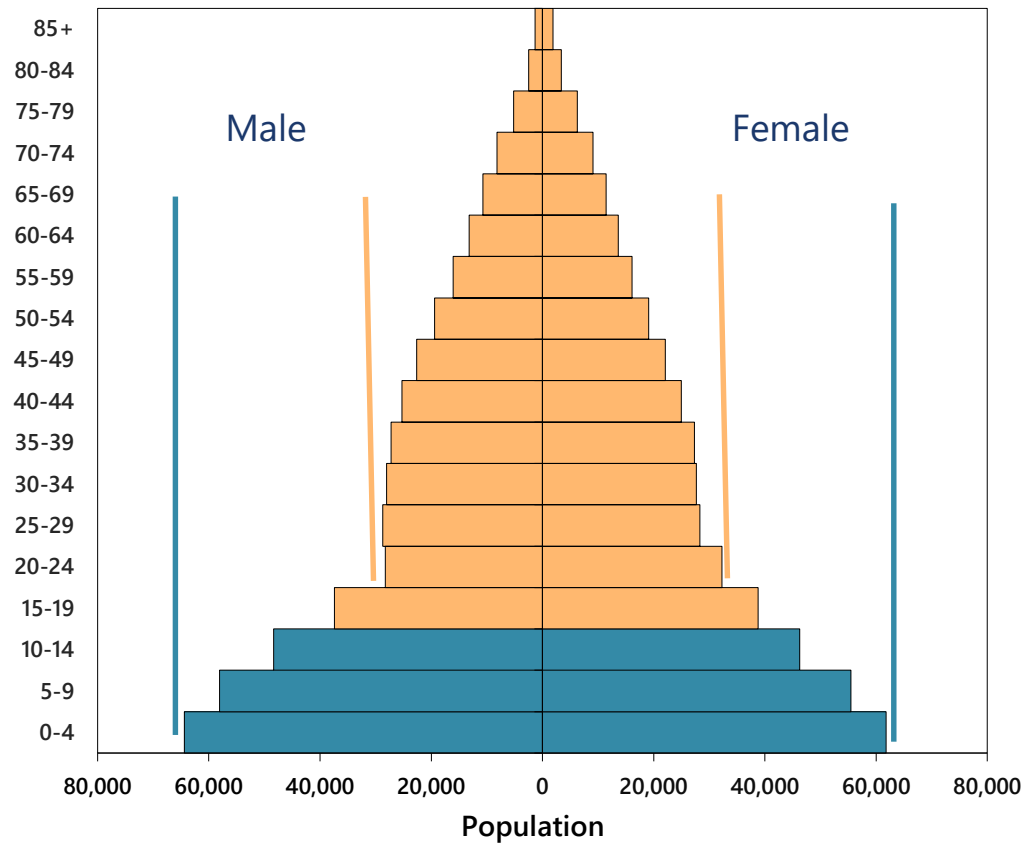
The Country is Moving Toward an Economic Paradigm Shift


Up to now, the story of the United States' economic history has been to adjust to and support population growth.

The story is now about to change to adjusting to and managing population stagnation, followed shortly by contraction.

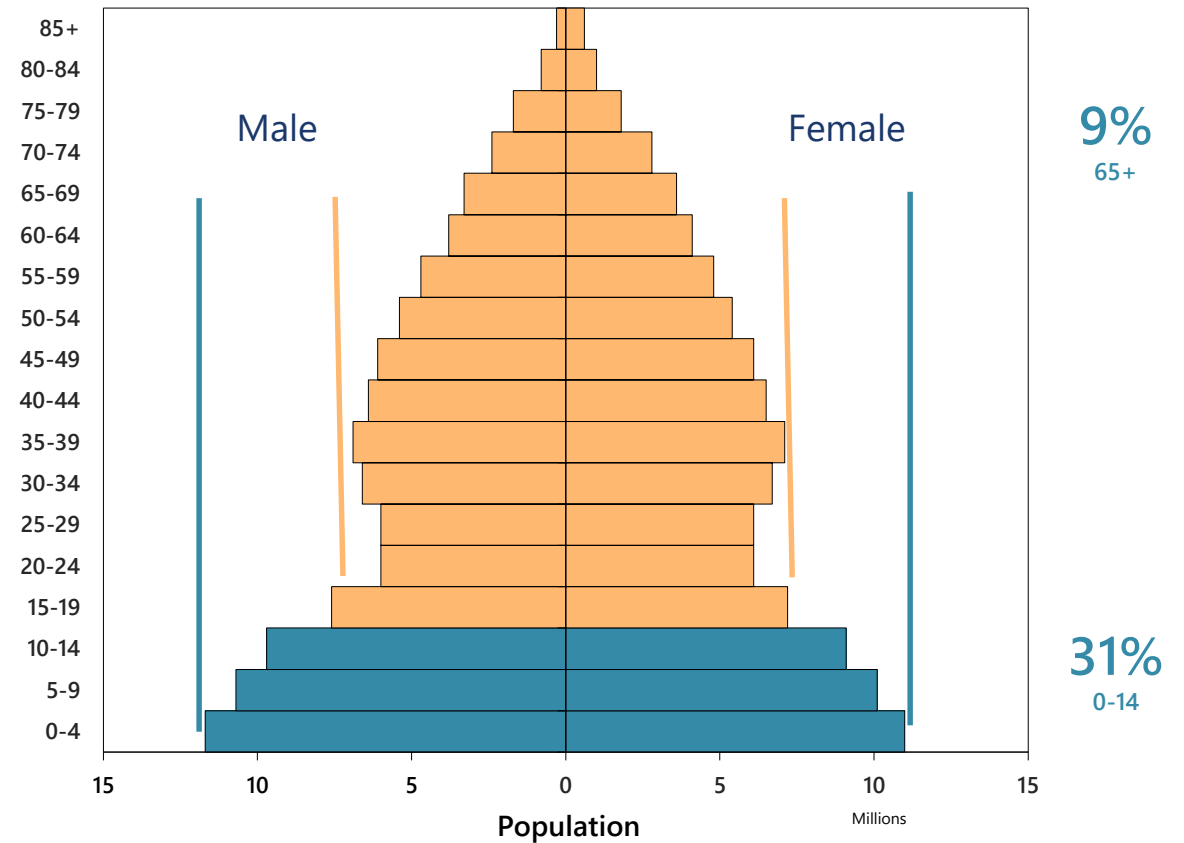
For Utah going forward, the story will be how to adjust to and manage economic growth inside of an economic system that is adjusting to and trying to manage economic contraction.


Utah's Population by Age and Sex: 1960



 Baby Boom Generation

U.S. Population by Age and Sex: 1960

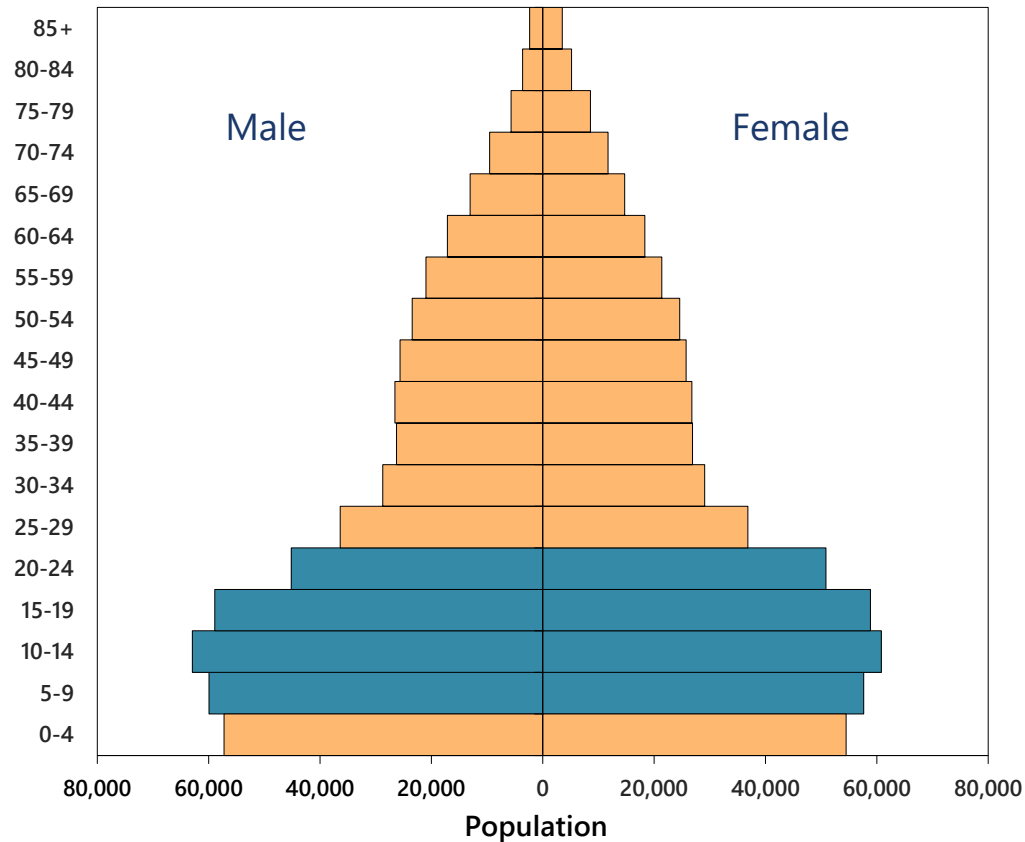



 Baby Boom Generation

9%
65+

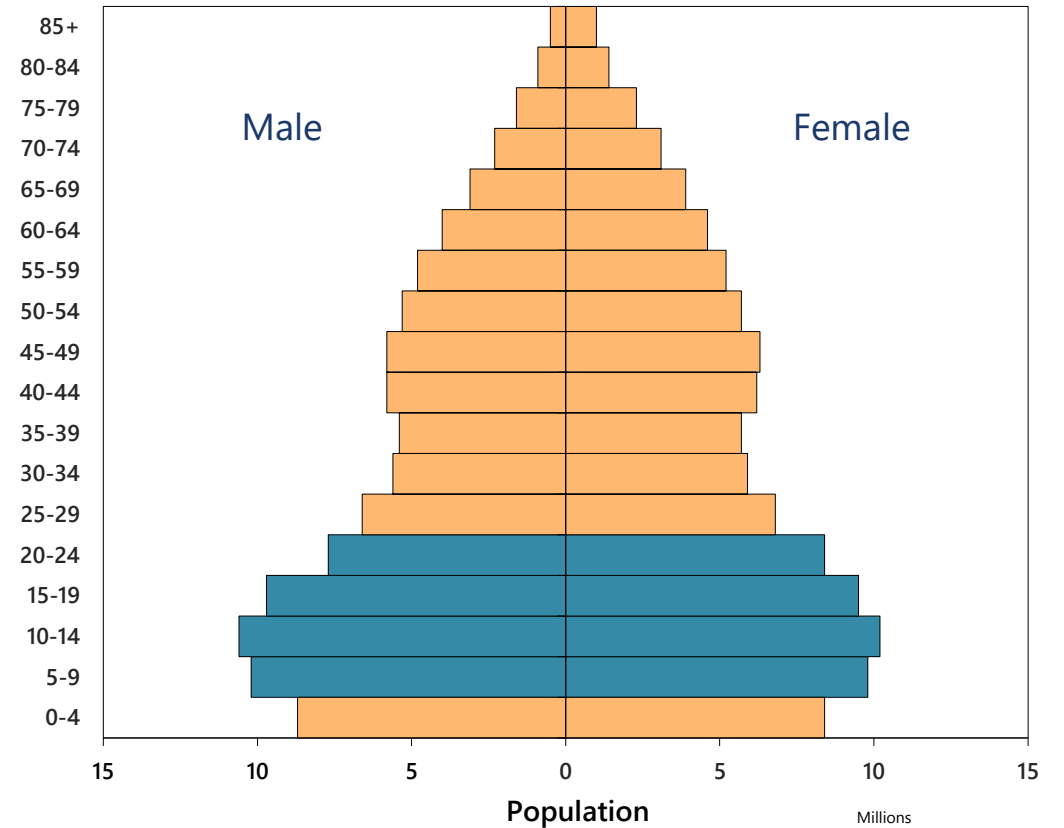
31%
0-14


Utah's Population by Age and Sex: 1970



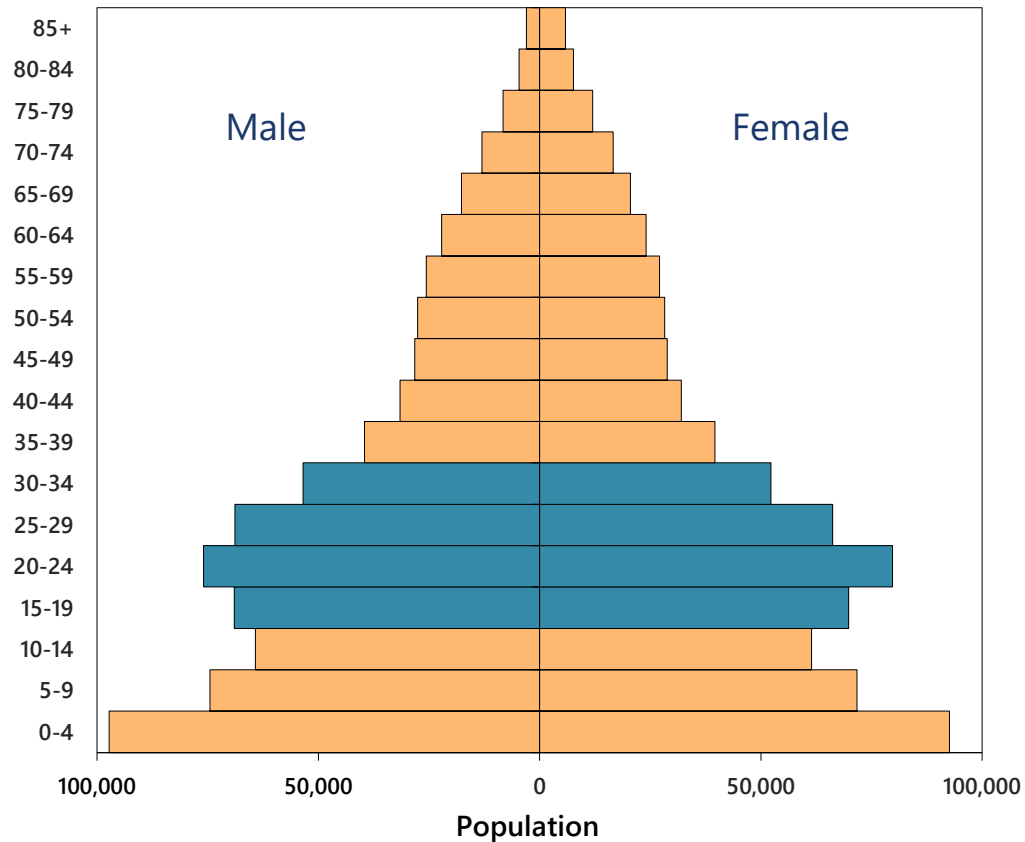
 Baby Boom Generation


U.S. Population by Age and Sex: 1970



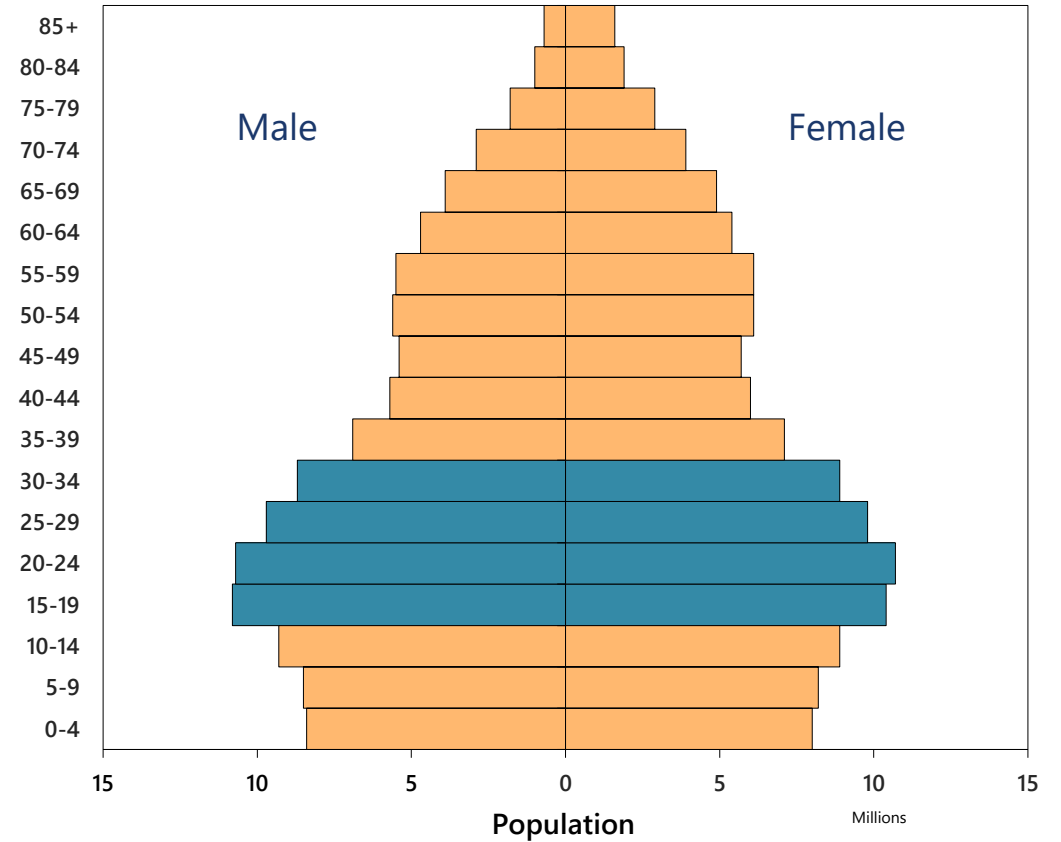
 Baby Boom Generation


Utah's Population by Age and Sex: 1980



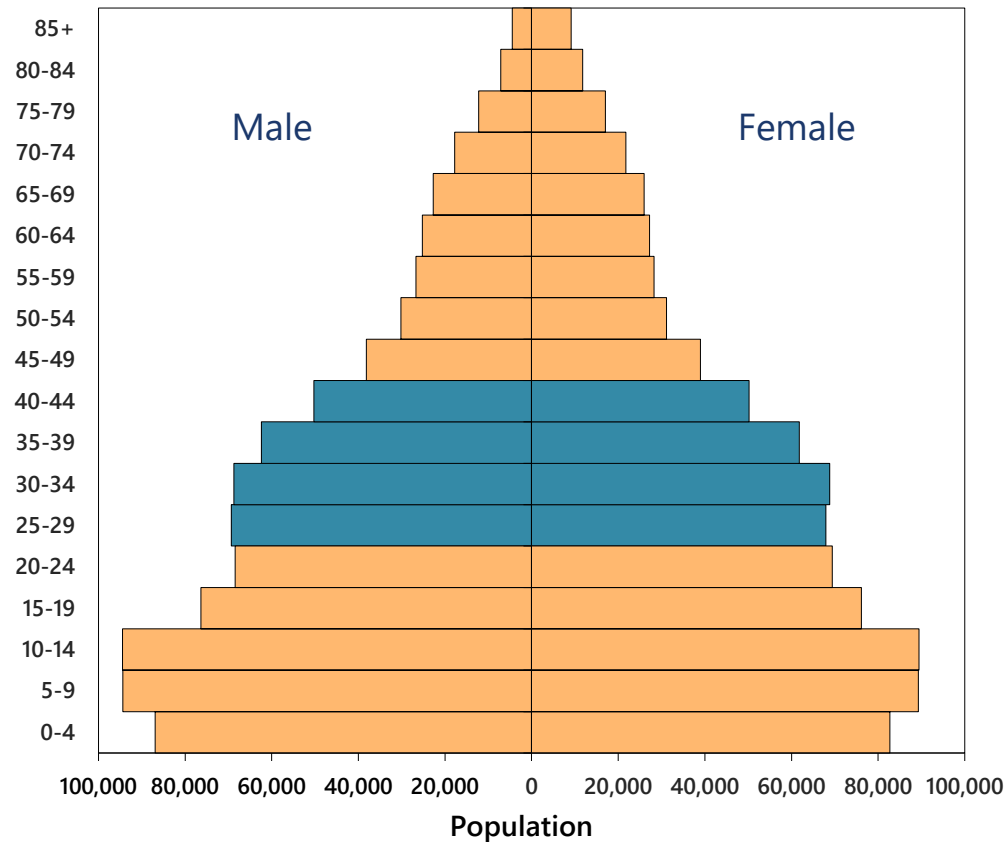
 Baby Boom Generation

U.S. Population by Age and Sex: 1980



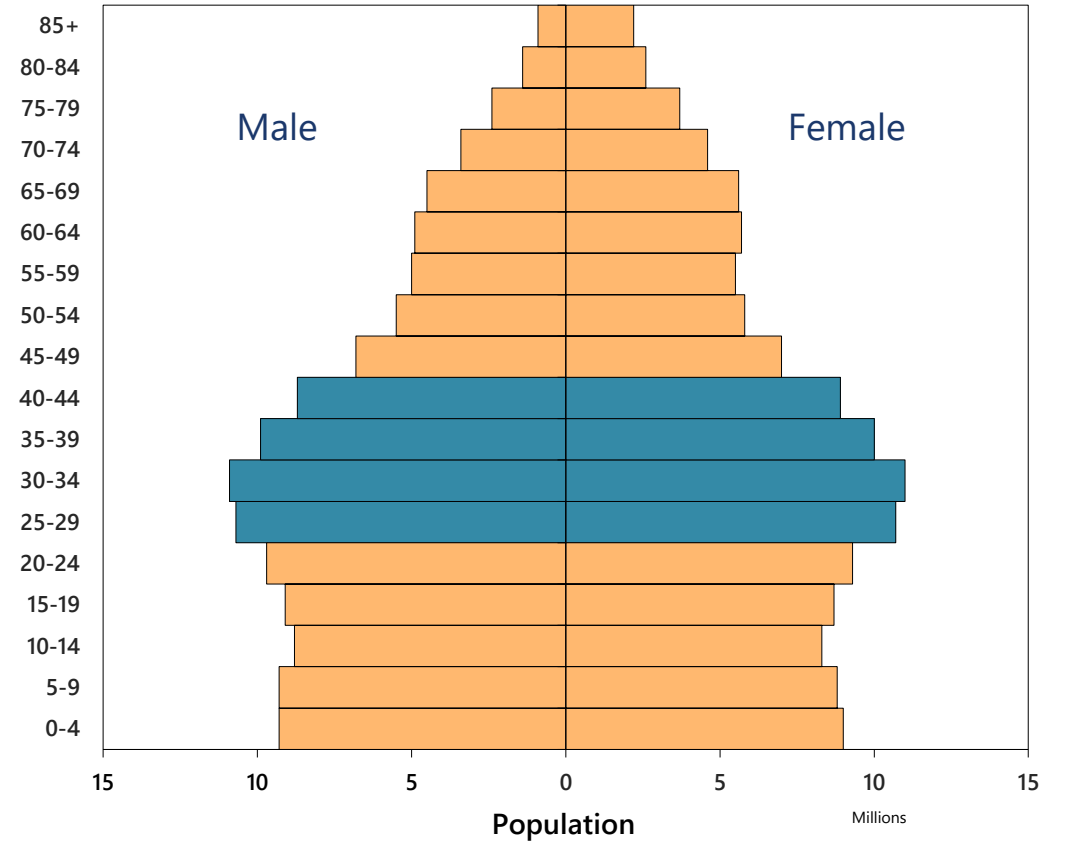
 Baby Boom Generation

Utah's Population by Age and Sex: 1990



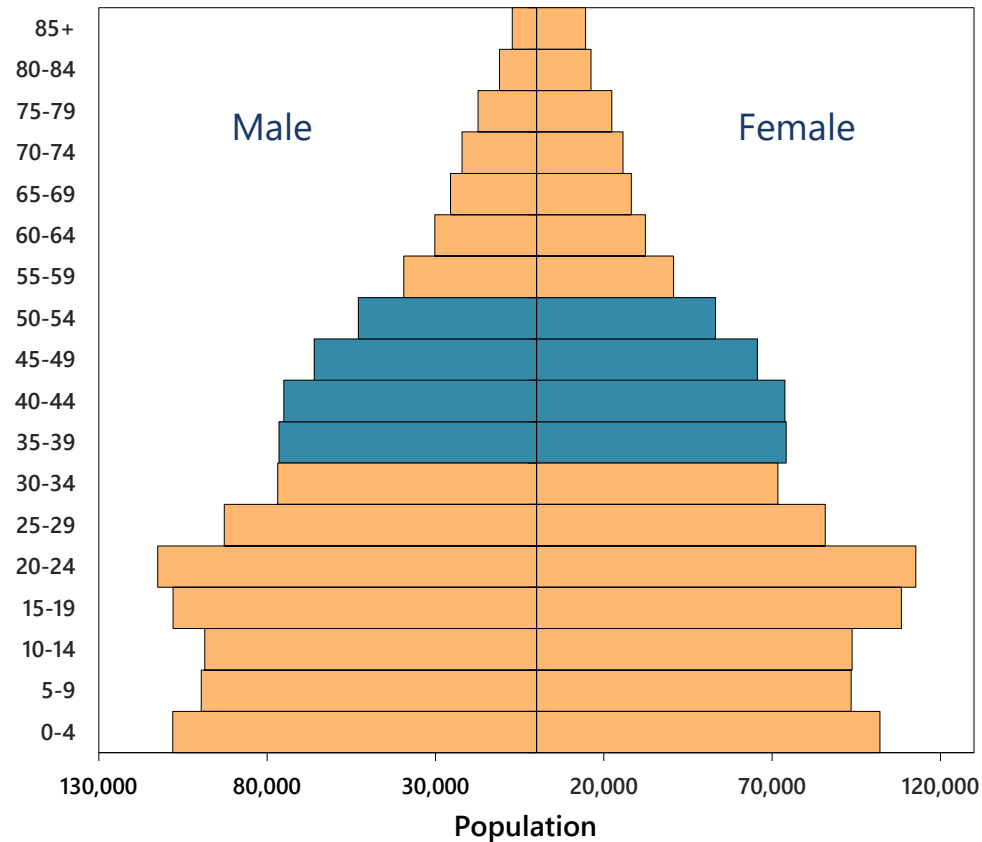
■ Baby Boom Generation


U.S. Population by Age and Sex: 1990



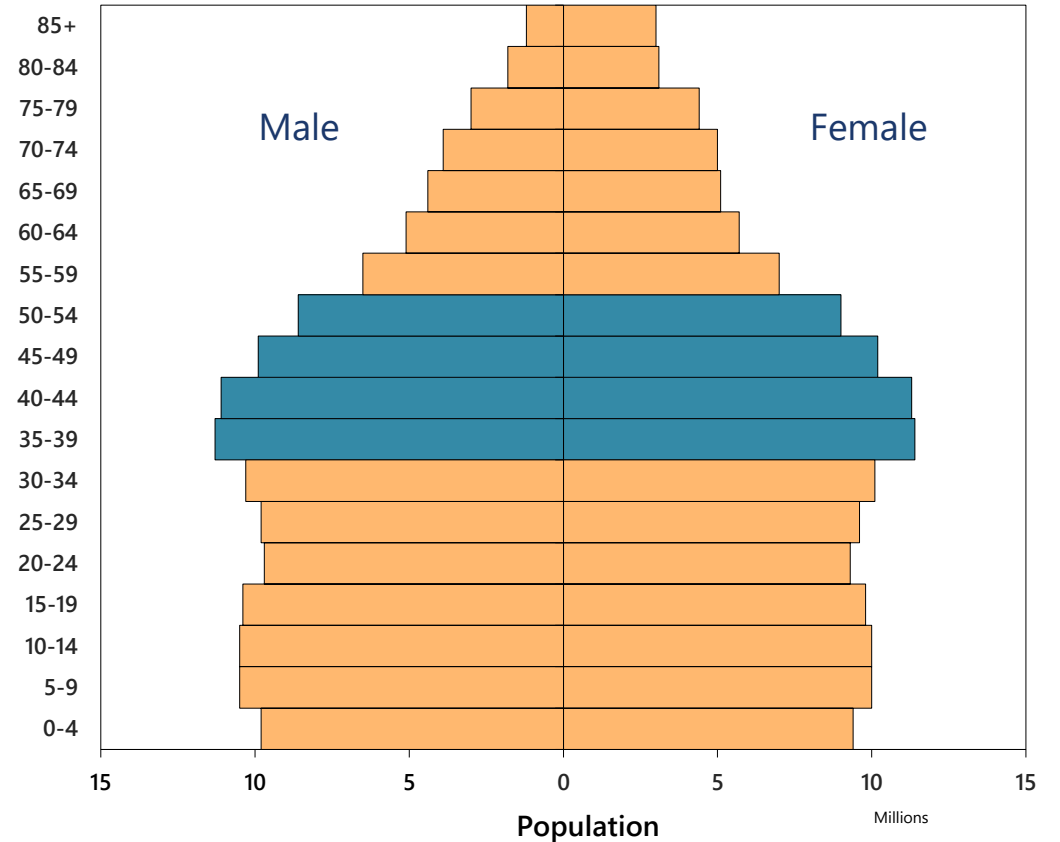
■ Baby Boom Generation


Utah's Population by Age and Sex: 2000



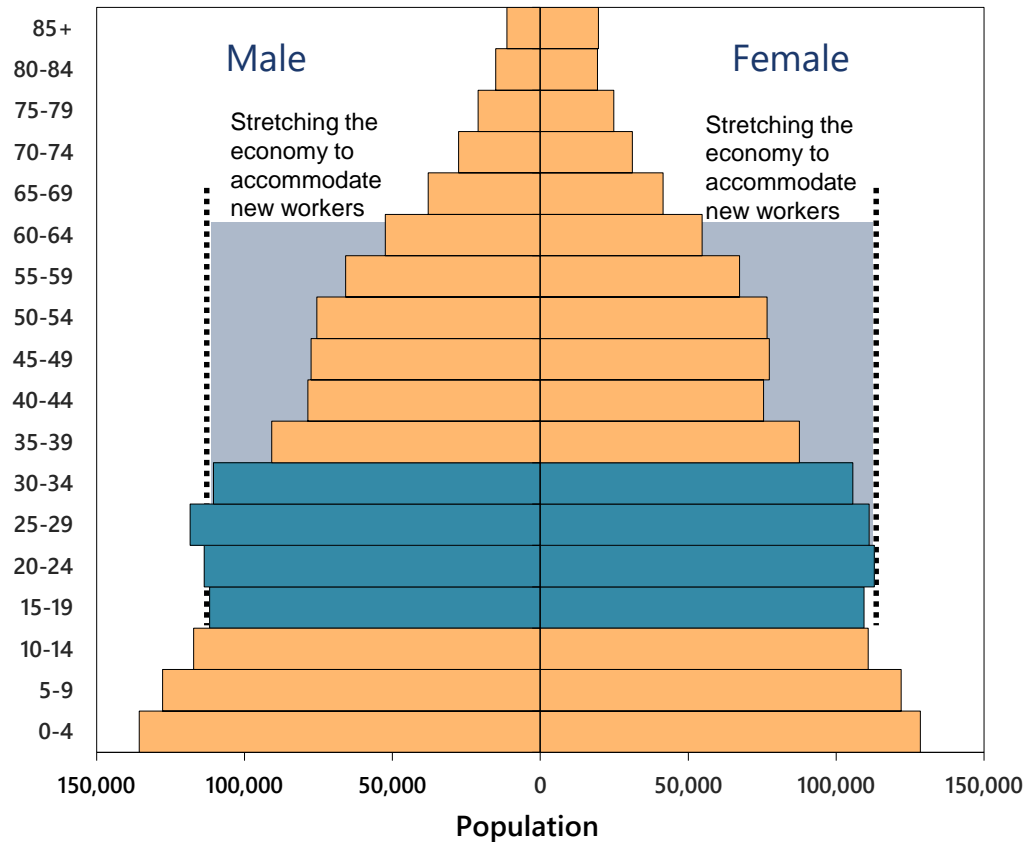
 Baby Boom Generation

U.S. Population by Age and Sex: 2000



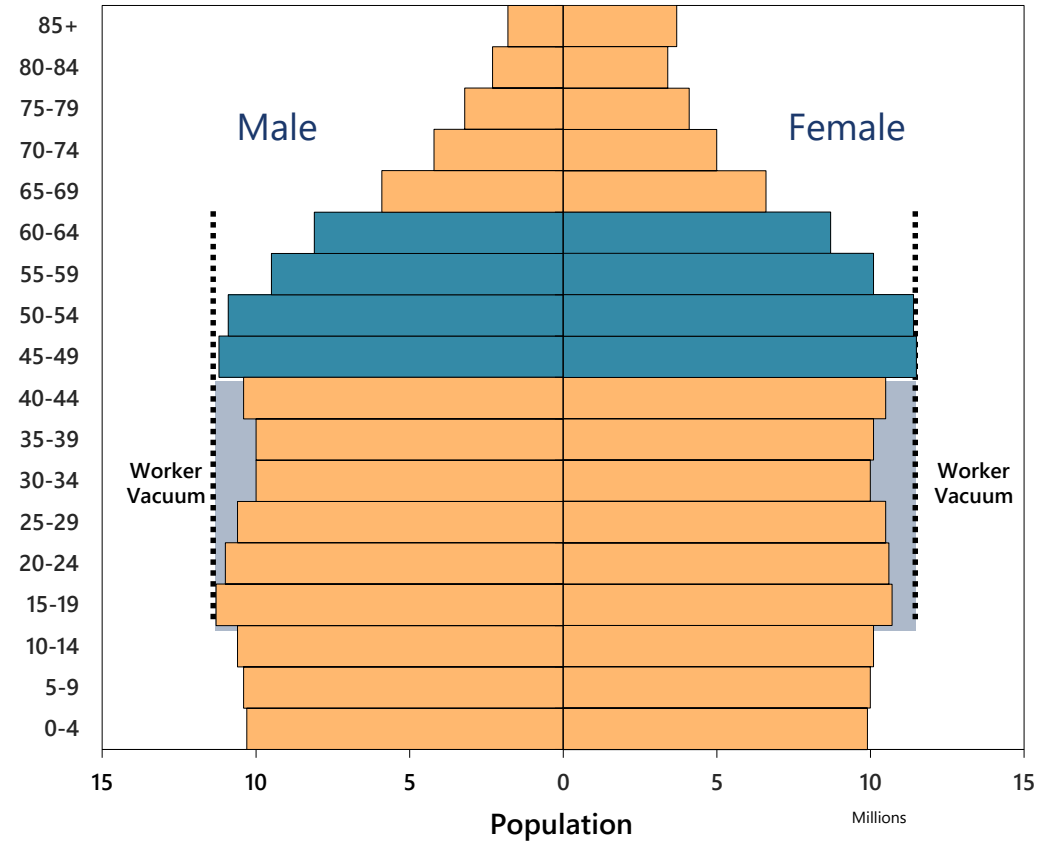
 Baby Boom Generation


Utah's Population by Age and Sex: 2010



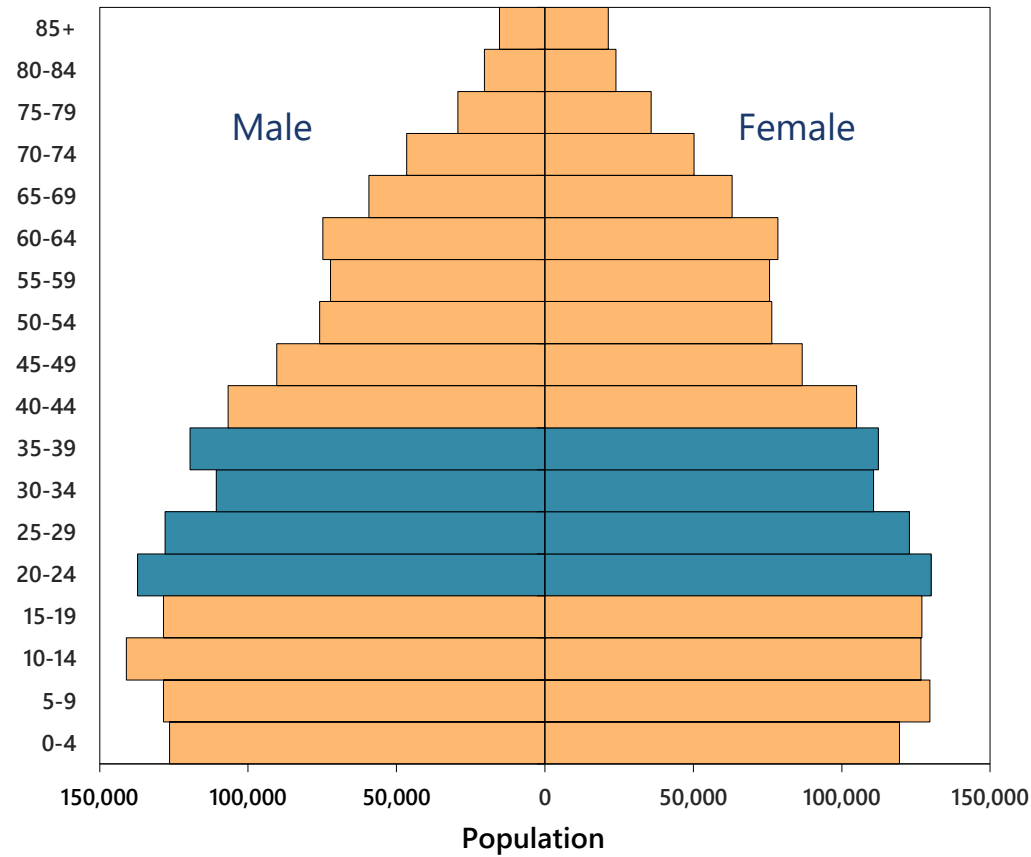
 Labor Force Dominance

U.S. Population by Age and Sex: 2010



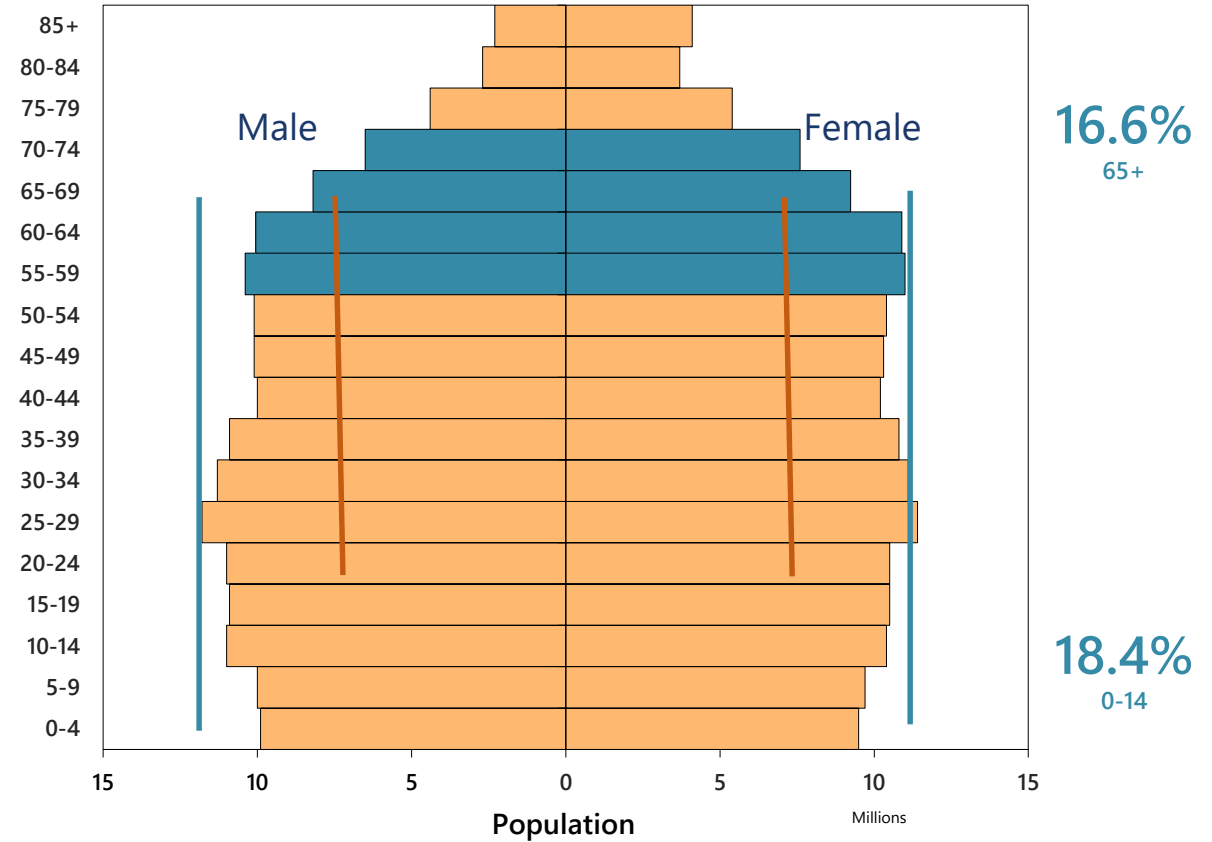
 Baby Boom Generation


Utah's Population by Age and Sex: 2020



 Labor Force Dominance

U.S. Population by Age and Sex: 2020



 Baby Boom Generation

Recent Census Bureau Articles Highlight This Phenomenon



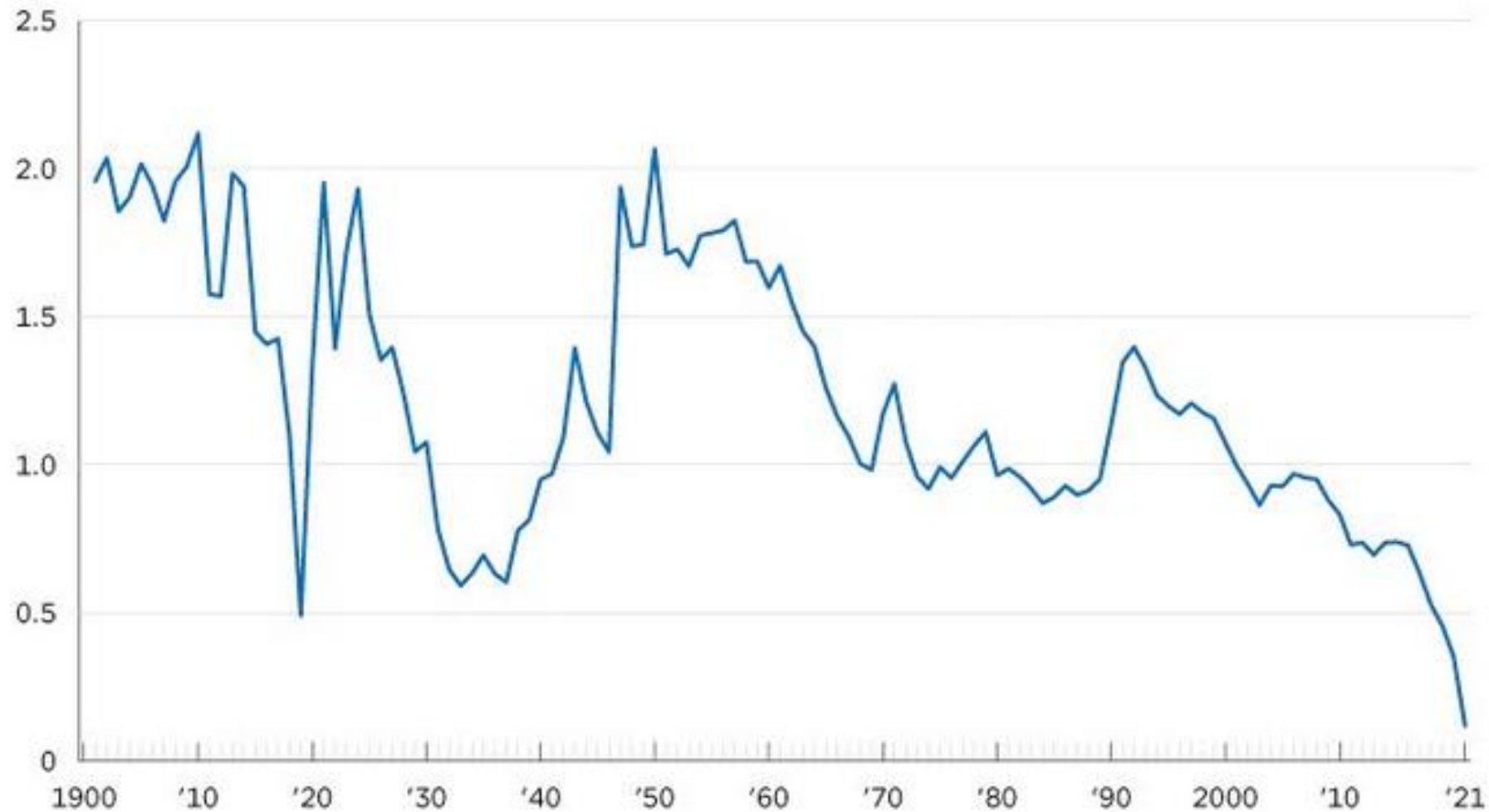
**U.S. Population Grew
0.1% in 2021,
Slowest Rate Since
Founding of the
Nation**



**Net International
Migration at Lowest
Levels in Decades**

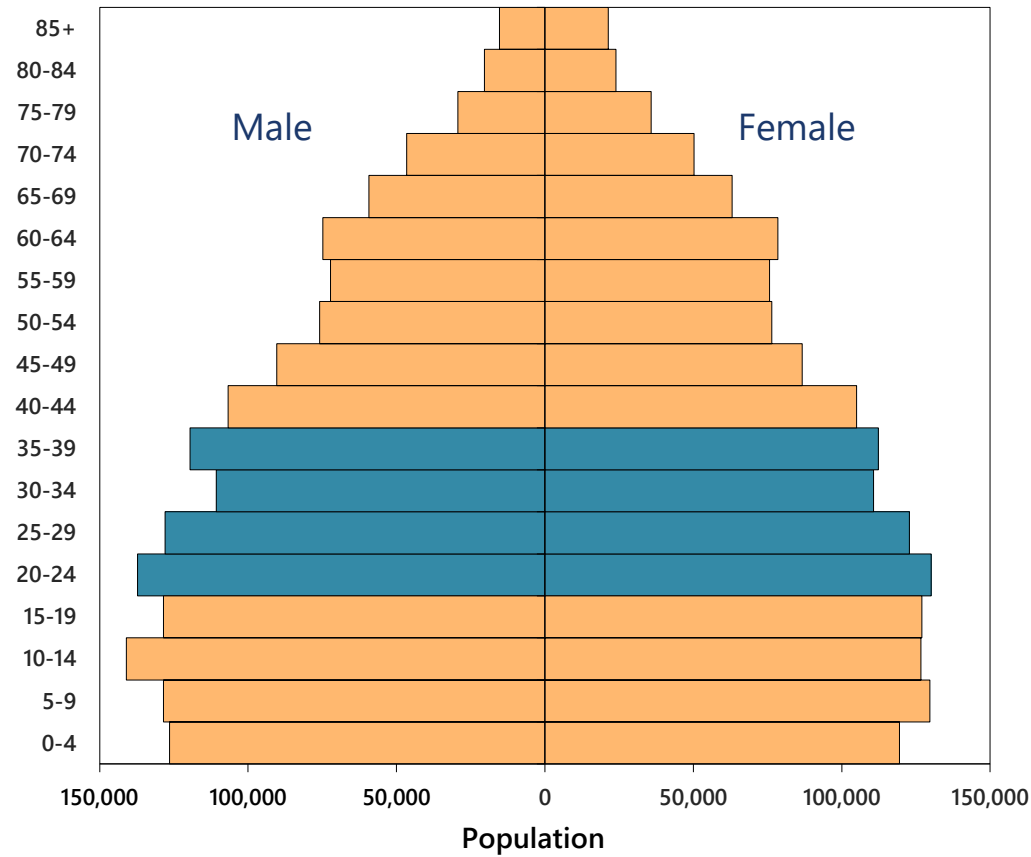


Annual Percent Change in the U.S. Population 1900-2021



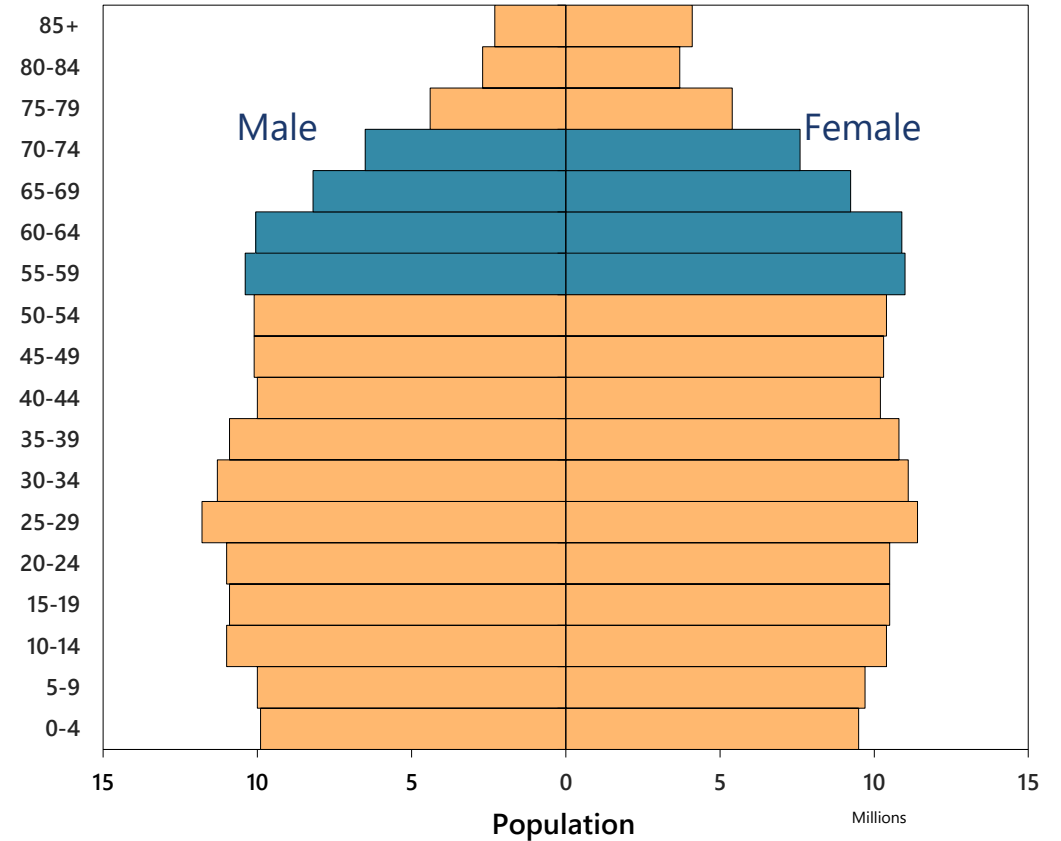
Note: 1917-1919 includes U.S. Armed Forces overseas.


Utah's Population by Age and Sex: 2020



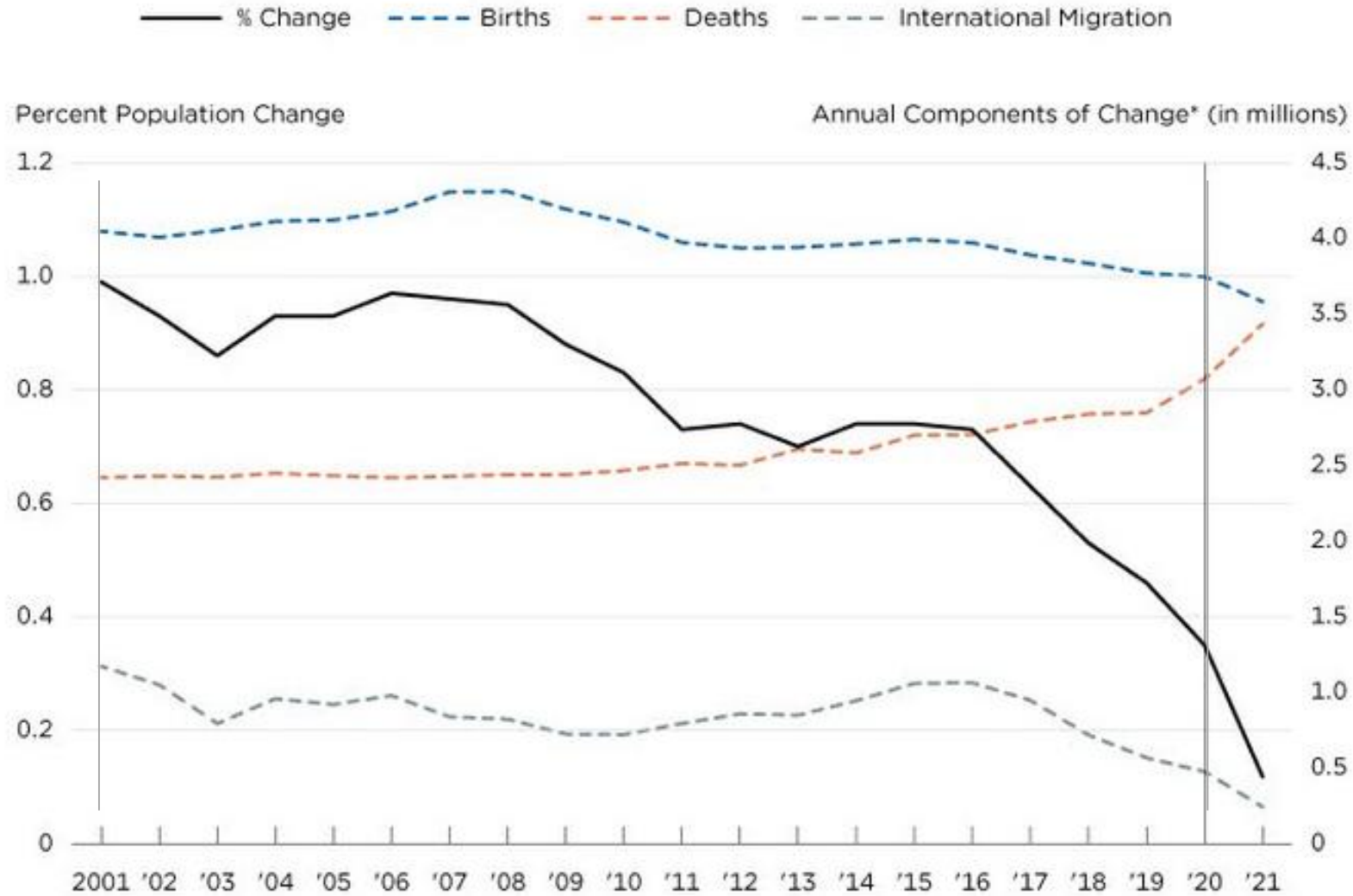
 Labor Force Dominance

U.S. Population by Age and Sex: 2020



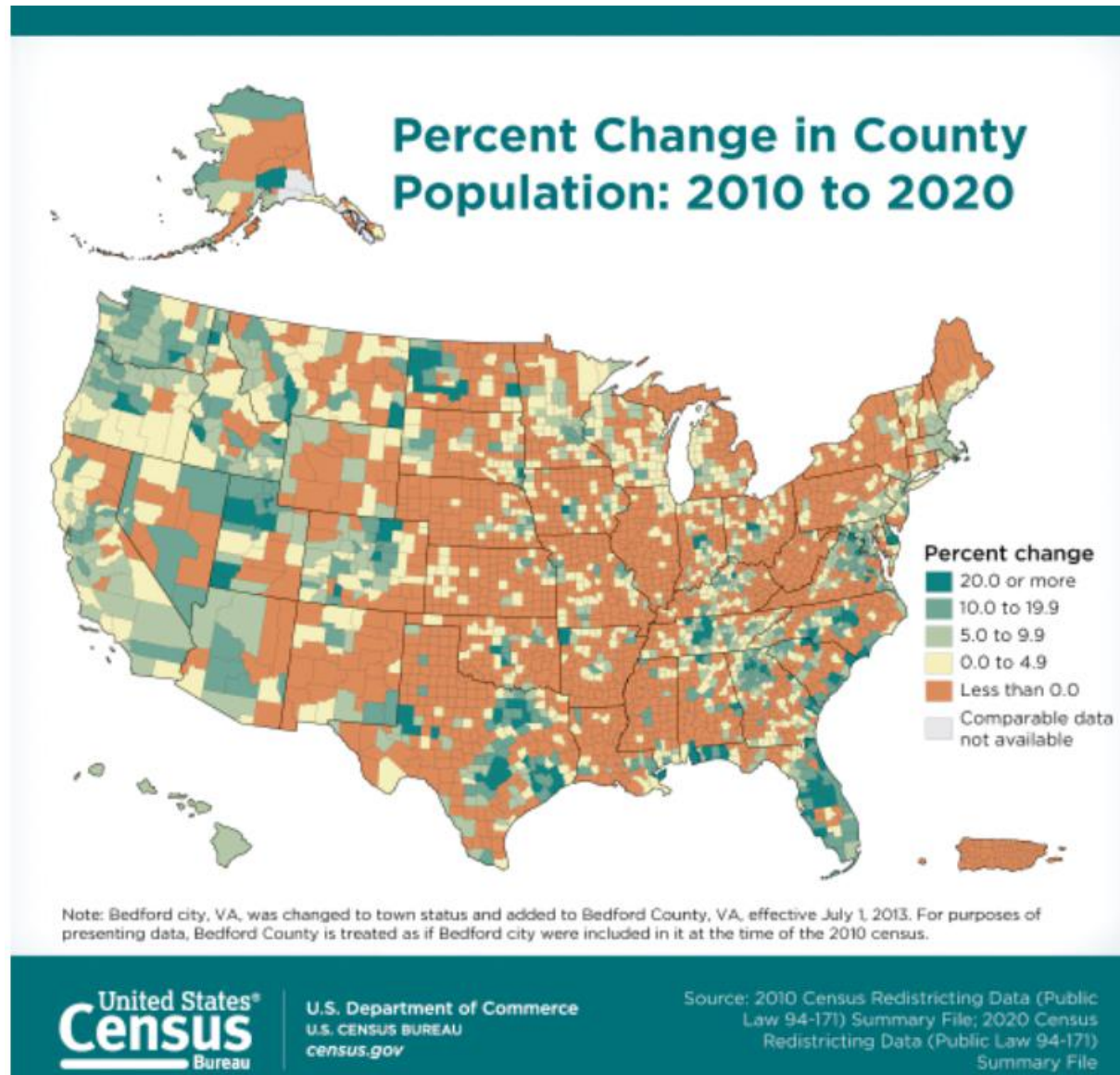
 Baby Boom Generation

Population Change and the Components Change 2001-2021



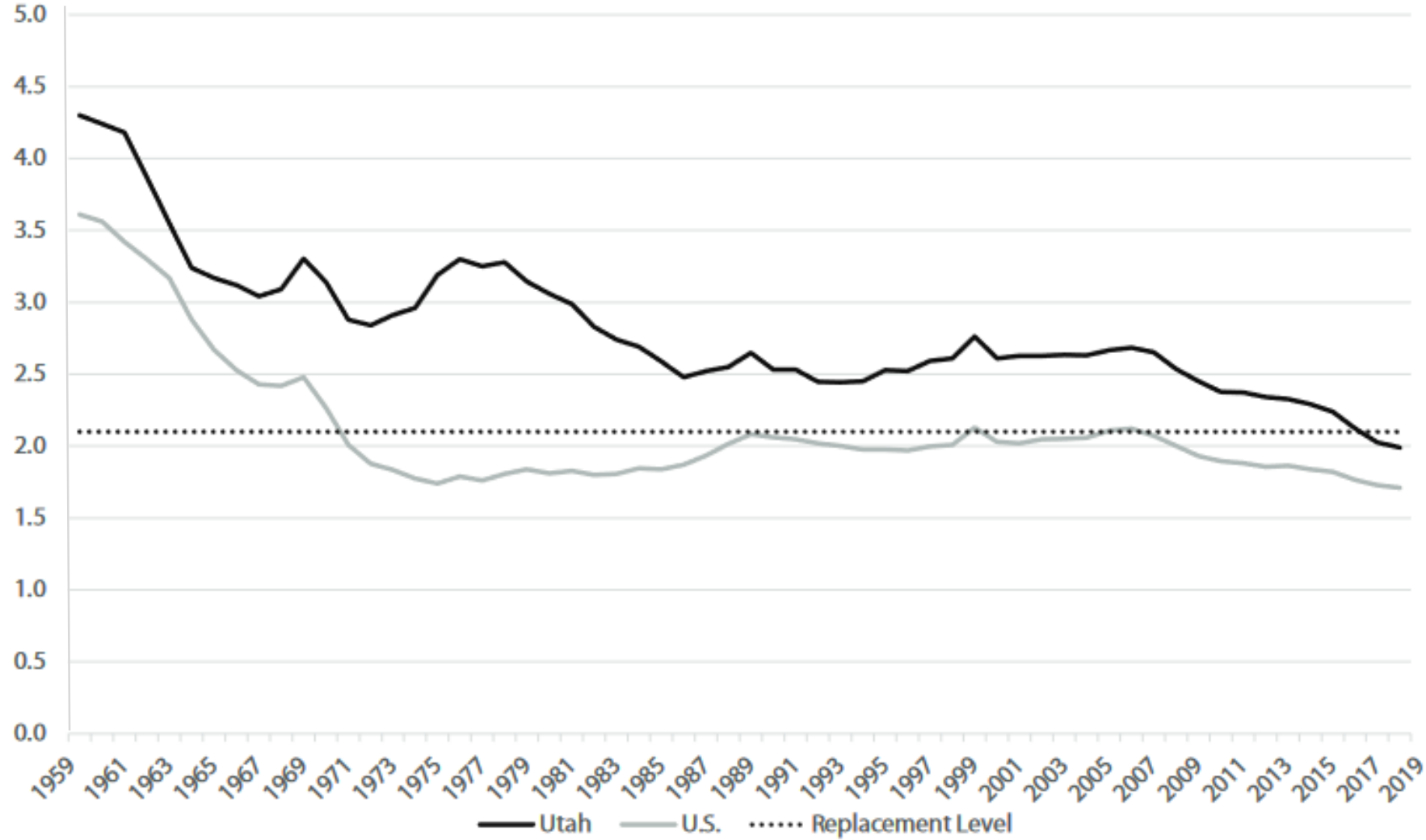
* Components of change include births, deaths and net international migration.
 Note: Only data to the right of the line are from Vintage 2021.

County Population Change



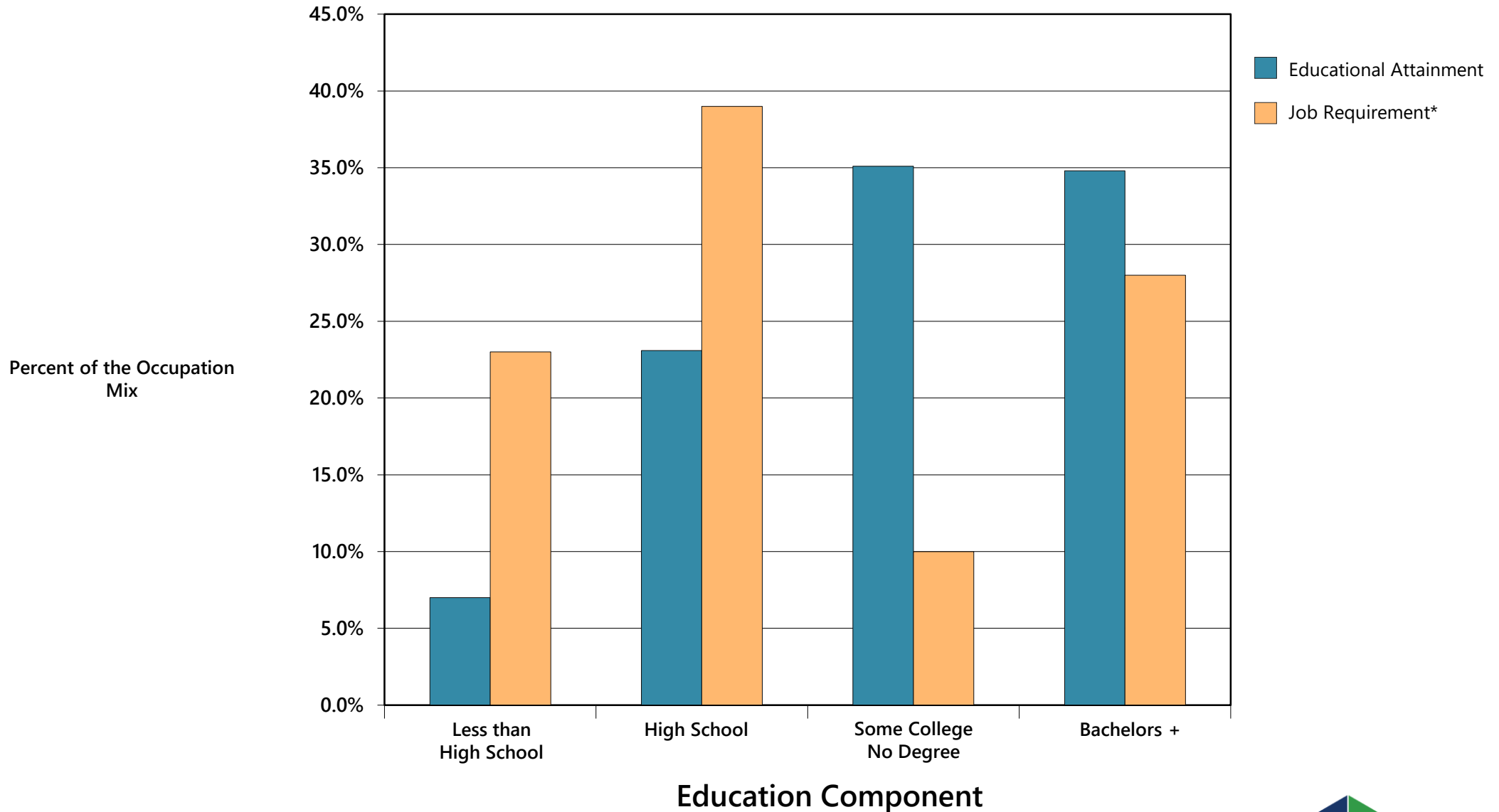
Source: United States Census Bureau

Total Fertility for Utah and the United States



Note: The Replacement Level is the fertility level at which the current population is replaced.

Utah Labor Force By Education /Occupation Mix



* The normal education level required as reported by employers. Source: U.S. Bureau of Labor Statistics.

Tight labor markets shifting into blue collar and manual services



Massive retirement of baby boomers. This is why the current era of labor shortages is different.

Never before have such a large number of retirements and almost zero growth in the working-age population happened before.



The working-age population of non-college graduates is shrinking

The share of young adults enrolling in four-year colleges is growing. On the flip side, the number without a bachelor's degree is shrinking.



The recovery in labor force participation has been disappointing

Overall, the tight labor market has led to an increase in labor force participation in recent years. But the improvement has not been remotely fast enough to prevent the labor market from tightening and has been somewhat disappointing, especially for men.



A large increase in disability rates

An important reason for the somewhat disappointing labor force participation rates is the large increase in recent decades in the number of people not in the labor force due to disability—almost all of whom lack a college degree.



Young men without college degrees are less likely to be in the labor force

Their decline in participation is partly because they are much more likely to be single, living with their parents, and have less of a need to earn income. These trends are more structural than cyclical and will be hard to reverse.

Manifesting Results

Much of the recent wage acceleration is coming from blue collar and manual services occupations.*



17%

Average hourly earnings increase in leisure and hospitality



15%

Increase in transportation and warehousing



3%

Wage growth for management and professional occupation

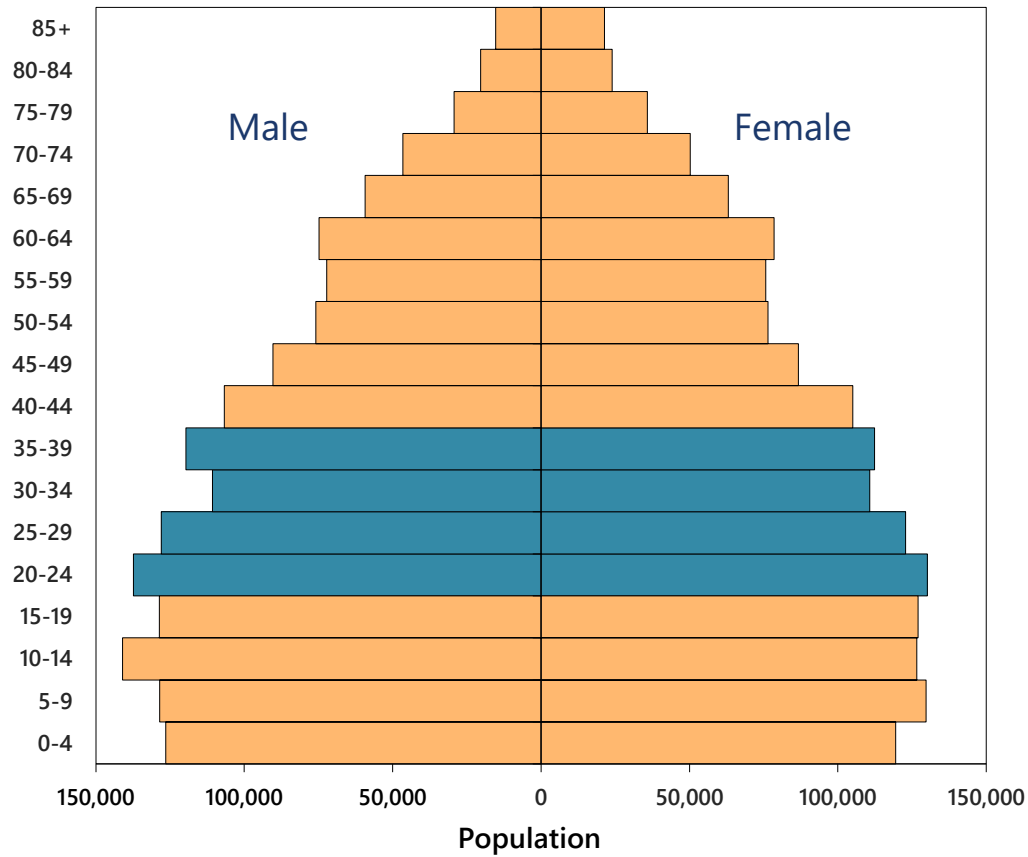
* 2021 wage observations

The Perfect Demographic, Political, Phenomenal, and Economic Storm



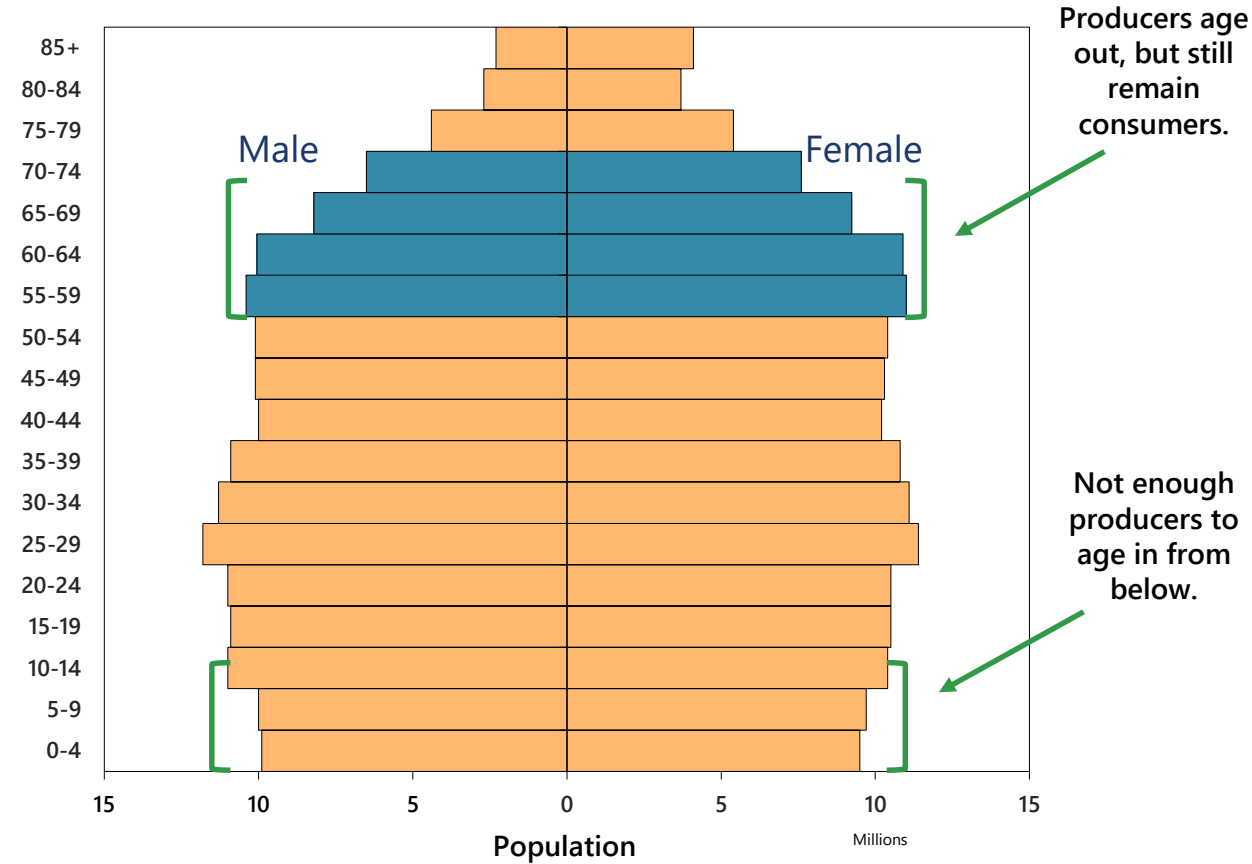
- **Demographic:** Stagnated population growth – little to no labor force growth. Cusp of massive Baby Boom retirements.
- **Political:** International in-migration is high in the political dialogue. In-migration has diminished.
- **Phenomenal:** A world-wide pandemic hits and massively disrupts the normal interaction of labor in the economy.
- **Economic:** Labor is in short supply. Existing labor moves up the ladder. Dearth of labor at the bottom.
- **Economic:** The production and flow of goods and services across national borders is deeply restricted.


Utah's Population by Age and Sex: 2020



 Labor Force Dominance

U.S. Population by Age and Sex: 2020



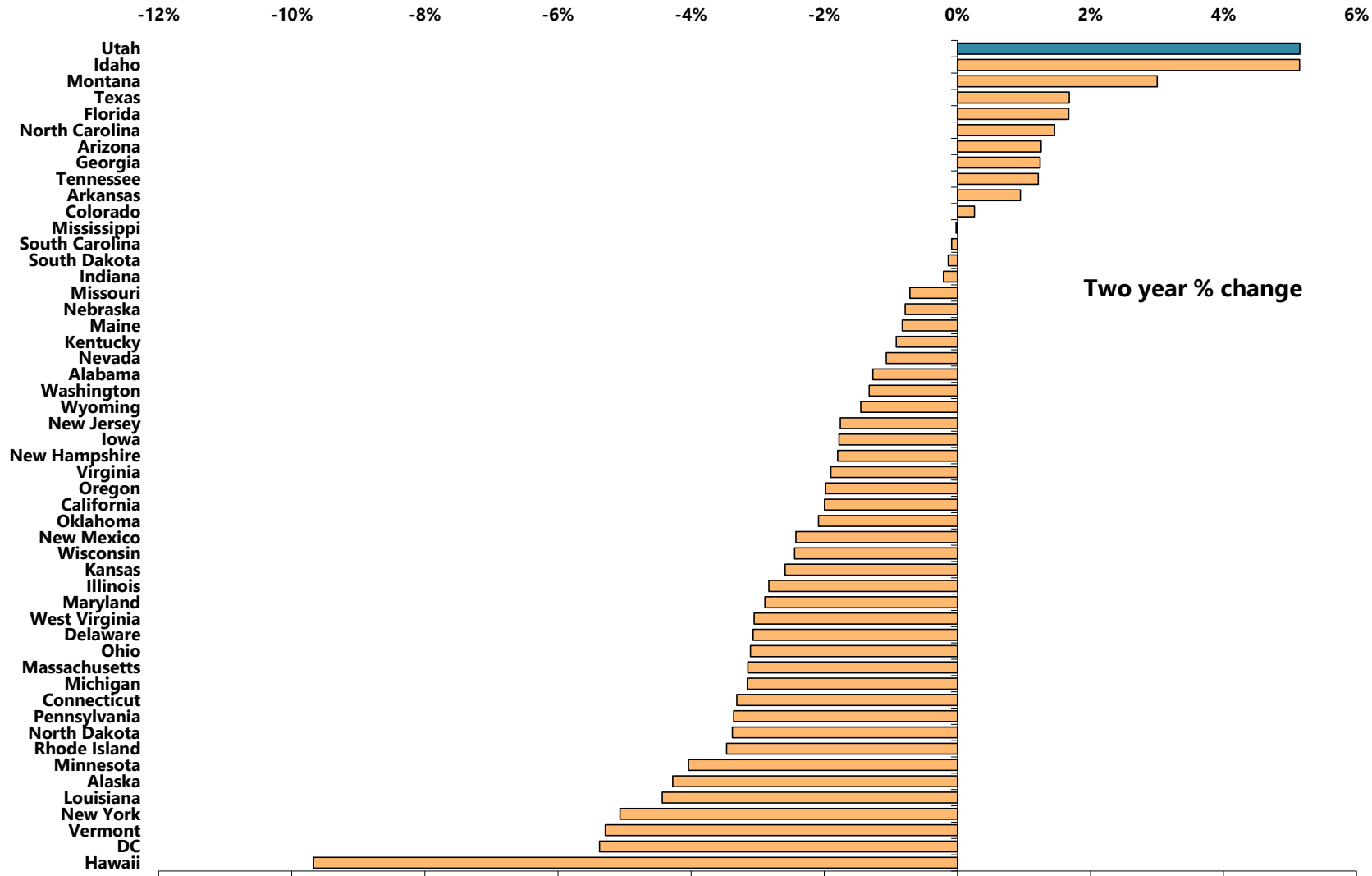
 Baby Boom Generation

Source: United States Census Bureau

Five Plausible/Combined Macro Solutions

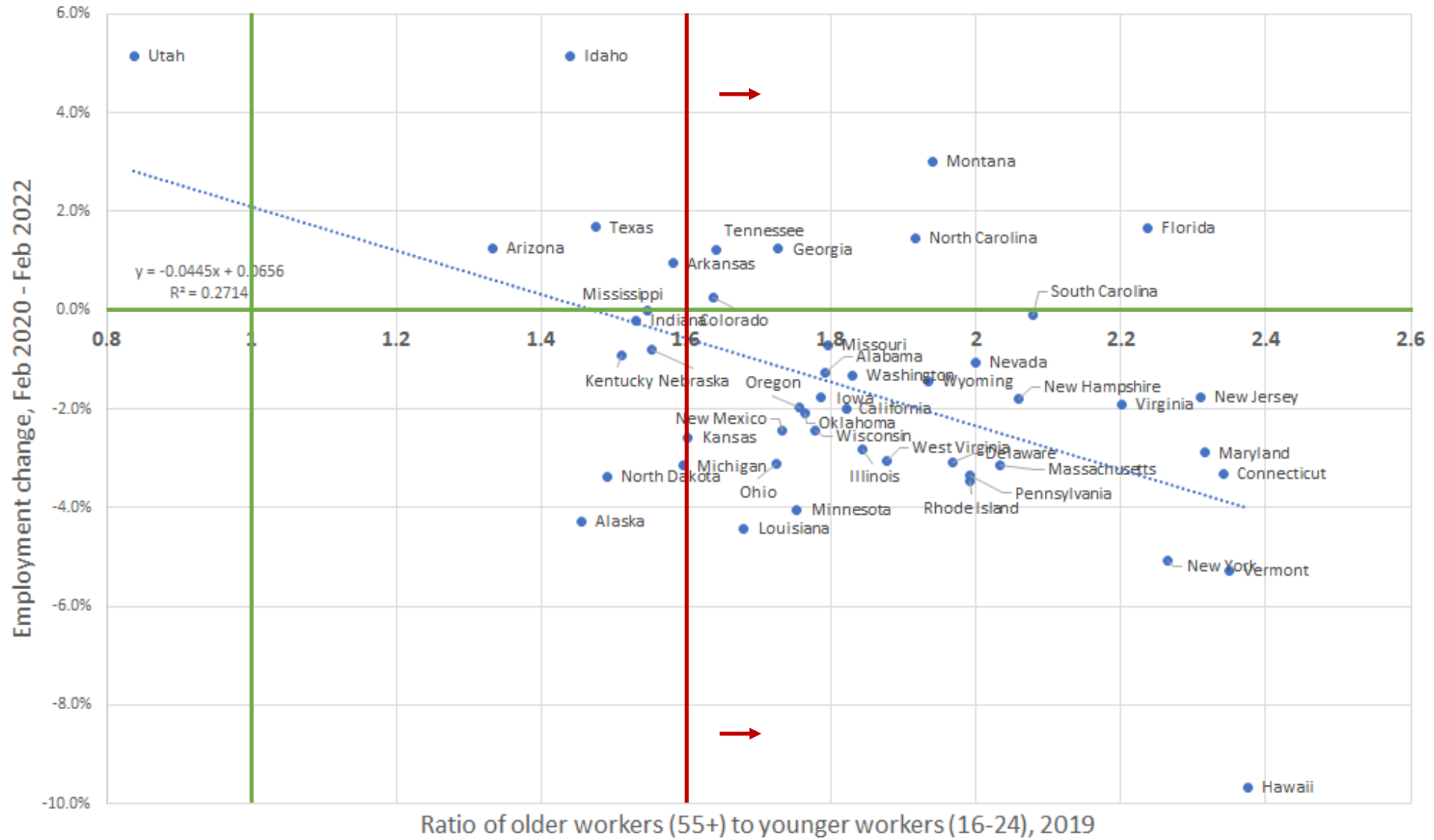
1. Incentivize or pressure the Baby Boomers to remain in the labor force.
2. Let the economy naturally shrink.

State by State Employment Change March 2020-2022



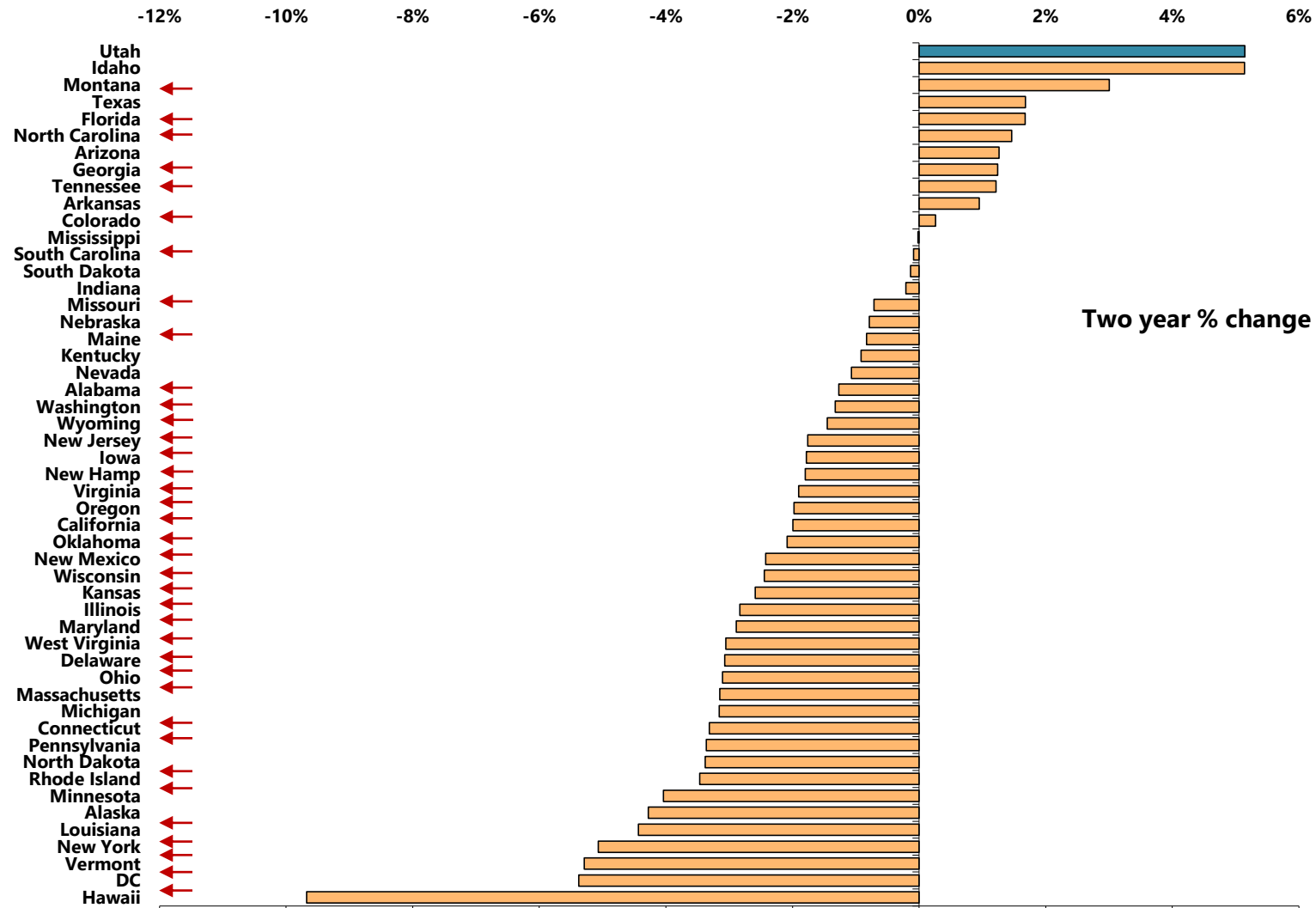
Source: United States Bureau of Labor Statistics; Utah Department of Workforce Services

Old (55+):Young (16-24) Labor Force ratio in 2019 vs Employment growth, Feb 2020 to Feb 2022



Source: United States Bureau of Labor Statistics; Utah Department of Workforce Services

State by State Employment Change March 2020-2022



Source: United States Bureau of Labor Statistics; Utah Department of Workforce Services

Five Plausible/Combined Macro Solutions

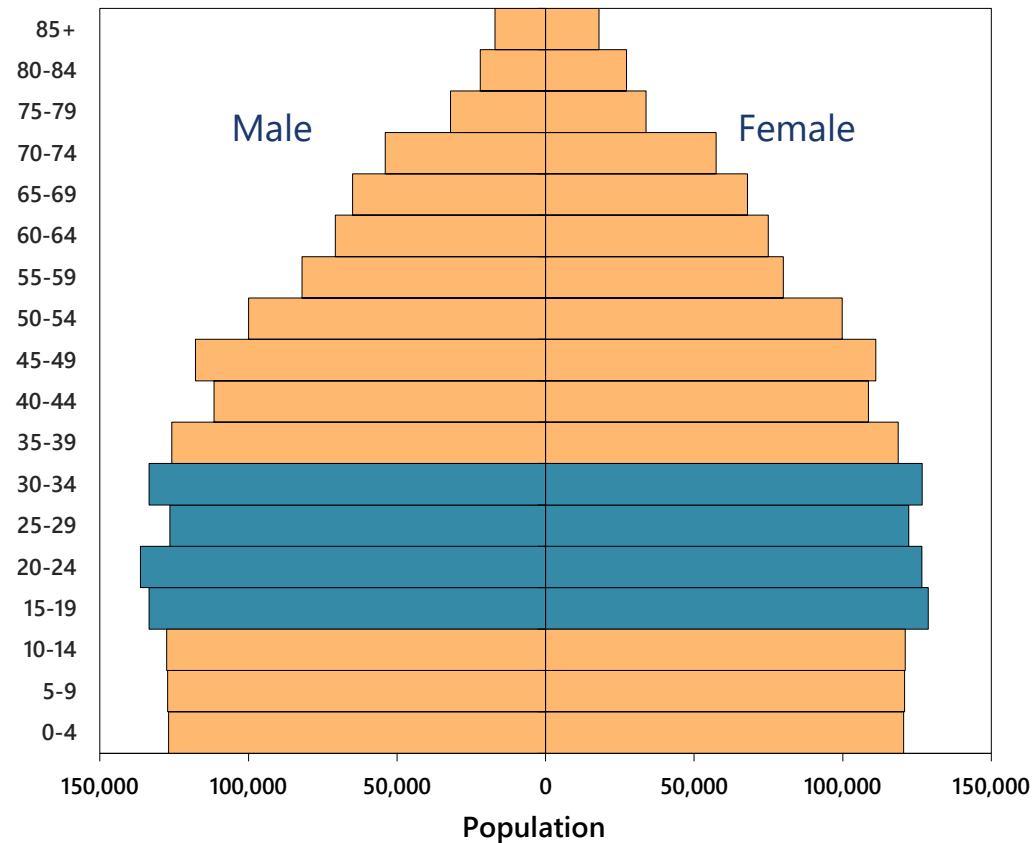
1. Incentivize or pressure the Baby Boomers to remain in the labor force.
2. Let the economy naturally shrink.
3. Use other countries labor and import in their product and/or service production.
4. Let other countries labor migrate to this country.
5. Offset the declining labor with automation and artificial intelligence.

Utah's Saving Grace



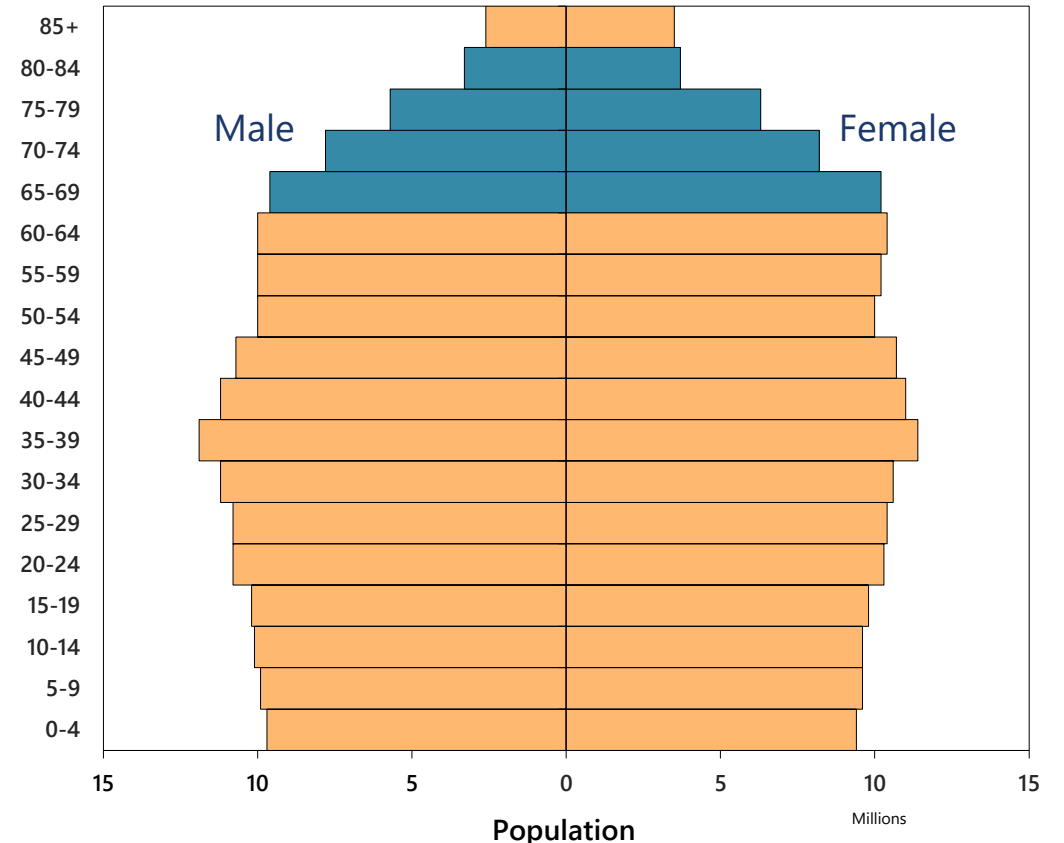
Looking to the Future


Utah's Population by Age and Sex: 2030



 Labor Force Dominance

U.S. Population by Age and Sex: 2030



 Baby Boom Generation

Source: Workforce Services Estimates

Demographic Impacts Moving Forward

1. Wage pressures are shifting toward the economic norm, not the exception.
2. The labor area that will need the most worker backfilling will be the low skill, low wage arena.
3. The country's current demographic trajectory, left unchanged, is for commerce demand to outpace labor supply. Therefore, wage pressure should persist until the baby boom generation diminishes, or new labor and/or automation and/or supply chains fill the void.
4. Wage pressure is often the main force behind inflation.
5. The FED desires low inflation. Going forward, one can envision the FED working to limit the economy to reduce its size so jobs do not outpace the amount of labor.