

# What is Causing the U.S. Population to Grow so Fast?

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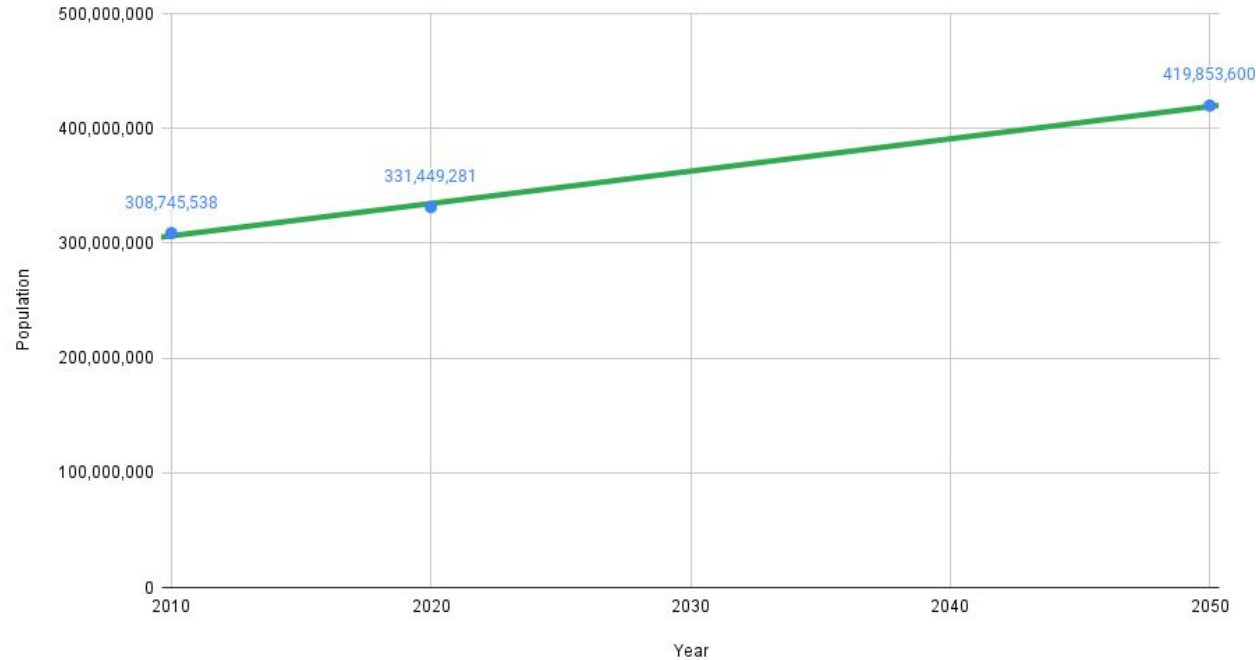
# Issue

America's population exceeds 330 million, with a projected outlook of potentially reaching 400 million by mid-century. "Without a doubt, America's population growth is a major factor affecting domestic demand for resources, including water, food and energy, and the worsening of the environment and climate change.

- Joseph Chamie<sup>[6]</sup>

- CDC estimates U.S. population to grow at faster rate from 2020-2050 compared to census in 2010-2020

Population According to the U.S. Census and CDC



# Objective

- The two factors contributing towards population are immigration and natural increase (difference in births and deaths)<sup>[5]</sup>
- **Hypothesis:** Advanced medicine and technology has increased longevity and decreased death rates, making birth rates the primary contributor to the growing U.S. population

*“...improvements in nutrition, water, medical care and other technological advances have contributed to a sharp decline in deaths while births continue to increase, resulting in population growth.”*

- Study Session 2 Population Growth<sup>[7]</sup>

# U.S. Birth Trends

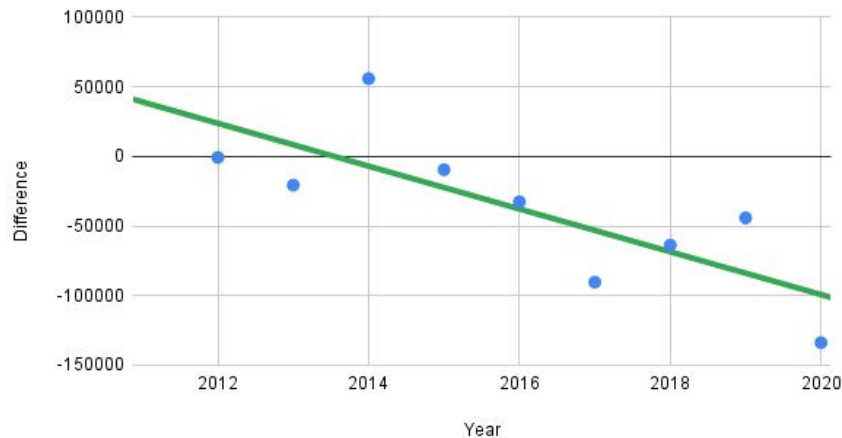
Population and Birth Data

- CDC birth data between 2011-2020<sup>[4]</sup>
  - 2010 and 2020 census data<sup>[1], [2]</sup> (for [approximate] population)
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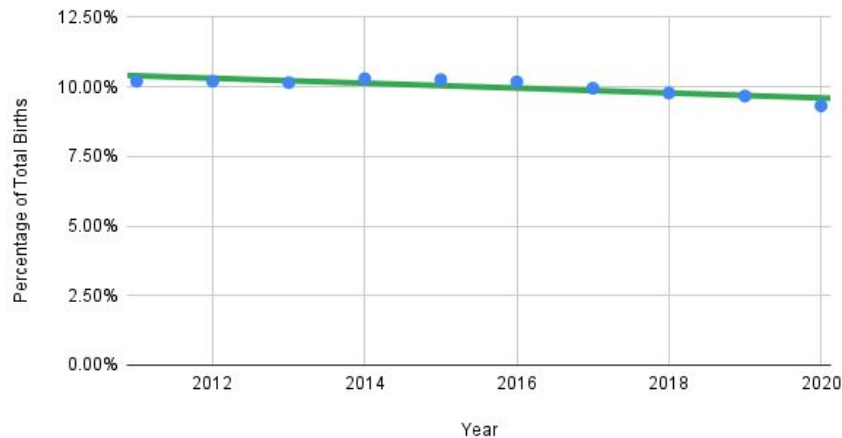
## 2011-2020 Birth Data

- 2014 is the only year with an **increase** in births from the previous year
- On average, a 37,771 **decrease** in live births from each previous year

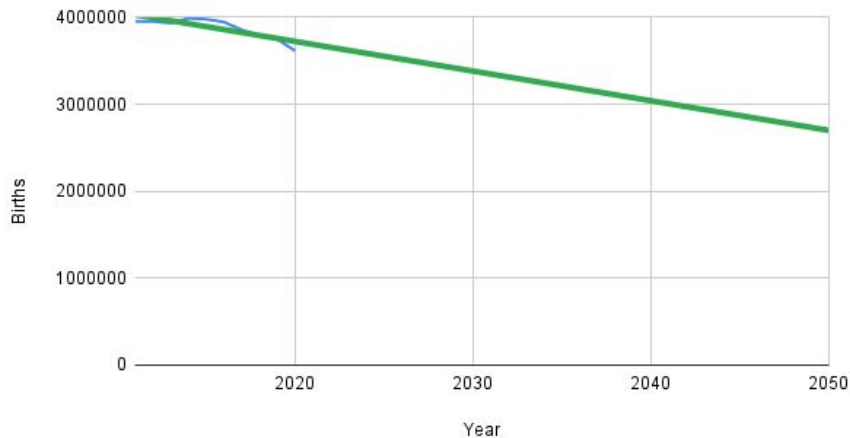
Difference In Births By Year



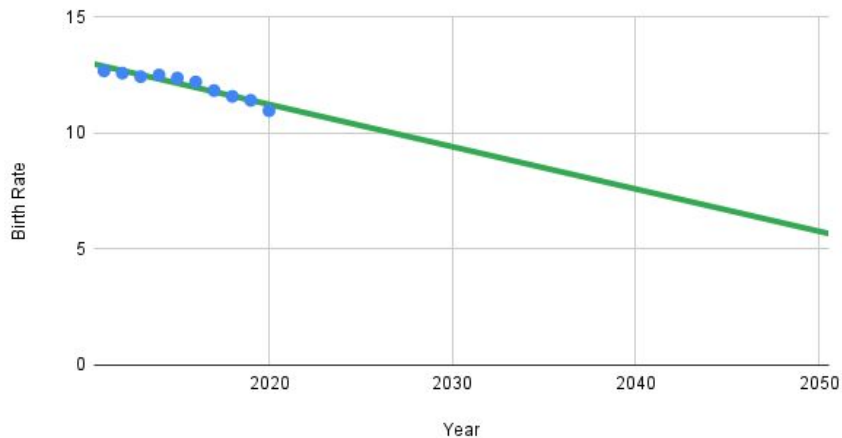
Percentage Of Total Births Each Year



Births Per Year



Birth Rate vs. Year



## Trajectory for 2050

- Data estimates **less than 3 million births**
- Data estimates **birth rate** to be **only 6.9, about half of 12.69** in 2011

**Birth rate**<sup>[8]</sup> - ratio of live births to total population [in that year], multiplied by 1000 - i.e. the frequency of births in a given population

But Population Still Increases Rapidly?

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# How Does Immigration Affect The U.S. Population?

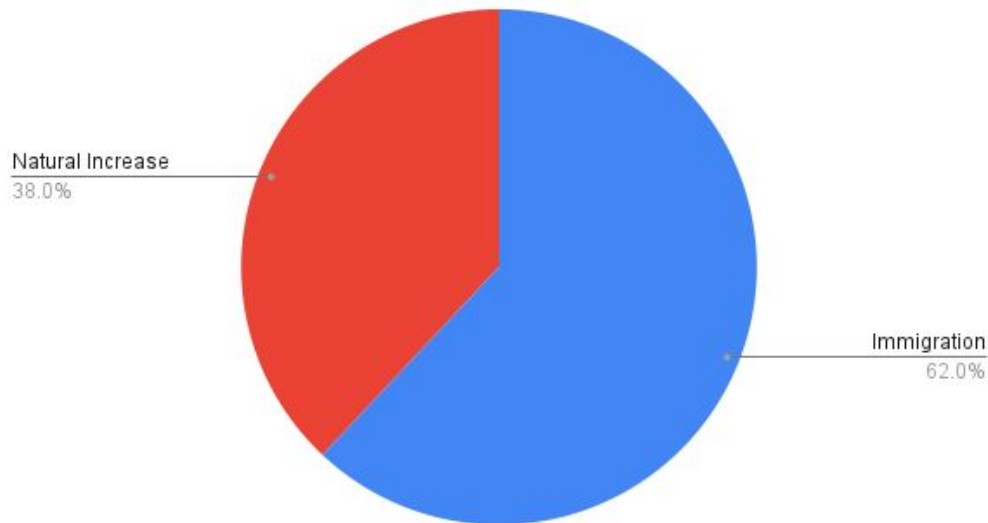
According to Joseph Chamie<sup>[5]</sup>:

- Historic high of **46.2 million** immigrants in America; **14.2** percent of U.S. population
- Total immigrant population in 2030 expected to be **54 million**; about **15 percent** of total population
- Total in 2050 expected to be **65 million**; about **17 percent** of population

“With the aging of America’s overall population and baby boomers reaching the oldest ages, deaths are expected to increase more rapidly than births. Consequently, by mid-century immigration is expected to be contributing twice as many people to America’s population as natural increase.”

- Joseph Chamie (The Hill)<sup>[5]</sup>

Contribution to U.S. Population in July 2020 - July 2021





# So What is the Primary Population Contributor?

- **Hypothesis:** Birth rates are the primary contributor to the growing U.S. population
- **Conclusion:** Immigration is the primary contributor; birth rates are not.
- While birth rates previously were on the high end, they are NOT the primary contributor anymore.
- Birth rates decreased over 37,771 a year on average between 2011 and 2020
- Immigration trends expected to continue rising and making up larger portions of population from previous years

# References and Appendix

## DATA

[1] Bureau, U. S. C. (n.d.). Explore census data. Retrieved October 30, 2022, from <https://data.census.gov/cedsci/table?q=us+population+2010&tid=DECENNIALPLNAT2010.P1>

[2] Bureau, U. S. C. (n.d.). Explore census data. Retrieved October 30, 2022, from <https://data.census.gov/cedsci/table?q=us+population+2020&tid=DECENNIALPL2020.P1>

[4] Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database. Data are from the Natality Records 2007-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/natality-current.html> with requested records 2011-2020 on Oct 29, 2022 5:51:00 PM.

[5] Joseph Chamie, opinion contributor. (2022, January 11). For the foreseeable future, immigration will fuel US population growth. The Hill. Retrieved October 31, 2022, from <https://thehill.com/opinion/immigration/589178-for-the-foreseeable-future-immigration-will-fuel-us-population-growth/>

## QUOTES

[3] Causes and consequences of overpopulation. Sustainability for all. (n.d.). Retrieved October 30, 2022, from [https://www.activesustainability.com/sustainable-development/causes-consequences-overpopulation/?\\_adin=02021864894](https://www.activesustainability.com/sustainable-development/causes-consequences-overpopulation/?_adin=02021864894)

[6] Npg. (2022, April 13). Opinion piece offers valuable insight on population growth. Negative Population Growth. Retrieved November 3, 2022, from <https://npg.org/npg-commentary/em-041322.html>

[7] *Study session 2 population growth*. Study Session 2 Population Growth: View as single page. (n.d.). Retrieved October 31, 2022, from <https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=79927&printable=1>

[8] World Health Organization. (n.d.). Indicator metadata registry details. World Health Organization. Retrieved October 31, 2022, from <https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1139#:~:text=The%20ratio%20between%20the%20number,year%2C%20usually%20multiplied%20by%201%2C000.>

Thank You.