

Do We Actually Have a Population Problem?

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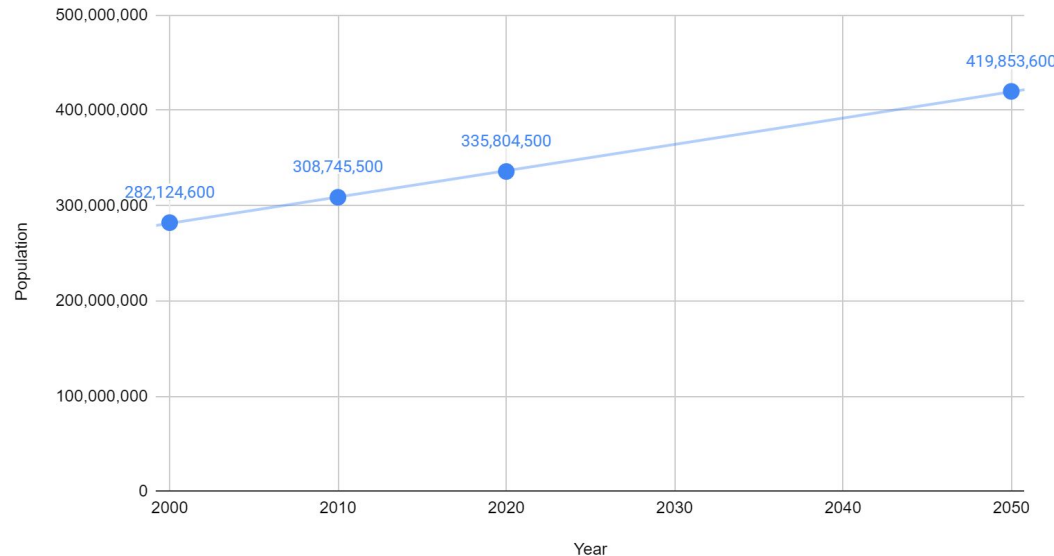
Issue

Overpopulation may cause severe exhaustion of natural resources, environmental degradation, rising unemployment, rising living costs

- Sustainability for all^[3]

- Hypothesis: Birth rates are a primary contributor to the U.S. population

(Approximate) Population According to the CDC



U.S. Birth Rate Trends

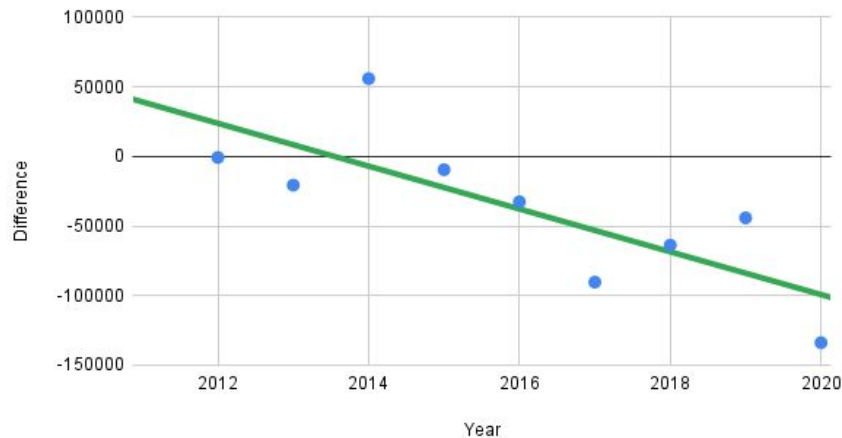
Population and Birth Data

- CDC birth data between 2011-2020^[4]
 - 2010 and 2020 census data^{[1], [2]}
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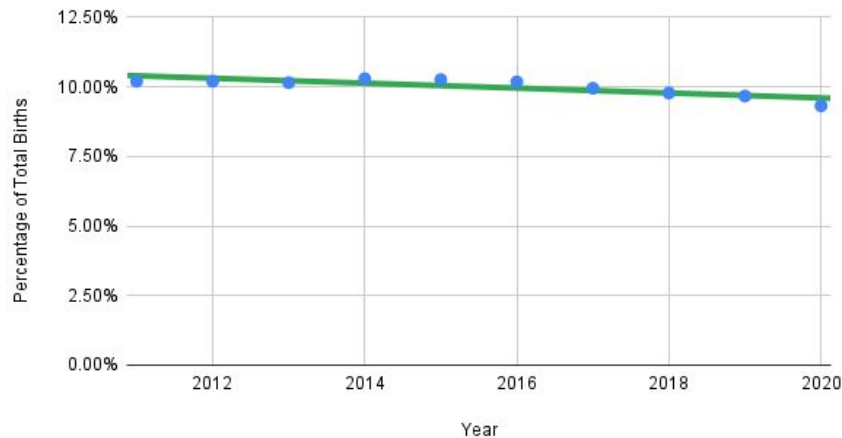
2011-2020 Birth Data

- 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

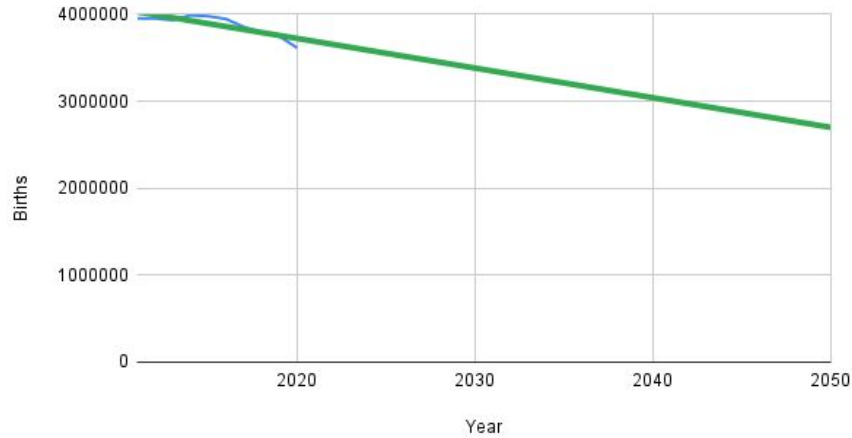
Difference In Births By Year



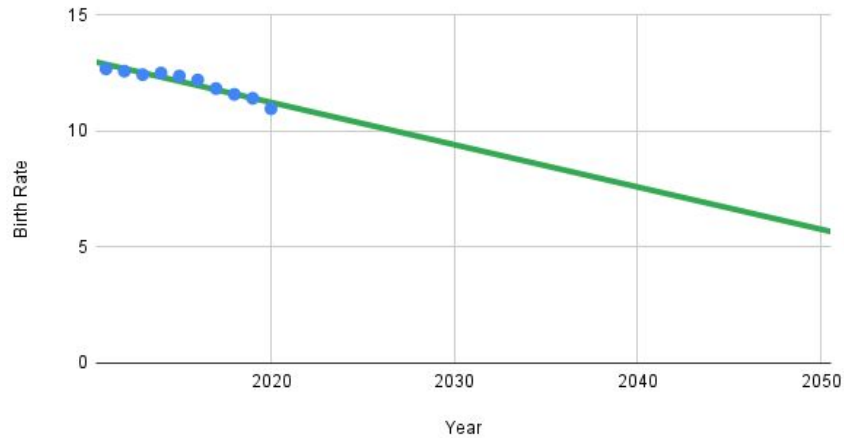
Percentage Of Total Births Each Year



Births Per Year



Birth Rate vs. Year



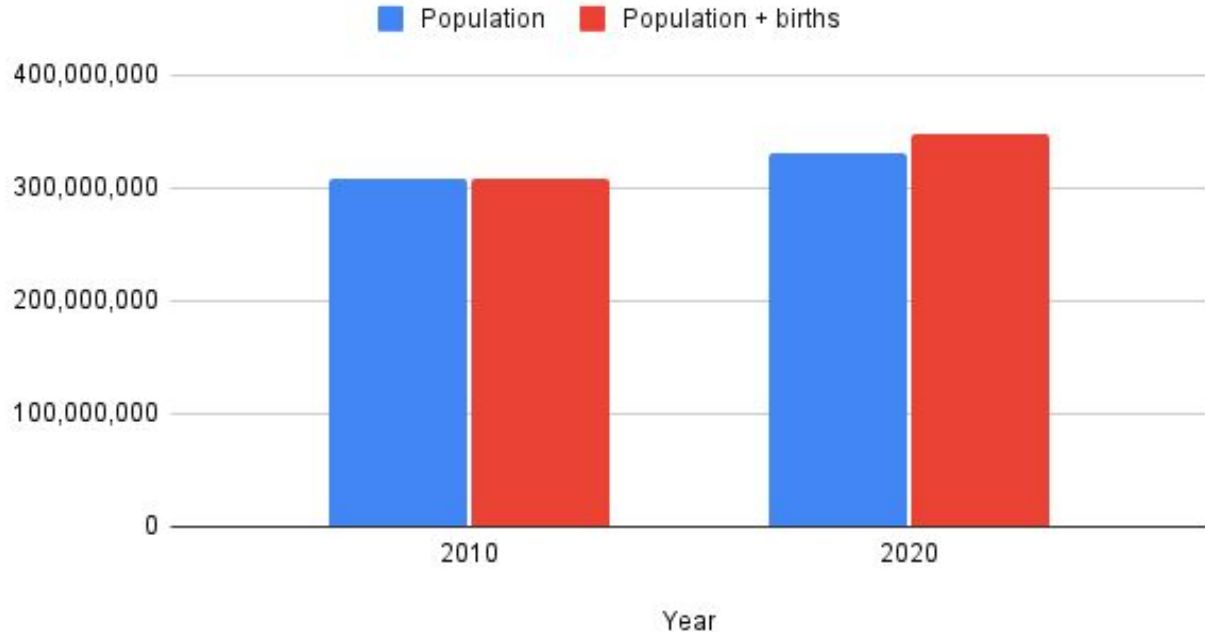
Trajectory for 2050

- Data estimates **less than 3 million births**
- Data estimates birth rate (births/total population * 1000) to be **only 6.9, about half of 12.69** in 2011

Does Birth Rate Greatly Impact Population Growth?

- Adding 2011-2020 births to 2010 census gives us greater population in 2020 than 2020 census
- Although there are many births, population is still low, so birth rate is not the main contributor

Census Population vs. Population With 2011-2020 Births



But Population Still Increases Rapidly?

Other Contributors to U.S. Population?

“Immigration, even at reduced levels, is for the first time making up a majority of population growth.

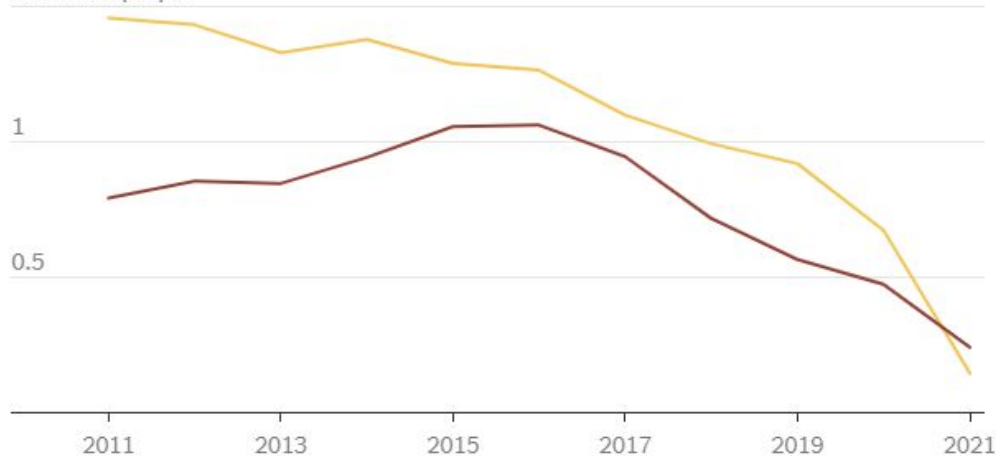
In part this is because Americans are dying at higher rates and having fewer babies, trends accelerated during the coronavirus pandemic. But it’s also because there are signs that immigration is picking up again.”

- New York Times ^[5]

Annual Change in Population by Category

— Immigration — Natural Increase

1.5 million people



Source: U.S. Census Bureau, Population Estimates Program By The New York Times

So Why Is The Population Still Rising So Much?

- **Hypothesis:** Birth rates are a primary contributor to the U.S. population
- **Conclusion:** Birth rates are NOT a primary contributor. However, immigration is gradually becoming a major contributor
- Although births appear to be on the high end, they continue to decrease year by year
- Immigration has begun to pick up, even alone beginning to affect the U.S. population greatly
- The increasing immigration will more likely cause overpopulation than birth rates

References and Appendix

- [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>
- [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
- [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] Jordan, M., & Gebeloff, R. (2022, February 5). Amid slowdown, immigration is driving U.S. population growth. The New York Times. Retrieved October 30, 2022, from <https://www.nytimes.com/2022/02/05/us/immigration-census-population.html>

Thank You.