

# Do We Actually Have a Population Problem?

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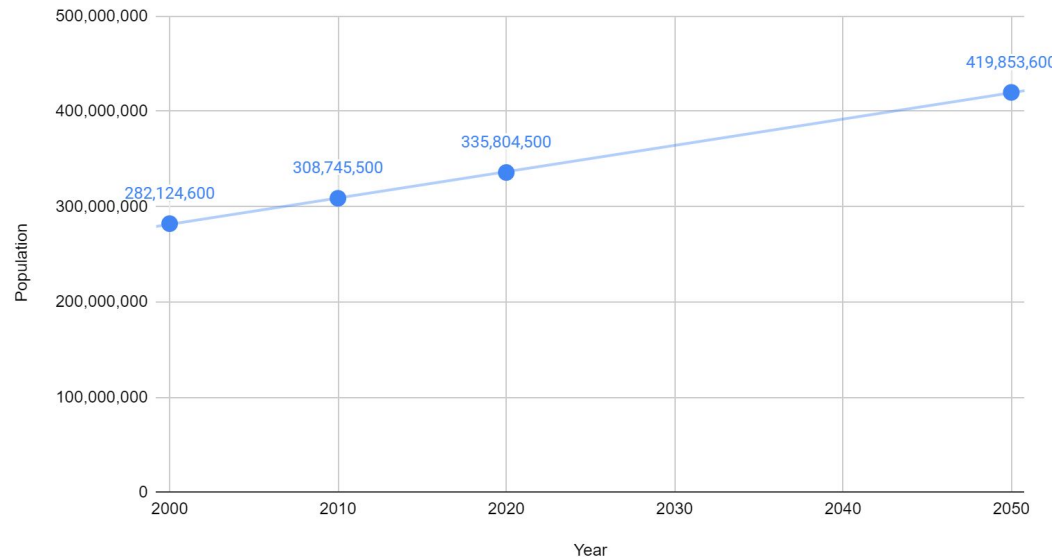
Chloe Rushing  
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# Issue

*“The U.S. population was 309 million in 2010; by 2050, the U.S. population is estimated to be greater than 400 million persons.”<sup>[2]</sup>*  
- U.S. CDC

- The rapidly growing U.S. population may cause overpopulation which will lead to a lack of food and resources necessary to maintain us.
- Hypothesis: A high birth rate greatly increases population. How do we prevent overpopulation?

(Approximate) Population According to the CDC



# U.S. Birth Rate Trends by Age Group

# Process and Approach

- U.S. CDC birth rate data<sup>[1]</sup>
- Separated data by race/ethnicity
- Percentage of yearly births per 1,000 women; excluded ages 10-14 and 45-54 due to outlier data
- Percentage differences from previous year; used 2000-2019 as most common timespan



# What Does This Tell Us About Birth Rates From 2000-2019?

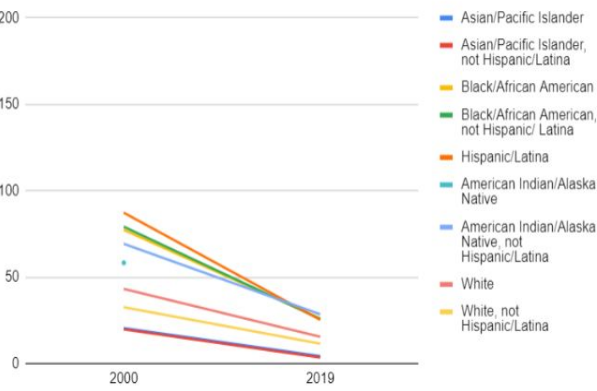
- Decrease for ages 15-29
- Increase for ages over 30, not significant portion of live births
- Smallest and largest **increase** between 40-44 and 35-39 at **1.92%** and **16.03%** respectively
- Smallest and largest **decrease** between 25-29 and 20-24 at **26.75%** and **51.97%** respectively

So...What do We Need to do?

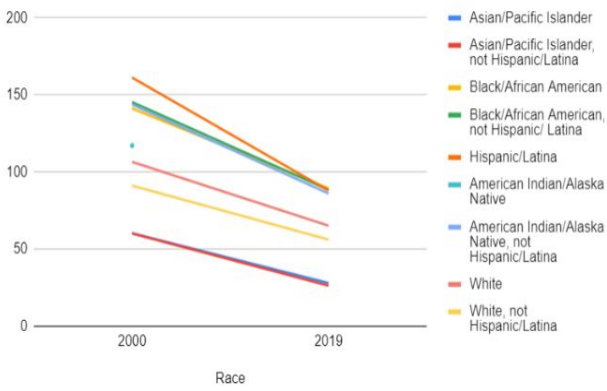
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# 2000 vs. 2019 Live Births

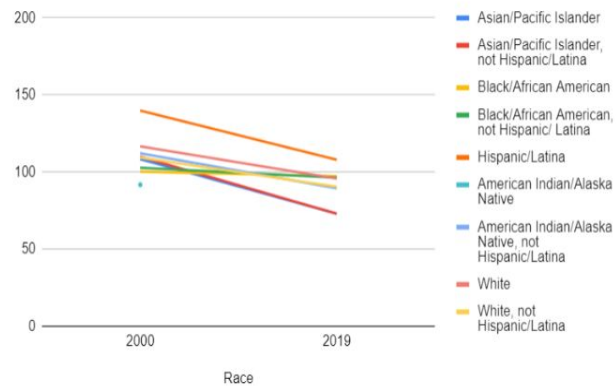
15-19



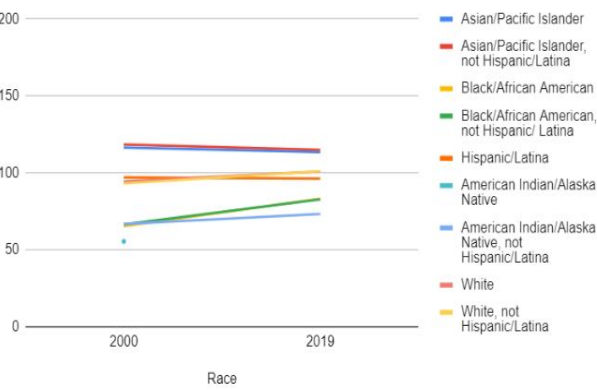
20-24



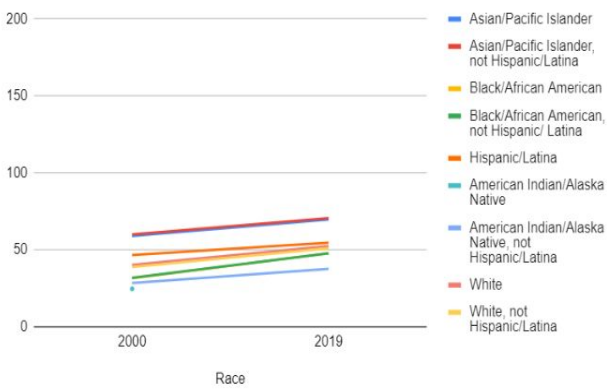
25-29



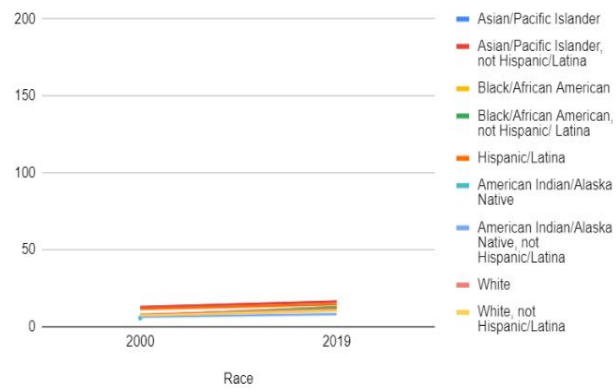
30-34



35-39



40-44





# Increasing Birth Rate ->? Overpopulation

- **Hypothesis:** A high birth rate greatly increases population
- Data shows greater decrease in birth rate than increase

- **Conclusion:** Birth rate does not contribute much to U.S. population
- Approximately 3000 total births between 2019-2020; way less than 2,705,900
- No need to act on birth rate as it is already so low

Year	Population	Change per 1 year
2000	282,124,600	
2010	308,745,500	2,662,090.00
2020	335,804,500	2,705,900.00
2050	419,853,600	2,801,636.67

# Further Exploration

- What other contributors are there to the U.S. population?
- How did the pandemic affect the current U.S. population?
- How does the U.S. population and its growth represent the world's population?

# References and Appendix

- [1] “Births - Health, United States.” Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 12 Aug. 2022, <https://www.cdc.gov/nchs/hus/topics/births.htm#explore-data>.
- [2] “CDC Surveillance System: Estimated and Projected Population in the U.S.” Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, <https://nccd.cdc.gov/ckd/detail.aspx?Qnum=Q155#tab-KeyPoints>.
- [3] Rushing, Chloe. “Chloelinli.github.io/Projects/US\_BIRTH\_RATE\_TRENDS\_20221006 at Main · Chloelinli/Chloelinli.github.io.” GitHub, [https://github.com/chloelinli/chloelinli.github.io/tree/main/projects/us\\_birth\\_rate\\_trends\\_20221006](https://github.com/chloelinli/chloelinli.github.io/tree/main/projects/us_birth_rate_trends_20221006).

Thank You.