Maryland County Analysis

Project by Nate Kaduk

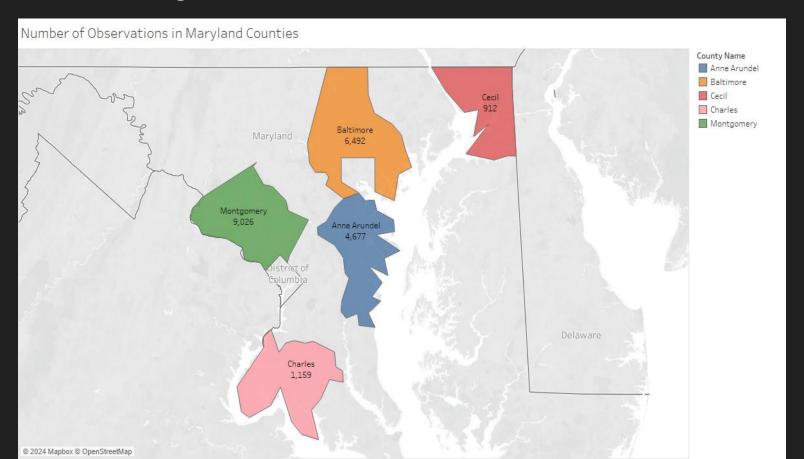
Goal

- Compare Maryland counties to see how they differ from one another.
- Answer questions such as:
 - Which counties have the most educated population?
 - How educated are different races or sexes in the counties?
 - Are there any counties with a high minority population?
 - How do counties touching the Chesapeake Bay differ than counties inland?
 - How do large counties differ from smaller counties?
 - How do the counties representing the three largest Maryland cities differ from one another.

Data

- Data was sourced from 2022 Census data using IPUMS.
- Variables obtained and created:
 - State/County Fips codes
 - County not unique Created unique identifier
 - County Names
 - o Income year 2024 income
 - No negative incomes
 - No system missing
 - Inflation
 - Age 18 or above
 - Sex
 - Race -- Categorical
 - Education Categorical
 - Maryland is big on education

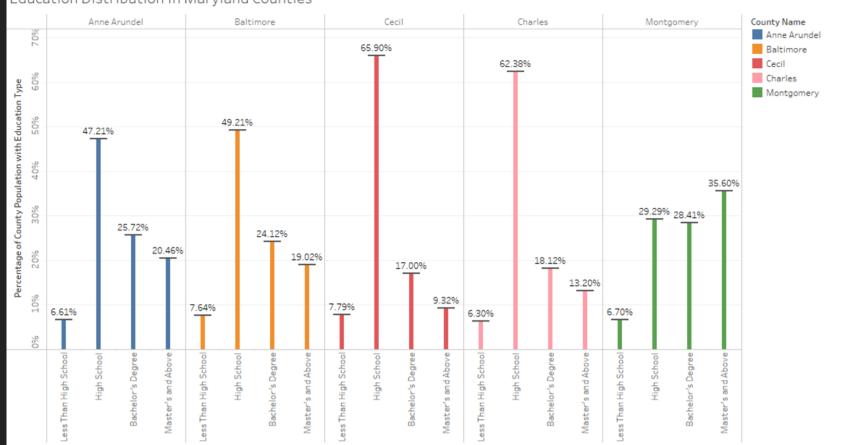
Counties Being Studied



Overall Results

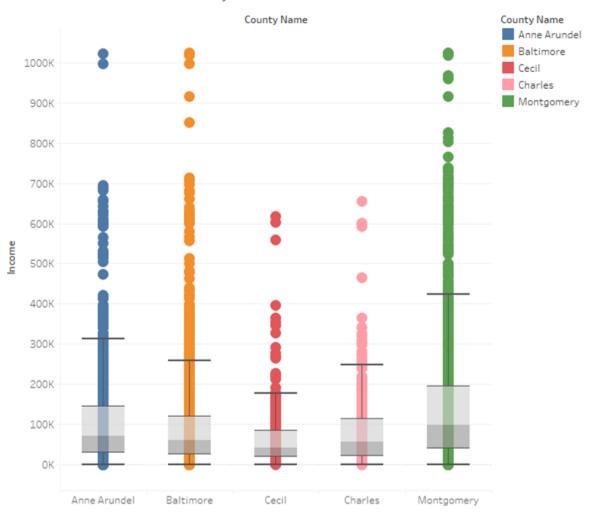
Education in Maryland Counties



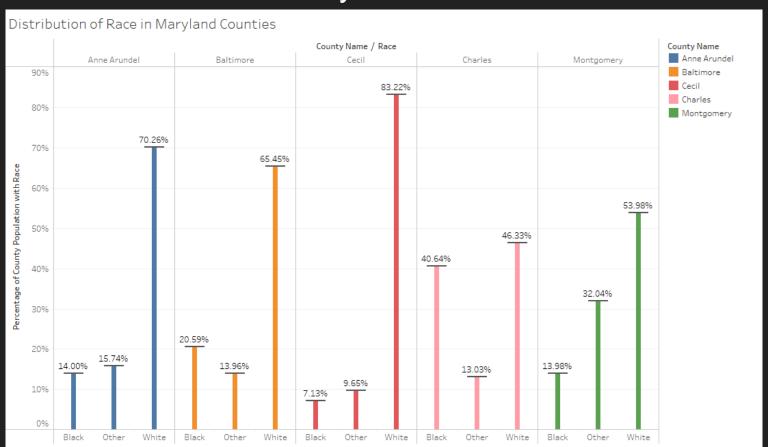


Income in Maryland Counties

Income Distribution for Maryland Counties



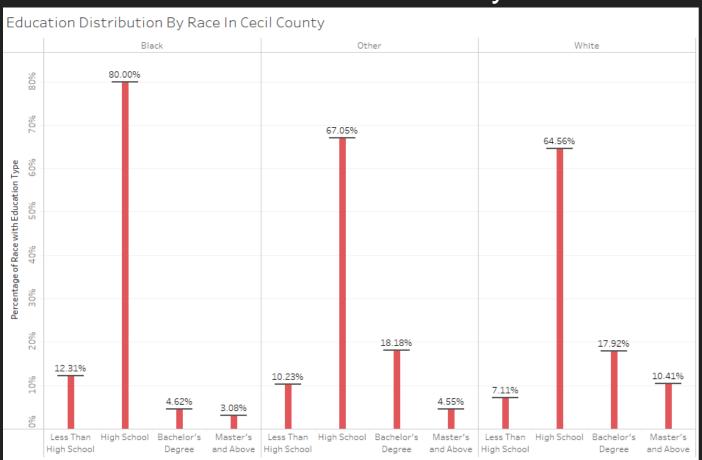
Distribution of Race in Maryland Counties



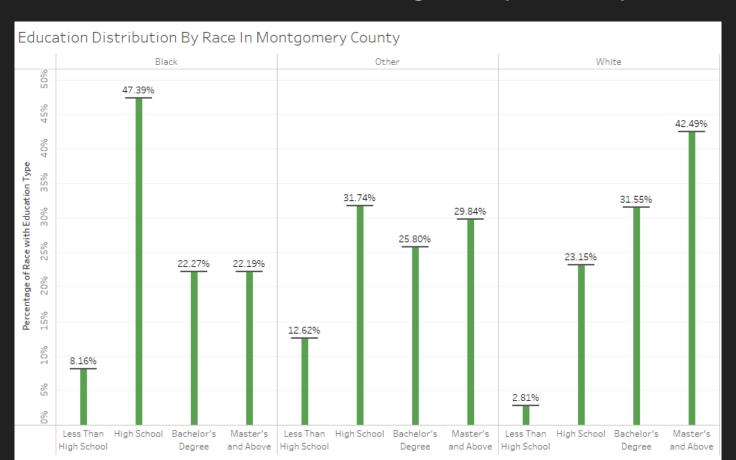
Race Subsample Analysis

(Some results)

Distribution of Education in Cecil County



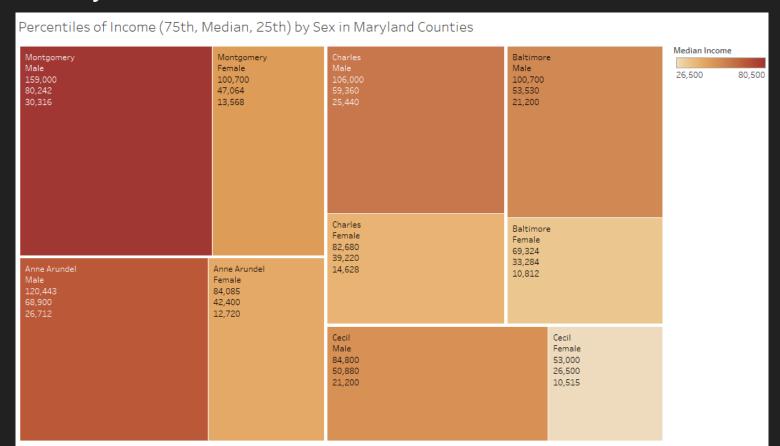
Distribution of Education in Montgomery County



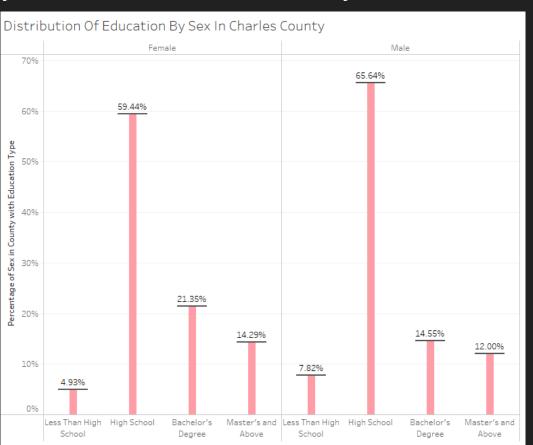
Sex Subsample Analysis

(Some results)

Income by Sex



Education by Sex in Charles County



Conclusion

- Obtained census data from IPUMS in order to study Maryland counties.
- Montgomery county is the best when it comes to education and income.
 - Cecil is the worst.
- Baltimore county and Anne Arundel county are very similar.
 - Anne Arundel is slightly better in regards to education/income.
- Each county has disparity in races
 - Montgomery is the best comparing the race groups.
 - Cecil is the worst.
- There is a massive income gap between males and females.
 - Charles has the smallest gap; Cecil has the largest

Questions?

Thank you for your time!

Citations

- 1. Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rogers, and Megan Schouweiler. IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024. https://doi.org/10.18128/D010.V15.0
- 2. Herrig, A. (2023, January 12). Rising inequality revealed: Ranking the most and least educated states. Cherokeephoenix.org. https://www.cherokeephoenix.org/education/rising-inequality-revealed-ranking-the-most-and-least-educated-states/article_634a254a-9289-11ed-b8a4-b39c750dc113.html
- 3. Aragão, C. (n.d.). Gender pay gap in U.S. hasn't changed much in two decades. Pew Research Center. https://www.pewresearch.org/short-reads/2023/03/01/gender-pay-gap-facts/#:~:text=The%20gender%20gap%20in%20pay%20has%20remained%20relatively