Inequality in Voter Turnout as a Measure of Democracy

Bass Connections, Spring 2023

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Executive Summary

Well-functioning democracy requires government responsiveness to the preferences of citizens across a wide range of constituencies. The health of democracy is threatened by the prevalence of unequal participation, unequal influence, and the extent to which unequal participation and influence overlap. Freedom House's 2021 *Freedom in the World Report* showed that over the last decade, the United States' democracy score declined by over 10%. Recent events, including rising election denialism, misinformation, and state-level adoption of anti-voter policies, have contributed to this decline.

In response to the declining health of U.S. democracy, we decided to design and implement a project to measure inequality in voter turnout across the states. By focusing on inequality in voter participation, we attempt to better understand state-level electoral policies and their impact on each citizen's ability to be heard at the ballot box. We measured inequality in democracy across U.S. states by analyzing disparities in voter turnout within four different demographic categories: age, ability status, race/ethnicity, and educational attainment. We then compared the turnout gaps in the most and least equal states with a qualitative analysis of state-level electoral policies.

Using data from the U.S. Census Bureau and the Bureau of Labor Statistics, we observed state-by-state inequalities in 2020 voter turnout among all four demographic categories. We found some correlation between policy indicators and 2020 turnout inequalities for three of the demographic categories: age, ability status, and race/ethnicity. We generally found that policies that give voters flexibility (such as language access, no excuse vote-by-mail, online voter registration, and expansive early voting) tend to be associated with more equal voter turnout across demographics.

To further supplement our analysis, we developed a predictive model using multilevel regression with poststratification that incorporated weighted survey data from the six most recent federal election cycles. The model roughly approximates the inequality of historic turnout trends within the aforementioned four demographic categories. The modeling identified different states at the most and least equal end of each demographic category. Its results are contained within an appendix to this report.

Beyond continued improvements to the logistic regression models, there are additional demographic categories (e.g., gender and household income) that could benefit from further exploration. There may be additional confounding variables that impact the observed turnout results, including each state's voting culture and the overall competitiveness of elections in a state. Ultimately, our project rests on the concept that democracy is best served when communities vote in proportion to their population. We hope that additional research will shed more light on unequal turnout across demographics and the policies that contribute to those observed inequalities.

Introduction

Why This Project

Democracy in the United States is declining. In March of 2021, Freedom House published its annual *Freedom in the World Report* (2021), which reported that over the last decade the U.S.'s democracy score dropped 11 points on a 100-point scale. Moreover, the score dropped 3 points due to events that occurred in 2020, indicating that a significant decline occurred recently. Some events from the past decade stand out as particularly corrosive to the current state of democracy. In 2013, the U.S. Supreme Court's decision in *Shelby County v. Holder* struck down as unconstitutional Section 4 of the Voting Rights Act, which subsequently made Section 5 inapplicable (Shelby County, 2018). Section 5 had required certain jurisdictions with a history of voter suppression to get federal preclearance before making changes to voting policy. Since then, many jurisdictions have altered voting policy in ways that make voting more difficult, such as by implementing strict voter ID laws and authorizing polling place closures. The events surrounding the 2020 election mark a distinct point in the erosion of democracy, with Donald Trump trying to overturn election results and his supporters attempting to thwart the peaceful transfer of power by storming the Capitol on January 6, 2021 (United States, 2022). Moreover, the Stop the Steal movement profoundly undercut confidence in elections among conservatives, causing many state legislatures to begin passing laws restricting voting access (Voting laws, 2022). Finally, as the COVID-19 pandemic persisted throughout the country, deep partisan divisions and the spread of misinformation further eroded the democratic character of the nation (United States, 2022). Based on these events and their impacts on the health of U.S. democracy, we believe it would be informative and contribute to the public debate to measure inequality in voter turnout across the states.

Theories of Democracy Measurement

One way political scientists categorize measurements of democratic health is through consideration of how "thick" or "thin" a project conceptualizes democracy (Coppedge, 1999; Møller and Skaaning, 2010). Thick conceptions of democracy typically look at democracy as a state of being, incorporating measures of civil and political rights, as well as economic freedom. The CIVICUS Monitor provides a paradigmatic example of a thick scorecard, tracking freedom of association, expression, and assembly, alongside the institutions that protect those freedoms (CIVICUS, 2021). By contrast, thinner measurements of democracy focus more narrowly on the health of political institutions.

Our project's focus, which is particularly thin, has its roots in political theorist Robert Dahl's concept of intrinsic equality. He explains that the case for democracy stems from the "moral judgment that all human beings are of equal intrinsic worth" and therefore that "the interests of each person must be given equal consideration" (Dahl, 2006, p. 4). If we believe in intrinsic equality, then a representative democracy must promote *inclusive citizenship*, one of Dahl's six essential institutions for a large-scale democracy (Dahl, 1998). When citizens are denied the

opportunity to participate in democracy, those citizens cannot expect their interests to be "adequately protected and advanced by those who govern" (Dahl, 1998, p. 77). In other words, a democracy without inclusive citizenship is not a democracy at all. By focusing narrowly on equality in voter participation, we assess Dahl's concept of inclusive citizenship and attempt to gain an understanding of the state-level policies having the greatest impact on each citizen's ability to be heard at the ballot box.

Political Participation and Political Equality in a Representative Democracy

Voting is one of the most important methods by which citizens can communicate their interests and preferences to the government (Verba, 1996). It is through this participation that government officials can be induced to respond to the needs and preferences of the public. While political participation and political equality are central tenets of democracy, political scientists have long documented the existence of unequal participation - and the accompanying unequal influence - in the United States (Lijphart, 1997; Bartels, 2016; Schlozman et al., 1999). Indeed, most evidence seems to suggest that the people who vote and how they vote greatly influence the public policies that government officials enact (Lijphart, 1997). As bluntly stated by political scientist Walter Dean Burnham (1987), "if you don't vote, you don't count."

The health of US democracy is threatened by the prevalence of unequal participation and unequal influence and the extent to which unequal participation and influence overlap. Political scientists have researched the ways in which political participation, representation, and influence are systematically distributed and biased in favor of the privileged (Lijphart, 1997; Bartels, 2016). Therefore, it is crucial to further understand who votes and the extent to which unequal participation persists in the United States.

A representative democracy can be conceptualized as well-functioning when the people who vote, the political elites (i.e. politicians and those able to exercise a disproportionate amount of political influence), and the public policies they enact reflect the overall preferences of the citizenry. As voting is the primary means of communicating the preferences of citizens to government officials, unequal political participation results in unequal political influence. Dahl (2006) emphasizes the importance of government responsiveness to the preferences of citizens and the necessity of inclusive citizenship and intrinsic equality. Equal consideration of citizens is central to a well-functioning democracy. Thus, we believe that unequal political influence fundamentally harms the health and stability of democracy.

Project Description

For this project, we chose to measure inequality in democracy across U.S. states by analyzing disparities in voter turnout. To do this, we began by choosing four demographic categories: race, disability status, age, and educational attainment. We used racial inequality as a starting point, knowing that existing research shows that seemingly neutral laws and policies have unequal impacts on communities of color. We chose our other three categories–disability status, age, and

educational attainment–to investigate whether electoral laws also have unequal impacts on other groups of voters. We used data from the Current Population Survey (CPS) Voting and Registration Supplement (VRS) for 2020 to quantify gaps in turnout within each of the categories. Because election administration is under the jurisdiction of state governments, we then set out to understand the observed gaps in turnout among the groups by choosing a range of indicators based on the state-specific policies that might impact those disparities. We aim for our project to serve as a proof of concept for researching and scorecarding inequality in democracy.

Literature Review

U.S. State-Level Democracy Scorecards

State-level democracy scorecards have not focused on inequality within the states. Existing scorecards track comprehensive measures of democratic health, including Grumbach's *State Democracy Index* and the MIT *Elections Performance Index*. Others focus on election integrity (Electoral Integrity Project, 2022) and democratic stability (Beckwith & Allison, 2022), topics which have become prominent in the last six years. While we applaud these efforts, we believe democratic inequality has been understudied. Some scorecards factor in measurements of equality (See MIT, 2023, or Electoral Integrity Project, 2022), as we discuss below, but none focuses on inequality as the driving force behind the scorecard. Our project seeks to fill this gap, by exploring how election administration and policies may disparately impact disfavored communities in each of the 50 states, including racial minorities, young people, people with disabilities, poor people, and less-educated people. These cohorts have historically been politically undervalued, both through representation in government and in public policy (Lax & Philips, 2012). As such, additional research is necessary to see what state-level electoral policies result in a more equal participatory democracy. The following literature review explores existing efforts to understand democratic inequality in our four chosen demographic categories.

Measuring Inequality in Voting by Age

Young Americans consistently vote at lower rates than their older counterparts, but the extent to which this difference exists varies significantly by state. While the 2020 presidential election saw record turnout among voters aged 18-24 at an estimated 51.4%, youth voting still lags behind older age groups (U.S. Census Bureau, 2021). In contrast, the 2020 turnout rate for voters aged 25 to 44 was 62.6%, for voters aged 45 to 64 was 71%, and for 65+ was 74.5% (Bloomberg Government, 2022). Data suggest a large discrepancy between youth voter turnout across states. A 2021 study by the Center for Information and Research on Civic Learning and Engagement (CIRCLE) at Tufts University found that across the 39 states for which data were available, the estimated turnout rate for eligible voters aged 18-29 varied from 67% in New Jersey to 32% in South Dakota. To estimate turnout, CIRCLE uses national aggregated voter files and estimates from the American Community Survey. Rather than using a scorecard, CIRCLE utilizes interactive maps and reports to disseminate information about youth voting and civic participation. Additionally, CIRCLE researchers primarily compare the youth voter turnout

between states, rather than examining the gap between youth voter turnout and elderly voter turnout within and between states. Despite the documented inequalities in voter turnout by age, no major index or scorecard integrates age as a measure of inequality in voter turnout in their assessment of democracy.

Measuring Inequality in Voting by Ability Status

Disabled voters consistently turn out at lower rates than non-disabled voters. Through its School of Management and Labor Relations, Rutgers University's Program for Disability Research has conducted extensive analysis on the voter turnout rates for people with disabilities. When adjusted for demographic characteristics, Rutgers estimates the 6.3% turnout gap between those without disabilities and those with disabilities. They conclude this gap implies that, if those with disabilities voted at the same rate as those without (while accounting for demographics), there would be about 1.75 million more voters in U.S. elections (Schur & Kruse, 2021).

Although some existing scorecards consider policy issues that affect disabled voters, no scorecards analyze inequality in voter turnout based on ability status. The MIT Election Performance Index's "Disability Access" indicator seeks to measure the extent to which voters are deterred from voting due to an illness or disability. Based on responses to the US Census Bureau's Voting and Registration Supplement of the Current Population Survey, this indicator incorporates the difference in turnout rates between people who reported having one of six disabilities and those who reported having none of these disabilities. MIT incorporates this indicator into a comprehensive scorecard on election performance by state and seeks to measure the extent to which voters are deterred from voting because of disability or illness. Additionally, the Movement Advancement Project (MAP) incorporates an indicator on the availability of curbside voting for people with disabilities into their ratings on democratic health by state. However, no scorecards principally analyze barriers to disabled individuals' ability to vote aggregated by US state. The indicators on disability access included in MIT's scorecard and MAP's ratings each exist as one of many indicators pertaining to democratic health. Thus, no existing indices examine the relationship between ability status and voter turnout and incorporate this relationship into a scorecard on inequality in voting.

Measuring Inequality in Voting by Race

Different racial groups turn out at unequal rates in U.S. elections, with voters of color going to the polls at significantly lower rates than white voters. Black voters have been historically targeted by voter suppression laws, notably during the Jim Crow era with poll taxes and literacy tests in the South. Later on, between the passage of the Voting Rights Act (VRA) in 1965 and 1988, the number of Black Americans registered to vote doubled in many Southern states (United States Department of Justice). However, the country has experienced a recent resurgence in voter suppression, after the 2013 ruling in Shelby County v. Holder made section 5 of the VRA inapplicable which allowed for states to manipulate voting laws in ways that suppress voters. In 2020, 71 percent of white eligible voters cast ballots in the presidential election, while

only 58 percent of nonwhite voters did. Moreover, there are gaps among voters of color; in 2020, 63 percent of Black voters, 60 percent of Asian voters, and 54 percent of Latino voters cast ballots (Morris & Grange, 2021). These turnout gaps have remained constant over the past six presidential elections. Some existing electoral scorecards, such as the Electoral Integrity Project, measure racial disparities in voting, but do so on a nationwide, aggregated basis (Norris et al., 2016). However, in this project, racial turnout gaps are measured on a state by state basis. Other scorecards such as the State Democracy Index include information on state specific policies such as whether or not a state has strict voter ID requirements (Grumbach, 2018). This study aims to take that a step further by investigating if there is any correlation between these policies and racial turnout gaps.

Measuring Inequality in Voting by Educational Attainment

Voters with college degrees are more likely to cast ballots than voters without degrees. Educational attainment correlates strongly with voter turnout. In 2020, college graduates were 39 percent of voters and only 17 percent of nonvoters. Those with a high school diploma or less were 29 percent of voters and half of nonvoters (Nadeem, 2022). Variation in educational attainment across states is well documented; the U.S. Department of Agriculture has data on college completion rates by state dating back to 1970. However, this data lacks any connection to voting behavior. A study titled "The dynamic effects of education on voter turnout" documents the ability of educational attainment to predict voter turnout, without disaggregating data by state (Burden, 2009). The current study measures voter turnout gaps between groups with differing education levels on a state by state basis. Researchers have also investigated why the link between education level and voting exists, but only on a national scale (Ahearn, 2022). Therefore, there is a lack of research that correlates educational attainment and voter turnout by state.

Phase I Methodology

Our project proceeded in three phases. In Phase I, we conducted a preliminary data analysis to understand state-by-state voter turnout differences among ingroups and outgroups within four demographic categories in the 2020 election. We used this data analysis to identify a subset of states to serve as a basis for our Phase II quantitative analysis. In Phase II, subteams performed qualitative analyses of the high and low inequality states in each demographic category. For each category, we conducted a policy and literature review to identify indicators that might be linked to voter inequality. We then scored the high and low inequality states using unweighted and weighted versions of the indicators. Phase II results are described in detail, below. Finally, Phase III of the project focused on creating a more comprehensive voter inequality model, incorporating data from six recent federal elections (2010-2020). Predictive modeling allows us to draw more statistically robust conclusions about turnout inequalities across the four demographic categories. Phase III, which is detailed in Appendix E, offers rich avenues for additional research. We recommend further developing the model, as well as performing a similar qualitative analysis as was performed in Phase II.

This section focuses on the preliminary data analysis performed during Phase I of the project. The analysis was completed using data from the Current Population Survey (CPS) Voting and Registration Supplement (VRS) for 2020. The CPS is a monthly sample of 60,000 households sponsored by the Bureau of Labor Statistics and conducted by the Census Bureau to assess the American labor force, gathering information on statistics such as unemployment rates, wage gains, and household income. Every two years, in November, the VRS is collected as an addendum and collects information on behavior related to voting and registration. A sample of the questions posed to respondents include, "Did you vote?", "Were you registered to vote?", and "Did you vote in-person or by mail?" These questions, combined with individual-level data on respondents and households, give researchers a comprehensive understanding of voting patterns. The individual-level data also includes racial/ethnic, educational, age, and disability demographic information.

The VRS is the "gold standard" for understanding demographic trends in turnout in the U.S., as alternative surveys such as the Election Administration and Voting Survey (EAVS) does not contain individual level-data and thus does not enable us to examine inequality between groups. The CPS' large sample size further enables us to draw statistically significant inferences from observed trends in the data. However, for this initial phase, we do not look at individual-level data, and instead rely on summary tables for the VRS data tracing turnout rates by race, ethnicity, age, education, and disability status for the 2020 election.

However, the CPS has major flaws. Most notably, because the survey relies on voluntary responses, it is liable to overestimate the true turnout and registration rate (voters are more likely to respond than nonvoters). Studies find this to be true empirically (Ansolabehere et al., 2021; Bauman, 2018). The work of political scientists like Aram Hur and Christopher Achen (2013) have proposed to rectify this bias by comparing CPS data to state-level turnout rates and deweighting those who responded as having "voted" accordingly. This readjustment has been adopted by the MIT Elections Performance Index and the creators of the `cpsvote` package in R; as such, our regression model developed at the end of our project (see Appendix E) implements this change to ensure that our CPS data more accurately represents the true turnout rate. For this preliminary data exercise, the recorded turnout rates in Census summary tables appear to have been adjusted for this overrepresentation bias already. Regardless, the flaws in this dataset are worth mentioning upfront as they will impact all of our analyses.

To calculate voter turnout for the preliminary analysis, we divided those that indicated they voted by the sum of those that indicated they voted or did not vote. The CPS includes the options of "No Response" and "Not in Universe." Responses that indicated either of these options were not included in the calculations.

Our preliminary analysis separated the data for each of four demographic categories (Age, Disability, Race/Ethnicity and Educational Attainment) into relevant categories and then compared voter turnout between the ingroups and outgroups. For example, the age turnout data was separated into four age ranges: 18-24, 25-34, 35-44, 45-64, and 65+. From there we calculated differences in turnout between groups considered "privileged" and "unprivileged" in the literature. For the age group, the main calculation was determining the difference in turnout between the 65+ group and the 18-24 group for each state. The calculation was reached by subtracting the 2020 voter turnout of the 18-24 age group from the 2020 voter turnout of the 65+ age group. For this preliminary data analysis, no complex calculations were used to reach the results. Using the turnout numbers calculated for each state, the states were ranked from "worst" to "best," with "best" states being those that had the smallest differences in turnout between privileged and unprivileged groups.

The race/ethnicity group and the educational attainment group chose to use two calculations when ranking states because there were too many relevant groups that could not be effectively captured with only one calculation. For race/ethnicity, the problems faced by Hispanic voters manifest differently than the problems faced by African American voters. For educational attainment, individuals without a high school diploma have access to vastly different resources than those with a high school or college education. For this reason, it was necessary to track inequalities between those with a high school diploma and without a high school diploma as well as those with a college degree and those with only a high school diploma.

Below is a table with groups formed in each category and the calculations that were used to determine a state's ranking in each category.

Demographic Category	Groups formed	Calculations Used
Age	18-24; 25-34; 35-44; 45-64; 65+	Old-Young (65+ - 18-24)
Educational Attainment	No High School Diploma; High School Completion; Some College; Graduate or Beyond	HS - No HS; College - HS
Disability	Some Disability; No Disability	Disability - No Disability
Race/Ethnicity	White Non-Hispanic (WNH); Black Asian-American and Pacific Islander; American Indian; Hispanic	WNH - Hispanic; WNH - Black

Note: *Not all groups formed were used in the calculations because this preliminary analysis was not intended to be an exhaustive cross-comparison.*

For the educational attainment group, each of the two calculations made up 50% of a state's educational attainment ranking. Calculations were combined by calculating the average of the two different rankings. If a state ranked 30th for HS-No HS turnout and 20th for College-HS turnout, then its average ranking is 25th. We calculated the average ranking for all states and then sorted them in order. The state with the lowest average ranking is the most equal state, and the state with the highest average ranking is the most unequal state based on our methodology.

In each demographic category, we formed inequality turnout rankings for each state based on which states had the lowest discrepancies in turnout. These turnout rankings were how the high- and low-performing states were chosen for the policy input analysis.

Our data analysis was limited in scope, both for practical reasons and because we wanted to emphasize primarily on the differences in turnout between select "privileged" and "unprivileged" groups. This allowed us to determine potential states of interest quickly, which would in turn enable us to conduct a qualitative analysis of the existing laws and policies that could potentially explain turnout disparities. While 2020 was admittedly an abnormal election cycle due the COVID-19 pandemic, it was selected for analysis as it was the most recent federal election cycle for which we had data. This meant that it would more accurately represent the voting policy landscape in the status quo (e.g. some states' recent changes to all-mail elections or the expansion of online voter registration) and its impacts on turnout.

However, relying on one set of turnout data came with its own restrictions. There was missingness (the absence of data) for several states in the 2020 election cycle. For instance, in the Census reports that we drew from, thirteen states lacked any turnout information for race, and five states were missing data on age. Thus, our rankings were sometimes based on incomplete information, a methodological weakness we tried to address in our regression model (see Appendix E).

Moreover, relying on existing Census tables meant that our conclusions were drawn based on aggregated data from one election cycle. To reach a statistically valid conclusion about differences in turnout rates, we would need to draw upon turnout rates for many election cycles and analyze whether differences in turnout rates were truly correlated with demographic factors or whether observed turnout gaps could simply be chalked up to noise. However, given that election cycles happen only once every two years, and that there are many confounding variables that make election cycles difficult to compare, this is not a feasible approach.

To assess differences in demographic group turnout at a statistically significant level, we would need to aggregate individual-level data based on demographic differences (what impact a given demographic identity would have on an individual's likelihood of turning out). Although work of

this sort is explored in Phase III (see Appendix E), it is worth clarifying that our initial data work was meant merely as a launchpad for qualitative investigation.

Phase II Qualitative Analyses

Age and the Voter Turnout Gap

To measure inequality in voting by age, we analyzed the voter turnout gap between 18-24 year-old voters and 65+ year-old voters in the 2020 election cycle. Due to limited resources, we focused on six different states - those that had the smallest young-old voter turnout gaps and those that had the largest young-old voter turnout gaps. For instance, a state with a 25% young-old turnout gap would signify that, in the 2020 election, the percentage of people who are at least 65 years old who voted was 25% higher than the percentage of individuals aged 18-24 who voted. The results of this primary analysis are included in the figure below:

Turnout Analysis Findings

Smallest Inequality Gaps in Voter Turnout by Age	**Largest Inequality Gaps in Voter Turnout by Age**
1. Maryland (5.7% turnout gap)	1. Oklahoma (39.8% turnout gap)
2. New Jersey (7.3% turnout gap)	2. Nevada (39.3% turnout gap)
3. Maine (12.6% turnout gap)	3. Indiana (36.3% turnout gap)

Policy Analysis and Scoring:

To conduct our policy analysis on the young-old voter turnout gap, we examined ten primary and subsidiary indicators based upon whether or not certain policies are currently enacted in a state. These indicators were selected based on research conducted by Tuft University's Center for Information and Research on Civic Learning and Engagement (CIRCLE). The policies analyzed are included in the figure below:

Indicators Analyzed
No-Excuse Absentee Voting
Early Voting
Ballot Automatically Sent to Registered Voters
Same-Day Registration
Online Voter Registration

Automatic Voter Registration through the Department of Motor Vehicles
Pre-Registration for Those Under 18-Years-Old
Voter ID Legislation
Acceptable Voter ID: College IDs
Acceptable Voter ID: Out-of-State IDs

Drawing upon research conducted by CIRCLE on commonly cited barriers to youth voting, we weighted our indicators to correspond with our views on which indicators may have a more significant impact on the voter turnout gap by age. Using these weighted scores, the final scores that a state could receive range from 0 points (the lowest possible score) to 31 points (the highest possible score). For a more detailed breakdown of the scoring assigned to each state, see Appendix A. The final scores assigned to each state are displayed in the figure below:

Scoring: Smallest Inequality States	**Scoring: Largest Inequality States**
Maryland (22.5 points)	Nevada (26.75 points)
Maine (22.5 points)	Oklahoma (11.75 points)
New Jersey (16.75 points)	Indiana (10.5 points)
***A higher score denotes a larger prevalence of policies expected to correlate with a low voter turnout gap between young and old voters*	

In order to indicate areas of possible research, we categorized each state's final score into a "good" score and a "bad score." To receive a "good" score, a state would need to receive a score of at least 50% of the highest possible score. Thus, we consider a "good" score to be at least 15.5. Using similar logic, a "bad" score would entail a score of less than 15.5.

With one important exception, our research suggests a possible relationship between states with high voter turnout gaps between young and old voters and policies that may uniquely impact young voters.

Each of the three states (Maryland, New Jersey, and Maine) that experienced a smaller young-old voter turnout gap in 2020 received a relatively "good" score when we conducted the indicator research and scoring. Maryland, New Jersey, and Maine all accept no-excuse absentee voting, accept college IDs and out-of-state IDs as acceptable forms of voter IDs, allow pre-registration

of under 18 year olds, have at least a 7-day early voting period, and automatically register eligible individuals during interactions with the Department of Motor Vehicles. While all states require state agencies to allow eligible individuals to "opt-in" to register to vote, automatic voter registration simplifies this process and automatically registers eligible individuals to vote (National Conference of State Legislatures, 2023). Based on our analysis, we found that each of the three states with the smallest young-old voter turnout gaps have policies implemented that may make it easier for young people to vote. While each of the three states did receive a "good" score, New Jersey's score of 16.75 out of 31 points may suggest the importance of further research on the possible impacts of its lack of same-day registration and online voter registration policies on the youth voter turnout rate.

Of the three states (Oklahoma, Nevada and Indiana) that experienced a large young-old voter turnout gap in 2020, two states, Oklahoma and Indiana, received a relatively "bad" score on our indicator analysis metric. However, Nevada received a "good" score of 26.75 based on its state policies. In general, the states with higher young-old voter turnout gaps have stricter voter ID laws and do not automatically register eligible individuals during interactions with the Department of Motor Vehicles. It is possible that these policies may have larger impacts on youth voter turnout and may merit additional research.

Due to the contrast between its high young-old voter turnout gap and its seemingly accessible voting legislation, we believe that Nevada's voter turnout gap by age merits additional research and consideration. As evidenced by its "good" score, Nevada has several policies that appear to make it easier and more accessible for young people to vote. For instance, Nevada has a 13-day early voting period, allows no-excuse absentee voting and online voter registration, and automatically sends mail-in ballots to all registered voters. Despite these seemingly accessible policies, Nevada's percentage of people ages 18-24 who voted was 39.3% less than the percentage of individuals 65 years or older who voted in the 2020 elections.

Possible explanations for this contrast could include Nevada's vote-by-mail elections or significant gaps between the voter turnout rate of 18-19 year olds and 20-24 year olds in Nevada. According to CIRCLE research, Nevada's newly eligible voters (ages 18-19 years old) in 2020 had a higher voter turnout (61%) than those ages 18-29 (53%). It may be interesting to further research the turnout gaps between 18-19 year olds and 65+ year olds. Perhaps those ages 20-24 have a significantly lower voter turnout rate, thus resulting in a large overall gap.

Additionally, it is important to reconsider the impact of policies that appear to increase voter accessibility on voter turnout disparities. Policies such as no-excuse absentee voting and automatically sending mail-in ballots to all registered voters may disproportionately benefit older voters, thus increasing the turnout gap between young and old voters.

Overall Findings:

With one important exception, our research indicates a relationship between states with high voter turnout gaps between young and old voters and policies that may uniquely impact young voters. Each of the three states (Maryland, New Jersey, and Maine) that experienced a smaller young-old voter turnout gap in 2020 received a relatively "good" score when we conducted the indicator research and scoring. Based on our analysis, we found that each of the three states with the smallest young-old voter turnout gaps have policies implemented that may make it easier for young people to vote. Of the three states (Oklahoma, Nevada and Indiana) that experienced a large young-old voter turnout gap in 2020, two states, Oklahoma and Indiana, received a relatively "bad" score on our indicator analysis metric. Despite Nevada's large young-old voter turnout gap in 2020, the state received a "good" score of 26.75 based on its state policies. In general, the states with higher young-old voter turnout gaps have stricter voter ID laws and no motor voter laws. Due to the contrast between its high young-old voter turnout gap and its seemingly accessible voting legislation, we believe that Nevada's voter turnout gap by age merits additional research and consideration (perhaps by exploring the impacts of vote-by-mail elections on youth turnout and/or turnout gaps between 18-19 year olds and 65+ year olds).

Ability Status and the Voter Turnout Gap

To measure inequality in voting by ability status, we analyzed the voter turnout gap between individuals with disabilities and those without in the 2020 election cycle. In our analysis, individuals with disabilities were defined as such due to their CPS responses. If they indicated that they had certain physical, mental, or emotional conditions that impacted their daily life, they were included in the "disabled" category of our analysis. This analysis focused on six different states - those who had the smallest disabled-abled voter turnout gaps and those who had the largest disabled-abled voter turnout gaps. For instance, a state with a 25% disabled-abled turnout gap would signify that, in the 2020 election, the percentage of people without disabilities who voted was 25% higher than the percentage of individuals with disabilities who voted. The results of this primary analysis are included in the figure below:

Turnout Analysis Findings

Smallest Inequality Gaps in Voter Turnout by Ability Status	**Largest Inequality Gaps in Voter Turnout by Ability Status**
1. Florida (0.6% turnout gap)	1. Maryland (15.7% turnout gap)
2. Vermont (0.8% turnout gap)	2. Tennessee (14.6% turnout gap)
3. Colorado (1.3% turnout gap)	3. Wisconsin (11.4% turnout gap)

Policy Analysis and Scoring:

To conduct our policy analysis on the disabled-abled voter turnout gap, we examined five indicators based upon whether or not certain policies are currently enacted in a state. The policies analyzed are included in the figure below:

Indicators Analyzed
No-Excuse Mail-In Ballot
All-Mail Elections
Curbside Voting Option
Online Voter Registration
Mental Health Statutes

We weighed our indicators based on their perceived impact on the ability of disabled individuals to vote. The level of significance awarded to each indicator reflected our review of existing literature, including the testimonials of disabled voters and disability activism organizations. We weighed indicators on a scale from 1-5, with 1 indicating that the policy is moderately significant and 5 indicating that the policy is highly significant. Using these weighted scores, the final scores that a state could receive range from 0 points (the lowest possible score) to 18 points (the highest possible score).

For a more detailed breakdown of the scoring assigned to each state, see Appendix F. The final scores assigned to each state are displayed in the figure below:

Scoring: Smallest Inequality States	**Scoring: Largest Inequality States**
Vermont (18 points)	Wisconsin (13 points)
Colorado (16 points)	Maryland (9 points)
Florida (9 points)	Tennessee (6.5 points)
**A higher score denotes a larger prevalence of policies expected to correlate with a low voter turnout gap between disabled and abled voters*	

The three states with the smallest turnout gaps (most equal) earned an average of 14.33 points; the three states with the largest turnout gaps (least equal) earned an average of 9.5 points. Interestingly, the most equal state and the least equal state in terms of turnout (Florida and

Maryland, respectively) received identical scores of 9, which was also the lowest score overall. The second most equal state, Vermont, earned the highest score possible, 18.

Our indicator analysis found some correlation with turnout rates, with two of the three states with the smallest disabled/abled turnout gaps receiving the two highest scores (Vermont and Colorado), and the three worst states scoring relatively lower. For more information on the policies implemented in these states, see Appendix F. The outlier was Florida, the state with the smallest turnout gap, but the second-worst score. Further investigation is necessary to understand the discrepancy in data.

While Florida had the smallest gap in turnout rate, it received a score of 9 points, the second-lowest score (tied with Maryland) of the states analyzed. Florida's population is significantly comprised of those 65 and older, that a notable percentage of those 65 and older consider themselves to have a disability or experience difficulties with mobility, hearing, and/or seeing, and that the majority of those aged 65 and older voted in Florida. Therefore, we hypothesize that, though Florida does not have excessive or expansive policies that allow for disabled populations to vote, its low gap in abled/disabled turnout rate is largely due to the elderly disabled population and their determination and commitment to exercising their civic rights.

Overall Findings:

In general, our research demonstrates a weak correlation between disability turnout and state performance across indicators, which implies that there may be additional factors affecting the ability of disabled voters to vote. Across our indicators, the presence of an all-mail voting system was most clearly correlated with a low turnout gap. As such, we suspect that a policy with a strong impact on turnout rate is all-mail elections.

The existence of policies that increase poll accessibility does not guarantee improved turnout, likely due (in part) to discrepancies in the implementation and reach of these policies across states. There is often a major gap between the promises of accessibility-oriented policies and the reality that disabled individuals face. For instance, in states that offer accessible voting machines, poll workers may not be adequately instructed on how to operate such technology, thus reducing their ability to assist disabled voters (Vasilogambros, 2018). In other cases, polling locations themselves may not comply with the physical accessibility standards outlined by the American Disability Act (ADA), but lack the funding to incorporate the changes needed to comply (Alexander, 2023). There is even evidence that policymakers have misused the ADA to shut down out-of-compliance polling locations, deliberately blocking groups of people from voting altogether (Hudson & Bishop, 2020).

These findings reflect the highly localized nature of American democracy. They suggest that scholars should approach future studies on disability turnout through a more local lens and perhaps consider disparities in turnout within states, instead of between them. Elections are frequently thought of as spatially bounded along state lines, but perhaps our understanding of equality should seek to erase and redraw those lines instead of taking them as separate entities.

This work would facilitate a greater understanding of how the design and implementation of key policies both across and within states may impact turnout. It could also highlight initiatives that occur on local levels, such as Free Ride to Polls or assisted living support programs.

Race and the Voter Turnout Gap

To measure inequality in voting by race/ethnicity, we analyzed the voter turnout gap between individuals with marginalized racial/ethnic identities and those who belong to the dominant white racial/ethnic group in the United States 2020 election cycle. Specifically, Hispanic and Black individuals were selected to represent marginalized racial/ethnic identities (although we recognize others such as Asian Americans and Native Americans also experience inequalities in voting—further research is necessary to examine these groups). Our analysis looked at the average white-Black and white-Hispanic difference in voter turnout. For instance, a state with a 25% Black/Hispanic-white turnout gap would signify that, in the 2020 election, the percentage of people who identify as "white" who voted was 25% higher than the percentage of individuals who identify as "Black" or "Hispanic" who voted. This led us to focus on six specific U.S. states—those three who had the smallest Black/Hispanic-white voter turnout gaps and those three who had the largest Black/Hispanic-white voter turnout gaps. The results of this primary analysis are included in the figure below:

Turnout Analysis Findings

Smallest Inequality Gaps in Voter Turnout by Race/Ethnicity	**Largest Inequality Gaps in Voter Turnout by Race/Ethnicity**
1. Maryland (3.35% turnout gap)	1. Wisconsin (23.5% turnout gap)
2. Pennsylvania (4.2% turnout gap)	2. Massachusetts (21.5% turnout gap)
3. New York (4.8% turnout gap)	3. Iowa (21.15% turnout gap)

Policy Analysis and Scoring:

To conduct our policy analysis on the Black/Hispanic-white voter turnout gap, we examined three indicators based upon whether or not certain policies are currently enacted in a state. The policies analyzed are included in the figure below:

Indicators Analyzed
Voter ID Laws
Felony Disenfranchisement
Required Bilingual Voting Ballot

The data for these indicators was gathered from the Brennan Center for Justice, the American Civil Liberties Union, and academic research studies. With these three indicators, we proceeded to score each of our six states using categorical scales. Given that not all of our indicators are equally relevant to racial voting equality, we assigned weights based on the perceived impact they would have on minority voting access. We determined that their order of importance is: voter ID laws, policies related to felony disenfranchisement, and the availability of bilingual ballots. With these weights, we were able to combine them with the raw scores, creating weighted scores for each of our six states, ranging from 0 (worst policies for racial equality in voting) to 12 (best policies for racial equality in voting). For our analysis, we only included states that had data on both Black and Hispanic voters.
For a more detailed breakdown of the scoring assigned to each state, see Appendix C. The final scores assigned to each state are displayed in the figure below:

Scoring: Smallest Inequality States	Scoring: Largest Inequality States
Maryland (10.64 points)	Massachusetts (10.64 points)
New York (10.64 points)	Wisconsin (4.32 points)
Pennsylvania (9.39 points)	Iowa (3.75 points)
****A higher score denotes a larger prevalence of policies expected to correlate with a low voter turnout gap between Black/Hispanic and white voters*	

Our top three states, Maryland, New York and Pennsylvania, received relatively high scores based on our indicator analysis. This suggests that there may be some correlation between the policies we chose to analyze and voter turnout for racial minorities. Both Maryland and New York have no voter ID requirements for voting, while Pennsylvania does not have strict requirements, meaning the state accepts a wide range of forms of identification and even non-photo or expired ID in some cases. We predicted states with no laws or flexible laws regarding photo ID for voting would experience lower gaps in turnout, and our indicator analysis supports this hypothesis. Conversely, two of our bottom states require photo IDs to vote. Wisconsin, which had the largest gap between white-Black and white-Hispanic voter turnout, has extremely strict photo ID requirements. Iowa also requires photo ID; however, they are lenient

with ID requirements, as they accept out of state IDs, student IDs, and expired IDs. Massachusetts interestingly has no voter ID laws, despite having one of the largest turnout gaps.

The top states also each have more permissive felon voting right policies; in each of these states, individuals lose the right to vote while incarcerated, but their rights are automatically restored after release. We hypothesized that states that automatically restore rights or states where the right to vote is never lost would have the smallest turnout gaps, and our results once again support this hypothesis. In Wisconsin, rights are also automatically restored, but only after completion of the sentence including parole or probation. In Iowa, additional action is required to restore rights after the sentence is completed (including parole and probation). Massachusetts again is an outlier, because in Massachusetts rights are automatically restored after incarceration despite the state having one of the widest gaps in turnout.

Finally, each of the top three states have counties that fall under the requirements of section 203 of the Voting Rights Act (VRA). This means that certain counties within the state meet the criteria under which they are required to provide ballots in a language other than English, which we predicted would lower turnout gaps between white and minority voters. Of the bottom states, Wisconsin and Massachusetts also have counties that are required to provide bilingual ballots; however, Iowa has none.

Overall Findings:

Analyzing gaps in white-Black voter turnout and white-Hispanic voter turnout, the three most equal states were Maryland, Pennsylvania and New York, and the three most unequal states were Wisconsin, Massachusetts and Iowa. Our group hypothesized that states with strict voter ID laws, harsh felony disenfranchisement policy, and no counties with bilingual ballots would show higher turnout gaps between white and minority voters. Both our weighted and unweighted indicator analyses were consistent with our predictions for all but one state. The three most equal states received the highest scores based on our indicators, and two of our least equal states received the lowest scores. The outlier in our data was Massachusetts, which despite having one of the largest turnout gaps between both white-Black and white-Hispanic voters, received the same score as two of our best states. This suggests that electoral policy does not always impact voter turnout in a consistent way, and as we chose only three indicators for analysis, we are certainly missing other legal, political and social factors that impact voter turnout. Therefore, future analysis should aim to explain the link between policy and observed turnout as well as consider additional factors.

Educational Attainment and the Voter Turnout Gap

To measure inequality in voting by educational attainment, we analyzed the voter turnout gap between individuals with lower levels of educational attainment and those with higher levels of educational attainment in the 2020 election cycle. This analysis aggregated the turnout gaps between those with a high school degree and those without and between those with a Bachelor's

degree and those without a Bachelor's degree. We focused on six different states - those who had the smallest low education-high education voter turnout gaps and those who had the largest low education-high education voter turnout gaps. For instance, a state with a 25% low education-high education turnout gap would signify that, in the 2020 election, the percentage of people with a "high level of educational attainment" who voted was 25% higher than the percentage of individuals with a "low level of educational attainment" who voted. The results of this primary analysis are included in the figure below:

Turnout Analysis Findings

Smallest Inequality Gaps in Voter Turnout by Educational Attainment	**Largest Inequality Gaps in Voter Turnout by Educational Attainment**
1. New Jersey (7.15% turnout gap)	1. Idaho (29.65% turnout gap)
2. Florida (15.05% turnout gap)	2. Indiana (27.75% turnout gap)
3. Maryland (15.35% turnout gap)	3. Oklahoma (27.3% turnout gap)

Policy Analysis and Scoring:

To conduct our policy analysis on the low education-high education voter turnout gap, we examined seven indicators based upon policies enacted in the state and proxies for the accessibility of voting for those likely to be employed in blue-collar jobs. We hypothesized that educational attainment could be a proxy for occupation type and therefore policies that offer voters flexibility in voting time, location, and method (e.g., early voting, shorter election day wait times, voting center availability) would result in more equal turnout across levels of educational attainment. The indicators analyzed are included in the figure below:

Indicators Analyzed
No-Excuse Mail-In Ballots
Availability of Voting Centers
Voting Wait Time
Early Voting Flexibility
Election Day - Holiday or PTO
Early Voting Period Length
Online Voter Registration

For a more detailed breakdown of the scoring assigned to each state, see Appendix D. The final weighted scores assigned to each state are displayed in the figure below:

Scoring: Smallest Inequality States	**Scoring: Largest Inequality States**
Florida (15 points)	Indiana (18.5 points)
New Jersey (14.5 points)	Idaho (12 points)
Maryland (13 points)	Oklahoma (10.5 points)
**A higher score denotes a larger prevalence of policies expected to correlate with a low voter turnout gap between low education and high education voters*	

Of the three states with the smallest low education-high education voter turnout gap, only one state received a policy score that corresponded with its small turnout gap. Florida is the only state that is also ranked in the top half of our indicator rankings, 20th in the unweighted analysis and 22nd in the weighted analysis. Florida offers no-excuse vote-by-mail and has a relatively long and flexible early voting period. Despite over half of voters reporting that on Election Day they were able to vote in under 10 minutes, the state does not call the day a holiday or require employers to offer PTO.

Despite their small turnout gaps, both New Jersey and Maryland ranked lower in our policy analysis. Even though New Jersey ranked the most equal in the EA turnout analysis, it ranked 30th in both the unweighted and weighted turnout analysis. New Jersey was the only focus state we analyzed that does not offer any online voter registration. Election Day is a public holiday in New Jersey, but employers are not required to provide paid time off for voting. New Jersey offers nine days for early voting, which includes some extended weekday hours, as well as weekend hours. Maryland ranked 3rd in the EA turnout analysis, but 30th in the unweighted turnout analysis (tied with New Jersey) and 37th in the turnout analysis. While Marylanders enjoy Election Day as a public holiday and employers are required to provide paid time off for voting, they also have some of the worst wait times at polling places. Over 30% of voters report waiting more than 30 minutes in line (MIT Election Data and Science Lab, 2023). Additionally, while voters have an early voting option, the early voting period is only seven days.

The policy analysis results were slightly more mixed for the three states with the largest low education-high education voter turnout gap.

Of our focus states, Oklahoma has the strongest correlation between the EA turnout gap analysis and our team's indicator analysis. Oklahoma ranked 44th in both our unweighted and weighted

indicator analyses. Notably, Oklahoma has an early voting period under one week and on Election Day, over 16% of voters report waiting more than an hour to vote (MIT Election Data and Science Lab, 2023). Oklahoma is the only state to offer online voter registration capabilities *solely* for the purpose of updating registration records, but not for registering new voters.

According to our unweighted indicator analysis, Idaho ranked 38th in the country. In the weighted analysis, Idaho ranked 39th. While Idaho offers more than seven days for early voting, they neither require any extended hours on weekdays nor weekend early voting. Idaho does not recognize Election Day as a holiday and does not require that employers provide paid time off for employee voting. However, Idaho voters have relatively short wait times on Election Day and can also vote by mail without an excuse.

Despite ranking at the bottom of the EA turnout gap analysis, Indiana was our highest ranking focus state, coming in at 6th in the unweighted analysis and 8th in the weighted analysis. Interestingly, Indiana is the only one of our focus states to allow for voting centers, rather than solely precinct-based voting. Our team hypothesized that voting centers would offer maximal flexibility to voters, so that they can choose to vote close to home, work, or anywhere in between. Additionally, Indiana has an extensive early voting period, lasting nearly four weeks and counties are required to open early voting sites on certain Saturdays before Election Day.

Overall Findings:

While our data team observed gaps in 2020 turnout based on educational attainment ranging from nearly imperceptible to 35 percentage points, our policy and indicator analysis did not reveal any conclusive results to explain the differences between states. No one indicator category correlated with the turnout rankings of most or least equal states.

When accounting for turnout, the three most equal states based on educational attainment (EA) were New Jersey, Florida, and Maryland. The three most unequal states were Oklahoma, Idaho, and Indiana. However, our indicator analysis, both unweighted and weighted, did not offer much correlation with our most and least equal states for turnout. These results suggest that pinpointing how certain policies have outsized impacts on persons of differing educational attainment may not be possible. Our results may have also been confounded by aggregating multiple turnout gaps (“bachelors-no bachelors” plus “high school-no high school”) to arrive at a composite ranking, rather than relying on the disaggregated turnout gaps. Furthermore, the passage of policies may not carry an intended effect unless they are diligently implemented. Thus, additional analysis should be centered on the specific implementation of these policies.

Conclusion

Through our research, we observed state-by-state inequalities in 2020 voter turnout among all four demographic categories. In each category, our most and least equal states for turnout do not fall along partisan or geographic lines. We attempted to correlate the observed gaps in turnout with policy indicators, but discovered that these do not always clearly align. While we also applied weighting to various policy indicators across the four demographic categories, the weighting process had little effect on states' expected rankings within each category when compared with the unweighted results.

Additional qualitative research could uncover a more useful weighting for the impactful policies. However, we found some correlation between policy indicators and 2020 turnout inequalities for three of the demographic categories: age, ability status, and race/ethnicity. We generally found that policies that give voters flexibility (such as language access, no excuse vote-by-mail, online voter registration, and expansive early voting) correlate with more equal voter turnout across demographics. Interestingly, Maryland was among the most equal states in the age, race/ethnicity, and educational attainment categories, but was one of the least equal states for ability status.

In Phase III of our project, we created a survey-based linear model, incorporating data from the six most recent federal election cycles. The model roughly approximates the inequality of historic turnout trends within the four demographic categories we studied in the first phase of our project. The results of this modeling are contained within an appendix to this report. Compared to the Phase I and II analysis above, the modeling identified different states at the most and least equal end of each demographic category. We believe that the project's best avenue for future research is to continue updating the model, especially utilizing Bayesian multilevel regression, and that a similar policy input analysis should be performed to better understand the state-by-state inequalities based on the refined model. The trajectory of trends in the model may be best suited to understanding how changes in policy help or hurt voter turnout inequalities over time.

To understand better the nature of inequality in voter turnout and to address this inequality, we recommend several avenues for future research. Beyond continued improvements to the multilevel regression models, there are additional demographic categories that could benefit from further exploration. We focused on four demographic categories as a "proof of concept," but there is an opportunity to aggregate a scorecard across additional categories, including gender, household income, carceral status, and urban/rural divides. There may be additional confounding variables to tease out from the observed turnout results, including each state's voting culture and the overall competitiveness of elections in a state. For instance, less competitive states (e.g.,

those with lopsided results in statewide elections) may have depressed turnout among outgroups. And while unequal turnout may not have implications in less competitive statewide elections, there may be more competitive elections at the municipal level which suffer from unequal turnout. Ultimately, our project rests on the concept that democracy is best served when communities vote in proportion to their population. We hope that additional research will shed more light on unequal turnout across demographics and the policies that contribute to those observed inequalities.

We would also encourage future researchers to consider the implications of incorporating data on inequalities in voter turnout into scorecards on democracy in the United States. By displaying this research in the form of a scorecard, we believe that this could both incentivize states to analyze how their policies contribute to inequalities at the ballot box and better aid policymakers and academics in their efforts to compare inequalities in voter turnout throughout the United States.

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Appendices

Appendix E: Model of Inequality in Voter Turnout from 2010-2020

This section showcases a survey-based linear model that our data team constructed to assess disparities in voter turnout across demographic groups.

This model is included to highlight the potential for future technical research into the interstate comparisons that constituted our project. However, this model was completed too late for our project team to substantively interpret its results. Since its outputs had no bearing on our team's qualitative analyses, it is included as an appendix.

It is worth noting that much of this research was conducted with the expectation of building a Bayesian multilevel regression model, the rationale and methodology of which is explained below. Ultimately, due to unforeseen challenges, we were unable to complete a model of this form. Nonetheless, our background literature and procedure are included so as to provide insight for a potential future continuation of this project. Readers who would like to understand only what modeling was completed can ignore "Bayesian Plan of Work" under methodology and skip directly to "State-Level Regression Plan of Work".

Literature Review

We have previously mentioned our rationale for using the CPS VRS to conduct group-level data analysis. However, before relying on individual-level data from the VRS to inform a model, we must rectify some flaws in the data. Most notably, because the survey relies on voluntary responses, it is liable to overestimate the true turnout and registration rate (voters are more likely to respond than nonvoters). Studies find this to be true empirically (Ansolabehere et al., 2021; Bauman, 2018). The work of political scientists like Aram Hur and Christopher Achen (2013) have proposed to rectify this bias by comparing CPS data to state-level turnout rates and deweighting those who responded as having "voted" accordingly. This readjustment has been adopted by the MIT Elections Performance Index and the creators of the `cpsvote` package in R; as such, we also implement this change to ensure that our CPS data more accurately represents the true turnout rate.

Beyond the lack of accessible data, measuring political sentiment and its differences across demographic groups and geographic areas poses a challenge to researchers for many reasons.

First, every survey of the population necessarily faces bias in its sampling. For example, observers posit that the failure to predict Donald Trump's victory in the 2016 election may have stemmed from a systematic underrepresentation of non-college educated voters (Cohn, 2020). The Census Bureau (2021) conducts a complex weighting procedure to match the demographics

and geography of its respondents to those of the true population by using a two-stage ratio estimate. Details on its exact weighting process can be found on the Census Bureau webpage.

We have previously mentioned the idiosyncrasies in the VRS' data collection that have made it susceptible to systematically overreporting the proportion of respondents who vote. But this error is confirmable by cross-referencing the VRS with other national surveys of voter turnout, such as the U.S. Election Assistance Commission's Election Administration and Voting Survey (EAVS). As elaborated on in our earlier data explorations, a rudimentary way of accounting for this "overrepresentation bias" is by adopting Hur and Achen's adjustment to more heavily weight non-voters and create updated survey weights.

Another challenge that our research question imposed on our model is the need for small-area estimation (SAE). SAE techniques are used to estimate parameters (in our case, voter turnout) at a sub-population level. Here, we are interested in state-level turnout so we can better assess differences between states. However, given the differences between states, not all respondents will be weighted equally. For example, in a larger state like Texas or California, it is reasonable to assume that enough respondents will be sampled to provide a relatively unbiased estimate of the state's voting-eligible population by race, education, and other demographic identifiers. However, in states like Vermont or Idaho, researchers could hope to model comprehensive demographic data but lack a sufficient data size. Even though the CPS samples more than 60,000 households in each survey, when the data is fully broken down across all of the demographic groups we hope to measure (e.g. a Black Hispanic 65+ year old with a postgraduate degree in Maine or an American Indian 18-29 year old who is disabled with a Bachelor's degree in Georgia), we may find very little or no data.

One of the leading techniques to overcome these challenges is multilevel regression and poststratification (MRP), a technique that was developed by Thomas Little and Andrew Gelman in 1997. Affectionately known as "Mister P", MRP circumvents the previous challenges by generating subgroup-level population estimates across demographic categories (Gelman and Little). It then compares these national population estimates to the results of a Bayesian multilevel regression model. Gelman and his collaborator, Yair Ghitza, continue to elaborate on the application of MRP to election modeling, including accounting for survey weights and allowing coefficients to vary by group-level predictor (2013).

A multilevel regression model is, in essence, a statistical model that recognizes multiple "levels" of data – in our case, the higher level (group-level) is the state and the lower level is the demographic information applied to the individual voter. Since we hypothesize that the levels are correlated in some way (e.g. demographic identities do not have the same impact on voting across all fifty states), a multilevel regression model is appropriate to achieving our ultimate goal. The multilevel model used in MRP was conducted using Bayesian statistical techniques.

Put simply, Bayesian methods rely on a weak assumption ("prior") about how the parameter of interest will be distributed (in our case, the probability that a member of a certain demographic group will vote) and will update that probability based on increasing amounts of real-world data ("posterior").

Methodology

Given that we were interested in a binary outcome (did a given person vote or not?), we concluded it would make the most sense to build a logistic regression model. This model would help us answer the question, "All else equal, what impact does an individual possessing a specific demographic characteristic have on the likelihood that the individual votes in each state?" Put less abstractly, our model answered questions like "How much does being Black impact the likelihood that one votes in Texas?" or "How much does being disabled impact the likelihood that one votes in Oregon?"

It bears repeating that this literature review was conducted and this methodology was drafted with the intention of replicating Gelman and Little's MRP model. However, due to technical challenges that are detailed below, the methodology that was ultimately employed in conducting our model is different from the one we initially planned. Nonetheless, our full research process and methodology is detailed as to leave room for potential future research and to enable future collaborators to continue our work.

Our dataset came from combining CPS VRS data from six recent federal election cycles: 2010, 2012, 2014, 2016, 2018, and 2020. This decision was informed by a few factors. First, pre-2008 data was old enough that it did not reflect substantial demographic changes that have since occurred. 2008 itself was an anomalous year with regards to voter turnout by demographic, and we did not want to bias our results with data we knew were unlikely to be representative of the nation's typical voting behaviors. Second, there is more existing literature about pre-2008 elections than there are about the elections that follow, and our team wanted to focus our attention on relatively unexplored data. Lastly, one can argue that many recent policy changes that have affected popular faith in democracy and access to the ballot box have occurred in the 2010s. We identify an increase in voter ID laws, the Supreme Court's decisions in *Shelby County v. Holder* and *Rucho v. Common Cause,* and the redistricting that occurred after the 2010 Census as substantial shifts in the voting landscape that make the 2010s especially interesting as a case study for American democracy.

Bayesian Plan of Work

Our first step was to build a post-stratification table to identify the true proportion of the population with various demographic identities so that we could readjust our model output to generate accurate subgroup estimates from the data. The data for the post-stratification table came from Public Use Microsample data (PUMS) collected from the Census Bureau's American

Community Survey (ACS), which provides a sample of roughly 300,000 individuals for each year based on decennial Census estimates.

Afterward, a Bayesian multilevel logistic regression model was fitted using the `rstanarm` package in the R programming language. Our team first tested for interactions between variables and found interactions between race and state, race and age, race and education, and race and disability (meaning that knowing the race of a voter affected the impact of their state, age, education, or disability status on turnout likelihood differently.) As a result, we fitted a Bayesian logistic regression model:

$$\theta = logit^{-1}(\alpha^{age} + \alpha^{race} + \alpha^{educ} + \alpha^{state} + \alpha^{\{state*race\}} + \alpha^{\{race*age\}} + \alpha^{\{race*education\}} + \alpha^{\{race*disability\}} + Disability_i + Hispanic_i$$

Here, each coefficient had values corresponding with their number of levels (e.g. state had 51 levels, age had four levels, and race had five levels). Every alpha was given a Normal prior (our weak guess at its distribution) with an appropriate standard deviation. Disability status and ethnicity (Hispanic or non-Hispanic) were left as indicator variables, as they only had two levels. More intuition on this rationale for model-building can be found in "Multilevel Regression and Poststratification Case Studies" (Lopez-Martin et al., 2022). Guidance on the usage of the `rstanarm` package came from Kennedy and Gabry (2020).

However, we had trouble with the computations necessary for a Bayesian model of this size. Given that our short timeframe would prevent us from accessing the appropriate cloud computing resources to derive results from this model, we ultimately abandoned it in favor of a more flawed but computationally simpler approach.

State-Level Regression Plan of Work

Our team pivoted toward using the `survey` and `survyr` packages in R to develop an alternative approach to modeling that could be completed within a shorter timeframe. Our team decided to construct a regression on the state level, since our goal was to compare voting equality across states. This would result in 204 vastly simplified models – four models (one for each demographic category) for each of fifty states and D.C. Since we were no longer using a group-level predictor, it was no longer appropriate to use a Bayesian MRP approach to conduct regression. Our revised model was implemented using Hur and Achen's adjustments, fed into the "svyglm" function in R, which runs a logistic regression while accounting for survey weights. This survey weighting was a necessary adjustment, since did not ultimately post-stratify the data using the American Community Survey. We filtered the combined VRS dataset to only examine one state and one dimension of analysis. The revised model was significantly simpler:

$$\theta_{i,j} = logit^{-1}(\beta_{j,0} + X\beta_i)$$

In this scenario, *j* represents the jth state being analyzed (1 = Alabama, 2 = Alaska, 51 = Wyoming, etc.) and *i* represents the demographic category (1 = Age, 2 = Race/Ethnicity, 3 = Education, 4 = Disability). The $\theta_{i,j}$th result would thus represent one state measured along one dimension using VRS survey weights.

The results of these models gave us the log-odds of voting relative to all voters in the given state. For example, for the Rhode Island education model, we found that having gone to some college was associated with a log-odds of voting of 1.354, which, when exponentiated, means that eligible voters who attended some college were 3.873 times more likely to vote than those who had not gone to high school (the "baseline" category).

The relative importance of these odds was then weighted by assessing the proportion of the total U.S. population that were contained within each category. For example, since voters with "some college" (a partial or completed bachelor's degree) constitute 48.9% of all U.S. voters, the variance in their voting patterns is worth more than those of voters with no high school, which only constitute 8.9% of the population. This weighting was necessary to avoid treating each coefficient equally. Due to small sample sizes, it is likely that small minority groups (such as American Indians or disabled voters) could have inaccurate predicted log-odds with extreme values. If they were not weighted to adjust for their relatively small sample size, they could dominate our estimates of total voting inequality. Our team used the following weights, which come from U.S. Census data:

- Age: 16.1% 18-29 years old, 19.5% 30-44 years old, 25.1% 45-64 years old, 16.8% 65+ years old
- Race: 59.3% Non-Hispanic White, 12.6% Black, 1.3% American Indian, 6.4% AAPI, 2.9% Multiracial, 18.9% Hispanic
- Highest Education Level: 8.9% No High School Diploma, 27.9% High School Diploma, 48.9% Some College/Bachelor's, 14.4% Beyond Bachelor's
- Disability: 87.3% Non-disabled, 12.7% Disabled

Afterward, the difference in log-odds was multiplied by 100, squared and multiplied by the demographic weighting coefficient to return the "weighted variation" in that category. This method was chosen for its resemblance to least-squares regression, as it would more heavily penalize models with larger differences in log-odds by squaring the result after multiplying by a large normalizing constant (to avoid dealing with very small fractions).

We return to the Rhode Island education example to showcase what this looks like in practice:

- The square of difference in log-odds between non-HS educated voters and voters with some college was $(100 – (100*3.873)^2)$, which equals 82,541.
- The weighting coefficient is 0.489.
- The "weighted variation" is the square of difference in log-odds multiplied by the weighting coefficient. In this case, 82,541 * 0.489 = 40,361.
- This process was repeated for the other comparison groups, non-HS vs. HS and non-HS vs. those with advanced degrees.
- Their cumulative variation was added to determine a final sum of variation for each state.

After, the "weighted variation" across all levels in each dimension of inequality were summed to produce a rough estimate of the "total variation" within that category. The chart below records the observed differences.

Results

Using the survey-based state-by-state model, here is our analysis of total variation:

State	Age (Sum of Var.)	Race/Ethnicity (Sum of Var.)	Education (Sum of Var.)	Disability (Sum of Var.)
Alabama	16358.9001	1042.826	122951.4	161.8999
Alaska	64382.84	880.1261	395038.7	36.59372
Arizona	42743.36	956.9159	241144	0.090278
Arkansas	38317.79	952.2599	231388.6	124.5696
California	16478.04	846.3041	97789.03	86.26168
Colorado	71622.66	1574.574	512768.6	68.79365
Connecticut	32723.04	829.2937	92656.64	89.05811
Delaware	36423.26	978.1449	298495.4	160.7877
D.C.	1710.136	370.6585	88886.91	303.486
Florida	39374.53	594.1218	109733.7	55.43179
Georgia	20330.46	851.4276	239136.3	148.7247
Hawaii	40308.42	738.2611	235639.1	12.58138
Idaho	41810.99	1415.243	420170.9	55.14489
Illinois	30850.55	783.815	148166.7	41.89386
Indiana	27767.67	637.0096	363036	134.3203
Iowa	47530.26	1022.17	270252.9	105.7116
Kansas	53554.57	950.6924	492691.6	41.84036
Kentucky	18223.05	825.1885	263878.5	178.6247
Louisiana	26131.51	518.5864	143092.7	154.1225
Maine	56532.95	1178.291	621571.4	185.1109
Maryland	14196.01	497.994	125837.2	249.7392
Massachusetts	31803.63	1353.358	114107.4	214.4344
Michigan	55781.13	578.9438	327116.5	76.0655
Minnesota	21676.45	984.3383	331427.2	228.714
Mississippi	18329.17	1135.824	55580.65	86.94751
Missouri	16100.23	480.9531	255475.7	155.0795

Montana	89606.19	1077.472	365601.6	60.23558
Nebraska	39276.73	1341.855	190181.1	11.22952
Nevada	25940.59	609.8921	174932.7	5.314265
New Hampshire	30351.75	936.0061	232691.4	135.5375
New Jersey	17850.56	377.0212	36404.59	182.8238
New Mexico	43001.19	1283.383	218301.9	25.23924
New York	13941.88	603.8181	73943.56	189.2113
North Carolina	26223.3	429.1207	154590.3	135.6275
North Dakota	31392.87	1787.471	93360.66	50.22619
Ohio	29681.77	453.1162	194165.3	140.6865
Oklahoma	66539.53	1075.9	440292.5	46.05318
Oregon	40469.53	1370.818	320685.6	113.5406
Pennsylvania	14371.53	942.4105	402969.4	147.0222
Rhode Island	23511.25	550.5834	249467.8	93.78531
South Carolina	17847.99	1027.237	349775.4	188.3773
South Dakota	74855.77	1510.367	157648.1	64.47568
Tennessee	22674.95	655.0294	210860.5	260.5009
Texas	45773.69	856.7501	115433.7	22.85726
Utah	44790.3	1217.279	137906.3	4.028968
Vermont	47077.9	682.321	979509.1	149.0351
Virginia	13252.78	474.0115	169322.1	202.6527
Washington	53864.31	1255.164	464833.3	59.28687
West Virginia	28771.02	764.3268	441137.9	145.1491
Wisconsin	31908.32	1008.249	353311.2	166.5978
Wyoming	44942.88	580.6082	187583.8	62.66779

The relative size of these coefficients does suggest that education was by far the most correlated with turnout and age clearly second. However, these numbers are also skewed by a lack of accounting for varying degrees of freedom, as further discussed below. In addition, because these numbers are only being compared *against* each other, the raw numbers should not be taken as the main output of the model and merely as a proxy for each state's relative equality or inequality.

Based on this variance data, here is the "rank" of most unequal (1) and most equal (51) states across our four metrics:

Rank	Age	Race/Ethnicity	Education	Disability
1	Montana	North Dakota	District of Columbia	Vermont
2	South Dakota	Colorado	Tennessee	Maine
3	Colorado	South Dakota	Maryland	Colorado
4	Oklahoma	Idaho	Minnesota	Kansas
5	Alaska	Oregon	Massachusetts	Washington
6	Maine	Massachusetts	Virginia	West Virginia
7	Michigan	Nebraska	New York	Oklahoma
8	Washington	New Mexico	South Carolina	Idaho
9	Kansas	Washington	Maine	Pennsylvania
10	Iowa	Utah	New Jersey	Alaska

11	Vermont	Maine	Kentucky	Montana
12	Texas	Mississippi	Wisconsin	Indiana
13	Wyoming	Montana	Alabama	Wisconsin
14	Utah	Oklahoma	Delaware	South Carolina
15	New Mexico	Alabama	Missouri	Minnesota
16	Arizona	South Carolina	Louisiana	Michigan
17	Idaho	Iowa	Vermont	Oregon
18	Oregon	Wisconsin	Georgia	Delaware
19	Hawaii	Minnesota	Pennsylvania	Iowa
20	Florida	Delaware	West Virginia	Kentucky
21	Nebraska	Arizona	Ohio	Missouri
22	Arkansas	Arkansas	North Carolina	Rhode Island
23	Delaware	Kansas	New Hampshire	Arizona
24	Connecticut	Pennsylvania	Indiana	Georgia
25	Wisconsin	New Hampshire	Arkansas	Hawaii
26	Massachusetts	Alaska	Oregon	New Hampshire
27	North Dakota	Texas	Iowa	Arkansas
28	Illinois	Georgia	Rhode Island	New Mexico
29	New Hampshire	California	Connecticut	Tennessee
30	Ohio	Connecticut	Mississippi	Ohio
31	West Virginia	Kentucky	California	Nebraska
32	Indiana	Illinois	Michigan	Wyoming
33	North Carolina	West Virginia	Colorado	Nevada
34	Louisiana	Hawaii	South Dakota	Virginia
35	Nevada	Vermont	Wyoming	South Dakota
36	Rhode Island	Tennessee	Montana	North Carolina
37	Tennessee	Indiana	Washington	Illinois
38	Minnesota	Nevada	Florida	Louisiana
39	Georgia	New York	Idaho	Utah
40	Mississippi	Florida	North Dakota	Maryland
41	Kentucky	Wyoming	Oklahoma	Alabama
42	New Jersey	Michigan	Illinois	Texas
43	South Carolina	Rhode Island	Kansas	Massachusetts
44	California	Louisiana	Alaska	Florida
45	Alabama	Maryland	New Mexico	California
46	Missouri	Missouri	Texas	North Dakota
47	Pennsylvania	Virginia	Hawaii	Connecticut
48	Maryland	Ohio	Nebraska	District of Columbia
49	New York	North Carolina	Nevada	New York
50	Virginia	New Jersey	Utah	Mississippi
51	District of Columbia	District of Columbia	Arizona	New Jersey

We find that there are no overwhelmingly “equal” or “unequal” states, but that there are some states who appear toward the bottom on multiple (but not all metrics). For example, Montana ranks 1st, 11th, and 13th on age, disability, and race-based inequality respectively, while Colorado is even more extreme at 3rd, 3rd, and 2nd in the same categories. Other states, like New Jersey and the District of Columbia, appear at the bottom of three of four categories. Notably, there seems to

be a strong positive correlation between rank along age, disability, and race but a negative correlation for education (states that are at the top of those three categories are more equal on education). However, no testing was conducted to assess this hypothesis or the strength of this relationship. It is interesting to note, but not by itself conclusive, that the states that rank the "least equal" on education tend to have the highest proportion of residents with college degrees or beyond. This suggests that their rank may come from the overrepresentation of college-educated voters at the polls, a phenomenon that has been observed heavily elsewhere in political science literature.

Future Research and Potential Improvements

This model was far from ideal, and thus we are more limited in the strength of our conclusions about interstate inequality than we would otherwise like to be. In this section, we provide an overview of changes that our team would have made with additional time and resources, and that we would encourage future researchers to adopt.

The primary improvement we would make is a successful implementation of the MRP methodology. To do this, we would require arranging a cloud computing service that can handle multiple multilevel Bayesian regressions with hundreds of predictors or otherwise simplify the model. The model we proposed is significantly more complicated than any from the existing literature, which suggests that there may be a need to revise our approach if the model continues to be unfeasible with additional experimentation.

In addition, when implementing MRP, we would attempt to account for the CPS' existing survey weighting methodology in our post-stratification table by using an adjustment coefficient developed by Ghitza and Gelman known as the "design effect" to improve the accuracy of our estimates (2013).

There are other small adjustments in our model that could be employed to further its accuracy. First, we should find a way to value recent data more heavily than previous data, which could be implemented through a simple exponential moving average weight system for differing election cycles. In addition, we would suggest collecting more granular data on state-by-state demographics, more properly weight the "total variation" calculated in the state-level regression to make sure they are more accurate to reality. For example, since we used the same weighting coefficient in Florida as in Nebraska, we treated the Hispanic population as 18.9% of the statewide population even though that number is likely to be much higher in Florida and much lower in Nebraska. By adjusting our demographic estimates to reflect reality more accurately, we would avoid disproportionately assessing states as having "unequal turnout" when they simply have different demographic proportions than the United States has on average. Lastly, in the future, we would recommend accounting for the differences in the total number of levels across demographic categories when conducting analyses of variance – in statistical terms, controlling

for the total degrees of freedom. Groups with fewer categories (like disability) will naturally show lower variance across those categories, which may mislead readers into thinking that higher values are attributable to underlying patterns in turnout. This issue should not affect our ultimate rankings, since our current model compares states to each other within each category without considering the other dimensions of inequality, but would be useful for standardizing the model's outputs if this work is continued.

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Appendix F: Policy Breakdown by State for Disability Group

Florida

While Florida had the smallest gap in turnout rate, it received a score of 9/18, the second-lowest score (tied with Maryland) of the states analyzed. In our qualitative analysis of the state, we found the most basic of policies, including HAVA (Help America Vote Act) necessitated voting systems in addition to three of our five indicators: online voter registration, no-excuse mail-in voting, and mental health statutes that allow mentally disabled individuals to retain their rights to vote.[1] Those under guardianship for reasons pertaining to mental disability cannot vote. [2]

In 2019, 21% of Florida's population consisted of those aged 65 and older.[3] Additionally, 19% of adults age 65 and older reported being disabled, with even larger percentages reporting having difficulty seeing (22%), hearing (31%), and difficulty with mobility (40%). Furthermore, in 2019, Florida was the state with the largest percentage (24%) of its population being those with intellectual and developmental disabilities living with a family caregiver. Combining this information with the age sub-team's data, 72.1% of American citizens in Florida aged 65 or older voted in the 2020 election compared to a lesser 46.6% of American citizens and residents of Florida that voted in the same election. Combining this information, we find that Florida's population is significantly comprised of those 65 and older, that a notable percentage of those 65 and older consider themselves to have a disability or experience difficulties with mobility, hearing, and/or seeing, and that the majority of those aged 65 and older voted in Florida. Therefore, we hypothesize that, though Florida does not have excessive or expansive policies that allow for disabled populations to vote, its low gap in abled/disabled turnout rate is largely due to the elderly disabled population and their determination and commitment to exercising their civic rights.[4]

Vermont

Vermont scored a perfect score of 18/18 possible points in our indicator analysis allowing for online voter registration, curbside voting, all-mail elections, no-excuse mail-in voting, and mental health statutes that allow for mentally disabled voters to exercise their right to vote. In addition to meeting HAVA standards, Vermont is also utilizing the "OmniBallot Tablet" accessible voting system, available in all Vermont polling places for Federal elections.[5] The voting machine provides assistive technology like headphones and a screen reader, toggle switches, and a touch screen. Additionally, in the 2020 General Election, Vermont voters who

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[1] https://disabilityrightsflorida.org/documents/Voting%20Guide/Voting_in_Florida_2012.pdf
[2] https://www.accessthevote.org/election-issue/guardianship/
[3] https://acl.gov/sites/default/files/aging%20and%20Disability%20In%20America/2020Profileolderamericans.final_.pdf
[4] https://money.usnews.com/money/retirement/aging/articles/why-older-citizens-are-more-likely-to-vote
[5] https://disabilityrightsvt.org/wp-content/uploads/2021/01/VoterGuide_2020_Web.pdf

were overseas, ill, injured, or disabled were able to vote using the "Omniballot Online" system and receive their ballots electronically.[6]

Colorado

In addition to aligning with HAVA, Colorado, which scored 16/18, enacted initiatives to further orient itself with HAVA, including its VOTE! Program that provides nonpartisan support for people with disabilities to register and cast their votes. The program reaches out to disabled individuals, including citizens who are "homeless [and/or] dealing with mental health issues." [7] Colorado is also one of only 11 states without restrictions on voting rights due to mental capacity. [8] Importantly, all-mail elections are conducted within the state, allowing all Colorado voters to receive and vote by mail ballots. Furthermore, eligible voters with a disability can request to access their ballot to vote electronically. [9] For voters who prefer to cast their ballots in person, county clerks can help to make polling places accessible. Inside polling places, each county has accessible voting machines that utilize assistive and adaptive technology that allows voters to vote privately and independently. [10] Colorado voters are also able to register online and access curbside voting (depending on county).[11]

Maryland

Maryland scored a 9/18. In addition to mandatory compliance with HAVA, Maryland allows voters to register online, provides the option of no-excuse mail-in voting, and has mental health statutes that allow mentally disabled individuals to exercise their full right to vote, unless they are under guardianship for reasons pertaining to mental disability, in which case they are not eligible to vote.[12] Additionally, those who reside in institutions are eligible to vote and can vote by absentee ballot. Maryland has an accessible ballot option that is accessible to most voters, providing a headset and keypad and the option of high contrast and large print for blind and vision-impaired voters; assistive devices (e.g. sip and puff) can be plugged into the machine as well.[13] An audio ballot is also available by request.[14] Maryland has multiple initiatives and organizations that seek to ensure the full participation of people with disabilities in the voting process including VOTE Because It Matters! And RespectAbility's disability voters' guide.[15]

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[6] ibid
[7] https://disabilitylawco.org/VOTE
[8] https://www.9news.com/article/news/politics/voter-guide/colorado-voter-with-disabilities/73-b2a49d12-3500-4b4a-945b-33bfdd574258
[9] https://www.sos.state.co.us/pubs/elections/FAQs/ElectorsWithDisabilities.html
[10] ibid
[11] https://www.aapd.com/wp-content/uploads/2020/10/State-Voting-Guide-Colorado.pdf
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[14] https://www.vote411.org/node/7866
[15] https://disabilityrightsmd.org/wp-content/uploads/2016/07/DRM-voter-information.pdf ; https://therespectabilityreport.org/2022/09/28/maryland-voter-guide-2022/

RespectAbility also provides nonpartisan political commentary on US elections with a focus on disability issues, asking all Maryland candidates the same five key questions about issues affecting people with disabilities and recording their answers on their website to provide insight into candidates' values and stances.

Tennessee

Tennessee scored 6.5/18 and offers online voter registration, mail-in voting for those who are working during polling hours, and allows for those who are mentally disabled to exercise their full right to vote. However, those who are under guardianship cannot vote.[16] Tennessean voting machines comply with HAVA.[17] The state also has a disability coalition that encourages those who are disabled to vote, outlines how to register, how to receive voting assistance, how to vote by absentee ballot, and voting rights, and offers videos and text options that demonstrate an accessible polling place and the voting process for those with varying disabilities.[18] Helping Tennessee Vote also provides a guide to assisting voters with disabilities.[19]

Wisconsin

Wisconsin scored 13/18. In addition to complying with HAVA, Wisconsin allows voters to register online, curbside vote,[20] cast no-excuse mail-in ballots, and allows those who are mentally disabled to exercise their full right to vote. However, Wisconsin does not allow those under guardianship to vote.[21] All Wisconsin polling places must have accessible voting equipment set up and turned on. If voters inside the polling location cannot sign the poll list due to disability, they can inform a poll worker who will write "exempt by order of inspectors" in the signature space on the poll list. If voters are unable to state their name and address, Wisconsin law allows voters to have poll workers or an assistant of their choice state their name and address on their behalf prior to receiving a ballot. Voters can also provide their information in writing to poll workers or assistors.

[16] https://www.aucd.org/docs/policy/Guardianship_Chart_2020.pdf
[17] https://www.vote411.org/tennessee#provisions-for-voters-with-disabilities
[18] https://www.tndisability.org/disability-vote
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