

EXHIBIT B

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
Lynchburg Division**

**LEAGUE OF WOMEN VOTERS OF
VIRGINIA, et al. ,**

Plaintiffs,

v.

**VIRGINIA STATE BOARD OF
ELECTIONS, et al.,**

Defendants.

Case No. 6:20-cv-00024-NKM

RULE 26(a)(2) DISCLOSURE OF DR. JOHN B. HOLBEIN

Pursuant to 28 U.S.C. § 1746, I hereby declare as follows:

I. INTRODUCTION AND SUMMARY OF OPINIONS

I have been retained by the Plaintiffs in this case to provide my expert opinion on the likely impact (if any) of Virginia’s witness requirement policy, which requires that each voter submitting a mail absentee ballot have another individual witness that signs their ballot envelope.¹ To establish an expert opinion in this case, I reviewed a variety of materials from academic, governmental, legal, and media sources. The data sources on which I relied are cited in the memorandum and are listed together in the Appendix.

As I discuss in this report:

¹ At present, Virginia is one of only 12 states that requires a witness signature or a notarized signature with an absentee ballot. The other 11 states are Alabama, North Carolina, Rhode Island, South Carolina, Louisiana, Wisconsin, Minnesota, Alaska, Missouri, Mississippi, and Oklahoma. 2 states—Alabama and Arkansas—require a photocopied ID. The rest of states require neither of these things. See: <https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx>

- Turnout has been perpetually low and unequal in the United States and this is true especially in the state of Virginia.
- Turnout is especially low among groups most affected by Virginia’s witness requirement policy.
- Living alone reduces the chances that individuals vote.
- The people most likely to be affected by Virginia’s witness requirement policy are those that are more likely to live alone—minorities, the elderly, those with disabilities, those in poverty, women, and those that live in rural areas in the state.
- Efforts to expand the ease of rules surrounding voting and registration increase the chances that disadvantaged groups vote.
- Efforts to expand vote-by-mail increase voter turnout and help those—regardless of their political affiliation—who might otherwise struggle to cast a ballot in person.
- If the historical patterns of absentee ballot usage, absentee vote rejection rates, and voter turnout hold in the 2020 election, approximately 16,689 voters will have their absentee ballots that they submitted rejected for the lack of a witness signature.
- Virginia’s witness requirement will decrease voter turnout, especially so among older, disabled, disadvantaged, and minority citizens. During a pandemic, this requirement effectively neuters the gains that vote-by-mail systems afford and disenfranchises voters.

II. BACKGROUND AND QUALIFICATIONS

I am an Assistant Professor of Public Policy, Politics, and Education at the Frank Batten School of Leadership and Public Policy at the University of Virginia. I received my PhD in Public Policy from Duke University in 2016. I was a Postdoctoral Research Fellow at Princeton University from 2016-2017. From 2017-2019, I was an Assistant Professor of Political Science at Brigham Young University.

I have expertise on the topics of American political behavior, civic engagement, education policy, the effects of vote-by-mail, voter registration files, statistics, and methods for causal inference. I teach courses on the politics of public policy, methods for causal inference, research methods with quantitative data, and program evaluation. I am the coauthor (with D. Sunshine Hillygus) of the book “Making Young Voters: Converting Civic Attitudes into Civic Action” (Cambridge University Press, 2020), which provides a deep dive into why so few young people vote.

I have published several peer-reviewed works on voter turnout² and have published work that uses data from the surveys and voter files used in this report.³ Most pertinent to this case, I have also recently published research on the effects of vote-by-mail on elections in the United States.⁴ My work has been published in leading peer-reviewed scholarly journals, including the *American Political Science Review*, the *American Journal of Political Science*, the *Journal of Politics*, the *British Journal of Political Science*, *Science Advances*, *Nature Human Behavior*, *Public Administration Review*, the *Journal of Public Administration Research and Theory*, the *Journal of Experimental Political Science*, the *Economics of Education Review*, *PLOS One*, *Education Finance and Policy*, and *Electoral Studies*. My research has been supported by two large grants from the National Science Foundation.

I previously was retained as an expert witness assessing the effect of preregistration of 16- and 17-year-olds on youth turnout in North Carolina (see *League of Women Voters of North Carolina, et al. v. North Carolina, et al.*) and in assessing the effect of preregistration and automatic voter registration reforms in Michigan (see *Priorities USA et al. v. Benson, No. 19-000191-MZ*). I am being compensated \$400 per hour for my effort in this case. My compensation is in no way contingent on the conclusions reached as a result of my analysis.

² Fraga, Bernard, and John Holbein. "Measuring youth and college student voter turnout." *Electoral Studies* (2019): 102086. Holbein, John B., and D. Sunshine Hillygus. *Making Young Voters: Converting Civic Attitudes Into Civic Action*. Cambridge University Press, 2020. Holbein, John B., and D. Sunshine Hillygus. "Making young voters: the impact of on youth turnout." *American Journal of Political Science* 60, no. 2 (2016): 364-382. Holbein, John B. "Childhood Skill Development and Adult Political Participation." *American Political Science Review* 111, no. 3 (2017): 572-583. Holbein, John B., D. Sunshine Hillygus, Matthew A. Lenard, Christina Gibson-Davis, Darryl V. Hill, and. "The Development of Students' Engagement in School, Community, and Democracy" Forthcoming, *British Journal of Political Science* (in press). Holbein, John B. "Left Behind? Citizen Responsiveness to Government Performance Information." *American Political Science Review* 110, no. 2 (2016): 353-368.

³ Holbein, John B., Jerome P. Schafer, and David L. Dickinson. "Insufficient sleep reduces voting and other prosocial behaviours." *Nature human behaviour* 3, no. 5 (2019): 492-500. Schafer, Jerome and John B. Holbein. "When Time is of the Essence: A Natural Experiment on How Time Affects Elections" *The Journal of Politics* 82, no. 2 (2020)

⁴ Barber, Michael J. and John B. Holbein. "The Participatory and Partisan Impacts of Mandatory Vote-by-mail." *Science Advances* (Forthcoming).

III. BACKGROUND AND ANALYSES

a. VOTER TURNOUT IN THE UNITED STATES

Voter turnout in the United States is low relative to other advanced democracies. This has been true for decades and remains to be so today. Figure 1 shows this visually. The gap between the U.S. and other (non-compulsory voting) countries ranges around 10 to 15 percentage points, putting the U.S. in the bottom third worldwide. In addition to being low, voter turnout in the United States is vastly unequal: with white, older, and more affluent citizens being more likely to vote than their minority, youth, and disadvantaged counterparts.

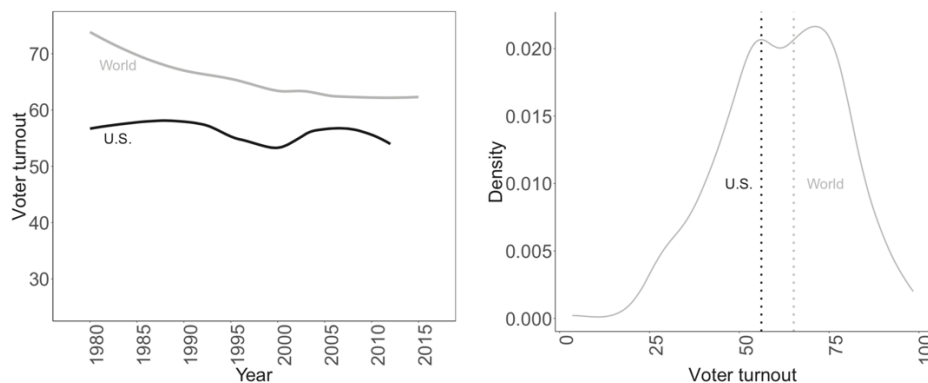


Figure 1: Voter turnout in the United States relative to other countries. This figure provides two comparisons to illustrate the rate of voter turnout in the United States relative to other countries. The figure on the left plots voter turnout in the United States (black line) to that in the non-compulsory voting countries (grey line). Voter turnout rates reported with lines presenting a smoothed non-parametric function to allow for the flexibility given that elections are held in different years. The figure on the right places the mean level of voter turnout in the United States in the distribution of turnout across other countries in the world. This is plotted with a vertical dashed black line. Other countries' turnout mean level is shown with a vertical dashed grey line. Source: International Institute for Democracy and Electoral Assistance (IDEA). Takeaway: voter turnout in the United States is low relative to other advanced democracies.

b. VOTER TURNOUT IN THE STATE OF VIRGINIA

Virginia is no exception to this pattern of low and unequal voter turnout. Figure 2 shows Virginia's rates of voter turnout in Presidential and Midterm elections over the past 20 years. Virginia's turnout rate is shown by the **black** line. The figure benchmarks Virginia's rate of voter turnout to the national average (**blue** line) and all other states (**grey** lines).

As can be seen, voter turnout rates in Virginia are middling. They are in the middle of the pack compared to other states—sometimes right above and sometimes right below the national average. In addition to being low, voter turnout in Virginia is more unequal than in other states. Figure 3 shows the difference in rates of voter turnout (from 1996-2018) between white and Black voters in the state and in all other states. As can be seen, the gap between Black and white voters is larger in the state of Virginia. Whereas nationwide the difference between Black and white voters is 3.5 percentage points, in the state of Virginia the gap is 7.9 percentage points—more than twice as large as the nation as a whole and a difference that is statistically significant ($p < 0.01$).

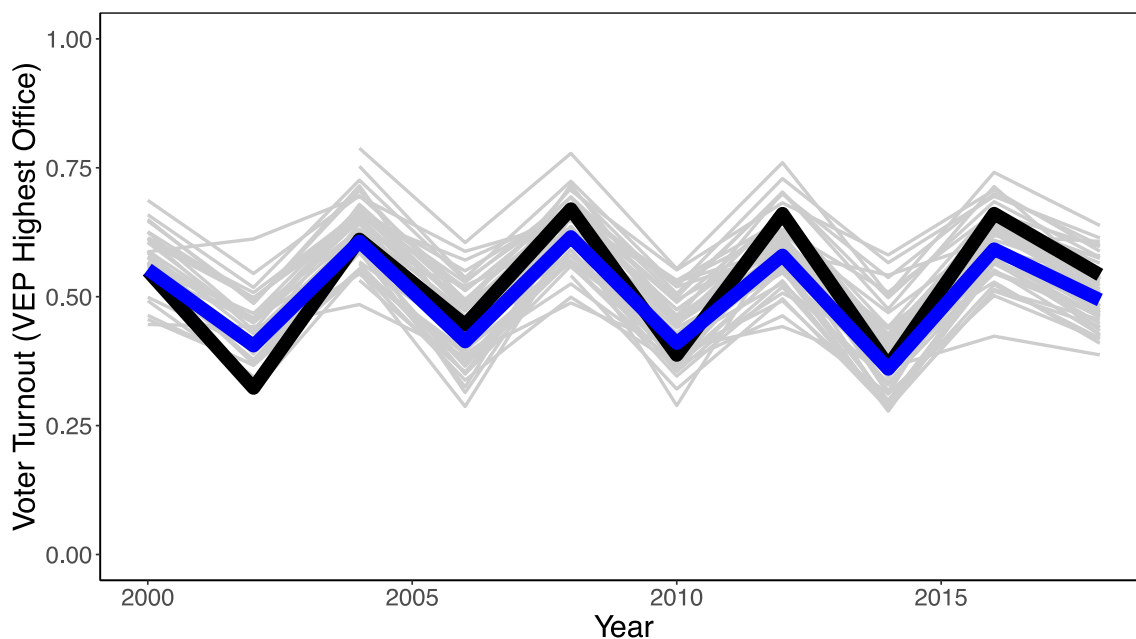


Figure 2. Voter turnout in Virginia relative to other states. The black line is Virginia’s rate of turnout, the blue line is the national level, the grey lines are the other states. The data here come from the U.S. Elections Project. The measure of turnout is the voting eligible population from the highest rate on the ballot. Takeaway: Virginia is about average, perhaps a bit lower than the average, in terms of its rate of overall voter turnout. From 2000-2018, voter turnout nationwide averaged 52.7%; in Virginia, voter turnout averaged 52.2%.

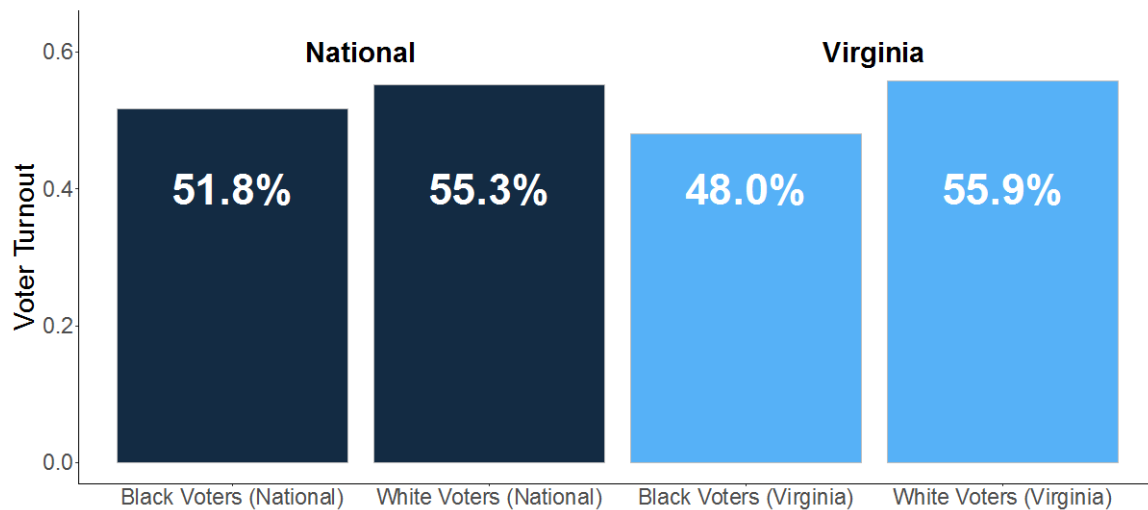


Figure 3. Race gaps in voter turnout in Virginia relative to other states. Bars display rates of voter turnout among the groups (i.e. Black v. white citizens) shown on the horizontal axis. Dark blue bars are nationwide turnout rates; light blue bars show turnout patterns in Virginia. The data here come from the Current Population Survey November Supplement (1996-2018). Takeaway: Virginia has had a much larger gap in voter turnout between white and Black voters; the gap between Virginia’s gap and the nationwide gap is 4.5 percentage points ($p=0.000$)—that is the difference between white and Black turnout is much larger in Virginia than in other states.

c. WHY LOW AND UNEQUAL PATTERNS OF VOTER TURNOUT MATTER

Low and unequal levels of turnout are troubling for a number of reasons. First, voting is the cornerstone of democracy, so low and unequal levels of voter turnout undermine the health of the political system as a whole.⁵ Second, research has shown that low and unequal voter turnout has implications for democratic representation. Political scientists have long documented that “who votes, and who doesn’t, has important consequences for who gets elected and for the content of public policies.”⁶ The systematic under-representation of certain groups of the electorate means that the views and concerns of these groups will be consistently under-represented by elected representatives. Empirical research consistently finds evidence that low-turnout groups—such as

⁵ Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. *Voice and equality: Civic voluntarism in American politics*. Harvard University Press, 1995. Lijphart, Arend. *Thinking about democracy: power sharing and majority rule in theory and practice*. New York: Routledge, 2007. Dahl, Robert A.. *A preface to democratic theory*. Vol. 115. University of Chicago Press, 1956.

⁶ Lijphart, Arend. *Thinking about democracy*. New York: Routledge, 2007.

young, minority, and less-affluent citizens—are less likely to be adequately represented in the government’s decision making.⁷ Finally, voting may be a proxy for other desirable social attitudes and behaviors. Voting has long been used as a marker of social cohesion or “social capital”.⁸ Places with low voter turnout—the logic goes—are also likely to have lower levels of social connections between individuals, making transactions more difficult and depleting society from the inherent value of interconnectedness. Scholars argue that there is a reciprocal relationship between various civic attitudes and behaviors, so that voting is both fostered by and reinforces attitudes like social trust, tolerance, and humanitarianism and promotes other civic behaviors like volunteering, belonging, and donating.⁹ In short, low and unequal turnout is normatively bad in its own right, skews democratic representation, and is indicative of low and unequal levels of social capital.

d. WHY DO PEOPLE VOTE? THE CORE ROLE OF HEALTH AND SOCIAL CONNECTIONS IN SHAPING VOTER TURNOUT

Many individual and contextual factors shape whether individuals vote.¹⁰ Some of the strongest and most consistent predictors of voting are education, socioeconomic status, age, and social connectivity. Better educated, affluent, older, and more connected citizens are much more likely to vote than their otherwise similar counterparts.¹¹

Another factor that shapes whether citizens vote or not is their health status. Recent high-quality research has documented that even in normal, non-pandemic times, individuals who are less

⁷ Griffin, John D., and Brian Newman. “Are voters better represented?” *Journal of Politics* 67, no. 4 (2005): 1206-1227. Bartels, Larry M. *Unequal democracy*. NJ: Princeton University Press, 2009.

Schlozman, Kay Lehman, and Henry E. Brady. *The unheavenly chorus: Unequal political voice and the broken promise of American democracy*. NJ: Princeton University Press, 2012.

⁸ Putnam, Robert D. “Bowling alone: America’s declining social capital.” In *Culture and politics*, pp. 223-234. Palgrave Macmillan, New York, 2000.

⁹ Lijphart, Arend. “Unequal participation: Democracy’s unresolved dilemma presidential address, American Political Science Association, 1996.” *American political science review* 91, no. 1 (1997): 1-14.

¹⁰ Leighley, Jan E., and Jonathan Nagler. *Who votes now?: Demographics, issues, inequality, and turnout in the United States*. Princeton University Press, 2013.

¹¹ Smets, Kaat, and Carolien Van Ham. “The embarrassment of riches? A meta-analysis of individual-level research on voter turnout.” *Electoral studies* 32, no. 2 (2013): 344-359.

healthy are much less likely to vote than similarly healthy individuals. For example, Burden et al. (2017) use various analytic techniques to explore the role of health over one's life course on their rates of political participation. They find that "[health] has a powerful effect [on voting] on par with traditional predictors of participation such as education."¹² In fact a recent meta-analysis, which provided a comprehensive review of this literature, found that "voting and health are associated, namely people with worse health tend to be less likely to engage in voting."¹³ One of the implications for this pattern is that as people age, and their health declines, they become less likely to vote. Figure 4 shows this visually. Even though, as a whole, older citizens are more likely to vote than younger citizens, as older citizens age and their health begins to deteriorate, their participation begins to decline (as can be seen on the right side of Figure 4). This results in thousands of fewer voters than there would otherwise be in U.S. elections. In short, health plays a key role even in normal times. In times of pandemic, these gaps between the healthy and the unhealthy are likely to be magnified (especially in areas where voting in person is unsafe).¹⁴

¹² Burden, Barry C., Jason M. Fletcher, Pamela Herd, Donald P. Moynihan, and Bradley M. Jones. "How different forms of health matter to political participation." *The journal of politics* 79, no. 1 (2017): 166-178.

¹³ Brown, Chloe L., Danyaal Raza, and Andrew D. Pinto. "Voting, health and interventions in healthcare settings: a scoping review." *Public Health Reviews* 41, no. 1 (2020): 1-21.

¹⁴ Barber, Michael J. and John B. Holbein. "The Participatory and Partisan Impacts of Mandatory Vote-by-mail." *Science Advances* (Forthcoming).

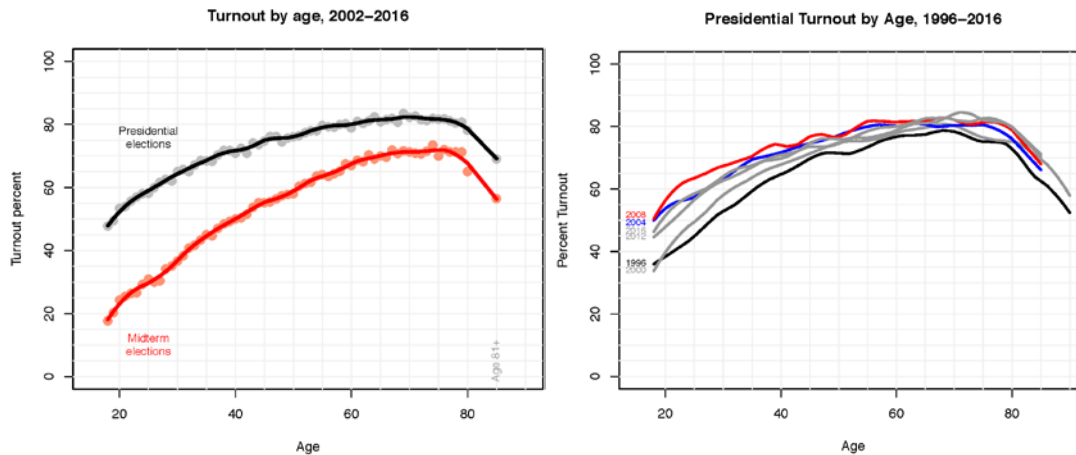


Figure 4. Rates of voter turnout by age. Average rates of voter turnout by age. Drawn from the Current Population Survey. Image comes from Franklin (2018).¹⁵ Takeaway: Rates of voter turnout decline as individuals age and their health declines.

In addition to health, one of the strongest contributors to voting is social connectivity. Voting is a powerfully social act. Individuals who have more and stronger social connections are much more likely to vote than those that are not.¹⁶ People who are asked to vote by others—be it by political campaigns or by close associates (i.e. friends and family members)—are much more likely to vote than those who are not.¹⁷ In fact, family members of those who are asked to vote by political campaigns are also more likely to vote themselves, suggesting that there are strong connections and spillovers within families in terms of their voter turnout.¹⁸ Families that have one person voting in them are much more likely to see rates of voter turnout within that family rise.¹⁹ And voters are highly sensitive to interventions that reveal to their neighbors and family members whether or not

¹⁵ See Franklin, Charles. "Age and Voter Turnout." Medium (February 25, 2018).

¹⁶ Holbein, John B., and D. Sunshine Hillygus. *Making Young Voters: Converting Civic Attitudes Into Civic Action*. Cambridge University Press, 2020.

¹⁷ Rosenstone, Steven J., and John Mark Hansen. *Mobilization, participation, and democracy in America*. Longman Publishing Group, 1993

¹⁸ Nickerson, David W. "Is voting contagious? Evidence from two field experiments." *American political Science review* (2008): 49-57.

¹⁹ Dahlgaard, Jens Olav. "Trickle-up political socialization: The causal effect on turnout of parenting a newly enfranchised voter." *American Political Science Review* 112, no. 3 (2018): 698-705.

they vote.²⁰ Finally, as I show below, living alone makes it less likely that individuals will vote (see Figure 9). In short, prospective voters are strongly influenced by their social environment. Voting is, at its roots, fundamentally a social behavior—those who have more social connections are more likely to vote, while those that have fewer social connections are less likely to do so. As such, interventions that affect social connections are likely to have large and powerful effects.

e. WHY DO PEOPLE VOTE? THE EFFECT OF THE EASE OF VOTER REGISTRATION AND VOTING ITSELF ON VOTER TURNOUT

Research has shown that citizens are quite sensitive to how easy or hard it is to register to vote and to cast a ballot. Individuals who live in states where voter registration and voting rules are easier are much more likely to vote than those who live in places where it is harder and more complex to do so. When states change their laws to make registering and voting easier, more individuals vote. And when they do the opposite, turnout goes down.²¹ For instance, scholars have shown that reforms like same-day registration and preregistration of 16/17-year-olds increase voter turnout noticeably.²² Moreover, there is good evidence that low-turnout groups are especially sensitive to how hard or easy it is to register and to cast a ballot.²³

²⁰ Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. "Social pressure and voter turnout: Evidence from a large-scale field experiment." *American political Science review* (2008): 33-48

²¹ Leighley, Jan E., and Jonathan Nagler. *Who votes now? Demographics, issues, inequality, and turnout in the United States*. Princeton University Press, 2013.

²² Burden, Barry C., David T. Canon, Kenneth R. Mayer, and Donald P. Moynihan. "Election laws, mobilization, and turnout: The unanticipated consequences of election reform." *American Journal of Political Science* 58, no. 1 (2014): 95-109. Leighley, Jan E., and Jonathan Nagler. *Who votes now? Demographics, issues, inequality, and turnout in the United States*. Princeton University Press, 2013. Holbein, John B., and D. Sunshine Hillygus. *Making Young Voters: Converting Civic Attitudes Into Civic Action*. Cambridge University Press, 2020. Bertocchi, Graziella, Arcangelo Dimico, Francesco Lancia, and Alessia Russo. "Youth Enfranchisement, Political Responsiveness, and Education Expenditure: Evidence from the US." *American Economic Journal: Economic Policy*.

²³ Holbein, John B., and D. Sunshine Hillygus. *Making Young Voters: Converting Civic Attitudes Into Civic Action*. Cambridge University Press, 2020.

f. THE EFFECTS OF VOTE-BY-MAIL SYSTEMS ON VOTER TURNOUT

Recent research has shown that systems of vote-by-mail (VBM) increase voter turnout.²⁴ Leighley and Nagler show that when states adopt no-excuse absentee voting reforms, voter turnout rises by 3.2 percentage points.²⁵ Examining Washington's staggered implementation of a mandatory vote-by-mail system, Gerber et al. (2013) show that this change increased voter turnout overall by 2 to 4 percentage points and that the effects were even large among people who are less likely to vote. More recent work looking at the changes to other states that have adopted mandatory vote-by-mail in recent years has shown that these effects generalize beyond that single state. Barber and Holbein (Forthcoming) and Thompson et al. (Forthcoming) show that areas that adopted VBM increase turnout by about 2 to 4 percentage points, with these gains being seen by both Republicans and Democrats.²⁶ This effect is shown in Figure 5 below, which shows the effects of VBM on turnout. (Figure 5 is a coefficient plot.²⁷ Coefficient plots display the size of the effect (i.e. the coefficient from the regression model) with a dot and the statistical uncertainty surrounding that estimate (similar to the margin of error in surveys) with bars around the dot.)

Recent research has also shown that when states adopt VBM systems, it provides voters with the opportunity to be better informed about the candidates/issues on the ballot and, as a result, results in lower levels of down-ballot roll-off, wherein citizens vote for the races higher on the ballot (e.g.

²⁴ Gerber, Alan S., Gregory Huber, and Seth Hill. "Identifying the effect of all-mail elections on turnout: Staggered reform in the evergreen state." *Political Science research and methods* 1, no. 1 (2013): 91-116.

²⁵ Leighley, Jan E., and Jonathan Nagler. *Who votes now? Demographics, issues, inequality, and turnout in the United States*. Princeton University Press, 2013.

²⁶ Barber, Michael J. and John B. Holbein. "The Participatory and Partisan Impacts of Mandatory Vote-by-mail." *Science Advances* (Forthcoming). Thompson, Daniel, Jennifer Wu, Jesse Yoder, and Andrew Hall. "Universal vote-by-mail has no impact on partisan turnout or vote share." *Proceedings of the National Academy of Sciences* (2020). Bonica, Adam, Jacob M. Grumbach, Charlotte Hill, and Hakeem Jefferson. "All-Mail Voting in Colorado Increases Turnout and Reduces Turnout Inequality." (2020).

²⁷ Larger/positive effects would appear higher on the plot, while smaller/negative effects are plotted near the bottom. Effects that are unlikely to be unobserved simply by chance will not have bars that overlap with a zero effect (the zero effect is shown by the horizontal dashed line).

Senate, President, etc.) but not those lower on the ballot (e.g. local races).²⁸ At present, no credible research has been conducted on the effects of witness requirements under vote-by-mail systems on voter turnout overall and on rates of voter turnout among various groups in the electorate. However, based on previous research and based on additional empirical research conducted for this report (see below), we can triangulate the effects of this requirement.

Taken together, previous research has shown that health is a major factor in determining who votes, especially for older citizens. Citizens' patterns of voting are fundamentally shaped by their social connections. And citizens are highly sensitive to the election laws that they face. In the midst of a pandemic, witness requirements are likely to lower turnout and make it more unequal—substantially harming those who are older, minorities, have disabilities, or are otherwise homebound.

²⁸ Szewczyk, James. How Electoral Institutions Affect Political Accountability: Evidence from All-Mail Elections. Working Paper. http://jameszewczyk.com/VBM_V7.pdf, 2020.

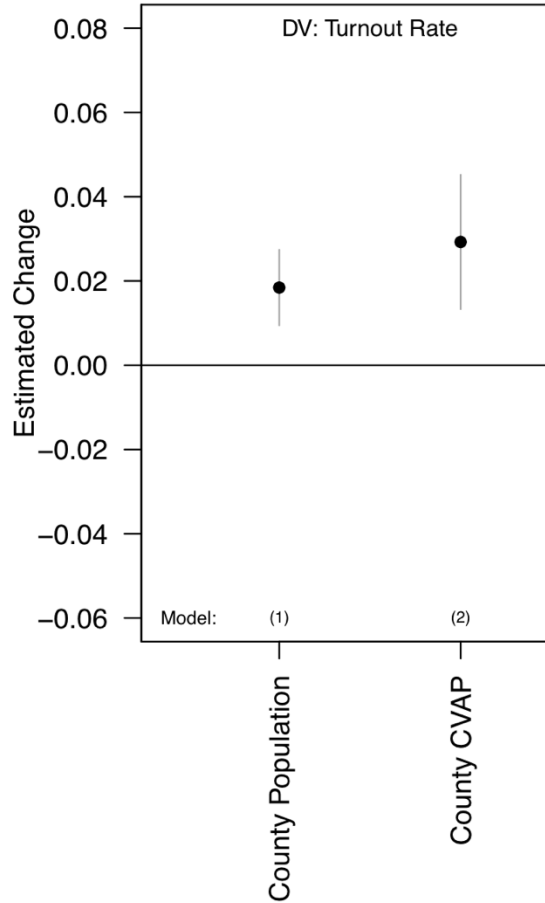


Figure 5. The effect of vote-by-mail on voter turnout. Coefficient plot from difference-in-difference models that estimate the effect of VBM on voter turnout. Points are effect estimates and lines are 95% confidence intervals. The data here come from the Dave Leip’s Atlas of Elections. Takeaway: VBM increases voter turnout by approximately 2-3 percentage points.

g. WHO LIVES ALONE?

According to the CPS, 25.3% of Virginia’s citizens—that is a full 1 in 4 members of the Commonwealth—live by themselves. (According to the state’s voter file, 21-24% live as solo-registrants in their households [in 2020 the number was 24%, in 2017 the number was 21%.])

Individuals that live alone and adhere to public health social distancing recommendations—particularly those at higher risk for severe COVID-19 cases—face a substantial burden to fulfilling the witness signature requirement.

Living alone is not a randomly determined characteristic—certain groups are much more likely to live alone than others. Figure 6 and Figure 7 show this visually. Figure 6 uses survey data from the Current Population Survey and Figure 7 uses data from Virginia’s statewide voter file. The first panel shows the differences between several relevant subgroups in the United States as a whole. The second panel shows these differences in Virginia. As can be seen, Black, older, disabled, and impoverished citizens are much more likely to live alone than white, young, not disabled, and not impoverished citizens. These differences are large. For example, in Virginia those who have disability are a full 13.9 percentage points more likely to live alone than those that do not have a disability. And those that are in poverty are a whopping 22.2 percentage points more likely to live alone than those that are not in poverty.²⁹ Figure 7 shows that Black, Hispanic, other race, older, female, and citizens who live in rural areas are much more likely to be the only registered members of their family in their household. Given that many citizens will, inevitably, look to their families or to other individuals living in their households to be their witnesses and that individuals who comply with stay-at-home orders are less likely to interact with individuals outside with their homes, the burden to obtain a witness signature falls heavier upon those that live alone—for instance, the elderly, minorities, disabled, and impoverished citizens.

²⁹ Since Black Americans are more likely to be in poverty, controlling for poverty places some of the effect of being Black under that category.

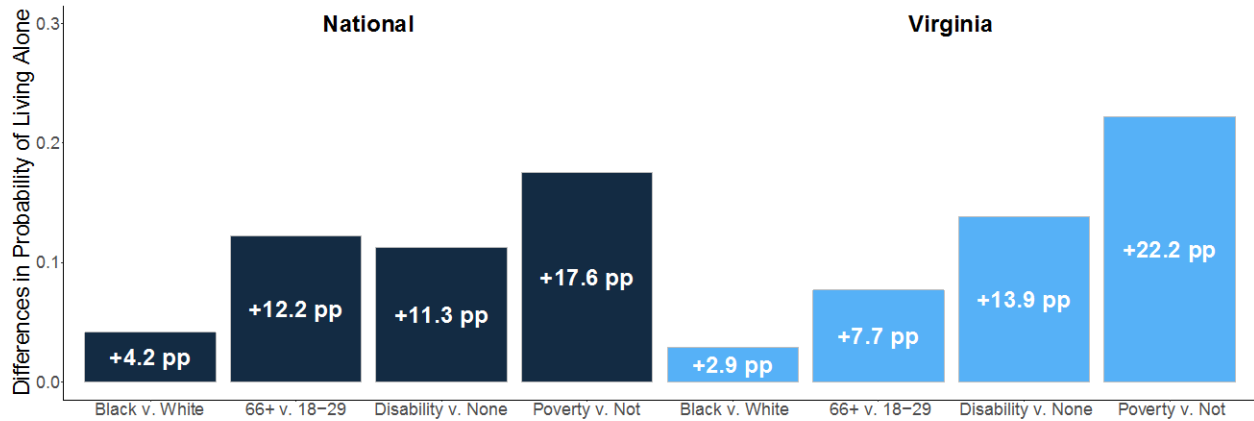


Figure 6. Who Lives Alone, Nationwide and in Virginia? Bars display the differences in rates of living alone among those aged 18 and above, comparing the groups listed on the horizontal axis in percentage points (i.e. “pp”). Bars above zero indicate that the first group listed (i.e. Black, 66+, has a disability, in poverty) are more likely to live alone (conditional on the other factors included here). Dark blue bars are from a nationwide sample; light blue bars show Virginia alone. The data here come from the Current Population Survey November Supplement (2018). Results come from regression models that include state fixed effects in the national sample. Takeaway: Black, older, citizens with a disability, and citizens in poverty are much more likely to live alone than white, younger, citizens without a disability, and citizens not in poverty.

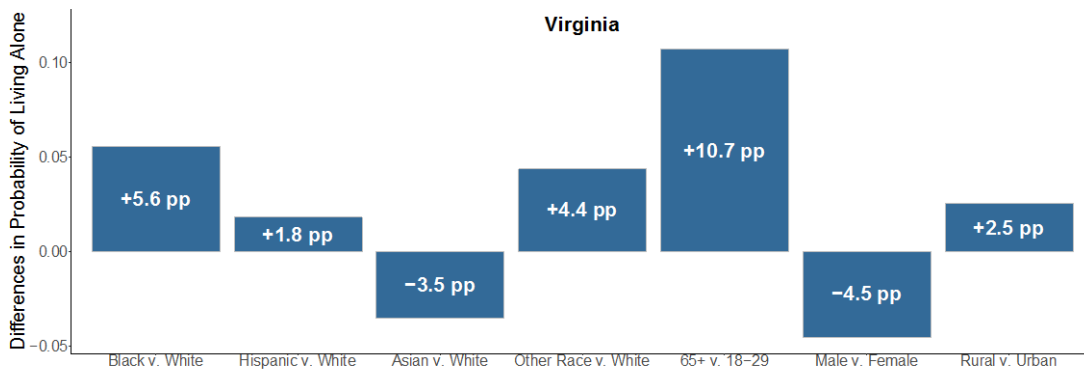


Figure 7. What Types of Registered Voters Live Alone in Virginia? Bars display the differences in rates of being alone in the data files among those registered to vote, comparing the groups listed on the horizontal axis in percentage points (i.e. “pp”). Bars above zero indicate that the first group listed (i.e. Black, Hispanic, Asian, Other race, 65+, Male, and Rural) are more likely to live alone (conditional on the other factors included here); bars below zero indicate that the first group listed is less likely to live alone. The data here come from the Virginia statewide voter registration lists. Results come from regression models that include all of the variables listed above. Takeaway: Black (v. white), Hispanic (v. white), Other race (v. white), older, and citizens living in rural areas are

much more likely to live alone. Males (v. females) and Asian citizens (v. white) are less likely to live alone.³⁰

h. EVEN IN NON-PANDEMIC TIMES, LIVING ALONE DECREASES THE CHANCES THAT CITIZENS VOTE

Even in non-pandemic times, when vote-by-mail is restricted to instances where a witness signature is obtained, living alone decreases the chances that individuals vote. Figure 8 shows this visually.

(Figure 8 is a coefficient plot.³¹ Coefficient plots display the size of the effect (i.e. the coefficient from the regression model) with a dot and the statistical uncertainty surrounding that estimate (similar to the margin of error in surveys) with bars around the dot.) All-else-equal, individuals who live alone are approximately 5.3 to 7.2 percentage points less likely to vote than individuals who live with others. This is true regardless of whether one uses survey data (i.e. from the CPS) or data from voter registration lists. These effects are quite large. Individuals who live by themselves face unique challenges that decrease the chances that they show up at the polls or cast a ballot via other means.

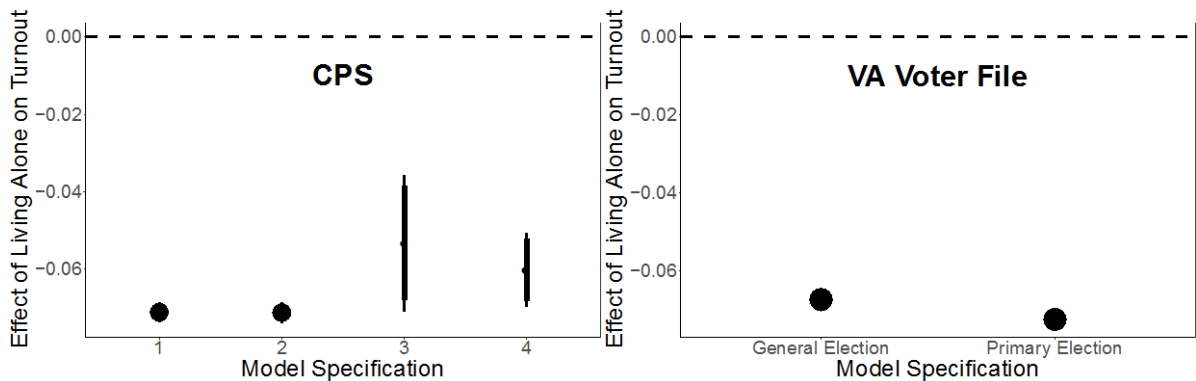


Figure 8. Effect of living alone on the chances that person votes. Difference-in-differences effect estimates are listed. Points reflect coefficient estimates and bars represent 90 percent and 95 percent confidence intervals (points are sized by the sample size used in the models). Model specification 1 includes data from 1996-2018 for a nationwide sample and state + year fixed effects. Model specification 2 includes all the same things as model 1 plus a linear, state-specific time trend. Model specification 3 estimates the effect of living alone in Virginia using data from 1996-2018. Model 4

³⁰ In the voter file, race is modeled using the who are you (i.e. “wru”) approach developed by Imai et al. This approach uses individuals’ names and geographic locations, along with data from the Census to model race. Imai et al. have shown that this approach accurately classifies a high proportion of citizens.

³¹ Larger/positive effects would appear higher on the plot, while smaller/negative effects are plotted near the bottom. Effects that are unlikely to be unobserved simply by chance will not have bars that overlap with a zero effect (the zero effect is shown by the horizontal dashed line).

uses only data from 2018 on a nationwide sample. The second panel shows effect estimates from the 2016 voter files with models including county and precinct fixed effects. Takeaway: living alone decreases the chances that a person votes by somewhere between 5.3 and 7.2 percentage points.

i. WHO RELIES ON VOTE-BY-MAIL?

Figure 9 shows that in non-pandemic times, older citizens and those who live alone are much more likely to vote-by-mail than to vote in person. These effects are only likely to be magnified in the current pandemic climate. Minority citizens are slightly less likely to use VBM than white citizens. However, this difference is much smaller in Virginia than in the country as a whole.

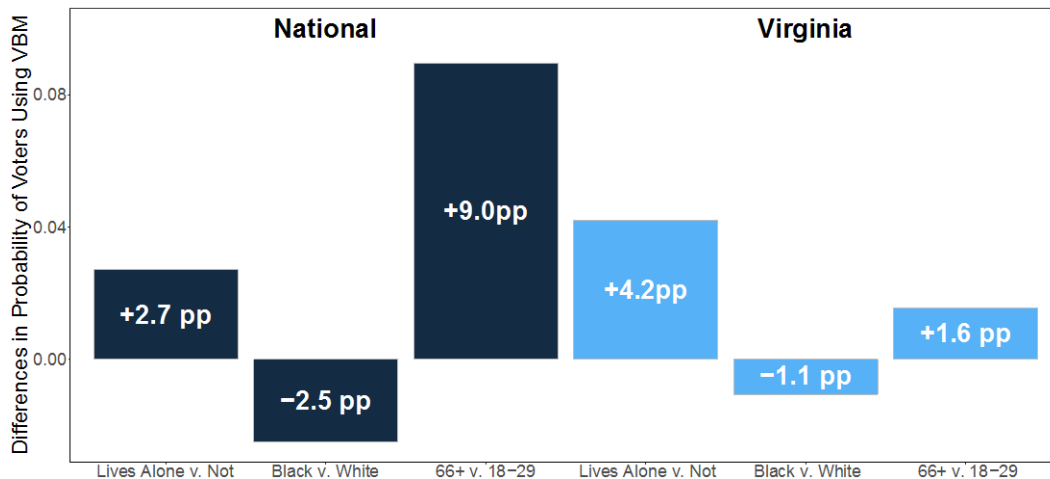


Figure 9. Patterns in vote-by-mail usage (among voters) Nationwide and in Virginia. Bars display the differences in rates of using vote-by-mail (among those ages 18 and above) comparing the groups listed on the horizontal axis. Bars above zero indicate that the first group listed (i.e. lives alone, Black, and 66+) are more likely to use VBM, whereas bars below zero indicate that the first group listed is less likely to use VBM. Dark blue bars are nationwide rates; light blue bars show Virginia. The data here come from the Current Population Survey November Supplement (2018). Results come from regression models that include state fixed effects in the national sample. Takeaway: Those who live alone and older citizens are much more likely to use VBM. In Virginia, the difference in VBM usage between Black and white citizens is small.

IV. HOW MANY BALLOTS ARE REJECTED IN VA FOR LACK OF A WITNESS?

Below is information on patterns in ballots rejected in the state of Virginia during past periods and during the current pandemic. This can be seen in Figure 10 below. The upper left panel displays the proportion of voters casting an absentee ballot. As can be seen, the fraction of voters using this method was substantially up in 2020 compared to previous election cycles. It went up from 4% of the

voting public using this method in 2016 to a full 55% of voters voting via absentee methods in 2020—a 14-fold increase over that period. The upper right panel shows that there were 653 ballots rejected in the May 2020 primaries for the lack of a witness signature. This too is up substantially. It translates to about 11 rejections per county (as the bottom left panel shows). Finally, it's important to note that rejections for a lack of a witness signature are concentrated in areas where more African Americans live. The lower right panel in Figure 10 shows this visually and shows that areas that have one standard deviation higher rates of African Americans living in their community have about 9 more rejected ballots for a lack of a witness signature, on average.

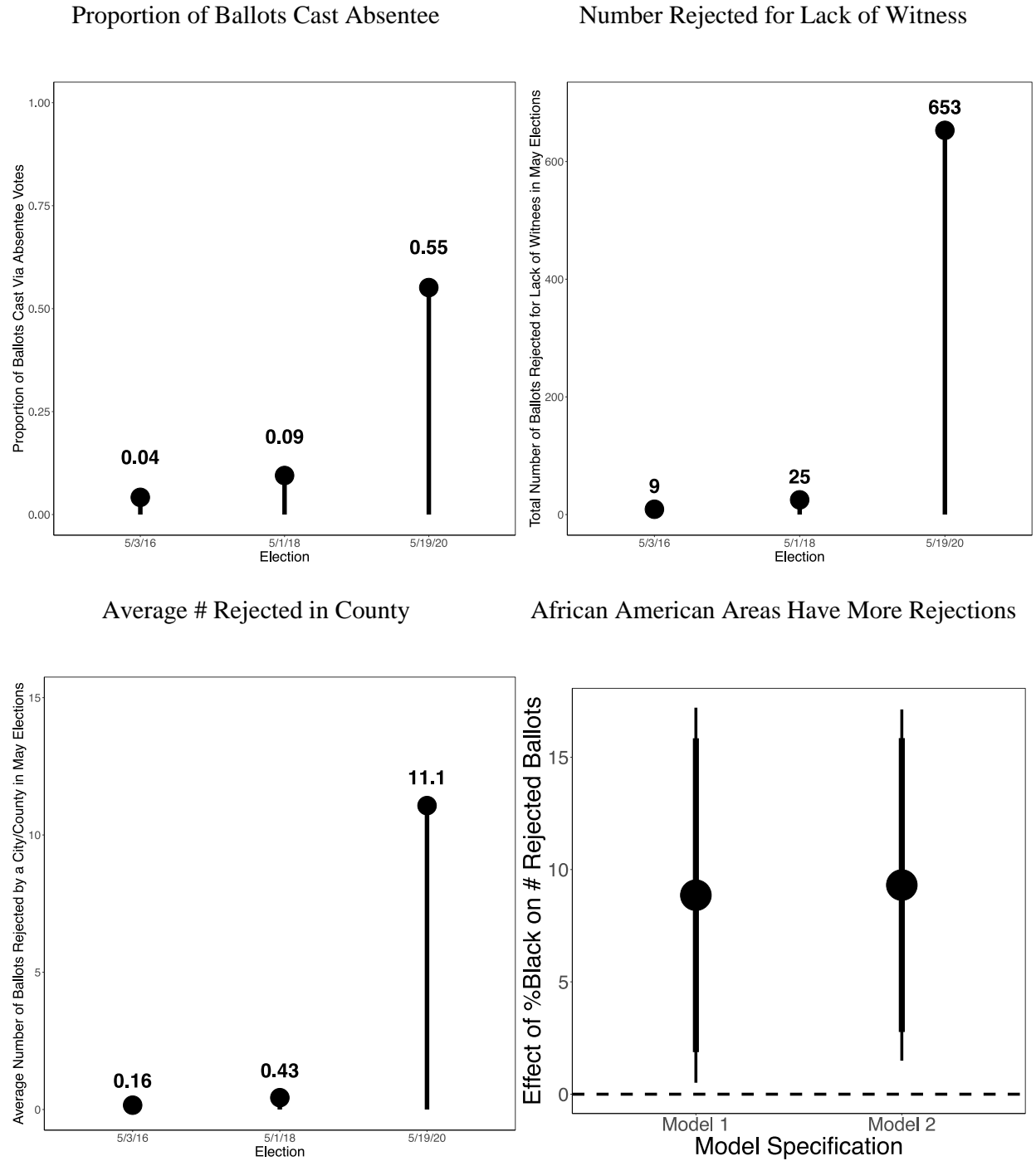


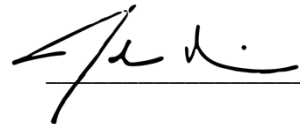
Figure 10. Patterns in ballots rejected for a lack of a witness signature. The first three panels are lollipop charts that show the numbers indicated on the y-axis. The lower right panel shows the effect of an area’s African American density on the number of rejected ballots for a lack of a witness signature. Takeaways: absentee voting is up substantially, which means more ballots are being rejected (653 in total in the May primaries), and these are higher in areas where more Black citizens live.

If the historical patterns of absentee ballot usage, rejection rates, and turnout hold in the 2020 election, it would mean that a full 16,689 voters will have their ballots that they submitted rejected.³² These will be concentrated in areas where more African Americans live.

V. CONCLUSION

In light of the current pandemic, Virginia's witness requirement is likely to depress turnout because it makes it more difficult and burdensome to vote-by-mail, especially for citizens who live alone—including, the elderly, minorities, those that are disabled, those that live in rural communities, and those of low socioeconomic status. These groups are much more likely to live alone; to fail to show up and cast a ballot without additional interventions to encourage them to do so; when they do vote, to turn to vote-by-mail as a means of casting their ballot; and in the current climate to be dissuaded by the witness requirement. Living alone, in and of itself, demobilizes voters under normal circumstances. But given the current context, with many vulnerable populations looking to vote-by-mail, those who live by themselves and yet still need to comply with the witness requirement face an even more crucial challenge their participating in the 2020 elections.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 20, 2020.



John B. Holbein, PhD

³² This forecast comes from multiplying the number of people who voted in 2016 (3,984,631) by the fraction of voters in the May 2020 elections voting absentee (0.55) by the fraction of absentee ballots rejected (0.008). If voter turnout is up from 2020, more citizens use absentee voting, and/or the rejection rate increases, the number of ballots expected to be rejected will also increase.

VI. APPENDIX

a. FIGURES INCLUDED IN THIS REPORT

Figure 1. Voter turnout in the United States relative to other countries [Source: IDEA]

Figure 2. Voter turnout in Virginia relative to other states [Source: U.S. Elections Project]

Figure 3. Race gaps in voter turnout in Virginia relative to other states [Source: CPS]

Figure 4. Voter turnout by age [Source: CPS]

Figure 5. The effect of vote-by-mail on voter turnout [Source: Dave Leip Atlas of Elections and Voter Registration Lists from Utah and Washington]

Figure 6. Who lives alone? [Source: CPS]

Figure 7. What types of registered voters are registered alone in Virginia? [Source: Virginia Board of Elections]

Figure 8. The effect of living alone on voter turnout [Source: CPS & Virginia Board of Elections]

Figure 9. Who uses vote-by-mail? [Source: CPS]

Figure 10. Patterns in ballots rejected for a lack of a witness signature [Source: Virginia Board of Elections]

b. DATA SOURCES

Here are the datasets used and/or requested for this report [along with their status/inclusion]:

1. The Current Population Monthly Files, including the November and Annual Social and Economic Supplements
2. Data on ballots rejected in the May Virginia elections in 2016, 2018, and 2020 because of a lack of a witness signature
3. Statewide voter registration lists from the state of Virginia [snapshots from 2017 and 2020]

Description of other datasets used in this report:

4. The Current Population Survey Table Creator
5. Dave Leip Atlas of Elections
6. Voter Turnout Database, International Institute for Democracy and Electoral Assistance (IDEA)
7. Voter Registration File Data from Utah and Washington
8. Data from the Census on voter registration rates from the Census
9. Data on Patterns of Voter Turnout from the U.S. Elections Project

c. SUPPLEMENTARY ANALYSES

Table A1: Percent of Registered Voters Solo-Registered by Jurisdiction

All	Jurisdiction	Black	Jurisdiction	65+	Jurisdiction
12.48%	POWHATAN	13.76%	NEW KENT	16.81%	POWHATAN
13.14%	GOOCHLAND	13.95%	POWHATAN	17.18%	GOOCHLAND
13.42%	LOUDOUN	15.24%	GOOCHLAND	18.17%	NEW KENT
13.93%	STAFFORD	15.72%	SURRY	19.20%	PRINCE WILLIAM
13.95%	POQUOSON	16.03%	KING WILLIAM	19.35%	STAFFORD
14.05%	NEW KENT	16.17%	SPOTSYLVANIA	19.39%	JAMES CITY
14.38%	HANOVER	16.48%	FAIRFAX CITY	20.72%	POQUOSON
14.79%	SPOTSYLVANIA	16.51%	LOUDOUN	20.88%	FAIRFAX
14.88%	FAUQUIER	17.51%	FAUQUIER	20.90%	YORK
15.30%	YORK	17.53%	STAFFORD	21.40%	KING GEORGE
15.37%	PRINCE WILLIAM	17.96%	CAROLINE	21.46%	LOUDOUN
15.82%	FAIRFAX CITY	18.29%	AMELIA	21.52%	SPOTSYLVANIA
15.91%	JAMES CITY	18.35%	CHARLES CITY	21.84%	FAUQUIER
15.95%	FAIRFAX	18.60%	KING GEORGE	21.95%	HANOVER
16.16%	KING GEORGE	18.62%	YORK	22.29%	ISLE OF WIGHT
16.16%	ISLE OF WIGHT	18.63%	RAPPAHANNOCK	22.68%	CHESAPEAKE
16.41%	SURRY	19.02%	SUFFOLK	22.86%	FLUVANNA
16.55%	BOTETOURT	19.22%	FLUVANNA	22.89%	CULPEPER
16.88%	FREDERICK	19.22%	PRINCE WILLIAM	23.11%	AMELIA
16.93%	CULPEPER	19.23%	FREDERICK	23.30%	GREENE
16.95%	CLARKE	19.30%	MADISON	23.37%	FAIRFAX CITY
17.16%	FLUVANNA	19.31%	GLOUCESTER	23.49%	FREDERICK
17.19%	AMELIA	19.84%	ISLE OF WIGHT	23.58%	BOTETOURT
17.39%	CHESAPEAKE	20.16%	KING AND QUEEN	23.83%	CAROLINE
17.62%	KING WILLIAM	20.18%	LOUISA	23.83%	CLARKE
17.83%	SUFFOLK	20.19%	CHESAPEAKE	23.88%	BEDFORD
17.88%	MADISON	20.33%	POQUOSON	24.00%	MADISON
18.01%	BEDFORD	20.49%	GREENSVILLE	24.12%	PRINCE GEORGE
18.07%	GREENE	20.56%	HANOVER	24.28%	SUFFOLK
18.18%	GLOUCESTER	20.58%	CULPEPER	24.29%	VIRGINIA BEACH
18.29%	FALLS CHURCH	20.62%	BOTETOURT	24.38%	LOUISA
18.49%	CAROLINE	20.76%	SOUTHAMPTON	24.43%	KING WILLIAM
18.88%	ORANGE	20.77%	BUCKINGHAM	24.47%	SURRY
18.97%	ROANOKE	20.95%	CUMBERLAND	24.57%	ORANGE
19.26%	VIRGINIA BEACH	21.60%	JAMES CITY	24.70%	GLOUCESTER
19.55%	LOUISA	21.65%	PITTSYLVANIA	24.79%	AUGUSTA

19.56%	APPOMATTOX	21.79%	PRINCE GEORGE	25.15%	WILLIAMSBURG
19.59%	WILLIAMSBURG	21.81%	NORTHUMBERLAND	25.15%	FRANKLIN
19.72%	SOUTHAMPTON	21.81%	WESTMORELAND	25.67%	NORTHUMBERLAND
20.12%	MANASSAS	21.82%	BRUNSWICK	25.73%	CHARLES CITY
20.13%	CHARLES CITY	21.83%	APPOMATTOX	25.88%	NELSON
20.14%	AUGUSTA	22.03%	CLARKE	26.14%	SOUTHAMPTON
20.36%	ALBEMARLE	22.12%	BEDFORD	26.24%	ALBEMARLE
20.48%	WARREN	22.17%	ACCOMACK	26.31%	MATHEWS
20.54%	RAPPAHANNOCK	22.19%	PAGE	26.42%	CUMBERLAND
20.65%	GREENSVILLE	22.29%	AMHERST	26.45%	APPOMATTOX
20.72%	KING AND QUEEN	22.30%	FAIRFAX	26.63%	MANASSAS
20.80%	FRANKLIN	22.38%	ESSEX	26.85%	ROANOKE
20.80%	MATHEWS	22.53%	SHENANDOAH	27.32%	FLOYD
20.94%	CUMBERLAND	22.57%	RICHMOND	27.36%	MIDDLESEX
21.02%	HENRICO	22.83%	MATHEWS	27.67%	FALLS CHURCH
21.15%	BUCKINGHAM	22.85%	VIRGINIA BEACH	27.70%	KING AND QUEEN
21.29%	PITTSYLVANIA	22.92%	MIDDLESEX	27.80%	PITTSYLVANIA
21.61%	CAMPBELL	23.02%	SUSSEX	27.87%	AMHERST
21.65%	FLOYD	23.19%	LANCASTER	27.88%	MONTGOMERY
21.67%	AMHERST	23.27%	AUGUSTA	27.91%	ROCKBRIDGE
21.87%	PRINCE GEORGE	23.35%	LUNENBURG	27.99%	CAMPBELL
21.92%	NELSON	23.58%	HENRY	28.11%	GREENSVILLE
22.34%	WASHINGTON	23.68%	ORANGE	28.16%	WARREN
22.45%	SHENANDOAH	23.77%	MANASSAS	28.25%	SHENANDOAH
22.62%	CRAIG	23.95%	HENRICO	28.30%	ROCKINGHAM
22.74%	BRUNSWICK	24.11%	WASHINGTON	28.40%	HIGHLAND
22.76%	NORTHUMBERLAND	24.20%	HALIFAX	28.49%	RAPPAHANNOCK
22.79%	ROCKINGHAM	24.21%	HAMPTON	28.60%	ESSEX
23.00%	MANASSAS PARK	24.43%	RUSSELL	28.79%	PAGE
23.04%	SUSSEX	24.43%	FLOYD	28.81%	WASHINGTON
23.05%	ROCKBRIDGE	24.80%	NOTTOWAY	29.20%	HAMPTON
	[Median Rate]		[Median Rate]		[Median Rate]
23.14%	PAGE	24.83%	PORTSMOUTH	29.40%	LANCASTER
23.22%	MIDDLESEX	24.84%	FRANKLIN	29.43%	BUCKINGHAM
23.56%	RUSSELL	24.87%	SCOTT	29.87%	CRAIG
23.60%	SALEM	25.00%	HIGHLAND	29.95%	HENRICO
23.61%	GILES	25.04%	PRINCE EDWARD	30.09%	PORTSMOUTH
23.70%	HIGHLAND	25.16%	ROCKBRIDGE	30.10%	ACCOMACK
23.72%	LUNENBURG	25.16%	SMYTH	30.12%	BRUNSWICK
23.73%	HALIFAX	25.17%	PATRICK	30.55%	DINWIDDIE
23.81%	HENRY	25.28%	NELSON	30.65%	CARROLL

24.05%	RICHMOND	25.40%	BLAND	30.72%	NEWPORT NEWS
24.14%	ESSEX	25.59%	CHARLOTTE	30.73%	PULASKI
24.16%	FRANKLIN CITY	25.63%	ROANOKE	30.82%	GILES
24.21%	HAMPTON	25.69%	CAMPBELL	30.90%	HENRY
24.23%	CARROLL	26.17%	MECKLENBURG	31.11%	RADFORD
24.43%	ACCOMACK	26.37%	FRANKLIN CITY	31.24%	RUSSELL
24.45%	COLONIAL HEIGHTS	26.64%	GREENE	31.24%	WESTMORELAND
24.50%	PORTSMOUTH	26.68%	MANASSAS PARK	31.29%	FRANKLIN CITY
24.52%	CHESTERFIELD	26.72%	NEWPORT NEWS	31.44%	PATRICK
24.68%	NOTTOWAY	26.83%	BATH	31.54%	HARRISONBURG
24.68%	ALLEGHANY	26.90%	TAZEWELL	31.59%	ALLEGHANY
24.70%	BATH	26.95%	WILLIAMSBURG	31.60%	NORTHAMPTON
24.80%	LANCASTER	27.18%	NORTHAMPTON	31.66%	NOTTOWAY
24.85%	CHARLOTTE	27.38%	ALBEMARLE	31.75%	LUNENBURG
24.87%	WESTMORELAND	27.78%	CARROLL	31.87%	COLONIAL HEIGHTS
25.03%	GRAYSON	27.78%	FALLS CHURCH	31.87%	SUSSEX
25.06%	PULASKI	27.89%	DINWIDDIE	31.99%	MANASSAS PARK
25.07%	WYTHE	27.92%	FREDERICKSBURG	32.03%	ARLINGTON
25.09%	PATRICK	28.02%	PULASKI	32.05%	WYTHE
25.16%	PRINCE EDWARD	28.04%	ARLINGTON	32.06%	MECKLENBURG
25.18%	MECKLENBURG	28.16%	ROCKINGHAM	32.21%	HALIFAX
25.24%	NEWPORT NEWS	28.42%	WARREN	32.24%	BATH
25.52%	BUCHANAN	28.63%	BUCHANAN	32.24%	CHARLOTTE
25.59%	ARLINGTON	28.95%	NORTON	32.30%	TAZEWELL
25.63%	TAZEWELL	29.02%	PETERSBURG	32.32%	PRINCE EDWARD
25.73%	FREDERICKSBURG	29.05%	GILES	32.38%	SALEM
25.88%	NORTHAMPTON	29.07%	EMPORIA	32.66%	BUCHANAN
26.19%	MONTGOMERY	29.34%	LEXINGTON	32.83%	WAYNESBORO
26.24%	SCOTT	29.58%	HARRISONBURG	33.00%	WINCHESTER
26.43%	SMYTH	29.77%	HOPEWELL	33.06%	GRAYSON
26.85%	BUENA VISTA	29.82%	GALAX	33.11%	RICHMOND
26.91%	DINWIDDIE	29.86%	WYTHE	33.23%	SCOTT
27.25%	EMPORIA	29.90%	WINCHESTER	33.39%	SMYTH
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27.92%	CHARLOTTESVILLE	30.83%	DANVILLE	34.30%	FREDERICKSBURG
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28.34%	WINCHESTER	31.44%	MONTGOMERY	34.72%	CHARLOTTESVILLE
28.36%	BLAND	31.47%	ROANOKE CITY	34.78%	WISE
28.67%	BRISTOL	31.62%	WISE	34.97%	NORFOLK
28.81%	DICKENSON	31.75%	RADFORD	35.15%	BUENA VISTA

28.94%	LEXINGTON	31.77%	CHARLOTTESVILLE	35.21%	BLAND
29.14%	STAUNTON	31.78%	NORFOLK	35.34%	PETERSBURG
29.24%	RADFORD	31.93%	RICHMOND CITY	35.90%	CHESTERFIELD
29.60%	WAYNESBORO	32.00%	BUENA VISTA	36.11%	STAUNTON
29.61%	DANVILLE	32.15%	MARTINSVILLE	36.23%	LEXINGTON
29.66%	WISE	32.16%	CHESTERFIELD	36.53%	DANVILLE
29.68%	PETERSBURG	32.89%	DICKENSON	36.70%	ALEXANDRIA
29.88%	GALAX	33.42%	BRISTOL	36.98%	DICKENSON
30.34%	MARTINSVILLE	33.43%	ALLEGHANY	37.32%	GALAX
30.48%	NORFOLK	33.56%	WAYNESBORO	37.55%	BRISTOL
30.93%	ALEXANDRIA	33.66%	SALEM	37.70%	RICHMOND CITY
30.93%	ROANOKE CITY	34.41%	GRAYSON	38.09%	ROANOKE CITY
31.05%	COVINGTON	34.76%	LYNCHBURG	38.98%	MARTINSVILLE
31.68%	RICHMOND CITY	35.14%	CRAIG	39.12%	LEE
31.93%	NORTON	36.30%	STAUNTON	39.93%	EMPORIA
34.39%	LYNCHBURG	36.75%	ALEXANDRIA	40.46%	COVINGTON
34.81%	LEE	36.93%	LEE	43.03%	NORTON

d. CURRICULUM VITAE

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Academic Positions

University of Virginia

06/2019-present

- ★ Assistant Professor of Public Policy, Frank Batten School of Leadership and Public Policy (primary)
- ★ Assistant Professor of Politics (courtesy)
- ★ Assistant Professor of Education, Curry School of Education (courtesy)

Brigham Young University

09/2017-06/2019

- ★ Assistant Professor of Political Science

Princeton University

09/2016-07/2017

- ★ Postdoctoral Fellow, Center for the Study of Democratic Politics (CSDP)

Education

Ph.D. in Public Policy, Duke University

2016

- ★ Dissertation: “Making Good Citizens: Approaches to Increase Civic Participation”
- ★ Committee: D. Sunshine Hillygus (Co-Chair), Helen “Sunny” Ladd (Co-Chair), Jacob Vigdor, Nicholas D. Carnes

M.A. in Public Policy, Duke University

2013

B.A. in Political Science, Brigham Young University

2011

Research

Peer-Reviewed Book

- [1] John B. Holbein and D. Sunshine Hillygus. “Making Young Voters: Converting Civic Attitudes into Civic Action” (2020). New York, NY: *Cambridge University Press*

Peer-Reviewed Articles

- [19] Michael Barber and John B. Holbein. "The Participatory and Partisan Impacts of Mandatory Vote-by-Mail" Forthcoming, *Science Advances* (in press)
- [18] Hans Hassell, John B. Holbein, and Matthew Baldwin. "Mobilize for Our Lives? School Shootings and Democratic Accountability in U.S. Elections" Forthcoming, *American Political Science Review* (in press)
- ★ Best Paper in Elections, Public Opinion, and Voting Behavior Award for the best paper presented at the American Political Science Association's Annual Meeting [American Political Science Association; 2020]
- [17] Steven Pfaff, Charles Crabtree, Holger L. Kern, and John B. Holbein. "Does Religious Bias Shape Access to Public Services? A large-scale audit experiment Among Street-Level Bureaucrats" Forthcoming, *Public Administration Review* (in press)
- [16] Matt Easton and John B. Holbein. "The Democracy of Dating: Survey Experiments on How Partisanship Shapes Romantic Relationships." Forthcoming, *Journal of Experimental Political Science* (in press)
- [15] Hans Hassell, John B. Holbein, and Matt Miles. "There is No Liberal Media Bias in the News Political Journalists Choose to Cover." *Science Advances*, 6, no. 14 (2020).
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- [7] Carnes, Nicholas and John B. Holbein. "Do Public Officials Exhibit Social Class Biases when they Handle Casework?" *PLOS ONE* 14, no. 3 (2019).
- [6] Holbein, John B. and Hans J.G. Hassell. "When Your Group Fails: The Effect of Race-Based Performance Signals on Citizen Voice and Exit" *Journal of Public Administration Research and Theory* 29, no. 2 (2019): 268–286.

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- [7] Charles Crabtree, John B. Holbein, and J. Quin Monson. "Americans Are Just as Racially Biased as Their Elected Representatives" *Under Review*
- [6] John B. Holbein, Marcos Rangel, Rael Moore, and Michelle Croft. "Are Voting Experiences Transformative? Expanding Upon and Meta-Analyzing the Evidence" *Under Review*
- [5] Michael Barber and John B. Holbein. "410 Million Voting Records Show That Minority Citizens, Young People, and Democrats Are at a Profound Disadvantage at the Ballot Box" *Under Review*
- [4] John B. Holbein, Catherine Bradshaw, B. Kal Munis, Jill Rabinowitz and Nicholas Ialongo. "Early Child Interventions Durably Increase Adult Voter Turnout." *Under Review*
- [3] Julia B. Christensen, John B. Holbein, and Cecilia Mo. "National Service Powerfully Increases Youth Political Participation."
- [2] Charles Crabtree, John B. Holbein, and J. Quin Monson. "Racial Discrimination in the United States"

- [1] Fraga, Bernard, John B. Holbein, and Christopher Skovron. "Using Nationwide Voter Files to Study the Effects of Election Laws"

Select Other Publications

- [17] Hassell, Hans, John B. Holbein, Matthew Miles, Kevin Reunig. 2020. "Claims of ideological bias among the media may be overblown: Research shows that ideological bias among media outlets is largely nonexistent" *Salon* (May 19)
- [16] Hassell, Hans, John B. Holbein, Matthew Miles, Kevin Reunig. 2020. "Claims of ideological bias among the media may be overblown" *The Conversation* (May 18).
- [15] Hassell, Hans, John B. Holbein, Matthew Miles. 2020. "Journalists may be liberal, but this doesn't affect which candidates they choose to cover." *Washington Post* (April 10).
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- [13] Hassell, Hans, John B. Holbein, Matthew Miles. 2020. "There's No Liberal Bias in What the Media Chooses to Cover." *Data for Progress* (April 7)
- [12] Holbein, John B. 2020. "Expert Report: Priorities USA et. al. v. Benson, No. 19-000191-MZ"
- [11] Holbein, John B. 2020. "Why Many Young People Don't Vote – And How to Fix That" *American Political Science Association* (March 16).
- [10] Holbein, John B. 2020. "Why so few young Americans vote." *The Conversation* (Mar. 11)
- [9] Fraga, Bernard, John B. Holbein, and Chris Skovron. 2018. "Using Nationwide Voter Files to Study the Effects of Election Laws" *MIT Election Lab Report* (July 27).
- [8] Simeonova, Emilia, Randall Akee, John B. Holbein, William E. Copeland, E. Jane Costello. 2018. "Low voter turnout? Increasing household income may help" *VoxEu, CEPR* (July 15).
- [7] Holbein, John B. 2016. "How No Child Left Behind encourages more affluent parents to flee poorly performing schools." *USAPP, American Politics and Policy, LSE* (November 7).
- [6] Holbein, John B. 2015. "New research has uncovered a surprising factor that helps people vote. And it involves marshmallows." *Washington Post Monkey Cage Blog* (October 4).
- [5] Holbein, John B. and D. Sunshine Hillygus. 2015. "How preregistration can help increase youth voter turnout." *USAPP, American Politics and Policy, LSE* (April 27).
- [4] Holbein, John B. and D. Sunshine Hillygus. 2015. "Expert Report: United States District Court Middle District of North Carolina Civil Action No. 1:13-CV-00660-TDS-JEP (M.D.N.C.) League of Women Voters of North Carolina, et al. v. North Carolina, et al."
- [3] Holbein, John B. and D. Sunshine Hillygus. 2015. "How to get young people to vote? Register them before they turn 18" *Washington Post Monkey Cage Blog* (January 13).

- [2] Carnes, Nicholas and John B. Holbein. 2013. "Are Politicians Prejudiced against the Poor?" *Scholar's Strategy Network Basic Facts Brief* (January).
- [1] Holbein, John B, Andre Baksh, Jin Dai. 2011. "The History of the Utah Tax Code" *Utah State Tax Commission Economics & Statistical Unit Research Publication* (June).

Grants [Total: \$806,289]

- ★ NEO Philanthropy, New Venture Fund [**\$132,500**], "Youth Movements in the 2018 Midterms and Beyond: Impacts and Prospects for Permanence" [Co-PI] (with Tova Wang, Kei Kawashima-Ginsberg, Johnnie Lotesta, Jerusha Conner, and Matt Davis) 2019-2021
- ★ National Science Foundation, Political Science Program, Grant SES-1657821 [**\$335,690**], "Making Young Voters: Policy Reforms to Increase Youth Turnout" [Co-PI] (with D. Sunshine Hillygus, Darryl V. Hill, and Matthew A. Lennard) 2017-2019
- ★ National Science Foundation, Political Science Program, Grant SES-1416816 [**\$249,999**], "Education, Engagement, and Well-being among Adolescents" [SI] (with D. Sunshine Hillygus and Christina Gibson-Davis) 2014-2016
- ★ Brigham Young University Mentored Environment Grant [**\$40,000**], "Audit the Public: Leveraging Large-Scale Audit Experiments to Ascertain How Levels of Racial Bias Among U.S. Citizens Correspond to Levels of Bias in their Elected Officials" [PI] 2019
- ★ Brigham Young University Mentored Environment Grant [**\$20,000**], "Making Young Voters: Using Big Data to Understand How to Increase Youth Voter Turnout" [PI] 2018
- ★ Research Opportunities in Surveys and Experiments, Duke SSRI [**\$1,000**] 2015
- ★ Bass Instructional Fellowship, Duke University [**\$10,000**] 2016
- ★ American Political Science Association (APSA) Travel Award [**\$500**] 2015
- ★ William and Janet Hunt Fellowship, Duke University [**\$5,500**] 2015
- ★ Duke University Research Grant [**\$6,500**] 2014-2015
- ★ Sanford School of Public Policy Research Grant [**\$3,100**] 2012-2015
- ★ Office of Research & Creative Activities (ORCA) Undergraduate Research Grant, Brigham Young University [**\$1,500**] 2010-2011

Awards

- ★ Best Paper in Political Behavior Award ["Mobilize for Our Lives? School Shootings and Democratic Accountability in U.S. Elections," *American Political Science Association, Elections, Public Opinion, and Elections (EPOVB) Section*, 2020]

- ★ Best Reviewer, *Political Analysis* (2019)
- ★ Batten School of Leadership and Public Policy Excellence in Faculty Research Award (2019)
- ★ Beryl A. Radin Best Article Award for the best article in *Journal of Public Administration Research and Theory* ["When Your Group Fails: The Effect of Race-Based Performance Signals on Citizen Voice and Exit," *Public Management Research Association*, 2019]
- ★ Best Paper in Political Behavior Award ["Family Income and the Intergenerational Transmission of Voting Behavior: Evidence from an Income Intervention," *Midwest Political Science Association*, 2018]
- ★ Harrell Rodgers Graduate Student Award [*Midwest Political Science Association/Policy Studies Organization*, 2015]

Invited Presentations

- ★ Pew Research Center (2020)
- ★ UVA Department of Developmental Psychology (2020)
- ★ EdPolicyWorks (2020)
- ★ Dartmouth College, Quantitative Social Sciences (2020)
- ★ Students Learn Students Vote Coalition (2020)
- ★ The Civics Center/American Constitution Society [2x] (2020)
- ★ Duke University (2020)
- ★ University of California, Berkeley (2020)
- ★ University of Toronto (2020)
- ★ McGill University/Université de Montréal (2020)
- ★ Youth-Nex (2020)
- ★ Southern Political Science Association (2020)
- ★ Coalition for National Science Foundation/American Political Science Association's Congressional Exhibition (2019)
- ★ Youth Research Group, AFLCIO (2019)
- ★ University of Kentucky—Martin School of Public Policy and Administration (2019)
- ★ Society for Political Methodology, POLMETH (2018)
- ★ University of Virginia—Batten, Politics, and Curry Faculty Workshop (2017, 2018)
- ★ Harvard Kennedy School—Political Economy Workshop (2017)
- ★ Princeton University—CSDP (2017)
- ★ American Political Science Association Annual Meeting (2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019)
- ★ Midwest Political Science Association Annual Meeting (2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020)
- ★ Association for Public Policy Analysis & Management Annual Meeting (2013, 2014, 2015, 2016, 2017)

- ★ Election Sciences, Reform, and Administration (2017, 2018)
- ★ Boston University (2015)
- ★ Brigham Young University (2015)
- ★ Columbia University—School of International and Public Affairs (2015)
- ★ University of Chicago—Harris School of Public Policy (2015)
- ★ University of Tennessee (2015)
- ★ Tufts University (2015)
- ★ Rand Corporation (2015)
- ★ Brookings Institution—Governance Studies/Brown Center (2015)
- ★ Association for Education Finance and Policy Annual Meeting (2015)
- ★ Center for the Analysis of Longitudinal Data in Education Research Annual Meeting (2015)
- ★ American Association for Public Opinion Research Annual Meeting (2015)
- ★ Brigham Young University (2015, 2016, 2017)

Teaching

- ★ The Politics of Public Policy, Undergraduate (2016, 2017, 2018, 2019)
- ★ The Politics of Public Policy, Graduate (2019, 2020)
- ★ Senior Research Project in Public Policy, Undergraduate (2017, 2018, 2019)
- ★ Causal Inference, Graduate (2013)
- ★ Quantitative Political Methodology, Undergraduate (2009)

Professional Service

Refereeing [Total: 77x]

- ★ American Political Science Review [12x]
- ★ American Journal of Political Science [8x]
- ★ Journal of Politics [14x]
- ★ The Review of Economics and Statistics [1x]
- ★ Journal of Policy Analysis and Management [2x]
- ★ Journal of Public Administration Research and Theory [3x]
- ★ British Journal of Political Science [2x]
- ★ Journal of the European Economic Association [1x]
- ★ Political Analysis [2x, Best Reviewer Award (2019)]
- ★ Political Behavior [2x]
- ★ Political Science Research and Methods [1x]
- ★ Perspectives on Politics [2x]
- ★ Election Law Journal [2x]
- ★ Legislative Studies Quarterly [2x]
- ★ Electoral Studies [2x]
- ★ Public Choice [2x]
- ★ Public Administration [1x]

- ★ Journal of Public Policy [1x]
- ★ Political Research Quarterly [3x]
- ★ American Politics Research [4x]
- ★ PLOS ONE (Guest Editor) [2x]
- ★ Educational Policy [1x]
- ★ Educational Researcher [1x]
- ★ Communication Studies [1x]
- ★ German Politics [1x]
- ★ European Journal of Political Economy [1x]
- ★ Politics and the Life Sciences [3x]

Public Engagement

- ★ Social Media and Outreach Officer for the Experimental Research Section of the American Political Science Association (2019-2021)
- ★ Executive Committee for the Experimental Research Section of the American Political Science Association (2019-2021)
- ★ Communications Director of the Elections, Public Opinion, and Voting Behavior (EPOVB) section of the American Political Science Association (2019-2021)
- ★ Executive Committee of the Elections, Public Opinion, and Voting Behavior (EPOVB) section of the American Political Science Association (2019-2021)
- ★ Expert Witness, League of Women Voters of Va., et al., v. Va. Bd. Of Elections, et al., No. 6:20-cv-00024
- ★ Expert Witness, Priorities USA et al. v. Benson et al., No. 19-000191-MZ
- ★ Expert Witness, United States District Court Middle District of North Carolina Civil Action No. 1:13-CV-00660-TDS-JEP (M.D.N.C.) League of Women Voters of North Carolina, et al. v. North Carolina, et al.
- ★ Research Fellow, North Carolina Family Impact Seminar (2012)
- ★ Research Fellow, Scholars Strategy Network (2012-present)

Department & University Service

Committees/Chairs

- ★ Faculty Sponsor, Batten School Faculty Research Workshop (2020-2021)
- ★ Honors Thesis Coordinator, BYU Political Science Department (2016-2019)
- ★ PhD Program Distinguished Speaker Series Chair, Sanford School of Public Policy (2015)
- ★ Dean Steering Committee, Sanford School of Public Policy (2014)
- ★ Graduate Steering Committee, Sanford School of Public Policy (2014)
- ★ Graduate Curriculum Steering Committee, Sanford School of Public Policy (2014)
- ★ Graduate Professional Development Committee, Sanford School of Public Policy (2013)

Student Advising

Graduate

- ★ Emily Noh (2022, *Dissertation Advisor*, Vanderbilt University Politics Department)
- ★ Richard Burke (2022, *Dissertation Advisor*, University of Virginia Politics Department)

Undergraduate

- ★ Tyler Durfee (2019, *Honors Thesis Advisor*, Brigham Young University)
- ★ David Bates (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Eliza Riley (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Fred Tan (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ John Geilman (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Louise Paulsen (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Reed Rasband (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Stephen Hunsaker (2018, *Honors Thesis Advisor*, Brigham Young University)
- ★ Nick Roweton (2017, *Honors Thesis Advisor*, Brigham Young University)

Memberships and Affiliations

- ★ American Political Science Association (APSA; APSA Elections, Public Opinion, and Voting Behavior; APSA Experimental Research)
- ★ Midwest Political Science Association (MPSA)
- ★ Association for Public Policy Analysis & Management (APPAM)
- ★ Society for Political Methodology (POLMETH)
- ★ Election Sciences, Reform, and Administration (ESRA)