

# Cost of Voting in the American States: 2020

Scot Schraufnagel, Michael J. Pomante II, and Quan Li

## ABSTRACT

The ease of voting across the United States is constantly changing. This research updates work which established the relative “cost of voting” during presidential election cycles, in each of the 50 states, from 1996 to 2016. The 2020 iteration takes into account the recent adoption of automatic voter registration processes, expansion of early voting, new absentee voting laws, and the elimination of polling stations in some states. We learn that Oregon, which has one of the most progressive automatic voter registration processes and mail-in voting, maintains the first position as the easiest state in which to vote. Texas falls to 50th, in part because it does not keep pace with reforms like online voter registration and no excuse absentee voting, which have taken place in most other states. Voters in both Michigan and Virginia will find voting more hassle free in 2020 because of changes to both voter registration and balloting processes that have occurred since 2016.

**Keywords:** cost of voting, voter registration, early voting, automatic voter registration, photo ID laws, vote by mail

## INTRODUCTION

THE DECENTRALIZED NATURE of election laws in the United States, along with the dynamic nature of these laws, creates considerable confusion for the American voter. If a citizen moves from one state to another it will certainly take time to get used to the new voting practices they will encounter (Burden and Videll 2016). Indeed, voting laws across the 50 states are so dissimilar that we

have been motivated to develop a measure that can capture the unique electoral climate of each state in presidential election years. We believe these snapshots of electoral conditions can be used to help elaborate state voter turnout rates, and also a number of political outcomes and quality of life considerations.

Earlier work finds that states vary considerably in their level of restrictions or what is termed the “cost of voting” (Li, Pomante, and Schraufnagel 2018). This update measures the relative restrictiveness of each state’s electoral environment in mid-June of 2020.<sup>1</sup> There has been considerable movement in the relative cost of voting since data was last collected in 2016, with many states going out of their way to make voting less costly or hassle free. Yet

---

Scot Schraufnagel is a professor in the Department of Political Science at Northern Illinois University in DeKalb, Illinois, USA. Michael J. Pomante II is an assistant professor in the Department of Political Science at Jacksonville University in Jacksonville, Florida, USA. Quan Li is an associate professor in the Department of Public Administration at Wuhan University in Wuhan, China.

© Scot Schraufnagel et al., 2020; Published by Mary Ann Liebert, Inc. This Open Access article is distributed under the terms of the Creative Commons License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is

---

<sup>1</sup>Notably, the 2020 Cost of Voting Index (COVI) captures only “permanent” changes in state electioneering practices and does not count temporary changes adopted in response to the COVID-19 pandemic. However, please see Appendix A1 for a version of the COVI that does take into account these provisional changes.

other states have maintained the status quo and failed to innovate when technological advancements afford the opportunity to make things easier for the voting public. Furthermore, a few states have increased the cost of voting, principally by reducing the number of polling stations but also by adopting new restrictions on absentee voting. In order to keep pace with the many election law changes over the past four years it is necessary to update the Cost of Voting Index (COVI) to reflect the new reality in each of the 50 states.

Both stages of the voting process in the United States—registering to vote and casting a ballot—are combined into a single index value. We pay special attention to developing a state rank, which particularizes the *relative* costs associated with voting in each of the 50 states. Importantly, the state ranking and the change in state rank allow for easy cross-state comparisons of electoral climate. Movement, over time, in the qualified cost of voting makes it clear that not all state legislatures value citizen participation alike. Our results suggest there remains considerable disparity in the relative cost of voting in 2020.

## CALCULATING THE 2020 COVI

The 2020 indicator is developed using the same principal component analysis (PCA) that was drawn on to create indices from 1996 through 2016. Because state laws have been significantly modified since 2016, it is necessary to expand the number of issue areas or components used in the PCA from seven to nine. Most specifically, we have included a new four-item Likert scale that captures the complexion of new state laws surrounding the issue of “automatic” voter registration. Also, the number of early voting days has become a new stand-alone ratio variable because this consideration has taken on greater significance in the past four years and there is much more variability between states to capture than was the case in 2016. All nine issue areas used for the construction of the 2020 index are displayed in Table 1. The new considerations are issue areas 5 and 9, respectively. All newly added considerations are presented in italic font.

In the table, the first five issue areas deal with the act of registering to vote. Issue areas six through nine deal with the costs associated with casting a

ballot. Regarding the registration issue areas, we have added two additional considerations to the Voter Registration Restrictions issue area. In the past we considered any felon restriction the same, but now are counting this consideration in two unique ways. The first is whether felons can register while incarcerated. The second, more costly, consideration denotes states that do not allow felons to register even after their incarceration is complete. The other new registration restriction designates whether a state has an online voter registration deadline (in days before the general election) greater than the median number of days.<sup>2</sup>

The third issue area, Registration Drive Restrictions, combines state certification and training requirements into a single variable because in 2020 there is no longer any variance between these two considerations across the 50 states. Maintaining a four-point additive scale, we insert a consideration that taps the two states (New Hampshire and Wyoming) that have written laws that effectively ban registration drives. These two states are scored “4” on the index under the assumption that a ban is more limiting than a combination of three different laws that make registration drives more restrictive.

The last change to the registration half of the costliness puzzle reflect new laws passed in 20 states that provide nuanced versions of automatic voter registration. Importantly, state laws in only two states (Alaska and Oregon) have actual automatic registration of the type that is seen in many democracies around the world. These two states go out of their way to find and keep citizens registered when they change addresses. Other “automatic” voter registration laws combine a visit to a state Department of Motor Vehicles (DMV) licensing facility, or the Secretary of State office, with automatic voter registration unless you opt out. Still other states register you to vote if you visit additional state-run agencies besides the DMV. The Likert scale ranges from “0,” for Alaska, Oregon, and North Dakota,<sup>3</sup> to “3” for the 30 states that

<sup>2</sup>The nine states that still do not have online voter registration are scored “1,” suggesting they have greater than the median number of days. Notably, the improved measurement strategy regarding felon registration has been adopted for earlier versions of the COVI, and index values from 1996 to 2016 have been revised accordingly and are available from the authors.

<sup>3</sup>North Dakota does not require voter registration.

TABLE 1. COMPONENT PARTS OF THE COST OF VOTING INDEX: 2020

<i>Issue area (measurement)</i>	<i>Cost of voting consideration</i>
1—Registration deadline (ratio-level)	Number of days prior to the election a voter must be registered to vote
2—Voter reg. restrictions (8-item additive scale)	Same day registration not allowed for all elections Same day registration not located at polling station Mental competency required for voter registration No online voter registration Same day registration not allowed for presidential election <i>Felons not allowed to register while incarcerated</i> <i>Felons not allowed to register after incarceration</i> <i>Online voter registration deadline greater than median</i>
3—Reg. drive restrictions (4-item additive scale)	Official certification/training required by state Group required to submit documents to state Penalty imposed for violation of deadline or rules <i>No registration drives allowed</i>
4 – Pre-registration laws (5-item Likert scale)	0= 16-year-olds allowed to pre-register 1=registration allowed if 18 by Election Day 2= 17-year-olds allowed to pre-register 3= 17.5-year-olds allowed to register 4=allowed to register 60/90 days prior to 18th birthday
5—Automatic voter reg. (4-item Likert scale)	0=State contacts voters to keep them registered 1=Automatic registration at more than one state agency 2=Automatic registration at DMV, only 3=No automatic voter registration
6—Voting inconvenience (12-item additive scale)	No early voting Excuse required for absentee voting No in-person absentee voting No “ask once and always able to vote absentee” No time off from work for voting No time off from work with pay for voting No all mail voting Reduced number of polling stations since 2012 <i>Reduced number of stations more than 50% some areas</i> <i>Age and other restrictions on absentee voting</i> <i>No state holiday for Election Day</i> <i>No voting centers</i>
7 – Voter ID laws (5-item Likert scale)	0=no ID required to cast a ballot, only signature 1=non-photo ID required not strictly enforced 2=photo ID required not strictly enforced 3=non-photo ID required strictly enforced 4=photo ID required strictly enforced
8 – Poll hours (ratio-level)	Minimum and maximum poll hours (averaged and reversed)
9—Early voting (ratio-level)	<i>Number of early voting days (reversed)</i>

have not yet tried to make voter registration more automatic (see Table 1 for more detail).

Regarding the second stage of voting in the United States, actually casting a ballot, we have added four new considerations to the Voting Inconvenience scale. Particularly, we append a new consideration to the additive scale that indicates states that have reduced the number of polling locations since 2012 by 50% or more in some part of the state. Arizona, Georgia, and Texas are scored “1” but we also score Oregon and Washington “1” on this consideration because, although they have vote by mail, neither state provides an opportunity for in-person voting in the way the other three states

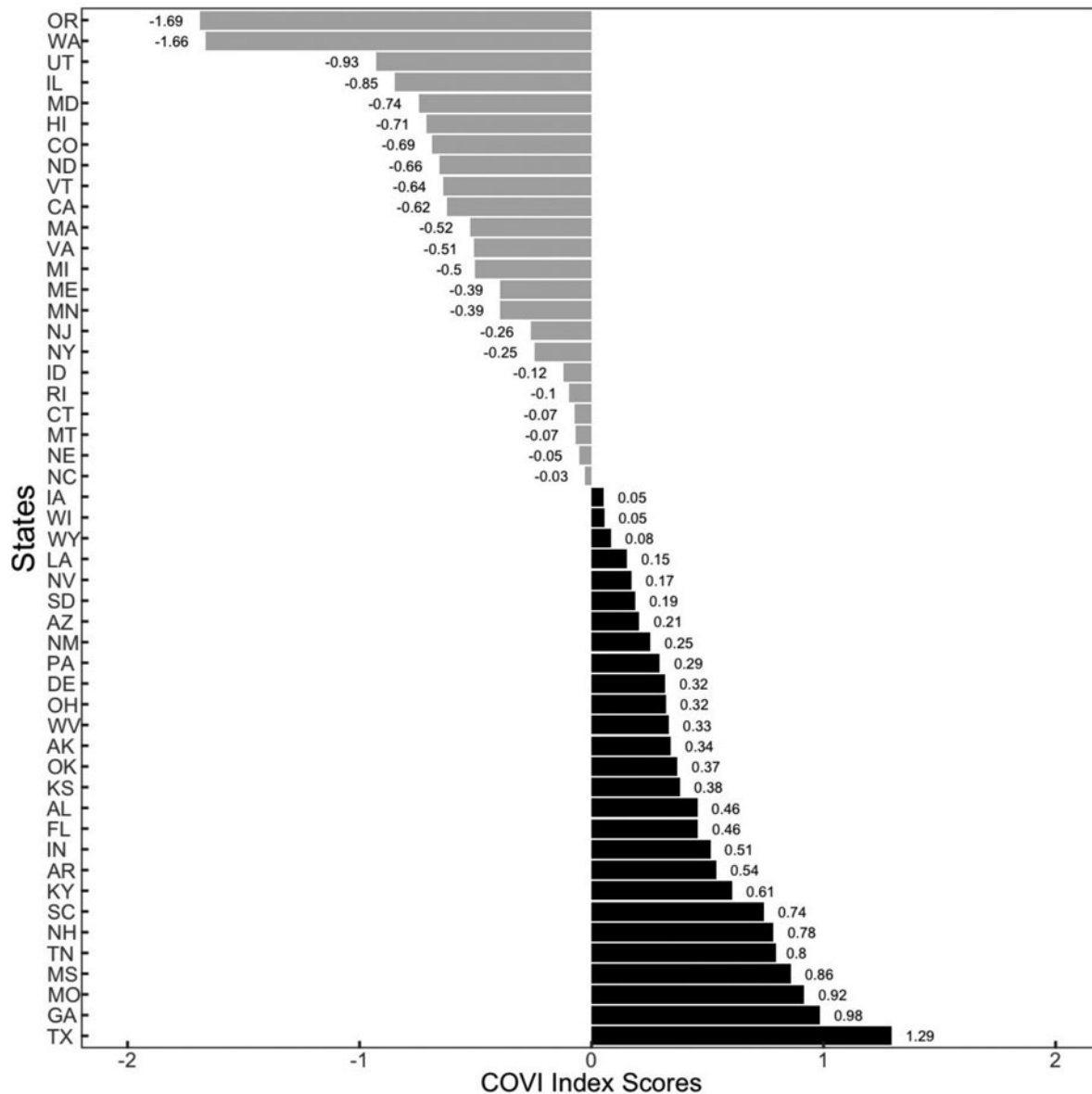
(Colorado, Hawaii, and Utah) that have institutionalized a vote-by-mail process do.<sup>4</sup> A second consideration captures new state laws that somehow restrict absentee voting, limiting it to people of a certain age or not allowing first time voters to

<sup>4</sup>We do not provide any accommodation for states that will allow mail-in voting in 2020 because of the COVID-19 pandemic. Because our intention is to develop a measure of electoral climate that is a reflection of more institutionalized practices, we only count states that have made a longer-term commitment to mail-in voting. However, the adoption of temporary vote-by-mail policies, due to the COVID-19 pandemic, is included in the COVID Cost of Voting Index discussed in Appendix A1.

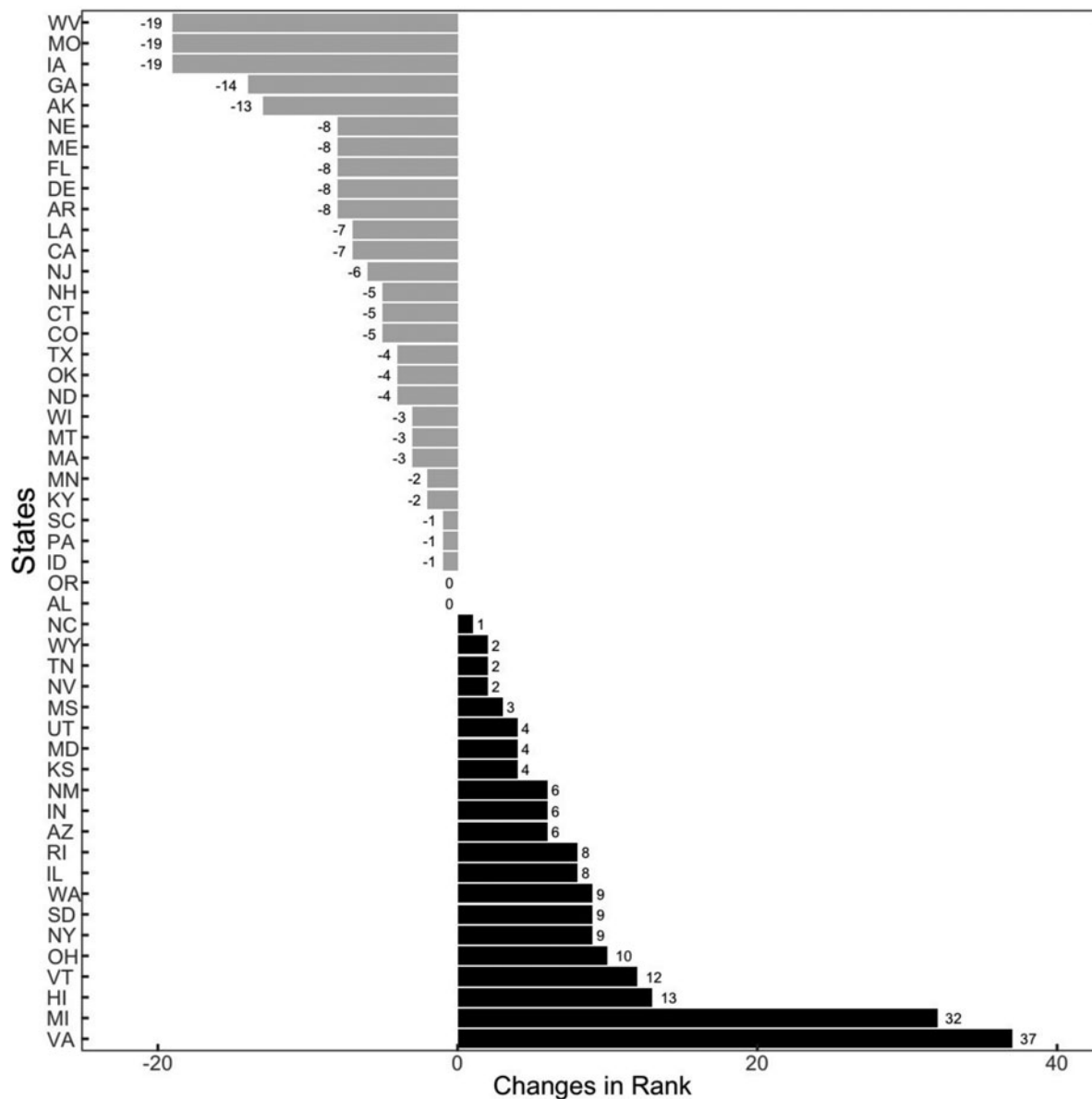
vote absentee. The third consideration measures whether the state recognizes Election Day as a state holiday (nine states in 2020) and the fourth consideration taps states that have created voting centers (17 states in 2020), which allow voters to cast a ballot somewhere other than their local precinct. The new Voting Inconvenience scale now has 12 items (see Table 1) and the effective range is “0” for Hawaii to “11” for Mississippi and South Carolina.

The last change is the inclusion of a new issue area (number 9), a ratio-level variable which

measures the number of early voting days in each state. We take care to account for weekends and count the actual number of early voting days available. The highest value, 46 days, belongs to Minnesota. Because the COVI is constructed in a manner that higher numbers represent greater cost, the values of this variable are reversed. The number of days a state allows is subtracted from the maximum of 46 days. The nine states that do not allow for early voting each receive a score of 46. The five states that have institutionalized vote-by-mail processes are scored “0” under the



**FIG. 1.** Cost of Voting Index values for all 50 states in 2020. *Note:* Index values that extend beyond two decimal points are available from the authors.



**FIG. 2.** Change in state rank from 2016 to 2020. *Note:* Negative values indicate a decrease in state rank or a relative increase in the cost of voting.

assumption that voting by mail precludes the need to vote early. Importantly, the value of all our variables is available to the public for replication purposes. A detailed codebook provides the sources of our data. For a refresher on the principal component analysis used to create index values we ask the reader to view the article by Li, Pomante, and Schraufnagel (2018, 235–37) and the online Supplementary Appendix to that article made available by the publisher.<sup>5</sup>

<sup>5</sup>The 2020 index was constructed using the same weighted linear combination of four principal components derived from the principal component analysis (PCA) of the indicators. The total variance explained by the four components is 73 percent. For more details on the methods employed see Li, Pomante, and Schraufnagel (2018, Supplementary Appendix), available at: <[https://www.liebertpub.com/doi/suppl/10.1089/elj.2017.0478/suppl\\_file/Supp\\_Appendix.pdf](https://www.liebertpub.com/doi/suppl/10.1089/elj.2017.0478/suppl_file/Supp_Appendix.pdf)> (last accessed Sept. 25, 2020).

## THE 2020 COVI

Figure 1 presents the new values. Note that Oregon repeats as the state where it is easiest to vote. Mississippi had been ranked 50th in 2016, and now moves up marginally to 47th place. Texas takes over the 50th spot, representing the state with the most restrictive electoral climate. In particular, Texas has an in-person voter registration deadline 30 days prior to Election Day, has reduced the number of polling stations in some parts of the state by more than 50 percent, and has the most restrictive pre-registration law in the country. States that make voting less costly, like Oregon and Washington, have mail-in voting but also automatic voter registration processes. Other considerations that states with lower COVI values have in common include same day voter registration at the polling station, a significant number of early voting days and laws that make voting more convenient such as paid time off from work to vote.

Figure 2 displays the change in state rank from 2016 to 2020. This is done to see which states in the past four years have made voting easier relative to other states. Note the dramatic change in Virginia. The state, in 2016, had laws that made it the 49th most difficult state to exercise the franchise. Changes passed early in 2020 move Virginia 37 places and it is now the 12th easiest state to vote in. Specifically, Virginia passed an automatic voter registration law, got rid of the in-person registration deadline, and made Election Day a national holiday, among several other considerations. Presumably, partisan change in majority control of the state legislature from the Republican Party to the Democratic Party in the 2019 off-year elections facilitated the aggressive move to make voting less costly.

But it is important to note that the relative cost of voting is not necessarily a partisan matter. Michigan voters in 2018, using a ballot initiative, changed the state constitution eight different ways to make voting easier. Among the changes were an “automatic” voter registration process, same day voter registration, and a no-excuse absentee voting provision. These changes, garnered 67 percent voter support and had, obvious broad bipartisan appeal. The changes have caused the state to move from the 45th easiest state to vote in to the 13th easiest, a move of 32 positions. Note, also, that the cost of voting does not always associate with Democratic or Republican Party influence over state legislative processes. More Democratic leaning

states such as New Mexico and Delaware do not make voting particularly straightforward and Republican leaning states like Utah, North Dakota, and Idaho have less costly voting on average.

## CONCLUSION

What is abundantly clear from the examples of Virginia and Michigan is that if a state wishes to make voting more accessible it is entirely possible to do so. Particularly interesting is the fact that some of the reforms, such as online voter registration, are found to come with a reduced monetary cost for states (PEW 2011). Moreover, researchers have identified cost savings associated with vote-by-mail processes (Hamilton 1988) and have found that automatic voter registration reduces election administration costs (Gerken 2013). So, it is not the case that state legislatures cannot afford these reforms. What else is clear is that if a state does nothing to change their laws the relative cost of voting, compared to other states, will increase. When the relative cost of voting increased in 2020 it was often the case that state legislatures simply failed to keep pace with changes in other states.<sup>6</sup> Reforms take advantage of new technologies to make processes more efficient and less costly.

## REFERENCES

- Barreto, Matt A., Bonnie Glaser, Karin Mac Donald, Loren Collingwood, Francisco Pedraza, and Barry Pump. 2011. *Online Voter Registration (OLVR) Systems in Arizona and Washington: Evaluating Usage, Public Confidence and Implementation Process*. Philadelphia, PA: PEW Charitable Trusts. <<https://www.pewtrusts.org/en/research-and-analysis/reports/0001/01/01/online-voter-registration>> (last accessed September 26, 2020).
- Burden, Barry C., and Logan Videl. 2016. “How Resources, Engagement, and Recruitment Are Shaped by Election Rules.” In *New Advances in the Study of Civic Voluntarism: Resources, Engagement, and Recruitment*, eds. Casey A. Klofstad, Henry E. Brady, Key Lehman Schlozman, and Sidney Verba, 77–94. Philadelphia, PA: Temple University Press.

---

<sup>6</sup>This is the case with a state like West Virginia, which did not go out of its way to make voting more costly but did not keep pace with any of the reforms passed in other states that make voting easier. But the elimination of polling stations in Georgia and Texas since 2016 is partly responsible for the drop in rank in each of these two states.

- Gerken, Heather K. 2013. "Make It Easy: The Case for Automatic Registration." *Democracy: A Journal of Ideas* 28 (spring). <<https://democracyjournal.org/magazine/28/make-it-easy-the-case-for-automatic-registration/>> (last accessed September 26, 2020).
- Hamilton, Randy H. 1988. "American All-Mail Balloting: A Decade's Experience." *Public Administration Review* 48 (5): 860–66.
- Li, Quan, Michael J. Pomante, and Scot Schraufnagel. 2018. "The Cost of Voting in the American States." *Election Law Journal* 17 (3): 234–47. doi 10.1089/elj.2017.0478.
- National Council of State Legislatures. 2020. "Absentee and Mail Coting Policies in Effect for the 2020 Election." *NCSL.org*. <[https://www.ncsl.org/research/elections-and-campaigns/absentee-and-mail-voting-policies-](https://www.ncsl.org/research/elections-and-campaigns/absentee-and-mail-voting-policies-in-effect-for-the-2020-election.aspx)

[in-effect-for-the-2020-election.aspx](https://www.ncsl.org/research/elections-and-campaigns/absentee-and-mail-voting-policies-in-effect-for-the-2020-election.aspx)> (last accessed September 25, 2020).

Address correspondence to:  
 Scot Schraufnagel  
 Department of Political Science  
 Northern Illinois University  
 Zulauf Hall 415  
 DeKalb, IL 60115  
 USA

E-mail: [sschrauf@niu.edu](mailto:sschrauf@niu.edu)

Received for publication June 12, 2020; accepted September 26, 2020; published online October 13, 2020.

## Appendix A1. Updating the COVI in a Pandemic

Several states, in 2020, made short-term changes to state election law in response to the COVID-19 pandemic. The virus caused concerns about in-person voting and the possible transmission of the illness at polling locations around the country. Specifically, four states (California, Nevada, New Jersey, and Vermont)<sup>A1</sup> adopted vote-by-mail processes, joining the five states who already have laws that establish this practice (Colorado, Hawaii, Oregon, Utah, and Washington). Importantly, vote by mail is distinguished from simply expanding absentee voting in a state. The latter has the states' election supervisors sending a copy of the ballot to all registered voters whether they request one or not. There are also 15 states that have made absentee voting processes less restrictive or costly as the result of the pandemic. In most instances this meant election supervisors sending an absentee voting application to all registered voters in the state.<sup>A2</sup> These specific changes for the 2020 election are now incorporated in a version of the Cost of Voting Index that we are calling the COVID Cost of Voting Index (CCOVI).

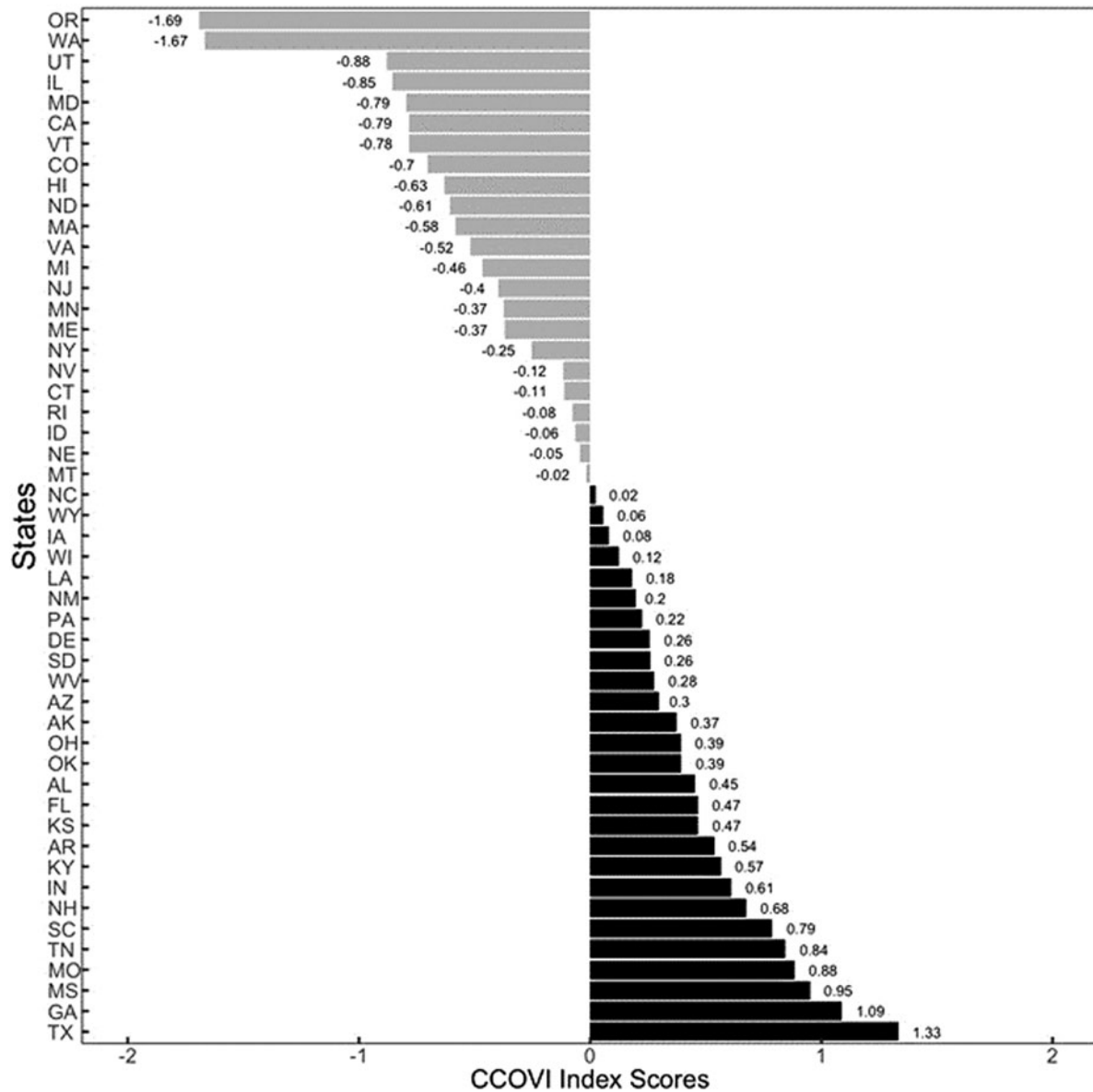
The values of the CCOVI are presented in Appendix Figure A1 below. Note that Texas remains the state with the most restrictive voting practices. Vermont and California move from the ninth and tenth easiest states to vote in to the seventh and sixth easiest states to vote in, respectively. Nevada moves from below the median (28th) to

above the median state (18th) in terms of voting ease. New Jersey moves from the 16th easiest to the 14th easiest state to vote in. There are other minor changes throughout, in terms of relative state rank. Last, we need to note that the new values are based on state laws that were passed by September 1, 2020. Some of these temporary law changes are facing legal challenges, and it is conceivable that other states will make changes to their election laws in the last two months prior to the election in November of 2020.

<sup>A1</sup>Notably, we do not count Montana as a "vote-by-mail" state because that state's law allows county election supervisors the opportunity to opt in or out of a vote-by-mail process and as of this writing it is not clear how many Montana counties will actually be sending ballots to registered voters. The District of Columbia also adopted a true vote-by-mail process, but because DC's laws are not established by an independent state legislature or a citizen referendum process it is left out of our analysis.

<sup>A2</sup>The data is obtained from the National Council of State Legislatures and is available at: <https://www.ncsl.org/research/elections-and-campaigns/absentee-and-mail-voting-policies-in-effect-for-the-2020-election.aspx> (last accessed 25 September, 2020).

(Appendix continues →)



**APPENDIX FIG. A1.** The COVID Cost of Voting Index values for all 50 states in 2020. *Note:* Index values that extend beyond two decimal points are available from the authors.