Each tab at the bottom of the Excel file contains the data for the corresponding year. The number of considerations and Issue Areas grows over time. Hence, earlier years do not include all the variables or Issue Areas. The 2020c COVI data represents state policy changes in response to the global pandemic. The ten Issue Area values in 2024 represent the ten variables included in the Principal Component Analysis. Letting the data speak for itself and using the ‘proportion of variance explained by each component, we employ the following weights:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1st Component | 2nd Component | 3rd Component | 4th Component | Total Explained |
| 1996 | 0.3454 | 0.2567 | 0.1368 |  | 0.739 |
| 2000 | 0.3251 | 0.2223 | 0.178 |  | 0.7254 |
| 2004 | 0.2993 | 0.2498 | 0.1999 |  | 0.7491 |
| 2008 | 0.309 | 0.2346 | 0.1942 |  | 0.7378 |
| 2012 | 0.2838 | 0.1943 | 0.1582 | 0.1346 | 0.7709 |
| 2016 | 0.3051 | 0.1917 | 0.1624 | 0.1375 | 0.7967 |
| 2020 | 0.3536 | 0.192 | 0.1229 | 0.1006 | 0.7691 |
| 2020c | 0.3609 | 0.194 | 0.1206 | 0.0877 | 0.7632 |
| 2022 | 0.4583 | 0.1334 | 0.1124 | 0.0933 | 0.7973 |
| 2024 | 0.4705 | 0.1327 | 0.1257 | 0.0815 | 0.8104 |

We normalize all the component weights by the total variance explained so that the total weights for each year sum up to “1.” Once the included components are weighted, we simply add the component values. Most importantly, when we use other weighting and aggregation methods as a baseline index, subsequent sensitivity analyses do not produce any evidence that other schemas are more appropriate than the COVI values reported in the articles (2018, 2020, and 2022).

**Column Markers in this codebook are for the 2024 Cost of Voting Index**

**Column A - Statenu** – alphabetical state number Alabama is 1 and Wyoming is 50

**Column B – State** – two letter state abbreviation

**Column C – Year** – the election year. Values represent state laws as of Election Day for Presidential elections between 1996-2020 and the 2022 Midterm. However, the 2024 presidential election data represent laws in place as of May 1, 2024. Following the completion of the 2024 election, I will update the data to reflect the election law changes that took place before Election Day 2024.

**Column D - Issue Area #1-Registration Deadlines** – This is the number of days before Election Day citizens need to register to vote. Because larger numbers represent a bigger burden or more cost there is no further manipulation. States with same-day voter registration scored “0.”

<https://www.vote.org/voter-registration-deadlines/> (last accessed 2/5/2024)

This issue area appears in the years: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* North Carolina’s same-day registration ends the Saturday before Election Day, so we score it as “2 days.” However, before 2022 we had scored NC “0” in this category because they allow citizens to register to vote and cast a ballot the same day, but only during the early voting period. We hold the score of “2” is a better reflection of NC law.
* In MT, voters may register during the late registration period ending at noon the day before Election Day scored as no SDVR and a “1” day deadline (Vote.org has erroneous information on their website regarding MT, cross reference with state law).

**Column E – NoSameDayReg** – the state has no same-day registration 1=yes 0=no.

<https://www.ncsl.org/research/elections-and-campaigns/same-day-registration.aspx> (last accessed 2/6/2024). This consideration appears in the years: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* NC only allows same-day registration during early voting, coded as having same-day registration in 2008-2020. However, we alter this coding decision for 2022 and scored it as “1” because it is not Election Day registration.
* We code ND as having same-day registration because it does not have any registration requirement.
* In MT, Voters may also register during the late registration period ending at noon the day before Election Da. So, we score it as no SDVR and a “1” day deadline (Vote.org has erroneous information on their website regarding MT, cross reference with state law).

**Column F – NoPollPlaceReg** – State does not have same-day registration at polling locations. This indicates that voters must go to the county courthouse or other government facility to register and then return to the polling location. 1=yes 0=no.

<https://www.ncsl.org/research/elections-and-campaigns/same-day-registration.aspx> (last accessed 2/6/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022 and 2024.

Notes:

* ND is coded “0” or as having same-day registration at polling locations because it does not have any voter registration requirement.
* In CO, if citizens register at the voting center on the day of the election, they are limited to voting in state and national elections (no local elections). However, we score it “0” nonetheless because they can still vote in the presidential election.

**Column G – NoFelonsReg** – State does not allow people incarcerated to register to vote 1=yes 0=no. This is part of the registration restriction subindex because the restriction relates most directly to the ability to register to vote.

<https://www.ncsl.org/research/elections-and-campaigns/felon-voting-rights.aspx> (last accessed 2/5/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

**Column H – NoFelonsRegAfterIncar** – There has been considerable relaxation of voter registration bans related to felons. Today there is some way to have rights restored in all 50 states. However, some states still stipulate voting rights are lost until the completion of their sentence and a post-sentencing waiting period. In other instances, these citizens require some additional action for a full restoration of their voting rights. Those states with these kind of laws are scored “1”.1=yes 0=no. This is part of the registration restriction subindex because the restriction relates most directly to the ability to register to vote.

<https://www.ncsl.org/research/elections-and-campaigns/felon-voting-rights.aspx> (last accessed 2/6/2024). Years this data is collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

**Column I Noonlineregistration** – The state does not have online voter registration. 1=yes 0=no.

<https://www.vote.org/voter-registration-deadlines/>. (accessed last 2/6/2024). Years this data was collected: 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* ND-is coded as having online voter registration because it does not have any registration requirement.

**Column J –MentalCompReg** – state has a mental competency requirement to register to vote 1=yes 0=no. This is part of the registration restriction subindex because the restriction relates most directly to the ability to register to vote.

<https://www.cga.ct.gov/2020/rpt/pdf/2020-R-0018.pdf> (last accessed 4/3/2024). Years this data was collected: 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

**Column K – NoSameDayRegPresOnly** – State has no same-day voter registration except for presidential elections. 1=yes 0=no. This is done because RI allows for voters to register same day for the Presidential Election only. So, they receive a “0” here. Otherwise, the same as NoSameDayReg.

<https://www.ncsl.org/research/elections-and-campaigns/same-day-registration.aspx> (last accessed 2/6/2024). Years this data was collected: 2012, 2016, 2020, 2022, and 2024.

Notes:

* ND is coded as having same-day registration for presidential elections because it does not have any registration requirement

**Column L – onlineregistration>median** – the deadline or number of days before the election citizens must be registered *if registering online*. In calculating the median score, we give each state that does not have online voter registration a score of “30”, the longest deadline allowed by the National Voter Registration Act of 1993. For calculating the median North Dakota, which does not have voter registration, is scored “0,” as is Vermont, which allows same-day online voter registration. The calculated median for 2024 equals 21 days. We score states 22 and above a “1” and states below the median “0”. A smaller number of days suggests you can wait longer to be registered. Obviously, we score states without online voter registration “1” because they are above average regarding this restriction. This variable has the effect of weighting the Registration Restriction additive index to penalize states without online voter registration.

<https://www.vote.org/voter-registration-deadlines/> (last accessed 2/6/2022). This data is collected for: 2016, 2020, 2022, and 2024.

Notes:

* We score North Dakota “0” because it does not require voter registration.
* Connecticut has an online registration deadline of 5 days prior to a primary election and 7 days for general elections. Therefore, the average of 6 days is used for the calculation.

**Column M – AdditionalDocuments4Reg** – does the state require additional documentation for registration beyond the federal requirements? 1=yes, 0=no, .5= requires proof of citizenship if a voter does not have a driver’s license or ID issued after October 1, 1996. These additional documents include proof of residency, a full social security number, and proof of citizenship. If states require any of these three additional documents, we score it “1.”

<https://www.globalcitizen.org/en/content/register-to-vote-basic-requirements/> (last accessed 4/3/2024). This data is collected for 2022 and 2024.

Notes:

* This is the most current article providing this information.
* In Arizona, individuals may need to provide proof of citizenship if they do not have an in-state driver’s license or an ID number issued after October 1, 1996. In this case, we score AZ as “.5.”
* In a state-by-state examination of the registration requirement, Hawaii’s registration form does not require a full social security number, just the last four digits. Since this is not different from the federal requirement, we score it a “0,” despite it being listed in the source below as requiring a full social security number.

**Column N – Issue Area #2-Registration Restrictions** (Additive Scale) – the sum of Columns related to registration restrictions (Columns E-M in 2024).

Notes:

* The number of items in the scale changes from 4 in 1996 to an eight-item additive index in 2020. The theoretical range in 2020 is 9 (0-8). In the database, the range is eight. Vermont gets a “0” because the state has none of the restrictions, even allowing incarcerated felons to register and vote. Many states have a value of 7. ND is a little tricky because the state does not have voter registration. Therefore, one might assume a “0” for ND on the registration restriction additive scale. However, the state has a law stipulating felons cannot vote, effectively denying them the right to register. Therefore, ND receives a score of “1” in Issue Area #2.
* The number of items in the registration restrictions category remains at nine in 2022. One category was eliminated, with additional documentation for registration taking its place. The theoretical range for Issue Area #2 is 0 to 9. However, the actual range in the data is 1 (CO, IL, MN, ND, VT) to 7.5 (AZ).

**Column O – ReqVolCert** – Official certification to conduct a voter registration drive is required by the state. For example, if a state requires individuals to register their name with state or local election officials before conducting a registration drive is coded as “1.” Another consideration that results in a score of “1,” is if the state requires the individual to take a test before conducting a registration drive. 1=yes 0=no

<https://nationalvoterregistrationday.org/partner-tools/rules-for-voter-registration-drives/>

<https://www.brennancenter.org/sites/default/files/2019-08/ReportState%20Restrictions%20on%20Voter%20Registration%20Drives.pdf>

2022 and 2024 source <https://www.fairelectionscenter.org/voter-registration-drive-guides>

(last accessed 2/7/2024). Years this data was collected: 2012, 2016, 2020, 2022, and 2024.

**Column P – ReqTrain** – The state requires training before conducting a registration drive. 1=yes 0=no

<https://nationalvoterregistrationday.org/partner-tools/rules-for-voter-registration-drives/>

<https://www.brennancenter.org/sites/default/files/2019-08/ReportState%20Restrictions%20on%20Voter%20Registration%20Drives.pdf>

2022 and 2024 source (<https://www.fairelectionscenter.org/voter-registration-drive-guides>)

(last accessed 2/7/2024). Years this data was collected: 2012, 2016, 2020, 2022, and 2024.

**Column Q – ReqPermission** – The state requires anyone or group conducting a voter registration drive to file a report with the state or local election administration bureau. Or if drive requires supervision of a state or local elections office. 1=yes 0=no

<https://nationalvoterregistrationday.org/partner-tools/rules-for-voter-registration-drives/>

<https://www.brennancenter.org/sites/default/files/2019-08/ReportState%20Restrictions%20on%20Voter%20Registration%20Drives.pdf>

2022 and 2024 source (<https://www.fairelectionscenter.org/voter-registration-drive-guides>)

(last accessed 2/7/2024). Years this data was collected: 2012, 2016, 2020, 2022, and 2024

**Column R – RegPunish** – Scored “1” if the state has some sort of sanction for breaking the law during a registration drive, even if there is little or no enforcement. Using the 2022 source we code any state as having possible punishments for registration drives, if the report signifies a punishment by using terminology such as “punishable, illegal, felony, misdemeanor, fine”…etc. All other states are scored “0.”

<https://nationalvoterregistrationday.org/partner-tools/rules-for-voter-registration-drives/>

<https://www.brennancenter.org/sites/default/files/2019-08/ReportState%20Restrictions%20on%20Voter%20Registration%20Drives.pdf>

2022 and 2024 source (<https://www.fairelectionscenter.org/voter-registration-drive-guides>)

(last accessed 2/7/2024). Years this data was collected: 2012, 2016, 2020, 2022, and 2024.

**Column S – NoDriveAllowed** – Registration drives by 3rd parties are not allowed. 1=yes 0=no

<https://nationalvoterregistrationday.org/partner-tools/rules-for-voter-registration-drives/>

<https://www.brennancenter.org/sites/default/files/2019-08/ReportState%20Restrictions%20on%20Voter%20Registration%20Drives.pdf>

2022 and 2024 source (<https://www.fairelectionscenter.org/voter-registration-drive-guides>)

(last accessed 7/21/2022). Years this data was collected: 2004, 2008, 2012, 2016, 2020, 2022, and 2024

Notes:

* The states of NH, WY, and WI are the only three states scoring a “1” all other states are “0.” Because the outright ban in WY goes back to 2004, this is part of the registration restriction additive index in 2004 and 2008.
* In 2012 the issue of registration drive restrictions became its own issue area.
* In 2022, Wisconsin is added to the list of not allowing registration drives because the state’s requirement to produce evidence of residency along with a citizen’s voter registration form has made 3rd party registration drives nearly impossible to conduct.

**Column T – Issue Area #3-Registration Drive Restrictions** – (additive scale)

This Issue area is calculated by adding columns ReqVolCert, RerqTrain, ReqReport, Reqpunish. NoDriveAllowed. However, the theoretical and actual range is “0” to “5” is because there are a number of states that do not allow registration drives or have made requirements so strict that a mass registration drive is nearly impossible.

Notes:

* The states of NH, WI, & WY that have banned (or nearly banned) registration drives are scored “1” in the NoDriveAllowed category. But because a ban is the most restrictive possibility, we assign them a score of “5,” despite having scored zero in the other four categories.
* ND is given all “0s” because voter registration is not required.

**Column U – PR16** – 16-year-olds allowed to preregister 1-yes 0-no. These states are trying to get young citizens interested in the political process, the law usually dictates some sort of civic education provision in public schools.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2022). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

Notes:

* As of 2/7/2024 the NCSL site had incorrect information for MI, stating that the state required voters to be 18 by the next election to register. However, in November 2023 Gov. Whitmer signed HB 4569 which allows individuals as young as 16 to preregister to vote. <https://www.governing.com/politics/michigan-will-allow-16-year-olds-to-preregister-to-vote>

**Column V – PR17** – 17-year-olds allowed to preregister 1-yes 0-no.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2022). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column W – PR175** – 17.5-year-olds allowed to register 1-yes 0-no.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column X – PR90** – allowed to register 90 days prior to 18th birthday 1-yes 0-no.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column Y – PR60** – allowed to register 60 days prior to 18th birthday 1-yes 0-no.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

**Column Z - Pr\_16\_not\_enshrined** - States that do not have a pre-registration law, but the language in the registration law technically allows those as young as 16 to register to vote. 1=yes, 0=no.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 2/7/2022). Years this data was collected: 2022 and 2024

**Column AA – NoPR** – citizens are only allowed to register if they will be 18 by next election. 1-yes 0-no. While this national law seems reasonable because only those older than 18 can vote, this consideration is the most restrictive in this category. Because we are attempting to capture state electoral-institutional climate, we argue that states that have adopted pre-registration for those under 18 have a broader window to register. Therefore, states that have not implemented any type of pre-registration show they are not overly concerned with the registration and voting of their young citizens.

<https://www.ncsl.org/research/elections-and-campaigns/preregistration-for-young-voters.aspx> (last accessed 7/2/2024).Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AB – Issue Area #4-Preregistration** Likert Scale (0-6)

0 = 16-year-olds allowed to preregister

1 = 17-year-olds allowed to preregister

2 = 17.5-year-olds allowed to register

3 = allowed to register 90 days prior to 18th birthday

4 = allowed to register 60 days prior to 18th birthday

5 = pre-registration for 16-year-olds is not enshrined in law

6= no pre-registration, must be 18 by next election

Categories are exhaustive and mutual exclusive

**Column AC – noAutomaticregDMV** – States that do not allow any form of Automatic Voter Registration score “1.” States with some sort of automatic registration score “0.”

<https://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx> (last accessed 2/7/2024). Years this data was collected: 2016, 2020, 2022, and 2024

Notes:

* North Dakota scored “0” because no voter registration is required.
* In 2016, this consideration was a part of the Registration Restriction additive scale. However, in 2020 it becomes part of the new standalone Automatic Registration Issue Area (#8).

**Column AD – NoAutoRegmorethanDMV** – States that do not allow any form of Automatic Voter Registration that is more than just registering through the DMV. States scoring “1” have either no automatic voter representation or do not allow automatic voter registration anywhere other than the DMV. We score states “0” if they allow automatic voter registration in state agencies other than DMV.

<https://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx> (last accessed 2/7/2024). Years this data was collected: 2020, 2022, and 2024.

* North Dakota scored “0” because no voter registration is required.

**Column AE – NoPostcardAutoreg** – If potential voters are automatically registered and not informed of this at the time and only given notice via a postcard after the fact, we score the state “0.” Others refer to this as “Back End AVR.” The reference is because it requires the potential voter to act after they have been registered. Essentially, Back End AVR requires citizens to put in more effort not to be registered than they would need to stay registered.

<https://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx> (last accessed 7/21/2022). Years this data was collected: 2020, 2022, and 2024.

Notes:

* North Dakota scored “0” because no voter registration is required.
* Only Alaska and Oregon have this more aggressive approach to getting people registered to vote “automatically” in 2020.
* CO, DE, and MA add this less costly policy by 2022.

**Column AF – Issue Area #5-Automatic Registration** – Sum of NoAutomaticregDMV, NoAutoRegmorethanDMV and NoPosstcardAutoreg. The issue area is captured with a four item (0-3) additive scale in 2020, 2022, and 2024.

**Column AG – nostateholiday** – The state does not make Election Day a holiday. 1-yes 0=no. Specifically, this measures whether state employees have Election Day off.

<https://www.usatoday.com/story/news/politics/2023/12/08/is-election-day-a-federal-holiday/71665471007/>

(last accessed 2/7/2024). In the Book of States, the data is found under the Management, Regulation, and Personnel tabs. Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022 and 2024.

* In the case of Kentucky, state employees get Election Day for presidential election years off but not for midterm elections. Therefore, we score Kentucky “.5” because it is caught halfway between states with no state holiday and those with a state holiday every two years. <https://extranet.personnel.ky.gov/pages/leave.aspx>

**Column AH – NoEarlyVote** – This variable taps whether the state has NOT adopted early voting. 1-yes 0-no.

<https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx> (last accessed 2/7/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* We score all vote by mail states “0,” using the assumption that all mail voting is a form of early voting.
* We define a state as having early voting if the state erects temporary voting locations (usually with public announcements and some non-workday hours) for individuals to vote early.
* In-person absentee voting can look a lot like early voting. However, we distinguish states with auxiliary early voting sites established, and these sites are open after 5:00p on a weekday or have weekend hours. Consequently, if a state uses in-person absentee voting terminology, we count the state as having early voting if the preceding two characteristics exist.
* For the 2020c index, we would have added CA, NV, NJ, and VT states as “0’s” because they adopted mail-in voting during the pandemic. However, all states were already scored “0” because they allowed early voting.

**Column AI – noallmailvoting** – Does the state prohibit all elections from being conducted by mail? 1=yes 0=no.

<https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx>(last accessed 2/7/2024).Years this data was collected: 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

Notes:

* HI, UT, CO, WA, OR, CA, NV, and VT are scored “0” in 2020 because they have all mail-in voting, all other states are scored “1.” These states began receiving “0’s” once the law went into effect in their state.
* For the 2020c index, we add CA, NJ, NV, and VT as “0’s” because of their temporary adoption of the law in response to the Covid-19 pandemic.

**Column AJ - novotingcenters** – some states are beginning to allow people to vote at “Vote Centers” in the county or state. These centers allow citizens an additional location to cast a ballot, besides their designated polling location. States are scored “1” if voters must cast a ballot in their precinct. If the accommodation is provided, the variable is scored “0.”

https://www.ncsl.org/elections-and-campaigns/vote-centers (last accessed 2/8/2024). Years this data was collected: 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* IA has some limited use of vote centers, but because their use is limited, it is scored “1”.
* In 2022, IL rolled out a vote center pilot project that allowed vote centers in Champaign County only. Because vote centers are not available statewide, it is scored “1”.
* OR, WA, CO, UT, HI, CA, NV, and VT all score “0” in the column because they have all mail-in voting.
* For the 2020c index – CA, NV, NJ, and VT score “0” because they temporarily adopted all-mail voting for the 2020 election due to the pandemic. However, CA and NV already scored “0” because they already had voting centers.

**Column AK – NoTimeOffVote** – Time off from work for voting. Scored “0” if time off is afforded workers, scored “1” if not.

<https://www.onedigital.com/blog/a-state-by-state-guide-to-employee-voter-leave/> (last accessed 2/7/2024). Years this data was collected: 2008, 2012, 2016, 2020, 2022, and 2024 (reliable data unavailable before 2008).

Notes:

* North Dakota state law “encourages” employers to give people time off (no pay) scored “0” because arguably the encouragement is really all that is going on in any of the states because little or no enforcement.
* Language on Virginia’s government website on time off for voting differs from the website (4/27/2020).
* All states with mail-in voting (OR, WA, CO, UT, HI, CA, NV, and VT) are scored “0” because one does not need time off to vote if voting by mail.
* For the 2020c index – we would have scored CA, NV, NJ, and VT as “0” because they adopted mail-in voting during the pandemic. However, CA was already scored “0” because it allows time off from work for voting.

**Column AL – NoTimeOffPay**– Paid time off from work for voting scored “0” if paid time off is afforded workers, scored “1” if not. All states with no time off for voting are also scored “1” on this consideration.

<https://www.onedigital.com/blog/a-state-by-state-guide-to-employee-voter-leave/> (last accessed 2/7/2024). Years this data was collected: 2008, 2012, 2016, 2020, 2022, and 2024 (reliable data unavailable before 2008).

Notes:

* Ohio is scored “1” because “time off with pay” is for salaried employees only.
* OR, WA, CO, UT, HI, CA, NV, and VT are scored “0” because they have all mail-in voting.
* For the 2020c index – we would have scored CA, NV, NJ, and VT as “0” because they adopted mail-in voting during the pandemic. However, CA was already scored “0” because it allows paid time off from work for voting.

**Column AM – noallmailornopolllocations** – scored “1” for states that do not have all mail-in voting. Oregon and Washington also score “1” because they have mail-in voting but no Election Day voting locations, all other mail-in states are scored “0.” This variable is intended to distinguish OR and WA from other vote-by-mail states.

Years this data was collected: 2020, 2022, and 2024

**Column AN –somepollreductionspost2012** – In 2022, the seven states that removed polling locations after the 2012 election cycle scored “1,” and the states that did not remove polling locations scored “0.”

<https://www.thenation.com/article/archive/there-are-868-fewer-places-to-vote-in-2016-because-the-supreme-court-gutted-the-voting-rights-act/>

<https://www.vice.com/en/article/pkdenn/the-us-eliminated-nearly-21000-election-day-polling-locations-for-2020>.

(Both sites were last accessed on 7/21/2022). Years this data was collected: 2016, 2020, 2022, and 2024.

Notes:

* All states with mail-in voting (OR, WA, CO, UT, HI, CA, NV, VT) are scored “0” because poll reductions are not an issue when voting by mail.
* For the 2020 COVI we had added other states that had only reduced the number of polling locations since 2016. However, some reductions are the result of the adoption of Voting Centers.
* In 2022, we revert to the 2016 coding because the reliability of the data for 2020 was questionable.
* As it stands, we have just noted the seven states that went out of their way to reduce polling locations in the immediate aftermath of the Shelby County v. Holder Supreme Court ruling in 2013.
* For the 2020c index, we score CA, NV, NJ, and VT as “0” because they used mail-in voting during the pandemic

**Column AO - ReducePollingLoc>50%someareas** – Scored “1” for Texas, Arizona, and Georgia because these three states were particularly egregious in terms of closing polling stations. In some counties more than 50% of the locations were closed.

<https://civilrights.org/democracy-diverted/>

See also - <http://civilrightsdocs.info/pdf/reports/Democracy-Diverted.pdf> (Both last accessed 2/8/2024). Years this data was collected: 2016, 2020, 2022, and 2024.

**Column AP – ExcessiveWaitTime** – States that have excessive wait times are scored “1” and states without excessive wait times are scored “0.” To determine if a state had excessive wait times to cast a ballot on Election Day in the last presidential election (2020), we use data collected by the MIT Election Data Science Lab. Their survey asks voters “how long did you have to wait in line to vote? The categories respondents had to choose from included, “not at all, less than 10 minutes, 10-30 minutes, 31 minutes to 1 hour, [and] more than 1 hour.” MEDSL reports the percentage of the respondents for each category in each state. We are primarily concerned with excessive wait times, so we use the “more that 1 hour” category and find the mean of the percentage of voters that reported waiting more than 1 hour to vote. Before we calculate the mean, we score any states that either voted by mail in the last presidential election or will be conducting this election entirely by mail as zero. The mean percentage of voters that waited more than one hour to vote was 5.86. Therefore, we code any state where more than 5.86 percent of the voting population reported they waited more than an hour, as excessive.

Year this data was collected: 2022 and 2024.

**Column AQ – MailVotePostagePaid** - Does the state provide prepaid postage for returning a mail-in ballot? 0=yes, 1=no

<https://www.ncsl.org/elections-and-campaigns/table-12-states-with-postage-paid-election-mail> (last accessed 2/8/2024). Year this data was collected: 2022 and 2024

**Column AR – nofoodordrink** - Stops third parties from handing out food or drink to people waiting in line. MT and NY had old laws that address this, but they were not particularly strict. GA passes a very clear ban. Nonetheless all three states are scored “1” on this consideration and the other 47 states are scored “0.”

<https://www.statesman.com/story/news/politics/politifact/2021/07/16/kamala-harris-exaggerates-food-and-water-laws-voters/7989665002/> (last accessed 2/8/2024). Year this data was collected: 2022 and 2024

**Column AS - Issue Area #6-Voting Inconveniences** – this is the sum of all the considerations that are in Issue Area #6. The additive index has 4 items in 1996 and this grows to 13 items by 2020. In 2022 it falls to 12 items due the creation of a new absentee voting issue area and the inclusion of the ExecissiveWaitTime and MailVotePostagePaid items. Theoretical range in 2024 is 0 to 11. Actual range is 0 (HI) to 10 (MS).

**Column AT – NoVoterID** – No identification document required to vote. Only signature required.

<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx> (last accessed 2/8/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AU– nonstrictID** – ID required but does not have to be photo ID and it is not strictly enforced. Some voters without acceptable identification are still allowed to cast a ballot that will be counted.

<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx> (last accessed 2/8/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AV – nonstrictPhoto** – A photo ID may be requested but is not strictly enforced.

<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx> (last accessed 2/8/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AW – strictID** – strict enforcement of non-photo ID. Generally, if identification is not presented, a voter may cast a provisional ballot that is set aside. The ballot is counted if the voter provides valid identification within a predetermined length of time.

<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx> (last accessed 2/8/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AX – strictPhoto** – Photo identification is required to cast a vote, strict enforcement. <https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx> (last accessed 2/8/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column AY – Issue Area #5-Voter ID Laws** (5-item Likert Scale)

4 = photo ID strictly enforced

3 = non-photo ID strictly enforced

2 = photo ID not strictly enforced

1 = non-photo ID required not strictly enforced

0 = no ID required, only signature.

Categories are exhaustive and mutual exclusive

**Column AZ – PollHoursMin** – Minimum poll hours assigned by the state.

Poll times apply to those who chose to vote in person on Election Day.

<https://www.ncsl.org/research/elections-and-campaigns/polling-places.aspx> (last access 2/8/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, and 2022

Notes:

* Mail-in voting states are scored accordingly: HI, UT, and CO still maintain poll locations, so they are scored the number of hours those polls are open on Election Day.
* OR and WA are scored 20 because ballots can be dropped off by 8:00p and we use midnight of Election Day to 8:00p to calculate the value of 20. This is the same measurement strategy used in the *ELJ* piece.
* In 2022, the opening of polling locations varies in Tennessee by county. Therefore, for parsimony we adopt the minimum and maximum number of hours from 2020.

**Column BA –PollHoursMax** – Maximum poll hours assigned by the state.

Poll times apply to those who chose to vote in person on Election Day.

<https://www.ncsl.org/research/elections-and-campaigns/polling-places.aspx> (last accessed 2/8/2024). Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, and 2022

Notes:

* Mail-in voting states are scored accordingly: HI, UT, and CO still maintain poll locations, so they are scored the number of hours those polls are open on Election Day.
* Massachusetts is scored 14.25 because polls close at 8 and some municipalities are allowed to open the polls at 5:45.
* OR and WA are scored 20 because ballots have to be dropped off by 8:00p. In the other mail-in states, poll hours were open until 7pm. Therefore, their maximum number of hours for the polls being open is scored 19.
* For the 2020c – we would have added the states CA, NV, NJ, and VT as “20” because they are using mail-in voting during the pandemic, however, all four states maintained polling stations and those poll hours are scored accordingly.
* In 2024, the opening of polling locations varies in Tennessee by county. Therefore, for parsimony we adopt the minimum and maximum number of hours from 2020.
* NH law allows counties to determine when they will open voting locations, with the stipulation that they are open by 11am. However, Manchseter, NH opens their polls at 6am. Therefore, we used 6am as the earliest time that polls can open to determine the maximum number of hours for the state.

**Column BB – PollHrsAvg -** the average of Columns PollHoursMin and PollHoursMax

**Column BC – Issue Are #6-Poll Hours**– the average of Columns PollHoursMin and PollHoursMax.Because 20 is the highest value, in 2020, all state values are subtracted from 20. A score of “0” means the state has the maximum level of poll hour accommodation. Whereas a score of 9.5 (for ND) suggests the state has poll hours 9.5 units from the best-case scenario.

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

**Column BD – EarlyVotingDays** – 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.

<https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx> (last accessed 7/25/2022). Years this data was collected: 2020, 2022, and 2024.

Notes:

* In-person absentee voting can look a lot like early voting. However, we distinguish states that have auxiliary early voting sites established and these sites are open either after 5:00p on a weekday or the site has weekend hours. Consequently if a state uses the terminology in-person absentee voting we count the state as having early voting, only if the preceding two characteristics exist.
* FL allows 10 days for non-state elections and 11 to 15 days for state and federal elections. Since the COVI focused on statewide elections, I use the mean (13) for the number of early voting days before the election. Early voting ends two days before the federal election, leaving the state with a score of 11 days of early voting for federal elections.
* AZ scored “26” for 2022 (variable based on election year calendar). Vote.org reports AZ as 27 days. AR begins 15 days before but ends one day before scored 14.
* Vote.org has erroneous information for DE.
* ID no statewide early voting and some counties clearly do not have scores as no early voting.
* IN has both extended hours and satellite locations so I score as having early voting in 2024, though the state calls in in-person absentee voting.
* IA very difficult to open satellite location and no real extended hours so we code as not having early voting.
* For KS, the law is “up to 20 days” but the length of time is determined by the County, scored “7” as our best guess of the average number of early voting days (by county).
* Vote.org has erroneous information about KY.
* LA starts early voting 14 days before the election, but ends seven days before the election scored “7. NCLS and Vote.org have conflicting info on LA. ”
* Both Vote.Org and NCLS have incomplete information about Maryland and Massachusetts – in 2024, MD scored “7” based on State Board of Elections and MA scored “8” because it has weekday early voting at least one location in the county from October 24 to Election Day (source: <https://blog.mass.gov/masslawlib/misc/early-voting-in-massachusetts-2/>).
* MI is scored as having early voting, they call it in-person absentee voting, but it is more than that because there are weekend hours and there is at least one special (central) polling location established in each county beyond the county clerk office.
* In-person absentee voting in Maine and Minnesota do not meet the threshold for early voting.
* In NM, the NCLS and Vote.org indicate 28 days of early voting. However, the first 14 days are at the County Court house and do not meet the definition of “early voting” described above. Fourteen days out from the election, satellite locations and extra hours are in place. Hence, we score NM in 2024 as having 14 days of early voting.
* In-person absentee voting in Ohio does not meet the minimum criteria (no satellite locations).
* We always subtract 2 days for the weekend that takes place in the early voting timeframe if weekend hours are not included.

**Column BE – Issue Area #9-Early Voting Days** – because we measure all variables in a manner that a greater cost is the larger number, the value of early voting days is reversed. The maximum value for early voting days is 42 (VA). So, the values are (42 – Early Voting Days). States without early voting are score “42” and the state with 42 days of early voting is scored “0.”

Years this data was collected: 2020 and 2022

Notes:

* The eight states that have institutionalized vote by mail processes scored “0” under the assumption that voting by mail precludes the need to ‘vote early.’ Eight states in 2022 are CA, CO, HI, NV, OR, UT, VT, and WA.
* For the COVIDCOVI –the states of CA, NV, NJ and VT who adopted all mail in voting in response to the pandemic are also scored “0”

**Column BF – AbsenteeExcuseReq** – taps whether the state requires people to have some sort of reason or excuse for voting absentee 1-yes 0-no.

<https://www.ncsl.org/elections-and-campaigns/table-1-states-with-no-excuse-absentee-voting> (last accessed 2/9/2024).

Years this data was collected: 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024

Note:

* For the 2020c – all states dropped the need for an absentee voting excuse except IN, LA, MS, NY, SC, TN, TX. These seven states still required an excuse for absentee voting during the pandemic.

**Column BG – NoAbsenteeInPerson** – Does the state allow in-person absentee voting 1-no 0-yes. This consideration starts to look like early voting when allowed, but not the same as setting up specific polling locations with special hours for early voting. This variable equals the early voting consideration, but then we add other states that specifically allow in-person absentee voting.

<https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx> (last accessed 3/28/2024). Years this data was collected:1996, 2000, 2004, 2008, 2012, 2016, 2020, 2022, and 2024.

Notes:

* Oregon, Washington, Colorado, Utah, Hawaii, California, Nevada, and Vermont are all scored 0 because they have all mail-in voting by 2022
* In 2024, only four states allow no early voting and no in-person absentee voting (AL, DE, MS, NH).
* For the 2020c – we would have added the states CA, NV, NJ, and VT as “0” because they are used mail-in voting during the pandemic, however, they already were scored “0” because each state already allowed either in person absentee voting or early voting.

**Column BH – NoPermanentAbsentee** – scored “1” if the state does not allow people to have permanent absentee voter status and scored “0” if state does allow permanent absentee voter status.

<https://www.ncsl.org/research/elections-and-campaigns/vopp-table-4-state-laws-on-removing-voters-from-permanent-absentee-lists.aspx> (last accessed 2/9/2024). Years this data was collected: 2008, 2012, 2016, 2020, 2022, 2024

Notes:

* Oregon, Washington, Colorado, Utah, Hawaii, California, Nevada, and Vermont are all scored 0 because they have all mail-in voting by 2024.
* For the 2020c – CA, NV, NJ, and VT are not added because they had not made voting my mail a permanent change before the 2020 election.

**Column BI - Noconvenientabsenteeballotdropoff** - Some states also allow voters to return ballots at other voting locations, such as early in-person voting locations. Thirteen states and Washington, D.C., have statutes allowing voters to return ballots at voting locations, such as Election Day polling places, vote centers and early in-person voting locations.

https://www.usvotefoundation.org/ballot-return-options#Note1 (last accessed 2/9/2024). Years this data was collected: 2008, 2012, 2016, 2020, 2022 and 2024.

Notes:

* Oregon, Washington, Colorado, Utah, Hawaii, California, Nevada, and Vermont are all scored 0 because they have all mail-in voting.
* States that just allow drop off at election offices or require absentee ballots to be returned by mail are scored “1”. States that provide multiple options to drop off absentee ballots are all scored “0”.
* In 2024, FL, GA, IN, IA, and OH require or allow drop boxes statewide, but their use is limited or restricted in some way. These states receive a score of 0.5 because drop boxes use is limited.

**Column BJ – mustincludecopyofIDwithform** – You must send a copy of your driver’s license in the mail with your absentee ballot request. This consideration includes Oklahoma, which requires a notarized signature.

<https://www.vote.org/absentee-voting-rules/>(last accessed 3/29/2024). Years this data was collected: 2020, 2022, and 2024.

Notes:

**Column BK– Noonlineabsenteeapplication** – there is no opportunity to request an absentee ballot online. 1=no online absentee application 0= online absentee application available

<https://www.ncsl.org/elections-and-campaigns/table-6-states-with-online-absentee-ballot-application-portals> (Last accessed 2/9/2024). Year data was collected: 2022 and 2024

Note:

* Oregon, Washington, Colorado, Utah, Hawaii, California, Nevada, and Vermont are all scored 0 because they have all mail-in voting by 2022.

**Column BL – lawrestrictswhocanreturnballot** – The state forbids others from turning in a ballot for the voter (AL & WI) or restricts this to a designee or a family member. Restriction prevents third party from returning absentee ballot, this process is known pejoratively as “ballot harvesting.” Some vote-by-mail states (CA, CO, & NV) have this restriction or limitation. States with limitations scored “1” and all others are scored “0.”

<https://www.ncsl.org/research/elections-and-campaigns/vopp-table-10-who-can-collect-and-return-an-absentee-ballot-other-than-the-voter.aspx> (last accessed 2/9/2024). Year this data was collected: 2022 and 2024

**Column BM – timeandquantiyballotrestriction –** state law that restricts either the quantity or timing of ballot returns by a designee or family member. States with tie or quantity restrictions score “1” all others “0.” Some vote-by-mail states (CO, NV, & OR) have this restriction or limitation.

<https://www.ncsl.org/research/elections-and-campaigns/vopp-table-10-who-can-collect-and-return-an-absentee-ballot-other-than-the-voter.aspx> (last accessed 2/9/2024). Year this data was collected: 2022 and 2024.

**Column BN – restrictsdistofabsenteeballots3rdparty** - State bans third parties from distributing absentee ballots applications. In this case we score states with a ban “1” and the other states “0.”

<https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx#third-party> see also <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-5-applying-for-an-absentee-ballot-including-third-party-registration-drives.aspx> (Both sites last accessed 3/29/2024). Year this data was collected: 2022 and 2024.

**Column BO – restrictdistofabsenteeballotscounty** - states have considered banning county officials from sending out absentee ballot applications. To date (May 2022) only Texas has this additional ban, and we score Texas “1” on this consideration and all other states are scored “0.”

<https://www.texastribune.org/2022/01/26/dan-crenshaw-texas-mail-in-ballot-voting-law/> (last accessed 3/29/2024)

Year this data was collected: 2022 and 2024.

**Column BP – AddReguirements4mailballotreturn –** Does the state require more than a signature to have a mail-in absentee ballot counted? Some states require additional witness signatures (up to 2), or a public notary to sign the ballot indicating that the correct individual filled out the ballot. I score states with additional signature requirements “1” and those that do not have any additional requirements “0.”

<https://www.ncsl.org/elections-and-campaigns/table-14-how-states-verify-voted-absentee-mail-ballots> (last accessed 4/3/2024)

**Column BQ - Column BP - Issue Area #10-Absentee Voting Restrictions** – twelve-point additive scale. “0” if the state has none of the restrictions and “12” if it has all 12 different absentee voting restrictions. However, the observed range is 0 for Hawaii to 10 for Alabama.

Notes:

* This is a new Issue Area for 2022.
* Oregon, Washington, Colorado, Utah, Hawaii, California, Nevada, and Vermont are all scored 0 because they have all mail-in voting by 2022.