

## Abortion Ballot Measures Affect Election Outcomes\*

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### Abstract

In the 2022 U.S. midterm elections, Democratic candidates lost fewer than predicted seats and stymied an expected red wave. News coverage and polling data represent this surprise Democratic success as a result of voters' response to the Supreme Court overturning *Roe v. Wade*. Using county-level vote data, we find that the decrease in Republican vote margin in 2022 can be explained by demographic and economic factors. However, relative to the national average, the Republican vote margin decreased by 4.8 percentage points more in states with abortion-related ballot measures. Our results indicate that abortion ballot measures have effects on election outcomes of a magnitude large enough to determine competitive races.

Keywords: Abortion, Voting, Elections

JEL Codes: D72, I18, J13

### Highlights:

- Demographic change and economic conditions likely explain Democrats' success in 2022
- Abortion ballot measures decrease Republican vote margin in congressional races
- The influence of ballot measures is large enough to determine competitive races

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## Introduction

The 2022 U.S. midterm election was expected to be a “red wave” with Republicans gaining substantial seats in both the Senate and the House of Representatives. This expectation is consistent with prior midterm elections in which the incumbent party has lost an average of 28 House seats between 1934 and 2018 (Woolley, 2022). High inflation in 2022 furthered the expectation of a red wave (Olorunnipa, 2022). These predictions were consistent with the theory that people vote retrospectively based on the incumbent party’s performance, with midterm elections serving as a referendum of voters’ satisfaction with economic conditions (Healy and Malhotra, 2013; Tufte, 1975). Contrary to predictions, Democrats maintained control of the Senate and lost only 9 House seats in the 2022 election.

One explanation for this outcome is the response to the Supreme Court decision in *Dobbs v. Jackson Women’s Health*. In June 2022, the Supreme Court overturned *Roe v. Wade*, removing federal protections for abortion and potentially mobilizing votes for Democrats in the midterm election. Two days following the November election, the front page of *The New York Times* headlined, “How Democrats Used the Abortion Debate to Hold Off a Red Wave” (Lerer and Dias, 2022). Democrats nationwide certainly embraced abortion as a campaign issue: by late September, they were estimated to have spent \$124 million on abortion-related ads, nearly 20 times the amount spent on such ads in the 2018 midterms (Peoples & Kessler, 2022). In addition to increased emphasis on abortion policy, 5 states included abortion-related measures on the ballot that may have affected voting behavior. These ballot measures may have further boosted local Democratic campaigns’ emphasis on abortion or increased the salience of the issue enough to affect overall voting behavior.

This paper is the first to use nationwide, county-level data on voter turnout and party votes to assess the effect of the *Dobbs* decision and subsequent abortion ballot measures on the 2022 midterm election. Comparing 2022 outcomes to prior midterms, we find an overall decrease in Republican vote margin in House elections. However, after controlling for demographics and economic factors, the Republican vote margin in 2022 does not differ from prior midterm elections. Though we cannot test for a *Dobbs* effect directly, this finding suggests that the Democrats’ success in 2022 may be attributable to observable factors, such as more college educated voters, and not the abortion policy debate.

However, we find that abortion ballot measures resulted in election outcomes that differed from the nationwide trend in 2022. In states with abortion ballot measures, the Republican vote margin decreased by 4.8 percentage points more than the nationwide average in 2022, relative to prior midterms. To put this magnitude in perspective, the vote margin in House elections nationwide was 3.18 percent in 2022, and there were 36 House seats with election margins of less than 4.8 percent. In the wake of the *Dobbs* ruling, states are increasingly turning to direct democracy to determine abortion policy. In 2024, 10 states had abortion related measures on the ballot. While further research is needed to understand the effects of abortion ballot measures in presidential election years, our results highlight the importance of ballot measures in determining election outcomes.

## Data and Methods

We use county-level U.S. House returns to construct four outcome variables for measuring voter behavior: voter turnout (total votes / voting age population), Republican vote margin (Republican vote share – Democratic vote share), Republican vote share (Republican votes / total votes), and Democratic vote share (Democratic votes / total votes) (Leip, 2024).

We categorize states into one of four categories depending on their abortion policy environment as of the 2022 midterm: *Safe*, *Ban*, *On Ballot*, and *At Risk*. *Safe* states either have laws explicitly protecting abortion or have legal abortion with low risk of a future ban based on the state’s political environment. *Ban* states have laws banning abortion at 15 weeks gestation or less. *At Risk* states either have an unenforced ban currently undergoing legal challenges or a political environment indicating abortion is at risk of being banned depending on the election outcome. *On Ballot* states have an abortion-related ballot measure on the same day and ballot as the 2022 midterm election.<sup>1</sup>

There were five states with abortion-related ballot measures in November 2022: California, Michigan, and Vermont had ballot measures to protect abortion access. Montana had a “born alive”

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<sup>1</sup> See Appendix B for a full explanation of each state’s categorization. We use information from Ballotpedia.org and the *New York Times*’ Abortion Tracker for categorizations (McCann & Schoenfeld Walker, 2022).

ballot measure that was related to the debate surrounding abortion but did not explicitly restrict abortion. Kentucky had an abortion ballot measure to restrict abortion.<sup>2</sup>

Our empirical approach compares voting behavior in 2022 to voting behavior in 2010 and 2014, and then tests whether this difference varies by abortion policy category. We intentionally limit the comparison group to recent midterm elections with a sitting Democratic president.<sup>3</sup> It is well-documented that voting behavior differs across presidential and midterm years and that midterm elections favor the non-Presidential party (Tufte, 1975; Charles and Stephens, 2013; Jacobson, 2023).

To motivate our analysis, we first show that vote shares on abortion ballot measures are correlated with shifts away from Republican votes. Figure 1 uses county-level data to compare the share of ballot votes to protect abortion rights with the change in the Republican vote margin in 2022 relative to an average of 2010 and 2014. A 1 percentage point increase in votes to protect abortion is associated with a decrease in the Republican vote share of 0.51 percentage points. This negative relationship is present regardless of whether the ballot measure is to protect or restrict abortion.

We use a two-step approach to measure the effects of abortion ballot measures. We first estimate differences in voting behavior in the 2022 election relative to prior midterm elections,

$$Y_{ct} = \beta_0 + \beta_1 I(2022)_t + \beta_2 Uncontest_{ct} + \beta_3 X_{ct} + \gamma_s + \epsilon_{ct} \quad (1)$$

where  $I(2022)_t$  is an indicator for the 2022 election,  $Uncontest_{ct}$  indicates for every county and year whether the House race was uncontested with a Republican or Democratic candidate,  $X_{ct}$  are county-by-year demographic and economic controls and  $\gamma_s$  represents state fixed effects. Demographic and economic controls include county-year population share female, white, Black, Hispanic, age 18-29, 30-49, 50-64, and 65+, population share with a college degree, natural log of population density, unemployment rate, real median income, and poverty rate.<sup>4</sup>

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<sup>2</sup> Kansas additionally voted on an abortion ballot measure in an August 2022 primary. We drop Kansas from all analyses. We also drop Alaska since redistricting makes 2022 elections outcomes in Alaska difficult to compare to prior years.

<sup>3</sup> In Appendix Table A1, we show results are robust to including 2018 data with a 2018 year fixed effect to control for the Republican president.

<sup>4</sup> In Appendix Table A1, we additionally control for candidate incumbency status and prior midterm abortion ballot measures.

$\beta_1$  can be interpreted as the difference between 2022 election voting behavior relative to average voting behavior across the 2010 and 2014 elections. Standard errors are robust and clustered at the state level. When analyzing turnout, we weight regressions by county-year voting age population. When analyzing vote margin and vote shares, we weight regressions by county-year total votes, as is standard in the literature (Mas and Moretti, 2009; Shue and Luttmer, 2009; Crane et al., 2024).

We estimate differences in voting behavior in 2022 within each abortion policy category relative to prior midterm elections, and compare this to the overall 2022 effect estimated in equation (1),

$$Y_{ct} = \alpha_0 + \alpha_1 \text{Abortion2022}_s * I(2022)_t + \alpha_2 \text{Uncontest}_{ct} + \alpha_3 X_{ct} + \gamma_s + \epsilon_{ct} \quad (2)$$

$$\delta_A = \widehat{\alpha_{1,A}} - \widehat{\beta_1} \quad (3)$$

where  $\text{Abortion2022}_s$  is a categorical variable representing the state's abortion policy environment in 2022. Other variables are defined as in equation (1).  $\delta_A$  is the vector of coefficients of interest and describes whether a given abortion policy environment results in voting behavior that differs from the national average.

We then evaluate whether the effects of state abortion policies vary with demographic composition. Prior studies have argued that young voters, female voters, and voters with a college degree turned out to vote for Democrats in response to the *Dobbs* ruling (Amos and Middlewood, 2024). For each demographic group of interest, we repeat our main analysis, adding a term to interact  $I(2022)_t$  in equation (1) and  $\text{Abortion2022}_s * I(2022)_t$  in equation (2) with the demographic composition as a moderator variable. We then compare the coefficients on these interaction terms, as with equation (3) in our main analysis, to estimate whether the moderator effect within each abortion category differs from the 2022 overall moderator effect.<sup>5</sup>

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<sup>5</sup> Specifically, we estimate the following three equations:

$$Y_{ct} = \beta_0 + \beta_1 I(2022)_t * \text{Mod}_{ct} + \beta_2 I(2022)_t + \beta_3 \text{Mod}_{ct} + \beta_4 \text{Uncontest}_{ct} + \beta_5 X_{ct} + \gamma_s + \epsilon_{ct} \quad (4)$$

$$Y_{ct} = \alpha_0 + \alpha_1 \text{Abortion2022}_s * I(2022)_t * \text{Mod}_{ct} + \alpha_2 \text{Abortion2022}_s * I(2022)_t + \alpha_3 \text{Mod}_{ct} + \alpha_4 \text{Uncontest}_{ct} + \alpha_5 X_{ct} + \gamma_s + \epsilon_{ct} \quad (5)$$

$$\delta_A = \widehat{\alpha_{1,A}} - \widehat{\beta_1} \quad (6)$$

## Results

Table 1 presents results for turnout and Republican vote margin. Relative to 2010 and 2014, voter turnout was 7 percentage points higher in 2022, but there was no difference in turnout by abortion policy category (column 1). Nationwide, the Republican vote margin decreased by 3.39 percentage points. The decline in Republican vote margin was larger by 3.4 ppt in counties with abortion ballot measures, relative to the national average (column 3).

The increase in turnout persists when controlling for demographic and economic factors and the differences by abortion category remain small and insignificant (columns 2). After including controls, the direction of estimates for Republican vote margin switches and becomes insignificant. One possible explanation for this finding is that shifting demographic composition, including more college educated voters, more Hispanic voters, and more Black voters, favored Democrats.<sup>6</sup> However, states with abortion ballot measures still have a statistically significant decrease in Republican vote margin of 4.8 percentage points over the nationwide change (column 4).<sup>7</sup> To further understand these patterns, we evaluate the effects on partisan vote shares. Results are shown in Table 2. Relative to the national average, Republican vote share is lower and Democratic vote share is higher in states with abortion ballot measures, though magnitudes are larger and more significant for lower Republican vote share.

It could be possible that unobservable factors in the five ballot measure states are contributing to the effects we observe. In Appendix Table A2, we drop one ballot state at a time to show that results are not driven by one specific state. Further, because the ballot measures in our sample include both protections and restrictions for abortion, it is less likely that the presence of a ballot measure is related to pre-existing trends towards Democratic votes.

Finally, we assess whether effects differed in counties with higher share female, young, or college educated voters. Results are presented in Figure 2. Counties with a higher population share female had a differential increase in turnout in *On Ballot* and *At Risk* states. Higher female population share is also associated with an additional decrease in Republican vote margin of 1.7 ppt in *On Ballot* states and 2.0 ppt in *At Risk* states. In contrast, higher share female is associated with relatively lower turnout in *Safe* states.

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<sup>6</sup> See Appendix Table A3.

<sup>7</sup> In Appendix Table A1, we show that these results are robust to dropping uncontested elections, controlling for candidate incumbency status, controlling for abortion ballot measures in prior midterms, and including 2018 data.

## Discussion

While we find that there was an overall increase in turnout and a decrease in Republican vote margin, the decrease in margin can be explained by demographic change and economic factors. These results question on-going news coverage and political strategy arguing that the abortion debate is a deciding factor in current elections (Weisman and Epstein, 2023; Long et al., 2024). However, we find that abortion ballot measures affect election outcomes. We also find evidence of larger effects in counties with higher share female, suggesting that part of this effect may be due to higher female turnout in ballot states.

This paper is related to the economic literature documenting large effects of abortion access on fertility, maternal health, infant health, and financial outcomes (Dench et al., 2024; Farin et al., 2024; Miller et al., 2023; Gardner, 2024). Given these effects, it is reasonable that abortion policy might mobilize voters, consistent with our findings for states with ballot measures. However, it is surprising that we find no broader change in 2022 after the inclusion of controls. It could be that the voters most affected by abortion restrictions are those who would vote Democratic regardless of abortion policy.

This paper is also related to the literature on ballot referendums and voting behavior. Evidence from pre-2010 elections show that ballot measures on topics such as same-sex marriage increase turnout (Garretson, 2014; Grummel, 2008; Tolbert et al., 2001). Other studies evaluate which demographic groups turn out to vote for ballot measures (Madio and Principe 2023; Matsa and Miller, 2019). This paper contributes to this literature by documenting the importance of abortion ballot measures in the outcomes of recent elections.

Our results clarify conflicting evidence in studies relying on survey data or administrative data from a single state. Surveys of the 2022 election indicate that abortion was an important issue for voters, but other issues, such as inflation, were more important (Radcliffe, 2022; Kirzinger et al., 2022). Comparisons of 2020 and 2022 surveys suggest that abortion opinions led to vote switching away from Republican candidates (Mutz and Manfield, 2024; Kann et al., 2024). Further survey evidence shows that the *Dobbs* ruling made abortion a more important issue for voters but did not affect their intended voting behavior (Baum et al., 2022). Sommer et al. (2023) study North Carolina and show that there was an increase in voter registration among women and Democrats after the ruling. Amos and Middlewood (2024) use voter registration data and precinct-level election results to study the effects of Kansas' August 2022 abortion ballot measure. They

find that the abortion ballot measure mobilized voters, especially women, young people, and college-educated voters, but these voters did not vote in the November 2022 election. This is consistent with our results suggesting that abortion ballot measures affect election outcomes, but the abortion debate more broadly may not.



## References

- Amos, B., & Middlewood, A. T. (2024). All Eyes on Kansas: Voter Turnout and the 2022 Abortion Referendum. *American Politics Research*, 1532673X241263089. <https://doi.org/10.1177/1532673X241263089>
- Baum, M., Trujillo, K. L., Safarpour, A., Lazer, D., Cadenasso, S., Ognyanova, K., Perlis, R., Druckman, J., Santillana, M., Green, J., Shere, A., Uslu, A., Qu, H., Quintana, A., & Pippert, C. H. (2022). *The COVID States Project #89: The Dobbs Decision, Support for Abortion, and 2022 Voting*. OSF. <https://doi.org/10.31219/osf.io/3d6r8>
- Charles, K. K., & Stephens Jr., M. (2013). Employment, Wages, and Voter Turnout. *American Economic Journal: Applied Economics*, 5(4), 111–143. <https://doi.org/10.1257/app.5.4.111>
- Crane, A. D., Koch, A., & Lin, L. (2024). Real Effects of Markets on Politics: Evidence from US Presidential Elections. *American Economic Review: Insights*, 6(1), 73–88. <https://doi.org/10.1257/aeri.20220240>
- Dench, D., Pineda-Torres, M., & Myers, C. (2024). The effects of post-Dobbs abortion bans on fertility. *Journal of Public Economics*, 234, 105124. <https://doi.org/10.1016/j.jpubeco.2024.105124>
- Farin, S. M., Hoehn-Velasco, L., & Pesko, M. F. (2024). The Impact of Legal Abortion on Maternal Mortality. *American Economic Journal: Economic Policy*, 16(3), 174–216. <https://doi.org/10.1257/pol.20220208>
- Gardner, G. (2024). The Maternal and Infant Health Consequences of Restricted Access to Abortion in the United States. *Journal of Health Economics*, 102938. <https://doi.org/10.1016/j.jhealeco.2024.102938>
- Garretson, J. J. (2014). Changing with the Times: The Spillover Effects of Same-Sex Marriage Ballot Measures on Presidential Elections. *Political Research Quarterly*, 67(2), 280–292. <https://doi.org/10.1177/1065912914521897>
- Grummel, J. A. (2008). Morality Politics, Direct Democracy, and Turnout. *State Politics & Policy Quarterly*, 8(3), 282–292. <https://doi.org/10.1177/153244000800800304>
- Healy, A., & Malhotra, N. (2013). Retrospective Voting Reconsidered. *Annual Review of Political Science*, 16, 285–306. <https://doi.org/10.1146/annurev-polisci-032211-212920>
- Jacobson, G. C. (2023). The 2022 Elections: A Test of Democracy’s Resilience and the Referendum Theory of Midterms. *Political Science Quarterly (Oxford University Press / USA)*, 138(1), 1–22. <https://doi.org/10.1093/psquar/qqad002>

Kann, C., Ebanks, D., Morrier, J., & Alvarez, R. M. (2024). Persuadable voters decided the 2022 midterm: Abortion rights and issues-based frameworks for studying election outcomes. *PLOS ONE*, 19(1), e0294047. <https://doi.org/10.1371/journal.pone.0294047>

Kirzinger, A., Kearney, A., Stokes, M., Montero, A., Hamel, L., & Published, M. B. (2022, November 11). How The Supreme Court's Dobbs Decision Played In 2022 Midterm Election: KFF/AP VoteCast Analysis. *KFF*. <https://www.kff.org/other/poll-finding/2022-midterm-election-kff-ap-votecast-analysis/>

Leip, Dave (2024). Dave Leip's Atlas of U.S. Presidential Elections. <https://uselectionatlas.org/>

Lerer, L., & Dias, E. (2022, November 10). How Democrats Used the Abortion Debate to Hold Off a Red Wave. *The New York Times*. <https://www.nytimes.com/2022/11/10/us/politics/abortion-midterm-elections-democrats-republicans.html>

Long, C., Fernando, C., & Seitz, A. (2024, July 24). Democrats hope Harris' bluntness on abortion will lead to 2024 wins. *PBS News*. <https://www.pbs.org/newshour/politics/democrats-hope-harris-bluntness-on-abortion-will-lead-to-2024-wins>

Madio, L., & Principe, F. (2023). Who supports liberal policies? A tale of two referendums in Italy. *Economics Letters*, 232, 111338. <https://doi.org/10.1016/j.econlet.2023.111338>

Mas, A., & Moretti, E. (2009). Racial Bias in the 2008 Presidential Election. *American Economic Review*, 99(2), 323–329. <https://doi.org/10.1257/aer.99.2.323>

Matsa, D. A., & Miller, A. R. (2019). Who Votes for Medicaid Expansion? Lessons from Maine's 2017 Referendum. *Journal of Health Politics, Policy and Law*, 44(4), 563–588. <https://doi.org/10.1215/03616878-7530801>

McCann, A., & Schoenfeld Walker, A. (2022). Tracking Abortion Bans Across the Country. *The New York Times*. <https://www.nytimes.com/interactive/2024/us/abortion-laws-roe-v-wade.html>

Miller, S., Wherry, L. R., & Foster, D. G. (2023). The Economic Consequences of Being Denied an Abortion. *American Economic Journal: Economic Policy*, 15(1), 394–437. <https://doi.org/10.1257/pol.20210159>

Mutz, D. C., & Mansfield, E. D. (2024). Inflation in 2022 did not affect congressional voting, but abortion did. *Proceedings of the National Academy of Sciences*, 121(21), e2319512121. <https://doi.org/10.1073/pnas.2319512121>

Olorunnipa, T. (2022, November 3). Democrats fear midterm drubbing as party leaders rush to defend blue seats. *Washington Post*. <https://www.washingtonpost.com/politics/2022/11/03/democrats-midterm-election-fears/>

Peoples, S., & Kessler, A. M. (2022). Ad spending shows Dems hinging midterm hopes on abortion | AP News. *AP News*. <https://apnews.com/article/2022-midterm-elections-abortion-health-congress-4be6df000de67933fcdabcd6f7b56a3d>

Radcliffe, M. (2022, November 17). Abortion Was Always Going To Impact The Midterms. *FiveThirtyEight*. <https://fivethirtyeight.com/features/abortion-was-always-going-to-impact-the-midterms/>

Shue, K., & Luttmer, E. F. P. (2009). Who Misvotes? The Effect of Differential Cognition Costs on Election Outcomes. *American Economic Journal: Economic Policy*, 1(1), 229–257. <https://doi.org/10.1257/pol.1.1.229>

Sommer, U., Rappel-Kroyzer, O., Adamczyk, A., Lerner, L., & Weiner, A. (2023). The Political Ramifications of Judicial Institutions: Establishing a Link between Dobbs and Gender Disparities in the 2022 Midterms. *Socius*, 9, 23780231231177157. <https://doi.org/10.1177/23780231231177157>

Tolbert, C. J., Grummel, J. A., & Smith, D. A. (2001). The Effects of Ballot Initiatives on Voter Turnout in the American States. *American Politics Research*, 29(6), 625–648. <https://doi.org/10.1177/1532673X01029006005>

Tufte, E. R. (1975). Determinants of the Outcomes of Midterm Congressional Elections. *American Political Science Review*, 69(3), 812–826. <https://doi.org/10.2307/1958391>

Weisman, J., & Epstein, R. J. (2023, November 8). How Abortion Lifted Democrats, and More Takeaways From Tuesday's Elections. *The New York Times*. <https://www.nytimes.com/2023/11/08/us/politics/election-takeaways-abortion-biden.html>

Woolley, J. T. (2022, August 30). *The 2022 Midterm Elections: What the Historical Data Suggest*. The American Presidency Project at UC Santa Barbara. <https://www.presidency.ucsb.edu/analyses/the-2022-midterm-elections-what-the-historical-data-suggest>

## Tables and Figures

Table 1

	Turnout		Rep % - Dem %	
	(1)	(2)	(3)	(4)
<i>Equation 1</i>				
2022	0.0700*** (0.00654)	0.0916*** (0.00806)	-0.0339*** (0.0121)	0.0283 (0.0226)
<i>Equation 3</i>				
Safe - 2022	-.0029 (.0086)	-.0052 (.0078)	-.0197 (.0167)	-.0086 (.0147)
Ban - 2022	-.0047 (.0112)	-.0042 (.0094)	.0394 (.0245)	.0253 (.0172)
On Ballot - 2022	-.0002 (.015)	.009 (.0166)	-.0341* (.0188)	-.0485*** (.0153)
At Risk - 2022	.0124 (.013)	.0117 (.0114)	.0026 (.0157)	-.0056 (.0143)
Observations	9018	9018	9018	9018
Controls		X		X

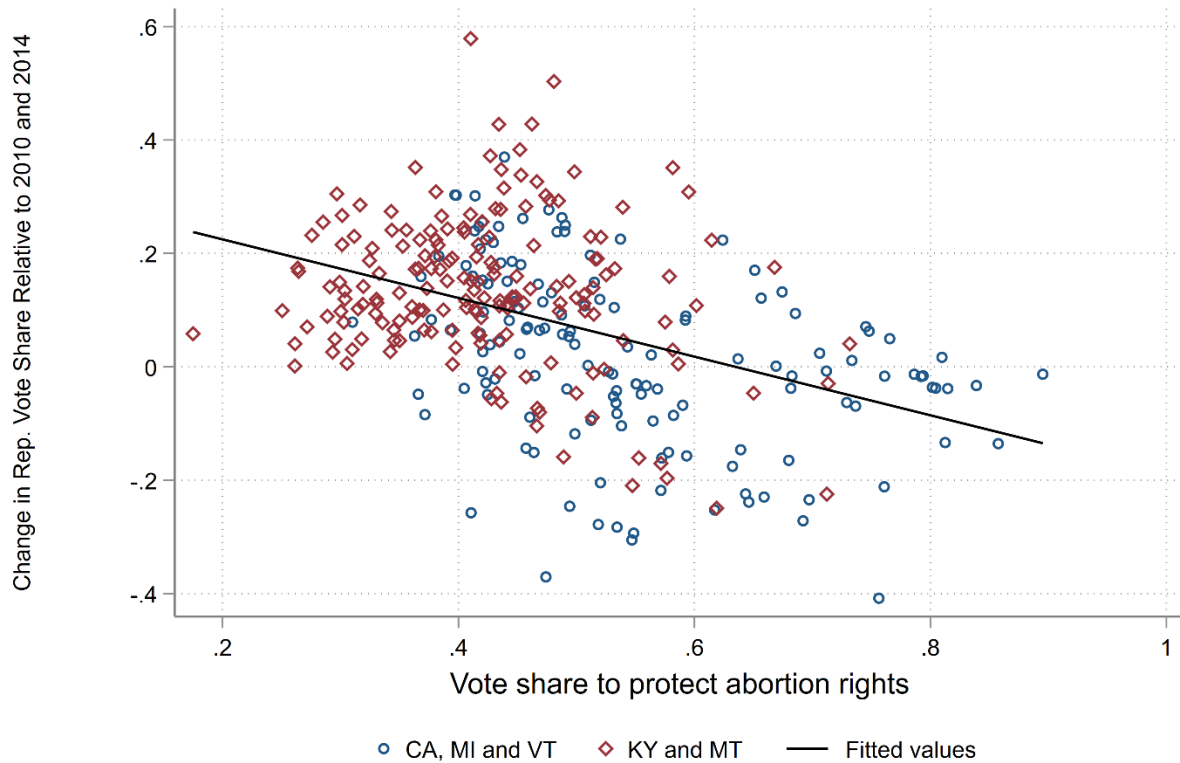
Notes: This table shows the differences in turnout and Republican vote margin in 2022 relative to 2010 and 2014, and whether turnout and Republican vote margin differ by states' abortion category relative to the national average. Columns (1) and (2) are weighted by voting age population. Columns (3) and (4) are weighted by total votes. All regressions include state fixed effects. Standard errors are robust and clustered at the state level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 2

	Rep %		Dem %	
	(1)	(2)	(3)	(4)
<i>Equation 1</i>				
2022	-0.0120*	0.0177	0.0219***	-0.0106
	(0.00627)	(0.0108)	(0.00621)	(0.0121)
<i>Equation 3</i>				
Safe - 2022	-.0072	-.0019	.0125	.0067
	(.0082)	(.0072)	(.0087)	(.0078)
Ban - 2022	.0183	.0105	-.021	-.0148
	(.0113)	(.0081)	(.0138)	(.01)
On Ballot - 2022	-.0229***	-.0303***	.0111	.0182**
	(.0087)	(.009)	(.0107)	(.0078)
At Risk - 2022	.0037	-.0012	.0011	.0045
	(.0091)	(.0081)	(.0073)	(.007)
Observations	9018	9018	9018	9018
Controls		X		X

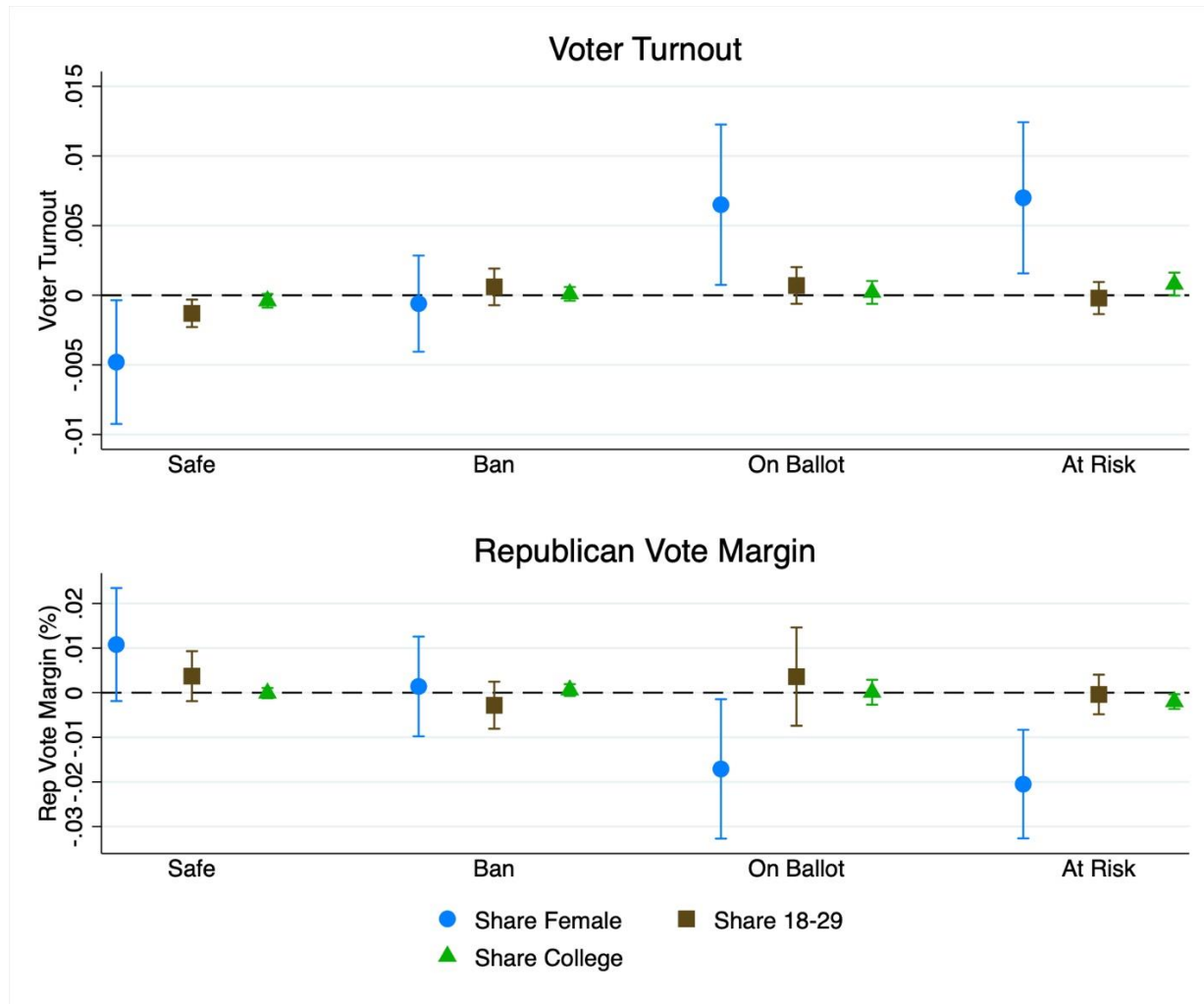
Notes: This table shows the differences in Republican and Democratic vote share in 2022 relative to 2010 and 2014, and whether vote shares differ by states' abortion category relative to the national average. All regressions include state fixed effects and are weighted by total votes. Standard errors are robust and clustered at the state level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Figure 1



Notes: This figure shows the correlation between ballot vote shares to protect abortion rights in 2022 and the change in Republican vote margin in 2022 relative to an average of 2010 and 2014. A vote is considered as protecting abortion rights if it is in favor of the ballot measure in California, Michigan or Vermont, or against the ballot measure in Kentucky and Montana. Counties in *On Ballot* states with higher vote share to protect abortion rights also had a decrease in Republican vote margin. The correlation coefficient for the fitted values is -0.517 (s.e. 0.061).

Figure 2



Notes: This figure shows how the effect of a county's demographic composition on turnout and Republican vote margin differs by state abortion category, relative to the overall effect of the demographic composition in 2022. Turnout regressions are weighted by voting age population and vote margin regressions are weighted by total votes. All regressions include state fixed effects and the full set of demographic and economic controls. Standard errors are robust and clustered at the state level. 90 percent confidence intervals are shown.

## Appendix A: Additional Tables and Figures

Table A1

	Turnout				Rep % - Dem %			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Equation 1</i>								
2022	0.0943*** (0.00826)	0.0922*** (0.00803)	0.0901*** (0.00796)	0.0884*** (0.00771)	0.0266 (0.0254)	0.0296 (0.0228)	0.0352 (0.0201)	0.0287 (0.0212)
<i>Equation 3</i>								
Safe - 2022	-.0053 (.0075)	-.005 (.0078)	-.0049 (.0076)	-.0031 (.0066)	-.0075 (.0156)	-.0069 (.0148)	-.0068 (.014)	-.0029 (.0136)
Ban - 2022	-.003 (.0093)	-.0043 (.0093)	-.0035 (.0091)	-.0041 (.008)	.0266 (.0247)	.0251 (.0173)	.0194 (.0173)	.0206 (.0129)
On Ballot - 2022	.0074 (.0165)	.0084 (.0165)	.0078 (.0159)	.0025 (.0154)	-.0492*** (.0159)	-.05*** (.0155)	-.0335** (.0138)	-.0334** (.016)
At Risk - 2022	.0095 (.0109)	.0112 (.0113)	.0109 (.0114)	.011 (.011)	-.0003 (.016)	-.0068 (.0142)	-.0059 (.0145)	-.0076 (.0129)
Observations	7011	9018	9018	12024	7011	9018	9018	12024
Controls	X	X	X	X	X	X	X	
No Uncontested	X				X			
Prior Ballots		X				X		
Incumbents			X				X	
With 2018				X				X

Notes: This table shows the results from Table 1 are robust to alternative samples and controls. In column (1) and (5) we drop counties that ever have an uncontested House election in 2010, 2014, or 2022. In columns (2) and (6) we include an additional control indicating abortion ballot measures in 2010 or 2014. In columns (3) and (7) we control for whether a candidate in the House election is a Democratic or Republican incumbent or whether the county crosses House district boundaries. 20% of counties in our sample cross district boundaries, not including counties in states with at-large House members. In columns (4) and (8) we additionally include 2018 data with a 2018 year fixed effect to account for the Republican president. Columns (1)-(4) are weighted by voting age population. Columns (5)-(8) are weighted by total votes. All regressions include state fixed effects and the full set of demographic and economic controls. Standard errors are robust and clustered at the state level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.



Table A2

<b>Panel A</b>	Rep % - Dem %					
	All	No CA	No KY	No MI	No MT	No VT
<i>Equation 1</i>						
2022	0.0283 (0.0226)	0.0191 (0.0259)	0.0242 (0.0230)	0.0280 (0.0232)	0.0279 (0.0227)	0.0282 (0.0226)
<i>Equation 3</i>						
Safe - 2022	-.0086 (.0147)	-.0122 (.0139)	-.008 (.0146)	-.01 (.0146)	-.0085 (.0147)	-.0085 (.0147)
Ban - 2022	.0253 (.0172)	.0227 (.0166)	.0243 (.0172)	.0239 (.017)	.0253 (.0172)	.0253 (.0172)
On Ballot - 2022	-.0485*** (.0153)	-.0468 (.0299)	-.0558*** (.0178)	-.0421*** (.0152)	-.0496*** (.016)	-.0496*** (.0158)
At Risk - 2022	-.0056 (.0143)	-.007 (.0141)	-.0064 (.0144)	-.0067 (.0142)	-.0056 (.0143)	-.0056 (.0143)
Observations	9,018	8844	8658	8769	8850	8976
Controls	X	X	X	X	X	X
<b>Panel B</b>	Rep %					
	All	No CA	No KY	No MI	No MT	No VT
<i>Equation 1</i>						
2022	-0.0120 (0.00627)	0.0117 (0.0122)	0.0157 (0.0110)	0.0176 (0.0112)	0.0176 (0.0109)	0.0177 (0.0109)
<i>Equation 3</i>						
Safe - 2022	-.0072 (.0082)	-.0039 (.0069)	-.0017 (.0072)	-.0027 (.0072)	-.002 (.0072)	-.0019 (.0072)
Ban - 2022	.0183 (.0113)	.009 (.0079)	.0098 (.0081)	.0098 (.008)	.0104 (.0081)	.0105 (.0081)
On Ballot - 2022	-.0229*** (.0087)	-.0327*** (.0124)	-.0335*** (.011)	-.0285*** (.0087)	-.0298*** (.009)	-.0304*** (.0092)
At Risk - 2022	.0037 (.0091)	-.0021 (.0079)	-.0017 (.0081)	-.0017 (.008)	-.0013 (.0081)	-.0012 (.0081)
Observations	9,018	8844	8658	8769	8850	8976
Controls	X	X	X	X	X	X

Notes: This table shows that the results in Table 1 and Table 2 are robust to dropping one ballot state at a time. All regressions include state fixed effects and the full set of demographic and economic controls and are weighted by total votes. Standard errors are robust and clustered at the state level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A3

Variable	2022 mean	2010 & 2014 mean	Diff
Share 18-29	16.04 (3.264)	16.79 (3.671)	-0.75*** (0.079)
Share 30-49	25.97 (2.736)	26.52 (2.552)	-0.55*** (0.058)
Share 50-64	18.93 (1.990)	19.45 (2.293)	-0.53*** (0.048)
Share 65+	17.45 (4.221)	13.83 (3.709)	3.62*** (0.086)
Share Hispanic	19.00 (17.062)	16.69 (16.569)	2.31*** (0.369)
Share Black	14.44 (12.948)	13.79 (13.200)	0.66** (0.289)
Share White	76.98 (14.960)	78.97 (14.936)	-2.00*** (0.329)
Share Female	50.42 (1.229)	50.73 (1.252)	-0.31*** (0.027)
Share College	34.29 (11.497)	28.66 (10.393)	5.63*** (0.238)
Poverty Rate	12.52 (4.556)	14.74 (5.406)	-2.22*** (0.113)
Unemployment Rate	3.70 (1.073)	7.97 (2.749)	-4.27*** (0.051)
Real Median Income (10k)	5.86 (1.590)	5.26 (1.388)	0.59*** (0.032)

Notes: This table shows how county demographic and economic controls changed between midterm elections. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A4

Moderator Variable	Turnout			Rep % - Dem %		
	(1) Share Female	(2) Share 18-29	(3) Share College Degree	(1) Share Female	(2) Share 18-29	(3) Share College Degree
Moderator	0.00625*** (0.00175)	-0.00164* (0.000927)	0.00296*** (0.000305)	-0.0250*** (0.00910)	-0.0337*** (0.00583)	-0.00560*** (0.00152)
2022*Mod	-0.00438** (0.00184)	-0.00174*** (0.000503)	0.0000545 (0.000298)	-0.0142* (0.00707)	-0.00894*** (0.00207)	-0.00658*** (0.000905)
Safe*Mod - 2022*Mod	-.0048* (.0027)	-.0013** (.0006)	-.0004* (.0003)	.0108 (.0077)	.0037 (.0034)	-.0001 (.0007)
Ban*Mod - 2022*Mod	-.0006 (.0021)	.0006 (.0008)	.0001 (.0003)	.0014 (.0068)	-.0028 (.0032)	.0006 (.0008)
On Ballot*Mod - 2022*Mod	.0065* (.0035)	.0007 (.0008)	.0002 (.0005)	-.0171* (.0095)	.0036 (.0067)	.0001 (.0017)
At Risk*Mod - 2022*Mod	.007** (.0033)	-.0002 (.0007)	.0008* (.0005)	-.0205*** (.0074)	-.0004 (.0027)	-.002* (.001)
Observations	9,018	9,018	9,018	9,018	9,018	9,018
Controls	X	X	X	X	X	X

Notes: This table presents the coefficients for estimates shown in Figure 2. This table shows how the effect of a county's demographic composition on turnout and Republican vote margin differs by state abortion category, relative to the overall effect of the demographic composition in 2022. Turnout regressions are weighted by voting age population and vote margin regressions are weighted by total votes. All regressions include state fixed effects and the full set of demographic and economic controls. Standard errors are robust and clustered at the state level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## Appendix B: Abortion Policy Categorizations

We categorize states using information from two sources. Following the Dobbs ruling, *The New York Times* began live tracking of states' abortion laws on their webpage, "Tracking the States Where Abortion is Now Banned." We used the internet archive to access the October 13, 2022 version of the website to capture states' status prior to the early November election. We also use information from *Ballotpedia* on abortion ballot measures.

Coding categories:

- 1) Safe: Abortion is protected or is legal with low risk of a ban
- 2) Ban: Abortion is banned at 15 weeks or less
- 3) On Ballot: Abortion-related measure is on ballot in the 2022 midterm
- 4) At Risk: Abortion is at risk of being banned by state government depending on election outcome, or an abortion ban is currently in court proceedings
- 5) Safe: Abortion is protected or is legal with low risk of a ban

### Alabama:

- October 2022 status: "Abortion is banned with no exceptions for rape or incest." – NYT
- Coding Category: Ban

### Alaska:

- October 2022 status: "The state's Supreme Court has recognized a right to 'reproductive choice' under its Constitution." – NYT
- Coding Category: Safe

### Arizona:

- October 2022 status: "A state court temporarily blocked enforcement of an 1864 law that banned abortion with no exceptions for rape or incest. A separate ban on abortion after 15 weeks of pregnancy is in effect." – NYT
- Coding Category: At Risk

### Arkansas:

- October 2022 status: "Abortion is banned with no exceptions for rape or incest." – NYT
- Coding Category: Ban

### California:

- October 2022 status: California Proposition 1 on ballot - "Amend the California Constitution to provide that the state cannot 'deny or interfere with an individual's reproductive freedom in their most intimate decisions,' including decisions to have an abortion or to choose or refuse contraceptives." - Ballotpedia
- Coding Category: On Ballot

### Colorado:

- October 2022 status: "State law protects abortion, but a 1984 law prohibits using state funds to cover the cost of most abortions. In July, the governor issued an executive order

to shield those seeking or providing abortions in Colorado from laws in other states.” - NYT

- Coding Category: Safe

**Connecticut:**

- October 2022 status: “State law protects abortion. A law expanding which clinicians can provide abortions took effect July 1. The law also shields both providers and patients from out-of-state lawsuits.” - NYT
- Coding Category: Safe

**Delaware:**

- October 2022 status: “State law protects abortion and a new law expands access to providers, but state funds cannot be used to cover the cost of the procedure.” – NYT
- Coding Category: Safe

**Florida:**

- October 2022 status: “Abortion is banned after 15 weeks of pregnancy. Abortion providers and advocates have sued to block the ban. The state’s Supreme Court recognized the right to an abortion in its Constitution three decades ago, but the court has become more conservative, with three of the seven judges appointed by the Republican governor.” – NYT
- Coding Category: Ban

**Georgia:**

- October 2022 status: “Abortion is banned after six weeks of pregnancy, after a court allowed a 2019 law to go into effect. Abortion rights groups have sued to block the ban.” – NYT
- Coding Category: Ban

**Hawaii:**

- October 2022 status: “State law protects abortion, and a new law expands access to providers.” – NYT
- Coding Category: Safe

**Idaho:**

- October 2022 status: “Nearly all abortions are banned, but a federal judge has blocked a piece of the law, ruling that doctors could not be punished for performing an abortion to protect a patient’s health. Abortion advocates and the Department of Justice have sued to challenge the bans.” – NYT
- Coding Category: Ban

**Illinois:**

- October 2022 status: “The state’s Supreme Court has recognized abortion protections under its Constitution, and state law protects the procedure.” – NYT
- Coding Category: Safe

**Indiana:**

- October 2022 status: “A judge has blocked a ban on nearly all abortions while a lawsuit against it proceeds. The Indiana Supreme Court will hear oral arguments in the case in January.” – NYT
- Coding Category: At Risk

**Iowa:**

- October 2022 status: “In June, the state’s Supreme Court overruled a 2018 decision that said the right to an abortion was protected under the State Constitution. A ban on abortion after six weeks has been blocked by a judge since 2019, but the governor is seeking its enforcement.” – NYT
- Coding Category: At Risk

**Kansas:**

- October 2022 status: “The state’s Supreme Court ruled in 2019 that a pregnant woman’s right to personal autonomy is protected in its Constitution, and Kansans voted on Aug. 2 to reject a ballot measure that would have amended the State Constitution to say it contains no right to an abortion. State funds cannot be used to cover the cost of most abortions, and the state has enacted multiple restrictions that limit access to the procedure.” – NYT
- Coding Category: Dropped due to August ballot measure

**Kentucky:**

- October 2022 status: Kentucky had a ballot measure but as of Oct. 2022 abortion was banned in the state. “Abortion is banned with no exceptions for rape or incest.” – NYT The ballot measure, Amendment 2, would “Amend the Kentucky Constitution to state that nothing in the state constitution creates a right to abortion or requires government funding of abortions.” Voters rejected this amendment.
- Coding Category: On Ballot

**Louisiana:**

- October 2022 status: “Abortion is banned with no exceptions for rape or incest.” – NYT
- Coding Category: Ban

**Maine:**

- October 2022 status: “State law protects abortion. The governor issued an executive order to shield those seeking or providing abortions in Maine from laws in other states.” – NYT
- Coding Category: Safe

**Maryland:**

- October 2022 status: “State law protects abortion, and new laws increase access to providers and insurance coverage.” – NYT
- Coding Category: Safe

**Massachusetts:**

- October 2022 status: “The Massachusetts Supreme Judicial Court has recognized the right to abortion under its Constitution. Recently enacted laws protect abortion, and the governor issued an executive order to shield those seeking or providing abortions in Massachusetts from laws in other states.” – NYT
- Coding Category: Safe

#### **Michigan:**

- October 2022 status: Ballot Measure Proposal 3 “Amend the Michigan Constitution to provide a state constitutional right to reproductive freedom, defined to include abortion, contraception, and other matters related to pregnancy.” – Ballotpedia.
- Coding Category: On Ballot

#### **Minnesota:**

- October 2022 status: “The state’s Supreme Court has recognized the right to abortion under its Constitution. The governor issued an executive order to shield those seeking or providing abortions in Minnesota from laws in other states.” - NYT
- Coding Category: Safe

#### **Mississippi:**

- October 2022 status: “Abortion is banned with exceptions for rape, but not incest.” - NYT
- Coding Category: Ban

#### **Missouri:**

- October 2022 status: “Abortion is banned with exceptions for rape, but not incest.” - NYT
- Coding Category: Ban

#### **Montana:**

- October 2022 status: “Born Alive” Ballot measure LR 131 – “Provide in state law that infants born alive at any stage of development are legal persons; Require medical care to be provided to infants born alive after an induced labor, cesarean section, attempted abortion, or other method.”
- Coding Category: On Ballot

#### **Nebraska:**

- October 2022 status: “A bill to enact a trigger ban failed in the Legislature earlier this year, before the Supreme Court overturned Roe. The state has enacted multiple restrictions that limit access to the procedure, including a ban on abortion after 22 weeks, and state funds cannot be used to cover the cost of most abortions. The governor said in August that he does not have enough votes to pass a more restrictive ban.” - NYT
- Coding Category: At Risk, due to potential for elected candidates to ban abortion

#### **Nevada:**

- October 2022 status: “State law protects abortion but state funds cannot be used to cover the cost of most abortions. The governor issued an executive order to shield those seeking or providing abortions in Nevada from laws in other states.” - NYT
- Coding Category: Safe

#### **New Hampshire:**

- October 2022 status: “Abortion will most likely stay accessible, though it is not expressly protected by state law and state funds cannot be used to cover the cost of most abortions. The state repealed a pre-Roe ban on abortion in 1997.” - NYT
- Coding Category: Safe

#### **New Jersey:**

- October 2022 status: “State law protects abortion throughout pregnancy, and the governor has proposed making the state a “sanctuary” for those seeking the procedure.” - NYT
- Coding Category: Safe

#### **New Mexico:**

- October 2022 status: “Abortion will most likely stay accessible, though it is not expressly protected by state law. The governor issued an executive order to shield those seeking or providing abortions in New Mexico from laws in other states.” - NYT
- Coding Category: Safe

#### **New York:**

- October 2022 status: “State law protects abortion. Legislators have proposed other protections, including an amendment to the State Constitution.” - NYT
- Coding Category: Safe

#### **North Carolina:**

- October 2022 status: “Abortion is banned at 20 weeks of pregnancy, after a federal judge allowed an older law to go into effect. The governor has issued an executive order to shield those seeking or providing abortions in North Carolina from laws in other states.” – NYT
- Notes: A 20-week ban is past our cutoff for the “Ban” category. The Democratic governor issued protections, but both houses of the state legislature were Republican. The governor was not up for re-election in 2022. We code this as At Risk. The legislature did end up enacting a 12 week ban after the 2022 midterm.
- Coding Category: At Risk

#### **North Dakota:**

- October 2022 status: “A judge temporarily blocked a ban on nearly all abortions, after the state’s sole abortion provider filed a lawsuit challenging the bans.” – NYT
- Coding Category: At Risk

#### **Ohio:**



- October 2022 status: “A judge indefinitely blocked the state’s ban on abortion after six weeks of pregnancy while a lawsuit against it proceeds.” – NYT
- Coding Category: At Risk

#### **Oklahoma:**

- October 2022 status: “Abortion is banned at the point of fertilization.” – NYT
- Coding Category: Ban

#### **Oregon:**

- October 2022 status: “State law protects abortion throughout pregnancy, and the Legislature approved \$15 million to support those seeking the procedure.” – NYT
- Coding Category: Safe

#### **Pennsylvania:**

- October 2022 status: “Abortion is not protected by state law. The state has enacted multiple restrictions that limit access to the procedure, and state funds cannot be used to cover the cost of most abortions. Republicans control the state legislature, but the governor, a Democrat, has vetoed abortion restrictions. The governor issued an executive order this year that shields those seeking or providing abortions in Pennsylvania from laws in other states.” – NYT
- Coding Category: At Risk

#### **Rhode Island:**

- October 2022 status: “State law protects abortion but state funds cannot be used to cover the cost of most abortions. The governor issued an executive order to shield those seeking or providing abortions in Rhode Island from laws in other states.” – NYT
- Coding Category: Safe

#### **South Carolina:**

- October 2022 status: “The South Carolina Supreme Court temporarily blocked a ban on abortion after six weeks of pregnancy; a lower court judge had allowed the ban to take effect in June. Lawmakers are working on a bill that would ban or further restrict abortion.” – NYT
- Coding Category: At Risk

#### **South Dakota:**

- October 2022 status: “Abortion is banned with no exceptions for rape or incest.” – NYT
- Coding Category: Ban

#### **Tennessee:**

- October 2022 status: “Abortion is banned with no exceptions for rape or incest.” – NYT
- Coding Category: Ban

#### **Texas:**

- October 2022 status: “Abortion is banned with no exceptions for rape or incest.” – NYT

- Coding Category: Ban

#### **Utah:**

- October 2022 status: “A judge temporarily blocked the state’s trigger ban on most abortions. A ban on abortion after 18 weeks of pregnancy is in effect.” – NYT
- Notes: A 20-week ban is past our cutoff for the “Ban” category. The court proceedings for a full ban meet our requirement for At Risk.
- Coding Category: At Risk

#### **Vermont:**

- October 2022 status: On Ballot amendment to “Amend the Vermont Constitution to provide a state constitutional right to personal reproductive autonomy.” -Ballotpedia
- Coding Category: On Ballot

#### **Virginia:**

- October 2022 status: “Abortion will most likely stay accessible, though it is not expressly protected by state law and state funds cannot be used to cover the cost of most abortions. Split control of the state legislature may prevent significant changes until the next election, in 2023.” - NYT
- Notes: We coded this as safe instead of At Risk since there were no state legislature elections in Virginia in 2022.
- Coding Category: Safe

#### **Washington:**

- October 2022 status: “State law protects abortion, and recent laws expand access to providers.” - NYT
- Coding Category: Safe

#### **West Virginia:**

- October 2022 status: “Nearly all abortions are banned as of Sept. 16.” – NYT
- Coding Category: Ban

#### **Wisconsin:**

- October 2022 status: “The state has a law from before Roe that bans abortion with no exceptions for rape or incest, and makes performing the procedure a felony. The Democratic governor and attorney general have filed a lawsuit in an attempt to block the ban.” - NYT
- Coding Category: Ban

#### **Wyoming:**

- October 2022 status: “A judge temporarily blocked a ban on nearly all abortions on July 27, the same day the ban was set to take effect.” - NYT
- Coding Category: At Risk