

# Partisan Elections and Partisan Voting: Evidence from Partisan Judicial Elections\*

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May 15, 2026

Word Count:

## Abstract

How much do partisan elections increase partisan voting? A large literature documents a higher correlation between vote shares in national and sub-national races when the elections are partisan rather than nonpartisan. However, some races are more likely to be partisan than others, potentially confounding the relationship between partisan elections and partisan voting. In this paper, we leverage policy changes in North Carolina and Ohio. In both states, state court elections switched from nonpartisan to partisan while other statewide races remained partisan. Using 25 years of data, we find that switching to partisan elections dramatically increased partisan voting in judicial elections. Our effects are roughly as large as the increase in “nationalization” from the mid-twentieth century to today. Partisan labels also meaningfully reshape the electorate by massively reducing roll-off—approximately 20% of people who vote in the presidential race only vote in judicial races if the election is partisan.

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\*For helpful discussion and comments, the authors thank Dan Butler, Andrea Campbell, Devin Gaughey, Darin Christensen, Alexander Coppock, Seth Hill, Connor Huff, Apoorva Lal, Joseph Loffredo, Shiro Kuriwaki, Julia Payson, Gabrielle Péloquin-Skulski, Charles Stewart III, and Ariel White. We’re also grateful to participants in the 2025 Political Methodology Conference and workshop participants at the Massachusetts Institute of Technology, the University of California, Los Angeles, and the University of California, Berkeley. The authors contributed equally.

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# 1 Introduction

Many subnational elections in the United States are formally nonpartisan.<sup>1</sup> Yet party often remains easy to infer from endorsements, campaign messages, donor networks, media coverage, and other cues (Bonneau and Cann 2015; Kirkland 2015; Squire and Smith 1988). This leaves an important question: when voters can often recover a candidate’s partisanship anyway, how much does it matter whether the ballot itself displays a partisan label? The answer is central to ongoing debates over how to select judges and other subnational officials. When Ohio recently considered shifting to partisan state supreme court elections, this disagreement surfaced clearly in the state legislature. Ohio State Representative Bride Rose Sweeney argued that party labels would push voters to ignore candidates’ backgrounds and qualifications: “Judges are currently not even allowed to make statements implying how they would rule on a case before them ...why would we ...require a party label that would make similar implications to voters?” Ohio State Representative D.J. Swearingen offered the opposite view, arguing that labels would matter little because voters already rely on party: “In reality, the process of electing a judge is already simply partisan in nature.” These competing claims capture the broader uncertainty motivating this paper.

Several plausible expectations follow from the existing literature. One possibility is that partisan labels should matter relatively little. Even in nonpartisan races, many voters may be able to infer party from other signals, and that may be especially true today when polarization and nationalization have made Democratic and Republican candidates easier to distinguish than in the past (APSA 1950; Hopkins 2018; McCarty, Poole, and Rosenthal 2016). If so, making the ballot partisan may simply formalize information that voters were already using. A second possibility is that partisan labels should matter a great deal, particularly in down-ballot elections. A large literature argues that voters rely on heuristics to

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<sup>1</sup>For example, roughly three-quarters of municipal elected officials run in nonpartisan rather than partisan races (Butler, Dynes, and Torres 2025). Nebraska also holds nonpartisan elections for members of its state legislature. Finally, out of the 22 states that use elections to select their supreme court justices, 14 use nonpartisan elections, and out of the 32 states that use elections to select state trial court judges, 21 use nonpartisan elections (Brennan Center for Justice 2023).

navigate low-information contests, and party labels provide one especially cheap and powerful cue (Butler, Dynes, and Torres 2025; Conevska et al. 2025; Downs 1957; Kam 2005; Lim and Snyder Jr 2015; Schaffner, Streb, and Wright 2001). If so, removing party labels should weaken partisan voting, increase the role of weaker cues and, possibly, candidate-specific characteristics, and discourage some voters from participating in the race at all. A third possibility is that changing ballot format affects not only how voters process information, but also who runs for office, how candidates campaign, and how outside actors discuss the race. On this view, differences between partisan and nonpartisan elections may reflect changes in candidates and campaigns as much as changes in voter behavior. Existing research contains support for each of these possibilities, and cross-sectional comparisons alone do not tell us which is most important.

Judicial elections are a useful setting for adjudicating among these ideas. They are typically low-salience races in which many voters know little about the candidates, but they are not information-free. Voters with greater political knowledge and those living in richer information environments may still be exposed to information about the candidates (Delli Carpini and Keeter 1996; Rock and Baum 2010; Peterson 2017; Moskowitz 2021). Prior work on judicial elections likewise suggests that press coverage, competitiveness, and campaign spending can increase turnout and partisan voting (Baum and Klein 2007; Hall 2007; Hall and Bonneau 2008). These considerations point in different directions *ex ante*. If outside information is already sufficient, partisan labels may add little. If many voters come to the ballot with very little information, labels may substantially change both vote choice and participation. We return to these competing possibilities in Section 6, where we use a simple framework to interpret our estimates.

Estimating the causal effect of partisan labels is difficult because jurisdictions do not randomly choose partisan or nonpartisan institutions. Jurisdictions with partisan local elections tend to elect local officials from the same party they support in federal races (Lim and Snyder Jr 2015; Conevska et al. 2025). That pattern is consistent with partisan ballots en-

couraging voters to focus on party, but it is also consistent with jurisdictions sorting into partisan or nonpartisan systems based on how partisan the politics of an office already are. Distinguishing these explanations requires observing the same office under both ballot formats.

We do so using policy changes in North Carolina and Ohio, where statewide judicial elections have switched from partisan to nonpartisan and back to partisan over the last twenty-five years. We assemble precinct-level returns for all statewide elections held in gubernatorial election years—when North Carolina elects ten cabinet officials, among other offices, and Ohio elects five—and measure partisan voting using the relationship between precinct voting at the top of the ticket and voting in other statewide contests. Our main analysis uses a difference-in-differences design: we estimate how voting changes in judicial elections when ballot labels change relative to changes over the same period in other statewide offices that remain partisan throughout. We also validate our aggregate results with individual-level data from eleven Ohio counties.

We find that partisan labels substantially increase partisan voting. The effect of switching from nonpartisan to partisan judicial elections is approximately as large as the entire rise in partisan voting from the early 1970s to the present. Our difference-in-differences estimates are also very similar to the raw cross-sectional difference in partisan voting between partisan and nonpartisan statewide offices, suggesting that most of that gap reflects ballot labels rather than selection into partisan institutions. Partisan labels also substantially increase participation: roughly 20% of voters who cast a ballot in the top-of-the-ticket race vote in judicial contests only when those contests are partisan. Using a simple back-of-the-envelope calculation, we show that many votes cast in nonpartisan judicial races appear to come from voters relying on weak proxies for the vote they would have cast had candidates' party affiliations been explicit.

At the same time, our design does not by itself isolate a purely voter-level mechanism. Ballot format could affect who runs for office, how candidates present themselves, or how

the media and other actors cover the race. We therefore interpret our headline estimates as equilibrium effects of electoral institutions. To assess how much of the effect plausibly reflects changes in candidates or campaigns, we collect information on candidates' prior occupations and newspaper coverage of the relevant elections. We do not find evidence that partisan elections dramatically change candidate quality, but our estimates are too noisy to conclude that there are not politically meaningful effects of partisan elections on candidate entry. We also find that newspapers in Ohio routinely use partisan labels when discussing candidates, even when the ballot itself is nonpartisan. These exercises cannot rule out every channel other than voter behavior, but they suggest that our results are driven primarily by large changes in the information available to voters not who is running or how the media covers them.

Our main contribution is to show that ballot format itself can have large effects on voter behavior in state and local elections, even when the candidates competing are members of opposing parties and information about the partisan affiliation of the candidates is readily available for voters who want to look. More broadly, the paper speaks to ongoing debates over whether municipal officials, school board members, election administrators, and judges should be chosen in partisan or nonpartisan elections (Middleton 2024; Johnson 2026; Ferrer 2025; Eden 2021). We do not claim that judicial elections are identical to these other contests, but our evidence suggests that removing party labels dramatically changes how reliably voters can find candidates who share their party.

## **2 Electoral Institutions in North Carolina and Ohio**

In both North Carolina and Ohio, most statewide races are partisan contests. This means that each candidate's name has a partisan label printed next to it on the ballot. Both states hold partisan primaries and partisan general elections for most statewide races. Both states also hold staggered statewide judicial elections with at least one occurring in every even-

year general election since 2000. In North Carolina, non-judicial statewide state-level elections are held concurrently with presidential elections, and statewide elections are used to select members of the state Supreme Court and the state Court of Appeals. In Ohio, non-judicial statewide state-level elections, including gubernatorial elections, are held during the midterms and statewide elections are used to select members of the state Supreme Court but not the state Court of Appeals.

In 2004, North Carolina adopted nonpartisan elections for all appellate judicial elections. This switch encompassed two major changes: first, the partisan affiliations of candidates were no longer listed on the ballot, and second, primaries went from partisan contests to open, top-two contests with candidates of all parties competing for one of the two slots in the general election. In 2016, the state required that partisan labels be printed on the ballot next to the names of candidates for the Court of Appeals in the general election, but left the primary nominally nonpartisan and did not include partisan labels on the ballot in supreme court races. Starting in 2018, the state made all statewide appellate judicial elections partisan again.

During the study period from 2000 to 2024, Ohio has always held partisan primaries to select their state Supreme Court candidates. Until 2022, the general elections were contests between the winners of these partisan primaries, but party labels were not included on the ballot. Starting in 2022, general election ballots listed state Supreme Court candidates' party next to their names.

### **3 Studying the Effect of Partisan Elections**

In this section, we describe the election data we assemble and the difference-in-differences design we use to estimate the effect of partisan statewide judicial elections on voter behavior.

### **3.1 Precinct-Level Data on Statewide Races**

Our main data sources for this analysis are the precinct-level election returns from North Carolina and Ohio provided by their secretaries of state. The North Carolina data runs from 2000 until 2024. Since, as we discussed above, North Carolina consolidates nearly all statewide races onto the presidential election cycle, we focus our attention on presidential election years. We consider the presidential election the top of the ticket and use it as the source of comparison for estimating partisan voting and roll-off in North Carolina.

The data from Ohio runs from 2006 until 2024. Ohio holds nearly all its statewide races, including the gubernatorial race, in midterm years. We focus our attention on midterm elections and consider the gubernatorial race the top of the ticket and the source of comparison for estimating partisan voting and roll-off in Ohio.

### **3.2 Uncovering Candidate Party in Nonpartisan Races**

The fact that some of these elections are nominally nonpartisan creates a potential empirical challenge—to compare partisan voting across partisan and nonpartisan elections, we would ideally know the partisanship of candidates even in nonpartisan elections. This is simple in Ohio because, even when party labels were left off the ballot in general elections, the supreme court primary elections were partisan, so we assign each general election candidate the party of the primary they ran in. For North Carolina’s nonpartisan judicial elections, we identify each candidate’s party in two steps. First, we look to see if the candidate ever ran in a partisan judicial election either before or after the nonpartisan election and assume their membership in the party stayed constant. If they did not run in a previous or subsequent partisan election, we look them up in a snapshot of the list of registered voters produced closest to the time of their election and record their registered party. We found the party membership of all candidates.

Although we conducted detailed research on the partisanship of each candidate, we think voters would have been able to reliably identify the partisanship of each candidate without as much effort. From 2010 to present, in every single newspaper article about a judicial race in Ohio, the party of each candidate is mentioned. In North Carolina, endorsements did not always reveal a candidate’s party, but, for most candidates, a simple Google search also instantly reveals the party of the candidate. We think voters with even very little motivation should have been able to easily discover the party of the candidates in nonpartisan elections. This makes our analysis a “hard” case where all the reasonably motivated voters would have been able to discover the partisan affiliation of the candidates before them and vote as they intended. If it was more difficult to acquire the partisan affiliation of candidates without a party label on the ballot, then we expect the same set of reasonably motivated voters would not all have been able to discover the partisan affiliation of the candidates.

### 3.3 Estimating the Effect of Partisan Elections

The goal of this article is to estimate the effect of listing a candidate’s party on the general election ballot. We could simply compare election results in races that are partisan to results in nonpartisan races. But, it is plausible that policymakers add party labels to elections when voters should already be expected to vote in more partisan ways. If this were true, it would bias estimates of the effects of those partisan labels toward finding that partisan elections increase partisan voting behavior.

We address this threat using a difference-in-differences design. We start by estimating the relationship between Democratic vote share at the top of the ticket and all other coincident statewide races. For this, we estimate the regression equation

$$V_{ijkst} = \alpha_{ijst} + \beta_{ijst} Z_{kst}^{top} + \epsilon_{ijkst} \quad (1)$$

where  $V_{ijkst}$  is the Democratic two-party vote share in office  $i$ , seat  $j$ , precinct  $k$ , state  $s$ , and election year  $t$ ;  $Z_{kst}^{top}$  is the Democratic two-party vote share in the office at the top of the ticket in precinct  $k$ , state  $s$ , and year  $t$ ;  $\alpha_{ijst}$  is a office-seat-state-election-year fixed effect;  $\beta_{ijst}$  is the office-seat-state-election-year-specific coefficient for the relationship between the Democratic vote share at the top of the ticket and further down the ballot; and  $\epsilon_{ijkst}$  is a residual.  $\beta_{ijst}$  is the quantity of interest in Equation 1 because it tells us how related voting is between the top of the ticket and other offices. While we do not have individual-level data to measure split-ticket voting (although see Section 4.1),  $\beta_{ijst}$  tells us whether places that vote very differently at the top of the ticket vote more or less similarly in this race on average. When voting is highly partisan or ideological,  $\beta_{ijst}$  is close to 1. It is smaller when voting is less partisan or ideological considerations vary substantially across offices.<sup>2</sup> We extend our conclusions from this measure using a different but related measure: the correlation in precinct-level Democratic vote share across races in each election.

With this measure of partisan voting in hand, we estimate two-way fixed-effects regressions of the form

$$\hat{\beta}_{ijst} = \tau P_{ist} + \gamma_{is} + \lambda_{st} + \eta_{ijst} \quad (2)$$

where  $P_{ist}$  is an indicator for whether the election for office  $i$  in state  $s$  and election year  $t$  is partisan,  $\tau$  is our estimate of the effect of partisan elections,  $\gamma_{is}$  is an office-state fixed effect,  $\lambda_{st}$  is a state-year fixed effect, and  $\eta_{ijst}$  is a residual.

Equation 2 recovers the average effect of partisan elections on partisan voting in judicial elections under three assumptions. First, we must assume that the outcomes in judicial elections would have changed by the same amount from one election to the next in the absence of a change in electoral institutions. We cannot directly test this, but the fact

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<sup>2</sup>In some cases,  $\beta_{ijst}$  can be greater than 1. Mechanically, this occurs when the covariance between the down-ballot and top-ticket vote shares exceeds the variance of the top-ticket vote share—equivalently, when the down-ballot race exhibits greater cross-precinct dispersion in Democratic vote share than the top of the ticket.

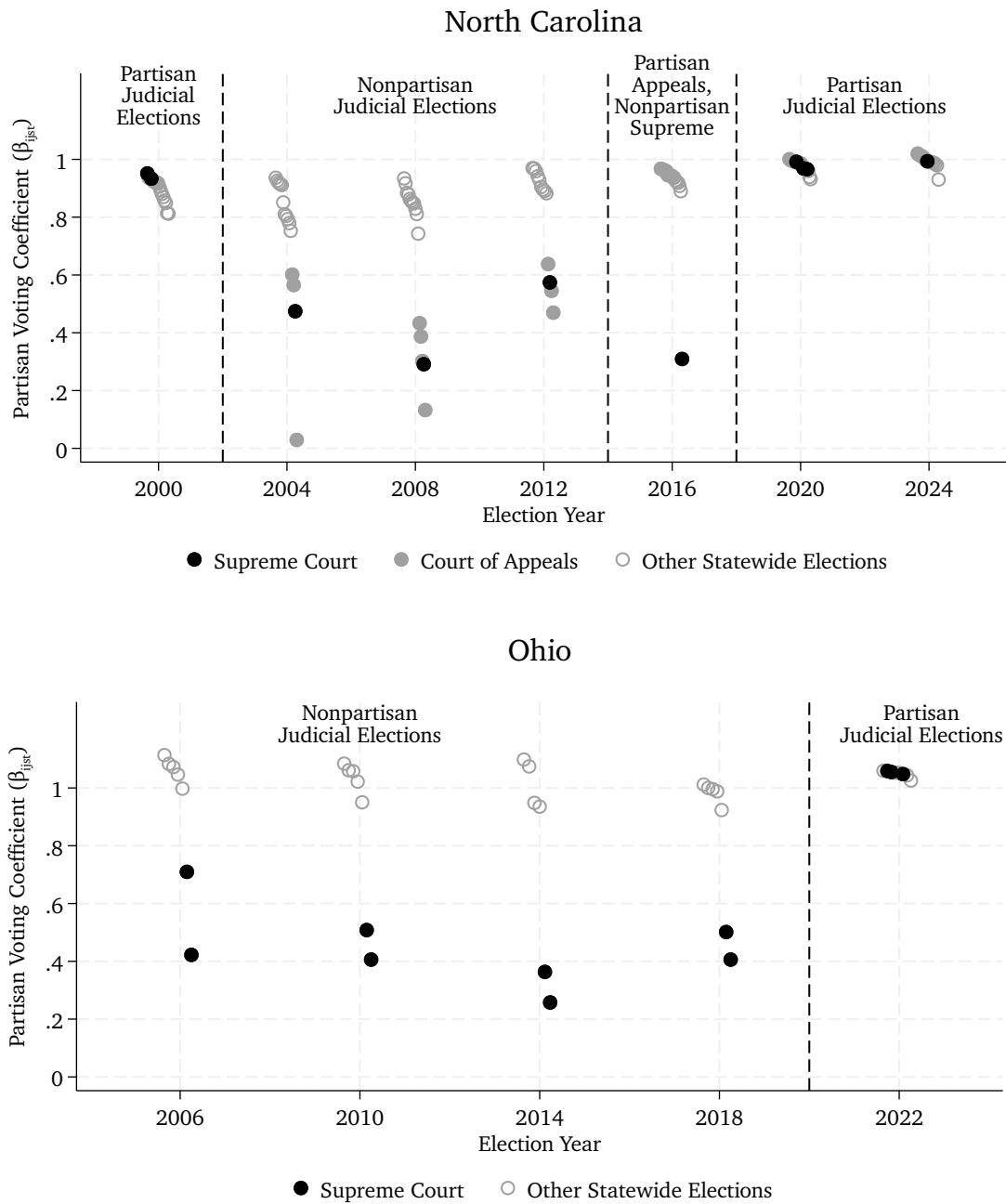
that the outcomes we study look very similar for statewide judicial elections and all other statewide elections in every period when all elections are partisan is consistent with this assumption. Second, we must assume that the adoption of statewide partisan elections does not affect behavior in elections at the top of the ticket or across other statewide races. We cannot directly assess this either, but the fact that we do not see any structural breaks in the time series of our outcomes for other statewide races when judicial election rules change suggests this assumption likely holds (at least approximately). Finally, because we observe a staggered roll-out of partisan judicial elections in North Carolina, we only recover the time-averaged effect of partisan elections on judicial races if the effect is not changing over time (Goodman-Bacon 2021). We validate this assumption by removing the Court of Appeals elections from the North Carolina data, which makes the treatment non-staggered, and re-estimating our results in Table SI.2. Our results do not change significantly.

Across North Carolina and Ohio, we observe elections for 19 statewide offices below the top of the ticket, three of which switch between partisan and nonpartisan elections between 2000 and 2024. Given this small sample, analytic clustered standard errors can be too small, increasing rejection rates (Conley and Taber 2011). To address this, we estimate 95% confidence intervals using 10,000 state-office-clustered wild bootstrap samples (Cameron, Gelbach, and Miller 2008).

## **4 Partisan Elections Dramatically Increase Partisan Voting**

In this section, we present evidence that partisan elections dramatically increase partisan voting, and that approximately the entire gap in partisan voting between partisan and non-partisan elections is due to this election administration decision.

Figure 1. Partisan Voting in Partisan and Nonpartisan Statewide Elections



*Notes:* This plot displays the coefficients from the precinct-level regression of the Democratic vote share for a given seat (which we divide into Supreme Court, Court of Appeals, and other Statewide Elections) on the Democratic vote share for the top-ticket office in that precinct in that year. The top plot displays estimates for North Carolina, while the bottom plot is for Ohio. Distinct periods in history relative to the election of judges are denoted.

We begin with graphical evidence that partisan elections cause a dramatic increase in partisan voting. Figure 1 presents the raw data. The finding immediately stands out in the plot. In the top panel we plot the results from North Carolina. The top panel plots the coefficient from the precinct-level regression of the Democratic vote share for a given seat in a given year on the Democratic presidential vote share in that precinct in that year. Each dot is one statewide election. In years where Supreme Court and Court of Appeals races are partisan (2000, 2020, and 2024), the coefficient is nearly 1 in all races and is high relative to all concurrent statewide races. In years where both the Supreme Court and the Court of Appeals used nonpartisan elections (2004, 2008, and 2012), the coefficients in the judicial races are all below the smallest coefficient in any partisan race, i.e., we observe no overlap between the partisan voting distributions for partisan and nonpartisan races. In 2016, when the Court of Appeals returned to partisan elections and the Supreme Court did not, the Court of Appeals races have some of the highest coefficients again while the Supreme Court continues to have a very small coefficient, consistent with a large causal effect of partisan elections on partisan voting.

One thing that stands out in the data from North Carolina is that, while there is a modest increase in partisan voting over time in the offices that are consistently partisan, these changes are quite modest compared to the effects of partisan elections. Under these conditions, simple difference-in-means estimates will be approximately unbiased and match the conclusions one draws from a difference-in-differences design.

The bottom panel of Figure 1 presents the same results for Ohio. We find the same pattern in Ohio as in North Carolina—in the one year when Supreme Court races were partisan (2022), the Supreme Court races showed similar patterns of partisan voting as every other statewide race. In the years before 2022, when Supreme Court races were nonpartisan in the general election, there was no overlap in the partisan voting distribution between partisan and nonpartisan races.

Table 1. **Estimates of the Effect of Partisan Elections on Partisan Voting.**

	Partisan Voting Coefficient		
	(1)	(2)	(3)
Partisan Election	0.53 [0.40, 0.56]	0.51 [0.37,0.63]	0.52 [0.44, 0.57]
Constant	0.42	-	-
# State-Offices	19	19	19
Observations	146	146	146
State-Year FE	No	Yes	Yes
State-Office FE	No	No	Yes

Notes: Confidence intervals estimated using 10,000 state-office-clustered wild bootstrap samples in braces.

Table 1 presents our formal estimates of the effect of partisan elections on partisan voting. Columns 1 through 3 use  $\beta_{ijst}$  from Equation 1 as the outcome. Column 1 is the simple difference in means between partisan and nonpartisan elections, column 2 is a regression with state-year fixed effects, and column 3 is a two-way fixed effects regression with state-year and state-office fixed effects as described in Equation 2. Across all three columns, we find similar and massive effects. In column 1, the average coefficient in nonpartisan races, represented by the constant, is 0.42. This more than doubles in partisan elections, increasing to 0.95. The estimate is almost identical across the first three columns, implying that, as we explained based on Figure 1, the difference-in-means recovers the causal effect because there are no substantial state-year shocks or state-office preexisting differences prior to the institutional changes. The estimated effect can be read as saying that two precincts that voted differently at the top of the ticket will be more than 50% closer in terms of the two-party vote share in nonpartisan elections than in partisan elections.<sup>3</sup>

These effects are similar in magnitude to the increasing correspondence between county-level gubernatorial and presidential voting in on-cycle governor elections between 1972

<sup>3</sup>In Table SI.1 we report these estimates using the correlation coefficient as the main quantity of interest instead of  $\beta_{ijst}$ . The results are substantively similar.

and 2016, a measure of nationalization and one of the most significant shifts in American political behavior over the last century (Hopkins 2018).<sup>4</sup>

#### 4.1 Similar Effects Using Individual-Level Data

One of the main weaknesses of the analyses above is that we are relying on aggregate-level information to infer the behavior of individual voters. There are two main reasons this could bias our estimates: first, many more people vote at the top of the ticket than in less salient statewide races. Even fewer people vote when the race is nonpartisan. Given this, a low correlation between Democratic vote share in a presidential and state supreme court race may be low because there a lot of split ticket voters or simply because the group of people voting in the presidential race may have very different preferences from those who vote in the state supreme court race.

Second, people who vote for the Democratic presidential candidate and live around other people who voted the same way for president may be especially likely to vote for the Democrat in other races.<sup>5</sup> The same could hold for Republican voters in Republican-leaning areas. When people vote more in line with the people around them, we would overestimate the share of people voting consistently for one party.

We address this problem with two additional analyses. First, we re-estimate our main effect using individual-level cast vote records from 2020 and 2024 for 10 counties in Ohio.<sup>6</sup> We compare the change in partisan voting in the state Supreme Court race to the change in partisan voting in U.S. House races. Although the main analysis uses other statewide elections as the comparison, because our data only includes presidential elections, when

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<sup>4</sup>See also similar findings about the magnitude of nationalization over this period in Amlani and Algara (2021); Holliday (2022); Sievert and McKee (2019).

<sup>5</sup>Kuriwaki and McCartan (2026) show some evidence for this phenomenon.

<sup>6</sup>Note that cast vote records “are not the ultimate basis of an election, but because ‘election results are [often] produced by tabulating the collection of cast vote records’, they should directly reproduce vote totals produced by ballot tabulators” (Kuriwaki et al. 2024). Similar to Kuriwaki et al., we verify the cast vote records used in Ohio by checking whether the vote totals for each contest add up to official election results. In all cases vote totals match within 1% accuracy and never change the results of the election.

relatively few statewide offices are elected in Ohio, we rely on U.S. House races instead as a comparison and the presidential race as the top-ticket contest. We use the cast vote records to document how much differences between the aggregate and individual-level data affect our estimates of the effect of partisan elections on partisan voting. Table SI.6 presents our results.

In column 1, we reproduce our main result from Table 1 but for the much smaller set of races, years, and counties we can study with the cast vote records. This involves, first, aggregating the cast vote records to the precinct level, estimating regressions of Democratic vote share for each lower-level office on Democratic vote share for president, then using the coefficients on Democratic presidential vote share across races to estimate how much more partisan state supreme court voting became after 2020, differencing out any change in partisan voting in U.S. House races. We find that adding party labels to the ballot increased partisan voting by a similar amount, on average, as in our main analysis.

In column 4, we present an estimate from the same difference-in-differences analysis as in column 1, but we swap in the individual-level measure of partisan voting called the “partisan gap” proposed in Conevska et al. (2025): for a given race not at the top of the ticket, the partisan gap is the share of Democratic presidential voters who voted for the Democratic candidate in that race minus the share of Republican presidential voters who voted for the Democratic candidate in that race. The estimates in columns 1 and 4 are nearly identical, meaning that our simple estimation strategy of regressing Democratic vote share for an office on the Democratic vote share in the concurrent top-ticket race is doing a good enough job of recovering the effects we would estimate if we had the individual-level data to estimate the partisan gap.

In columns 2 and 3, we detail how the effects change when we change one aspect of our partisan voting estimation strategy at a time. Column 2 reports an estimate from the same difference-in-differences analysis as in columns 1 and 4, but we swap in a measure of partisan voting computed using regressions on precinct-level data after excluding people

who fail to vote in any of the races we study. This ensures that differences in the Democratic vote share across races are arising only from split ticket voting, not from changes in which voters participated. In column 3, we report estimates using the partisan gap measure from Conevska et al. (2025), but we weight each ballot by the inverse of the number of complete ballots cast in the precinct. This mirrors the weighting in the precinct-level analyses, but uses the exact same measurement strategy as in column 4.

Looking across all four columns, we find that these issues of ecological inference in our measurement of partisan voting do not meaningfully alter the conclusions we reach.

In a separate analysis, in Section SI.2 of the online appendix, we present results using recent approaches to ecological inference to estimate the partisan gap. Again, we estimate very similar effects when using ecological inference techniques.

## **4.2 Changes in Candidate Quality Cannot Explain Effects on Voter Behavior**

To this point, our interpretation has focused on the effects of partisan elections on voter behavior. But, changes in electoral institutions can also affect candidate entry, and citizens may vote differently in nonpartisan races simply because the choices they face are different. Does adding partisan labels to the ballot shift candidate entry enough to explain the massive effects of partisan ballots on voter behavior?

One common prediction in the literature is that voters in nonpartisan races select higher-quality judges (see, e.g., Ash and MacLeod 2021 and Lim and Snyder Jr 2015, but also see Choi, Gulati, and Posner 2010). To investigate how these electoral institutions shape candidate entry, we collected data on the professional backgrounds of all statewide judicial candidates in our data and coded whether they were already serving as a judge while running for another judicial position.

We use our data on judicial candidate backgrounds to answer two questions: First, do nonpartisan elections lead more experienced judges to enter the race? Table SI.4 presents

our results. While the estimates are noisy, we do not find consistent evidence that experienced candidates are more likely to run when the races are nonpartisan. Instead, our point estimates suggest partisan elections may increase or decrease the share of candidates with judicial experience by a very modest amount, though our standard errors are large and we cannot rule out effects smaller than roughly 20 percentage points.

Even if candidate quality increased in nonpartisan elections, for it to affect vote shares, it needs to happen differentially across candidates. Do the candidates in nonpartisan races differ more in their background? Table SI.5 in the appendix presents these results. We find very noisy but suggestive evidence that nonpartisan races are more likely to have two candidates with different backgrounds running against each other. But, this tendency is nowhere near large enough to explain the massive increase change in partisan voting. In Table SI.3, we document that incumbents and candidates with newspaper endorsements only perform modestly better than expected in these down-ballot statewide races. These relationships are far too weak to explain a substantial portion of the overall effect of partisan elections on partisan voting.

### **4.3 Nonpartisan Races Covered as Partisan in Ohio**

Our discussion of findings above focuses on the information available to voters on election day. Yet, one explanation for our findings is that the media cover nonpartisan elections in ways that make it harder for a voter to discern which candidate shares their views. The fact that Ohio held partisan primaries even during the nonpartisan period, that many of the candidates held previous partisan office over the course of the nonpartisan period in North Carolina, and that we as researchers looking many years later had no trouble finding the party of every candidate suggests voters could have found the partisanship of the candidates without too much effort. Still, it's possible that even an informed reader of the news may not learn the party of the candidates in nonpartisan races if media organizations adopt a policy of not discussing the party affiliations of candidates in nonpartisan races.

We explore this possibility by looking at endorsements of statewide candidates for partisan and nonpartisan offices in the Raleigh News and Observer and the Cleveland Plain Dealer for the study period. In North Carolina, the News and Observer notably changed their editorial practices as election rules changed. Out of the 78 statewide executive and US senate races that held during our study period where the paper made an endorsement, they named the party of at least one candidate in 71 cases (91%). They mentioned party in endorsements of partisan judicial candidates at almost identical rate—18 out of 20 endorsements mentioned party. During the period when North Carolina’s statewide judicial elections were nonpartisan, this changed dramatically. Out of 15 endorsements the paper wrote, only five mention party (33%).

On the other hand, the Cleveland Plain Dealer—the newspaper with the widest circulation in Ohio—mentioned the party of at least one candidate in all 27 endorsement they authored over our study period including those for nonpartisan judicial races.

Since we estimate a similar effect of partisan elections on partisan voting in North Carolina and Ohio, we take this as evidence that a change in media coverage is not the main reason for the effects we observe.

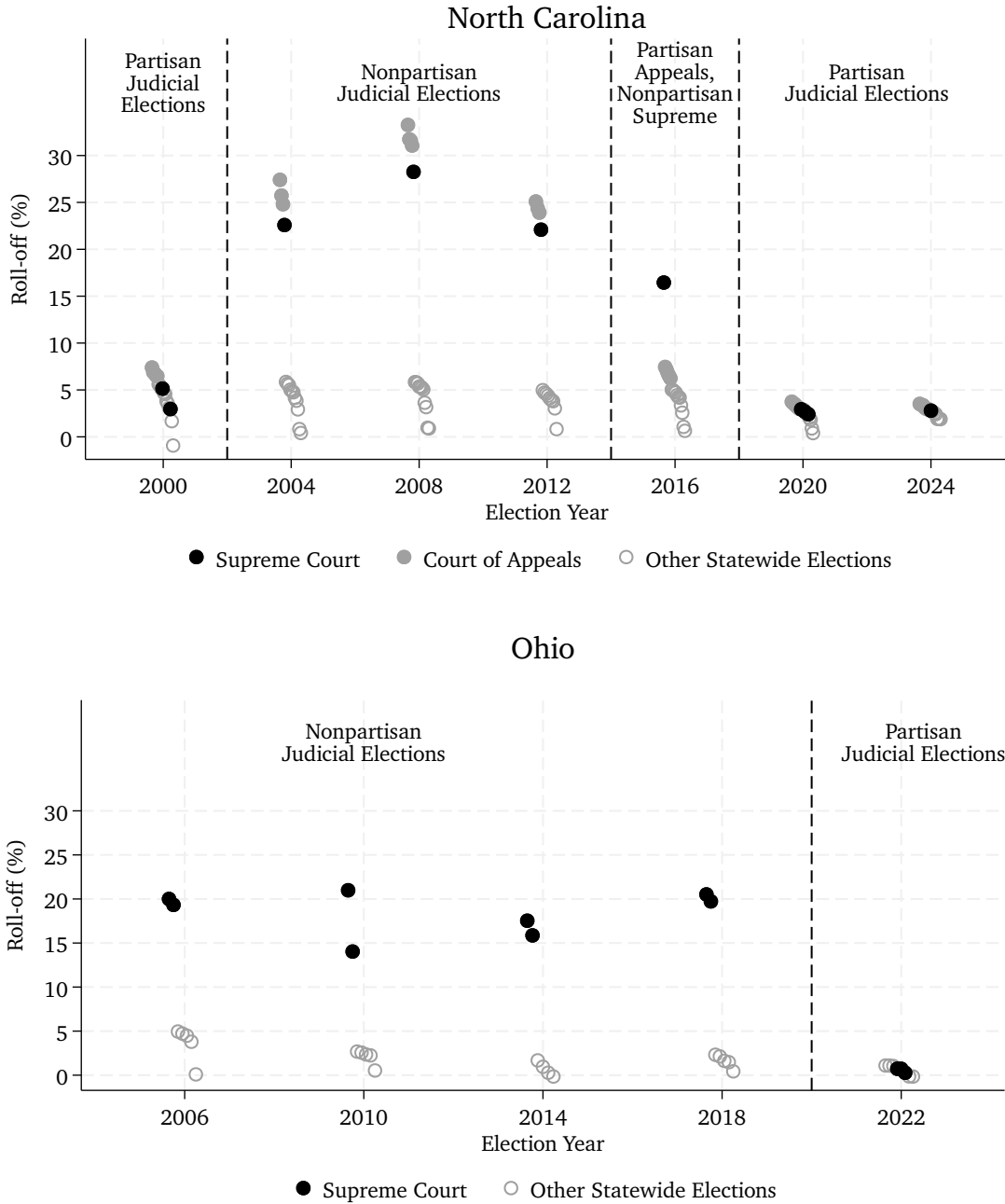
## **5 Partisan Elections Dramatically Decrease Roll-Off**

In this section, we present evidence that partisan elections also substantially alter the composition of the electorate.

We begin with graphical evidence that partisan elections increase the number of people who vote in the race. Figure 2 presents the raw data. The vertical axis is roll-off—one minus the number of people who voted in the down-ballot race over the number of people who voted in the top-ticket race. Assuming that nearly everyone who returns a valid ballot casts a vote at the top of the ticket, this measure is approximately the share of people who cast a ballot and yet fail to vote in a given race.

In the top panel, we focus on statewide elections in North Carolina. We see that, even when judicial races are partisan (2000, 2020, and 2024), more voters tend to leave the judicial sections of their ballots blank than other parts of the ballot with other statewide offices. Still, roll-off goes up dramatically when elections are made nonpartisan. When elections are nonpartisan for both the Supreme Court and the Court of Appeals (2004, 2008, and 2012), roll-off rates do not overlap with roll-off rates for other statewide races. When the North Carolina Court of Appeals races are made partisan in 2016 but the Supreme Court race remains nonpartisan, the Court of Appeals races have low roll-off rates while the Supreme Court race still has over 15% roll-off. We see the same basic pattern in Ohio as shown in the bottom panel of Figure 2, though the average level of roll-off in nonpartisan years is somewhat lower.

Figure 2. **Voter Roll-Off in Partisan and Nonpartisan Statewide Elections**



*Notes:* Plots roll-off, approximated as one minus the number of people who voted in the down-ballot race over the number of people who voted in the top-ticket race, for each office. Offices are separated into categories as in Figure 1.

Table 2 presents our formal estimates of the effect of partisan elections on participation. Columns 1 through 3 use the same specifications as columns 1 through 3 of Table 1: first the simple difference-in-means, then including state-year fixed effects, and finally the full two-way fixed effects regression. We confirm that partisan elections dramatically and noticeably decrease roll-off compared to nonpartisan races. We estimate nearly identical effects across all three regressions, suggesting that approximately all the difference in roll-off rates between partisan and nonpartisan statewide races is caused by the presence of party labels on the ballot in those partisan races. Assuming that approximately everyone who casts a ballot votes in the race at the top of the ticket, roughly 3% of people cast a ballot without voting in the partisan appellate court elections. This share of people increases roughly seven-fold to 23% of people abstaining when the elections are nonpartisan.

As we did in Section 4.1, we reevaluate our results using individual-level data from eleven counties in Ohio. In Table SI.7 we calculate the effect of partisan elections on roll-off, first as a difference-in-means and then including state-year and a full two-way fixed effects regression. Our results, although three to five points smaller in magnitude, remain large and significant.<sup>7</sup>

The effect of partisan elections on roll-off is very large compared to the effect of other interventions. For example, universal vote-by-mail decreases roll-off by giving people more time to vote and easier access to information about how to vote, but the effect is only five percent of the effect of making the election partisan (Marble 2017). Nichols and Strizek (1995) find that electronic voting decreases roll-off by approximately 10 percentage points in statewide executive and judicial races, but even this very large effect is only half as large as the effect of adding party labels to the ballot. Finally, choice fatigue increases roll-off by approximately 8%, less than half of the effect of including party labels (Augenblick and Nicholson 2016).

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<sup>7</sup>Kuriwaki and McCartan (2026) found a similar gap between aggregate estimates and individual-level data of about three points, although they focus primarily on split-ticket voting instead of roll-off.

Table 2. **Estimates of the Effect of Partisan Elections on Roll-Off.**

	(1)	Roll-off (2)	(3)
Partisan Election	-0.20 [-0.48, -0.15]	-0.20 [-0.24, -0.17]	-0.20 [-0.22, -0.17]
Constant	0.23	-	-
# State-Offices	19	19	19
Observations	146	146	146
State-Year FE	No	Yes	Yes
State-Office FE	No	No	Yes

Notes: Confidence intervals estimated using 10,000 state-office-clustered wild bootstrap samples in braces.

## 6 How Many Voters Change their Vote When Shown Party Labels?

The previous sections documented two large effects of partisan elections: a dramatic increase in the correspondence between top-of-the-ticket and down-ballot voting and a substantial reduction in roll-off. In this section, we combine these two findings to decompose the electorate into groups defined by how they respond to having party labels on the ballot. We begin with a simple model that is partially identified by our main estimates. We then extend it to allow for voters who use noisy heuristics and explore heuristic voting in non-partisan judicial races. Finally, we discuss what this might tell us about voter information in state legislative races.

### 6.1 A Simple Model of Voter Types

Consider a population of voters all of whom vote at the top of the ticket. Each voter must decide whether and how to vote in a judicial race. We suppose that each voter falls into one of four mutually exclusive and exhaustive groups whose population shares sum to one:

Table 3. **Types of Voters in Judicial Elections.**

Symbol	Short Description	Estimated Proportion
$\pi_I$	Label-insensitive voters	0.34
$\pi_U$	Label-sensitive voters	0.43
$\pi_A$	Nonpartisan abstainers	0.20
$\pi_Z$	Always-abstainers	0.03

$\pi_I + \pi_U + \pi_A + \pi_Z = 1$ . We provide an overview each group of voter and our estimates of their proportion in the electorate in Table 3.

Label-insensitive voters (share  $\pi_I$ ) vote the same in judicial races regardless of whether the party labels are included on the ballot or not. They always vote in the judicial race and vote for the candidate who shares their party with probability  $p^I$ . Label-sensitive voters (share  $\pi_U$ ) always participate in the judicial race. In partisan elections, they vote for their co-partisan at the same rate as label-insensitive voters,  $p^I$ . In nonpartisan elections, they vote for their co-partisan with some probability  $p^U$  that may differ from  $p^I$ . Nonpartisan abstainers (share  $\pi_A$ ) vote like label-insensitive voters when the judicial election is partisan but abstain from voting in nonpartisan judicial races. Finally, always-abstainers (share  $\pi_Z$ ) never vote in judicial elections regardless of the institutions.

Under this simple model, we can identify the share of voters who fall into each type using the differences between partisan and nonpartisan judicial races in our cast vote records.

We begin by identifying the share of the population that is nonpartisan abstainers. In partisan elections, label-insensitive voters, label-sensitive voters, and nonpartisan abstainers all vote, so the roll-off rate is  $r^P = \pi_Z$ . In nonpartisan elections, nonpartisan abstainers drop out, so  $r^{NP} = \pi_A + \pi_Z$ . The difference in roll-off directly identifies the share of nonpartisan abstainers:

$$\pi_A = r^{NP} - r^P. \quad (3)$$

Next, we identify the share of voters who we label label-sensitive. We define partisan voting using the cast vote records as  $PV = V_D - V_R$ , where  $V_D$  is the share of votes cast

for the Democratic judicial candidate by people who voted for the Democrat at the top of the ticket and  $V_R$  is the share of votes cast for the Democratic judicial candidate by people who voted for the Republican at the top of the ticket. This is the “partisan gap” proposed in Conevska et al. (2025).

Assuming that voter type is independent of party, in partisan elections all non-abstaining types vote for their co-partisan at rate  $p^I$ , so

$$PV^P = 2p^I - 1. \quad (4)$$

In nonpartisan elections, nonpartisan abstainers drop out, label-insensitive voters continue to vote for their co-partisans at rate  $p^I$ , and label-sensitive voters vote for their co-partisans at rate  $p^S$ . This gives

$$PV^{NP} = \frac{(2p^I - 1)\pi_I + (2p^U - 1)\pi_U}{\pi_I + \pi_U}. \quad (5)$$

Taking the difference and simplifying,

$$PV^P - PV^{NP} = \frac{2(p^I - p^U)\pi_U}{\pi_I + \pi_U}. \quad (6)$$

Substituting  $\pi_I + \pi_U = 1 - \pi_A - \pi_Z$  and solving for  $\pi_U$  yields

$$\pi_U = \frac{(PV^P - PV^{NP})(1 - \pi_A - \pi_Z)}{2(p^I - p^U)}. \quad (7)$$

Equation 3 identifies  $\pi_A$  directly from the difference in roll-off, and  $\pi_Z$  from the level of roll-off in partisan elections. The remaining quantity needed to recover  $\pi_U$  from Equation 7 is  $p^I - p^U$ , the difference between the rate at which label-insensitive voters support their co-partisan and the rate at which label-sensitive voters do so in nonpartisan elections. If label-sensitive voters guess at random,  $p^U = \frac{1}{2}$ . We can also compute  $p^I$  from  $PV^P$  using  $p^I = (PV^P + 1)/2$ . More generally, any assumption about  $p^U$  pins down the decomposition.

We consider the random guessing case ( $p^U = \frac{1}{2}$ ) as our baseline and discuss departures in the next subsection.

We estimate the share of voters in each group using the simple regressions in column 1 of Table 1 and Table 2, which report both the nonpartisan mean (the constant) and the effect of partisan elections. This allows us to recover all of the quantities needed for the decomposition as long as we take on all of the modeling assumptions as well as the baseline assumption that label-sensitive voters vote at random when not shown party labels.

Beginning with roll-off, column 1 of Table 2 estimates an average roll-off rate in nonpartisan judicial races of  $r^{NP} = 0.23$  and an effect of partisan elections of  $-0.20$ , implying a partisan roll-off rate of  $r^P = 0.03$ . The share of always-abstainers is therefore  $\hat{\pi}_Z = r^P = 0.03$ , the share of nonpartisan abstainers is  $\hat{\pi}_A = r^{NP} - r^P = 0.20$ , and the share of voters who participate regardless of electoral format is  $\hat{\pi}_I + \hat{\pi}_U = 1 - r^{NP} = 0.77$ .

Turning to partisan voting, column 1 of Table 1 estimates an average level of partisan voting in nonpartisan races of  $PV^{NP} = 0.42$  and an effect of partisan elections of  $0.53$ , implying  $PV^P = 0.95$ .<sup>8</sup> This gives  $\hat{p}^I = (PV^P + 1)/2 = 0.975$ .

Under the baseline assumption that label-sensitive voters guess at random ( $p^U = 0.5$ ),

$$\hat{\pi}_U = \frac{0.53 \times 0.77}{2(0.975 - 0.50)} \approx 0.43. \quad (8)$$

The remaining share of label-insensitive voters is  $\hat{\pi}_I = 0.77 - 0.43 = 0.34$ . Again, we provide an overview of these results in Table 3.

The decomposition implies that, among people who vote at the top of the ticket, roughly one third are cast the exact same vote in judicial races regardless of whether they include party labels, one fifth will only vote in the judicial race when a party label is present, and over two fifths participate in nonpartisan judicial races but vote in meaningfully different

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<sup>8</sup>Recall from Table SI.6 that the precinct-level coefficient  $\hat{\beta}$  and the individual-level partisan gap yield nearly identical estimates, so we use them interchangeably here.

way. The largest group, by this accounting, consists of voters who meaningfully change their behavior depending on whether the government puts party labels on the ballot.

## 6.2 Information as an Explanation for Sensitivity to Partisan Labels

Our analysis above suggests that a large share of voters use very different strategies to vote when they are told the party affiliation of the judicial candidates on the ballot. One explanation for this pattern is that label-insensitive voters are those who have some approach to deciding on candidates without relying on the ballot itself and, most of the time, decide to vote for the judge who is a member of the same party of the presidential or governor candidate they voted for at the top of the ticket. Meanwhile, under this explanation, label-sensitive voters come to the ballot unsure who to vote for and rely on the information there to select a candidate. This interpretation suggests a potential weak spot in our baseline model: might these label-sensitive voters use heuristics to infer the party of judicial candidates? If so, this would mean our estimates of the share of label-sensitive voters is a meaningful under estimate.

Suppose that, instead of guessing at random like in our baseline model, label-sensitive voters use heuristics to vote in nonpartisan races that lead them to vote for their party's candidate more than half of the time. A higher value of  $p^U$  also leads to a higher value of  $\pi_U$  by shrinking the denominator in the expression for  $\pi_U$ . For example, if label-sensitive voters vote with their party 60% of the time, that would imply that approximately 54% of voters have this type.

While there is a lot of information contained on a nonpartisan ballot that voters could be using to infer a candidate's party, we investigate one noisy signal of party: candidate gender. Since women are more likely to be Democrats than men, a voter may infer that, in a race between a woman and a man, the woman is more likely to be a Democrat. While our data is too limited to provide a direct test of this, an extreme case in our data offers an illustrative example. In 2004, Barbara Jackson ran against Alan Thornburg in a race for NC

State Court of Appeals. Going against type, Jackson ran as a Republican and Thornburg ran as a Democrat. Jackson dramatically outperformed in Democratic areas, and Thornburg outperformed in Republican areas leading to a case where Democratic vote share in the judicial race was nearly uncorrelated with Democratic presidential vote share across precincts. We see similar results in other races where Republican women ran against Democratic men, but this only holds when the race is nonpartisan. We interpret this anecdote as consistent with the idea that voters are using heuristics based on the ballot to infer the party of the candidates and vote on that basis.

An alternative, but related story, is that label-sensitive voters are just looking for cheap ways to decide how to vote and don't care about the party of the candidate they choose at all. We look for one sign of this sort of behavior by investigating how the effects of ballot order change when elections become nonpartisan.<sup>9</sup> As we detail in Table SI.3, we do not find much evidence that a substantially higher share of voters use ballot order to make their selection in nonpartisan judicial races.

An entirely different explanation for our results is that label-sensitive voters are those who satisfice, using a partisan heuristic when it's available to them but looking for richer information when the race is nonpartisan. That explanation could produce a lot of split ticket voting but for the good reason that voters are better off learning about the candidates without the crutch of partisan labels. If this were the case, we'd expect to see valence characteristics like incumbency and endorsements matter more when elections nonpartisan than when they are partisan. We investigate this possibility in Table Table SI.3 in the online appendix, and we do not find much evidence that nonpartisan elections lead to more valence voting, though this should only be taken as a tentative finding given how noisy our estimates are.

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<sup>9</sup>See Ho and Imai (2008); Koppell and Steen (2004); Miller and Krosnick (1998) for more on the effects of ballot order.

Put together, these patterns suggest to us that there is likely a large share of voters who would like to vote based on policy or party but are relying on noisy information from the ballot to do so when the ballot does not provide the party label of judicial candidates.

## 7 Discussion

In this article, we present evidence that making elections partisan dramatically increases the correspondence between results in races at the top-of-ticket and the results of races down the ballot. We also find that a very large portion of the electorate is only willing to vote when they are told the party of the official. These results suggest that many voters are relying heavily on the partisan information provided on the ballot and many may not be looking for much additional information. This is especially interesting in Ohio where the primaries have been partisan for the entire study period, meaning that any voter could find the candidate's party affiliation trivially.

While the results of our analyses are clear, it is not obvious what the policy recommendation should be for other states and municipalities considering a change between partisan and nonpartisan elections. On the one hand, partisan elections may help voters identify the candidate whose proposals best match their views. On the other hand, this increase in partisan voting may come with a modest drop in probability that the higher-valence candidate wins. Further, a large drop in the share of citizens who cast a vote in the race may shape who wins and their incentives while in office, and this would be exacerbated if those who roll off or are in our label-sensitive group are quite different from those who vote the same way regardless of whether partisan labels are on the ballot. New research designs are needed to pin down those effects.

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# Supporting Information

Intended for online publication only.

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## **SI.1 Additional Statistical Results**

In this section we present additional statistical results that complement the main text.

### **SI.1.1 Partisan Voting Correlations**

Here, we reproduce the results shown in Table 1, but add results using the correlation coefficient instead of the coefficient estimated in Equation 1. Columns 1 through 3 are the same as in the main text. Columns 4 through 6 extend the findings of the first three columns using as the outcome the correlation between Democratic vote share at the top of the ticket and down the ballot. We find the same basic pattern as in the first three columns: partisan elections largely increase the correlation between voting at the top of the ticket and down the ballot. This means that outcomes in nonpartisan races are not just more compressed, but still tightly tracking with results at the top of the ticket. Instead, nonpartisan races are only slightly less spread out, meaning that much less of the variation is accounted for by Democratic vote share at the top of the ticket and the electorate is voting on the basis of some other information or the electorate is changing substantially.

### **SI.1.2 Without NC's 2016 Appeals Court Contest**

In Table SI.2 we estimate our main specification again, except we drop all Court of Appeals contests in North Carolina. We drop them because we only recover the time-averaged effect of partisan elections on judicial races if the effect is not changing over time, due to the staggered rollout in North Carolina of partisan judicial elections (Goodman-Bacon 2021). In model 3, we estimate the effect of partisan elections on partisan voting to be 0.54, not substantively different from our main estimate in Table 1 of 0.52. The results are similarly unchanged in the other models.

Table SI.1. **Estimates of the Effect of Partisan Elections on Partisan Voting.**

	Partisan Voting					
	(1)	Coefficient		Correlation		(6)
		(2)	(3)	(4)	(5)	
Partisan Election	0.53 [0.40, 0.56]	0.51 [0.37,0.63]	0.52 [0.44, 0.57]	0.24 [0.11,0.27]	0.23 [0.19, 0.25]	0.23 [0.21,0.25]
Constant	0.42	-	-	0.73	-	-
# State-Offices	19	19	19	19	19	19
Observations	146	146	146	146	146	146
State-Year FE	No	Yes	Yes	No	Yes	Yes
State-Office FE	No	No	Yes	No	No	Yes

Notes: Confidence intervals estimated using 10,000 state-office-clustered wild bootstrap samples in braces.

Table SI.2. **Estimates of the Effect of Partisan Elections on Partisan Voting, No Appeals Court.**

	Partisan Voting					
	(1)	Coefficient		Correlation		(6)
		(2)	(3)	(4)	(5)	
Partisan Election	0.51 [0.21, 0.74]	0.54 [0.27,0.83]	0.54 [0.31, 0.76]	0.22 [-0.03,0.48]	0.21 [0.13, 0.31]	0.21 [0.15,0.28]
# State-Offices	18	18	18	18	18	18
Observations	118	118	118	118	118	118
State-Year FE	No	Yes	Yes	No	Yes	Yes
State-Office FE	No	No	Yes	No	No	Yes

Notes: Confidence intervals estimated using 10,000 state-office-clustered wild bootstrap samples in braces.

### SI.1.3 Other Contest Characteristics

In Table SI.3 we estimate the effects of a partisan election on partisan voting, conditional on several additional features about the candidate. Because we measure partisan voting using the vote share for the Democrat in the top-ticket and down-ballot contest, all features are coded as 1 if the Democrat was the (incumbent, endorsee by a local newspaper, first on the ballot), a -1 if the Republican was, and 0 otherwise. The index variable just sums the incumbent and endorsement variables. These variables are then included one at a time in the main regression in addition to the main partisan election indicator. Our estimates are

noisy, but we do not find evidence that partisan elections dramatically increase or decrease the effect of any of these features on a candidate's vote share.

Table SI.3. **Estimates of the Effect of Partisan Elections on Partisan Voting.**

	Partisan Voting			
	(1)	(2)	(3)	(4)
Partisan Election	0.53 [0.48, 0.56]	0.53 [0.46, 0.61]	0.54 [0.48, 0.58]	0.54 [0.46, 0.60]
Incumbent	0.02 [-0.04, 0.08]	-	-	-
Partisan Election × Incumbent	-0.03 [-0.08, 0.03]	-	-	-
Endorsement	-	0.01 [-0.26, -0.14]	-	-
Partisan Election × Endorsement	-	-0.02 [-0.17, 0.05]	-	-
First on Ballot	-	-	0.09 [-0.50, 0.86]	-
Partisan Election × First on Ballot	-	-	-0.10 [-0.45, -0.20]	-
Index	-	-	-	0.01 [-0.21, -0.04]
Partisan Election × Index	-	-	-	-0.02 [-0.05, 0.02]
# State-Offices	19	19	19	19
Observations	146	132	139	132
State-Year FE	Yes	Yes	Yes	Yes
State-Office FE	Yes	Yes	Yes	Yes

Notes: Confidence intervals estimated using 10,000 state-office-clustered wild bootstrap samples in braces. Incumbent, endorsed, and first on ballot are coded 1 when only the Democrat has that trait, -1 when only the Republican has the trait, and 0 otherwise. Endorsements defined based on the endorsements of the Raleigh News and Observer editorial board in North Carolina. The index is defined as the sum of the endorsement, incumbent, and first on ballot variables.

Table SI.4. **Partisan Elections and Judicial Candidate Experience.**

	Judicial Experience		
	(1)	(2)	(3)
Partisan Election	-0.02 (0.09)	0.04 (0.09)	-0.06 (0.11)
Constant	0.73	-	-
Observations	98	98	98
State FE	No	Yes	Yes
State-Specific Year Trend	No	No	Yes

Notes: Robust standard errors in parentheses. Each observation is a candidate in a judicial election in North Carolina or Ohio. The outcome is an indicator for whether the candidate was a sitting judge. Partisan is an indicator for whether the election was partisan.

In Table SI.4 we estimate the effect of switching to a partisan election on “judicial experience,” which we code as whether a judge was a sitting judge when running for office or not. This information is collected manually from the profile pages of each candidate for office. Our measure is necessarily coarse and an imperfect approximation for experience, as candidates for judicial contests may have other relevant experience while serving as attorneys or in other positions in state government and candidates with less experience may have unmeasured compensating qualities.

We find that candidates in nonpartisan races are two percentage points less likely to be currently serving as a judge. When we include state fixed effects, we estimate that candidates in partisan races are four percentage points more likely to be currently serving as a judge as compared to candidates in the same state when the elections were nonpartisan. Once we adjust for state-specific time trends in the experience of judges, we find that the candidates running in nonpartisan races are six percentage points less likely to be currently serving judges than expected. Even at the upper bound of our confidence intervals, these effects on candidate composition are too small to account for more than a modest share of the massive effect on partisan voting.

Table SI.5. **Partisan Elections and Candidate Experience Match.**

	Same Judge Status		
	(1)	(2)	(3)
Partisan Election	-0.01 (0.15)	0.12 (0.14)	0.13 (0.17)
Constant	0.55	-	-
Observations	48	48	48
State FE	No	Yes	Yes
State-Specific Year Trend	No	No	Yes

Notes: Robust standard errors in parentheses. Each observation is a contested judicial race in North Carolina or Ohio. The outcome is an indicator for whether both candidates had the same judge status (both sitting judges or both non-judges).

In Table SI.5 we perform a similar analysis on judicial experience. However, instead of making the comparison about whether a candidate was a sitting judge, we study the relationship between the two candidates. We construct a binary variable “Same Judge Status” where 1 indicates a contest where either both candidates were judges or both candidates were not judges, i.e., when there was not imbalance in the type of experience on the ballot. Again, we find, with or without including state and state-year fixed effects, inconclusive results on the effects of partisan elections.

### SI.1.4 Additional Analysis with Individual-Level Data

Table SI.6 and Table SI.7 present our main results using individual-level data, as described in Section 4.1. The individual-level data encompasses eleven counties in Ohio: Ashtabula,

Table SI.6. **Comparing Ecological Estimates of Partisan Effect to Individual-Level Estimates.**

	Partisan Voting			
	Precinct-Level		Individual-Level	
	Baseline (1)	No Abstainers (2)	Precinct-Weighted (3)	Baseline (4)
Partisan Election	0.57	0.52	0.53	0.53
Observations	71	71	71	71
Office FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes

Notes: This table re-computes our main estimates of a partisan election using individual-level data, in the form of cast vote records, from Ohio’s 2020 and 2024 election in eleven counties. The left side of the table aggregates the individual-level data up to provide a comparable baseline using this geographic and time subset, while the right side of the table uses the individual level data as is.

Table SI.7. **Estimates of the Effect of Partisan Elections on Roll-Off Using Cast Vote Records.**

	Roll-off		
	(1)	(2)	(3)
Partisan Election	-0.16	-0.17	-0.15
	[-0.20, -0.12]	[-0.21, -0.13]	[-0.20, -0.10]
Constant	0.19	-	-
Observations	91	91	91
Office FEs	No	No	Yes
Year FEs	No	Yes	Yes

Notes: This table re-computes our estimates of a partisan election on roll-off using individual-level data, in the form of cast vote records, from Ohio’s 2020 and 2024 election in eleven counties. Robust standard errors, clustered at the office level, in brackets.

Butler, Clark, Cuyahoga<sup>10</sup>, Darke, Highland, Monroe, Pickaway, Putnam, VanWert, and Wood. Our data includes 743,575 voters in 2020 and 1,066,478 voters in 2024.

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<sup>10</sup>For the 2020 election, in Cuyahoga county only, we are only able to use individual-level data from in-person voters. In 2024, we use full cast vote records for all counties. If anything, we expect this slight difference to bias our results against our main point. Mail voters may have more time to research judicial candidates and determine the partisan who aligns more closely with their own partisanship. We also anticipate that having the time to vote by mail should reduce roll-off in 2020 vis-à-vis 2024. Empirically, when we remove Cuyahoga from the analysis, our results do not substantively change.

## SI.2 Using Ecological Inference Techniques to Estimate Partisan Voting

When we only know the marginal distribution of our data (vote shares for top-ticket and down-ballot candidates), but are interested in the joint distribution (the percent of voters who vote for a given pairing of top-ticket and down-ballot candidates), we face the classic ecological inference (EI) problem. As reviewed in Kuriwaki and McCartan (2026), this is only a concern if we believe that the joint data are mean-independent of the preferences for down-ballot candidates and the number of people within each precinct. We don't necessarily believe the joint data are mean-independent nor turnout-independent, although our similar results in Section 4.1 are comforting. One way we can address any outstanding concerns are by including covariates that are related to preferences and turnout. Using these covariates, we can then make use of a newly developed double/debiased machine learning model that allows a complex relationship between the demographic variables and our outcomes of interest (McCartan and Kuriwaki 2025).

We collect demographic data over time from the North Carolina voter registration file, which is available in snapshots beginning in 2005. We use the 2005 file for both the 2004 and 2000 elections. The file includes demographic data on every registered voter's reported race and age. We aggregate the data up for each precinct in North Carolina and merge them to the precinct-level data. The merge is only successful for one in four precincts, due to name differences between the voter registration and election results files. Nevertheless, we proceed with 180,356 precinct-year observations. We set-up a regression of the same form as Equation 2, but combine the step of estimating  $\beta$  into the regression estimation step, following the guidance from (McCartan and Kuriwaki 2025). Then, we estimate two models to be combined together in the double/debiased machine learning framework: (1) a regression model of the outcome on the predictors and the covariates and (2) a Riesz

representer model which creates a set of weights to be used in the estimation. For more details, see McCartan and Kuriwaki (2025).

We fit these models and combine them using the R software `seine` (McCartan and Kuriwaki 2025). The estimated coefficient for  $\tau$  is 0.458 with an asymptotic 95% confidence interval of [0.33, 0.58], comparable to our main estimates in Table 1. These results increase our confidence that our results are not a function of the ecological inference fallacy.