

Partisan Alignment Increases Voter Turnout: Evidence from Redistricting*

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Abstract

Are individuals more likely to vote when their party dominates election outcomes? Leveraging nationwide voter file data and the redistricting process, we present causal evidence on this question via a longitudinal analysis of individual-level political participation. Tracking turnout before and after a redistricting cycle, where the boundaries of congressional districts change, we observe what happens when registrants experience a shock to the partisan composition of their congressional district. We find a measurable increase in turnout for individuals assigned to districts aligned with their partisan identities as compared to individuals in misaligned districts. An analysis of survey data spanning the districting cycle, as well as evidence from past experimental research, point to the expressive benefits of voting for the winning party as a key mechanism. By demonstrating how districting influences political participation, our findings suggest a new implication of partisan gerrymandering that may clash with other democratic goals.

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“...I can say this — winning’s a lot more fun.” —Richard M. Nixon in his victory speech in 1968¹

1 Introduction

Decennial redistricting is among the most contentious political processes in the United States. The state officials tasked with re-drawing electoral district lines face a variety of competing interests, and, depending on the rules laid out in their state’s constitution, may have to deal with concerns that are political (protecting incumbent politicians and the seats held by their political party), legal (maintaining districts of equal population and not diluting political representation of minority groups), and practical (maintaining relatively compact districts and respecting natural boundaries). For these reasons, redistricting invariably leads to shifts in the geographical composition of congressional districts and, more often than not, the partisan composition of those districts as well.² These changes hold enormous implications for who wins seats in local, state, and federal elections, and how citizens’ policy preferences are represented in legislatures.

Much activity in the courts and among commentators thus focuses on how redistricting may shift the balance of political power within a state or in the U.S. Congress. For instance, a 2018 court decision in Maryland noted that state officials had “targeted Republican voters in the Sixth District by, on net, removing roughly 66,000 of them from the district and adding some 24,000 Democratic voters, thereby effecting a swing of about 90,000 voters.”³ Redistricting transformed the Sixth District from “Solid Republican” to “Likely Democratic”; plaintiffs in the case argued that these changes prevented Republican voters from electing their candidates of choice. Scholars have also focused on how redistricting affects the partisan composition of legislatures — devising methods for evaluating the relationship between votes cast and seats won (e.g., Kendall and Stuart 1950; Tufte 1973; King and Browning 1987; Gelman and King 1994; Stephanopolous and McGhee 2015) as well as determining whether gerrymandering has altered partisan polarization (McCarty, Poole, and Rosenthal 2009; Chen and Rodden 2013), the party system (Stephanopoulos and Warshaw 2019), or the incumbency advantage (McKee 2013).

¹<https://www.nixonfoundation.org/1968/11/victory-speech-1968/>

²One exception is states with single at-large districts.

³*Benisek v. Lamone*, 348 F. Supp. 3d 493, 501 (D. Md. 2018).

Far less attention has been paid to how changes in the partisan composition of districts influence voters' behaviors. With the notable exception of Hunt (2018), most researchers instead treat voter behavior as fixed rather than responsive to district partisanship. We take up this question by examining how a key determinant of the election outcomes that are the focus of previous analyses of redistricting — who votes — may be shaped by partisan context. How does changing a district's partisan composition influence voter turnout? To be precise, does an “alignment” between the partisan composition of the district and an individual's party affiliation increase citizen participation in an election, and does a “misalignment” created by redistricting inhibit subsequent participation by voters?

In this paper, we examine the interplay between a person's partisan identity, partisan context, and voter turnout, evaluating several competing explanations that might link these factors together. Several theoretical traditions offer predictions about how changing partisan context should influence voters: both the *expressive voting hypothesis* and the *elite mobilization hypothesis* imply that turnout will increase when a voter's partisan identity aligns with the partisan composition of the district. The *partisan threat hypothesis*, on the other hand, implies that turnout increases with partisan *misalignment* as voters in the district are stimulated to participate due to “threat” from the other party.

To distinguish which, if any, of these theoretical perspectives stand up to scrutiny, we estimate the effect of changes in district partisanship on changes in rates of participation for individual voters. We present evidence from a real-world electoral setting and largely avoid the internal and external validity concerns that plague previous work. Our results, based on national voter file data tracking over six million individuals before and after the 2012 redistricting cycle, suggest that partisan alignment has a modest, positive effect on turnout, ruling out the *partisan threat* explanation. We then turn to longitudinal survey data to provide secondary evidence and adjudicate the extent to which mechanisms associated with *expressive voting* and *elite mobilization* yield the observed turnout patterns. This secondary evidence provides substantial support for the *expressive voting* hypothesis.

In seeking to understand how redistricting changes both a district's partisan composition and turnout, we clarify the electoral outcomes affected by this contentious political process. Participation in elections is a fundamental building block of democracy and is used as a primary indicator of

democratic performance (Powell 1982). If the redistricting process nudges some citizens to vote or not, then these changes in behavior are important to know for practitioners of redistricting, scholars of elections, and the legal institutions that permit or sanction certain types of districting schemes. Ultimately, our findings indicate that electoral participation is another competing interest that redistrictors (and, possibly, courts) should consider when evaluating newly drawn electoral jurisdictions.

2 Voter Turnout and Partisan Context

Early rational choice approaches to voter turnout emphasized voting as a cost-benefit calculation. As understood by Downs (1957), Riker and Ordeshook (1968), and many others, citizens should be motivated to participate when an internal calculus indicates that their vote is likely to influence the election outcome. Subsequent work challenged the empirical validity of the Downsian construct on various dimensions, but most importantly for this study, such an understanding obviates any effect of partisan alignment/misalignment on participation: on average, voters should treat aligned and misaligned districts the same way in their turnout calculus and *not* vote. Yet, competing theories suggest differential effects depending on the partisan divide within a district. These may be grouped into three broad categories: *expressive voting*, *elite mobilization*, and *partisan threat*.

The *expressive voting hypothesis* is straightforward: the expressive benefit to casting a ballot for a winning candidate is likely greater than the expressive benefit to casting a ballot for a losing candidate. For instance, Ashworth, Geys, and Heyndels (2006) find higher turnout rates in Belgian municipalities with a single dominant party, which they attribute to expressive voting. More generally, some evidence suggests that voters prefer to be a part of the winning team (e.g., Niemi and Bartels 1984; Bartels 1988; Kenney and Rice 1994).⁴ A close relative to *expressive voting* is the *voter empowerment hypothesis*. Scholars often cite the empowerment hypothesis when examining the racial and ethnic composition of districts (Gay 2001; Barreto, Segura, and Woods 2004), where being in a district with more same-race citizens is associated with higher turnout (Hayes and McKee 2012; Fraga 2018). Applying this hypothesis to partisanship, citizens whose partisan leanings align

⁴Others, such as Mutz (1997), are skeptical that voters “have an inherent desire to be on the winning team.”

with the partisan composition of their district grow politically empowered and more likely to feel effectively represented. Indeed, citizens have greater trust in their representatives and feel more efficacious in places where their party wins and the election was not close (Brunell and Buchler 2009), and across democracies we see evidence that those consistently on the losing side of electoral contests develop negative attitudes toward government in general and their own political efficacy in particular (Anderson et al. 2005).

While the hypotheses discussed so far are voter-centric, the *elite mobilization hypothesis* focuses on the behavior of officeseekers and their agents. Contact by partisan elites is at the heart of mobilization-based understandings of turnout (Wolfinger and Rosenstone 1980; Rosenstone and Hansen 1993), and empirical evidence suggests campaigns have substantively large effects on turnout in recent elections, especially for targeted groups of voters (Enos and Fowler 2016). Party and candidate contact increases turnout in congressional elections as well (Wielhouwer and Lockerbie 1994; Caldeira, Aage, and Patterson 1990), and may explain higher turnout in close U.S. House elections (Cox and Munger 1989; Jackson 1996).⁵ Under this hypothesis, strongly partisan (safe) districts elect representatives who are likely to keep winning in the future and become incumbents. In turn, these incumbents draw on their experience and abundant resources to campaign effectively and to turn out their bases of support (Jacobson and Kernell 1983). Higher-quality incumbent candidates will expose their supporters to increased direct voter contact, media advertising, and outside endorsements, boosting co-partisan turnout. In a district where a subset of the same voters comprised a political minority whose party had essentially no chance of winning the election, these outreach efforts would exist to far less a degree or not at all. For the majority group in such districts, campaign targeting should also be facilitated (Oberholzer-Gee and Waldfogel 2005). Because the change in behavior in this theory occurs at the level of party officials, politicians, and campaign staffers — all keenly aware of the composition of the district — elite mobilization theory does not require citizens themselves to be informed about the composition of their districts.

The above hypotheses predict increases in turnout for changes in district composition that align with an individual citizen’s partisanship. A final theoretical explanation — “threat” — goes in

⁵Moskowitz and Schneer (2019) cast doubt on the existence of a causal relationship between competitiveness and turnout in recent U.S. House elections.

the opposite direction. If potential voters feel that they must compete harder for resources and representation when they are part of a minority in the district (due to “threat” from the opposing group), then they will be more likely to turn out after shifts in the district that make them a political minority.⁶ This theory has primarily been applied in the context of race, where scholars have found evidence for the threat hypothesis at both a macro (Key 1949) and micro level (Enos 2016). The same logic could be applied for party, and while attempts to establish empirical evidence for explicitly *partisan* threat have not been confirmatory so far (Barber and Imai 2014), the notion that potential voters respond to the increased presence of an out-group with higher levels of participation bears further investigation.

Empirical tests to adjudicate which of these processes dominates are fraught with issues of internal and external validity. For one, strategic redistricting (whereby district lines are purposefully drawn to include or exclude voters with certain characteristics) poses a fundamental problem for making firm inferences from cross-sectional studies that focus on the effects of redistricting. Hunt (2018), in an analysis of the impact of redistricting in Florida, finds suggestive evidence that partisan alignment (misalignment) increases (decreases) turnout, but the analytical framework for this paper focuses on a single year and a single state with a highly contentious redistricting process. Other observational studies may suffer from selection problems. For example, if individuals self-select into homogeneous communities with respect to ideology or party (Motyl et al. 2014), or if members of one party sort (Cho, Gimpel, and Hui 2013; Mummolo and Nall 2016), then partisan alignment may correlate with important observed and unobserved voter characteristics that are also related to turnout. Finally, disaggregating the effects of partisan alignment from the effects of district heterogeneity is also not trivial, as past research has suggested heterogeneity within a district (Kaniovski and Mueller 2006) or neighborhood (Gimpel, Dyck, and Shaw 2004) may have a negative effect on turnout; or alternatively, conflict aversion may depress participation in areas with partisan and ideological diversity (Mutz 2002). Under such a framework, electoral jurisdictions would play

⁶Alternatively, we may consider “threat” to be greatest when the risk of loss is greatest, as in highly competitive districts. In this case, turnout should be highest in the most competitive districts, and less high in both heavily-aligned and heavily misaligned districts. We thank an anonymous reviewer to alerting us to this possibility.

no precise role in affecting turnout, except insofar as they reflect the underlying heterogeneity of a community.

While research in a laboratory setting sidesteps many of these problems, it faces other potential stumbling blocks for drawing broader conclusions. On the basis of experimental research, there is reason to suspect that placing voters in a lopsided district aligned with their partisanship may increase their propensity to turn out compared with voters in a misaligned lopsided district. This research finds that individuals are more likely to report their intent to participate in elections and are more likely to participate in simulated elections when they think their preferred choice will win (de Bock 1976; Ansolabehere and Iyengar 1994; Agranov et al. 2018); these findings align best with the expressive voting hypothesis. However, the extent to which findings from a lab setting extend to voters making real-world decisions is unclear.

We attempt to balance the tradeoffs between internal and external validity by drawing on methodologies that leverage features of the redistricting process that approximate a natural experiment (Dunning 2012; Sekhon and Titiunik 2012). Importantly, we use a longitudinal approach that uses multiple snapshots of an individual’s participation before and after a change in district context, isolating individuals who remained at the same address throughout the period. This limits the possibility that self-selection or other features tied to the types of individuals who live in a particular partisan context drive our results. Similar approaches have been used to study the impact of racial/ethnic context on voter turnout (Fraga 2016; Keele and White 2018; Henderson, Sekhon, and Titiunik 2016) and the impact of competition on voter turnout (Moskowitz and Schner 2019). We extend these advances to the study of partisan context, providing increased internal and external validity by using national data to conduct empirical tests that probe the changes in voter behavior, awareness, and campaign contacts resulting from redistricting.

As noted above, the first set of explanations suggest that turnout should be higher for individuals voting in districts where their party dominates the district, *ceteris paribus*. The *partisan threat* hypothesis, on the other hand, implies that turnout should be higher in the opposite circumstance: partisans feel threatened when their majority status is eliminated, and they are mobilized to participate. As a first step, we seek to establish the *magnitude* and *direction* of the effect of district partisan composition on voter turnout, adjudicating both between these hypotheses and the pos-

sibility of no impact of district partisan alignment. We then investigate the potential *mechanisms* behind the effects we find, further refining our understanding of what motivates individuals to vote.

3 Data

To study the turnout behavior of individuals across the redistricting process, we use data from Catalist, LLC.⁷ Catalist is a data vendor whose primary product is a “unified national voter file,” which they compile from numerous state-level and county-level voter lists across the United States. Catalist standardizes the publicly available information from voter lists, such as registration, turnout history, age, residence, gender, and race, and they routinely update the database with new information such as turnout records and changes in registration status.⁸ Catalist further supplements the publicly available data from these voter lists with proprietary commercial data. Relevant to our purposes, Catalist tracks the individuals in their unified file across time, even as their registration may lapse or they move addresses.⁹ Most of Catalist’s clients are progressive organizations, political action committees, and Democratic candidates, but several academic studies use Catalist data (e.g., Ansolabehere and Hersh 2012; Fraga 2016; Hersh and Nall 2016). For this study, we utilize a sample of the Catalist database that contains 6.4 million individuals.¹⁰

We restrict the sample to individuals who did not move to a different address during the period under study. This condition allows us to accurately measure the district partisan composition for all individuals in our sample, and it ensures that we are only examining changes in partisan alignment induced by redistricting. This restriction excludes from our sample individuals who relocated and perhaps considered the partisan composition of potential locales (or characteristics correlated with partisan composition) in their relocation decision, and, thus, preserves the validity of our empirical strategy. Additionally, we further restrict the sample to individuals who are of voting age and non-

⁷See here for basic information on Catalist: <http://www.catalist.us/data/>.

⁸Some of these characteristics (e.g., race/ethnicity) are only available in certain states’ voter files.

⁹“[L]ongitudinal analysis of individual-level registration or turnout is a great challenge to researchers wishing to avoid contracting with a third-party organization, despite the public availability of the voter file” (Fraga 2016).

¹⁰This data set is a product intended for the use of academic researchers.

deceased during the entirety of the time period. Finally, our sample only includes individuals who are registered Democrats or Republicans in states with party registration.¹¹

In order to determine if an individual resides in a partisan aligned or misaligned district, we require a measure of the partisan composition of the congressional district. The primary measure of district partisanship we employ is the normalized presidential vote in the congressional district (Abramowitz, Alexander, and Gunning 2006). Normalized presidential vote is the difference in the Democratic percentage of the two-party vote in the congressional district versus the national average for a given election, and allows a researcher to avoid endogeneity issues related to using actual congressional election results for a district. In our study, we use an average of the normalized presidential vote from the 2004 and 2008 presidential elections to measure the partisan alignment of a district, as calculated by Cook Political Report to construct their Partisan Voting Index (PVI) (Moskowitz and Schneer 2019). In practical terms, this measure of district partisan alignment indicates, relative to the average congressional district, how many percentage points more Democratic or Republican a given congressional district is. 0 indicates a 50/50 district, D+10 or R+10 represents a 60/40 district that favors the Democratic candidate or Republican candidate, respectively. For purposes of classifying districts as partisan aligned or misaligned, we use the 55/45 threshold.¹² An individual registered as a Republican residing in a D+6 district would be coded as “misaligned,” while a registered Republican in an R+6 district would be coded as “aligned.”

We also present secondary evidence based on the analysis of survey data. We use data from the 2010-2014 Cooperative Congressional Election Study (CCES) Panel. The 2010-2014 CCES Panel allows us to examine the extent to which voters demonstrate awareness of the partisan composition of their congressional districts as well as whether voters in partisan aligned districts report additional campaign contact. The CCES Panel is a sample of 9,500 respondents who are surveyed during the

¹¹For the time period of our sample, there are 29 party registration states: AK, AZ, CA, CO, CT, DE, FL, IA, KS, KY, LA, MA, MD, ME, NC, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SD, UT, WV, and WY.

¹²Districts within the D+5 through R+5 interval are considered competitive. Districts D+6 and “greater” are considered favoring Democrats, and districts R+6 and “greater” are considered favoring Republicans.

election season in 2010, 2012, and 2014. This information allows us to examine the mechanisms behind the turnout effects extracted from the voter file.

4 Research Design

Using a panel constructed from the voter files, we evaluate the evidence on whether voters situated in districts with a partisan composition aligned with their partisanship turn out at higher rates than voters in misaligned districts. We conceptualize the “treatment” as occurring when voters reside in a district in which the partisan composition aligns with their individual partisanship. Formally, when an individual i resides in a district matching her party registration in year t and state s , then the binary indicator variable $\text{Partisan Alignment}_{ist} = 1$; when this condition is not met, it takes the value 0. Redistricting provides the quasi-experimental variation in treatment. For example, by tracking individual voting behavior in 2008, which is pre-redistricting, and in 2012, which is post-redistricting, we observe how voters respond when placed into new districts through the redistricting process. Some of these voters experience a change in the partisan composition of their district and, thus, their individual partisan alignment.¹³ Importantly, we can also restrict the sample so that we only make comparisons between two voters of the same party who reside in the same congressional district in the first period.¹⁴ This approach ensures that treatment and control units reside in roughly the same geographic area with the same pre-treatment electoral experience (with respect to congressional elections); their experience differs only insofar as the redistricting process shuffles one into an aligned district and one into a misaligned district.

Perhaps the greatest threat to internal validity when relying on redistricting to provide variation in partisan alignment is the possibility of strategic redistricting. Specifically, one might worry that state legislatures with partisan interests systematically move partisans into or out of a district based

¹³As noted in the section above, the sample includes only stationary individuals—i.e., individuals who live at the same residential address throughout the entire time period under examination. We do so to ensure that we are examining changes in partisan alignment due to redistricting and not changes in partisan alignment due to individuals moving to a new area with a different partisan composition.

¹⁴Building on the framework provided in Sekhon and Titiunik (2012).

on characteristics including propensity to vote. For example, a Democratic legislature might go out of their way to move Republican voters who reside in a competitive district and who have a high propensity to turn out into a strong majority Republican district, while leaving Republican voters with a lower turnout propensity in the original, competitive district. If this were the case, then we might lack a valid comparison group for the individuals placed into the strong majority Republican district. The primary empirical approach that we take is designed to address these concerns. We use “block” fixed effects to ensure that comparisons occur between voters who start in the same district, share a party affiliation, have identical voting histories, and have similar demographic profiles with respect to age, sex, and race. These are the characteristics observable to those drawing district boundaries, so comparing within groups that share these characteristics guards against concerns about strategic redistricting.

To find the effect of competitiveness on turnout using block fixed effects, we estimate the turnout decision in a post-redistricting year as follows:

$$E(\text{Turnout}_{ibst}) = \alpha + \gamma_b + \delta \cdot \text{Partisan Alignment}_{ibst} \quad (1)$$

where α is a constant term, γ_b is a block fixed effect, and $\text{Partisan Alignment}_{ist}$ is a binary indicator defined as above. We determine blocks by matching individuals exactly on the following observable characteristics: congressional district pre-redistricting, party registration, Black, Hispanic, Asian, female, age group (18-24, 25-34, 35-44, 45-54, 55-64, and over 65), turnout in 2008, and turnout in 2010.

We complement this framework with a difference-in-differences approach, in which we take advantage of the over time and across individual variation in the panel data. Consider a reduced form empirical model of the turnout decision:

$$E(\text{Turnout}_{ist}) = \alpha + \lambda_{st} + \delta \cdot \text{Partisan Alignment}_{ist} + \text{Vote Propensity}'_i \cdot \psi \quad (2)$$

where α is a constant term, λ_{st} is a state-year fixed effect, $\text{Partisan Alignment}_{ist}$ is a binary indicator defined as above, and $\text{Vote Propensity}'_i$ is an individual’s unobserved underlying tendency to vote.¹⁵

¹⁵The state-year fixed effects control for state-specific political conditions in a given election year such as gubernatorial and senatorial elections, changes to election laws, etc. These are redundant when using block fixed effects.

By imposing the assumption that unobserved propensity to vote remains constant over time, then we can let $\gamma_i = \alpha + \text{Vote Propensity}'_i \cdot \psi$ and estimate the model:

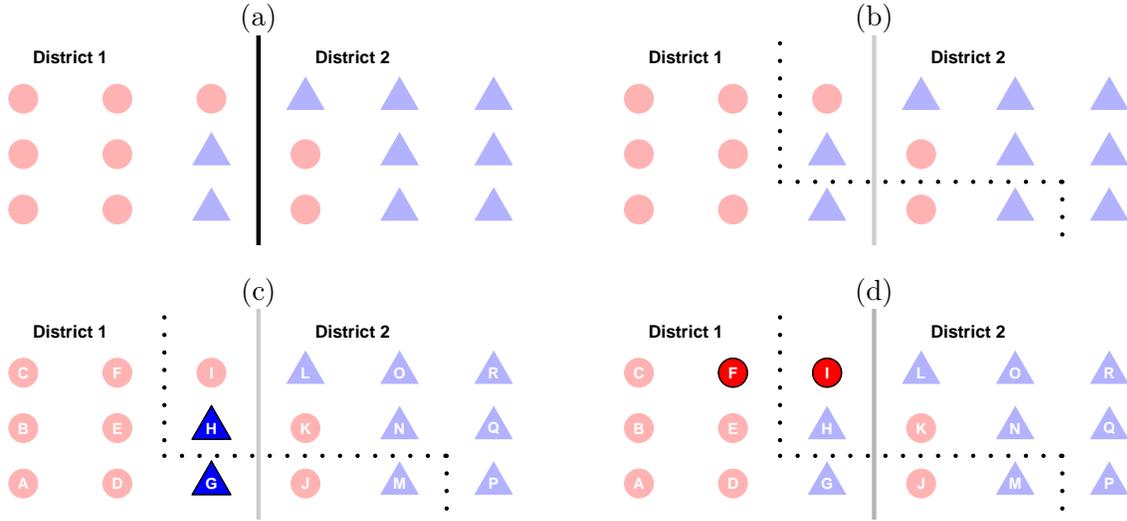
$$E(\text{Turnout}_{ist}) = \gamma_i + \lambda_{st} + \delta \cdot \text{Partisan Alignment}_{ist} \quad (3)$$

where we identify the effect of residing in a partisan aligned district based upon variation in partisan alignment over time due to redistricting. By taking this approach, we deal explicitly with the critique that the tendency to reside in a partisan aligned district might be correlated with observable and unobservable fixed individual characteristics that also affect turnout. For example, a district comprised primarily of a densely populated urban area with a high concentration of low-income voters might tend towards including many citizens whose party registration matches the partisan composition of their district (possibly boosting turnout) while also having other observable (e.g., socioeconomic status) and unobservable characteristics (e.g., lack of time/political resources) known to lower turnout. If turnout choices systematically vary with these characteristics, then estimates of the effect of individual partisan alignment on turnout would be biased if we did not condition on these variables. Since we cannot possibly measure all potential confounders, we instead employ individual and state-year fixed effects to difference out all time-invariant covariates (both measured and unmeasured) that influence turnout.

We can apply these approaches to make several different types of comparisons. Figure 1 provides a simplified graphical presentation. Figure 1a displays two districts with District 1 comprised of 7/9 Republicans and 2/9 Democrats, and District 2 comprised of 2/9 Republicans and 7/9 Democrats in the pre-redistricting period. For the sake of simplicity, suppose that Republicans (Democrats) in District 1 match on the observable characteristics that comprise a block with the other Republicans (Democrats) in the district. Part b of the figure illustrates the district composition after redistricting. In this case, the partisan composition of each district remains the same pre- and post-redistricting, but several individual voters switch districts.

First consider the comparison between citizens who experience partisan misalignment with citizens who experience partisan alignment. In this case, we identify individuals who start out (pre-redistricting) in the same, uncompetitive district where the majority of residents have an opposing partisan affiliation. This occurs in Figure 1c, which shows that both voters *G* and *H* begin in the pre-redistricting period as misaligned Democrats in a majority Republican district. However, after

Figure 1 – Graphical Representation of the Research Design



redistricting occurs, G remains in a misaligned district but H is located in the new District 2, which is aligned with H 's partisanship. Thus, in the first period both voters have a treatment status (i.e., partisan alignment) equal to zero; in the second period, G 's treatment status remains zero but H , who now resides in a partisan aligned district, has a treatment status equal to one. To estimate the effect of moving from a partisan misaligned district to a partisan aligned district, we can calculate the difference in turnout in the second period, i.e., $\delta_{m,a}^{BFE} = H_2 - G_2$, in which the subscripts on G and H refer to their district in the pre- versus post-redistricting periods and $\delta_{m,a}^{BFE}$ refers to the estimate from the block fixed effects approach of the effect of moving from a partisan misaligned to a partisan aligned district. Alternatively, *if we did not form blocks* based on observable characteristics, we could also calculate a difference-in-differences estimate of $\delta_{m,a}^{DID} = (H_2 - H_1) - (G_2 - G_1)$.¹⁶

The two key features of these approaches are that (1) they account for time-invariant covariates that might be correlated with both partisan alignment and with turnout; and, (2) they make it possible to compare only individuals who begin in the same district and belong to the same party and, through redistricting alone, experience a changed electoral context.

We can also estimate the effects of moving from a partisan aligned district to a partisan misaligned district. Figure 1d illustrates a similar exercise for voters F and I , Republicans who both

¹⁶Further, note the link between these two estimates: because in the block fixed effects approach, blocks are formed based upon previous turnout history, we know that by definition $H_1 - G_1 = 0$, which implies that when looking within any one block $\delta^{BFE} = \delta^{DID}$.

begin in partisan aligned districts. The block fixed effects estimate is $\delta_{a,m}^{BFE} = F_2 - I_2$ and the difference-in-differences estimate of partisan alignment is provided by $\delta_{a,m}^{DID} = (F_2 - F_1) - (I_2 - I_1)$. Finally, in instances with competitive districts (i.e., not a clear majority of Republican or Democratic voters in a district), then we may also estimate the effects of moving from a competitive district to a partisan aligned district ($\delta_{c,a}$) or the effects of moving from a competitive district to a partisan misaligned district ($\delta_{c,m}$) using a similar approach.

5 Main Results

Our expectation is that partisan alignment matters and, further, that it boosts rather than depresses turnout. That is, we expect that one of the elite mobilization or expressive voting hypotheses (which predict positive effects), rather than the partisan threat hypothesis (negative effects), prevails.

More formally, we are interested in testing the following hypothesis:

$$H_0 : \delta = 0 \tag{H1a}$$

$$H_A : \delta \neq 0$$

where δ is either $\delta_{a,m}$ or $\delta_{m,a}$ and we perform a test with the null being that the partisan alignment/misalignment treatment has no effect. Additional evidence of a positive effect of increasing alignment can occur when examining the transition from competitive to aligned or misaligned districts. If moving from a competitive to a partisan aligned district ($\delta_{c,a}$) has a greater effect than moving from a competitive district to a partisan misaligned district ($\delta_{c,m}$), then this pattern helps confirm our expectations. We therefore test:

$$H_0 : \delta_{c,a} = \delta_{c,m} \tag{H1b}$$

$$H_A : \delta_{c,a} \neq \delta_{c,m}$$

A second order question is whether the effects of partisan alignment/misalignment operate symmetrically; that is, does moving from a partisan aligned to misaligned district have the same magnitude effect as moving from a partisan misaligned to aligned district? Does a move from a competitive to a partisan aligned district have roughly equal magnitude and opposite sign to a move from a

competitive to a partisan misaligned district? We test for symmetry in terms of the magnitude of effects:

$$H_0^a : \delta_{m,a} = \delta_{a,m} \text{ and } H_0^b : \delta_{c,a} = -\delta_{c,m} \quad (\text{H2})$$

$$H_A^a : \delta_{m,a} \neq \delta_{a,m} \text{ and } H_A^b : \delta_{c,a} \neq -\delta_{c,m}$$

To test these hypotheses, we devise four different sets of comparisons. In the first comparison, we examine individuals who start in a partisan misaligned district in the first period; in the second period, some remain in a misaligned district and some, through the redistricting process, are placed into a partisan aligned district. In the second comparison, we examine the converse of this scenario. In the first period, all voters reside in a partisan aligned district; however, in the second period, some voters continue in the aligned district, while others are placed in a misaligned district. For the third and fourth scenarios, we instead examine individuals who are in a competitive district in the first period (i.e., one where each party’s vote share falls in the ± 5 range). We then study what happens when, in the second period, some voters remain in a competitive district and some are placed into districts with a new partisan composition (in the third scenario a partisan match and in the fourth a partisan mismatch).¹⁷

Table 1 reports the results from each of these approaches for our preferred model specification, which uses block fixed effects to estimate effects for pooled post-redistricting election years (2012, 2014 and 2016). Panel A includes all districts, whether or not any of the residents of a particular district are shifted into a different partisan context due to redistricting — in effect, including individuals in “unredistricted” districts as controls. Panel B instead restricts the sample to pre-redistricting districts where at least some voters end up in a different partisan context post-redistricting; individuals redistricted to a new partisan context are matched with individuals from the same initial district who do not experience a change in partisan context. Table 1 indicates that across all specifications, estimated effects are in the expected direction. Columns 1 and 2 provide the most straight-forward estimates; for these columns, across the years we examine, we observe effect sizes that range from slightly more than two-fifths of a percentage point to a 1.7 percentage

¹⁷For a sense of the extent of changes in partisan composition experienced by voters in the sample, see the histograms in Figures A.1– A.3.

point increase in turnout rates attributable to partisan alignment. A 99% confidence interval does not overlap with zero for our estimates of the effect of moving from a misaligned to an aligned district; however, we cannot say the same for the estimates of moving from an aligned to a misaligned district. Overall, the direction, magnitude, and significance of these point estimates provide initial evidence supporting Hypothesis H1a.

We also can examine Hypothesis H1b, which indicates differences in the effects for individuals moving from competitive to aligned districts *versus* those moving from competitive to misaligned districts. If the effect of the former is larger and we can reject the null of no difference in effects, then this provides additional evidence in support of either the expressive voting or elite mobilization theories. Running this hypothesis test, we can indeed reject the null of no effect for both Panels A and B (at $p \leq 0.05$ and $p \leq 0.01$, respectively). For these specifications, moving from a competitive to an aligned district has a meaningfully different effect on turnout than does moving from a competitive to a misaligned district and, specifically, $\delta_{c,a} \geq \delta_{c,m}$. Overall, then, in each panel, two of the three hypothesis tests conducted allow us to reject the null; these results suggest that partisan (mis)alignment has an effect on turnout and that increasing alignment leads to higher turnout while decreasing alignment leads to lower turnout.

Table 1 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, All Years with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Panel A: All Districts				
Partisan Aligned	0.0172 (0.00545)	0.00409 (0.00458)	0.00695 (0.00789)	
Partisan Misaligned				-0.0148 (0.00573)
Observations	623820	1014561	536796	522165
R^2	0.406	0.386	0.403	0.404
Panel B: Redistricted				
Partisan Aligned	0.0169 (0.00380)	0.00600 (0.00404)	0.00994 (0.00597)	
Partisan Misaligned				-0.0190 (0.00635)
Observations	443256	769119	496473	481878
R^2	0.430	0.407	0.407	0.415
State-Year FEs	Yes	Yes	Yes	Yes
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses. The sample is comprised of contested general elections by a D and R candidate. Panel B matches observations in treatment group to controls from same first period CD. All elections in Louisiana are excluded from the sample due to their unusual rules.

To test the symmetry hypothesis (H2), we have two pieces of evidence to examine. First, we can compare the estimates from models 1 and 2 (i.e., examining $\delta_{m,a}$ versus $\delta_{a,m}$). Second, we can compare the magnitudes of the estimates from models 3 and 4 (i.e., examining $\delta_{c,a}$ versus $-\delta_{c,m}$). The results here are more mixed. Comparing the effects from models 1 and 2, we can reject the null of no difference in the estimates for Panel A and for Panel B at $\alpha = 0.10$ but not at $\alpha = 0.05$. Yet when comparing the magnitudes of the estimates from models 3 and 4, we cannot reject the null hypotheses in either panel. Thus, we have only limited evidence that moving from a misaligned to an aligned district has a more pronounced effect than moving in the opposite direction. That said, even though the results are not significant when comparing models 3 and 4, we observe effects of a slightly larger magnitude when moving from a competitive to a misaligned district, which cuts against the notion that moving to an aligned district is uniquely important for turnout. Based on this mixed evidence, we think it is safest to conclude that the magnitude of the effects of alignment versus misalignment are not tremendously different from one another.

In addition to the results in Table 1, we also estimated effects when separating midterm and presidential election years, and using the difference-in-differences approach instead of block fixed effects. We present the raw results of these analyses in the Online Appendix and summarize the effects with regard to our hypotheses in Table 2. The first column in the table indicates whether the tests were performed using turnout data from all election years, midterm election years only (2010 and 2014), or presidential election years only (2008 and 2012 as well as another set of results using 2008 and 2016). The second column of Table 2 indicates the modeling approach: difference in differences (DID) versus block fixed-effects (BFE). The “Right Direction” columns refer to whether or not the sign of the effect is in the hypothesized direction for a given hypothesis. The $p \leq 0.05$ columns refer to whether or not the null hypothesis can be rejected at standard levels of statistical significance.

Across each combination of year and specification, we counted the number of estimates that support Hypotheses 1a and 1b (in the columns labelled Hyp. 1) and the number of estimates that support Hypothesis 2. When we evaluate Hypothesis 1, which states that moving to (away from) partisan aligned districts increases (decreases) turnout, we find that the effects operate in a direction that overall supports either the expressive voting or elite mobilization hypotheses more than three quarters of the time. When formally testing each hypothesis for a given year/specification

Table 2 – Summary of Regressions of Turnout on Partisan Alignment

Year	Specification	Hypothesis 1 Right		Hypothesis 2 Right	
		Direction	$p \leq 0.05$	Direction	$p \leq 0.05$
All Years	BFE	6/6	4/6	4/4	1/4
All Years	DID	6/6	0/6	3/4	0/4
Midterm	BFE	6/6	2/6	2/4	0/4
Midterm	DID	0/6	0/6	0/4	0/4
Presidential	BFE	9/12	7/12	5/8	1/8
Presidential	DID	12/12	5/12	7/8	0/8

combination, we can reject the null at $p \leq 0.05$ slightly less than half of the time. Looking more closely across years and specifications in Table 2, several patterns emerge worth noting. First, we observe stronger effects of partisan alignment in presidential election years, with notably more mixed results in midterm election years. Second, the results are more likely to allow rejection of the null hypothesis of no effect under the block fixed effects approach as compared to the difference-in-differences approach.¹⁸

What might explain the larger and more robust effects observed in the presidential election years? One notable explanation is that a “learning” effect occurs, where the effects of switching to a new district provide more of mobilizing/demobilizing “shock” in the first election after redistricting than in later years. For example, after a redistricting period, candidates might work harder to reach out to new partisans in their district thereby boosting turnout, efforts that are not as strong

¹⁸When examining midterm years only, we also discover one specification that might support a version of the partisan threat hypothesis. In Table 2, we see that the difference-in-differences approach, when applied to 2014 turnout only, suggests a decrease in turnout when voters are assigned to misaligned districts. To determine whether this is a mere statistical artifact or if something more meaningful is at work, ideally we would have data from an additional midterm election year. Given that this data is not yet available to us, we cannot say for sure whether the negative effects we observe in this combination of year and specification fit with a larger pattern or not. However, given that we do not observe similar results for the block fixed effects specification for these same years, we do not think we have robust evidence in favor of the partisan threat hypothesis.

in subsequent contests. Such a phenomenon would explain larger effects in 2012 than in 2014. However, the results from 2016 do not bear out this pattern. In fact, rather than observing effects in line with 2014 we instead observe effects for 2016 more similar in direction and magnitude to 2012.¹⁹

Instead, when the House contest coincides with the presidential election campaign cycle we observe more substantial effects. These effects can most likely be attributed to some combination of two explanations. First, complementarities in mobilizing efforts between presidential and House campaigns will lead to larger, positive effects in presidential election years. Second, heightened attention through media coverage and the perception of higher stakes in presidential election years will also boost turnout effects.²⁰

We also test whether the observed effects operate symmetrically using these alternative years and specifications. As with our main specification presented in Table 1, we do not find convincing evidence that the effects of alignment differ in magnitude from misalignment. In the Table 2 column labelled “Right Direction” under Hypothesis 2, we count the share of instances in which the effects of alignment are positive and the effects of misalignment are negative. This occurs the majority of the time, with the notable exception of the midterm difference-in-differences approach mentioned above. When we test Hypothesis H2 formally, which compares the magnitudes of the positive versus negative effects, we cannot reject the null in the vast majority of cases. This finding suggests that, for these additional specifications and subsets of the data, we do not have much evidence to suggest that partisan alignment or misalignment operate very differently from one another (i.e., alignment appears to be as mobilizing as misalignment is demobilizing).

¹⁹Again, the raw results used to build Table 2 may be found in the Online Appendix.

²⁰We sought to distinguish between these two options by examining whether the effect of alignment was larger in battleground versus non-battleground states during presidential elections. We determined battleground status by referring to the classifications made in Enos and Fowler (2016). However, results here were inconclusive, as we found a slight *positive* effect for battleground states in 2012 and a slight *negative* effect in 2016. It is possible that both of these mechanisms are at work without one necessarily overwhelming the other, but future work should examine the nature of this heterogeneity more fully.

The totality of the evidence presented thus far suggests partisan alignment/misalignment influences turnout. Furthermore, most estimates have values consistent with positive (negative) effects of partisan alignment (misalignment) on turnout. Though the results are less clear for some specifications in midterm election years, in the vast majority of our analyses we see results consistent with one of the two hypotheses (elite mobilization or expressive voting) that predicts a boost in turnout resulting from partisan alignment.

While the empirical approach here explicitly addresses most threats to inference surrounding redistricting, some challenges remain. Chief among these is the idea that redistricting represents more than just a change in partisan composition but rather a bundle of different treatments. For example, redistricting may change the partisan composition of a district along with the racial composition. If racial composition changes in tandem with partisan composition, then the former might drive changes in behavior rather than the latter — and we might wrongly attribute changes in turnout to changes in partisan composition when in fact racial composition was the more salient factor. We discuss this issue and related ones in the Appendix, and we also include several additional robustness checks that help account for these concerns. Specifically, in one specification, we restrict the sample to states without a majority-minority district. In another, we include a set of time-varying district level characteristics such as racial composition and income to control for elements that may be changing other than district partisanship. In each of these tests, we see confirmatory evidence for the relationships between partisan composition and turnout that we outline in the results above.

6 Secondary Evidence: Voter Awareness & Campaign Contact

Section 5 provides evidence that assignment to a partisan aligned district leads to a modest increase in turnout as compared to residing in a misaligned district. In this section, we utilize survey data to examine the mechanisms producing our finding and, to the extent possible, adjudicate between the *expressive voting* and *elite mobilization* hypotheses laid out in Section 2. Specifically, survey data allows us to explore whether patterns of voter awareness and self-reported campaign contact coincide with the increases in turnout that we have observed. Are voters aware of their district's

partisan composition? Do voters experience more campaign contact when they are situated in a partisan aligned district relative to a misaligned district?

We begin by using data from the 2010-2014 Cooperative Congressional Election Study (CCES) Panel to investigate if citizens are aware of the partisan composition of their congressional districts. The 2010-2014 CCES Panel tracks 9,500 respondents to the 2010 CCES through the 2014 election.²¹ In 2012 and 2014, CCES Panel respondents were asked: “How would you describe the new Congressional District you live in?” They could respond: “Most people are Democratic,” “Most people are Republican,” or “My district is a mix with no single dominant party.”²² We create a perception of district partisanship variable that takes a value of -1 if the respondent states that the district is mostly Republican, 0 if the respondent states that the district is mixed, and 1 if the respondent says the district is mostly Democratic.

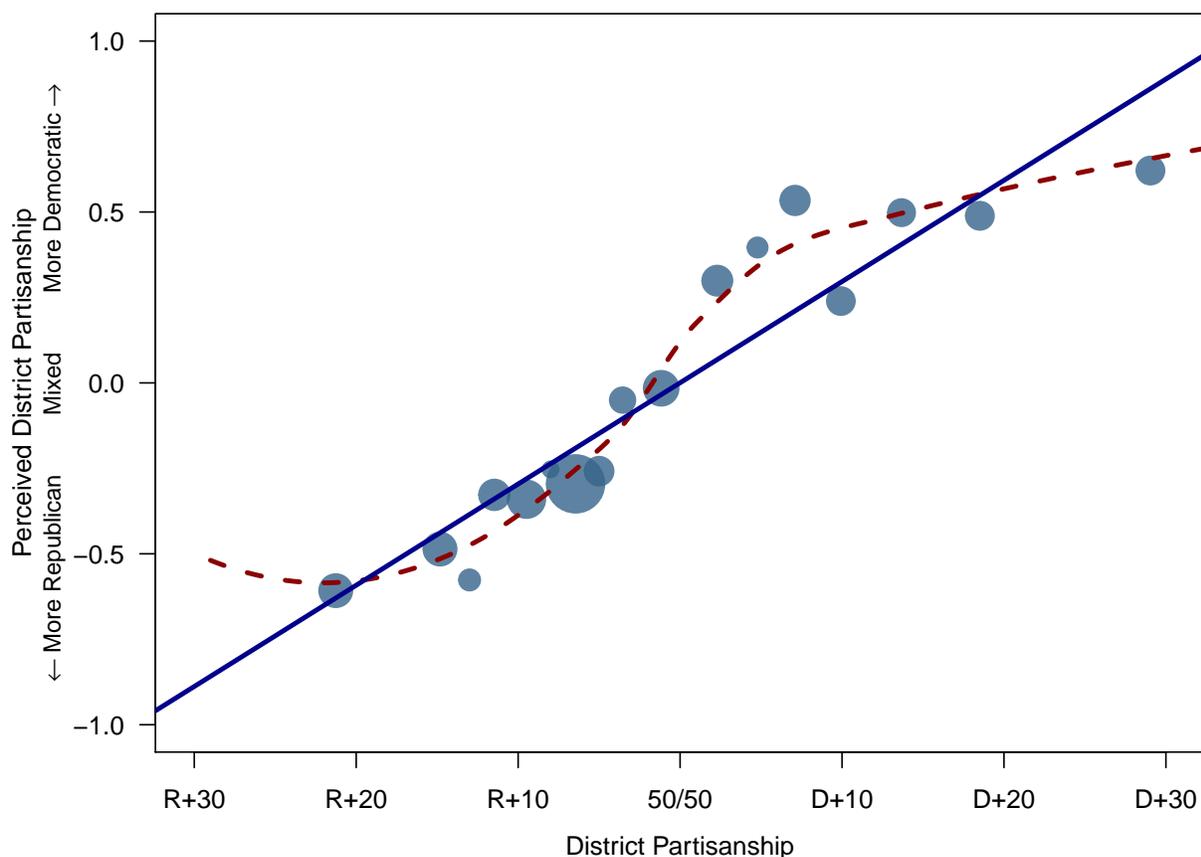
Figure 2 plots respondents’ perceptions of their district partisanship in 2012 against a measure of the actual district partisan alignment (based on normalized presidential vote) in 2012. We see that voters are aware of their district’s partisanship to an impressive degree: respondents situated in Democratic districts tend to indicate that they are in mostly Democratic districts, those in competitive districts largely indicate that there is a mix, and respondents in heavily-Republican districts correctly indicate that most people in their district are Republicans. On its face, therefore, respondents seem able to infer when they are in a circumstance in which their party is likely to win, versus congressional districts in which their party is likely to lose; a key requirement for expressive voting to take place.

The analysis in Figure 2 indicates that voters correctly identify the partisan composition of their congressional district. However, such a relationship is not definitive evidence that voters are able to perceive the *changes* in district composition that produce the turnout effects we find above. Perhaps voters (correctly) guess the the partisan composition of their immediate surroundings (due to sociodemographic features of their neighborhood, for instance), and use this information as a

²¹The 2010 CCES had 55,400 respondents.

²²As in our analyses using voter file data, we restrict to respondents who did not move throughout the period of the panel. This question is only asked to panel respondents (i.e., it is not included in the CCES Common Content for 2012 or 2014).

Figure 2 – Voters’ Perceptions of District Partisanship, 2012



This figure demonstrates that voters are largely aware of their congressional districts’ partisan composition. This binned scatterplot is based on tabulations of 2012 data from the 2010-2014 CCES Panel. Each point in the figure corresponds to a local mean and is proportional in size to the number of observations within the locale. The dark blue, solid line is based on a linear regression and the red, dashed line is based on a locally weighted regression.

proxy for the partisan composition of their congressional districts. Based on our research design in Section 5, variation in congressional district partisanship is induced by changes to district boundaries. If our turnout effects are attributable to expressive voting, therefore, voters must also be aware of changes to the partisan composition of their district that result from redistricting.

In Table 3, we conduct a more stringent test of voters’ ability to judge their congressional district’s partisan composition. While model (1) shows the results for the linear regression in Figure 2, models (2) and (3) account for the partisanship of each respondent’s *pre*-redistricting congressional district. In model (2), we include fixed effects for respondents’ “old” congressional district. By conditioning on the pre-redistricting congressional district, we can isolate voters’ perceptions of their current district partisanship from the partisanship of their previous district. In model (3), we take

a different approach with the same objective in mind: we condition on the partisan composition of the pre-redistricting congressional district (“lagged PVI”). While the magnitude of the estimated coefficients from models (2) and (3) is somewhat smaller than the naive estimate from model (1), models (2) and (3) still indicate a statistically (and substantively) significant ability of respondents to perceive their congressional district’s partisan composition independent of the partisanship of their previous district.²³ In sum, citizens demonstrate awareness of the partisan composition of their congressional district, even when they are in a “new” partisan circumstance in the first election after redistricting.²⁴

Table 3 – Perceived Partisan Composition of District | 2012

	(1)	(2)	(3)
PVI	0.0296 (0.0014)	0.0213 (0.0023)	0.0205 (0.0029)
Lagged PVI			0.0102 (0.0029)
Constant	0.0013 (0.0193)	-0.0087 (0.0075)	0.0019 (0.0192)
Observations	7611	7611	7611
R^2	0.257	0.444	0.264
Old District FEs	No	Yes	No

Standard errors, clustered by congressional district, are in parentheses.

While awareness of the partisan composition of the congressional district is a necessary precondition for individuals to engage in expressive voting, there may be other observable implications of this mechanism. For instance, individuals who engage in expressive voting should also have greater awareness of their party’s candidate, that is, their “team leader.” In all three years of the 2010-2014 CCES panel, respondents are asked to rate the Democratic and Republican House candidates in their district in terms of competence and personal integrity. Respondents are also asked to place

²³Moving from a 60/40 pro-Republican district (R+10) to a 60/40 pro-Democratic district (D+10) is associated with about a 0.4 increase in perceived district partisanship.

²⁴While we focus on perceived district partisanship in 2012, results are extremely similar for perceptions of district partisanship in 2014. See Figure A.4 and Table A.17 in the Online Appendix.

these candidates on an ideological scale.²⁵ For all three of these questions, respondents can choose the option: “Not sure.” We investigate whether individuals situated in partisan aligned districts are better able to make an evaluation of their party’s candidate (i.e., less likely to respond “not sure”).²⁶ It is worth noting that, for a given characteristic, candidate, and year, approximately 35-40 percent of all individuals are unable to make an evaluation. Because this question is asked both pre- and post-redistricting, we can examine whether the same individual is more or less likely to evaluate her party’s candidate under varying conditions of partisan (mis)alignment.²⁷ By including individual and state-year fixed effects, we implement a research design similar to our study of turnout reported in Section 5 with many of the same benefits (e.g., protecting against time-invariant confounding).²⁸

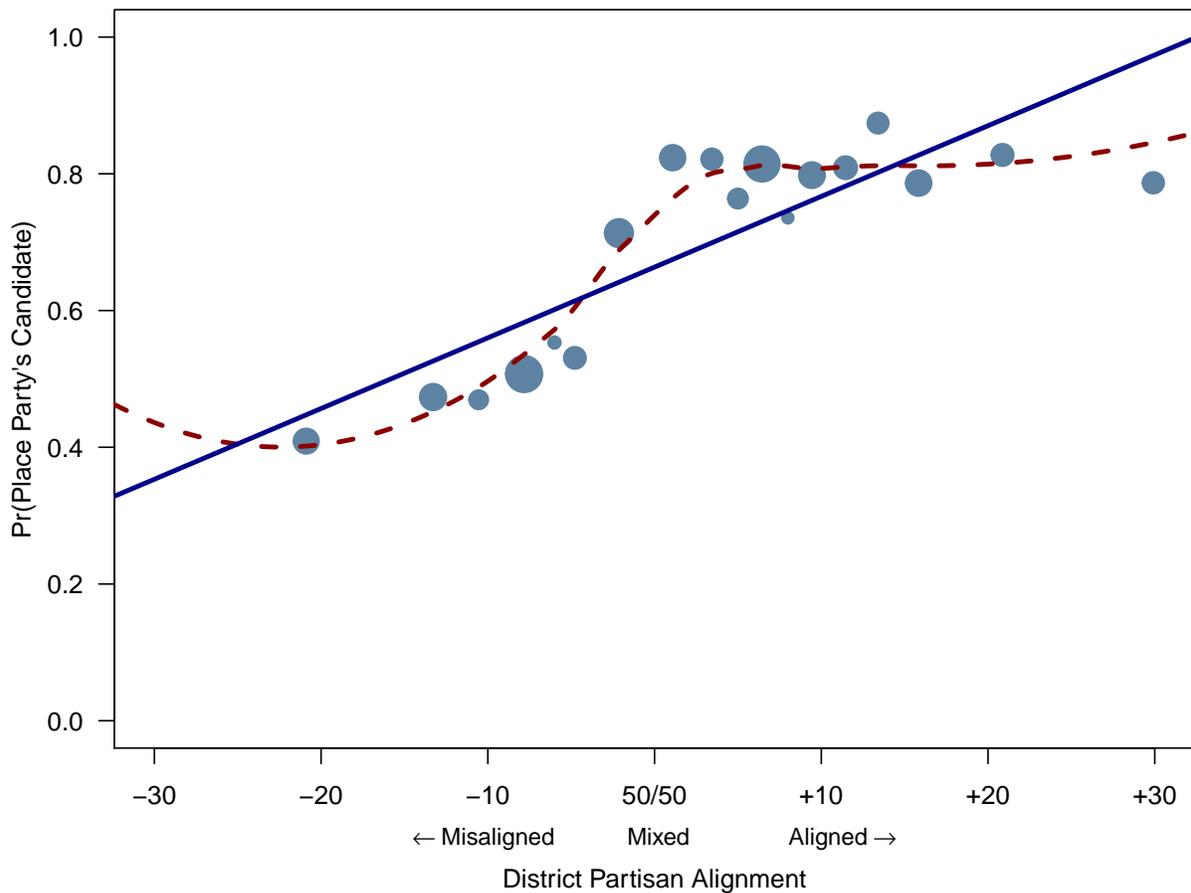
²⁵The text of the competence and personal integrity question is as follows: “Please rate the following characteristics of the [Democratic/Republican] candidate [INSERT NAME] for the U.S. House in your district...[Competence / Personal integrity].” Respondents then rate how strong or weak the candidate is on a seven-point scale, or they respond: “Not sure.” For placing the candidate on an ideological scale, respondents are asked: “How would you rate each of the following individuals and groups...[INSERT NAME].” Respondents then rate the candidate on a seven-point scale from very liberal to very conservative, or they respond: “Not sure.”

²⁶In other words, if the respondent makes an evaluation of her party’s candidate for a given characteristic in a given year, $Evaluation_{ict}$ is coded = 1 (where i is the index for respondents in the CCES Panel, c is the set of characteristics to be evaluated: {competence, personal integrity, ideology}, and t is the set of years in the CCES Panel: {2010, 2012, 2014}). If the respondent cannot make an evaluation of her party’s candidate and instead responds not sure, $Evaluation_{ict}$ is coded = 0.

²⁷The partisan-aligned district variable is coded = 1 if the respondent is in a district aligned with her partisan identity (D+6/R+6 or greater) and coded = 0 otherwise; the competitive district variable is coded = 1 if the respondent is in a district where the district partisanship is within the interval of R+5 through D+5 and coded = 0 otherwise; and the set of misaligned voters is the reference group for the regression. We define respondents’ partisan identities based on their 2010 responses in the CCES Panel. Partisan leaners as well as weak and strong partisans are all included. Non-leaning independents are not included in these analyses.

²⁸These results are based on candidate evaluations made in 2010 and 2014. We opt to use 2010 and 2014 because the 2010-2014 CCES Panel does not have candidate evaluations for 2008. As in the

Figure 3 – Ability to Place Their Party’s Candidate on an Ideological Scale, 2012



This figure demonstrates that voters in congressional districts aligned with their partisanship are better able to place their party’s candidate on an ideological scale. This binned scatterplot is based on tabulations of 2012 data from the 2010-2014 CCES Panel. Each point in the figure corresponds to a local mean and is proportional in size to the number of observations (accounting for sampling weights) within the locale. The dark blue, solid line is based on a linear regression and the red, dashed line is based on a locally weighted regression.

We begin by reporting the cross-sectional relationship between the degree of partisan alignment and the probability respondents can place their party’s candidate on an ideological scale.²⁹ Relative to voters residing in misaligned districts, voters in partisan aligned districts have a greater ability to place their party’s candidate on an ideological scale. In Table 4, we report the more rigorous

previous section, we exclude respondents who experience uncontested races, races between two Democrats or two Republicans, and respondents living in Louisiana due to their unique electoral rules.

²⁹While we show the relationship between partisan alignment and ideology for 2012, the patterns are generally similar for other characteristics and other years.

Table 4 – Ability to Evaluate Their Party’s Candidate

	(1)	(2)	(3)
	Competence	Integrity	Ideology
Partisan-aligned district	0.1728 (0.0551)	0.1121 (0.0524)	0.1424 (0.0634)
Competitive district	0.0705 (0.0510)	0.0084 (0.0569)	0.0729 (0.0584)
Observations	10734	10782	10650
R^2	0.069	0.066	0.070
Individual FEs	Yes	Yes	Yes
State-Year FEs	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting CD level, are in parentheses. The dependent variable is coded =1 if the respondent is able to make evaluation about their party’s candidate.

test using our panel research design for ideological placement, competence, and integrity. Here the omitted category is a misaligned district. We see that, relative to being situated in a misaligned district, individuals placed in a partisan aligned district are 17 percentage points more likely to make a competence evaluation, 11 percentage points more likely to make a personal integrity evaluation, and 14 percentage points more likely to make an ideological placement. Voters situated in an aligned district have greater awareness of their party’s candidate, again supporting the expressive voting hypothesis.

While voters’ greater ability to “say something” about their party’s candidate (i.e., make an evaluation) accords with expressive voting, it could also be consistent with elite mobilization. Perhaps voters have greater knowledge about their party’s candidate directly as a result of the campaign efforts of that candidate. Importantly, the results in Table 4 do not imply that voters’ awareness of their party’s candidate is higher in competitive districts, which are the places where incentives to raise candidate salience are strongest. Nevertheless, we search for any evidence in support of the elite mobilization hypothesis.

Elite mobilization-based explanations of partisanship tend to focus on voter mobilization and contact. Conveniently, CCES panel respondents report if campaigns contacted them during the election and, if so, the methods through which they received contact.³⁰ Focusing in particular on

³⁰Respondents are asked: “Did a candidate or political campaign organization contact you during the [INSERT YEAR] election?” If respondents answer “yes,” they are then asked: “How did these

this channel of direct voter outreach from campaigns to voters makes sense given that Enos and Fowler (2016) find evidence of very large turnout effects from this mode of campaigning. On the other hand, an abundance of studies suggest that television advertising has minimal or no effect on turnout (Ashworth and Clinton 2007; Huber and Arceneaux 2007; Krasno and Green 2008; Vavreck 2007). As a result, if elite mobilization is responsible for the turnout effects reported in the previous section, it likely manifests via direct voter outreach. Again, we first show the cross-sectional relationship between the degree of partisan alignment and the probability respondents report any contact from a campaign in 2012 in Figure 4.³¹ As is clear from both the locally weighted regression and the very flat linear regression, individuals residing in aligned districts do not appear to report greater campaign contact; contact increases slightly in more competitive districts but is relatively lower in both aligned and misaligned districts.³²

Results from our more rigorous panel research design for the “any” campaign contact outcome as well as the individual methods of contact outcomes are reported in Table 5. For nearly all of the outcomes, being situated in an aligned district relative to a misaligned district seems to have little or no effect on reported campaign contact. With one exception, the estimated coefficients have a substantively small magnitude and are not significant from zero. We do find that being situated in either a partisan aligned district or a competitive district increases the probability of reporting campaign contact via email or text message by about 8 percentage points relative to misaligned districts. While 8 percentage points might at first glance seem like a large effect, given the relatively small turnout effects from most impersonal forms of campaign contact, an 8 percentage point increase in reported email/text message contact likely only translates into a minuscule increase in turnout.³³

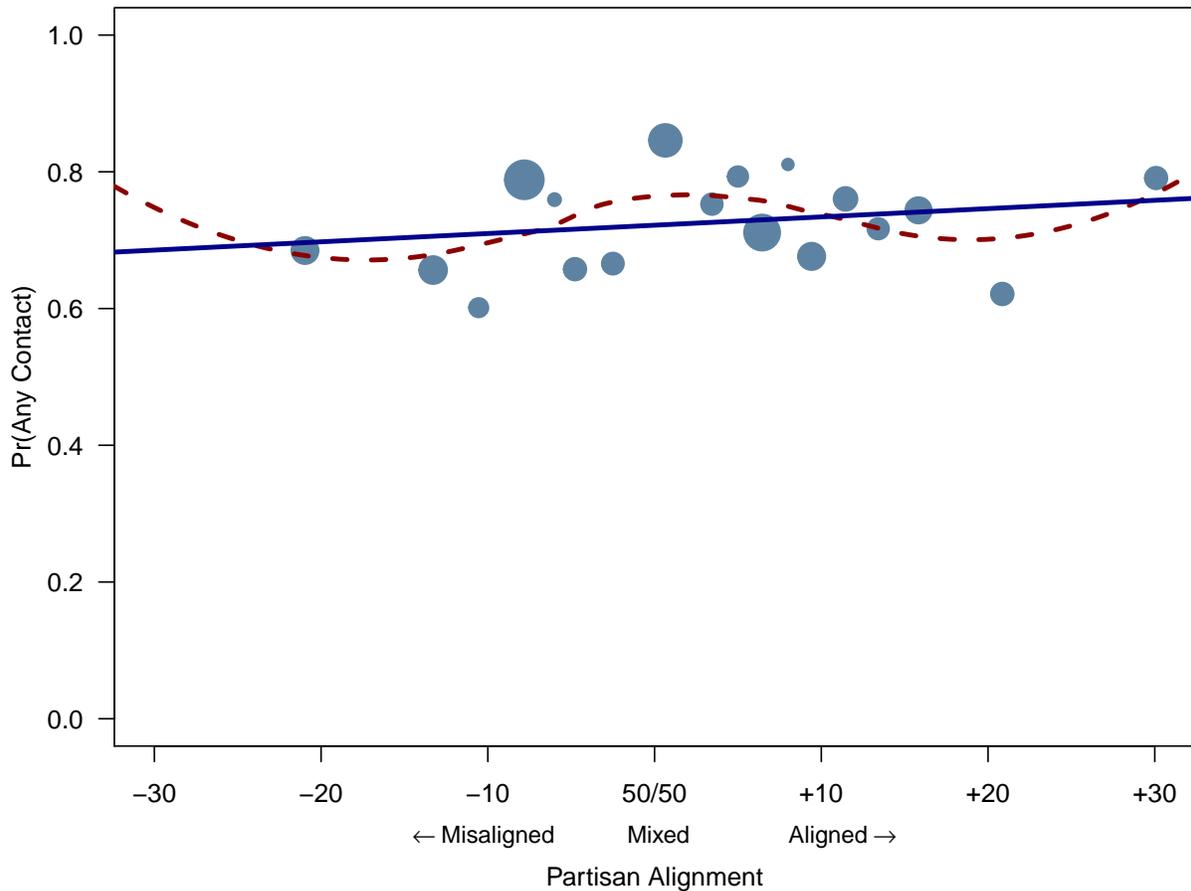
candidates or campaigns contact you...[in person / phone call / email or text message / letter or post card.”

³¹We show this relationship for 2010, 2012, and 2014 in the same plot in Figure A.5 in the Online Appendix.

³²The loess curve begins to increase again in the extreme ends of both aligned and misaligned districts, but very few CCES respondents are in these parts of the distribution.

³³In a meta-analysis of both published and unpublished experimental studies on turnout, Green, McGrath, and Aronow (2013) finds that most impersonal interventions have substantively small

Figure 4 – Any Campaign Contact, 2012



This figure demonstrates that voters in congressional districts aligned with their partisanship do not report substantially more campaign contact than voters in misaligned districts. This binned scatterplot is based on tabulations of 2012 data from the 2010-2014 CCES Panel. Each point in the figure corresponds to a local mean and is proportional in size to the number of observations (accounting for sampling weights) within the locale. The dark blue, solid line is based on a linear regression and the red, dashed line is based on a locally weighted regression.

effects on turnout. Unfortunately, there are relatively few studies of the turnout effects of emails and text messages. In the case of email, few studies find positive effects on turnout. The evidence on text messages is sparse, but Malhotra et al. (2011) finds a 0.79 percentage point increase in turnout with a “cold” text message, while Dale and Strauss (2009) reports an extremely large 4.1 percentage point (treatment-on-the-treated) effect on turnout. Green, McGrath, and Aronow (2013) describes the “effectiveness of text messaging [as]...an intriguing anomaly” given that “impersonal tactics...tend to produce weak effects...” Nevertheless, our estimated 8 percentage point increase in reporting email/text message contact would only translate into a 0.3 percentage point increase in turnout, based on an estimated turnout effect of 4.1 percentage points of text messages.

Table 5 – Reported Campaign Contact

	(1)	(2)	(3)	(4)	(5)
	Any	In-Person	Phone	Mail	Email/Text
Partisan-aligned district	-0.0017 (0.0452)	0.0353 (0.0369)	-0.0467 (0.0499)	0.0519 (0.0609)	0.0793 (0.0394)
Competitive district	0.0083 (0.0284)	0.0253 (0.0243)	0.0007 (0.0313)	0.0335 (0.0483)	0.0799 (0.0362)
Observations	12444	12444	12444	12444	12444
R^2	0.060	0.034	0.071	0.036	0.046
Individual FEs	Yes	Yes	Yes	Yes	Yes
State-Year FEs	Yes	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting CD level, are in parentheses. The dependent variable is coded =1 if the respondent reported campaign contact.

In sum, the analyses of survey data presented in this section provide both corroboratory evidence for the effect of partisan alignment on turnout and indications for which mechanisms likely produce the turnout boost. Voters demonstrate strong awareness of the partisan composition of congressional districts, and are more likely to rate their party’s candidate when situated in a partisan aligned district relative to a misaligned district or a competitive district. On the other hand, voters do not consistently report more campaign contact when situated in partisan aligned districts, implying that greater campaign activity is unlikely to be the explanation for increased turnout. Taken together, these findings provide relatively strong support for the expressive voting hypothesis and limited support for the elite mobilization hypothesis.

7 Discussion

When analyzed appropriately, the redistricting process approximates a natural experiment that induces considerable variation in the partisan composition of voters’ congressional districts. The re-drawing of district boundaries allocates some voters into districts aligned with their partisanship and other voters into misaligned districts. Analyzing panel data tracking over 6 million voters pre- and post-redistricting, we determine how turnout changes in response to shifting conditions of partisan (mis)alignment. We find a 0.4-1.7 percentage point increase in turnout resulting from

Of course, some of the respondents who reported contact via email or text message received emails rather than text messages.

assignment to a partisan aligned district versus assignment to a misaligned district. Examining potential mechanisms behind this effect, our analyses of survey data show that voters are highly perceptive of their congressional district's partisan composition, and individuals situated in partisan aligned districts are much more likely to be able to evaluate their party's candidate. However, voters placed in aligned districts, for the most part, do not report significantly more campaign contact relative to voters in misaligned districts. On the whole, evidence from both the voter file and survey data is supportive of the *expressive voting hypothesis* and the limited evidence of additional campaign contact in partisan aligned districts casts doubt on mechanisms associated *elite mobilization hypothesis*. The positive effect of partisan alignment on turnout is at odds with the *partisan threat hypothesis*, whether we think that threat is greatest in lopsided districts in favor of the other party or competitive districts: when individuals are redistricted into districts where co-partisans make up a larger share of the electorate, turnout increases.

Our findings thus provide a notable update to recent research (Moskowitz and Schmeer 2019) that finds no discernible effect of competition on turnout. One possible explanation for this inconsistency with previous work is that the partisan alignment of districts and voters affects turnout in more subtle ways. Measures of competitiveness account for the closeness of an election outcome, but as elections become less close these measures do not account for the direction that the district is moving from the perspective of individual voters. Our findings suggest that we might observe no overall changes in turnout as the composition of a district moves, for example, from 50/50 to 60/40 Republican, but the levels of turnout between partisans are likely still shifting under the surface, with Republican turnout increasing and Democratic turnout decreasing. We find the most convincing support for this account in the models where we separately study the effects of moving from a competitive district to a partisan aligned district and moving from a competitive district to a partisan misaligned district. In these instances, we find effects with opposite signs, consistent with the account that changes in competition could have near zero effects overall due to effect heterogeneity depending on an individual's partisan alignment.

The potential asymmetry in the effects we find also deserves further attention given its implications for our understanding of voter turnout. If researchers can show convincingly that movements from an aligned to misaligned district have smaller magnitude effects than movement from misaligned to aligned districts, then such a finding might provide some evidence in favor of habit

formation as applied to voting (Meredith 2009). The logic here is that partisan alignment might provide an initial boost to turnout that persists due to habit even after a switch to a mismatched districts where the expressive benefits of casting a vote for the winning side no longer exist.

These findings have broader implications for debates about redistricting. A cursory glance at our findings would seem to support research by Brunell and Buchler (2009) and Brunell (2010) that suggests “packing” partisans into uncompetitive, homogeneous districts may improve citizens’ perceptions of the representation they receive. Given findings that “packing” is an optimal strategy for those seeking partisan advantage through redistricting (Friedman and Holden 2008), the turnout increases we find with partisan alignment do indeed suggest partisan gerrymandering can yield unexpected benefits. But to whom will these benefits accrue? While courts have struggled to determine a clear standard for partisan gerrymandering (Lowenstein 2006; Stephanopolous and McGhee 2015), understanding turnout effects is important for courts evaluating partisan gerrymandering on basis of free speech or equal protection arguments. If presence in a misaligned district reduces turnout, then partisan gerrymandering systematically benefiting one party over the other (which cuts to the heart of gerrymandering’s aim) may violate these principles.

Clashes in democratic goals also persist when thinking about partisan representation. A previously unappreciated trade-off may exist between state- or national-level election outcomes and congressional election outcomes. Gerrymanders that pack partisans into just a few districts may have the effect of increasing residents’ turnout above expected levels. Such a gerrymander would limit the number of congressional seats won by the party, but due to the higher turnout, may also *help* the chances of the “gerrymandered” party in statewide elections. Court cases that evaluate the effects of redistricting often consider the probability of a party or candidate winning an election given different potential changes in district lines. However, the statistical models used in these efforts all assume that turnout does not change as a result of the redistricting process itself. By estimating how partisan context influences turnout, the results of this paper could be useful for evaluating the true impact of a hypothetical districting plan.

Finally, our results provide evidence of the challenge to democratic legitimacy produced by “losers” in the electoral process. Building on Hirschman (1970), Anderson et al. (2005) indicate that consistent losers may “exit” from the political process, undermining the legitimacy of subsequent election outcomes. We show that those likely to end up on the losing side of elections as a result of

redistricting do indeed “exit,” dropping out of the electoral process in subsequent elections. Thus if the potential turnout boost for partisans placed in heavily-favorable districts must be offset by a decrease in voting among out-partisans, the normative implications of our work indicate that it may be better to produce competitive jurisdictions where no single group always ends up on the losing side of the electoral divide. Winning might be more fun, but an inclusive electoral process may yield long-run benefits that outweigh the turnout gains that we find.

The boundaries of electoral districts often determine who gets what in politics. We demonstrate that the partisan consequences of redistricting extend beyond the representation individuals receive, shaping individual involvement in the political process itself. As affective polarization increases and the electorate increasingly views democracy as a clash of identities (Mason 2018; Iyengar et al. 2019), we provide yet another piece of evidence that party shapes political life.

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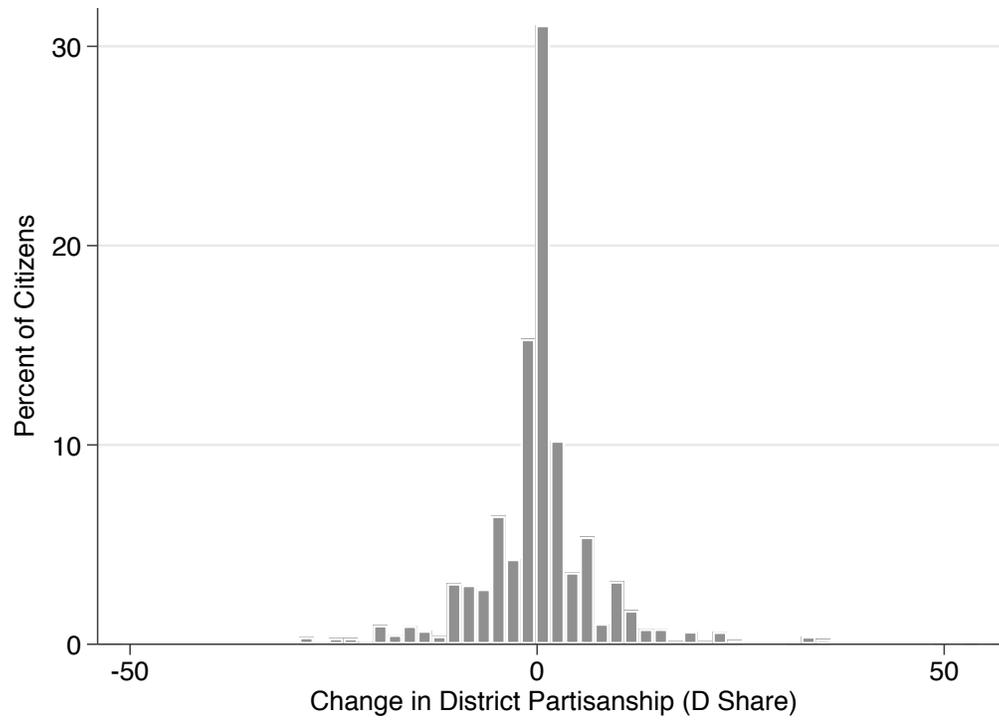
Online Appendix: Supporting Information for
Partisan Alignment Increases Voter Turnout: Evidence from Redistricting

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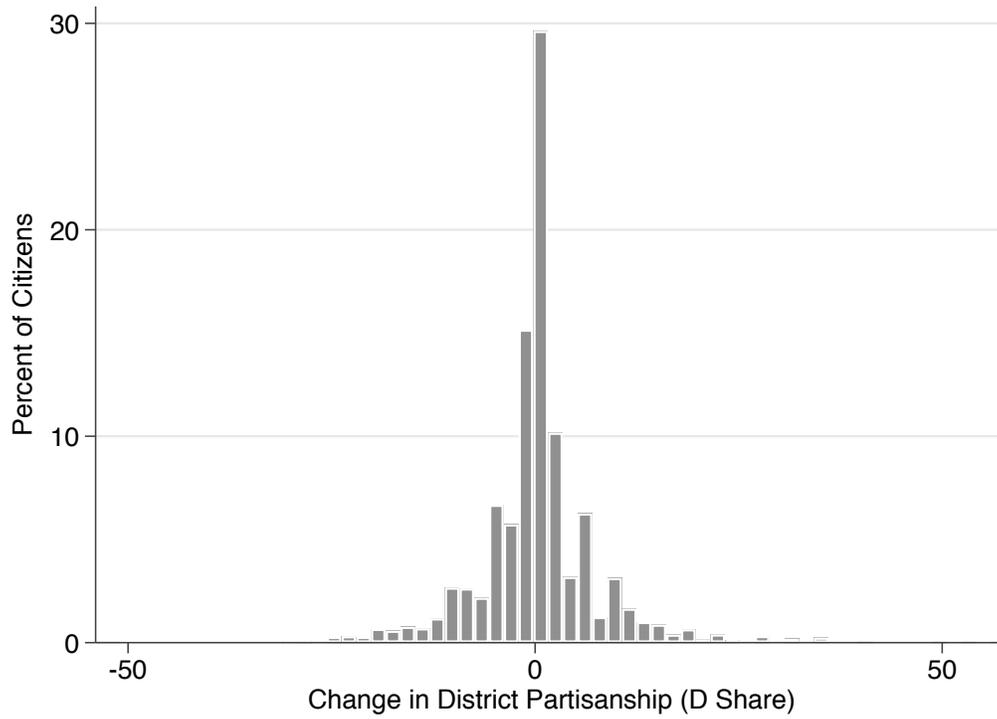
A.1 Changes in District Composition

Figure A.1 – Changes in District Composition, 2008 to 2012



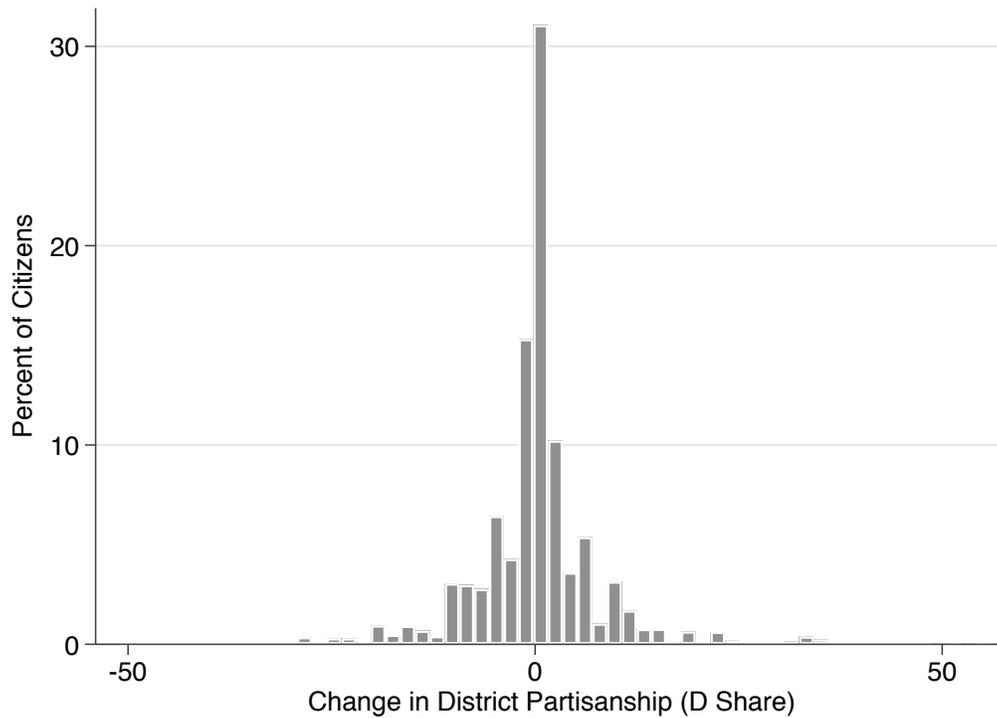
This figure illustrates the distribution of changes in partisan composition for individuals in the sample for years 2008 to 2012.

Figure A.2 – Changes in District Composition, 2008 to 2016



This figure illustrates the distribution of changes in partisan composition for individuals in the sample for years 2008 to 2016.

Figure A.3 – Changes in District Composition, 2010 to 2014



This figure illustrates the distribution of changes in partisan composition for individuals in the sample for years 2010 to 2014.

A.2 Alternative Modeling Strategies, Effect of Partisan Alignment on Turnout

In the main text we explain that we use a block fixed-effects (BFE) approach to model the effect of partisan alignment on voter turnout. In Table 1 we provide estimates demonstrating that partisan alignment increases turnout and partisan misalignment decreases turnout under a variety of comparisons (i.e., aligned versus misaligned and competitive versus aligned/misaligned) and when including all districts in the sample as opposed to just districts that were redistricted. We also include Table 2 in the main text, which provides a summary of our findings under alternative specifications. Below we produce the raw estimates shown in Table 2.

Tables A.1 to A.6 use the same BFE approach as in Table 1, but separate midterm (2010-2014) and presidential (2008-2012 or 2008-2016) election years. As compared to including all years, the results are generally slightly noisier when looking at just a single pre and post year. Examining the effects when moving from misaligned to aligned/misaligned (column 1 in the tables), we observe results that range from essentially zero (in Table A.1) on the low end to 0.0353 on the high end. The results are slightly weaker when examining individuals who move from aligned to aligned/misaligned districts, ranging from -0.0066 on the low end to 0.008 on the high end. Examining movements out of competitive districts serves as another means of assessing our hypotheses. Here, the results fall generally in line with our expectations but with a notable exception of one negative point estimate when moving from competitive to competitive/aligned districts for mid-term years (significant at $p \leq 0.10$). We also observe two of six point estimates that are positive and significant at $p \leq 0.01$. Looking at this subset of the data also speaks to the literature on competitiveness and turnout. The prevalent theme in the literature is that competitiveness leads to higher turnout. Under this framework, we would expect to see negative results for both column 3 and column 4, since each indicates the effect of moving from competitive to uncompetitive districts. Echoing the findings in some other recent research (Moskowitz and Schneer 2019), this straightforward story is not exactly what we observe. Instead, 4 of 6 results for column 3 are positive. Interestingly, the lone negative results are for mid-term years. A plausible explanation for this is that when the competitiveness effect plays a role large enough to outweigh the effects of partisan alignment, it occurs in mid-term years, where House races sit closer to the top of the ticket and therefore have more salience. For individuals redistricted from competitive to misaligned districts (column 4), all six point estimates

suggest a negative effect on turnout, including in midterm years. In some sense, this is not surprising, because in this case the possible effects of competitiveness and of partisan alignment/misalignment should be operating in the same direction to depress turnout. The estimates in column 4 range from -0.0047 on the low end (in terms of magnitude) to -0.0220 (significant at $p \leq 0.01$) on the high end in terms of magnitude.

Table A.1 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Mid-Term Years with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00110 (0.00459)	0.00906** (0.00423)	-0.00913* (0.00517)	
Partisan Misaligned				-0.0215*** (0.00478)
Observations	262527	445499	201859	195839
R^2	0.434	0.408	0.427	0.429
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.2 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Mid-Term Years (Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00787* (0.00466)	0.00713 (0.00464)	-0.00434 (0.00541)	
Partisan Misaligned				-0.0221*** (0.00576)
Observations	185431	335985	185155	180013
R^2	0.446	0.416	0.427	0.433
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.3 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2012) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00987*** (0.00337)	-0.00132 (0.00330)	0.00366 (0.00427)	
Partisan Misaligned				-0.00487 (0.00427)
Observations	272496	470881	202695	196960
R^2	0.508	0.476	0.496	0.497
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.4 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2012, Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0115*** (0.00357)	0.000178 (0.00361)	0.00108 (0.00392)	
Partisan Misaligned				-0.0141** (0.00664)
Observations	199069	339216	188856	182441
R^2	0.524	0.492	0.507	0.535
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.5 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2016) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0385*** (0.00610)	-0.00707 (0.00486)	0.0214*** (0.00820)	
Partisan Misaligned				-0.00759 (0.00751)
Observations	278948	481179	205163	198974
R^2	0.343	0.307	0.322	0.324
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.6 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2016, Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0330*** (0.00576)	-0.00219 (0.00540)	0.0222*** (0.00782)	
Partisan Misaligned				-0.0114 (0.00838)
Observations	214164	384149	188098	182099
R^2	0.350	0.319	0.333	0.352
State-Year FEs				
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Tables A.7 to A.14 use a difference-in-differences approach, either pooling all years or separating midterm and presidential years. In all cases, we separate results for all districts versus redistricted districts only. The difference-in-differences results generally support the narrative advanced in this paper, but do exhibit some notable departures from expectations. Tables A.7 (all districts) and A.8 (redistricted only) report results when pooling all years. Here we observe noisier results in general than under the block fixed effects approach. The combination of the severe sample restrictions (i.e., restricting to only certain types of districts based on levels of competitiveness) and including individual fixed effects is particularly taxing on the data. Nonetheless, 7 of 8 point estimates in these tables are in the hypothesized directions. The largest effect we observe is for movements from competitive to competitive/misaligned districts at -0.0391. By far the biggest departure we observe from our hypotheses occurs in Tables A.9 and A.10, which report results for the difference-in-differences specification in midterm years. In these cases, we observe negative effects across the board. The most puzzling results are those for columns 1 and 2, where we observe slightly negative results for movements between aligned and misaligned districts. That said, only 1 of the 4 point estimates is statistically significant at $p \leq 0.10$. So, it is at least possible to interpret these as primarily null results that reflect noise in the data. The results for movements out of competitive districts in Columns 3 and 4 are more rationalizable. In these cases, the effects of competitiveness may outweigh the effects of partisan alignment for the subset of voters we are examining. Including voters who moved in the opposite directions (i.e., from aligned/misaligned districts to competitive districts) might, due to the idiosyncrasies of these elections attenuate the negative results.

The results for presidential election years are generally much more in line with expectations. Tables A.11 to A.14 report these results.

Table A.7 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, All Years with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00847 (0.00759)	0.00274 (0.00425)	-0.00102 (0.00446)	
Partisan Misaligned				-0.00887* (0.00454)
Observations	1039700	1690935	894660	870275
R^2	0.089	0.092	0.093	0.094
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.8 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, All Years (Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00858 (0.00864)	0.00338 (0.00481)	0.00101 (0.00475)	
Partisan Misaligned				-0.0178 (0.0130)
Observations	738760	1281865	827455	803130
R^2	0.108	0.105	0.095	0.101
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.9 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Mid-Term Years with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	-0.00887 (0.00628)	-0.00144 (0.00554)	-0.0185*** (0.00530)	
Partisan Misaligned				-0.0151*** (0.00568)
Observations	525054	890998	403718	391678
R^2	0.024	0.023	0.014	0.015
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.10 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Mid-Term Years (Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	-0.00887 (0.00690)	-0.000766 (0.00616)	-0.0181*** (0.00553)	
Partisan Misaligned				-0.0129** (0.00595)
Observations	370862	671970	370310	360026
R^2	0.027	0.025	0.017	0.017
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.11 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2012) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0115** (0.00453)	0.00327 (0.00346)	0.00456 (0.00388)	
Partisan Misaligned				-0.00350 (0.00464)
Observations	544992	941762	405390	393920
R^2	0.005	0.004	0.003	0.003
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.12 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2012, Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0113** (0.00467)	0.00736** (0.00349)	0.000956 (0.00449)	
Partisan Misaligned				-0.0343 (0.0291)
Observations	398138	678432	377712	364882
R^2	0.005	0.007	0.002	0.014
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.13 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2016) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0238** (0.00938)	0.00697 (0.00699)	0.0164** (0.00678)	
Partisan Misaligned				-0.00153 (0.00687)
Observations	557896	962358	410326	397948
R^2	0.008	0.010	0.007	0.006
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.14 – Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, Presidential Years (2008 & 2016, Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0218** (0.00896)	0.00879 (0.00737)	0.0143** (0.00670)	
Partisan Misaligned				0.00132 (0.0153)
Observations	428328	768298	376196	364198
R^2	0.008	0.014	0.010	0.009
State-Year FEs	Yes	Yes	Yes	Yes
Individual FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

A.3 Accounting for Redistricting as a Bundle of Treatments

A variety of district-level characteristics — in addition to partisan composition — may change when redistricting occurs. These changes could serve as a threat to inference if they also influence the decision to vote made by redistricted individuals and are correlated with changes in partisan composition. At a minimum, it seems that other district-level demographic factors likely influence turnout rates: Fraga (2018) documents how voters may grow more likely to turn out when their racial/ethnic group comprises a larger share of the district’s population. Since the racial composition of a district is also correlated with the partisan composition of the district, we need to assess whether this or other related factors impact our estimates.

To try to deal with these concerns, we control for several district-level covariates that change in conjunction with redistricting that might also relate to turnout. We estimate specifications that include Census-based information about the racial composition (i.e., percent Black, Hispanic, Asian) and district-level median household income. Table A.15 reveals that when controlling for these redistricting-associated characteristics the direction and statistical significance of the partisan effects we focus on is unchanged. That is, the racial composition of the district or income level of a district does not negate the effect of partisan composition.

All this said, there are reasons we may wish to avoid separating the effects of race from party in the first place. To the extent that the modern Democratic and Republican parties are in part defined by notions of racial identity, efforts to isolate the effects of partisan composition from racial composition might leave us with a version of partisan composition that is conceptually meaningless. On the other hand, for the purposes of this paper — which emphasizes partisan composition — we would nonetheless like to rule out that the effects that we observe are not occurring solely through the channel of race.

To this end, we isolate contexts where redistricting takes place and changes in racial composition likely played a minimal role in turnout decisions. Specifically, we narrow our sample to include only states that did not include a majority-minority district. Given that redistricting decisions occur at the state level — and that the boundaries of one district in a state also affect the boundaries of other districts — this approach balances the tradeoff between providing conceptual clarity and preserving external validity.

Table A.15 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, All Years (Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.00996*** (0.00328)	0.00852*** (0.00302)	0.000946 (0.00339)	
Partisan Misaligned				-0.0214*** (0.00636)
Observations	295504	512746	330982	321252
R^2	0.480	0.449	0.454	0.463
State-Year FEs	Yes	Yes	Yes	Yes
Block FEs	Yes	Yes	Yes	Yes
Income Controls	Yes	Yes	Yes	Yes
Race Controls	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

Table A.16 presents our main results when we estimate models only on those states that do not have any majority-minority districts. The results illustrate that changes in racial composition appear unlikely to be the primary driver behind the effects that we observe. Specifications 1 and 2 remain positive and statistically significant. Specification 4 is of a sizable magnitude and negative, the same as when we estimate this effect in the full sample (though it does not reach the threshold of statistical significance at standard levels). Only Specification 3 (moving from competitive to aligned) does not accord with previous estimates. All told, the available evidence points towards district partisan composition standing on its own as a meaningful factor influencing turnout decisions above and beyond district racial composition or other possible district-level confounding factors.

Table A.16 – Block FE: Individual Regressions of Turnout on Partisan Alignment, Aligned versus Misaligned Districts, All Years (Redistricted Districts Only) with State-Year FEs

	Misaligned to Aligned/ Misaligned	Aligned to Aligned/ Misaligned	Competitive to Competitive/ Aligned	Competitive to Competitive/ Misaligned
	(1)	(2)	(3)	(4)
Partisan Aligned	0.0179* (0.00881)	0.0192*** (0.00463)	-0.00586 (0.0182)	
Partisan Misaligned				-0.0163 (0.0118)
Observations	50364	84468	135183	132096
R^2	0.502	0.482	0.422	0.437
State-Year FEs	Yes	Yes	Yes	Yes
Block FEs	Yes	Yes	Yes	Yes

Standard errors, clustered at the pre/post redistricting Party-CD level, are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The sample is comprised of contested general elections by a D and R candidate.

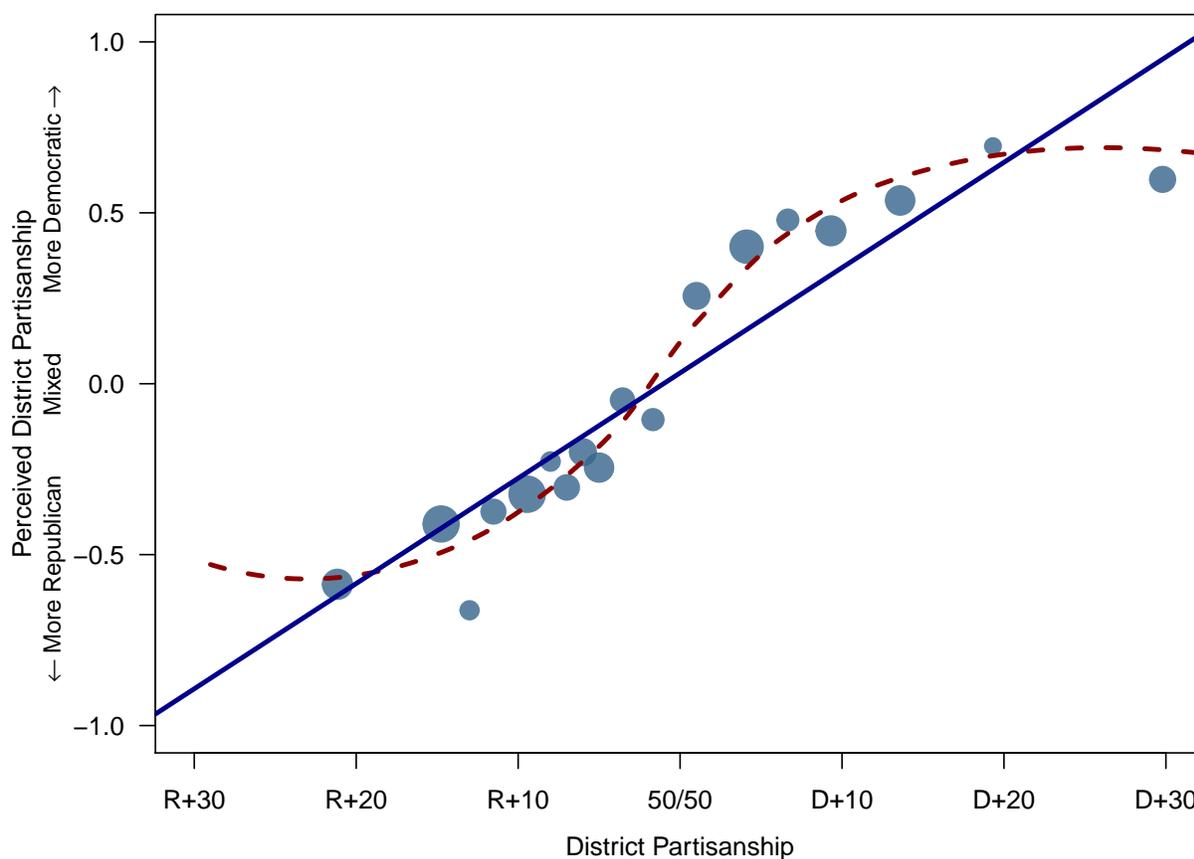
Treatment occurs in second period.

All elections in Louisiana are excluded from the sample due to their unusual rules.

A.4 Perceptions of District Partisanship

Secondary evidence for expressive voting in the main text takes the form of CCES panel survey results spanning the redistricting cycle. There we choose to focus on results for 2012 perceptions of the partisan composition of districts and self-reported campaign contact in the 2012 election (for the cross-sectional plots). Below we provide results for 2014 perceptions of district partisanship, where we see patterns that are strikingly similar to 2012 perceptions, even after accounting for the partisan composition of individual's pre-redistricting district.

Figure A.4 – Voters' Perceptions of District Partisanship, 2014



This figure demonstrates that voters are largely aware of their congressional districts' partisan composition. This binned scatterplot is based on tabulations of 2014 data from the 2010-2014 CCES Panel. Each point in the figure corresponds to a local mean and is proportional in size to the number of observations within the locale. The dark blue, solid line is based on a linear regression and the red, dashed line is based on a locally weighted regression.

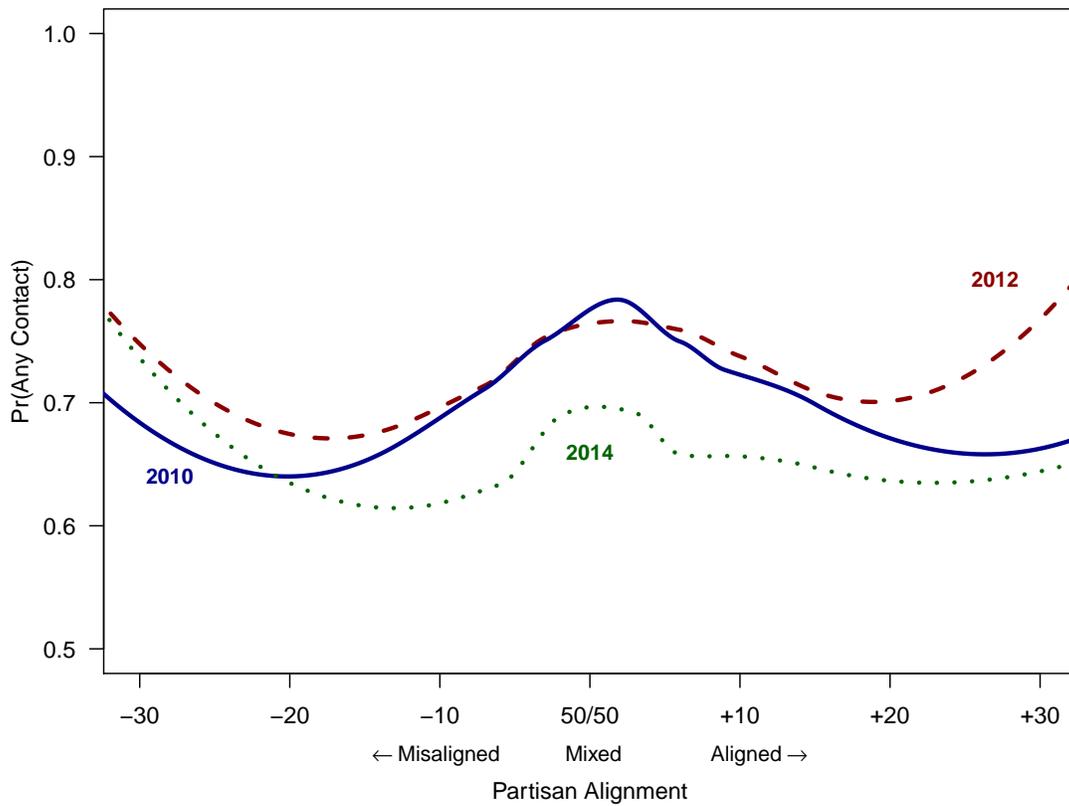
Table A.17 – Perceived Partisan Composition of District | 2014

	(1)	(2)	(3)
PVI	0.0294 (0.0018)	0.0227 (0.0023)	0.0204 (0.0046)
Lagged PVI			0.0100 (0.0042)
Constant	0.0100 (0.0215)	0.0014 (0.0074)	0.0110 (0.0210)
Observations	7647	7647	7647
R^2	0.242	0.463	0.249
Old District FEs	No	Yes	No

Standard errors, clustered by congressional district, are in parentheses.

We find little evidence that campaign contact increases substantially in aligned versus misaligned districts. In the main text, we visually show this evidence for 2012. In Figure A.5, we see that this holds across years.

Figure A.5 – Any Campaign Contact



This figure demonstrates that voters in congressional districts aligned with their partisanship do not report substantially more campaign contact than voters in misaligned districts. Each curve is fit from a locally weighted regression based on CCES Panel data from each respective year.