

Local News and Policy Responsiveness in the States*

Michael Auslen[†]

October 14, 2025

Abstract

The news media play an important role in theories of representation in democracies by serving as an informational link between politicians and their constituents. But to what extent does this information correspond with increased responsiveness to public opinion? Drawing on an extensive archive of local newspaper text, circulation data, state legislative roll-call votes, and measures of district-level public opinion on five policy areas, I find that state legislators exhibit greater policy responsiveness when they are more likely to be covered by the press. Newspapers have the strongest effects in less professionalized state legislatures, where coverage by the news media may act as an informational subsidy for legislators, in addition to informing their constituents. I further show that, although media effects on responsiveness do not vary by party, they increase as legislators serve in office for longer periods of time. My results underscore the important role that the news media play in democracies, and suggest that further declines in local news may undermine substantive representation in the American states.

Keywords: Responsiveness; Dyadic representation; Local news; State legislatures; Public opinion

*I thank Hayley Cohen, Lauren Futter, Max Goplerud, Shigeo Hirano, Eunji Kim, Patricia Kirkland, Vladimir Kogan, Diana Lee, Beatrice Montano, Justin Phillips, Bob Shapiro, Chris Wlezien, Hye Young You; seminar participants at the University of Pittsburgh Center for American Politics and Society, the Columbia American Politics Graduate Student Workshop, the Columbia Graduate Student Seminar; and attendees at the 2023 State Politics and Policy Conference, MPSA 2023, APSA 2023, and EPSA 2025 for helpful feedback. I am also grateful to Erik Peterson and the National Conference of State Legislatures for sharing data. I thank Jose Antonio Alfaro, Briana Cruz, Lindsay Davenport, Madeleine Johnson, Ryan Oh, and Angelyna Rosales for research assistance. This paper was funded in part by an American Political Science Association Doctoral Dissertation Research Improvement Grant. I acknowledge computing resources from Columbia University's Shared Research Computing Facility project (supported by NIH Research Facility Improvement Grant 1G20RR030893-01 and New York State Empire State Development, Division of Science Technology and Innovation Contract C090171) and the OSG Consortium (<https://doi.org/10.21231/906P-4D78>), which is supported by the National Science Foundation awards 2030508 and 2323298. The statements made and views expressed are solely the responsibility of the author.

[†]Assistant Professor, Department of Government, University of Texas at Austin, Austin, TX. Email: mauslen@austin.utexas.edu. URL: <https://michaelauslen.com>.

The news media play a central role democratic representation. In canonical accounts of political accountability, the press informs the public about goings-on in government, thereby providing an essential linkage between the masses and political elites. The information that the news media provide allows voters to hold politicians accountable by sanctioning bad representatives or selecting good ones (Arnold 2004; Strömberg 2015; Ashworth 2012). At the same time, news coverage may be a conduit of public opinion, informing politicians about issues that are important to voters and thereby driving the agenda toward mass preferences (Soroka and Wlezien 2022; Walgrave and Van Aelst 2006). By covering elected officials, therefore, the news media create some of the conditions necessary for politicians to be responsive to the preferences of their constituents when enacting policies.

In recent years, however, two notable trends in American politics have raised questions about the media’s ability to contribute to representative democracy. First, the locus of many major, high-importance issues has moved to the states. Battles over issues ranging from abortion and health care access to gun control and economic inequality are now more likely to be fought and decided in state capitols than in Congress (Grumbach 2022). This shift has put increased emphasis on the quality of democratic representation in state legislatures, a level of government about which the public is remarkably uninformed and to which they pay little attention (Delli Carpini and Keeter 1996; Hopkins 2018; Rogers 2023). Second, the media environment itself has fractured, and local news outlets are particularly fragile (Hayes and Lawless 2018; Peterson 2021). Across the 50 state capitols, the primary sources of information are local newspapers—and, to a lesser extent, local TV news broadcasts—(Shearer et al. 2022), which have faced 15 years of economic uncertainty and retrenchment.

These broad changes in American politics raise important questions about the extent to which the media meaningfully contribute to democratic representation. Existing literature has routinely found that state governments are responsive to the preferences of constituents; that is, as public support a policy increases, so too does the probability of that policy being enacted (Erikson, Wright and McIver 1993; Caughey and Warshaw 2022). Yet there are

also limits to representation in America’s statehouses, with only about half of state policies matching the median voter’s preference across a range of issues on the state legislative agenda (Lax and Phillips 2012). Declines in local news may further undercut the public’s ability to hold state legislators accountable, and with it, legislators’ incentives to reflect constituent preferences in policymaking.

Previous scholarship has not, to my knowledge, explored these possibilities. To the extent that prior research has studied the role of the media in state legislative politics, it has focused on the behaviors of state capitol press corps (Cooper and Johnson 2006), the effects of state capital press corps on political knowledge (Rogers 2023), and returns to ideological moderation (Myers 2025). My results focus instead on the ways in which the incentives of the media to cover individual legislators increases dyadic responsiveness on policy votes. In other words, as the media cover legislators more, does public opinion in their districts matter more for explaining their roll-call votes?

This article examines the role of the news media in contributing to statehouse democracy via policy responsiveness on particular pieces of legislation. First, using a text corpus of articles published in 290 local newspapers over a 14-year period, I show that there is considerable coverage of state legislative politics, most of which is substantive and policy-focused. However, I find that the intensity of this coverage varies by legislator. In particular, news outlets are more likely to cover legislators who represent a greater share of their readers.

Next, I construct a national dataset of legislative roll-call votes on five issue domains matched to media activity about individual legislators and public opinion in legislators’ districts. The data include bills filed in all state legislatures from 2011-2022 on abortion, same-sex marriage, gun control, police body cameras, and the minimum wage—policies on which states have considerable authority and are actively engaged in policymaking. These data allow me to make two contributions: I first show what I believe to be among the first nationwide evidence of dyadic responsiveness to district-level opinion within state legislatures. Where prior work in the states has focused on the degree of policy responsiveness statewide

or using ideal-point measures (e.g., Erikson, Wright and McIver 1993; Lax and Phillips 2012; Caughey and Warshaw 2022), I leverage large-scale survey data and modern opinion measurement techniques to show that individual legislators’ roll-call votes on policy are shaped by *their own* voters’ preferences for policy in the same issue domain.

I then find that this relationship between public opinion and legislator roll-call votes is strengthened by the attentiveness of local newspapers. To do so, I extend a common empirical design used to study media effects in other domains. I use the congruence of newspaper circulation areas and legislative districts to measure of the media’s economic incentive to cover individual legislators (Snyder and Strömberg 2010). I find that in districts that are more congruent with newspaper circulation areas—and, as a result, where legislators are more likely to be covered by the press—legislators are more responsive to mass preferences when casting policy votes. I find that this effect is consistent across issue domains.

Finally, I consider the institutional and legislator-level factors that enhance or diminish the effects of the media on policy responsiveness. Most notably, I find that the effect of the media is strongest in less professionalized state legislatures and those where legislators have smaller staffs. This suggests that the press in part act as an information substitute for legislators who have fewer resources to understand and engage directly with public opinion. I also find that most legislator-level characteristics do not affect the degree to which the media shape responsiveness, including legislators’ partisan affiliations. However, longer-serving legislators do seem to experience larger effects.

This paper argues that the media play an important role in translating public opinion into policy in the states. These results are consistent with a number of theoretical accounts, which expect that the media contribute to mass political knowledge and, as a result, democratic accountability. They are also consistent with more complicated stories in which the press act as an information conduit from the public to politicians. In both cases, the media—and specifically local newspapers—are evidently important actors in producing quality representation in the American states.

1 Responsiveness and the Media

Whether and how well legislators represent the policy preferences of their constituents is an integral question to the study of democracies. Political scientists have routinely found that elected representatives at all levels of American government are responsive to the preferences of their constituents; that is, when more constituents support a given policy, politicians are more likely to pass it (e.g., in Congress: Page and Shapiro 1983; Erikson 1978; in the states: Erikson, Wright and McIver 1993; Caughey and Warshaw 2022; and in localities: Tausanovitch and Warshaw 2014).

The dominant theoretical explanation for this ideological representation is that the public holds politicians accountable via elections, sanctioning those who take unpopular stances on issues and replacing them with more favorable representatives. As a result, reelection-minded incumbents face a strong incentive to support popular policies, or else risk being voted out of office (e.g., Ferejohn 1986; Ashworth 2012). So, the degree to which politicians are responsive to public opinion depends on two key informational linkages between representatives and their constituencies. Voters must have sufficient information about the actions taken by politicians to sanction bad behavior. Likewise, politicians must be knowledgeable enough about public opinion that they can cast popular votes on important issues. The news media, therefore, play a central role in producing accountability and, as a result, responsive policymaking. By observing politicians and reporting information about their behaviors to readers and viewers, the media help to serve these two informational needs.

First, news coverage can inform members of the public about actions taken by government and the policy positions of candidates (Besley and Burgess 2001; Strömberg 2015). Considerable scholarship—primarily focused on the federal government and especially Congress—has found that substantive news coverage improves mass knowledge of policy (Jerit, Barabas and Bolsen 2006; Barabas and Jerit 2009; Soroka and Wlezien 2022) and congressional elections (Snyder and Strömberg 2010; Hayes and Lawless 2018; Peterson 2019).

Downstream of knowledge, local news coverage is associated with greater turnout in

congressional elections (Gentzkow 2006; Gentzkow, Shapiro and Sinkinson 2011), voters' preferences over candidates (Druckman 2005), and reductions in split-ticket voting (Darr, Hitt and Dunaway 2018; Moskowitz 2021). Local news coverage is especially relevant to accountability in Congress because coverage tends to focus on local representatives (Arnold 2004; Snyder and Strömberg 2010). A growing literature in subnational politics has similarly found mass political knowledge effects of local news (e.g., Hayes and Lawless 2021). However, the extent of these effects in state politics may be more limited (e.g., Rogers 2023).

Second, news coverage may inform elected politicians about the policy preferences of their constituents. An important limitation in responsiveness is that politicians may incorrectly perceive public support for particular policies (Miller and Stokes 1963). Indeed, in the state legislative context, representatives frequently overestimate the conservatism of their constituencies (Broockman and Skovron 2018). These perceptions have been shown to be improved by informing politicians about public opinion in their districts (Butler and Nickerson 2011). As a result, politicians may need to learn from some source what the important issues—and preferences over those issues—are in their districts. While legislative staff, opinion polling, or other resources facilitate much of this information gathering, not all politicians have access to these resources. In less professionalized legislative contexts—where there are fewer resources available to interact with constituents and ascertain public opinion—the media may be a more important source of information about the constituency (Butler and Nickerson 2011, p. 73). To be sure, news coverage generally does not include granular, district-level polling data on specific issues. However, the news can provide a sense of the interests of the public and their reactions to shifts in policy (Wlezien and Soroka 2024).

Because the news media alleviate these informational challenges, we may expect that politicians are better able to respond to the public's policy preferences when they are more closely monitored by the press. In Congress, the press is considerably active in covering the policy positions taken and votes cast by members of Congress, so when representatives are covered more often, “they need to be especially careful about their positions and actions,”

(Arnold 2004, p. 255). In the states, enacted policies are better aligned with mass preferences on high-salience issues, where the public is more likely to be engaged and, as a result, hold politicians accountable for their actions (Lax and Phillips 2012).

Existing scholarship finds that politicians do alter their behavior in response to changes in news coverage. In their sweeping study of local newspapers' role in congressional accountability, Snyder and Strömberg (2010) found that members of Congress who are more likely to be covered by the press participate more in committee hearings, are less extreme, vote more frequently against their party, and do better at delivering federal spending to their districts. Studies of Fox News's roll-out in the 1990s show that the introduction of the conservative cable channel in members' districts caused incumbents to cast more conservative votes in the run-up to elections (Arceneaux et al. 2016). In the state legislative context, there is also evidence that politicians in competitive districts enjoy electoral returns to moderation and exhibit greater productivity in office (Myers 2025).

This existing evidence suggests politicians do change their behaviors in response to press coverage, and even may cast more moderate votes in general. But it is not established whether politicians do a better job at reflecting the preferences of their constituents on particular policies when they are covered more often by the press.

2 Media in State Politics

Scholars have paid relatively little attention to the role of the news media in state politics.¹ There is good reason, however, to suspect that general trends from the more frequently studied national or local levels would differ in the context of state politics. In particular, state governments are especially low-information and low-salience environments. There are also fewer opportunities for the public to learn about state legislative politics. Whereas many

¹In addition to work discussed below, there is a small literature on the ways in which legislators use the news media to solicit electoral and policy support (e.g., Hogan 1997; Cooper 2002), though this work is not directly relevant to the focus of this paper.

local and national outlets closely cover Congress, local news organizations are often the only sources covering the state legislatures (Hopkins 2018, p. 197).

The extent to which the media contribute to political accountability and political representation is of special concern in state legislatures, where enacted policies only match public opinion majorities about half the time (Lax and Phillips 2012) and the overall degree of mass political knowledge and interest is low. Legislators—especially those in more professionalized states—enjoy extremely high incumbency advantage, making accountability especially challenging, to the extent that accountability includes replacing incumbents (Berry, Berkman and Schneiderman 2000).

In a systematic study of state legislatures, Rogers (2023) argued that elections are generally not effective at producing accountability in state legislative politics, largely because the public is neither interested in nor informed about state legislatures. Indeed, scholars have consistently found that fewer than 30% of Americans can identify their state representative, with some estimates as low as 11% (Delli Carpini and Keeter 1996; Rogers 2023).

Rogers found that survey respondents know more about state legislative politics in general when there are more reporters covering the capitol in their state. Even still, the degree of knowledge about state politics does not reach the levels expected from literature focused on Congress or local governments. In a second study of individual legislators in Tennessee, he found that the frequency with which legislators are covered in the press had no effect on whether constituents could identify their representative. On the other hand, Myers (2025) found that in close elections, legislators who the media were more likely to cover faced more informed and participatory electorates and responded by moderating their positions.²

For these same reasons, state legislatures are a useful contest in which to study the effects of media on representation more generally. Because the public is inattentive, whatever information they do have likely comes from local news outlets. As a result, the extent to

²These close general elections are rare in state politics, covering about 20% of races from 2012-2020, but this does provide some evidence of media effects in the states.

which local news organizations cover the state legislature affects the amount of information available to the public rather directly. Local newspapers are especially important for this dynamic, as they are far more likely than TV newscasts to cover state politics (Mahone et al. 2019). I similarly find in Appendix A.2 that there is two-to-three times as much coverage of state legislators in the average local newspaper compared to local TV broadcasts.

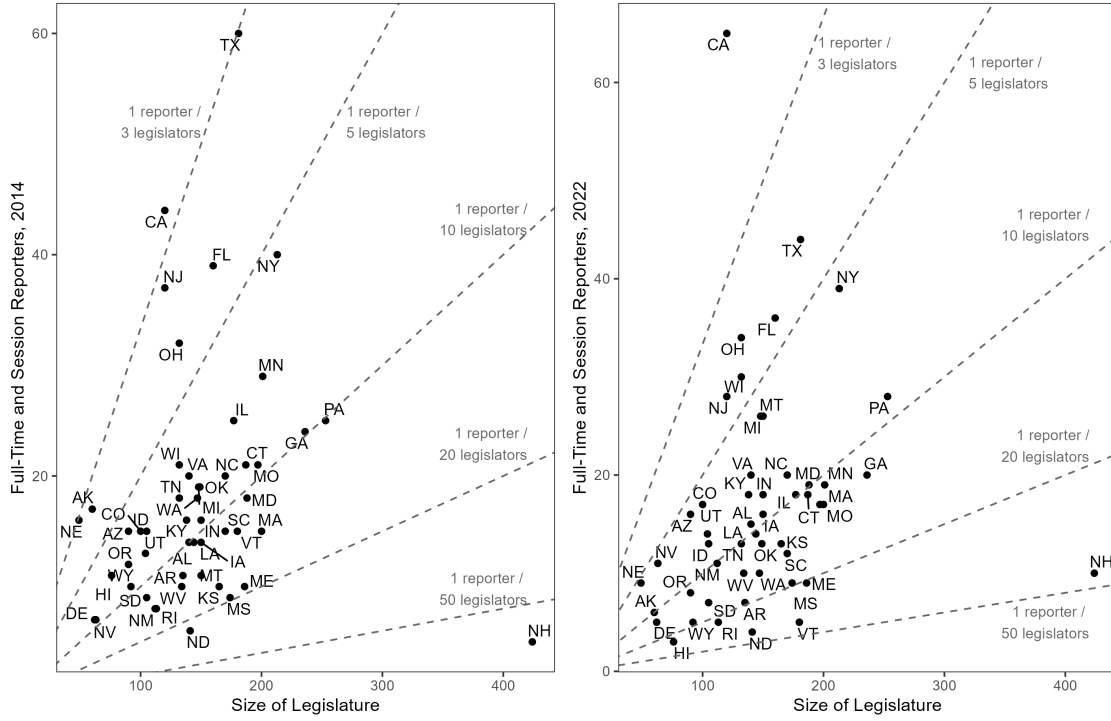
2.1 State Capitol Press Corps

The primary way in which local news outlets cover state legislatures is through capitol press corps—reporters stationed full-time in state capitals whose primary jobs are to cover state politics and the policy debates in the statehouse. Because U.S. newsrooms are generally organized around a beat structure, in which journalists specialize on narrow coverage areas to generate expertise and efficiency (Boydston 2013), the number of reporters assigned to the capitol bureau is a reasonable proxy for the degree to which state governments are covered.

In 2022, there were 850 reporters assigned nationally to cover state capitols full-time, according to data collected by the Pew Research Center (Shearer et al. 2022). Of these, 753 worked for what might be thought of as “mainstream” news organizations—that is, newspapers, websites, TV and radio stations, excluding ideological, government insider-focused, or trade publications. There are more than twice as many full-time state government reporters at local newspapers than TV stations (Shearer et al. 2022). The size of these state capitol press corps varies considerably. Figure 1 shows the number of capitol reporters by state in 2014 and 2022, and how the sizes of press corps vary with the number of seats in legislatures. Dashed diagonal lines correspond to ratios between reporters and legislators. In some states, especially large ones such as California, Texas, and Florida, the ratio of reporters to legislators is quite high. However, in most states, there is one reporter for every 10 to 20 legislators across all news outlets and types of media.³

³Pew data are not made available at the level of outlet type and state, so these figures include newspapers, TV, radio, online news sources, wire services, and nonprofit newsrooms, as well as non-mainstream outlets such as partisan news websites, insider-focused publications, and trade publications.

Figure 1: State Capitol Reporters by State

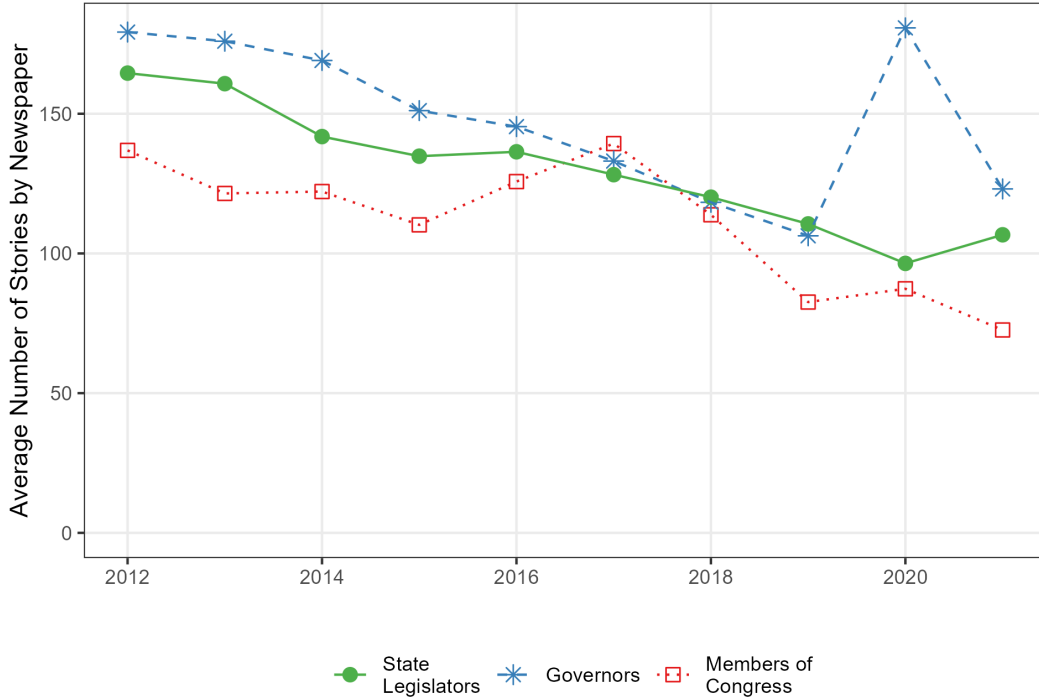


Note: Press corps data from Shearer et al. (2022).

I next quantify the amount of news coverage these reporters produce. To do so, I use a corpus containing the full text of all articles published in 290 newspapers between 2012-2021, which I collected by partnering with two data vendors. In total, the corpus contains more than 40 million articles. I then construct a dictionary of search terms for each newspaper containing the names of all sitting legislators in states where it circulates at least 1,000 copies. Using this dictionary, I search the articles and transcripts for mentions of individual legislators (see Appendix A.1 for more detail about the corpus and search procedure). This yields for each news outlet, in each year, the number of stories or broadcasts referencing each state legislator by name.

Figure 2 shows the number of stories in the average newspaper-year in my sample that mention state legislators, compared to members of Congress and governors. These data reveal that despite limited resources and relatively low public interest, the average local newspaper publishes a considerable number of stories about state legislators. However, the quantity of

Figure 2: News Coverage of Legislators and Governors



newspaper coverage of both state legislators and members of Congress has declined rapidly alongside contraction in the industry. Stories naming governors tracked legislators before peaking in 2020, when governors became central figures in the response to Covid-19.

Not only is coverage of state legislators frequent, it is also highly substantive. Though not my primary focus here, in Appendix A.3, I report the results of a manual content analysis that found that two-thirds of stories about state legislators are focused on either general policy issues or specific legislation under consideration.

3 Measuring Media Attention to State Legislators

A core challenge in studying media effects stems from the fact that news coverage is itself a function of political factors. These include leadership and power within the institution (Ban et al. 2019), extreme position-taking (Padgett, Dunaway and Darr 2019), and scandals (Puglisi and Snyder 2011). Comparing legislators who are covered more frequently with those

who are not, then, risks confounding analyses by these other characteristics.

To address this issue, I adapt the empirical design from Snyder and Strömberg (2010), who demonstrate the effects of media on accountability in Congress using the *congruence* of newspaper markets and legislative districts. This design leverages the idea that the amount of coverage each individual legislator receives from a newspaper is in part a function of the share of the newspaper’s readership that lives in the legislator’s district. That is, holding other characteristics constant, newspapers face an economic incentive to cover politicians who represent their readers (Campbell, Alford and Henry 1984). The logic behind this design is that news organizations are more likely to spend limited reporting resources covering legislators who are most interesting to their readers (Zaller 2017; Strömberg 2015). Consider, for example, a hypothetical case where a newspaper circulates entirely within a single legislator’s district. We should expect that this newspaper is extremely likely to cover that legislator. On the other hand, in cases where a newspaper’s subscribers live in many districts (e.g., in a large city), the newspaper’s limited resources for covering state politics will be spread across many districts.

This relationship can be expressed formally as:

$$\text{NumStories}_{md} = \alpha_0 + \alpha_1 \text{ReaderShare}_{md}, \quad (1)$$

where NumStories_{md} is the number of stories published in newspaper m about the representative from district d in, and ReaderShare_{md} is the percent of newspaper m ’s subscribers who live in district d :

$$\text{ReaderShare}_{md} = \frac{\text{Circulation}_{md}}{\text{Circulation}_m}. \quad (2)$$

Circulation_{md} is the total number of newspaper m ’s subscribers living in district d , and Circulation_m is the total subscribers to newspaper m ’s across all districts.

This relationship is well-documented in the case of Congress (Snyder and Strömberg 2010; Peterson 2019). Here, I test it in state legislatures by regressing the quantity of news coverage

Table 1: ReaderShare and Coverage of State Legislators

	Any Coverage (Likelihood)		Num. Stories (Frequency)	
ReaderShare	0.81** (0.09)	0.28** (0.05)	31.13** (2.97)	29.71** (3.07)
Chamber	Lower	Upper	Lower	Upper
District Ctrls.	X	X	X	X
Legislator Ctrls.	X	X	X	X
N	305,189	127,518	305,189	127,518
Adj. R ²	0.24	0.30	0.10	0.15

Note: Results are from OLS regressions. The dependent variable is coverage of individual legislators in newspaper-years. All models include state-year fixed effects and controls for characteristics of legislators (leadership and tenure in office) and districts (race, age, education, income, and urbanness). Standard errors, in parentheses, are clustered by outlet. * $p < 0.05$; ** $p < 0.01$.

mentioning each legislator on the ReaderShare of their district. I compute ReaderShare_{md} for all districts using data from the Alliance for Audited Media (AAM), which publishes independently audited information about newspaper circulation.⁴

Table 1 reports results. The leftmost section reports that that legislators in districts with higher ReaderShare_{md} are more likely to be covered at least one time per year by newspapers and TV stations in their districts. The rightmost columns, show that news outlets also cover legislators more frequently when they represent a higher share of the outlet’s audience. In fact, increasing ReaderShare_{md} from 0 to 1 increases the likelihood of coverage for a state house member by 80% and for a state senate member by 28%, and increases the expected number of stories by approximately 30 per year.

There is empirical support, then, for the key intuition that newspapers more frequently

⁴An advantage to AAM data is that they are released annually and so can reveal changes in circulation over time, unlike alternative sources. However, these data exclude some smaller newspapers that have fewer resources and as a result may be less likely to staff state capitol bureaus and cover legislators routinely. In Appendix B, I discuss the computation of congruence in greater detail. In Appendix F.3, I show that my results are robust to alternative sources that include more newspapers but lack annual granularity.

cover legislators who represent more of their readers. In the typical district, however, multiple newspapers circulate. For example, there may be competing large newspapers, or one or more smaller papers as well as a large regional one. So, we need an average measure of coverage at the district level. Again following the intuition from Snyder and Strömberg (2010), the sales-weighted average number of stories about a legislator representing district d is:

$$\text{NumStories}_d = \sum_{m=1}^M \text{MarketShare}_{md} \text{NumStories}_{md} = \alpha_0 + \alpha_1 \text{Congruence}_d, \quad (3)$$

where MarketShare_{md} is the share of newspaper m 's circulation that comes from district d :

$$\text{MarketShare}_{md} = \frac{\text{Circulation}_{md}}{\text{Circulation}_d}. \quad (4)$$

It follows, then, that Congruence_d can be computed for every district using the formula:

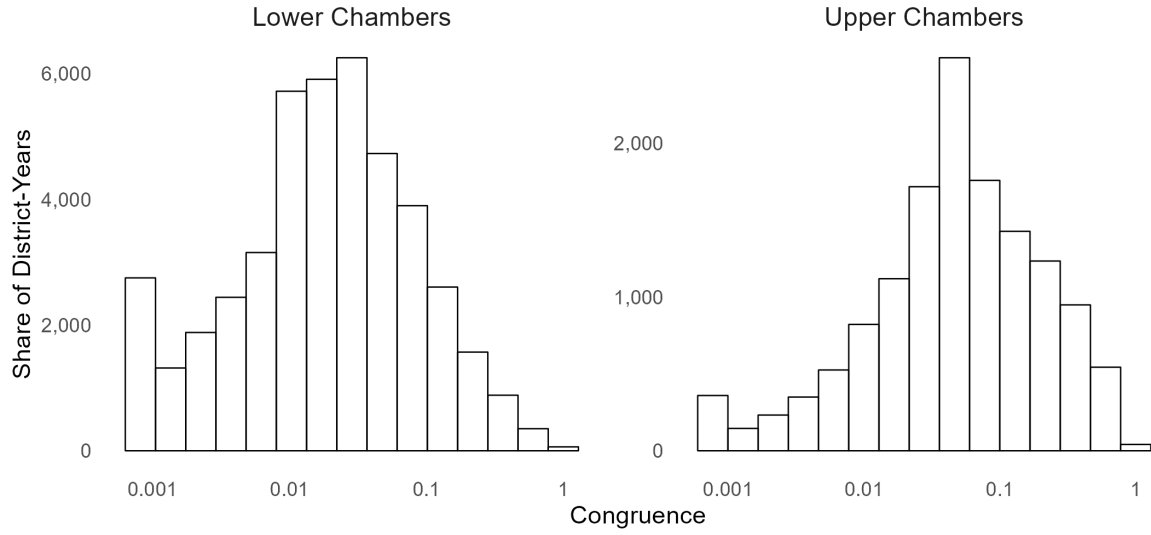
$$\text{Congruence}_d = \sum_{m=1}^M \text{ReaderShare}_{md} \times \text{MarketShare}_{md}. \quad (5)$$

This design allows for the estimation of the effect of exogenous differences in coverage of legislators that arise from variation in the overlap of political boundaries with newspaper markets. By construction, congruence ranges from 0 to 1; if congruence equals 1 for a district, news outlets are extremely likely to focus coverage on that legislator, who represents all of their readers. I compute congruence for all state legislative districts from AAM data for each year from 2011-2022. These data include a considerably larger set of newspapers than a text-based method could reasonably cover.

In Appendix F.2, I replicate the main results presented below using the observed frequency of coverage of individual legislators instead of congruence. I find that the results are generally robust to this alternative measure, though they lack the exogenous variation that the congruence design provides.

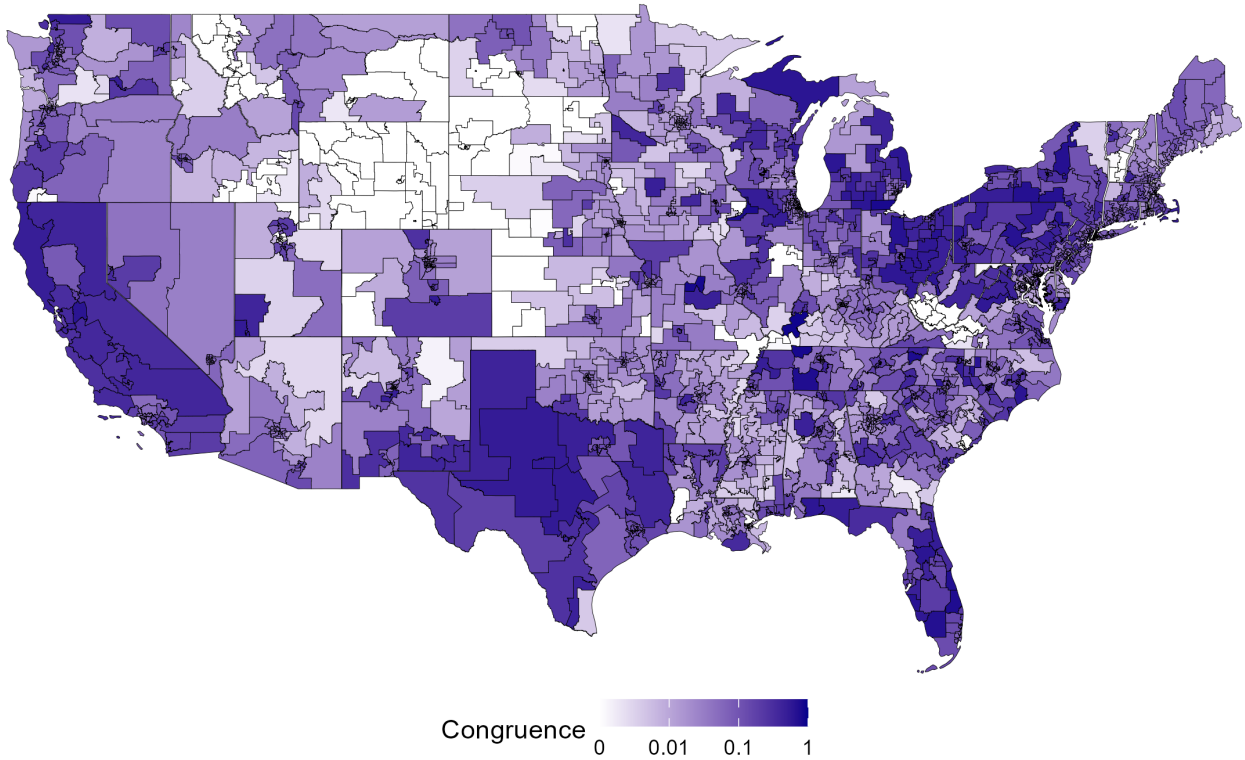
Figure 3 shows the distribution of congruence over all district-years in the sample. There

Figure 3: Histogram of Newspaper Congruence in Legislative Districts



Note: Histogram plots the distribution of congruence across lower- and upper-chamber legislatures.

Figure 4: Newspaper Congruence by State Senate Districts, 2016



Note: This map reports congruence measures for all upper chamber districts in 2016. The scale is logged to better accentuate variation in the measure.

is considerable variation in the measure. Importantly, we see similar degrees of variation in both lower and upper chambers of legislatures, though upper-chamber districts are in general larger and have slightly higher congruence on average.

To illustrate the variation of the measure nationally, Figure 4 plots the congruence of upper-chamber districts in the contiguous United States for the year 2016. Here, too, we can see a great deal of variation both across and within states, underscoring that the measure varies due to the haphazard alignment and misalignment of districts with media markets.

4 Data

The main goal of this paper is to examine how the media moderate the relationship between public opinion on specific policies and the votes cast by legislators on bills within those domains. To do so, I use the congruence measures described in Section 3 and collect additional data: roll-call votes in state legislatures and public opinion on the same policy areas at the legislative district level. In this section, I describe these data, which cover all 50 state legislatures from 2011-22. Descriptive statistics for all variables can be found in Appendix E.

4.1 Roll-Call Votes

To measure legislators' actions on substantive policy, I collected all final passage roll-call votes in state legislatures related to five policy areas: abortion, gun control or access, same-sex marriage, police body cameras, and the minimum wage. These issues are all ones on which states actively legislate, and they are salient enough for repeated inclusion on large-sample public opinion polls. All data were collected from LegiScan, and I manually corrected errors in their data that arise from assuming constant chambers, districts, and parties over time. More details about data collection, including search terms used to identify bills, are discussed in Appendix C.

Table 2 presents summary information about the roll-call data. The years for which

Table 2: Policy Issues and Summary Information

	Restrict Abortion	Stricter Gun Laws	Same-sex Marriage	Police Body Cameras	Minimum Wage
Years	2011-2022	2011-2022	2011-2016	2017-2018, 2021-2022	2017-2022
Bills	5,061	16,821	622	729	769
Floor Votes	1,278	2,944	44	71	100
Liberal	31.3%	42.5%	68.2%	76.1%	80.0%
Passed	96.6%	96.1%	100.0%	95.8%	94.0%

individual policies are included are limited by the availability of corresponding opinion data, described below. Overall, I identify 23,913 bills related to at least one policy area (some matched and are included in multiple issues). Of these, 3,098 received a final passage roll-call vote on the floor of at least one legislative chamber. I focus on these bills in the analyses that follow. I also code whether bills describe conservative or liberal policy using legislators’ votes.⁵ About 41% of bills that received a floor vote I identify as being liberal. Substantively, they are wide ranging in terms of their specific policy implications.

4.2 District Public Opinion

In order to measure district-level public opinion, I estimate support for each individual issue using Multilevel Regression and Poststratification (MRP; Park, Gelman and Bafumi 2004). To do so, I leverage large sample sizes and detailed geographic data in the Cooperative Election Study (CES; formerly CCES). MRP estimates constituency opinion from national polls by pooling information about similar types of respondents across geography. It has been shown to improve estimates of opinion, even when there are very few respondents in a given area, and has been used to measure opinion in states, cities, and legislative districts (Lax and Phillips 2009; Warshaw and Rodden 2012).

⁵I predicted legislators’ votes by their partisanship using logistic regression. If being a Democrat is more predictive of a “yea” vote than a “nay” vote, I code the bill as liberal; otherwise, I code the bill as conservative. This method is accurate for 91% of non-neutral bills in a sample of 352 bills across issues; see Appendix C.1.

I summarize district opinion on each issue using individual responses to questions on the CES. For each question, I fit a hierarchical model with random effects for individual respondents’ race, sex, education, district, state, region, and the interactions among the demographic variables and state. So-called “deep” MRP models with many interactions can improve estimation in MRP with limited risk of over-fitting (Goplerud 2024). I also include a number of contextual covariates at the district level—Republican vote share, percent urban, and issue-specific variables such as percent evangelical in estimating social issue opinion—as splines to capture nonlinear effects in these predictors (see Goplerud 2024). A final wrinkle to my opinion estimation approach is that respondents need to be matched to state legislative districts, which are not included in CES data but are necessary to fit a district random intercept.⁶ I do so using Zip codes and counties included in the survey to estimate the probability that respondents live in each of a set of possible districts.

I then poststratify predictions from the random effects model to produce opinion estimates using the joint distributions of demographics in each state legislative district, constructed from block-level American Community Survey data. I use this method to estimate opinion on each issue in all districts in election years from 2010-2020, taking care to ensure that opinion is measured prior to the roll-call vote on each bill. Specific question wording, model details, and the procedure used to match Zip codes to districts are discussed in Appendix D.3.

For two policy domains—stricter gun laws and the minimum wage—the relevant CES survey questions change over the course of the period I study. In the results below, I pool these questions together, scaling district opinion for each version of the question to have a mean of zero and variance of one.⁷ Appendix F.4 reports results for each separate measure.

⁶The model also includes splines of the latitude and longitude of district centroids, grouped within states, to allow districts to be modeled as a function of their geography; i.e., to allow estimates from any one district to be partly shaped by respondents from neighboring districts.

⁷For gun control, the CES shifts from asking if gun regulations should be made stronger, weaker, or kept the same, to asking a battery of specific questions. For the minimum wage, the question switches from a \$12 to a \$15 hourly wage. In both cases, I re-scale district-level support for each question to have a mean of zero

5 Research Design

My main empirical strategy in this paper extends a popular design for studying dyadic representation, namely, modeling legislators’ roll-call votes as a function of opinion among their own constituents (Achen 1978). My main results regress legislators’ votes on the interaction between public opinion and newspaper congruence, using the following model:

$$\text{RollCall}_{itv} = \beta_1 \text{Opinion}_{i,t-1} + \beta_2 \text{Congruence}_{it} + \beta_3 \text{Opinion}_{i,t-1} \times \text{Congruence}_{it} + \delta \mathbf{X}_{it} + \gamma_v + \varepsilon_i. \quad (6)$$

RollCall_{itv} corresponds to the up-or-down vote cast by legislator i on bill v in year t , recoded to match the ideological direction of survey questions. Congruence_{it} is the newspaper congruence with legislator i ’s district. $\text{Opinion}_{i,t-1}$ is district-level mass support for the policy measured using MRP prior to the roll-call vote. The coefficient β_1 on Opinion can be interpreted as responsiveness; a higher number reflects a larger increase in the probability of casting a vote for bill v when opinion becomes more supportive. Likewise, the coefficient on the interaction term, β_3 , can be interpreted as the degree to which newspaper congruence strengthens the relationship between public opinion and roll-call votes.

I include a number of demographic, geographic, and legislator controls (\mathbf{X}_{it}) for district-level demographics (age, race, and education makeup, and logged population density and percent urban for each district) and legislator characteristics (leadership and seniority). The models also include bill fixed effects (γ_v) to account for unobserved differences across bills, such as the extremity of the policy, which might affect the baseline likelihood that legislators vote for the policy or not. Because bills are nested in state-chamber-years, bill fixed effects also account for unobserved variation across states and chambers (e.g., institutional features).⁸

A common concern about studies of responsiveness is that there is no optimal threshold for “good representation,” especially where roll-call votes and public opinion measures are

and standard deviation of one before combining them together.

⁸The use of fixed effects also motivates the choice to use a linear probability model.

not on identical scales (Achen 1978). I take care to use public opinion on the same issue domain as the roll-call votes and to use bill fixed effects to reduce these concerns, but there may still be differences between the content of bills and the substance of survey questions. However, my interest here is not on whether roll-call votes exactly match public opinion; instead, I investigate whether newspapers’ incentives to cover legislators makes them *more responsive* (see, e.g., Olson and Snyder 2020 for discussion of similar concerns). In other words, do legislators respond to higher public support for a policy by being more likely to vote for a bill in that domain?

5.1 Measurement Error

Measuring district-level opinion using MRP introduces additional measurement error, as public opinion is modeled as a function of predictive variables rather than observed directly. This measurement error may bias regression coefficients and standard errors. To account for this, I use the method of composition (also called propagated uncertainty; see, e.g., Treier and Jackman 2008; Knox, Lucas and Cho 2022) in fitting the regressions and computing standard errors (see Appendix F.1 for results without error correction).

6 Results

Are legislators in districts with higher levels of media market congruence more sensitive to the preferences of their constituents? In this section, I begin by presenting evidence that legislators are responsive to constituent preferences in general. Then, I show how and under what conditions this relationship is strengthened by the news media.

6.1 Dyadic Representation in State Legislatures

Before turning to the role of the media in strengthening representation, it is useful to establish the degree to which state legislators respond to the preferences of their constituents in voting

Table 3: Responsiveness to Opinion in State Legislatures

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage	All Issues
Opinion	1.32** (0.07)	1.59** (0.18)	0.03** (0.01)	0.84* (0.43)	0.19** (0.02)	0.22** (0.00)
District Ctrls.	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X
N	93,384	3,810	225,686	5,036	6,659	334,575
Adj. R ²	0.48	0.40	0.52	0.56	0.44	0.44

Note: Results are from OLS regressions where the dependent variable is legislator roll-call votes. Models include bill fixed effects. Standard errors, in parentheses, are clustered by district and account for measurement error in opinion. * $p < 0.05$; ** $p < 0.01$.

on policy generally. To do so, I regress legislators’ roll-call votes on district public opinion by issue.

Table 3 reports the results of this model fit separately for each issue, and in a single model that combines issues. In the first five columns, I find a strong positive relationship between opinion and legislator votes across all five issue domains. This result is expected, as it is consistent with existing literature at both the statewide level and in Congress (e.g., Lax and Phillips 2012; Erikson 1978). Because the distributions of issue opinions vary across domains—and the scales for minimum wage and gun control are forced to be zero-mean and unit-variance due to question wording variation above—responsiveness is not directly comparable across issues.

In the rightmost column of Table 3, I report results for a model using all issues. This model is identical to the issue-specific models except that it re-scales all district-level opinion measures to be zero-mean and unit-variance, within issue, to account for variation in the distribution of opinion across issue domains (for more information about these distributions, see Appendix D.4). Here, too, I find the expected positive correlation between the preferences of the public and the votes cast by their representatives in state legislatures.

Table 4: Newspaper Market Congruence and Responsiveness across Issues

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage	All Issues
Opinion \times Congruence	0.87** (0.28)	2.39* (1.13)	0.15** (0.02)	4.78** (1.68)	0.38** (0.13)	0.04* (0.02)
Opinion Congruence	1.19** (0.08)	1.46** (0.20)	0.02** (0.01)	0.30 (0.45)	0.16** (0.02)	0.21** (0.00)
	-0.53** (0.17)	-1.06 (0.68)	0.07** (0.02)	-4.19** (1.51)	-0.04 (0.10)	0.01 (0.01)
District Ctrls.	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X
N	87,932	3,749	216,724	4,903	6,390	319,698
Adj. R ²	0.48	0.41	0.52	0.56	0.44	0.43

Note: Results are from OLS regressions where the dependent variable is legislator roll-call votes. Models include bill fixed effects. Standard errors, in parentheses, are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

6.2 Effect of Newspaper Congruence on Responsiveness

Now, I turn to the role played by the media in strengthening the degree of representation in state legislatures. To do so, I fit the linear probability models described in Equation (6) for each issue separately, as well as for all issues in a single model. Table 4 reports results. Across all five individual issues, the coefficient on the interaction between Opinion and Congruence is positive and statistically significant. Because roll-call votes and district-level opinion measures share a common ideological direction, we can interpret these effects as evidence that greater newspaper congruence *strengthens* the relationship between public opinion and legislator votes. Put simply, when the press faces a greater incentive to cover legislators, those legislators are more responsive to the preferences of the public. This effect is present and statistically significant for both social and economic issues, as well as where all issues are included in a single model.

A number of specific cases are emblematic of this dynamic. For example, in 2019, the Nevada Legislature passed SB 179, a sweeping bill to liberalize the state’s abortion laws. Of

21 Republicans in the legislature, just one (Sen. Ben Kieckhefer) voted in favor of the bill, although I estimate that opinion majorities in all but four of Nevada’s State Senate districts oppose restrictions on abortion. Kieckhefer’s district was much higher congruence than other members of the Senate (0.31, compared to 0.09 on average for other senators), and this congruence is further reflected in 26 news stories published about him by local newspapers.

Similarly, in 2014, the Ohio General Assembly passed legislation (HB 234) that made several changes to gun laws, including honoring concealed carry permits from other states. In the House of Representatives, 17 Democrats joined Republicans in supporting the legislation. The pattern of their votes is instructive; 10 of these Democrats represented districts where the majority of constituents did not support stricter gun laws. Those representatives were particularly likely to be in higher-congruence districts (six of their districts had newspaper congruence above 0.2). Conversely, the seven Democrats who voted for the bill, despite high levels of support for stricter gun laws, all represented districts with very low congruence.

These policies represent a hard test for the media’s role in shaping responsiveness. Much of the policy enacted by state legislatures is arcane and not particularly salient to much of the public: regulations of particular industries, appropriations for infrastructure, minor amendments to criminal codes, etc. Conversely, these policies are high-salience, as evidenced by their inclusion in opinion surveys. As a result, legislators’ preferences are likely difficult to change. Even still, the degree to which their votes correlate with constituent preferences significantly increases as local newspapers are incentivized to cover them more.

My primary focus has been on the effects of newspaper coverage. However, we might likewise expect to see effects from coverage by local TV news broadcasts. In Appendix G, I show that the congruence of TV media markets has a similar effect, though smaller in magnitude, consistent with TV broadcasts’ reduced focus on political accountability coverage.

The results reported in Table 4 are robust to the decision to use AAM circulation data, rather than SRDS, as well as a number of alternative specifications reported in Appendix F.3. I also show in the appendix that results appear similar if observed frequency of legislative

coverage from newspaper text data is used, rather than Congruence, although this measure is prone to confounding as discussed in Section 4 above.

6.3 Explaining Variation in Media Effects

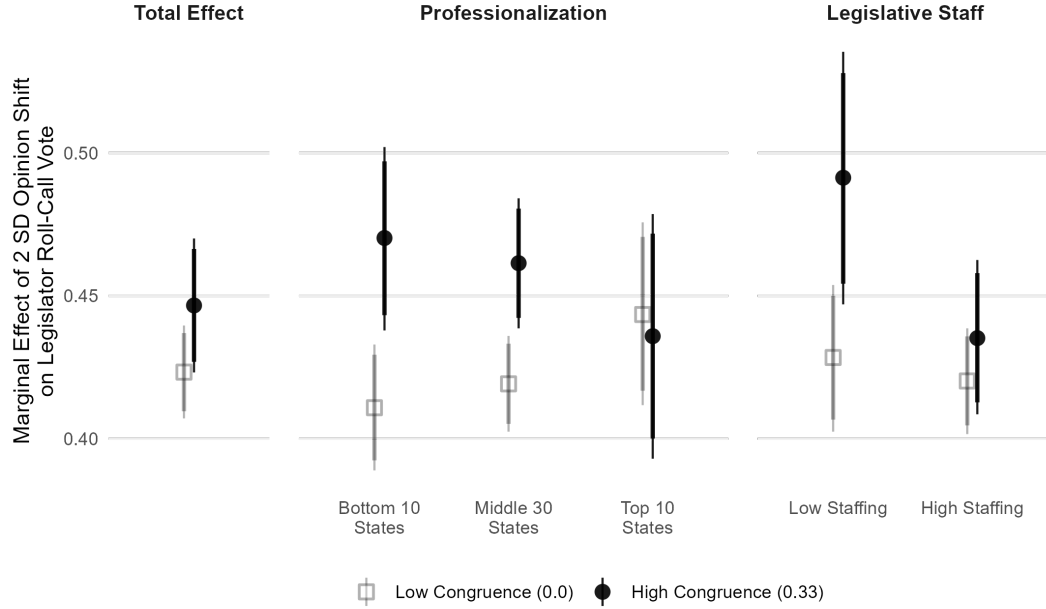
Now, I explore institutional and legislator factors that may shape the media’s effect on responsiveness. First, I consider heterogeneous effects at varying levels of legislative professionalism, a key institutional variable in the state legislatures. I also explore effects across legislators’ personal characteristics, namely tenure in office, leadership status, and party. I find that newspaper congruence strengthens responsiveness, especially in less professionalized states, and among legislators who have served longest. However, I find no statistically significant differences in effects by party or between leadership and rank-and-file members.

6.3.1 Legislative Professionalism

Professionalism is an important moderator of representation in state legislatures. Classically, more professionalized legislatures are those with more staff resources, longer session lengths, and higher legislative salaries (Squire 1992). Legislators in more professionalized states have access to more resources that can help them understand complex issues and represent their districts (Maestas 2000; Berry, Berkman and Schneiderman 2000). In particular, we might expect that legislators that are able to employ more staff have a greater ability to understand the priorities and preferences of constituents, as these staff can operate district offices and engage more with constituents. In states where legislators lack resources, it may be more difficult for them to know the public’s preferences or the implications of policy for accomplishing the goals of constituents (Butler and Nickerson 2011). In these cases, the press may act as an information subsidy, providing relevant information to those whose districts back home are covered more frequently.

To explore heterogeneity in media effects across different levels of professionalization, I modify the regression from my main results (Equation 6 above) to include a triple interaction

Figure 5: Heterogeneous Effects of Media Congruence by Legislative Professionalism



Note: Point estimates report the marginal effect of a two-standard-deviation shift in district opinion on the probability that legislators will support a policy. Lighter-colored square points correspond to the case where Congruence is low (0.0), and darker-colored circles correspond to the case where Congruence is relatively high (0.33). Error bars report 90% and 95% confidence intervals, clustered by district and accounting for measurement error in opinion.

for $\text{Opinion}_{i,t-1} \times \text{Congruence}_{it} \times \text{Professionalization}_{it}$, where Professionalization is measured using Squire scores (Squire 2017).⁹ Specifically, I fit this model on all issues, mirroring the rightmost column of Table 4. This approach allows the effect of Congruence on responsiveness to vary across different levels of legislative professionalism.

Figure 5 reports the marginal effects of changes in opinion on the probabilities of supporting a roll-call vote, broken down by high and low Congruence. This eases interpretation of the triple-interaction models; regression tables reporting full results for these models can be found in Appendix H. First, the leftmost bars report the total effect of a two-standard-deviation increase in public support for a policy, among both high- and low- congruence districts. This

⁹I also include the two-way interactions with Professionalization and Opinion and Congruence. A coefficient cannot be estimated for Professionalization on its own because it is a feature of state-years, and the bill fixed effects are nested within state-years.

effect is computed from the rightmost model reported in Table 4, and shows that across issues, an opinion shift of two standard deviations corresponds to a 43 percentage point increase in the probability of supporting a bill for districts with zero congruence, but a 45 percentage point increase for districts with congruence equal to 0.33. The gap between the two points in the figure is, essentially, the effect of newspaper congruence on responsiveness.

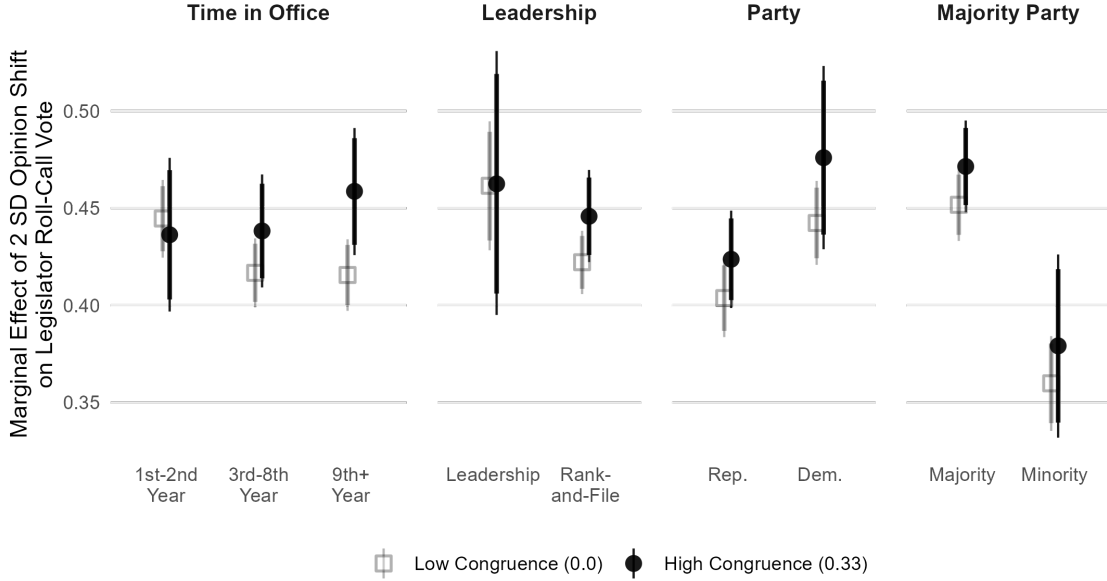
The next set of results in Figure 5 compares states with low professionalism (for simplicity defined here as the 10 states with the lowest Squire scores) against those with medium or high levels of professionalism. Clearly, congruence matters a great deal more in less professionalized states than those that are more professionalized. The difference in the effect reported for the top 10 states and bottom 10 states is statistically significant, as is the difference between the top 10 and middle 30 states (see Appendix H).

I also consider the role of legislative staff, specifically, in shaping responsiveness. The third panel of Figure 5 reports results for regressions that interact congruence and opinion with a measure of staffing levels (obtained from Squire 2017). To ease interpretation, I binarize this variable to above- and below-median levels. We can see that in states with below-median levels of staffing, the effect of congruence is much greater than those with high levels of staffing. In the average year, the median number of staff-per-legislator is 2.6; at the upper end of the distribution, California legislators have 18.2 staff each on average, and New York legislators have 12.9.

6.3.2 Legislator Characteristics

I next consider heterogeneity across legislator characteristics. A number of features may shape the degree to which newspaper market congruence—and the additional news coverage that accompanies it—shape legislators’ policy votes. First, we might expect that the amount of time legislators have served in the legislature affects their relationships with the press. Legislators who have served longer are more likely to hold senior positions in the legislature, such as chairing major committees, and as a result, may face greater scrutiny from the press

Figure 6: Heterogeneous Effects of Media Congruence by Legislator Characteristics



Note: Point estimates report the marginal effect of a two-standard-deviation shift in district opinion on the probability that legislators will support a policy, varying by legislator characteristics. Lighter-colored square points correspond to the case where Congruence is low (0.0), and darker-colored circles correspond to the case where Congruence is relatively high (0.33). Error bars report 90% and 95% confidence intervals, clustered by district and accounting for measurement error in opinion.

(e.g., Ban et al. 2019 show more powerful officials are covered more frequently). Likewise, because journalists and politicians engage in repeated personal interaction (Zaller 2017; Cooper and Johnson 2006), those who have served longer may have closer relationships with journalists and the effect of these interactions may have built up more.

In the leftmost panel of Figure 6, I show how the marginal effect of a two-standard-deviation shift in public opinion on roll-call votes varies among legislators with more and less tenure in office. As in the case of professionalization above, I model this by interacting Congruence and Opinion with Tenure.¹⁰ I find that my results are driven largely by legislators who have served longer in the legislature, especially those who are in their ninth year or longer. The difference between the effect size for those in their ninth year or later and those

¹⁰I include Tenure as a continuous variable for the number of years legislators have served in either chamber, as well as binary variables for those in their first two years or who have served 10 or more years. All of these variables are interacted with Congruence and Opinion.

in their first two years is statistically significant at the 95% level.

We might also expect members of chamber leadership to be affected differently from rank-and-file legislators. On the one hand, members of leadership may face greater scrutiny by the press and be more likely to be affected by them. Alternatively, they may behave vote contrary to district opinion on key issues, instead seeking to satisfy a statewide constituency or a constituency of their fellow (copartisan) legislators. The second panel in Figure 6 shows that the effect of congruence is greater among rank-and-file legislators than members of leadership.¹¹ However, this difference is not statistically significant at either the 95% or 90% confidence level.

Finally, we may expect party to shape legislators' relationships with the press or the extent to which they are affected by coverage. In the final two columns of Figure 6, I show that there is no meaningful difference in the effects of congruence between Republicans or Democrats, or between members of majority and minority parties.

7 Conclusion

Democratic theory expects that news coverage improves political accountability and representation. By informing the public and conducting watchdog coverage that holds politicians to account for unpopular positions they take, the press creates incentives for legislators to represent their constituents well. We should expect, then, that politicians who are covered more often by the press better reflect mass preferences in casting policy votes.

Indeed, I find new evidence that state legislators are more responsive to the preferences of their constituents when they are more likely to be covered by the local newspapers in their districts. Using the congruence of newspaper circulation areas and legislative districts to measure the media's economic incentive to cover particular legislators, I find that the

¹¹I collected leadership data from the National Conference of State Legislatures. I classify chamber presiding officers, presiding officers *pro tempore*, majority leaders, and assistant majority leaders to be members of leadership. In New Hampshire, I also include the deputy Speaker of the House.

relationship between public support for specific policies and roll-call votes on those policies is stronger in districts where local newspapers are more likely to cover legislators. I find this relationship consistently across five policy domains that are on the state agenda: abortion, gun control, same-sex marriage, the minimum wage, and police body cameras.

This evidence suggests that even in the low-information, low-engagement context of state legislatures and in the era of declining local news, the press matter a great deal in enhancing the extent to which representatives reflect constituent preferences. This finding affirms research that suggests the news media contribute meaningfully to statehouse democracy (e.g., Rogers 2023; Myers 2025), in this case by strengthening the effect that public opinion has on policy votes by legislators. I leave the disentangling and testing of the mechanisms by which the media affect state legislative representation to future work.

Notably, I do find important heterogeneity in my main results. The press’s role in responsiveness is largely driven by less professionalized legislatures, and especially those where members have smaller staffs. This suggests that one mechanism through which the press may contribute to representation is as an information link between the public and their representatives. By subsidizing information about public opinion and policy for legislators who lack resources to do so independently, the press may make it easier for politicians to be responsive. Likewise, the press has greater effects on legislators who have served longer tenures. These members may both be more senior and powerful in the legislature and have closer relationships with journalists—and therefore more likely to be covered by the press and affected by more frequent interactions with reporters.

The results presented here have two important implications for our understandings of political accountability in the states and of the role of the news media. First, these findings underscore the importance of the independent press for democracy. Scholars have generally understood responsiveness in the states to be moderated by institutional and electoral features (e.g. Lax and Phillips 2012), but these findings point toward the importance of the media as an external check on legislator behavior and conduit of information between the elites

and the public. Likewise, these results should raise alarms that if the local news industry continues to decline, as it has over the past two decades, the quality of representation in state governments may be adversely affected. The extent to which this may spread to other levels of government is a question for other research, but given the low levels of engagement in local politics, it is reasonable to expect a similar concern to hold in that domain as well.

Second, these findings suggest a need for deeper and fuller understandings of the mechanisms by which the news media shape representation. Prior work has highlighted the role of the press in improving electoral accountability (e.g., Snyder and Strömberg 2010; Myers 2025). This is undoubtedly one important mechanism by which the media affect the actions taken by politicians. However, my findings of heterogeneous effects across varying levels of legislative professionalization and tenure in office suggest there may be more connecting the press and politicians than simply the voters. In particular, these suggest that the press may be useful in informing politicians about constituent opinion, especially in states where legislators have fewer resources to do so themselves (Butler and Nickerson 2011, p. 73). Likewise, as Zaller (2017) argued, the press and politicians operate in the same domains but in tension with one another, and so these interactions may shape the behaviors of politicians, as well. Understanding these alternative mechanisms would be especially important in subnational politics, where mass familiarity with and interest in government is considerably lower than at the national level. As a result, the potential effects of information for political accountability may be more limited.

Together, these results suggest that the role the media play as an informational link between the public and their representatives democracy has meaningful consequences for the policies that are enacted, even in low-engagement domains such as state legislatures. But they also present a critical challenge for those concerned about democratic accountability: In light of the declining fortunes of local news, the quality of representation in the states may be at further risk.

References

- Achen, Christopher H. 1978. "Measuring Representation." *American Journal of Political Science* 22(3):475–510.
- Arceneaux, Kevin, Martin Johnson, René Lindstädt and Ryan J. Vander Wielen. 2016. "The Influence of News Media on Political Elites: Investigating Strategic Responsiveness in Congress." *American Journal of Political Science* 60(1):5–29.
- Arnold, R. Douglas. 2004. *Congress, the Press, and Political Accountability*. Princeton, N.J.: Princeton University Press.
- Ashworth, Scott. 2012. "Electoral Accountability: Recent Theoretical and Empirical Work." *Annual Review of Political Science* 15(Volume 15, 2012):183–201.
- Ban, Pamela, Alexander Fouirnaies, Andrew B Hall and James M Snyder. 2019. "How Newspapers Reveal Political Power." *Political Science Research and Methods* 7(04):661–678.
- Barabas, Jason and Jennifer Jerit. 2009. "Estimating the Causal Effects of Media Coverage on Policy-Specific Knowledge." *American Journal of Political Science* 53(1):73–89.
- Berry, William D., Michael B. Berkman and Stuart Schneiderman. 2000. "Legislative Professionalism and Incumbent Reelection: The Development of Institutional Boundaries." *American Political Science Review* 94(4):859–874.
- Besley, Timothy and Robin Burgess. 2001. "Political Agency, Government Responsiveness and the Role of the Media." *European Economic Review* 45(4):629–640.
- Boydston, Amber E. 2013. *Making the News: Politics, the Media, and Agenda Setting*. Chicago: University of Chicago Press.
- Broockman, David E. and Christopher Skovron. 2018. "Bias in Perceptions of Public Opinion among Political Elites." *American Political Science Review* 112(3):542–563.
- Butler, Daniel M. and David W. Nickerson. 2011. "Can Learning Constituency Opinion Affect How Legislators Vote? Results from a Field Experiment." *Quarterly Journal of Political Science* 6(1):55–83.

- Campbell, James E., John R. Alford and Keith Henry. 1984. "Television Markets and Congressional Elections." *Legislative Studies Quarterly* 9(4):665–678.
- Caughey, Devin and Christopher Warshaw. 2022. *Dynamic Democracy: Public Opinion, Elections, and Policymaking in the American States*. Chicago Studies in American Politics Chicago (Ill.): the University of Chicago press.
- Cooper, Christopher A. 2002. "Media Tactics in the State Legislature." *State Politics & Policy Quarterly* 2(4):353–371.
- Cooper, Christopher A. and Martin Johnson. 2006. Politics and the Press Corps: Reporters, State Legislative Institutions, and Context. In *State Politics and Policy Conference*. Texas Tech University, Lubbock, TX: .
- Darr, Joshua P., Matthew P. Hitt and Johanna L Dunaway. 2018. "Newspaper Closures Polarize Voting Behavior." *Journal of Communication* 68(6):1007–1028.
- Delli Carpini, Michael X. and Scott Keeter. 1996. *What Americans Know about Politics and Why It Matters*. New Haven: Yale University Press.
- Druckman, James N. 2005. "Media Matter: How Newspapers and Television News Cover Campaigns and Influence Voters." *Political Communication* 22(4):463–481.
- Erikson, Robert S. 1978. "Constituency Opinion and Congressional Behavior: A Reexamination of the Miller-Stokes Representation Data." *American Journal of Political Science* 22(3):511–535.
- Erikson, Robert S., Gerald C. Wright and John P. McIver. 1993. *Statehouse Democracy: Public Opinion and Policy in the American States*. New York: Cambridge University Press.
- Ferejohn, John. 1986. "Incumbent Performance and Electoral Control." *Public Choice* 50(1/3):5–25.
- Gentzkow, Matthew. 2006. "Television and Voter Turnout." *The Quarterly Journal of Economics* 121(3):931–972.
- Gentzkow, Matthew, Jesse M. Shapiro and Michael Sinkinson. 2011. "The Effect of Newspaper Entry and Exit on Electoral Politics." *American Economic Review* 101(7):2980–3018.

- Goplerud, Max. 2024. "Re-Evaluating Machine Learning for MRP Given the Comparable Performance of (Deep) Hierarchical Models." *American Political Science Review* 118(1):529–536.
- Grumbach, Jacob M. 2022. *Laboratories against Democracy: How National Parties Transformed State Politics*. Princeton Studies in American Politics Princeton, New Jersey: Princeton University Press.
- Hayes, Danny and Jennifer L. Lawless. 2018. "The Decline of Local News and Its Effects: New Evidence from Longitudinal Data." *The Journal of Politics* 80(1):332–336.
- Hayes, Danny and Jennifer L. Lawless. 2021. *News Hole: The Demise of Local Journalism and Political Engagement*. New York: Cambridge University Press.
- Hogan, Robert E. 1997. "Voter Contact Techniques in State Legislative Campaigns: The Prevalence of Mass Media Advertising." *Legislative Studies Quarterly* 22(4):551–571.
- Hopkins, Daniel J. 2018. *The Increasingly United States: How and Why American Political Behavior Nationalized*. Chicago: University of Chicago Press.
- Jerit, Jennifer, Jason Barabas and Toby Bolsen. 2006. "Citizens, Knowledge, and the Information Environment." *American Journal of Political Science* 50(2):266–282.
- Knox, Dean, Christopher Lucas and Wendy K. Tam Cho. 2022. "Testing Causal Theories with Learned Proxies." *Annual Review of Political Science* 25(Volume 25, 2022):419–441.
- Lax, Jeffrey R. and Justin H. Phillips. 2009. "How Should We Estimate Public Opinion in The States?" *American Journal of Political Science* 53(1):107–121.
- Lax, Jeffrey R. and Justin H. Phillips. 2012. "The Democratic Deficit in the States." *American Journal of Political Science* 56(1):148–166.
- Maestas, Cherie. 2000. "Professional Legislatures and Ambitious Politicians: Policy Responsiveness of State Institutions." *Legislative Studies Quarterly* 25(4):663–690.
- Mahone, Jessica, Qun Wang, Philip Napoli, Matthew Weber and Katie McCollough. 2019. *Who's Producing Local Journalism? Assessing Journalistic Output Across Different Outlet Types*. DeWitt Wallace Center for Media and Democracy.

- Miller, Warren E. and Donald E. Stokes. 1963. "Constituency Influence in Congress." *The American Political Science Review* 57(1):45–56.
- Moskowitz, Daniel J. 2021. "Local News, Information, and the Nationalization of U.S. Elections." *American Political Science Review* 115(1):114–129.
- Myers, Andrew C. W. 2025. "Press Coverage and Accountability in State Legislatures." *American Political Science Review* .
- Olson, Michael P. and James M. Snyder. 2020. "Dyadic Representation in the American North and South: The Case of Prohibition." *The Journal of Politics* 83(3):1030–1045.
- Padgett, Jeremy, Johanna L Dunaway and Joshua P Darr. 2019. "As Seen on TV? How Gatekeeping Makes the U.S. House Seem More Extreme." *Journal of Communication* 69(6):696–719.
- Page, Benjamin I. and Robert Y. Shapiro. 1983. "Effects of Public Opinion on Policy." *The American Political Science Review* 77(1):175–190.
- Park, David K., Andrew Gelman and Joseph Bafumi. 2004. "Bayesian Multilevel Estimation with Poststratification: State-Level Estimates from National Polls." *Political Analysis* 12(4):375–385.
- Peterson, Erik. 2019. "Not Dead Yet: Political Learning from Newspapers in a Changing Media Landscape." *Political Behavior* pp. 1–23.
- Peterson, Erik. 2021. "Paper Cuts: How Reporting Resources Affect Political News Coverage." *American Journal of Political Science* 65(2):443–459.
- Puglisi, Riccardo and James M. Snyder. 2011. "Newspaper Coverage of Political Scandals." *The Journal of Politics* 73(3):931–950.
- Rogers, Steven. 2023. *Accountability in State Legislatures*. Chicago Studies in American Politics Chicago: The University of Chicago Press.
- Shearer, Elisa, Katerina Eva Matsa, Amy Mitchell, Mark Jurkowitz, Kirsten Worden and Naomi Forman-Katz. 2022. *Total Number of U.S. Statehouse Reporters Rises, but Fewer Are on the Beat Full Time*. Washington, D.C: Pew Research Center.

- Snyder, James M. and David Strömberg. 2010. "Press Coverage and Political Accountability." *Journal of Political Economy* 118(2):355–408.
- Soroka, Stuart N. and Christopher Wlezien. 2022. *Information and Democracy: Public Policy in the News*. Communication, Society and Politics Cambridge ; New York, NY: Cambridge University Press.
- Squire, Peverill. 1992. "Legislative Professionalization and Membership Diversity in State Legislatures." *Legislative Studies Quarterly* 17(1):69–79.
- Squire, Peverill. 2017. "A Squire Index Update." *State Politics & Policy Quarterly* 17(4):361–371.
- Strömberg, David. 2015. Media Coverage and Political Accountability: Theory and Evidence. In *Handbook of Media Economics*, ed. Simon P. Anderson, Joel Waldfogel and David Strömberg. Vol. 1 of *Handbook of Media Economics* North-Holland pp. 595–622.
- Tausanovitch, Chris and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108(3):605–641.
- Treier, Shawn and Simon Jackman. 2008. "Democracy as a Latent Variable." *American Journal of Political Science* 52(1):201–217.
- Walgrave, Stefaan and Peter Van Aelst. 2006. "The Contingency of the Mass Media's Political Agenda Setting Power: Toward a Preliminary Theory." *Journal of Communication* 56(1):88–109.
- Warshaw, Christopher and Jonathan Rodden. 2012. "How Should We Measure District-Level Public Opinion on Individual Issues?" *The Journal of Politics* 74(1):203–219.
- Wlezien, Christopher and Stuart Soroka. 2024. "Media Reflect! Policy, the Public, and the News." *American Political Science Review* 118(3):1563–1569.
- Zaller, John. 2017. A Theory of Media Politics: How the Interests of Politicians, Journalists, and Citizens Shape the News. Manuscript.

Supplementary Materials for “Local News and Policy Responsiveness in the States”

Michael Auslen*

Contents

A	Media Text Corpus Collection and Content Analysis	1
B	Computing Congruence	3
C	Bill and Roll-Call Data Collection	4
D	MRP Estimates of District Opinion	6
E	Descriptive Statistics of Analysis Variables	9
F	Robustness of Responsiveness Results	10
G	Television Congruence Results	15
H	Heterogeneous Effects	16

A Media Text Corpus Collection and Content Analysis

The text analysis results in the main text rely on data collected from two sources. First, I collected full newspaper texts from ProQuest covering English-language, local newspapers in the United States over the period 2012-2021. I also collected additional newspaper texts via NewsBank. The full corpus comprises 290 newspapers.

These are not a complete sample of all newspapers in the country, nor are they randomly drawn. In building the NewsBank sample, I took special care to fill gaps in the ProQuest data, where possible—especially by collecting text from the largest newspapers and those in larger markets.

A.1 Automated Text Analysis Procedure

Text analysis results in Sections 2 and 3 of the main paper and Appendix F.2 use a dictionary method. I first constructed a list of state legislators’ names from any state in which a newspaper sells at least 1,000 copies. Names of legislators are from Klarner (2018) for 2012-2016, and a combination of LegiScan and manual searches for 2017-2021. From this list, I produced a dictionary of search terms for each outlet and year that combine the names of legislators and the name of the chamber or office. I followed an identical process for members of Congress, using names from Lewis et al. (2023), and governors, using names from Kaplan

*Assistant Professor, Department of Government, University of Texas at Austin, Austin, TX. Email: mauslen@austin.utexas.edu. URL: <https://michaelauslen.com>.

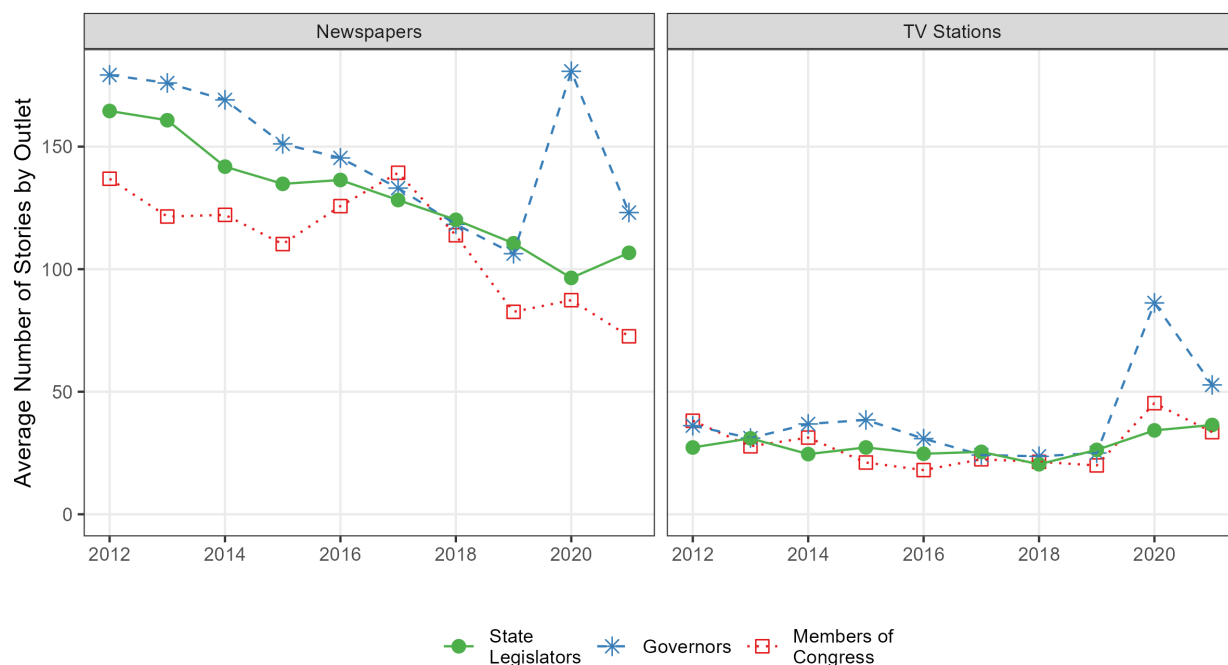
(2021). Finally, I conducted an automated search of all articles in the corpus for stories referencing one or more legislators.

A.2 Comparing Newspaper Coverage with TV

My results focus on newspapers, rather than television, because newspapers engage in considerably more coverage of public affairs and state politics than do local TV news broadcasts. In 2022, newspaper journalists made up 33% of full-time state government reporters from mainstream news outlets (i.e., excluding government insider publications, expressly ideological outlets, and the trade press), compared to 15% for television.

This variation reveals itself in the text of newspapers and TV news broadcasts. I extended the automated text analysis procedure described above to TV, using an archive of news broadcast transcripts and online articles from 239 TV stations. Figure A1 reports the average number of stories mentioning state legislators, governors, and members of Congress by name in the local newspapers and TV stations in my sample. Although the coverage on TV has been more stable over time than newspaper coverage, politics is much less frequently covered on broadcast news, as compared to newspapers.

Figure A1: State Government Coverage in Newspapers and Local TV



Note: Number of articles that mention individual politicians by name, in newspapers and TV coverage.

A.3 Newspaper Content

In order to understand the substance of local newspaper coverage of state legislatures, I worked with a team of research assistants to read and hand-code information about a random sample of newspaper stories identified by the automated procedure as mentioning state legislators by name. The sample contains 939 articles, which include news coverage as well as opinion content. Each article was hand-coded by at least two coders for a variety of variables. We find considerable evidence of substantive, policy-focused coverage of state legislatures.

First, we considered whether news coverage is focused on policy, elections, or other topics of political coverage. We find that nearly 65% of stories focus primarily on policy, either taking a broad look at an area of state policymaking or focusing on particular pieces of legislation. Each of these categories garners considerably more press attention than elections (16%), the personal lives of legislators (10%), or process stories (9%).

Table A1: Story Focus from Content Analysis

Story Focus	Share of Stories
Policy, General	33.92%
Specific Legislation	33.04%
Elections	14.39%
Personal Lives	10.30%
Procedure	8.35%

In light of the large quantity of stories published relating to policy, we next identified the topics these stories focus on. Stories were coded according to a list of potential policy topics, and each could be assigned to multiple topics if applicable. Table A2 reports the share of stories focused on each topic.

Table A2: Story Topics: Full List

Topic	Pct.	Topic	Pct.	Topic	Pct.
Education	11.5%	Transportation	4.5%	Other	1.7%
Elections (General)	10.6%	District Community Event	4.3%	Civil & Family Law	1.6%
Health Care	9.1%	Social Welfare	4.3%	Immigration	1.3%
Crime & Criminal Justice	9.0%	Multiple Policies	3.6%	State-Local Gov. Relations	1.3%
Government Operations	7.9%	Personal Lives	3.6%	Campaign Finance	0.9%
Budget	7.8%	Ethics	3.0%	Agriculture	0.8%
Civil Rights & Liberties	7.3%	Commemorative	2.9%	State-Federal Relations	0.6%
Business & Econ. Dev.	6.5%	Process (General)	2.5%	Rules and Procedure	0.6%
Environment & Energy	6.4%	Gambling	2.2%	Foreign Affairs	0.5%
Taxes	5.9%	Election Policy	2.1%	Interstate Relations	0.3%
Labor & Employment	4.9%	Elections (Results)	1.8%		

Note: Frequencies do not sum to 100% as some stories contain multiple topics.

B Computing Congruence

Newspaper congruence is computed using circulation within each district. Circulation data from the Alliance for Audited Media (AAM) is reported at the county level. Following Snyder and Strömberg (2010), I assume that circulation within counties is distributed according to population. This allows me to project circulation to the district level using the formula

$$\text{Circulation}_{mcd} = \text{Circulation}_{cm} \frac{\text{Population}_{cd}}{\text{Population}_c}, \quad (\text{A1})$$

where Circulation_{cm} is newspaper m 's circulation in county c , and $\frac{\text{Population}_{cd}}{\text{Population}_c}$ is the share of county c 's population that lives in district d . This forms the core building block of Congruence_d . From Circulation_{mcd} , I compute the following quantities:

$$\begin{aligned} \text{Circulation}_{md} &= \sum_c \text{Circulation}_{mcd} \\ \text{Circulation}_m &= \sum_d \text{Circulation}_{md} \\ \text{Circulation}_d &= \sum_m \text{Circulation}_{md} \\ \text{ReaderShare}_{md} &= \frac{\text{Circulation}_{md}}{\text{Circulation}_m} \\ \text{MarketShare}_{md} &= \frac{\text{Circulation}_{md}}{\text{Circulation}_d} \\ \text{Congruence}_d &= \sum_m \text{ReaderShare}_{md} \text{MarketShare}_{md} \end{aligned} \quad (\text{A2})$$

For some robustness tests in Appendix F, I use newspaper circulation data from the Standard Rate and Data Service (SRDS) *Circulation* handbook. These data are available for 2008, 2014, and 2018, so I linearly impute county-level circulation for each newspaper. I discuss the SRDS data in more detail below.

C Bill and Roll-Call Data Collection

Bill roll-call data are obtained from LegiScan. The sources of bills in each policy area are below:

Table A3: Sources of Relevant Legislation

Policy Domain	Source	Search Term or URL
Restrict Abortion	LegiScan	abortion+OR+(pregnancy+NEAR+termination)
Same-Sex Marriage	LegiScan	(marriage+NEAR+man+NEAR+woman)+OR+(marriage+NEAR+same+NEAR+sex)+OR+(marriage+NEAR+equality)+OR+(marriage+NEAR+sexual+NEAR+orientation)
Stricter Gun Laws	LegiScan	firearm+OR+handgun+OR+rifle
Police Body Cameras	LegiScan	(police+NEAR+body+NEAR+camera)+OR+(law+NEAR+enforcement+NEAR+camera)
Minimum Wage	NCSL	https://www.ncsl.org/labor-and-employment/minimum-wage-legislation-database

C.1 Bill Ideological Classification

To analyze all bills on a given policy domain in a single regression, I code the ideological direction of bills. Specifically, I fit the logistic regression model

$$\Pr(\text{Vote}_i = 1) = \beta_0 + \beta_1 \text{Dem}_i + \varepsilon_i \quad (\text{A3})$$

for each bill, where Vote_i is whether a legislator i voted in favor of a bill, and Dem_i is a binary variable indicating whether they are a Democrat. Where $\beta_1 > 0$, I code bills as taking the liberal position on an issue, and where $\beta_1 < 0$, I code them as conservative.

I validated these automated codings by hand using a sample of 352 bills—a random sample of 100 bills on abortion and gun laws, plus all bills in the sample about LGBTQ rights, police body cameras, and the minimum wage. Table A4 reports results of this effort. I find that 17.7% of bills are either nonideological or are included in the sample incidentally (e.g., because surrounding sections of law mention abortion and are reprinted in the text of the bill, though the bill focuses on something else). Of the remaining 82.3% of bills, the regression classification approach correctly identifies the ideological direction of 90.6% of bills, with some variation across policy domains.

Table A4: Validation of Bill Ideology Classification

Policy Domain	Accuracy	Correct (Raw)	Incorrect (Raw)	Incidental/Neutral
Abortion	98.2%	82.5%	1.5%	16.0%
LGBTQ Rights	96.4%	81.5%	3.1%	15.4%
Gun Control	87.2%	68.0%	10.0%	22.0%
Minimum Wage	94.1%	94.1%	5.9%	0.0%
Police Body Cameras	77.1%	50.0%	14.8%	35.2%
Total	90.6%	75.2%	7.1%	17.7%

D MRP Estimates of District Opinion

Here, I provide technical details of district opinion estimation using Multilevel Regression and Poststratification (MRP) (Park, Gelman and Bafumi 2004), which can produce reliable estimates of subnational opinion from national polls—even with sparse data at units as small as state legislative districts (Lax and Phillips 2009*b*; Warshaw and Rodden 2012).

D.1 Opinion Data

To estimate opinion, I rely on responses to the Cooperative Election Study (CES, formerly CCES), which is conducted every two years and includes approximately 60,000 respondents per survey. I construct the main opinion measures from the following questions on the CES; my results are robust to several alternative questions (see Appendix F.4)

Restrict Abortion: (2010-2012) “Which one of the opinions on this page agrees with your view on abortion?” Coded as *restrict* if respondents say that abortion should be allowed “never,” “only in case of rape, incest, or when the woman’s life is in danger,” or “only after the need for the abortion has been established.” (2014-2020) “Do you support or oppose the following proposals?” Coded as *restrict* if respondents support abortions “always...as a matter of choice,” “only in cases of rape, incest, or when the woman’s life is in danger,” or only before “the 20th week of pregnancy.”

Same-Sex Marriage: (2010) “Do you support a constitutional amendment banning gay marriage?” Opposition to the amendment is coded as *support* for same-sex marriage. (2012-2016) “Do you favor or oppose allowing gays and lesbians to marry legally?”

Stricter Gun Laws: (2010-2012) “In general, do you feel that the laws covering the sale of guns should be...” Coded as *restrict* if respondents say laws should be “more strict.” (2014-2022) “On the issue of gun regulation, are you for or against each of the following...” Coded as *restrict* if respondents support either of the following policies: “background checks” or “ban assault rifles.” Because these questions differ dramatically (see the distributions of opinion below), district opinion estimates are rescaled to mean-zero, unit variance within question type before being combined.

Police Body Cameras: (2016, 2020-2022) “Do you support or oppose each of the following proposals? Require police officers to wear body cameras that record all of their activities while on duty.”

Minimum Wage: (2016-2018) “If your state put the following questions for a vote on the ballot, would you vote for or against? Raise the state minimum wage to \$12 an hour.” (2020) “Do you support each of the following proposals? Raise the minimum wage to \$15 an hour.” Because these questions differ dramatically, district opinion estimates are rescaled to mean-zero, unit variance within question type before being combined.

D.2 Modeling Opinion

Generally, MRP proceeds in two steps. First, a predictive model is fit—typically using hierarchical logistic regression—of individual opinion using demographic and geographic variables. This model can be used to predict average opinion among demographic subgroups in each geographic area (e.g., among Black women with a college degree aged 30-44 in Alabama).

Then, these estimates are “poststratified” to the geography of interest by taking a weighted average using the known distribution of the demographic subgroups in the population as the weights.

I produce MRP estimates from the CES. I begin by fitting the below predictive model using the `vglm` package in R (Goplerud 2023):

$$\begin{aligned}
Pr(\text{Opinion}_i = 1) = & \text{logit}^{-1}(\beta_0 + \alpha_{g[i]}^{\text{race}} + \alpha_{g[i]}^{\text{sex}} + \alpha_{g[i]}^{\text{educ}} + \alpha_{g[i]}^{\text{race} \times \text{sex}} + \alpha_{d[i]}^{\text{district}} + \alpha_{g[i]}^{\text{race} \times \text{educ}} \\
& + \alpha_{g[i]}^{\text{sex} \times \text{educ}} + \alpha_{g[i]}^{\text{race} \times \text{sex} \times \text{educ}} + \alpha_{g[i]}^{\text{race} \times \text{district}} + \alpha_{g[i]}^{\text{sex} \times \text{district}} \\
& + \alpha_{g[i]}^{\text{educ} \times \text{district}} + \alpha_{g[i]}^{\text{race} \times \text{sex} \times \text{district}}) \\
\alpha_g^j \sim & N(0, \sigma_g^2) \text{ for all } g \text{ and } j \\
\alpha_d^{\text{district}} \sim & N(\alpha_{s[d]}^{\text{state}} + s(\text{RepVote}_d) + s(\text{UrbanPct}_d) + s(\text{Income}_d), \sigma_{\text{district}}^2) \\
\alpha_s^{\text{state}} \sim & N(\alpha_{m[s]}^{\text{region}}, \sigma_{\text{state}}^2) \quad \alpha_m^{\text{region}} \sim N(0, \sigma_{\text{region}}^2)
\end{aligned} \tag{A4}$$

where Opinion_i is respondent i ’s response to a policy question in the CES; α_g^j indexes random effects on demographic characteristics and interacted characteristics, and $s(\cdot)$ refers to a flexible spline over a continuous predictor at the district level. In the cases of same-sex marriage and abortion opinion, I include a spline $s(\text{Evangelical}_d)$ for the percent of the district that is evangelical, following Lax and Phillips (2009a). By a similar logic, I include I include a spline for $s(\text{PctUnion}_d)$ for the share of a district that is a member of a labor union when estimating support for minimum wage increases. For each question, I fit separate models for upper- and lower-chamber legislative districts in each year of the survey.

A final wrinkle to my opinion estimation approach is that MRP models typically include a random effect for the target geography—in this case, state legislative districts, which are not included in the CES. To address this problem, I use geographic information included in the survey—ZIP code and county—to determine the probability that each respondent lives in each possible legislative district. Appendix D.3 describes this procedure, which results in a probabilistic matching of respondents to districts. I weight by these probabilities in the MRP model, following the weighting procedure from Ghitza and Gelman (2013). Each respondent is included in the dataset once for each district with a nonzero probability, but they are weighted such that the sum of their weights is equal to 1. I then follow the usual poststratification procedure (Lax and Phillips 2009b).

D.3 Matching the CES to Legislative Districts

The CES includes granular location data for respondents, including state, ZIP code, and county, but not state legislative districts. I use ZIP codes and counties to match respondents probabilistically to districts. My approach is similar to Steelman and Curiel (2023). However, I take advantage of more granular geography by using the overlap between ZIP codes and counties.

Technically, there is no official record of the boundaries of ZIP codes, which are sometimes updated by the United States Postal Service to aid in mail delivery. However, the U.S. Census Bureau collects data by ZIP Code Tabulation Areas (ZCTAs), which approximate ZIP codes.

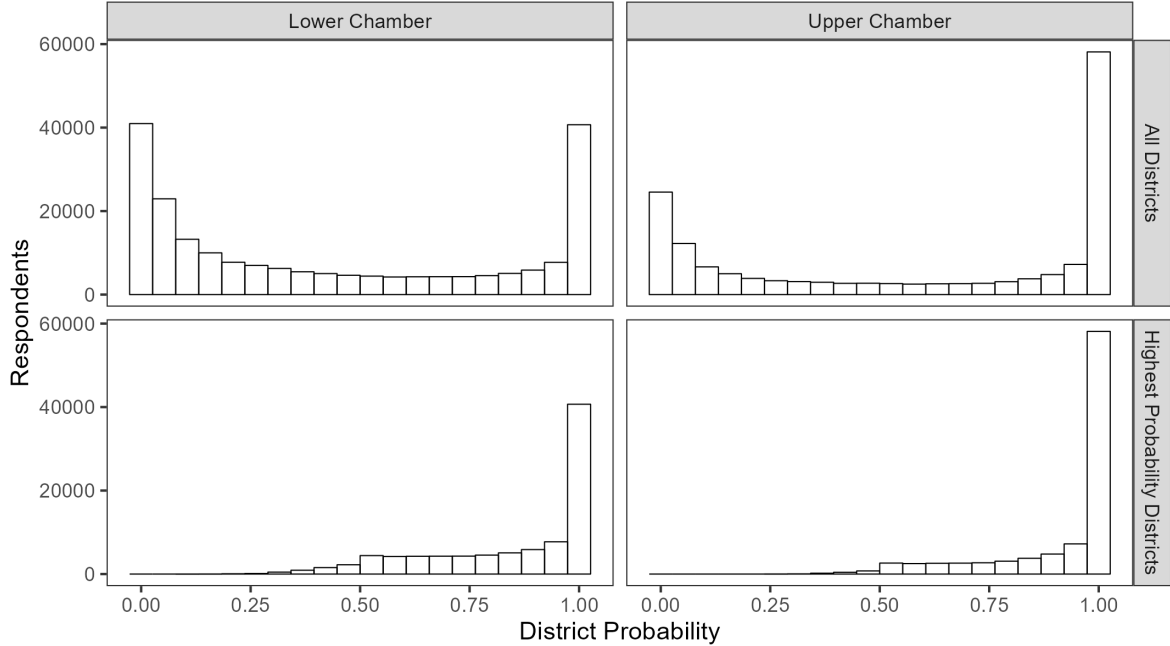
For each CES respondent, I use GIS software to find the overlap of their ZIP code (substituting ZCTA) and county. I then identify all districts that intersect with this area, and find the population of each district-ZCTA-county combination by aggregating up from Census blocks. I use these population distributions to compute the probability that the respondent i lives in each district, d , conditional on their ZIP code z and county, c :

$$\Pr(\text{District}_i = d \mid \text{ZIP}_i = z, \text{County}_i = c) = \frac{\text{Population}_{dzc}}{\sum_{d=1}^D \text{Population}_{dzc}}. \quad (\text{A5})$$

Probabilities sum to 1 for each respondent separately for lower- and upper-chamber districts.

Figure A2 shows the distribution of the probabilities of district assignment. The top two panels show the distribution of probabilities across all districts; the bottom panels show the distribution only for each respondent's highest-probability district. I do not include ZIP code-county combinations not represented among the CES respondents from 2010-2020. The vast majority of respondents have a district with a probability of more than 95%, and nearly all respondents have districts with above 50% probability.

Figure A2: District Matching Probabilities in the CES



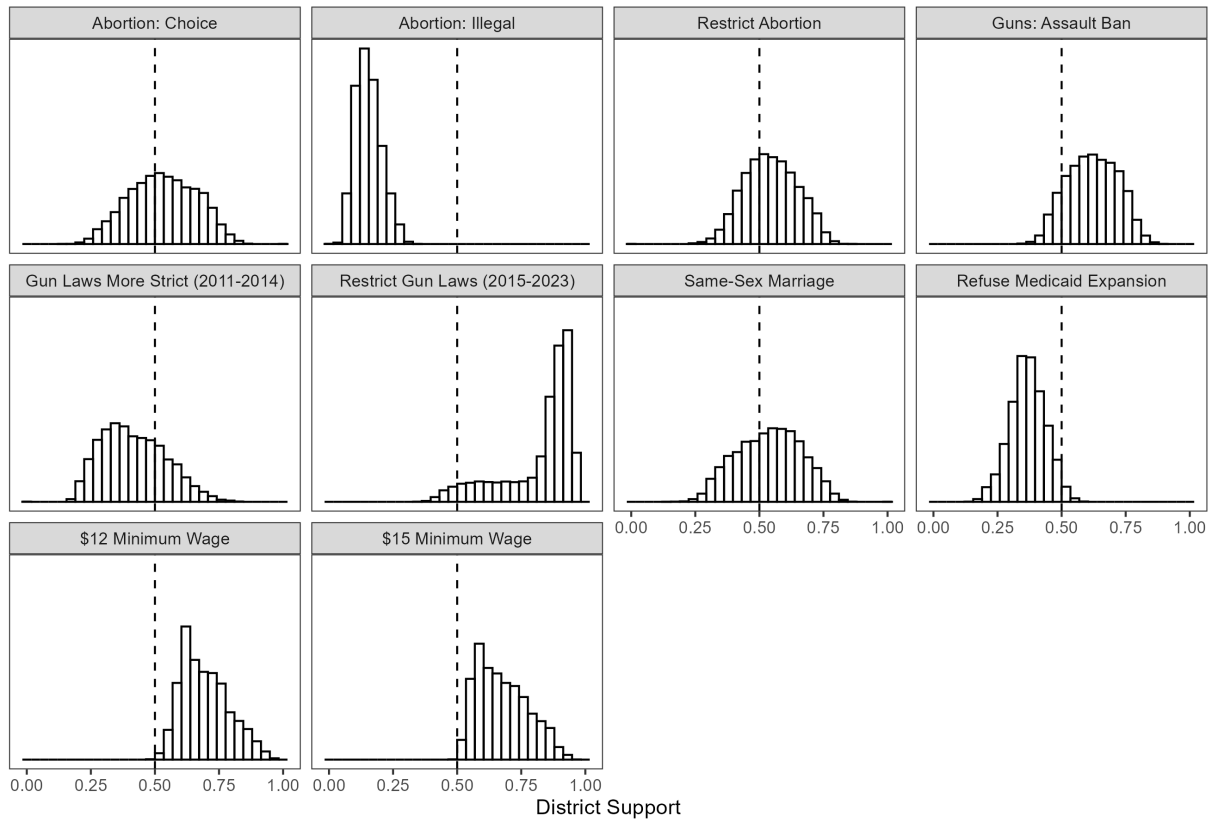
Note: Histograms report the distribution of district probabilities for all respondents of the CES.

D.4 Distribution of District Opinion

Below, in Figure A3, I report the distribution of district-level opinion estimates by policy domain and question, over the full time series of the sample. Note that the distributions for some variables are much more skewed than others (e.g., the composite restriction of gun access based on support for specific policies beginning in the 2014 CES). In the case of guns,

this seems to be caused by high levels of mass support for requiring background checks. For this reason, I present results using alternative opinion measures (e.g., support for an assault weapons ban) in Appendix F.4 below.

Figure A3: Distribution of Opinion by District



Note: Histograms report the distribution of district-level support for each policy.

E Descriptive Statistics of Analysis Variables

Below, I report simple descriptive statistics for variables used in the main analysis and in the heterogeneous effects section of the paper. Descriptive statistics (i.e., distributional information) for public opinion measures is in Appendix D.4 above.

Table A5: Descriptive Statistics of Responsiveness Data

Statistic	Mean	St. Dev.	N
Congruence	0.066	0.108	327,683
% College	0.308	0.144	342,966
% 65+	0.150	0.043	342,966
% Under 30	0.392	0.057	342,966
% Black	0.120	0.168	342,966
% Hispanic	0.123	0.156	342,966
% Other	0.086	0.082	342,966
% Urban	0.581	0.372	342,966
Log Pop. Density	3.370	2.064	342,966
Tenure	5.222	5.535	342,966
Freshman	0.390	0.488	342,966
10+ Years	0.133	0.339	342,966
Leadership	0.029	0.168	342,966
Professionalization (Squire)	0.287	0.203	342,966
Staff per Member	4.730	4.911	342,966
Democrat	0.447	0.497	342,966
Majority Party	0.655	0.475	342,966

F Robustness of Responsiveness Results

This appendix reports several robustness tests of my main responsiveness results.

F.1 Results without Measurement Error Correction

The table below replicates the main results using a single model, without accounting for measurement error in the process of estimating opinion. The results generally replicate (although the effect on same-sex marriage is not statistically significant at the 95% level in this specification).

Table A6: Newspaper Congruence and Responsiveness: without Error Correction

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage	All Issues
Opinion \times Congruence	1.56** (0.29)	1.16 (0.75)	0.63** (0.08)	4.88** (1.62)	5.34** (1.48)	0.05** (0.02)
Opinion Congruence	1.99** (0.10)	0.01 (0.11)	0.06* (0.03)	0.20 (0.43)	2.07** (0.20)	0.24** (0.00)
	-0.91** (0.18)	-0.19 (0.41)	-0.36** (0.06)	-4.29** (1.45)	-3.70** (1.01)	0.01 (0.01)
District Ctrls.	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X
N	93,384	3,810	225,686	5,036	6,659	334,575
Adj. R ²	0.48	0.40	0.52	0.56	0.44	0.44

Note: Results are from OLS regressions where the dependent variable is legislator roll-call votes on the named policy area. All models include bill fixed effects. Standard errors, in parentheses, are clustered by district; uncertainty in Opinion measure is not propagated in the models. * $p < 0.05$; ** $p < 0.01$.

F.2 Results using Observed Coverage

The main empirical strategy in the paper uses the congruence of media markets and legislative districts to exogenously identify the effect of news coverage on legislator behavior. Section 3 of the manuscript explains the reasons this approach is preferred. However, below I find similar results using a more blunt measure. Specifically, I replace congruence with the percent of all stories about the legislature that mention each individual legislator, using the news archive and automated text analysis procedure described in Appendix A. Because my sample of newspapers includes multiple newspapers in some communities, I only include the share of stories in the newspaper that covered each legislator most frequently (i.e., if a legislator is mentioned in 2% of one newspaper’s coverage but 3% of another’s, I used data only from the latter). I also exclude legislators who are not mentioned in any stories.

These results are generally consistent with those reported in the main text using congruence.

Table A7: Observed Coverage Frequency and Responsiveness

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage
Opinion \times Pct. Stories	2.06** (0.58)	3.54* (2.08)	0.35** (0.07)	12.38* (5.86)	0.23 (0.39)
Opinion	1.23** (0.08)	1.70** (0.26)	0.02** (0.01)	0.38 (0.44)	0.21** (0.02)
Pct. Stories	-1.22** (0.31)	-1.88 (1.43)	0.20** (0.07)	-10.90* (5.16)	-0.26 (0.37)
District Ctrls.	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X
N	51,575	1,797	139,906	2,822	4,337
Adj. R ²	0.48	0.39	0.52	0.56	0.47

Note: Dependent variable is roll-call votes. Models include bill fixed effects. Standard errors are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

F.3 Alternative Newspaper Circulation Data for Congruence

Newspaper results use congruence constructed from Alliance for Audited Media (AAM) circulation data for 2011-2022. An alternative source of data is the Standard Rate and Data Service (SRDS). SRDS data have been preferred by some other scholars (e.g, Peterson 2019) because they include more small newspapers that are less likely to participate in the AAM.

SRDS data have two key limitations for this study. First, SRDS data only exist through 2018, so out-of-date data must stand in for 2019-22. Second, small newspapers that appear in SRDS but not in AAM are less likely to have resources to fund full-time state capitol coverage. So, adding these newspapers may not actually be informative of the effects of news coverage *in state capitols*.

My results are largely robust to using the SRDS data. On most policies, I still find positive and significant coefficients on the interaction between congruence and opinion. The lone exception is abortion, where the coefficient is not statistically significant and is close to zero (notably much smaller in magnitude than the effect of opinion on roll-call votes).

Table A8: Congruence and Responsiveness with SRDS Circulation Data

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage
Opinion \times SRDS Congruence	-0.17 (0.18)	1.05** (0.43)	0.06** (0.01)	4.00* (1.80)	0.17** (0.07)
Opinion	1.40** (0.08)	1.41** (0.20)	0.02** (0.01)	0.48 (0.45)	0.17** (0.02)
SRDS Congruence	-0.06 (0.12)	-0.38* (0.21)	0.16** (0.02)	-3.47* (1.61)	0.18** (0.08)
District Ctrls.	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X
N	92,200	3,612	223,471	5,029	6,668
Adj. R ²	0.48	0.40	0.52	0.56	0.45

Note: Dependent variable is roll-call votes. Models include bill fixed effects. Standard errors are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

F.4 Alternative Measures of Opinion

This section reports the main responsiveness results using several alternative measures of opinion for those issues where opinion is a composite of different questions over the years. All results are robust to the alternative measures. Note that Abortion: Choice refers to support for allowing abortions “as a matter of choice,” and so the negative coefficient is consistent with responsiveness.

Table A9: Newspaper Congruence and Responsiveness with Alternate Opinion Measures

	Abortion: Choice	Abortion: Illegal	Guns: Assault Ban	Guns: More Strict	Guns: Restrict	Min. Wage: \$12	Min. Wage: \$15
Opinion \times Congruence	-0.97** (0.24)	2.87** (0.60)	1.49** (0.31)	1.81** (0.36)	0.59** (0.13)	3.93** (1.63)	3.37* (1.90)
Opinion	-1.25** (0.08)	1.70** (0.28)	0.94** (0.09)	0.62** (0.09)	0.75** (0.08)	1.63** (0.23)	2.80** (0.41)
Congruence	0.38** (0.11)	-0.59** (0.11)	-0.80** (0.18)	-0.59** (0.13)	-0.38** (0.11)	-2.64** (1.12)	-2.27* (1.26)
Years	2011- 2022	2011-2014, 2017-2022	2015- 2022	2011- 2014	2015- 2022	2017- 2020	2021- 2022
District Ctrls.	X	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X	X
N	87,269	72,617	150,279	65,509	150,279	5,141	1,247
Adj. R ²	0.49	0.49	0.53	0.53	0.53	0.43	0.52

F.5 Separate Results by Chamber

This section reports the main results separately for upper and lower legislative chambers. The sign and direction of all effects are identical to those from the models pooling chambers in the main text, though in upper chambers, some effects are no longer statistically significant. These are on issues with reduced sample sizes for data using the much smaller upper chambers.

Table A10: Newspaper Congruence and Responsiveness by Chamber

	Upper Chambers				
	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage
Opinion \times Congruence	1.36** (0.45)	0.95 (1.68)	0.19** (0.03)	0.00 (6.33)	0.35* (0.17)
Opinion	0.87** (0.14)	1.39** (0.42)	0.01 (0.01)	1.62 (2.47)	0.18** (0.04)
Congruence	-0.85** (0.28)	-0.01 (1.01)	0.12** (0.04)	-0.02 (5.72)	0.06 (0.15)
District Ctrls.	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X
N	21,115	726	48,455	1,228	1,533
Adj. R ²	0.51	0.48	0.53	0.54	0.48

	Lower Chambers				
	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage
Opinion \times Congruence	0.81* (0.37)	3.96** (1.29)	0.13** (0.02)	5.84** (1.75)	0.39* (0.17)
Opinion	1.33** (0.10)	1.40** (0.22)	0.02* (0.01)	0.27 (0.48)	0.16** (0.02)
Congruence	-0.60** (0.23)	-2.01** (0.76)	0.11** (0.03)	-5.08** (1.57)	0.14 (0.14)
District Ctrls.	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X
N	65,718	2,825	166,091	3,668	4,855
Adj. R ²	0.48	0.39	0.52	0.58	0.43

Note: Results from OLS regressions where the dependent variable is roll-call votes for lower-chamber legislators. All models include bill fixed effects. Standard errors, in parentheses, are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

G Television Congruence Results

The main manuscript is primarily concerned with the effects of newspaper congruence on responsiveness because newspapers are much more engaged in covering state legislatures than other media. In this appendix, I show that legislators are also more responsive to public opinion when local TV newscasts face similar incentives to cover them.

To do so, I adapt the measure of Congruence to Designated Market Areas (DMAs, commonly called media markets) defined by the Nielsen Company, which correspond to the reach of broadcast television stations in a given market (Moskowitz 2021). Not all residents of a DMA may watch local TV news.

I compute TVCongruence_d using the formula

$$\text{TVCongruence}_d = \sum_{m=1}^M \text{ViewerShare}_{md} \times \text{MarketShare}_{md}, \quad (\text{A6})$$

where ViewerShare_{md} is the share of potential viewers of TV stations in market m who live in district d . Because TV viewership data is prohibitively expensive, I use population as a proxy for viewership, following Snyder and Strömberg (2010); Campbell, Alford and Henry (1984). So,

$$\text{ViewerShare}_{md} = \frac{\text{Population}_{md}}{\text{Population}_m} \quad (\text{A7})$$

and MarketShare_{md} is defined as in Equation (4). In almost all cases, $\text{MarketShare}_{md} = 1$ because districts are not split across markets, so TVCongruence_d for most districts is equivalent to ViewerShare_{md} .

The table below reports results following the specification in Table 4 of the main paper, substituting TVCongruence_{it} for Congruence_{it} , for each legislator i 's district in year t .

	Restrict Abortion	Same-sex Marriage	Stricter Gun Laws	Police Body Cameras	Minimum Wage	All Issues
Opinion × TVCongruence	0.51 (0.38)	2.13 (1.24)	0.17** (0.03)	0.66 (6.53)	0.34* (0.17)	0.03 (0.02)
Opinion	1.28** (0.08)	1.44** (0.20)	0.02** (0.01)	0.82 (0.46)	0.18** (0.02)	0.21** (0.00)
TVCongruence	-0.42 (0.24)	-1.13 (0.72)	0.13** (0.04)	-0.48 (5.89)	0.05 (0.14)	0.02 (0.02)
District Ctrls.	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X
N	93,384	3,810	225,686	5,036	6,659	334,575
Adj. R ²	0.48	0.40	0.52	0.56	0.44	0.44

Note: Results from OLS regressions where the dependent variable is roll-call votes. All models include bill fixed effects. Standard errors, in parentheses, are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

Positive coefficients across all five issues are consistent with TV news attention strengthening responsiveness, and in most cases (except police body cameras) are of a similar magnitude to the newspaper results reported in the main manuscript. However, the results are not statistically significant at the 5% level for three of five policy areas, and the pooled model.

There are two likely explanations for why these TV results differ from newspapers. First, local newspapers produce more coverage focused on state politics compared to TV broadcasts, as I showed in Figure A1. The resulting effects of this coverage, or of the behaviors of journalists working for newspapers on legislators, may be stronger. A second explanation is that using population, rather than direct television viewership, to estimate TVCongruence introduces measurement error that contributes to inflated standard errors. Nevertheless, across issues, a similar pattern emerges for the effect of local TV market congruence: Where legislators are more likely to be covered by broadcast reporters, they are also more responsive to their constituents.

H Heterogeneous Effects

This section reports full models for heterogeneous effects regressions, as well as tests of statistical significance for the differences between levels of moderating variables reported in Section 6.3 of the main manuscript.

First, I report regression results for the heterogeneous effects reported in the main paper.

Table A11: Full Regression Results for Heterogeneous Effects Models

	Professionalism	Staffing	Tenure	Leadership	Party	Majority Party
Opinion ×	0.11**	0.10**	0.04	0.04*	0.03*	0.03
Congruence	(0.03)	(0.03)	(0.06)	(0.02)	(0.02)	(0.04)
Opinion	0.20**	0.21**	0.20**	0.21**	0.20**	0.18**
	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)
Congruence	0.00	-0.07**	0.16**	0.01	0.01	-0.18**
	(0.03)	(0.03)	(0.05)	(0.02)	(0.01)	(0.03)
Prof. × Opinion ×	-0.20*					
Congruence	(0.09)					
Hi Staff × Opinion ×		-0.07*				
Congruence		(0.04)				
Tenure × Opinion ×			0.00			
Congruence			(0.01)			
First 2 Yrs × Opinion ×			-0.06			
Congruence			(0.07)			
10+ Yrs. × Opinion ×			0.10			
Congruence			(0.09)			
Leadership × Opinion ×				-0.03		
Congruence				(0.06)		
Dem. × Opinion ×					0.02	
Congruence					(0.04)	
Majority × Opinion ×						0.00
Congruence						(0.04)

(continued)

	Professionalism	Staffing	Tenure	Leadership	Party	Majority Party
Opinion × Professionalism	0.03 (0.02)					
Opinion × High Staff		-0.00 (0.01)				
Opinion × Yrs. in Office			0.00 (0.00)			
Opinion × First 2 Yrs.			0.03** (0.01)			
Opinion × 10+ Yrs.			0.02 (0.01)			
Opinion × Leadership				0.02** (0.01)		
Opinion × Majority						0.05** (0.01)
Congruence × Professionalism	0.02 (0.07)					
Congruence × High Staff		0.10** (0.03)				
Congruence × Yrs. in Office			-0.03** (0.01)			
Congruence × First 2 Yrs.			-0.14** (0.06)			
Congruence × 10+ Yrs.			-0.29** (0.09)			
Congruence × Leadership				0.13** (0.04)		
Congruence × Dem.					-0.05* (0.03)	
Congruence × Majority						0.28** (0.03)
Leadership	0.04** (0.01)	0.04** (0.01)	0.04** (0.01)	0.03** (0.01)	0.05** (0.00)	0.01* (0.01)
Democrat					0.18** (0.00)	
Majority						0.06** (0.00)
Years in Office	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00** (0.00)	-0.00 (0.00)
First 2 Years	0.01* (0.00)	0.01** (0.00)	0.01* (0.01)	0.01* (0.00)	0.01* (0.00)	0.01* (0.00)
10+ Years	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
District Ctrls.	X	X	X	X	X	X
Legislator Ctrls.	X	X	X	X	X	X
N	317,822	317,822	317,822	317,822	317,763	317,822
Adj. R ²	0.43	0.43	0.44	0.43	0.45	0.44

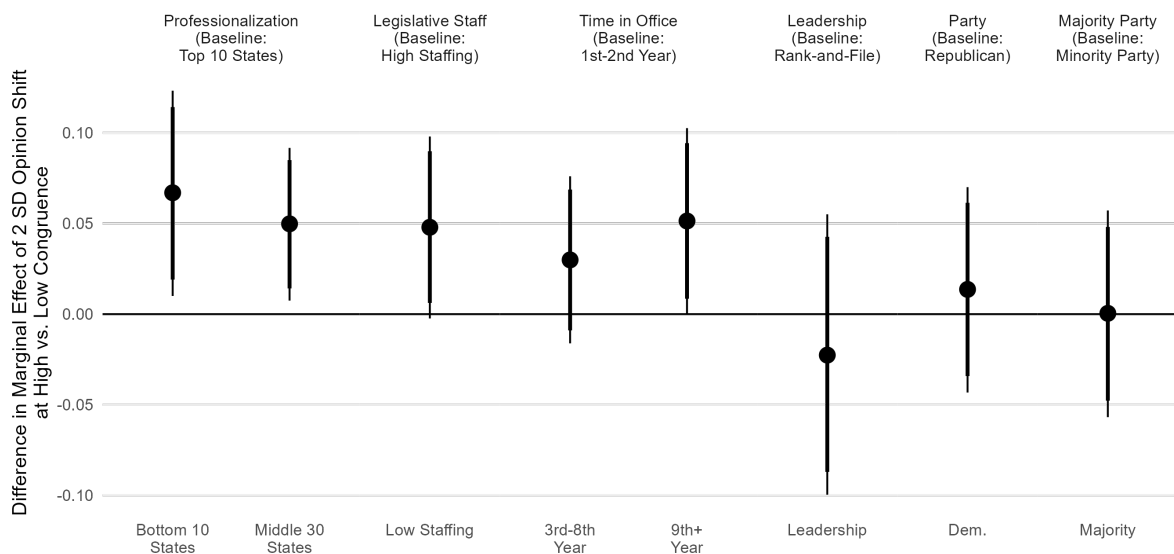
Note: Results from OLS regressions where the dependent variable is roll-call votes. All models include bill fixed effects. Standard errors, in parentheses, are clustered by district and account for measurement error in Opinion. * $p < 0.05$; ** $p < 0.01$.

Next, I turn to tests of statistical significance for the differences between marginal effects reported in the main paper. Because these involve triple-interactions, testing statistical significance is not straightforward. In reporting heterogeneous effects in the paper, the “effect” of congruence was defined as the difference between the effect of a 2 standard deviation increase in public opinion on legislator roll-call votes in high- vs. low-congruence districts. That statistic was visible as the gap between the points in Figures 5 and 6.

In order to test whether the marginal effects are statistically distinguishable at different levels of moderating variables (e.g., professionalization, tenure in office, party, etc.), we must test whether the difference between those gaps vary at the different levels of the variable. The figure below reports these differences, as well as standard errors. I compute standard errors by bootstrapping and using the method of composition, as described in Section 5 of the main manuscript.

We can see that the effect of congruence on responsiveness is greater in the 10 least professionalized states, as compared to the 10 most professionalized states. Likewise, we see a slightly lesser effect on the middle 30 states as compared to the most professionalized states. These differences are statistically significantly greater than zero. We see a similarly sized effect of being a high-staffing state, which is significant at the 90% level (though not at the 95% level). And the effect of congruence is similarly greater among legislators in their ninth or greater years in office than those serving in their first or second terms. We see a similarly sized effect of being a high-staffing state, which is significant at the 90% level (though not at the 95% level). And the effect of congruence is similarly greater among legislators in their ninth or greater years in office than those serving in their first or second terms.

Figure A4: Statistical Significance of Group Differences in Heterogeneous Effects Analysis



Note: Points report the differences between the marginal effect of high vs. low congruence at the stated baseline and at a different value of the moderator, noted on the x-axis. Error bars cover 90% and 95% confidence intervals.

References

- Campbell, James E., John R. Alford and Keith Henry. 1984. "Television Markets and Congressional Elections." *Legislative Studies Quarterly* 9(4):665–678.
- Ghitza, Yair and Andrew Gelman. 2013. "Deep Interactions with MRP: Election Turnout and Voting Patterns Among Small Electoral Subgroups." *American Journal of Political Science* 57(3):762–776.
- Goplerud, Max. 2023. "Re-Evaluating Machine Learning for MRP Given the Comparable Performance of (Deep) Hierarchical Models." *American Political Science Review* pp. 1–8.
- Kaplan, Jacob. 2021. "United States Governors 1775-2020."
- Klarner, Carl. 2018. "State Legislative Election Returns (1967-2016)."
- Lax, Jeffrey R. and Justin H. Phillips. 2009a. "Gay Rights in the States: Public Opinion and Policy Responsiveness." *American Political Science Review* 103(3):367–386.
- Lax, Jeffrey R. and Justin H. Phillips. 2009b. "How Should We Estimate Public Opinion in The States?" *American Journal of Political Science* 53(1):107–121.
- Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche and Luke Sonnet. 2023. "Voteview: Congressional Roll-Call Votes Database."
- Moskowitz, Daniel J. 2021. "Local News, Information, and the Nationalization of U.S. Elections." *American Political Science Review* 115(1):114–129.
- Park, David K., Andrew Gelman and Joseph Bafumi. 2004. "Bayesian Multilevel Estimation with Poststratification: State-Level Estimates from National Polls." *Political Analysis* 12(4):375–385.
- Peterson, Erik. 2019. "Not Dead Yet: Political Learning from Newspapers in a Changing Media Landscape." *Political Behavior* pp. 1–23.
- Snyder, James M. and David Strömberg. 2010. "Press Coverage and Political Accountability." *Journal of Political Economy* 118(2):355–408.
- Steelman, Tyler and John A. Curiel. 2023. "The Accuracy of Identifying Constituencies with Geographic Assignment Within State Legislative Districts." *State Politics & Policy Quarterly* .
- Warshaw, Christopher and Jonathan Rodden. 2012. "How Should We Measure District-Level Public Opinion on Individual Issues?" *The Journal of Politics* 74(1):203–219.