

What Politicians Believe About Their Constituents: Asymmetric Misperceptions and Prospects for Constituency Control*

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Abstract

We reexamine prospects for constituency control in American politics with original data describing nearly 2,000 state legislative candidates' perceptions of mass opinion in their districts and recent advances in public opinion estimation that allow us to determine actual district-level opinion with precision. Actual district opinion explains only a modest share of the variation in politicians' perceptions of their districts' views. Moreover, there is a striking conservative bias in politicians' perceptions, particularly among conservatives: conservative politicians systematically believe their constituents are more conservative than they actually are by over 20 percentage points, while liberal politicians also typically overestimate their constituents' conservatism by several percentage points. A follow-up survey demonstrates that politicians appear to learn nothing from democratic campaigns or elections that leads them to correct these shortcomings. Electoral selection has a limited impact on whether the chosen representative is congruent with the majority of her constituents. These findings suggest a substantial conservative bias in American political representation and bleak prospects for constituency control of politicians when voters' collective preferences are less than unambiguous.

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The possibly weak connection between public opinion and public policy remains an important concern for students of democratic politics. Many politicians appear to routinely support policies that a majority of their constituents do not (e.g. Fiorina and Abrams 2009; Bafumi and Herron 2010). Such behavior is on the one hand deeply troublesome for democratic representation and perplexing in light of foundational assumptions in political economy (e.g. Downs 1957), although political scientists have supplied no shortage of potential explanations.¹ On the other hand, many have also suggested that public opinion still exerts a strong pull on public policy and elite behavior (e.g. Page and Shapiro 1983; Canes-Wrone, Brady and Cogan 2002; Ansolabehere and Jones 2010), a supposition that continues to undergrid most accounts of democratic representation and motivate the study of public opinion.

We endeavor to advance the understanding of this basic question about democratic politics: what is the nature and extent of “constituency control” in American democracy in the sense defined by Miller and Stokes (1963) – that is, correspondence between constituencies’ policy preferences and their representatives’ policymaking?

We examine pathways and prospects for constituency control in contemporary American politics at the micro-level with original data representing one of the most extensive documentations of elite perceptions of public opinion, elite position-taking, and constituency preferences ever compiled. To measure elite position-taking and perceptions of public opinion we surveyed every candidate for state legislative office in the United States in 2012 and probed candidates’ own positions and their perceptions of their constituents’ positions on universal health care, same-sex marriage, and federal welfare programs, three of the most publicly salient issues in both national-level and state-level American politics during the past several years. With recent advances in public opinion estimation (e.g. Warshaw and Rodden 2012) and a dataset describing the political views of nearly 100,000 Americans, we also estimate actual district- and issue-specific opinion in these candidates’ districts with a great deal of precision. Together these data allow us to examine the essential processes that connect constituencies’ opinions and their representatives’ behavior among nearly 2,000 politicians that well-approximate the country’s districts and politicians writ large.

¹Extreme primary electorates (Burden 2001), extremist party activists (Fiorina and Abrams 2009), control of nominations by well-organized interests (Bawn, Cohen, Karol, Masket, Noel and Zaller 2012), dimly aware voters (Lenz 2012), and a host of other explanations (see Grofman (2004) for review) have been advanced to account for this pattern.

Pairing data on elites' perceptions of their constituents' opinion and election outcomes with data on their constituents' actual opinions, we reach several striking findings.

We first investigate the general relationship between elite perception of public opinion and actual public opinion and show that it is remarkably linear on average – an increase in support for same-sex marriage of 10 percentage points in a district is associated with an equally-sized 10 percentage point increase in politicians' perceptions of their districts' opinions on average. The same holds true for districts' support for universal healthcare and politicians' average perceptions of this support. Yet although politicians' perceptions do vary directly with their constituencies' actual views on average, the correlations between public opinion and politicians' perceptions of it are at best modest – 0.43 for universal health care and 0.51 for same-sex marriage. These relationships are far stronger than those reported by Miller and Stokes (1963) but still suggest that lion's share of the variance in politicians' beliefs about their constituents' cannot be explained by the reality of their constituents' views.²

What is most notable about the relationship between actual public opinion and elite perceptions of this opinion is not its strength nor its average *slope*, however, but its *intercept* (e.g. Achen 1978). Politicians consistently and substantially overestimate support for conservative positions among their constituents on these issues. The differences we discover in this regard are exceptionally large among conservative politicians: across both issues we examine, conservative politicians appear to overestimate support for conservative policy views among their constituents by over 20 percentage points on average. In fact, on each of the issues we examine, over 90% of politicians with conservative views appear to overestimate their constituents' support for conservative policies. This misperception is so large that nearly half of sitting conservative officeholders appear to believe that they represent a district that is more conservative on these issues than the most conservative legislative district in the entire country despite the fact that over half of these officeholders actually support positions more conservative than their own districts' median voter. Comparable figures for liberal politicians also show a slight conservative bias: in fact, about 70% of liberal officeholders typically *underestimate* support for liberal positions on these issues among their con-

²Recall that the typical metric for how much variance in one variable (e.g., politicians' perception of constituent opinion) can be explained by a second variable (e.g., constituent opinion) is the R^2 statistic, which in these cases are 0.18 and 0.26 for universal health care and same-sex marriage, respectively. By contrast, consider that the R^2 statistic for the regression of 2008 Presidential vote on party identification among the mass public is 0.49 in the 2010 CCES.

stituents. These differences by elite ideology persist among all varieties of politicians: those from highly professionalized legislative bodies, those running in competitive elections, and those who have been in office for many years.

In light of these severe misperceptions, we also investigate whether the democratic process helps elites come to more accurate views of the public. We exploit the timing of our survey, August 2012 – prior to the most intense period of the fall election campaign, and prior to when the first election itself had occurred in newly drawn legislative districts – to examine whether politicians gain information from the democratic process that allows them to correct these misperceptions. We find little evidence that politicians do learn from the democratic process. After the election campaign and the November election itself, we re-contacted politicians to appraise whether their perceptions of their constituents had grown more accurate. Strikingly, politicians’ perceptions of public opinion after the campaign and the election itself look identical to their perceptions prior to these events, with little evidence that their misperceptions had been corrected.

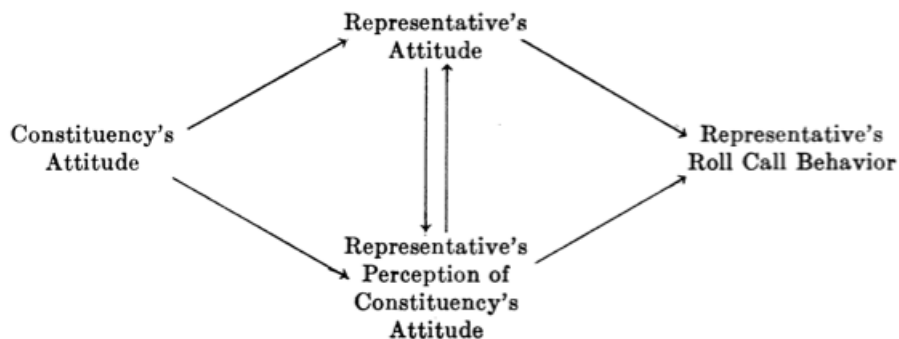
In concluding we turn to the question first posed by Miller and Stokes (1963) – how well are the “conditions for constituency control” met in American politics? In this regard our conclusions are not optimistic: in an era when correctly ascertaining district opinion would represent little burden for most politicians, American politicians appear to operate under massive misperceptions about their constituents’ demands that they make little effort to correct. Moreover, a striking conservative bias also tinges these misperceptions, especially among conservative politicians, meaning that liberal constituencies only reliably secure representation when their collective demands are nothing short of unambiguous. Moreover, constituencies themselves exert only slight selective pressure on politicians to induce responsiveness through electoral selection. These findings with regard to dyadic representation are discouraging and suggest that promising lines of inquiry for understanding political representation primarily lay beyond further investigation of mass opinion.

1 Public Opinion and Democratic Responsiveness: Perceptual and Electoral Routes to Control

Walter Lippmann (1922) famously observed that, although the public wields ultimate political authority in democracies, “the world that [the public] deal[s] with politically is out of reach, out of sight” and “Man is no Aristotelian god [capable of] contemplating all existence at one glance.” As we approach a century since Lippmann made these observations, students of democratic politics continue to wrestle with the significant questions they raise about what members of the public know about the political world and how they learn it (e.g. Lupia 1994; Baum 2002; Brader 2005; Popkin 1991).

Questions about the nature of public opinion captivate because public opinion seems to tremendously influence public policy (e.g. Butler and Nickerson 2011; Gilens 2012); however, the influence of public opinion on public policy is mediated through representative institutions – and such institutions, in turn, rely upon representatives to perceive the public’s demands or upon voters to select representatives who share their views, although surely neither voters nor politicians are “Aristotelian gods.” Although the effects of public opinion on public policy are clearly real, the substantial limitations of representative institutions’ human participants thus also raises questions about the strength and contours of this relationship.

Figure 1: Avenues for Constituency Control: Miller and Stokes (1963)



As shown in Figure 1, Miller and Stokes (1963) noted that representative institutions translate constituency opinion into public policy via two principal routes: voters’ selection of congruent

representatives (electoral control) and representatives' reactions to their perceptions of voters' demands (perceptual control). To what extent can each of these avenues of control be expected to produce robust "constituency control?"

1.1 Prospects for Perceptual Control

In order for representatives to actively respond to their constituents' views they clearly must both be motivated to ascertain what those views are and be able to ascertain these views correctly. However, the relationship between the public opinion and politicians' perceptions of it remains murky at best.

Miller and Stokes's (1963) classic work concluded that "the conditions of influence that presuppose effective communication between [Representative] and district are much less well met" – after pairing a pioneering survey of political elites with data on mass opinion from the American National Election Study, they concluded that Representatives typically have "very imperfect information about the issue preferences of [their] constituenc[ies]." Following the publication of Miller and Stokes's (1963) seminal work in the field of political representation, a cottage industry sprung up in the field seeking to replicate, criticize, and build upon their findings. Scholars in the decade after Miller and Stokes (1963) in particular focused on replicating their findings with regard to elite perception among state legislators and other elites (McCrone and Kuklinski 1979; Kuklinski and Elling 1977; Brand 1969; Uslaner and Weber 1979; Erikson, Luttbeg and Holloway 1975; Hedlund and Friesema 1972) but reached conflicting results. McCrone and Kuklinski (1979), for example, described the accuracy of elites' perceptions of their constituents as "reasonable" while Brand (1969) judged it "scandalously low." Meanwhile, other scholars (Erikson 1978; Clausen 1977) pointed out that small elite and mass sample sizes and insensitive survey instrumentation meant that much of this research was underpowered and prone to significant error. This promising line of inquiry seemed to fall out of fashion by the early 1980s in light of these challenges (Jewell 1983), and only rarely since have scholars attempted to appraise elites' perceptions, nearly always in contexts beyond the United States (Converse and Pierce 1986; Holmberg 1989; Belchior 2012).

With the rise of modern polling techniques (e.g. Herbst 1993) and the nationalization of American elections (e.g. Kawato 1987) one might be tempted to think that the study of elite perceptions

should be left to history – after all, modern politicians would appear to have manifold resources available to them to ascertain public opinion if they wish.³ A closer look at contemporary evidence, however, suggests that American politicians may remain far from Aristotelian gods in their perceptions of their constituents. Bergan (2009) and Butler and Nickerson (2011) conduct field experiments suggesting that information about constituents’ views materially changes how legislators vote, which in turn implies that politicians in their natural state do not have routine access to good information about their constituents’ views.⁴

1.2 Prospects for Electoral Control

Failing representatives’ abilities to accurately ascertain their constituents’ views, one might rest one’s hopes for constituency control with constituencies themselves, who may be able to install legislators who reflect their views even if legislators themselves fail to take account of theirs. We suspect readers will be considerably more familiar with the arguments that have been made regarding this proposition (e.g. Lupia 1994; Converse 2000; Bartels 2005), to which we would only add the reminder that research generally places far less weight on outright electoral selection than on politicians’ anticipatory perceptual control. In a memorable passage, Mayhew (1974, p. 37) notes:

When we say “Congressman Smith is unbeatable,” we do not mean that there is nothing he could do that would lose him his seat. Rather we mean, “Congressman Smith is unbeatable as long as he continues to do the things he is doing.” ... What characterizes “safe” congressmen is not that they are beyond electoral reach, but that their efforts are very likely to bring them uninterrupted electoral success.

To place the tradition that Mayhew’s (1974) insight inspired (e.g. Carmines and Stimson 1989) in the context of our question of constituency control, recall that optimistic views of constituency

³Of course, on the other hand, American civic institutions have also greatly flagged during this period, leaving open the real possibility that elites’ connections with their constituents might have loosened in the past fifty years (e.g. Skocpol 2004).

⁴On the basis of structured interviews, Miler (2009) similarly concludes that legislators generally think of their constituencies in a fragmented and inaccurate way, recalling only a small subset of relevant constituencies on any given topic. Likewise, it is well known that Members of Congress dedicate considerable resources to ascertaining their constituents’ views, yet that they also remain unsure about what aspects of the torrential communication they receive is truly diagnostic of district opinion (Foundation 2011).

control typically posit that legislators enjoy such high re-election rates because they remain intimately in tune with their constituencies throughout their long tenures in office. Electoral selection itself is rarely posited to contribute the lion's share of responsiveness; rather, it is the incentives that electoral pressure generates that are thought to keep politicians responsive to majority opinion (e.g. Downs 1957). We now turn to investigating both of these nexuses of constituency control, with principal focus on prospects for control via elite perception.

2 Requisite Data for Investigating Constituency Control

To what extent does public opinion translate into public policy through either elite perception or voter selection? These questions are among the most basic for understanding representative democracy, yet answers are still surprisingly elusive, principally due to a dearth of data on how representatives perceive their constituents, true majority opinion in representatives' constituencies, and how constituencies behave as a collective. In this section we describe how we amassed data on constituency-level public opinion, elite perception, and electoral outcomes that far outstrips what would have been possible to collect in the days of Miller and Stokes (1963).

2.1 Measurement of Elite Perceptions and Positioning: The 2012 National Candidate Study

2.1.1 Subject Recruitment

To measure elite perceptions, in early August we gathered data on contact information for every candidate for state legislative office. Many legislators only had email addresses, many more had only physical street addresses, and the preponderance of candidates had both. We attempted to gather contact information for all 10,131 state legislative candidates though were unable to gather contact information for 306 (3%) – this left a total of 9,825 in the sampling frame. In mid-August we (Broockman, Carnes, Crowder-Meyer and Skovron 2013) sent three waves of email solicitations to all 7,444 candidates for whom we had e-mail addresses. After 1,318 responses from this email solicitation, we then attempted to secure cooperation in a mail version of the survey

among a randomly selected⁵ 5,000 candidates who had not yet responded. These candidates were sent a postcard informing them that the survey would be arriving in the mail, followed by a paper version of the survey one week later. An additional 589 candidates returned this paper survey. A follow-up online-only study sent in mid-November yielded 514 responses among the 1,907 respondents to the first wave of the study. Unique identifiers allow us to match each candidate to the district in which he or she ran, although these identifiers are confidential.⁶

2.1.2 Response Rate and Representativeness

1,907 candidates responded to the NCS in total, for a response rate of 19.5%, or about double the typical response rate for opinion surveys of the mass public. Suggesting propitious prospects for generalizing the results of the sample to the population of all politicians, there is no statistically meaningful relationship between response rate and party of the candidate, whether the candidate won or lost, or the candidates' margin of victory. About half the sample won their November general elections and are now sitting in office, and about half the same comes from each party.⁷ The only systematic non-response bias we could locate is that the relatively few candidates who were running unopposed were slightly less responsive; we expect this is because these candidates were less likely to have been checking their campaign mailboxes regularly during the study period.

2.1.3 Measurement of Elite Perceptions

Among other questions, the survey queried respondents for their perceptions of the opinions of the constituents in the districts they were running to represent on three issues: same-sex marriage and universal health care. Specifically, we asked legislators “What percent of your constituents” would “agree with” the “statements” “Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income,” “Same-sex couples should be allowed to marry,” and

⁵We conducted blocked sampling on state and incumbency, retaining the probability that each individual candidate was selected but ensuring greater balance in the resulting sample on these variables.

⁶To ensure that only candidates themselves completed the survey, the online survey contained a screener question that shut down the survey if the respondent identified himself or herself as someone other than the candidate. The paper version of the survey included large type and a screener question to encourage only candidates to complete it.

⁷In future revisions we will show these relationships in the Appendix.

“Abolish all federal welfare programs.”⁸ (See Appendix Section A.4 for exact question wording.)⁹

We chose to ask candidates about the public’s attitudes on same-sex marriage, universal health-care, and welfare programs for a number of reasons. Principal among these reasons, (1) these issues are very highly salient in both national and state mass politics, (2) both national and state legislators are currently making high-stakes policy decisions on these issues that will affect tens of millions of Americans,¹⁰ and (3) these issue tap into two core ‘dimensions’ of contemporary American politics: degree of government economic redistribution and involvement in the case of universal healthcare, and social conservatism in the case of same-sex marriage.

In short, we expected that both candidates and constituents would have reasonably well-defined preferences on these issues and that these issues would provide reasonable cases to study broader principles of representation.¹¹

⁸Political scientists familiar with the work of Fenno (1978) may wonder whether the word “constituent” is excessively vague – e.g., Fenno (1978) refers to legislators’ “multiple constituencies.” Based on pilot testing with a number of legislators we found that this word was the word of choice for legislators to refer to the residents of their legal electoral districts. (In Fenno’s (1978) language, when legislators hear or use the word “constituents,” they understand it to mean “geographic constituents.”)

⁹Note that our instrumentation is a great deal more precise than that employed by Miller and Stokes (1963) and most other studies from the 1970s, which only gave legislators’ three options: “More of them are in favor,” “They are fairly evenly divided,” and “More of them are opposed.” With the rise of public polling in politics and arithmetic education we believe nearly all of our respondents – the vast majority of whom have college educations – would have no difficulty expressing their perceptions in percentage terms. Butler (2013) also shows that state legislators are exceptionally accurate when it comes to describing district demographic information in percentage terms, suggesting that our results are unlikely to contain a great deal of measurement error due to elite innumeracy.

¹⁰We expect readers are familiar with the significant policy battles being waged on each issue, but for the sake of unfamiliar readers and posterity we record the highlights here.

First, the fight over universal healthcare and the generosity of the welfare state have been one of the most enduring battles in American politics over the last century, recurring at all levels of government since the early 20th century and especially in the last two decades in the form of high-profile fights during the Clinton and Obama administrations. Recently, the Affordable Care Act and the Supreme Court’s decision pertaining to the Medicaid expansion associated with it have forced state governments to decide whether and how to expand their Medicaid rolls. Many of the regulations and subsidies built into the ‘Obamacare’ law flow through state governments, meaning that Americans’ health care will be significantly impacted by the decisions made by their state legislators. Health care captures about 15% of US GDP and determine the life changes of millions of Americans every year – needless to say, we believe the issue qualifies as politically and substantively significant by any standards.

In the case of same-sex marriage, the debate over government recognition of same-sex relationships has raged for more than a decade, and it has been a cross-cutting cleavage, pitting religion against partisanship in many cases (Camp 2008; Stone 2012). In the past decade, many state legislatures voted to initiate statutory or constitutional bans on same-sex marriage (Lupia, Krupnikov, Levine, Piston and Von Hagen-Jamar 2010). Increasingly, some state legislatures have passed bills to legalize same-sex marriage. More such bills are on the agenda for 2013. Abortion represented another potential choice, although abortion is not on the agenda in many states, and there is reason to think that public opinion on abortion would be more difficult for politicians to ascertain as it is subject to more conflicting considerations.

¹¹The authors plan to conduct a subsequent elite survey in 2014 and welcome suggestions on additional issues to examine.

2.1.4 Measurement of Elite Positioning

Elsewhere in the survey, we also asked candidates whether they agreed or disagreed with eleven issue statements, including the statements about same-sex marriage and universal health care noted above. We selected most of these statements because Tausanovitch and Warshaw (2012) suggested that answers to them correlated highly with individuals' underlying political ideology and we wanted to design the most sensitive possible set of questions given limited space in the survey. See Appendix Section A.4 for precise question wordings.

2.2 Measurement of Constituencies' Opinions With MRP

To examine the accuracy of candidates' perceptions of constituency opinions, we must come to somewhat precise estimates of these opinions ourselves. Miller and Stokes (1963) had access to only a small number of respondents in each of their respondents' congressional districts, leaving their analysis open to significant critique on the grounds of high measurement error and sampling noise (Erikson 1978). However, in the fifty years since Miller and Stokes's (1963) investigation, the enterprise of public polling has transformed from a niche academic exercise to a multi-billion dollar industry. With this transformation has come both economies of scale that allow for a considerably greater number of individuals in the public to be surveyed at reasonable cost and statistical methodologies that allow researchers to extract a great deal more statistical power from each mass survey response.

Nonetheless, although the cost of an individual survey response has plummeted, it remains prohibitively expensive and time-consuming to collect enough survey data to reach reliable estimates in each of the nation's over 6,500 state legislative districts. However, recent advances in public opinion estimation allow us to make remarkably precise estimates of opinion in each district nonetheless. Specifically, multi-level regression and poststratification (MRP) allows researchers to construct estimates of public opinion in small geographic units from responses to a national survey and US Census data on those units' demographic makeup. The method has been derived, applied, and validated extensively elsewhere (Ghitza and Gelman 2013; Lax and Phillips 2009*a,b*, 2012; Pacheco 2011; Park, Gelman and Bafumi 2004; Tausanovitch and Warshaw 2012), including at the state legislative level (Warshaw and Rodden 2012). In this section we discuss the steps that we

took to apply MRP to state legislative districts (e.g. Warshaw and Rodden 2012) and to implement Ghitza and Gelman's (2013) recommendations about deep interactions in the models.

2.2.1 Intuition Behind MRP Estimation Procedure

MRP may seem complex or lacking in transparency at first, but the logic it applies is straightforward and can be communicated with a simple example.

Suppose we were to conduct a relatively large survey of individuals in California and were especially interested in ascertaining public opinion in downtown San Francisco on the basis of this survey.

One approach – disaggregation – would simply subset the data to respondents from downtown San Francisco and compute sample quantities of interest within this subset. This is the approach pursued by Miller and Stokes (1963) and most studies of district-level opinion until relatively recently. As Erikson (1978) discussed in the context of Miller and Stokes's (1963) estimates and is widely understood, as only a small number of respondents would likely live in downtown San Francisco our estimates of opinion there would be relatively noisy from even a large representative survey of all Californians.

However, only examining survey responses in San Francisco leaves significant opportunity for statistical power on the table because we know a great deal more about downtown San Francisco than what our survey respondents from there would have told us. Specifically, the United States Census tells us that downtown San Francisco is predominately populated by well-educated and high-income white individuals and that the city voted overwhelmingly for Barack Obama in 2012. At the individual level, many individuals elsewhere in the state fit this description; and at the city level, much of the city of Berkeley and many parts of LA also fit this description as well. It stands to reason that these descriptively similar individuals and areas might thus hold similar opinions on questions such as whether same-sex couples should be allowed to marry and thus should inform our estimates of opinion in San Francisco.

Using multilevel regression, MRP relies upon the data itself to make the determination of how informative respondents outside San Francisco should be about the city's residents views and extrapolates across respondents to the degree the data suggests is warranted. After reaching estimates

for what different kinds of individuals in San Francisco would likely think about the opinion item in question, the post-stratification step in MRP uses information from US Census demographic data to determine what share of the city’s residents fall into each of these categories and comes to a district-level estimate.

2.2.2 MRP Estimation Procedure

Estimation of an MRP model proceeds in two stages. First, a hierarchical logistic choice model is estimated for the opinion item being studied. Our models include predictors at three different levels. At the individual level, we include random effects for the respondent’s education, gender, race/ethnicity, an interaction between race and education, an interaction between race, gender and education, and for the survey from which the respondent was taken. At the state-house and -senate district level, we include individual district random effects, linear effects for the districts’ median household income, percent black and percent hispanic, Obama’s share of the 2012 Presidential vote, and, for the gay marriage model, percentage Mormon or evangelical (see Lax and Phillips (2009b)).¹² A state random effect and a random effect for all combinations of race and region¹³ complete the individual model.¹⁴

The general form of the model is a varying intercept, varying slope model:

$$\theta_j = \text{logit}^{-1}(X_j\beta + \sum_s \alpha_{S(j)}^S) \quad (1)$$

where j indexes cells, each of which is identified by the unique combination of race, gender, education, and district, and S represents subsets of the grouping variables. β represents the fixed effects and is modeled with a uniform prior distribution. α^S are random effects, modeled with

¹²The current version of this paper relies on data imputed from block- and block-group level data for demographics and county-level data for election returns as we await release of the state-legislative district level data from the relevant Census and state elections bureaus. See Section A.1 in the Appendix for information about what data in this version of the paper will be replaced with more accurate information as it becomes available. Based on very high correlations between currently available district-level data and our estimates where they are available, we do not expect the results to materially change.

¹³We decided to include this term based on important differences between race relations across regions and after encountering the compelling research of Hersh and Nall (2013).

¹⁴The models are estimated using the `glmer()` function in R. Respondents are matched to state legislative district using their ZIP codes. Nearly all respondents are matched to districts with certainty, though to avoid biases from dropping respondents that do not match with certainty we down-weight these observations appropriately.

hierarchical Gaussian priors.

This model yields predictions for the share of individuals in any given state legislative district who support same-sex marriage or universal health care in all possible combinations of race, gender, and education. For illustrative purposes, of all the over 100,000 possible combinations of cells that these estimates yield, we expect that the most supportive group of individuals of gay marriage are well-educated, white women living in San Francisco, California. On the other hand, a white, male college dropout living in East Texas appears most likely among all varieties of individuals to be opposed to government recognition of same-sex relationships.¹⁵

2.2.3 Data for MRP Estimation

We estimate such a multi-level regression model for support for same-sex marriage and universal health care using a great deal of public opinion data originally assembled and graciously shared with these researchers by Warshaw and Rodden (2012). The healthcare model is estimated on data from the 2008 CCES, $N = 26,935$. The same-sex marriage model is estimated on data from the 2008 CCES and 2010 CCES, $N = 79,475$. The welfare question is from the Stanford module on the 2012 CCES, $N = 1,015$.

2.2.4 Poststratification

The final step in constructing district-level estimates is poststratification. We first use data from the US Census to calculate the share of individuals in each state legislative district that fall into each ‘cell’: for example, of all the individuals living in California’s 17th State Assembly district (San Francisco’s), what share of them are white college-educated women? These official US Census estimates are exceptionally accurate.

We then merge these cell-level district proportion estimates from the Census with our cell-level opinion estimates from the multilevel regression model to construct the district-level opinion estimates. This poststratification process is a straightforward aggregation process by which estimates for each cell θ_j in each district are summed in proportion to the share of the district that they

¹⁵We would of course not place a great deal of stock in these two particular predictions but describe them to aid intuition in understanding the estimation procedure.

represent. Note that the cells in each district are exhaustive and mutually exclusive.

$$\theta_{district} = \frac{\sum_{j \in J_{district}} N_j \theta_j}{\sum_{j \in J_{district}} N_j} \quad (2)$$

The result of this poststratification process are estimates of district support for universal health-care and same-sex marriage for each of the nation’s state legislative districts.

2.2.5 Brief Discussion of MRP Model Performance and Robustness of Findings

Our analysis obviously rests to some extent on the accuracy of the MRP estimates, although relatively little. Appendix A.2 evaluates the accuracy of the estimates and the robustness of our conclusions at greater length and we review some of our the points in brief here.

First, the mean opinion we calculate in the model on same-sex marriage and universal health-care is very similar to the mean opinion on these issues conducted in other contemporaneous national polls – there is little reason to believe the input data are systematically biased in a liberal or a conservative direction.

Second, the model has strong face validity. We also depict maps depicting the estimates in a number of geographic areas and in all cases the results are very responsive to well-understood local conditions.

Moreover, we also show that subsetting the data to politicians of opposite parties running against each other in the very same districts produces the exact same results. No unobserved factor correlated with survey non-response and bias in the MRP could plausibly yield our estimates.

We also show that politicians’ estimates do not add much predictive power to the MRP model – a model predicting a validation set of MRP estimates from a training set of MRP estimates and politicians’ estimates does essentially no better than the training estimates do alone. Politicians do not appear to have access to much information about public opinion that we do not.

Finally, we also conduct a sensitivity analysis to appraise how biased our model would need to be in order to alter the findings we reach below. Due to the magnitude of our central findings the MRP model would need to perform exceptionally poorly in order to tangibly change any of our conclusions – adding even 10 percentage points of non-random measurement error would appear

to do little to alter our substantive conclusions.

3 What Politicians Believe About Their Constituents

We have now described how we assembled among the most extensive and precise records ever compiled matching candidates' perceptions of their constituencies' opinion and the truth about this opinion. This unique data now put us in a unique position to assess what American politicians believe about their constituents and how responsive their perceptions are to the truth. Eschewing nontransparent statistical models, we present these data nearly exclusively in the form of plots that depict relationships between politicians' estimates of constituency opinion and actual district opinion with the raw data superimposed upon sensitive non-parametric smoothers that depict the conditional expectation functions.

Figure 2: Politicians' Perceptions of Districts' Opinions – Overall

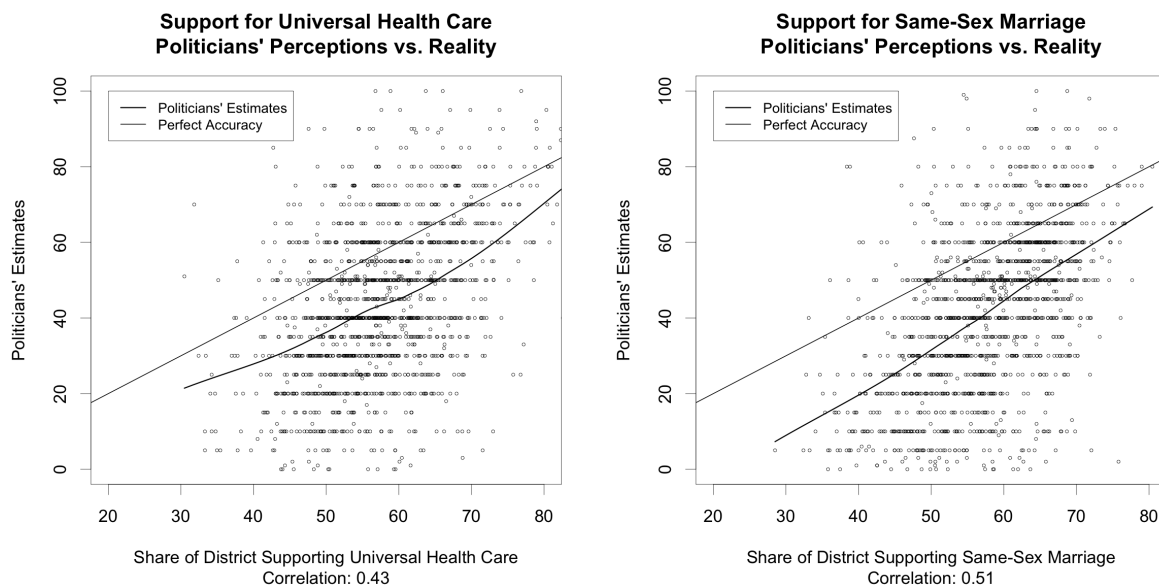


Figure 2 shows candidates' perceptions of their constituencies' opinions given varying levels of actual public opinion as estimated by the MRP. The graph on the left shows the relationship between actual support for universal healthcare and candidates' perceptions of this support. The graph on the right shows the same for same-sex marriage. The x-axes in these graphs correspond to the share of politicians' constituents that support same-sex marriage and universal health care,

while the y-axes correspond to politicians' perceptions of district opinion. Each dot represents an individual politician's response. The thick black lines show the conditional expectation functions of politicians' estimates for a given level of public support for these issues, while the straight, thinner 45-degree lines show what politicians would answer were their perceptions fully accurate. The data appear striated in bands of 5 percentage points because many candidates gave answers in multiples of 5 – e.g., “45%”.

Four patterns are immediately evident upon visual inspection of Figure 2.

First, there is clearly a strong and positive relationship between district opinion and politicians' perceptions – on both of these issues, a 10 percentage point increase in district-level support for these policies corresponds, on average, with a 10 percentage point increase in politicians' perceptions of support for these issues.

Second, this surprisingly linear relationship clearly belies the large dispersion of the raw data. In similar districts there is a great deal of variation from one politician to the next, such that the correlation between district opinion and politicians' estimates are around 0.50. These estimates are quite close to those computed by Erikson (1978), who characterizes correlations of this size as “relatively high.” Judgments about the substantive significance of correlations of various sizes are inherently subjective, but in the view of these authors the correlations are not particularly impressive – recall that the typical metric for how much variance in one variable (e.g., politicians' perception of constituent opinion) can be explained by a second variable (e.g., constituent opinion) is the R^2 statistic, which in these cases are 0.18 and 0.26 for universal health care and same-sex marriage, respectively. By contrast, consider that the R^2 statistic for the regression of 2008 Presidential vote on party identification among the mass public is 0.49 in the 2010 CCES. If only 20% of the variance in politicians' views of their constituents' opinions on two highly salient issues can be accounted for by reality, there is clearly a great deal of slack in the system.¹⁶

It is also clear that politicians are generally fairly wrong about their constituents' views. In fact, elementary calculations suggest that the typical politician errs in her assessment of district opinion

¹⁶We examined a number of ex ante hypotheses about what might lead to greater perceptual accuracy, including politicians' own demographics, the saliency of these issues in their states, politicians' level of electoral experience, and politicians' pre-candidacy experiences. Consistent with Holmberg (1989) and Clausen, Holmberg and deHaven Smith (1983), however, we found no individual or district level differences that predict accuracy beyond the ideological differences that we discuss below. However, we are open to suggestions for other factors that might be expected to induce greater accuracy among politicians.

on these issues by about 20 percentage points.¹⁷ For perspective, 20 percentage points is roughly the difference in partisanship between California and Alabama. Most politicians appear to believe they are representing constituents who are considerably different than their actual constituents.

A final and unexpected pattern also presents itself: a substantial and pervasive conservative bias in politicians' estimates of district opinion. Politicians are much more likely to erroneously believe that their constituents are more conservative than they actually are than to erroneously believe that their constituents are more liberal than they actually are. As demonstrated by the loess curves, candidates generally overestimate the degree to which their constituents hold conservative views on these issues by more than 10 percentage points. The preponderance of the politicians in our sample – more than three-fourths – consistently underestimate support for and overestimate opposition to these policies among their constituents. Put differently, for the typical politician to believe that these policies command majority support, it appears that public support would need to pass a threshold of close to 60%. In this regard our findings echo surveys of other political elites suggesting that elites systematically overestimate the conservatism of the mass public (McGarrell and Sandys 1996; Kohut, Palmer, Sonner, Flemming and Donovan 1998; Kull and Ramsay 2002) and have important implications we will consider shortly.

3.1 Asymmetric Misperceptions

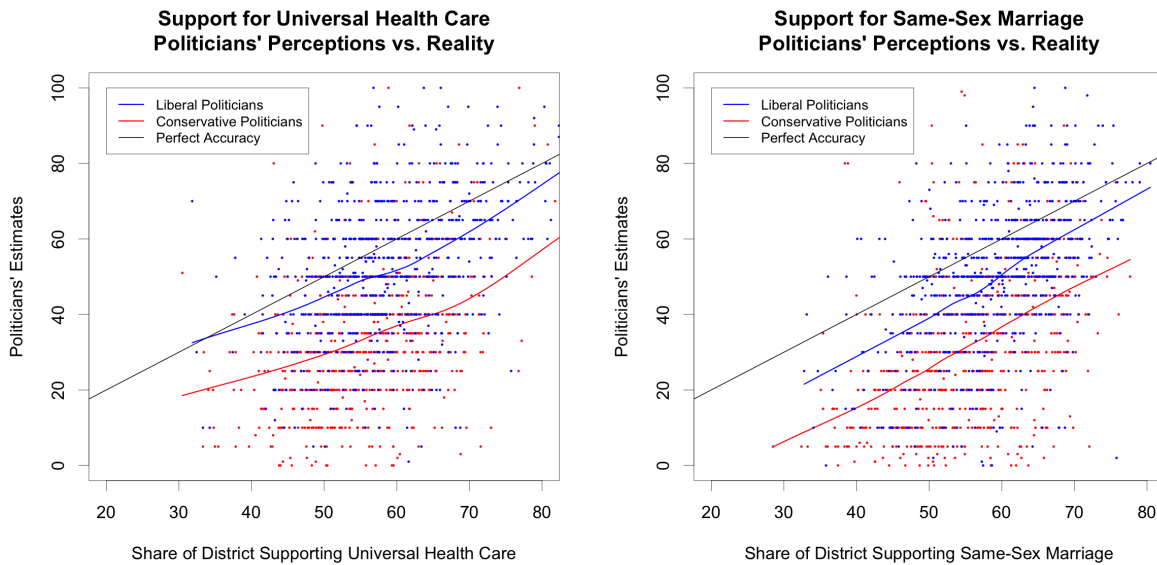
Elites' overestimation of the public's conservatism is not symmetric between liberal and conservative politicians. Perhaps our most striking finding concerns differences in perceptions of Americans' views between politicians of different ideologies, as determined by their responses to issue questions other than universal health care and same-sex marriage.¹⁸

As Figure 3 shows, conservative politicians dramatically overestimate the conservatism of their districts. Indeed, although *both* liberals and conservatives overestimate how conservative their con-

¹⁷Even adjusting for the mild degree of measurement error in the MRP estimates, their true errors are likely to be of a similar size – about around 18 percentage points.

¹⁸These questions appear in Appendix A.4. We calculate politicians' ideologies using the popular `MCMCpack` package in R (Martin, Quinn and Park 2011). It is not lost upon us that ideology and party correlate highly – indeed, our conclusions look essentially identical when separating candidates on the basis of their Democratic and Republican party affiliation instead of their ideologies or when using their ideological self-placement on a 7-point scale. We choose to discuss the differences in general ideological terms because we do not wish to imply any one causal theory about why these candidates tend to differ in this way. We speculate on these differences later in the paper but do not wish to implicitly 'attribute' these differences to any one factor such as party.

Figure 3: Politicians' Perceptions of Districts' Opinions – By Politicians' Ideology



stituents are, conservatives' perceptions in this regard are exceptionally distorted – conservative politicians typically overestimate the conservatism of their constituencies by more than 20 percentage points. This difference is so large that nearly half of conservative politicians appear to believe that they represent a district that is more conservative on these issues than is the most conservative district in the entire country.

These systematic distortions in elite perception suggest an extremely biased view of the American electorate among those who vie to exercise political authority. In districts where supporters of these policies outnumber opponents by 2 to 1, liberal politicians appear to typically believe these policies enjoy only bare majority support while conservative politicians typically outright reject the notion that these policies command widespread support.

Figure 4 depicts a different view of this pattern, showing the percentage of candidates in each ideological camp that overestimate how many constituents oppose universal healthcare or same-sex marriage. For both issues, more than 90% of conservative candidates overestimate their constituents' opposition to these policies, a difference so great that even a great deal of bias in our procedure for estimating public opinion would not begin to explain it.¹⁹ A clear majority of liberal

¹⁹See A1 in the Appendix for evidence that even candidates in the same districts differ in their perceptions of public opinion by this degree and Appendix Section A.2 for discussion of to what extent bias in the MRP procedure would alter these conclusions.

candidates overestimate their districts' conservatism as well, although these distortions are much less severe.²⁰

Paralleling a rich literature describing the mass public's optimistic processing of information (e.g. Cowgill, Wolfers and Zitzewitz 2009; Eveland 2002; Granberg and Holmberg 1986; Nir 2011) a great deal of the classic literature on elite political perception suggests that elites exhibit "wishful thinking" in their constituent perception (e.g. Converse and Pierce 1986; Granberg and Holmberg 2002), consistently overestimating support for their polices.²¹ However, we are not aware of any studies that found differences of this magnitude or that were this systematically concentrated on one side of the ideological spectrum.

This strong and asymmetric pattern of misperception has highly perverse consequences for constituency control. Figure 5 describes the share of sitting legislators in the sample who believe their position is congruent with district majority opinion in their districts on each of these issues and the share who actually are congruent with majority opinion. The dotted line then depicts these legislators' perceptions of their congruence, with higher values corresponding do a greater share of politicians of a given ideology who believe themselves to be congruent with the majority opinion in their district (and hence the median voter). The solid line depicts the truth of the share of sitting representatives of any given ideology whose positions are actually congruent with district majority opinion.

It is clear from Figure 5 that the vast majority of representatives believe their positions are congruent with those of their district. As a descriptive finding this is notable although not particularly surprising – to the degree that political position-taking results from perception (and that 'wishful thinking' generally distorts perception in turn), one would expect most representatives to believe themselves congruent.

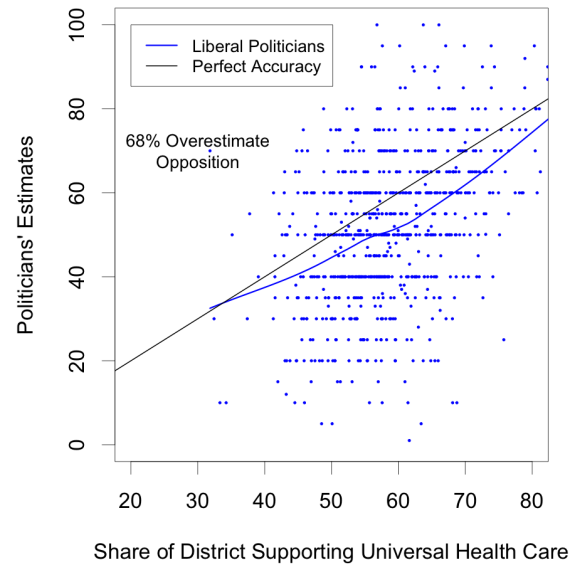
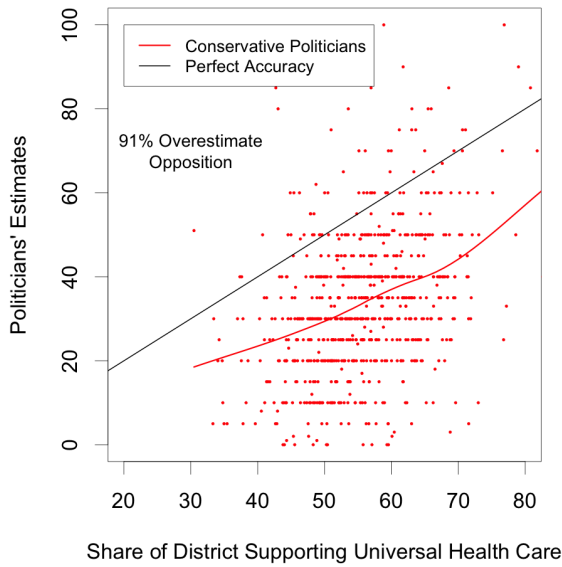
However, there are striking ideological differences with regard to actual versus perceived congruence. Nearly every sitting liberal legislator in our sample has taken an opinion congruent with district majority opinion on same-sex marriage and universal health care. Perversely, however, a sizable number of these congruent liberal politicians seem to actually underestimate their degree

²⁰Figure A2 in the Appendix shows that these patterns look identical even for sitting legislators in the most highly professionalized legislatures.

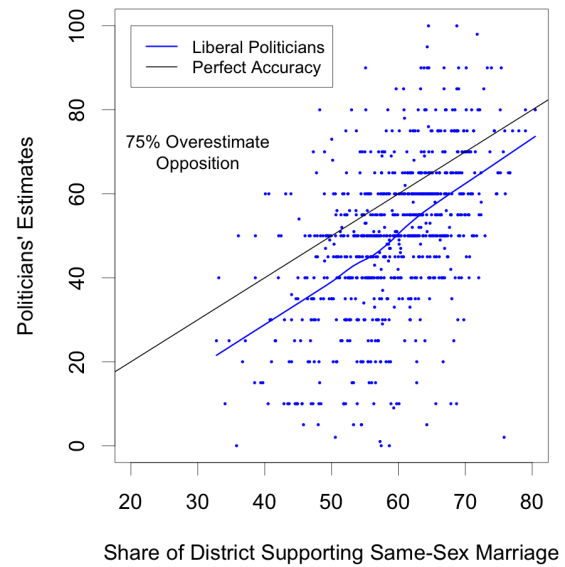
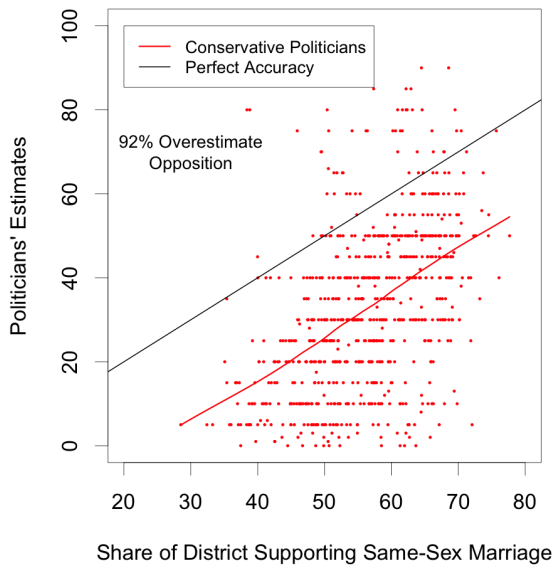
²¹On this general topic, see also Eveland (2002) for stimulating discussion of how individuals perceive social reality.

Figure 4: Overestimation of Support for Own Views – By Issue and Elite Ideology

Politicians' Overestimates of Opposition to Universal Health Care

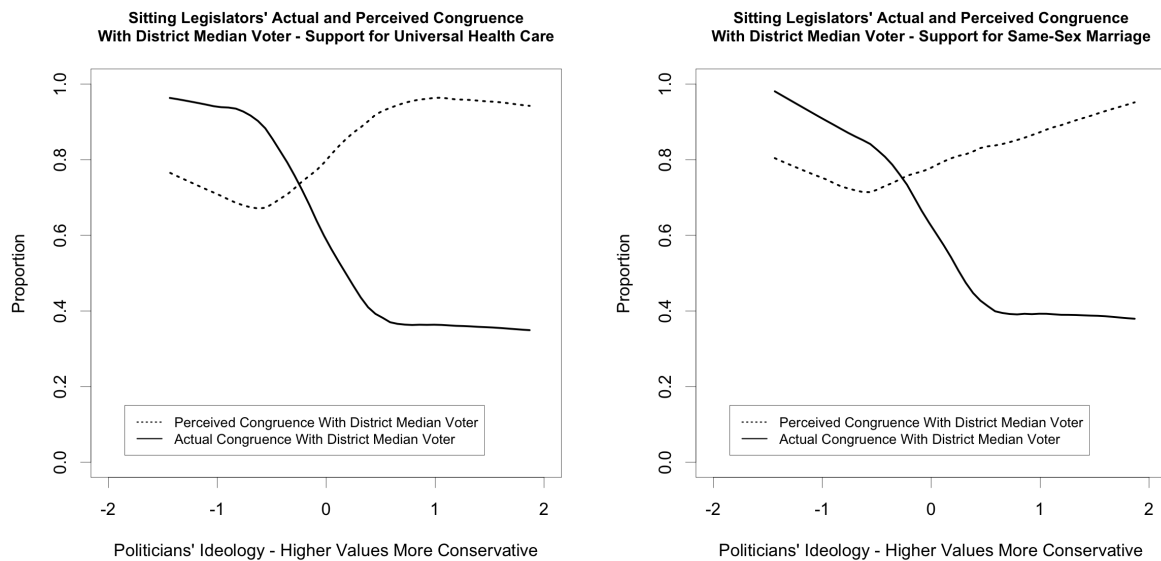


Politicians' Overestimates of Opposition to Same-Sex Marriage



of congruence. On the other hand, the story for conservatives is the opposite – nearly every conservative legislator in our sample *believes* that they are congruent with majority opinion in their

Figure 5: Asymmetric Misperceptions of Majority Opinion (And The Median Voter) Among Sitting Legislators

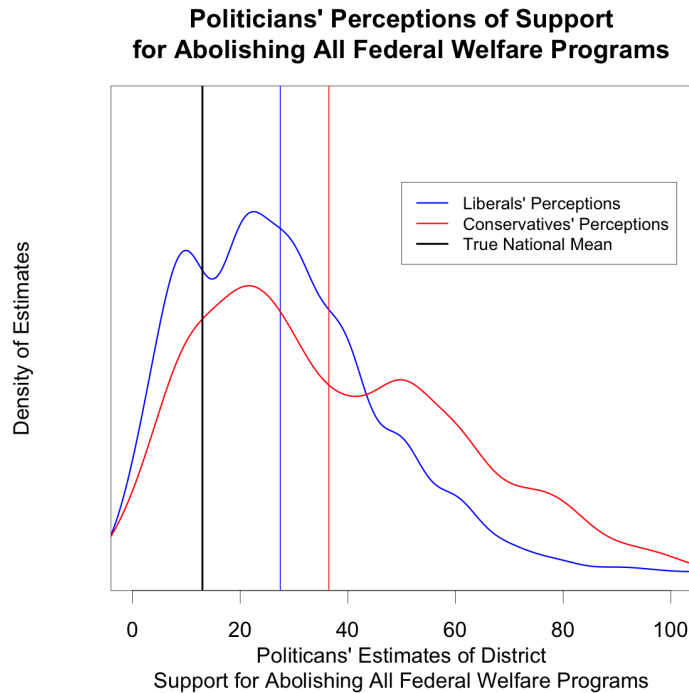


districts, yet less than half actually are.

Lest one be tempted to attribute these findings to the particular issues we have examined, Figure 6 shows the distribution of support for the third and final question on which we asked politicians to estimate their constituents' opinions – the statement “Abolish all federal welfare programs.” Although we do not have a sufficient sample size to reach sufficiently accurate district-by-district estimates, the Figure shows that the same striking conservative bias exists on this question. Very few Americans agree with this extreme statement – a complete dismantling of the entire American welfare state – yet American politicians believe that support for this sentiment is extremely widespread. Indeed, even liberal politicians typically believe that support is well above 25% in their districts, while conservative politicians typically perceive opinion on this issue closer to 40%. The true national mean is 13%, considerably more liberal than politicians of all stripes believe. Conservative politicians again overestimate support for conservative positions by about 25 percentage points on this issue, while liberals substantially overestimate support for conservative positions as well.

To the degree that elite perceptions of public opinion are isolated to this degree, prospects for constituency control via elite perception appear bleak. Candidates for state legislative offices know

Figure 6: Politicians' Perceptions of Support for Abolishing All Federal Welfare Programs



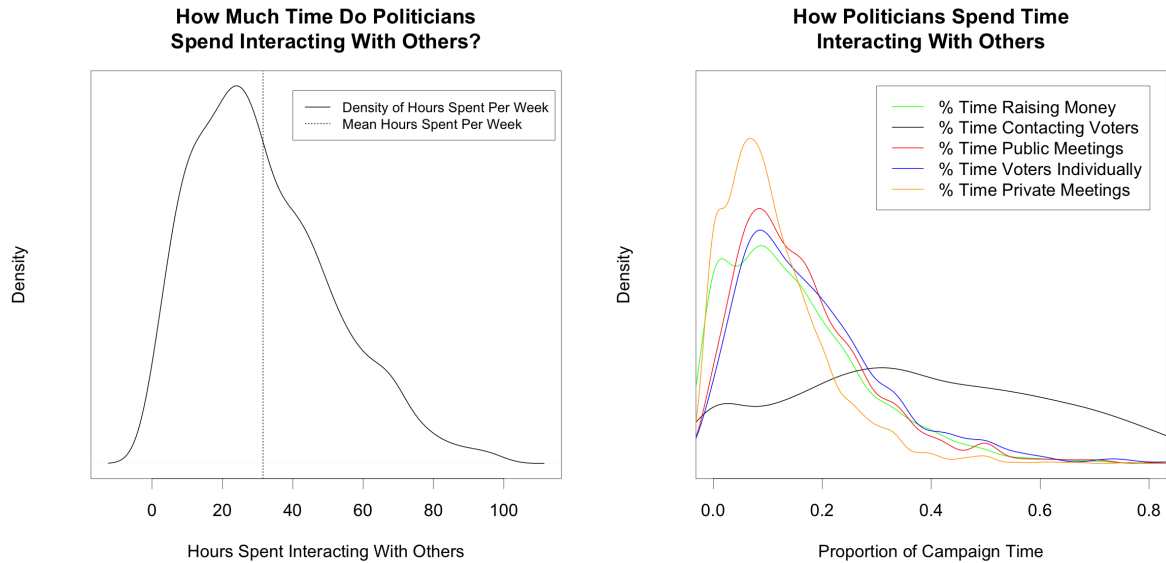
little about their constituents' preferences, while this misperception is particularly strong among conservatives, who massively overestimate their constituencies' support for conservative policy positions both when running for office and once in office.

3.2 Do Candidates Learn From Campaigns and Elections?

Politicians apparently know surprisingly little about their constituents when asked in mid-August of an election year, although one might hope that political campaigns themselves might inform politicians about prevailing voter opinion, just as campaigns (may) inform voters about politicians (e.g. Gelman and King 1993; Lenz 2012). Do politicians learn from their campaign activities or from elections? We present three findings on this question, all of which suggest that they do not.

First, taking cues from Fenno's (1978) classic work, our National Candidate Study also asked candidates to describe the amount of time they spent on each of several kind of campaign activities each week. Figure 7 presents descriptive statistics for these variables and shows that politicians

Figure 7: How Politicians Spend Time During Campaigns

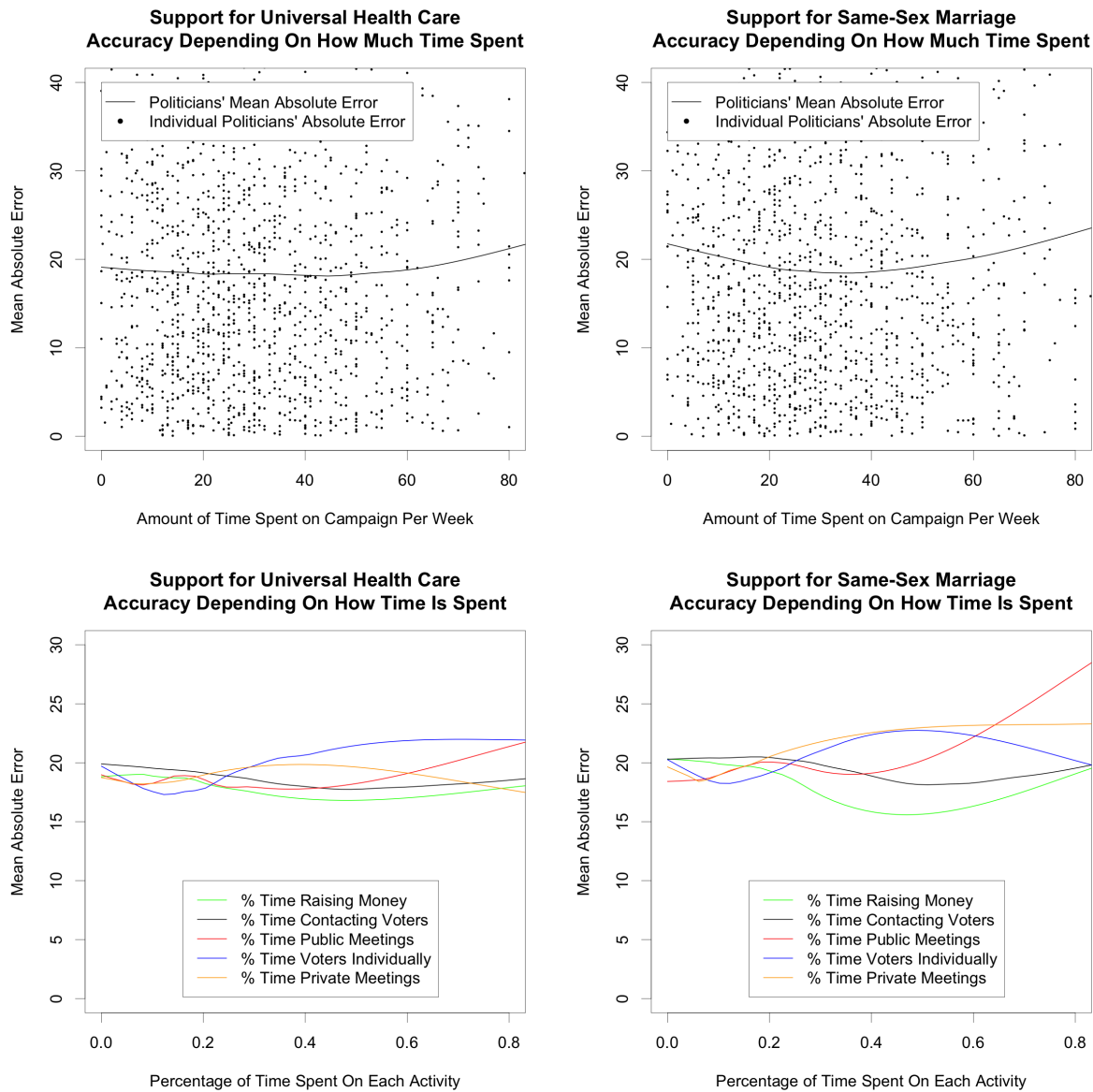


typically spend a great deal of time on activities during which they might learn voter opinion. The typical candidate was spending just over 30 hours per week interacting with potential supporters in various ways, most of which is spent contacting voters individually but a fair amount of which is spent raising money, in public and private meetings, and talking to voters individually at public events.²² Campaigns would thus seem to represent an ideal time for prospective representatives to better ascertain public opinion, especially when most candidates' baseline level of accuracy is so low.

Did candidates who had spent more time interacting with potential supporters gain a better appreciation for their constituents' views? Our results suggest that they did not. Figure 8 depicts candidates' mean level of accuracy depending on the amount of time they spend on their campaigns and how this time is spent. No clear trend emerges: spending more time interacting with constituents overall does not appear to make a candidate more accurate, nor does spending a greater share of that time on the kinds of personal contact with voters or groups that Fenno (1978) argues help keep legislators connected to the district. Politicians may sincerely believe that they are learn-

²²Candidates likely spend a great deal more time on their campaigns total; we did not ask about how much candidates spend on less social activities that would seem to have little prospect of influencing their views of their constituencies; e.g., the amount of time spent traveling to various events, hiring and firing campaign staff, and assembling canvassing packets for volunteers.

Figure 8: Relationship Between Perceptual Accuracy and Amount of and Manner In Which Campaign Time Is Spent



ing about district opinion writ large from these activities, but our results suggest that they are learning little that is systematically diagnostic of constituency opinion.

Even more compelling than these cross-sectional findings are data from a follow-up survey we conducted in mid November 2012, two weeks after the general election. This survey asked politicians the same questions about constituent perception as we had asked three months earlier, yet now after they had just experienced the height of the campaign and the election results them-

selves. It seems that campaigns ought to help candidates learn more about constituent preferences by bringing candidates into contact with voters and organizations across the district. Failing this, perhaps election results themselves represent at least a blunt instrument that the most egregiously inaccurate candidates would learn from.

However, evidence from our post-election survey provides no evidence of this kind of elite learning. As Figure 9 demonstrates, politicians who completed both waves of the survey show no discernible improvement in accuracy between the pre- and post-election surveys. Politicians' responses to our survey in August are shown in light green, while those same candidates' responses in November are shown in dark green. Were politicians to learn from elections, one would expect the darker blue lines to be closer to the black line indicating perfect accuracy. Such movement is not observed; politicians appear to learn very little from democratic campaigns and elections.

4 Evidence for Constituency Control

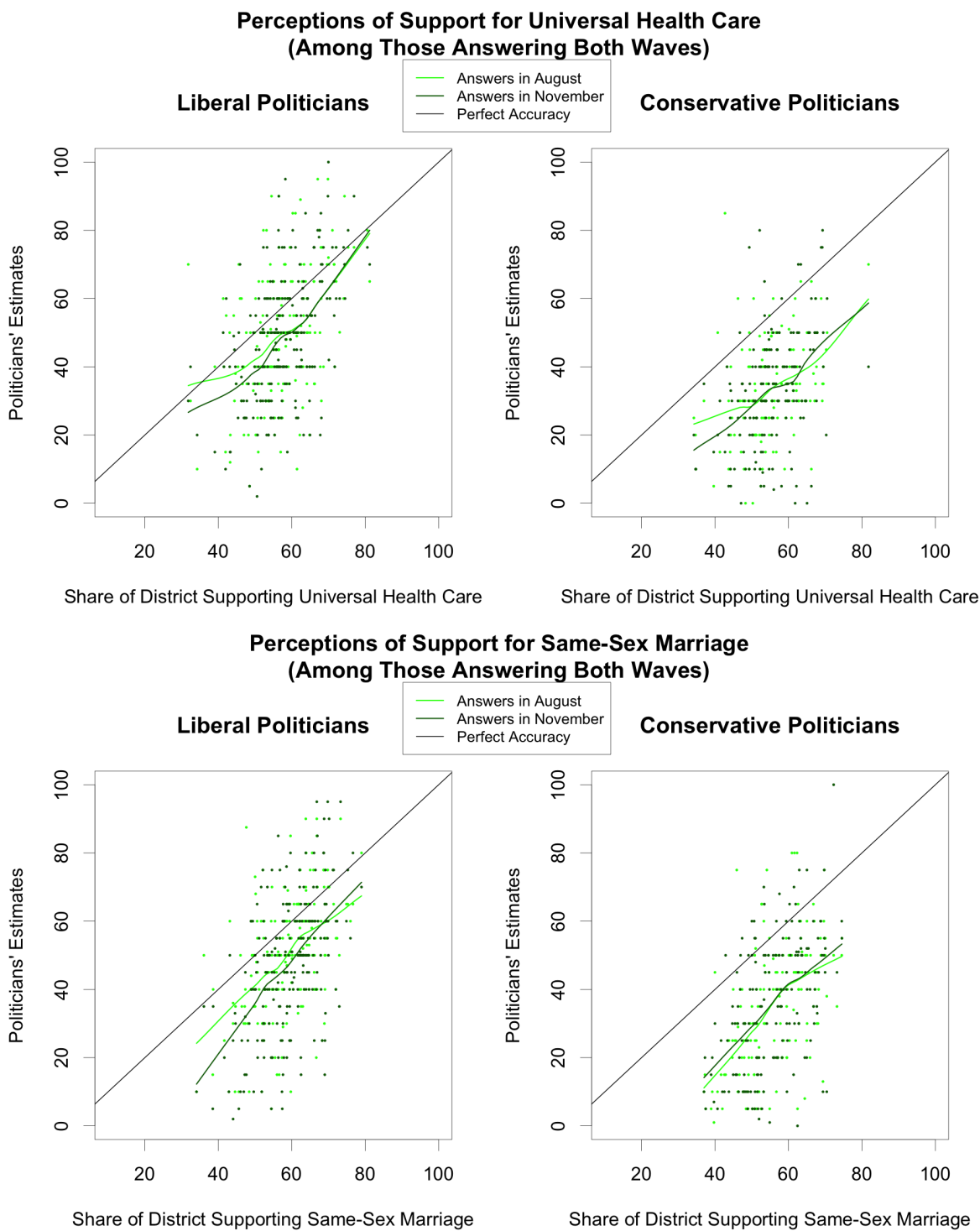
What do these findings suggest about prospects for constituencies' control over their representatives in American politics? We now present a final series of findings that describe the results of the processes we have sought to elucidate: the relationship between constituent opinion and elected officials' perceptions and, briefly, prospects for the alternative route of electoral selection.

4.1 Evidence for Constituency Control: Elite Perception

Figure 10 summarizes our central findings with regard to perceptual control by depicting the share of now-sitting politicians in our sample who believe the majority of voters in their constituencies support universal healthcare and same-sex marriage. The x-axes in these graphs correspond to district opinion, while the y-axes dichotomize the perception variables to depict the now-sitting legislators' perceptions of majority support. Note that these data have been subset to include only respondents who ultimately won their elections; every point on this graph represents a survey response from a sitting American legislator.

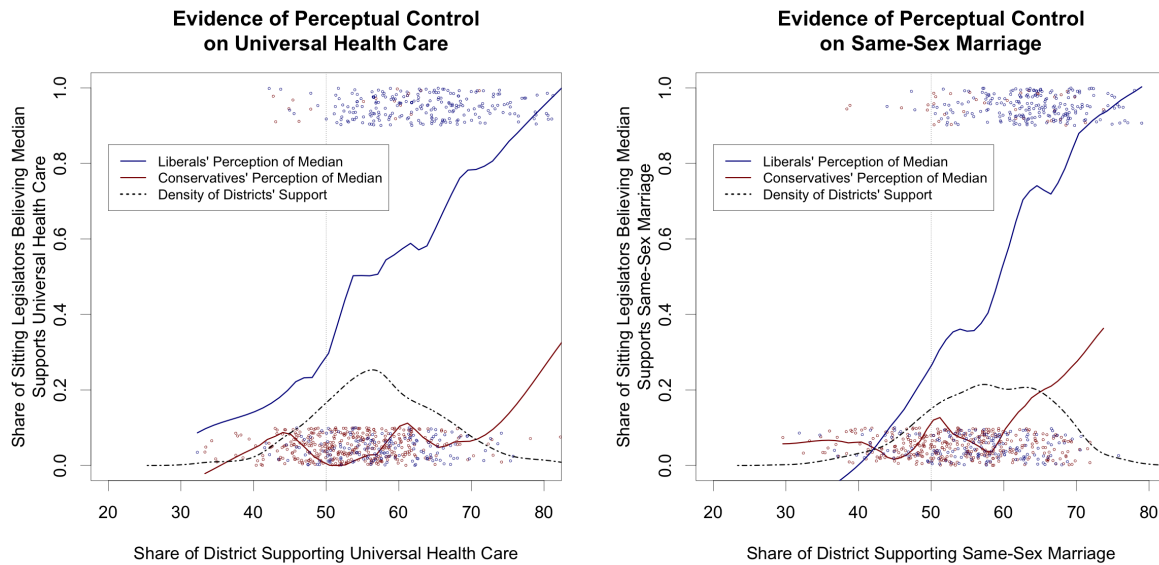
Several conclusions present themselves and are consistent with our previous findings across these two very different issues. First, on average, elite perception does respond to changes in mass

Figure 9: Politicians Learn Nothing About Constituents' Views From Campaigns Or Elections



beliefs, although the connection is weak at best in the vast majority of districts and does not fully convert to a liberal direction until liberals reach near-supermajorities. Elites' insensitivity to actual

Figure 10: Prospects for Constituency Control: Perception Among Sitting Legislators



district opinion is particularly true among conservative representatives, who appear to nearly never entertain the notion that a majority of their constituents support these issues, even when support among their constituents is overwhelming.²³ Liberal representatives do recognize that their constituents support these policies, although only once support becomes somewhat lopsided, and even then there remains considerable room for error in most districts. For most constituencies represented by conservative politicians perceptual routes to control seem to be largely foreclosed; for those represented by liberals, the perceptual route to control seems at best muted, with liberal elite perception of majority opinion seemingly determined by coin flip for many districts.

4.2 Evidence for Constituency Control: Voter Selection

One might hope that voter selection would step in to fill the apparent gap in elite perception – if representatives are unwilling to learn that their constituencies would favor an alternate course, democracy allows constituencies to replace their representatives.

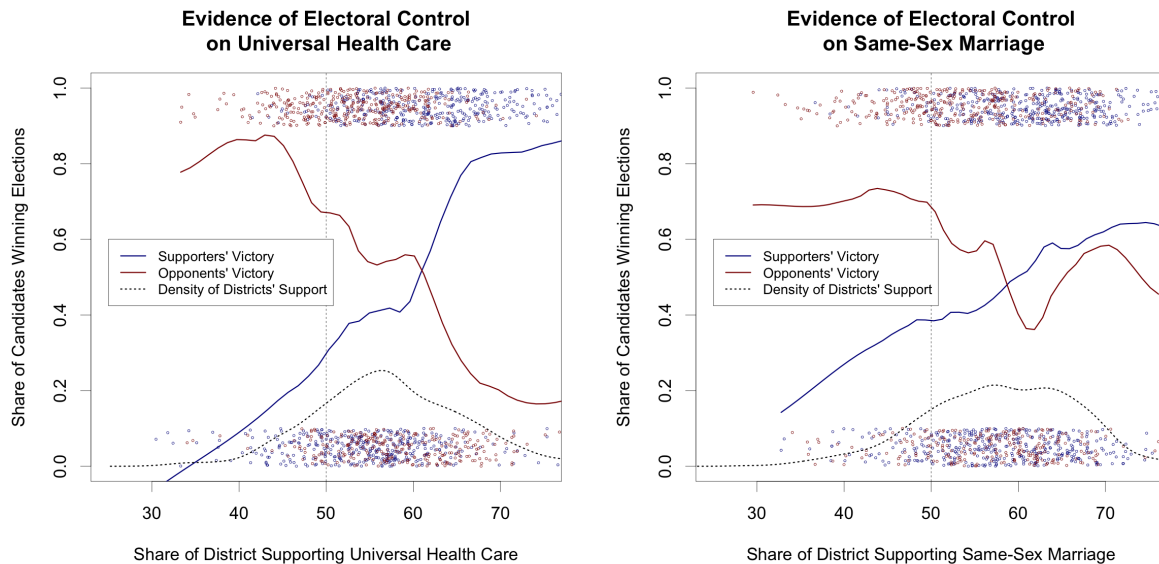
In Figure 11 we depict the share of candidates supporting and opposing each of these policies who won and lost their elections in November – the candidates who won their elections are shown

²³In this respect our findings stand in accord with an earlier research tradition suggesting that elite perceptual accuracy is correlated with the homogeneity of voter opinion (Clausen, Holmberg and deHaven Smith 1983).

at the top of each plot, and the candidates who lost are shown at the bottom. The smoothed lines depict the conditional expectation functions.

To the degree that voters exercise considerable control over legislators’ policymaking through sheer electoral selection itself, one would observe a sharp discontinuity between supporters’ and opponents’ fortunes around the dotted 50% line, with incongruent would-be representatives falling by the wayside as voters select congruent alternatives (e.g. Fiorina 1974). In such a setup, the red and blue dots that appear at the bottom and top of the graphs would separate entirely, with the lower x-axis filled with blue dots only at first followed by red dots only, and the upper x-axis looking like the reverse.

Figure 11: Prospects for Constituency Control: Voter Selection



There is a clear upward trend in these data but, nevertheless, observe that this relationship is principally driven by the data in the tails of the distribution, districts where support or opposition for these policies is overwhelming and incongruent candidates face nearly certain defeat. Yet inferring congruence from the strength of the relationship in the tails of the distribution is misleading (e.g. Achen 1977) when one considers that in the preponderance of districts – where voters support these policies at rates of between 50% and 60% – congruent candidates have at most a 60% chance of winning while incongruent candidates have at most a 40% chance of defeat. Constituencies’ preferences do certainly express themselves in the electoral process to some extent, but in account-

ing for which policies their representatives will espouse they represent only a small part of the story in places where collective opinion is short of unambiguous.²⁴ Moreover, the relationship is also only particularly present in the tails of the distribution on the issue of universal health care – the issue most highly correlated with underlying partisanship Tausanovitch and Warshaw (2012). On the issue of gay marriage (one of the most correlated issues with partisanship, yet not as highly correlated as universal healthcare) the relationship grows considerably weaker. Given that legislative and Congressional elections generally reflect underlying partisan ties, it appears unlikely that district-level nuance in public opinion is likely to induce control via electoral selection except when the correlation between partisanship and issue opinions in the public is exceptionally high.

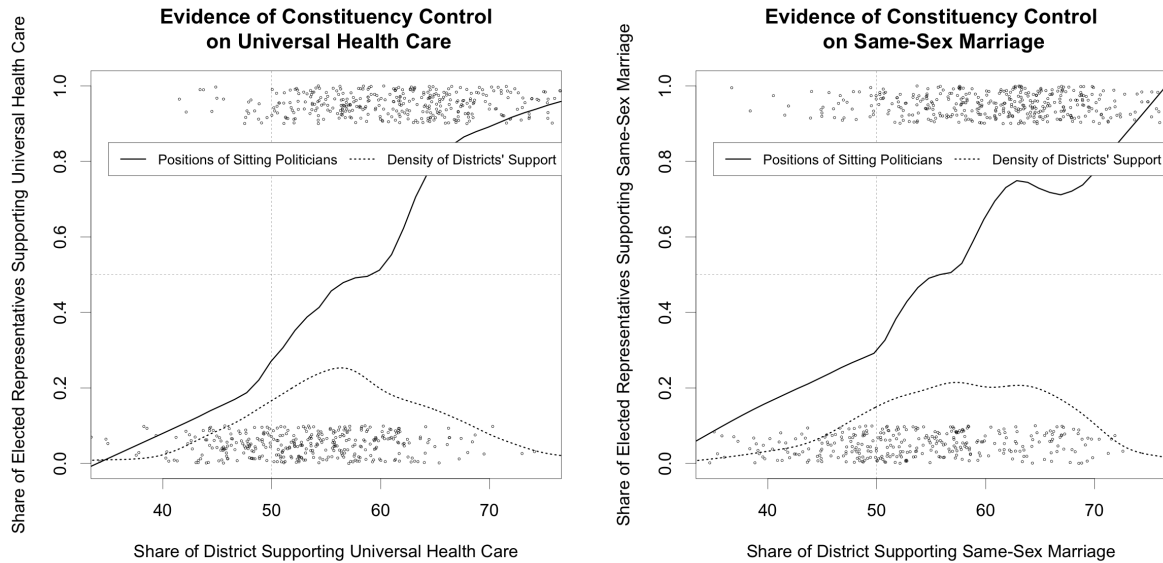
5 Discussion: Prospects for Constituency Control

We have assembled unique evidence on the prospects for what Miller and Stokes (1963) referred to as constituency control – the ability of constituencies to control the laws that their representatives make on their behalf. We are far from the first to raise these time-honored questions, although we can speak with decidedly more precision about the contours of the relationship between constituency and representative than has been possible before thanks to the data we have assembled – among the most extensive and precise of which we are aware that combines information on politicians’ positions, their perceptions of their constituencies’ positions, their constituents’ actual positions, and electoral outcomes. To aid in our discussion, Figure 12 presents the final output of the process of constituency control we have examined – the positions of sitting American legislators on the issues we examine given the preferences of their constituencies.

Our data suggest several clear conclusions.

²⁴We are of course in no position to conclude that constituencies’ modest influence over their politicians is individuals constituents’ “fault” or draw any other micro-level conclusions about voter behavior – the political system presents constituencies with only two choices in any given election, each of which is likely to be incongruent with the district on a number of issues given that most districts are fairly evenly divided and candidates typically hew closely to their national party platforms (Fiorina, Abrams and Pope 2005). This is precisely the point we are making – in areas where voters’ collective demands are short of unambiguous, one can scarcely hang one’s hopes on electoral selection alone to induce constituency control.

Figure 12: Evidence for Constituency Control: National Candidate Study



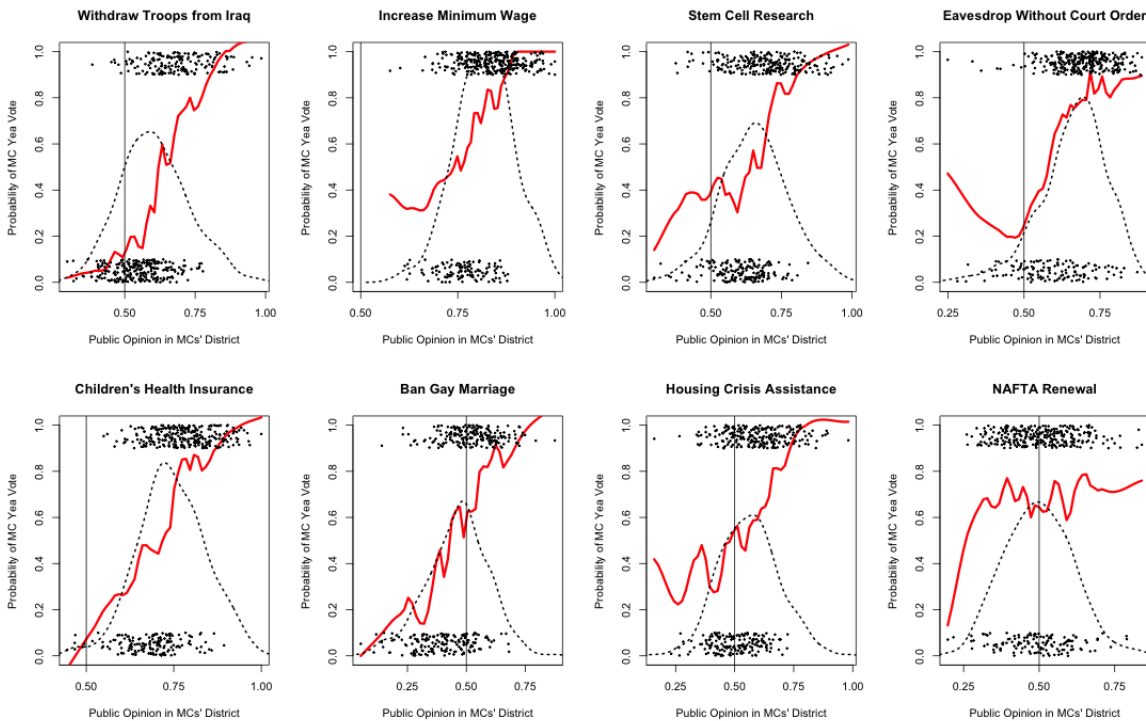
5.1 Degree of Constituency Control

First, fifty years after Miller and Stokes (1963), their broadest findings appear intact. Based on the strength of the essential processes of constituency control we have examined, we would expect a real yet decidedly modest relationship between constituency opinion and representative position in districts where constituency opinion falls short of unambiguous. This is indeed what Figure 12 shows. The R^2 statistic for the relationship between district opinion and elite position is 0.24 overall for universal healthcare and 0.17 for same-sex marriage. As Achen (1977) would note, however, the presence of some districts with relatively lopsided opinions in the sample makes it easy to overstate the strength of relationship with this overall summary statistic – for example, narrowing our focus even to districts between the 10th and 90th percentile in support for these issues the R^2 statistics fall to 0.15 for universal healthcare and 0.14 for same-sex marriage. There is clearly a relationship between constituency opinion and representative behavior, but this relationship seems to account for at most a relatively small share of why representatives do what they do. Other factors appear to account for the lion’s share of the variance in representatives’ behavior than constituency opinion.

Lest one be tempted to believe that our conclusions are limited to the province of American

state legislatures (the Appendix shows that our results hold in the most highly professionalized state legislatures as well), Figure 13 shows that these general conclusions stand up well in the 2008²⁵ Cooperative Congressional Election Study. In this large sample survey, we again find real but modest relationships between Congressional District-level opinion and representative roll call voting on the eight roll call votes included in the Study. To be sure, the relationships are positive and statistically significant in every case – but in every case we also see that representatives spurn majority opinion routinely, with most districts falling in a middle region where how legislators vote cannot be reliably predicted on the basis of district opinion (see also Lax and Phillips (2009b, 2012)).

Figure 13: Evidence for Constituency Control: 2008 Cooperative Congressional Election Study



5.2 Biases in Constituency Control

We also probed the processes undergirding constituency control with an unprecedented degree of precision. Our first key finding from this analysis indicated that politicians' perceptions suffer

²⁵Future revisions of the paper will include data from the 2010 and 2012 CCES.

from a widespread conservative bias: the typical politician appears to overestimate her constituents' conservatism by more than 10 percentage points. Conservative legislators' misperceptions on this score are particularly severe: nearly every sitting conservative politician overestimates the support for conservative policies among their constituents, typically by more than 20 percentage points. These patterns echo rhetoric from a distinguished pedigree of conservative politicians in the United States, including Richard Nixon's pronouncement that a "silent majority" of Americans backed his policies with regard to the Vietnam War and Sarah Palin's suggestion that a latent "real America" supported her and John McCain's Presidential ticket. Such remarks seem to suggest a folk theory among conservative politicians that the American public is considerably more conservative than it seems at face value. At this juncture it has become apparent that this folk theory is not contained to the conservative politicians who have made such infamous statements – in actuality, such statements appear diagnostic of highly distorted perceptions of public opinion that pervade conservative politicians. Liberal politicians exhibit a similar conservative perceptual bias that, although less severe, contributes to the overall pattern that politicians typically overestimate opposition to the policies we study by over 10 percentage points on the policies we examined. Perversely, these differences mean that liberal politicians were broadly congruent with their constituents but in many cases unaware of this congruence, while conservative politicians were quite often incongruent but nearly never cognizant of this fact.

These systematic biases in politicians' perceptions would predict and indeed correspond to a more general and similarly sized bias against liberal policies evidenced in Figure 12. Although there is a relatively linear relationship between constituencies' opinions and the probability that their representatives take certain positions, the slope of this relationship belies a significant shift in its intercept (Achen 1978) – not until district opinion reaches about 60% supportive of these positions does it become more probable than not that these districts' representatives will adopt these positions in turn.

5.3 The Question of Elite Motivation

Politicians' asymmetric misperceptions of their constituents' opinions naturally raise the question of what accounts for their typically gross inaccuracy and – a different formulation of the same

question – what might be done to correct it.

For those interested in strengthening democratic responsiveness, one tempting conclusion from this analysis is that alternative means of informing legislators about their constituents' views need to be devised – democratic campaigns and elections appear to do little to update politicians' perceptions of their constituents. However, on reflection, the fact that candidates and legislators know so little about their constituents and learn so little about them from campaigns and elections is perhaps indicative of a deeper and more basic problem of elite motivation. When Miller and Stokes (1963) conducted their authoritative study of information flows between representatives and their constituencies it was less clear how representatives might ascertain their constituencies' views with a great deal of precision even if they so desired – reliable district-level opinion surveys were still relatively rare. However, if today's elites viewed congruence with majority opinion as a primary goal we would expect considerably more knowledge of this opinion in our sample than we observe; such knowledge is quite inexpensive to obtain relative to the cost of modern campaigns. As with voters' typically low level of motivation to learn about their representatives (Downs 1957, ch. 13), it thus appears that our respondents must have found little desire to accurately ascertain public opinion on political issues of the very highest salience. Politicians clearly do respond to cues about the political consequences of their actions when taking political positions (e.g. Kollman 1998; Bergan 2009), but accurately ascertaining the state of constituency opinion does not appear to rank fairly highly on their priorities necessary for gaining and maintaining access to political authority. Only when constituency opinion is relatively unambiguous do representatives appear to reliably see reason to take notice – yet as most districts are relatively moderate in aggregate (e.g. Fiorina, Abrams and Pope 2005),²⁶ such conditions are rare.

What value, then, is there in investigating the origins of public policy with such a single-mindedly dyadic view of the process of representation as we have maintained in this paper, bearing nearly nothing in mind but the vertices of Miller and Stokes's (1963) infamous "diamond" (see Figure 1), with its undifferentiated mass of constituents on one side and a representative vying for their continued favor on the other? Having expended considerable effort undertaking such an intentionally narrow-minded empirical investigation, we obviously believe there is indeed some value in this

²⁶A condition due in part to the intentional drawing of moderate districts, and in part because Americans are not nearly as divided between red and blue districts and states as one may be tempted to think (Fiorina, Abrams and Pope 2005).

enterprise. One source of such value is in the systematic patterns it can surface with regard to the perceptual and electoral routes to constituency control – for example, it seems almost certain that politicians’ relatively severe misperceptions of their constituents’ conservatism on policy issues as salient as these has considerable implications for understanding American policymaking. Yet on the other hand, a principle reason we (and we suspect Miller and Stokes (1963)) have chosen to embark upon an approach that so willfully ignores the other ingredients in policymaking is to carefully appraise just how much of democratic policymaking might be understood on the basis of constituencies’ demands alone. Our cases represented a relatively easy test for the hypothesis that constituency control is highly robust in American democracy – we selected highly salient issues, and voters’ propensity to adopt their parties’ positions should have led us to further overstate the typical influence of their opinions still (Lenz 2012) – yet elites appeared generally uninterested in coming to accurate perceptions of their constituents’ opinions or remaining congruent with them. Factors beyond constituency opinion appear to account for most of the variation in what representatives do on behalf of their constituencies. Be these additional influences on elite behavior national party platforms (e.g. Ansolabehere, Snyder and Stewart 2001), primary voters (e.g. Burden 2001), or narrow interest groups (e.g. Bawn et al. 2012), on the basis of our investigation it seems alternative dynamics such as these are the ones principally worthy of investigation for understanding how representatives make public policy in the United States.

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A Appendix

Figure A1: Responses of Candidates In Same Districts and MRP Predictions in Those Districts

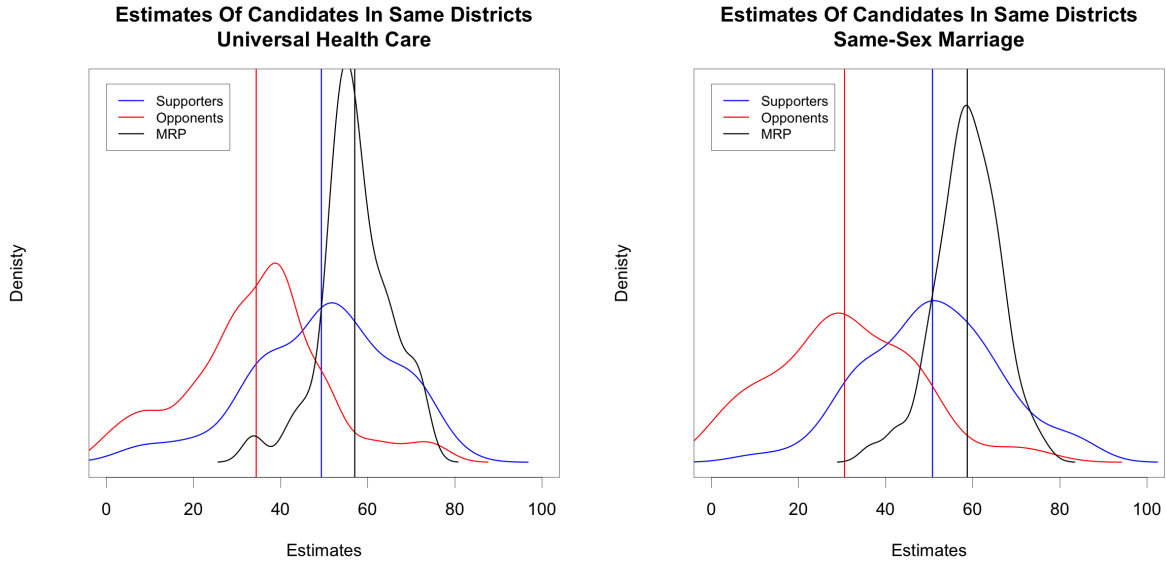
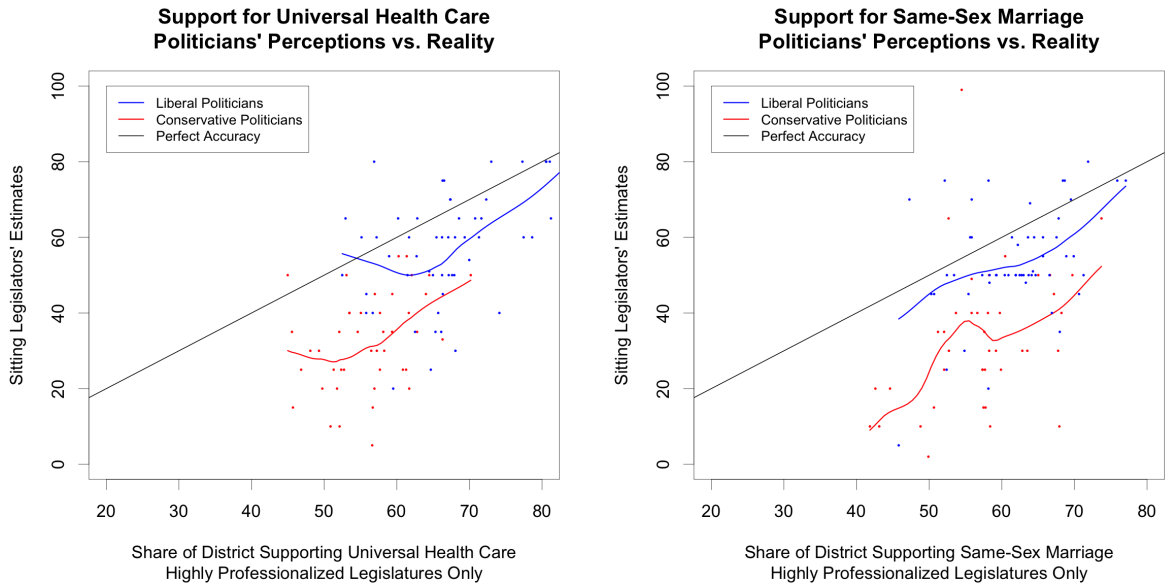


Figure A2: Estimates of Sitting Legislators in Highly Professionalized Legislatures



A.1 Notes on Data Sources for Future Revisions

As of this writing several sources of data used to estimate the MRP model have not yet been made available, and so as a stopgap measure we use estimates that well-approximate final estimates. Given the magnitude of the differences we document we believe it is unlikely the substantive results will change. Table A1 summarizes these data.

Table A1: Data Sources To Be Used In Future Revisions

Data	Current Source	Eventual Source
Public Opinion	CCES 2008, 2010	CCES 2008, 2010, 2012
CCES Respondent District	Zip-Based Imputation	Respondent District Identifiers
District Demographics	ACS Block- and Block-Group Data	ACS July Data Release
District-Level Obama Vote	Imputed County Data	Aggregated Precinct Returns (Typically Released Late 2013)

A.1.1 Temporary Methodology for Reaching District-Level Demographic Estimates

As we write the US Census is preparing to release state legislative district-level files that will allow us to measure with near complete accuracy the demographic makeup of each district. These files are not yet available, and in this version of the paper we use a stopgap that is likely to closely resemble these final files. Specifically, we build up district racial and gender composition information from the block level files using the Census’ block equivalency file, a process that introduces no error whatsoever because the districts themselves are built from these Census blocks. In order to estimate education, we use the lowest level of aggregation currently available, US Census tracts. We first compute tract-level estimates for levels of education within each race – for example, of the black female individuals who live in a given tract, what percentage have completed college degrees? To compute education by race within each district we take these tract data and match them to state legislative districts using the `Geocorr` tool offered by the University of Missouri Census Data Center, taking weighted averages within each racial group to come to estimated distributions of educational attainment within each group within each district. These complete the data needed for the post-stratification procedure.

A.1.2 Allocation of Survey Respondents to Districts and MRP Weights

In fitting the multilevel choice models, respondents were matched to 2012 state legislative districts using ZIP codes. Because some ZIP codes straddle state legislative boundaries, we estimated the likelihood that each respondent had been assigned to the correct upper and lower house district by taking the percentage of the zip code contained in that district. We weighted respondents by these values such that every respondent in the original data represented one or more rows in the estimation data with weights that summed to one. The multilevel regression takes these weights into account and ensures that district-level predictors are fit with the least error possible.

A.2 Evaluating Performance of the MRP Model

Warshaw and Rodden (2012) show that MRP produces precise estimates of district-level opinion for state legislative districts on these issues, and we estimate a model that uses strictly more information than even theirs. Nonetheless, we undertake some discussion here to reassure the reader of the accuracy of our estimates (which we intend to significantly expand in future drafts as more data becomes available.)

First, as a basic check on the performance of the model, Figure A3 shows that the MRP model predicts individuals' survey responses in the public opinion data very well. There is some inaccuracy far in the tail of the universal health care model, although for the vast majority of state legislative districts the expectation of district support among survey respondents lines up very closely with the MRP model estimates. The dotted line below shows the density of the estimates.

Those who are skeptical of the generally divided nature of districts on these issues are directed to Figure A4, which depicts the density of Barack Obama's vote share in the 2012 election in the country's state house districts. 90% of districts fall between 30 and 70%, with the majority falling within 10% of the mean. As Fiorina, Abrams and Pope (2005) reminds us, casual observers often believe that Americans are deeply divided between areas of the country, but we are in fact generally evenly divided within all areas.

Figure A5 shows some of these estimates graphically for the Los Angeles area and helps establish the face validity of these estimates. Patterns of support for these issues in areas such as

Figure A3: Relationship Between Estimates of District Opinion from MRP and Average District Opinion in Survey

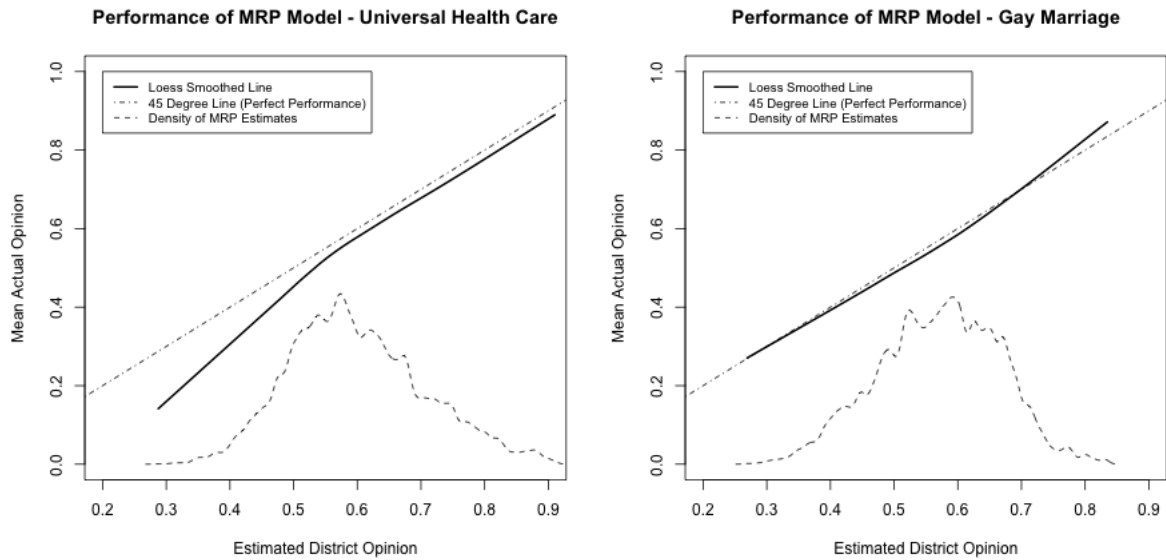
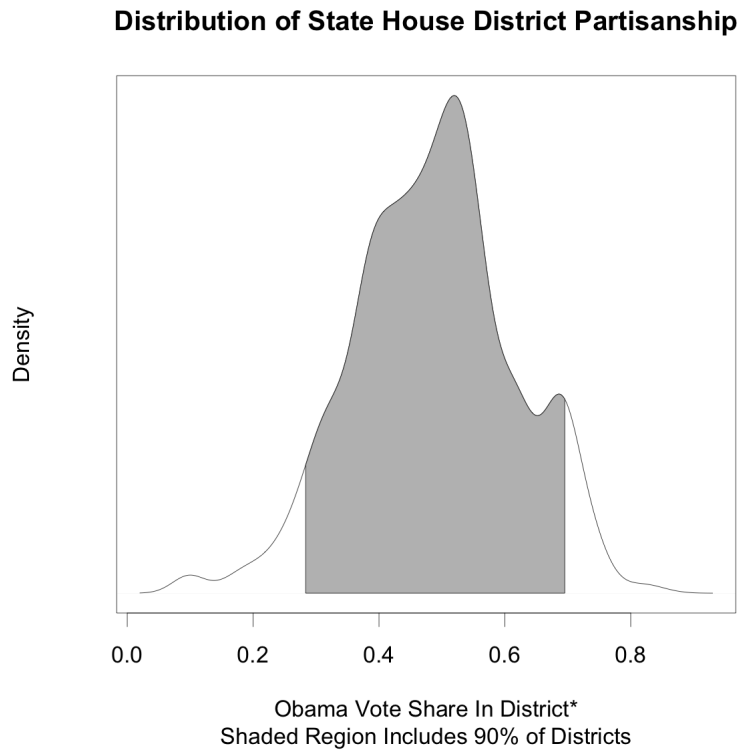
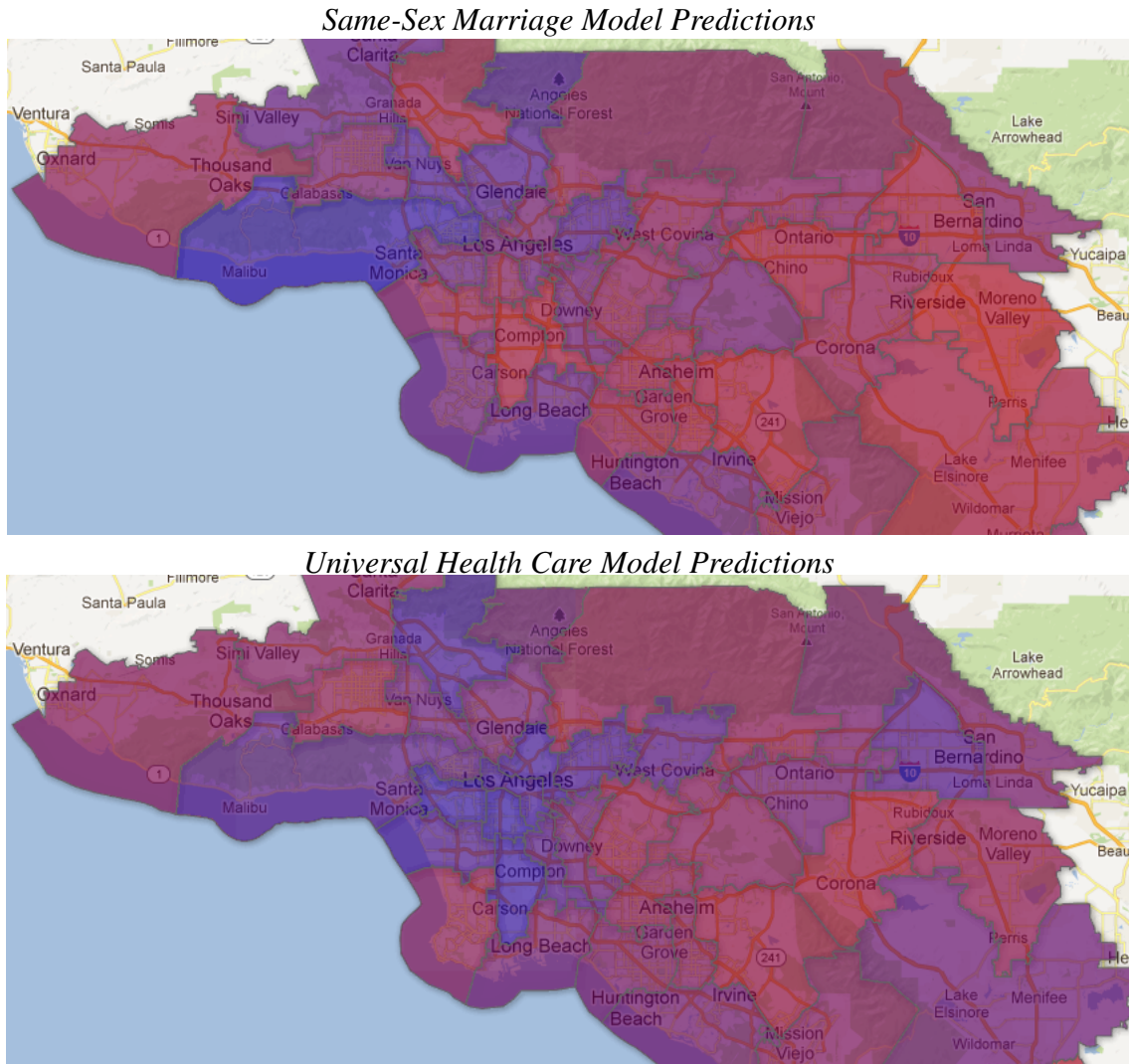


Figure A4: Density of State House District Partisanship



Compton, East Los Angeles, and Long Beach correspond closely with predictions. These results also correspond closely with these areas' vote returns in California's 2008 Proposition 8 and 2012 Proposition 30.

Figure A5: MRP Estimates for State Assembly Districts in the Los Angeles Area



Notes: Estimates of district support from the MRP models. More blue shading indicates higher levels of support; more red shading represents lower levels of support. Note the difference between the two issues in areas such as Compton and East Los Angeles. Map made with Google Fusion Tables.

Perhaps most relevant to our purposes, we also examined whether politicians' estimates contained a great deal of information not reflected in our MRP estimates. Perhaps as local experts these individuals are capturing a great deal of systematic variation not reflected in our estimates.

To evaluate this hypothesis, we split the public opinion data for same-sex marriage in two and calculate MRP estimates for each district twice, once with each half of the data. We then regress the estimates from the first half of the data on the estimates from the second and politicians' estimates. If politicians know a great deal that is not being captured in the MRP model, we would expect politicians' estimates to predict the survey responses very well and improve the model fit over the MRP predictions. Table A2 shows that candidates' own perceptions actually provide little additional information that allow us to predict survey responses beyond that contained in the MRP models. Information on politicians' own estimates of their constituents' views does improve the fit of the same-sex marriage model, but by only about 1%. In terms of substantive size, we expect that if a candidate believes opinion is 10 percentage points more in favor of same-sex marriage, our best guess about support in that district would change by only 0.5 percentage points. Though the MRP model is not perfect it appears highly unlikely that politicians are responding to real district-level idiosyncratic not reflected in the estimates.

Table A2: Do Politicians Know Anything About Their Constituents That We Do Not?

Dependent Variable:	Support for SSM MRP1	Support for SSM MRP1	Support for	Support for
MRP2 Estimate	0.82*** (0.02)	0.76*** (0.02)		
Politicians' Estimates	–	0.05*** (0.01)		
Constant	10.6*** (0.91)	11.8*** (0.91)		
R^2	.695	.708		
N Candidates	1207	1207		

Notes: *** = $p < 0.001$.

As many of our findings concern mean levels of support for various policies, Table A3 depicts differences in mean support between our polls and other readily available national poll results on these questions.

Finally, Figure A6 shows that adding a fair amount of noise to the MRP estimates would do little to change our conclusions. The first two graphs depict simulated plots where additional random noise $\mathcal{N}(0, 5)$ has been added to all MRP estimates. The second two depict the effects of adding non-random noise of size $c_i|\mathcal{N}(0, 5)|$ such that c_i is set to 1 if the candidate supports the issue and

Table A3: Our Polls vs. Other Polls

Support for Universal Health Care			
Poll	Date	For	Against
CBS	6/14/10	64%	27%
Kaiser	7/14/09	58%	38%
NYT	6/16/09	64%	30%
Our sample	–	60%	40%

Support for Same-Sex Marriage			
Poll	Date	For	Against
CBS	11/19/12	51%	41%
Washington Post	8/5/12	53%	42%
CNN	6/16/09	54%	42%
Our sample	–	56%	44%

-1 if the candidate opposes the issue – in other words, what would occur if our candidates were always more informed about their constituents’ views than the MRP estimates, typically about 5 percentage points in the direction of their views.

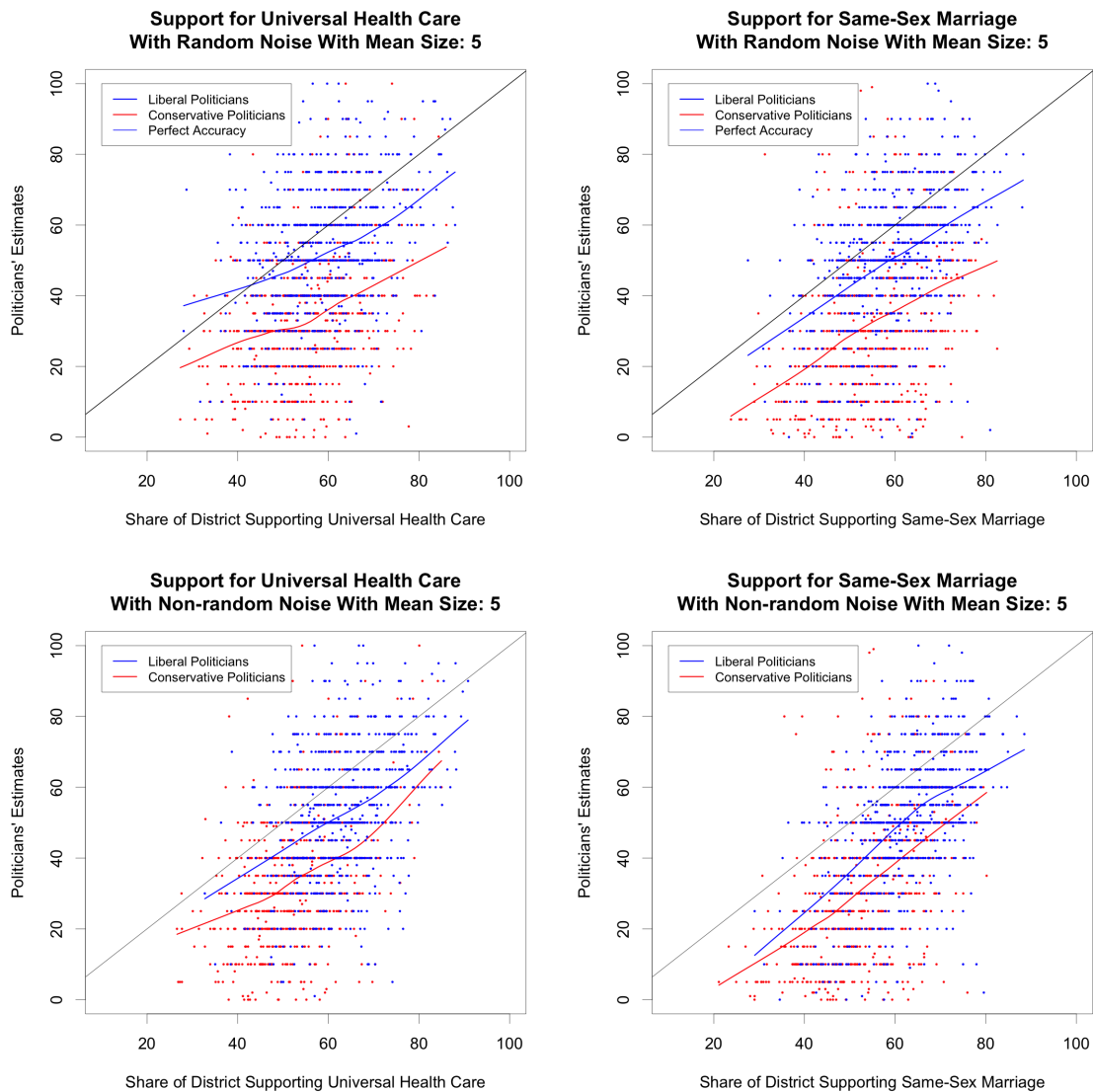
A.3 Key Findings Among Politicians In Highly Professionalized Legislatures

Figure A7 replicates Figure 3 from the paper for politicians in states with professionalized legislatures (Squire 2007): CA, NY, WI, MI, PA, OH, IL, NJ, and AZ only. Though the results are unsurprisingly considerably more noisy given the significantly reduced size of the sample they are essentially identical.

A.4 National Candidate Survey Questionnaire Item Wording

The key questions from the National Candidate Study used in this paper were worded as follows:

Figure A6: Influence of Adding A Great Deal of Noise To MRP Estimates on Substantive Conclusions

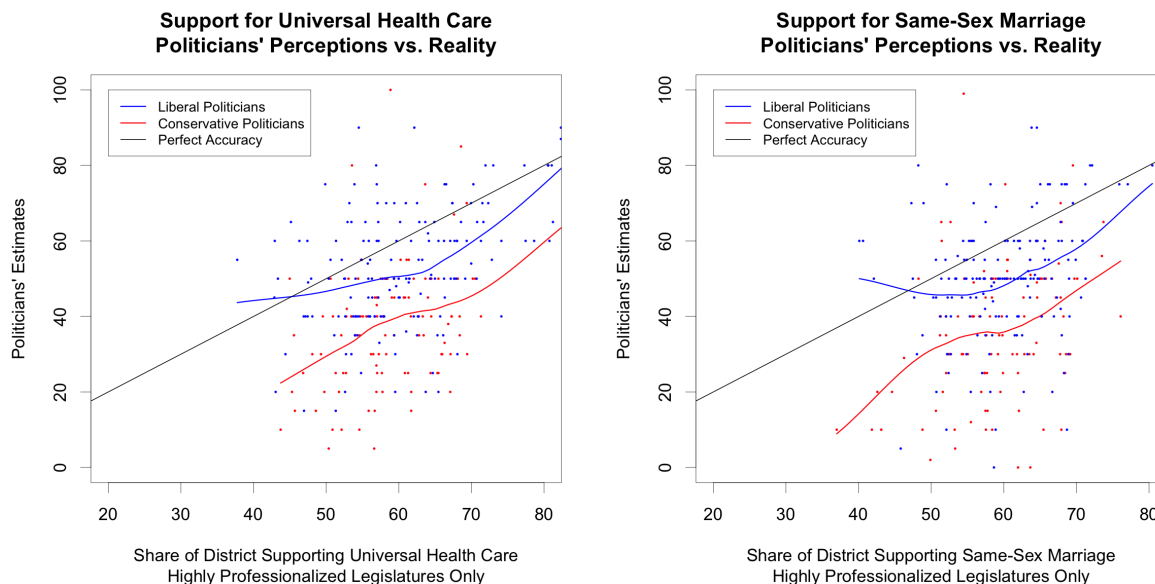


A.4.1 CANDIDATE IDEOLOGY BATTERY

Do you agree or disagree with the following statements? (We have kept these choices simple and realize there are shades of gray on many issues. Please check the option that most accurately reflects your views.) *All questions had response options of “Agree” or “Disagree.”*

- Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income.

Figure A7: Main Results Among Politicians in States with Highly Professionalized Legislatures



- Same sex couples should be allowed to marry.
- Make President Bush's tax cuts permanent.
- Reduce government regulation of the private sector.
- Reduce government regulation of the private sector.
- The government should regulate greenhouse gas emissions.
- Providing healthcare is not a responsibility of the government.
- Abolish all federal welfare programs.
- Law enforcement agencies should have discretion to monitor domestic communications to prevent future terrorist attacks.
- Abortions should always be illegal.
- School sexual education programs should teach abstinence only.
- The government should consider race and gender in government contracting decisions.

- The government should consider race and gender in government contracting decisions.
- Allow workers to invest a portion of their payroll tax in private accounts that they can manage for themselves.

A.4.2 CAMPAIGN ACTIVITY BATTERY

How many hours per week do you typically spend on the following campaign activities?

- Personally contacting voters one-on-one (e.g., knocking on their doors): [BLANK] hours
- Raising money: [BLANK] hours
- Attending public community meetings to speak to groups of voters (e.g., at civics clubs): [BLANK] hours
- Meeting voters one-on-one at public events (e.g., county fairs): [BLANK] hours
- Meeting privately with community leaders (e.g., civic club Presidents, church pastors): [BLANK] hours

A.4.3 DISTRICT PERCEPTIONS BATTERY

If you had to guess, what percent of your constituents do you think...

- Agree with this statement: Implement a universal healthcare program to guarantee coverage to all Americans, regardless of income. [BLANK] %
- Agree with this statement: Same-sex couples should be allowed to marry. [BLANK] %