Electoral Accountability for State Legislative Roll-Calls and Ideological Representation Online Appendix

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Table A-1: Summary Statistics of Variables

Variable	Min.	Max	Median	Mean	SD
Support for Incumbent's Roll Call (Referendum Measure)	9.10	90.90	55.37	54.07	12.80
Incumbent Vote Share	31.55	100.00	61.79	62.44	9.76
Ideological Distance	0.00	3.65	0.64	0.65	0.35
Incumbent Party Presidential Vote	11.92	96.52	56.67	57.14	12.00
Incumbent Party Previous Vote	36.66	100.00	64.32	70.97	18.08
Incumbent Previously Contested	0.00	1.00	1.00	0.77	0.42
Incumbent Contribution Advantage	-6.18	11.70	1.26	1.61	1.74
President's Party Dummy	0.00	1.00	1.00	0.52	0.50
Democratic Member Dummy	0.00	1.00	1.00	0.53	0.50
Freshman Dummy	0.00	1.00	0.00	0.29	0.46
State Senator Dummy	0.00	1.00	0.00	0.24	0.42
Change Annual Log Q4 Personal Income	-0.07	0.13	0.02	0.02	0.03
Midterm Dummy	0.00	1.00	1.00	0.58	0.49
District Size (Logged)	9.02	13.65	10.90	10.87	0.93
Legislative Staff per Member	0.39	19.66	3.70	5.34	4.26
Legislator Salary (in 1000s of 2010 dollars)	0.00	243.73	57.80	70.96	58.09
Session Length	39.00	519.30	142.71	174.08	109.81
Number of Full Time Reporters (Logged)	0.00	3.69	2.08	2.07	0.70

Comparison of Congruence Approach to Other Approaches

Prior research on Congressional and state legislative elections employs a variety of approaches to study the relationship between legislators' behavior and election outcomes. The following sections briefly describe the "congruence approach" used in the "Accountability for Ideological Representation" section and compares it to other approaches.

Congruence Approach

The congruence approach assesses the relationship between representation and vote share. If one focuses on a delegate model of representation, a measure of representation must account for both the preferences of the principal (e.g. district ideology) and the agent (e.g. legislator ideology). To solve the moral hazard problem posed by representative government, agents (legislators) must have an incentive to act on the behalf of their principals (districts). In the context of elections, legislators have this incentive if their vote share or likelihood of reelection increases if they act as their district prefers.

Responsiveness Approach

The "responsiveness approach" focuses on the relationship between legislator ideology and vote share instead of that between representation and vote share. Analyses that employ a responsiveness approach do not directly address if legislators have an incentive to represent their districts but instead address whether legislators gain Democratic (Republican) vote share as they become more "moderate" by providing more conservative (liberal) representation (e.g. Birkhead 2015). This increased moderation is at times confused for better representation, but this is not necessarily the case. Consider the example in Table A-2 of a district's and two incumbents' support for 7 different bills.

Table A-2: Responsiveness Approach Example: Roll-Call Positions

	Vote on Bill 1	Vote on Bill 2	Vote on Bill 3	Vote on Bill 4	Vote on Bill 5	Vote on Bill 6	Vote on Bill 7
District Preference	N	Y	Y	Y	Y	Y	N
Incumbent A	Y	Y	Y	N	N	N	N
Incumbent B	N	N	N	N	Y	Y	Y

Example district's preferences and two incumbents' votes on seven bills. Each incumbent agrees with the district on three bills. Assume voters care about each bill equally, and higher numbered bills are more conservative. Incumbent A therefore provided more liberal representation than Incumbent B.

Assume that Incumbent A's and B's respective ideal points are -2 and 2 and supporting Bill 4 shifts their respective ideal points to -1 and 1. Consider the below hypothetical estimates from responsiveness and congruence models.

Responsiveness

$$Democratic\,Vote\,Share = \beta_0 + \beta_1[Legislator\ Ideal\ Point] + \beta_2[District\ Pres.\ Vote] + \epsilon \quad (1)$$
$$\text{where } \beta_0 = 33.5;\ \beta_1 = 2; \text{ and } \beta_2 = .45$$

Congruence

$$Incumbent\,Vote\,Share = \beta_0 + \beta_1[Ideological\ Distance] + \beta_2[District\ Pres.\ Vote] + \epsilon \quad (2)$$
$$\text{where } \beta_0 = 33.5;\ \beta_1 = -2; \text{ and } \beta_2 = .45$$

If a district has an ideal point of 0 and a presidential vote share of 50, the above estimates yield the predicted vote shares listed in Table A-3. In this example, it is important

to keep in mind the assumption that underlies the theory that elections are a solution to a moral hazard problem: legislators are motivated by maximizing vote share or prospects for reelection.

Table A-3: Responsiveness Approach Example: Legislator Vote Shares under Each Model

Responsiveness Model			**Congruence Model**	
Ideal Point	Predicted Democratic Vote Share	Predicted Republican Vote Share	Ideological Distance	Predicted Incumbent Vote Share
-3	44	56	3	44
-2	46	54	2	46
-1	48	52	1	48
0	50	50	0	50
1	52	48	1	48
2	54	46	2	46
3	56	44	3	44

For a responsive analysis, the key independent variable is a legislator's ideal point. If Incumbent A were to support Bill 4, it moves her ideal point from -2 to -1. Incumbent A would gain Democratic vote share (46% to 48%) but lose Republican vote share (54% to 52%). Incumbent A then is best off opposing Bill 4 and receiving 54% of the (Republican) vote. A similar story can be told where Incumbent B wants to receive 54% of the (Democratic) vote with an ideal point of 2 instead of 1. Neither incumbent then has an incentive to vote for Bill 4, despite the district's support for this bill.

In a congruence analysis, the key independent variable is the ideological distance between a legislator and her district.[1] If Incumbent A supports Bill 4, her ideal point again shifts from -2 to -1. Her ideological distance measure then moves from 2 to 1. These changes result in the incumbent's vote share increasing from 46% to 48%. A similar story can be told for Incumbent B. This implies that both legislators have an electoral incentive to support the bill the district favors. By capturing the relationship between representation and vote share

[1] As in the main text, *Ideological Distance* is the absolute value of the difference between the legislator's and district's ideal point.

instead of legislator ideology and vote share, the congruence approach is more appropriate to study the extent to which elections create incentives for legislators to act on behalf of or represent their constituents.

[Insert Tables A-4 and A-5 about here]

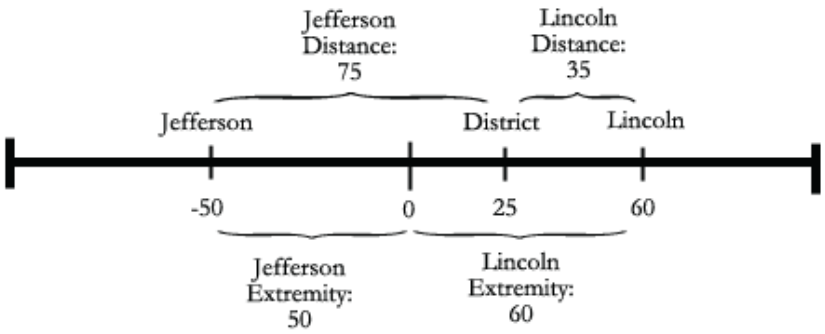
Tables A-4 and A-5 provide statistical analyses following the responsiveness approach and are comparable to those in Tables 1 and 2 but substitute the ideological distance metric for the legislator's ideal point. A standard deviation change in ideology results in a 0.910 change in vote Democratic vote share and a .005 change in the probability of reelection.

Absolute Value Approach

Another approach commonly used to study the relationship between legislative behavior and election outcomes is the "absolute value approach." To test the claim that "ideological moderation should increase an incumbent's vote share" (Canes-Wrone et al. 2002: 129), prior work on Congress often measures legislators' ideological extremity by taking "the absolute value of [DW-NOMINATE] scores so that high values...indicate that a member has an "extreme" voting record" (Carson et al. 2010: 606; see also Birkhead 2015). Using this absolute value approach, however, presumes an ideal point of zero to be moderate across all districts and potentially overlooks ideologically similar legislators representing dissimilar districts.

Figure A-1 illustrates an example of how a candidate classified as "extreme" using this absolute value measurement may be more representative than a "non-extreme" one. In this example, Jefferson and Lincoln respectively have ideal points of -50 and 60 and are seeking votes in a district whose ideal point is 25. When measuring extremity by taking the absolute value of an ideal point, Lincoln is considered more extreme than Jefferson with a score of 60 compared to 50. However, the ideological distance between Lincoln's ideal point and the district (35) is less than the comparable distance for Jefferson (75). Lincoln's ideology, therefore, is more similar to the district's preferences, but in regard to how Lincoln's ideological representation will influence his electoral fate, empirical findings

Figure A-1: Measuring Ideological Extremity using the Absolute Value Approach



Assuming Jefferson and Lincoln represent districts with similar preferences, absolute value measures of ideological extremity do not necessarily correspond to legislators' ideological distance from their district.

from some Congressional research suggest that the "extreme" Lincoln will receive fewer votes than Jefferson. Spatial theories of elections, meanwhile, predict the ideologically similar Lincoln will receive more votes than Jefferson.

[Insert Tables A-6 and A-7 about here]

Tables A-6 and A-7 provide absolute value approach analyses comparable to those in the main text (Tables 1 and 2) where the absolute value of a legislator's ideal point replaces the ideological distance metric. A standard deviation change in ideology results in a 0.515 percent change in incumbent vote share and a .009 change in the probability of reelection.

Alternative Measurement of Congruence

Empirical tests that follow the congruence approach require putting legislators and voters in the same ideological space. As detailed in the main text, I aim to do this through regressions of legislators' ideal points on measures of district ideology. Prior work on state legislative or congressional elections follows similar methods but substitutes demographic variables or presidential vote for the Tausanovitch and Warshaw estimates in versions of Equations 1 and 2 (e.g. Hogan 2008). An advantage of using these measures instead of the Tausanovitch and Warshaw ideal points is that the former are measured with more cer-

tainty. The Tausanovitch and Warshaw ideal points, however, incorporate both demographic variables and district-level presidential vote along with survey measures of public opinion.

[Insert Tables A-8 and A-9 about here]

Tables A-8 and A-9 provide analyses comparable to those in Tables 1 and 2 but use district ideal points based on district demographics (percent urban, percent black, percent latino, percent with a college degree) and district-level presidential vote averaged over the 2004 and 2008 presidential elections. When using demographic based district ideal point estimates, a standard deviation change in ideology results in a 0.476 change in incumbent vote share and a .009 change in the probability of reelection. When using presidential vote based district ideal points, a standard deviation change in ideology results in a 0.682 change in incumbent vote share and a .010 change in the probability of reelection.

Supplementary "Acct. for Ideological Representation" Analyses

Sensitivity of Results to Tausanovitch and Warshaw District Ideal Point Uncertainty

Tausanovitch and Warshaw use multilevel regression and poststratification to estimate district-level measures of ideology for most state legislative districts across the country. As noted by Tausanovitch and Warshaw, "the standard deviation of the MRP-based estimate of the mean ideology of each district. It can be used to incorporate the uncertainty in the MRP-based estimates of district ideology into subsequent analyses" (AmericanIdeologyProject.com Codebook 2015). To investigate my results' sensitivity to Tausanovitch and Warshaw estimates' uncertainty, I estimate the main vote share model but interact my distance metric with the Tausanovitch and Warshaw estimate's standard deviation for incumbent's districts to provide the relationship between *Ideological Distance* and vote share conditional on the uncertainty of the Tausanovitch and Warshaw estimate.

[Insert Table A-10 about here]

Estimates from the second column of Table A-10 suggest increased uncertainty in the Tausanovitch and Warshaw estimates attenuates the relationship between representation and vote share. A standard deviation increase in the ideological distance metric results in a predicted 0.678 percent change in vote when the Tausanovitch and Warshaw estimate is most certain (has the lowest standard deviation), but when Tausanovitch and Warshaw estimates are the least certain (has the maximum standard deviation), the predicted vote loss for this change in representation is 0.648 percent.

Sensitivity of Results to Controls or Particular States

Prior work on Congressional elections often controls for quality challengers as indicated by whether the opposition candidate held prior political office (e.g. Canes-Wrone et al. 2002). Holding prior political office, however, may be too course an indicator of candidate quality, particularly in state legislative elections. In a 1995 survey, 46 percent of over 3,500 state legislators indicated they have never held prior elected office (Carey et al. 2000), and it is unlikely all these state legislators were not once quality candidates. Statistical analyses in Table A-11, however, are similar when studying state senate elections and controlling for whether the challenger previously served in the state legislature (e.g. the state house). Analyses suggest that state senate incumbents who faced such a quality challenger received approximately 2.9 percent less vote.

[Insert Table A-11 about here]

The first two columns of Table A-12 illustrate the extent to which findings are sensitive to controls. The relationship between *Ideological Distance* and incumbent vote share when only including fixed effects as controls is positive, but findings reflect those in the main text when controlling for district-level presidential vote. The relationship between *Ideological Distance* and vote share is weakest when excluding Rhode Island elections (Table A-12: Column 3) and strongest when excluding New York elections (Table A-12: Column 4). The

respective changes in predicted vote shares associated with a standard deviation change in the *Ideological Distance* metric are -0.637 percent and -0.767 percent.

[Insert Table A-12 about here]

Comparisons to Congress

To make more direct comparisons between my analyses of state legislatures and Congress, I conduct similar congruence analyses of U.S. House elections from 2002 - 2010. To make comparisons between the electoral implications that result from a specific or common change in representation, I put ideology measures for members of the U.S. House and state legislatures on a common scale. To do this, I identify U.S. House members who served in the state legislature; regress their state legislative ideal point on their U.S. House ideal point and a party dummy (Table A-13); and use the coefficients from this regression to project all U.S. House members into an "NPAT" space common with state legislators. This procedure assumes that individuals' ideology are the same when serving in the U.S. House or state legislature. I then estimate a reduced model of that presented in the first column of Table 1, which excludes more state specific controls such as state legislative professionalism, district size, the state economy, and reporters at the state capital. Table A-14 presents results for the members of the U.S. House and state legislatures.

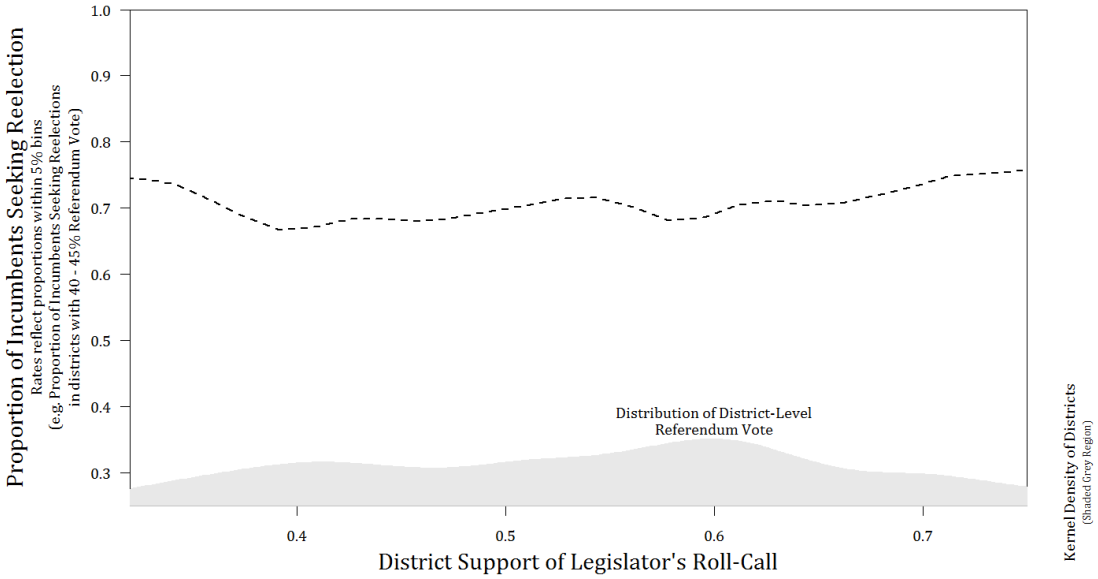
[Insert Tables A-13 and A-14 about here]

Supplementary "Acct. for Individual Roll-Call Votes" Analyses

Strategic Retirement

Analyses in the main text focus on the set of incumbents who decide to seek reelection. Studies of U.S. House elections, however, suggest that incumbents at times strategically retire to avoid electoral defeat (e.g. Cox and Katz 2002). A legislator who cast an unpopular roll-call vote may then decide not to seek reelection to avoid electoral punishment and losing.

Figure A-2: Distribution of District Support of Roll-Call Positions and Incumbents Seeking Reelection



The dashed line represents the rate at which incumbents sought reelection broken into segments based on their district's level of support for a legislator's roll-call position (grey region)

Such strategic retirement could bias results in Table 5, which only reflect incumbents who decided to seek reelection.

There, however, appears to be little relationship between the popularity of incumbents' roll-call positions and the rate at which these incumbents sought reelection or retired. To illustrate this, the dashed line Figure A-2 represents the rate at which incumbents sought reelection broken into segments based on their district's support for a legislator's roll-call position (grey region). Incumbents who represented districts where less than 40 percent, 40-60 percent, and more than 60 percent of voters supported their roll-call position respectively sought reelection 73 percent, 69 percent, and 72 percent of the time. Probit analyses in Table A-15 - which examine the relationship between district support for a legislator's position and likelihood of seeking reelection – additionally do not provide evidence that incumbents who represent districts favorable to their roll-call positions are more likely to seek reelection.

[Insert Table A-15 about here]

Additional "Accountability for Individual Roll-Call Votes" Analyses

Table A-16 provides probit estimates of the relationship between district support for an incumbent's roll call and the likelihood an incumbent is reelected. Table A-17 provides analyses similar to those in Table 5 but replaces the continuous district support measure with a dichotomous measure indicating whether a majority of a legislator's district supported the bill. Substantive conclusions are similar to those taken from Table 5.

[Insert Table A-16 and A-17 about here]

Table A-18 provides analyses of the conditional impact professionalism, the media, and incumbents' campaign finance advantages have on the relationship between support for a legislator's position and incumbent vote share. Unlike the ideological representation analyses, I do not find that representation's impact on incumbent vote share is conditional on legislative staff or the media coverage. However, I find that legislators with higher salaries are less likely to held accountable. Readers should note that these analyses focus on 11 states instead of 47, providing less cross-state variation in institutional contexts than that in the study of ideological representation.

[Insert Table A-18 about here]

Tables A-19 through A-28 provide full results of analyses presented in Table 6.

[Insert Tables A-19 through A-28 about here]

Table A-4: Responsiveness Approach - Dependent Variable: Democratic Vote Share

	All Districts	All Districts	All Districts
Legislator Ideal Point	2.216*	2.398*	1.612*
	(0.172)	(0.172)	(0.297)
Ideal Point Squared		0.811*	0.698*
		(0.084)	(0.096)
Ideal Point x Staff			0.089*
			(0.023)
Ideal Point x Salary			-0.018*
			(0.002)
Ideal Point x Session Length			-0.002*
			(0.001)
Ideal Point x Reporters			1.012*
			(0.144)
Ideal Point x Inc. Contr. Adv.			0.113*
			(0.037)
Democratic Party Pres Vote	0.535*	0.527*	0.530*
	(0.007)	(0.007)	(0.007)
Democrat Previous Vote Share	0.085*	0.085*	0.087*
	(0.003)	(0.003)	(0.003)
Incumbent Previously Contested	0.022	0.042	0.055
	(0.139)	(0.138)	(0.137)
Democrat Contribution Advantage	1.436*	1.420*	1.407*
	(0.033)	(0.033)	(0.035)
Member of the President's Party	-0.723*	-0.675*	-0.731*
	(0.144)	(0.144)	(0.144)
Member of the Democratic Party	4.741*	5.046*	4.786*
	(0.541)	(0.540)	(0.545)
Freshman Incumbent	-0.152	-0.203	-0.254*
	(0.127)	(0.127)	(0.126)
State Senate Race	-0.099	0.007	0.125
	(0.367)	(0.365)	(0.362)
Midterm Election	0.420	0.088	-0.171
	(1.518)	(1.509)	(1.494)
Change Annual Log Q4 State Personal Inc. (Adjusted)	7.667*	6.335*	4.158*
	(1.735)	(1.733)	(1.735)
District Size (Logged)	0.040	-0.129	-0.168
	(0.348)	(0.347)	(0.344)
Legislative Staff per Member	-0.136	-0.134	-0.109
	(0.085)	(0.084)	(0.084)
Legislator Salary (in 1000s of 2010 dollars)	-0.013*	-0.014*	-0.013*
	(0.007)	(0.007)	(0.006)
Session Length	0.003*	0.003*	0.001
	(0.001)	(0.001)	(0.001)
Full Time State Capital Reporters (Logged)	0.274	0.342	0.363
	(0.323)	(0.321)	(0.319)
Constant	17.759*	19.334*	20.245*
	(3.734)	(3.717)	(3.687)
N	10926	10926	10926
Log-Likelihood	-34662.6	-34616.6	-34527.7

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between state legislators' ideology and Democratic vote share for contested incumbents who sought reelection from 2001 - 2010. Estimations include fixed effects for years and random effects for states.

Table A-5: Responsiveness Approach - Dependent Variable: Democratic Winner

	All Districts	All Districts
Legislator Ideal Point	0.197*	0.267*
	(0.051)	(0.099)
Ideal Point x Staff		-0.024*
		(0.010)
Ideal Point x Salary		-0.003*
		(0.001)
Ideal Point x Session Length		-0.001
		(0.000)
Ideal Point x Reporters		0.161*
		(0.054)
Democratic Party Pres Vote	0.063*	0.062*
	(0.003)	(0.003)
Democrat Previous Vote Share	0.022*	0.022*
	(0.001)	(0.001)
Incumbent Previously Contested	0.046	0.051
	(0.057)	(0.057)
Member of the President's Party	-0.581*	-0.592*
	(0.043)	(0.044)
Freshman Incumbent	-0.029	-0.039
	(0.042)	(0.042)
State Senate Race	-0.028	-0.026
	(0.084)	(0.084)
Midterm Election	-0.283*	-0.287*
	(0.041)	(0.041)
Change Annual Log Q4 State Personal Inc. (Adjusted)	-0.056	-0.525
	(0.562)	(0.573)
District Size (Logged)	-0.028	-0.012
	(0.074)	(0.074)
Legislative Staff per Member	0.009	0.002
	(0.016)	(0.016)
Legislator Salary (in 1000s of 2010 dollars)	-0.002*	-0.002*
	(0.001)	(0.001)
Session Length	0.000	-0.000
	(0.000)	(0.000)
Full Time State Capital Reporters (Logged)	-0.106	-0.106
	(0.067)	(0.067)
Constant	-2.052*	-2.133*
	(0.697)	(0.692)
N	19741	19741
Log-Likelihood	-2729.0	-2700.8

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between state legislators' ideology and likelihood of a Democratic winner in races where incumbents sought reelection from 2001 - 2010. Probit estimations include random effects for states.

Table A-6: Absolute Value Approach - Dependent Variable: Incumbent Vote Share

	All Districts	All Districts	All Districts
Absolute Value of Ideal Point	-1.541*	-4.495*	-4.533*
	(0.192)	(0.427)	(0.685)
Abs(Ideal Point) Squared		1.641*	1.542*
		(0.212)	(0.233)
Abs(Ideal Point) x Staff			0.044
			(0.055)
Abs(Ideal Point) x Salary			0.004
			(0.005)
Abs(Ideal Point) x Session Length			0.007*
			(0.002)
Abs(Ideal Point) x Reporters			-0.320
			(0.307)
Abs(Ideal Point) x Inc. Contr. Adv.			-0.642*
			(0.080)
Incumbent Party Pres Vote	0.395*	0.404*	0.404*
	(0.006)	(0.007)	(0.007)
Incumbent Previous Vote Share	0.287*	0.283*	0.281*
	(0.008)	(0.008)	(0.008)
Incumbent Previously Contested	8.887*	8.740*	8.686*
	(0.312)	(0.312)	(0.311)
Incumbent Contribution Advantage	1.389*	1.388*	1.898*
	(0.037)	(0.037)	(0.073)
Member of the President's Party	-5.446*	-5.445*	-5.463*
	(0.147)	(0.147)	(0.146)
Member of the Democratic Party	-2.082*	-2.092*	-2.280*
	(0.151)	(0.150)	(0.153)
Freshman Incumbent	0.379*	0.374*	0.402*
	(0.136)	(0.136)	(0.135)
State Senate Race	0.145	0.210	0.291
	(0.327)	(0.323)	(0.325)
Change Annual Log Q4 State Personal Inc.	-1.926	-2.028	-1.704
	(3.899)	(3.885)	(3.872)
Midterm Election	0.519	0.540	0.564
	(1.293)	(1.277)	(1.285)
District Size (Logged)	-0.696*	-0.787*	-0.856*
	(0.304)	(0.300)	(0.302)
Legislative Staff per Member	-0.099	-0.110	-0.139
	(0.067)	(0.065)	(0.080)
Legislator Salary (in 1000s of 2010 dollars)	0.020*	0.020*	0.018*
	(0.005)	(0.005)	(0.006)
Session Length	-0.001	-0.001	-0.007*
	(0.001)	(0.001)	(0.002)
Full Time State Capital Reporters (Logged)	0.265	0.288	0.511
	(0.301)	(0.298)	(0.368)
Constant	20.773*	22.710*	23.695*
	(3.204)	(3.168)	(3.229)
N	10926	10926	10926
Log-Likelihood	-35001.0	-34971.3	-34921.3

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between absolute value of legislator's ideal point and incumbent vote share for contested incumbents who sought reelection from 2001 - 2010. Estimations include fixed effects for years and random effects for states.

Table A-7: Absolute Value Approach - Dependent Variable: Incumbent Reelection

	All Districts	All Districts
Absolute Value of Ideal Point	-0.345*	-0.023
	(0.065)	(0.178)
Abs(Ideal Point) x Staff		0.011
		(0.018)
Abs(Ideal Point) x Salary		0.005*
		(0.002)
Abs(Ideal Point) x Session Length		-0.001
		(0.001)
Abs(Ideal Point) x Reporters		-0.232*
		(0.099)
Incumbent Party Pres Vote	0.049*	0.049*
	(0.002)	(0.002)
Incumbent Previous Vote Share	0.068*	0.068*
	(0.004)	(0.004)
Incumbent Previously Contested	2.347*	2.357*
	(0.171)	(0.171)
Member of the President's Party	-1.126*	-1.127*
	(0.056)	(0.056)
Member of the Democratic Party	-0.707*	-0.720*
	(0.052)	(0.053)
Freshman Incumbent	0.167*	0.166*
	(0.047)	(0.047)
State Senate Race	-0.204*	-0.199*
	(0.076)	(0.075)
Change Annual Log Q4 State Personal Inc.	-0.785	-0.687
	(0.874)	(0.874)
Midterm Election	-0.087	-0.089*
	(0.045)	(0.045)
District Size (Logged)	0.100	0.096
	(0.064)	(0.062)
Legislative Staff per Member	0.010	0.002
	(0.013)	(0.018)
Legislator Salary (in 1000s of 2010 dollars)	0.001	-0.002
	(0.001)	(0.001)
Session Length	0.000	0.001
	(0.000)	(0.001)
Full Time State Capital Reporters (Logged)	-0.095	0.045
	(0.064)	(0.086)
Constant	-7.019*	-7.204*
	(0.699)	(0.700)
N	19741	19741
Log-Likelihood	-2476.9	-2470.0

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between absolute value of legislator's ideal point and likelihood of reelection for incumbents who sought reelection from 2001 - 2010. Probit estimations include random effects for states.

Table A-8: Alternative Congruence Analyses: Relationship between State Legislators' Representation and Vote Share

	Tausonovitch and Warshaw Based	Demographic Based	Pres. Vote Base
Ideological Distance from District	-3.483*	-4.020*	-4.068*
	(0.462)	(0.444)	(0.453)
Ideological Distance Squared	0.963*	1.484*	1.395*
	(0.267)	(0.234)	(0.266)
Incumbent Party Pres Vote	0.380*	0.393*	0.376*
	(0.006)	(0.006)	(0.006)
Incumbent Previous Vote Share	0.284*	0.287*	0.284*
	(0.008)	(0.008)	(0.008)
Incumbent Previously Contested	8.787*	8.856*	8.813*
	(0.311)	(0.312)	(0.311)
Incumbent Contribution Advantage	1.384*	1.392*	1.384*
	(0.037)	(0.037)	(0.037)
Member of the President's Party	-5.454*	-5.464*	-5.454*
	(0.147)	(0.147)	(0.147)
Member of the Democratic Party	-2.007*	-2.046*	-2.050*
	(0.151)	(0.151)	(0.150)
Freshman Incumbent	0.371*	0.364*	0.385*
	(0.136)	(0.136)	(0.135)
State Senate Race	0.189	0.207	0.184
	(0.321)	(0.323)	(0.320)
Change Annual Log Q4 State Personal Inc.	-1.921	-1.676	-2.005
	(3.884)	(3.887)	(3.882)
Midterm Election	0.572	0.589	0.664
	(1.267)	(1.275)	(1.266)
District Size (Logged)	-0.712*	-0.780*	-0.724*
	(0.297)	(0.299)	(0.297)
Legislative Staff per Member	-0.100	-0.112	-0.106
	(0.064)	(0.065)	(0.064)
Legislator Salary (in 1000s of 2010 dollars)	0.020*	0.020*	0.020*
	(0.005)	(0.005)	(0.005)
Session Length	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)
Full Time State Capital Reporters (Logged)	0.259	0.286	0.286
	(0.297)	(0.298)	(0.296)
Constant	22.627*	22.528*	22.948*
	(3.125)	(3.157)	(3.125)
N	10926	10926	10926
Log-Likelihood	-34975.5	-34981.6	-34970.6

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between incumbent vote share and ideological distance metrics using district ideal points based on Tausanovitch and Warshaw district ideal points, district demographics, or presidential vote. Estimations include fixed effects for years and random effects for states.

Table A-9: Alternative Congruence Analyses: Relationship between State Legislators' Representation and Incumbent Reelection

	Tausonovitch and Warshaw Based	Demographic Based	Pres Vote Based
Ideological Distance from District	-0.325*	-0.371*	-0.378*
	(0.063)	(0.060)	(0.063)
Incumbent Party Pres Vote	0.046*	0.048*	0.045*
	(0.002)	(0.002)	(0.002)
Incumbent Previous Vote Share	0.068*	0.069*	0.068*
	(0.004)	(0.004)	(0.004)
Incumbent Previously Contested	2.335*	2.358*	2.342*
	(0.171)	(0.171)	(0.171)
Member of the President's Party	-1.126*	-1.131*	-1.124*
	(0.056)	(0.056)	(0.056)
Member of the Democratic Party	-0.694*	-0.705*	-0.703*
	(0.053)	(0.052)	(0.052)
Freshman Incumbent	0.164*	0.165*	0.168*
	(0.046)	(0.047)	(0.047)
State Senate Race	-0.202*	-0.202*	-0.201*
	(0.075)	(0.076)	(0.075)
Change Annual Log Q4 State Personal Inc.	-0.752	-0.805	-0.815
	(0.871)	(0.873)	(0.871)
Midterm Election	-0.089*	-0.090*	-0.085
	(0.045)	(0.045)	(0.045)
District Size (Logged)	0.100	0.105	0.100
	(0.062)	(0.063)	(0.062)
Legislative Staff per Member	0.010	0.009	0.009
	(0.012)	(0.013)	(0.012)
Legislator Salary (in 1000s of 2010 dollars)	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)
Session Length	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)
Full Time State Capital Reporters (Logged)	-0.095	-0.094	-0.092
	(0.063)	(0.064)	(0.063)
Constant	-6.825*	-7.042*	-6.775*
	(0.684)	(0.693)	(0.683)
N	19741	19741	19741
Log-Likelihood	-2477.9	-2472.3	-2473.2

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between incumbent reelection and ideological distance metrics using district ideal points based on Tausanovitch and Warshaw district ideal points, district demographics, or presidential vote. Probit estimations include random effects for states.

Table A-10: Relationship between State Legislators' Representation and Incumbent Vote Share Conditional on Uncertainty of District Ideal Point

	All Districts	All Districts
Ideological Distance from District	-1.836*	-0.629
	(0.625)	(1.468)
Ideological Distance Squared		-0.803
		(0.795)
Distance x TW Standard Dev.	-1.273	-21.561*
	(4.449)	(10.213)
Distance Squared x TW Standard Dev.		13.331*
		(5.616)
Standard Dev. of TW District Ideal Point	16.719*	22.689*
	(4.016)	(4.953)
Incumbent Party Pres Vote	0.377*	0.379*
	(0.006)	(0.006)
Incumbent Previous Vote Share	0.285*	0.283*
	(0.008)	(0.008)
Incumbent Previously Contested	8.797*	8.764*
	(0.311)	(0.311)
Incumbent Contribution Advantage	1.387*	1.387*
	(0.037)	(0.037)
Member of the President's Party	-5.438*	-5.447*
	(0.147)	(0.147)
Member of the Democratic Party	-2.066*	-2.046*
	(0.151)	(0.151)
Freshman Incumbent	0.373*	0.359*
	(0.135)	(0.135)
State Senate Race	0.277	0.288
	(0.320)	(0.318)
Change Annual Log Q4 State Personal Inc.	-2.137	-2.053
	(3.880)	(3.874)
Midterm Election	0.914	0.901
	(1.264)	(1.255)
District Size (Logged)	-0.119	-0.139
	(0.313)	(0.311)
Legislative Staff per Member	-0.109	-0.112
	(0.064)	(0.063)
Legislator Salary (in 1000s of 2010 dollars)	0.020*	0.020*
	(0.005)	(0.005)
Session Length	-0.001	-0.001
	(0.001)	(0.001)
Full Time State Capital Reporters (Logged)	0.240	0.259
	(0.296)	(0.294)
Constant	13.323*	13.164*
	(3.471)	(3.471)
N	10926	10926
Log-Likelihood	-34966.2	-34956.7

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between state legislators' ideological distance from their district and reelection vote share conditional on the standard deviation of a legislator's Tausanovitch and Warshaw's district ideal point for contested incumbents who sought reelection from 2001 - 2010. Estimations include fixed effects for years and random effects for states.

Table A-11: Relationship between Ideological Representation and Vote Share: Control for Quality Challengers

	All Districts	All Districts
Ideological Distance from District	-4.785*	-4.803*
	(0.983)	(0.976)
Ideological Distance Squared	1.185*	1.220*
	(0.578)	(0.574)
Incumbent Party Pres Vote	0.417*	0.412*
	(0.011)	(0.011)
Incumbent Previous Vote Share	0.260*	0.257*
	(0.015)	(0.015)
Incumbent Previously Contested	7.397*	7.316*
	(0.612)	(0.608)
Incumbent Contribution Advantage	1.172*	1.131*
	(0.071)	(0.071)
Member of the President's Party	-4.938*	-4.892*
	(0.297)	(0.295)
Member of the Democratic Party	-1.597*	-1.542*
	(0.306)	(0.304)
Freshman Incumbent	0.331	0.361
	(0.271)	(0.269)
Change Annual Log Q4 State Personal Inc.	-4.125	-3.251
	(6.785)	(6.738)
Midterm Election	-0.737	-0.824
	(0.514)	(0.511)
District Size (Logged)	-0.619	-0.616
	(0.503)	(0.501)
Legislative Staff per Member	-0.151	-0.161
	(0.096)	(0.095)
Legislator Salary (in 1000s of 2010 dollars)	0.032*	0.032*
	(0.007)	(0.007)
QualityChallenger		-2.853*
		(0.463)
Session Length	-0.003	-0.004
	(0.002)	(0.002)
Full Time State Capital Reporters (Logged)	-0.236	-0.198
	(0.524)	(0.521)
Constant	24.961*	25.723*
	(5.190)	(5.165)
N	2589	2589
Log-Likelihood	-8200.2	-8181.4

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between legislator's ideological distance from district and incumbent vote share for state senate elections. Analyses in the second column control for whether the challenger previously served in the state legislature (e.g. state house). Estimations include fixed effects for years and random effects for states.

Table A-12: Relationship between Ideological Representation and Vote Share: Robustness

	Fixed Effects Only	FE and Pres Vote	Drop RI	Drop NY
Distance	1.117*	-2.529*	-3.179*	-4.144*
	(0.297)	(0.234)	(0.466)	(0.470)
Ideological Distance Squared			0.824*	1.183*
			(0.267)	(0.267)
IncumbentPartyPresVote		0.515*	0.377*	0.369*
		(0.006)	(0.006)	(0.006)
IncumbentPrevVoteShare			0.284*	0.278*
			(0.008)	(0.008)
Incumbent Previously Contested			8.738*	8.675*
			(0.315)	(0.326)
IncFundraisingAdvantage			1.384*	1.446*
			(0.037)	(0.038)
Member of the President's Party			-5.467*	-5.466*
			(0.148)	(0.148)
Member of the Democratic Party			-1.972*	-2.160*
			(0.151)	(0.152)
Freshman Incumbent			0.403*	0.413*
			(0.136)	(0.135)
State Senate Race			0.201	0.118
			(0.331)	(0.315)
Change Annual Log Q4 State Personal Income			-2.148	-0.778
			(3.891)	(3.874)
Midterm Election			0.591	0.580
			(1.254)	(1.221)
District Size (Logged)			-0.769*	-0.628*
			(0.304)	(0.287)
Legislative Staff per Member			-0.089	-0.121
			(0.064)	(0.065)
Legislator Salary (in 1000s of 2010 dollars)			0.020*	0.022*
			(0.005)	(0.005)
Session Length			-0.001	-0.004*
			(0.001)	(0.002)
Full Time State Capital Reporters (Logged)			0.212	0.104
			(0.304)	(0.292)
Constant	59.967*	33.123*	23.432*	23.915*
	(0.497)	(0.507)	(3.178)	(3.022)
N	10926	10926	10671	10313
Log-Likelihood	-39907.3	-37107.9	-34098.7	-32791.5

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between state legislators' ideological distance from their district and reelection vote share for contested incumbents who sought reelection from 2001 - 2010 dropping control variables and states as indicated by the column heading. Estimations include fixed effects for years and random effects for states.

Table A-13: Regression of State Legislative NPAT Ideal Points on U.S. House Ideal Points

	OLS Estimate
U.S. House Ideal Point	0.755*
	(0.088)
Republican Dummy	0.234
	(0.178)
Constant	-0.260*
	(0.092)
N	155
R-Squared	0.826

*$p \leq .05$; Standard Errors in Parentheses

Relationship between U.S. House Member's ideal point from the U.S. House and their ideal point as a state legislator. Estimates used to project U.S. House Ideal Points into NPAT Space.

Table A-14: Accountability in Congress and State Legislatures

	U.S. House	U.S. House	State Leg.	State Leg.
Ideological Distance from District	-2.997*	-5.844	-1.999*	-3.488*
	(0.912)	(5.076)	(0.194)	(0.463)
Ideological Distance Squared		1.914		0.945*
		(3.357)		(0.267)
Incumbent Party Pres Vote	0.391*	0.391*	0.380*	0.381*
	(0.019)	(0.019)	(0.006)	(0.006)
Incumbent Previous Vote Share	0.125*	0.125*	0.284*	0.283*
	(0.016)	(0.016)	(0.008)	(0.008)
Incumbent Previously Contested	3.119*	3.127*	8.764*	8.740*
	(0.906)	(0.906)	(0.311)	(0.311)
Incumbent Campaign Fin. Advantage	1.971*	1.973*	1.380*	1.378*
	(0.064)	(0.064)	(0.037)	(0.037)
Member of the President's Party	-7.415*	-7.418*	-5.443*	-5.450*
	(0.443)	(0.443)	(0.147)	(0.147)
Member of the Democratic Party	-1.241*	-1.255*	-2.013*	-1.996*
	(0.456)	(0.457)	(0.151)	(0.151)
Freshman Incumbent	-0.974	-0.999	0.346*	0.341*
	(0.517)	(0.519)	(0.135)	(0.135)
Midterm Election	-3.124*	-3.129*	0.732	0.741
	(0.523)	(0.523)	(1.341)	(1.338)
Constant	33.758*	34.742*	15.383*	15.801*
	(1.711)	(2.428)	(1.489)	(1.491)
N	1748	1748	10926	10926
Log-Likelihood	-5888.1	-5887.9	-34996.5	-34990.2

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between legislators' ideological distance from their district and reelection vote share for contested incumbents who sought reelection from 2001 - 2010. Estimations include fixed effects for years and random effects for states. First two columns focus on U.S. House elections, and second two columns focus on state legislative elections.

Table A-15: Strategic Retirement: Relationship between District-Level Support of Legislator's Roll-Calls and Incumbent Seeking Reelection

	All Districts	All Districts	SMDs	SMDs
District Support for Legislator's Position	0.002	0.002	0.004	0.004
	(0.002)	(0.002)	(0.002)	(0.002)
Incumbent Party Pres Vote	0.005*	0.000	0.005*	-0.002
	(0.002)	(0.002)	(0.003)	(0.003)
Incumbent Previous Vote Share	-0.013*	-0.001	-0.015*	0.002
	(0.003)	(0.003)	(0.004)	(0.004)
Incumbent Previously Contested	-0.477*	-0.214	-0.497*	-0.097
	(0.123)	(0.132)	(0.141)	(0.152)
State Senate Race	-0.191*	-0.650*	-0.263*	-0.946*
	(0.051)	(0.103)	(0.054)	(0.133)
Member of the Democratic Party	0.060	0.081	0.083	0.083
	(0.048)	(0.051)	(0.054)	(0.057)
Previous Three Candidates	-0.187	-0.112		
	(0.119)	(0.124)		
Previous Four Candidates	-0.539*	-0.263		
	(0.136)	(0.145)		
Member of the President's Party		-0.036		-0.060
		(0.050)		(0.057)
Freshman Incumbent		1.377*		1.462*
		(0.067)		(0.074)
Legislative Staff per Member		0.001		0.011
		(0.020)		(0.020)
Legislator Salary (in 1000s of 2010 dollars)		-0.003		-0.007*
		(0.002)		(0.002)
Session Length		-0.003*		-0.003*
		(0.001)		(0.001)
Full Time State Capital Reporters (Logged)		-0.213		-0.319*
		(0.128)		(0.129)
District Size (Logged)		0.435*		0.685*
		(0.097)		(0.131)
Constant	1.458*	-2.892*	1.451*	-5.316*
	(0.285)	(0.916)	(0.330)	(1.197)
N	3781	3781	2931	2931
Log-Likelihood	-2237.1	-1956.7	-1766.7	-1506.4

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and likelihood of incumbent seeking reelection. Analyses in the first two columns include all districts, and analyses in the second two columns focus on states that exclusively have single-member district elections. Probit estimations allow intercepts to vary by bill.

Table A-16: Relationship between District-Level Support of Legislator's Roll-Calls and Incumbent Reelection

	All Districts	All Districts	SMDs	Marginal Districts	Safe Districts
District Support for Legislator's Position	0.010*	0.011*	0.014*	0.013*	0.001
	(0.004)	(0.004)	(0.005)	(0.004)	(0.011)
Incumbent Party Pres Vote	0.041*	0.036*	0.030*	0.034*	-0.002
	(0.005)	(0.005)	(0.007)	(0.008)	(0.018)
Incumbent Previous Vote Share	0.051*	0.049*	0.078*	0.058*	0.035
	(0.008)	(0.008)	(0.012)	(0.010)	(0.019)
Incumbent Previously Contested	1.687*	1.603*	2.671*	1.877*	1.153
	(0.414)	(0.430)	(0.584)	(0.535)	(0.845)
State Senate Race	-0.090	-0.309	-0.074	-0.221	-0.574
	(0.114)	(0.182)	(0.255)	(0.203)	(0.530)
Member of the Democratic Party	-0.150	-0.112	0.001	-0.110	0.028
	(0.099)	(0.105)	(0.122)	(0.115)	(0.424)
Current Three Candidates	0.721*	0.641*		0.409	0.678
	(0.295)	(0.306)		(0.358)	(0.803)
Current Four Candidates	-0.046	-0.041		-0.054	0.231
	(0.359)	(0.372)		(0.513)	(0.761)
Previous Three Candidates	-0.145	-0.254		0.236	-0.871
	(0.238)	(0.245)		(0.324)	(0.480)
Previous Four Candidates	0.838*	0.869*		1.184*	0.558
	(0.313)	(0.326)		(0.398)	(0.810)
Member of the President's Party		-0.345*	-0.309*	-0.364*	-0.133
		(0.103)	(0.121)	(0.115)	(0.325)
Freshman Incumbent		-0.119	-0.152	-0.165	-0.128
		(0.102)	(0.123)	(0.114)	(0.309)
Legislative Staff per Member		0.036	0.023	0.041	0.071
		(0.027)	(0.031)	(0.031)	(0.062)
Legislator Salary (in 1000s of 2010 dollars)		-0.001	0.002	0.001	-0.014*
		(0.002)	(0.003)	(0.003)	(0.007)
Session Length		-0.000	-0.001	-0.000	-0.002
		(0.001)	(0.001)	(0.001)	(0.004)
Full Time State Capital Reporters (Logged)		-0.206	-0.056	-0.283	0.438
		(0.162)	(0.189)	(0.189)	(0.384)
District Size (Logged)		0.224	0.005	0.169	0.306
		(0.128)	(0.200)	(0.145)	(0.416)
Constant	-5.615*	-7.054*	-7.806*	-7.346*	-3.103
	(0.864)	(1.510)	(2.201)	(1.745)	(4.411)
N	2579	2579	1966	1368	1211
Log-Likelihood	-427.1	-413.8	-299.3	-351.0	-45.4

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and likelihood of incumbent reelection. Probit estimations allow intercepts to vary by bill.

Table A-17: Relationships between if Majority of District Supported Legislator's Roll-Call Position and Incumbent Vote Share

	All Districts	All Districts	SMDs	Marginal Districts	Safe Districts
Majority of District Supports Bill	-0.145	-0.209	-0.055	0.256	0.285
	(0.391)	(0.385)	(0.430)	(0.428)	(0.472)
Incumbent Party Pres Vote	0.257*	0.248*	0.277*	0.169*	0.367*
	(0.014)	(0.014)	(0.017)	(0.028)	(0.028)
Incumbent Contribution Advantage	1.499*	1.497*	1.424*	1.551*	1.276*
	(0.079)	(0.079)	(0.085)	(0.104)	(0.116)
Incumbent Previous Vote Share	0.362*	0.353*	0.353*	0.319*	0.309*
	(0.019)	(0.019)	(0.022)	(0.029)	(0.026)
Incumbent Previously Contested	10.257*	9.851*	10.446*	9.128*	8.952*
	(0.804)	(0.804)	(0.879)	(1.393)	(0.998)
State Senate Race	-0.908*	-1.614	0.070	0.071	-2.563*
	(0.319)	(0.829)	(0.972)	(0.959)	(0.852)
Member of the Democratic Party	1.230*	1.356*	1.804*	0.596	0.663
	(0.303)	(0.302)	(0.329)	(0.372)	(0.585)
Current Three Candidates	-22.145*	-22.731*		-22.656*	-23.992*
	(0.996)	(0.998)		(1.468)	(1.429)
Current Four Candidates	-20.525*	-20.696*		-16.922*	-23.105*
	(1.170)	(1.168)		(1.957)	(1.485)
Previous Three Candidates	-0.252	-0.278		1.450	-2.196*
	(0.704)	(0.699)		(1.217)	(0.883)
Previous Four Candidates	1.730	2.098*		4.512*	-1.946
	(0.970)	(0.965)		(1.321)	(1.522)
Member of the President's Party		-1.835*	-1.358*	-1.936*	-2.040*
		(0.293)	(0.314)	(0.370)	(0.500)
Freshman Incumbent		0.103	0.145	-0.195	0.263
		(0.288)	(0.318)	(0.374)	(0.434)
Legislative Staff per Member		0.020	-0.037	0.203	-0.194
		(0.312)	(0.340)	(0.272)	(0.119)
Legislator Salary (in 1000s of 2010		-0.012	0.018	-0.009	0.004
dollars)		(0.027)	(0.031)	(0.024)	(0.013)
Session Length		-0.015	-0.008	-0.013	-0.016*
		(0.013)	(0.013)	(0.012)	(0.006)
Full Time State Capital Reporters		1.286	1.264	1.547	-0.387
(Logged)		(1.165)	(1.170)	(1.183)	(0.810)
District Size (Logged)		0.934	-0.856	-0.591	1.678*
		(0.799)	(0.952)	(0.866)	(0.739)
Constant	10.508*	3.979	15.713	24.910*	-3.073
	(1.858)	(7.659)	(9.135)	(8.347)	(6.930)
N	2181	2181	1697	1231	950
Log-Likelihood	-7027.4	-7006.3	-5392.3	-3911.8	-3033.6

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share. Estimations allow slopes and intercepts to vary by bill.

Table A-18: Conditional Relationships between District-Level Support of Legislator's Roll-Calls and Incumbent Vote Share

	All Districts	Single Member Districts
District Support for Legislator's Position	0.010	0.102*
	(0.041)	(0.042)
Incumbent Party Pres Vote	0.246*	0.275*
	(0.014)	(0.017)
Incumbent Contribution Advantage	0.902*	1.697*
	(0.306)	(0.350)
Incumbent Previous Vote Share	0.353*	0.356*
	(0.019)	(0.022)
Incumbent Previously Contested	9.823*	10.502*
	(0.805)	(0.882)
District Support for Legislator's Position × Legislative Staff per Member	-0.002	0.002
	(0.007)	(0.007)
District Support for Legislator's Position × Legislator Salary (in 1000s of 2010 dollars)	-0.002*	-0.001*
	(0.001)	(0.001)
District Support for Legislator's Position × Session Length	0.000	0.000
	(0.000)	(0.000)
District Support for Legislator's Position × Full Time State Capital Reporters (Logged)	0.050	0.043
	(0.037)	(0.036)
District Support for Legislator's Position × Incumbent Contribution Advantage	0.011*	-0.005
	(0.006)	(0.007)
State Senate Race	-1.619*	0.037
	(0.790)	(0.915)
Member of the Democratic Party	1.189*	1.645*
	(0.298)	(0.322)
Member of the President's Party	-1.908*	-1.535*
	(0.290)	(0.307)
Freshman Incumbent	0.091	0.169
	(0.289)	(0.320)
Legislative Staff per Member	0.136	-0.182
	(0.368)	(0.362)
Legislator Salary (in 1000s of 2010 dollars)	0.053	0.076*
	(0.032)	(0.033)
Session Length	-0.030	-0.014
	(0.017)	(0.017)
Full Time State Capital Reporters (Logged)	-1.426	-1.204
	(2.108)	(2.045)
District Size (Logged)	0.897	-0.845
	(0.752)	(0.882)
Current Three Candidates	-22.681*	
	(0.997)	
Current Four Candidates	-20.665*	
	(1.168)	
Previous Three Candidates	-0.333	
	(0.700)	
Previous Four Candidates	2.185*	
	(0.968)	
Constant	6.035	14.606
	(7.055)	(8.187)
lnsig_e	1.766*	1.731*
	(0.016)	(0.019)
N	2181	1697
Log-Likelihood	-6998.6	-5383.1

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share. Estimations allow slopes and intercepts to vary by bill.

Table A-19: Full OLS Estimates of Analyses in Table 6: Part 1

	AK-SB267	AK-SB267	AK-SB21	AK-SB21	CA-SB2	CA-SB2
District Support for Legislator's Position	0.148		-0.011		0.291*	
	(0.215)		(0.183)		(0.140)	
Incumbent Party Pres Vote	0.720*	0.651*	0.173	0.176	0.335*	0.439*
	(0.205)	(0.176)	(0.183)	(0.174)	(0.123)	(0.115)
Incumbent Contribution Advantage	2.114*	1.994*	4.493*	4.488*	1.373*	1.405*
	(0.595)	(0.560)	(0.771)	(0.755)	(0.253)	(0.259)
Incumbent Previous Vote Share	0.413	0.441	-0.012	-0.010	0.030	0.135
	(0.221)	(0.214)	(0.198)	(0.191)	(0.110)	(0.100)
Incumbent Previously Contested	16.906	17.282	-8.535	-8.498	1.170	4.317
	(9.305)	(9.145)	(7.187)	(7.040)	(3.600)	(3.350)
State Senate Race	-2.728	-2.139	4.756	4.753	-1.973	-1.623
	(3.212)	(3.048)	(3.170)	(3.116)	(1.211)	(1.230)
Member of the Democratic Party	20.611*	17.379*	6.624	6.605	1.313	-1.061
	(7.775)	(6.106)	(3.766)	(3.689)	(1.988)	(1.668)
Constant	-39.977	-29.786	53.607*	52.758*	19.525*	21.419*
	(25.611)	(20.591)	(22.159)	(16.656)	(5.942)	(6.023)
N	24	24	37	37	70	70
R-Squared	0.742	0.734	0.656	0.656	0.808	0.794

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-20: Full OLS Estimates of Analyses in Table 6: Part 2

	CA-SB957	CA-SB957	CA-SB175	CA-SB175	CA-SB903	CA-SB903
District Support for Legislator's Position	0.020		0.011		0.010	
	(0.100)		(0.102)		(0.101)	
Incumbent Party Pres Vote	0.158	0.156	0.152	0.151	0.156	0.155
	(0.131)	(0.129)	(0.123)	(0.121)	(0.122)	(0.120)
Incumbent Contribution Advantage	0.700*	0.700*	0.691*	0.692*	0.701*	0.702*
	(0.260)	(0.257)	(0.249)	(0.247)	(0.247)	(0.244)
Incumbent Previous Vote Share	0.473*	0.473*	0.477*	0.478*	0.472*	0.473*
	(0.131)	(0.129)	(0.123)	(0.122)	(0.122)	(0.121)
Incumbent Previously Contested	15.723*	15.747*	15.825*	15.855*	15.623*	15.651*
	(4.934)	(4.879)	(4.686)	(4.628)	(4.640)	(4.585)
State Senate Race	-0.771	-0.795	-0.900	-0.923	-0.734	-0.753
	(1.249)	(1.230)	(1.238)	(1.207)	(1.191)	(1.165)
Member of the Democratic Party	8.307*	8.231*	8.358*	8.323*	8.225*	8.190*
	(1.722)	(1.660)	(1.643)	(1.594)	(1.621)	(1.568)
Constant	0.272	1.511	0.750	1.396	1.083	1.698
	(10.043)	(7.788)	(9.436)	(7.252)	(9.368)	(7.186)
N	51	51	54	54	55	55
R-Squared	0.864	0.864	0.874	0.874	0.874	0.874

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-21: Full OLS Estimates of Analyses in Table 6: Part 3

	CA-SB174	CA-SB174	CA-AB277	CA-AB277	ID-SB1184	ID-SB1184
District Support for Legislator's Position	0.036		0.069		-0.017	
	(0.106)		(0.115)		(0.073)	
Incumbent Party Pres Vote	0.158	0.156	0.523*	0.540*	0.300*	0.301*
	(0.130)	(0.129)	(0.139)	(0.135)	(0.077)	(0.076)
Incumbent Contribution Advantage	0.705*	0.700*	0.656	0.625	1.828*	1.852*
	(0.260)	(0.257)	(0.641)	(0.633)	(0.412)	(0.394)
Incumbent Previous Vote Share	0.473*	0.473*	0.081	0.099	0.245	0.247
	(0.131)	(0.129)	(0.163)	(0.159)	(0.144)	(0.141)
Incumbent Previously Contested	15.872*	15.747*	9.086	10.051	8.467	8.419
	(4.943)	(4.879)	(7.296)	(7.050)	(5.453)	(5.379)
State Senate Race	-0.755	-0.795	2.316	2.322	-2.242	-2.122
	(1.248)	(1.230)	(3.729)	(3.694)	(1.713)	(1.611)
Member of the Democratic Party	8.377*	8.231*	-10.975*	-11.671*	2.634	2.202
	(1.732)	(1.660)	(3.756)	(3.540)	(3.161)	(2.524)
Constant	-0.861	1.511	19.219	19.847	18.426	17.432
	(10.555)	(7.788)	(16.464)	(16.276)	(14.135)	(13.296)
N	51	51	41	41	44	44
R-Squared	0.864	0.864	0.487	0.481	0.729	0.729

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-22: Full OLS Estimates of Analyses in Table 6: Part 4

	ID-SB1110	ID-SB1110	ID-SB1108	ID-SB1108	ME-LS1196	ME-LS1196
District Support for Legislator's Position	0.130		0.140		0.092	
	(0.131)		(0.170)		(0.057)	
Incumbent Party Pres Vote	0.285*	0.301*	0.264*	0.301*	0.178	0.243*
	(0.077)	(0.076)	(0.088)	(0.076)	(0.099)	(0.091)
Incumbent Contribution Advantage	1.901*	1.852*	1.874*	1.852*	0.789	0.776
	(0.397)	(0.394)	(0.396)	(0.394)	(0.572)	(0.575)
Incumbent Previous Vote Share	0.220	0.247	0.218	0.247	0.475*	0.454*
	(0.144)	(0.141)	(0.146)	(0.141)	(0.093)	(0.093)
Incumbent Previously Contested	7.256	8.419	7.672	8.419	16.022*	15.256*
	(5.505)	(5.379)	(5.478)	(5.379)	(5.473)	(5.487)
State Senate Race	-1.638	-2.122	-1.899	-2.122	-0.035	-0.665
	(1.683)	(1.611)	(1.640)	(1.611)	(1.394)	(1.347)
Member of the Democratic Party	-0.926	2.202	-2.094	2.202	1.848	1.590
	(4.029)	(2.524)	(5.795)	(2.524)	(1.550)	(1.551)
Constant	15.090	17.432	16.304	17.432	-0.012	3.648
	(13.504)	(13.296)	(13.424)	(13.296)	(9.923)	(9.722)
N	44	44	44	44	134	134
R-Squared	0.736	0.729	0.734	0.729	0.417	0.405

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-23: Full OLS Estimates of Analyses in Table 6: Part 5

	ME-LD2247	ME-LD2247	ME-LD1020	ME-LD1020	MI-PA269	MI-PA269
District Support for Legislator's Position	0.039		0.117*		0.146	
	(0.062)		(0.052)		(0.190)	
Incumbent Party Pres Vote	0.277*	0.291*	0.460*	0.502*	0.073	0.077
	(0.078)	(0.075)	(0.080)	(0.079)	(0.076)	(0.076)
Incumbent Contribution Advantage	0.823*	0.811*	0.052	-0.072	2.047*	2.023*
	(0.348)	(0.347)	(0.535)	(0.541)	(0.445)	(0.443)
Incumbent Previous Vote Share	0.523*	0.517*	0.393*	0.394*	0.449*	0.452*
	(0.073)	(0.072)	(0.080)	(0.081)	(0.088)	(0.088)
Incumbent Previously Contested	24.396*	24.359*	11.226*	10.246*	15.235*	15.045*
	(5.825)	(5.809)	(3.632)	(3.669)	(4.124)	(4.100)
State Senate Race	-0.393	-0.443	-1.875	-1.906	-1.984	-1.914
	(1.122)	(1.116)	(1.303)	(1.325)	(1.818)	(1.809)
Member of the Democratic Party	3.377	2.113	-11.975*	-15.474*	-0.808	1.865
	(2.337)	(1.190)	(2.042)	(1.368)	(3.788)	(1.494)
Constant	-13.608	-11.348	0.437	6.841	5.773	11.502
	(9.336)	(8.594)	(8.151)	(7.782)	(10.866)	(7.875)
N	117	117	128	128	60	60
R-Squared	0.599	0.597	0.603	0.586	0.686	0.683

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-24: Full OLS Estimates of Analyses in Table 6: Part 6

	MI-PA4	MI-PA4	MI-PA160	MI-PA160	MT-SB423	MT-SB423
District Support for Legislator's Position	-0.069		0.091*		0.057	
	(0.049)		(0.037)		(0.134)	
Incumbent Party Pres Vote	0.385*	0.409*	0.333*	0.344*	0.079	0.082
	(0.137)	(0.137)	(0.082)	(0.085)	(0.077)	(0.076)
Incumbent Contribution Advantage	2.029*	2.048*	1.264*	1.228*	1.206*	1.183*
	(0.382)	(0.384)	(0.305)	(0.313)	(0.572)	(0.565)
Incumbent Previous Vote Share	0.101	0.098	0.401*	0.427*	0.528*	0.535*
	(0.104)	(0.105)	(0.083)	(0.085)	(0.117)	(0.116)
Incumbent Previously Contested	-7.101	-6.605			13.679*	13.908*
	(3.913)	(3.918)			(4.877)	(4.811)
State Senate Race	-1.237	-1.589	-2.654*	-2.677*	5.130*	5.275*
	(1.415)	(1.400)	(1.009)	(1.037)	(2.147)	(2.104)
Member of the Democratic Party	3.874	3.539	3.560*	2.333*	1.887	1.599
	(2.323)	(2.323)	(1.132)	(1.042)	(2.142)	(2.016)
Constant	37.682*	32.831*	10.641*	14.456*	4.212	6.727
	(7.468)	(6.671)	(3.242)	(2.917)	(12.269)	(10.644)
N	103	103	94	94	63	63
R-Squared	0.736	0.731	0.841	0.830	0.562	0.561

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis. All Michigan incumbents who voted on PA160 and sought reelection faced a challenger in their previous election. Due to the lack of variation in this variable, it is omitted from analyses in the third and fourth columns.

Table A-25: Full OLS Estimates of Analyses in Table 6: Part 7

	OH-HB545	OH-HB545	OH-SB5	OH-SB5	WA-ESSHB2295	WA-ESSHB2295
District Support for Legislator's Position	-0.077		-0.035		0.031	
	(0.062)		(0.069)		(0.047)	
Incumbent Party Pres Vote	0.445*	0.433*	0.068	0.071	0.580*	0.582*
	(0.073)	(0.073)	(0.053)	(0.052)	(0.045)	(0.045)
Incumbent Contribution Advantage	1.675*	1.645*	1.048*	1.005*	1.186*	1.198*
	(0.347)	(0.348)	(0.356)	(0.344)	(0.254)	(0.253)
Incumbent Previous Vote Share	0.272*	0.308*	0.383*	0.379*	0.335*	0.332*
	(0.104)	(0.101)	(0.084)	(0.084)	(0.056)	(0.056)
Incumbent Previously Contested	9.703*	10.203*	11.817*	11.624*	10.828*	10.677*
	(3.500)	(3.497)	(3.753)	(3.714)	(2.277)	(2.257)
State Senate Race	-2.995	-3.044	0.987	0.959	0.229	0.227
	(1.548)	(1.556)	(1.685)	(1.675)	(0.807)	(0.805)
Member of the Democratic Party	5.693*	4.878*	7.848*	6.996*	-2.223*	-2.034*
	(1.617)	(1.488)	(2.193)	(1.413)	(0.964)	(0.917)
Constant	8.106	1.940	19.306*	18.097*	-5.674	-4.052
	(8.526)	(6.992)	(8.210)	(7.818)	(5.491)	(4.887)
N	56	56	75	75	94	94
R-Squared	0.881	0.877	0.627	0.625	0.893	0.892

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-26: Full OLS Estimates of Analyses in Table 6: Part 8

	WA-SB5726	WA-SB5726	WA-SB6239	WA-SB6239	WA-SB5688	WA-SB5688
District Support for Legislator's Position	-0.090		0.191*		-0.070	
	(0.101)		(0.094)		(0.054)	
Incumbent Party Pres Vote	0.612*	0.547*	0.326*	0.509*	0.546*	0.570*
	(0.103)	(0.072)	(0.121)	(0.083)	(0.091)	(0.090)
Incumbent Contribution Advantage	1.900*	1.904*	1.645*	1.622*	2.871*	2.744*
	(0.324)	(0.324)	(0.417)	(0.426)	(0.399)	(0.388)
Incumbent Previous Vote Share	0.202*	0.205*	0.165*	0.123	0.252*	0.264*
	(0.089)	(0.089)	(0.080)	(0.079)	(0.101)	(0.101)
Incumbent Previously Contested	7.573*	7.645*	2.498	1.113	8.715*	9.136*
	(3.335)	(3.330)	(3.363)	(3.367)	(3.707)	(3.708)
State Senate Race	-1.171	-1.076	-1.631	-1.217	1.268	0.301
	(0.959)	(0.952)	(1.199)	(1.208)	(1.380)	(1.164)
Member of the Democratic Party	-1.414	-1.853	-0.344	-1.984	-6.364*	-6.385*
	(1.115)	(0.998)	(1.676)	(1.504)	(1.201)	(1.206)
Constant	9.630	8.343	16.324*	21.326*	6.286	0.950
	(6.878)	(6.716)	(7.028)	(6.734)	(7.868)	(6.725)
N	94	94	78	78	86	86
R-Squared	0.791	0.789	0.763	0.748	0.820	0.816

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-27: Full OLS Estimates of Analyses in Table 6: Part 9

	MD-HB1368	MD-HB1368	MD-HB438	MD-HB438	MD-SB167	MD-SB167
District Support for Legislator's Position	0.038		-0.018		-0.009	
	(0.091)		(0.085)		(0.070)	
Incumbent Party Pres Vote	0.138*	0.151*	0.290*	0.291*	0.302*	0.298*
	(0.068)	(0.059)	(0.057)	(0.056)	(0.061)	(0.056)
Incumbent Contribution Advantage	1.801*	1.784*	1.330*	1.343*	1.315*	1.319*
	(0.573)	(0.570)	(0.465)	(0.458)	(0.465)	(0.461)
Incumbent Previous Vote Share	0.495*	0.497*	0.131	0.128	0.128	0.127
	(0.115)	(0.115)	(0.082)	(0.080)	(0.081)	(0.080)
Incumbent Previously Contested	13.443*	13.584*	-12.993*	-13.144*	-13.143*	-13.250*
	(5.367)	(5.336)	(4.155)	(4.072)	(4.190)	(4.090)
State Senate Race	-1.519	-1.380	0.327	0.351	0.572	0.595
	(2.632)	(2.601)	(2.401)	(2.385)	(2.368)	(2.349)
Member of the Democratic Party	-2.558	-1.305	-9.875*	-9.964*	-10.026*	-10.067*
	(3.434)	(1.627)	(1.661)	(1.599)	(1.659)	(1.621)
Current Three Candidates	-17.133*	-17.036*	-35.505*	-35.487*	-35.380*	-35.406*
	(4.544)	(4.521)	(2.548)	(2.533)	(2.558)	(2.537)
Current Four Candidates	-15.741*	-15.723*	-32.389*	-32.377*	-32.289*	-32.333*
	(4.777)	(4.759)	(2.968)	(2.952)	(2.991)	(2.957)
Previous Three Candidates	-0.777	-0.768	-1.835	-1.857	-1.748	-1.767
	(1.838)	(1.831)	(1.459)	(1.448)	(1.470)	(1.455)
Previous Four Candidates	1.611	1.716	6.649*	6.547*	6.641*	6.651*
	(4.735)	(4.711)	(3.148)	(3.095)	(3.114)	(3.096)
Constant	7.294	7.477	53.945*	53.241*	52.858*	52.680*
	(10.787)	(10.738)	(8.337)	(7.607)	(7.751)	(7.591)
N	123	123	102	102	101	101
R-Squared	0.852	0.852	0.925	0.925	0.922	0.922

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

Table A-28: Full OLS Estimates of Analyses in Table 6: Part 10

	ND-SB2370	ND-SB2370	AZ-SB1373	AZ-SB1373	AZ-HB2518	AZ-HB2518
District Support for Legislator's Position	0.011		-0.110		-0.002	
	(0.025)		(0.224)		(0.117)	
Incumbent Party Pres Vote	0.246*	0.244*	-0.077	-0.144	-0.154	-0.154
	(0.043)	(0.042)	(0.226)	(0.178)	(0.182)	(0.176)
Incumbent Contribution Advantage	1.235*	1.281*	2.104*	2.227*	2.205*	2.202*
	(0.382)	(0.365)	(0.487)	(0.411)	(0.480)	(0.405)
Incumbent Previous Vote Share	0.482*	0.479*	0.137	0.117	0.154	0.154
	(0.083)	(0.082)	(0.186)	(0.178)	(0.189)	(0.184)
Incumbent Previously Contested	15.924*	15.745*	-3.669	-4.940	-3.645	-3.633
	(4.228)	(4.189)	(8.695)	(8.157)	(8.545)	(8.303)
State Senate Race	7.802*	7.818*	12.793*	11.912*	10.299	10.320
	(1.961)	(1.952)	(5.419)	(5.025)	(5.820)	(5.478)
Member of the Democratic Party	0.780	0.921	0.703	1.517	1.675	1.656
	(1.126)	(1.076)	(2.730)	(2.133)	(2.526)	(2.067)
Current Three Candidates	-17.687*	-17.686*	-5.588*	-5.780*	-5.560*	-5.551*
	(1.321)	(1.315)	(2.133)	(2.061)	(2.226)	(2.067)
Current Four Candidates	-10.983*	-10.946*				
	(1.501)	(1.492)				
Previous Three Candidates	6.375*	6.239*	3.138	2.740	2.039	2.042
	(2.128)	(2.096)	(2.846)	(2.681)	(2.939)	(2.858)
Previous Four Candidates	11.079*	10.937*	0.707	0.416	-0.246	-0.237
	(2.463)	(2.430)	(3.242)	(3.132)	(3.367)	(3.219)
Constant	-9.207	-8.141	41.352	41.859	40.635	40.520
	(8.896)	(8.526)	(21.615)	(21.215)	(23.302)	(21.105)
N	94	94	32	32	32	32
R-Squared	0.943	0.943	0.946	0.946	0.946	0.946

* $p \leq 0.05$. Standard errors in parentheses.

Relationship between district support for incumbent's roll-call vote and vote share using Ordinary Least Squares. Column heading indicates the bill considered in the analysis.

References

Cox, Gary W., and Jonathan N. Katz. 2002. *Elbridge Gerry's Salamander: The Electoral Consequences of the Reapportionment Revolution.* Cambridge ; New York: Cambridge University Press.