Appendix A: Variables Used in analyses & NAES question wording

Variable Name	**Source**	**Coding**
Republican	*The Almanac of American Politics*	0 Democrat 1 Republican
Legislator Liberalism	*DW-Nominate Scores* for Senate accessed on 4-26-11 from http://voteview.com/dwnomin.htm	First Dimension Coordinate
Legislator Liberalism	*W-Nominate Scores* for Senate, estimated using W-NOMINATE Roll Call Analysis Software for R	First Dimension Coordinate
Class	*2004 National Annenberg Election Study*. Question cwa04. Percentage of each income group calculated using Census data (2000)	Low-income: below $35,000 Middle Income: $35,000-$75,000 High-Income: above $75,000
Constituency Conservatism	*2004 National Annenberg Election Study*. Question Cma06.	Generally speaking, would you describe your political views as very conservative, conservative, moderate, liberal, or very liberal? (Recoded to match DW-NOMINATE scale and to center at 0). 2 Very conservative 1 Conservative 0 Moderate -1 Liberal -2 Very liberal
Percent Black	*US Census (2000)*	Percent African-American by state

Appendix B

Table 1b. Summary statistics for state Constituency Opinion

State Constituency Opinion by Class	*Mean*	*Standard Deviation*	*Min*	*Max*
Lower	.129	.16	-.27	.56
Middle	.239	.22	-.26	.67
Upper	.222	.22	-.19	.79
State Mean	.199	.16	-.06	.51

Table 2b. Summary statistics for Legislator Ideology (DW-NOMINATE)

Congress	*Years*	*Partisan Control*	*Mean*	*Standard Deviation*	*Min*	*Max*
107th	2001-2003	Split	.001	.42	-.768	.784
108th	2003-2005	Republican	.01	.43	-.55	.697
109th	2005-2007	Republican	.04	.46	-.55	.907
110th	2007-2009	Democrat	.03	.44	-.641	.907
111th	2009-2011	Democrat	-.04	.44	-.641	.907

Table 3b. Correlations between Constituency Opinion Measures

	Lower	Middle	Upper
Lower	1	-	-
Middle	.56	1	
Upper	.63	.79	1

Table 4b. Tests of equality between coefficients

Congress	**Test**	**P-value**	**Test**	**P-value**
107th	Lower=Upper	.04		
	Lower=Middle	.29		
	Middle=Upper	.29	GOP*Upper= GOP*Lower	.21
108th	Lower=Upper	.01		
	Lower=Middle	.22		
	Middle=Upper	.23	GOP*Upper= GOP*Lower	.72
109th	Lower=Upper	.01		
	Lower=Middle	.09		
	Middle=Upper	.36	GOP*Upper= GOP*Lower	.84
110th	Lower=Upper	.01		
	Lower=Middle	.02		
	Middle=Upper	.64	GOP*Upper= GOP*Lower	.38
111th	Lower=Upper	.04		
	Lower=Middle	.00		
	Middle=Upper	.71	GOP*Upper= GOP*Lower	.77

p values less than .10 indicate coefficients significantly different from each other

Table 5b. Responsiveness of Senators to Constituency Opinion (107th-111th Congresses). Ordinary least squares regression coefficients (with standard errors in parentheses) for Poole-Rosenthal W-Nominate scores.

	107th Congress		108th Congress		109th Congress		110th Congress		111th Congress	
Constant	-0.306***	-0.749***	-0.227	-0.784***	-0.213*	-0.697***	-0.208*	-0.695***	-0.585***	-0.849***
	(0.110)	(0.0431)	(0.137)	(0.0405)	(0.108)	(0.0451)	(0.121)	(0.0447)	(0.0856)	(0.0358)
Low-Income Constituency Opinion	11.05*	0.512	4.864	0.512	6.420	1.221	7.645	1.563	5.410	0.687
	(5.941)	(2.205)	(8.384)	(2.038)	(6.786)	(1.794)	(6.915)	(2.308)	(6.559)	(2.334)
Middle-Income Constituency Opinion	0.213	0.764	-1.865	0.280	-1.033	1.049***	-0.626	1.003**	-0.338	0.746
	(1.749)	(0.472)	(2.056)	(0.603)	(1.621)	(0.384)	(1.767)	(0.427)	(1.663)	(0.505)
Upper-Income Constituency Opinion	5.843	2.834*	12.13***	3.380*	12.38***	1.545	10.81**	1.676	11.02***	2.033
	(3.797)	(1.634)	(4.166)	(1.708)	(3.920)	(1.170)	(4.032)	(1.151)	(4.105)	(1.353)
Percent Black (x100)		-.00490		-.147		-.121		-.169		-.242
		(.282)		(.284)		(.283)		(.291)		(.269)
GOP		1.220***		1.424***		1.301***		1.299***		1.174***
		(0.0507)		(0.0594)		(0.0531)		(0.0571)		(0.0576)
Observations	97	97	96	96	97	97	97	97	103	103
R^2	0.185	0.907	0.175	0.932	0.270	0.928	0.252	0.930	0.280	0.920

Standard errors in parentheses (clustered by state) * p<.10, ** p<.05, *** p<.01. Two-tailed tests

Table 5b. W-NOMINATE estimates for the 107th Senate (before and after Jeffords party switch)

107th Congress	W-NOMINATE mean	Std. Dev.	Min	Max
Before Jeffords Switch	.148	.61	-.946	.973
After Jeffords Switch	-.038	.68	-.998	.952
Difference	**-.186** t=16.6 ($p < .001$)			

Table 6b. Non-Freshmen Senator Responsiveness to Constituency Opinion (107th Congress). Ordinary least squares regression coefficients (with standard errors in parentheses) for Poole-Rosenthal W-Nominate scores (before and after Jeffords' party switch).

	Before Jeffords Switch			After Jeffords Switch		
Constant	-0.119	-0.432***	-0.472***	-0.372*	-0.720***	-0.742***
	(0.189)	(0.0744)	(0.0715)	(0.206)	(0.0612)	(0.0647)
Low Constituency Opinion	1.095	-1.113	-0.962	1.514	-0.0815	0.206
	(2.835)	(1.016)	(1.066)	(3.150)	(1.141)	(1.405)
Middle Constituency Opinion	-0.669	0.354	0.539	-0.636	-0.0391	-0.0154
	(0.904)	(0.324)	(0.403)	(1.015)	(0.483)	(0.634)
Upper Constituency Opinion	5.910***	1.868**	2.222**	6.613***	2.193***	2.232***
	(1.368)	(0.741)	(0.902)	(1.703)	(0.571)	(0.713)
GOP		1.049***	1.153***		1.186***	1.213***
		(0.0591)	(0.0864)		(0.0569)	(0.102)
GOP* Low Constituency Opinion			-0.172			-0.170
			(0.265)			(0.284)
GOP* Middle Constituency Opinion			-0.305			-0.162
			(0.296)			(0.370)
GOP*Upper Constituency Opinion			-0.00786			0.175
			(0.318)			(0.355)
Observations	86	86	84	86	86	84
R^2	0.221	0.888	0.893	0.236	0.903	0.904

Standard errors in parentheses (clustered by state) * p<.10, ** p<.05, *** p<.01 Two-tailed tests.