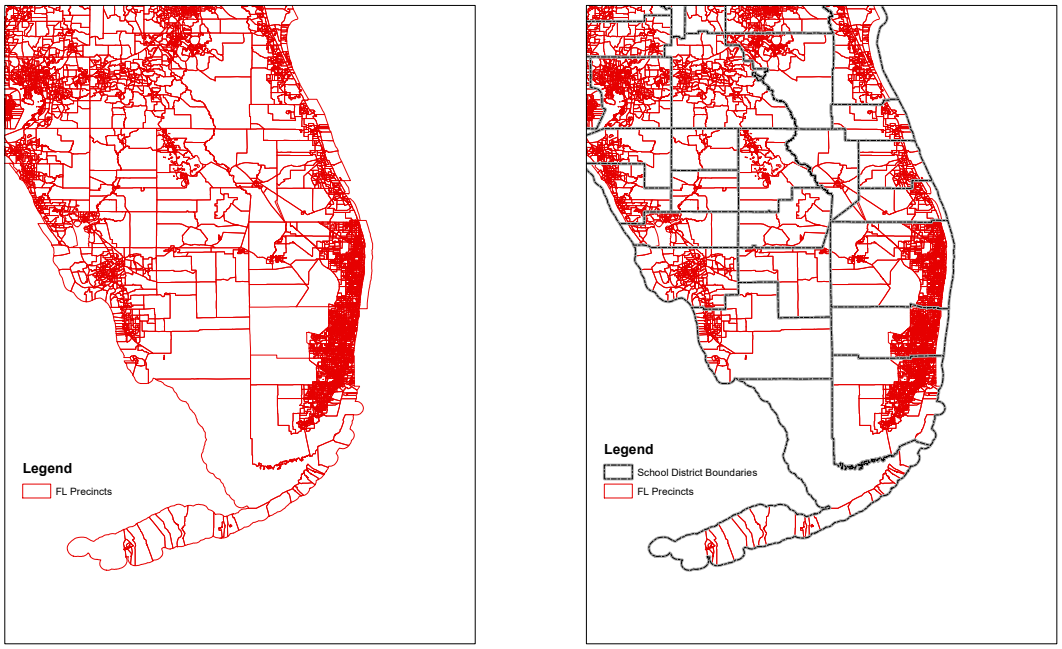
A Appendix: Mapping Precincts to School Districts

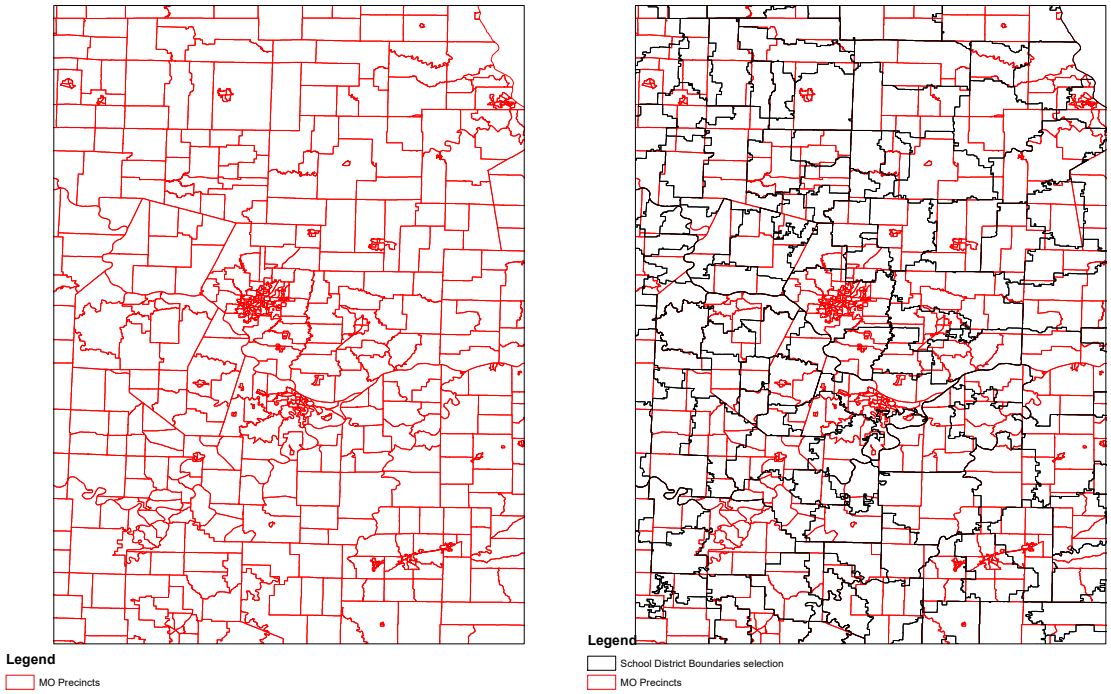
To map precincts to school district boundaries, I obtained shape files for both. I used the mapping software ArcGIS to match precinct boundaries to school district boundaries. Figure A.1 shows just the precinct boundaries for Florida on the left and then the school district boundaries on top of precinct boundaries on the right as an example. Specifically, I used the "Union" tool to join boundaries based on spatial location of the data. Table B.1 in the appendix provides the source used for precinct boundaries for each state. School district boundaries were mapped using data from the National Center for Education Statistics (2013). For the majority of cases, a precinct was defined to be within a school district if it fell completely inside the school district boundaries. This is the case for Florida. Therefore, each school district is composed of a set of precincts and vote counts are aggregated to the school district level.

Figure A.1: Florida Precinct and School District Boundaries



The figure on the left shows just the precinct boundaries. The figure on the right adds school district boundaries on top of the precinct boundaries.

Figure A.2: Missouri Precinct and School District Boundaries

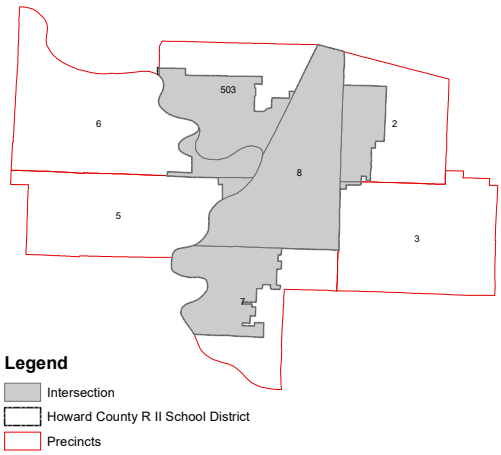


The figure on the left shows just the precinct boundaries. The figure on the right adds school district boundaries on top of the precinct boundaries.

However, there are cases in which a precinct crossed school district lines. Missouri is an example of a state in which precinct boundaries and school district boundaries do not line up. This can be seen in Figure A.2, which is a zoomed in look at boundaries in Missouri. To illustrate exactly what I did, I highlight one of the more extreme examples when precinct and school district boundaries to do not have the same boundaries. Figure A.3 maps Howard County School District to the surrounding precincts. Precinct 8 is the only one that is completely inside of Howard County School District in MO. In terms of the other precincts, ArcMap keeps the information from original feature class with each polygon. For example, the number of people who voted for the Democratic candidate for the United States House of Representatives was 50 in precinct 503. ArcMap does not divide this information in anyway based on area using either the *Union* or *Intersection* tools.[14] The *Union* tool in ArcMap

[14]This is true for the license that I have. There are ways to do this with a more comprehensive version of

Figure A.3: Hoard County School District



then would assign each precinct to this school district that overlap with it.[15] Therefore, the 50 votes that the Democratic candidate received in precinct 503 would be associated with both Howard County School District **and** any additional school district that it overlapped with.

Precincts 8, 6, 5, 503, 2, 4, and 7 would also be associated with Howard County School District. To determine the percent that voted in favor of a Democratic candidate, I would use information from **all** precincts that overlapped with it. I would aggregate the information up to the school district level, and then obtain the % based on the votes cast within each

ArcGIS that I do not have access to.

[15]Note: I could use a different tool, like the *intersection* tool, and while the visual would look slightly different, the end result would be the same. It would associate each of those precincts with that school district.

of those precincts. These precincts would be used again in a different school district if they overlapped with that school district (which is all of the precincts in this example, except for precinct 8).[16]

B Appendix

Table B.1 contains information about the number of years within each state that a party maintained control of state government. It also indicates whether or not the state is included in the precinct data and the source of precinct boundary files. I define a state as being under Democratic control if the Democrats have a majority in both legislative chambers and the governor is a Democrat or Democrats have a veto-proof majority in both legislative chambers.

Table B.1: Years of State Party Control from 1994 to 2011

State	Dem Rep Divide	Include	Boundary Source/Exclude
Alabama	17 - 1 - 0	**Yes**	Ansolabehere and Rodden (2011*a*)
Alaska	0 - 8 - 10	No	Excluded
Arizona	0 - 10 - 8	**Yes**	Ansolabehere and Rodden (2011*b*)
Arkansas	18 - 0 - 0	No	District Boundary Issues
California	6 - 0 - 12	**Yes**	Ansolabehere and Rodden (2011*c*)
Colorado[17]	4 - 4 - 10	**Yes**	Ansolabehere and Rodden (2011*d*)
Connecticut	1 - 0 - 17	**Yes**	Ansolabehere and Rodden (2011*e*)
Delaware	3 - 0 - 15	**Yes**	Ansolabehere and Rodden (2011*f*)
Florida	0 - 13 - 5	**Yes**	County=School District[18]
Georgia	9 - 7 - 2	**Yes**	Ansolabehere and Rodden (2011*g*)

Continued on next page

[16]I did try an alternate way of doing this. Instead of having all votes go to each school district it is associated with, I distributed votes based on the area of the overlap. The weighted measure based on area is correlated with the original measure at 0.98 for the state of Missouri. However, it also requires the assumption the voters are distributed the same way that the land area is, which might not be the case. Because of this and the additional steps required in the calculation, I did not use this measure.

[17]Issues matching precincts in Denver County from 2004 to 2006 and Larimer and Jefferson from 2006 to 2008 due to precinct consolidation

[18]Because counties define school districts, precinct data is not needed

Table B.1 – *Continued from previous page*

State	Dem Rep Divide	Include	Boundary Source/Exclude
Hawaii	18 - 0 - 0	No	Only one school district
Idaho	0 - 17- 1	**Yes**	Ansolabehere and Rodden (2011*h*)
Illinois	9 - 2 - 7	No	Precinct data unavailable
Indiana	0 - 5 - 13	No	Precinct data unavailable
Iowa[19]	4 - 2 - 12	**Yes**	Ansolabehere and Rodden (2011*i*)
Kansas	0 - 9 - 9	**Yes**	Ansolabehere and Rodden (2011*j*)
Kentucky	6 - 0 - 12	No	Precinct boundary info unavailable
Louisiana	6 - 0 - 12	**Yes**	Ansolabehere and Rodden (2011*k*)
Maine	8 - 1 - 9	No	Precinct boundary info unavailable
Maryland	18 - 0 - 0	**Yes**	Ansolabehere and Rodden (2011*l*)
Massachusetts	18 - 0 - 0	No	Precinct Issues
Michigan	0 - 7 - 11	No	Precinct boundary/vote match issue
Minnesota	0 - 0 - 18	No	Precinct Issues
Mississippi	5 - 0 - 13	**Yes**	Ansolabehere and Rodden (2011*m*)
Missouri	7 - 4 - 7	**Yes**	Ansolabehere and Rodden (2011*n*)
Montana	0 - 10 - 8	No	Precinct boundary info unavailable
Nebraska	0 - 0 - 18	No	Precinct Issues
Nevada	0 - 0 - 18	**Yes**	Ansolabehere and Rodden (2011*o*)
New Hampshire	4 - 6 - 8	**Yes**	Ansolabehere and Rodden (2011*p*)
New Jersey	6 - 8 - 4	**Yes**	Ansolabehere and Rodden (2011*q*)
New Mexico	9 - 0 - 9	**Yes**	Ansolabehere and Rodden (2011*r*)
New York[20]	2 - 0 - 16	**Yes**	Ansolabehere and Rodden (2011*s*)
North Carolina[21]	11 - 0 - 7	**Yes**	Ansolabehere and Rodden (2011*t*)

Continued on next page

[19]Issues matching precincts in Calhoun, Emmet, Greene, Guthrie, Marion, Pottowattamie, and Wayne Counties from 2004 to 2006. This involves approximately 10 percent of the precincts.

[20]Only has the years 2006, 2008, and 2010

[21]Issues matching 2006 to 2008 precinct data occurred for precincts in the following counties: Buncombe, Cumberland, Harnett, Lee, and Rockingham. This affects approximately 7 percent of the data in NC.

Table B.1 – *Continued from previous page*

State	Dem Rep Divide	Include	Boundary Source/Exclude
North Dakota	0 - 17 - 1	No	Precinct Issues
Ohio[22]	0 - 13 - 5	**Yes**	Ansolabehere and Rodden (2011*u*)
Oklahoma	3 - 1 - 14	**Yes**	Ansolabehere and Rodden (2011*v*)
Oregon	4 - 0 - 14	No	Boundary Issues
Pennsylvania	0 - 9 - 9	**Yes**	Ansolabehere and Rodden (2011*w*)
Rhode Island	18 - 0 - 0	No	Boundary Issues
South Carolina	0 - 9 - 9	**Yes**	Ansolabehere and Rodden (2011*x*)
South Dakota	0 - 17 - 1	**Yes**	Ansolabehere and Rodden (2011*y*)
Tennessee	10 - 3 - 5	**Yes**	Ansolabehere and Rodden (2011*z*)
Texas	1 - 9 - 8	**Yes**	Ansoloabehere and Palmer (2011)
Utah	0 - 18 - 0	No	Precinct Issues
Vermont	5 - 0 - 13	**Yes**	Ansolabehere and Rodden (2011a*a*)
Virginia[23]	0 - 2 - 16	**Yes**	Ansolabehere and Rodden (2011a*b*)
Washington	9 - 0 - 9	No	Precinct Issues
West Virginia	18 - 0 - 0	No	Precinct Issues
Wisconsin	2 - 3 - 13	**Yes**	Ansolabehere and Rodden (2011a*c*)
Wyoming	0 - 15 - 3	**Yes**	Ansolabehere and Rodden (2011a*d*)

[22]It appears that there was precinct consolidation between 2008 to 2010 that is hard to trace. While all 2010 precincts have matches to prior years, there are many 2008 precincts that disappear by 2010. This primarily affects precincts withing Cuyahoga, Franklin, Hamilton, Lucas, and Montgomery counties and about 15 percent of the data in OH.

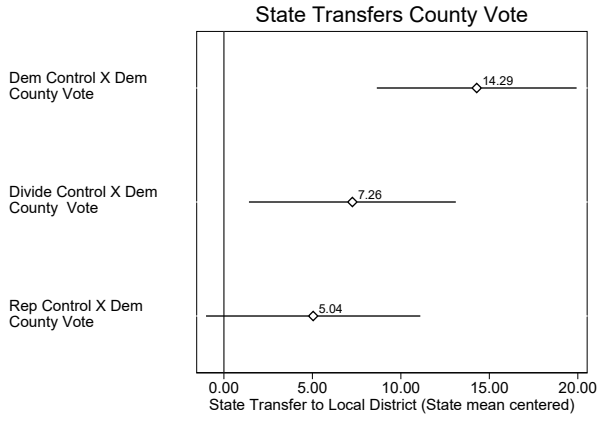
[23]School districts are county or city based so those boundaries are used to aggregate vote counts

Table B.2: Summary Statistics when county presidential vote is used

	2000			2008		
	Mean	Std Dev	N	Mean	Std Dev	N
State Dem Control	0.17	0.37	12,089	0.24	0.43	11,857
State Rep Control	0.28	0.45	12,089	0.26	0.44	11,857
Dem Control X Dem Vote	0.00	3.16	12,089	0.03	4.98	11,857
Divide Control X Dem Vote	0.08	6.53	12,089	0.06	6.63	11,857
Rep Control X Dem Vote	0.00	4.46	12,089	0.03	5.51	11,857
Median HH Income	57.16	21.92	12,089	53.76	20.27	11,857
Log Pop	8.97	1.38	12,089	9.06	1.40	11,857
% Bachelor or Higher	18.58	11.45	12,089	21.38	12.77	11,857
% Black	5.12	11.63	12,089	5.80	11.89	11,857
% Hispanic	6.95	13.97	12,089	9.03	15.14	11,857
% Asian	1.27	3.24	12,089	1.88	4.06	11,857
% Own Home	75.60	10.89	12,089	76.33	11.16	11,857

Note: This table presents district level data for select years of the data set. The two-party Presidential Democratic vote is relative to the state mean and is at the county level.

Figure B.4: Additional Robustness Checks



Note: This figure plots the 95% confidence intervals for party control and Democratic vote at the district level. Democratic vote is based off of county level vote information.

Table B.3: State Transfers to School Districts with 8 year party control window

	All	All	Formula	Formula
Dem Control X	5.89*	6.87**	12.49**	13.12**
Dem Vote Precinct	(2.35)	(2.48)	(1.84)	(1.52)
Divided Control X	2.36	4.43*	4.77**	3.83**
Dem Vote Precinct	(2.32)	(2.04)	(1.05)	(0.99)
Rep Control	-5.23*	-3.34	-2.89*	-1.72
Dem Vote Precinct	(2.27)	(2.90)	(1.44)	(1.35)
Dem Control	-89.76	-45.75	-49.96	-52.68
	(56.26)	(49.00)	(27.11)	(28.96)
Rep Control	-67.89**	-52.47*	-48.59**	-39.26*
	(24.36)	(26.01)	(17.52)	(17.74)
Close Vote 50-50	3.25**	3.19*	0.77	1.32
	(1.17)	(1.45)	(0.84)	(0.92)
Per Child Local	-0.05*	-0.05*	-0.12**	-0.11**
	(0.02)	(0.02)	(0.02)	(0.02)
Per Child Federal		0.04		0.03**
		(0.03)		(0.01)
Median HH Income		-15.68*		-6.22*
		(6.20)		(3.13)
Log Pop		-1041.49**		-790.15**
		(243.80)		(195.72)
% Bachelor or higher		-30.04		1.90
		(16.15)		(10.06)
% Black Community		14.34		10.34
		(18.03)		(9.68)
% Hispanic Community		15.12		24.00**
		(10.15)		(6.04)
% Asian Community		0.42		33.50**
		(21.24)		(10.90)
% Own Home		3.95		8.21
		(8.18)		(5.44)
% Free/Reduced Lunch		7.30**		5.62**
		(2.11)		(1.28)
% SPED		1.52		-0.64
		(2.83)		(2.50)
Constant	4.92	10072.12**	4.97	6336.15**
	(39.10)	(2063.59)	(28.02)	(1686.08)
District/Year Fixed Effects	X	X	X	X
Observations	41,250	37,386	41,250	37,386

Note: All refers to all state transfers; formula refers to transfers through the funding formula. Bootstrap standard errors are in parentheses. **p<.01, *p<.05

Table B.4: State Transfers to School Districts, Jackknife Standard Errors

	(1) All	(2) Formula
Dem Control X	6.85*	9.59**
Dem Vote Precinct	(2.86)	(1.54)
Divided Control X	3.90	5.19**
Dem Vote Precinct	(2.10)	(1.22)
Rep Control	-7.19*	-2.53
Dem Vote Precinct	(2.88)	(1.29)
Dem Control	2.92	-5.41
	(27.45)	(13.32)
Rep Control	49.24	30.79*
	(27.40)	(12.34)
Close Vote 50-50	4.83**	2.57**
	(1.36)	(0.87)
Per Child Local	-0.02	-0.10**
	(0.02)	(0.02)
Per Child Federal	0.04*	0.04**
	(0.02)	(0.01)
Median HH Income	-18.37**	-6.05
	(7.11)	(3.62)
Log Pop	-1184.67**	-684.13**
	(293.60)	(184.79)
% Bachelor or higher	-30.86	-2.13
	(16.83)	(11.55)
% Black	-10.28	-4.81
	(19.57)	(10.13)
% Hispanic	19.39	33.60**
	(12.86)	(6.61)
% Asian	-18.66	18.81
	(19.35)	(12.34)
% Own Home	-4.97	3.00
	(9.68)	(5.19)
% Free/Reduced Lunch	8.06**	6.01**
	(2.40)	(1.53)
% SPED	-0.04	-2.18
	(2.92)	(2.40)
Constant	12389.22**	5908.26**
	(2638.17)	(1679.41)
District/Year Fixed Effects	X	X
Observations	33,246	33,246

Note: All refers to all state transfers; formula refers to transfers through the funding formula. Jackknife standard errors are in parentheses. **p<.01, *p<.05