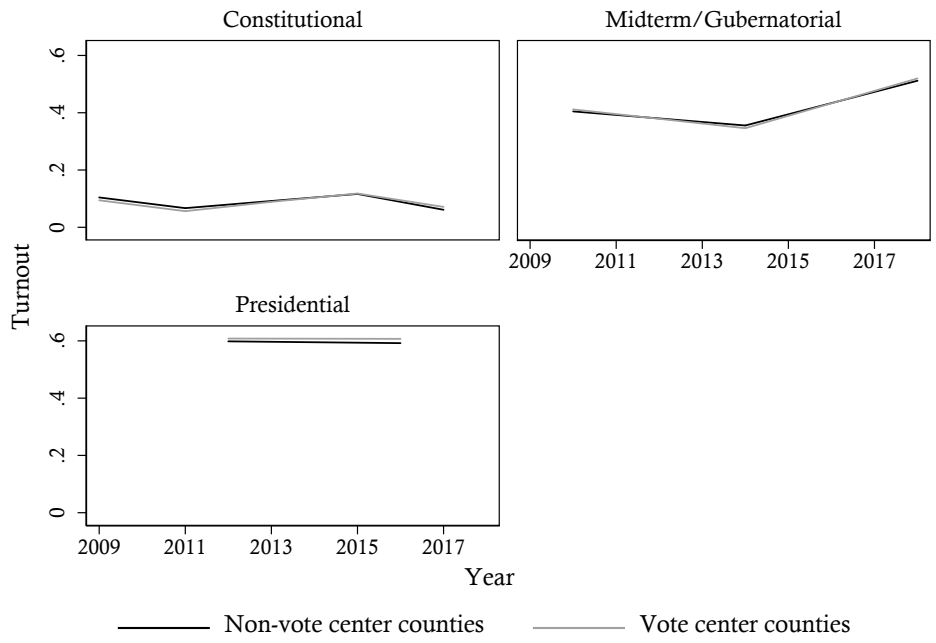
Supplemental Materials – Vote Centers and Texas Elections

$Y_{it} = \beta 0 + \beta 1*[Year] + \beta 2*[Vote\ Center] + \beta 3*[Year*Vote\ Center] + \beta 4*[Covariates] + \varepsilon_{it}$

- i = County
- t = Year
- Year = 1 if after implementation
- Vote Center = 1 if County has vote center

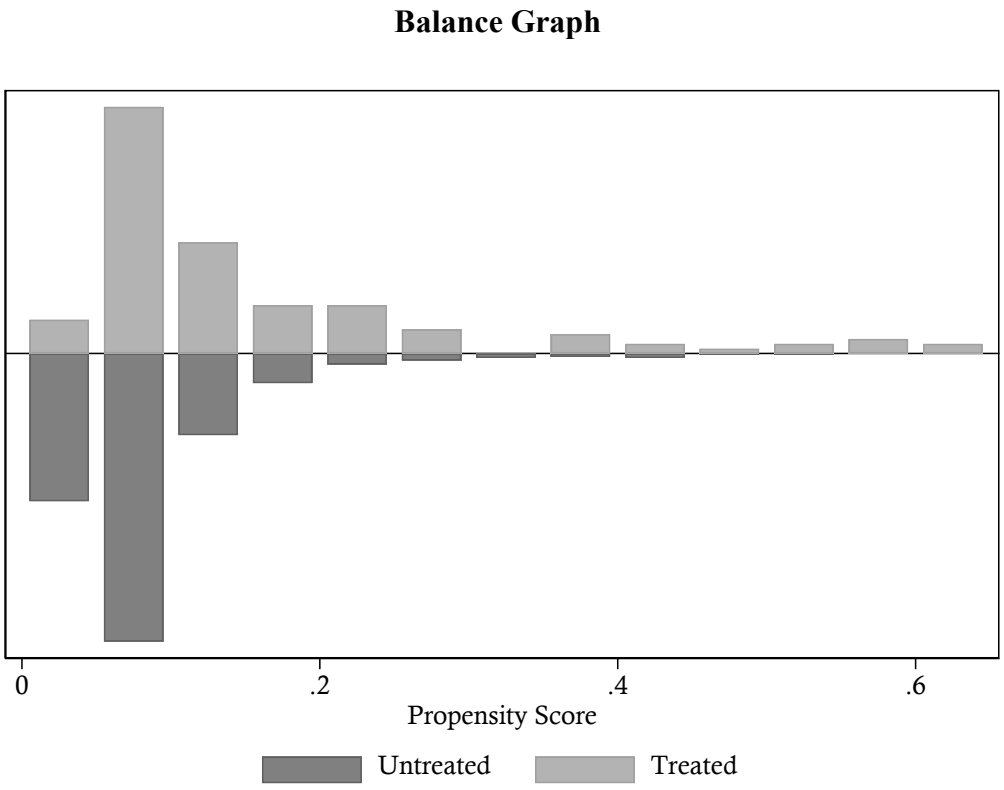
Parallel Assumption

The parallel assumption requires that in the absence of treatment, the difference between the those unites under the treatment and control groups is constant over time. The graph bellows illustrates a visual inspection of turnout comparing counties with no vote centers (black line) vs. those with vote centers (gray line).



For the SUTVA assumption, there is no reason to believe that the assumption does not hold -- that is, there is no reason to believe that in Lubbock County "assigned" to having a vote center depends on turnout in Anderson County assigned to not having vote centers. For the ignorability assumption, it seems reasonable to assume that given the covariates (median income, size of the county, percent of the population with higher education, and a county indicator as suggested by Hill et. al. (2005)), the treatments and potential outcomes are independent. We assume that at the very least weak ignorability is achieved as the balance and overlap seem to suggest this.

Constitutional Elections



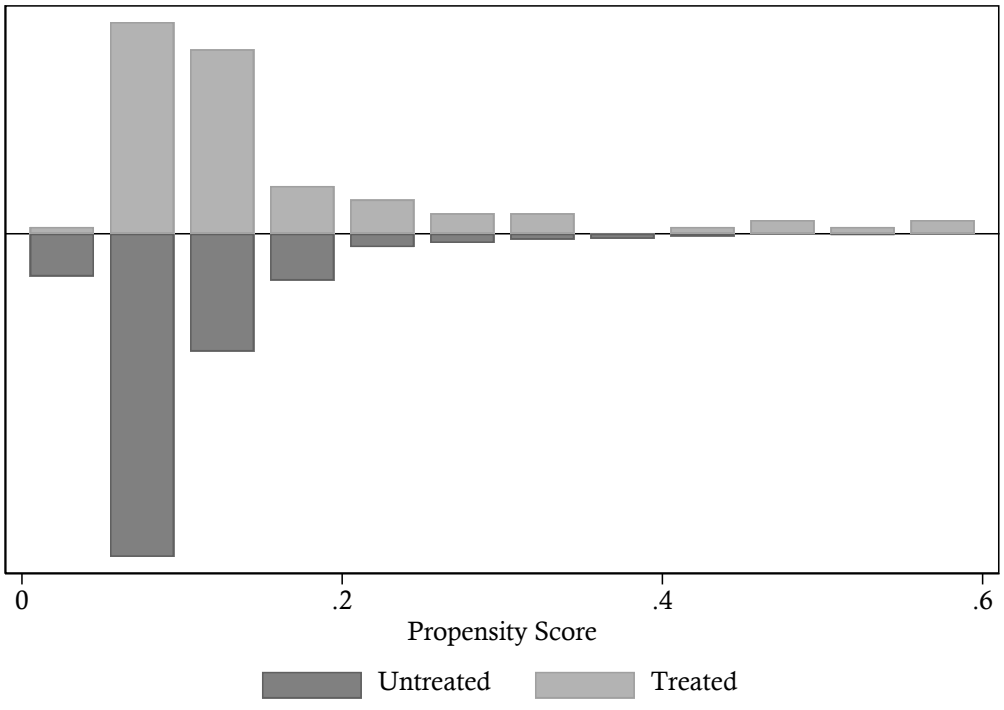
Balance Statistics before and after matching

Constitutional		Mean		% reduction		t-test		
		Treated	Control	% bias	|bias|	t	P>|t|	V(T)/V(C)
Median Income	Unmatched	5.34	4.54	64.90		7.34	0.00	1.45*
	Matched	5.34	5.46	-10.10	84.50	-0.68	0.50	0.81
Total Population	Unmatched	0.20	0.09	32.00		2.98	0.00	0.53*
	Matched	0.20	0.12	24.70	22.80	1.80	0.07	0.44*
Bachelor Degree	Unmatched	0.23	0.17	70.30		8.90	0.00	2.31*
	Matched	0.23	0.22	9.00	87.20	0.63	0.53	1.27

* if variance ratio outside [0.70; 1.43] for U and [0.70; 1.43] for M

Midterm Elections

Balance Graph



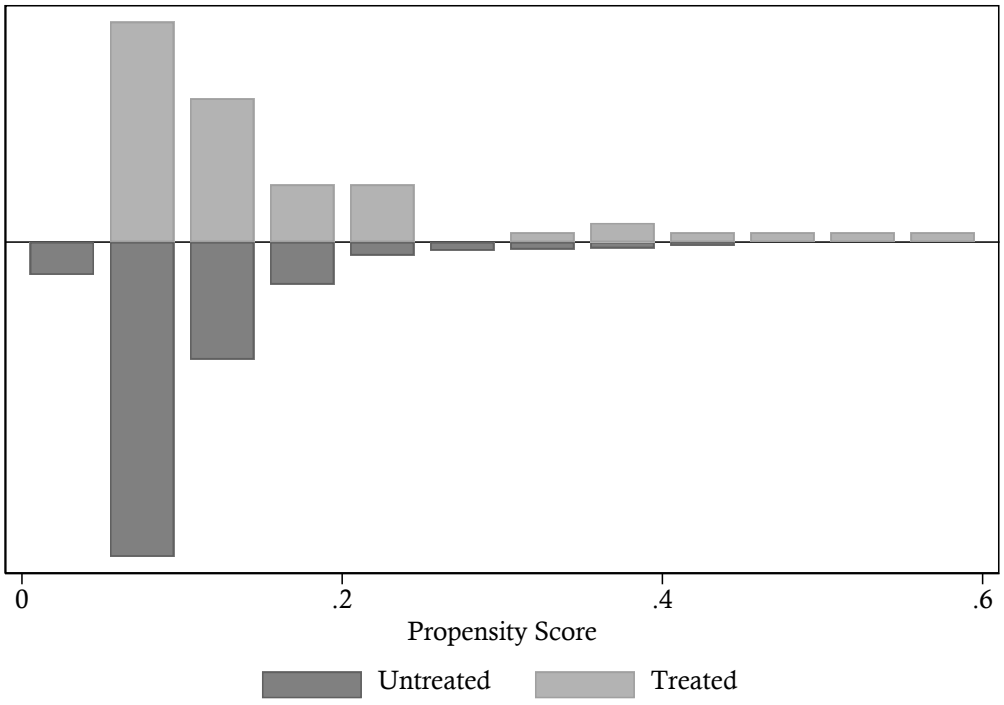
Balance Statistics before and after matching

Midterm		Mean			% reduction	t-test		
		Treated	Control	% bias	|bias|	t	P>|t|	V(T)/V(C)
Median Income	Unmatched	5.44	4.70	57.10		5.23	0.00	1.35
	Matched	5.44	5.37	5.40	90.60	0.30	0.76	0.79
Total Population	Unmatched	0.19	0.10	27.10		2.06	0.04	0.47*
	Matched	0.19	0.23	-11.90	56.00	-0.44	0.66	0.12*
Bachelor Degree	Unmatched	0.22	0.18	58.00		5.85	0.00	2.07*
	Matched	0.22	0.23	-2.30	96.10	-0.13	0.89	1.21

* if variance ratio outside [0.65; 1.55] for U and [0.65; 1.55] for M

Presidential Elections

Balance Graph



Balance Statistics before and after matching

Presidential		Mean		% reduction		t-test		
		Treated	Control	% bias	|bias|	t	P>|t|	V(T)/V(C)
Median Income	Unmatched	5.14	4.59	47.30		3.65	0.00	1.49
	Matched	5.14	5.31	-14.60	69.20	-0.69	0.49	0.90
Total Population	Unmatched	0.18	0.10	25.30		1.60	0.11	0.50*
	Matched	0.18	0.27	-25.00	0.90	-0.85	0.40	0.16*
Bachelor Degree	Unmatched	0.22	0.17	60.30		5.12	0.00	2.24*
	Matched	0.2244	0.21896	6.4	89.4	0.31	0.757	1.32