

Supporting Information for “Partisan Conversion
through Neighborhood Influence: How Voters Adopt the
Partisanship of their Neighbors and Reinforce
Geographic Polarization”

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1 Voterfile Data and Panel Construction

Table S1 lists the data availability for each state and year. Target Smart identifies voters across time periods by linking individuals based on name, age, residential address, voting history, and other proprietary information. The vendor further identifies people changing addresses using records from the USPS National Change of Address database, and keeps track of deceased voters by comparing voter lists to the Social Security Death Master File.

Table S1: State Voterfiles

State	Year	Source
CA	2005, 2007, 2009	State
CA	2012-2020	Target Smart
FL	2007, 2009	State
FL	2012-2020	Target Smart
KS	2008	State
KS	2012-2020	Target Smart
NC	2009	State
NC	2012-2020	Target Smart
NY	2001, 2008	State
NY	2012-2020	Target Smart

I rely on Target Smart's linkages when comparing years from 2012 to 2020. To construct the longer panel, I link pre-2012 directly to the Target Smart files. I do this through a three-step process, first exact matching on first name, last name, birth year, and residential address. In order to account for potential surname changes, possibly due to marriage, I do a second link of the remaining unlinked sample by first name, birth year and residential address. As a last step, I match only on first name, last name, and residential address, to see if there are any potential links where age was differentially recorded.

Table S2: Descriptive Statistics of Linked and Unlinked Samples

Variable	Mean Variable Levels Across Linked and Unlinked Samples					
	2008-2012		2012-2016		2016-2020	
	Linked	Unlinked	Linked	Unlinked	Linked	Unlinked
Age	51.202	48.013	53.375	45.580	51.892	46.532
Asian	0.034	0.032	0.042	0.040	0.047	0.041
Black	0.088	0.114	0.093	0.112	0.104	0.116
Democrat	0.408	0.447	0.435	0.433	0.431	0.429
Female	0.538	0.538	0.536	0.524	0.538	0.542
Hispanic	0.092	0.119	0.122	0.141	0.151	0.153
Republican	0.369	0.303	0.335	0.278	0.303	0.270
Vote General	0.826	0.685	0.600	0.363	0.067	0.033
Vote Primary	0.655	0.554	0.280	0.146	0.007	0.004
White	0.677	0.553	0.702	0.638	0.664	0.652
Block Group Democrat	0.400	0.450	0.425	0.444	0.428	0.433
Block Group Drive to Work	0.886	0.791	0.833	0.798	0.814	0.815
Block Group Homeowner	0.752	0.605	0.687	0.607	0.649	0.587
Block Group Registered	0.615	0.618	0.517	0.498	0.621	0.624
Block Group Republican	0.367	0.310	0.321	0.300	0.294	0.283
Block Group White	0.652	0.571	0.593	0.559	0.565	0.550
Block Group Median Age	40.626	39.234	40.571	39.358	41.148	40.066
Block Group Median House Value	\$343,528	\$363,856	\$339,897	\$329,663	\$356,220	\$333,232
Block Group Median Income	\$69,497	\$61,573	\$69,544	\$63,628	\$70,521	\$64,696
Block Group Median Year House Built	1974	1970	1972	1971	1973	1974
Democratic Exposure	39.989	45.092	42.179	43.975	42.976	43.388
Republican Exposure	36.379	30.586	31.505	28.496	28.819	26.964

Table shows the average levels of individual and aggregate variables across linked and unlinked samples for the 2008-2012, 2012-2016, and 2016-2020 linked samples. Exposure statistics are expressed percentage points. Individual level characteristics are presented as proportions.

In Table S2 I provide descriptive statistics of the linked (voters in the year 1 file who were located in the year 2 file at the same residence) and unlinked (all other voters in the year 1 file) samples for the linked voterfiles. The linked and unlinked samples are generally pretty similar, although there are differences in turnout, Block Group homeownership, Block Group median household income, and Block Group median house value, each of which are larger for the linked sample. Levels of partisan exposure and individual partisanship are similar.

2 Analysis of Movers

In the analysis, I focus on voters who do not change residences to account for time invariant features of the neighborhoods voters live in, and to account for sorting issues that arise from voters choosing which neighborhood to live in based on political geography, or on characteristics that correlate with political geography and with partisan registration. But focusing on non-movers does not fully account for sorting. If the process by which a voter chooses to stay in their neighborhood is related to the process by which they choose to change (or not change) their partisan registration, then the results may be biased. This bias is difficult to test for directly, as we cannot observe the reasons a voter in the sample chooses not to move. But one trend that would be consistent with voters generally sorting on political geography would be if, conditional on partisanship, voters are more likely to leave neighborhoods that are trending towards the opposite political party in favor of neighborhoods with more neighbors who share their partisanship. A portion of voters in the data who change residences have been identified by Target Smart across voterfiles. Target Smart identifies people changing addresses using records from the USPS National Change of Address database. Across 2012-2016 in the five states of this study, they identify 4,691,876 voters who change residences, remain on the voter lists and are linked by Target Smart, and 6,419,744 such voters from 2016-2020.

First, I model the decision to move as a function of changes in the Census Block Group¹ the voter lived in at the start of the panel. This test whether voters are more likely to move if the number of out-partisans in their neighborhood increases. These models are similar to the models in the main specifications, using matched strata to compare voters similar on observables and who live in similar areas, but have different changes in exposure in their

¹I use Block Groups in this analysis, rather than individual measures of exposure as in the main analysis, since it is more straightforward to see what the Block Group exposure of a voter would have been if they had not left the Block Group.

Census geography. I estimate models of the form:

$$\text{Move}_i = \alpha_{M_i} + \theta(\text{DE}_{i,2} - \text{DE}_{i,1}) + \beta(\mathbf{X}_{i,2} - \mathbf{X}_{i,1}) + \epsilon_i \quad (1)$$

Figure S1 reports the results. Democrats see a negative effect on moving in response to more Democratic neighbors, while non-partisans and Republicans become more likely to move. But this differential relationship is not apparent for Republican exposure, as all partisan groups react to more Republicans in the Census Block Group by being more likely to move. Thus, there is some evidence of voters being more likely to leave their neighborhood in response to out-partisan influxes but the results are inconsistent. Moreover, the effects for changes in Democratic or Republican exposure are quite small, so there is a limited relationship between local partisan changes and moving out of a neighborhood.

Tables S3 reports the average levels of proportion Democrat and Republican in movers' new and old neighborhoods in the final years of their respective linked sample (2016 for 2012-2016, and 2020 for 2016-2020). In general, the neighborhoods people leave and the neighborhoods they relocate to look similar in terms of differences in partisanship. The Census Block Groups that movers leave are only about 1 percentage points different in Democratic or Republican makeup from the Block Groups they move to. Combined with the mix evidence of changes in local partisan demographics influencing residential out-flows, there overall does not appear to be clear evidence pointing towards partisan residential sorting.

3 Matched Strata Statistics

Here I present the summary statistics of the standard deviations of changes in Democratic and Republican exposure within strata. These strata are used in the main specification in the main results in the paper to narrow the scope of comparison in the estimation. For

Table S3: Partisan Differences in Old and New Neighborhoods for Movers

Party 2020	2012-2016				2016-2020			
	% Democrat		% Republican		% Democrat		% Republican	
	Origin	New	Origin	New	Origin	New	Origin	New
Non-Partisan	41.35	40.40	29.17	30.18	42.04	41.12	27.50	28.59
Democrat	48.93	47.89	23.69	24.79	49.64	48.60	21.78	22.96
Republican	35.34	34.59	36.50	37.43	35.50	34.57	35.32	36.61

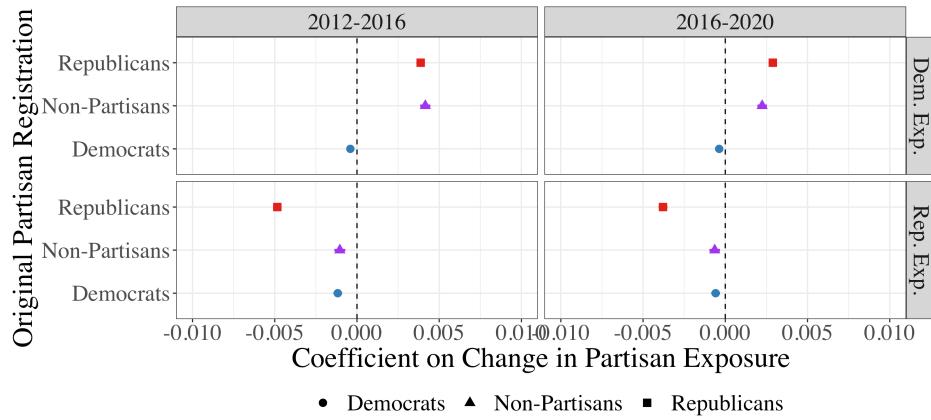


Figure S1: Effect of Census Block Group Changes in Partisan Exposure on Moving

each linked sample (2008-2012, 2012-2016, and 2016-2020) and for each subset (year 1 Democrats, Republicans, or Non-Partisans) within that sample, I calculate the within-strata standard deviation in Democratic or Republican Exposure. I also do this for the pre-trend specification strata. I report the average within-strata standard deviations in Table S4, showing that there is still variation within strata in changes in partisan exposure, making the within Zip Code and other characteristic comparison feasible.

Table S4: Average Within-Strata Standard Deviation of Changes in Partisan Exposure

Exposure Type	Subset	Main Specification			Pre-Trend Specification	
		2008-2012	2012-2016	2016-2020	2012-2016	2016-2020
Democratic	Democrats	0.087	0.072	0.075	0.084	0.084
Republican	Democrats	0.068	0.052	0.051	0.069	0.065
Democratic	Republicans	0.076	0.064	0.068	0.071	0.074
Republican	Republicans	0.097	0.082	0.086	0.086	0.088
Democratic	Non-Partisans	0.081	0.067	0.075	0.077	0.081
Republican	Non-Partisans	0.080	0.063	0.066	0.075	0.076

4 Descriptive Statistics

Table S5 presents average levels of descriptive variables for voters by partisan stability or partisan switching across the linked samples. Table S6 shows these statistics by levels of changes in Democratic and Republican exposure.

Table S5: Mean Levels of Variables by Partisan Switching

Years	Variable	Stable Democrat	Switch Democrat	Stable Republican	Switch Republican	Stable Non-Partisan	Switch Non-Partisan
2008-2012	'08 Dem Exp	0.52	0.43	0.29	0.37	0.36	0.39
	'08 Rep Exp	0.26	0.31	0.50	0.40	0.33	0.38
	Δ Dem Exp	-0.01	0.04	0.00	-0.05	0.00	-0.03
	Δ Rep Exp	-0.01	-0.04	-0.03	0.05	-0.02	-0.05
	'08 Dem	1.00	0.00	0.00	0.54	0.00	0.49
	'08 Rep	0.00	0.42	1.00	0.00	0.00	0.51
	White	0.66	0.62	0.88	0.83	0.77	0.77
	Urban	0.23	0.27	0.15	0.15	0.20	0.19
	Suburban	0.61	0.62	0.66	0.66	0.63	0.64
	Rural	0.16	0.10	0.19	0.19	0.17	0.17
	California	0.36	0.45	0.33	0.34	0.32	0.40
	Florida	0.24	0.31	0.26	0.42	0.21	0.25
	Kansas	0.01	0.01	0.02	0.04	0.02	0.02
	New York	0.18	0.20	0.20	0.12	0.27	0.15
	North Carolina	0.21	0.04	0.18	0.09	0.19	0.18
	BG White	0.59	0.56	0.71	0.69	0.67	0.65
	BG Med. HH Inc.	\$65,726	\$69,611	\$72,505	\$67,655	\$71,580.17	\$70,257
	BG Homeowner	0.72	0.73	0.78	0.77	0.76	0.75
2012-2016	'12 Dem Exp	0.54	0.46	0.30	0.36	0.38	0.41
	'12 Rep Exp	0.22	0.26	0.45	0.36	0.29	0.32
	Δ Dem Exp	0.00	0.03	-0.01	-0.05	0.00	-0.03
	Δ Rep Exp	-0.01	-0.03	-0.01	0.06	-0.01	-0.03
	'12 Dem	1.00	0.00	0.00	0.52	0.00	0.54
	'12 Rep	0.00	0.35	1.00	0.00	0.00	0.46
	White	0.58	0.60	0.86	0.82	0.71	0.72
	Urban	0.38	0.39	0.19	0.20	0.30	0.27
	Suburban	0.50	0.51	0.62	0.61	0.56	0.56
	Rural	0.12	0.09	0.19	0.20	0.15	0.17
	California	0.38	0.50	0.35	0.37	0.35	0.42
	Florida	0.21	0.20	0.26	0.35	0.21	0.17
	Kansas	0.02	0.05	0.05	0.06	0.03	0.03
	New York	0.26	0.20	0.20	0.12	0.27	0.17
	North Carolina	0.13	0.05	0.13	0.10	0.13	0.22
	BG White	0.51	0.52	0.69	0.66	0.61	0.60
	BG Med. HH Inc.	\$65,014	\$68,677	\$72,504	\$67,789	\$70,730	\$69,196
	BG Homeowner	0.64	0.64	0.75	0.73	0.69	0.70
2016-2020	'16 Dem Exp	0.55	0.45	0.29	0.37	0.39	0.43
	'16 Rep Exp	0.19	0.25	0.44	0.34	0.27	0.28
	Δ Dem Exp	0.00	0.04	0.00	-0.03	0.00	-0.01
	Δ Rep Exp	-0.01	-0.03	-0.01	0.04	-0.01	-0.03
	'16 Dem	1.00	0.00	0.00	0.47	0.00	0.58
	'16 Rep	0.00	0.29	1.00	0.00	0.00	0.42
	White	0.53	0.61	0.86	0.77	0.67	0.63
	Urban	0.41	0.39	0.18	0.24	0.30	0.34
	Suburban	0.48	0.53	0.61	0.56	0.55	0.54
	Rural	0.11	0.09	0.21	0.20	0.15	0.13
	California	0.36	0.54	0.31	0.43	0.32	0.59
	Florida	0.22	0.18	0.30	0.25	0.25	0.12
	Kansas	0.02	0.04	0.06	0.05	0.03	0.02
	New York	0.29	0.22	0.20	0.18	0.26	0.15
	North Carolina	0.11	0.03	0.13	0.08	0.14	0.12
	BG White	0.48	0.53	0.68	0.61	0.58	0.52
	BG Med. HH Inc.	\$66,993	\$78,207	\$73,618	\$70,964	\$71,213	\$76,087
	BG Homeowner	0.59	0.64	0.73	0.70	0.66	0.66

Table S6: Mean Levels of Variables by Partisan Exposure

Sample	Variable	Δ Dem. Exp.			Δ Rep. Exp.		
		< -0.05	[-0.05, 0.05]	> 0.05	< -0.05	[-0.05, -0.05]	> 0.05
2008-2012	Age	50.83	51.78	49.92	50.67	51.54	50.67
	Democrat	0.48	0.38	0.40	0.34	0.46	0.38
	Republican	0.31	0.40	0.36	0.44	0.32	0.38
	White	0.76	0.78	0.73	0.78	0.74	0.83
	Urban	0.16	0.20	0.21	0.19	0.22	0.11
	Suburban	0.64	0.63	0.63	0.66	0.62	0.64
	Rural	0.21	0.17	0.16	0.15	0.17	0.26
	California	0.32	0.35	0.34	0.37	0.35	0.28
	Florida	0.28	0.23	0.27	0.27	0.23	0.30
	Kansas	0.02	0.02	0.01	0.02	0.01	0.03
	New York	0.15	0.21	0.24	0.20	0.21	0.19
	North Carolina	0.23	0.18	0.14	0.15	0.20	0.21
	BG White	0.66	0.66	0.63	0.66	0.63	0.72
	BG Med. HH Inc.	\$65,809	\$71,087	\$69,965	\$72,774	\$68,351	\$67,500
2012-2016	BG Homeowner	0.75	0.76	0.75	0.76	0.74	0.78
	Age	52.74	53.89	52.23	52.71	53.55	53.42
	Democrat	0.47	0.42	0.46	0.37	0.48	0.34
	Republican	0.31	0.35	0.29	0.39	0.29	0.43
	White	0.70	0.71	0.66	0.73	0.66	0.82
	Urban	0.24	0.31	0.33	0.24	0.35	0.16
	Suburban	0.58	0.54	0.54	0.61	0.52	0.61
	Rural	0.19	0.14	0.12	0.14	0.13	0.23
	California	0.31	0.37	0.48	0.43	0.37	0.30
	Florida	0.29	0.23	0.19	0.23	0.22	0.31
	Kansas	0.01	0.02	0.01	0.02	0.01	0.03
	New York	0.18	0.27	0.21	0.18	0.27	0.18
	North Carolina	0.21	0.12	0.11	0.15	0.12	0.18
	BG White	0.61	0.59	0.56	0.61	0.56	0.70
2016-2020	BG Med. HH Inc.	\$63,825	\$69,974	\$70,169	\$71,001	\$68,171	\$68,489
	BG Homeowner	0.69	0.69	0.66	0.71	0.67	0.74
	Age	50.60	52.51	50.88	51.54	51.85	51.86
	Democrat	0.48	0.42	0.44	0.35	0.48	0.33
	Republican	0.25	0.33	0.27	0.38	0.26	0.39
	White	0.61	0.67	0.66	0.73	0.61	0.77
	Urban	0.29	0.32	0.33	0.24	0.37	0.18
	Suburban	0.53	0.53	0.56	0.63	0.50	0.58
	Rural	0.18	0.15	0.11	0.14	0.13	0.24
	California	0.35	0.32	0.47	0.48	0.33	0.28
	Florida	0.26	0.26	0.22	0.22	0.25	0.34
	Kansas	0.01	0.02	0.01	0.02	0.01	0.03
	New York	0.20	0.28	0.22	0.16	0.29	0.20
	North Carolina	0.18	0.12	0.08	0.12	0.12	0.16
	BG White	0.53	0.57	0.57	0.61	0.52	0.66
	BG Med. HH Inc.	\$62,983	\$70,331	\$77,620	\$79,353	\$68,336	\$66,723
	BG Homeowner	0.64	0.65	0.64	0.69	0.62	0.71

5 Main Results Full Tables

Table S7: Main Specification Regression Tables – Democratic Exposure

	DV: Δ Dem. Reg.								
	2008-2012			2012-2016			2016-2020		
	2008 Reps	2008 NPs	2008 Dems	2012 Reps	2012 NPs	2012 Dems	2016 Reps	2016 NPs	2016 Dems
Δ Dem Exp	0.114 (0.008)	0.161 (0.011)	0.258 (0.013)	0.097 (0.008)	0.158 (0.012)	0.241 (0.019)	0.233 (0.013)	0.346 (0.014)	0.284 (0.013)
Δ BG White	0.000 (0.001)	0.004 (0.002)	0.001 (0.002)	-0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.003 (0.002)	-0.001 (0.001)
Δ BG Age	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Δ BG Reg.	0.001 (0.001)	-0.001 (0.001)	-0.002 (0.001)	0.000 (0.000)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.003 (0.001)	0.001 (0.001)
Δ BG HH Income	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Δ BG Homeowner	0.000 (0.001)	0.002 (0.003)	0.000 (0.002)	0.000 (0.001)	0.000 (0.002)	0.000 (0.001)	0.000 (0.001)	-0.001 (0.002)	-0.001 (0.001)
Δ BG Med. Year Built	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Δ BG Drive Work	0.001 (0.001)	-0.004 (0.003)	-0.002 (0.001)	0.000 (0.001)	0.000 (0.002)	0.000 (0.001)	-0.003 (0.001)	-0.003 (0.003)	0.000 (0.001)
Δ BG Med. House Value	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Δ Married				0.003 (0.000)	0.007 (0.001)	-0.013 (0.002)	0.002 (0.001)	0.005 (0.003)	-0.005 (0.002)
Δ BG CollegeB				-0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	-0.002 (0.001)	-0.003 (0.002)	-0.001 (0.001)
Δ BG Unemployed				-0.001 (0.001)	-0.001 (0.002)	-0.001 (0.001)	0.006 (0.002)	0.007 (0.003)	0.003 (0.002)
Num.Obs.	6,026,476	3,629,153	6,639,303	6,764,649	4,617,512	8,578,386	7,964,156	6,786,277	10,619,616
R ²	0.256	0.330	0.228	0.303	0.370	0.273	0.275	0.321	0.254
R ² Adj.	0.117	0.100	0.064	0.098	0.066	0.058	0.085	0.067	0.059

Table S8: Main Specification Regression Tables – Republican Exposure

	DV: Δ Rep. Reg.								
	2008-2012			2012-2016			2016-2020		
	2008 Reps	2008 NPs	2008 Dems	2012 Reps	2012 NPs	2012 Dems	2016 Reps	2016 NPs	2016 Dems
Δ Rep. Exp	0.150	0.240	0.287	0.129	0.257	0.288	0.231	0.292	0.347
	(0.007)	(0.019)	(0.016)	(0.006)	(0.021)	(0.015)	(0.015)	(0.017)	(0.010)
Δ BG White	-0.002	-0.001	0.000	0.001	0.001	0.000	-0.001	-0.002	0.001
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
Δ BG Age	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Δ BG Reg.	0.001	0.001	0.002	0.001	0.001	0.000	-0.001	0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Δ BG Med. HH Income	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Δ BG Homeowner	0.000	0.001	-0.001	-0.002	0.000	-0.001	0.001	0.000	0.001
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
Δ BG Med. Year Built	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Δ BG Drive Work	-0.001	0.001	0.001	0.000	0.001	0.001	0.003	0.000	0.001
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)
Δ BG House Value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Δ Married				-0.007	0.013	0.008	-0.001	0.007	0.005
				(0.000)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)
Δ BG College				0.001	0.000	0.000	0.005	0.004	0.001
				(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)
Δ BG Unemployed				0.001	-0.003	-0.001	-0.012	-0.005	-0.005
				(0.002)	(0.002)	(0.001)	(0.003)	(0.002)	(0.001)
Num.Obs.	6,026,476	3,629,153	6,639,303	6,764,649	4,617,512	8,578,386	7,964,156	6,786,277	10,619,616
R ²	0.234	0.309	0.228	0.282	0.365	0.269	0.276	0.309	0.261
R ² Adj.	0.087	0.071	0.072	0.064	0.054	0.065	0.080	0.049	0.081

6 Additional Panel Results

6.1 Results by District Electoral Competitiveness

If campaign activity is driving the effects then results should be larger in competitive electoral districts, and potentially non-existent in uncompetitive ones. To test this, I subset the 2012-2016 and 2016-2020 linked samples by House district, and re-estimate the main specification within these district subsets. I then classify each district as competitive if across the time period the same party represented the district, and the minimum margin of victory never fell below 20 percentage points. Figure S2 shows the distribution of these district-level estimates across districts, weighting by sample size in each district, plotting separate histograms for competitive and uncompetitive districts. Not only do the results persist in uncompetitive districts but the distributions for competitive and uncompetitive districts almost entirely overlap, indicating that electoral competition is not determinant of effect size.

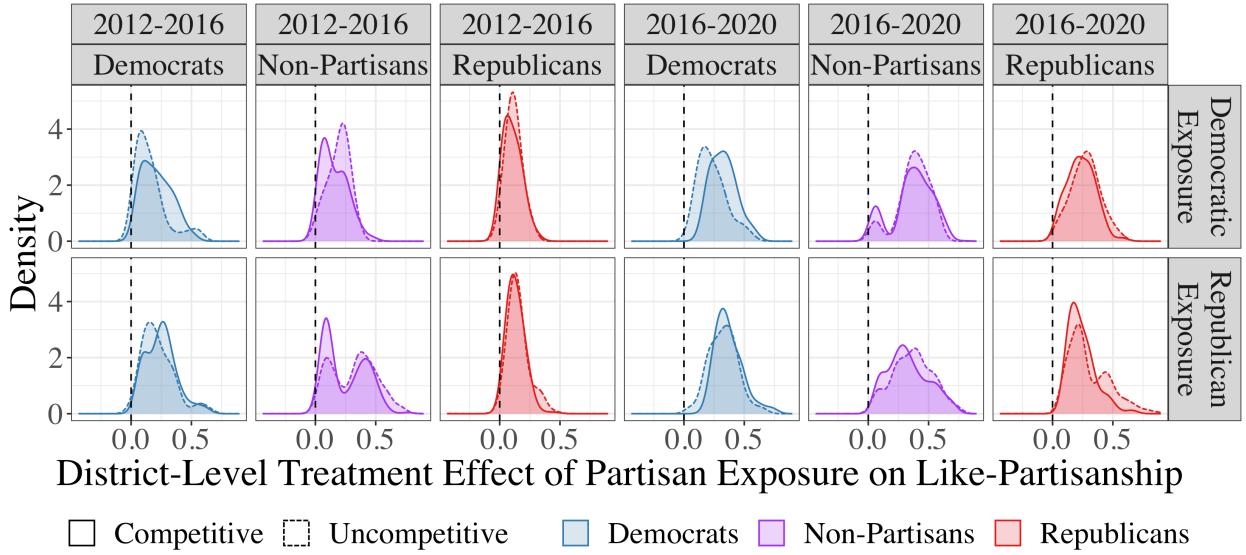


Figure S2: District Electoral Competition is not Determinant of Effect Size

Figure plots the distribution of effects across U.S. House districts for the 2012-2016 and 2016-2020 linked sample. Distributions are weighted by voters in the sample in each district. Distributions are plotted separately for year 1 Democrats (blue), Republicans (red) and Non-Partisans (purple) for each linked sample. Effects of Democratic exposure on changes in Democratic partisanship are plotted in the top row, and effects of Republican exposure on changes in Republican partisanship are plotted in the bottom row. Overlaid histograms plot effects for competitive (solid lines) and uncompetitive (dashed lines).

6.2 Main Results across Other Time Periods

Here I present results across alternative time periods. I created linked samples connecting 2008 to 2012, 2014, 2016, 2018 and 2020, linking 2012 to 2014, 2016, 2018 and 2020, and connecting 2016, to 2018 and 2020. I estimated the main specification effects for all of these years. The patterns shown in the main text are consistent regardless of which year pair I choose, although results are larger over longer time periods.

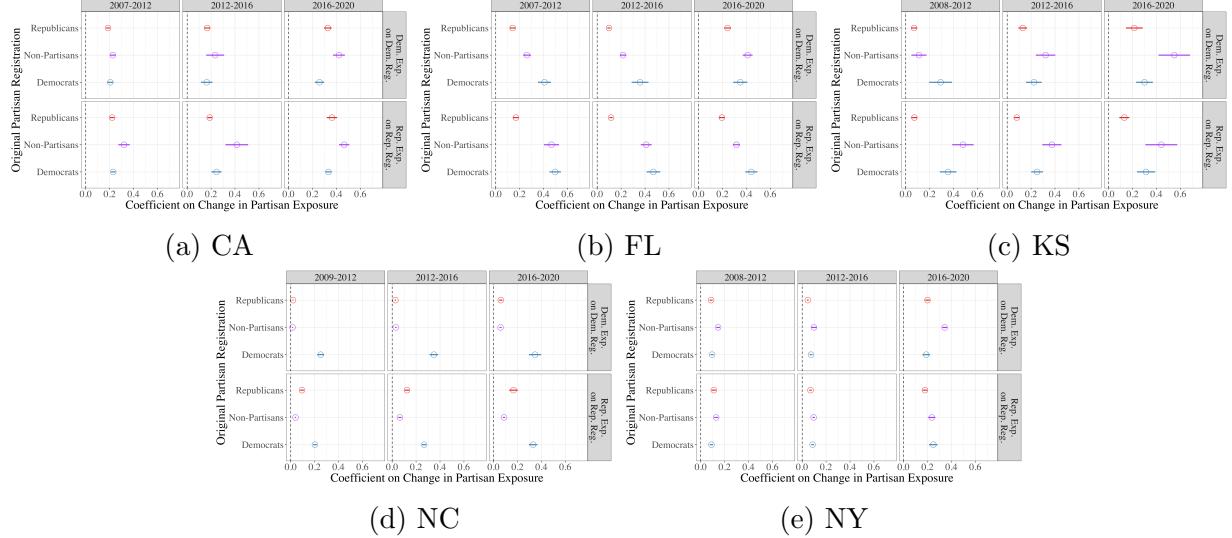


Figure S4: Effect of Partisan Exposure by State

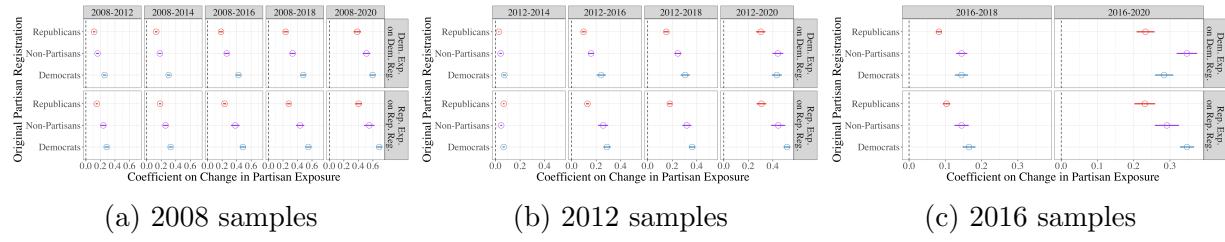


Figure S3: Effect of Partisan Exposure Across Multiple Time Periods

Figure plots the effect of Democratic and Republican exposure across alternative linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.3 Main Results by State

Here, I present the main results broken out by state. The patterns observed in the pooled samples are consistent across states, with all states exhibiting consistent direction of the effects. There is some variation in magnitude, with the largest effects observed in Kansas, and the smallest generally observed in North Carolina.

6.4 Alternative Treatment Definitions

Next, I present the results under alternative definitions of treatment and alternative specifications. I present these results for the 2012-2016 and 2016-2020 linked samples. These include:

1. Aspatial exposure, the proportion of Democrats or Republicans in each voter's 1,000 nearest neighbors, with no distance weighting.
2. Spatial Democratic ratio of Republicans and Democrats, the spatially weighted proportion of Democrats out of the all the Democrats and Republicans in a voter's 1,000 nearest neighbors (dropping non-partisans from the denominator).
3. Spatial exposure omitting neighbors living in the same household as the voter.
4. Spatial exposure within each voter's 100 and 500 nearest neighbors.
5. Spatial exposure among neighbors within one mile of each voter and one half mile.
6. Change in spatial exposure coming from new neighbors (dropping neighbors who switch).
7. Controlling for number of Democratic/Republican switchers among neighbors.
8. Census Block and Census Block Group proportions of Democrats and Republicans out of total registered voters in the Census geography.

6.4.1 Aspatial Exposure

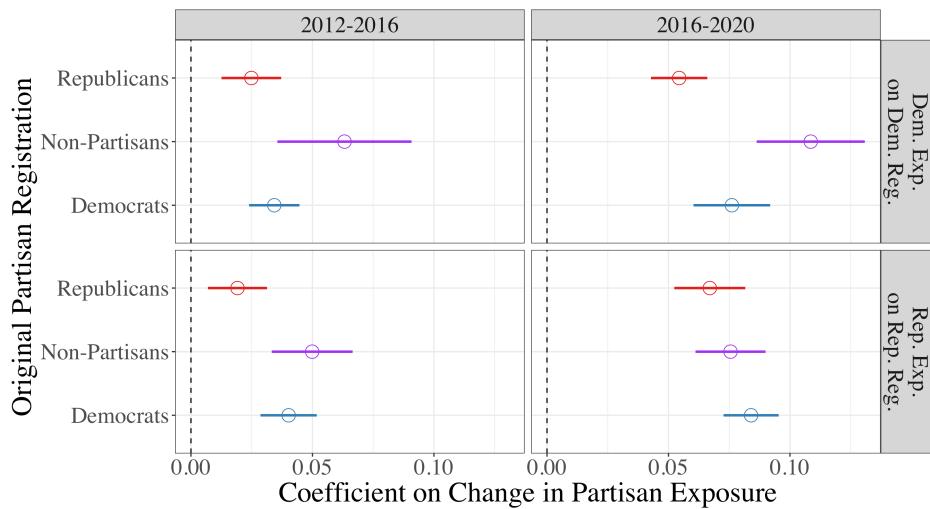


Figure S5: Effect of Aspatial Partisan Exposure

Figure plots the effect of Democratic and Republican aspatial exposure for the 2012-2016 and the 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.2 Democratic-Republican Exposure Ratio

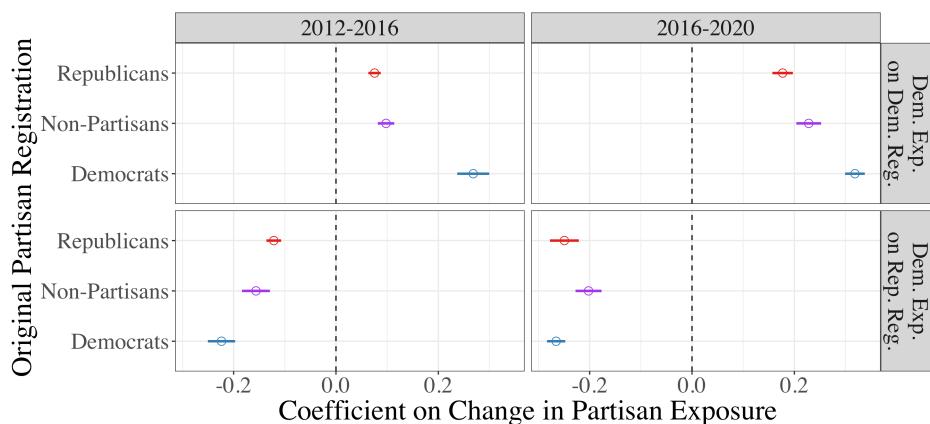


Figure S6: Effect of Net Democratic Partisan Exposure

Figure plots the effect of net Democratic exposure for the 2012-2016, and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.3 Spatial Exposure omitting same-household neighbors

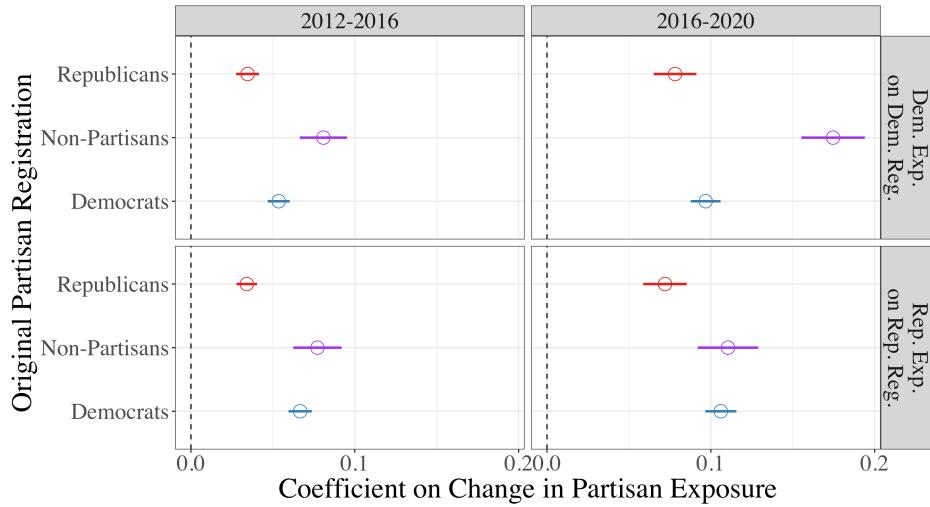
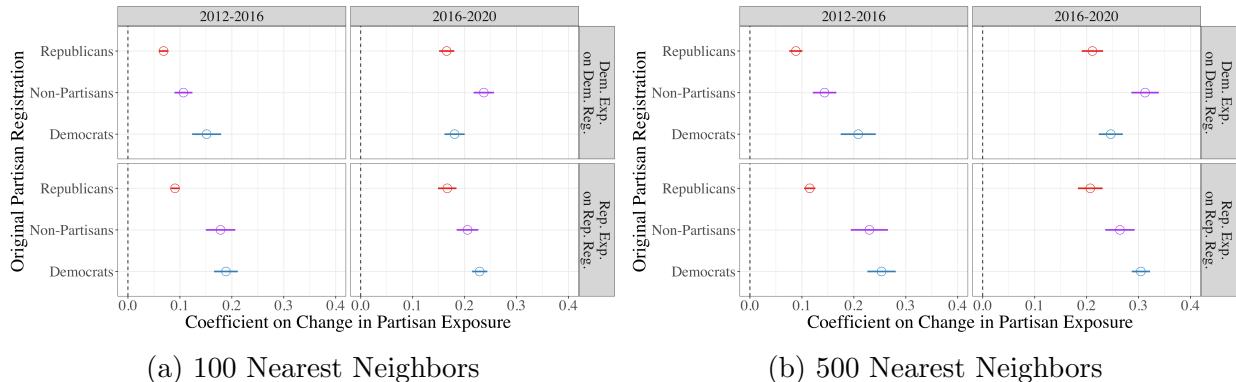


Figure S7: Effect of Partisan Exposure without same-household neighbors

Figure plots the effect of Democratic and Republican exposure excluding neighbors living in the same household as the voter for the 2012-2016, and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.4 Spatial exposure within 100 and 500 nearest neighbors



(a) 100 Nearest Neighbors

(b) 500 Nearest Neighbors

Figure S8: Effect of Partisan Exposure within One Mile and a Half Mile

Figure plots the effect of Democratic and Republican exposure among voters' 100 (left) and 500 (right) nearest neighbors for the 2012-2016 and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.5 Spatial exposure within one mile and a half-mile

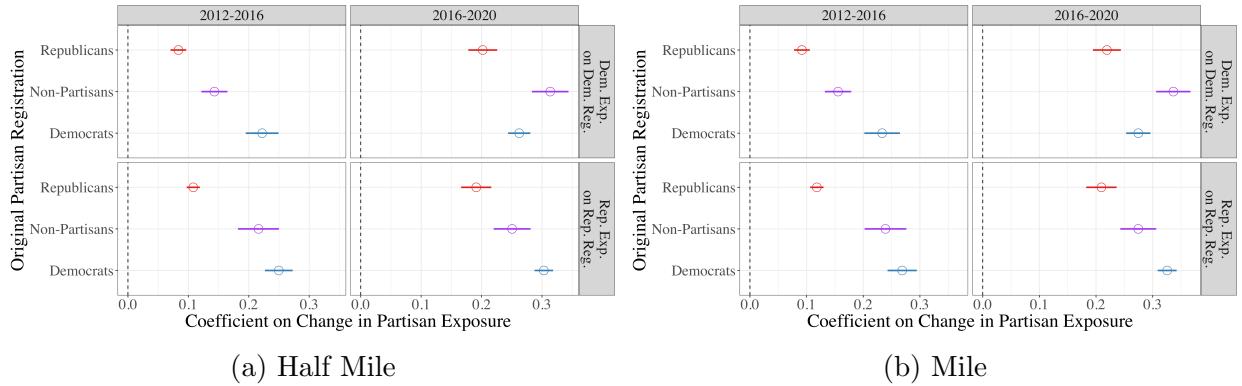


Figure S9: Effect of Partisan Exposure within One Mile and a Half Mile

Figure plots the effect of Democratic and Republican exposure among neighbors living within a mile (right plot) and a half mile (left plot) from the voter for the 2012-2016 and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.6 Change in Spatial Exposure from new neighbors only

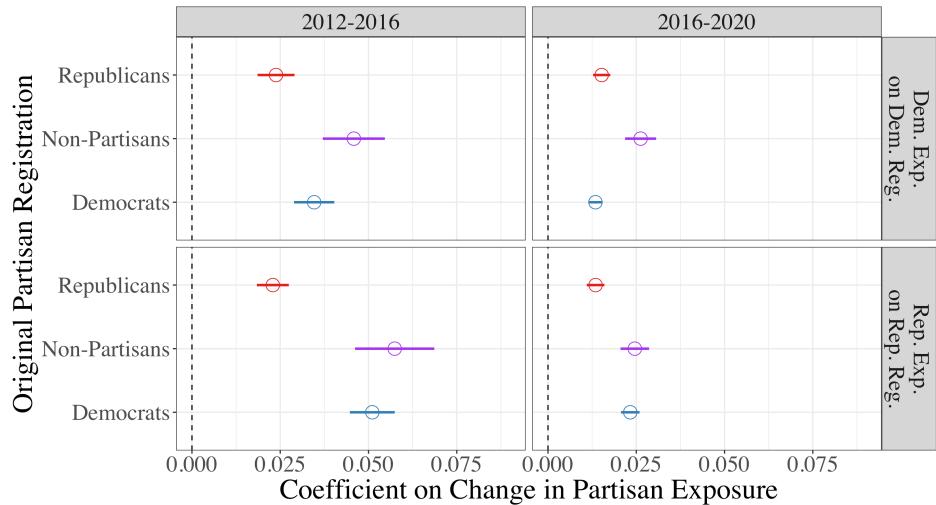


Figure S10: Effect of Partisan Exposure from New Neighbors Only

Figure plots the effect of Democratic and Republican exposure from new neighbors only for the 2012-2016, and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.7 Controlling for number of neighbors switching partisanship

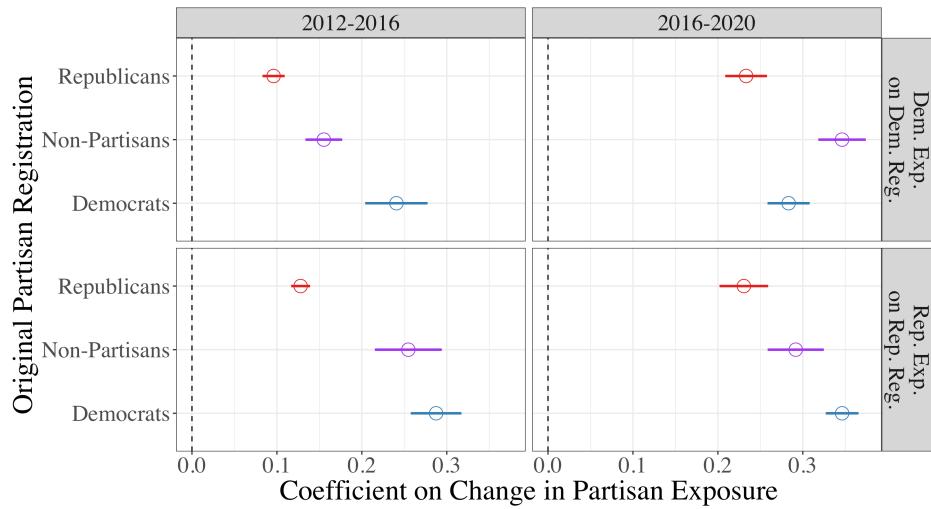


Figure S11: Effect of Partisan Exposure Controlling for Number of Neighbor Partisan Switchers

Figure plots the effect of Democratic and Republican exposure from specification controlling for the number of neighbors who switch to the Democratic or Republican party, to measure the effect of changes in partisan exposure accounting for neighbors switching. Effects are reported for the 2012-2016, and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.4.8 Census Block and Census Block Group

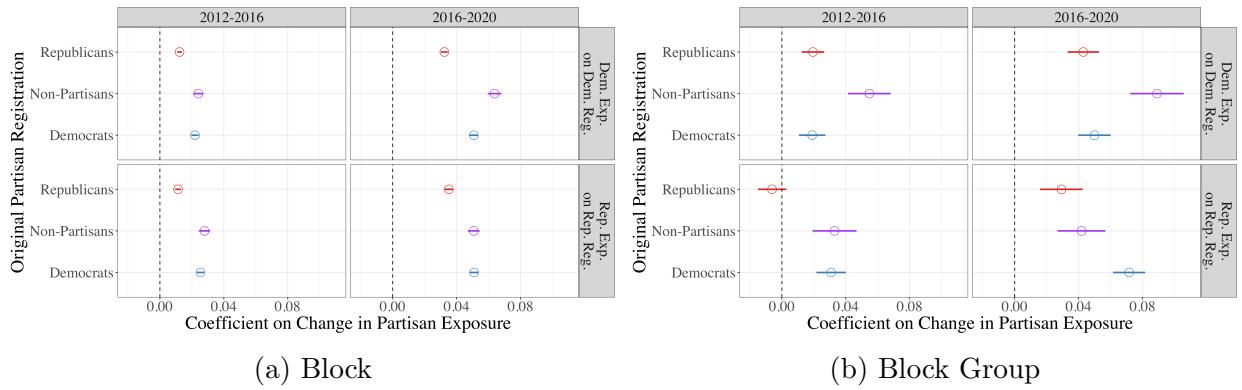


Figure S12: Effect of Partisan Exposure in a Voter’s Census Block and Census Block Group

Figure plots the effect of Democratic and Republican exposure in a voter’s Census Block (left plot) and Census Block Group (right plot) for the 2012-2016 and 2016-2020 linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.

6.5 Polynomial Specification

To test for non-linearity in the effects, I estimate an alternative specification adding in second, third, and fourth-order polynomial transformations of changes in Democratic and Republican partisan exposure. With the estimates from these models, in Figure S13 I plot the predicted change in likelihood of registering Democrat or Republican across different levels of changes in Democratic or Republican exposure. The marginal effect of an increase in partisan exposure is increasing with changes in that exposure, meaning that voters are most persuaded to shift their registration in respond to larger changes, whereas small changes seem to have negligible effects.

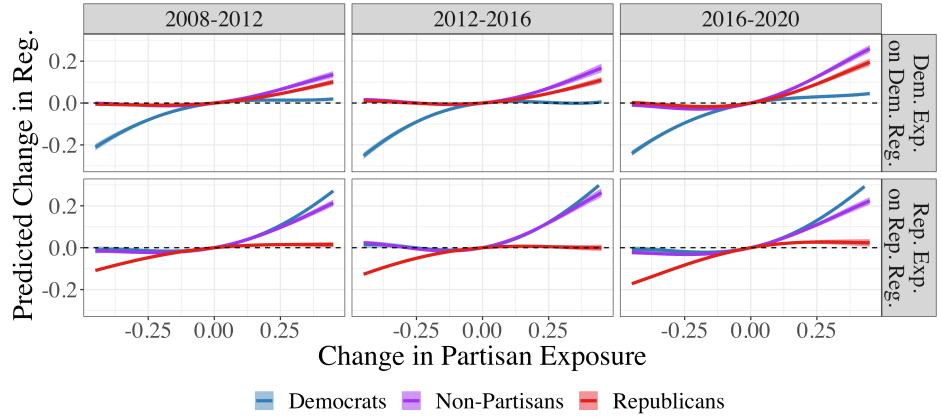


Figure S13: Marginal Effect of Partisan Exposure is Increasing with Size of the Change in Partisan Exposure

Figure plots the predicted change in Democratic (top row) or Republican (bottom row) partisanship in the final year of each (2008-2012, 2012-2016, 2016-2020) linked sample as a function of the size of the shift in partisan exposure. Predictions come from the main specification model with second, third, and fourth order polynomial terms of the treatment added in. Predictions are plotted separately for subsets based on partisanship at the start of each linked sample.

6.6 Downstream Effect of Changes in Partisan Exposure

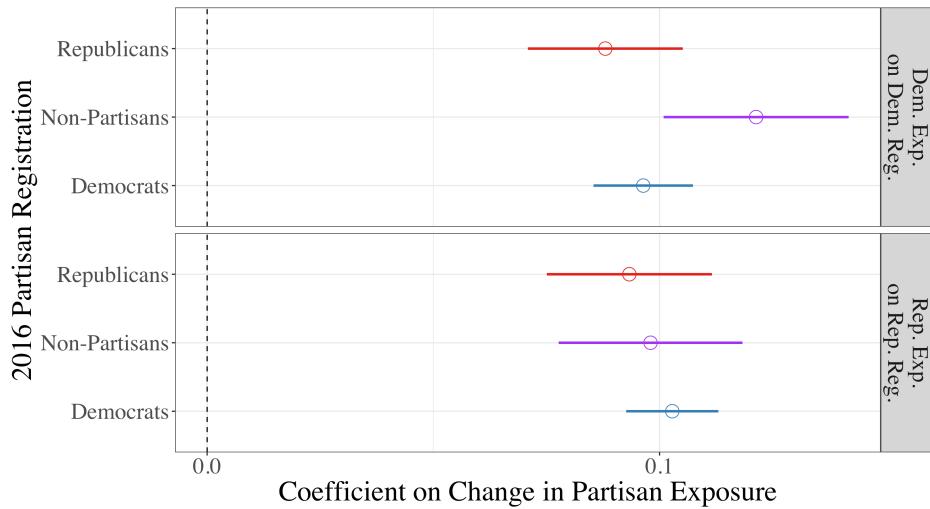


Figure S14: Effect of 2012-2016 Change in Partisan Exposure on 2016-2020 Change in Registration

Figure plots the effect of 2012-2016 changes in partisan exposure on 2016-2020 changes in registration. Results are plotted separately based on partisanship in the first year of each linked sample.

6.7 Heterogeneous Results by Housing Type and Age

In the paper I present heterogeneous results subset by housing type and age for the 2016-2020 linked sample. Here I show the same results for the 2012-2016 linked sample, as well as the 2012-2016 and 2016-2020 results subset to just White voters. Housing type is not measured in the earlier state voterfiles, so I do not estimate 2008-2012 results. Subsetting to Whites serves to check that the patterns observed in the age and housing subsets are not a result of unequal distributions of race across these subsets.

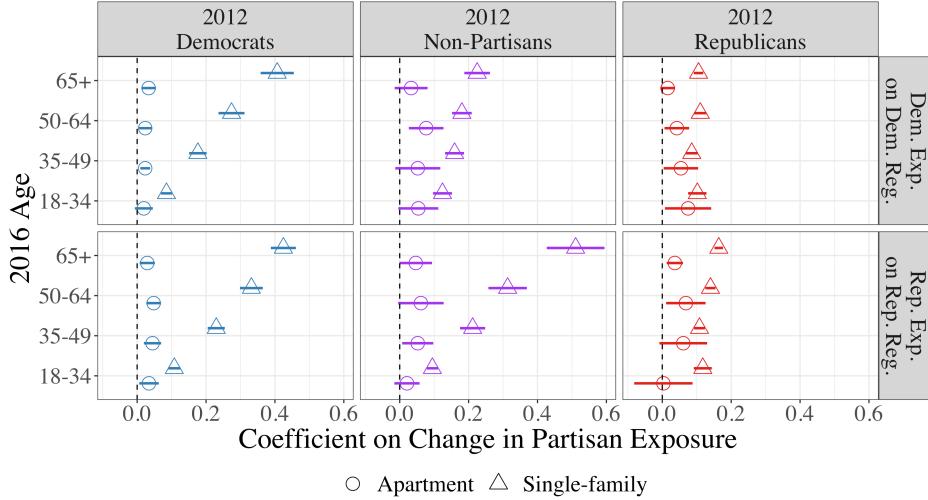


Figure S15: Effect of Partisan Exposure by Age and Housing Type

Figure plots the effect of a one unit (100 percentage point) increase in Democratic exposure on Democratic partisanship (top row) and the effect of a similar increase in Republican exposure on Republican partisanship (bottom row) for the 2012-2016 linked sample. Results are plotted separately by subsets of age (Y-axis) and whether the voter lives in a single-family home (triangles) or an apartment (circles). Results are also plotted separately for subsets based on partisanship in the first year of the linked sample. Bars plot 95% confidence intervals.

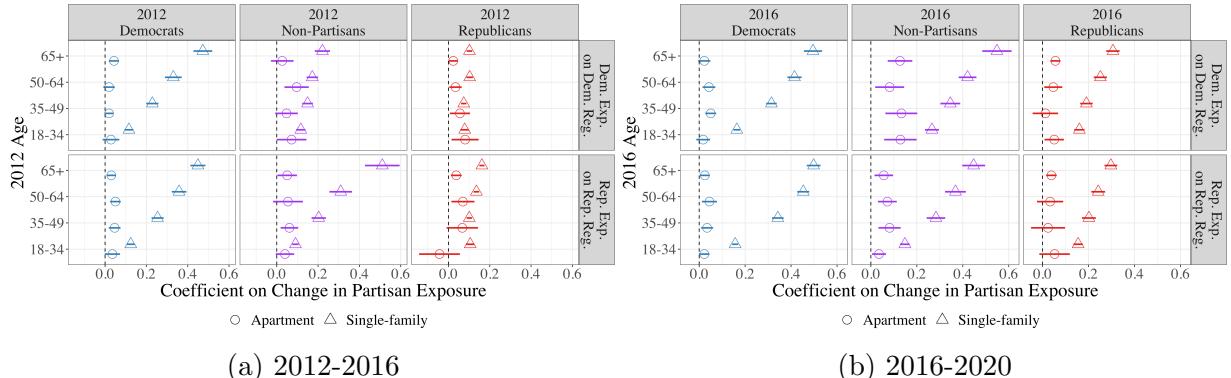


Figure S16: Effect of Partisan Exposure by Age and Housing Type – White Voters

Figure plots the effect of a one unit (100 percentage point) increase in Democratic exposure on Democratic partisanship (top row) and the effect of a similar increase in Republican exposure on Republican partisanship (bottom row) for 2012-2016 and 2016-2020 linked samples. Results are plotted separately by subsets of age (Y-axis) and whether the voter lives in a single-family home (triangles) or an apartment (circles). Results are also plotted separately for subsets based on partisanship in the first year of the linked sample. Bars plot 95% confidence intervals.

7 Survey

7.1 Administering the Survey

The survey was in the field from June 29, 2020 to August 28, 2020, administered from email lists linked to voter data. The survey was taken online through Qualtrics. Surveys were delivered by e-mail via Qualtrics, and e-mails were drawn from e-mail lists connected to voterfile data by Target Smart. The survey was fielded nationwide, with voters randomly drawn from the email list, and a large oversample was taken in the 5 states from the panel analysis. Sampled voters were sent an initial e-mail inviting them to be in the survey, and follow-up reminder emails were sent each week for the following 3 weeks. In total, 4,826,036 voters were contacted, with 71,506 total responses for a response rate of 1.48%. Of these responses, 92.3% verified that they were the person listed on the voterfile. For the analysis in this paper I limit the sample to voters who were also in the panel analysis (and thus living in California, Florida, Kansas, New York, or North Carolina), and who verified their identity, leaving a sample of 24,623 voters.

7.2 Survey Weights and Descriptive Statistics

In the analysis, I use survey weights designed to make the survey sample look more like the registered population of the states in the sample. Survey weights were constructed by estimating a logistic regression, fit to all the voters in the five states, modeling being in the sample as a function of voter age, gender, race, party, state, 2016 turnout, and 2018 turnout:

$$\text{Survey}_i = \alpha + \text{Age}_i + \text{Race}_i + \text{Party}_i + \text{State}_i + \text{Vote 2016}_i + \text{Vote 2018}_i + \text{Gender}_i + \epsilon_i$$

From this model I calculate the probability of being in the sample and invert the prob-

Table S9: Survey Descriptive Statistics and Population Comparisons

Status	Registered Population	Sample	Sample Weighted
Democrat	0.424	0.408	0.400
Married	0.370	0.544	0.446
Republican	0.271	0.369	0.306
White	0.641	0.853	0.662
Black	0.103	0.052	0.092
Hispanic	0.165	0.053	0.156
Asian	0.050	0.018	0.050
Female	0.511	0.514	0.515
Age	50.097	62.081	53.374
Democratic Spatial Exposure	0.430	0.380	0.414
Democratic Exposure	0.430	0.377	0.412
Republican Spatial Exposure	0.270	0.325	0.289
Republican Exposure	0.270	0.318	0.287
Age Spatial Exposure	49.567	52.162	49.968
Age Exposure	49.889	51.415	50.197
White Spatial Exposure	0.632	0.778	0.675
White Exposure	0.634	0.756	0.674
Block Group Registered	0.481	0.631	0.596
Block Group Median Age	41.294	43.761	41.605
Block Group Median Household Income	78,956	84,755	81,719
Block Group Homeowner	0.629	0.713	0.666
Block Group Median Year House Built	1974	1978	1974
Block Group Drive to Work	0.810	0.848	0.828
Block Group Median House Value	421,767	405,621	409,932
Vote 2016 General	0.662	0.948	0.707
Vote 2018 General	0.576	0.907	0.607

ability ($1/p$) to get the survey weight for each voter. Table S9 shows the mean levels of variables for the survey sample compared to the registered voting population of the 5 states from the panel. The table also shows the average levels of the variables when accounting for survey weights, which generally move the average levels of variables for the survey sample towards the averages of the broader population.

7.3 Survey Results

Table S11: Main Survey Results

	Dem vs. Rep Neighbors		Contact Dems	Contact Reps	Share PID		Dem Ideo	Rep Ideo	Dem Therm	Rep Therm
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Δ Dem Exp '16-'20	0.57 (0.17)		0.74 (0.32)		-0.35 (0.24)		-0.35 (0.14)		21.64 (3.63)	
Dem Exp '16	0.56 (0.11)		0.64 (0.22)		-0.42 (0.18)		-0.42 (0.11)		16.43 (2.42)	
Δ Rep Exp '16-'20		-0.45 (0.14)		0.89 (0.31)		0.02 (0.31)		-0.15 (0.19)		15.93 (3.32)
Rep Exp '16		-0.67 (0.11)		1.29 (0.21)		0.02 (0.22)		0.21 (0.13)		10.37 (2.35)
Δ Dem Exp '16-'20 * Dem					0.34 (0.37)					
Dem Exp '16 * Dem					0.74 (0.22)					
Δ Rep Exp '16-'20 * Rep						0.44 (0.40)				
Rep Exp '16 * Rep						0.61 (0.24)				
BG White	-0.75 (0.14)	-0.74 (0.15)	-0.03 (0.30)	0.49 (0.25)	0.06 (0.18)	-0.13 (0.17)	0.01 (0.14)	-0.12 (0.17)	1.75 (3.20)	-0.91 (2.88)
BG Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.03 (0.05)	0.01 (0.05)
BG Regs	0.32 (0.11)	0.32 (0.11)	0.00 (0.20)	-0.14 (0.19)	0.08 (0.17)	0.15 (0.13)	0.00 (0.10)	0.07 (0.12)	1.84 (2.70)	-2.17 (2.75)
BG HH Inc	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
BG College	0.58 (0.15)	0.60 (0.14)	0.67 (0.35)	-0.03 (0.29)	0.17 (0.25)	0.05 (0.26)	0.02 (0.16)	-0.31 (0.19)	0.96 (3.63)	-2.32 (3.09)
BG Homeowner	0.06 (0.12)	0.09 (0.12)	-0.18 (0.22)	-0.10 (0.19)	-0.01 (0.19)	-0.18 (0.15)	0.10 (0.13)	-0.24 (0.12)	-0.55 (2.41)	-2.34 (3.08)
BG Year Built	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.03 (0.04)	-0.01 (0.04)
BG Drive Work	0.15 (0.18)	0.15 (0.18)	-0.59 (0.33)	-0.22 (0.27)	-0.12 (0.28)	0.13 (0.24)	0.15 (0.23)	0.25 (0.28)	0.83 (3.48)	6.44 (4.65)
BG Unemployed	0.59 (0.35)	0.61 (0.36)	-0.09 (0.67)	0.10 (0.57)	1.38 (0.51)	0.94 (0.49)	-0.20 (0.38)	0.18 (0.45)	-1.60 (8.64)	-1.80 (9.36)
BG House Value	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Asian	-0.03 (0.11)	-0.05 (0.11)	-0.62 (0.23)	-0.70 (0.15)	-0.21 (0.17)	-0.40 (0.18)	0.03 (0.11)	0.04 (0.14)	0.58 (2.36)	4.67 (2.06)
Black	0.13 (0.09)	0.14 (0.09)	0.25 (0.15)	-0.46 (0.13)	0.05 (0.20)	0.32 (0.13)	-0.22 (0.09)	-0.13 (0.13)	11.14 (2.18)	-5.53 (1.99)
Hispanic	-0.08 (0.07)	-0.08 (0.07)	-0.13 (0.15)	-0.12 (0.15)	-0.11 (0.15)	-0.07 (0.13)	-0.08 (0.12)	-0.13 (0.09)	1.88 (1.83)	2.68 (1.68)
White	-0.10 (0.06)	-0.10 (0.06)	-0.21 (0.10)	-0.09 (0.10)	0.01 (0.12)	0.05 (0.12)	0.13 (0.08)	-0.26 (0.09)	-1.29 (1.41)	3.90 (1.40)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.18 (0.03)	-0.02 (0.03)
Male	0.00 (0.03)	0.00 (0.03)	0.06 (0.06)	0.04 (0.05)	0.21 (0.04)	0.03 (0.04)	0.08 (0.02)	0.00 (0.04)	-2.89 (0.71)	-2.34 (0.59)
Liberalism	0.03 (0.01)	0.03 (0.01)	0.07 (0.02)	-0.19 (0.02)	-0.03 (0.02)	0.09 (0.02)	-0.25 (0.01)	-0.16 (0.02)	11.46 (0.31)	-11.96 (0.34)
Married	0.00 (0.03)	0.01 (0.03)	0.16 (0.05)	0.15 (0.05)	0.06 (0.05)	0.08 (0.05)	0.05 (0.03)	-0.03 (0.03)	1.70 (0.70)	-0.90 (0.55)
College	-0.02 (0.03)	-0.01 (0.03)	0.24 (0.05)	0.08 (0.06)	-0.05 (0.04)	0.00 (0.06)	0.04 (0.04)	-0.22 (0.04)	2.38 (0.76)	-2.90 (0.78)
Homeowner	-0.20 (0.04)	-0.20 (0.04)	0.11 (0.06)	0.34 (0.07)	0.19 (0.07)	0.15 (0.07)	0.06 (0.05)	-0.15 (0.04)	0.15 (0.78)	1.32 (0.91)
Years Residence	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.03 (0.02)	0.03 (0.02)
Non-Partisan	0.10 (0.04)	0.07 (0.04)	-0.17 (0.07)	-0.05 (0.07)	0.11 (0.05)	0.16 (0.05)	0.11 (0.06)	-14.17 (1.01)	5.56 (0.97)	
Republican	0.09 (0.05)	0.10 (0.05)	0.02 (0.09)	0.18 (0.09)		-10.62 (5.20)	0.43 (0.04)	0.19 (0.06)	-22.46 (1.18)	20.20 (1.37)
Democrat					6.60 (4.38)					
Num.Obs.	18956	18956	17983	17997	14232	14232	20980	20965	18720	18686
R2	0.585	0.585	0.388	0.444	0.421	0.425	0.513	0.431	0.718	0.709
R2 Adj.	0.493	0.494	0.246	0.315	0.252	0.257	0.415	0.317	0.655	0.644

Table S13: Partisan Exposure on Perceptions of Neighbors' Partisanship, Interaction with Partisan Neighbors, and Comfort Sharing Partisanship with Neighbors - No Weights

	Dem vs Rep Neighbors	Contact Dems	Contact Reps	Share PID		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ Democratic Exposure '16-'20	0.53 (0.11)	0.56 (0.19)		-0.40 (0.18)		
Democratic Exposure '16	0.57 (0.08)	0.52 (0.13)		-0.33 (0.12)		
Δ Democratic Exposure '16-'20 * Democrat				0.49 (0.25)		
Democratic Exposure '16 * Democrat				0.74 (0.15)		
Δ Republican Exposure '16-'20		-0.40 (0.11)	0.78 (0.18)		-0.07 (0.21)	
Republican Exposure '16		-0.64 (0.08)	1.23 (0.13)		-0.18 (0.16)	
Δ Republican Exposure '16-'20 * Republican				0.65 (0.27)		
Republican Exposure '16 * Republican				0.84 (0.17)		
Mean Outcome	3.83	3.83	3.44	3.55	4.05	4.05
Number of Observations	18,956	18,956	17,983	17,997	14,232	14,232
R ²	0.501	0.501	0.266	0.318	0.259	0.262
R ² Adj.	0.391	0.391	0.095	0.160	0.043	0.046

Table presents the results from least squares regression modeling the relationship between Democratic and Republican exposure and perceptions of neighbors' partisanship, contact with Democratic or Republican neighbors, and level of comfort with neighbors knowing one's partisanship. Coefficients on Democratic or Republican Exposure represent the change in the outcome corresponding to a 1 unit (i.e. going from 0 to 1 Democratic exposure) increase in exposure.

Table S14: Partisan Exposure on Party Ideology and Partisan Favorability - No Weights

	Dem Ideo (1)	Rep Ideo (2)	Dem Therm (3)	Rep Therm (4)
Δ Democratic Exposure '16-'20	-0.46 (0.09)		20.34 (2.37)	
Democratic Exposure '16	-0.40 (0.06)		14.39 (1.65)	
Δ Republican Exposure '16-'20		0.02 (0.10)		15.93 (2.50)
Republican Exposure '16		0.23 (0.08)		9.99 (1.86)
Mean Outcome	5.86	2.14	49.28	45.97
Num.Obs.	20,980	20,965	18,720	18,686
R ²	0.407	0.285	0.701	0.686
R ² Adj.	0.288	0.141	0.635	0.616

Table presents the results from least squares regression modeling the relationship between Democratic and Republican exposure and perceptions feelings of favorability towards Democrats and Republicans. Coefficients on Democratic or Republican Exposure represent the change in the outcome corresponding to a 1 unit (i.e. going from 0 to 1 Democratic exposure) increase in exposure.