Supporting Information for "Partisan Conversion through Neighborhood Influence"

Contents

1 Voterfile Data and Panel Construction

Data for this study consists of yearly Target Smart snapshots from 2012-2020 for California, Florida, Kansas, New York, and North Carolina, and older state files (CA 2005, 2007, 2009; FL 2007, 2009; KS 2008; NY 2001, 2008; NC 2009). 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 provides 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.

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.

2 Mover Analysis

Tables S2 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,

Table S1: Mean Variable Levels Across Linked and Unlinked Samples

	2008-2012		2012-2016		2016-2020	
Variable	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	0.400	0.451	0.422	0.440	0.426	0.431
Republican Exposure	0.364	0.306	0.315	0.285	0.291	0.272

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.

Table S2: Partisan Differences in Old and New Neighborhoods for Movers

	2012-2016				2016-2020			
	% Democrat		% Republican		% Democrat		% Republican	
Party 2020	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

Table reports Block Group % Democrat and % Republican of origin and destination neighborhoods for movers.

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.

Next, I model the decision to move as a function of changes in the Census Block Group[1] 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 census geography. I estimate models of the form:

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

Figure S1 reports the results, showing very small effects on moving. Combined with the information that voters do not replace old neighborhoods with substantially more homogeneous ones, there does not appear to be clear evidence pointing towards partisan residential sorting.

[1] I 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.

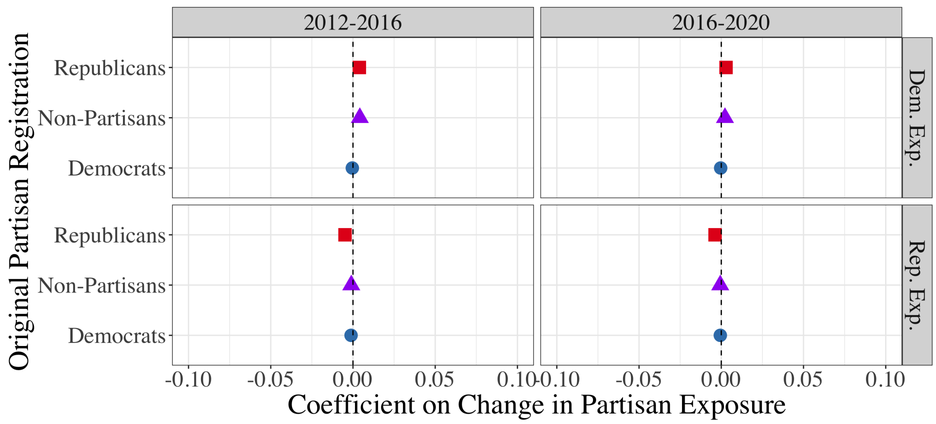


Figure S1: Effect of Census Block Group Changes in Partisan Exposure on Moving

Table S3: Average Within-Strata Standard Deviation of Changes in Partisan Exposure

		Main Specification			Pre-Trend Specification	
Exposure Type	Subset	2008-2012	2012-2016	2016-2020	2012-2016	2016-2020
Democratic	Democrats	0.087	0.073	0.075	0.084	0.084
Republican	Democrats	0.068	0.052	0.051	0.069	0.066
Democratic	Republicans	0.076	0.064	0.068	0.071	0.074
Republican	Republicans	0.097	0.082	0.087	0.086	0.089
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

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 to narrow the scope of comparison in the estimation. For each linked sampled (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 and Republican Exposure. I also do this for the pre-trend specification strata. I report the average within-strata standard deviations in Table S3, showing that there is variation within strata in changes in partisan exposure, making the within Zip Code and other characteristic comparison feasible.

Table S4: Mean Levels of Variables by Party 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
	White	0.66	0.62	0.88	0.83	0.77	0.77
	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
	White	0.58	0.60	0.86	0.82	0.71	0.72
	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
	White	0.53	0.61	0.86	0.77	0.67	0.63
	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

4 Descriptive Statistics and Main Results Tables

Table S4 presents average levels of descriptive variables for voters by partisan stability or partisan switching across the linked samples. Table S5 shows these statistics by levels of changes in Democratic and Republican exposure. Table S6 presents the full regression tables from the current effect main specifications.

5 Simulation Analysis of Within-Zip Code Switching

To assess the sensitivity of the estimation to spatially clustered party switching that is not accounted for by matching voters on Zip Code, I conduct a simulation that generates increasingly stronger within-Zip Code party switching. The aim is to assess how much of this clustered switching it would take for the estimation of the current effects to return coefficients as large as the effects obtained in the main analysis.

Table S5: Mean Levels of Variables by Partisan Exposure

		Δ Dem. Exp.			Δ Rep. Exp.		
Sample	Variable	< -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
	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
	BG Homeowner	0.75	0.76	0.75	0.76	0.74	0.78
2012-2016	Age	52.75	53.90	52.25	52.73	53.57	53.42
	Democrat	0.46	0.42	0.46	0.37	0.48	0.34
	Republican	0.31	0.36	0.29	0.40	0.30	0.43
	White	0.71	0.71	0.66	0.73	0.67	0.82
	BG White	0.61	0.60	0.56	0.62	0.58	0.70
	BG Med. HH Inc.	\$63,732	\$69,955	\$70,990	\$68,132	\$68,480	\$68,489
	BG Homeowner	0.69	0.69	0.67	0.71	0.67	0.74
2016-2020	Age	50.60	52.51	50.90	51.52	51.86	51.85
	Democrat	0.48	0.41	0.44	0.35	0.48	0.33
	Republican	0.26	0.33	0.27	0.38	0.26	0.39
	White	0.61	0.68	0.67	0.73	0.62	0.78
	BG White	0.53	0.57	0.57	0.61	0.53	0.67
	BG Med. HH Inc.	\$62,877	\$70,261	\$77,725	\$79,324	\$68,320	\$66,754
	BG Homeowner	0.64	0.65	0.65	0.70	0.62	0.71

The simulation was run on the sub-sample of voters in California in the 2012-2016 linked sample, and focused on how generating spatially clustered Democratic party switching would influence the estimation of the effect of Democratic exposure on Democratic partisanship[2]. Within-Zip Code party switching was generated by measuring the distance in meters that each voter lives from the centroid of their Zip Code. Voters were then binned into within-Zip Code distance decile groups, creating a variable for each voter that ranges from 1 to 10, with 10 representing the 10% of voters that live closest to the center of the Zip Code. Using this variable, each voter was assigned a probability of being a Democrat in 2016. For voters that were not Democrats in 2012, this was based on the following formula, with proximity to the Zip Code centroid increasing the likelihood of becoming a Democrat:

$$P(D_{t+1} = 1 | D_t = 0) = \sigma^{-1}(\mu_i + \beta Dist_i)$$

[2] The sample was restricted to reduce the amount of time it took to run the simulation, which even on the restricted sample took several days.

Table S6: Current Effects Main Specification Regression Tables

DV: Δ Dem. Reg.	2008-2012			2012-2016			2016-2020		
	'08 Reps	'08 NPs	'08 Dems	'12 Reps	'12 NPs	'12 Dems	'16 Reps	'16 NPs	'16 Dems
Δ Dem Exp	0.114	0.161	0.258	0.090	0.163	0.241	0.235	0.355	0.282
	(0.008)	(0.011)	(0.013)	(0.007)	(0.013)	(0.019)	(0.013)	(0.016)	(0.013)
Δ BG White	0.000	0.004	0.001	-0.001	0.000	0.000	0.000	0.003	-0.001
	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(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	0.000	0.000	0.000	0.000	0.003	0.001
	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(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	0.002	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000
	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(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	-0.004	-0.002	0.000	0.000	0.000	-0.003	-0.003	0.000
	(0.001)	(0.003)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.003)	(0.001)
Δ BG Med. Home 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	0.007	-0.013	0.002	0.005	-0.005
				(0.000)	(0.001)	(0.002)	(0.001)	(0.003)	(0.002)
Δ BG CollegeB				-0.001	0.000	0.000	-0.002	-0.003	-0.001
				(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
Δ BG Unemployed				-0.001	-0.001	-0.001	0.006	0.007	0.003
				(0.001)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)
Num.Obs.	6,026,476	3,629,153	6,639,303	6,764,649	4,617,512	8,578,386	8,217,689	6,930,237	10,755,390
R^2	0.256	0.330	0.228	0.303	0.370	0.273	0.273	0.321	0.255
R^2 Adj.	0.117	0.100	0.064	0.098	0.066	0.058	0.083	0.067	0.059

DV: Δ Rep. Reg.	2008-2012			2012-2016			2016-2020		
	'08 Reps	'08 NPs	'08 Dems	'12 Reps	'12 NPs	'12 Dems	'16 Reps	'16 NPs	'16 Dems
Δ Rep. Exp	0.150	0.240	0.287	0.129	0.260	0.288	0.291	0.296	0.345
	(0.007)	(0.019)	(0.016)	(0.006)	(0.020)	(0.015)	(0.014)	(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 Home 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	8,217,689	6,930,237	10,755,390
R^2	0.234	0.309	0.228	0.282	0.365	0.269	0.275	0.312	0.263
R^2 Adj.	0.087	0.071	0.072	0.064	0.054	0.065	0.079	0.052	0.081

where μ_i is an individual intercept parameter drawn from a normal distribution $N(-10, 1)$, and β is the parameter controlling the relationship between proximity to the Zip Code centroid and Democratic partisanship. β values consist of 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.80, 0.85, 0.90, 0.95, and 1. $\sigma^{-1}(\cdot)$ is the inverse logit function mapping the linear model $\mu_i + \beta Dist_i$ to probability values between 0 and 1.

For voters that were already Democrats, party switching was generated such that proximity to the Zip Code increased the likelihood of remaining a Democrat. For these voters, the $Dist_i$ variable was reversed coded (so that 10 is now furthest away from the Zip Code centroid), and the probability was derived from the following formula:

$$P(D_{t+1} = 1 | D_t = 1) = 1 - \sigma^{-1}(\mu_i + \beta RevDist_i)$$

Figure S2 plots the likelihood of being a Democrat as a function of distance to the Zip Code centroid across voters in the linked sample, plotted separately by starting partisanship, and with separate plots for each β parameter. With these probabilities, partisan changes were simulated by drawing from a Bernoulli distribution (Democrat or Not Democrat) for each voter. This setup makes it such that the only party switching occurring in the data is a function of proximity to the Zip Code centroid. Ten simulated datasets were generated. For each simulated dataset, partisan exposure was re-calculated by identifying the 1,000 nearest neighbors for each voter and using the simulated Democratic partisanship to calculated the weighted proportion of Democrats. These new partisan exposure measures were then used to construct the treatment variable, the change in Democratic exposure from 2012 to 2016. The simulated data was also used to update the outcome, at which point the specification from the main analysis was estimated.

Figure S3 plots the average point estimate across simulated datasets for increasing values of β. For interpretability, the X-axis is translated to the ratio of changes in Democratic

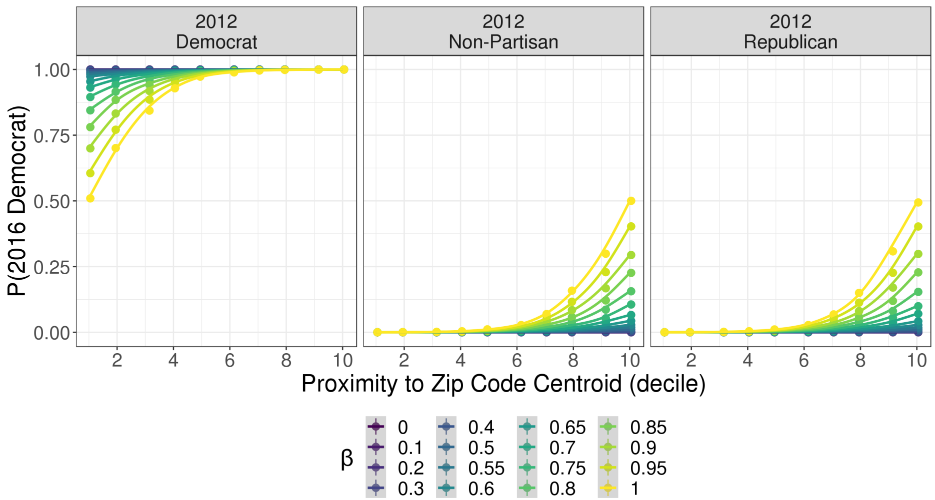


Figure S2: 2016 Democrat probability across simulation β

Figure plots the average simulated probability of being a Democrat in 2016 as a function of distance to voters' Zip Code centroids. Points are plotted separately by values of β.

registration generated by the within-Zip code parameter compared to the levels observed in the real data. This allows for direct evaluation of how much within-Zip Code partisan switching would have to be generated in this setup for to observe estimates at similar sizes as the main analysis. As the figure shows, the estimates do increase as the intensity of within-Zip Code switching increases, but in order for within-Zip Code switching to completely explain the effect it would have to generate levels of partisan switching as high as 1.5-3 times the rate observed in the data, depending on starting partisanship.

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

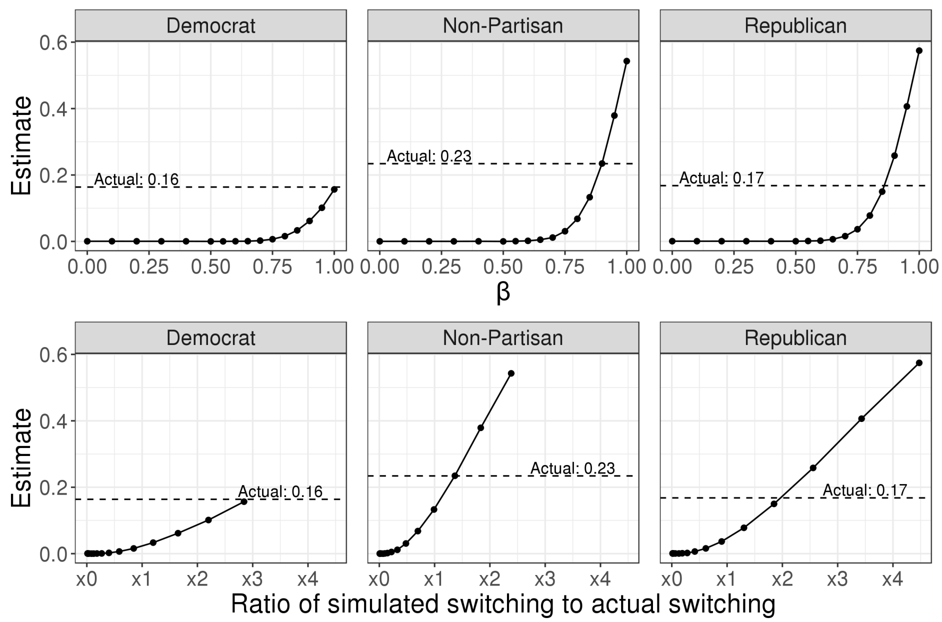


Figure S3: Estimated effect by intensity of within-Zip Code party switching

Figure plots the estimates of the effect of Democratic exposure on Democratic partisanship for the 2012-2016 linked California sample. The x-axis in the top row figure is the β parameter from the simulation. The x-axis in the bottom row is the ratio of simulated changes in Democratic partisanship to actual changes in Democratic partisanship. Horizontal dashed lines represent the actual results from the current results main specification from the 2012-2016 linked California sample.

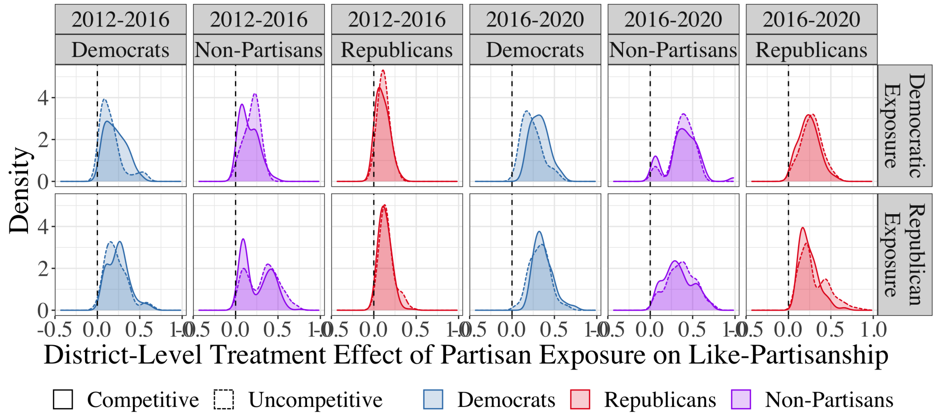


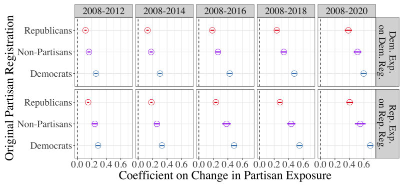
Figure S4: District Electoral Competition is not Determinant of Effect Size

Figure plots the distribution of current effects across U.S. House districts for the 2012-2016 and 2016-2020 linked samples. 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 Democratic partisanship are in the top row, and effects of Republican exposure on Republican partisanship are in the bottom row. Overlaid histograms plot effects for competitive (solid lines) and uncompetitive (dashed lines).

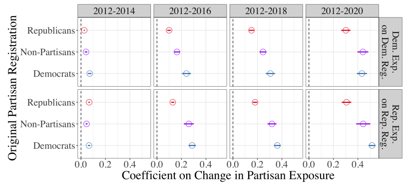
period the same party represented the district, and the minimum margin of victory never fell below 20 percentage points. Figure S4 shows the distribution of these district-level estimates across districts, weighting by sample size in each district, plotting separate histograms for competitive and uncompetitive 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.

6.2 Main Results Across Other Time Periods and by State

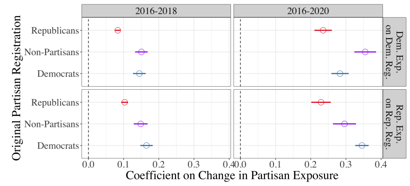
Here I present current results across alternative time periods. I created linked samples connecting 2008 to 2012, 2014, 2016, 2018 and 2020, linking 2012 to 2014, 2016, 2018 and 2020, and connecting 2016, to 2017, 2018, 2019 and 2020. I estimated the main specification effects for all of these years. The patterns shown in the main text are consistent regardless of which year pair I choose, although results are larger over longer time periods.



(a) 2008 samples



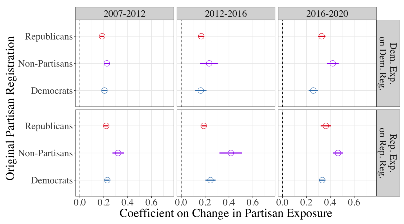
(b) 2012 samples



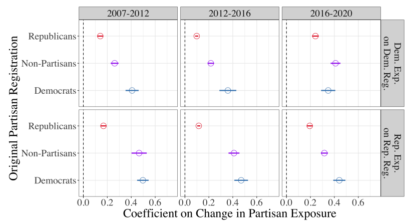
(c) 2016 samples

Figure S5: Effect of Partisan Exposure Across Multiple Time Periods

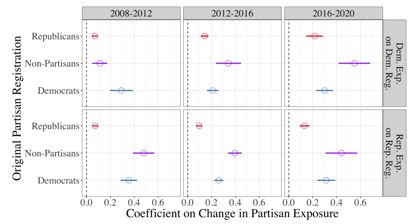
Figure plots the effect of Democratic and Republican exposure across alternative linked samples. Results are plotted separately based on partisanship in the first year of each linked sample.



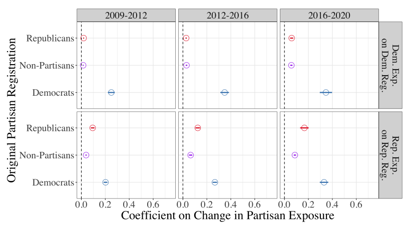
(a) CA



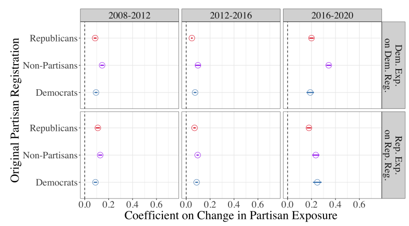
(b) FL



(c) KS



(d) NC



(e) NY

Figure S6: Effect of Partisan Exposure by State

Next, I present the main current 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.

6.3 Alternative Estimation

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 within 1 mile of each voter.

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.

9. Main specification but using posterior probability of being White as the race variable rather than categorical imputations.[3]

6.4 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 S7 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.

[3]Target Smart provides posteriors only for the 2020 data, so these results are only estimated for the 2016-2020 linked sample.

Table S7: Alternative Treatment Estimates

	Current Results: 2012-2016					
	DV: Democratic Registration			DV: Republican Registration		
Treatment	Democrats	Republicans	Non-Partisans	Democrats	Republicans	Non-Partisans
Main	0.241	0.099	0.163	0.288	0.129	0.260
	(0.005)	(0.006)	(0.014)	(0.006)	(0.006)	(0.008)
Aspatial	0.034	0.025	0.064	0.040	0.019	0.051
	(0.005)	(0.006)	(0.014)	(0.006)	(0.006)	(0.008)
Dem. Ratio	0.267	0.077	0.101	-0.223	-0.122	-0.158
	(0.016)	(0.006)	(0.009)	(0.013)	(0.007)	(0.014)
No Same Households	0.054	0.035	0.081	0.067	0.034	0.077
	(0.003)	(0.004)	(0.007)	(0.004)	(0.003)	(0.008)
100 Neighbors	0.152	0.069	0.107	0.189	0.090	0.178
	(0.014)	(0.005)	(0.009)	(0.011)	(0.004)	(0.014)
500 Neighbors	0.209	0.088	0.144	0.253	0.115	0.230
	(0.017)	(0.006)	(0.011)	(0.014)	(0.006)	(0.018)
Mile Radius	0.233	0.092	0.156	0.269	0.118	0.239
	(0.016)	(0.007)	(0.012)	(0.013)	(0.006)	(0.019)
New Neighbors	0.035	0.024	0.046	0.051	0.023	0.057
	(0.003)	(0.003)	(0.004)	(0.003)	(0.002)	(0.006)
Census Block	0.022	0.012	0.024	0.025	0.011	0.028
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)
Census Block Group	0.019	0.019	0.055	0.031	-0.006	0.033
	(0.004)	(0.004)	(0.007)	(0.005)	(0.005)	(0.007)

	Current Results: 2016-2020					
	DV: Democratic Registration			DV: Republican Registration		
Treatment	Democrats	Republicans	Non-Partisans	Democrats	Republicans	Non-Partisans
Main	0.283	0.235	0.355	0.345	0.229	0.296
	(0.013)	(0.013)	(0.016)	(0.01)	(0.014)	(0.017)
Aspatial	0.074	0.056	0.111	0.084	0.066	0.076
	(0.008)	(0.006)	(0.012)	(0.006)	(0.007)	(0.007)
Dem. Ratio	0.317	0.179	0.234	-0.265	-0.251	-0.204
	(0.01)	(0.01)	(0.013)	(0.009)	(0.014)	(0.013)
No Same Households	0.097	0.078	0.175	0.106	0.072	0.111
	(0.005)	(0.007)	(0.01)	(0.005)	(0.007)	(0.009)
100 Neighbors	0.180	0.166	0.237	0.229	0.167	0.206
	(0.01)	(0.008)	(0.01)	(0.008)	(0.009)	(0.011)
500 Neighbors	0.246	0.212	0.312	0.304	0.208	0.265
	(0.012)	(0.011)	(0.013)	(0.009)	(0.012)	(0.015)
Mile Radius	0.275	0.219	0.336	0.326	0.209	0.275
	(0.011)	(0.013)	(0.015)	(0.009)	(0.014)	(0.016)
New Neighbors	0.055	0.054	0.090	0.062	0.051	0.068
	(0.002)	(0.004)	(0.005)	(0.002)	(0.004)	(0.005)
Census Block	0.051	0.032	0.064	0.051	0.035	0.051
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)
Census Block Group	0.05	0.043	0.089	0.072	0.029	0.042
	(0.005)	(0.005)	(0.009)	(0.005)	(0.007)	(0.008)
Race Posteriors	0.285	0.256	0.362	0.347	0.252	0.302
	(0.013)	(0.014)	(0.017)	(0.010)	(0.017)	(0.018)

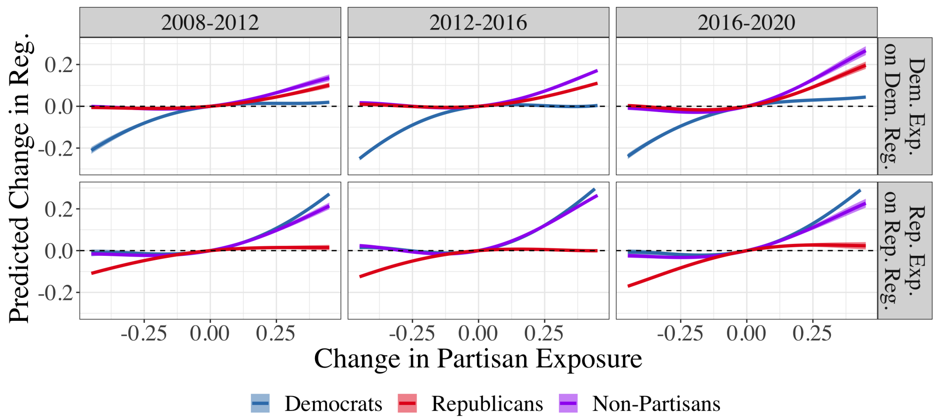


Figure S7: Marginal Effect of Partisan Exposure is Increasing with Size of the Change in Partisan Exposure

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.

6.5 Results by Housing Type and Age

In the paper I present current 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 shows that the patterns observed in the age and housing subsets are not a result of unequal distributions of race across these subsets.

7 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

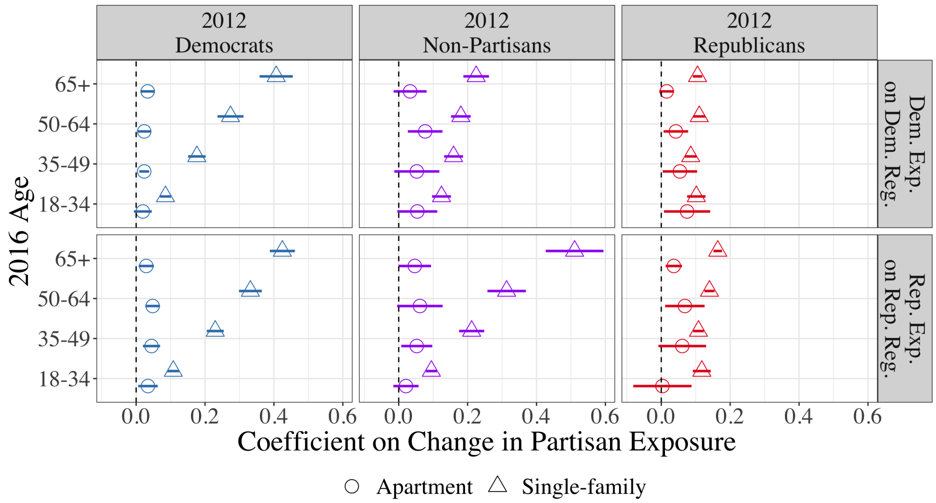
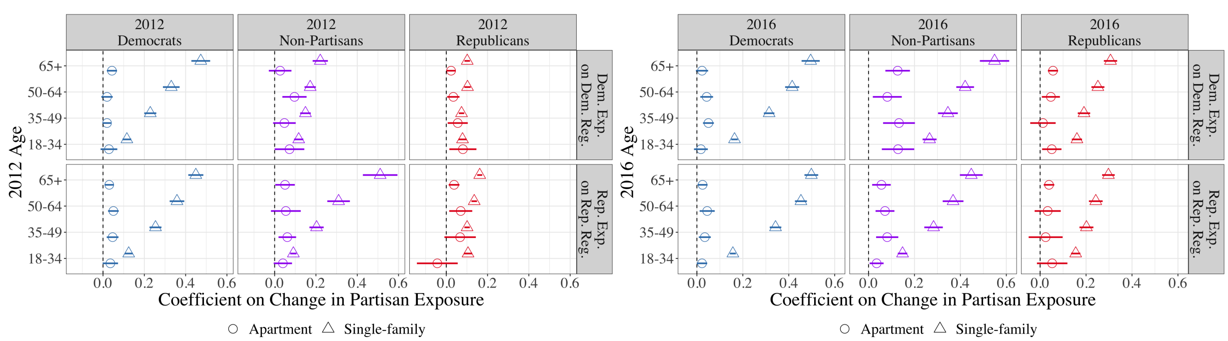


Figure S8: Effect of Partisan Exposure by Age and Housing Type

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.



(a) 2012-2016

(b) 2016-2020

Figure S9: 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.

voterfile data by Target Smart. The survey was 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 76,576 total responses for a response rate of 1.59%. 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.

Participation in the survey was voluntary. Participants were not compensated for participation in the survey and were aware they were taking part in a research study. Compensation was not offered due to budgetary constraints and participants were informed at the start that there would be no compensation for participation in the study. Informed consent was obtained from subjects prior to starting the survey. Potential respondents who chose to follow the survey link in the invitation email were first taken to the informed consent form. The informed consent included explanations of the general purpose of the research, to collect voters' opinions about politics and current events. The informed consent also included an explanation that their responses could be linked to public voter records by the researchers. Voters were not allowed to start the survey until they had confirmed their consent to take part in the research. No deception was used in the survey. The study intervened in no political processes.

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

Table S8: Survey Descriptive Statistics and Population Comparisons

Status	Registered Population	Sample	Sample Weighted
Democrat	0.424	0.411	0.408
Married	0.370	0.537	0.445
Republican	0.271	0.366	0.304
White	0.641	0.856	0.664
Black	0.103	0.051	0.089
Hispanic	0.165	0.052	0.156
Asian	0.050	0.018	0.051
Female	0.511	0.513	0.517
Age	50.097	62.097	53.557
Democratic Exposure	0.430	0.380	0.413
Republican Exposure	0.270	0.324	0.288
Block Group Registered	0.481	0.626	0.588
Block Group Median Age	41.294	43.759	41.575
Block Group Median Household Income	78,956	84,541	81,546
Block Group Homeowner	0.629	0.712	0.667
Block Group Median Year House Built	1974	1978	1974
Block Group Drive to Work	0.810	0.847	0.830
Block Group Median House Value	421,767	404,466	407,465
Vote 2016 General	0.662	0.951	0.720
Vote 2018 General	0.576	0.912	0.624

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 probability (1/p) to get the survey weight for each voter. Table S8 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.

Table S10: 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)
Dem Exp	0.44		0.62		-0.34		-0.29		9.82	
	(0.10)		(0.21)		(0.17)		(0.10)		(2.04)	
Rep Exp		-0.50		1.14		0.06		0.01		8.63
		(0.09)		(0.19)		(0.21)		(0.12)		(1.99)
Dem					6.88					
					(4.33)					
Dem Exp * Dem					0.53					
					(0.21)					
Rep						-10.53				
						(5.31)				
Rep Exp * Rep						0.54				
						(0.23)				
BG White	-0.77	-0.75	-0.03	0.50	0.10	-0.11	0.02	-0.11	0.89	-0.70
	(0.14)	(0.15)	(0.31)	(0.25)	(0.17)	(0.17)	(0.13)	(0.17)	(2.51)	(2.37)
BG Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.02
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.04)
BG Regs	0.32	0.32	0.03	-0.13	0.11	0.18	0.03	0.08	1.09	-1.56
	(0.11)	(0.11)	(0.20)	(0.18)	(0.17)	(0.13)	(0.09)	(0.12)	(2.13)	(2.19)
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	0.59	0.60	0.67	0.02	0.18	0.02	0.05	-0.28	0.10	1.11
	(0.14)	(0.14)	(0.35)	(0.29)	(0.25)	(0.26)	(0.16)	(0.18)	(3.03)	(2.68)
BG Homeowner	0.07	0.08	-0.16	-0.06	0.03	-0.16	0.15	-0.19	-1.55	-1.10
	(0.11)	(0.11)	(0.22)	(0.19)	(0.19)	(0.15)	(0.13)	(0.12)	(2.01)	(2.57)
BG YearBuilt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	-0.04
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.03)
BG Drive Work	0.18	0.19	-0.63	-0.28	-0.10	0.13	0.10	0.25	2.45	4.86
	(0.18)	(0.18)	(0.34)	(0.28)	(0.28)	(0.24)	(0.22)	(0.27)	(3.44)	(3.97)
BG Unemployed	0.60	0.63	0.05	0.07	1.39	0.99	-0.20	0.12	1.34	-2.62
	(0.35)	(0.35)	(0.67)	(0.55)	(0.51)	(0.48)	(0.39)	(0.43)	(7.70)	(8.69)
BG Home 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	-0.04	-0.64	-0.73	-0.21	-0.40	-0.01	0.02	1.27	2.70
	(0.11)	(0.11)	(0.22)	(0.15)	(0.17)	(0.18)	(0.12)	(0.13)	(1.94)	(1.78)
Black	0.09	0.10	0.24	-0.36	0.06	0.29	-0.14	-0.07	5.90	0.98
	(0.09)	(0.09)	(0.15)	(0.13)	(0.20)	(0.13)	(0.09)	(0.12)	(1.82)	(1.70)
Hispanic	-0.08	-0.09	-0.12	-0.12	-0.12	-0.08	-0.09	-0.14	2.58	2.64
	(0.07)	(0.07)	(0.15)	(0.15)	(0.15)	(0.13)	(0.11)	(0.09)	(1.86)	(1.45)
White	-0.09	-0.09	-0.19	-0.11	0.00	0.05	0.10	-0.29	0.95	2.14
	(0.06)	(0.06)	(0.10)	(0.10)	(0.12)	(0.12)	(0.08)	(0.09)	(1.30)	(1.22)
Age	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.12	0.06
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.03)
Male	0.01	0.01	0.06	0.02	0.21	0.04	0.07	-0.01	-2.34	-3.21
	(0.03)	(0.03)	(0.06)	(0.05)	(0.04)	(0.04)	(0.02)	(0.04)	(0.63)	(0.48)
Liberalism	0.00	0.00	0.03	-0.11	-0.02	0.07	-0.15	-0.09	4.57	-5.35
	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.27)	(0.30)
Married	0.00	0.01	0.16	0.15	0.08	0.08	0.06	-0.02	1.40	-0.61
	(0.03)	(0.03)	(0.05)	(0.05)	(0.05)	(0.04)	(0.03)	(0.03)	(0.64)	(0.51)
College	-0.02	-0.02	0.25	0.09	-0.04	0.00	0.06	-0.20	1.47	-2.00
	(0.03)	(0.03)	(0.06)	(0.06)	(0.05)	(0.05)	(0.04)	(0.04)	(0.66)	(0.62)
Homeowner	-0.20	-0.20	0.11	0.33	0.18	0.14	0.06	-0.15	0.82	1.09
	(0.04)	(0.04)	(0.06)	(0.07)	(0.07)	(0.07)	(0.05)	(0.04)	(0.67)	(0.74)
Years Residence	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.02
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.02)
Party7	0.02	0.02	0.03	-0.10	-0.02	0.04	-0.15	-0.10	9.65	-8.91
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.21)	(0.22)
Mean Outcome	3.82	3.82	3.44	3.56	4.05	4.05	5.86	2.14	49.26	46.03
Num.Obs.	19,123	19,123	18,144	18,159	14,365	14,365	21,159	21,144	18,886	18,850
R2	0.589	0.590	0.391	0.451	0.423	0.427	0.533	0.444	0.794	0.777
R2 Adj.	0.497	0.498	0.247	0.322	0.252	0.257	0.438	0.331	0.747	0.726

Table S11: 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	Comfort Share PID	
	(1)	(2)	(3)	(4)	(5)	(6)
Democratic Exposure	0.55		0.53		-0.34	
	(0.08)		(0.12)		(0.12)	
Democratic Exposure * Democrat					0.67	
					(0.15)	
Republican Exposure		-0.57		1.11		0.02
		(0.09)		(0.12)		(0.14)
Republican Exposure * Republican						0.81
						(0.31)
Mean Outcome	3.77	3.77	3.44	3.62	4.09	4.09
Num.Obs.	19,123	19,123	18,144	18,159	14,365	14,365
R^2	0.502	0.502	0.268	0.320	0.260	0.263
R^2 Adj.	0.390	0.391	0.095	0.160	0.041	0.045
Covars	✓	✓	✓	✓	✓	✓
FE: Zip Code	✓	✓	✓	✓	✓	✓

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 S12: Partisan Exposure on Party Ideology and Partisan Favorability - No Weights

	Dem Ideo	Rep Ideo	Dem Therm	Rep Therm
	(1)	(2)	(3)	(4)
Democratic Exposure	-0.41		15.78	
	(0.10)		(1.78)	
Republican Exposure		0.19		11.39
		(0.07)		(1.99)
Mean Outcome	5.92	2.11	49.14	49.14
Num.Obs.	21,159	21,144	18,886	18,850
R^2	0.409	0.287	0.702	0.687
R^2 Adj.	0.289	0.142	0.635	0.616
Covars	✓	✓	✓	✓
FE: Zip Code	✓	✓	✓	✓

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.

8 Impact of Social Influence on Segregation

Here, I present the results from a simulation designed to measure the change in geographic polarization caused by the social influence effects identified in the main analysis. To do so, I take the 2012-2020 linked samples (voters who did not change residences between 2012 and 2020), estimate the main specifications from the analysis (modeling changes in partisanship from 2012-2020 as a function of changes in partisan exposure from 2012-2020), and then simulate party switching across this time period from those models, except with the the coefficients on Democratic and Republican exposure set to 0. This simulation thus emulates what party switching would have looked like if local partisan exposure were having no effect on party switching. With the simulated datasets, I calculate common metrics of partisan segregation: the county-level dissimilarity index, and the county-level relative share of the electorate that is Democrat versus Republican. I then compare the results of the simulation to the actual changes observed in the data to see how these metrics would change if social influence were not a factor.

The dissimilarity index is a measure of geographic evenness between two groups (most commonly used to measure Black-White racial segregation), comparing the composition of sub-geographies (generally Census tracts) to larger geographies (often counties or cities). The dissimilarity index ranges from 0 (complete integration) to 1 (complete segregation) the proportion of a group that would have to move to achieve complete integration. Dissimilarity thus whether, conditional on the overall partisan composition of a county, how segregated Democrats and Republicans are across Census tracts within that county. The Democrat-Republican dissimilarity index is formalized as:

$$DI_c = \frac{1}{2} \sum_{t=1}^{N_t} \left| \frac{D_t}{D_c} - \frac{R_t}{R_c} \right|$$

where DI_c is the dissimilarity index for county c, D_t and R_t are the number of Democrats and Republican in tract t, and D_c and R_c are the number of Democrats and Republicans in county c, and N_t is the number of tracts in the county.

While the dissimilarity index captures segregation within counties, the county-level share of the electorate that is Democrat versus Republicans captures in absolute terms the partisan balance of each county. Analysis of this metric allows for tests of the extent to which social influence is making counties more Democratic or more Republican. The relative share is formalized as:

$$DR_c = \frac{\sum_{i \in c} D_i}{\sum_{i \in c} D_i + \sum_{i \in c} R_i}$$

where DR_c is the proportion of Democrats out of total Democrats and Republicans in county c, and D_i and R_i are indicator variables that take a value of 1 if voter i is a Democrat or Republican.

Party switching was simulated by fitting the current effect main specification to the 2012-2020 linked sample, and then simulating party switching with that fitted model but the with the coefficients on partisan exposure set to zero. Similar to the main analysis, separate models were fit based on starting partisanship (2012 Democrats, Republicans, and Non-partisans), and the effect of Democratic exposure on Democratic partisanship and Republican exposure on Republican partisanship were estimated in separate models. For each voter in the linked sample, the probabilities of being a Democrat and Republican in 2020 were generated from the appropriate specification. These two probabilities were then input into a draw from a categorical distribution with three outcomes (2020 Democrat, Republican, or Non-partisan). The drawing process was repeated 100 times to create 100 simulation data sets. For each simulated dataset, the party switchers were merged to the entire list of voters in each state in 2020, and the dissimilarity index and relative Democratic share were calculated for each county. I also calculated the relative Democratic share for each Census tract.

Table S13 shows the average dissimilarity index across counties, weighted by registered

Table S13: County Dissimilarity Index Simulation Summary Statistics

	2012 Actual	2020						Actual vs. Simulation	
		Actual			Simulation				
	DI	DI	Δ	% Δ	DI	Δ	% Δ	Diff.	% Explained
	0.234	0.246	0.012	4.997%	0.245	0.011	4.491%	0.001	10.125%

Table shows the county dissimilarity index in the actual data and in the simulation without social influence. The final two columns show the difference between the actual and simulated 2012-2020 change, and the percent of the actual change that is explained by social influence, calculated by dividing the difference between the actual and simulate change (column 11) by the actual change (column 8).

voters in the county. From 2012 to 2020, the average dissimilarity index rose by 1.17 percentage points, a 5% increase.[4] Comparing this ground truth to the simulated results demonstrates that social influence accounted for 10.13% of this increase, as the actual increase is 0.12 percentage points less than the simulated increase without social influence. Thus, partisan segregation within counties increased moderately over the past 8 years, and social influence is responsible for a modest portion of this increase.

To examine how social influence is making areas more Democratic or Republican in absolute terms, I classify counties as more Democratic than Republican (or vice-versa) in 2012. I then measure in the simulation the extent to which social influence effects had an impact on these counties trajectories. Table S14 displays the weighted average of relative Democratic share across counties, weighted by registered voters, separately for Democratic and Republican counties. From 2012 to 2020, Democratic counties increased their relative Democratic share by 3.2 percentage points, and the countries that trended Republican decreased their relative Democratic share (thus increasing the relative Republican share) by 2.0 percentage points. In the Democrat counties, social influence accounted for 6.76% of the increase, with the simulated results having an average Democratic share 0.2 percentage points lower than the actual changes. In Republican counties, social influence accounted for 2.89% increase in

[4]This increase mostly occurred in the 2012-2016 period. From 2016-2020, the dissimilarity index remained stagnant.

Table S14: Relative Democratic Share Simulation Statistics

			2012	2020						Actual vs.	
			Actual	Actual			Simulation			Simulation	
Unit	Type	N	Share	Share	Δ	% Δ	Share	Δ	% Δ	Diff.	% Explained
County	Dem.	160	0.658	0.690	0.032	4.858%	0.688	0.030	4.529%	0.002	6.761%
County	Rep.	232	0.427	0.447	0.020	4.651%	0.446	0.019	4.516%	0.001	2.886%
Tract	Dem.	12,793	0.710	0.741	0.030	4.258%	0.739	0.028	3.971%	0.002	6.732%
Tract	Rep.	7,174	0.390	0.412	0.022	5.716%	0.411	0.021	5.465%	0.001	4.388%

Table shows the proportion Democrat (out of all Democrats and Republicans) in the actual data and in the simulation without social influence. The final two columns show the difference between the actual and simulated 2012-2020 change, and the percent of the actual change that is explained by social influence, calculated by dividing the difference between the actual and simulate change (column 11) by the actual change (column 6).

Republican share. Therefore, social influence is again playing a reinforcing role in broader shifts in partisan geography, contributing to these processes as voters conform to local partisan trends. Table S14 also shows the relative Democratic share comparison by Census tract, demonstrating a similar impact of social influence on the demographic trajectory of these smaller geographies.