

# Causes and Extent of Increasing Partisan Segregation in the U.S. – Evidence from Migration Patterns of 212 Million Voters

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**Using data on the residential location and migration for every voter in U.S. states recording partisan registration between 2008–2020, we find that residential segregation between Democrats and Republicans has increased year over year at all geographic levels, from neighborhoods to Congressional Districts. Individual demographic information reveals that segregation increases for voters of most demographic backgrounds, but that Democratic and Republican trending places have starkly different demographic profiles, thus contributing to the growing confluence of demographics, partisanship, and geography in the United States. We further decompose the change in segregation into different sources. Increases in segregation have not been driven primarily by migration but rather by generational**

**change, as young voters enter the electorate, causing some places to become more homogeneously Democratic, and by existing voters leaving the Democratic party and causing other places to become more Republican.**

**Introduction** Concerns about partisan animosity in the United States coincide with renewed interest in the geography of partisanship, with scholars documenting extensive segregation between Democrats and Republicans (1–3). Drawing on a large literature showing that segregation is associated with negative social outcomes—including animosity, violence, and poor governance (4–7)—scholars and journalists alike have warned that geographic sorting of voters by party affiliation poses a threat to the sustainability of democracy (8, 9). However, because existing studies have largely relied on aggregate data (3, 10), the extent to which these changes affect the partisan makeup of an individual’s daily life, the drivers of these changes, and the demographics of voters contributing to them remain unclear.

While racial and ethnic segregation generally involves population replacement, either by migration or generational change (4, 11), this is not necessarily the case for changes in partisan segregation. Changes in partisan segregation may be caused by 1) demographic changes, such as individuals dying, coming of age, or entering or exiting the electorate at later ages, 2) internal mobility, where individuals relocate within the country, driven either by preferences based on partisanship or factors correlated with partisanship, such as racial preferences or the pursuit of a specific type of job; but also 3) party switching, when voters change their partisan registration to align with local majorities. Understanding the respective contributions of these different sources of segregation is important as they have different implications for the health of democracy: while residential sorting can be seen as a symptom of social fragmentation and political polarization (9, 12), demographic change and party-switching dynamics may not have the same implications.

Existing scholarship suggests all three types of factors may contribute to geographic partisan segregation. Long-standing theories of macro-partisanship (13) emphasize that generational change can reshape the partisan composition of the electorate (14), and recent demographic trends such as the widening rural-urban divide (10) and the increasingly uneven geographic distributions of age and education (15), which show a growing correlation with partisanship (16), could drive changes in partisan geography. On the other hand, popular accounts have claimed that partisan considerations

can influence where people choose to live (9, 17). Although some scholars have found that there is less opportunity for such sorting than is popularly believed (18), and that internal migration flows tend to be too small to explain partisan-based residential clustering (19, 20), others provide evidence of political homophily in residential preferences (21, 22). Even if voters are not sorting directly on partisanship, sorting by education, income, or race could have the effect of increasing partisan segregation. Finally, although party switching is somewhat infrequent, geographic context has been shown to influence this behavior (23–26). Large-scale party realignments in U.S. history, such as white Southern Democrats who changed their party registration to Republican in the latter half of the 20<sup>th</sup> century (27), further underscore the plausibility of geographically-based party switching.

Changes in partisan segregation can either reproduce and exacerbate existing social-geographic cleavages or serve to diminish these. For example, the well-documented racial segregation in the United States (4) or the relative aging of the population in rural places (28) could mean that the alignment of race or age with geography and partisanship is exacerbated if partisan segregation increases for certain places and groups. In contrast, partisan segregation could undermine other types of segregation if, for example, partisanship drives residential choice more than race or other social divisions. These possibilities also have different implications for socio-political harmony, as the first increases the deleterious alignment of social cleavages (7, 12), while the other does not.

Finally, while the sorting of partisans at broad geographic levels, such as states, is widely recognized (29), this segregation may or may not take place at lower levels of geography. Counties or neighborhoods within states may overwhelmingly support one party or another, reproducing higher-level segregation. Alternatively, state-level segregation could mask heterogeneity at lower levels of aggregation if even in states or Congressional Districts where one party has an electoral majority, voters of different parties live mixed together in the same neighborhoods. Although the latter situation has electoral consequences, it does not carry the same concerns about the potentially destabilizing effects of local segregation present in the first instance.

We study partisan segregation in the United States by leveraging individual-level administrative data from two nationwide panels covering every voter from 2008 to 2020 in states that record party registration, i.e., more than 212 million individuals across 12 years and over 895 million data points. In contrast to previous studies of partisan segregation that have relied on aggregate data (9, 30), our approach allows us to track the same individuals over multiple years, while observing their exact

residential addresses and partisan affiliations. We are able to measure changes in partisan segregation at any geographic level, including down to the neighborhood, and decompose these changes across demographic groups and into contributing factors, allowing us to identify the underlying forces driving segregation.

We find that geographic partisan segregation increased every year from 2008 to 2020 across a range of geographic levels, from the Congressional District to the neighborhood. This shift is substantial: the weighted standard deviation of the county-level distribution of the two-party Democratic registration share (i.e., the proportion of Democrats among registered Democrats and Republicans) increased by 9.7% from 2008 to 2020, translating into millions more voters residing in more homogeneous partisan areas. Given contemporary high levels of geographic polarization (3, 25), the consistent and continued increase is especially notable.

We also find that this increase in segregation is primarily driven by generational change, adult voters entering or exiting the electorate, and party switching, whereas residential mobility plays a less important role. The main sources of increasing geographic partisan segregation differ across places: in Republican-trending areas, party switching is the key driver, while in Democratic-trending areas, generational change plays a more significant role. As such, the rise in partisan segregation exacerbates the confluence of geographic, demographic, and political divides in the United States.

**Data and Measurement** Previous studies of geographic sorting based on aggregate election returns have limited geographic precision and are subject to issues of scale and to the Modifiable Areal Unit Problem (1, 7). Furthermore, these data can only track changes when elections occur, sometimes as infrequently as every four years, and may reflect election-specific factors rather than underlying partisan preferences, obscuring or distorting the actual geographic sorting of voters.

In contrast, we measure changes in partisan segregation using nationwide high-frequency individual-level data on partisanship and exact residential location, allowing us to decompose sources of change at the individual level. We measure segregation across multiple geographic levels to assess the sensitivity of our results to the choice of areal unit. Because we use individual data, we could aggregate the data to any arbitrary scale, but we choose to examine geographic units that are politically and socially meaningful and are commonly used in social science. In the main

analysis, we focus on counties and neighborhoods, using Census Tracts to represent neighborhoods.<sup>1</sup> Results using Congressional Districts, Census Block Groups, and Census Blocks are provided in the Supporting Information (SI).

To vote in federal elections, U.S. citizens must register on official voter lists maintained by state governments. These lists are regularly updated to reflect changes in voters' addresses and entry or exit from the local electorate. Crucially, because the data are collected and maintained by states or, in some cases, counties within states, there is no publicly controlled nationwide database of registered voters and, as such, the same voter can appear in more than one state or even more than once in the same state. In addition, some entries may remain on voter files after the voters have died. Commercial vendors obtain these lists, consolidate the data across states, account for movement and death, and resell them to political campaigns and other interested parties (31).

Because commercial vendors must make probabilistic guesses about the identity of many voters, there are discrepancies between different commercial files, with even the raw counts of registered voters differing by millions of entries (32). Therefore, we rely on data from two distinct vendors: Catalist (covering even years from 2008 to 2018) and TargetSmart (covering even years from 2012 to 2020). To our knowledge, we are the first large-scale study to use commercial files from two different vendors. Where possible, we replicate our analyses using both datasets. Furthermore, due to differences in data availability, the two datasets are better suited for analysis at different levels and also allow for an increased analytical timespan.<sup>2</sup>

Registered party membership, which prior research has shown to reflect both voters' self-declared partisan identity and their ideological leanings (33, 34), is available in 29 states, along with the District of Columbia, where voters can declare membership in a political party when registering to vote (Democrat, Republican, or one of many minor parties).<sup>3</sup> We limit our analysis to these states

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<sup>1</sup>Census Tracts contain an average of 2,527 voters in our data. Census Tracts are drawn by the Census Bureau for each decennial Census and generally include between 1,200 and 8,000 people.

<sup>2</sup>The TargetSmart data include the exact addresses of individuals and can thus be used at any level of geography. On the other hand, our version of the Catalist data does not include individual addresses and requires aggregation to larger geographic levels. The Catalist data also span a congressional redistricting cycle in 2010, where the districts for Congress and other electoral districts were redrawn. As such, we primarily use the Catalist data for examining county-level segregation and TargetSmart for other geographic levels. SI Section A.2 presents similar comparative summary statistics for the Catalist and TargetSmart panels.

<sup>3</sup>Idaho started recording partisan registration in 2013 and is not included in our voter file analyses that span from

and determine voters' partisanship based on this official registration. Notably, party registration is not mandatory and between 2008 and 2018, the percentage of registered voters not affiliated with the Democratic or Republican parties rose from 25.9% to 30.6%. We test the robustness of our results that rely on registration by using aggregate electoral results as a proxy for partisan ideology and including all states in the sample.

We employ two metrics of partisan segregation:<sup>4</sup> 1) the *Exposure to Democrats*, which measures geographic sorting *across* units and, in a given geography, is computed as the share of Democrats and Republicans that are Democrats (the two-party Democratic registration share), so that higher values indicate higher Exposure to Democrats, for Republicans, and higher isolation, for Democrats; and 2) the index of *Dissimilarity*, which measures geographic sorting *within* units by assessing how evenly members of the two parties are distributed. The first metric evaluates whether areas are becoming more politically homogeneous, while the second measures the internal evenness of partisan distribution across neighborhoods within those areas (35).<sup>5</sup> We then measure year-to-year changes in each.

**Changes in Partisan Segregation** We first document trends in partisan segregation across counties and neighborhoods. Figure 1 displays the distribution of Exposure to Democrats for 2008 and 2018 at the county level and for 2012 and 2020 at the neighborhood level. Red shading indicates greater exposure to Republicans, while blue shading represents more exposure to Democrats. The dotted and solid lines correspond to the earlier and later periods, respectively. The widening of these distributions indicates that partisan segregation has grown *across* both counties and neighborhoods: more voters live in areas that are homogeneously Democratic or Republican at the end of the period than at the beginning, resulting in lower exposure to the other party in their residential environment. Weighted by the number of registered voters in a given year, the standard deviation of Exposure to Democrats rose from 0.155 to 0.167 at the county level and from 0.200 to 0.209 at the neighborhood level, representing increases of 7.7% and 4.5%, respectively (SI Table S2).

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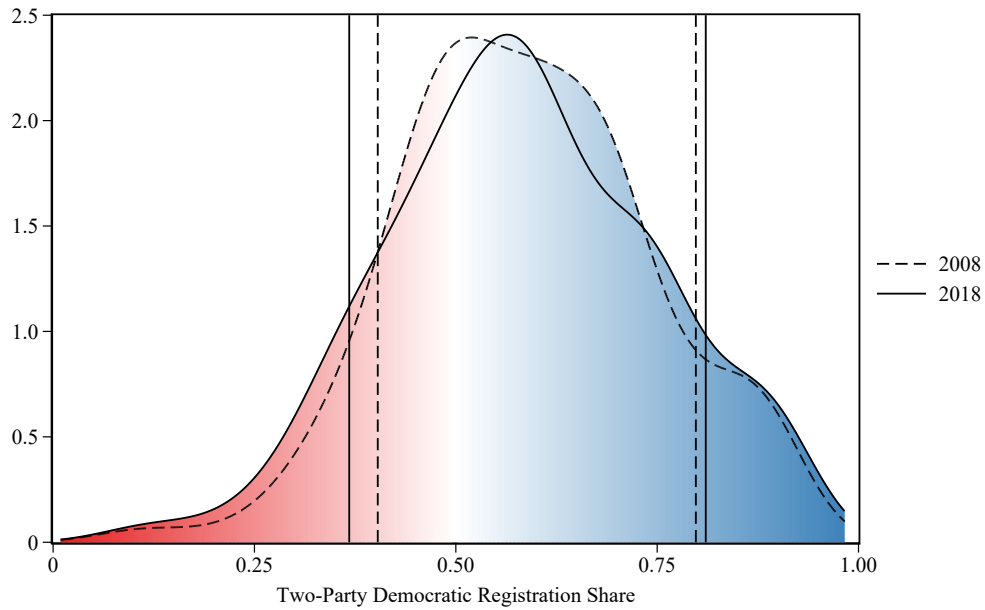
2008 to 2020.

<sup>4</sup>See Materials and Methods in SI Section B for further details.

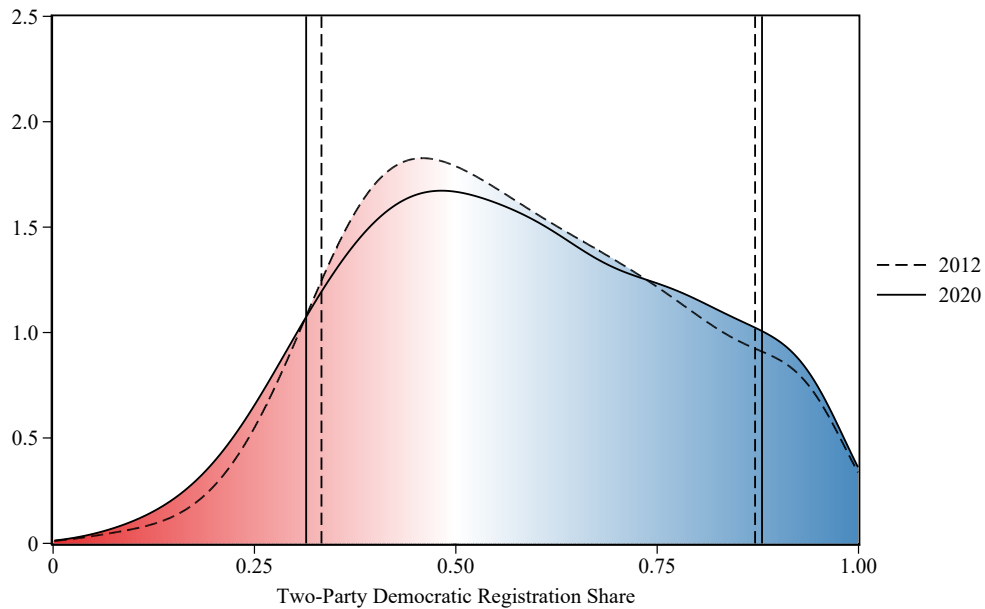
<sup>5</sup>Recent work on partisan segregation (*I*) calculates voter exposure to both parties by examining the proportion of Democrats or Republicans among a voter's closest neighbors. We do not adopt this method, as it does not allow to decompose the forces driving partisan segregation.

**Figure 1: Distribution of Exposure to Democrats**

(a) County-level Distribution, 2008 and 2018



(b) Neighborhood Distribution, 2012 and 2020



*Notes:* Kernel density plots of Exposure to Democrats. All kernel density estimates are weighted by counts of registered voters in a given election and use a Gaussian kernel with bandwidth of 0.05. In each plot, vertical lines represent the 10th (vertical lines on the left tail of each plot) and 90th percentiles (vertical lines on the right tail of each plot). Panel A uses the county-level Catalist data for the 2008 and 2018 elections. Panel B uses the Census Tract-level TargetSmart data for the 2012 and 2020 elections.

These changes mark a substantial shift in the proportion of voters residing in highly segregated areas over a relatively short period. In 2008, 20% of U.S. voters lived in counties where Exposure to Democrats was below 0.403 or above 0.798 (the 10th and 90th percentiles of the distribution). By 2018, this figure had risen to 25.7%, indicating a 28.6% increase in Americans living in highly segregated counties over 10 years. This shift translates to an additional 7.7 million voters in 2018 residing in such counties. Similarly, at the neighborhood level, the share of voters in extremely segregated areas grew by 15.7% between 2012 and 2020, with 23.1% of voters in 2020 living in neighborhoods above the 2012 90th percentile (0.872) or below the 2012 10th percentile (0.333), translating to 7.1 million more voters living in extremely segregated neighborhoods in 2020 than in 2012.

In addition to the sorting of partisans *across* geographic units in the United States, we also find that segregation is increasing *within* geographic units. Figure 2 presents the weighted distribution of the index of Dissimilarity at the county level for 2008 and 2018. The distribution shifted rightward, and the mean increased by 2.1 points (9.6%), indicating that, within counties, voters are increasingly sorted into different neighborhoods based on partisan registration (SI Table S5).

Partisan segregation across counties and neighborhoods has increased year over year, as documented in SI Section C.1. We also observe this increase across other geographic units (SI Section C.2), and when using electoral results instead of partisan registration data (SI Section C.3). Segregation within units has also increased consistently over years and across geographic levels (SI Sections C.4 and C.5), except for the 2018-2020 period, perhaps due to the Covid-19 pandemic and related shocks to mobility.<sup>6</sup>

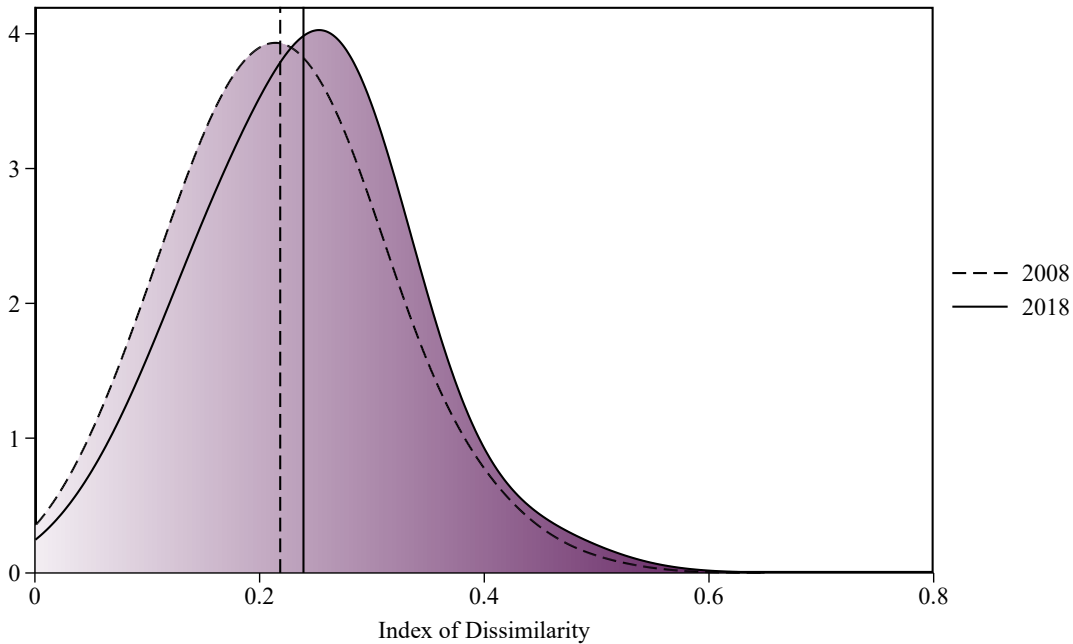
**Characteristics of Areas Driving the Rise in Geographic Partisan Segregation** While partisan segregation has increased across the United States, this trend has not been uniform across all regions. To systematically classify counties based on their contributions to rising segregation, we measure counties' deviation from the mean in different years and classify a county as contributing to increased segregation if its deviation from the mean (in absolute terms) widens over time (see Materials and

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<sup>6</sup>See Supplementary Information for additional results on the increase in partisan segregation (SI Section C), its statistical significance (SI Section D.1), and partisan composition trends by starting partisan composition (SI Section D.2).



**Figure 2:** Distribution of the County-level Index of Dissimilarity, 2008 and 2018



*Notes:* Kernel density plots of the county-level index of Dissimilarity based on the 2008 and 2018 Catalist data, using Census Tracts as sub-units and weighting by counts of registered voters in a given county-year. Vertical lines represent year-specific (weighted) means. All kernel density estimates use a Gaussian kernel with bandwidth of 0.05.

Methods, SI Section B.2). We distinguish between counties trending Democratic or Republican and map these changes at the county level in SI Section E.1.

Of 1,373 counties in states that record partisan registration, 853 counties (representing 64.3 million registrants in 2018, or 59.9% of the total) contributed to the increase in segregation, while 520 counties (representing 42.9 million registrants in 2018, or 40.1% of the total) resisted the trend. The increasingly Democratic counties are clustered around major metropolitan areas on the coasts (SI Figures S8 and S9) and include a disproportionately large share of the electorate. Among the 853 counties with increasing segregation, only 91 counties trended more Democratic, while 762 counties shifted more Republican, yet counties shifting Democratic represented 34.5 million registrants (approximately 379,000 voters per county) in 2018, compared to only 29.8 million registrants in counties shifting Republican (approximately 39,000 voters per county).<sup>7</sup>

<sup>7</sup>Conversely, of the counties resisting segregation, 115 (representing 23.6 million registrants) became more Democratic, and 405 (representing 19.3 million registrants) leaned more Republican.

Examining the index of Dissimilarity within counties, we also observe different patterns for Republican and Democratic-trending counties: Republican-trending counties tend to have partisans relatively evenly distributed across neighborhoods, while Democratic-trending counties have higher values of the index of Dissimilarity initially and also show a larger increase, indicating a rise in geographic partisan segregation *within* Democratic counties. This suggests that voters in high-population counties, representing major metropolitan areas, are clustering away from each other based on partisanship (SI Figures S10 and S11).

Table 1 uses Census and voter file data to compare counties contributing to increased partisan segregation with those that did not.<sup>8</sup> Reflecting the geographic distribution discussed above and an increasing confluence of demographics and partisanship, Democratic-trending counties tend to have higher population density, higher median income, a large share of foreign-born and non-white populations, and younger median age than Republican-trending counterparts. Notably, population density and racial demographic differences between Democratic- and Republican-trending counties are more pronounced in areas contributing to rising segregation than those resisting that trend.<sup>9</sup>

**Which Types of Behavior Have Caused the Increase in Segregation?** To study the forces driving the increase in partisan segregation, we classify each voter into one of the following contributing factors: internal mobility, generational change, entry and exit of adult voters, and changes in partisanship (see SI Table S15 for voter counts of each factor per dataset).

*Internal mobility* refers to registered voters moving across geographic units within the U.S. *Generational change* occurs as young adults aged 25 and below register for the first time and as older voters pass away. Additionally, we account for the *entry and exit of adult voters*. Adult entries include voters aged over 25 becoming registered for the first time and voters re-registering, regardless of their age.<sup>10</sup> Adult exits capture registered voters becoming unregistered without being recorded as

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<sup>8</sup>The table draws on 2015 5-year ACS Census variables aggregated at the county level and voter file data from 2008. The values reported are averages weighted by the number of registered voters in a county in 2008.

<sup>9</sup>SI Tables S11 and S12 replicate Table 1 using the TargetSmart data at the county and neighborhood levels. SI Tables S13 and S14 also display changes in socio-demographic variables over time in counties contributing to or resisting partisan segregation.

<sup>10</sup>While the median age of new entrants into the electorate is 26 in the Catalist data, 33.2% of new registrants are over 34 years old. Among adult entrants, we include new registrants aged 26 and over, representing 3.2% to 5.4% of registered voters in each electoral year in the Catalist data. These adult entrants consist of natural-born U.S. citizens

**Table 1: Demographics of Counties Contributing to the Rise in Partisan Segregation vs. Resisting that Trend**

|  | Increase Segregation   |                        | Decrease Segregation   |                        |
|--|------------------------|------------------------|------------------------|------------------------|
|  | More Democratic<br>(1) | More Republican<br>(2) | More Democratic<br>(3) | More Republican<br>(4) |
| <u>Panel A. Census Statistics</u>                              |                        |                        |                        |                        |
| Total population   | 653,058                | 61,787                 | 362,816                | 76,110                 |
| Median age   | 37.18                  | 40.78                  | 37.14                  | 39.38                  |
| Share female   | 0.513                  | 0.505                  | 0.507                  | 0.510                  |
| HHI ethnic homogeneity   | 0.403                  | 0.638                  | 0.499                  | 0.587                  |
| Share foreign-born   | 0.256                  | 0.073                  | 0.150                  | 0.086                  |
| Share non-white  | 0.539                  | 0.236                  | 0.400                  | 0.292                  |
| Population/Sq. mile  | 7,381                  | 416                    | 1,668                  | 1,032                  |
| Share urban population   | 0.957                  | 0.706                  | 0.897                  | 0.748                  |
| Median income  | 63,627                 | 51,273                 | 63,335                 | 53,271                 |
| Gini index   | 0.486                  | 0.445                  | 0.456                  | 0.459                  |
| High-school degree or above                                    | 0.856                  | 0.879                  | 0.872                  | 0.872                  |
| Share homeowners   | 0.560                  | 0.699                  | 0.658                  | 0.688                  |
| <u>Panel B. Voter File Statistics on Registered Population</u> |                        |                        |                        |                        |
| Democrats  | 0.504                  | 0.368                  | 0.365                  | 0.503                  |
| Independents   | 0.283                  | 0.232                  | 0.267                  | 0.252                  |
| Republicans  | 0.213                  | 0.400                  | 0.368                  | 0.246                  |
| Black  | 0.145                  | 0.058                  | 0.075                  | 0.109                  |
| White  | 0.614                  | 0.882                  | 0.769                  | 0.824                  |
| Hispanic   | 0.155                  | 0.038                  | 0.103                  | 0.042                  |
| Number of counties   | 91                     | 762                    | 115                    | 405                    |

*Notes:* The table reports average demographic characteristics of counties that contributed to the increase in partisan segregation and of counties that decreased segregation, separately for counties that trended Democratic or Republican (i.e., counties that featured an increase vs. a decrease in Exposure to Democrats between 2008 and 2018). All figures are weighted by county-level counts of registered voters in 2008, except for total population figures that are unweighted. Census statistics in Panel A are based on 5-year American Community Survey Data. Voter file statistics in Panel B are based on the 2008 Catalist data.

deceased. *Changes in the partisanship* of residents in a given area can also contribute to segregation. These partisan affiliation changes refer to voters who were registered in both time periods and who switched party affiliation. We consider switches between Democrats and Republicans as well as becoming politically active for the first time, as well as newly naturalized citizens gaining the right to vote. Part of this category may also reflect imperfect tracking of individuals over time and across space.

between Independents and either major party.

Figure 3 shows the percentage of the total changes in Exposure to Democrats explained by these factors, for counties and neighborhoods trending Democratic or Republican (see Materials and Methods, SI Section B.3). Areas trending Democratic and Republican exhibit distinct drivers of increased partisan segregation. In Democratic-trending counties, the shift is driven by compositional changes, with generational change accounting for 46.9% of the trend and adult entries/exits contributing an additional 41.5%. In Republican-trending counties, the primary driver is party switching, which explains 39.6% of the shift.<sup>11</sup> Despite widespread media attention to residential sorting, internal mobility only explains 12.0% and 14.1% of the change in Democratic- and Republican-trending units, at the county level. At the neighborhood level, generational change and adult entries/exits account for 70.8% of the change in Democratic-trending areas. Notably, adult entries/exits play the largest role in Republican-trending neighborhoods, contributing 33.7% to the change. Residential mobility plays a slightly more important role at this level, contributing 22.6% of the compositional change in Democratic-trending neighborhoods and 23.3% of the change in Republican-trending neighborhoods.<sup>12</sup>

**Changes in Partisan Segregation by Demographic Group** The ability to track individual voters means that we can observe how changes in partisan segregation and the contributing factors vary by demographics. In SI Section G.1, we show changes in segregation within gender, age, and racial groups. We find that segregation has generally increased across all gender and age groups at the county level. However, whites are the only racial group experiencing a marked increase in segregation, while Blacks and Hispanics see no change at the county level and a decrease at the

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<sup>11</sup>This figure includes switches between Democrats and Republicans as well as changes involving Independents. Party switches between Democrats and Republicans are doubly impactful because each switch both subtracts a voter from one party and adds them to the other.

<sup>12</sup>Mobility impacts smaller geographies more because voters moving across neighborhoods within a county are categorized as movers in neighborhood analysis but not in county analysis. Conversely, fewer voters are classified as partisan switchers in the neighborhood analysis since staying within the same geographic unit is required for categorization as a switcher. SI Tables S16 and S17 report the counts in each category at the county and neighborhood levels. We find that internal mobility plays a larger role at the Congressional District level than at the county level, which may be explained by strategic political moves across those boundaries (SI Table S22). See SI Section F for additional results on the drivers of the increase in geographic partisan segregation.

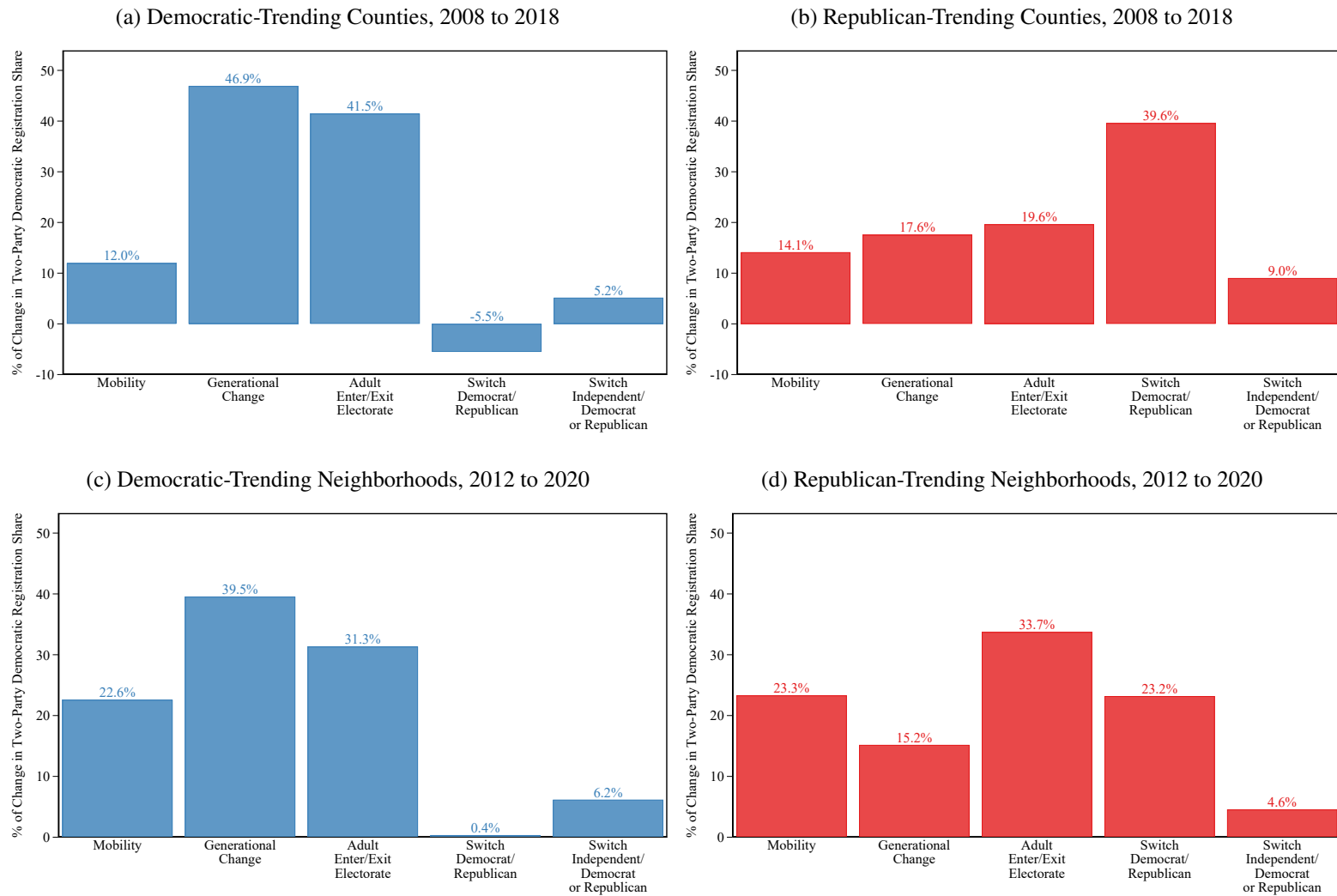
neighborhood level. Figure 4 illustrates the partisan patterns of the increases in segregation for racial groups using the Catalist data. The distribution of Exposure to Democrats among white voters shifted noticeably towards lower values over the decade (indicating greater Republican homogeneity), while the distribution among Hispanics shifted towards the other extreme. There was less movement among Black voters, for whom the initial distributions were already centered at very high values of Democratic homogeneity. We observe similar polarizing patterns across age cohorts (SI Figures S25 and S26) and for both genders (SI Figures S23 and S24). These results indicating an increasing confluence of demographics, geography, and partisanship raise concerns about the deleterious influence of partisan sorting on democratic outcomes (12).

Taking advantage of the individual-level data, we can also examine how each of the factors contributing to segregation is driven by voters of different genders, ages, and races. For instance, we can calculate how much the contribution of residential mobility to geographic partisan segregation results from the mobility of each racial group. The results for factors contributing to increases in county-level segregation are summarized in Table 2.

In areas trending Democratic, increases in segregation appear to be driven by non-white and women voters becoming increasingly Democratic. For example, generational change in the electorate, which explains 46.9% of the increase in segregation in these areas, is primarily fueled by female voters, who contribute 60.6% (28.4/46.9) compared to 39.7% (18.6/46.9) for male voters. Hispanic voters and those in the other race category also play a major role in generational change. By contrast, the contribution of Black voters is limited, as many are already registered Democrats in highly Democratic areas, reducing the potential for further partisan homogenization. Similarly, adult entries/exits are primarily driven by female voters, Hispanic voters, and voters in the other race category.

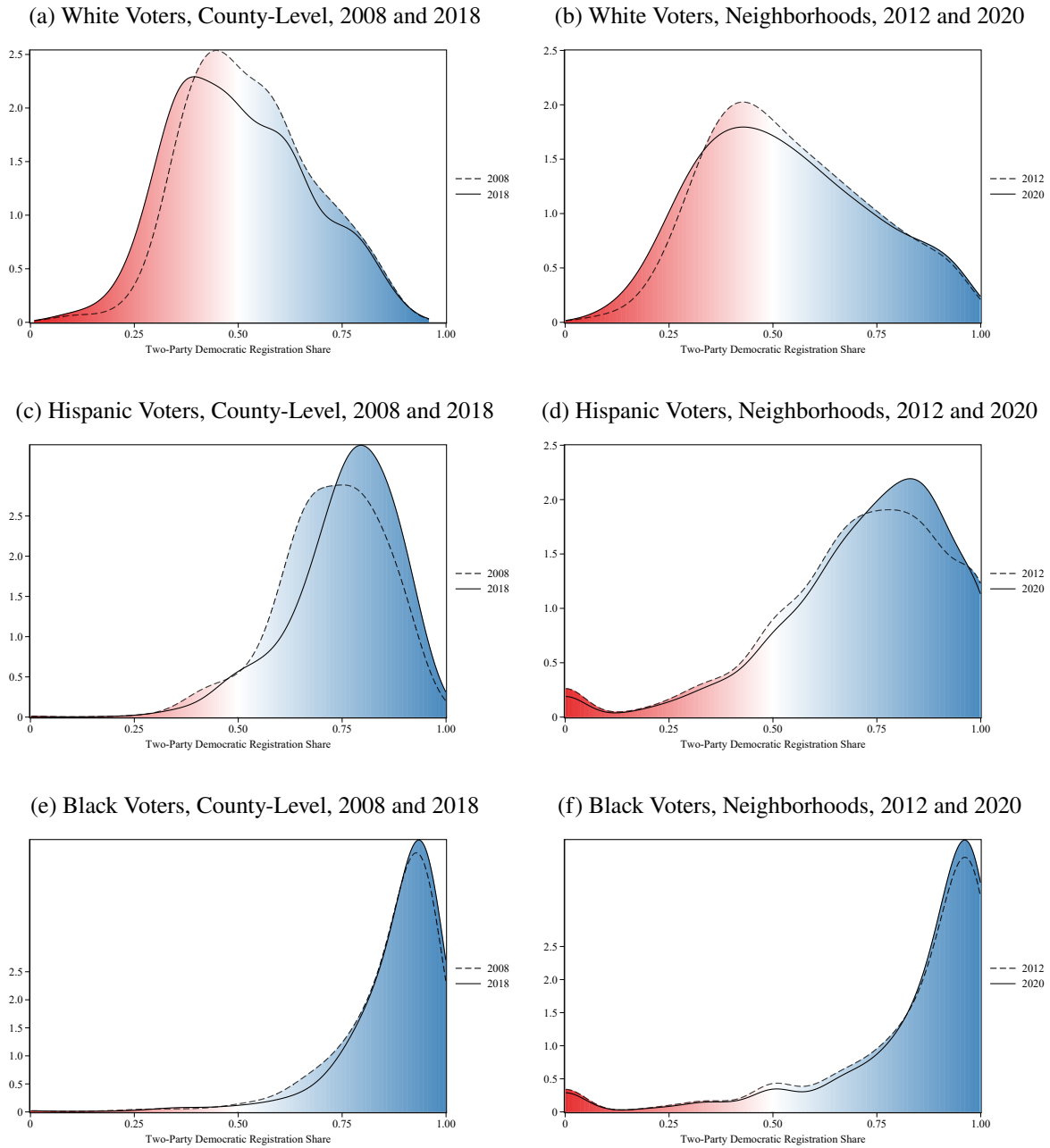
In Republican trending places, the changes are driven more by male, white, and older voters. For example, generational change is overwhelmingly driven by white voters. Party switching, the main factor in counties becoming more Republican, is relatively rare among younger voters but is contributed to relatively equally by voters in older age groups and is mostly attributable to white voters.

**Figure 3: Factors Driving Changes in Exposure to Democrats**



*Notes:* Each plot shows the percentage of the change in Exposure to Democrats explained by different decomposition factors. Panels A and B are based on 2008 and 2018 Catalist county-level data; Panels C and D are based on 2012 and 2020 TargetSmart neighborhood-level data. Samples for panels A and C (resp. B and D) consist of Democratic-leaning (resp. Republican-leaning) geographies; that is, geographic units that witnessed an increase (resp. a decrease) in Exposure to Democrats over the period.

**Figure 4: Exposure to Democrats by Race**



*Notes:* The figure plots kernel density estimates of county- and Census Tract-level Exposure to Democrats by voter race. Panels A, C, and E use 2008 and 2018 Catalist county-level data. Panels B, D, and F use 2012 and 2020 TargetSmart neighborhood-level data. All kernel density estimates use a Gaussian kernel with bandwidth of 0.05, weighting by counts of voters in a given sample/year.

**Table 2: Demographic Groups' Contribution to Factors Driving Changes in Exposure to Democrats**

|                 | More Democratic                      |          |             |            |        |        | More Republican                      |          |             |            |        |        |
|-----------------|--------------------------------------|----------|-------------|------------|--------|--------|--------------------------------------|----------|-------------|------------|--------|--------|
|                 | % Voters                             | Factors  |             |            |        |        | % Voters                             | Factors  |             |            |        |        |
|                 |                                      | Mobility | Gen. Change | Adult      |        | Switch |                                      | Mobility | Gen. Change | Adult      |        | Switch |
|                 |                                      |          |             | Enter/Exit | Switch |        |                                      |          |             | Enter/Exit | Switch |        |
| (1)             | (2)                                  | (3)      | (4)         | (5)        | (6)    | (7)    | (8)                                  | (9)      | (10)        | (11)       | (12)   |        |
|                 | <b>Panel A. Overall Contribution</b> |          |             |            |        |        | <b>Panel A. Overall Contribution</b> |          |             |            |        |        |
|                 |                                      | 12.0     | 46.9        | 41.5       | -5.5   | 5.2    |                                      | 14.1     | 17.6        | 19.6       | 39.6   | 9.0    |
|                 | <b>Panel B. By Age Quartile</b>      |          |             |            |        |        | <b>Panel B. By Age Quartile</b>      |          |             |            |        |        |
| Aged 18-27 (Q1) | 20.4                                 | 6.7      | 54.1        | 12.0       | 1.5    | 2.7    | 18.8                                 | 3.3      | 12.2        | 4.6        | 5.8    | 1.8    |
| Aged 28-42 (Q2) | 26.4                                 | 1.5      | -0.9        | 16.6       | -1.7   | 1.3    | 24.6                                 | 3.7      | 0.6         | 3.8        | 10.7   | 3.0    |
| Aged 43-57 (Q3) | 25.2                                 | 2.6      | -3.5        | 6.7        | -1.9   | 1.1    | 25.3                                 | 4.2      | 1.4         | 6.3        | 12.8   | 2.5    |
| Aged 58+ (Q4)   | 28.0                                 | 1.1      | -2.9        | 6.2        | -3.4   | 0.0    | 31.3                                 | 3.0      | 3.4         | 4.9        | 10.3   | 1.8    |
|                 | <b>Panel C. By Sex</b>               |          |             |            |        |        | <b>Panel C. By Sex</b>               |          |             |            |        |        |
| Male            | 46.1                                 | 6.6      | 18.6        | 18.7       | -3.8   | 2.4    | 46.6                                 | 8.1      | 12.7        | 12.1       | 20.9   | 5.1    |
| Female          | 53.9                                 | 5.4      | 28.4        | 22.7       | -1.7   | 2.8    | 53.4                                 | 6.0      | 4.8         | 7.6        | 18.7   | 3.9    |
|                 | <b>Panel D. By Race</b>              |          |             |            |        |        | <b>Panel D. By Race</b>              |          |             |            |        |        |
| Black           | 11.6                                 | 1.1      | 1.3         | 3.4        | -4.6   | 0.6    | 7.9                                  | -0.8     | 15.9        | -4.3       | -1.4   | -0.9   |
| Hispanic        | 13.3                                 | 2.2      | 16.7        | 14.1       | -4.1   | 1.5    | 3.9                                  | 3.8      | -35.7       | -26.4      | 5.8    | -0.5   |
| White           | 67.9                                 | 4.9      | 3.2         | 2.7        | 7.4    | 0.5    | 85.9                                 | 7.5      | 89.5        | 45.5       | 24.3   | 8.9    |
| Other race      | 7.2                                  | 3.7      | 25.8        | 21.3       | -4.2   | 2.7    | 2.3                                  | 3.7      | -52.1       | 4.7        | 11.0   | 1.5    |

*Notes:* The table is based on the Catalist data. Panel A reports the share of the change in Exposure to Democrats attributable to each decomposition factor, separately for counties that became more Democratic (columns 1-6) or more Republican (columns 7-12) between 2008 and 2018. Each cell in Panels B, C, and D shows how much a given demographic group (in rows) contributed to a given factor's share of the decomposition (in columns). Vertical sums within panels add up to a given factor's overall contribution reported in Panel A. For example, Democrats changing their party affiliation to Republican or vice versa explain 39.6% of the change in Exposure to Democrats in counties that became more Republican; 5.8, 10.7, 12.8, and 10.30 percentage points of this 39.6% are due, respectively, to voters aged 18-27, 28-42, 43-57, and 58+ (5.8% + 10.7% + 12.8% + 10.3% = 39.6%).



## Conclusion

In this paper, we leverage individual-level data from two nationwide panels of every voter in the United States from 2008 to 2020 to offer the most complete accounting of changes in partisan segregation yet presented. Until recently, over-time geographic data on the partisan composition of the electorate was only available at coarse levels of aggregation. As a consequence, while scholars have found evidence for geographic partisan clustering (1, 3), first-order questions on the causes and even the trend of partisan segregation in the U.S. remain subject to debate (9, 18, 20, 36). By tracking individual voters across time and space, we have documented the recent increase in partisan segregation in the United States and the underlying factors contributing to it.

Voters choosing where to live (directly or indirectly) based on politics could represent a symptom of growing partisan discord. The data, however, demonstrate that to the extent any such sorting exists, it is a secondary explanation for changes in political geography. In Democratic trending places, the most impactful factors are the transformations of the American electorate: influxes of new Democratic-leaning young voters and older first-time registrants replacing voters who are dying or de-registering. In Republican areas, forces of partisan realignment are the most prominent factor driving partisan segregation: voters leaving the Democratic party and registering as Republicans or unaffiliated. Thus, rising geographic polarization is less about Democrats and Republicans fleeing from each other and more about macro-level forces shaping the types of people each party represents and the demographic composition of the U.S. electorate.

Still, the consistent increase in segregation raises important questions about the consequences of rising geographic polarization for the healthy functioning of American democracy. Segregation between Democratic and Republican voters contributes to representational imbalances in state and federal legislatures (37), exacerbates discrepancies between Electoral College and popular vote outcomes in presidential elections (38), and impedes support for place-based public policy such as transit and infrastructure (39). Partisan segregation may also fuel partisan issue polarization among elites (29) as parties become representative of distinct geographic areas, and it may contribute to issue and affective polarization within the mass public due to diminished exposure to neighbors with different partisan identities (40) and the alignment of partisan, geographic, and social cleavages (7, 16).

The study of segregation based on ethnicity has been part of a massive social science literature

on inter-ethnic relations. This rich literature helped scholars understand the causes and consequences of the well-documented racial segregation in the United States and other countries. Similarly, further research on the nature of partisanship, for example whether it is a social identity akin to ethnicity, and on partisan segregation, will help us better understand the connections between the two phenomena and their implications for democracy.

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## **Supplementary Materials**

Description of Data and Data Processing

Materials and Methods

Additional Analysis

Figures S1 - S27

Tables S1 - S24