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## "Sort Selling": Political Polarization and Residential Choice\*

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#### Abstract

Partisanship and political polarization are salient features of today's society. We merge deeds records with voter rolls and show that political polarization is more than just "political cheer-leading." Descriptively, homeowners are more likely to sell their homes and move when their next-door neighbors are affiliated with the opposite political party. We use a novel, new-next-door-neighbor identification strategy along with rich demographic control variables and time-by-geography fixed effects to confirm causality. Consistent with a partisanship mechanism, our results are strongest when new next-door neighbors (i) are more likely to be partisan and (ii) live especially close by. Our findings help explain increases in political segregation, improve our understanding of residential choice, and illustrate the importance of political polarization for economic decision-making.

**JEL Classification**: D10, H31, R20 **Keywords**: Political Polarization, Residential Choice

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#### **1** Introduction

The role of partisan identity in voter choice was discussed as early as Campbell et al. (1960). But not until much later was its importance for daily life seriously considered when Green et al. (2004) argued that "party identification is a genuine form of social identification." Since then, a large and growing body of survey evidence suggests Americans increasingly loathe those of the opposite political party (Gentzkow, 2016; Iyengar et al., 2019; Iyengar and Westwood, 2015; Kalmoe and Mason, 2019; Mason, 2015).<sup>1</sup> Whether this resentment affects real economic decisions, though, is less clear. That is, evidence from surveys and even low-stakes field experiments might reflect just "expressive voting" or "political cheerleading" and therefore poorly predict how political polarization affects more costly economic choices like, for example, residential choice.

The claim that Democrats and Republicans sort themselves into politically homogeneous silos has been contentious since first hypothesized (Ansolabehere et al., 2006; Bishop, 2009; Glaeser and Ward, 2006; McGhee and Krimm, 2009). On the one hand, political segregation has been documented at many geographies<sup>2</sup> and, when surveyed, households voice a preference for living near co-partisans (Gimpel and Hui, 2017, 2015; Mummolo and Nall, 2017). On the other hand, empirical work refutes the idea that residential choice is driven by political polarization and concludes, instead, that any observed sorting by party is a side effect of co-partisan households valuing similar neighborhood attributes (Martin and Webster, 2020; Mummolo and Nall, 2017).<sup>3</sup> Disentangling the effects of preferences for *neighbor* attributes from the preferences for *neighborhood* attributes is not a challenge unique to our setting. In this paper, we make progress on this front by using extraordinarily fine (publicly available) data that detail households' residential choices and political affiliations, and the political affiliations of their new next-door neighbors.

We begin our analysis with an investigation of election results in North Carolina, the setting of this study. We find that precincts in North Carolina have become increasingly one-sided, with the number of voters living in precincts with a greater than 50-point margin of victory almost doubling,

<sup>&</sup>lt;sup>1</sup>A single, consensus definition of "political polarization" has yet to be agreed upon, but it can refer to a high correlation between policy views and partian identity, a decline in either the number or importance of political moderates, or, as in this paper, an increased animosity between those with different political beliefs.

<sup>&</sup>lt;sup>2</sup>Evidence of political sorting has been documented at the congressional district level (McDonald, 2011), county level (Lang and Pearson-Merkowitz, 2015), ZIP code level (Cho et al., 2013), and even precinct level (Kinsella et al., 2015; Myers, 2013; Sussell, 2013; Walker, 2013).

<sup>&</sup>lt;sup>3</sup>Gimpel and Hui (2017) call these two types of sorting intentional, if driven by a taste for neighbors' politics, and inadvertent, if the sorting is merely a side effect of correlations between preferences for amenities and political affiliation.

from 15% of voters to 27% of voters, between 2000 and 2016. Election results alone might not reflect political segregation, though, if participation changes from election to election. So we look next to voter registration records, which similarly show that the number of NC homeowners living in census block groups with a majority to minority party ratio of at least three to one has increased from 20% to 27% between 2006 and 2018.

To explore the causes of this geographic political segregation, we merge CoreLogic Solutions Real Estate data and North Carolina voter registration data to build a panel data set that covers all homeowners in North Carolina registered to vote between 2005 and 2015. We design an algorithm that takes mailing addresses and precise geolocations to identify properties that are exactly next door to each other. Our final data set covers owner-occupied, single-family homes and details the owners' political affiliations and the political affiliations of their next-door neighbors. In our first analysis, we show descriptive evidence that current residents with an opposite-party next-door neighbor are more likely to sell their homes than current residents whose next-door neighbors are not affiliated with the opposite party.<sup>4</sup> This finding is robust to the inclusion of a battery of control variables – homeowner's race, age, birth state, and tenure; neighbor's race; property characteristics; and hyperlocal churn – and census block group-by-quarter-by-party-by-race fixed effects that together absorb many reasons households might move.

Since households have a limited ability to choose their precise next-door neighbors, this first result is compelling evidence in support of a taste-based partisan sorting mechanism. By including fine geography-by-time fixed effects, our test absorbs the effects of local amenities and disamenities.<sup>5</sup> For example, access to public transportation might be particularly appealing to people more often affiliated with one party. But, to the extent that this access and its effect on move-out rates is shared by everybody in the neighborhood, the effects of this amenity will be absorbed in our model. A similar problem arises if move-out rates vary by race and political party and these variations are correlated with having an opposite-party neighbor. Therefore, in our preferred specification we include a group-by-quarter-by-party-by-race fixed effect. Our effect of interest is therefore estimated using only variation in the move-out rates of current residents in the same neighborhood, at the

<sup>&</sup>lt;sup>4</sup>Our main outcome variable of interest is whether or not a household has sold their home in the following two years. We will refer to this interchangeably as moving and selling.

<sup>&</sup>lt;sup>5</sup>Households choose neighborhoods for a number of reasons including their school quality (Black, 1999), criminal activity (Linden and Rockoff, 2008), pollution (Banzhaf and Walsh, 2008; Bayer et al., 2009), and access to public transit (Glaeser et al., 2008).

same time, affiliated with the same party, and of the same race, but whose neighbors have different political affiliations. In this way, we can rule out the alternative explanation that households choose where to live based solely on the attributes of the neighborhood and not their specific neighbors.

A second endogeneity concern still remains: At any point in time, a household's *current* neighbors might not be randomly assigned. That is, current residents have *already* chosen whether to move away or stay put. Households who are especially likely to dislike opposite-party next-door neighbors will have previously realized this preference, biasing our estimated effect toward zero. Similarly, households whose preferences for neighbor politics are weak may still be living next door to oppositeparty neighbors. Our finding of a significant political polarization effect despite this design limitation is therefore compelling evidence that it exists. But, to remove as much of the biasing effects of nonrandom neighbors as possible, we focus on the subset of households who got *new* next-door neighbors.

First, we compare households that got new next-door neighbors of the opposite political party to nearby households who *also* got new next-door neighbors, but *not* of the opposite political party. The test's identifying assumption is that, conditional on the same control variables and fixed effects as before, new neighbors are randomly assigned to current residents. In other words, neighborhood-level characteristics and changes to them are shared by current residents who had homes next-door go up for sale. What differs between them is only the political affiliations of the new neighbors that move in.<sup>6</sup> The result of this test yields our headline result: Among households who got new neighbors, households whose new neighbors were of the opposite political party are 0.296 percentage points, or 4.4%, more likely to move out within two years than households whose new neighbors were not of the opposite party.

Our second related test compares the same treatment group – households that got new oppositeparty next-door neighbors – to another control group: nearby current residents who did *not* get a new neighbor. This test helps rule out the alternative hypothesis that having or getting an oppositeparty neighbor is correlated with other neighborhood attributes that push away or attract similar households. If, for example, a new Republican is attracted to a neighborhood because of changes to the neighborhood that are simultaneously pushing away Democrats, then this neighborhood effect should push away all Democrats equally. We continue to rule out local amenity and gentrification-

<sup>&</sup>lt;sup>6</sup>Since race and political affiliation are correlated, we control for the race of the current resident, the new neighbor, and whether the new next door neighbor and current resident have different races. And we continue to include the same control variables and group-by-quarter-by-party-by-race fixed effects as before.

style stories by including very granular fixed effects. Indeed, in our preferred specification for this second test, we find that, compared to other same-party, same-race households on the same census *block*, the current resident the new neighbor moved next to is 0.451 percentage points, or 7.4%, more likely to leave within two years. Thus, an amenity-based explanation would require an amenity that both attracts the opposite party and is so hyperlocal in nature it that does not affect other households on the same census block. We conclude that our results are more consistent with the new neighbors, themselves, affecting the move-out rates of current residents.

Next, we investigate the timing of current residents' move-outs. We find that getting a new opposite-party neighbor does not immediately make current residents more likely to move. It is not until more than a year has passed that the move-out rates begin to diverge. This time lag is consistent with current residents (i) not learning they dislike their new neighbors right away and (ii) requiring time to actually list and sell the home. Furthermore, the time lag also helps rule out neighborhood-change and local amenity stories. If neighborhoods were attracting members of one party while pushing away members of the other party, we would find that current residents who got opposite party neighbors appeared immediately and permanently (and spuriously) more likely to be moving away. However, we *do* document a time delay, consistent with a neighbor effect.

Our paper contributes evidence that households have a preference against living next door to members of the opposite party and are willing to sell their homes and move – an enormously costly activity – to realize that preference. One limitation of our data is that we cannot say whether households prefer certain types of neighbors because of, for example, who they voted for, their thoughts on the Tax Cuts and Jobs Act, their views on the #MeToo movement, or whether they think mask mandates violate the First Amendment. And, since political party, views on immigration, views on abortion, views on gun control, preferred television shows, and even coffee preferences are so strikingly correlated (DellaPosta et al., 2015), the data set required to tease apart which mechanisms affect migration may be impossible to assemble. In this paper, we leave the underlying factors that drive partisan bias and political polarization inside a black box. Instead, we point to recent surveys that find evidence of extraordinary partisan hostility. For example, 28% of Americans respond that they would be somewhat upset or very upset if their child were to marry someone from the opposite party.<sup>7</sup> Even more alarmingly, 15% percent of respondents in a different survey answered "yes" when

<sup>&</sup>lt;sup>7</sup>Source: https://docs.cdn.yougov.com/t0hi1tcqs5/econTabReport.pdf.

asked, "Do you think we'd be better off as a country if large numbers of [opposing party] in the public today just died?" (Kalmoe and Mason, 2019). We attribute our main result to this clear distaste for members of the opposite party – whatever its precise underlying causes. To support our claim that migration away from opposite-party neighbors is driven in part by a preference for co-partisan neighbors, we provide four more pieces of evidence.

First, we use the voter history file – a publicly available data set detailing all the elections each registered voter participated in – to classify voters as apathetic or engaged. We say that registered voters are apathetic if they have never participated in an election or participated only in presidential elections. All other registered voters we call engaged. Knowing precisely how intensely partisan each household is and how strong their distaste for those of the opposite party is impossible, but participation serves as a reasonable proxy since individuals holding consistently liberal or conservative views, and antagonistic views of the other party, are among the most likely to participate in elections.<sup>8</sup> We then ask how our effects vary by the political intensity of the current residents and their new next-door neighbors. If our main results are driven by preferences for amenities or neighborhood characteristics correlated with political affiliation then we would expect to see no difference between the effects that apathetic and engaged next-door neighbors have. We see the opposite. Getting a new opposite-party next-door neighbor does not affect current residents' move-out rates if that new neighbor is apathetic. Indeed, our main finding that households are more likely to sell when an opposite-party neighbor moves in next door, is driven purely by current residents getting oppositeparty and *engaged* new neighbors. This result is consistent with households preferring not to live near neighbors with opposite-party views when those neighbors make those views known.

Second, we investigate how the effects of opposite-party neighbors change with the distance between the current resident and the new next-door neighbor. When the neighbor lives very close by, they are more likely to interact with and influence each other. Our prediction, then, is that the opposite-party, new-next-door-neighbor effect is stronger when the new neighbor lives especially nearby. This is precisely what we find. Opposite-party next-door neighbors have no effect on current residents' moving decisions when they live sufficiently far away. Only for those current residents who live close to their next-door neighbors, less than 80 feet, do opposite-party neighbors affect moving decisions.

 $<sup>{}^8</sup>Source: https://www.pewresearch.org/politics/2014/06/12/section-5-political-engagement-and-activism/.$ 

Third, we examine the heterogeneity of our effects over block politics. The idea here is that households who have chosen to live in especially red or blue areas are less likely to move away from opposite-party neighbors for at least two reasons. First, the current residents are more likely to have like-minded neighbors living nearby who can help dissipate the effect of the new opposite-party neighbor. Second, and more importantly, opposite party new neighbors themselves are less likely to be intensely partisan, as evidenced by their decision to choose a neighborhood so politically different from themselves. Consistent with this prediction, we find that our results are strongest in purple areas, where no one party has a clear majority.

Finally, we look to movers' relocation decisions. When current residents move out of their county, we cannot observe their new address. But, when moving within county, they maintain the same voter registration number in the North Carolina State Board of Elections (NCSBE) database, so we see precisely where they move to and the politics of their new neighborhoods. Comparing Democrats and Republicans originally in similar neighborhoods, we find that when moving within county, Democrats go to blocks that have higher Democratic shares and Republicans move to blocks with higher Republican shares. This finding suggests that political segregation is increasing not only because households move away from opposite-party neighbors, but also because they then move nearby to places where that is less likely to be the case.

Our paper has important implications both for future research and for policy. To the residential sorting literature we offer an important new finding, that next-door neighbors, specifically, matter above and beyond local neighborhood characteristics. To the growing literature exploring the importance of political polarization, we provide evidence that partisanship has real economic effects on a major household decision, residential choice. Finally, our results show that concerns about the clustering of like-minded people into silos is warranted, at least insofar as this clustering is indeed happening and is happening because of preferences for living near co-partisans (Klar, 2014; Mutz, 2006; Sunstein, 2009).

#### **Contributions to the Literature**

Our first contribution is evidence of the real effects of political polarization and partisanship. One strand of this literature analyzes the relevance of sharing political affiliation with the head of state and what this does to investment, consumption, optimism, and beliefs (Gerber and Huber, 2009;

Kempf and Tsoutsoura, 2018; McGrath et al., 2017; Meeuwis et al., 2018; Mian et al., 2018). Our paper, instead, focuses explicitly on the negative feelings that partisans feel toward people at the opposite end of the political spectrum and whether these feelings influence real economic decisionmaking. On the one hand, recent work by Robbett and Matthews (2018) shows that when faced with economic costs, partisanship *decreases*. On the other hand, research on the economic role of identity and ingroup bias suggests that real decisions might be affected (Akerlof and Kranton, 2000; Tajfel et al., 1979). Consistent with this hypothesis, McConnell et al. (2018) use a field experiment to show that workers accept less pay when they and their employer are affiliated with the same party. By showing that households' residential choices are affected by their neighbors' politics, our paper contributes to this debate, evidence that political polarization has economically important real effects.

The specific hypothesis that Democrats and Republicans are sorting themselves into politically homogeneous silos burst into the mainstream in Bill Bishop's 2009 book, *The Big Sort* (Bishop, 2009). The hypothesis was immediately contentious and inspired a large literature debating the central claims in the book. Early work argued that claims of political polarization and claims of geographic sorting were overblown (Ansolabehere et al., 2006; Fiorina et al., 2008, 2005; Glaeser and Ward, 2006; McGhee and Krimm, 2009). Since then, though, partisan identity has hardened and political polarization has increased. However, well-identified evidence that households prefer living near co-partisans because of their partisan identity, specifically, has been hard to come by. Indeed, in their same paper whose survey evidence illustrates a preference for co-partisan neighbors, Mummolo and Nall (2017) find no empirical evidence, at the ZIP code level, in support of political migration – perhaps because ZIP codes are much larger than the relevant geography. Our results strongly favor the hypothesis that neighbor politics do matter and that political polarization and partisan identity are, at least partially, behind the documented increases in political segregation.

This paper's second contribution is to the large literature on residential choice. Disentangling the effects of preferences for neighbors of a certain type with preferences for local amenities is an empirical challenge not unique to those investigating the importance of political polarization. Segregation by race, income, and education can occur if demographically similar households have common preferences for schooling, pollution, and public infrastructure as in Tiebout (1956) or if households internally prefer neighbors who share their demographic characteristics as argued by (McPherson et al., 2001).<sup>9</sup> The challenge is to understand whether sorting on neighbor characteristics is an artefact of correlated preferences for amenities, vice versa, or somewhere in between. Newly developed general equilibrium models have begun to demonstrate the relative importance of preferences for observable features of neighbors and neighborhood characteristics (Almagro and Dominguez-Iino, 2020; Bayer et al., 2007; Bayer and McMillan, 2012; Kuminoff et al., 2013). To this literature we add some reduced-form evidence that the neighbors themselves affect residential choice. That is, preferences for amenities, and personal characteristics being correlated with amenity preferences, is unlikely to explain all residential sorting. This paper implicitly assumes that amenities affect preferences at the neighborhood level, while neighbor-level, social interaction effects operate at much smaller distances. But the reality is likely more nuanced. It is easy to imagine hyperlocal amenities and disamenities with narrow footprints and important, engaged neighbors with wide spheres of influence. Future work will need to wrestle more rigorously with the variety of footprint sizes that amenities and neighbors might have.

#### 2 Data Description & Stylized Facts

#### 2.1 The North Carolina Voter Data and Residential Political Sorting

We use voter registration data from the state of North Carolina to classify households' political affiliations. The data set is free, available to the public and, unlike the voter data in many other states which describes just those *currently* registered to vote, available in snapshot-form going back to 2005.<sup>10</sup> In other words, we can observe everybody registered to vote at many specific points in time, typically before major elections. With this rich panel data we can measure variation in the share of people affiliated with each party by geography and by time. The NCSBE includes in the voter registration data not only the full name of each person registered to vote, but their complete mailing address, age, race, sex, and state of birth. Furthermore, as these data are the official record of people eligible to vote, data entry errors, especially for the name and address fields, are rare.

<sup>&</sup>lt;sup>9</sup>For evidence on racial sorting see Bayer et al. (2014, 2004); Emerson et al. (2001); Ouazad and Rancière (2016). Households are also known to sort by income (Brueckner and Rosenthal, 2009; Reardon and Bischoff, 2011) and education (Bayer et al., 2007). At the same time, households choose neighborhoods for a number of reasons including their school quality (Black, 1999), criminal activity (Linden and Rockoff, 2008), pollution (Banzhaf and Walsh, 2008; Bayer et al., 2009), and access to public transit (Glaeser et al., 2008).

<sup>&</sup>lt;sup>10</sup>These data can be found online at https://dl.ncsbe.gov/index.html.

North Carolina is unusual in that its primary elections (those taking place in the spring before the general elections) are semi-closed. This means that voters affiliated with a specific party can vote only in that party's primary election while voters unaffiliated with any party can choose which primary they want to participate in. Each voter can vote only in one primary per election. We classify voters as members of a party as follows. If a voter is registered with a particular party we say she is a member of that party. If a voter is officially unaffiliated with any party, but we see her vote in one party's primary elections and only the primaries of that party, we say she is a member of that party. Voters we never see affiliated with a party and who never vote in any primary are classified as unaffiliated. Finally, voters who are affiliated with more than one party over the time series are classified as multi-party. For the purpose of this study, we drop multi-party voters from our sample, as we cannot unambiguously assign them to one of the two main parties, nor deem them unaffiliated.

Along with the voter registration data, the NCSBE also publishes detailed data on election outcomes. We cannot observe individual voters' choices, but we can observe the number of ballots cast for each candidate at the precinct level. North Carolina comprises approximately 3,000 voting precincts that average 825 voters each election. We present a simple measure of political sorting across local geographies in Panel A of Table 1.

#### [TABLE 1 HERE]

Panel A details the 5<sup>th</sup>, 25<sup>th</sup>, 75<sup>th</sup>, and 95<sup>th</sup> percentiles along with the mean of the distribution of precinct-level margin of victory over the past five elections for which data is available. What we find is that, in general, precinct margins of victory are growing over time and this is especially true of the most lopsided precincts. In the precincts with the largest margin of victory, the winning candidate received 55 percentage points more than the other major party candidate. By 2016, this difference had increased to nearly 70 percentage points. The final column reports that the number of blowout precincts, where the winning candidate won by more than 50 points, has nearly doubled between 2000 and 2016.

Using election outcomes as a measure of residential sorting is plagued by an important issue. Since the candidates who run for office vary by election, who turns out to vote also varies by election. This means that a precinct might *appear* more polarized – if one party's candidate is especially popular or unpopular – even if the people living there remain the same. An alternative way to measure an area's politics is to look at registered voters' party affiliations. Since the NCSBE publishes the exact address of each voter, we can precisely map voters. For example, the census block groups of Wake County are plotted in Figure 1.

#### [FIGURE 1 HERE]

Here, we plot the political lean of each block group, based on the share of registered voters who are affiliated with the Democratic Party. The advantages of using the block group share of registered voters, as opposed to voter turnout, are twofold. First, this measure is less affected by the nominees. Second, we observe political affiliation at a level much finer than precinct – the parcel level. That is, we observe election results for about 3,000 voting precincts, but we observe the party affiliation of more than two million households in North Carolina. Immediately obvious in Figure 1 is the striking political segregation with, for example, some very red neighborhoods in a downtown that is mostly blue. For a sense of how this has changed over time, we look to Panel B of Table 1. The share of block groups where the majority party is more than 50 percentage points larger than the minority party has increased steadily and dramatically since data coverage begins in 2006. These early findings demonstrate what many recent papers have documented in other parts of the United States: that segregation by political party affiliation is increasing.<sup>11</sup>

#### 2.2 The North Carolina Deeds Data and Sample Creation

We supplement the North Carolina voter registration data with publicly available assessor and deeds data obtained from the CoreLogic Solutions Real Estate data set. This data set contains information on both transactions and home characteristics for all houses in the most populous North Carolina counties (covering more than 90% of the state's population). Key variables we observe include precise site address; latitude and longitude coordinates of the property; transaction date and type; names of buyers, borrowers, and sellers (if applicable); year built; and building and land square footage. We merge the deeds date with the North Carolina voter registration data by owner name and address in order to create a quarterly panel at the parcel level. We make the assumption that the owner of each *matched* home is a resident of the home. This is a largely innocuous assumption since voters are

<sup>&</sup>lt;sup>11</sup>Recent work documents political party segregation at the congressional district level (McDonald, 2011), county level (Lang and Pearson-Merkowitz, 2015), ZIP code level (Cho et al., 2013), and precinct level (Kinsella et al., 2015; Myers, 2013; Sussell, 2013; Walker, 2013).

registered at only one location in North Carolina at a time. Non-person owners such as investment companies, banks, and trusts will never merge with the voter registration data so they will never be in our estimation sample.

With this merged data set, we observe the owners of every property at the beginning of each quarter. We use the party affiliation from the North Carolina voter registration data to assign a political party to each home. For two-person households, we make some adjustments. We assign the home a multi-party status, and thus drop them from the sample, if the two owners are registered in opposite parties or if one of the owners is multi-party. Homes where one owner is unaffiliated but the other owner is affiliated with a party are assigned to that party.

We then identify the next door neighbors for every parcel in North Carolina. Each household can have up to two next-door neighbors, and may have zero or one. We start by using address conventions in the state of North Carolina. If two households are on the same street and have consecutive even or consecutive odd house numbers then we conclude that they are next door. The algorithm allows, for example, for 4100 and 4104 to be next door if no 4102 exists. We further require that two homes be within 0.10 miles to qualify as next-door. The final sample is restricted to blocks with at least twenty registered voters in the given quarter,<sup>12</sup> and to owners who have lived at least one year in their home and lived through an election.

#### 2.3 Description of the Final Samples

#### [TABLE 2 HERE]

Table 2 describes our final, merged data set. The sample includes over 27 million property-byquarter observations between 2005 and 2015 in North Carolina.<sup>13</sup> The average household has a 5.45% chance of having sold their home and moved within two years of any given quarter. And 30% of our sample has a next-door neighbor affiliated with the opposite party. We say that two households are opposite party if one is Democratic and one is Republican. If either is unaffiliated with either major party, we say that the two households are not opposite party. All of our results tables include

 $<sup>^{12}</sup>$ Our Census block level covariates are constructed using all registered voters found in the NCSBE voter files, which includes renters, while the "households" we refer to are homeowners from the CoreLogic Solutions Real Estate who we successfully match to the North Carolina voter registration data set. Households frequently contain more than one registered voter.

 $<sup>^{13}</sup>$ When we say quarter we mean year-quarter. For example, 2009Q1 corresponds to the days between January 1, 2009 and March 31, 2009.

these two important statistics for each subsample used to estimate any given model.

The final sample described in Table 2 covers 4,642 unique census block groups, each with an average of 110 households. The 10<sup>th</sup> percentile block group has 11 households and the 90<sup>th</sup> has 264. In some of our analysis we go all the way down to the census block level. Our sample covers 52,450 unique census blocks, which average 11 households each.

To conduct our next-door neighbor analysis, we restrict our merged sample to household-quarter observations that got a new next-door neighbor. We require also that the new neighbor be in the merged sample so we can observe their political affiliation and race. Next, we omit households who moved away either the same quarter or the quarter immediately following the arrival of the new neighbor. Finally, we drop the last two years in the data because our outcome variable of interest is sell or not within two years of the new neighbor moving in next door. Table 3 summarizes this sample.

#### [TABLE 3 HERE]

The next-door neighbor sample has 156,697 observations, with 24% of observations getting a new neighbor of the opposite party. 6.70% sell within two years. The shares of the sample registered Democrat and Republican are 38% and 47%, respectively.

#### **3** Strategy for Identifying Political Sorting

#### 3.1 Next Door Neighbor Political Affiliations

We are interested in the role that politics plays in sorting. In particular, we study whether households are more likely to move away if living immediately next door to a household affiliated with the opposite party. To do so, we estimate the following equation:

Sell Next Two Years<sub>*it*</sub> = 
$$\beta_1 \times \text{Opposite Party Neighbor}_{it}$$
 +  
Controls<sub>*it*</sub> ×  $\Theta + \eta_{group,quarter,party,race} + \epsilon_{it}$ , (1)

where Sell Next Two Years<sub>*it*</sub> is an indicator variable (=100) if household *i* sells their home in the two years following time *t*. Opposite Party Neighbor<sub>*it*</sub> is a dummy variable equal to 1 if at least one of the household's next-door neighbors is affiliated with the opposite-party (households can have 0, 1, or 2 next-door neighbors). We control for the homeowner's age, birth state, residential tenure; the size and age of their home; the number of new next-door neighbors they have ever gotten divided by their tenure (our measure of hyperlocal churn); their block's local politics;<sup>14</sup> and the race of the new next-door neighbor. Finally, we include geography, time, party, and race fixed effects.<sup>15</sup> In our preferred specification, we use a census block group-by-quarter-by-party-by-race fixed effect.

By forcing the estimation to use variation within these tight geographic areas, we estimate only off of differences between the politics of a household's next-door neighbors. The identifying assumption of this model is that when comparing two households of the same party and race, in the same neighborhood, and at the same time, the political affiliation of the household's next-door neighbors is random. Many of the reasons households might choose to leave an area – school quality, crime, pollution – will be shared by everybody living in the census block group, especially conditional on party and race. What remains is a hyperlocal social influence effect coming from the neighbors as in Bayer et al. (2008) and McCartney and Shah (2019). This assumption is violated if (i) households with strong preferences for co-partisan next-door neighbors have already moved away or (ii) hyperlocal amenities or changes to them affect the move-out and move-in decisions of some parts of a census block group differently than other parts of the block group. We start by addressing the first violation.

#### 3.2 New Next-Door Neighbors

To more cleanly identify political sorting, we use a novel, next-door neighbor approach that compares two households of the same race, affiliated with the same party, and living in the same census block group that both got new next-door neighbors at the same time. If political polarization affects real economic decisions, we would expect the household that received a new neighbor of the opposite party to be more likely to move than the household whose new neighbor was not affiliated with the opposite party. The validity of this methodology requires that new neighbors are randomly assigned within census block groups. When determining where to live, individuals usually pick what general neighborhood they want to live in based on various factors including proximity to work, school district

<sup>&</sup>lt;sup>14</sup>For each block, we calculate the share of current residents affiliated with each party. If the Democratic (Republican) share is more than 12.5 percentage points larger than the Republican (Democratic) share, we say the block is blue (red). Otherwise, we call the block purple.

<sup>&</sup>lt;sup>15</sup>North Carolina is almost exclusively either White or Black, so we control for race with a dummy equal to 1 if the homeowner is White. Similarly, we say two households have opposite races if one is White and the other is non-White.

quality, and safety. Within neighborhoods, movers have fewer options because they can move only into houses that are on the market. With this strategy in mind, we estimate the following equation:

Sell Next 2 Years<sub>i</sub> = 
$$\beta_1 \times$$
 New Neighbor Opposite Party<sub>i</sub>+  
Controls<sub>i</sub> ×  $\Theta + \eta_{group,quarter,party,race} + \epsilon_i$ , (2)

where New Neighbor Opposite  $Party_i$  is a dummy indicating that household *i*'s new next-door neighbor is affiliated with the opposite party. We include the same set of control variables and fixed effects included in equation 1. We estimate this model using only observations of households that got a new next-door neighbor in quarter *t*. Treated households got new neighbors of the opposite party (Democrats getting Republican neighbors and Republicans getting Democratic neighbors), and the control group includes everybody else that got a new neighbor not of the opposite party. By testing this subsample of only households who have received a random shock to their immediate neighbor composition, we address the first potential violation to our identifying assumption: that households have already sorted themselves and realized their preferences for co-partisan neighbors.

Our second strategy modifies the control group. In this test, we compare households who got new next-door neighbors of the opposite party to other households of the same race and party and on the same census *block* (as opposed to block group) who did *not* get new next-door neighbors. Our second test therefore compares two very similar households that vary only in how far away they live from the new opposite-party next-door neighbor. One lives right next door while the other lives on the same block, but not immediately next door. By forcing the variation to come within such small geographies, we hope to rule out any amenity or gentrification-style stories, and thus address the second potential violation of our identifying assumption.

#### 4 Main Results

#### 4.1 Full Sample

We present our estimations of Equation 1 in Table 4.

#### [TABLE 4 HERE]

Column (1) includes our battery of control variables (see Table A1 for the complete list and their estimated magnitudes). We also include as control variables the party of the household (Democrats, Republican, or unaffiliated) and the race of the household (White or non-White). From the bottom two rows of the table, we see that 5.44% of households in the sample move within two years of any given point in time. We see also that 29.63% of households have an opposite-party next-door neighbor. The results of this first estimation, then, tell us that households with an opposite-party neighbor are 0.196 points or 3.6% more likely to have sold their home at some point in the next two years than households without opposite party neighbors, conditional on a number of important control variables.

However, move-out rates vary across time and across space. Some neighborhoods have especially high or low rates of churn, and our sample covers a time period when migration rates were declining overall. To account for these kinds of trends, column (2) includes a census block group-by-quarter fixed effect. In this way, our estimation identifies off of differences between two households living in the same neighborhood at the same time. It is with this specification that we begin to rule out amenity explanations for move-out rates. Households living in the same census block group are in the same school district, are exposed to similar amounts of pollution, and have similar access to public transportation. Neighborhood gentrification, or other neighborhood changes that have a common effect on the move-out rates of people living in the neighborhood, will therefore be absorbed and not bias our estimate of interest.

In columns three and four, we address the concern that households with different party affiliations or of different races might have different rates of moving out even within a neighborhood. Ideally our treatment and control groups would be identical and vary only in the political affiliation of their next-door neighbors. The estimate in column (2) does not do this perfectly since it compares, for example, a Democrat with a Republican next-door neighbor to a Republican with no Democratic next-door neighbors. But the latter is not an ideal control for the former, since Democrats and Republicans might have different base rates of leaving the neighborhood. To force the model to estimate as much as possible *only* off of differences in the neighbor's political affiliation, we include a groupby-quarter-by-party fixed effect in column (3) and a group-by-quarter-by-party-by-race fixed effect in column (4). In both cases, our results point to an economically important and statistically significant effect of having an opposite-party household living right next door.

#### 4.2 New Next-Door Neighbors Sample

In both of these tests, the treated group is current residents who got new next-door neighbors affiliated with the opposite party. All tests include the same battery of control variables as Table 4 and either group-by-quarter, group-by-quarter-by-party, or group-by-quarter-by-party-by-race fixed effects.

# 4.2.1 Control group: Current residents who got new next-door neighbors not affiliated with the opposite party

Equation 1 and Table 4 attempt to approximate an experiment by including a battery of control variables and fixed effects. But, since households' current residential choices are not random, the results of this test are biased by households' previous decisions. In this section we conduct two natural experiments that approximate the random assignment of opposite-party neighbors. In our first such test, we limit the sample to just those household-by-quarter observations where current residents get new next-door neighbors. Households belong to the treatment group if their new next-door neighbors are affiliated with the opposite party and the control group otherwise.

#### [TABLE 5 HERE]

In column (1) of Table 5, we estimate a statistically and economically significant effect of getting a new neighbor of the opposite party compared to a new neighbor *not* affiliated with the opposite party (see Table A2 for the complete list of control variables and their estimated magnitudes). Specifically, getting a new neighbor of the opposite party increases the relative probability of selling within two years by 0.369 percentage points or 5.7%. As before, we replace the group-by-quarter fixed effect with a group-by-quarter-by-party-by-race fixed effect. Column (2) presents the results of this specification, our preferred one, and leads to the paper's headline result. Compared to households who got new next-door neighbors not affiliated with the opposite political party, households in the same neighborhood, affiliated with the same party, and of the same race, who, at the same time, got a new next-door neighbor who was affiliated with the opposite party are 0.296 percentage points or 4.4% more likely to have left within two years of the new neighbor's arrival.

#### [TABLE 6 HERE]

We conduct four robustness tests. First, in columns (1) and (2) of Table 6, we require that every treated household – those with new opposite-party neighbors – match to at least one control household – those with new neighbors not affiliated with the opposite party. That is, if we tag a household as getting a new next-door neighbor of the opposite party, we require there to also be another household, in the same block group, affiliated with the same party, and of the same race who got a new next-door neighbor *not* of the opposite political party. Otherwise, the household is omitted from the sample. This sample restriction ensures that our results in Table 5 are not driven by differences in the support of the treatment and control groups. While this sample is much smaller, reflecting the strict requirements of the match, it is one where we are particularly confident that the control group provides a good counterfactual. The results are similar in both economic and statistical significance.

Second, we loosen the sample restriction that requires census blocks have a population of at least twenty registered voters to be included. Removing this restriction increases the sample size by approximately 8%. We show, in the next two columns of Table 6, that our main results become somewhat weaker when the sample is expanded in this way. However, this is likely due to the introduction of more noise, since in these low-population blocks, the likelihood of finding both a treated household and a control household is small.

Third, we focus just on Democrats and Republicans. In our main tables, we say that a pair of next-door neighbors are opposite-party neighbors if, and only if, one is Democrat and the other is Republican. Note that this means there are seven pairwise combinations of Democrat, Republican, and unaffiliated households defined as not-opposite. In columns (5) and (6) of Table 6, we replicate the analysis done in Table 5 but just on the subsample of households that are either Democratic or Republican. Omitting unaffiliated households from the analysis results in nearly identical estimated effects.

#### [FIGURE 2 HERE]

Fourth, and finally, we restrict the sample to especially homogeneous block groups. The assumption our strategy requires for validity is that, within a census block group, new neighbors could have picked any vacant house with equal probability. However, while census block groups are very small (a block group has an average of 110.4 households in our sample), variation in blocks within block groups is still possible.<sup>16</sup> Ideally, we would be able to absorb this hyperlocal variation by including block fixed effects, but to do so here limits the sample too much since two homes on the same block being purchased in the same quarter is very rare.<sup>17</sup> Instead, we create a measure of block group homogeneity. We calculate the difference in the share of current residents affiliated with the Democratic Party between the most and least Democratic blocks in the block group. In Figure 2, we then re-estimate our models of interest while restricting to especially homogeneous block groups. If anything, our results are strongest in the most homogeneous block groups, where the validity of our assumption is most likely to hold.

#### 4.2.2 Control group: Current residents who did not get new neighbors

Our second strategy compares our treatment group to other current residents on the same *census*  $block^{18}$  (as opposed to block group as in previous tests), of the same race, and affiliated with the same party, but who did *not* get a new next-door neighbor of any kind. Note that they did get a new *block* neighbor, by construction. Furthermore, note that their new *block* neighbor is the same as the treated household's new *next-door* neighbor. By including block-by-quarter-by-party-by-race fixed effects, this test cleanly compares the effect of living next door, as opposed to somewhere down the block, from the new opposite-party neighbor.

#### [TABLE 7 HERE]

We present the first results of this test in columns (1) and (2) in Table 7. In these regressions, the control group includes all other current residents who share the same party affiliation and race with a treated household on their block, but who did not receive new next-door neighbors. There are two noteworthy findings. First, the main effect is economically and statistically significant. Treated households are 0.451 percentage points, or 7.4%, more likely to move out within two years than other households on the same block who live slightly farther away from the new neighbor. Second, the results are very similar regardless of whether the geography fixed effect is at the census block group or census block level. This further suggests that our results are not driven by variation in

<sup>&</sup>lt;sup>16</sup>For example, Figure A1 zooms down to the block-level in Downtown Raleigh and variation in current residents' political affiliations is visible even at this very fine level.

<sup>&</sup>lt;sup>17</sup>Our next strategy, presented in Section 4.2.2 does allow for the inclusion of census block fixed effects.

<sup>&</sup>lt;sup>18</sup>Census blocks have an average of 11.4 households in our sample.

block characteristics within a block group. In columns (3) and (4), we restrict to a one-to-one match. Each treated household is matched to exactly one control household. To refine the sample in this way, we use a series of tiebreakers: homeowner age, ethnicity, born in NC, house year built, house square feet and land square feet. The results after this sample restriction are similar to those estimated in columns (1) and (2).

#### 4.3 Timing

Our last main test investigates the timing of the move-out decisions. We repeatedly estimate Equation 2 as in column (2) from Table 5 but vary the dependent variable. So instead of estimating the effect on move-out within two years, we investigate the effect on move-out within two quarters, within three quarters, and so on. We then plot these estimated coefficients in Figure 3.

#### [FIGURE 3 HERE]

We find that the estimates increase in magnitude and significance up to 18 months. Our interpretation is that the repellent effects of an opposite-party next-door neighbor take time to materialize. We propose two likely explanations. First, current residents take time to learn about their new neighbor's type. They might not know immediately if the new neighbors believe that wearing masks during a pandemic infringes on First Amendment rights, or if anybody driving a non-electric car should be treated with contempt. Second, even if current residents have learned enough to know they want to move, it takes time to actually realize that preference since listing their current home, selling their current home, and finding somewhere to move all require significant time and other transaction costs.

We further view this result as evidence largely inconsistent with a gentrification or hyperlocal amenity alternative explanation. If there was some hyperlocal amenity that was attracting those affiliated with one party to a very local part of the neighborhood while pushing away those of the other party, then we would not expect to see this time lag. Rather the attracting and repelling forces of the hyperlocal amenity would operate equally on both parties such that the opposite-party neighbor effect would be immediately and spuriously positive. But this is, of course, not what we find.

#### [FIGURE 4 HERE]

Next, we conduct a similar analysis by repeating our analysis in column (2) from Table 7, but at different time horizons for the dependent variable. The results of this analysis are plotted in Figure 4. We reach the same conclusion: There exists a real distaste for opposite-party next-door neighbors that takes time to manifest itself.

Our long panel also allows us to look beyond the two years after the arrival of the new neighbors. At a five-year horizon, our two tests find slightly different results. Comparing all households that got new next-door neighbors, we find that the cumulative difference in move-out rates between getting a new opposite-party and a new non-opposite-party neighbor becomes negligible at five years (see Figure A2). Our interpretation is that the new opposite-party neighbor effect does not necessarily lead to more out-moves but rather accelerates them for current residents who get opposite-party neighbors. Recall that this analysis is conducted on the sample of (i) only those households who got new next-door neighbors and (ii) only households who got new neighbors between 2006 and 2009 to ensure we can follow them for five years. We also repeat our second test that compares to same-party, same-race households who did *not* receive a new neighbor of any type (as in Table 7). We find that this group becomes and then remains, even five years later, more likely to have moved away (see Figure A3). This leads, in the long run, to increased political segregation.

#### 5 Secondary Results

Our main results provide compelling evidence that immediate neighbors, and their political affiliations, matter for households' residential choice. In the next section of the paper, we present a number of secondary results that serve two purposes. First, they help us continue to rule out that our main result can be explained by hyperlocal neighborhood changes attracting certain types of residents while pushing others away. Second they provide evidence especially consistent with a political polarization and partisanship mechanism being behind our main result.

#### 5.1 Partisanship

First, we explore the heterogeneity of our effects over the likelihood that the new opposite-party next-door neighbor is partisan. Our samples have so far included all households and all neighbors, regardless of how politically engaged they are. Among the sample of all registered voters, though, some people identify with their registered political party more than others and also dislike members of the opposite party more. In other words, if our hypothesis of partisan-fueled sorting is correct, we would expect to see that apathetic people are less affected by opposite-party neighbors. To measure how intensely people affiliate with their party, we turn to the voter history files. We can observe every election each voter participated in, and we can therefore classify voters as engaged or apathetic based on their participation. Participation is affected by a great many factors, but our motivation for this proxy can be summarized as follows: Registered voters who never vote, or vote only rarely, are less likely to be especially partisan.<sup>19</sup> To that end, we classify voters as apathetic if they never vote or vote only in the presidential election every four years and we call all other voters engaged.<sup>20</sup> We then estimate Equation 2 with different subgroups of households and new neighbors. The results of this analysis are presented in Table 8.

#### [TABLE 8 HERE]

In the first two columns, we allow the new neighbors to be engaged or apathetic, but split the sample of *current residents* into those who are apathetic and those who are engaged (by construction, all households are either apathetic or engaged). Neither of these types of households is significantly affected when getting new opposite-party next-door neighbors, when compared to other current residents of the same party and race, in the same block group who got a new neighbor at the same time. The standard errors are quite large, however, and we cannot rule out potentially large main effects. In columns (3) and (4), we do not categorize current residents' intensity, but instead classify the *new neighbor's* voting intensity as apathetic or engaged. We find that our main effects are being driven solely by the repellent effect of new, opposite-party, engaged neighbors.

#### [TABLE 9 HERE]

In Table 9, we conduct a similar analysis, but using interaction terms instead of subsamples. Our finding is the same. The effect of an opposite-party next-door neighbor is insignificant if that neighbor is not politically engaged (and therefore unlikely to be the type of household loathed by a

<sup>&</sup>lt;sup>19</sup>This claim is supported by survey data from the Pew Research Center: https://www.pewresearch.org/politics/2014/06/12/section-5-political-engagement-and-activism/.

 $<sup>^{20}</sup>$ Since apathetic voters includes those who vote only in presidential elections, or do not vote at all, engaged voters include voters who vote in midterm elections, or midterm presidential primaries, and local elections.

neighbor for its political affiliation). It is when the new neighbor is both opposite-party and engaged that the move-out rates of the current residents are especially affected.

If political sorting was just the result of changes to local neighborhoods that attracted certain types of people and pushed away others, such neighborhood effects would have to channel only through new residents who frequently vote. Therefore, we interpret these results as evidence consistent with an opposite-party neighbor effect that is driven, at least in part, by political polarization and the hostility with which some party affiliates treat those associated with the opposite party. Engaged residents themselves are no more likely to move away – they are the ones with the strong beliefs. What affects migration is people finding themselves living next door to others who (i) have different views, preferences, and behaviors and (ii) make it known.

#### 5.2 Distance

Next, we examine whether our results vary by how nearby the next-door neighbor lives. Recall the two potential mechanisms we consider for the observed increases in political segregation. The first is that political affiliation is correlated with preferences for amenities, and it is for the amenities that households choose neighborhoods. The second is that households prefer to live immediately next door to some people more than others. By looking at distance to the next-door neighbor, we can help tease these two channels apart. Within a neighborhood, the amenities are largely the same if the next-door neighbor is less than 100 feet away or more than 100 feet away, for example. So if we see the effect of opposite-party next-door neighbors being especially strong when they live very close by, that is evidence in favor of the second potential channel.

#### [TABLE 10 HERE]

To create Table 10, we calculate the distance between each current resident and her new nextdoor neighbor and then interact that distance with whether the new neighbor is affiliated with the opposite party. It is only in cases where the new opposite-party neighbor lives very close by that households are more likely to move away. These differential effects are estimated within neighborhood, as all of our tests have been. So this result is not because some parts of North Carolina are denser than others. The idea is that within a block group, amenities and changes to the neighborhood are shared, but the distances between the new opposite-party neighbors can vary from very nearby to slightly farther away.

#### [FIGURE 5 HERE]

In Figure 5, we plot the effect of a new next-door neighbor as a function of the distance between the neighbor and the current resident. The results are consistent with Table 10. Only at very local distances are current residents especially affected by new neighbors being affiliated with the opposite political party.

#### 5.3 Other Homeowner and Neighborhood Characteristics

We next explore the heterogeneity of the opposite-party neighbor effect over block politics. Blocks are defined as "blue" if the share of Democrats is more than 12.5 percentage points higher than the share of Republicans and as "red" if the share of Republicans is more than 12.5 percentage points higher than the share than the share of Democrats. Otherwise, we call the block "purple".<sup>21</sup> We estimate our standard regression on red, purple, and blue subsamples and present these findings in Table 11.

#### [TABLE 11 HERE]

The repellent effects of opposite-party neighbors are observed only in purple districts. Importantly, the block-level politics surrounding each current resident are not random so our results here are in no way causal. But the non-randomness of block level politics is, in this test, the whole point of the exercise. The kinds of Democrats who live in very red areas and the kinds of Republicans who live in very blue areas are also, likely, the kinds of people who (i) do not mind living next door to opposite-party neighbors or (ii) prefer some other feature of the neighborhood so much that they pay the cost of living next door to opposite-party neighbors.

#### [TABLE 12 HERE]

In Table 12, we investigate how our results vary by the tenure and personal age of the primary homeowner. In both cases, we find an economically and statistically significant main effect. In the

 $<sup>^{21}</sup>$ At these cutoffs, there is a roughly equal distribution of political block types. In our new next-door neighbors only sample, for example, 30.8% of census blocks are blue blocks, 30.9% are purple blocks, and 38.3% are red blocks.

case of homeowner tenure, we find that the results are relatively strongest for residents who have lived in the home for five to six years. This result is consistent with homeowners who have been there less time not being willing to pay moving costs again so soon and homeowners who have been there a long time not being willing to pay the moving costs at all. For age, we find a significant main effect. We further find that this effect dissipates with homeowner age, particularly for homeowners 45 years or older, although the standard errors on the interaction effects are sizeable and the estimates are not statistically significant.

#### [TABLE 13 HERE]

Finally, we investigate in Table 13 whether the effects are different in particularly high-churn areas. In this table, local churn is defined at the census block-by-quarter level as the mean number of new households on the block over the past 4 quarters, divided by the number of housing units on the block. We show that households living in areas with high churn are themselves more likely to move. But the relative effect of an opposite-party next-door neighbor does not change significantly over churn.

#### 5.4 Migration

In our last test, we use the fact that movers who stay in the same county keep the same voter registration IDs from the NCSBE to perform some simple migration tests. This allows us to follow within-county movers and compare the political affiliations of their old block neighbors and their new block neighbors.

#### [FIGURE 6 HERE]

To create Figure 6, we start with the sample of all within-county movers affiliated with either the Democratic or Republican Party. Next, we create quintiles of initial block Democrat share. The blocks with the smallest share of Democrats is quintile 1. We then follow these ten groups of movers and compare the Democrat share of the blocks they move to.

We find that households moving from especially Democratic blocks relocate to places with a higher share of Democrats (the overall upward trend of the first histogram). This likely reflects the correlation between local attributes and Democrat share that are common across blocks in the county. Within this overall trend, though, are two interesting comparisons. First, within quintile, Democrats always move to new blocks that are relatively more Democratic than the blocks moved to by Republicans. Second, this gap widens as the Democratic share of the initial block increases. These two findings both suggest the same takeaway. Movers prefer to relocate to blocks where a larger share of the population is affiliated with their party and where they are therefore more likely to have like-minded neighbors.

#### 6 Conclusion

This paper shows that partisan sorting across geographies is occurring at very local levels throughout North Carolina. This sorting is driven, at least in part, by households selling their homes and moving away from opposite-party neighbors. We identify this effect using a novel, new next-door neighbor identification strategy to show that households whose quasi-random new next-door neighbors are of the opposite political party are especially likely to move away. Consistent with a partisan identity mechanism, we find households are especially likely to move away when their new neighbors are opposite party and more likely to be intensely partisan. All together, our results suggest that political polarization, with households increasingly disliking those affiliated with the opposite political party, contributes to increases in political segregation observed at the precinct and even local neighborhood level.

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#### Figure 1: Democrat Share Across Census Block Groups in Wake County, NC

This figure plots census block groups in Wake County and illustrates the share of people affiliated with a particular party who are affiliated with the Democratic Party as of 2016. The voter registration data include precise address, which allows us to map them to block groups, and party affiliation. Since people unaffiliated with a party cannot be unambiguously assigned to one party, we omit them from this choropleth. That is, we divide the number of Democrats on the block by the sum of Democrats and Republicans. Heavily Democratic areas are in blue and heavily Republican areas are in red. The underlying data are publicly available on the website of the North Carolina State Board of Elections.



## Figure 2: Effect of New Opposite-Party Next-Door Neighbor Over Block Group Political Homogeneity

To create this figure we estimate Equation 2 (as in column (2) from Table 5). We plot, with a navy circle, the estimated opposite party next-door neighbor effect produced by twelve models. We start with the data set that contains only the quarter when the current resident got a new next-door neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. We then restrict that sample as follows: For each census block group, we calculate the difference between the Democratic block share at the most Democratic block in the block group and the least Democratic block in the block group. In this way, a very homogeneous block group implies a low difference. We first, in the left part of the figure, estimate the effect while restricting our sample to the most homogeneous census block groups. Moving to the right includes decreasingly homogeneous block groups. We include the same control variables from Table 5 in every specification. Within each subsample, we estimate three variations of the main specification. Along with the control variables, we include either a group-by-quarter (GQ), group-by-quarter-by-party (GQP), or group-by-quarter-by-party-by-race (GQPR) fixed effect. Sample sizes for the specification with the GQP fixed effect are displayed along the bottom of the figure. Whiskers illustrate 95% confidence intervals.



#### Figure 3: Effect of New Opposite-Party Next-Door Neighbor Given Any New Neighbor

This event study presents our analysis from column (2) of Table 5, which estimates the relative likelihood of moving out when getting a new neighbor of the opposite political party compared to a new neighbor not affiliated with the opposite party conditional on census block group, quarter, party affiliation, and race. The only difference is here we vary the dependent variable across different time horizons. The data set contains only the quarter when the current resident got a new next-door neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. 95% confidence intervals are plotted with dashed lines.



#### Figure 4: Comparing to Nearby Households Who Did Not Get New Neighbors

This event study presents our analysis from column (2) of Table 7, which estimates the relative likelihood of moving out when getting a new neighbor of the opposite political party compared to another current resident on the same census block, at the same quarter, affiliated with the same party, and of the same race who did not get a new neighbor. The only difference is here we vary the dependent variable across different time horizons. The data set contains only the quarter when the current resident got a new neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. 95% confidence intervals are plotted with dashed lines.



#### Figure 5: Distance Between the Current Resident and the New Next-Door Neighbor

This figure shows how the effect of a new neighbor changes over the distance between the current resident and the new next-door neighbor. We regress the decision to sell in the next two years on a linear, square, and cubic term of distance along with the standard control variables and a block group-by-quarter-by-party-by-race fixed effect. The data set contains only the quarter when the current resident got a new next-door neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. We estimate two models. Plotted in red is the effect of a new opposite-party neighbor over distance. In blue is the effect of a new neighbor when that neighbor is not affiliated with the opposite party as the current resident. The shaded regions represent 95% confidence intervals.



#### Figure 6: Block Level Politics of Movers' New Locations

The North Carolina State Board of Elections continues to use the same ID for each registered voter who continues to live in the same county. This means that we can follow households who move, so long as they move somewhere within the county. In this figure, we plot the share of households on the mover's new block that are Democrats. We split the sample in two ways. First, we split the sample into five quintiles based on their old block's Democrat share. Then, within each quintile, we look at the next Democrat share separately for migrating Democrats and Republicans.



#### **Table 1: Increasing Political Segregation**

Panel A presents some moments of the distribution of precinct margins of victory for each presidential election. To create Panel A of this table we calculate the margin of victory of the 3,000 precincts in North Carolina for each presidential election between 2000 and 2016. We take the share of the vote won by the Democratic candidate and the share won by the Republican candidate and calculate the absolute value of the difference. Panel B shows the distribution of majority party skew at the block group level. To create Panel B, we calculate the absolute difference in the share of each census block group's registered voters affiliated with the Democratic Party and the share affiliated with the Republican Party, conditional on being affiliated with any party. The underlying data for both panels are publicly available on the website of the North Carolina State Board of Elections.

	Margin	Between Ma	ajority Party	and Minor	ity Party	Share with
Year	$5^{\mathrm{th}}$	$25^{\mathrm{th}}$	Mean	$75^{\mathrm{th}}$	$95^{\mathrm{th}}$	Margin > $50\%$
2000	6.7%	15.4%	30.8%	42.6%	55.2%	14.6%
2004	7.6%	17.9%	32.8%	45.7%	57.8%	17.9%
2008	5.6%	14.2%	31.4%	44.2%	60.4%	18.9%
2012	7.0%	16.3%	33.7%	47.6%	63.8%	21.6%
2016	7.0%	15.7%	35.0%	52.2%	68.0%	27.1%

Panel A: Precinct Level, Election Results

Panel B: Bloo	ck Group	Level,	Political	Affiliation	from V	Voter	Registration	Records
		,						

	Margin	Share with				
Year	$5^{ m th}$	$25^{\mathrm{th}}$	Mean	$75^{\mathrm{th}}$	$95^{\mathrm{th}}$	Margin > 50%
2006	2.3%	12.4%	31.0%	43.7%	82.5%	19.9%
2008	3.0%	12.7%	32.8%	48.3%	85.7%	23.4%
2011	2.7%	12.8%	32.8%	48.2%	85.0%	23.4%
2012	2.9%	13.6%	33.9%	49.8%	86.3%	24.7%
2014	2.7%	13.9%	34.1%	49.3%	86.0%	24.5%
2016	3.1%	14.9%	35.2%	50.9%	85.8%	25.7%
2018	3.0%	15.2%	35.5%	51.5%	84.8%	26.8%

#### **Table 2: Describing the Full North Carolina Sample**

This table presents summary statistics on the full data set that merges the CoreLogic Solutions Real Estate data and the North Carolina voter registration data to describe homeowners registered to vote in North Carolina at any point between 2005 and 2015. Sell within 2 Years is a dummy presented in percent form (0 or 100) and equals 100 if the household has moved out within two years of the quarter. All other dummy variables are reported in decimal form (0 or 1). Homeowner politics are defined in the text. Apathetic is equal to 1 if the household voted only in presidential elections in November or never voted. Each household has at most two next-door neighbors. Opposite-Party Nbr is equal to 1 if a Democrat household has at least one Republican next-door neighbor, and 0 otherwise and analogously for Republican households. Dem Nbr and Rep Nbr equal 1 if the household has at least one Democrat or Republican next door neighbor. Nbr Churn Rate is defined as the number of new next-door neighbors a household has had divided by their tenure in the home. The sample is restricted to blocks with at least twenty registered voters and to owners who have lived at least one year in their home and lived through an election.

	Count	Mean	Std Dev
Dependent Variable			
Sell within 2 Years (0-100)	18,260,115	5.45	22.71
Homeowner Politics			
Party: Democrat	$18,\!260,\!115$	0.42	0.49
Party: Republican	$18,\!260,\!115$	0.39	0.49
Party: Unaffiliated	$18,\!260,\!115$	0.19	0.39
Intensity: Apathetic	18,260,115	0.37	0.48
Homeowner Demographics			
Race: White	18,260,115	0.75	0.43
Homeowner Age (Years)	18,260,115	52.10	15.29
Born in NC	18,260,115	0.35	0.48
Tenure (Quarters)	18,260,115	39.74	9.14
Next-Door Neighbor Politics			
Opposite-Party Nbr	18,260,115	0.30	0.46
Dem Nbr	18,260,115	0.48	0.50
Rep Nbr	18,260,115	0.45	0.50
Next-Door Nbr Demographics			
Nbr Different Race	18,260,115	0.26	0.44
White Nbr	18,260,115	0.79	0.40
Non-White Nbr	18,260,115	0.29	0.46
Nbr Churn Rate	18,260,115	0.02	0.05
Home Characteristics			
Year Built	18,260,115	1985	20
Building Sq Ft	18,260115	2,428	1,430
Block Peer Characteristics			
<b>Block Population Count</b>	$18,\!260,\!115$	156.42	169.65
Opposite-Party Block Share	18,260,115	0.24	0.18

#### Table 3: Describing the Sample of Households Who Got New Next-Door Neighbors

This table describes the sample of household-by-quarter observations where a household got a new next-door neighbor and both the household and the new neighbor exist in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. The sample described in this table is a strict subset of the sample described in Table 2. The sample is further restricted to households who did not sell in the same quarter or in the quarter immediately after the new neighbor's arrival.

	Count	Mean	Std Dev
Dependent Variable			
Sell within 2 Years (0-100)	156,697	6.70	25.00
Homeowner Politics			
Party: Democrat	156,697	0.38	0.48
Party: Republican	156,697	0.47	0.50
Party: Unaffiliated	156,697	0.15	0.36
Intensity: Apathetic	156,697	0.40	0.49
Homeowner Demographics			
Race: White	156,697	0.83	0.38
Homeowner Age (Years)	156,697	50.27	14.43
Born in NC	156,697	0.30	0.46
Tenure (Quarters)	156,697	15.94	10.39
New Next-Door Neighbor Politics			
New Opposite-Party Neighbor	156,697	0.24	0.43
New Democrat Neighbor	156,697	0.35	0.48
New Republican Neighbor	156,697	0.38	0.49
New Next-Door Neighbor Demographics			
New Nbr Different Race	156,697	0.21	0.41
Nbr Churn Rate	156,697	0.15	0.12
Home Characteristics			
Year Built	156.697	1988	18
Building Sq Ft	156,697	2,566	1,231
Block Peer Characteristics			
Block Share Peers Democrat	156.697	0.35	0.17
Block Share Peers Republican	156,697	0.36	0.15
Opposite-Party Block Share	156,697	0.24	0.16

#### Table 4: Likelihood of Moving and Next-Door Neighbor Politics

This table presents the coefficient estimates of the impact of having a next-door neighbor registered with the opposite party on an homeowner's decision to sell within two years. All coefficient estimates correspond to a percentage point (0-100) change in the probability of selling. The data set includes only individuals who exist in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set, described in Table 2. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)						
Sample:	All Current Residents						
	(1)	(2)	(3)	(4)			
New Next-Door Nbr: Opposite Party	0.196*** (0.037)	0.175*** (0.053)	0.055* (0.030)	0.084*** (0.029)			
Control Variables	X	X	X	X			
Fixed Effects:							
Race	Х	Х	Х				
Party	X	Х					
$\operatorname{Group}  imes \operatorname{Qtr}$		Х					
Group × Qtr × Party			X				
$Group \times Qtr \times Party \times Race$				Х			
Ν	18,365,628	18,363,465	18,339,272	18,260,115			
Sample Means:							
Dependent Variable	5.44	5.44	5.44	5.45			
Opposite Party Next-Door Nbr	29.63	29.63	29.62	29.62			

#### Table 5: Effect of New Opposite-Party Next-Door Neighbor Given Any New Neighbor

This table presents the coefficient estimates of the impact of getting a new opposite-party neighbor on an individual homeowner's decision to sell within two years. All coefficient estimates correspond to a percentage point (0-100) change in the probability of selling. The data set used in the first two columns contains all homeowner-by-quarter observations where a current resident got a new next-door neighbor. We require that both the current resident and the new neighbor exist in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. The sample is restricted to blocks with at least twenty registered voters and to owners who have lived at least one year in their home, lived through an election, and not moved in the quarter immediately following the new neighbor's arrival. In columns (3) and (4) we include only observations in block group-byquarter-by-party-by-race bins that include both a current resident who got a new neighbor affiliated with the opposite party and a current resident who got a new neighbor affiliated with the opposite party and a current resident who got a new neighbor not affiliated with the opposite party. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)				
Sample:	All Current Residents Who Got New Neighbors				
	(1)	(2)			
New Next-Door Nbr: Opposite Party	0.369***	$0.296^{*}$			
	(0.112)	(0.161)			
Control Variables	Х	Х			
Fixed Effects					
Race	Х				
Party	Х				
Group × Qtr	Х				
$Group \times Qtr \times Party \times Race$		Х			
Ν	228,787	156,697			
Sample Means:					
Dependent Variable	6.47	6.70			
New Opposite-Party Next-Door Nbr	23.89	23.69			

#### **Table 6: Robustness of New Neighbor Results to Sample Changes**

This table is identical to Table 5 except for changes to the samples. In columns (3) and (4), we include all census blocks, even those with registered voter populations under 20 which are dropped in our other tests. In columns (5) and (6), we limit to just current residents affiliated with either the Democratic or Republican Parties. That is, unaffiliated current residents are dropped from the sample. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. S1tandard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)								
Sample:	Matched Households Subsample		All Current Residents Who Got New Neighbors, All Blocks		Dem & Rep Residents Who Got New Neighbors				
	(1)	(2)	(3)	(4)	(5)	(6)			
New Next-Door Nbr: Opposite Party	0.418** (0.196)	0.386* (0.214)	0.299** (0.124)	0.138 (0.166)	0.338*** (0.124)	0.301* (0.179)			
Control Variables	Х	Х	Х	Х	Х	Х			
Fixed Effects									
Race	Х		Х		Х				
Party	Х		Х		Х				
Group × Qtr	Х		Х		Х				
$Group \times Qtr \times Party \times Race$		Х		Х		Х			
Ν	66,081	66,056	246,337	169,692	176,114	132,881			
Sample Means:									
Dependent Variable	6.91	6.91	6.37	6.60	6.18	6.39			
New Opposite-Party Next-Door Nbr	41.14	41.14	23.94	23.74	29.95	27.94			

#### Table 7: Comparing to Nearby Households Who Did Not Get New Neighbors

This table presents the coefficient estimates of the impact of getting a new opposite-party neighbor on an individual homeowner's decision to sell within two years. All coefficient estimates correspond to a percentage point (0-100) change in the probability of selling. The data set used in the first two columns contains all homeowner-by-quarter observations where a current resident got a new nextdoor neighbor of the opposite party. For every household treated in this way, we identify households on the same census block, in the same quarter, affiliated with the same party, and of the same race who did not receive a new next-door neighbor. We require that both the treated households (who got new neighbors) and the control households (who did not) exist in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. The sample is restricted to blocks with at least twenty registered voters and to owners who have lived at least one year in their home, lived through an election, and not moved in the quarter or quarter immediately following the new neighbor's arrival. In columns (3) and (4), we further restrict the control group by using homeowner age, ethnicity, born in NC, year built, house square feet, and land square feet as tiebreakers such that we are left with a one-to-one-match between treated households and control households. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)					
Sample:	Residents Nbrs & A	Who Got New All Matches	One-to-One Matched Subsample			
	(1)	(2)	(3)	(4)		
New Next-Door Nbr: Opposite Party	$0.454^{***}$	$0.451^{***}$	0.340***	0.346**		
	(0.107)	(0.101)	(0.128)	(0.132)		
Control Variables	Х	Х	Х	Х		
Fixed Effects Group × Qtr × Party × Race Block × Qtr × Party × Race	Х	X	Х	х		
Ν	618,760	618,677	106,561	106,436		
Sample Means:						
Dependent Variable	6.12	6.12	6.14	6.14		
New Opposite-Party Next-Door Nbr	8.73	8.72	50.65	50.66		

#### Table 8: Heterogeneity Over Household and New Neighbor Voter Intensity

This table estimates the same model as before on different subsamples of current residents and neighbors based on their voting frequency. Apathetic voters are those who never vote or vote only in the presidential elections every four years, while engaged voters are those who have ever voted in a midterm election, primary, special election, or local election. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)						
Sample:	Current Residents Who Got New Next-Door Neighbors						
Subsample, Current Resident: Subsample, New Nbr:	Apathetic All	Engaged All	All Apathetic	All Engaged			
	(1)	(2)	(3)	(4)			
New Next-Door Nbr: Opposite Party	0.434 (0.851)	0.202 (0.170)	-0.569 (0.722)	0.467** (0.232)			
Control Variables	Х	Х	Х	Х			
$\begin{array}{l} \textit{Fixed Effects} \\ \textit{Group} \times \textit{Qtr} \times \textit{Party} \times \textit{Race} \end{array}$	X	X	X	X			
Ν	19,109	103,266	25,499	101,360			
Sample Means:	15 50	2.04	6 50	0.05			
Dependent Variable New Opposite-Party Next-Door Nbr	15.56 22.88	$3.94 \\ 23.79$	6.73 23.17	6.65 23.81			

#### Table 9: Heterogeneity Over Household and New Neighbor Voter Intensity

This table estimates a similar model as before but interacts the main effect with the apathy of the new next-door neighbor. Apathetic voters are those that never vote or only vote in the presidential elections every four years, while engaged voters are those who have ever voted in a midterm election, primary, special election, or local election. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)					
Sample:	All Current Residents Who Got New Next-Door Neighbors					
	(1)	(2)	(3)			
New Next-Door Nbr: Opposite Party	0.026	-0.138	-0.110			
	(0.166)	(0.224)	(0.288)			
New Next-Door Nbr: Engaged	-0.511***	-0.506***	-0.499**			
	(0.117)	(0.168)	(0.232)			
Opposite Party × Engaged	$0.459^{**}$	$0.500^{*}$	0.543			
	(0.224)	(0.275)	(0.351)			
Control Variables	X	X	X			
Fixed Effects						
Race	Х	X				
Party	Х					
$\operatorname{Group}  imes \operatorname{Qtr}$	Х					
$\mathbf{Group} \times \mathbf{Qtr} \times \mathbf{Party}$		X				
$Group \times Qtr \times Party \times Race$			Х			
Ν	228,787	179,414	156,697			
Sample Means						
Dependent Variable	6.47	6.58	6.70			
New Opposite-Party Next-Door Nbr	23.89	23.82	23.69			

#### **Table 10: Distance to Neighbor**

This table estimates how the effect of a new opposite party next-door neighbor varies over the distance between the current resident's house and the house next-door the new neighbor moves into. The sample is restricted to just those households receiving a new neighbor as in Table 5. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)			
Sample:	All Current Residents Who Got New Next-Door Neighbors			
	(1)	(2)	(3)	
New Next-Door Nbr: Opposite Party	$1.161^{***}$ (0.251)	0.809** (0.355)	0.844 <sup>**</sup> (0.350)	
Distance to New Next-Door Neighbor (miles) $0.000 < \text{Distance} \le 0.015 \text{ (omitted)}$				
$0.015 < \text{Distance} \le 0.025$	$-0.691^{***}$ (0.221)	$-0.855^{***}$ (0.294)	$-1.007^{***}$ (0.299)	
$0.025 < \text{Distance} \le 0.100$	-1.447*** (0.348)	-1.440*** (0.431)	-1.585*** (0.486)	
Interaction Effects				
New Opp Nbr $\times$ 0.015 < Distance $\leq$ 0.025	$-1.086^{***}$ (0.298)	-0.737* (0.396)	$-0.671^{*}$ (0.373)	
New Opp Nbr $\times$ 0.025 < Distance $\leq$ 0.100	-1.013** (0.420)	-0.871 (0.652)	-0.907 (0.619)	
Control Variables	Х	X	X	
Fixed Effects:				
Race	X	Х		
Party Croup × Otr	X			
Group $\times$ Qtr $\times$ Party	А	X		
$Group \times Qtr \times Party \times Race$			Х	
Ν	228,787	179,414	156,697	
Sample Means:				
Dependent Variable	6.47	6.58	6.70	
New Opposite-Party Next-Door Nbr	23.89	23.82	23.69	

#### Table 11: Different Effects of New Next-Door Neighbors Across Block Shares

This table estimates how the effect of a new opposite-party next-door neighbor varies over the census block's local political make-up. Blocks where the majority party has 12.5 percentage points more than the minority party are called red if the majority party is Republican and blue if it is Democrat. All other blocks are called purple. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. The sample is restricted to just those households receiving a new neighbor as in Table 5. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)					
Sample:	Current Residents Who Got New Next-Door Neighbors					
Subsample:	Blue Blocks		Purple Blocks		Red Blocks	
	(1)	(2)	(3)	(4)	(5)	(6)
New Next-Door Nbr: Opposite Party	-0.027	-0.069	0.369**	$0.327^{*}$	-0.123	-0.087
	(0.176)	(0.190)	(0.176)	(0.194)	(0.154)	(0.157)
Control Variables	X	X	X	X	X	X
Fixed Effects						
Race	Х		Х		Х	
$County \times Qtr \times Party$	Х		Х		Х	
$County \times Qtr \times Party \times Race$		Х		Х		Х
Ν	77,676	76,785	77,400	76,486	97,334	96,484
Sample Means						
Dependent Variable	5.68	5.71	6.62	6.65	6.50	6.52
New Opposite-Party Next-Door Nbr	20.52	20.50	26.46	26.50	24.48	24.48

#### Table 12: Heterogeneity over Current Resident Age and Tenure

This table estimates how the effect of a new opposite-party next-door neighbor varies over the tenure and age of the current resident. The sample is restricted to those households receiving a new neighbor as in Table 5. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)			
Sample:	All Current Residents Who Got New Neighbors			
	(1)	(2)		
New Next-Door Nbr: Opposite Party	$0.345^{**}$	$1.281^{*}$		
	(0.154)	(0.675)		
Tenure and Age				
Tenure: 3 to 4 Years	$2.281^{***}$			
	(0.371)			
Tenure: 5 to 6 Years	$1.817^{***}$			
	(0.438)			
Tenure: 7 to 8 Years	0.928			
	(0.649)			
Tenure: 9 Years or More	-0.442			
	(0.480)			
Age: 30 to 44		0.408		
		(0.508)		
Age: 45 to 64		-2.746***		
		(0.581)		
Age: 65 and over		-2.424***		
		(0.618)		
Interaction Effects				
New Oppo Nbr × Tenure: 3 to 4 Years	-0.283			
	(0.358)			
New Oppo Nbr × Tenure: 5 to 6 Years	$0.672^{*}$			
	(0.340)			
New Oppo Nbr × Tenure: 7 to 8 Years	0.111			
	(0.384)			
New Oppo Nbr × Tenure: 9 Years or More	-0.464			
	(0.559)			
New Oppo Nbr × Age: 30 to 44		-0.969		
		(0.689)		
New Oppo Nbr × Age: 45 to 64		-0.880		
		(0.679)		
New Oppo Nbr × Age: 65+		-1.147		
		(0.832)		
Fixed Effects		(0.00_)		
Bace	X	х		
Party	X	x		
$Group \times Qtr$	X	X		
Ν	228,787	230,881		
Sample Means				
Dependent Variable	6.47	6.43		
New Next-Door Nbr: Opposite Party	23.89	23.84		

#### Table 13: Heterogeneity over Hyperlocal Churn

This table estimates how the effect of a new opposite-party next-door neighbor varies over the local churn on the current resident's census block. The sample is restricted to those households receiving a new neighbor as in Table 5. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. All columns include the same control variables as Table 4. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)			
Sample:	All Current Residents Who Got New Neighbors			
	(1)	(2)		
New Next-Door Nbr: Opposite Party	0.312* (0.169)	0.547** (0.219)		
Next-Door Neighbor Churn Churn Tercile 1 (omitted)				
Churn Tercile 2	$0.417^{***}$	$0.580^{***}$		
Churn Tercile 3	(0.142) $0.772^{***}$ (0.178)	(0.177) $0.824^{***}$ (0.209)		
Interaction Effects				
New Oppo Nbr × Churn Tercile 2	-0.128 (0.244)	-0.300 (0.357)		
New Oppo Nbr × Churn Tercile 3	0.026 (0.286)	-0.199 (0.340)		
Fixed Effects				
Race Party County × Qtr	X X X	X X		
$\operatorname{Group}^{\vee} \times \operatorname{Qtr}^{\vee}$		Х		
Ν	237,356	212,663		
Sample Means				
Dependent Variable New Next-Door Nbr: Opposite Party	$\begin{array}{c} 6.43\\ 23.75\end{array}$	$6.66 \\ 23.78$		

### A Online Appendix - Supplemental Figures and Tables

#### Figure A1: Democrat Share Across Census Blocks in Downtown Raleigh, NC

This figure plots census block groups and census blocks in Downtown Raleigh and illustrates the share of people affiliated with a particular party who are affiliated with the Democratic Party as of 2016. The voter registration data include precise address, which allows us to map voters to census block and party affiliation. Since people unaffiliated with a party cannot be unambiguously assigned to one party, we omit them from this choropleth. That is we divide the number of Democrats on the block by the sum of Democrats and Republicans. Heavily Democratic areas are in blue and heavily Republican areas are in red. The underlying data are publicly available on the website of the North Carolina State Board of Elections.



## Figure A2: Effect of New Opposite-Party Next-Door Neighbor Given Any New Neighbor - 5 Years

This event study presents column (2) from Table 5 that estimates the relative likelihood of moving out when getting a new neighbor of the opposite political party compared to a new neighbor not affiliated with the opposite party conditional on census block group, quarter, party affiliation, and race. The data set contains only the quarter when the current resident got a new next-door neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. 95% confidence intervals are plotted with dashed lines.



#### Figure A3: Comparing to Nearby Households Who Did Not Get New Neighbors - 5 Years

This event study presents column (2) from Table 7 that estimates the relative likelihood of moving out when getting a new next-door neighbor of the opposite political party compared to another current resident on the same census block, in the same quarter, affiliated with the same party, and of the same race who did not get a new next-door neighbor. The data set contains only the quarter when the current resident got a new next-door neighbor conditional on both the current resident and the new neighbor existing in the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. 95% confidence intervals are plotted with dashed lines.



#### Table A1: Table 4 - All Coefficients

This table is identical to Table 4 but lists all of the control variables. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-1)				
Sample:	All Current Residents				
	(1)	(2)	(3)	(4)	
New Opposite Party Next-Door Nbr	0.1962*** (0.0367)	$0.1748^{***}$ (0.0529)	0.0546* (0.0303)	$0.0841^{***}$ (0.0294)	
Control Variables Party: Una (omitted)					
Party: Dem	$-0.9375^{***}$ (0.0773)	$-0.8398^{***}$ (0.0918)			
Party: Rep	-0.5909*** (0.0984)	-0.3221*** (0.0868)			
Has Dem Next-Door Nbr	-0.0331 ( $0.0517$ )	-0.0442 (0.0361)	0.0001 (0.0312)	-0.0026 (0.0344)	
Has Rep Next-Door Nbr	-0.0714 (0.0468)	0.0071 (0.0354)	0.0499 (0.0389)	0.0403 (0.0414)	
Race: White	3.3578***	$3.2524^{***}$	3.2395***		
Has Different Race Next-Door Nbr	(0.1363) $0.6585^{***}$ (0.0663)	0.3576*** (0.0390)	0.3436*** (0.0366)	$0.2218^{***}$ (0.0379)	
Age: Under 30 (omitted)					
Age: 30 to 44	$0.3642^{**}$ (0.1605)	0.0611 (0.1537)	0.0672 (0.1579)	0.1004 (0.1600)	
Age: 45 to 64	-2.8069*** (0.1037)	-2.7464*** (0.1221)	-2.7453*** (0.1184)	-2.7275*** (0.1159)	
Age: 65 and over	-2.7091*** (0.1207)	-2.4112*** (0.1355)	-2.4519*** (0.1312)	-2.4152*** (0.1291)	
Born in NC	$-1.1370^{***}$ (0.1011)	-0.6529*** (0.1167)	$-0.6279^{***}$ (0.1155)	$-0.6185^{***}$ (0.1151)	

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Bldg Sq Ft: Less than 1,249 (omitted)

Bldg Sq Ft: 1,250 to 1,999	$0.7421^{***}$	$0.3120^{***}$	$0.3276^{***}$	$0.3241^{***}$
	(0.0878)	(0.0759)	(0.0741)	(0.0756)
Bldg Sq Ft: 2,000 to 2,999	0.5899*	-0.1810	-0.1584	-0.1494
Pldg Sg Et. Mana than 2 000	(0.2971)	(0.2410)	(0.2408)	(0.2373)
Bldg Sq Ft: More than 3,000	0.2903	-0.8325	-0.8009	$-0.7869^{\circ}$
	(0.4029)	(0.2498)	(0.2400)	(0.2400)
Year Built: Before 1960 (omitted)				
Year Built: 1960 to 1979	$-0.5670^{***}$	0.0462	0.0257	0.0150
	(0.1550)	(0.0634)	(0.0605)	(0.0620)
Year Built: 1980 to 1999	$1.1139^{***}$	$1.2756^{***}$	$1.2808^{***}$	$1.2704^{***}$
	(0.2320)	(0.1072)	(0.1060)	(0.1067)
Year Built: After 1999	$0.9752^{**}$	$1.4448^{***}$	$1.4637^{***}$	1.5035***
	(0.3831)	(0.1281)	(0.1271)	(0.1275)
Tenure: 2 Years or Less (omitted)				
Tenure: 3 to 4 Vears	1 5633***	3 0814***	3 0994***	3 0919***
	(0.1083)	(0.1689)	(0.1655)	(0.1678)
Tenure: 5 to 6 Years	1.1451***	2.8888***	2.9058***	2.9201***
	(0.0790)	(0.2698)	(0.2646)	(0.2630)
Tenure: 7 to 8 Years	$2.2054^{***}$	$1.4625^{***}$	1.5000***	1.5363***
	(0.2012)	(0.2947)	(0.2919)	(0.2924)
Tenure: 9 Years or more	2.9018***	-0.0067	0.0608	0.1155
	(0.2359)	(0.2323)	(0.2329)	(0.2370)
New Next-Door Nhr Churn Bate	0 0332***	5 5976***	5 5409***	5 5615***
New Next-Door Nor Onurn Nate	(0.8657)	(0.7835)	(0.7946)	(0.8063)
	(0.0001)	(0.1.000)	(0110 10)	(0.0000)
Block: Purple (omitted)				
Block: Blue	0.2175	-0.0685	-0.0816	-0.0844
	(0.2523)	(0.0543)	(0.0546)	(0.0581)
Block: Red	-0.3250***	-0.0007	0.0165	0.0061
	(0.1141)	(0.0426)	(0.0447)	(0.0417)
Fixed Effects:				
$Group \times Qtr$		Х	37	
$Group \times Qtr \times Party$			Х	37
$Group \times Qtr \times Party \times Race$				Х
Ν	18,365,628	18,363,465	18,339,272	18,260,115
Sample Means				
Dependent Variable	5.44	5.44	5.44	5.45
Opposite-Party Next-Door Nbr	29.63	29.63	29.62	29.62

#### Table A2: Table 5 – All Coefficients

This table is identical to Table 5 but lists all of the control variables. Data are from the merged CoreLogic Solutions Real Estate and North Carolina voter registration data set. Standard errors, adjusted for clustering at the county level, are reported in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	Household Sold within 2 Years (0-100)				
Sample:	All Current Residents Who Got New Neighbors		Matched Households Subsample		
	(1)	(2)	(3)	(4)	
New Opposite Party Next-Door Nbr	0.369*** (0.112)	0.296* (0.161)	0.418 <sup>**</sup> (0.196)	$0.386^{*}$ (0.214)	
Control Variables Party: Una (omitted)					
Party: Dem	-1.011***		-0.766*		
Party: Rep	(0.241) -0.393*** (0.139)		(0.426)		
New Next-Door Nbr Party: Una (omitted)					
New Next-Door Nbr Party: Dem	0.018 (0.168)	0.005 (0.183)	-0.200	-0.191	
New Next-Door Nbr Party: Rep	-0.131 (0.137)	-0.203 (0.152)	-0.325 (0.420)	-0.275 (0.411)	
Race: White (=1)	$3.490^{***}$		$3.259^{***}$		
New Next-Door Nbr Diff Race (=1)	0.239* (0.126)	0.134 (0.118)	0.207 (0.216)	0.083 (0.197)	
Age: Under 30 (omitted)					
Age: 30 to 44	-0.788*	-0.908	-0.621	-0.732	
Age: 45 to 64	(0.439) -3.938*** (0.503)	(0.021) -4.107*** (0.629)	(0.719) -3.743*** (0.582)	(0.830) -3.875*** (0.742)	
Age: 65 and over	-3.692*** (0.511)	-3.819*** (0.649)	-3.545*** (0.848)	-3.744*** (1.039)	
Born in NC	$-0.699^{***}$ (0.139)	$-0.669^{***}$ (0.193)	-0.362 $(0.333)$	-0.377 $(0.359)$	

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Bldg Sq Ft: Less than 1,249 (omitted)

Bldg Sq Ft: 1,250 to 1,999	$0.502^{*}$	$0.649^{*}$	0.628	0.715
	(0.265)	(0.367)	(0.641)	(0.657)
Bldg Sq Ft: 2,000 to 2,999	-0.211	-0.264	-0.279	-0.226
	(0.414)	(0.564)	(0.594)	(0.637)
Bldg Sq Ft: More than 3,000	$-1.059^{***}$	$-0.925^{*}$	-0.616	-0.475
	(0.384)	(0.515)	(0.517)	(0.530)
Year Built: Before 1960 (omitted)				
Year Built: 1960 to 1979	0.317	0.139	-0.323	-0.318
	(0.367)	(0.502)	(0.935)	(0.915)
Year Built: 1980 to 1999	$1.449^{***}$	$1.408^{***}$	0.586	0.576
	(0.328)	(0.473)	(0.714)	(0.790)
Year Built: After 1999	$2.106^{***}$	$2.293^{***}$	$1.501^{*}$	$1.445^{*}$
	(0.254)	(0.328)	(0.758)	(0.783)
Tenure: 2 Years or Less (omitted)				
Tenure: 3 to 4 Years	$2.214^{***}$	$2.739^{***}$	$2.103^{***}$	$1.994^{***}$
	(0.413)	(0.534)	(0.511)	(0.530)
Tenure: 5 to 6 Years	1.969***	$2.354^{***}$	1.960***	1.672***
	(0.408)	(0.423)	(0.467)	(0.505)
Tenure: 7 to 8 Years	0.953	$1.391^{*}$	0.105	0.041
	(0.620)	(0.777)	(0.619)	(0.703)
Tenure: 9 Years so More	-0.550	-0.310	-0.615	-1.064
	(0.523)	(0.653)	(0.664)	(0.686)
Next-Door Nbr Churn Rate	-4.690***	-4.474***	-5.117***	-5.403***
	(1.081)	(1.204)	(1.269)	(1.097)
Block: Purple (omitted)				
Block: Blue	-0.050	-0.027	-0.278	-0.123
	(0.263)	(0.319)	(0.294)	(0.327)
Block: Red	-0.073	-0.028	0.005	0.033
	(0.143)	(0.242)	(0.256)	(0.202)
Fixed Effects				
Group × Qtr	Х		Х	
$Group \times Qtr \times Party \times Race$		Х		Х
Ν	228,787	156,697	66,081	66,056
Sample Means				
Dependent Variable	6.47	6.70	6.91	6.91
New Opposite-Party Next-Door Nbr	23.89	23.69	41.14	41.14