# The Urban-Rural Divide and Residential Contentment as Antecedents of Political Ideology

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We explore the foundations of the urban-rural political gulf, which is well-documented in the United States and other western democracies. We theorize that it is anchored in the variable extent of residents' satisfaction and place attachment. Consistent with a long tradition of sociological findings, we first demonstrate that attachment to one's neighborhood of residence is much higher among rural populations than in big cities. This variation in place attachment is an important font of political and policy attitudes, substantively contributing to the ideological differences between urban and rural areas. Politically relevant grievances arise most acutely when they are shared as prevailing conditions in specific social environments. The more dissatisfied one is with the place they live, the more attractive they find the policy goals and political agenda of liberal progressivism in US politics. Greater contentment with place, on the other hand, is predictive of politically conservative viewpoints.

Aesop's fable of the city mouse and the country mouse has been told for centuries with slight variations across many cultures. The gist of the story is that the country mouse visits the city mouse and dines on an opulent dinner. But that dinner is interrupted by extreme danger. In some versions, the feast is interpreted by a pair of mastiffs, and in other versions, it is a cat. The country mouse regards the opulence of the feast as unworthy of the constant violence and fear that the city mouse must endure. The lavish lifestyle is not worth a life in constant fear, so the country mouse retires home. His parting words to the city mouse are, "Good-bye, my friend, I have no love / For pleasure when it's mixed with fear." In a version of the 13th century, the country mouse says, "I'd rather gnaw a bean than be gnawed by continual fear." This age-old fable rings true today. With the trappings of urban life come disadvantages in security.

Here we puzzle over whether the empirical evidence supports the social science logic in this fable. Likewise, we explore whether different levels of place attachment influence individuals' orientations towards governments. Classical sociological theory has regularly accentuated the problematic aspects of city life (Park 1915; Wirth 1938; Shaw and McKay 1942), with recent studies underscoring the disorder and unhappiness found in cities (Okulicz-Kozaryn and Valente 2021; 2020; Okulicz-Kozaryn and Mezelis 2018; Jargowosky and Park 2009; Cullen and Levitt 1999; Sampson and Wilson 1995). Even so, certain economic advantages of dense population settlements are also well known, including the sharing of knowledge and the attraction of a diverse talent pool (Florida 2005). Many people are drawn to living in dense urban environments. They report finding cities exciting, resource-abundant, and offering opportunities and choices not found in sparsely populated locales (Glaeser 2012). The findings across several social science fields suggest that urban discontent may be widespread but

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<sup>&</sup>lt;sup>1</sup> https://sites.pitt.edu/~dash/type0112.html

not universal (Carlsen and Leknes 2022; Glaeser 2020). Perhaps big cities offer advantages to select populations. At the same time, there remains a current of discontent that has a longstanding impact on differentiating the political demands of urban populations from that of citizens living elsewhere (Florida 2017).

The urban-rural divide is a well-documented phenomenon in political divisions around the world, and it is driven by many factors.<sup>2</sup> No doubt, it is partly a function of the composition of the types of people living in urban and rural places. Ruralites may be older, less diverse, and less educated than their rural counterparts. One viewpoint is that the urban-rural divide is largely or even entirely a function of the different types of individuals who settle in these locales more than any independent influences of the particular location (Maxwell 2019; King 1996, Rentfrow 2010).

Alternatively, communities may have their own unique features and cultures that influence how citizens behave quite apart from what one would expect simply given a collection of individual traits. Population density and distance to a metropolis may condition social interactions, which may then influence beliefs around matters including lifestyle decisions (DellaPosta, Shi, and Macy 2015), human values (Morrison and Weckroth 2017, Bruna 2022), personality (Rentfrow 2010; Rentfrow, Jokela, and Lamb 2015), and political views (Gimpel et al. 2020; Martin and Webster 2020; Cantoni and Pons 2022). One study of the US demonstrated that residents of urban places are more liberal than those living in rural places, even after accounting for compositional differences (Gimpel et al. 2020). Considered together, these

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<sup>&</sup>lt;sup>2</sup> An incomplete list of the political units where studies have found evidence of the urban-rural divide include Canada (Armstrong, Lucas, and Taylor 2022; McGrane, Berdahl, and Bell 2017; Walks 2006); United Kingdom (Brooks 2020; Jennings and Stoker 2019; Johnston, Jones, and Jen 2009); Poland (Marcinkiewic 2018); the EU (Kenny and Luca 2021; de Dominicis, Kijkstra, and Pontarollo 2020); the Netherlands (Huijsmans 2020); and the US (Guest 2016; Gimpel et al. 2020; McKee 2008; Mettler and Brown 2022; Scala and Johnson 2017).

findings suggest that the urban-rural divide is determined by more than the background characteristics of the people residing in each place. Likewise, these political differences persist across and within countries, suggesting there is more to the division than the mores or amenities of any particular place.

While some research highlights social interactions and the influence of novel ideas (for an overview, see Gimpel et al. 2020), other work points to the alienation that urban life can induce (Fisher 1982). These political differences may also result from different place-based economic and cultural experiences. Studies on multiple locations worldwide suggest that globalization and economic decline have animated rural resentment (Cramer 2016; Rodríguez-Pose 2018; Rodríguez-Pose, Lee, and Lipp 2021; Gordon 2018; Garretsen et al. 2018; Essletzbichler, Disslbacher, and Moser 2018; Wuthnow 2018).

In this paper, we focus on how place attachment contributes to the political divide between urban and rural places across the US. Place attachment is a major component of life satisfaction (Scannell and Gifford 2017a; 2017b; Fried 1984, 82). Our argument, anchored in decades of social scientific observation and research, is that variability in the policy demands arising across the geography of the national political party system is related to the degree of place attachment residents express for the locations where they live. Discontent with one's place of residence fuels demands for political change. In contrast, locations with largely contented populations press a less demanding policy agenda, centering more on preserving present conditions. Suspicion is inevitably directed by the contented toward the discontented, producing political competition around which political partisanship is formed and reinforced. Deep discontent often yields progressivism in public policy, embraced in the US context in

contemporary times by the Democratic Party, while contentment may promote conservatism, embraced by Republicans.

We begin by setting forth the concept of place attachment. We use survey instrumentation to measure it in a national population and then examine the variation in place attachment across locations of variable population concentration. First, we reveal that residents' sense of place attachment is considerably lower in big cities than in smaller towns and rural areas. More people express dissatisfaction when they live in large cities, and many more express the desire to leave if they could. In rural areas and small towns, there is greater contentment with and commitment to place. Rural inhabitants more regularly report not wanting to leave and missing it when they are away. They also express a liking for their communities, their neighbors, and greater satisfaction with their lives than those living elsewhere. We first contrast place attachment between urban and rural residents before turning to how that attachment shapes political ideology. Specifically, we test the impact of place attachment on self-reported liberal-conservative ideology. Even after controlling for other familiar covariates of political ideology, if people are unhappy with where they live, they are more likely to be policy progressives than conservatives.

## Place Attachment and its Importance

Place attachment, as measured by contentment, satisfaction, and identification with where one lives, is studied because of its relevance to a broad range of outcomes considered important to social stability and individual well-being (Kasarda and Janowitz 1974; Lewicka 2011). Place attachment is an affective bond people develop to a location where they would like to remain. It is associated with fitting into a community and possessing a sense of belonging. Importantly,

place attachment is a bond with a particular physical geographic space or territory. This attachment involves regular social interaction with the co-residents of that territory and a familiarity with them that they will not have with people living elsewhere. A sense of membership and allegiance is also stamped by shared values and norms that form a community consensus, sometimes labeled *culture*. People attached to the places they reside are acquainted with this consensus and largely live in accord with it, reflecting a commitment (Pollini 2005).

Across a variety of measures of place attachment implemented in several fields of social science, empirical findings have been mostly consistent. Though individual studies vary somewhat, stronger senses of place attachment, have been found in populations that are less dense, more homogeneous, containing more families with children, with residents of higher socioeconomic status, longer residential tenure, and older age (Kasarda and Janowitz 1974; Riger and Lavrakas 1981; Sampson 1988; Lewicka 2011).

Not surprisingly, living close to friends and family usually yields a greater sense of place attachment (Morse and Mudgett 2018). Place attachment can be disrupted by an individual's voluntary or forced relocation, high levels of mobility within the community, and events such as floods and fires that destroy communities and property (Brown and Perkins 1992). Criminal activity, a sense of insecurity and disorder present in declining neighborhoods, undermines place attachment (Wirth 1938; Sampson 1988; Taylor 1996; Brown, Perkins, and Brown 2004; Swaroop & Morenoff, 2006). The social environment of a place has a more significant impact on sense of attachment than the physical attributes of the locale. For example, no one develops a high attachment to an unsafe and disorderly area just because it is walkable with many open spaces.

Low levels of place attachment, one might describe as place *dis-attachment*, are also associated with the classical sociological phenomenon of *alienation* (Seeman 1959). This term has a well-developed sociological history (Marx 1971; Marx and Engels 1978; Simmel 1990) and is meant to capture several unattractive but common facets of life in modern societies: powerlessness and a low sense of efficacy, normlessness, meaninglessness, self-estrangement, and isolation (Finifter 1972; Seeman 1959; 1975; Silver 2019). A sense of uncertainty about where one fits in the world, and habitual doubts about one's future may accompany a sense of powerlessness and monotony. Employment is alienating, lacking opportunity for advancement and reward (Blauner 1964; Seeman 1971; Lewicka 2011).

After establishing the link between urban residence and place attachment, we investigate the relationship between place attachment and political behavior, as gauged by measures of ideology. More precisely, we expect the variability in contentment with place to mirror the political and policy demands of populations. For instance, the kind of social disquiet and unhappiness found in locations with persistently low place satisfaction may translate into calls for aggressive government action to ameliorate the sources of discontent. According to textbook definitions, liberalism is associated with government intervention in the social and economic sphere and is typically more closely associated with the Democratic Party in US politics.<sup>3</sup>

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<sup>&</sup>lt;sup>3</sup> Our focus here is the US, where textbook definitions of liberal and conservative are based on demands for government service. For example, Lowi et al. (2020, 408--409) defines a conservative as "A personal who generally believes that social institutions and the free market solve problems better than governments do, the a large and powerful government poses a threat to citizens' freedom, and that the appropriate role of government is to uphold traditional values." In contrast, a liberal as "A person who generally believes that the government should play an active role in supporting social and political change and generally supports a strong role of the government in the economy, the provision of social services, and the protection of civil rights."

There are exceptions as left-right labeling does not always reliably map policy differences. There are those in specifically socially conservative circles that would call for activist government to regulate abortion services and use police powers to act against such moral vices as gambling and prostitution. Yet these policy demands have historically been submerged in the fusion of economic and social conservatism. Economic conservatives do not favor gay marriage or abortion on demand, but they would rather not highlight these issues (Busch 2012). Even in the early decades of the 21st century the coalition remains intact. Although it is certainly true that pledges to reduce

While some conservatives undoubtedly support substantial government involvement in certain areas, conservatives generally favor less government involvement and conservatism is most associated with the Republican Party. While these belief structures may be symbolic, there is at least some evidence that political ideology may be an influential force. For example, Kriner and Reeves (2012, 363) examine how citizens respond to federal spending and find that liberals and moderates reward presidents for government spending while conservatives do not. We hypothesize that those expressing the most discontent with their locations are more likely to express support for policy positions supported by liberals and progressives. Because discontent about place is not simply a reflection on one's own, possibly unique, circumstances, it calls out for changes that a more assertive government can bring about. These findings elucidate the causes of the urban and rural political divide in American politics (Gimpel et al. 2020; Gimpel and Reeves 2022).

### **Contemporary Urban-Rural Differences in Place Attachment**

Given previous findings about the negative relationship between population concentration and place satisfaction (McKnight et al. 2019; Okulicz-Kozaryn and Valente 2020), we turn to examine differences along the contemporary urban-rural continuum. How much difference do we see in the level of place attachment from the largest densely developed cities to the most sparsely settled burgs? A well-developed sociological literature predicts very high levels of discontent and alienation in large cities and far higher levels of contentment and satisfaction in rural areas, even controlling for obvious covariates such as income.

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the size of government are more rhetoric than reality, such vows remain a strong symbolic dividing line, and continue to demarcate the two major parties in their long-term policy commitments.

From the perspective of political science, variation in place attachment is relevant to explanations of the patterning of political partisanship and political ideology across regions, cities, communities, and neighborhoods. This is because place attachment is a measure of contentment with the current situation at the location of residence. Policy demands for change are anchored in discontent, but grievance can have its roots in many sources. Not all discontents emerge as policy demands. One may attribute unhappy circumstances to something that has no policy remedy, such as a personal choice made entirely under one's control. Not every individual choice leading to an unpleasant outcome has a policy remedy.

The grievances that surface in policy demands are likely to originate well outside one's control, for example, in the broader society or economy, where individual agency is limited. One of these is the sense that the place one is living is unsatisfying along some basic dimension, not living up to expectations, not providing the opportunity to fulfill needs, and not where one would prefer to live if she had a choice. Myriad reasons may lie behind why one might conclude that the place she lives should be different than it is, leading to demands for government action. These might include better security through more policing and other strategies for crime reduction; government action to provide a cleaner and healthier environment; demands for less costly but resilient housing; government action to provide greater income security, employment, or educational opportunity; policies aimed at mediating conflicts that arise between competing status groups or subcultures sharing a space; and/or demands that authorities address circumstances of unequal treatment. All such interventions aim to address the complaintgenerating deficiencies present in the lived experience of particular locales. These are conditions, often linked to widespread public discord, that do not typically lie within one's own capacity to remedy. Hence, the outcry for the government to step in and do something.

Notably, however, the undercurrent of disharmony and restlessness about one's place is not uniformly present across every location, nor will it be expressed by everyone within the same place. Exposure to grievance-inducing circumstances will vary, as will the propensity to complain. Our view is that exposure to the risk of grievance rises chiefly with the volume of human interaction, which is why discontent runs so much higher in urban areas than it does outside them. Cities are also breeding grounds for societal grievances arising from intergroup competition for status, yielding greater conflict in settings with a diversity of identity groups. As these conflicts are given voice through their politicization, they are transformed into policy demands by groups, parties, and candidates, generating an ideology of government activism and intervention in the most urbanized areas of the country (Valente et al. 2020; Okulicz-Kozaryn and Valente 2020). Urban agitation for more government will stand in contrast to the fewer grievances voiced in more sparsely populated, less diverse locales. Not coincidentally, greater place attachment is associated with a conservative posture toward government involvement and stoicism when it comes to voicing grievances (Sniderman and Brody 1977). Help-seeking is less likely to turn in the government's direction as fewer complaints are translated into policy demands. This does not necessarily mean that rural areas and small towns have no problems, only that these are less likely than in other places to be viewed as a government responsibility.

# **Measuring Place Attachment**

Throughout our analysis, we rely on modules we fielded on the Cooperative Election Study (CES) in seven waves in 2006, 2008, 2010, 2012, 2014, 2018, and 2020, which we pool in the analyses. The CES is a nationally stratified sample administered by YouGov and designed to

be representative of all US national adults.<sup>4</sup> In seven CCES surveys between 2006 and 2020, we included a battery of six questions aimed at gauging attachment to place (Stedman 2002).

Respondents were prompted first to think of the area within about a mile of their location of residence. The order of the questions was randomly displayed to the respondents:

- This area is a reflection of me
- I would move somewhere else if I could
- This is my favorite place to be
- I really miss it when I am away too long
- I feel happiest when I am here
- I don't really fit in with the people who live here

Respondents were asked to rate, on a five-point Likert scale, whether they 'strongly disagree,' 'disagree,' 'neither agree nor disagree,' 'agree' and 'strongly agree' with each statement. The items that showed the most positive scores in agreement, indicating greater place attachment, were those for "I feel happiest when I am here" and "I really miss it when I am away too long." The item with the lowest score, indicating disagreement, is "I don't really fit in with the people who live here," suggesting that, on average, most people agree that they do fit in with the people where they live. To be sure, many respondents apparently do not have especially strong feelings of place attachment and indicated "neither agree nor disagree" in response to these questions. Even so, the mean response to the questions tipped slightly toward agreement or disagreement in all but one case, "I would move somewhere else if I could," where the distribution was centered in the middle of the five-point scale (stdev=1.30).

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<sup>&</sup>lt;sup>4</sup> Further documentation on the CES can be found at https://cces.gov.harvard.edu/frequently-asked-questions.

Table 1 presents the mean values for each survey instrument. Additionally, we divide the respondents into quartiles based on the population density of their ZIP code (Panel A) and quartiles based on distance from a city with a population of at least 100,000 (Panel B) and report the mean value of place attachment for each group. Some respondents hail from extremely sparse locations, such as a heavily forested ZIP code lying outside Idaho Falls, ID (83449) or a lightly populated location lying eighty miles east of Flagstaff, Arizona (86032). By contrast, respondents also come from some of the densest locales in the US, including Midtown Manhattan (10016) and the Washington Heights neighborhood in Manhattan (10032).

Across each survey instrument, residents from the least dense quartiles have significantly more positive views of their neighborhood compared to the rest of the sample, while residents from the most densely packed locales show lower levels of attachment.

Table 1 Mean Levels of Place	Datistact					
A. By Quartile of Populat	ion Densi	ity.				
•	Don't	Would	Reflects	Favorite	Miss	Нарру
	Fit In	Move	Me	Place	It	Here
1st Quartile (least dense)	2.40*	2.76*	3.21*	3.41*	3.57*	3.56*
2nd Quartile	2.44	2.98	3.11	3.26	3.40	3.45
3rd Quartile	2.54	3.14*	3.00*	3.08*	3.27*	3.30*
4th Quartile (most dense)	2.58*	3.25*	2.98*	3.11*	3.24*	3.29*
D. Dry Oyantila of Distance	to City					
B. By Quartile of Distance	•					
1st Quartile (farthest from city)	2.38*	2.80*	3.24*	3.40*	3.52*	3.54*
1st Quartile (farthest from city) 2nd Quartile	2.38* 2.49	2.99	3.02	3.19	3.39	3.41
1st Quartile (farthest from city)	2.38* 2.49 2.53	2.99 3.12*	3.02 3.03	3.19 3.16	3.39 3.33	3.41 3.36
1st Quartile (farthest from city) 2nd Quartile	2.38* 2.49	2.99	3.02	3.19	3.39	3.41
1st Quartile (farthest from city) 2nd Quartile 3rd Quartile	2.38* 2.49 2.53	2.99 3.12*	3.02 3.03	3.19 3.16	3.39 3.33	3.41 3.36

Note: Asterisk indicates that the mean value for that density quartile is significantly distinct from the mean values for the other density quartiles based on a two-tailed t-test at p < 0.01.

Correlations among these six questions were high, and we implemented principal components analysis to produce a factor score from the first component capturing the maximum amount of variance across the six individual items (Jolliffe and Morgan 1992; Jolliffe and Cadima 2016). The resulting score, a measure of place attachment, was subsequently rescaled to run from 0 to 100 to facilitate interpretation. A histogram showing the distribution of the score for the combined responses appears in Figure 1; higher scores toward the right side of the graph indicate greater place satisfaction. The mean score is 56.7, indicating that most respondents have at least some positive attachment to the places they live. The standard deviation, 21.7, indicates considerable variation around the mean, with two-thirds of respondents falling between 35.2 and 76.6. Some people are more satisfied with the place they live, and others are less enthusiastic.

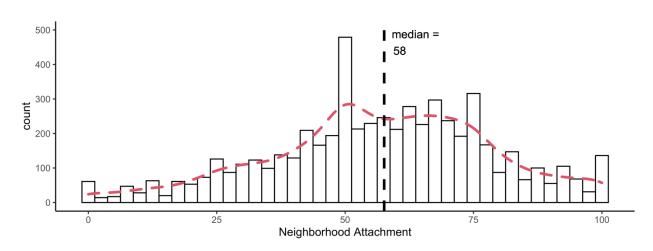


Figure 1. Distribution of Place Attachment Score from Principal Components Analysis of Place Attachment Items

To examine urban-rural differences in the place attachment of residents, we again consider respondents by quartiles for both population density and distance from a city.<sup>5</sup> Figure 2

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<sup>&</sup>lt;sup>5</sup> See Nemerever and Rogers (2021) for one discussion of measuring the urban-rural divide.

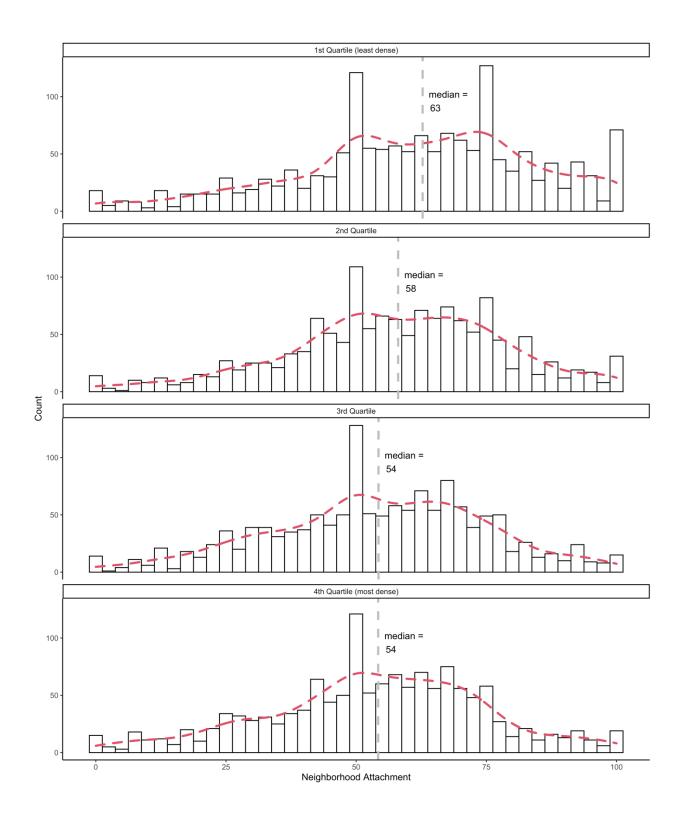
shows the distributions for the population density quartiles, with the most rural and least dense locations in the top graph and the urban and highly dense locations at the bottom. The shift downward in place attachment moving from top-to-bottom is visible. Divided in fourths, the mean score for the most rural residents on the scale (top graph Figure 2) is 60.8 (sd=22.9), and the most urban (bottom graph) is 53.5 (sd=21.0), and the difference is statistically significant (p≤.001).

Examining the alternative urban-rural measure, quartiles of distance from cities of 100,000 or more, the results are not quite as distinctive as for variation in population density. For the locations that are furthest away from a large city, the mean attachment score is 55 (sd=21), and for the most urban locations mean place attachment is 60 (sd=22) (Figures not shown). There is a tendency for place attachment to jump 2-3 points higher at extreme distances from large cities, suggesting that a more refined division of the distribution, by tenths, for example, would show more significant variability in place attachment scores, more closely approximating the results for population density.

The gaps shown by location of residence for place attachment generally show that populations in more sparsely settled areas are more satisfied with where they live than those residing in dense, urban areas. However, there can still be doubts about how significant these differences are. Perhaps the difference in a place attachment score of 54 rather than 61 is trivial, not even an entire letter grade, some might complain. Our next step is to evaluate how the urban-rural difference compares to other conventional indicators of place attachment found in sociological literature, specifically income, education level, race/ethnicity, and age. After all, it is possible that these variables' impact on place attachment is far greater than any urban-rural difference gauged by density or distance. It is also possible that these covariates weaken the

impact of the urban-rural residential location or erase it altogether. This would happen, for example, if residential location was measuring something like socioeconomic differences between populations or the settlement patterns of racial and ethnic groups. Once direct measures of these socioeconomic differences are included for individual respondents, there may be nothing for urban-rural residence to explain.

Figure 2. Place Attachment Scores by Quartiles of Residential Population Density



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To assess these possibilities, we carried out standard ordinary least squares regression on the place attachment score – our dependent variable – as shown in Figure 1.6 Education, income, home ownership, marital status, race/ethnicity, and age are measured by standard survey instrumentation and detailed in the appendix.

We also include contextual measures at the ZIP code level, as these units serve as quite granular measures of local environment. In part, these measures may help us capture sources of place resentment by measuring economic hardship, which may influence place attachment and shape political views (e.g., Cramer 2016). To address this, we rely on measures of adjusted gross income published by the US Internal Revenue Service (IRS). This measure has two distinct advantages because it is measured annually and reported at the ZIP code level. For each of our models, we include this measure as a change over a two-year period. Adjusted gross income at the ZIP code level is an indicator of the relative wealth of communities. All other things equal, we would expect those living in affluent areas to be more attached to the places they live because they have the financial capacity to move if they desire but choose not to. The percent change in adjusted gross income from two years previous is included to account for the short-term financial stresses in a location. As economic stress mounts, our expectation is that people will be forced to reconsider their place attachments, possibly forcing them to relocate.

Additionally, we include other contextual measures from the US Census, such as percent black and percent Hispanic, median home value, and median income, along with population density and proximity to a city of at least 100,000 inhabitants. These are also measured at the

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<sup>&</sup>lt;sup>6</sup> In some of our analyses, we include ZIP code-level contextual data. This raises concerns because respondents may be clustered geographically and effect the estimate of our standard errors. This clustering is imbalanced with many ZIP codes containing just a single individual. To address this concern, we run models fitting generalized estimating equations (GEE) using geepack software in R (Højsgaard, Halekoh, and Yan 2006; Yan and Fine 2004; Yan 2002), which we include the Appendix. These models are substantively identical to those presented in the text.

ZIP Code Tabulation Areas (ZCTAs)-level.<sup>7</sup> Finally, because the distributions for the population density and distance measures are very highly skewed, we use the natural log transformation of these measures in the regression models.

#### **Results for Place Attachment**

Results of estimating the impact of distance and density on the strength of place attachment are found in Table 2. Consistent with the large body of previous research, population density and proximity to a large city diminishes the extent of satisfaction with place. A one-unit increase in the log of density (in 1000s) is associated with a 1.13 point drop in place satisfaction. In linear terms, this means that for every one hundred percent increase in population density (e.g., 200 to 400 per sq mile, 400 to 800, 800 to 1,600, 1,600 to 3,200, etc.), there is a gradual but steady erosion in place attachment of 0.81 points, controlling for race, age, income, education, homeownership, religious observance, and the remaining covariates. The left panel of Figure 3 presents the expected place attachment score based on the range of observed residential ZIP code density. In the extreme, an inhabitant of a sparsely located town like Eagle, Alaska (99738), which is along the Yukon River and on the eastern border of Alaska and Canada, or Luning, Nevada (89420), a town about 150 miles southeast of Carson City, is expected to have a place attachment score of between 61.0 and 70.1. However, in the densest locals, represented by places like New York City or Washington, DC, neighborhood attachment plummets with predicted scores ranging between 44.6 and 50.5, holding constant the wide array of individual-level covariates.

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<sup>&</sup>lt;sup>7</sup> ZCTAs are close approximations of US ZIP codes. For more information, see https://www.census.gov/programs-surveys/geography/guidance/geo-areas/zctas.html.

Table 2. Impact of Distance and Density on Place Attachment, Controlling for Population Characteristics

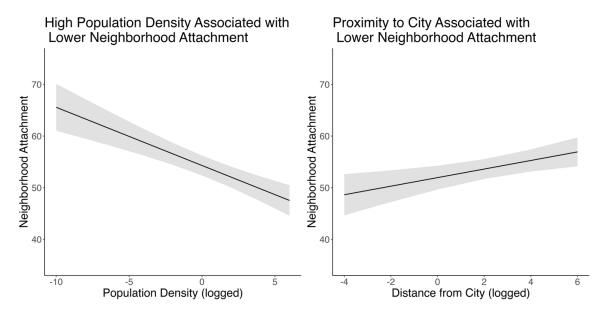
	Model 1	Model 2
Population Density (logged)	-1.13 (0.20) ***	
Distance from City		0.83 (0.28) **
Black	2.28 (1.14) *	2.23 (1.14).
Asian	0.90 (2.40)	0.61 (2.40)
Hispanic	1.94 (1.19)	1.84 (1.19)
Male	-1.51 (0.60) *	-1.54 (0.60) *
Married	0.94 (0.68)	1.07 (0.68)
Homeowner	6.76 (0.73) ***	7.11 (0.73) ***
High School	4.22 (1.87) *	3.83 (1.87) *
Some College	2.08 (1.89)	1.75 (1.90)
2 Year Degree	1.03 (2.02)	0.74 (2.02)
4 Year College Degree	0.00 (1.92)	-0.43 (1.92)
Post Graduate Degree	-0.64 (2.03)	-1.16 (2.03)
Age 18-29	-4.31 (0.94) ***	-4.26 (0.94) ***
Age 65 and up	6.08 (0.76) ***	6.09 (0.76) ***
Attend Church Weekly	1.34 (0.83)	1.37 (0.83).
Attend Church Never	-3.30 (0.74) ***	-3.36 (0.74) ***
Income < \$30k	-2.79 (0.99) **	-2.60 (0.99) **
Income \$30k-\$50k	-1.06 (0.95)	-0.99 (0.95)
Income \$70k-\$100k	0.31 (0.99)	0.28 (0.99)
Income \$100k-\$150k	2.64 (1.10) *	2.61 (1.10) *
\$150k and up	3.70 (1.34) **	3.64 (1.35) **
Change in AGI (ZIP)	0.09 (0.03) **	0.11 (0.03) **
Median Income (ZIP)	-0.09 (0.02) ***	-0.09 (0.02) ***
Percent Black (ZIP)	-0.06 (0.02) **	-0.08 (0.02) ***
Percent Hispanic (ZIP)	-0.07 (0.02) ***	-0.09 (0.02) ***
Home Value (ZIP)	0.02 (0.00) ***	0.02 (0.00) ***
Intercept	50.66 (2.49) ***	49.31 (2.67) ***
Survey Wave Fixed Effects	✓	✓
$\mathbb{R}^2$	0.11	0.11
Adj. R <sup>2</sup>	0.11	0.10
Num. obs.	4,957	4,955

Notes: OLS regression; cell entries are regression coefficients (standard errors); Categorical (0,1) variables capturing year of survey are not included in the table. The dependent variable is place attachment ranging from 0 to 100; Excluded reference categories for Education= Less than High School; Income = \$50k to \$70k.

\*\*\* p<0.001; \*\* p<0.01; \*p<0.05; p<0.10

As for distance, the results in the second panel of Table 2 similarly show that for every one unit rise in the natural log of distance from a city larger than 100,000, place attachment increases by 0.83 points. When untransformed, this means that for every 100 percent jump in distance (e.g., 2 miles to 4, 4 to 8, 8 to 16, 16 to 32, etc.), the score for place attachment increases by 0.58 points. Examples of locations isolated from a major metro area but with reportedly high place attachment include Glasgow, Montana (59230), and Lamoine, Maine (04605). In the right panel of Figure 3, we again see a graphical presentation of the model results. As individuals live further from a city, they express more satisfaction with their community. Those closest to a city with a population of at least 100,000 have place attachment scores between 44.7 and 52.6. As individuals get farther from a city, attachment rises significantly. Those individuals living the greatest distance from a large city, for example, residents of Bangor, Maine, express very high levels of attachment. The model in Table 2 predicts scores of between 54.1 and 59.72.

**Figure 3. Relationship between Living in a City and Neighborhood Attachment.** The figure is generated from Table 2 and shows the expected change in neighborhood attachment as density (left) or nearness to a city increases (right).



As anticipated, individual population characteristics also matter to place attachment in some interesting ways. Simply living in a ZIP code with higher home values augments attachment to that place, with a \$50,000 increase in home value yielding a one-point increase. Meanwhile, a \$50,000 increase in median income (at the ZIP code level) decreases place attachment by over 4 points, holding constant personal wealth, home values, and an array of other variables – a reflection of the fact that more populated metro areas are higher in median income. Individual affluence, however, pushes attachment in the other direction. Those earning \$100,000 or more are more attached to the places where they live than those in the middle-income reference bracket of \$50,000-\$70,000. Those earning less than \$30,000 reported the least satisfaction, ranking about 2.79 points lower than the middle-income respondents (see Column 1, Table 2). Higher personal income empowers and enhances residential satisfaction by enabling residential choice in a way that education alone does not.

Age turns out to be very important in predicting how content respondents are with where they live, with the oldest showing far higher satisfaction than those in middle age brackets, by over 6 points, even as those under age 30 are the least happy with where they live seeing a decline in place attachment of over 4 points. Undoubtedly, this is the result of older residents having lived longer in their locations of residence, reaching a point where they are settled in places they have selected after years of consideration, and, typically, multiple moves (Long 1988). Interestingly, race and ethnicity do not turn out to be very important to place attachment once holding income, age, education, marital status, homeownership, and density/distance constant. Black respondents appear to be about 2 points more attached to their place of residence, but this result is statistically significant in one model only.

Homeownership, a sign of stakeholding in a community, greatly enhances place attachment, even after we account for the effects of income and age. But place attachment might precede homeownership rather than follow it; if you are serious enough to settle down and invest in a property, you are more attached to that location than to a place where you might be a renter. Homeowners also become more attached to their locations as long-term property owners. A dwelling is a consumption good, providing shelter, warmth, space, and access, but it is also a store of value as an asset and potential capital gain (Ronald 2005, 128-129). Indeed, the case may be made that homeownership is itself a separate indicator of place attachment.

Those who are single and were never married report markedly lower place attachment than others, and to a considerable extent in the results reported in Table 2, even after accounting for youth. Attending religious services weekly, one sign of social and organizational involvement in a community, is positively associated with place attachment but not to a statistically significant extent over attending less frequently. On the other hand, *never* attending church

significantly diminishes place attachment by 3.3 points or about half as much as being elderly promotes it. This finding is consistent with the idea that religious affiliation is associated with pro-social activities such as volunteering and charitable giving, behaviors that also promote life satisfaction and contentment (Lim and Putnam 2010; Smidt 2003; Putnam 2000). Interestingly, having no church involvement is about as depressing on place attachment as being positioned in the lowest income bracket (less than \$30,000) – as if low economic and low social capital have an independent but substantially similar alienating effect (see Table 2).

Interestingly, those living in places showing a decline in income from two years previous, as measured by the change in local adjusted gross income (AGI), are also lower in place attachment. Economic decline forces some people to reconsider their satisfaction with the place they live, as they are often forced to rationalize a move or live under more stressful conditions.<sup>8</sup> We also see other contextual forces shape place attachment. Higher percentages of Hispanic and Black residents are associated with lower place attachment.

## **Implications of Results**

Regardless of which measure of urban-rural residence one uses, there is a pronounced association of place of residence with place attachment. Residents in more densely populated areas, lying in or close to central cities, are the least content with where they reside. Their discontent will be greatly augmented if they are in a lower income bracket and younger, single, renting, and with more education. Those in sparsely settled areas, situated well away from larger cities, live a life much more satisfied with their place of residence. If they are also older and

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<sup>&</sup>lt;sup>8</sup> That place decline is related to depressed place attachment may suggest some of the underpinnings of populist movements in the US and elsewhere around the world (e.g., Rodriquez-Pose 2018). We do not expliticly address this consideration, but leave it for further research to consider.

wealthier, live with a partner, live in an area with higher prevailing income, and own property, they will be even more satisfied with where they live. Religion seems to matter as an important sign of social capital and community connection. If one never attends church, they are markedly lower in their contentment with the place they reside. Age and homeownership are probably the greatest contributors to place satisfaction, with income and urban-rural residence following, then education, religious involvement, and finally, race/ethnicity. Aspects of the neighborhood environment are also relevant, with higher income levels contributing to greater satisfaction net of individual characteristics while declining neighborhood income levels understandably heighten economic anxiety and erode satisfaction.

There is also a sizable component of error in the results reported in Table 2, showing that there are many sources of attitudes about attachment to a place that are not captured here.

Moreover, as the distribution shows in Figure 1, many respondents are neutral with respect to their place satisfaction, neither strongly positive nor especially down on where they live. These middling responses to the survey questions suggest that people may not have very well-formed opinions about the place they live; they simply endure life the best they can at the place they happen to be. Their geographic location is a complicated balance of considerations of affordability and convenience, and it is neither optimal nor miserable.

One's level of place attachment may depend upon a myriad of local conditions and circumstances that we have not measured: the level of local amenities and recreational resources, the pleasantness of the physical environment, and the general level of grievance and disquiet among neighbors. If others in our neighborhood express satisfaction and happiness, we will likely express contentment too. Though we have controlled for declining prosperity in neighborhoods, we have not found contextual variables directly gauging neighborhood

sentiment. As appropriate data become available, future research should consider them.

Establishing clear causality – what causes contentment with place of residence to rise and fall – is not something we can identify with exactitude given these observational data. For instance, choice is important to where one lives, which helps to explain why higher income enhances place attachment. Likewise, local politics and the compositional characteristics of a community may influence the provision of services (Trounstine 2018), thereby influencing attachment. We argue that the explanations we offer impact one's contentment with place of residence but cannot rule out reciprocal causation. Nor can we rule out all competing explanations. Even so, we identify a vigorous persistence of a relationship between two social science phenomena: rural populations are more satisfied with where they live than urban ones, even after controlling for a roster of social and economic characteristics.

## Place Satisfaction and Support for Progressive Policies and Parties

The next step is to evaluate whether place satisfaction influences specific political dispositions associated with the policy demands individuals make on government. The hypothesis advanced earlier was that place dissatisfaction serves as a foundational rationale for greater government involvement to ameliorate present conditions. Psychologists have pointed to a link between general life satisfaction and liberal-conservative ideology – contentment is found more at the conservative pole than at the liberal one (Schlenker et al. 2012; Bixter 2015; Clarkson et al. 2015; Newman et al. 2019). Exactly why life satisfaction and conservatism are found together is not entirely clear; perhaps there is something palliative about conservative ideology, i.e., conservatives easily rationalize away bad things (Sengupta et al. 2017). We suggest that the direction of influence runs the other way, from being satisfied to adopting conservative viewpoints about what government should be and do. Ideological policy demands

issue forth from what we think should be changed in our present situation. Our effort here is to push this insight in a geographic direction, testing the hypothesis that the more dissatisfied one is with their place of residence, the more they are likely to favor the party of the left, certainly in the US, and perhaps also elsewhere.

A common measure of ideological identification is a survey question asking people to classify themselves on a scale ranging from very conservative to very liberal. Although the issue content of liberal-conservative ideology is likely to vary across locations, most survey respondents readily place themselves. Across multiple years of the Cooperative Congressional Election Study (CCES), about seven percent of the respondents reported being unsure of their political ideology, compared with only three percent who were unsure about their appropriate placement on a 7-point scale of political party identification. In recent decades, political party placement has become more congruent with left-right ideological positioning: there are very few liberal or very liberal Republicans and only slightly more conservative or very conservative Democrats (Halliez and Thornton 2020; Barber and Pope 2019; Levendusky 2009; Lewis-Beck et al. 2008).

Though there are voters who remain innocent of ideology (Converse 1964), more people find their views on political issues and candidates to be congruent with, even informed by, ideological labels (Carmines and D'Amico 2015; Popp and Rudolph 2011; Jacoby 1991; 2014; Jost et al. 2013; Federico and Hunt 2013). Conflicting worldviews are found in public opinion, anchored in moral and religious commitments (Haidt 2012; Day et al. 2014; Silver and Silver 2017). These commitments can shift but exhibit a strong correlation with viewpoints on public policy, though the precise direction of causal influence is often ambiguous (Goggin et al. 2020; Freeder et al. 2019). Ideology is sometimes condensed from survey questions on multiple policy

issues, which are then scaled on a single dimension, or sometimes two (Ellis and Stimson 2012; Feldman and Johnston 2014; Jacoby 2014; Jost et al. 2009; 2013). The liberal pole of political ideology, associated with left-of-center, or progressive, policy positions on a wide variety of issues that Democrats typically favor, from policing reform; racial justice and abortion rights; to more permissive views about sexuality; concern about reversing climate change; a more lenient immigration policy, and reduced military spending. Conservatives favor right-of-center policies, supporting viewpoints Republicans tend to favor; including more punitive criminal justice policies; immigration restrictions; increased military spending; restrictions on access to abortion services; doubts about whether climate change is controllable through public policy, and traditionalist views of marriage and the family.

Not everyone exhibits the same degree of ideological constraint, with the politically knowledgeable showing the most consistency across issue domains. Evidence is regularly uncovered for the mixed nature of opinion and the existence of cross-pressures. Higher levels of education promote political coherence and ideological consistency, interest in politics, higher socioeconomic status, and living in more politicized environments; ideologically consistent individuals are sometimes described as opinion leaders or as possessing social influence (Zaller 1992). Political ideology is also associated with a surprisingly large number of seemingly non-political consumption and lifestyle choices frequently observed in close conjunction (DellaPosta et al. 2015; Jost 2017). For example, liberals and conservatives watch different non-political television programs, pointing to a kind of cultural sorting that separates partisan groups in venues of life with no overt political content (Rogers 2018, 4-6).

The instrument that bundles these preferences together is apparently social influence, the inclination for individuals to affiliate regularly with like-minded others where they live. In these

settings, they communicate their values and viewpoints and develop shared understandings and judgments on various subjects, politics included. Through this localized interaction, meanings develop, and habits of thought and action become socially accepted, forming a consensus. Acceptance of a shared preference is not necessarily communicated verbally. Instead, it can be signaled through consumption symbolism – purchasing a hybrid car, adopting a fashion ensemble, or purchasing (or avoiding) particular food products (Smaldino et al. 2017). The fact that networks of routine association are geographically constrained explains why opinion homophily can show up on maps that depict variation in the dominant viewpoint of communities dotted across the landscape. Our most influential associates are those we see often and who live closest to us (Onnela et al. 2011). Places are relevant to individual preference because they are the domicile for groups that offer social support for specific opinions, providing stability of viewpoint and insulation from pressure to change (Huckfeldt and Sprague 1995; Berelson, Lazarsfeld and McPhee 1954). By this reasoning, it is plausible to suggest that political ideology and issue attitudes not only have origins captured by the measurement of individual characteristics but also in the locations where individuals dwell and their distance from other locations of contrary belief and practice.

## **Results for Ideological Liberalism**

First, we find that place attachment impacts liberal-conservative political ideology such that those with lower attachment express the most progressive political values. The association between place attachment and ideology persists when confounds are included, such as political party identification, race and ethnicity, and level of education. The results are shown in Table 3

based on an ordinary least squares regression, placing political ideology on a five-point scale, ranging from very conservative (1) to very liberal (5). The dependent variable is distributed with a mean of 2.86 (sd=1.15), exhibiting a slight right skew. This means that the respondents to these surveys were slightly more likely to say they were "conservative" or "very conservative" (36.5%) than "liberal" or "very liberal" (29.8%); with the balance of 33.7% describing their ideological views as "moderate." Four sets of estimates appear in Table 3. Columns 1 and 2 exclude party identification as an explanatory variable, while columns 3 and 4 include it.

Additionally, columns 2 and 4 include contextual characteristics measured at the ZIP code, while columns 1 and 3 do not. Given the unclear causal ordering of many of these variables, we opt to show a range of specifications to examine the robustness of our findings.

The first column of estimates shows that place attachment is inversely associated with politically liberal policy views. Consider that the standard deviation for place attachment is 22 points. Moving from a standard deviation below the mean attachment score to a standard deviation above the mean is associated with a decrease in liberalism of .13, which is comparable to the magnitude of the relationship of being a senior or being married (based on the results in Column 1).

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<sup>&</sup>lt;sup>9</sup> As in the previous analyses, we run models fitting generalized estimating equations (GEE) when ZIP code level covariates are included using geepack software in R (Højsgaard, Halekoh, and Yan 2006; Yan and Fine 2004; Yan 2002), which we include the Appendix. These models are substantively identical to those presented in the text.

Table 3. Impact of Place Attachment on Political Liberalism, Controlling for Party Identification and Population Characteristics

	b (SE)	b (SE)	b (SE)	b (SE)
Place Attachment	-0.003 (0.001) ***	-0.003 (0.001) ***	-0.001 (0.001) *	-0.001 (0.001)
Black	0.409 (0.053) ***	0.288 (0.060) ***	-0.239 (0.043) ***	-0.282 (0.048) ***
Asian	0.313 (0.127) *	0.190 (0.128)	0.120 (0.098)	0.078 (0.100)
Hispanic	0.181 (0.057) **	0.130 (0.062) *	-0.047 (0.044)	-0.070 (0.048)
Male	-0.265 (0.031) ***	-0.268 (0.031) ***	-0.107 (0.024) ***	-0.111 (0.024) ***
Married	-0.142 (0.035) ***	-0.115 (0.036) **	-0.053 (0.027).	-0.040 (0.028)
Homeowner	-0.173 (0.038) ***	-0.096 (0.039) *	-0.104 (0.029) ***	-0.070 (0.030) *
High School	-0.085 (0.105)	-0.137 (0.106)	0.031 (0.082)	-0.007 (0.083)
Some College	0.042 (0.106)	-0.005 (0.106)	0.130 (0.082)	0.099 (0.083)
2 Year Degree	0.010 (0.112)	-0.039 (0.112)	0.103 (0.087)	0.074 (0.088)
4 Year College Degree	0.226 (0.107) *	0.159 (0.108)	0.229 (0.083) **	0.197 (0.084) *
Post Graduate Degree	0.631 (0.112) ***	0.551 (0.112) ***	0.422 (0.087) ***	0.382 (0.088) ***
Age 18-29	0.059 (0.050)	0.072 (0.050)	0.107 (0.039) **	0.113 (0.039) **
Age 65 and up	-0.102 (0.039) **	-0.113 (0.039) **	-0.040 (0.030)	-0.045 (0.030)
Attend Church Weekly	-0.430 (0.043) ***	-0.423 (0.043) ***	-0.196 (0.033) ***	-0.201 (0.034) ***
Attend Church Never	0.353 (0.038) ***	0.350 (0.039) ***	0.191 (0.030) ***	0.187 (0.030) ***
Income < \$30k	-0.080 (0.051)	-0.053 (0.052)	-0.111 (0.040) **	-0.098 (0.040) *
Income \$30k-\$50k	-0.063 (0.049)	-0.069 (0.049)	-0.061 (0.038)	-0.067 (0.038).
Income \$70k-\$100k	-0.092 (0.051).	-0.120 (0.051) *	-0.051 (0.039)	-0.060 (0.039)
Income \$100k-\$150k	-0.023 (0.056)	-0.050 (0.057)	-0.031 (0.043)	-0.046 (0.044)
\$150k and up	-0.049 (0.068)	-0.101 (0.069)	-0.041 (0.052)	-0.066 (0.054)
Distance from City		0.003 (0.019)		0.024 (0.014).
Population Density (logged)		0.072 (0.013) ***		0.044 (0.010) ***
Change in AGI (ZIP)		-0.002 (0.002)		-0.000 (0.001)
Median Income (ZIP)		-0.004 (0.001) ***		-0.002 (0.001) *
Percent Black (ZIP)		0.001 (0.001)		0.000 (0.001)
Percent Hispanic (ZIP)		-0.002 (0.001) *		-0.001 (0.001)
Home Value (ZIP)		0.001 (0.000) ***		0.000 (0.000) **
Party ID			-0.326 (0.006) ***	-0.322 (0.006) ***
Intercept	3.261 (0.129) ***	3.375 (0.151) ***	4.252 (0.102) ***	4.223 (0.119) ***
Year Fixed Effects	✓	✓	✓	√
$\mathbb{R}^2$	0.178	0.197	0.512	0.516
Adj. R <sup>2</sup>	0.174	0.191	0.510	0.512
	01111	0.171	0.010	0.512

*Notes:* OLS regression; cell entries are regression coefficients (standard errors); All survey waves are pooled and categorical (0,1) variables capturing the year of the survey are included in the model but not in the table. The dependent variable is political ideology ranging from conservative (1) to liberal (5); Excluded reference categories for Education= Less than High School

\*\*\* p<0.001; \*\* p<0.01; \*p<0.05; · p<0.10

As for the specific impact of place attachment on self-reported ideology when party identification is included, the estimates indicate that for every two standard deviations increase in place attachment, there is a -.055 point move in a conservative direction on the ideology scale –

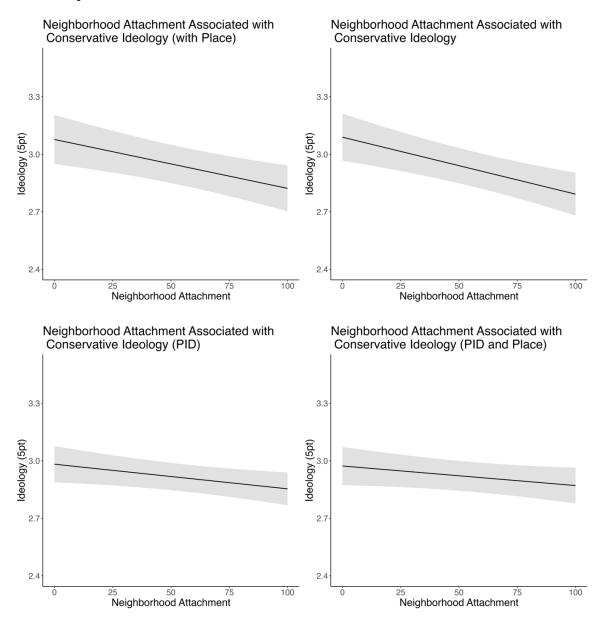
equivalent to about a 1.4 percent drop in liberalism. These are not large effects, but it is important to note that partisanship is an extremely powerful predictor of a whole range of attitudes and behaviors. Ideology and partisanship are closely aligned in the United States, so any statistically significant relationship is still notable. To contextualize the strength of this relationship, consider the magnitude of the relationship between youth and ideology. Those aged 18 to 29 score about .11 higher on the liberalism score controlling for partisanship and other variables (Table 3, column 2). A two-standard deviation increase in place attachment is associated with a decrease in liberalism of about half of this magnitude.

Across the four models, we see that contextual measures add modestly to explanatory power, but do not attenuate the magnitude of the relationship between place attachment and ideology. Short-term changes in income seem to have little bearing on political ideology. As ZIP code home values rise, respondents tend to be more conservative, but a higher median income is associated with a more liberal ideology, holding all else constant. More densely-packed locales are associated with more liberal political ideology, and racial and ethnic composition seem to have little bearing on one's political ideology.

Partisanship and ideology are strongly related. The model's explanatory power is significantly improved in columns 3 and 4. Compared to the models in columns 1 and 2, the statistical power and the size of the effect of place attachment are weakened. In the model with both contextual measures and partisanship, place attachment is marginally statistically significant ( $p \le 0.10$ ). As we have previously noted, the causal ordering of place attachment and other variables, such as homeownership, are not obvious. Similarly, it is unclear whether ideology causes party identification or is a function of it.

Figure 4 presents this relationship graphically, with the figure on the left presenting the results from the model without controlling for partisanship, and the figure on the right includes partisanship as a control. The impact of place attachment on ideology is less important when party identification is present. In the upper left panel of Figure 4, we see the results from our most parsimonious model. Here, liberalism is predicted to decline from 3.09 to 2.79 when moving from 0 to 100 in place attachment. The results from our least parsimonious model are presented in the lower right panel of Figure 4. Here, moving from 0 to 100 is associated with a decrease in liberalism from 2.97 to 2.87.

**Figure 4. Relationship Neighborhood Attachment and Political Ideology.** Figures are generated from the results in Table 2 and show the expected change in ideology associated with neighborhood attachment. The top two panels show results from models without party identification, and the bottom two panels show models with control for party identification. The two left panels show results without controls for place, and the two right panels show models with controls for place.



### **Conclusion**

Investigating the antecedents and consequences of political ideology is challenging because of the complex relationship among policy views, life situations, and political learning experiences. High cost of living, limited housing stock, fear of crime, and lengthy commutes are but a few of the stressors of an urban life that may engender insecurity and unhappiness.

We have shown that some are attached to the places they reside – and those places are less likely to be densely populated or close to cities. Cities are places where grievance is found in greater abundance and is accompanied by geographic pockets of support for left-leaning policies and political candidates. This reality is abundantly clear in any geographic presentation of US election results, with deep Democratic support (usually portrayed in shades of blue by US election analysts) found in inner city neighborhoods fading and ultimately giving way to deep Republican support (usually portrayed in deepening shades of pink to red, depending on how strong the Republican support) at the most rural extents. Underlying the expression of those political identities is a complex array of settlement patterns of people who find themselves and their offspring sorted into communities reflecting various degrees of racial, socioeconomic, and political homophily, with attendant habits of interest and endeavor. Cross-sectional surveys cannot possibly do justice to the complex causal story that makes a place what it is. But we can make clear observations about the places people report liking and the ones they dislike. Rural and small-town residents are happier with the places they live, consistently more so than those living in densely packed cities. We should not be surprised that they want to keep things as they are rather than demand change.

For the reasons we describe above, disentangling the forces driving the political gulf in the urban-rural divide is challenging. Evidence suggests that this political divide is something more than the differences in the demographic, social, and economic characteristics coinciding with the people who come to settle in these places. This paper identifies an additional potential mechanism by which place attachment produces this divide. Conforming to a wealth of existing research, we show that rural dwellers are, on average, more firmly attached to their communities than urbanites. We then show that place attachment is related to political ideology. The magnitudes of the relationships are modest but robust and suggest a possibility aside from evident socioeconomic distinctions that could account for one of the conspicuous divides in contemporary political life.

There is much more work to be done. For example, further research should be carried out on how residential mobility contributes to urban-rural distinction. Are rural residents happier because they are so committed to the places they live that they have decided to remain? Likewise, perhaps chronically dissatisfied people are more likely to gravitate toward big cities than suburban or rural locales. Additional work should be done on better understanding the personality traits and values associated with the urban-rural divide. Additionally, we do not address the uneven but marked rise of populism here. Radical forces calling for aggressive government intervention are not confined to the political left. Though we find no evidence of changing relationship between place attachment and politics over time (see Appendix), changing political issue alignments could alter the relationships we identify.

Another challenge is understanding how these findings extend beyond the United States. Several studies have documented similar urban-rural divides in, for example, Canada (Armstrong et al. 2022; McGrane et al. 2017); the Netherlands (Huijsmans 2020; the UK (Jennings and Stoker 2019; Johnston, Jones, and Jen 2009); Poland (Marcinkeiwicz 2018); and the EU (de Dominicus et al. 2020; Maxwell 2021). The focus here is on the United States case, which has its

own historical trajectory of moving from a largely rural nation to one in which most of its citizens live in metropolitan areas (Gimpel et al. 2020). While our focus is on the US, there is suggestive evidence that our argument may be more general. In addition to the widespread urban-rural divides identified above, there is generalized discontent in large cities worldwide. For example, one study finds that "city unhappiness is common across the world" with only a few exceptions (Okulicz-Kozaryn and Valente 2021, 1). In today's world, rural residence does not divorce one from comfortable living conditions as it may have in times past.

#### Sources

Altman, I., & Low, S. M. (Eds.). (2012). *Place attachment* (Vol. 12). Springer Science & Business Media.

Armstrong, David A., Jack Lucas, and Zack Taylor. (2022). "The Urban-Rural Divide in Canadian Federal Elections, 1896-2019." *Canadian Journal of Political Science* 55 (1):84-106.

Barber, M., & Pope, J. C. (2019). Does party trump ideology? Disentangling party and ideology in America. *American Political Science Review*, 113(1), 38-54.

Berger, Peter L., Luckmann, Thomas. 1967. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. New York, NY: Anchor.

Blauner, R. (1964). Alienation and freedom: The factory worker and his industry.

Brehm, J. M., Eisenhauer, B. W., Krannich, R. S. (2004). Dimensions of community attachment and their relationship to well-being in the amenity-rich rural west. *Rural Sociology*, 69(3), 405-429

Brooks, Sally. (2020). "Brexit and the Politics of the Rural." Sociologia Ruralis 60 (4):790-809.

Brown, B. B., & Perkins, D. D. (1992). Disruptions in place attachment. In *Place attachment* (pp. 279-304). Springer, Boston, MA.00000000

Brown, B. B., Perkins, D. D., & Brown, G. (2004). Incivilities, place attachment and crime: Block and individual effects. *Journal of environmental psychology*, 24(3), 359-371.

Bruna, F. (2022). Happy Cultures? A Multilevel Model of Well-Being with Individual and Contextual Human Values. *Social Indicators Research* 164, 55–77.

Busch, A. E. (2012). Social conservatives and economic conservatives. *Society*, 49(1), 13-23.

Cantoni, Enrico, and Vincent Pons. (2022). "Does Context Outweigh Individual Characteristics in Driving Voting Behavior? Evidence from Relocations within the United States." *American Economic Review* 112 (4):1226-72.

Carlsen, F., & Leknes, S. (2022). For whom are cities good places to live?. *Regional Studies*, 1-14.

Carmines, E. G., & D'Amico, N. J. (2015). The new look in political ideology research. *Annual Review of Political Science*, *18*, 205-216.

Cattell, V., Dines, N., Gesler, W., Curtis, S. (2008). Mingling, observing, and lingering: Everyday public spaces and their implications for well-being and social relations. *Health & Place*, 14, 544-561.

Clarkson, J. J., Chambers, J. R., Hirt, E. R., Otto, A. S., Kardes, F. R., & Leone, C. (2015). The self-control consequences of political ideology. *Proceedings of the National Academy of Sciences*, 112(27), 8250-8253.

Cuba, L., & Hummon, D. M. (1993). A place to call home: Identification with dwelling, community, and region. *Sociological quarterly*, 34(1), 111-131.

Cramer, Katherine. (2016). The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker. Chicago, IL: University of Chicago Press.

Cuba, L., & Hummon, D. M. (1993, December). Constructing a sense of home: Place affiliation and migration across the life cycle. In *Sociological forum* (Vol. 8, No. 4, pp. 547-572). Kluwer Academic Publishers-Plenum Publishers.

Cullen, J. B., & Levitt, S. D. (1999). Crime, urban flight, and the consequences for cities. The Review of Economics and Statistics, May 1999, 81(2): 159–169.

Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting liberal and conservative attitudes using moral foundations theory. *Personality and Social Psychology Bulletin*, 40(12), 1559-1573.

de Dominicis, Laura, Lewis Dijkstra, and Nicola Pontarollo. (2020). The Urban-Rural Divide in Anti-EU Vote: Social, demographic and economic factors affecting the vote for parties opposed to European integration. Luxembourg: Publications Office of the European Union.

DellaPosta, D., Shi, Y., & Macy, M. (2015). Why do liberals drink lattes? *American Journal of Sociology*, 120(5), 1473-1511.

Dunleavy, Patrick. (1979). "The Urban Basis of Political Alignment: Social Class, Domestic Property Ownership, and State Intervention in Consumption Processes." *British Journal of Political Science*, 9 (4):409-443.

Durkheim, E. [1893] 1933. The Division of labor in society. New York, NY: The Free Press.

Ellis C, Stimson JA. (2012). *Ideology in America*. New York, NY: Cambridge Univ. Press

Essletzbichler, J., Disslbacher, F., and Moser, M. (2018) The victims of neoliberal globalisation and the rise of the populist vote: a comparative analysis of three recent electoral decisions. *Cambridge Journal of Regions, Economy and Society*, 11(1), 73–94.

Federico, C. M., & Hunt, C. V. (2013). Political information, political involvement, and reliance on ideology in political evaluation. *Political Behavior*, *35*(1), 89-112.

Florida, Richard (2005). Cities and the creative class. Routledge.

Florida, R. (2017). The new urban crisis: How our cities are increasing inequality, deepening segregation, and failing the middle class-and what we can do about it. New York, NY: Basic Books.

Finifter, A. W. (1972). Alienation and the social system. John Wiley & Sons.

Fried, M. (1984). The structure and significance of community satisfaction. *Population and Environment*, 7(2), 61-86.

Freeder, S., Lenz, G. S., & Turney, S. (2019). The importance of knowing "what goes with what": Reinterpreting the evidence on policy attitude stability. *The Journal of Politics*, 81(1), 274-290.

Gimpel, James G., Nathan Lovin, Bryant Moy, and Andrew Reeves. (2020) The Urban-Rural Gulf in American Political Behavior. *Political Behavior*, 42:1343–1368.

Gimpel, J., and Reeves, A., (2022), Electoral geography, political behavior and public opinion, in *Handbook on Politics and Public Opinion*, ed. By Thomas J. Rudolph. Edward Elgar Publishing.

Garretsen, H., Stoker, J.I., Soudis, D., Martin, R.L., and Rentfrow, P.J. (2018) Brexit and the relevance of regional personality traits: more psychological Openness could have swung the regional. *Cambridge Journal of Regions, Economy and Society*, 11(1), 165–175.

Gest, Justin. (2016). *The New Minority: White Working Class Politics in an Age of Immigration and Inequality*. Oxford, UK: Oxford University Press.

Glaeser, E. (2012). Triumph of the city: How our greatest invention makes us richer, smarter, greener, healthier, and happier. New York, NY: Penguin.

Glaeser, E. L. (2020). Urbanization and its discontents. *Eastern Economic Journal*, 46(2), 191-218.

Goggin, S. N., Henderson, J. A., & Theodoridis, A. G. (2020). What goes with red and blue? Mapping partisan and ideological associations in the minds of voters. *Political Behavior*, 42(4), 985-1013.

Goggin, S. N., Henderson, J. A., & Theodoridis, A. G. (2020). What goes with red and blue? Mapping partisan and ideological associations in the minds of voters. *Political Behavior*, 42(4), 985-1013.

Gordon, I.R. (2018). In what sense left behind by globalisation? Looking for a less reductionist geography of the populist surge in Europe. *Cambridge Journal of Regions, Economy and Society*, 11(1), 95–113.

Haidt, J. (2012). The righteous mind: Why good people are divided by politics and religion. New York, NY: Vintage.

Halliez, A. A., & Thornton, J. R. (2020). Examining Trends in Ideological Identification: 1972–2016. *American Politics Research*, 1532673X20961314.

Hernández, B., Hidalgo, M. C., Salazar-Laplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *Journal of environmental psychology*, 27(4), 310-319.

Hidalgo, M. C., & Hernandez, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of environmental psychology*, 21(3), 273-281.

Højsgaard, S., Halekoh, U. & Yan J. (2006) The R Package geepack for Generalized Estimating Equations. *Journal of Statistical Software*, 15(2), 1-11.

Huijsmans, Twan. (2020). "The Urban-Rural Divide in Political Attitudes in the Netherlands." Council for European Studies, Columbia University,

https://www.europenowjournal.org/2020/11/09/the-urban-rural-divide-in-political-attitudes-in-the-netherlands/

Hummon, D. M. (1986). City mouse, country mouse: The persistence of community identity. *Qualitative sociology*, 9(1), 3-25.

Hummon, D. M. (1992). Community attachment. In *Place attachment* (pp. 253-278). Springer, Boston, MA.

Jacoby, W. G. (1991). Ideological identification and issue attitudes. *American Journal of Political Science*, 178-205.

Jacoby, W. G. (2014). Is there a culture war? Conflicting value structures in American public opinion. *American Political Science Review*, 108(4), 754-771.

Jennings, W. & Stoker, G. (2019). "The Divergent Dynamics of Cities and Towns: Geographical Polarisation and Brexit." *The Political Quarterly* 90 (S2):155-166.

Johnston, R., Jones, K., & Jen, M. H. (2009). Regional variations in voting at british general elections, 1950–2001: group-based latent trajectory analysis. *Environment and Planning A: Economy & Space*, 41(3), 598-616.

Jargowsky, P. A., & Park, Y. (2009). Cause or consequence? Suburbanization and crime in US metropolitan areas. *Crime & Delinquency*, 55(1), 28-50.

Jolliffe, I. T., & Cadima, J. (2016). Principal component analysis: a review and recent developments. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 374(2065), 20150202.

Jolliffe, I. T., & Morgan, B. J. T. (1992). Principal component analysis and exploratory factor analysis. *Statistical methods in medical research*, *1*(1), 69-95.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual review of psychology*, 60, 307-337.

Jost, J. T., Federico, C. M., & Napier, J. L. (2013). Political ideologies and their social psychological functions. *The Oxford handbook of political ideologies*, 232-250.

Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review*, 328-339.

Kenny, M., & Luca, D. (2021). The urban-rural polarisation of political disenchantment: an investigation of social and political attitudes in 30 European countries. *Cambridge Journal of Regions, Economy and Society*, 14(3), 565-582.

Korpela, K. M. (2012). Place attachment. *The Oxford handbook of environmental and conservation psychology*, 9.

Kriner, D. L., & Reeves, A. (2012). The influence of federal spending on presidential elections. *American Political Science Review*, 106(2), 348-366.

Lavallee, L. F., Hatch, P. M., Michalos, A. C., & McKinley, T. (2007). Development of the contentment with life assessment scale (CLAS): Using daily life experiences to verify levels of self-reported life satisfaction. *Social Indicators Research*, 83(2), 201-244.

Levendusky, M. (2009). *The partisan sort: How liberals became democrats and conservatives became republicans*. Chicago, IL: The University of Chicago Press.

Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years?. *Journal of environmental psychology*, 31(3), 207-230.

Lewis-Beck, M. S., Jacoby, W. G., Norpoth, H., & Weisberg, H. F. (2008). *The American voter revisited*. Ann Arbor, MI: University of Michigan Press.

Lim, C., & Putnam, R. D. (2010). Religion, social networks, and life satisfaction. *American sociological review*, 75(6), 914-933.

Long, Larry H. Migration and Residential Mobility in the United States. New York, NY: Russell Sage Foundation, 1988.

Marcinkiewicz, K. (2018). The economy or an urban–rural divide? Explaining spatial patterns of voting behaviour in Poland. *East European Politics and Societies*, 32(04), 693-719.

Martin, G. J., & Webster, S. W. (2020). Does residential sorting explain geographic polarization?. *Political Science Research and Methods*, 8(2), 215-231.

Marx, K. J (1971). *The Grundrisse*, ed. and transl. D. McLellan. New York, NY: Harper & Row.

Marx, K. and Engels, F. (1978). *The Marx-Engels Reader*. Translated by Robert Tucker. New York, NY: W.W. Norton.

Maxwell, Rahsaan. (2019). "Cosmopolitan Immigration Attitudes in Large European Cities: Contextual or Compositional Effects?" *American Political Science Review* 113(2), 456—474.

McGrane, D., Berdahl, L., & Bell, S. (2016). Moving beyond the urban/rural cleavage: Measuring values and policy preferences across residential zones in Canada. *Journal of Urban Affairs*.

McKee, S. C. (2008). Rural voters and the polarization of American presidential elections. *PS: Political Science & Politics*, 41(1), 101-108.

McKnight, M. L., Gibbs, B. G., Sanders, S. R., Cope, M. R., Jackson, J. E., & Park, P. N. (2019). Small towns and urban centers: The relationship of distance and population size to community satisfaction. *Community Development*, 50(4), 389-405.

Mettler, S., & Brown, T. (2022). The growing rural-urban political divide and democratic vulnerability. *The ANNALS of the American Academy of Political and Social Science*, 699(1), 130-142.

Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of environmental psychology*, 30(1), 11-22.

Morrison, Philip S. and Weckroth, Mikko. (2018) Human values, subjective well-being and the metropolitan region. *Regional Studies*, 52(3), 325—337.

Morse, C. E., & Mudgett, J. (2018). Happy to be home: Place-based attachments, family ties, and mobility among rural stayers. *The Professional Geographer*, 70(2), 261-269.

Nemerever, Z., & Rogers, M. (2021). Measuring the rural continuum in political science. *Political Analysis*, 29(3), 267-286.

Okulicz-Kozaryn, A., & Mazelis, J. M. (2018). Urbanism and happiness: A test of Wirth's theory of urban life. *Urban Studies*, *55*(2), 349-364.

Okulicz-Kozaryn, A., & Valente, R. R. (2020). The perennial dissatisfaction of urban upbringing. *Cities*, 104, 102751.

Okulicz-Kozaryn, A., & Valente, R. R. (2021). Urban unhappiness is common. *Cities*, 118, 103368.

Onnela, J. P., Arbesman, S., González, M. C., Barabási, A. L., & Christakis, N. A. (2011). Geographic constraints on social network groups. *PLoS one*, *6*(4), e16939.

Newman, D. B., Schwarz, N., Graham, J., & Stone, A. A. (2019). Conservatives report greater meaning in life than liberals. *Social psychological and personality science*, *10*(4), 494-503.

Oswald, F., Jopp, D., Rott, C., & Wahl, H. W. (2011). Is aging in place a resource for or risk to life satisfaction?. *The Gerontologist*, 51(2), 238-250.

Park, R. E. (1915). The city: Suggestions for the investigation of human behavior in the city environment. *American journal of sociology*, 20(5), 577-612.

Pollini, G. (2005). Elements of a theory of place attachment and socio-territorial belonging. *International Review of Sociology—Revue Internationale de Sociologie*, 15(3), 497-515.

Popp, E., & Rudolph, T. J. (2011). A tale of two ideologies: Explaining public support for economic interventions. *The Journal of Politics*, 73(3), 808–820.

Putnam, R. D. (2000). *Bowling alone: America's declining social capital*. New York, NY: Palgrave Macmillan.

Reeves, A., & Gimpel, J.G. (2012). Ecologies of Unease: Geographic Context and National Economic Evaluations. *Political Behavior*, 34(3), 507—534.

Raymond, C. M., Brown, G., & Weber, D. (2010). The measurement of place attachment: Personal, community, and environmental connections. *Journal of environmental psychology*, 30(4), 422-434.

Rentfrow, P. J. (2010). Statewide differences in personality: Toward a psychological geography of the United States. *American Psychologist* 65(6), 548–558.

Rentfrow PJ, Jokela M, Lamb ME (2015). Regional Personality Differences in Great Britain. *PLoS ONE* 10(3): e0122245.

Riger, S., & Lavrakas, P. J. (1981). Community ties: Patterns of attachment and social interaction in urban neighborhoods. *American journal of community psychology*, 9(1), 55-66.

Rodríguez-Pose, A. (2018) The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, 11(1), 189-209.

Rodríguez-Pose, A., Lee, N., & Lipp, C. (2021). Golfing with Trump. Social capital, decline, inequality, and the rise of populism in the US. *Cambridge Journal of Regions, Economy and Society*, 14(3), 457-481.

Rogers, N. (2018). Split screens: A content analysis of American liberals' and conservatives' respective television favorites. *Psychology of Popular Media Culture*. 9(1), 45-58.

Ronald, R. (2005). Meanings of property and home ownership consumption in divergent socio-economic conditions. In John Doling and Marja Elsinga, (eds.) *Home ownership. Getting in, getting from, getting out*, (Part II). Amsterdam, The Netherlands: IOS Press. Pp. 127-150.

Sampson, R. J. (1988). Local friendship ties and community attachment in mass society: A multilevel systemic model. *American sociological review*, 766-779.

Sampson, Robert J., and Wilson, William Julius (1995). Toward a Theory of Race, Crime, and Urban Inequality. In Hagan, John and Peterson, Ruth D. (Eds.), Crime and Inequality, pp. 37–56. Stanford, CA: Stanford University Press.

Scala, D. J., & Johnson, K. M. (2017). Political polarization along the rural-urban continuum? The geography of the presidential vote, 2000–2016. *The ANNALS of the American Academy of Political and Social Science*, 672(1), 162-184.

Scannell, L., & Gifford, R. (2017a). The experienced psychological benefits of place attachment. *Journal of Environmental Psychology*, *51*, 256-269.

Scannell, L., & Gifford, R. (2017b). Place attachment enhances psychological need satisfaction. *Environment and Behavior*, 49(4), 359-389.

Schlenker, B. R., Chambers, J. R., & Le, B. M. (2012). Conservatives are happier than liberals, but why? Political ideology, personality, and life satisfaction. *Journal of Research in Personality*, 46(2), 127-146.

Seeman, M. (1959). On the meaning of alienation. American sociological review, 783-791.

Seeman, M. (1971). The urban alienations: Some dubious theses from Marx to Marcuse. *Journal of personality and social psychology*, 19(2), 135.

Seeman, M. (1975). Alienation studies. *Annual review of sociology*, 1(1), 91-123.

Silver, D. (2019). Alienation in a four factor world. *Journal for the Theory of Social Behaviour*, 49(1), 84-105.

Sengupta, N. K., Greaves, L. M., Osborne, D., & Sibley, C. G. (2017). The sigh of the oppressed: The palliative effects of ideology are stronger for people living in highly unequal neighbourhoods. *British Journal of Social Psychology*, *56*(3), 437-454.

Shaw. C., McKay, H. (1942). *Juvenile Delinquency and Urban Areas*. Chicago, IL: University of Chicago Press.

Silver, J. R., & Silver, E. (2017). Why are conservatives more punitive than liberals? A moral foundations approach. *Law and Human Behavior*, *41*(3), 258.

Simmel, Georg (1990) The Philosophy of Money, ed. D.P. Frisby. London, UK: Routledge.

Simmel, Georg (1991) 'Money in Modern Culture', Theory, Culture & Society 8(3): 17–31.

Smaldino, P., Janssen, M., Hillis, V., & Bednar, J. (2017). Adoption as a Social Marker: The Diffusion of Products in a Multigroup Environment. *Journal of Mathematical Sociology*, 41(1), 26-45.

Smidt, C. E., (Ed.). (2003). *Religion as social capital: Producing the common good*. Waco, TX: Baylor University Press.

Sniderman, P. M., & Brody, R. A. (1977). Coping: The ethic of self-reliance. *American Journal of Political Science*, 501-521.

Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity. *Environment and behavior*, 34(5), 561-581.

Swaroop, S., & Morenoff, J. D. (2006). Building community: The neighborhood context of social organization. *Social Forces*, 84(3), 1665-1695.

Taylor, R. B. (1996, March). Neighborhood responses to disorder and local attachments: The systemic model of attachment, social disorganization, and neighborhood use value. In *Sociological forum* (Vol. 11, No. 1, pp. 41-74). Kluwer Academic Publishers-Plenum Publishers.

Taylor, R. B., Gottfredson, S. D., & Brower, S. (1985). Attachment to place: Discriminant validity, and impacts of disorder and diversity. *American Journal of Community Psychology*, 13(5), 525-542.

Tönnies, F., [1887] (1963), Community and Society, New York, Harper

Trentelman, C. K. (2009). Place attachment and community attachment: A primer grounded in the lived experience of a community sociologist. *Society and natural resources*, 22(3), 191-210.

Trounstine, J. (2018). Segregation by Design: Local Politics and Inequality in American Cities. Cambridge, UK: Cambridge University Press.

Ulrich-Schad, J. D., & Duncan, C. M. (2018). People and places left behind: Work, culture and politics in the rural United States. *The Journal of Peasant Studies*, 45(1), 59-79.

Valente, R. R., Berry, B. J., & Okulicz-Kozaryn, A. (2020). An Intensifying Urban–Rural Schism in US Women's Preference for Governmental Solutions to Social Problems. *The Professional Geographer*, 1-12.

Walks, R. A. (2006). The causes of city-suburban political polarization? A Canadian case study. *Annals of the Association of American Geographers*, *96*(2), 390-414.

Weckroth, Mikko and Kemppainen, Teemu. (2023) Rural conservatism and the urban spirit of capitalism? On the geography of human values. *Regional Studies*.

Wirth, L. (1938). Urbanism as a Way of Life. American journal of sociology, 44(1), 1-24.

Woldoff, R. A. (2002). The effects of local stressors on neighborhood attachment. *Social Forces*, 81(1), 87-116

Wuthnow, R. (2018). *The Left Behind: Decline and Rage in Small-Town America*. Princeton University Press.

Yan, J. & Fine, J.P. (2004) Estimating Equations for Association Structures. *Statistics in Medicine* 23, 859-880.

Yan, J. (2002) geepack: Yet Another Package for Generalized Estimating Equations *R-News* 2/3, 12-14.

# Supplemental Information for "The Urban-Rural Divide and Residential Contentment as Antecedents of Political Ideology"

## September 1, 2023

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## A Summary Statistics

Variable	n	Mean	Std Dev	Min	Max
Black	7203	0.1	0.3	0	1
Asian	7203	0.02	0.13	0	1
Hispanic	8000	0.07	0.26	0	1
Male	7176	0.57	0.49	0	1
Married	7203	0.47	0.5	0	1
High School	8000	0.26	0.44	0	1
Some College	8000	0.22	0.41	0	1
2 Year Degree	8000	0.09	0.29	0	1
4 Year College Degree	8000	0.2	0.4	0	1
Post Graduate Degree	8000	0.11	0.31	0	1
Age 18-29	8000	0.14	0.34	0	1
Age 65 and up	8000	0.18	0.39	0	1
Attend Church Weekly	8000	0.24	0.43	0	1
Attend Church Never	8000	0.44	0.5	0	1
Income < \$30k	6376	0.23	0.42	0	1
Income $$30k-$50k$	6376	0.22	0.41	0	1
Income \$50k-\$70k	6376	0.17	0.35	0	1
Income \$70k-\$100k	6376	0.18	0.38	0	1
Income \$100k-\$150k	6376	0.13	0.33	0	1
Income \$150k and up	6376	0.07	0.26	0	1
Change in AGI (ZIP)	7080	9.59	19.54	-59.18	922.65
Percent Black (ZIP)	7131	11.53	17.3	0	98.96
Percent Hispanic (ZIP)	7131	11.97	16.38	0	97.74
Home Value (ZIP)	7131	178.18	142.99	0	2000
Median Income (ZIP)	7131	52.38	22.14	0	233.41
Distance from City	7181	2.61	1.24	-3.13	6.02
Population Density (logged)	7131	-0.22	1.85	-8.33	4.87
Place Attachment	6406	56.7	21.7	0	100
Ideology (5pt)	6662	2.86	1.15	1	5
Partisanship (7pt)	7074	3.8	2.17	1	7
		Place Attac	hment Iten	ns	
This place is a reflection of me	6494	3.08	1.07	1	5
I don't fit in here	6496	2.48	1.13	1	5
I'm happiest when I'm here	6480	3.41	1.01	1	5
I miss it when I'm away	6487	3.38	1.06	1	5
This is my favorite place	6488	3.22	1.1	1	5

Table 1: Summary Statistics

## **B** Factor Analysis Information

		Initial Eigenval	ues	Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative $\%$	Total	% Variance	Cumulative $\%$
1	3.698	61.642	61.642	3.698	61.642	61.642
2	0.730	12.168	73.81			
3	0.516	8.608	82.418			
4	0.446	7.436	89.854			
5	0.380	6.333	96.187			
6	0.229	3.813	100			

Table 2: Total Variance Explained. Extraction Method: Principal Component Analysis with Varimax Rotation.

Survey Item	Component 1
I don't fit in here	653
I'm happiest when I'm here	.861
I miss it when I'm away	.761
This is my favorite place	.867
I would move if I could	755
This place is a reflection of me	.793

Table 3: Factor Analysis Component Matrix. Extraction method: Prinicpal Component Analysis with Varimax Rotation. 1 component extracted.

- C Place Attachment Model Robustness Checks
- C.1 Fit Using Generalized Estimating Equations

	Model 1	Model 2
Distance from City		$0.83 (0.27)^{**}$
Population Density (logged)	$-1.13 (0.20)^{***}$	,
Black	$2.29 (1.12)^*$	$2.23 (1.11)^*$
Asian	0.90(2.42)	0.61(2.42)
Hispanic	1.95(1.20)	1.84(1.20)
Male	$-1.49 (0.59)^*$	$-1.54 (0.60)^{**}$
Married	0.95(0.68)	1.07(0.69)
High School	$4.20(1.81)^*$	$3.83 (1.81)^*$
Some College	2.06(1.82)	1.75(1.83)
2 Year Degree	1.02(1.97)	0.74(1.97)
4 Year College Degree	-0.02(1.85)	-0.43(1.86)
Post Graduate Degree	-0.66(1.96)	-1.16(1.97)
Age 18-29	$-4.30 (0.94)^{***}$	$-4.26 (0.94)^{***}$
Age 65 and up	$6.09(0.72)^{***}$	$6.09 (0.72)^{***}$
Attend Church Weekly	1.34(0.81)	$1.37\ (0.81)^{\cdot}$
Attend Church Never	$-3.30(0.73)^{***}$	$-3.36 (0.73)^{***}$
Income < \$30k	$-2.82(0.97)^{**}$	$-2.60(0.97)^{**}$
Income $$30k-$50k$	-1.07(0.94)	-0.99(0.95)
Income \$70k-\$100k	0.31(0.96)	0.28(0.97)
Income \$100k-\$150k	$2.64(1.07)^*$	$2.61 (1.07)^*$
Income \$150k and up	$3.70(1.30)^{**}$	$3.64 (1.30)^{**}$
Change in AGI (ZIP)	$0.09 (0.03)^{**}$	$0.11 (0.03)^{**}$
Median Income (ZIP)	$-0.09 (0.02)^{***}$	$-0.09 (0.02)^{***}$
Percent Black (ZIP)	$-0.06 (0.02)^{**}$	$-0.08(0.02)^{***}$
Percent Hispanic (ZIP)	$-0.07 (0.02)^{***}$	$-0.09(0.02)^{***}$
Home Value (ZIP)	$0.02 (0.00)^{***}$	$0.02 (0.00)^{***}$
Intercept	$50.62 (2.45)^{***}$	$49.31 (2.61)^{***}$
Scale parameter: gamma	416.09	417.99
Scale parameter: SE	8.00	8.02
Num. obs.	4955	4955
Num. clust.	4954	4954
***n < 0.001. **n < 0.01. *n < 0.05	(i.i.m. < 0.1	

<sup>\*\*\*</sup>p < 0.001; \*\*p < 0.01; \*p < 0.05; 'p < 0.1

Table 4: Impact of Distance and Density on Place Attachment, Using a Generalized Estimating Equations (GEE) approach. Cell entries are regression coefficients (standard errors); Categorical (0,1) variables capturing year of survey are included in the model but not in the table. The dependent variable is place attachment ranging from 0 to 100; Excluded reference categories for Education = Less than High School; Income = \$50k to \$70k. The substantive results are identical to those using the least squares model in Table 2.

#### C.2 With Year Indicators

	Model 1	Model 2
Distance from City		0.83 (0.28)**
Population Density (logged)	$-1.13 (0.20)^{***}$	,
Black	$2.28 (1.14)^*$	$2.23 (1.14)^{\cdot}$
Asian	0.90(2.40)	0.61(2.40)
Hispanic	$1.94\ (1.19)$	1.84(1.19)
Male	$-1.51(0.60)^*$	$-1.54 (0.60)^*$
Married	$0.94\ (0.68)$	1.07(0.68)
High School	$4.22 (1.87)^*$	$3.83 (1.87)^*$
Some College	2.08(1.89)	1.75(1.90)
2 Year Degree	1.03(2.02)	0.74(2.02)
4 Year College Degree	0.00(1.92)	-0.43(1.92)
Post Graduate Degree	-0.64(2.03)	-1.16(2.03)
Age 18-29	$-4.31 (0.94)^{***}$	$-4.26 (0.94)^{***}$
Age 65 and up	$6.08 (0.76)^{***}$	$6.09 (0.76)^{***}$
Attend Church Weekly	1.34(0.83)	$1.37~(0.83)^{\cdot}$
Attend Church Never	$-3.30 (0.74)^{***}$	$-3.36 (0.74)^{***}$
Income < \$30k	$-2.79 (0.99)^{**}$	$-2.60 (0.99)^{**}$
Income $$30k-$50k$	-1.06(0.95)	-0.99(0.95)
Income $70k-100k$	0.31(0.99)	0.28(0.99)
Income $100k-150k$	$2.64 (1.10)^*$	$2.61 (1.10)^*$
Income \$150k and up	$3.70 (1.34)^{**}$	$3.64 (1.35)^{**}$
Change in AGI (ZIP)	$0.09 (0.03)^{**}$	0.11 (0.03)**
Median Income (ZIP)	$-0.09 (0.02)^{***}$	$-0.09 (0.02)^{***}$
Percent Black (ZIP)	$-0.06 (0.02)^{**}$	$-0.08 (0.02)^{***}$
Percent Hispanic (ZIP)	$-0.07 (0.02)^{***}$	$-0.09 (0.02)^{***}$
Home Value (ZIP)	$0.02 (0.00)^{***}$	$0.02 (0.00)^{***}$
2008	2.09(1.30)	$2.37\ (1.30)$
2010	$3.90 (1.29)^{**}$	$4.19 (1.30)^{**}$
2012	$2.14 (1.20)^{\cdot}$	$2.40 (1.20)^*$
2014	1.97(1.27)	$2.54 (1.27)^*$
2018	0.33(1.24)	0.81(1.24)
2020	1.16(1.31)	1.82(1.31)
Intercept	$50.66 (2.49)^{***}$	$49.31 (2.67)^{***}$
$\mathbb{R}^2$	0.11	0.11
$Adj. R^2$	0.11	0.10
Num. obs.	4957	4955
***n < 0.001: **n < 0.01: *n < 0.05	. 'n < 0.1	

Table 5: Impact of Distance and Density on Place Attachment, Controlling for Population Characteristics (With Year Distance / Density Interactions). OLS regression; cell entries are regression coefficients (standard errors); Categorical (0,1) variables capturing year of survey ARE included in the table. The dependent variable is place attachment ranging from 0 to 100; Excluded reference categories for Education = Less than High School; Income = \$50k to \$70k. These results are identical to Table 2 in the manuscript but publish the coefficients for each year indicator variable.

## C.3 With Year Interactions

Distance from City		Model 1	Model 2
Population Density (logged)	Distance from City	1,10401 1	
Black Asian 0.59 (2.40) 0.36 (2.40)  Hispanic 1.91 (1.19) 1.75 (1.19)  Male -1.48 (0.60)* -1.50 (0.60)*  Married 0.94 (0.68) 1.10 (0.68)  High School 4.35 (1.87)* 3.92 (1.87)*  Some College 2.21 (1.89) 1.85 (1.89)  2 Year Degree 1.17 (2.02) 0.86 (2.02)  4 Year College Degree 0.13 (1.92) -0.30 (1.92)  Post Graduate Degree -0.58 (2.03) -1.11 (2.03)  Age 18-29 -4.22 (0.94)*** -4.18 (0.94)****  Age 65 and up 6.07 (0.76)****  Attend Church Weekly 1.37 (0.83) 1.43 (0.83)*  Attend Church Never -3.24 (0.74)**** -3.31 (0.74)****  Income \$30k -520k -1.08 (0.95) -1.01 (0.95)  Income \$100k-\$150k  0.31 (0.99) 0.19 (0.99)  Income \$100k-\$150k  2.67 (1.10)* 2.59 (1.10)*  Income \$100k-\$150k  0.31 (0.99) 0.19 (0.99)  Income \$100k-\$150k  0.30 (0.02)*** -0.09 (0.02)****  Percent Black (ZIP) -0.09 (0.02)*** -0.09 (0.02)****  Percent Hispanic (ZIP) -0.07 (0.02)*** -0.09 (0.02)****  Home Value (ZIP) 0.02 (0.00)*** -0.09 (0.02)***  2008  1.87 (1.30)** 5.33 (2.77)*  2012  2.15 (1.20) 3.11 (2.67)  2014  1.93 (1.27) 2.05 (2.69)  Distance × 2010 Distance × 2012 Distance × 2010  Distance × 2012 Distance × 2018 Distance × 2018  Distance × 2018 Density × 2010 0.33 (0.65)  Density × 2010 0.33 (0.65)  Density × 2018 1.11 (0.65)  Density × 2018 1.11 (0.65)  Density × 2018 1.11 (0.66)  Density × 2018 Density × 2018 Density × 2018  Density × 2018 1.11 (0.65)  Density × 2018 Density × 2018 Density × 2018 Density × 2018  Density × 2018 Density ×		$-1.30 (0.51)^*$	0.00 (0.10)
Asian	- , , , ,	` ' .	2 25 (1 14)*
Hispanic Male		, ,	
Male         -1.48 (0.60)*         -1.50 (0.60)*           Married         0.94 (0.68)         1.10 (0.68)           High School         4.35 (1.87)*         3.92 (1.87)*           Some College         2.21 (1.89)         1.85 (1.89)           2 Year Degree         1.17 (2.02)         0.86 (2.02)           4 Year College Degree         -0.58 (2.03)         -1.11 (2.03)           Age 18-29         -4.22 (0.94)****         -4.18 (0.94)****           Age 65 and up         6.07 (0.76)****         6.07 (0.76)****           Attend Church Weekly         1.37 (0.83)         1.43 (0.83)           Attend Church Never         -3.24 (0.74)****         -3.31 (0.74)****           Income \$30k-\$50k         -1.08 (0.95)         -1.01 (0.95)           Income \$70k-\$100k         0.31 (0.99)         0.19 (0.99)           Income \$150k and up         3.79 (1.35)**         3.60 (1.35)**           Change in AGI (ZIP)         0.08 (0.03)*         0.10 (0.03)**           Percent Black (ZIP)         -0.06 (0.02)***         -0.09 (0.02)***           Percent Hispanic (ZIP)         -0.06 (0.02)***         -0.08 (0.02)***           Home Value (ZIP)         0.02 (0.00)***         0.02 (0.00)***           2012         2.15 (1.20)         3.11 (2.67) <t< td=""><td></td><td>, ,</td><td>• ,</td></t<>		, ,	• ,
Married         0.94 (0.68)         1.10 (0.68)           High School         4.35 (1.87)*         3.92 (1.87)*           Some College         2.21 (1.89)         1.85 (1.89)           2 Year Degree         1.17 (2.02)         0.86 (2.02)           4 Year College Degree         0.13 (1.92)         -0.30 (1.92)           Post Graduate Degree         -0.58 (2.03)         -1.11 (2.03)           Age 18-29         -4.22 (0.94)****         -4.18 (0.94)****           Age 65 and up         6.07 (0.76)****         6.07 (0.76)****           Attend Church Weekly         1.37 (0.83)*         1.43 (0.83)*           Attend Church Never         -3.24 (0.74)****         -3.31 (0.74)****           Income \$30k-\$50k         -1.08 (0.95)         -1.01 (0.95)           Income \$70k-\$100k         0.31 (0.99)         0.19 (0.99)           Income \$150k and up         3.79 (1.35)**         3.60 (1.35)**           Change in AGI (ZIP)         0.08 (0.03)*         0.10 (0.03)**           Percent Black (ZIP)         -0.09 (0.02)***         -0.09 (0.02)***           Percent Hispanic (ZIP)         -0.07 (0.02)***         -0.09 (0.02)***           Home Value (ZIP)         0.02 (0.00)***         0.02 (0.00)***           2012         2.15 (1.20)*         3.11 (2.67)			
High School Some College 2.21 (1.89) 1.85 (1.89) 2 Year Degree 1.17 (2.02) 0.86 (2.02) 4 Year College Degree 0.13 (1.92) -0.30 (1.92) Post Graduate Degree -0.58 (2.03) -1.11 (2.03) Age 18-29 -4.22 (0.94)*** -4.18 (0.94)*** Age 65 and up 6.07 (0.76)*** 6.07 (0.76)*** Attend Church Weekly 1.37 (0.83) 1.43 (0.83) Attend Church Never 1.24 (0.74)*** -3.31 (0.74)*** Income < \$30k -2.79 (0.99)** -2.59 (0.99)** Income \$30k-\$50k -1.08 (0.95) -1.01 (0.95) Income \$70k-\$100k 0.31 (0.99) 0.19 (0.99) Income \$100k-\$150k and up 3.79 (1.35)** 3.60 (1.35)** Change in AGI (ZIP) 0.08 (0.03)* 0.10 (0.03)** Percent Black (ZIP) -0.09 (0.02)*** -0.09 (0.02)*** Percent Hispanic (ZIP) -0.06 (0.02)** -0.08 (0.02)*** 2008 1.87 (1.30) -1.27 (2.87) 2012 2.15 (1.20) 3.11 (2.67) 2014 1.93 (1.27) 2.05 (2.69) 2018 0.54 (1.25) 5.54 (2.80)* 2020 1.03 (1.32) -0.93 (2.82) Distance × 2014 Distance × 2014 Distance × 2018 Density × 2010 0.33 (0.65) Density × 2010 0.33 (0.65) Density × 2010 0.33 (0.65) Density × 2018 1.11 (0.65) Density × 2018 Density × 2019 Density × 2019 Density × 2010 Density × 2014 Density × 2018 Density × 2014 Density × 2018 Density × 2014 Density × 2018 Density × 2014 Density × 2014 Density × 2015 Density × 2016 Density × 2016 Density × 2017 De			
Some College         2.21 (1.89)         1.85 (1.89)           2 Year Degree         1.17 (2.02)         0.86 (2.02)           4 Year College Degree         0.13 (1.92)         -0.30 (1.92)           Post Graduate Degree         -0.58 (2.03)         -1.11 (2.03)           Age 18-29         -4.22 (0.94)****         -4.18 (0.94)****           Age 65 and up         6.07 (0.76)****         6.07 (0.76)****           Attend Church Weekly         1.37 (0.83)**         1.43 (0.83)*           Attend Church Never         -3.24 (0.74)****         -3.31 (0.74)****           Income \$30k         -2.79 (0.99)***         -2.59 (0.99)**           Income \$30k-\$50k         -1.08 (0.95)         -1.01 (0.95)           Income \$70k-\$100k         0.31 (0.99)         0.19 (0.99)           Income \$100k-\$150k         2.67 (1.10)*         2.59 (1.10)*           Income \$150k and up         3.79 (1.35)**         3.60 (1.35)**           Change in AGI (ZIP)         0.08 (0.03)*         0.10 (0.03)**           Median Income (ZIP)         -0.09 (0.02)***         -0.09 (0.02)***           Percent Black (ZIP)         -0.06 (0.02)**         -0.09 (0.02)***           Percent Hispanic (ZIP)         -0.07 (0.02)***         -0.09 (0.02)***           2010         3.87 (1.30)*			
2 Year Degree       1.17 (2.02)       0.86 (2.02)         4 Year College Degree       0.13 (1.92)       -0.30 (1.92)         Post Graduate Degree       -0.58 (2.03)       -1.11 (2.03)         Age 18-29       -4.22 (0.94)***       -4.18 (0.94)****         Age 65 and up       6.07 (0.76)***       6.07 (0.76)***         Attend Church Weekly       1.37 (0.83)       1.43 (0.83)         Attend Church Never       -3.24 (0.74)***       -3.31 (0.74)***         Income \$30k       -2.79 (0.99)**       -2.59 (0.99)**         Income \$30k-\$50k       -1.08 (0.95)       -1.01 (0.95)         Income \$100k-\$150k       0.31 (0.99)       0.19 (0.99)         Income \$150k and up       3.79 (1.35)**       3.60 (1.35)**         Change in AGI (ZIP)       0.08 (0.03)*       0.10 (0.03)**         Median Income (ZIP)       -0.09 (0.02)***       -0.09 (0.02)***         Percent Black (ZIP)       -0.06 (0.02)***       -0.09 (0.02)***         Percent Hispanic (ZIP)       -0.07 (0.02)***       -0.09 (0.02)***         Portent Hispanic (ZIP)       -0.07 (0.02)***       -0.09 (0.02)***         2010       3.87 (1.30)*       -1.27 (2.87)         2012       2.15 (1.20)       3.11 (2.67)         2014       1.93 (1.27)       2.0	~		
4 Year College Post Graduate Degree       0.13 (1.92)       -0.30 (1.92)         Post Graduate Degree       -0.58 (2.03)       -1.11 (2.03)         Age 18-29       -4.22 (0.94)****       -4.18 (0.94)****         Age 65 and up       6.07 (0.76)****       6.07 (0.76)***         Attend Church Weekly       1.37 (0.83)**       1.43 (0.83)*         Attend Church Never       -3.24 (0.74)****       -3.31 (0.74)****         Income \$30k**       -2.79 (0.99)***       -2.59 (0.99)**         Income \$30k**       -1.08 (0.95)       -1.01 (0.95)         Income \$100k**       1.50k       2.67 (1.10)*       2.59 (1.10)*         Income \$150k and up       3.79 (1.35)***       3.60 (1.35)**         Change in AGI (ZIP)       0.08 (0.03)*       0.10 (0.03)**         Median Income (ZIP)       -0.09 (0.02)***       -0.09 (0.02)***         Percent Black (ZIP)       -0.06 (0.02)**       -0.08 (0.02)***         Percent Hispanic (ZIP)       -0.07 (0.02)***       -0.09 (0.02)***         Home Value (ZIP)       0.02 (0.00)***       -0.09 (0.02)***         2010       3.87 (1.30)*       -1.27 (2.87)         2011       3.81 (2.7)       2.05 (2.69)         2012       2.15 (1.20)*       3.11 (2.67)         2014       1.93 (	_		
Post Graduate Degree         -0.58 (2.03)         -1.11 (2.03)           Age 18-29         -4.22 (0.94)***         -4.18 (0.94)***           Age 65 and up         6.07 (0.76)****         6.07 (0.76)***           Attend Church Weekly         1.37 (0.83)**         1.43 (0.83)**           Attend Church Never         -3.24 (0.74)***         -3.31 (0.74)***           Income \$30k*         -2.79 (0.99)**         -2.59 (0.99)**           Income \$30k*\$50k         -1.08 (0.95)         -1.01 (0.95)           Income \$100k*\$150k         2.67 (1.10)*         2.59 (1.10)*           Income \$150k and up         3.79 (1.35)**         3.60 (1.35)**           Change in AGI (ZIP)         0.08 (0.03)*         0.10 (0.03)**           Median Income (ZIP)         -0.09 (0.02)***         -0.09 (0.02)***           Percent Black (ZIP)         -0.06 (0.02)**         -0.09 (0.02)***           Percent Hispanic (ZIP)         -0.07 (0.02)***         -0.09 (0.02)***           Percent Hispanic (ZIP)         -0.07 (0.02)***         -0.09 (0.02)***           Post         1.87 (1.30)         -1.27 (2.87)           2010         3.87 (1.30)*         -1.27 (2.87)           2011         3.81 (1.30)*         -0.27 (2.66)           2012         2.15 (1.20)*         3.11 (2.67) <td><u> </u></td> <td>, ,</td> <td>, ,</td>	<u> </u>	, ,	, ,
Age 18-29       -4.22 (0.94)***       -4.18 (0.94)***         Age 65 and up       6.07 (0.76)***       6.07 (0.76)***         Attend Church Weekly       1.37 (0.83)       1.43 (0.83)         Attend Church Never       -3.24 (0.74)****       -3.31 (0.74)****         Income \$30k*\$50k       -1.08 (0.95)       -1.01 (0.95)         Income \$70k*\$100k       0.31 (0.99)       0.19 (0.99)         Income \$10k-\$150k       2.67 (1.10)*       2.59 (1.10)*         Income \$150k and up       3.79 (1.35)**       3.60 (1.35)**         Change in AGI (ZIP)       0.08 (0.03)*       0.10 (0.03)**         Median Income (ZIP)       -0.09 (0.02)***       -0.09 (0.02)***         Percent Black (ZIP)       -0.06 (0.02)***       -0.08 (0.02)***         Percent Hispanic (ZIP)       -0.07 (0.02)***       -0.09 (0.02)***         Home Value (ZIP)       0.02 (0.00)***       -0.09 (0.02)***         2008       1.87 (1.30)       -1.27 (2.87)         2010       3.87 (1.30)*       5.33 (2.77)         2012       2.15 (1.20)       3.11 (2.67)         2014       1.93 (1.27)       2.05 (2.69)         2018       0.54 (1.25)       5.54 (2.80)*         2020       1.03 (1.32)       -0.93 (2.82)         Dista		` /	, ,
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_	6.07 (0.76)***	6.07 (0.76)***
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			0.10 (1.33)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- ,	0.08 (0.03)	
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	* *	-0.00 (0.02)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_ ` '	-0.07 (0.02)	-0.09 (0.02)
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$1.03\ (1.32)$	
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Intercept $50.61 (2.49)^{***}$ $49.26 (3.17)^{***}$ R <sup>2</sup> $0.12$ $0.11$ Adj. R <sup>2</sup> $0.11$ $0.11$		, ,	
$R^2$ 0.12 0.11 Adj. $R^2$ 0.11 0.11			
Adj. $R^2$ 0.11 0.11			
Num. obs. 4957 4955			0.11
	Num. obs.	4957	4955

<sup>\*\*\*</sup>p < 0.001; \*\*p < 0.01; \*p < 0.05; 'p < 0.1

Table 6: Impact of Distance and Density on Place Attachment, Controlling for Population Characteristics (With Year Fixed Effects in Table). OLS regression; cell entries are regression coefficients (standard errors); Categorical (0,1) variables capturing year of survey are included in the table. The dependent variable is place attachment ranging from 0 to 100; Excluded reference categories for Education = Less than High School; Income = \$50k to \$70k.

- D Ideology Model Robustness Checks
- D.1 Fit Using Generalized Estimating Equations

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
2 Year Degree -0.039 (0.101) 0.074 (0.087) 4 Year College Degree 0.159 (0.097) 0.197 (0.083)*
4 Year College Degree $0.159 (0.097)$ $0.197 (0.083)^*$
Post Craduate Degree $0.551 (0.102)^{***} 0.292 (0.096)^{***}$
Post Graduate Degree $0.551 (0.103)^{***} 0.382 (0.086)^{***}$
Age 18-29 $0.072 (0.049) 0.113 (0.037)^{**}$
Age 65 and up $-0.113 (0.040)^{**} -0.045 (0.030)$
Attend Church Weekly $-0.423 (0.041)^{***} -0.201 (0.033)^{***}$
Attend Church Never $0.350 (0.037)^{***}$ $0.187 (0.029)^{***}$
Income $< $30k$ $-0.053 (0.052)$ $-0.098 (0.042)^*$
Income $\$30k-\$50k$ $-0.069 (0.048)$ $-0.067 (0.037)$
Income \$70k-\$100k $-0.120 (0.051)^* -0.060 (0.039)$
Income $$100k-$150k$ $-0.050 (0.058)$ $-0.046 (0.042)$
Income \$150k and up $-0.101 (0.068) -0.066 (0.048)$
Distance from City $0.003 (0.018) 0.024 (0.015)$
Population Density (logged) $0.072 (0.013)^{***} 0.044 (0.011)^{***}$
Change in AGI (ZIP) $-0.002 (0.002) -0.000 (0.001)$
Median Income (ZIP) $-0.004 (0.001)^{***} -0.002 (0.001)^{*}$
Percent Black (ZIP) $0.001 (0.001) 0.000 (0.001)$
Percent Hispanic (ZIP) $-0.002 (0.001)^* -0.001 (0.001)$
Home Value (ZIP) $0.001 (0.000)^{***} 0.000 (0.000)^{**}$
Party ID $-0.322 (0.006)^{***}$
Intercept $3.375 (0.138)^{***} 4.223 (0.118)^{***}$
Scale parameter: gamma 1.058 0.637
Scale parameter: SE 0.020 0.015
Num. obs. 4648 4628
Num. clust. 4647 4627

p < 0.001; \*\*p < 0.01; \*p < 0.05; \*p < 0.1

Table 7: Impact of Place Attachment on Political Liberalism: Using a Generalized Estimating Equations (GEE) approach. Cell entries are regression coefficients (standard errors); All survey waves are pooled and categorical (0,1) variables capturing the year of the survey are included in the model but not in the table. The dependent variable is political ideology ranging from conservative (1) to liberal (5); Excluded reference categories for Education= Less than High School; Income = \$50k to \$70k.

D.2 Decline and Place Attachment

	Model 1	Model 2
Place Attachment $\times$ Change in AG Income (ZIP)	0.000 (0.000)	$0.000\ (0.000)$
Place Attachment	$-0.003 (0.001)^{***}$	-0.001 (0.001)
Change in AG Income (ZIP)	-0.008 (0.005)	-0.003(0.004)
Black	$0.287 (0.060)^{***}$	$-0.282 (0.048)^{***}$
Asian	$0.188 \; (0.128)$	0.077 (0.100)
Hispanic	$0.130 (0.062)^*$	-0.069 (0.048)
Male	$-0.268 (0.031)^{***}$	$-0.111 (0.024)^{***}$
Married	$-0.115 (0.036)^{**}$	$-0.040 \ (0.028)$
High School	-0.137 (0.106)	-0.007 (0.083)
Some College	-0.005 (0.106)	0.099(0.083)
2 Year Degree	-0.039(0.112)	$0.074\ (0.088)$
4 Year College Degree	0.158 (0.108)	$0.196 (0.084)^*$
Post Graduate Degree	$0.549 (0.112)^{***}$	$0.381 (0.088)^{***}$
Age 18-29	$0.073\ (0.050)$	$0.113 (0.039)^{**}$
Age 65 and up	$-0.113 (0.039)^{**}$	-0.045 (0.030)
Attend Church Weekly	$-0.423 (0.043)^{***}$	$-0.201 (0.034)^{***}$
Attend Church Never	$0.351 (0.039)^{***}$	$0.188 (0.030)^{***}$
Income < \$30k	-0.054 (0.052)	$-0.099 (0.041)^*$
Income \$30k-\$50k	-0.071(0.049)	-0.068 (0.038)
Income \$70k-\$100k	$-0.121 (0.051)^*$	-0.060 (0.040)
Income \$100k-\$150k	-0.051 (0.057)	-0.046 (0.044)
Income \$150k and up	-0.102(0.069)	-0.067 (0.054)
Distance from City	0.003(0.019)	$0.024\ (0.014)$
Population Density (logged)	$0.073 (0.013)^{***}$	$0.044 (0.010)^{***}$
Median Income (ZIP)	$-0.004 (0.001)^{***}$	$-0.002 (0.001)^*$
Percent Black (ZIP)	$0.001\ (0.001)$	0.000(0.001)
Percent Hispanic (ZIP)	$-0.002 (0.001)^*$	-0.001 (0.001)
Home Value (ZIP)	$0.001 (0.000)^{***}$	$0.000(0.000)^{**}$
Party ID		$-0.322 (0.006)^{***}$
Intercept	$3.421 (0.154)^{***}$	4.241 (0.121)***
$\mathbb{R}^2$	0.197	0.516
$Adj. R^2$	0.191	0.512
Num. obs.	4648	4628
***n < 0.001 · **n < 0.01 · *n < 0.15 · 'n < 0.1		

Table 8: Impact of Place Attachment on Political Liberalism: Place Decline and Place Attachment. OLS regression; cell entries are regression coefficients (standard errors); All survey waves are pooled and categorical (0,1) variables capturing the year of the survey are included in the model but not in the table. The dependent variable is political ideology ranging from conservative (1) to liberal (5); Excluded reference categories for Education= Less than High School; Income = \$50k to \$70k.

## D.3 Ordered Logit

	Model 1	Model 2	Model 3	Model 4
Place Attachment	$-0.005 (0.001)^{***}$	$-0.005 (0.001)^{***}$	$-0.004 (0.001)^{**}$	$\frac{-0.003 (0.001)^*}{}$
Black	$0.714 (0.092)^{***}$	$0.522 (0.105)^{***}$	$-0.462 (0.103)^{***}$	$-0.557 (0.114)^{***}$
Asian	$0.482 (0.222)^*$	0.252 (0.103) 0.252 (0.227)	0.179 (0.226)	0.074 (0.231)
Hispanic	$0.329 (0.097)^{***}$	0.252 (0.227) $0.255 (0.108)^*$	-0.119 (0.103)	-0.171 (0.114)
Male	$-0.454 (0.054)^{***}$	$-0.465 (0.055)^{***}$	$-0.245 (0.056)^{***}$	$-0.171 (0.114)$ $-0.253 (0.057)^{***}$
Married	$-0.264 (0.061)^{***}$	$-0.403 (0.053)$ $-0.216 (0.062)^{***}$	$-0.164 (0.064)^*$	$-0.233 (0.037)$ $-0.131 (0.065)^*$
Homeowner	$-0.204 (0.001)$ $-0.300 (0.066)^{***}$	$-0.210 (0.002)$ $-0.168 (0.068)^*$	$-0.104 (0.004)$ $-0.223 (0.069)^{**}$	$-0.131 (0.003)$ $-0.146 (0.071)^*$
High School	-0.159 (0.179)	-0.108 (0.008) -0.266 (0.182)	-0.223 (0.009) $0.032 (0.194)$	-0.140 (0.071) $-0.057 (0.197)$
Some College	$-0.139 (0.179) \\ 0.042 (0.180)$	-0.200 (0.182) $-0.055 (0.183)$	0.052 (0.194) 0.256 (0.195)	-0.037 (0.197) $0.175 (0.198)$
2 Year Degree	-0.042 (0.180) -0.002 (0.190)	-0.035 (0.183) $-0.098 (0.193)$	0.236 (0.193) $0.196 (0.205)$	0.173 (0.198) 0.123 (0.208)
4 Year College Degree	0.342 (0.182)	-0.098 (0.193) $0.218 (0.185)$	0.190 (0.203) $0.462 (0.197)^*$	$0.384 \ (0.200)^{\cdot}$
Post Graduate Degree	$1.058 (0.191)^{***}$	$0.218 (0.183)$ $0.922 (0.194)^{***}$	$0.402 (0.197)$ $0.912 (0.205)^{***}$	$0.820 (0.208)^{***}$
Age 18-29	0.086 (0.191) 0.086 (0.086)	$0.922 (0.194) \\ 0.102 (0.087)$	0.912 (0.203) $0.253 (0.089)^{**}$	0.263 (0.090)**
Age 65 and up	$-0.166 (0.068)^*$	$-0.179 (0.069)^{**}$	-0.090 (0.070)	, ,
Age of and up Attend Church Weekly	$-0.779 (0.074)^{***}$	$-0.179 (0.009)$ $-0.770 (0.076)^{***}$		-0.096 (0.072)
Attend Church Never	$0.595 (0.066)^{***}$	$0.603 (0.067)^{***}$	-0.488 (0.078)***	$-0.497 (0.080)^{***}$
Income < \$30k	-0.148 (0.089)		0.426 (0.069)***	$0.424 (0.070)^{***}$
Income \$30k-\$50k	\ /	-0.109 (0.092)	$-0.254 (0.094)^{**}$	$-0.228 (0.096)^*$
	-0.105 (0.084)	-0.120 (0.086)	-0.142 (0.088)	-0.156 (0.090)
Income \$70k-\$100k	$-0.164 (0.088)^{\circ}$	$-0.222 (0.090)^*$	-0.115 (0.091)	-0.136 (0.093)
Income \$100k-\$150k	-0.032 (0.098)	-0.086 (0.101)	-0.048 (0.100)	-0.076 (0.102)
Income \$150k and up	$-0.074 \ (0.117)$	-0.176 (0.121)	-0.052 (0.119)	-0.108 (0.123)
Distance from City		0.009 (0.032)		0.052 (0.034)
Population Density (logged)		0.133 (0.024)***		$0.104 (0.025)^{***}$
Change in AGI (ZIP)		-0.003(0.003)		0.000 (0.003)
Median Income (ZIP)		-0.008 (0.002)***		$-0.004 (0.002)^*$
Percent Black (ZIP)		0.002 (0.002)		0.001 (0.002)
Percent Hispanic (ZIP)		$-0.005 (0.002)^*$		-0.002 (0.002)
Home Value (ZIP)		0.001 (0.000)***	/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$0.001 (0.000)^*$
Party ID			$-0.786 (0.018)^{***}$	$-0.780 (0.018)^{***}$
AIC	13600.668	13148.219	11029.224	10719.021
BIC	13801.274	13393.099	11236.166	10970.176
Log Likelihood	-6769.334	-6536.110	-5482.612	-5320.510
Deviance	13538.668	13072.219	10965.224	10641.021
Num. obs.	4775	4648	4755	4628

<sup>\*\*\*</sup>p < 0.001; \*\*p < 0.01; \*p < 0.05; 'p < 0.1

Table 9: Impact of Place Attachment on Political Liberalism: Ordered logistic regression. Cell entries are regression coefficients (standard errors); All survey waves are pooled and categorical (0,1) variables capturing the year of the survey are included in the model but not in the table. The dependent variable is political ideology ranging from conservative (1) to liberal (5); Excluded reference categories for Education= Less than High School; Income = \$50k to \$70k.