Article

Urban Affairs Review
1–35

DOI: 10.1177/1078087420988598
journals.sagepub.com/home/uar
SAGE

Jurisdictional Size and Residential Development: Are Large-Scale Local Governments More Receptive to Multifamily Housing?

Nicholas J. Marantz[1] and Paul G. Lewis[2]

Abstract
In the United States, particularly in high-cost urban areas, local resistance to multifamily housing development has been widely noted. In many metropolitan areas, legal authority over land-use regulation is assigned to jurisdictions that often are very small, and some scholars argue that this small-scale local control institutionalizes neighborhood-level opposition to new construction. Using census tracts as units of analysis, we assess the relationship between the population size of the city, county, or township that regulates a tract's land use and the change in multifamily units between two recent waves of the American Community Survey (2008–2012 and 2014–2018). Results of regression analysis indicate that larger jurisdictional population size is indeed associated with increased multifamily construction. However, the relationship applies only for jurisdictions with populations exceeding 100,000 and decays at jurisdictional populations of more than 1 million. This nonlinearity may reflect quasi-monopolistic land-use control in the largest jurisdictions.

[1]University of California, Irvine, CA, USA
[2]Arizona State University, Tempe, AZ, USA

Corresponding Author:

Nicholas J. Marantz, University of California, 300 Social Ecology I, Irvine, CA 92697, USA.
Email: nmarantz@uci.edu

Keywords
housing, metropolitan governance, land use, zoning

Introduction

Rapidly escalating housing costs in economically thriving U.S. metropolitan areas contribute to a variety of socioeconomic problems, including housing insecurity and increased commute times. The available evidence suggests that increased housing costs in some of the most prosperous metropolitan areas result, in large measure, from local regulatory restrictions on new housing supply generally, and—in particular—policies limiting new multifamily housing (Asquith, Mast, and Reed 2019; Been, Ellen, and O'Regan 2019; Einstein, Glick, and Palmer 2019). But such restrictions can vary considerably from community to community, even within a given region, and broader institutional factors may influence local governments' receptivity to multifamily development. In particular, scholars have provided a theoretical basis for presuming that jurisdictional size should matter for accommodating housing, with larger jurisdictions relatively more permissive of development (Banfield 1965; Fischel 2007). However, the severity of housing cost increases even in large central cities such as San Francisco, Los Angeles, and New York suggests that such claims might be overdrawn (Mangin 2014).

In this article, we address the question of whether jurisdictional size is associated with the magnitude of change in multifamily housing units. Scholars have noted that new housing is likely to be more salient (and have a proportionally larger impact) in relatively small jurisdictions. Such jurisdictions may be more likely to resist new development due to the extensive influence of homeowners and the relative ease of monitoring the actions of local elected officials (Fischel 2001, 2007). However, even if receptivity to new development increases with population size, the relationship may be nonlinear. For example, there may be no discernible difference in receptivity to new housing between a municipality of 10,000 and a municipality of 50,000. Moreover, very large jurisdictions may exert quasi-monopolistic control over land-use regulation, because housing developers may lack close substitutes for a large jurisdiction within a given metro area. The quasi-monopolistic control of very large jurisdictions, some scholars argue, may empower existing homeowners to influence local regulation in ways that extract economic rents by inducing housing scarcity (Ellickson 1977; Epple and Zelenitz 1981; Fischel 2007).

Simply analyzing the correlates of housing change at the jurisdiction level would pose several problems. Jurisdiction-level analysis could yield a nearly automatic relationship between population size and housing production, with larger jurisdictions accommodating more housing (holding all else equal) simply because they are large. Moreover, jurisdictions can be extremely heterogeneous in population and territorial extent, and the amount of development may vary within a given city.

We avoid these problems by combining data from multiple geographical scales, including census tracts, municipalities, counties, and metropolitan areas. Our dependent variable measures the change in multifamily units between the 2008–2012 American Community Survey (ACS) and the 2014–2018 ACS—thus, approximately from the trough of the Great Recession well into the economic recovery. We focus on multifamily housing in part because it is the type of housing most undersupplied and most needed in regions with high housing costs, and in part because it is subject to different constraints than single-family housing.[1] Although the unit of analysis is the census tract, each tract-level observation includes—among other covariates—a measure of the population size of the jurisdiction that regulates land use for that tract (e.g., a city, county, or township). This empirical strategy enables us to assess whether variation in the scale of land-use regulation is associated with receptivity to multifamily housing.

The remainder of this article proceeds as follows. First, we describe historical shifts in population settlement that have been largely neglected in analyses connecting housing development with political institutions. Second, we discuss political and economic theories connecting jurisdictional size with housing development. Third, we address the limits of prior empirical research related to this topic. Fourth, we present our data and model. Fifth, we discuss our results. We conclude by discussing the implications for policy and research.

Shifting Settlement Patterns and Exclusionary Zoning

After World War II, as housing development in the United States boomed in previously undeveloped areas surrounding existing cities, scholars came to recognize the tendency of jurisdictions covering such outlying areas to establish land-use regulations—such as minimum lot size requirements and prohibitions on apartments—that would exclude lower-income households (e.g., Haar 1953; Williams 1955). By the late 1960s, this phenomenon had a name—“exclusionary zoning” (Sager 1969). A leading judicial opinion defined exclusionary zoning as "involv[ing] two distinct but interrelated practices: (1) the use of the zoning power by municipalities to take advantage of the benefits of regional development without having to bear the burdens of such development; and (2) the use of the zoning power by municipalities to maintain themselves as enclaves of affluence or of social homogeneity" (*Southern Burlington County NAACP v. Mount Laurel Twp*., 336 A.2d 713, 736 (N.J. 1975), Pashman, J. (concurring)). This definition of exclusionary zoning suggests the kinds of municipalities that might engage in such actions: suburban enclaves that derive value by serving as bastions of affluence or social homogeneity within a broader metropolitan economy that hinges on proximity and agglomeration. Identifying exclusionary zoning as a suburban problem, advocates and scholars called for "suburban action" and "opening up the suburbs" (Davidoff, Davidoff, and Gold 1970; Downs 1973). The progress of such reform efforts was halting and uneven, given the limited constituency seeking to open the suburbs and the high salience of land-use controls to the emerging suburban political majority (Danielson 1976). However, the issue has once again gained salience among scholars and members of the public (see Einstein 2021; Goetz 2021; Imbroscio 2021a, 2021b; Pendall 2021).

Critics of exclusionary zoning often have presumed the existence of jurisdictional configurations that are prevalent in the northeastern and midwestern United States, but which are less common in other parts of the country that have grown rapidly in recent decades. Mount Laurel Township, New Jersey—the defendant in the case quoted above—illustrates characteristics of the quintessential exclusionary suburb of the early 1970s. Located about 16 miles from Philadelphia's central business district, Mount Laurel had nearly 22 square miles of territory, with 11,221 inhabitants as of the 1970 Census and little commercial or industrial development. At that time, 96% of its year-round housing stock consisted of detached single-family homes, 92% of occupied housing units were owner-occupied, and 96% of the population identified as White (Manson et al. 2019).

Fischel (2001, 2007, 2015) suggests that small, homogenous suburbs such as Mount Laurel may be particularly susceptible to control by homeowners who participate in local affairs largely in order to protect their most valuable investment—their house. Such homeowners fear that the addition of new housing development nearby—especially large-scale housing development—could depress housing values (or slow their rate of increase), both by increasing competition in the home-sale market and by contributing to the congestion of local resources, such as schools and roads. Moreover, in jurisdictions where most developed land is used for owner-occupied housing, homeowners may form a monolithic voting bloc on issues relevant to housing production. Race- and ethnicity-based animus has also led to exclusionary zoning in homogenous municipalities such as Mount Laurel (Danielson 1976; Trounstine 2018).

Notwithstanding the salience of such small, homogenous suburbs in the discourse of "exclusionary zoning," at roughly the same time that the latter term entered the vernacular, the concept of the "suburb" was becoming increasingly amorphous. For cities in the ascendant Southwest, such as Phoenix and Los Angeles, detached single-family homes were the dominant housing type, in marked contrast to northeastern cities such as New York and Boston (Manson et al. 2019). Although the federal government designated Phoenix and Los Angeles as central cities of their respective metropolitan areas for purposes of statistical tabulation, the built form of these cities (outside of a relatively tiny pre-automobile core) was largely indistinguishable from many of their putative suburbs. Employment too continued to disperse after 1970, although configuration of this dispersal varied among metropolitan areas (Anas, Arnott, and Small 1998; Arribas-Bel and Sanz-Gracia 2014; Frey and Fielding 1995; Gordon and Richardson 1996).

In addition, many measures of racial and ethnic segregation declined after 1970, although the extent and patterns of change varied across the U.S. (Farley 2011; Frey 2018; Logan and Stults 2011; Sander, Kucheva, and Zasloff 2018). For example, Figure 1 displays the Black-White dissimilarity index, calculated by Iceland et al. (2013), from the 1970 census to the 2005–2009 ACS for the four U.S. census regions—the Midwest, Northeast, South, and West.[2] This index indicates the proportion of Black residents that would have to move in order for each tract to have the same percentage of Black residents as the whole metropolitan area. Thus, for example, a value of 1 indicates complete segregation, because 100% of Black residents would have to move to attain an even distribution across census tracts. As Figure 1 shows, although Black-White dissimilarity declined across all census regions, the drop was far larger in the South and the West than in the Northeast and the Midwest.

Regional variation in jurisdictional size may help to explain why segregation declined more in the West and the South after 1970, as compared with the Northeast and the Midwest. In the South and the West, jurisdictions with authority to regulate land use are both more territorially extensive and more populous than their counterparts in the Northeast and the Midwest (Table 1). As of the 2008–2012 ACS, within the national sample described below, the median populations for jurisdictions with authority to regulate land use in the West and South were, respectively, 57,789 and 46,395. By contrast, the

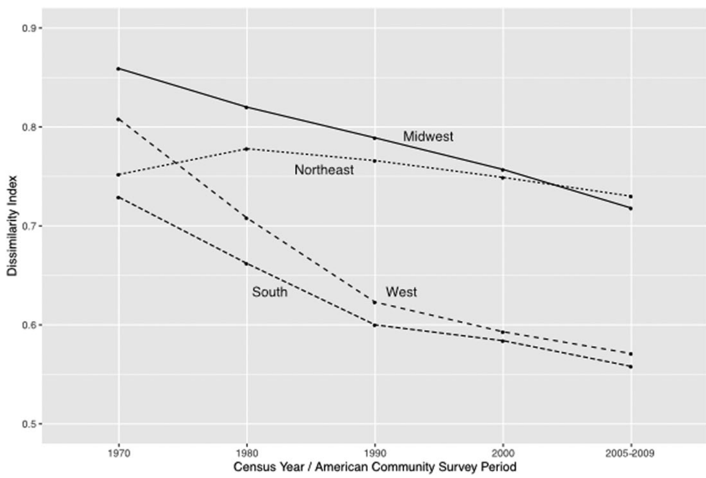

Figure 1. Weighted average of Black-White dissimilarity in metropolitan areas, by census region, from 1970 Census to 2005–2009 American Community Survey.
Source: Iceland et al. (2013).

median midwestern jurisdiction had a population of 22,946 and the median northeastern jurisdiction had a population of 13,550. Perhaps even more notably, over 25% of the sampled jurisdictions in both the South and the West had populations exceeding 100,000, compared with fewer than 3% in the Northeast and around 6% in the Midwest. Thus, if jurisdictional scale is positively associated with receptivity to apartments, then the small average territorial scale and population size of midwestern and northeastern municipalities may have limited the racial/ethnic integration of suburbia by excluding this relatively affordable type of housing. Some scholars have suggested that regional variation in neighborhood desegregation may be connected with the relative ease of building housing in the South and the West (Farley and Frey 1994; Logan, Stults, and Farley 2004; South and Crowder 1997). But we are not aware of any accounts that link the relative ease of building housing in these regions to jurisdictional size.

Jurisdictional Population and Multifamily Housing

At the close of World War II, residents of an affluent unincorporated area just south of Denver, Colorado, near the Cherry Hills Country Club, engaged in discussions about the future of their community. Foreseeing postwar growth,

Table 1. Population Percentiles for Jurisdictions Containing Urbanized Census Tracts, by Census Region.

	Population				Land area (sq. mi.)			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
25th percentile	5,887	12,229	21,433	30,366	1.5	4.2	8.7	7.6
50th percentile	13,550	22,946	46,395	57,789	5.0	9.8	24.3	16.4
75th percentile	27,147	41,316	129,446	113,105	17.3	24.1	80.9	37.7
N	1,222	587	454	437	1,222	587	454	437

Note. This table indicates the 25th, 50th, and 75th percentiles of population and land area for sampled jurisdictions in each of the four U.S. Census regions as of the 2008–2012 American Community Survey. The sample includes jurisdictions (e.g., cities, townships, counties) in the continental U.S. that (a) are located in a core-based statistical area with a population of at least 500,000, (b) have land-use regulatory authority, and (c) contain at least one census tract that is fully within an urbanized area.

and fearing potential designs on the area by an actively annexing Denver and by developers, residents decided to incorporate a new local government: Cherry Hills Village. The new municipality locked into place the existing, low-density residential zoning, with a 2.5-acre minimum lot size across most of the city, and over the subsequent 75 years, Cherry Hills Village "has prevailed in maintaining its semi-rural character against changing economic trends," all the while "striv[ing] to preserve its unique character as a quality, single-family residential community" (City of Cherry Hills Village, Colorado n.d.). Left unstated in the municipal government's discussion of its growth goals were the racial/ethnic implications of large-lot single-family zoning, which were likely quite salient to local residents at the time of Cherry Hills Village's incorporation (see, e.g., Freund 2007; Rothstein 2017; Trounstine 2018). Even as nearby Denver's Black and Latino populations grew substantially in the postwar period, Cherry Hills Village remained much less diverse; its population was 94% non-Hispanic White as of 2018. Overall, by that year, the municipality had only about 6,600 residents living in its 6.2 square miles of territory, with more than 98% of housing units being single-family detached, despite its location near major office parks and employment centers.

Would the area now known as Cherry Hills Village have maintained its exclusive single-family, large-lot character had it never incorporated and instead been annexed by Denver (with a 2018 population of 716,492)—or if it had remained part of unincorporated Arapahoe County (countywide population 637,671)? Or would a far-away city council or county commission have instead proven more flexible about land-use regulation, perhaps more willing to listen to the entreaties of residential and commercial developers, or more responsive to the housing needs of the region?

We hypothesize that higher jurisdictional population size will be associated with a larger increase in multifamily housing units, ceteris paribus. There are several reasons that land-use policy in larger jurisdictions may be more likely to lead to more multifamily housing, holding other factors equal. Smaller jurisdictions may be more resistant to new housing simply because the externalities associated with new projects will affect a larger percentage of existing residents than in larger jurisdictions. Whether the residents' concerns relate to school crowding, parking, or aesthetics, a 100-unit apartment complex probably will make a much more noticeable impact in a municipality of 4 square miles and 10,000 inhabitants than in a municipality of 40 square miles and 100,000 inhabitants.

Moreover, elected officials and civil servants in larger jurisdictions may be more politically insulated from the demands of existing residents concerning land-use regulation. In populous jurisdictions, homeowners, while politically important, are less likely to be the *primary* politically active constituency.

In comparison to small-population suburban governments, which are often seen as responding primarily to local homeowners (Fischel 2001), populous jurisdictions tend to include multiple politically active constituencies and interest groups (Anzia 2015; Dahl 1961; Stone 1989), of whom homeowner groups are merely one. Moreover, a relatively large proportion of voters in high-population jurisdictions are likely to be renters,[3] who typically vote at lower rates than homeowners (Jiang 2018; Squire et al. 1987). Such jurisdictions are also more likely to contain large institutional, commercial, and business districts. Businesses that would benefit from larger labor and consumer pools may agitate for further housing development, potentially counterbalancing homeowner interests opposed to residential growth (Logan and Molotch 1987). A larger and more distant city government, with geographically larger voting districts or constituencies, may be more removed from neighborhood-level antagonism to development (Fischel 2007). Additionally, since “city population size is itself an indicator of overall city capacity to handle complex policy initiatives” (Sharp and Mullinix 2012, 143), large jurisdictions may have better bureaucratic capability to plan and provide services for large new housing tracts or dense residential infill projects.

In addition, campaign contributions for mayoral and council candidates are more essential in large-scale jurisdictions, given the higher cost of running for office, and pro-growth interests such as real-estate firms and construction unions may be well-positioned to assist in raising funds and bundling contributions for candidates. By contrast, voter participation and political engagement of individual residents is known to be lower in large-population communities (Oliver 2000; Trounstine 2013; van Houwelingen 2017). In short, “growth machine” politics, where pro-development interests hold political precedence (Logan and Molotch 1987), may be more likely in large-population jurisdictions. Homeowners opposed to new housing—particularly multifamily infill housing, which likely seems more threatening to single-family neighborhoods—may have a greater ability to block (or at least downsize) multifamily proposals in small-population jurisdictions.

Consistent with these premises, a classic case study by Danielson and Doig (1982) compares mid-twentieth century residential development in Staten Island, which was under the control of a distant New York City government, to development during the same period in small suburban jurisdictions elsewhere in the New York metropolitan area (e.g., in New Jersey). Large sections of Staten Island had become accessible to commuters due to the opening of the Verrazzano Bridge and associated highway links in 1964. (Previously, only ferries had connected Staten Island to the rest of New York City.) After the bridge opening, Staten Island quickly accommodated a great deal of modestly priced, relatively dense housing. Meanwhile, smaller jurisdictions elsewhere in the region that were similarly in the path of development severely restricted apartment construction by zoning for low densities.

A 1999 survey of planning officials in California municipalities also supports the notion that large-population municipalities tend to be friendlier to new housing development than small-scale local governments. Lewis (2004) compares the survey responses from planners representing suburbs with populations of under 50,000 to responses from planners in more populous municipalities (excluding central cities). In their survey responses, the large-suburb planners were approximately twice as likely as the small-suburb planners to report that their locality's council majority "generally encourages" residential growth, while the small-suburb planners were significantly more likely to say that their localities limit residential development. Multivariate analyses of the California data showed broadly similar findings regarding the relationship between municipal population size and various survey-based measures of residential policy (Lewis and Neiman 2009, 147–51).

Although the literature reviewed thus far suggests that receptivity to new development increases with population size, the relationship may in fact be nonlinear. Up to a certain threshold, the impacts of increased population size on residents' ability to monitor local elected officials may be minimal. Thus, for example, monitoring might be no more difficult in a jurisdiction of 50,000 than in a jurisdiction of 10,000. Fischel (2001, 92) conjectures that a population of 100,000 is "a rough threshold at which voters find it difficult to know what is going on in city hall."

At the other end of the population distribution, the very largest jurisdictions may exercise quasi-monopoly power over land-use regulation, due to the lack of close substitutes for developers (Ellickson 1977; Epple and Zelenitz 1981; Fischel 2007; Hamilton 1978; Thorson 1996). Whereas many suburbs may be virtually indistinguishable, large jurisdictions may offer a unique bundle of amenities and proximity to employment. Under such conditions, with a single jurisdiction regulating land use in an area of considerable demand, existing homeowners can influence local regulation to extract economic rents by inducing scarcity. Evidence from New York City provided by Been, Madar, and McDonnell (2014) is consistent with this theory. Moreover, under such quasi-monopoly conditions both homeowners and renters with political clout can demand exactions from developers in exchange for permission to develop (Schleicher 2013).

Scholars articulating theories of quasi-monopolistic land-use regulation have drawn explicitly on Tiebout (1956), who postulated that increasing the number of municipalities could—under certain conditions—enhance the efficiency of local public goods provision. Tiebout posited that such efficiency would occur in regions consisting of many general-purpose local governments because an individual "consumer-voter" could move "to that community whose local government best satisfies his set of preferences" (p. 418). Although Tiebout was concerned with the provision of services, rather than the regulation of land use, scholars of land-use regulation have extended the Tiebout theory to treat land-use regulation as a local public good (e.g., Ellickson 1977; Serkin 2007). However, land-use regulation differs considerably from local public services like libraries or sanitation, in that low-density zoning and other regulatory tools may be used to ration entry to the community by new members (Hamilton 1975). While very large jurisdictions may limit entry (by limiting the approval of new multifamily housing) through quasi-monopolistic control of land use, small jurisdictions, as described above, may limit entry because of political hyper-responsiveness to incumbent homeowners in neighborhood-sized local governments. For these reasons, we hypothesize that there may be a nonlinear relationship between a jurisdiction's population size and its receptivity to multifamily housing.

Just as jurisdictional size could affect housing supply via preference aggregation, so too might the electoral system *within* a jurisdiction. Elected officials who are accountable only to a subset of voters, as is the case when local legislatures are elected by ward or district, may be more resistant to new development than officials elected at-large, who answer to all voters in a jurisdiction. Prior research suggests that at-large councilmembers tend to devote less time than district-based councilmembers to constituents' complaints and are instead more likely to "direct their attention to a citywide and business constituency" (Bowman 1997, 137; Welch and Bledsoe 1988). Officials elected by district face lower fundraising thresholds to mount serious campaigns, potentially reducing the influence of pro-growth business interests relative to homeowners. Thus, to the extent that logrolling is widespread in local legislatures, the relative parochialism of district-based systems may limit development (Langbein, Crewson, and Brasher 1996; Schleicher 2013). Two recent studies provide empirical evidence that switching from at-large to district electoral systems can decrease housing development. Mast (2020) finds that, among a national sample of municipalities, switching from at-large to ward elections reduces the total number of housing units permitted by 24% and reduces the number of multifamily units permitted by 47%. Hankinson and Magazinnik (2020) find that plausibly exogenous conversion of California municipalities from an at-large system to a district-based system causes a 48% decline in the number of multifamily units permitted.

Empirically Connecting Jurisdictional Size to Housing Production

Despite the theoretical plausibility of claims concerning the relationship between jurisdictional size and housing production, the empirical evidence is extremely limited. Many studies assessing the determinants of housing supply include jurisdictional population as a control variable (e.g., Schuetz 2009; Lewis and Marantz 2019). Such studies use general-purpose local governments, such as municipalities, as the units of analysis. This approach is generally reasonable, because these entities typically have authority to regulate land use. Thus, to the extent that regulation is a binding constraint on development, preferences aggregated to the jurisdiction level may determine development outcomes. The results from these studies are consistent with the theory described above, inasmuch as the coefficients on the relevant variables indicate that population size is positively associated with multifamily housing production.

Yet jurisdiction-level analysis poses problems, for at least three reasons. First, when the unit of analysis is the jurisdiction, there can be a nearly automatic relationship between population size and housing production, because—holding all else equal—a municipality with more people will require more housing than a municipality with fewer people. Second, depending on the sample, jurisdictions can be extremely heterogeneous in territorial extent and population. Third, using jurisdictions as the units of analysis fails to account for the possibility of intra-jurisdictional variation, as—for example—when a city promotes infill housing near its downtown but restricts multifamily housing in its outlying neighborhoods.

In order to mitigate these problems, we use census tracts as our unit of analysis. Census tracts are, by design, standardized. The Census Bureau intends tracts to be "relatively permanent," in comparison with municipal boundaries which may change, for example, when unincorporated areas incorporate as municipalities or when existing municipalities annex new territory (U.S. Census Bureau n.d.-c, 3). According to the Census Bureau, tracts are intended to reflect coherent neighborhoods or subareas (with input from local committees of data users) and range in population size from 1,200 to 8,000, averaging about 4,000.[4] Consequently, whereas the standard deviation of population for the jurisdictions in our sample is more than two-and-a-half times larger than the mean, the standard deviation for tract population is less than half of the mean. In sum, census tracts come much closer to approximating "natural" social areas and housing submarkets than do municipal boundaries. Tract-level analysis also allows us to extend our analysis of housing development into unincorporated areas.

This approach enables us to directly analyze population size, in contrast to previous studies which analyze the relationship between jurisdictional fragmentation and housing supply elasticity or population density. Carruthers (2003) finds an increase in the per capita number of general-purpose local governments in a metropolitan area to be associated with higher relative

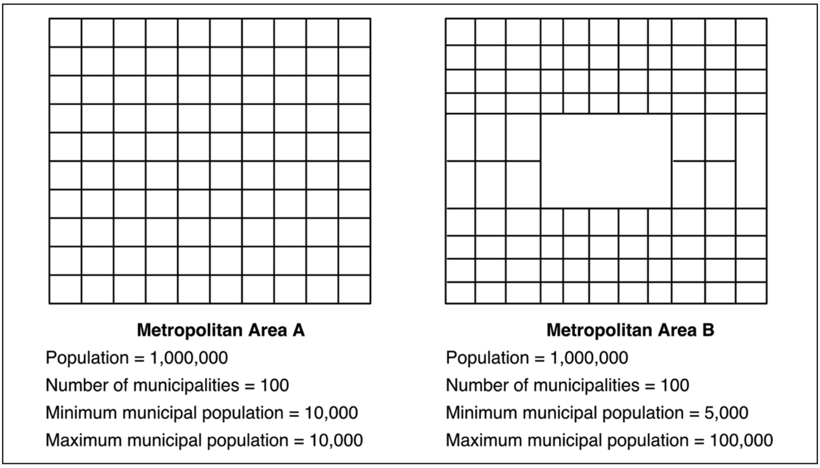

Figure 2. Stylized examples of jurisdictional fragmentation.

growth rates in unincorporated areas, suggesting that jurisdictional fragmentation pushes new housing development to the urban fringe. Similarly, Ulfarsson and Carruthers (2006) find the number of municipalities per capita to be associated with reduced densities. Kim et al. (2015) find jurisdictional fragmentation to be associated with slower increases in population density. These studies provide evidence consistent with the claim that larger jurisdictions are more accommodating of new housing, but they do not provide a direct measure.

That is because, although jurisdictional fragmentation is related to jurisdiction size, large jurisdictions can exist even in jurisdictionally fragmented metropolitan areas, as illustrated by the two stylized metropolitan areas in Figure 2. Both areas contain 1 million inhabitants and are divided into 100 general-purpose local governments (municipalities). In one, however, each jurisdiction has an equal amount of territory and an equal population. In the other, the territorial extent and population of the jurisdictions vary, so that the largest municipality has 100,000 inhabitants, and the smallest has 5,000 inhabitants. Most measures of jurisdictional fragmentation would treat the two metropolitan areas identically. By contrast, our empirical model, described below, controls for regional effects such as fragmentation *separately* from jurisdiction size.

Notwithstanding the advantages of our empirical approach, we are unable to address all potential forms of endogeneity. For example, it is theoretically possible that relatively populous cities are more populous simply because they have a latent (i.e., unobservable), stable propensity to accommodate more housing than other cities, and that this propensity is analytically distinct from their population size. Nevertheless, the available evidence suggests that jurisdictions do not have stable propensities vis-à-vis accommodating new housing development. For example, Hilber and Robert-Nicoud (2013) develop and test a model in which owners of undeveloped (e.g., agricultural) land oppose stringent land-use regulations, which decrease the value of their land by increasing the costs of development, while homeowners favor stringent land-use regulations, which increase the value of their land (see also, Ortalo-Magné and Prat 2014). Thus, the available evidence suggests that jurisdiction-level preferences about the accommodation of new housing are *not* stable, but instead change as the balance of power shifts between residents and the owners of undeveloped land.[5]

Data and Empirical Model

Our sample consists of census tracts in the continental U.S. located in Urbanized Areas (UAs) within Core-Based Statistical Areas (CBSAs) having a 2010 population of at least 500,000.[6] CBSAs consist of one or more counties having a "high degree of social and economic integration" with an urban core (Office of Management and Budget 2015, A-2). CBSAs are delineated based on county boundaries. As a result, many CBSAs include substantial undeveloped areas—particularly in the West, where counties tend to be territorially expansive. Because we are interested in areas with preexisting development—the types of places where multifamily housing tends to be in demand but may often be opposed by existing residents—we analyze UAs within CBSAs. UAs "comprise a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with contiguous territory containing nonresidential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core" (76 Fed. Reg. 53030, 53039 (2011)).

We further restrict the sample to tracts contained wholly within a jurisdiction with authority to regulate land use.[7] The legal form and territorial extent of such jurisdictions varies by state, and in order to identify relevant variation, we consulted documents from the U.S. Census Bureau (1994, 2013), legal treatises, the user guide for the National Longitudinal Land Use Survey (Urban Institute 2019), state statutes, judicial opinions, experts with state-specific knowledge, and other state-specific resources (e.g., Michigan Department of Environment, Great Lakes, and Energy, Office of Climate and Energy 2019), as well as local ordinances, charters, and websites. In general, there are three types of governments that can have land-use regulatory authority. *Counties* are the most territorially extensive general-purpose local governments. In most states, counties are authorized to regulate land use in an area that is not covered by a subsidiary general-purpose local government. *Municipalities* are the principal type of subsidiary general-purpose local government, and they have regulatory authority in nearly every state. Several states also empower *intermediate local governments* (often called townships) that can encompass municipalities.

Where multiple levels of jurisdictions have legal authority to regulate land use, a given voter will generally be able to vote for the responsible officials at each level. For example, a resident of Long Beach, California, located in Los Angeles County, can cast a vote in an election for the Long Beach City Council and an election for the Los Angeles County Board of Supervisors. Because our theoretical motivation hinges on the size of the population represented jurisdiction-wide, our models include both tract-level demographics and the population of the entire jurisdiction with legal authority to regulate land use. Thus, for example, each tract in unincorporated Los Angeles County has a jurisdiction-level population of 9,840,024, whereas tracts in incorporated municipalities in Los Angeles County have the jurisdiction-level population of the relevant municipality (e.g., in the case of Long Beach, 463,589).

We use regression models with state-CBSA fixed effects to analyze the relationship between jurisdiction size and changes in the stock of multifamily housing. We focus on multifamily housing because we expect the siting of multifamily projects to be particularly controversial and a focus of opposition for nearby homeowners. From a policy standpoint, as well, multifamily housing is typically most needed and undersupplied in regions with high housing cost burdens. The regression model takes the form:

$$U_{tract,j,scbsa_t} - U_{tract,j,scbsa_{t-1}} = \beta W_{j,scbsa_{t-1}} + \delta X_{tract,j,scbsa_{t-1}}$$
$$+\alpha_{scbsa} + \varepsilon_{tract,j,scbsa}$$

The subscripts index census tracts (*tract*), which are nested in jurisdictions (*j*), which are nested in CBSAs disaggregated by state (*scbsa*). (Some CBSAs straddle multiple states, and—in these cases—the CBSA component in each state has a different identifier.) $U_{tract,j,scbsa}$ denotes the tract-level count of multifamily units, and the subscripts *t* and *t-1* denote, respectively, the 2014–2018 ACS and the 2008–2012 ACS. Thus, the dependent variable is the change in multifamily units between the two ACS periods. Although the model does not causally identify the outcome of interest, it mitigates some forms of endogeneity via the temporal lag between the left-hand side variable and the right-hand side variables.

Characteristics of the ACS affect the construction of the dependent variable and the size of the sample. The ACS currently provides 1-year and 5-year estimates.[8] The 1-year estimates are more temporally precise, but they have a larger margin of error and, in any event, are not available at the tract level. The 5-year estimates pool observations collected over a 60-month period, so that analyses of change derived from temporally overlapping estimates can show a smoother trend than more temporally precise observations would indicate. We mitigate such temporal imprecision by deriving the dependent variable from non-overlapping 5-year estimates, as suggested by the U.S. Census Bureau (2020, 16). In addition, due to sampling error, the estimates for some census tracts are unreliable. We increase the reliability of the estimates by aggregating estimates for the counts of units in buildings with 5–9 units, 10–19 units, 20–49 units, and 50 or more units, as recommended by Folch et al. (2016) and the U.S. Census Bureau (2018a). Calculating measures of sampling error for these aggregated categories requires variance replicate tables, which are available for the 2014–2018 ACS estimates, but not the 2008–2012 estimates (U.S. Census Bureau 2018a, 59). Using the variance replicate tables, we calculate a standard error (SE) and coefficient of variation (CV) for each 2014–2018 estimate used to derive the dependent variable. The CV divides the SE for an estimate by the estimate itself.[9] CVs under 0.12 are generally viewed as indicating high reliability, and CVs between 0.12 and 0.4 can indicate moderate reliability (Folch et al. 2016, 1539). Using these standards, roughly 40% of the estimates from the 2014–2018 ACS have high reliability and roughly 44% have moderate reliability. The models below use only the high-reliability estimates, and we conduct robustness checks with samples including the moderate-reliability estimates in the online Supplemental Appendix.

On the right-hand side, $W_{j,scbsa_{t-1}}$ is a vector of jurisdiction-level attributes that may be associated with the rate of multifamily development. W includes a measure of population, a measure of per capita spending on administrative functions, and a dummy variable indicating whether j contains at least one subsidiary jurisdiction (as would be the case, for example, with a county containing a city). We include the latter variable because some commentators have suggested that jurisdictions containing subsidiary municipalities have a distinctively hands-off approach to land-use regulation (Anderson 2012; Chase 2015). On the other hand, because such jurisdictions tend to regulate territory at the periphery of urbanized areas, they may experience limited multifamily development. Indeed, Anderson (2012, 368) describes such jurisdictions as "sprawl's shepherd" for their role in "enabling, if not actively courting" low-density development on previously undeveloped sites. We include the administrative spending measure because jurisdictions with more administrative resources may be more likely to adopt zoning ordinances or other land-use regulations (Locke and Rissman 2015). In two model specifications, conducted with a more restricted sample described below, W also includes a dichotomous variable indicating whether j elects most of its legislature via district elections (as opposed to at-large elections).[10]

The tract-level covariates, $X_{tract,j,scbsa_{t-1}}$, represent attributes that may affect the demand for multifamily housing and the supply of such housing. These attributes, measured at or before the beginning of our study period, include the number of existing multifamily units in the tract, the natural log of the land area, dichotomous variables indicating the period during which the median-aged housing unit was constructed (pre-1940, 1940–1959, 1960–1979, 1980–1999, or post-1999),[11] the number of jobs within a 45-minute auto commute,[12] the percentage of housing units that were vacant, the average household size, the percentage of occupied housing units that were owner-occupied, the median gross rent,[13] and the percentages of residents identified as Black, Hispanic or Latino, and Asian (Table 2). As a measure of infrastructural capacity, we also include a dummy variable indicating whether at least 25% of the housing units in the tract were connected to a public sewer in 1990.[14] The fixed effects capture regional variation. As noted above, if a CBSA is spread across multiple states, we identify each CBSA component separately, so that the fixed effects also capture variation in state-level policies. α_{scbsa} is the state-CBSA fixed effect; $\varepsilon_{tract,j,scbsa}$ is the error term. We cluster the standard errors by *scbsa*.

We run four model specifications. In each, our dependent variable is the change in multifamily units between the 2008–2012 ACS and the 2014–2018 ACS. Specification A includes three jurisdiction-level variables—the log of population in j, the subsidiary jurisdiction dummy variable, and the administrative spending variable. Specification B replaces the log of population with a series of dichotomous variables identifying jurisdiction population categories (<50,000; 50,000–99,999; 100,000–249,999; 250,000–499,999; 500,000–999,999; ≥1,000,000).[15] We use this alternative measure of population to test for non-linearities associated with threshold effects at both ends of the population distribution, as discussed above. The sample for specifications A and B consists of all tracts with 100% of their territory located in jurisdictions in the CBSA-UA combinations described above. In specifications C and D, we add the *district elections* variable, which, due to data limitations, further restricts the sample to tracts located either in jurisdictions with a population of at least 20,000 as of the 2008–2012 ACS or in unincorporated county territory.[16] The variance inflation factors (VIFs) for the continuous variables in the regression models are all below 5.0, and the mean VIFs for all variables are 4.1 or lower.

Table 2. Variables.

Variable		Definition
Tract-level		
(1)	Δ multifamily units	Change in multifamily units (2012 5-year ACS to 2018 5-year ACS)
(2)	Existing multifamily units	Count of multifamily units (2012 5-year ACS)
(3)	Land area	Land area of tract (sq. miles) (2012)
(4)	Median year built	Dichotomous variable indicating period during which the median-aged housing unit was constructed: (pre-1940, 1940–1959, 1960–1979, 1980–1999, or post-1999) (2012 5-year ACS)
(5)	Jobs within 45-minute drive	Jobs within 45-minute drive (100,000s) (2010)
(6)	% vacant	Percentage of housing units that are vacant (2012 5-year ACS)
(7)	Average household size	Average number of persons per household (2012 5-year ACS)
(8)	Median rent	Median gross rent ($100s) (2012 5-year ACS)
(9)	% owner-occupied	% of occupied housing units that are owner-occupied (2012 5-year ACS)
(10)	% Black	% of population identifying as Black or African American (2012 5-year ACS)
(11)	% Hispanic	% of population identifying as Hispanic or Latino (2012 5-year ACS)
(12)	% Asian	% of population identifying as Asian (2012 5-year ACS)
(13)	Minimal public sewer	=1 if $<$25% of occupied housing units connected to public sewer (1990)
Jurisdiction-level		
(14)	Population	Population (2012 5-year ACS)
(15)	Per capita central staff expenditures	Expenditures for local executive, administrative, and staff service agencies ($) (2012)
(16)	Contains subsidiary jurisdiction	=1 if jurisdiction contains one or more geographically smaller jurisdictions (2012)
(17)	District elections	=1 if a majority of the local legislature is elected by ward or district

Sources: (1) U.S. Census Bureau (n.d.-a, n.d.-b); (2), (4), (6), (7), (9), (10), (11), (12), (14) U.S. Census Bureau (n.d.-a); (3), (16) U.S. Census Bureau (n.d.-d); (5) U.S. Environmental Protection Agency (2013); (8) U.S. Census Bureau (n.d.-a); Ruggles et al. (2020); (13) U.S. Census Bureau and Social Explorer (n.d.); (15) U.S. Census Bureau (2018b); (17) Tausanovitch and Warshaw (2014), supplemented by information from municipal codes and local government websites.

Table 3 provides summary statistics for the sample used in specifications A and B. Notably, the number of multifamily units *decreased* in roughly 36% of the sampled tracts, which experienced more demolition than new construction, and *increased* in roughly 50%. The median net change is only two multifamily units, suggesting that even seemingly small coefficients on independent variables may prove substantively important at the census tract level.

Findings

Our regression models, summarized in Table 4, provide evidence consistent with the theories about jurisdictional size described above. In specification A, a one-unit increase in the log of a jurisdiction's population is associated with a roughly seven-unit increase in a tract's multifamily housing. Specification B suggests that a subset of higher-population jurisdictions may be driving the positive, statistically significant coefficient on the log of population in specification A. The population dummy variables in specification B are largely consistent with expectations, inasmuch as the magnitude of the coefficients generally increases with jurisdiction size. As predicted by Fischel's postulate, described above, the coefficients are positive only for tracts in jurisdictions exceeding the 100,000 population threshold. The positive coefficients on the population dummy variables are statistically significant at the 10% level for jurisdictions with populations of 250,000 to 500,000 and at the 5% level for jurisdictions with populations of 500,000 or more. The location of a tract in a jurisdiction with a population of 500,000 to 1,000,000 is associated with an increase of roughly 46 multifamily units between the 2008–2012 ACS and the 2014–2018 ACS, relative to tracts in jurisdictions with populations under 50,000. Location in the largest jurisdictions—those with populations of at least 1 million—is associated with a smaller increase of roughly 24 units. This result is consistent with the quasi-monopoly zoning theory described above.

Results for other jurisdiction-level variables also indicate a relationship with multifamily development. Tracts in jurisdictions that contain subsidiary jurisdictions experienced a change of –40 to –45 multifamily units, controlling for other observable characteristics. An additional ten dollars of per capita spending on central administrative staff is negatively associated with changes in multifamily units, significant at the 10% level in three of four specifications, with the magnitude of the coefficient ranging from –0.5 units to –0.8 units. Specifications C and D add the *district elections* variable, which has a coefficient in the expected direction, but is not statistically significant at conventional levels. The robustness of the results in specifications C and D suggests that any association between jurisdiction size and multifamily

Table 3. Summary Statistics.

Variable	N	Mean	Std. Dev.	Min	Median	Max
Tract-level						
Δ multifamily units	11,337	61.59	215.27	−1,163	2	3,262
Existing multifamily units	11,337	883.08	850.84	0	734	11,224
Median year built is pre-1940 (dichotomous)*	1,503	–	–	–	–	–
Median year built is 1940–1959 (dichotomous)*	2,471	–	–	–	–	–
Median year built is 1960–1979 (dichotomous)*	4,456	–	–	–	–	–
Median year built is 1980–1999 (dichotomous)*	2,498	–	–	–	–	–
Median year built is post-1999 (dichotomous)*	409	–	–	–	–	–
Jobs within 45-minutes drive (100,000s)	11,337	2.81	2.34	0.05	2.00	14.85
% vacant	11,337	10.68	8.73	0.00	8.65	88.83
Average household size	11,337	2.50	0.61	1.05	2.45	7.78
Land area (sq. mi.)	11,337	0.81	0.89	0.00	0.53	10.62
Median rent ($100s)	11,337	11.55	4.71	1.14	10.61	36.40

(continued)

Table 3. (continued)

Variable	N	Mean	Std. Dev.	Min	Median	Max
% owner-occupied	11,337	45.44	28.11	0.00	41.76	99.86
% Black	11,337	18.68	24.99	0.00	7.69	100.00
% Hispanic	11,337	22.21	23.62	0.00	12.44	100.00
% Asian	11,337	8.42	11.27	0.00	4.51	90.64
Minimal public sewer (dichotomous)*	208	–	–	–	–	–
Jurisdiction-level						
Population	11,337	1,637,382	2,607,241	953	443,875	9,840,024
Per capita central staff expenditures ($)	11,337	56.17	74.71	0.25	31.65	1630.86
Contains subsidiary jurisdiction (dichotomous)*	1,432	–	–	–	–	–
District elections (dichotomous)†	7,643	–	–	–	–	–

Note: This table provides summary statistics for the sample used in regression model specifications A and B, except for the district elections variable, which is included only in specifications C and D. For dichotomous variables, *N* indicates the number of observations equal to one out of the full sample of 11,337 (in the case of variables marked with an asterisk (*)) and 10,654 (in the case of the variable marked with a dagger (†)).

Table 4. Regression Models.

	(A)	(B)	(C)	(D)
Tract-level covariates				
Existing multifamily units	0.000 (0.014)	−0.000 (0.014)	0.001 (0.015)	0.001 (0.015)
Median year built				
Pre-1940	−251.847*** (37.799)	−256.184*** (37.845)	−256.467*** (39.132)	−260.647*** (39.378)
1940–1959	−229.762*** (37.456)	−233.203*** (37.816)	-233.062*** (39.224)	−236.613*** (39.831)
1960–1979	−238.056*** (34.271)	−239.512*** (34.371)	−243.307*** (35.641)	−245.016*** (35.841)
1980–1999	−203.449*** (31.571)	−203.491*** (31.253)	−206.945*** (32.656)	−207.031*** (32.381)
Jobs within 45-minute drive (100,000s)	13.838** (6.073)	14.417** (6.029)	13.645** (6.305)	14.498** (6.220)
% vacant	1.518*** (0.350)	1.453*** (0.371)	1.480*** (0.378)	1.432*** (0.400)
Average household size	−44.912*** (7.910)	−44.177*** (7.554)	−46.819*** (7.824)	−45.892*** (7.472)
Land area (log)	38.619*** (3.998)	38.955*** (4.144)	39.839*** (4.263)	39.907*** (4.442)
Median rent ($100s)	1.745** (0.795)	1.613** (0.782)	1.822** (0.855)	1.669* (0.856)
% owner-occupied	−0.791*** (0.207)	−0.790*** (0.205)	−0.791*** (0.219)	−0.787*** (0.216)
% Black	0.069 (0.181)	0.032 (0.187)	0.106 (0.178)	0.068 (0.184)
% Hispanic	0.621*** (0.201)	0.610*** (0.199)	0.659*** (0.195)	0.646*** (0.192)
% Asian	0.157 (0.226)	0.143 (0.228)	0.191 (0.212)	0.174 (0.215)
Minimal public sewer (1990)	−37.206** (14.290)	−42.827*** (15.444)	−38.545** (16.664)	−45.187** (17.849)

(continued)

Table 4. (continued)

	(A)	(B)	(C)	(D)
Jurisdiction-level covariates				
Population (log)	6.903*** (1.915)		11.126*** (3.032)	
Pop. ≥ 50,000 & < 100,000		−13.557** (6.313)		−11.844* (6.600)
Pop. ≥ 100,000 & < 250,000		14.802 (9.098)		19.461** (8.926)
Pop. ≥ 250,000 & < 500,000		21.298* (11.527)		27.637* (14.438)
Pop. ≥ 500,000 & < 1,000,000		45.727** (18.638)		54.795** (21.440)
Pop. ≥ 1,000,000		24.074** (11.558)		36.814** (15.735)
Per capita central staff expenditures	−0.049* (0.028)	−0.053* (0.030)	−0.067 (0.045)	−0.076* (0.046)
Contains subsidiary jurisdiction	−39.478*** (9.862)	−44.432*** (11.896)	−40.136*** (10.473)	−45.010*** (12.643)
District elections			−14.580 (10.449)	−15.579 (10.690)
State-CBSA fixed effects	Yes	Yes	Yes	Yes
N	11,337	11,337	10,654	10,654
R-squared	0.12	0.12	0.12	0.12

Note. DV = change in multifamily units.
*$p < 0.1$. **$p < 0.05$. ***$p < 0.01$; standard errors clustered by state-CBSA in parentheses. Omitted median year built category is post-1999; Omitted population category in specifications B and D is <50,000.

development is distinct from the potential effects of district elections. (Unreported specifications interacting the *district elections* variable with our measures of population yielded null results on the interaction terms.)

The tract-level control variables are generally consistent with expectations. Compared with tracts in which most housing units were built after 1999, tracts with older housing stock accommodated fewer multifamily housing units during the study period. In specification A, for example, tracts with a median year built between 1980 and 1999 accommodated, on average, 204 fewer multifamily units than tracts with a post-1999 median year built, significant at the 1% level. The large negative coefficients on the median year built variables are consistent with claims that existing development produces a regulatory "strait-jacket" that prevents new multifamily housing (Ellickson 2020). An increase of 100,000 jobs within a 45-minute drive of the tract is associated with an increase of 14 multifamily units, significant at the 5% level. A one-person increase in average household size is associated with a 45-unit decrease in the number of multifamily units accommodated, significant at the 1% level. This result is sensible, because where households have more members (e.g., in areas of families with children, or of multi-generational households), a given number of residents will tend to demand fewer housing units than in areas with smaller household sizes (e.g., areas dominated by singles or childless couples). A one-point increase in the vacancy rate is associated with an additional 1.5 multifamily units, significant at the 1% level; a one-point increase in the percentage of housing units that are owner-occupied is associated with a decrease of 0.8 multifamily units, significant at the 1% level. A $100 increase in median rent is associated with a 1.8-unit increase, significant at the 5% level, and an increase in tract land area from 1 square mile to roughly 2.75 square miles is associated with 39 added multifamily units, significant at the 1% level. Tracts where less than 25% of housing units were connected to a public sewer in 1990 accommodated, on average, 38 fewer multifamily units, significant at the 5% level. The percentage of residents identifying as Asian or Black is not associated with the number of multifamily units accommodated at conventional levels of statistical significance, but a one-point increase in the percentage of residents identifying as Hispanic or Latino is associated with an additional 0.6 multifamily units.

Conclusion

In response to a deepening housing affordability crisis, there has been a recent resurgence of attention to the influence of local electoral systems on receptivity to housing. But other attributes of local institutional structure can also influence the politics of housing development. In this article, we analyze one of the most empirically neglected attributes—population size. Our evidence suggests that jurisdiction size matters, and that the relationship between jurisdiction size and receptivity to new development is non-linear. Increases in jurisdiction size up to roughly 100,000 are not associated with net gains in multifamily housing development. Jurisdictions with populations of at least 100,000 are more receptive to multifamily housing than less populous jurisdictions, judging by the number of units built. But jurisdictions with populations of 500,000 to 1 million are more accommodating of such housing than jurisdictions with populations below *or above* this range. In short, while our findings suggest that small-scale control of land use may play an important part in constraining multifamily construction, they are also consistent with the hypothesis that quasi-monopolistic control over land supply possessed by local governments in the largest jurisdictions limits multifamily development.

In the longstanding scholarly debate over metropolitan governmental structure, public choice theorists have focused mainly on the efficiency of service provision in governmentally fragmented areas (Ostrom, Bish, and Ostrom 1988). Authors more sympathetic to regionalism, meanwhile, have argued that public choice theory fails to consider important negative spillovers of fragmented land-use decision making (Howell-Moroney 2008; Miller 1981). Small jurisdictions seeking to maximize benefits within their narrow confines (e.g., through large-lot zoning) ultimately may externalize costs onto other communities, for example by limiting the amount of housing in the region that is affordable to low- and moderate-income households. However, *very* large-scale local governments also may introduce problems for regional development, as the dominant geopolitical position of such jurisdictions gives residential developers few alternative locales to build new housing if rebuffed by the large city or county.

The present study indicates that jurisdictional arrangements may have important implications for housing development. On one hand, the small-scale control of land use that is common in highly fragmented metropolitan areas appears to constrain multifamily construction. On the other hand, large-scale amalgamations of local government into megacities or single-tier urban counties may *not* lead to significantly more housing, due to the issue of quasi-monopoly control of land use. Rather, if maximizing housing opportunity is the primary goal, then it may be advisable to consider reforming governance systems such that more land is under the regulatory control of jurisdictions in the 500,000 to 1 million population range. Nevertheless, given both the unexplained variance in our regression models and the potential endogeneity discussed above, our evidence is only suggestive. Alternative approaches to reform could involve the creation of multi-level metropolitan governance systems in which over-arching state, regional or sub-regional bodies would have authority to overrule anti-housing decisions or zoning made at the local level (Frug 2002; Marantz and Zheng, 2020; Orfield 1997; Taylor, 2019).

Future research could further investigate the specific mechanisms by which small jurisdictions—and some very large jurisdictions—constrain multifamily development. Prior research has examined how factors such as large-lot zoning, homeowner participation in local public meetings, local direct democracy, racial animus, and district elections play a role in the denial or modification of developer proposals for dense housing. But scholars have devoted limited attention to assessing whether such mechanisms are especially common in jurisdictions of particular size ranges. Ultimately, a more nuanced understanding of anti-housing motives among residents, and how those sentiments are actualized (or marginalized) in local politics and policy, may necessitate close study not only of growth-slowing, but of growth-accommodating jurisdictions. Overall, we suggest that the underlying structure of local government in metro areas, including the issue of jurisdictional size, may deserve more attention from scholars, policymakers, and activists concerned with the underprovision of multifamily housing.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Support for this research was provided by the Emmett Shear Charitable Trust.

ORCID iDs

Nicholas J. Marantz https://orcid.org/0000-0003-2565-6885
Paul G. Lewis https://orcid.org/0000-0002-3890-158X

Supplemental Material

Supplemental material for this article is available online.

Notes

1. In areas where demand for housing is strong, the primary constraint on *multifamily* housing is likely to be local regulatory requirements (e.g., single-family zoning), whereas the primary constraint on *single-family* housing in such areas is more likely to be the limited availability of undeveloped (e.g., agricultural) land (Fischel, 2015; Hilber and Robert-Nicoud 2013; Jackson, 2018). By design, our focus is on

census tracts with significant existing development and, thus, areas where regulatory constraints may serve as the principal barrier to new housing development.

2. In the 1970 Census, the region now known as the Midwest was denoted as the North Central region.
3. Hankinson (2018) provides evidence that renters generally support new housing, but oppose nearby market-rate housing in cities with high housing costs.
4. In urban areas the Census Bureau initially drew census tracts such that "each is designed to include an area fairly homogeneous with respect to race, national origin, economic status, and living conditions" (U.S. Census Bureau 1947, 1).
5. Analysis of the National Land Cover Database (NLCD) provides additional support for the the account elaborated by Hilber and Robert-Nicoud, among others (U.S. Geological Survey, 2019). Using the 2001 vintage of the NLCD, we grouped the census tracts included in sample for regression models A and B by the categories for median year built described in Table 2. The mean percentage of undeveloped land in these tracts increases monotonically. Thus, for example, as of the 2001 NLCD, on average 3.0% of land was undeveloped in tracts where the median year built was between 1941 and 1950. The corresponding figures were 9.6% for tracts with a median year built from 1971 to 1980 and 22.0% for tracts with a median year built from 1991 to 2000. In short, a higher proportion of units are of more recent vintage in areas with more undeveloped land. This result is consistent with the Hilber and Robert-Nicoud model, which suggests that the politics of new housing development will be less challenging in areas with less existing development.
6. We use the 2013 CBSA boundaries, which reflect the population shifts documented in the 2010 Census, and calculate 2010 population using 2010 Census data for the constituent counties.
7. Tracts that are (a) in urbanized areas of CBSAs with populations of at least 500,000, and (b) have 100% of their territory in a single jurisdiction are home to roughly 35% of the continental U.S. population. Our results are robust to a larger sample consisting of tracts satisfying condition (a) that have at least 50% of their territory in a single jurisdiction, which cover roughly 55% of the continental U.S. population.
8. The Census Bureau previously released 3-year estimates, but discontinued the 3-year product in 2014 (U.S. Census Bureau 2018a, 1 n. 1).
9. Where both the numerator and the denominator equal zero, we treat the CV as zero, rather than undefined.
10. For jurisdictions in New England with a town meeting form of government, we treat the board of selectmen (sometimes called a select board) as the local legislature.
11. We use dichotomous variables, rather than a continuous variable, because the data are left-censored at 1939.
12. Our measure is derived from the U.S. Environmental Protection Agency's *Smart Location Database v. 2.0* (2013), which includes a block group-level measure of the number of jobs within a 45-minute auto commute. We first scale this number by the proportion of the working age population in the relevant tract residing in the block group, then aggregate the scaled block group data to the tract level.
13. The Census Bureau top-codes median gross rent above $2,000 per month and

bottom-codes median gross rent below $100 per month. For tracts where the median gross rent is top-coded, we impute the relevant statistic from 2008–2012 ACS microdata for the overlapping public use microdata area (PUMA), taking the median of gross rents over $2,000. If a PUMA has an insufficient number of observations, we combine it with adjacent PUMAs. For bottom-coded tracts, we make no alteration, as the distribution of rents does not appear to be significantly truncated at the bottom end. In order to address concerns about endogeneity, we also ran model specifications, available upon request, excluding the median rent variable. Our results are robust to these alternative specifications.

14. The relevant question was not included in post-1990 versions of the decennial census. The 1990 census tract estimates are reallocated to 2010 geographies by Social Explorer using interpolation weights from Logan, Xu, and Stults (2014). Several 2010 tracts in Arizona and California differ from the 2012 geographies, and we reallocate the relevant data based on guidelines from the U.S. Census Bureau (2019).
15. For robustness, we also ran the models subtracting and adding 5,000 to each cut point (e.g., <45,000; 45,000–94,999; etc. *and* <55,000; 55,000–104,999; etc.). Our results are not sensitive to the specific cut points, except that—unlike our reported models—the coefficient on the second population category (45,000–94,999 or 55,000–104,999) is not statistically significant at conventional levels, using the first category as the reference category.
16. The data on municipal electoral systems originate with Tausanovitch and Warshaw (2014), who used the 20,000-minimum population threshold and only examined municipal governments. Where their data were missing (i.e., for counties, townships and for municipalities that crossed the 20,000-person threshold after their data were collected), we updated and expanded the electoral-systems variable based on our own analysis of municipal charters and ordinances, as well as government websites. Although our sample size of tracts is reduced by dropping the sub-20,000 population jurisdictions, the political differences between ward and at-large elections described in the text may well be muted in these smaller communities, since the cost of campaigning and the presence of major businesses tends to be limited in small communities.

References

Anas, Alex, Richard Arnott, and Kenneth A. Small. 1998. "Urban Spatial Structure." *Journal of Economic Literature* 36 (3): 1426–64. doi:10.2307/2564805.

Anderson, Michelle Wilde. 2012. "Sprawl's Shepherd: The Rural County." *California Law Review* 100 (2): 365–80.

Anzia, Sarah F. 2015. "City Policies, City Interests: An Alternative Theory of Interest Group Systems." Presented at the Annual Meeting of the American Political Science Association, San Francisco, CA.

Arribas-Bel, Daniel, and Fernando Sanz-Gracia. 2014. "The Validity of the Monocentric City Model in a Polycentric Age: US Metropolitan Areas in 1990, 2000 and 2010." *Urban Geography* 35 (7): 980–97. doi:10.1080/02723638.2014.940693.

Asquith, Brian J., Evan Mast, and Davin Reed. 2019. "Supply Shock Versus Demand Shock: The Local Effects of New Housing in Low-Income Areas." Working Paper. W.E. Upjohn Institute. doi:10.17848/wp19-316.

Banfield Edward C. 1965. *Big City Politics: A Comparative Guide to the Political Systems of Atlanta, Boston, Detroit, El Paso, Los Angeles, Miami, Philadelphia, St. Louis and Seattle*. New York: Random House.

Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. 2019. "Supply Skepticism: Housing Supply and Affordability." *Housing Policy Debate* 29 (1): 25–40. doi:10.1080/10511482.2018.1476899.

Been, Vicki, Josiah Madar, and Simon McDonnell. 2014. "Urban Land-Use Regulation: Are Homevoters Overtaking the Growth Machine?" *Journal of Empirical Legal Studies* 11 (2): 227–65. doi:10.1111/jels.12040.

Bowman, Ann O'M. 1997. "Urban Government." In *Handbook of Research on Urban Politics and Policy in the United States*, edited by Ronald K. Vogel, 129–45. Westport, CT: Greenwood Press.

Carruthers, John I. 2003. "Growth at the Fringe: The Influence of Political Fragmentation in United States Metropolitan Areas." *Papers in Regional Science* 82 (4): 475–99. doi:10.1007/s10110-003-0148-0.

Chase, Jacquelyn. 2015. "Bending the Rules in the Foothills—County General Planning in Exurban Northern California." *Society & Natural Resources* 28 (8): 857–72. doi:10.1080/08941920.2015.1045643.

City of Cherry Hills Village, Colorado. n.d. "History of Cherry Hills Village." Accessed May 26, 2020. https://www.cherryhillsvillage.com/315/History-of-Cherry-Hills-Village.

Dahl, Robert A. 1961. *Who Governs? Democracy and Power in an American City*. New Haven, CT: Yale University Press.

Danielson, Michael N. 1976. *The Politics of Exclusion*. New York: Columbia University Press.

Danielson, Michael N., and Jameson W. Doig. 1982. *New York: The Politics of Urban Regional Development*. Berkeley, CA: University of California Press.

Davidoff, Paul, Linda Davidoff, and Neil Newton Gold. 1970. "Suburban Action: Advocate Planning for an Open Society." *Journal of the American Institute of Planners* 36 (1): 12–21. doi:10.1080/01944367008977275.

Downs, Anthony. 1973. *Opening up the Suburbs: An Urban Strategy for America*. New Haven, CT: Yale University Press.

Einstein, Katherine Levine. 2021. "The Privileged Few: How Exclusionary Zoning Amplifies the Advantaged and Blocks New Housing—and What We Can Do About It." *Urban Affairs Review* 57 (1): 252–68. doi:10.1177/1078087419884644.

Einstein, Katherine Levine, David M. Glick, and Maxwell Palmer. 2019. *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*. New York: Cambridge University Press. doi:10.1017/9781108769495.

Ellickson, Robert C. 1977. "Suburban Growth Controls: An Economic and Legal Analysis." *Yale Law Journal* 86 (3): 385–511.

Ellickson, Robert C. 2020. “The Zoning Strait-Jacket: The Freezing of American Neighborhoods of Single-Family Houses.” *SSRN Electronic Journal*. doi:10.2139/ssrn.3507803.

Epple, Dennis, and Allan Zelenitz. 1981. “The Implications of Competition Among Jurisdictions: Does Tiebout Need Politics?” *The Journal of Political Economy* 89 (6): 1197–217.

Farley, Reynolds. 2011. “The Waning of American Apartheid?” *Contexts* 10 (3): 36–43. doi:10.1177/1536504211418452.

Farley, Reynolds, and William H. Frey. 1994. “Changes in the Segregation of Whites from Blacks During the 1980s: Small Steps Toward a More Integrated Society.” *American Sociological Review* 59 (1): 23–45. doi:10.2307/2096131.

Fischel, William A. 2001. *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies*. Cambridge, MA: Harvard University Press.

Fischel, William A. 2007. “Political Structure and Exclusionary Zoning: Are Small Suburbs the Big Problem?*”* Working Paper. Cambridge, MA: Lincoln Institute of Land Policy.

Fischel, William A. 2015. *Zoning Rules!: The Economics of Land Use Regulation*. Cambridge, MA: Lincoln Institute of Land Policy.

Folch, David C., Daniel Arribas-Bel, Julia Koschinsky, and Seth E. Spielman. 2016. “Spatial Variation in the Quality of American Community Survey Estimates.” *Demography* 53 (5): 1535–54. doi:10.1007/s13524-016-0499-1.

Freund, David M. 2007. *Colored Property: State Policy and White Racial Politics in Suburban America*. Chicago, IL: University of Chicago Press.

Frey, William H. 2018. *Diversity Explosion: How New Racial Demographics Are Remaking America*. Washington, DC: Brookings Institution Press.

Frey, William H., and Elaine L. Fielding. 1995. “Changing Urban Populations: Regional Restructuring, Racial Polarization, and Poverty Concentration.” *Cityscape* 1 (2): 1–66.

Frug, Gerald E. 2002. “Beyond Regional Government.” *Harvard Law Review* 115: 1763–836.

Goetz, Edward G. 2021. “Democracy, Exclusion, and White Supremacy: How Should We Think About Exclusionary Zoning?” *Urban Affairs Review* 57 (1): 269–83. doi:10.1177/1078087419886040.

Gordon, Peter, and Harry W. Richardson. 1996. “Employment Decentralization in US Metropolitan Areas: Is Los Angeles an Outlier or the Norm?” *Environment and Planning A* 28 (10): 1727–43. doi: 10.1068/a281727.

Haar, Charles M. 1953. “Zoning for Minimum Standards: The Wayne Township Case.” *Harvard Law Review* 66: 1051–63.

Hamilton, Bruce W. 1975. “Zoning and Property Taxation in a System of Local Governments.” *Urban Studies* 12 (2): 205–11. doi:10.1080/00420987520080301.

Hamilton, Bruce W. 1978. “Zoning and the Exercise of Monopoly Power.” *Journal of Urban Economics* 5 (1): 116–30. doi:10.1016/0094-1190(78)90040-2.

Hankinson, Michael. 2018. “When Do Renters Behave Like Homeowners? High Rent, Price Anxiety, and NIMBYism.” *American Political Science Review* 112 (3): 473–93. doi:10.1017/S0003055418000035.

Hankinson, Michael, and Asya Magazinnik. 2020. “The Supply-Equity Trade-off: The Effect of Spatial Representation on the Local Housing Supply*.”* http://mhankinson.com/documents/supply_equity_working.pdf.

Hilber, Christian A. L., and Frédéric Robert-Nicoud. 2013. “On the Origins of Land Use Regulations: Theory and Evidence from U.S. Metro Areas.” *Journal of Urban Economics* 75 (May): 29–43. doi:10.1016/j.jue.2012.10.002.

Howell-Moroney, Michael. 2008. “The Tiebout Hypothesis 50 Years Later: Lessons and Lingering Challenges for Metropolitan Governance in the 21st Century.” *Public Administration Review* 68 (1): 97–109.

Iceland, John, Gregory Sharp, and Jeffrey M. Timberlake. 2013. “Sun Belt Rising: Regional Population Change and the Decline in Black Residential Segregation, 1970–2009.” *Demography* 50 (1): 97–123. doi:10.1007/s13524-012-0136-6.

Imbroscio, David. 2021a. “Rethinking Exclusionary Zoning or: How I Stopped Worrying and Learned to Love It.” *Urban Affairs Review* 57 (1): 214–51. doi:10.1177/1078087419879762.

Imbroscio, David. 2021b. “Stop Worrying (So Much) about Exclusionary Zoning and Fight Our Real Enemies: A Reply to My Critics.” *Urban Affairs Review* 57 (1): 298–311. doi:10.1177/1078087419890679.

Jackson, Kristoffer. 2018. “Regulation, Land Constraints, and California’s Boom and Bust.” *Regional Science and Urban Economics* 68 (January): 130–47. doi:10.1016/j.regsciurbeco.2017.10.005.

Jiang, Boquian. 2018. “Homeownership and Voter Turnout in U.S. Local Elections.” *Journal of Housing Economics* 41: 168–83. doi:10.1016/j.jhe.2018.06.006.

Kim, Jae Hong, Timothy D. Keane, and Eric A. Bernard. 2015. “Fragmented Local Governance and Water Resource Management Outcomes.” *Journal of Environmental Management* 150 (March): 378–86. doi:10.1016/j.jenvman.2014.12.002.

Langbein, Laura I., Philip Crewson, and Charles Niel Brasher. 1996. “Rethinking Ward and At-Large Elections in Cities: Total Spending, the Number of Locations of Selected City Services, and Policy Types.” *Public Choice* 88 (3–4): 275–93.

Lewis, Paul G. 2004. “An Old Debate Confronts New Realities: Large Suburbs and Economic Development in the Metropolis.” In *Metropolitan Governance: Conflict, Competition, and Cooperation*, edited by Richard C. Feiock, 95–123. Washington, DC: Georgetown University Press.

Lewis, Paul G., and Nicholas J. Marantz. 2019. “What Planners Know: Using Surveys About Local Land Use Regulation to Understand Housing Development.” *Journal of the American Planning Association* 85 (4): 445–62. doi:10.1080/01944363.2019.1643253.

Lewis, Paul G., and Max Neiman. 2009. *Custodians of Place: Governing the Growth and Development of Cities*. Washington, DC: Georgetown University Press.

Locke, Christina M., and Adena R. Rissman. 2015. “Factors Influencing Zoning Ordinance Adoption in Rural and Exurban Townships.” *Landscape and Urban Planning* 134 (February): 167–76. doi:10.1016/j.landurbplan.2014.10.002.

Logan, John R., and Harvey L. Molotch. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press.

Logan, John R, and Brian J. Stults. 2011. “The Persistence of Segregation in the Metropolis: New Findings from the 2010 Census.” Census Brief prepared for Project US2010. https://s4.ad.brown.edu/Projects/Diversity/Data/Report/report2.pdf.

Logan, John R., Brian J. Stults, and Reynolds Farley. 2004. “Segregation of Minorities in the Metropolis: Two Decades of Change.” *Demography* 41 (1): 1–22. doi:10.1353/dem.2004.0007.

Logan, John R., Zengwang Xu, and Brian J. Stults. 2014. “Interpolating U.S. Decennial Census Tract Data from as Early as 1970 to 2010: A Longitudinal Tract Database.” *The Professional Geographer* 66 (3): 412–20. doi: 10.1080/00330124.2014.905156.

Mangin, John. 2014. “The New Exclusionary Zoning.” *Stanford Law & Policy Review* 25: 91–120.

Manson, Steven, Jonathan Schroeder, David Van Riper, and Steven Ruggles. 2019. “IPUMS National Historical Geographic Information System: Version 14.0 [Database].” Minneapolis, MN. doi:10.18128/D050.V14.0.

Marantz, Nicholas J, and Huixin Zheng. 2020. “State Affordable Housing Appeals Systems and Access to Opportunity: Evidence from the Northeastern United States.” *Housing Policy Debate* 30 (3): 370–95. doi:10.1080/10511482.2020.1712612.

Mast, Evan. 2020. “Warding Off Development: Local Control, Housing Supply, and NIMBYs.” *Upjohn Institute Policy Brief*. https://research.upjohn.org/cgi/viewcontent.cgi?article=1026&context=up_policybriefs.

Michigan Department of Environment, Great Lakes, and Energy, Office of Climate and Energy. 2019. “Michigan Zoning Database.” https://www.michigan.gov/climateandenergy/0,4580,7-364-85453_85461-519951–,00.html.

Miller, Gary. 1981. *Cities by Contract: The Politics of Municipal Incorporation*. Cambridge, MA: MIT Press.

Office of Management and Budget. 2015. “Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas.” OMB bulletin 15–01. Washington, DC: Office of Management and Budget. https://obamawhitehouse.archives.gov/sites/default/files/omb/bulletins/2015/15-01.pdf.

Oliver, J. Eric. 2000. “City Size and Civic Involvement in Metropolitan America.” *The American Political Science Review* 94 (2): 361–73. doi:10.2307/2586017.

Orfield, Myron. 1997. *Metropolitics: A Regional Agenda for Community and Stability*. Washington, DC: Brookings Institution Press.

Ortalo-Magné, François, and Andrea Prat. 2014. “On the Political Economy of Urban Growth: Homeownership versus Affordability.” *American Economic Journal: Microeconomics* 6 (1): 154–81. doi:10.1257/mic.6.1.154.

Ostrom, Vincent, Robert L. Bish, and Elinor Ostrom. 1988. *Local Government in the United States*. San Francisco, CA: ICS Press.

Pendall, Rolf. 2021. "Growth + Climate Emergency: We're Already Too Late Getting Ready. Exclusionary Zoning Makes Matters Worse." *Urban Affairs Review* 57 (1): 284–97. doi:10.1177/1078087419889181.

Rothstein, Richard. 2017. *The Color of Law: A Forgotten History of How Our Government Segregated America*. New York: Liveright.

Ruggles, Steven, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas, and Matthew Sobek. 2020. "IPUMS USA: Version 10.0 [Dataset]." Minneapolis, MN. doi:10.18128/D010.V10.0.

Sager, Lawrence Gene. 1969. "Tight Little Islands: Exclusionary Zoning, Equal Protection, and the Indigent." *Stanford Law Review* 21 (4): 767–800. doi:10.2307/1227567.

Sander, Richard Henry, Yana A. Kucheva, and Jonathan M. Zasloff. 2018. *Moving toward Integration: The Past and Future of Fair Housing*. Cambridge, MA: Harvard University Press.

Schleicher, David. 2013. "City Unplanning." *Yale Law Journal* 122: 1670–1737.

Schuetz, Jenny. 2009. "No Renters in My Suburban Backyard: Land Use Regulation and Rental Housing." *Journal of Policy Analysis & Management* 28 (2): 296–320. doi:10.1002/pam.20428.

Sharp, Elaine B., and Kevin Mullinix. 2012. "Holding Their Feet to the Fire: Explaining Variation in City Governments' Use of Controls on Economic Development Subsidies." *Economic Development Quarterly* 26 (2): 138–50. doi:10.1177/0891242411431959.

Serkin, Christopher. 2007. "Local Property Law: Adjusting the Scale of Property Protection." *Columbia Law Review* 107: 883–948.

South, Scott J., and Kyle D. Crowder. 1997. "Escaping Distressed Neighborhoods: Individual, Community, and Metropolitan Influences." *American Journal of Sociology* 102 (4): 1040–84. doi:10.1086/231039.

Squire, Peverill, Raymond Wolfinger, and David Glass. 1987. "Residential Mobility and Voter Turnout." *American Political Science Review* 81 (1): 45–66.

Stone, Clarence N. 1989. *Regime Politics: Governing Atlanta, 1946-1988*. Lawrence: University Press of Kansas.

Tausanovitch, Chris, and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108 (3): 605–41. doi:10.1017/S0003055414000318.

Taylor, Zack. 2019. *Shaping the Metropolis: Institutions and Urbanization in the United States and Canada*. Montreal: McGill-Queen's University Press.

Thorson, James A. 1996. "An Examination of the Monopoly Zoning Hypothesis." *Land Economics* 72 (1): 43–55. doi:10.2307/3147156.

Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64 (5): 416–24. doi:10.1086/257839.

Trounstine, Jessica. 2013. "Turnout and Incumbency in Local Elections." *Urban Affairs Review* 49 (2): 167–89. doi:10.1177/1078087412463536.

Trounstine, Jessica. 2018. *Segregation by Design: Local Politics and Inequality in American Cities*. New York: Cambridge University Press.
Ulfarsson, Gudmundur F., and John I. Carruthers. 2006. "The Cycle of Fragmentation and Sprawl: A Conceptual Framework and Empirical Model." *Environment and Planning B: Planning and Design* 33 (5): 767–88. doi:10.1068/b30104.
Urban Institute. 2019. "National Longitudinal Land Use Survey User Guide." Washington, DC: Urban Institute.
U.S. Census Bureau. 1947. *Census Tract Manual*. 3rd ed., revised and enlarged. Washington, DC: U.S. Census Bureau. https://www.census.gov/history/pdf/1947_Census_Tract_Manual.pdf.
U.S. Census Bureau. 1994. *Geographic Areas Reference Manual*. Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. 2013. *2012 Census of Governments: Individual State Descriptions: 2012*. Washington, DC: U.S. Census Bureau https://www.census.gov/content/dam/Census/library/publications/2012/econ/2012isd.pdf.
U.S. Census Bureau. 2018a. "Understanding and Using American Community Survey Data: What All Data Users Need to Know." Washington, DC: U.S. *Census Bureau*. https://www.census.gov/content/dam/Census/library/publications/2018/acs/acs_general_handbook_2018.pdf.
U.S. Census Bureau. 2018b. "2012 State & Local Government Finance Historical Datasets and Tables." https://www.census.gov/data/datasets/2012/econ/local/public-use-datasets.html.
U.S. Census Bureau. 2019. "2012 Geography Changes." The United States Census Bureau. June 11, 2019. https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2012/geography-changes.html.
U.S. Census Bureau. 2020. "Understanding and Using American Community Survey Data: What Researchers Need to Know." Washington, DC: U.S. *Census Bureau*. https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_researchers_handbook_2020.pdf.
U.S. Census Bureau. n.d.-a. "2008-2012 American Community Survey 5-Year Estimates, B19083." Washington, DC: U.S. Census Bureau. Accessed February 20, 2014a. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_5YR_B19083&prodType=table.
U.S. Census Bureau. n.d.-b. "American Community Survey Tables: 2014-2018 (5-Year Estimates)." http://www.socialexplorer.com.
U.S. Census Bureau. n.d.-c. "Census Tracts." Accessed May 18, 2020b. https://www2.census.gov/geo/pdfs/education/CensusTracts.pdf.
U.S. Census Bureau. n.d.-d. "TIGER/Line with Selected Demographic and Economic Data." https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-data.2012.html.
U.S. Census Bureau. n.d.-e. "Glossary." https://www.census.gov/programs-surveys/geography/about/glossary.html.
U.S. Census Bureau and Social Explorer. n.d. "Census 1990 on 2010 Geographies Summary Tape File 3 (RC1990SF3), Census 1990 on 2010 Geographies."

Accessed April 4, 2020. http://www.socialexplorer.com/pub/reportdata/HtmlResults.aspx?reportid=R12514492.

U.S. Environmental Protection Agency. 2013. "Smart Location Database v. 2.0." Washington, DC: U.S. Environmental Protection Agency. https://edg.epa.gov/EPADataCommons/public/OP/SLD/.

U.S. Geological Survey. 2019. NLCD 2001 Land Cover Conterminous United States (2016 edition, amended Jan. 2019). Sioux Falls, SD: U.S. Geological Survey.

Van Houwelingen, Pepijn. 2017. "Political Participation and Municipal Population Size: A Meta-Study." *Local Government Studies* 43 (3): 408–28. doi:10.1080/03003930.2017.1300147.

Welch, Susan, and Timothy Bledsoe. 1988. *Urban Reform and Its Consequences: A Study in Representation*. Chicago, IL: University of Chicago Press.

Williams, Norman Jr. 1955. "Planning Law and Democratic Living." *Law and Contemporary Problems* 20: 317–50.

Author Biographies

Nicholas J. Marantz is an assistant professor in the Department of Urban Planning & Public Policy at the University of California, Irvine. His research addresses local governance and the regulation of the built environment, particularly as they relate to mobility and housing affordability. His recent research has appeared in outlets including the Journal of the American Planning Association, the Journal of Planning Education & Research, Housing Policy Debate, and the Journal of Urban Affairs.

Paul G. Lewis is an associate professor in the School of Politics and Global Studies at Arizona State University. He is interested in urban policy, local politics, and public attitudes toward policy issues. His recent research has appeared in such outlets as Journal of Public Administration Research and Theory, Journal of the American Planning Association, Journal of Urban Affairs, and Political Behavior.